

FINAL REPORT

Indian Study on Epidemiology of Asthma, Respiratory Symptoms and Chronic Bronchitis (INSEARCH)

A Multi-Centre Study (2006-2009)

Sponsored by

INDIAN COUNCIL OF MEDICAL RESEARCH

Principal Investigator

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CONTENT LIST

	Page
A. Investigators	1
B. Report Text	
1. Summary	4
2. Background	8
3. Objectives	13
4. Methodology and Study Design	14
5. Results	20
6. Discussion	32
7. References	36
C. Summary Tables of Results	40
D. Annexures	
I. Centrewise sampling details (1 to 12)	220
II. Questionnaires in different languages used in the study (1 to 11)	237
III. Project Manual	294
IV. Reports of three Training Workshops conducted for different centres in the Southern, Eastern and Western regions (1-3)	326
V. Monitoring Log	330

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SUMMARY

Chronic respiratory disease (CRD), which includes asthma and chronic obstructive pulmonary disease (COPD), may account for an estimated burden of about 100 million individuals in India. There are only a few studies from India on the field epidemiology of asthma. Both asthma and CB (or COPD), known by the common name “dama” (or others) in lay language, are inflammatory disorders of the airways, and important causes of disability and health-care burden. But unlike asthma, COPD is primarily a disease of adults and runs a progressive downhill course. The prevalence rates for both disorders reported in different studies have widely varied. There are several possible reasons of variations in the prevalence rates reported in different studies. Prevalence figures reported from clinic or hospital based surveys do not accurately reflect the general prevalence.

The Phase I of the Indian study on Epidemiology of Asthma, Respiratory symptoms and Chronic bronchitis (INSEARCH) sponsored by ICMR included four centers at Chandigarh, Delhi, Bangalore and Kanpur. Population-prevalence of ever-asthma in adults of over 15 years of age was reported in 2.4 percent, and of other respiratory symptoms in 4.3 - 10.5%, of 73605 individuals. The INSEARCH (Phase I) data were also analysed for the prevalence of CB in the adult population of over 35 years of age. Chronic bronchitis was diagnosed in 4.1 percent individuals with a male to female ratio of 1.56 to 1, i.e. a prevalence of 5.0 percent among men and 3.2 percent in women. There were some variations in prevalence rates depending upon the place of residence and socio-economic grouping, but significant differences were observed based on the habit of smoking and exposures to combustion of solid fuels and environmental tobacco smoke.

INSEARCH (Phase II)

The Phase II of the Indian Study on Epidemiology of Asthma, Respiratory symptoms and Chronic bronchitis (INSEARCH) was aimed to extend the Phase I study to include several other centers located in different parts of India for the assessment of the overall burden of chronic respiratory diseases in the country. To minimize some of the methodological problems, we have used a standardized, validated questionnaire, employing a uniform methodology at all the centers in the INSEARCH study. The analysis for the pooled as well as the center-wise data has been done centrally at the coordinating center. The questionnaire used for the INSEARCH study is based on the International Union Against Tuberculosis and Lung Diseases (IUATLD) questionnaire.

OBJECTIVES

1. To find differences in the epidemiology of asthma and chronic bronchitis, including in the prevalence rates and other causal variables (age, gender, place of residence, income and occupation etc.), if any, in different parts of India.
2. To find the national median (or mean) prevalence of asthma and arrive at the national disease burden.
3. To find the population prevalence of chronic nonspecific chronic respiratory symptoms and of chronic bronchitis.

4. To assess the influence of exposures to tobacco smoking, ETS and combustion of solid fuels, and other risk factors, on the prevalence of both asthma and chronic bronchitis.

STUDY DESIGN

The prevalence of asthma and chronic bronchitis in different parts of the country was studied using a multi-centric design with the help of uniform methodology at centers spread across India – Ahmedabad, Berhampur, Bikaner, Chennai, Guwahati, Kolkata, Mumbai, Mysore, Nagpur, Secunderabad, Shimla, and Trivandrum (Figure 1). These centres were selected on the basis of their geographical locations, availability of local expertise, and other facilities for participation in the study

The essential components of the study design were as follows:

1. A single definition of asthma and of chronic bronchitis for field prevalence.
2. A standardized and validated study-questionnaire (developed at the Central Coordinating Centre at Chandigarh). The questionnaire was translated into local languages, and modifications done depending upon the local needs.
3. Uniform method of collecting data from the field in each region.
4. Data analysis at the Central Coordinating Centre for area wise prevalence.

A random sample considering the district as a unit was selected. Accordingly, a target sample of about 12000 - 15000 subjects were recruited at each centre. The urban – rural composition of the sample was similar to the distribution in the population from that district. The sample design at each participating centre consisted of a two stage stratified (urban/rural) sampling, where villages/urban units formed the first stage units and the households formed the second stage units.

A proforma-questionnaire designed specifically for use in this project, was provided to the participating centres in both English and Hindi versions. Each individual item in the questionnaire was tested for its sensitivity and specificity in diagnosing asthma using physician diagnosis as the gold standard. Questions with a high sensitivity and those with a high specificity were then selected to frame a composite questionnaire definition of asthma. The questionnaire definition was validated in field conditions using physician diagnosis as the gold standard. Hindi questionnaire was used at Bikaner and Shimla. Various centres had translated the questionnaire into local languages. Gujarati, Tamil, Telugu, Kannada, Marathi, Malyalam, Bengali, Oriya and Assamese versions of the questionnaire were used respectively in the study at Ahmedabad, Chennai, Hyderabad, Mysore, Nagpur, Trivandrum, Kolkatta, Berhampur and Guwahati. Hindi questionnaires were also used at Nagpur, Mumbai and Ahmedabad for individuals who preferred the Hindi version.

Responses to the questionnaires were stored in the computer using the epidemiological software EpiInfo. Analysis was performed using this software as well as SPSS for Windows. Comparisons between groups were carried out using the chi-square test (for categorical variables) and Student's t-test (for continuous variables). Agreement between categorical variables was calculated using the Kappa measure. Various factors contributing to the presence of asthma and CB were studied by calculation of odds ratio, using both univariate and multivariate logistic regression techniques.

RESULTS

Sample Population

A total of 169575 individuals were surveyed across twelve centres. Both urban and rural clusters were covered at all centres, except at Secunderbad, where only urban area was surveyed. The rural:urban ratio for population surveyed ranged from 1.46 at Chennai to 4.28 at Berhampur, with an overall figure of 1.79 for the total study population. The total study population (based on 'current residence') of 12 urban and 11 rural samples consisted of 60764 and 108811 persons respectively. The sample included individuals of over 15 years up to over 85 years of age. The male:female ratio ranged from 0.63 at Chennai to 1.14 at Bikaner, although the gender distribution was almost equal for the total study population. In all, 85105 men (mean age 37.3±16.0 years) and 84470 women (mean age 36.9±15.8 years) were interviewed. In all, 8990 individuals (5.3%) had a first degree relative with history suggestive of bronchial asthma, more commonly in men – the male : female ratio was 1.9 for the rural and 1.2 for urban subjects.

Exposure History

Amongst men, history of 'ever smoking' was present in 18.5% of male (rural 20.6%, urban 14.7%) subjects. In all, 18.5% men (ranging from 4.5% at urban Mumbai to 40.7% at urban Kolkata) and 0.5% women (ranging from none at rural Nagpur to 2.2% at rural Shimla) were ever smokers. Ever exposure to household environmental tobacco smoke (ETS) was generally greater in rural areas and among women, and more than half of all women interviewed in rural areas of Ahmedabad, Bikaner, Chennai, Kolkata and Mysore had been exposed to household ETS. History of cooking at home was obtained to assess an individual's exposure to domestic indoor combustion pollutants. About 90 percent of rural and 86 percent of urban women were engaged in current or past cooking; history of cooking amongst men was limited to about 3.5 percent

Asthma

One or more of the twelve symptoms enquired were elicited in 14479 (8.5%) respondents. There was a large variation between individual symptoms, across centres, among men and women, and between rural and urban localities. The pooled prevalence of asthma (using the questionnaire definition) across the twelve centres was 2.05% (2.28% in rural and 1.64% in urban areas). There were wide variations across the different centres. Prevalence was quite low in urban Secunderabad (0.37%) and rural Mumbai (0.74%), and relatively high at Kolkata (rural 4.52% and urban 5.52%) and rural Trivandrum (4.45%).

Multiple regression models were generated to assess associations of asthma with usual residence, gender, age, socioeconomic status, family history of asthma, smoking (type of product predominantly smoked), timing of household ETS exposure and cooking fuel used, for the entire study population. Age, family history of asthma and tobacco smoking were consistently associated with higher odds of asthma at nearly all centres.

After pooling the entire data and additionally adjusting for between-centre differences, advancing age, asthma in first degree relative, use of any smoking product, ETS exposure in adulthood or both childhood and adulthood, and using LPG, coal, wood or dung cake, were associated with increased odds of asthma.

Chronic bronchitis

The pooled prevalence of chronic bronchitis (using the questionnaire definition) across the twelve centres was 3.49% (4.07% in rural and 2.50% in urban areas). There were wide variations across the different centres. Prevalence was quite low in urban Guwahati, Mumbai and Nagpur (0.61%, 0.91% and 0.67% respectively), and relatively high at rural Bikaner and Trivandrum (7.00% and 13.54% respectively). After pooling the entire data and additionally adjusting for between-centre differences, usual urban residence, advancing age, use of any smoking product, ETS exposure either in childhood or both in childhood and adulthood, and cooking using LPG, were associated with increased odds of chronic bronchitis. However, female gender, and medium or high socioeconomic status, was associated with reduced odds of chronic bronchitis.

BACKGROUND

India is a vast country with immense geographical and environmental diversities which affect the incidence and prevalence of chronic diseases. The vast economical, racial, religious and socio-political differences not only affect the prevalence but also the approach to management of chronic health problems. It is an enormously difficult and costly proposition to collect national statistics on diagnosis and management of common diseases. It requires coordination and cooperation between several centers spread across the country. On the other hand, an attempt to comprehend multiple studies conducted by different investigators suffers from scientific drawbacks, the principle being a lack of uniformity in definition of diseases, methodology used for the study and analysis of data.

Chronic respiratory disease (CRD) is one of the most common cause of disease burden, both globally and in India. CRD includes asthma and chronic obstructive pulmonary disease (COPD) which together may account for an estimated burden of about 100 million individuals in India. The prevalence rates reported in different studies have widely varied. There are several possible reasons of variations in the prevalence rates reported in different studies. Besides true differences expected on the basis of different risk-factor exposures, the differences could also be entirely methodological or analytic. Different studies use different definitions of asthma and chronic bronchitis. The methodology employed for sampling, interviewing and analyzing the data may variably influence the results. The instrument used to assess the prevalence (e.g. the questionnaire) may also suffer from the problems of validity, repeatability and sensitivity. A highly sensitive questionnaire is likely to over-diagnose while a highly specific questionnaire may under-diagnose asthma.

A. Asthma

Several different terms are employed to label asthma by the lay in different part of India. 'Dama' i.e. the disease of breathing difficulty" is the most frequently used term for both asthma and COPD/chronic bronchitis.

Terminology for Asthma/COPD in various Indian languages

- | | |
|--------------|------------------------------|
| 1. Assamese | Uoocha lobo nowastha, Hapani |
| 2. Bengali | Hapani |
| 3. Haryanavi | Uthu Chadna, Dama |
| 4. Hindi | Dama |
| 5. Kanada | Yezhathey |
| 6. Malayalam | Vallivu |
| 7. Manipuri | Harda Thungba, Zokhar |
| 8. Oriya | Swaaz |
| 9. Punjabi | Sahn di bimari, Dama |
| 10. Tamil | Izhuppu |
| 11. Urdu | Dama |
| 12. Telgu | Ubbasam |
| 13. Gujarati | Saanz ki thakleef |

Asthma is a chronic inflammatory disorder characterized by airway hyper-responsiveness to a variety of stimuli. It results from a complex interaction among inflammatory cells, mediators and airways. A clinico-physiological definition is more appropriate for routine diagnosis and management of this disorder. For practical purposes, asthma may be defined as a disorder of airways characterized by the following:

1. Paroxysmal and/or persistent symptoms such as dyspnea, chest tightness, wheezing and cough, with or without mucus production.
2. Variable airflow limitation demonstrated by chest auscultation and/or repeated measurements of peak expiratory flow (PEF) or other spirometric indices.
3. Airway hyper-responsiveness to a variety of specific and nonspecific inhalational stimuli. Of these criteria, the last is not essential.

Although recognition of these features helps in diagnosis and management of disease in patients presenting to clinicians, they are inappropriate for epidemiological purposes. While defining population characteristics through large population surveys, one needs a simple operational definition of asthma that is understood by field workers with little or no clinical background, and involves minimal use of laboratory investigations. There are only a few studies from India on the field epidemiology of asthma.¹⁻¹⁵

Summary of the important population-studies from India on prevalence of asthma

Author	Region	Group	No.	Age (years)	Prevalence (%)
Adults					
1. Viswanathan (1966) ²	North	Urban	15805	All ages	1.8
2. Chowgule (1998) ³	West	Field	2313	20-44	3.5
3. Jindal (2000) ⁴	North	Field	2016	18->70	2.8
4. Aggarwal (2006) ⁵	Multicentric	Field	73605	> 15	2.4
Children					
5. Chhabra (1998) ⁶	North	Schools	2609	4-17	11.6
6. Shah (2000) ⁷	Multicentric	Schools	37171 31697	13-14 6-7	3.7 4.5
7. Gupta (2001) ⁸	North	Schools	9090	9-20	2.3
8. Paramesh (2002) ⁹	South	Schools	6550	6-15	16.6
9. Chakravarthy (2002) ¹⁰	South	Field	855	<12	5
10. Mistry (2004) ¹¹	North	Schools	575	13-14	12.5
11. Awasthi (2004) ¹²	Lucknow	Schools	3000	13-14 6-7	3.3 2.3
12. Pakhale (2008) ¹³	West	Schools	3668	13-14	7.3
13. Lai (2009) ¹⁴	West	Schools	-	6-7	2.4

In a study conducted more than 40 years ago, the prevalence of asthma was reported as 2.78% in an urban population aged 30-49 years². It was also reported in the same study that the prevalence in morbidity surveys of government employees and their families in Delhi was 1.8%. These rates are unlikely to represent the current prevalence,

which is believed to be higher by most clinicians. Unpublished figures of 1.5% to 15% or higher, have been quoted from time to time. Most of these assumptions do not reflect the general prevalence. Many of these studies also suffer from several other drawbacks such as the (a) lack of uniform definition of asthma, (b) inappropriate and/or non-standardized methodology, (c) inadequate sample size, (d) demographic variations in different populations and samples, and (e) inadequate or inappropriate analytic techniques.

Prevalence figures reported from clinic or hospital based surveys do not accurately reflect the general prevalence. In recent years, a few well-designed and large population based studies in adults have been published in India. In a study from Mumbai, conducted as part of the European Community Respiratory Health Survey, asthma-prevalence in adults aged 20-44 years was reported as 3.5% using clinician diagnosis, and 17% using a very broad definition (which included prior physician-diagnosis and/or a positive bronchoprovocation test³). Prevalence was similar in men (3.8%) and women (3.4%). However, “physician-diagnosed asthma” may possibly underestimate the true prevalence of disease in the general population. The International Study of Asthma and Allergies in Childhood (ISAAC), included children of 13-14 and 6-7 year age group from 14 centers from India.¹⁵ The overall Indian prevalence of ‘ever asthma’ was reported in 3.7% of 30043 and 4.5% of 37171 children respectively of 6-7 and 13-14 year age groups.⁷ Some of the other studies in children have reported variable prevalences.⁸⁻¹⁴

The Phase I of the Indian study on Epidemiology of Asthma, Respiratory symptoms and Chronic bronchitis (INSEARCH) sponsored by ICMR included four centers at Chandigarh, Delhi, Bangalore and Kanpur. Population-prevalence of ever-asthma in adults of over 15 years of age was reported in 2.4 percent and of other respiratory symptoms in 4.3 – 10.5% of 73605 individuals.⁵

B. Chronic Bronchitis / Chronic Obstructive Pulmonary Disease

Chronic obstructive pulmonary disease, also an inflammatory disorder of the airways is a major cause of disability and death all over the world, including in India. Incidentally, both asthma and CB (or COPD) are known by the common name “dama” (or others) in lay language. Unlike asthma, COPD is primarily a disease of adults and runs a progressive downhill course. There has generally been an ambiguity about the terminology employed to define COPD. It includes the clinical conditions of chronic bronchitis (CB) and emphysema. Traditionally, CB was defined as the presence of cough and mucoid expectoration for at least 3 months in a year continuously for two or more years. Unfortunately, the definition lacks the inclusion of any of the parameters of “airway obstruction”. But this has remained as a popular definition of CB (as a prototype of COPD) in most epidemiological studies.

There are quite a few reports on the prevalence of CB in India in different populations.¹⁶⁻³² Prevalence rates varying from 2 to 22 percent in men and from 1.2 to 19 percent in women have been shown in different reports.

Summary of important population-studies from India on the prevalence of chronic bronchitis / COPD

Authors		Population		COPD prevalence (%)			
		Place	No.	M	F	M:F Ratio	S:NS ratio (men)
1.	Wig (1964) ²⁸	Rural Delhi	3767	3.36	2.54	1.32	1.98
2.	Viswanathan (1966) ¹	Patna	15805	2.12	1.33	1.59	-
3.	Sikand (1966) ²⁹	Delhi	14460	7.0	4.3	1.63	25
4.	Bhattacharya (1975) ²⁵	Rural U.P.	1140	6.67	4.48	1.49	-
5.	Viswanathan (1977) ²³	Delhi	993				
		Rural		4.7	3.5	.34	9.57
		Urban		8.0	4.3	1.86	4
6.	Thiruvengadam (1977) ²⁰	Madras	817	1.9	1.2	1.58	10.2
7.	Charan (1977) ³⁰	Rural Punjab	7132	2.28	1.63	1.4	-
8.	Radha (1977) ²⁴	New Delhi	2098	8.1	4.6	1.76	1.8
9.	Malik (1986) ²²	North India	4372				
		Rural		9.4	4.9	1.92	5.5
		Urban		3.7	1.6	2.31	7
10.	Jindal (1993) ²⁷	North India	2804				9.6
		Rural		6.2	3.9	1.59	-
		Urban		4.2	1.6	2.6	-
11.	Ray (1995) ³¹	South India	9946	4.08	2.55	1.6	1.6
12.	Jindal (2006) ³²	Multicentric	35295	5.0	3.2	1.56	2.65

M=Male; F=Female; S=Smoker; NS=Non-smoker; COPD=Chronic Obstructive Pulmonary (Lung, Airway) Disease

We had earlier reviewed the population studies on COPD prevalence from India which were reported in the three time periods of up to 1970, between 1971-1990 and after 1990.¹⁶ Most of these studies were conducted with the help of an interview or a questionnaire, while a few had used peak expiratory flow (PEF) measurement for assessment of the airway obstruction. But there had been differences in the design and methodology of these studies. More importantly, the statistical analyses were generally merely descriptive without any analysis of the causative or the confounder variables. In the few studies that were reported in the last three decades, COPD prevalence was reported to be about twice as high in men than in women, with a mean smoking association of over 82 percent.¹⁸⁻²⁵

The INSEARCH (Phase I) data were also analysed for the prevalence of CB in the adult population of over 35 year of age from Bangalore, Chandigarh, Delhi and Kanpur with total sample of over 73000 individuals; there were 35295 adult subjects of over 35 year of age.³² Chronic bronchitis was diagnosed in 4.1 percent individuals with a male to female ratio of 1.56 to 1, i.e. a prevalence of 5.0 percent among men and 3.2 percent in women.³² There were some variations in prevalence rates depending upon the place of residence and socio-

economic grouping, and significant differences were observed based on smoking habit and exposures to combustion of solid fuels and environmental tobacco smoke.

INSEARCH (Phase II)

The Phase II of the Indian Study on Epidemiology of Asthma, Respiratory symptoms and Chronic bronchitis (INSEARCH) was aimed to extend the Phase I study to include several other centers located in different parts of India for the assessment of the overall burden of chronic respiratory diseases in the country.

To minimize some of the methodological problems, we have used a standardized, validated questionnaire, employing a uniform methodology at all the centers in the INSEARCH study. The analysis for the pooled as well as the center-wise data has been done centrally at the coordinating center. The questionnaire used for the INSEARCH study is based on the International Union Against Tuberculosis and Lung Diseases (IUATLD) questionnaire.³³

OBJECTIVES

1. To find differences in the epidemiology of asthma and chronic bronchitis, including in the prevalence rates and other causal variables (age, gender, place of residence, income and occupation etc.), if any, in different parts of India.
2. To find the national median (or mean) prevalence of asthma and arrive at the national disease burden.
3. To find the population prevalence of chronic nonspecific chronic respiratory symptoms and of chronic bronchitis.
4. To assess the influence of exposures to tobacco smoking, ETS and combustion of solid fuels, and other risk factors, on the prevalence of both asthma and chronic bronchitis.

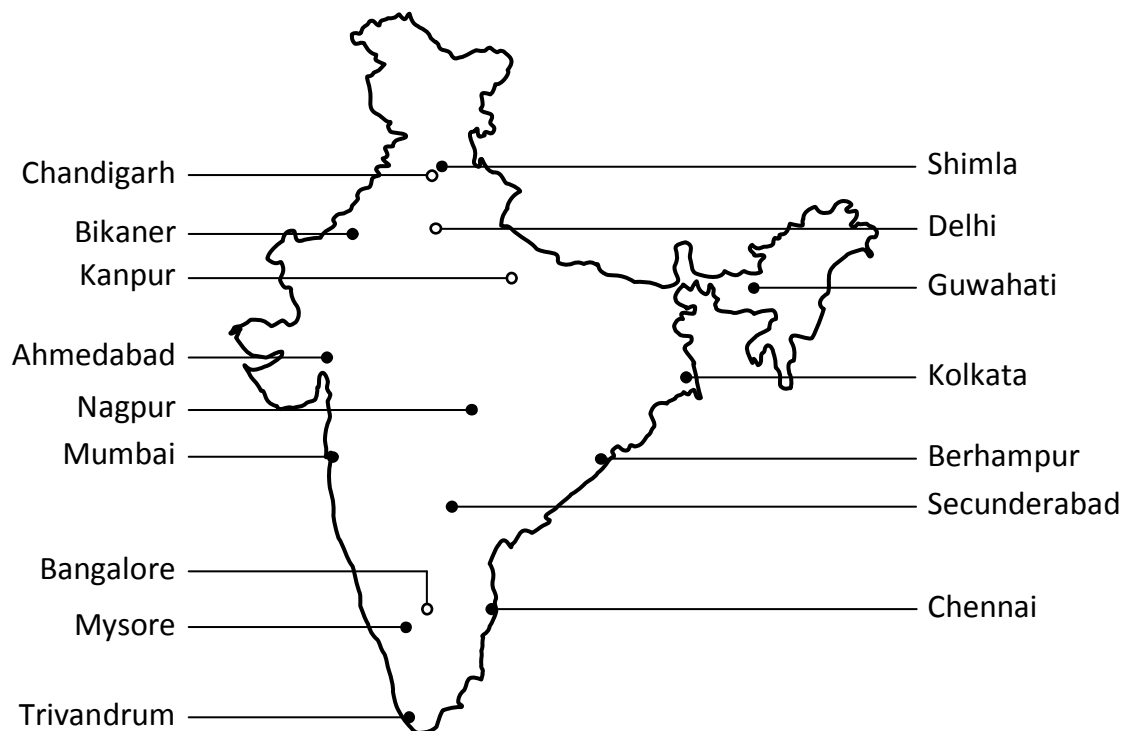
STUDY DESIGN AND METHODOLOGY

The prevalence of asthma and chronic bronchitis in different parts of the country was studied using a multi-centric design with the help of uniform methodology at centers spread across India – Ahmedabad, Berhampur, Bikaner, Chennai, Guwahati, Kolkata, Mumbai, Mysore, Nagpur, Secunderabad, Shimla, and Trivandrum (Figure 1). These centres were selected on the basis of their geographical locations, availability of the local expertise, and other facilities for participation in the study. A lead investigator was identified at each Centre, generally from the department of Pulmonary Medicine / Chest Diseases of the local medical college or some other hospital. He/She was assisted by one or more co-investigators from the department of Community Medicine and/or other departments.

Several Joint Working Group meetings of the investigators, the ICMR staff and the Expert Group were held both before and during the study. The essential components of the study design were as follows:

1. A single definition of asthma and of chronic bronchitis for field prevalence.
2. Standardized and validated study-questionnaire (developed at the Central Coordinating Centre at Chandigarh); this questionnaire was translated into local languages and minor modifications done depending upon the local needs.
3. Uniform method of collecting data from the field in each region.
4. Data analysis at the Central Coordinating Centre for area wise prevalence.

Figure 1: Indian map showing location of different study-centers (open circles represent the sites studied earlier in Phase I)



METHODOLOGY

A. Sampling Methodology

A random sample considering the district as a unit was selected. A sample of 12421 subjects was estimated to obtain a 95% confidence interval of $\pm 0.3\%$ around a prevalence estimate of 3.0%, using the formula $N = p \times (1-p) \times (t/m)^2$, where N was the estimated sample size, p the estimated prevalence in the population being surveyed, t the standard normal deviate associated with the confidence level (1.96 for a 95% confidence level), and m the margin of error. Accordingly, a target sample of about 12000 - 15000 subjects were recruited at each centre. The urban – rural composition of the sample was similar to the distribution in the population from that district.

The sample design at each participating centre consisted of a two stage stratified (urban/rural) sampling, where villages/urban units formed the first stage units and the households formed the second stage units. Both the urban and the rural units were confined to the municipal limits. In the urban setting, the locations where the survey was carried out were decided by a random selection of a number of areas defined by the boundaries of the municipal wards or the census blocks or the city sectors, as appropriate.

In the rural setting, the sample area was identified using the community development block as a unit. Each village was selected at random from among all villages in the block. Field workers would approach the village sarpanch or other community leaders to enlist their cooperation and help in defining the boundary of the area in which the survey needed to be carried out. With their help, a rough map of the village was drawn and the number of households were identified in different areas. Approximately 100 households were targeted in each village/urban cluster. In case a village was small, two or more neighbouring villages were combined till the group had approximately 100 households. In case the village was substantially large, it was partitioned into two or more areas, each with approximately 100 households.

Center-wise details of the samples are provided in **Annexure I (I₁ to I₁₂)**.

B. Study Questionnaire

A proforma-questionnaire, designed specifically for use in this project, was provided to the participating centres in both English and Hindi versions. The study-questionnaire was based on the IUATLD bronchial questionnaire.³³ The questionnaire used in this study had two components. The first part of the questionnaire was aimed at collecting information on respiratory symptoms and for establishing a diagnosis of asthma and of CB based on this data. The second component was aimed at collecting information on demographic and environmental exposure factors influencing the prevalence of asthma and CB. A Hindi translation of the IUATLD respiratory symptoms questionnaire was used for the first component. This translation has been previously standardized and validated for diagnosing asthma in the field conditions in adults.⁴

The original questionnaire (in English) was translated to Hindi. Stepwise details of the questionnaire development, reliability of the translated version was earlier established

using test-retest and split half methods on 200 individuals.⁴ The questionnaire was then administered to 506 patients attending Chest Clinic, and a final diagnosis (asthma or no asthma) was reached by the clinician in all instances using clinical information and appropriate investigations.

Each individual item in the questionnaire was tested for its sensitivity and specificity in diagnosing asthma using physician diagnosis as the gold standard. Questions with a high sensitivity and those with a high specificity were then selected to frame a composite questionnaire definition of asthma. The questionnaire definition was validated in field conditions on 753 individuals, using physician diagnosis as the gold standard.

Hindi questionnaire was used at Bikaner and Shimla. Various centres had translated the questionnaire into local languages. Gujarati, Tamil, Telugu, Kannada, Marathi, Malyalam, Bengali, Oriya and Assamese versions of the questionnaire were used respectively in the study at Ahmedabad, Chennai, Hyderabad, Mysore, Nagpur, Trivandrum, Kolkata, Berhampur and Guwahati. Hindi questionnaires were also used at Nagpur, Mumbai and Ahmedabad for individuals who preferred the Hindi version. Different questionnaires used for the study are enclosed – **Annexure II (II₁ to II₁₁)**.

A comprehensive Project Manual was prepared which included detailed instructions for filling the questionnaire, data entry and list of field codes (**Annexures III**).

C. Training of Field Staff

The field staff was provided training on the salient aspects of the study protocol, the structure of the study questionnaire, obtaining valid consent, interviewing patients enrolled for the study, filling up study proformas, and verification of proformas. This was accomplished through a series of Regional Training Workshops. Three such workshops were held at Chennai (for investigators and project staff from Chennai, Trivandrum, Mysore and Secunderabad), Kolkata (for investigators and project staff from Kolkata, Berhampur and Guwahati) and Ahmedabad (for investigators and project staff from Ahmedabad, Mumbai, Nagpur and Bikaner). A separate training workshop was later held for the investigators and the project staff from Shimla. Each of these workshops was attended by representatives from the ICMR, investigators from the coordinating centre (PGIMER, Chandigarh), and the investigators and the field staff from the participating centres. Reports of the three Training Workshops are enclosed (**Annexure IV₁₋₃**).

D. Questionnaire Administration

The household in a particular cluster from where the survey was to start, was randomly selected. In case the houses in a particular area were serially numbered, this was accomplished by a random selection of the number between the numbers of the first and the last house in the area. In case houses were not numbered such, the field worker would go to the central area of the segment, and chose a direction randomly. In the selected direction, all households located till the end of the street were listed, and a house selected at random. This random selection was accomplished in both instances by using random number tables to pick a number between the first and last numbers of the houses. Alternatively, the field workers could draw out a single currency note from their purse and

select the number represented by the last one, two, three or four digits of its serial number. Interview was started in the selected household and the field worker moved on to the next nearest house. The process continued till the required numbers were interviewed in that particular area. Field workers carried out interviews in approximately 100 households in each cluster. Once the field worker reached the target sample in any segment, all adults in this last household were interviewed. This field work was started at participating sites in 2007, and conducted over approximately 18 months.

In each of these clusters, field workers carried out interviews of all adult members in each household, moving to the next selected group once the previous one was exhausted, continuing till the requisite sample had been covered. In each household, the field worker interviewed all adults aged 15 years or more. Interviews were conducted face to face in privacy and in homes of the respondent. In case it was acceptable to the respondents, the interview was conducted outside the house in a centralized area like the village “chaupal”, school, or some other place preferred by the respondent to ensure privacy. In case a household was locked or a respondent was not available, the field worker would note it as such, and return at a subsequent date at a time convenient to the respondent to fill the questionnaire. If three such attempts at meeting residents of a household were unsuccessful, the household was dropped from the list. A separate register was maintained to record all these events.

The supervisor collected the list of all households visited by the field workers, and made a visit to 10% randomly selected households to verify the interview. He/she also administered the same questionnaire again to check for the mistakes made by the interviewer.

E. Project Monitoring

A standard protocol was developed for monitoring activities prior to the visits (**Annexure V**). This included verification of (a) staffing pattern, (b) drawn up sampling frame, (c) household visit registers (d) printed study questionnaires and consent sheets in locally appropriate languages, and (e) functionality of data entry software. At least two monitoring visits were undertaken for each site. Additional visits were made as and when considered essential and important for troubleshooting.

At each centre, the Monitor discussed in detail the experiences of field staff and tried to suggest modifications to local problems so that the overall activities conformed to uniform standards. A few study questionnaires were randomly checked to confirm adequacy and quality of data recording and verification. Similarly, sample records were also randomly checked in the computer database to verify correctness of the transcribed data.

F. Data Collection and Handling

The data were gathered as hard copies by filling up the study proformas. The data were then entered to a computer database. The development of the data-entry software was completed before initiating data collection, and field staff were trained to use this software. This computer programme was developed using EpiData (an epidemiological software predominantly designed for data entry for field based studies and available in

public domain). Database files were periodically sent electronically to the coordinating centre.

Efficiency of data recording was assessed by re-administering the questionnaire to randomly selected 500 respondents at each centre. Agreement between the original and re-administered questionnaire was assessed by calculating 'kappa index' for each relevant item in the questionnaire.

G. Statistical Methods

Responses to the questionnaires were stored in the computer using the epidemiological software EpiInfo. Analysis was performed using this software as well as SPSS for Windows. Comparisons between groups were carried out using the chi-square test (for categorical variables) and Student's t-test (for continuous variables). Agreement between categorical variables were calculated using the Kappa measure (K). Various factors contributing to the presence of asthma and CB were studied by calculation of odds ratio using both univariate and multivariate logistic regression techniques.

Descriptive Statistics

For purpose of distribution analysis, descriptive parameters such as the means, standard deviation (S.D.) and percentages were used. Gender and 'current' residence were used to create subgroups at each centre separately, as well as for the entire study population. Prevalences of asthma, CB and individual respiratory symptoms were calculated in percentages as the number of subjects categorized as having asthma or CB (based on the described definition) divided by the total number of subjects in that particular group. These prevalence estimates were also standardized to the age distribution of population in various states and in the whole country (as per the 2001 census figures). To calculate the national burden for both asthma and CB, these standardized prevalence rates for men and women across different age groups were summated and multiplied by the actual number of individuals in each strata (as per 2001 census figures). For CB, burden estimated were limited to persons aged 35 years or more.

Analytic Statistics

Univariate logistic regression analysis was conducted to calculate Odds Ratio (OR) and 95% Confidence Intervals (95% CI) to determine the relationship between each potential risk factor (which was studied) and the presence of asthma or C.B.. Such analysis was conducted for each centre individually, as well as for the whole study population. Multivariate logistic regression modeling was also performed to assess odds ratio for each potential risk factor after adjusting for other variables. Potential risk factors to be studied were categorized based on the information available from the questionnaire.

Influence of type of residence was studied using categories based on 'usual residence' (item 10) rather than 'current residence' (item4). Analysis of items related to environmental tobacco smoke (ETS) exposure was restricted only to subjects who were nonsmokers (i.e. answering "no" to item 35).

H. Definitions

Household was defined as a person or a group of persons who commonly lived together and took meals from a common kitchen unless exigencies of work prevented them from doing so. There could be household of persons related by blood or a household of unrelated persons or a mix of both. Collective living arrangements such as boarding houses, hotels, messes, jails, army camps boarding schools, ashrams, etc. were not considered a household and were not included in the study.

Current residence: The place (rural or urban) where the respondent was living at the time of the interview. The categorization of rural/urban areas was done as listed in State registers.

Usual residence: The place where the respondent had lived for > 75% of his life (rural, urban or mixed).

Head of the household was the person acknowledged as such by members of household, and was the person who made important decisions for the household and was responsible for its upkeep and maintenance.

Asthma was diagnosed if the respondent answered in “yes” to one of items 14 and 15, AND to one of the item nos. 25, 26 and 27.

14. Wheezing or whistling sound from chest or

15. Chest tightness or breathlessness in morning

AND

25. Having suffered from asthma or

26. Having an attack of asthma in past 12 months or

27. Using inhaled or oral bronchodilators

Chronic bronchitis was defined by the presence of cough with expectoration for 3 or more months in a year for two or more years i.e. “Yes” to item number 22 and to one of the two items n. 20 and 21.

20. Do you usually cough first thing in the morning?

21. Do you usually bring out phlegm from your chest first thing in the morning?

22. Do you usually bring up phlegm from your chest most of the morning for at least three consecutive months during the year?

RESULTS

I. Demographic profile of Study Population

1. Residence

A total of 169575 individuals were surveyed across twelve centres. Both urban and rural clusters were covered at all centres, except at Secunderbad, where only urban area was surveyed. The rural:urban ratio for population surveyed ranged from 1.46 at Chennai to 4.28 at Berhampur, with an overall figure of 1.79 for the total study population (Table 1). The total study population (based on 'current residence') of 12 urban and 11 rural samples consisted of 60764 and 108811 respectively (Table 1A). The distribution was somewhat different based on the "usual residence" (Table 1B) which could be predominantly rural, predominantly urban or mixed (i.e. both urban and rural at different times).

2. Age and gender

The sample comprises of individuals of over 15 years up to over 85 years of age (Table 2A). The male:female ratio ranged from 0.63 at Chennai to 1.14 at Bikaner, although the gender distribution was almost equal for the total study population (Table 1). In all, 85105 men (mean age 37.3 ± 16.0 years) and 84470 women (mean age 36.9 ± 15.8 years) were interviewed. The age-wise distribution showed a preponderance between 15-54 years (for both male and female subjects (Figure 2).

The age and sex-wise distribution for each centre are separately shown (Table 3). Nearly half the study population was aged below 35 years, and 7.7% men and 7.3% women were 65 years or older (Table 2). Age distribution of respondents was largely similar in rural and urban areas at all centres, although the proportion of young individuals (less than 25 years) was slightly less in urban Kolkata and urban Mumbai (Table 3).

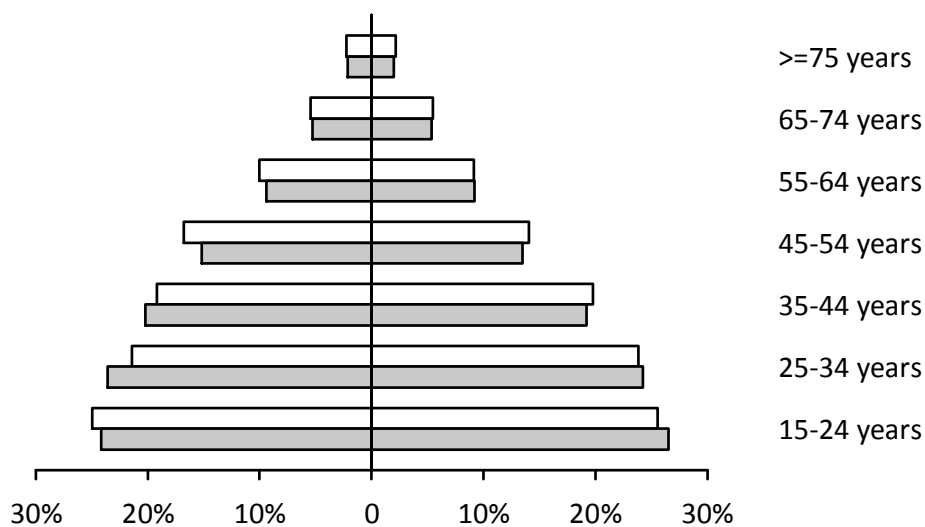


Figure 2. Age and gender distribution. Bars on left reflect urban and those on right reflect rural population; hollow bars reflect men and solid bars reflect women.

3. Occupation

The subjects were grouped into the following categories based on their broad area of occupation. The sex-wise occupation distribution of different centres are shown (Table 4). A large majority of women (69.4% rural and 66.9% urban) were grouped as “house-wives” i.e. engaged in household work, except at rural Mumbai and rural Nagpur, where a good proportion worked as farmers or unskilled labourers (Table 4). There were very few who were employed in outdoor jobs. The next most common category amongst women was “unemployed” (mostly students) or retired men had varying occupations at different centres, and 24.1% were not currently working (unemployed or retired) (Table 4).

4. Education

Level of education was assessed from the number of years spent in formal education at schools and colleges, i.e. none (no formal education), 1-5 years, 6-10 years, 11-15 years and more than 15 years. There were a larger percentage of women (28.4%) versus men (13.7%) who did not go to schools. There were 17.4% urban and 34.7% rural women who did not go to school (Table 5). Urban women more often had more than five years of education (73.5%) as compared to rural women (50.0%). The same was true for men i.e. 85.1% urban and 65.6% rural men had more than five years of formal education (Table 5).

The centre-wise distributions for years of education are shown in Tables 5. The educational profile also varied greatly across centres and between rural and urban areas, with generally better literacy rates among men and in urban areas (Table 5).

5. Socio-economic status

The subjects were grouped as belong to low, middle or high socio-economic status based on interviewer’s perception. Most individuals in rural areas had a low socioeconomic status, and most individual in urban areas had a medium socioeconomic status (Table 6).

II. Exposure Variables

1. Smoking History

Amongst men, history of ‘ever smoking’ was present in 18.5% of male (Rural 20.6%, Urban 14.7%) subjects. In all, 18.5% men (ranging from 4.5% at urban Mumbai to 40.7% at urban Kolkata) and 0.5% women (ranging from none at rural Nagpur to 2.2% at rural Shimla) were ever-smokers (Table 7). Bidis were the most common smoking product in rural areas, except at Berhampur and Trivandrum, where cigarettes and hookah respectively were more common (Table 8). While cigarette smoking was more common in urban individuals, bidi smoking was commoner amongst rural subjects; hookah was smoked by about 6 percent men in both urban and rural subjects (Table 8). Bidis were also the commonest smoking product in urban areas of Ahmedabad, Bikaner, Mysore and Nagpur (Table 8). Among smokers 80-100% individuals were still smoking at time of interview, and less than 8% of the total study population had quit smoking for a year or more (Table 8). Men had generally been initiated into the habit early in life (median around 20 years of age), except in rural Mumbai, where men started smoking at a median age of 31 years (Table 8). Average number smoked was about 10 to 12 cigarettes everyday.

2. Passive Exposure to Tobacco Smoke (Environmental Tobacco Smoke (ETS) Exposure)

Ever exposure to household environmental tobacco smoke (ETS) was generally greater in rural areas and among women, and more than half of all women interviewed in rural areas of Ahmedabad, Bikaner, Chennai, Kolkata and Mysore had been exposed to household ETS (Table 9). Most men reported exposures only in childhood, whereas women reported greater exposure in adulthood (Table 10). During childhood, fathers caused the most frequent exposure (Table 11). Among women, exposure during adulthood was most frequently related to smoking husbands (Table 12).

3. Domestic indoor combustion exposure

History of cooking at home was obtained to assess an individual's exposure to domestic indoor combustion pollutants. About 90 percent of rural and 86 percent of urban women were engaged in the current or past cooking; history of cooking amongst men was limited to about 3.5 percent (Table 13).

There were a few centre-wise differences. In the two Eastern centres, the current cooking history amongst women was lower - between 55 to 60 percent at Guwahati and 60 to 70 percent in Kolkata (Table 13). Less than 4% of all men interviewed (except at Shimla where the figure was close to 15%) had ever cooked regularly (Table 13). The vast majority of households had a separate kitchen (except at Trivandrum and rural areas of Mumbai) (Table 14). Kitchen ventilation of inadequate in a sizeable proportion at rural areas of Ahmedabad, Bikaner, and Mumbai (Table 14). More than 92% of all respondents regularly cooking (currently or in past), had done so for more than three weeks in a month (Table 14). Although there were regional differences, wood was the most common cooking fuel in rural areas, and LPG in urban areas (Table 14). The vast majority had started cooking early in life (median 15 years and 16 years in rural and urban areas respectively), and spent a median of three hours daily in the kitchen (Table 14).

4. Family history of asthma

In all, 8990 individuals (5.3%) had a first degree relative with history suggestive of bronchial asthma, more commonly in men – the male : female ratio was 1.9 for rural and 1.2 for urban subjects (Table 15). High figures of more than 15% were reported by men in rural Bikaner, and rural and urban Kolkata (Table 15).

III. Prevalence Data

1. Chronic respiratory symptoms

The prevalence of respiratory symptoms enquired through the IUATLD questionnaire are summarized in Table 16. One or more of the twelve symptoms enquired were elicited in 14479 (8.5%) respondents. There was a large variation between individual symptoms across centres, among men and women, and between rural and urban localities. In particular, the frequency of cough and phlegm was notably high at Kolkata and Trivandrum, and among men in rural Mumbai (Table 16).

2. Asthma prevalence

The pooled prevalence of asthma (using the questionnaire definition) across the twelve centres was 2.05% (2.28% in rural and 1.64% in urban areas). There were wide variations across different centres (Figure 3, Table 17). Prevalence was quite low in urban Secunderabad (0.37%) and rural Mumbai (0.74%), and relatively high at Kolkata (rural 4.52% and urban 5.52%) and rural Trivandrum (4.45%). Prevalence standardized to age distribution as per the 2001 census figures was largely similar to the observed prevalence (Table 18).

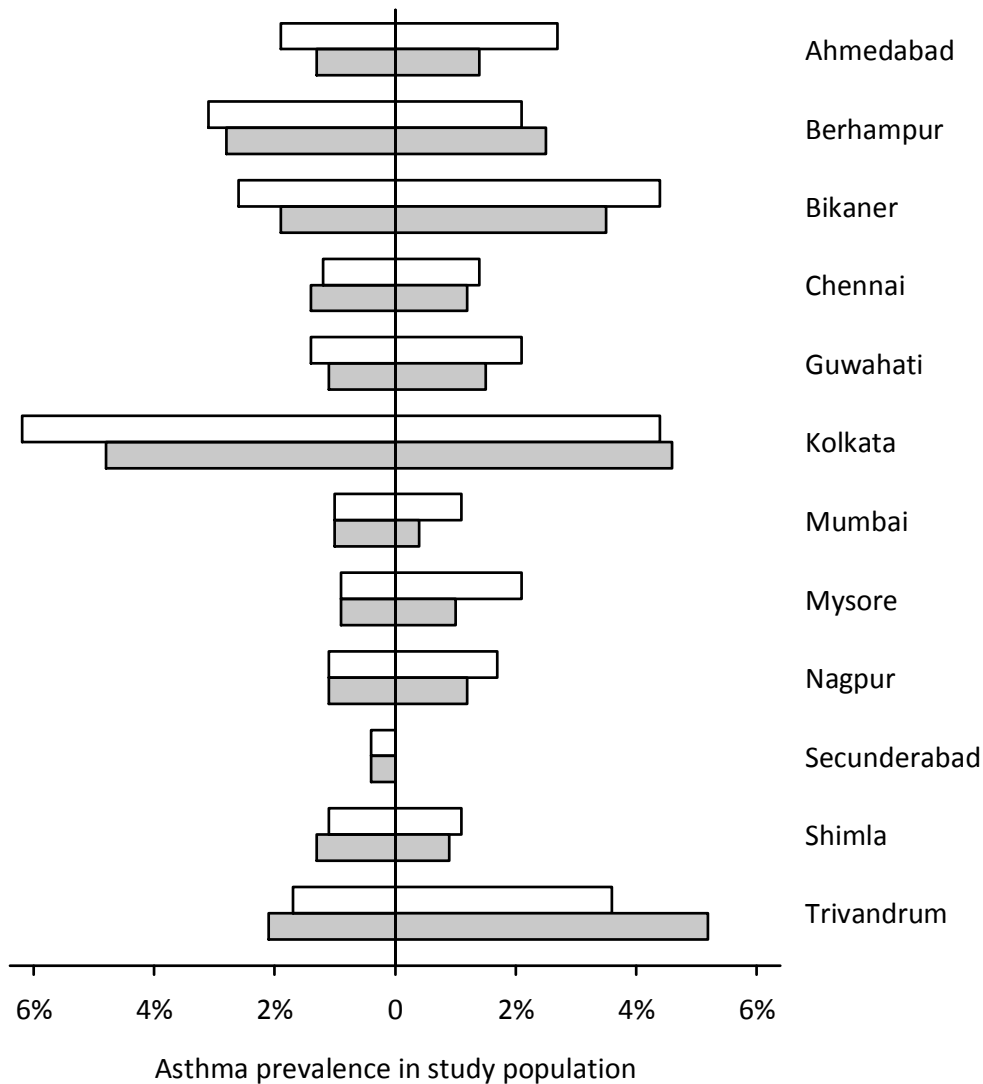


Figure 3. Prevalence of asthma in study population. Bars on left reflect urban and those on right reflect rural population; hollow bars reflect men and solid bars reflect women.

3. Analysis of risk factors for asthma

The association of various demographic and exposure variables with asthma was studied. Those having asthma (using the questionnaire definition) were compared with the remaining study population.

More than 70% of asthmatics were residents of rural areas, compared to 64% of the remaining study population (Table 19). These results (both overall and at individual centres) were largely in tune with the rural:urban ratio of the respondents interviewed. The odds of asthma were significantly lower among urban residents at Ahmedabad, Bikaner, Guwahati, Kolkata, Mysore and Trivandrum, and significantly higher at Mumbai, on univariate analysis (Table 20). When usual residence was considered, more than 60% asthmatics had usually resided in rural area, and only less than 2% has lived substantially in both rural and urban areas (Table 21). The odds of asthma were significantly lower among urban residents at Ahmedabad, Bikaner, Guwahati, Kolkata and Mysore, on univariate analysis (Table 22).

In all, 53.5% asthmatics were men, as compared to 50.1% of nonasthmatics (Table 23). Again, these results (both overall and at individual centres) were largely in tune with the male:female ratio of the respondents interviewed. However, the odds of asthma were significantly lower among women at Ahmedabad, Bikaner, Guwahati, Mumbai, Mysore and Trivandrum, on univariate analysis (Table 24).

Overall, 31.4% asthmatics were aged less than 45 years, and another 59.6% were aged 45-74 years (Table 25). This was significantly different ($p < 0.001$) than age distribution in the remaining study population, in which 69.4% individuals were younger than 45 years (Table 25). On univariate analysis, in general the odds of asthma progressively increased with advancing age (Table 26).

Most asthmatics (54.8%) had low socioeconomic status, and only a small minority (4.8%) had high socioeconomic status. The distribution of socioeconomic strata of asthmatics was significantly different from nonasthmatics at Ahmedabad, Bikaner, Chennai, Guwahati, Mumbai, Shimla and Trivandrum (Table 27). On univariate analysis, those with low socioeconomic status had significantly higher odds of asthma at Ahmedabad, Chennai, Guwahati, and Trivandrum, while at Mumbai the odds of asthma were lower for low and higher for high socioeconomic status (Table 28).

Significantly more number of asthmatics had a first degree relative with asthma, as compared to nonasthmatics, at all centres (Table 29). On univariate analysis, the odds of having asthma were 2.36 to 19.59 fold higher for those with such family history at different centres (Table 30).

Combining data from all centres, 28.3% asthmatics were ever smokers, with proportions exceeding 40% at Ahmedabad, Bikaner and Mysore (Table 31). On univariate analysis, the odds of asthma were uniformly and significantly increased among ever smokers at all centres, with cumulative odds ratio of 3.9 on analyzing the entire study group (Table 32). The usage of smoking products also differed significantly between nonasthmatics and asthmatics at all centres (Table 33). On univariate analysis, bidi smoking was associated with significantly higher odds of asthma at all centres except Berhampur (Table 34). Similarly cigarette smoking was associated with significantly higher odds of asthma at all centres except Ahmedabad, Bikaner, Nagpur and Secunderabad (Table 34).

Overall, significantly more asthmatics were ever exposed to household ETS than nonasthmatics (Table 35). The odds of having asthma were significantly increased among those thus exposed at Ahmedabad, Bikaner, Chennai, Guwahati and Trivandrum, and significantly decreased at Kolkata (Table 36). When analysis was restricted to nevermokers, significantly more asthmatics were still ever exposed to household ETS than nonasthmatics in the entire study population (Table 37). The odds of having asthma were significantly

increased among never-smokers thus exposed at Ahmedabad, Bikaner, Chennai, Guwahati, Secunderabad and Trivandrum, and significantly decreased at Kolkata (Table 38).

Overall, the proportion of persons exposed to ETS in adulthood (either alone, or both in childhood and adulthood) was significantly higher among asthmatics (Table 39). On univariate analysis, childhood exposure alone was associated with higher odds of asthma at Ahmedabad, Berhampur and Guwahati, and adulthood exposure alone was associated with higher odds of asthma at Chennai, Guwahati, Mysore, Secunderabad, Shimla and Trivandrum (Table 40). When analysis was restricted to never-smokers, significantly more asthmatics were still ever exposed to household ETS than nonasthmatics (Table 41). On univariate analysis, childhood exposure alone was associated with higher odds of asthma at Guwahati and Trivandrum, and adulthood exposure alone was associated with higher odds of asthma at Ahmedabad, Bikaner, Chennai, Guwahati, Mysore, Nagpur, Secunderabad, Shimla and Trivandrum (Table 42). Childhood exposure alone was associated with lesser odds of asthma at Berhampur, Kolkata, and Mysore (Table 42).

Overall, regular cooking (current or in past) habit was significantly different among asthmatics and nonasthmatics at all centres except Secunderabad (Table 43). On univariate analysis, regular cooking in past was associated with higher odds of asthma at all centres except Secunderabad (Table 44). Current regular cooking was associated with higher odds of asthma only at Trivandrum, and with decreased odds of asthma at Ahmedabad, Bikaner, Guwahati, Mumbai and Nagpur (Table 44).

Overall, the patterns of predominant cooking fuel used by asthmatics were significantly different from nonasthmatics, with wide variations across centres (Table 45). On univariate analysis, predominant use of LPG for cooking was associated with decreased odds of asthma at Ahmedabad, Bikaner and Mysore (Table 46). Predominant use of kerosene or coal at Kolkata, and dung cake at Nagpur, were associated with higher odds of asthma (Table 46). Overall, a lesser proportion of asthmatics cooked using a separate kitchen (Table 47). As compared to those not cooking, persons cooking in a separate kitchen had lower odds of asthma at Ahmedabad and Mysore, and higher odds of asthma at Shimla and Trivandrum (Table 48). Adequacy of kitchen ventilation was significantly different among asthmatics and nonasthmatics at Ahmedabad, Mumbai, Mysore, Shimla and Trivandrum (Table 49). As compared to those not cooking, persons cooking in a well ventilated kitchen had lower odds of asthma at Ahmedabad and Mysore (Tables 50).

The self-stated frequency of cooking among asthmatics and nonasthmatics differed across various centres (Table 51). On univariate analysis, regular but infrequent cooking (averaging seven days or less in a month) was associated with higher odds of asthma at Ahmedabad, Guwahati, Kolkata, Shimla, Bikaner and Nagpur (Table 52). Results were variable for other cooking frequencies (Tables 52).

Multiple regression models were generated to assess associations of asthma with usual residence, gender, age, socioeconomic status, family history of asthma, smoking (type of product predominantly smoked), timing of household ETS exposure and cooking fuel used (Tables 53). On analysis study population at individual centres, age, family history of asthma and tobacco smoking were consistently associated with higher odds of asthma at all centres (except Secunderabad) (Table 53). There was considerable heterogeneity in associations of other independent variables. For instance, urban residence was associated with higher odds of asthma at Berhampur, but lower odds at Bikaner and Chennai. Medium socioeconomic

status was associated with decreased odds of asthma only at Chennai, Guwahati and Trivandrum. Exposure to household ETS in adulthood alone was associated with increased odds of asthma at Chennai, Mysore and Secunderabad. Exposure to household ETS in childhood alone was associated with increased odds of asthma at Guwahati and Trivandrum, and with decreased odds of asthma at Kolkata. Regular cooking using LPG, kerosene, coal or wood at Kolkata, using dung cakes at Bikaner, and using kerosene at Shimla, were associated with higher odds of asthma. After pooling the entire data and additionally adjusting for between-centre differences, advancing age, asthma in first degree relative, use of any smoking product, ETS exposure in adulthood or both childhood and adulthood, and using LPG, coal, wood or dung cake, were associated with increased odds of asthma (Table 53, Figure 4).

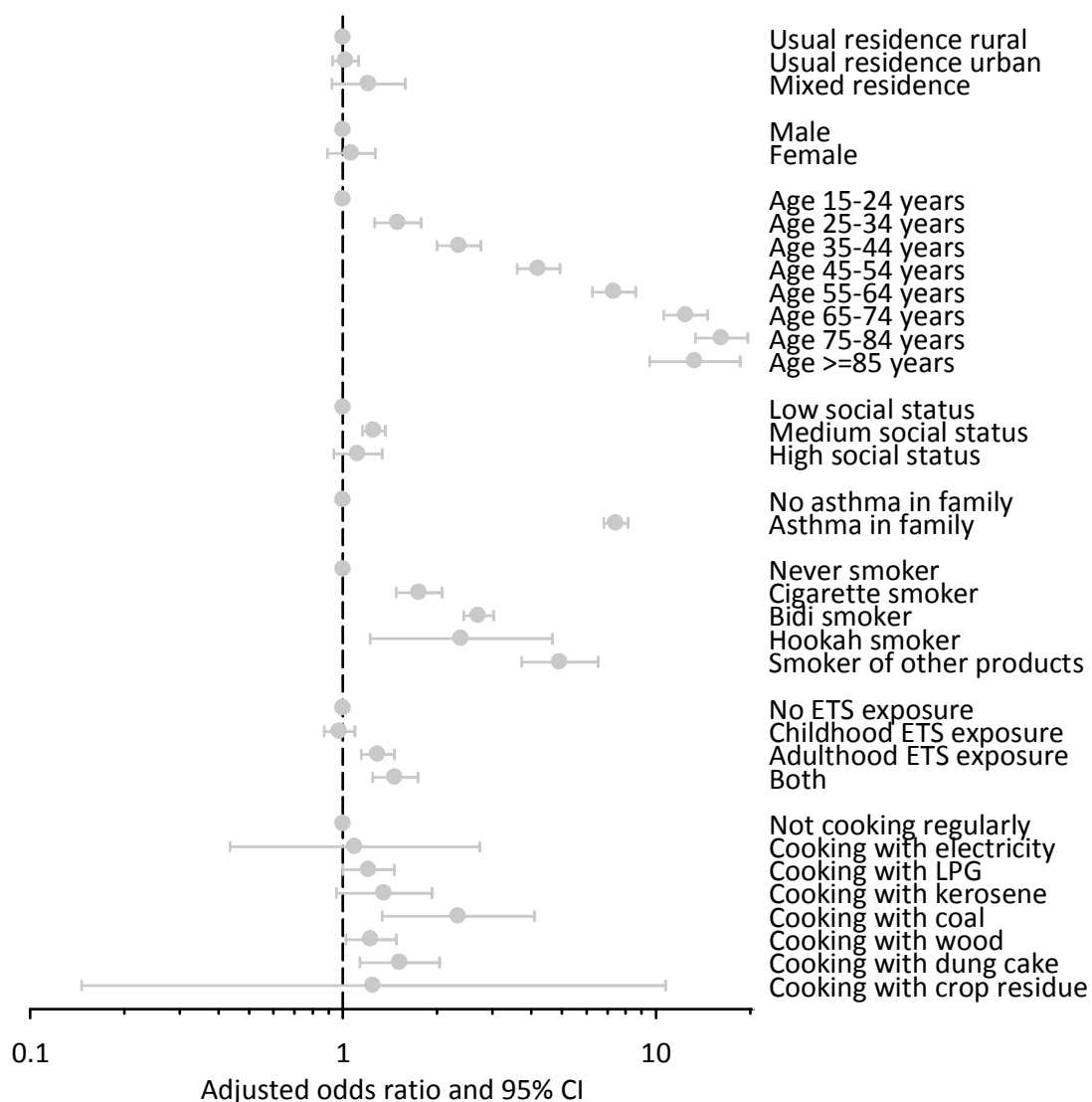


Figure 4. Adjusted odds ratios, and corresponding 95% confidence intervals (CI), for various demographic and exposure variables influencing occurrence of asthma.

4. Prevalence of chronic bronchitis

The pooled prevalence of chronic bronchitis (using the questionnaire definition) across the twelve centres was 3.49% (4.07% in rural and 2.50% in urban areas). There were wide variations across the different centres (Table 54). Prevalence was quite low in urban Guwahati, Mumbai and Nagpur (0.61%, 0.91% and 0.67% respectively), and relatively high at rural Bikaner and Trivandrum (7.00% and 13.54% respectively). Prevalence standardized to the age distribution as per the 2001 census figures was largely similar to the observed prevalence (Table 55). Nearly half of those diagnosed as having chronic bronchitis were also diagnosed as having asthma using the questionnaire definition of asthma (Table 56).

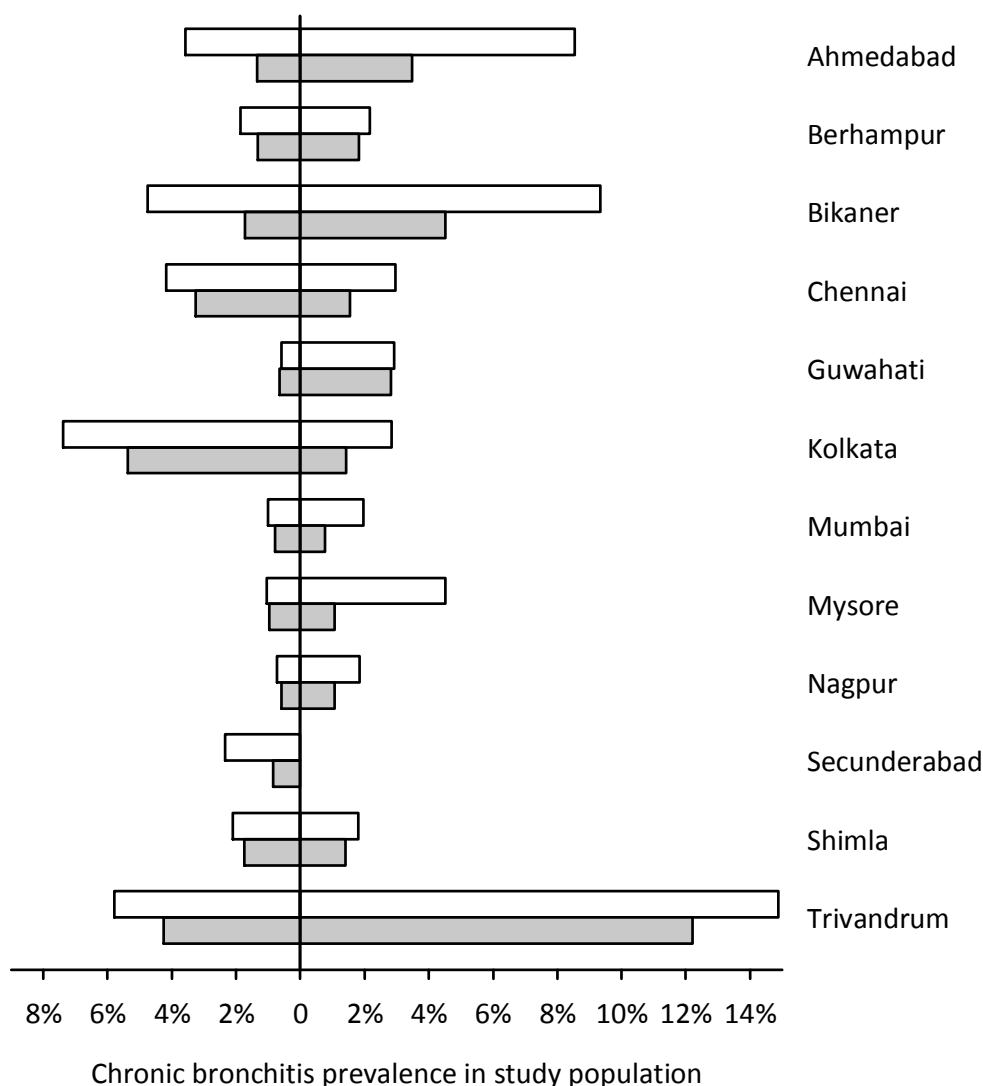


Figure 5. Prevalence of chronic bronchitis. Bars on left reflect urban and those on right reflect rural population; hollow bars reflect men and solid bars reflect women.

5. Analysis of risk factors for chronic bronchitis

More than 70% of those with chronic bronchitis were residents of rural areas, compared to 62.4% of the remaining study population (Table 57). These results (both overall and at individual centres) were largely in tune with the rural:urban ratio of the respondents

interviewed. In the entire study population, the odds of chronic bronchitis were significantly lower among urban residents at Ahmedabad, Bikaner, Guwahati, Mysore, Nagpur and Trivandrum, and significantly higher at Kolkata and Chennai, on univariate analysis (Table 58). When usual residence was considered, more than 50% persons with chronic bronchitis had usually resided in rural area, and only 1.3% had lived substantially in both rural and urban areas (Table 57). The odds of chronic bronchitis were significantly lower among urban residents at Ahmedabad, Bikaner, Guwahati, Mysore, Nagpur and Trivandrum, and significantly higher at Kolkata and Chennai, on univariate analysis (Table 60).

In all, 62.1% individuals with chronic bronchitis were men, as compared to 50.4% of remaining population (Table 61). Again, these results (both overall and at individual centres) were largely in tune with the male:female ratio of the respondents interviewed. However, the odds of chronic bronchitis were significantly lower among women at all centres except Berhampur, Guwahati and Shimla, on univariate analysis of the entire study population (Table 62).

Overall, 17.2% persons with chronic bronchitis were aged less than 45 years, and another 10.8% were 75 years or more (Table 63). This was significantly different than the age distribution in the remaining study population. On univariate analysis, in general the odds of chronic bronchitis progressively increased with advancing age (Tables 64).

Most persons with chronic bronchitis (62.9%) had low socioeconomic status, and a small minority (3.2%) had high socioeconomic status. The distribution of socioeconomic strata of those with chronic bronchitis was significantly different from those without, at all centres except Mumbai and Shimla (Table 65). On univariate analysis, those with lower socioeconomic status had significantly higher odds of chronic bronchitis at Ahmedabad, Chennai, Guwahati, Mysore, Nagpur, Secunderabad and Trivandrum, while at Kolkata odds of chronic bronchitis were lower for both low and high socioeconomic status (Table 66).

Combining data from all centres, 41.0% of all those with chronic bronchitis were ever smokers (Table 67). At all centres, a significantly higher proportion of persons with chronic bronchitis were ever smokers as compared to all others (Table 67). On univariate analysis, the odds of chronic bronchitis were uniformly and significantly increased among ever smokers at all centres, with cumulative odds ratio of 4.1 on analyzing the entire study group (Table 68).

The predominant usage of smoking products also differed at various centres (Table 69). On univariate analysis of the entire study population, bidi smoking was associated with significantly higher odds of chronic bronchitis at all centres (Table 70). Similarly cigarette smoking was associated with significantly higher odds of chronic bronchitis at all centres except Ahmedabad, Berhampur, Guwahati and Nagpur (Table 70).

Overall, significantly more persons with chronic bronchitis were ever exposed to household ETS than those without (Table 71). Odds of chronic bronchitis were significantly increased among those thus exposed at Ahmedabad, Bikaner, Guwahati, Shimla and Trivandrum (Table 72). When analysis was restricted to never smokers, significantly more persons with chronic bronchitis were still ever exposed to household ETS, than those without (Table 73). The odds of chronic bronchitis were significantly increased among never smokers thus exposed at Ahmedabad, Bikaner, Guwahati, Secunderabad, Shimla and Trivandrum (Table 74). Overall, the proportion of persons exposed to ETS in childhood was significantly higher among those with chronic bronchitis (Table 75). On univariate analysis,

childhood exposure alone was associated with higher odds of chronic bronchitis at Ahmedabad, Bikaner, Mysore, Secunderabad and Trivandrum, and adulthood exposure alone was associated with higher odds of chronic bronchitis at Guwahati, Shimla and Trivandrum (Table 76). Adulthood exposure alone was associated with significantly lesser odds of chronic bronchitis at Kolkata (Tables 76). When this analysis was restricted to never-smokers, significantly more persons with chronic bronchitis were still ever exposed to household ETS in childhood (Table 77). On univariate analysis, childhood exposure alone was associated with higher odds of chronic bronchitis in never-smokers at Ahmedabad, Secunderabad and Trivandrum, and adulthood exposure alone was associated with higher odds of chronic bronchitis at Ahmedabad, Guwahati, Shimla and Trivandrum (Table 78).

Overall, regular cooking (current or in past) habit was significantly different among those with and without chronic bronchitis at all centres except Secunderabad and Shimla (Table 79). On univariate analysis, current cooking was associated with lower odds of chronic bronchitis at all centres except Berhampur, Secunderabad and Shimla (Table 80). Regular cooking in past was associated with higher odds of chronic bronchitis only at Guwahati and Trivandrum (Table 80). Overall, the patterns of predominant cooking fuel used by persons with chronic bronchitis were significantly different from those without, with wide variations across centres (Table 81). On univariate analysis, predominant use of LPG for cooking was associated with decreased odds of chronic bronchitis at all centres, except Berhampur, Kolkata, Mumbai, Secunderabad, and Shimla (Table 82). Predominant use of coal at Berhampur, and wood at Guwahati, were associated with higher odds of chronic bronchitis (Table 82). Overall, a lesser proportion of those with chronic bronchitis cooked using a separate kitchen (Table 83). As compared to those not cooking, persons cooking in a separate kitchen had lower odds of chronic bronchitis at all centres except Berhampur, Guwahati, Mumbai, Secunderabad and Trivandrum (Tables 84). Those cooking in non-separate kitchens had higher odds at Guwahati and Shimla, and lower odds at Ahmedabad, Bikaner, Mumbai and Trivandrum. Adequacy of kitchen ventilation was significantly different among those with and without chronic bronchitis at all centres except Berhampur and Nagpur (Table 85). Persons cooking in a well ventilated kitchen had lower odds of chronic bronchitis at all centres except Berhampur, Guwahati, and Nagpur, as compared to those not cooking, (Tables 86). Those cooking in poorly ventilated kitchens had higher odds of chronic bronchitis at Guwahati and Shimla, and lower odds at Ahmedabad, Bikaner, Chennai, Mumbai and Mysore. The self-stated frequency of cooking among those with and without chronic bronchitis differed across various centres (Table 87). On univariate analysis of the entire study population, regular cooking (averaging more than three weeks in a month) was associated with lower odds of chronic bronchitis at Ahmedabad, Bikaner, Chennai, Kolkata, Mumbai, Nagpur, Secunderabad and Trivandrum (Table 88).

Multiple regression models were generated to assess associations of chronic bronchitis with usual residence, gender, age, socioeconomic status, smoking (type of product predominantly smoked), timing of household ETS exposure and cooking fuel used (Table 89). On analysis for individual centres, age and tobacco smoking were consistently associated with higher odds of chronic bronchitis at all centres (Table 89). There was considerable heterogeneity in associations of other independent variables. For instance, urban residence was associated with higher odds of chronic bronchitis at Chennai and Kolkata, but lower odds at Ahmedabad, Bikaner, Guwahati, Mysore and Secunderabad.

Medium socioeconomic status was associated with decreased odds of chronic bronchitis only at Ahmedabad, Kolkata, Chennai, Guwahati, Mysore, Secunderabad and Trivandrum. Exposure to household ETS in adulthood alone was associated with increased odds of chronic bronchitis at Guwahati, Shimla, and Trivandrum. Exposure to household ETS in childhood alone was associated with increased odds of chronic bronchitis at Bikaner, Kolkata, Secunderabad and Trivandrum. Regular cooking using coal at Berhampur, using LPG, wood or dung cake at Bikaner, using wood at Guwahati, using dung cakes at Bikaner, and using LPG at Secunderabad, were associated with higher odds of chronic bronchitis. After pooling the entire data and additionally adjusting for between-centre differences, advancing age, use of any smoking product, and ETS exposure in adulthood and/or childhood, were associated with increased odds of chronic bronchitis (Table 89, Figure 6).

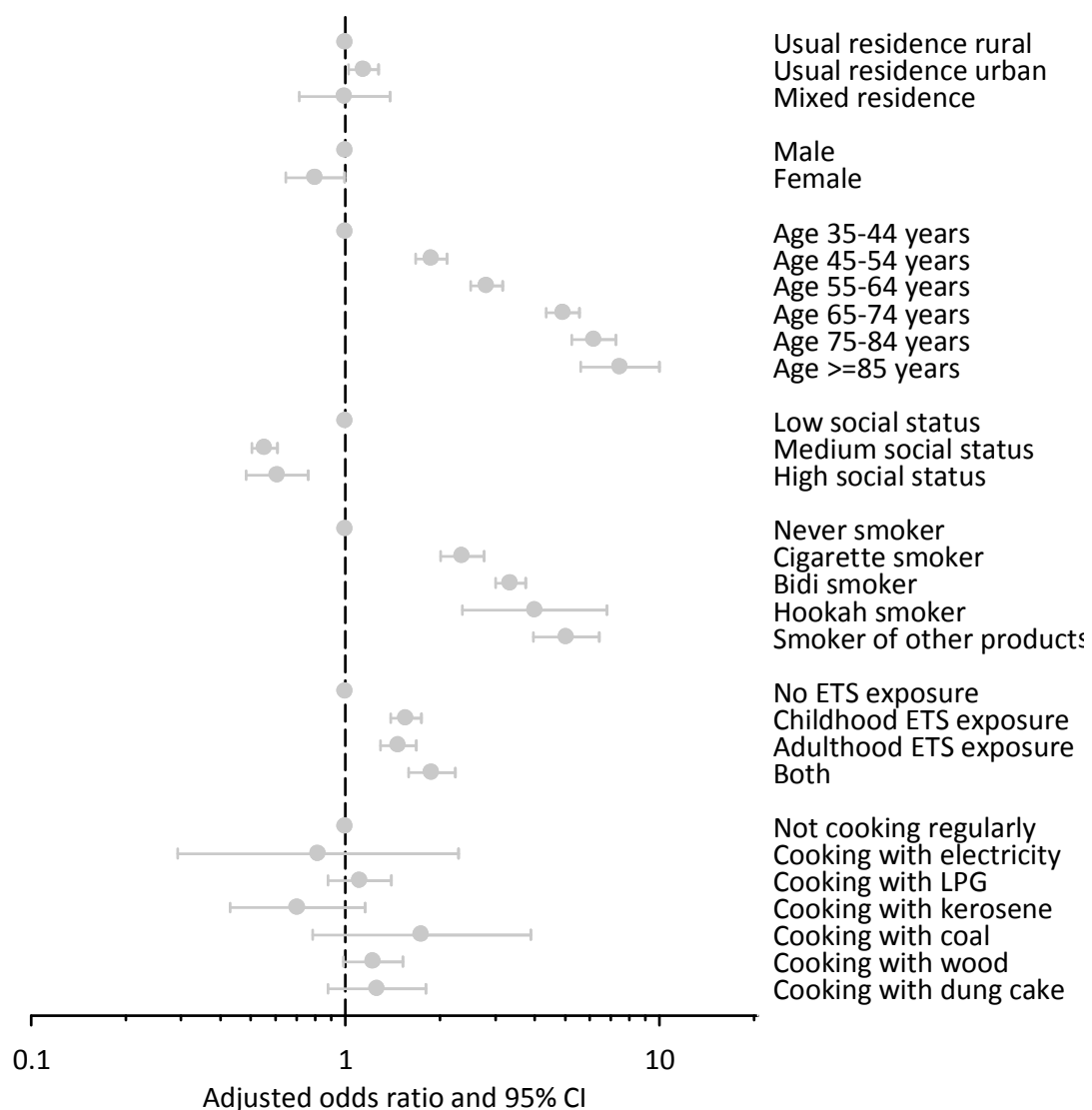


Figure 6. Adjusted odds ratios, and corresponding 95% confidence intervals (CI), for various demographic and exposure variables influencing occurrence of chronic bronchitis.

IV. Estimates of national burden

1. Asthma

The population of Indians aged 15 years or more was estimated at over 66 million as per the 2001 census data, with a nearly equal gender distribution. Observed prevalence of asthma in various age and gender categories in the entire study population was standardized to the corresponding national figures, and finally summated to get estimates of national burden. The overall projected estimates (as per 2001 census figures) show that nearly 13 million people aged 15 years or more have asthma, with a slightly higher disease burden among men (Table 90). This corresponds to 1.95% population in this age group.

2. Chronic bronchitis

The population of Indians aged 35 years or more was estimated at about 31.5 million as per the 2001 census data, with a nearly equal gender distribution. Observed prevalence of chronic bronchitis in various age and gender categories in the entire study population was standardized to the corresponding national figures, and finally summated to get estimates of national burden. The overall projected estimates (as per 2001 census figures) show that nearly 11 million people aged 35 years or more have chronic bronchitis, with a much greater disease burden among men (Table 90). This corresponds to 3.48% population in this age group.

DISCUSSION

Millions of people around the world suffer from chronic respiratory diseases (CRD), particularly from asthma and COPD. The two-together may account for about 380 million individuals (Asthma = 300 million, COPD = 80 million) globally in the earlier estimates.³⁴⁻³⁶ Data on the CRD risk factors, burden and surveillance are either scarce or unavailable in most developing countries.³⁴ The scene in India has been somewhat similar, although a few studies from different centres are available.

The present study undertaken at four centres between 2004-05 (INSEARCH Phase I) and 12 other centres between 2007-09 (INSEARCH Phase II) attempts to fill the gaps in our knowledge on the prevalence and risk factors of the two most common CRDs. The results of Phase I study, conducted at Chandigarh, Delhi, Bangalore and Kanpur were published earlier in 2006.^{5,8,36,37} The Phase II study reports the prevalence and risk factors at 12 other different centres spread in different parts of India.

Methodology and Questionnaire

This study allowed a large sample of adult population randomly selected on the basis of a cluster-design. Importantly, the common problems of variations in the design and methodology of multiple studies were adequately avoided by adopting a uniform design at all the centres. Intensive training of the study-teams and monitoring during the study period further ensured uniformity.

The questionnaire used for the study was developed and tested by the Coordinating Centre at Chandigarh. It was based on the IUATLD Bronchial Symptom questionnaire (1984).^{4,33} The IUATLD questionnaire had been used in the past in different countries. When used at four clinical centres in Europe (at Helsinki, Berlin, Paris and Nottingham), the reliability of the questionnaire and its ability to predict the bronchial response to histamine, was shown to be good.³⁸ We had earlier obtained the necessary permission along with the questionnaire and the notes for users from the International Union Against Tuberculosis (IUAT). We had used some of the items and also added different sections on risk-factors on the basis of the local feasibility.⁴ The questionnaire was translated and tested in different local languages. The questionnaire definition of asthma and of COPD were also locally developed by us on the basis of the sensitivity and specificity of the questionnaire-items.

It is important here to mention that the questionnaire-methodology as was used in this study has several advantages for a field-study. It is relatively simple and cheap to administer a questionnaire which does not require the use of equipment and skilled technicians required for laboratory-testing. Self-administered questionnaire are also used by some investigators. But self-administered questionnaire method is not as efficient and accurate as a questionnaire administered by a trained-interviewer. We have employed the interviewer-administered method which is more standardized and uniform.

The questionnaire-method suffers from the disadvantages of wrong reporting and misinterpretations. The replies of an individual also depend upon his/her understanding, memory of past events, the current symptomatology and other psycho-socio-cultural factors. Several of the questions may employ terms differently understood and interpreted

by different individuals. To take care of some of the issues as above, the question-items were translated in the regional languages, as were used by the local population. This was done by the investigators of different centres with the help of experts in local languages and dialects.

The critics of a questionnaire-methodology often complain of the lack of sensitivity and/or specificity of the method in diagnosing a disease. This is generally taken care of by employing a validated and reliable questionnaire. The questionnaire used in the study was tested for its repeatability, reproducibility and validity for diagnosis.⁴ As stated earlier, all the tests for the questionnaire had demonstrated a good reliability.

In spite of its reliability, a questionnaire-diagnosis made in a population study is not necessary the same as a clinical diagnosis made in a doctor's clinic or a hospital. But the epidemiological diagnosis established in the field is meant to find answers to research questions on prevalence, burden, risk-factors, other epidemiological associations and assertions. This diagnosis is not generally meant for administration of treatment to any individual patient.

The questionnaire diagnosis can also under-estimate or over-estimate a disease depending upon its sensitivity and specificity³³. A too sensitive method can over-diagnose while a too specific questionnaire may under-diagnose a disease. Again, a population-prevalence study is generally aimed at looking for a "prevalence of the true disease" which may not be the "total-prevalence". A specific-disease questionnaire provides a better estimate, of the "minimum" or the "least" prevalence of the true-disease. On the other hand, a sensitive questionnaire may actually provide a "higher incidence" by including false-positive cases. Such exaggerated figures on prevalence do not reflect the specific-disease information of importance.

Respiratory Disease Prevalence

1. Non-specific chronic respiratory symptoms

The presence of a chronic respiratory symptom (such as wheeze, cough, phlegm and expectoration) is abnormal, although not necessarily pathogenomic of a disease such as asthma, chronic bronchitis or COPD. Presence of one or more such chronic symptoms not fulfilling the criteria of diagnosis of asthma, CB or COPD may indicate the diagnosis of some other respiratory disease (e.g. hypersensitivity pneumonitis, interstitial lung disease, occupational or environmental disease, bronchiectasis etc.) which is not possible to diagnose with the help of a structured-questionnaire alone. A chronic symptom may also point towards the occult diagnosis or the evolution of diseases such as asthma or COPD.

A variable percent of people in the study had one or the other symptoms. Wheezing was present in 2-3 percent individuals in this study. Although normally considered as strongly indicative of, is not diagnostic of asthma. Wheezing in adults may also be present in patients with COPD or an interstitial lung disease. It may also point towards other conditions such as a cardiac or some other airway disease. On the other hand, cough and breathlessness also occur in asthma as well as in COPD. Both symptoms are more non-specific than wheezing and occur in a large number of medical diseases. Their presence cannot be used as diagnostic marker of either asthma or COPD.

2. Asthma

The prevalence of asthma in this study was seen in 2.05 percent of total individuals. There was a rural predominance at most centres. It was somewhat more common amongst males. As discussed earlier, the overall prevalence rate of about 2 percent may in fact indicate an 'under estimation' in view of the strict, high-specificity criteria used for diagnosis. Several of the global estimates of 'current-asthma' point to variable rates from 1.2 and 3.7% in Belgium to as high as 25.5% in Australia.³⁹ The prevalence rates are also different if one uses the definition of 'diagnosed asthma', 'Recent wheeze' or 'Airway hyper-responsiveness (AHR)'. The global burden of asthma has been assessed for the Global Initiative for Asthma (GINA) for different regions and countries.⁴⁰ The mean prevalence of clinical asthma for Southern Asia (Bangladesh, Bhutan, India, Nepal, Seychelles and Sri Lanka) was assessed as 3.5 percent for a total population of 1.21 billions.⁴⁰ But several of these estimates are based on limited data from a particular region and do not truly represent the overall population prevalence.

The age-adjusted prevalence of 1.97 percent reflects an enormous overall burden of asthma in India. For a total population of 1.028 billion (including children and adults) as per Census of India (2001),⁴¹ the minimum burden of asthma is about 21 millions for all age groups. The figure could actually be higher considering the prevalence rates as somewhat higher in children. As discussed above, this is the least prevalence of the true-disease. If one uses more sensitive criteria such as the "wheeze alone" or the presence of bronchial hyper-responsiveness as had been used in some other studies, the estimates will be very high.

The study looks into the role of different risk factors for asthma with the help of multiple logistic regression models. The important risk factors with high odds ratio included age, low socio-economic, age, asthma in the family and tobacco smoking. Age cannot be considered as a true risk factor. The total number of prevalent cases increased with the increasing age because of the cumulative prevalence of ever-asthma - as the age advanced, the number of prevalent cases of 'ever asthma' add up to the prevalence.

Urban (or mixed residence), female gender, low SE status and indoor exposure to both ETS and the cooking fuels (e.g. kerosene and dried wood) had high odds ratio of more than one. Tobacco smoking of all kinds (cigarettes, bidis and hookah) also had high odds for asthma. This is an important observation to make since the tobacco-asthma association has generally remained a debatable issue.⁴²⁻⁴⁵ Most of the studies however have demonstrated an adverse association between tobacco smoking and asthma. It is however difficult to conclude from this data whether the smoking is responsible in causing asthma or it merely worsens the underlying asthma, which in the presence of a trigger (such as smoking) becomes manifest.

Indoor exposures to pollutants for example from tobacco smoking or from solid-fuel or fossil-fuel combustion may act in the same fashion as tobacco smoke. Their role in causing asthma as well as in producing exacerbation has been described in the past, from time to time.⁴⁶⁻⁵⁰

3. Chronic Obstructive Pulmonary Disease

COPD is defined as the chronic inflammatory disease of the airways characterized by airway-obstruction which could be partially reversible. It includes chronic bronchitis and emphysema, which in the past were considered as two separate entities. A lot of confusion

in the terminology has prevailed in the last five decades because of the overlap between the two conditions. Traditionally, the disease was defined based on clinical symptomatology, by the presence of cough with or without phlegm for at least 3 months in a year continuously for 3 or more years.⁵¹ This definition however does not include the component of 'airway obstruction' which otherwise is considered important from a functional point of view. Some investigators in the past had classified CB as CB-Simple (CB-S) and CB with Airway obstruction (CB-AO). The Global Initiative for Obstructive Lung Disease (GOLD) includes the presence of airway-obstruction as an important criteria for diagnosis of COPD.⁵²

The CIBA symposium definition as above has remained the gold standard for diagnosis of CB, which in several ways can be considered a prototype of COPD.⁵¹ It is not always possible to measure a standardized parameter of airway obstruction in epidemiological studies. Most investigators have therefore relied on symptom questionnaires. The BOLD study included spirometric parameters in the COPD prevalence study.⁵³ The BOLD study is now completed in several European and American countries.⁵⁴ Similarly, the PLATINO study which has examined the COPD burden in Latin America has used spirometry.⁵⁵

In the INSEARCH Study, we have used bronchial symptom questionnaire as detailed earlier. We did not include spirometry for several logistic reasons. But the epidemiological diagnosis of CB based on questionnaire has remained the common practice.⁵⁶ The diagnosis of CB in this study was based on entirely a different set of questions than those for asthma. CB being a disease of adults, the study was meant for only adults of over 35 years of age. This set of questions was earlier validated against physician-diagnosed COPD.

The overall CB prevalence (age adjusted for those over 35 years of age) of 3.50% (M=4.20%, F=2.73%) was somewhat similar to that observed in the INSEARCH Phase I study.³² The gross burden in adults of 35 years of age estimated for 2001 population (Census of India, 2001)⁴¹ at 4.3% prevalence is 14.2 million. A high prevalence of 2.7% in women who were mostly non-smokers points to the importance of risk factors other than smoking. Indoor air pollution from domestic, solid fuel combustion is likely to play significant role.⁵⁷⁻⁶² This was also substantiated by the rural-urban difference (3.1% vs 2.1% respectively) in prevalence of CB in women in this study.

Tobacco smoking of all types was the most important risk factor for CB. The cumulative prevalence increased as the age advanced from 35-44 year age group to > 85 years age. The higher ORs for male gender and tobacco smoking are universally known risk factors for CB (and COPD).^{16,17,63,64} More importantly in this study, the finding of higher ORs for rural residence, low socio-economic status and domestic combustion of dried wood - all indicated the role of indoor air pollution. Role of low socio-economic status has been shown in other epidemiological studies in the past.⁶⁵

The other distinct finding of this study was the demonstration of higher ORs of 1.28 and 1.37 respectively for ETS exposure during childhood and adulthood for occurrence of CB. Similar observation was made in the Phase I study which in a population study, was the first reported association of ETS exposure with CB.³²

REFERENCES

1. Jindal SK. Bronchial asthma: The Indian scene. *Curr Opin Pulm Med* 2007; 13:8-12.
2. Viswanathan RM, Prasad M, Thakur AK, Sinha SP, Prakash N, Mody RK, Singh TRBPN, Prasad SN. Epidemiology of asthma in an urban population: a random morbidity survey. *J Med Assoc India* 1966; 46:480-483.
3. Chowgule RV, Shetye VM, Parmar JR, Bhosale AM, Khandagale MR, Phalnitkar SV, Gupta PC. Prevalence of respiratory symptoms, bronchial hyper-reactivity and asthma in a mega city. Results of the European Community Respiratory Health Survey in Mumbai (Bombay). *Am J Respir Crit Care Med* 1998; 158:547-554.
4. Jindal SK, Gupta D, Aggarwal AN, et al. Study of the prevalence of asthma in adults in North India using a standardized field questionnaire. *J Asthma* 2000; 37:345-351.
5. Aggarwal AN, Chaudhry K, Chhabra S, et al. Prevalence and risk factors for bronchial asthma in Indian adults: A multicentre study. *Indian J Chest Dis Allied Sci* 2006; 48:18-22.
6. Chhabra SK, Gupta CK, Rajpal S, Chhabra P. Prevalence of asthma in school children in Delhi. *J Asthma* 1998; 3:291-96.
7. Shah JR, Amdekar YK, Mathur RS. Nationwide variation in prevalence of bronchial asthma. *Indian J Med Sci* 2000; 6:213-220.
8. Gupta D, Aggarwal AN, Kumar R, Jindal SK. Prevalence of bronchial asthma and association with environmental tobacco smoke exposure in adolescent school children in Chandigarh, North India. *J Asthma* 2001; 38:501-507.
9. Paramesh H. Epidemiology of asthma in India. *Indian J Pediatr* 2002; 69:309-312.
10. Chakravarthy S, Singh RB, Swaminathan S, Venkatesan P. Prevalence of asthma in urban and rural children in Tamil Nadu. *Natl Med J India* 2002; 15:260-263.
11. Mistry R, Wickramasingha N, Ogston S, et al. Wheeze and urban variation in South Asia. *Eur J Pediatr* 2004; 163:145-147.
12. Awasthi S, Kalra E, Roy S, Awasthi S. Prevalence and risk factors of asthma and wheeze in school-going children in Lucknow. North India. *Indian Pediatrics* 2004; 41:1205-1210.
13. Pakhale S, Wooldrage K, Manfreda J, Anthonisen N. Prevalence of asthma symptoms in 7th and 8th grade school children in a rural region in India. *J Asthma* 2008; 45:117-22.
14. Lai CK, Beasley R, Crane J, Foliaki S, Shah J, Weiland S. Global variation in the prevalence and severity of asthma symptoms: phase three of the International Study of Asthma and Allergies in Childhood (ISAAC). *Thorax* 2009; 64:476-83.
15. The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee. Worldwide variations in the prevalence of symptoms of asthma, allergic rhino conjunctivitis and atopic eczema: ISAAC. *Lancet* 1998; 351:1225-1232.
16. Jindal SK, Aggarwal AN, Gupta D. A review of population studies from India to estimate national burden of chronic obstructive pulmonary disease and its association with smoking. *Indian J Chest Dis Allied Sci* 2001; 43:139-47.

17. Jindal SK. Emergence of chronic obstructive pulmonary disease as an epidemic in India. *Indian J Med Res* 2006; 124:619-630.
18. Pande JN, Khilnani GC. Epidemiology and aetiology. In: Shankar PS, editor. *Chronic obstructive pulmonary disease*. Mumbai: Indian College of Physicians; 1997 p.10-22.
19. Nigam P, Verma BL, Srivastava RN. Chronic bronchitis in an Indian rural community. *J Assoc Physicians India* 1982; 30:277-80.
20. Thiruvengadam KV, Raghva TP, Bhardwaj KV. Survey of prevalence of chronic bronchitis in Madras city. In: Viswanath R, Jaggi OP (editors). *Advances in chronic obstructive lung disease*. Delhi: Asthma and Bronchitis Foundation of India; 1977. p.59-69.
21. Joshi RC, Madam RN, Brash AA. Prevalence of chronic bronchitis in an industrial population in North India. *Thorax* 1975; 30:61-7.
22. Malik SK. Profile of chronic bronchitis in North India: The PGI experience (1972-1985). *Lung India* 1986; 4:89-100.
23. Viswanathan R, Singh K. Chronic bronchitis and asthma in urban and rural Delhi. In: Viswanath R, Jaggi OP (editors). *Advances in chronic obstructive lung disease*, Delhi: Asthma and Bronchitis Foundation of India; 1977. p.44-58.
24. Radha TG, Gupta GK, Singh A, Mathur N. Chronic bronchitis in an urban locality of New Delhi: An epidemiological survey. *Indian J Med Res* 1977; 66:273-95.
25. Bhattacharya SN, Bhatnagar JK, Kumar S, Jain PC. Chronic bronchitis in rural population. *Indian J Chest Dis* 1975; 17:1-7.
26. Akhtar MA, Latif PA. Prevalence of chronic bronchitis in urban population of Kashmir. *J Indian Med Assoc* 1999; 97:365-6.
27. Jindal SK. A field study on follow up at 10 years of prevalence of chronic obstructive pulmonary disease and peak expiratory flow rate. *Indian J Med Res (B)* 1993;98:20-26.
28. Wig KL, Guleria JS, Bhasin RC, Holmes E (Jr), Vasudeva YL, Singh H. Certain clinical and epidemiological patterns of chronic obstructive lung disease as seen in Northern India. *Indian J Chest Dis* 1964; 6:183-94.
29. Sikand BK, Pamra SP, Mathur GP. Chronic bronchitis in Delhi as revealed by mass survey. *Indian J Tuberc* 1966; 13:94-101.
30. Charan NB. Chronic bronchitis in North India, Punjab. In: Viswanathan R, Jaggi OP, ed. *Advances in Chronic Obstructive Lung Disease*. Delhi: Asthma and Bronchitis Foundation of India; 1977:92-102.
31. Ray D, Abel R, Selvaraj KG. A 5-year prospective epidemiological study of chronic obstructive pulmonary disease in rural South India. *Indian J Med Res* 1995; 101:238-44.
32. Jindal SK, Aggarwal AN, Chaudhry K, Chhabra SK, D'Souza GA, Gupta D, Katiyar SK, Kumar R, Shah B, Vijayan VK. A Multicentric study on epidemiology of Chronic Obstructive Pulmonary Disease and its relationship with tobacco smoking and environmental tobacco smoke exposure. *Indian J Chest Dis Allied Sci* 2006; 48:23-29.
33. Burney PG, Chinn S. Developing a new questionnaire for measuring the prevalence and distribution of asthma. *Chest* 1987; 91:79S-83S

34. Bousquet J, Dahl R, Khaltayev N. Global Alliance against chronic respiratory diseases. *Eur Respir J* 2007;29:233-239.
35. The World Health Organization. Preventing risks and taking action. In: *The World Health Report*. Geneva, World Health Organization Press 2002; p.167.
36. Gupta D, Aggarwal AN, Chaudhry K, et al. Household environmental tobacco smoke exposure. Respiratory symptoms and asthma in nonsmoker adults: a multicentric population study from India. *Indian Chest Dis Allied Sci* 2006; 48:31-36.
37. Jindal SK, Aggarwal AN, Chaudhry K, Chhabra SK, D'Souza GA, Gupta D, Katiyar SK, Kumar R, Shah B, Vijayan VK. Tobacco smoking in India: Prevalence, quit-rates and respiratory morbidity. *Indian Chest Dis Allied Sci* 2006; 48:37-42.
38. Burney PG, Laitinen LA, Perdrizet S, Huckauf H, Tattersfield AE, Chinn S, et al. Validity and repeatability of the IUATLD (1984) bronchial questionnaire: an international comparison. *Eur Respir J* 1989; 2:940-5.
39. Global Initiative for Asthma. NHLBI/WHO Workshop Report: Global Strategy for Asthma. N.I.H. Publication No. 02-3659 Revised 2002.
40. Masoli M, Fabian D, Holt S, Beasley R. *Global Burden of Asthma*. Medical Research Institute of New Zealand. Wellington, New Zealand. University of Southampton, Southampton, United Kingdom.
41. Census of India. 2001. Office of the Registrar General, Government of India.
42. Jindal SK, Gupta D. The relationship between tobacco smoke and bronchial asthma. *Indian J Med Res* 2004; 120:443-453
43. Flodin U, Jonsson P, Ziegler J, Axelson O. An epidemiologic study of bronchial asthma and smoking. *Epidemiology* 1995; 6:503-5.
44. Burney PGJ, Britton JR, Chinn S, Tattersfield AE, Papacosta AO, Kelson MC, et al. Descriptive epidemiology of bronchial reactivity in an adult population: results from a community study. *Thorax* 1987; 42:38-44.
45. Siroux V, Pin I, Oryszczyn MP, Le Moual N, Kauffman F. Relationship of active smoking to asthma and asthma severity in the EGEA study. *Epidemiological study on the genetics and environment of asthma*. *Eur Respir J* 2000; 15:470-7.
46. Becklake MR, Laloo U. The "healthy smoker"; a phenomenon of health selection? *Respiration* 1990; 57:137-44.
47. US Environmental Protection Agency. Respiratory health effects of passive smoking: lung cancer and other disorders. Office of Research and Development, Washington D.C. 1992; EPA/600/6-90/006F.
48. Jindal SK. A health perspective of indoor air pollution (Editorial). *Indian J Med Res* 2007; 126:409-11.
49. De Konning HW, Smith KR, Last JM. Biomass fuel combustion and health. *Bull World Health Organ* 1985; 63:11-26.
50. Morgan WJ, Crain EF, Gruchalla RS, O'Connor GT, Kattan M, Evans R 3rd, et al. Results of a home based environmental intervention among urban children with asthma. *N Engl J*

Med 2004; 351:1068-80.

51. CIBA Symposium. Terminology, definition and classification of chronic pulmonary emphysema and related contribution. *Thorax* 1959; 14:286-99.
52. Global Strategy for the diagnosis, management and prevention of chronic obstructive pulmonary disease, Updated 2008. <http://www.goldcopd.com>
53. Buist AS, Vollmer WM, McBurnie MA. Worldwide burden of COPD in high and low-income countries. Part I. The burden of obstructive e lung disease (BOLD) initiative. *Int J Tuberc Lung Dis* 2008; 12:703-8.
54. Buist AS, McBurnie MA, Vollmer WM, Gillespie S, Burney P, Mannino DM, Menezes AM, Sullivan SD, Lee TA, Weiss KB, Jensen RL, Marks GB, Gulsvik A. International variation in the prevalence of COPD (the BOLD Study): a population-based prevalence study. *Lancet* 2007; 370:741-50.
55. Ko FW, Hui DS, Lai CK. Worldwide burden of COPD in high and low-income countries. Part III. Asia-Pacific studies. *Int J Tuberc Lung Dis* 2008; 12:713-7.
56. Fletcher CM, Peto R, Tinker C, Speizer FE. The natural history of chronic bronchitis and emphysema. (1976), Chapter 1. Oxford Univ Press, London.
57. Tan WC, Ng TP. COPD in Asia – Where East Meets West. *Chest* 2008; 133:517-527.
58. Malik SK. Profile of chronic bronchitis in North India – The PGI experience (1972-1985). *Lung India* 1986; IV:89-100.
59. Behera D, Jindal SK. Respiratory symptoms in Indian women using domestic, cooking fuels. *Chest* 1991; 100:385-8.
60. Ehrlich RI, White N, Norman R, Laubscher R, Steyn K, Lombard C, Bradshaw D. Predictors of chronic bronchitis in South African adults. *Int J Tuberc Lung Dis* 2004; 8:369-76.
61. Kiraz K, Kart L, Emir R, Oymak S, Gulmez I, Unalacak M, Ozesmi M. Chronic pulmonary disease in rural women exposed to biomass fumes. *Clin Invest Med* 2003; 26:243-8.
62. Viegi G, Simoni M, Scognamiglio A, Baldacci S, Pistelli F, Carrozzi L, Annesi-Maesano I. Indoor air pollution and airway disease. *Int J Tuberc Lung Dis* 2004; 8:1401-15.
63. US Department of Health and Human Services. The health consequences of smoking: A report of the Surgeon General, Atlanta, GA: US Department of Health and Human Services, CDC, Office on Smoking and Health 2004.
64. Reddy KS, Gupta PC. Report on Tobacco Control in India. Ministry of Health and Family Welfare, Government of India, New Delhi 2004.
65. Viegi G, Scognamiglio A, Baldacci S, Pistelli F, Carrozzi L. Epidemiology of chronic obstructive pulmonary disease (COPD). *Respiration* 2001; 68:4-19.

INDEX OF SUMMARY TABLES

1. Number of respondents at each centre
2. Age and gender distribution
3. Age distribution at each centre
4. Occupation
5. Education
6. Socioeconomic status
7. Proportion of ever smokers
8. Smoking habits
9. Exposure to household ETS
10. Timing of ETS exposure
11. Persons responsible for childhood ETS exposure
12. Persons responsible for ETS exposure in adulthood
13. Regular cooking
14. Kitchen and cooking habits
15. Asthma in first degree relative
16. Respiratory symptoms
17. Asthma diagnosis
18. Asthma prevalence after age standardization
19. Asthma diagnosis and current residence
20. Logistic regression analysis for asthma and current residence
21. Asthma diagnosis and usual residence
22. Logistic regression analysis for asthma and usual residence
23. Asthma diagnosis and gender
24. Logistic regression analysis for asthma and gender
25. Asthma diagnosis and age
26. Logistic regression analysis for asthma and age
27. Asthma diagnosis and socioeconomic status
28. Logistic regression analysis for asthma and socioeconomic status
29. Asthma diagnosis and family history

30. Logistic regression analysis for asthma and family history
31. Asthma diagnosis and ever smoking
32. Logistic regression analysis for asthma and ever smoking
33. Asthma diagnosis and smoking product
34. Logistic regression analysis for asthma and smoking product
35. Asthma diagnosis and ETS exposure
36. Logistic regression analysis for asthma and ETS exposure
37. Asthma diagnosis and ETS exposure (nonsmokers only)
38. Logistic regression analysis for asthma and ETS exposure (nonsmokers only)
39. Asthma diagnosis and ETS exposure timing
40. Logistic regression analysis for asthma and ETS exposure timing
41. Asthma diagnosis and ETS exposure timing (nonsmokers only)
42. Logistic regression analysis for asthma and ETS exposure timing (nonsmokers only)
43. Asthma diagnosis and regular cooking
44. Logistic regression analysis for asthma and regular cooking
45. Asthma diagnosis and cooking fuel
46. Logistic regression analysis for asthma and cooking fuel
47. Asthma diagnosis and separate kitchen
48. Logistic regression analysis for asthma and separate kitchen
49. Asthma diagnosis and kitchen ventilation
50. Logistic regression analysis for asthma and kitchen ventilation
51. Asthma diagnosis and cooking frequency
52. Logistic regression analysis for asthma and cooking frequency
53. Multivariate logistic regression models for asthma
54. Chronic bronchitis diagnosis
55. Chronic bronchitis prevalence after age standardization
56. Chronic bronchitis and asthma cross-tabulation
57. Chronic bronchitis diagnosis and current residence
58. Logistic regression analysis for chronic bronchitis and current residence
59. Chronic bronchitis diagnosis and usual residence
60. Logistic regression analysis for chronic bronchitis and usual residence

61. Chronic bronchitis diagnosis and gender
62. Logistic regression analysis for chronic bronchitis and gender
63. Chronic bronchitis diagnosis and age
64. Logistic regression analysis for chronic bronchitis and age
65. Chronic bronchitis diagnosis and socioeconomic status
66. Logistic regression analysis for chronic bronchitis and socioeconomic status
67. Chronic bronchitis diagnosis and ever smoking
68. Logistic regression analysis for chronic bronchitis and ever smoking
69. Chronic bronchitis diagnosis and smoking product
70. Logistic regression analysis for chronic bronchitis and smoking product
71. Chronic bronchitis diagnosis and ETS exposure
72. Logistic regression analysis for chronic bronchitis and ETS exposure
73. Chronic bronchitis diagnosis and ETS exposure (nonsmokers only)
74. Logistic regression analysis for chronic bronchitis and ETS exposure (nonsmokers only)
75. Chronic bronchitis diagnosis and ETS exposure timing
76. Logistic regression analysis for chronic bronchitis and ETS exposure timing
77. Chronic bronchitis diagnosis and ETS exposure timing (nonsmokers only)
78. Logistic regression analysis for chronic bronchitis and ETS exposure timing (nonsmokers only)
79. Chronic bronchitis diagnosis and regular cooking
80. Logistic regression analysis for chronic bronchitis and regular cooking
81. Chronic bronchitis diagnosis and cooking fuel
82. Logistic regression analysis for chronic bronchitis and cooking fuel
83. Chronic bronchitis diagnosis and separate kitchen
84. Logistic regression analysis for chronic bronchitis and separate kitchen
85. Chronic bronchitis diagnosis and kitchen ventilation
86. Logistic regression analysis for chronic bronchitis and kitchen ventilation
87. Chronic bronchitis diagnosis and cooking frequency
88. Logistic regression analysis for chronic bronchitis and cooking frequency
89. Multivariate logistic regression models for chronic bronchitis
90. Estimates of total national disease burden

LIST OF ABBREVIATIONS USED IN TABLES

95% CI	95 percent confidence interval
B	Regression coefficient in logistic regression model
CB	Chronic bronchitis
OR	Odds ratio
SE(B)	Standard error of regression coefficient
Sig	Level of significance

Table 1. Number of respondents at various centres**A. Based on current residence**

Centre	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Ahmedabad	6068	5945	12013	3074	3000	6074	9142	8945	18087
Berhampur	6138	6039	12177	1434	1414	2848	7572	7453	15025
Bikaner	5475	4755	10230	2690	2431	5121	8165	7186	15351
Chennai	3472	5436	8908	2320	3773	6093	5792	9209	15001
Guwahati	5374	4823	10197	2573	2232	4805	7947	7055	15002
Kolkata	4515	4244	8759	1828	1941	3769	6343	6185	12528
Mumbai	3682	3843	7525	3416	3001	6417	7098	6844	13942
Mysore	4778	4347	9125	2960	2932	5892	7738	7279	15017
Nagpur	5209	4865	10074	2555	2450	5005	7764	7315	15079
Secunderabad	0	0	0	2339	2207	4546	2339	2207	4546
Shimla	5725	5083	10808	2138	2057	4195	7863	7140	15003
Trivandrum	4447	4548	8995	2895	3104	5999	7342	7652	14994
Total	54883	53928	108811	30222	30542	60764	85105	84470	169575

B. Based on usual residence

Centre	Rural			Urban			Mixed		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Ahmedabad	6080	5980	12060	2784	2630	5414	278	335	613
Berhampur	6161	6067	12228	1409	1386	2795	2	0	2
Bikaner	5493	4775	10268	2632	2315	4947	40	96	136
Chennai	3980	6261	10241	1772	2836	4608	40	112	152
Guwahati	5501	4893	10394	2445	2162	4607	1	0	1
Kolkata	4333	4047	8380	1766	1847	3613	244	291	535
Mumbai	3693	3852	7545	3276	2987	6263	129	5	134
Mysore	4772	4329	9101	2928	2868	5796	38	82	120
Nagpur	5296	4902	10198	2464	2410	4874	4	3	7
Secunderabad	11	13	24	2326	2193	4519	2	1	3
Shimla	5519	4910	10429	2093	1999	4092	251	231	482
Trivandrum	411	532	943	6919	7103	14022	12	17	29
Total	51250	50561	101811	32814	32736	65550	1041	1173	2214

Table 2. Age and gender percentwise distribution of the study population

Centre	Male										Female						
	15-24	25-34	35-44	45-54	55-64	65-74	75-84	>=85	15-24	25-34	35-44	45-54	55-64	65-74	75-84	>=85	
Ahmedabad	22.7%	24.6%	21.5%	15.4%	9.1%	5.2%	1.3%	0.2%	21.8%	25.1%	20.8%	15.1%	9.6%	5.8%	1.4%	0.4%	
Berhampur	23.2%	20.8%	20.2%	14.8%	10.9%	7.2%	2.3%	0.6%	25.2%	23.4%	18.4%	14.5%	10.9%	5.7%	1.5%	0.3%	
Bikaner	32.2%	24.5%	16.9%	12.8%	7.3%	4.2%	1.6%	0.4%	27.5%	25.5%	17.8%	13.4%	8.5%	5.1%	1.9%	0.3%	
Chennai	25.7%	23.3%	18.4%	14.0%	9.6%	6.1%	2.4%	0.6%	23.4%	25.3%	20.5%	13.7%	9.3%	5.4%	2.0%	0.4%	
Guwahati	26.5%	24.0%	18.2%	17.2%	9.2%	4.1%	.7%	0.2%	30.1%	24.9%	19.5%	15.3%	6.5%	2.8%	.7%	0.2%	
Kolkata	20.4%	23.9%	21.0%	15.7%	10.6%	6.0%	2.0%	0.3%	23.9%	24.8%	18.8%	14.9%	10.1%	5.0%	2.0%	0.5%	
Mumbai	26.2%	21.6%	18.9%	14.4%	10.5%	6.1%	1.9%	0.5%	27.7%	20.0%	18.4%	14.0%	10.0%	7.0%	2.2%	0.7%	
Mysore	24.8%	22.2%	20.6%	15.2%	8.7%	5.8%	2.2%	0.4%	24.8%	23.9%	20.5%	13.8%	8.9%	6.0%	1.6%	0.5%	
Nagpur	27.6%	24.5%	19.3%	13.2%	8.0%	5.5%	1.6%	0.3%	31.1%	24.3%	18.9%	10.2%	8.9%	5.2%	1.1%	0.3%	
Secunderabad	32.4%	21.8%	20.2%	13.7%	6.9%	3.7%	1.1%	0.2%	32.3%	24.5%	19.8%	11.7%	7.2%	3.2%	1.1%	0.2%	
Shimla	27.0%	23.4%	20.2%	14.9%	8.0%	4.1%	1.9%	0.5%	28.1%	25.4%	20.1%	13.5%	7.0%	4.0%	1.4%	0.5%	
Trivandrum	19.7%	19.6%	19.5%	17.8%	13.3%	7.2%	2.5%	0.4%	18.7%	20.9%	20.9%	17.2%	12.7%	6.9%	2.2%	0.5%	
Total	25.4%	23.0%	19.5%	15.0%	9.4%	5.5%	1.8%	0.4%	25.7%	24.0%	19.6%	14.1%	9.3%	5.3%	1.6%	0.4%	

Age expressed in years in all age groups

Table 3. Age and gender distribution in rural and urban areas at each centre**Ahmedabad**

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	1349 (22.2%)	1302 (21.9%)	722 (23.5%)	652 (21.7%)	2071 (22.7%)	1954 (21.8%)
25-34	1513 (24.9%)	1538 (25.9%)	734 (23.9%)	705 (23.5%)	2247 (24.6%)	2243 (25.1%)
35-44	1370 (22.6%)	1233 (20.7%)	596 (19.4%)	632 (21.1%)	1966 (21.5%)	1865 (20.8%)
45-54	879 (14.5%)	854 (14.4%)	531 (17.3%)	494 (16.5%)	1410 (15.4%)	1348 (15.1%)
55-64	556 (9.2%)	588 (9.9%)	278 (9.0%)	275 (9.2%)	834 (9.1%)	863 (9.6%)
65-74	307 (5.1%)	347 (5.8%)	168 (5.5%)	168 (5.6%)	475 (5.2%)	515 (5.8%)
75-84	81 (1.3%)	67 (1.1%)	38 (1.2%)	57 (1.9%)	119 (1.3%)	124 (1.4%)
>=85	13 (0.2%)	16 (0.3%)	7 (0.2%)	17 (0.6%)	20 (0.2%)	33 (0.4%)

Berhampur

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	1415 (23.1%)	1531 (25.4%)	340 (23.7%)	344 (24.3%)	1755 (23.2%)	1875 (25.2%)
25-34	1290 (21.0%)	1428 (23.6%)	287 (20.0%)	319 (22.6%)	1577 (20.8%)	1747 (23.4%)
35-44	1245 (20.3%)	1084 (17.9%)	284 (19.8%)	291 (20.6%)	1529 (20.2%)	1375 (18.4%)
45-54	892 (14.5%)	863 (14.3%)	230 (16.0%)	220 (15.6%)	1122 (14.8%)	1083 (14.5%)
55-64	656 (10.7%)	664 (11.0%)	173 (12.1%)	145 (10.3%)	829 (10.9%)	809 (10.9%)
65-74	456 (7.4%)	351 (5.8%)	90 (6.3%)	77 (5.4%)	546 (7.2%)	428 (5.7%)
75-84	144 (2.3%)	96 (1.6%)	27 (1.9%)	15 (1.1%)	171 (2.3%)	111 (1.5%)
>=85	40 (0.7%)	22 (0.4%)	3 (0.2%)	3 (0.2%)	43 (0.6%)	25 (0.3%)

Bikaner

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	1772 (32.4%)	1299 (27.3%)	857 (31.9%)	676 (27.8%)	2629 (32.2%)	1975 (27.5%)
25-34	1370 (25.0%)	1243 (26.1%)	634 (23.6%)	592 (24.4%)	2004 (24.5%)	1835 (25.5%)
35-44	946 (17.3%)	848 (17.8%)	431 (16.0%)	432 (17.8%)	1377 (16.9%)	1280 (17.8%)
45-54	648 (11.8%)	589 (12.4%)	400 (14.9%)	372 (15.3%)	1048 (12.8%)	961 (13.4%)
55-64	374 (6.8%)	419 (8.8%)	222 (8.3%)	195 (8.0%)	596 (7.3%)	614 (8.5%)
65-74	241 (4.4%)	251 (5.3%)	104 (3.9%)	116 (4.8%)	345 (4.2%)	367 (5.1%)
75-84	101 (1.8%)	95 (2.0%)	33 (1.2%)	38 (1.6%)	134 (1.6%)	133 (1.9%)
>=85	23 (0.4%)	11 (0.2%)	9 (0.3%)	10 (0.4%)	32 (0.4%)	21 (0.3%)

Chennai

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	817 (23.5%)	1240 (22.8%)	672 (29.0%)	912 (24.2%)	1489 (25.7%)	2152 (23.4%)
25-34	804 (23.2%)	1341 (24.7%)	545 (23.5%)	987 (26.2%)	1349 (23.3%)	2328 (25.3%)
35-44	675 (19.4%)	1149 (21.1%)	389 (16.8%)	739 (19.6%)	1064 (18.4%)	1888 (20.5%)
45-54	500 (14.4%)	738 (13.6%)	308 (13.3%)	526 (13.9%)	808 (14.0%)	1264 (13.7%)
55-64	343 (9.9%)	510 (9.4%)	213 (9.2%)	346 (9.2%)	556 (9.6%)	856 (9.3%)
65-74	227 (6.5%)	327 (6.0%)	128 (5.5%)	173 (4.6%)	355 (6.1%)	500 (5.4%)
75-84	86 (2.5%)	112 (2.1%)	52 (2.2%)	72 (1.9%)	138 (2.4%)	184 (2.0%)
>=85	20 (0.6%)	19 (0.3%)	13 (0.6%)	18 (0.5%)	33 (0.6%)	37 (0.4%)

Guwahati

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	1425 (26.5%)	1520 (31.5%)	679 (26.4%)	601 (26.9%)	2104 (26.5%)	2121 (30.1%)
25-34	1369 (25.5%)	1216 (25.2%)	542 (21.1%)	538 (24.1%)	1911 (24.0%)	1754 (24.9%)
35-44	1029 (19.1%)	888 (18.4%)	414 (16.1%)	488 (21.9%)	1443 (18.2%)	1376 (19.5%)
45-54	797 (14.8%)	655 (13.6%)	567 (22.0%)	427 (19.1%)	1364 (17.2%)	1082 (15.3%)
55-64	458 (8.5%)	331 (6.9%)	272 (10.6%)	126 (5.6%)	730 (9.2%)	457 (6.5%)
65-74	244 (4.5%)	158 (3.3%)	80 (3.1%)	43 (1.9%)	324 (4.1%)	201 (2.8%)
75-84	41 (0.8%)	43 (0.9%)	17 (0.7%)	7 (0.3%)	58 (0.7%)	50 (0.7%)
>=85	11 (0.2%)	12 (0.2%)	2 (0.1%)	2 (0.1%)	13 (0.2%)	14 (0.2%)

Kolkata

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	1007 (22.3%)	1174 (27.7%)	286 (15.6%)	307 (15.8%)	1293 (20.4%)	1481 (23.9%)
25-34	1222 (27.1%)	1111 (26.2%)	296 (16.2%)	421 (21.7%)	1518 (23.9%)	1532 (24.8%)
35-44	984 (21.8%)	760 (17.9%)	349 (19.1%)	400 (20.6%)	1333 (21.0%)	1160 (18.8%)
45-54	618 (13.7%)	571 (13.5%)	379 (20.7%)	351 (18.1%)	997 (15.7%)	922 (14.9%)
55-64	405 (9.0%)	359 (8.5%)	269 (14.7%)	265 (13.7%)	674 (10.6%)	624 (10.1%)
65-74	203 (4.5%)	168 (4.0%)	175 (9.6%)	142 (7.3%)	378 (6.0%)	310 (5.0%)
75-84	60 (1.3%)	79 (1.9%)	69 (3.8%)	46 (2.4%)	129 (2.0%)	125 (2.0%)
>=85	16 (0.4%)	22 (0.5%)	5 (0.3%)	9 (0.5%)	21 (0.3%)	31 (0.5%)

Mumbai

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	1145 (31.1%)	1293 (33.6%)	713 (20.9%)	603 (20.1%)	1858 (26.2%)	1896 (27.7%)
25-34	809 (22.0%)	744 (19.4%)	724 (21.2%)	625 (20.8%)	1533 (21.6%)	1369 (20.0%)
35-44	705 (19.1%)	726 (18.9%)	635 (18.6%)	533 (17.8%)	1340 (18.9%)	1259 (18.4%)
45-54	474 (12.9%)	467 (12.2%)	550 (16.1%)	491 (16.4%)	1024 (14.4%)	958 (14.0%)
55-64	325 (8.8%)	331 (8.6%)	417 (12.2%)	355 (11.8%)	742 (10.5%)	686 (10.0%)
65-74	180 (4.9%)	220 (5.7%)	252 (7.4%)	260 (8.7%)	432 (6.1%)	480 (7.0%)
75-84	37 (1.0%)	48 (1.2%)	95 (2.8%)	102 (3.4%)	132 (1.9%)	150 (2.2%)
>=85	7 (0.2%)	14 (0.4%)	30 (0.9%)	32 (1.1%)	37 (0.5%)	46 (0.7%)

Mysore

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	1271 (26.6%)	1151 (26.5%)	649 (21.9%)	655 (22.3%)	1920 (24.8%)	1806 (24.8%)
25-34	1049 (22.0%)	1017 (23.4%)	671 (22.7%)	720 (24.6%)	1720 (22.2%)	1737 (23.9%)
35-44	970 (20.3%)	900 (20.7%)	622 (21.0%)	593 (20.2%)	1592 (20.6%)	1493 (20.5%)
45-54	677 (14.2%)	575 (13.2%)	503 (17.0%)	428 (14.6%)	1180 (15.2%)	1003 (13.8%)
55-64	421 (8.8%)	357 (8.2%)	253 (8.5%)	293 (10.0%)	674 (8.7%)	650 (8.9%)
65-74	283 (5.9%)	257 (5.9%)	167 (5.6%)	179 (6.1%)	450 (5.8%)	436 (6.0%)
75-84	91 (1.9%)	68 (1.6%)	80 (2.7%)	46 (1.6%)	171 (2.2%)	114 (1.6%)
>=85	16 (0.3%)	22 (0.5%)	15 (0.5%)	18 (0.6%)	31 (0.4%)	40 (0.5%)

Nagpur

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	1412 (27.1%)	1490 (30.6%)	727 (28.5%)	788 (32.2%)	2139 (27.6%)	2278 (31.1%)
25-34	1306 (25.1%)	1124 (23.1%)	597 (23.4%)	653 (26.7%)	1903 (24.5%)	1777 (24.3%)
35-44	924 (17.7%)	844 (17.3%)	572 (22.4%)	538 (22.0%)	1496 (19.3%)	1382 (18.9%)
45-54	619 (11.9%)	508 (10.4%)	403 (15.8%)	239 (9.8%)	1022 (13.2%)	747 (10.2%)
55-64	463 (8.9%)	505 (10.4%)	161 (6.3%)	145 (5.9%)	624 (8.0%)	650 (8.9%)
65-74	355 (6.8%)	318 (6.5%)	75 (2.9%)	65 (2.7%)	430 (5.5%)	383 (5.2%)
75-84	105 (2.0%)	57 (1.2%)	18 (0.7%)	20 (0.8%)	123 (1.6%)	77 (1.1%)
>=85	25 (0.5%)	19 (0.4%)	2 (0.1%)	2 (0.1%)	27 (0.3%)	21 (0.3%)

Secunderabad

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	-	-	759 (32.4%)	713 (32.3%)	759 (32.4%)	713 (32.3%)
25-34	-	-	510 (21.8%)	541 (24.5%)	510 (21.8%)	541 (24.5%)
35-44	-	-	472 (20.2%)	437 (19.8%)	472 (20.2%)	437 (19.8%)
45-54	-	-	321 (13.7%)	259 (11.7%)	321 (13.7%)	259 (11.7%)
55-64	-	-	161 (6.9%)	158 (7.2%)	161 (6.9%)	158 (7.2%)
65-74	-	-	86 (3.7%)	70 (3.2%)	86 (3.7%)	70 (3.2%)
75-84	-	-	26 (1.1%)	24 (1.1%)	26 (1.1%)	24 (1.1%)
>=85	-	-	4 (0.2%)	5 (0.2%)	4 (0.2%)	5 (0.2%)

Shimla

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	1548 (27.0%)	1423 (28.0%)	576 (26.9%)	584 (28.4%)	2124 (27.0%)	2007 (28.1%)
25-34	1419 (24.8%)	1312 (25.8%)	420 (19.6%)	502 (24.4%)	1839 (23.4%)	1814 (25.4%)
35-44	1149 (20.1%)	1014 (19.9%)	441 (20.6%)	423 (20.6%)	1590 (20.2%)	1437 (20.1%)
45-54	800 (14.0%)	667 (13.1%)	372 (17.4%)	296 (14.4%)	1172 (14.9%)	963 (13.5%)
55-64	438 (7.7%)	353 (6.9%)	192 (9.0%)	144 (7.0%)	630 (8.0%)	497 (7.0%)
65-74	232 (4.1%)	206 (4.1%)	92 (4.3%)	79 (3.8%)	324 (4.1%)	285 (4.0%)
75-84	112 (2.0%)	82 (1.6%)	35 (1.6%)	21 (1.0%)	147 (1.9%)	103 (1.4%)
>=85	27 (0.5%)	26 (0.5%)	10 (0.5%)	8 (0.4%)	37 (0.5%)	34 (0.5%)

Trivandrum

Age (years)	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-24	873 (19.6%)	880 (19.3%)	570 (19.7%)	550 (17.7%)	1443 (19.7%)	1430 (18.7%)
25-34	926 (20.8%)	993 (21.8%)	512 (17.7%)	605 (19.5%)	1438 (19.6%)	1598 (20.9%)
35-44	853 (19.2%)	930 (20.4%)	582 (20.1%)	671 (21.6%)	1435 (19.5%)	1601 (20.9%)
45-54	810 (18.2%)	784 (17.2%)	500 (17.3%)	529 (17.0%)	1310 (17.8%)	1313 (17.2%)
55-64	568 (12.8%)	541 (11.9%)	411 (14.2%)	428 (13.8%)	979 (13.3%)	969 (12.7%)
65-74	291 (6.5%)	287 (6.3%)	236 (8.2%)	244 (7.9%)	527 (7.2%)	531 (6.9%)
75-84	104 (2.3%)	110 (2.4%)	77 (2.7%)	62 (2.0%)	181 (2.5%)	172 (2.2%)
>=85	22 (0.5%)	23 (0.5%)	7 (0.2%)	14 (0.5%)	29 (0.4%)	37 (0.5%)

Table 4. Occupation of respondents of either gender in rural and urban areas**Ahmedabad**

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	735 (12.1%)	321 (5.4%)	704 (22.9%)	419 (14.0%)
Housewife	52 (0.9%)	5326 (89.6%)	55 (1.8%)	2387 (79.6%)
Unskilled labourer	2386 (39.3%)	240 (4.0%)	937 (30.5%)	111 (3.7%)
Skilled labourer	228 (3.8%)	2 (0.0%)	341 (11.1%)	15 (0.5%)
Business or selfemployed	258 (4.3%)	6 (0.1%)	266 (8.7%)	6 (0.2%)
Farmer	1929 (31.8%)	27 (0.5%)	5 (0.2%)	0
Worker in service	456 (7.5%)	23 (0.4%)	653 (21.2%)	51 (1.7%)
Supervisor in service	24 (0.4%)	0	111 (3.6%)	11 (0.4%)
Officer in service	0	0	2 (0.1%)	0

Berhampur

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	1517 (24.7%)	1060 (17.6%)	491 (34.2%)	329 (23.3%)
Housewife	49 (0.8%)	4446 (73.6%)	9 (0.6%)	999 (70.7%)
Unskilled labourer	1246 (20.3%)	411 (6.8%)	68 (4.7%)	19 (1.3%)
Skilled labourer	473 (7.7%)	9 (0.1%)	74 (5.2%)	0 (0.0%)
Business or selfemployed	1342 (21.9%)	59 (1.0%)	434 (30.3%)	18 (1.3%)
Farmer	846 (13.8%)	8 (0.1%)	27 (1.9%)	2 (0.1%)
Worker in service	658 (10.7%)	46 (0.8%)	328 (22.9%)	46 (3.3%)
Supervisor in service	7 (0.1%)	0	3 (0.2%)	1 (0.1%)
Officer in service	0	0	0	0

Bikaner

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	792 (14.5%)	455 (9.6%)	584 (21.7%)	374 (15.4%)
Housewife	54 (1.0%)	4221 (88.8%)	39 (1.4%)	1940 (79.8%)
Unskilled labourer	1891 (34.5%)	51 (1.1%)	578 (21.5%)	21 (0.9%)
Skilled labourer	718 (13.1%)	5 (0.1%)	484 (18.0%)	2 (0.1%)
Business or selfemployed	338 (6.2%)	6 (0.1%)	459 (17.1%)	13 (0.5%)
Farmer	1472 (26.9%)	11 (0.2%)	11 (0.4%)	0
Worker in service	204 (3.7%)	5 (0.1%)	471 (17.5%)	72 (3.0%)
Supervisor in service	5 (0.1%)	1 (0.0%)	54 (2.0%)	7 (0.3%)
Officer in service	1 (0.0%)	0	10 (0.4%)	2 (0.1%)

Chennai

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	887 (25.5%)	1455 (26.8%)	674 (29.1%)	993 (26.3%)
Housewife	73 (2.1%)	3358 (61.8%)	31 (1.3%)	2065 (54.7%)
Unskilled labourer	466 (13.4%)	158 (2.9%)	268 (11.6%)	156 (4.1%)
Skilled labourer	332 (9.6%)	46 (0.8%)	160 (6.9%)	23 (0.6%)
Business or selfemployed	389 (11.2%)	67 (1.2%)	341 (14.7%)	71 (1.9%)
Farmer	613 (17.7%)	100 (1.8%)	18 (0.8%)	9 (0.2%)
Worker in service	649 (18.7%)	238 (4.4%)	797 (34.4%)	449 (11.9%)
Supervisor in service	53 (1.5%)	11 (0.2%)	28 (1.2%)	6 (0.2%)
Officer in service	10 (0.3%)	3 (0.1%)	3 (0.1%)	1 (0.0%)

Guwahati

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	1677 (31.2%)	1435 (29.8%)	920 (35.8%)	703 (31.5%)
Housewife	89 (1.7%)	3165 (65.6%)	30 (1.2%)	1387 (62.1%)
Unskilled labourer	533 (9.9%)	26 (0.5%)	23 (0.9%)	8 (0.4%)
Skilled labourer	496 (9.2%)	12 (0.2%)	163 (6.3%)	5 (0.2%)
Business or selfemployed	832 (15.5%)	30 (0.6%)	539 (20.9%)	13 (0.6%)
Farmer	731 (13.6%)	15 (0.3%)	25 (1.0%)	0
Worker in service	641 (11.9%)	97 (2.0%)	320 (12.4%)	39 (1.7%)
Supervisor in service	367 (6.8%)	43 (0.9%)	516 (20.1%)	69 (3.1%)
Officer in service	8 (0.1%)	0	37 (1.4%)	8 (0.4%)

Kolkata

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	864 (19.1%)	675 (15.9%)	556 (30.4%)	366 (18.9%)
Housewife	67 (1.5%)	3169 (74.7%)	18 (1.0%)	1165 (60.0%)
Unskilled labourer	1364 (30.2%)	214 (5.0%)	17 (0.9%)	26 (1.3%)
Skilled labourer	897 (19.9%)	32 (0.8%)	57 (3.1%)	46 (2.4%)
Business or selfemployed	683 (15.1%)	107 (2.5%)	478 (26.1%)	87 (4.5%)
Farmer	226 (5.0%)	2 (0.0%)	2 (0.1%)	1 (0.1%)
Worker in service	329 (7.3%)	39 (0.9%)	293 (16.0%)	119 (6.1%)
Supervisor in service	78 (1.7%)	6 (0.1%)	158 (8.6%)	86 (4.4%)
Officer in service	7 (0.2%)	0	249 (13.6%)	45 (2.3%)

Mumbai

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	522 (14.2%)	363 (9.4%)	1055 (30.9%)	521 (17.4%)
Housewife	0	1390 (36.2%)	0	1916 (63.8%)
Unskilled labourer	218 (5.9%)	168 (4.4%)	26 (0.8%)	2 (0.1%)
Skilled labourer	82 (2.2%)	7 (0.2%)	157 (4.6%)	17 (0.6%)
Business or selfemployed	58 (1.6%)	7 (0.2%)	715 (20.9%)	68 (2.3%)
Farmer	2562 (69.6%)	1865 (48.5%)	0	1 (0.0%)
Worker in service	208 (5.6%)	39 (1.0%)	1339 (39.2%)	451 (15.0%)
Supervisor in service	30 (0.8%)	4 (0.1%)	112 (3.3%)	22 (0.7%)
Officer in service	2 (0.1%)	0	12 (0.4%)	3 (0.1%)

Mysore

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	592 (12.4%)	331 (7.6%)	683 (23.1%)	588 (20.1%)
Housewife	69 (1.4%)	3577 (82.3%)	49 (1.7%)	1970 (67.2%)
Unskilled labourer	1221 (25.6%)	264 (6.1%)	393 (13.3%)	64 (2.2%)
Skilled labourer	198 (4.1%)	10 (0.2%)	420 (14.2%)	41 (1.4%)
Business or selfemployed	234 (4.9%)	20 (0.5%)	673 (22.7%)	79 (2.7%)
Farmer	1928 (40.4%)	61 (1.4%)	101 (3.4%)	20 (0.7%)
Worker in service	530 (11.1%)	82 (1.9%)	631 (21.3%)	168 (5.7%)
Supervisor in service	4 (0.1%)	0	9 (0.3%)	1 (0.0%)
Officer in service	2 (0.0%)	2 (0.0%)	1 (0.0%)	1 (0.0%)

Nagpur

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	879 (16.9%)	1194 (24.5%)	664 (26.0%)	728 (29.7%)
Housewife	10 (0.2%)	1926 (39.6%)	19 (0.7%)	1473 (60.1%)
Unskilled labourer	2573 (49.4%)	1518 (31.2%)	850 (33.3%)	130 (5.3%)
Skilled labourer	341 (6.5%)	25 (0.5%)	390 (15.3%)	51 (2.1%)
Business or selfemployed	329 (6.3%)	28 (0.6%)	343 (13.4%)	32 (1.3%)
Farmer	993 (19.1%)	164 (3.4%)	14 (0.5%)	1 (0.0%)
Worker in service	84 (1.6%)	10 (0.2%)	267 (10.5%)	34 (1.4%)
Supervisor in service	0	0	8 (0.3%)	1 (0.0%)
Officer in service	0	0	0	0

Secunderabad

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	-	-	686 (29.3%)	399 (18.1%)
Housewife	-	-	127 (5.4%)	1690 (76.6%)
Unskilled labourer	-	-	257 (11.0%)	26 (1.2%)
Skilled labourer	-	-	747 (31.9%)	51 (2.3%)
Business or selfemployed	-	-	356 (15.2%)	18 (0.8%)
Farmer	-	-	7 (0.3%)	0
Worker in service	-	-	133 (5.7%)	23 (1.0%)
Supervisor in service	-	-	21 (0.9%)	0
Officer in service	-	-	5 (0.2%)	0

Shimla

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	2281 (39.8%)	1302 (25.6%)	859 (40.2%)	582 (28.3%)
Housewife	123 (2.1%)	3401 (66.9%)	42 (2.0%)	1156 (56.2%)
Unskilled labourer	89 (1.6%)	10 (0.2%)	39 (1.8%)	6 (0.3%)
Skilled labourer	107 (1.9%)	10 (0.2%)	40 (1.9%)	7 (0.3%)
Business or selfemployed	542 (9.5%)	31 (0.6%)	321 (15.0%)	33 (1.6%)
Farmer	813 (14.2%)	35 (0.7%)	45 (2.1%)	3 (0.1%)
Worker in service	1701 (29.7%)	286 (5.6%)	699 (32.7%)	259 (12.6%)
Supervisor in service	6 (0.1%)	0	11 (0.5%)	2 (0.1%)
Officer in service	63 (1.1%)	8 (0.2%)	82 (3.8%)	9 (0.4%)

Trivandrum

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	1018 (22.9%)	785 (17.3%)	849 (29.3%)	505 (16.3%)
Housewife	93 (2.1%)	3425 (75.3%)	41 (1.4%)	2270 (73.1%)
Unskilled labourer	2191 (49.3%)	120 (2.6%)	1048 (36.2%)	43 (1.4%)
Skilled labourer	349 (7.8%)	5 (0.1%)	155 (5.4%)	5 (0.2%)
Business or selfemployed	343 (7.7%)	47 (1.0%)	377 (13.0%)	79 (2.5%)
Farmer	95 (2.1%)	2 (0.0%)	12 (0.4%)	0
Worker in service	230 (5.2%)	125 (2.7%)	241 (8.3%)	126 (4.1%)
Supervisor in service	127 (2.9%)	37 (0.8%)	170 (5.9%)	76 (2.4%)
Officer in service	1 (0.0%)	2 (0.0%)	2 (0.1%)	0

Total

Occupation	Rural		Urban	
	Male	Female	Male	Female
Unemployed or retired	11764 (21.4%)	9376 (17.4%)	8725 (28.9%)	6507 (21.3%)
Housewife	679 (1.2%)	37404 (69.4%)	460 (1.5%)	20418 (66.9%)
Unskilled labourer	14178 (25.8%)	3180 (5.9%)	4504 (14.9%)	612 (2.0%)
Skilled labourer	4221 (7.7%)	163 (0.3%)	3188 (10.5%)	263 (0.9%)
Business or selfemployed	5348 (9.7%)	408 (0.8%)	5302 (17.5%)	517 (1.7%)
Farmer	12208 (22.2%)	2290 (4.2%)	267 (0.9%)	37 (0.1%)
Worker in service	5690 (10.4%)	990 (1.8%)	6172 (20.4%)	1837 (6.0%)
Supervisor in service	701 (1.3%)	102 (0.2%)	1201 (4.0%)	282 (0.9%)
Officer in service	94 (0.2%)	15 (0.0%)	403 (1.3%)	69 (0.2%)

Table 5. Level of education of respondents of either gender in rural and urban areas**Ahmedabad**

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	1244 (20.5%)	3699 (62.2%)	153 (5.0%)	641 (21.4%)	1397 (15.3%)	4340 (48.5%)
1-5	1291 (21.3%)	793 (13.3%)	302 (9.8%)	440 (14.7%)	1593 (17.4%)	1233 (13.8%)
6-10	2821 (46.5%)	1294 (21.8%)	1523 (49.5%)	1261 (42.0%)	4344 (47.5%)	2555 (28.6%)
11-15	672 (11.1%)	153 (2.6%)	963 (31.3%)	583 (19.4%)	1635 (17.9%)	736 (8.2%)
>15	40 (0.7%)	6 (0.1%)	133 (4.3%)	75 (2.5%)	173 (1.9%)	81 (0.9%)

Berhampur

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	876 (14.3%)	2384 (39.5%)	33 (2.3%)	164 (11.6%)	909 (12.0%)	2548 (34.2%)
1-5	1299 (21.2%)	1192 (19.7%)	105 (7.3%)	213 (15.1%)	1404 (18.5%)	1405 (18.9%)
6-10	2648 (43.1%)	1952 (32.3%)	486 (33.9%)	557 (39.4%)	3134 (41.4%)	2509 (33.7%)
11-15	1209 (19.7%)	472 (7.8%)	645 (45.0%)	416 (29.4%)	1854 (24.5%)	888 (11.9%)
>15	106 (1.7%)	39 (0.6%)	165 (11.5%)	64 (4.5%)	271 (3.6%)	103 (1.4%)

Bikaner

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	2764 (50.5%)	3952 (83.1%)	620 (23.0%)	1373 (56.5%)	3384 (41.4%)	5325 (74.1%)
1-5	993 (18.1%)	345 (7.3%)	337 (12.5%)	247 (10.2%)	1330 (16.3%)	592 (8.2%)
6-10	1349 (24.6%)	361 (7.6%)	1016 (37.8%)	477 (19.6%)	2365 (29.0%)	838 (11.7%)
11-15	291 (5.3%)	74 (1.6%)	471 (17.5%)	215 (8.8%)	762 (9.3%)	289 (4.0%)
>15	78 (1.4%)	23 (0.5%)	246 (9.1%)	119 (4.9%)	324 (4.0%)	142 (2.0%)

Chennai

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	389 (11.2%)	1508 (27.7%)	182 (7.8%)	745 (19.7%)	571 (9.9%)	2253 (24.5%)
1-5	403 (11.6%)	782 (14.4%)	253 (10.9%)	519 (13.8%)	656 (11.3%)	1301 (14.1%)
6-10	1687 (48.6%)	2204 (40.5%)	1113 (48.0%)	1661 (44.0%)	2800 (48.3%)	3865 (42.0%)
11-15	882 (25.4%)	860 (15.8%)	661 (28.5%)	722 (19.1%)	1543 (26.6%)	1582 (17.2%)
>15	111 (3.2%)	82 (1.5%)	111 (4.8%)	126 (3.3%)	222 (3.8%)	208 (2.3%)

Guwahati

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	435 (8.1%)	922 (19.1%)	12 (0.5%)	56 (2.5%)	447 (5.6%)	978 (13.9%)
1-5	374 (7.0%)	405 (8.4%)	38 (1.5%)	57 (2.6%)	412 (5.2%)	462 (6.5%)
6-10	2643 (49.2%)	2350 (48.7%)	809 (31.4%)	1115 (50.0%)	3452 (43.4%)	3465 (49.1%)
11-15	1850 (34.4%)	1108 (23.0%)	1627 (63.2%)	967 (43.3%)	3477 (43.8%)	2075 (29.4%)
>15	72 (1.3%)	38 (0.8%)	87 (3.4%)	37 (1.7%)	159 (2.0%)	75 (1.1%)

Kolkata

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	422 (9.3%)	1177 (27.7%)	13 (0.7%)	76 (3.9%)	435 (6.9%)	1253 (20.3%)
1-5	1704 (37.7%)	1684 (39.7%)	62 (3.4%)	100 (5.2%)	1766 (27.8%)	1784 (28.8%)
6-10	1778 (39.4%)	1153 (27.2%)	367 (20.1%)	517 (26.6%)	2145 (33.8%)	1670 (27.0%)
11-15	578 (12.8%)	220 (5.2%)	715 (39.1%)	764 (39.4%)	1293 (20.4%)	984 (15.9%)
>15	33 (0.7%)	10 (0.2%)	671 (36.7%)	484 (24.9%)	704 (11.1%)	494 (8.0%)

Mumbai

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	0	0	0	0	0	0
1-5	731 (19.9%)	359 (9.3%)	137 (4.0%)	203 (6.8%)	868 (12.2%)	562 (8.2%)
6-10	1253 (34.0%)	834 (21.7%)	1463 (42.8%)	1279 (42.6%)	2716 (38.3%)	2113 (30.9%)
11-15	325 (8.8%)	97 (2.5%)	1610 (47.1%)	1162 (38.7%)	1935 (27.3%)	1259 (18.4%)
>15	1373 (37.3%)	2553 (66.4%)	206 (6.0%)	357 (11.9%)	1579 (22.2%)	2910 (42.5%)

Mysore

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	1911 (40.0%)	2475 (56.9%)	484 (16.4%)	908 (31.0%)	2395 (31.0%)	3383 (46.5%)
1-5	465 (9.7%)	322 (7.4%)	183 (6.2%)	163 (5.6%)	648 (8.4%)	485 (6.7%)
6-10	1626 (34.0%)	1230 (28.3%)	1018 (34.4%)	1033 (35.2%)	2644 (34.2%)	2263 (31.1%)
11-15	695 (14.5%)	296 (6.8%)	1042 (35.2%)	706 (24.1%)	1737 (22.4%)	1002 (13.8%)
>15	81 (1.7%)	24 (0.6%)	233 (7.9%)	122 (4.2%)	314 (4.1%)	146 (2.0%)

Nagpur

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	824 (15.8%)	1351 (27.8%)	118 (4.6%)	302 (12.3%)	942 (12.1%)	1653 (22.6%)
1-5	1077 (20.7%)	869 (17.9%)	272 (10.6%)	271 (11.1%)	1349 (17.4%)	1140 (15.6%)
6-10	2354 (45.2%)	1916 (39.4%)	1153 (45.1%)	1082 (44.2%)	3507 (45.2%)	2998 (41.0%)
11-15	915 (17.6%)	718 (14.8%)	969 (37.9%)	756 (30.9%)	1884 (24.3%)	1474 (20.2%)
>15	39 (0.7%)	11 (0.2%)	43 (1.7%)	39 (1.6%)	82 (1.1%)	50 (0.7%)

Secunderabad

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	-	-	369 (15.8%)	613 (27.8%)	369 (15.8%)	613 (27.8%)
1-5	-	-	144 (6.2%)	137 (6.2%)	144 (6.2%)	137 (6.2%)
6-10	-	-	971 (41.5%)	926 (42.0%)	971 (41.5%)	926 (42.0%)
11-15	-	-	830 (35.5%)	518 (23.5%)	830 (35.5%)	518 (23.5%)
>15	-	-	25 (1.1%)	13 (0.6%)	25 (1.1%)	13 (0.6%)

Shimla

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	355 (6.2%)	880 (17.3%)	79 (3.7%)	133 (6.5%)	434 (5.5%)	1013 (14.2%)
1-5	365 (6.4%)	606 (11.9%)	49 (2.3%)	102 (5.0%)	414 (5.3%)	708 (9.9%)
6-10	2693 (47.0%)	1988 (39.1%)	601 (28.1%)	621 (30.2%)	3294 (41.9%)	2609 (36.5%)
11-15	1945 (34.0%)	1351 (26.6%)	1082 (50.6%)	933 (45.4%)	3027 (38.5%)	2284 (32.0%)
>15	367 (6.4%)	258 (5.1%)	327 (15.3%)	268 (13.0%)	694 (8.8%)	526 (7.4%)

Trivandrum

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	193 (4.3%)	356 (7.8%)	168 (5.8%)	306 (9.9%)	361 (4.9%)	662 (8.7%)
1-5	717 (16.1%)	849 (18.7%)	381 (13.2%)	440 (14.2%)	1098 (15.0%)	1289 (16.8%)
6-10	2384 (53.6%)	2044 (44.9%)	1354 (46.8%)	1360 (43.8%)	3738 (50.9%)	3404 (44.5%)
11-15	1016 (22.8%)	1144 (25.2%)	814 (28.1%)	832 (26.8%)	1830 (24.9%)	1976 (25.8%)
>15	137 (3.1%)	155 (3.4%)	178 (6.1%)	166 (5.3%)	315 (4.3%)	321 (4.2%)

Total

Years of education	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
None	9413 (17.2%)	18704 (34.7%)	2231 (7.4%)	5317 (17.4%)	11644 (13.7%)	24021 (28.4%)
1-5	9419 (17.2%)	8206 (15.2%)	2263 (7.5%)	2892 (9.5%)	11682 (13.7%)	11098 (13.1%)
6-10	23236 (42.3%)	17326 (32.1%)	11874 (39.3%)	11889 (38.9%)	35110 (41.3%)	29215 (34.6%)
11-15	10378 (18.9%)	6493 (12.0%)	11429 (37.8%)	8574 (28.1%)	21807 (25.6%)	15067 (17.8%)
>15	2437 (4.4%)	3199 (5.9%)	2425 (8.0%)	1870 (6.1%)	4862 (5.7%)	5069 (6.0%)

Table 6. Socioeconomic status of respondents in rural and urban areas at each centre

	Rural			Urban			Total		
	Low	Middle	High	Low	Middle	High	Low	Middle	High
Ahmedabad	4466	7466	81	1318	4728	28	5784	12194	109
Berhampur	7440	4719	18	509	2300	39	7949	7019	57
Bikaner	7340	2880	10	1400	3461	260	8740	6341	270
Chennai	1088	7219	601	1149	4842	102	2237	12061	703
Guwahati	5294	4902	1	364	4271	170	5658	9173	171
Kolkata	6568	1996	195	544	1880	1345	7112	3876	1540
Mumbai	6698	826	1	169	6213	35	6867	7039	36
Mysore	2266	5708	1151	600	4547	745	2866	10255	1896
Nagpur	7243	2831	0	905	4076	24	8148	6907	24
Secunderabad	-	-	-	1324	3037	185	1324	3037	185
Shimla	6675	3318	815	1003	1642	1550	7678	4960	2365
Trivandrum	7265	1705	26	3445	2447	108	10710	4152	134
Total	62343	43570	2899	12730	43444	4591	75073	87014	7490

Table 7. Proportion of ever-smokers of either gender in rural and urban areas at each centre

	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
Ahmedabad	1988 (32.8%)	16 (0.3%)	395 (12.8%)	10 (0.3%)	2383 (26.1%)	26 (0.3%)
Berhampur	592 (9.6%)	1 (0.0%)	81 (5.6%)	1 (0.1%)	673 (8.9%)	2 (0.0%)
Bikaner	1462 (26.7%)	8 (0.2%)	420 (15.6%)	7 (0.3%)	1882 (23.0%)	15 (0.2%)
Chennai	951 (27.4%)	10 (0.2%)	535 (23.1%)	13 (0.3%)	1486 (25.7%)	23 (0.2%)
Guwahati	455 (8.5%)	62 (1.3%)	293 (11.4%)	6 (0.3%)	748 (9.4%)	68 (1.0%)
Kolkata	1545 (34.2%)	39 (0.9%)	744 (40.7%)	20 (1.0%)	2289 (36.1%)	59 (1.0%)
Mumbai	420 (11.4%)	80 (2.1%)	153 (4.5%)	0	573 (8.1%)	80 (1.2%)
Mysore	1504 (31.5%)	19 (0.4%)	294 (9.9%)	10 (0.3%)	1798 (23.2%)	29 (0.4%)
Nagpur	421 (8.1%)	0	321 (12.6%)	2 (0.1%)	742 (9.6%)	2 (0.0%)
Secunderabad	-	-	194 (8.3%)	4 (0.2%)	194 (8.3%)	4 (0.2%)
Shimla	753 (13.2%)	110 (2.2%)	293 (13.7%)	12 (0.6%)	1046 (13.3%)	122 (1.7%)
Trivandrum	1217 (27.4%)	15 (0.3%)	713 (24.6%)	5 (0.2%)	1930 (26.3%)	20 (0.3%)
Total	11308 (20.6%)	360 (0.7%)	4436 (14.7%)	90 (0.3%)	15744 (18.5%)	450 (0.5%)

Table 8. Smoking habits of respondents of either gender in rural and urban areas at each centre

Ahmedabad

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	3 (0.2%)	0	24 (6.1%)	0
Bidi	1434 (72.1%)	13 (81.3%)	360 (91.1%)	9 (90.0%)
Hookah	13 (0.7%)	1 (6.3%)	5 (1.3%)	1 (10.0%)
Others	538 (27.1%)	2 (12.5%)	6 (1.5%)	0
Current status: Still smoking	1857 (93.4%)	15 (93.8%)	363 (91.9%)	10 (100%)
Left for <1 year	6 (0.3%)	0	4 (1.0%)	0
Left for >1 year	125 (6.3%)	1 (6.3%)	28 (7.1%)	0
Daily amount of smoked tobacco	15 (10-25)	13 (10-25)	15 (10-20)	10 (8-25)
Age of starting smoking (years)	17 (17-18)	19 (16-29)	18 (18-20)	20 (18-30)

Berhampur

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	327 (55.2%)	0	64 (79.0%)	1 (100%)
Bidi	231 (39.0%)	0	0	0
Hookah	30 (5.1%)	0	0	0
Others	4 (0.7%)	0	0	0
Current status: Still smoking	561 (94.8%)	1 (100%)	76 (93.8%)	1 (100%)
Left for <1 year	5 (0.8%)	0	0	0
Left for >1 year	26 (4.4%)	0	5 (6.2%)	0
Daily amount of smoked tobacco	5 (3-6)	2 (2-2)	5 (3-6)	5 (5-5)
Age of starting smoking (years)	25 (20-25)	20 (20-20)	25 (20-25)	28 (28-28)

Bikaner

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	70 (4.8%)	0	62 (14.8%)	0
Bidi	1338 (91.5%)	8 (100%)	355 (84.5%)	7 (100%)
Hookah	3 (0.2%)	0	1 (0.2%)	0
Others	51 (3.5%)	0	2 (0.5%)	0
Current status: Still smoking	1303 (89.1%)	8 (100%)	343 (81.7%)	7 (100%)
Left for <1 year	0	0	0	0
Left for >1 year	159 (10.9%)	0	77 (18.3%)	0
Daily amount of smoked tobacco	18 (10-200)	11 (7-18)	15 (10-20)	10 (2-20)
Age of starting smoking (years)	20 (20-20)	20 (15-38)	20 (20-25)	20 (10-20)

Chennai

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	369 (38.8%)	4 (40.0%)	338 (63.2%)	6 (46.2%)
Bidi	574 (60.4%)	4 (40.0%)	192 (35.9%)	6 (46.2%)
Hookah	0	0	0	0
Others	8 (0.8%)	2 (20.0%)	5 (0.9%)	1 (7.7%)
Current status: Still smoking	763 (80.8%)	8 (80.0%)	427 (79.8%)	12 (92.3%)
Left for <1 year	34 (3.6%)	0	15 (2.8%)	1 (7.7%)
Left for >1 year	147 (15.6%)	2 (20.0%)	93 (17.4%)	0
Daily amount of smoked tobacco	10 (5-20)	8 (5-20)	10 (4-20)	10 (5-10)
Age of starting smoking (years)	19 (15-21)	20 (18-25)	21 (18-25)	20 (18-25)

Guwahati

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	175 (38.6%)	3 (4.8%)	256 (87.4%)	5 (83.3%)
Bidi	262 (57.8%)	59 (95.2%)	37 (12.6%)	1 (16.7%)
Hookah	8 (1.8%)	0	0	0
Others	8 (1.8%)	0	0	0
Current status: Still smoking	388 (86.0%)	53 (85.5%)	272 (92.8%)	5 (83.3%)
Left for <1 year	7 (1.6%)	0	2 (0.7%)	0
Left for >1 year	56 (12.4%)	9 (14.5%)	19 (6.5%)	1 (16.7%)
Daily amount of smoked tobacco	8 (5-10)	8 (4-20)	8 (5-10)	10 (5-10)
Age of starting smoking (years)	20 (18-25)	20 (20-30)	25 (24-27)	24 (20-27)

Kolkata

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	135 (8.7%)	1 (2.6%)	617 (82.9%)	19 (95.0%)
Bidi	1406 (91.1%)	38 (97.4%)	123 (16.5%)	1 (5.0%)
Hookah	3 (0.2%)	0	0	0
Others	0	0	4 (0.5%)	0
Current status: Still smoking	1447 (93.8%)	34 (87.2%)	610 (82.0%)	16 (80.0%)
Left for <1 year	1 (0.1%)	1 (2.6%)	5 (0.7%)	1 (5.0%)
Left for >1 year	95 (6.2%)	4 (10.3%)	129 (17.3%)	3 (15.0%)
Daily amount of smoked tobacco	20 (15-20)	12 (10-20)	10 (5-12)	6 (5-10)
Age of starting smoking (years)	17 (16-18)	20 (18-25)	20 (18-22)	19 (18-21)

Mumbai

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	43 (10.2%)	8 (10.0%)	125 (81.7%)	-
Bidi	377 (89.8%)	72 (90.0%)	27 (17.6%)	-
Hookah	0	0	0	-
Others	0	0	1 (0.7%)	-
Current status: Still smoking	411 (97.9%)	78 (97.5%)	144 (96.6%)	-
Left for <1 year	0	0	1 (0.7%)	-
Left for >1 year	9 (2.1%)	2 (2.5%)	4 (2.7%)	-
Daily amount of smoked tobacco	4 (3-7)	3 (2-4)	5 (4-7)	-
Age of starting smoking (years)	31 (27-36)	48 (41-55)	25 (20-30)	-

Mysore

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	136 (9.1%)	3 (16.7%)	96 (32.7%)	2 (20.0%)
Bidi	1362 (90.9%)	15 (83.3%)	198 (67.3%)	8 (80.0%)
Hookah	0 (0.0%)	0	0	0
Others	1 (0.1%)	0	0	0
Current status: Still smoking	1443 (97.2%)	17 (100%)	293 (99.7%)	10 (100%)
Left for <1 year	4 (0.3%)	0	0 (0.0%)	0
Left for >1 year	37 (2.5%)	0	1 (0.3%)	0
Daily amount of smoked tobacco	24 (12-24)	24 (10-24)	10 (5-20)	14 (10-15)
Age of starting smoking (years)	20 (17-20)	19 (16-20)	20 (18-21)	19 (18-20)

Nagpur

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	38 (9.0%)	-	135 (42.1%)	1 (50.0%)
Bidi	373 (88.8%)	-	180 (56.1%)	1 (50.0%)
Hookah	7 (1.7%)	-	0 (0.0%)	0
Others	2 (0.5%)	-	6 (1.9%)	0
Current status: Still smoking	415 (98.8%)	-	312 (97.2%)	2 (100%)
Left for <1 year	1 (0.2%)	-	6 (1.9%)	0
Left for >1 year	4 (1.0%)	-	3 (0.9%)	0
Daily amount of smoked tobacco	4 (4-7)	-	3 (2-6)	2 (2-2)
Age of starting smoking (years)	22 (19-25)	-	21 (19-25)	14 (7-20)

Secunderabad

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	-	-	169 (87.6%)	3 (75.0%)
Bidi	-	-	23 (11.9%)	1 (25.0%)
Hookah	-	-	1 (0.5%)	0
Others	-	-	0	0
Current status: Still smoking	-	-	143 (76.5%)	4 (100%)
Left for <1 year	-	-	33 (17.6%)	0
Left for >1 year	-	-	11 (5.9%)	0
Daily amount of smoked tobacco	-	-	8 (5-10)	9 (7-10)
Age of starting smoking (years)	-	-	20 (18-20)	21 (17-26)

Shimla

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	280 (37.2%)	3 (2.7%)	200 (68.3%)	7 (58.3%)
Bidi	470 (62.4%)	105 (95.5%)	91 (31.1%)	5 (41.7%)
Hookah	3 (0.4%)	1 (0.9%)	1 (0.3%)	0
Others	0	1 (0.9%)	1 (0.3%)	0
Current status: Still smoking	726 (96.5%)	103 (93.6%)	286 (97.6%)	10 (83.3%)
Left for <1 year	19 (2.5%)	4 (3.6%)	3 (1.0%)	1 (8.3%)
Left for >1 year	7 (0.9%)	3 (2.7%)	4 (1.4%)	1 (8.3%)
Daily amount of smoked tobacco	12 (8-15)	10 (7-14)	10 (6-13)	6 (5-10)
Age of starting smoking (years)	20 (18-25)	25 (19-30)	20 (18-25)	20 (18-26)

Trivandrum

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	563 (46.3%)	5 (35.7%)	454 (63.7%)	4 (80.0%)
Bidi	625 (51.4%)	7 (50.0%)	255 (35.8%)	0
Hookah	29 (2.4%)	0	4 (0.6%)	1 (20.0%)
Others	0	2 (14.3%)	0	0
Current status: Still smoking	1106 (90.9%)	10 (76.9%)	663 (93.0%)	3 (60.0%)
Left for <1 year	5 (0.4%)	1 (7.7%)	9 (1.3%)	0
Left for >1 year	106 (8.7%)	2 (15.4%)	41 (5.8%)	2 (40.0%)
Daily amount of smoked tobacco	10 (6-15)	5 (2-15)	9 (6-10)	10 (10-15)
Age of starting smoking (years)	20 (19-25)	25 (15-30)	20 (18-25)	20 (18-24)

Total

	Rural		Urban	
	Male	Female	Male	Female
Tobacco product: Cigarette	2139 (18.9%)	27 (7.5%)	2540 (57.3%)	48 (53.3%)
Bidi	8452 (74.8%)	322 (89.9%)	1858 (41.9%)	39 (43.3%)
Hookah	96 (0.8%)	2 (0.6%)	12 (0.3%)	2 (2.2%)
Others	615 (5.4%)	7 (2.0%)	26 (0.6%)	1 (1.1%)
Current status: Still smoking	10420 (92.4%)	327 (91.9%)	3932 (88.9%)	80 (88.9%)
Left for <1 year	82 (0.7%)	6 (1.7%)	78 (1.8%)	3 (3.3%)
Left for >1 year	771 (6.8%)	23 (6.5%)	415 (9.4%)	7 (7.8%)
Daily amount of smoked tobacco	12 (8-20)	10 (4-15)	10 (5-15)	10 (5-10)
Age of starting smoking (years)	20 (17-22)	25 (19-40)	20 (18-25)	20 (18-23)

Data presented as number and percentage, or median and interquartile range, as appropriate

Table 9. Ever-exposure to household environmental tobacco smoke (ETS) of respondents of either gender in rural and urban areas at each centre

	Rural		Urban	
	Male	Female	Male	Female
Ahmedabad	2893 (47.7%)	3266 (54.9%)	577 (18.8%)	709 (23.6%)
Berhampur	246 (4.0%)	524 (8.7%)	41 (2.9%)	84 (5.9%)
Bikaner	2229 (40.7%)	2582 (54.3%)	844 (31.4%)	933 (38.4%)
Chennai	1891 (54.5%)	3475 (63.9%)	1031 (44.4%)	2273 (60.2%)
Guwahati	979 (18.2%)	1327 (27.5%)	184 (7.2%)	391 (17.5%)
Kolkata	1276 (28.3%)	2537 (59.8%)	298 (16.3%)	708 (36.5%)
Mumbai	527 (14.3%)	776 (20.2%)	80 (2.3%)	108 (3.6%)
Mysore	1639 (34.3%)	2288 (52.6%)	279 (9.4%)	568 (19.4%)
Nagpur	281 (5.4%)	455 (9.4%)	215 (8.4%)	360 (14.7%)
Secunderabad	-	-	142 (6.1%)	176 (8.0%)
Shimla	412 (7.2%)	634 (12.5%)	130 (6.1%)	290 (14.1%)
Trivandrum	1055 (23.7%)	1904 (41.9%)	295 (10.2%)	923 (29.7%)
Total	13428 (24.5%)	19768 (36.7%)	4116 (13.6%)	7523 (24.6%)

Table 10. Timing of ETS exposure in the study population of respondents of either gender in rural and urban areas at each centre

		Rural		Urban	
		Male	Female	Male	Female
Ahmedabad	None	3175 (52.3%)	2679 (45.1%)	2497 (81.2%)	2291 (76.4%)
	Childhood	2790 (46.0%)	369 (6.2%)	546 (17.8%)	175 (5.8%)
	Adulthood	45 (0.7%)	2107 (35.4%)	18 (0.6%)	335 (11.2%)
	Both	58 (1.0%)	790 (13.3%)	13 (0.4%)	199 (6.6%)
Berhampur	None	5892 (96.0%)	5515 (91.3%)	1393 (97.1%)	1330 (94.1%)
	Childhood	228 (3.7%)	99 (1.6%)	41 (2.9%)	21 (1.5%)
	Adulthood	18 (0.3%)	425 (7.0%)	0	63 (4.5%)
	Both	0	0	0	0
Bikaner	None	3246 (59.3%)	2173 (45.7%)	1846 (68.6%)	1498 (61.6%)
	Childhood	2121 (38.7%)	631 (13.3%)	819 (30.4%)	346 (14.2%)
	Adulthood	50 (0.9%)	1140 (24.0%)	17 (0.6%)	368 (15.1%)
	Both	58 (1.1%)	811 (17.1%)	8 (0.3%)	219 (9.0%)
Chennai	None	1581 (45.5%)	1961 (36.1%)	1289 (55.6%)	1500 (39.8%)
	Childhood	1362 (39.2%)	1066 (19.6%)	868 (37.4%)	884 (23.4%)
	Adulthood	139 (4.0%)	1139 (21.0%)	47 (2.0%)	644 (17.1%)
	Both	390 (11.2%)	1270 (23.4%)	116 (5.0%)	745 (19.7%)
Guwahati	None	4395 (81.8%)	3496 (72.5%)	2389 (92.8%)	1841 (82.5%)
	Childhood	958 (17.8%)	671 (13.9%)	182 (7.1%)	211 (9.5%)
	Adulthood	17 (0.3%)	578 (12.0%)	2 (0.1%)	171 (7.7%)
	Both	4 (0.1%)	78 (1.6%)	0	9 (0.4%)
Kolkata	None	3239 (71.7%)	1707 (40.2%)	1530 (83.7%)	1233 (63.5%)
	Childhood	1233 (27.3%)	713 (16.8%)	271 (14.8%)	181 (9.3%)
	Adulthood	33 (0.7%)	1176 (27.7%)	24 (1.3%)	426 (21.9%)
	Both	10 (0.2%)	648 (15.3%)	3 (0.2%)	101 (5.2%)

Mumbai	None	3155 (85.7%)	3067 (79.8%)	3336 (97.7%)	2893 (96.4%)
	Childhood	488 (13.3%)	156 (4.1%)	75 (2.2%)	35 (1.2%)
	Adulthood	39 (1.1%)	616 (16.0%)	5 (0.1%)	73 (2.4%)
	Both	0	4 (0.1%)	0	0
Mysore	None	3139 (65.7%)	2059 (47.4%)	2681 (90.6%)	2364 (80.6%)
	Childhood	1435 (30.0%)	515 (11.8%)	247 (8.3%)	124 (4.2%)
	Adulthood	184 (3.9%)	1653 (38.0%)	17 (0.6%)	420 (14.3%)
	Both	20 (0.4%)	120 (2.8%)	15 (0.5%)	24 (0.8%)
Nagpur	None	4928 (94.6%)	4410 (90.6%)	2340 (91.6%)	2090 (85.3%)
	Childhood	268 (5.1%)	118 (2.4%)	204 (8.0%)	133 (5.4%)
	Adulthood	13 (0.2%)	337 (6.9%)	9 (0.4%)	178 (7.3%)
	Both	0	0	2 (0.1%)	49 (2.0%)
Secunderabad	None	-	-	2197 (93.9%)	2031 (92.0%)
	Childhood	-	-	70 (3.0%)	34 (1.5%)
	Adulthood	-	-	69 (2.9%)	138 (6.3%)
	Both	-	-	3 (0.1%)	4 (0.2%)
Shimla	None	5313 (92.8%)	4449 (87.5%)	2008 (93.9%)	1767 (85.9%)
	Childhood	376 (6.6%)	111 (2.2%)	113 (5.3%)	84 (4.1%)
	Adulthood	35 (0.6%)	519 (10.2%)	17 (0.8%)	204 (9.9%)
	Both	1 (0.0%)	4 (0.1%)	0	2 (0.1%)
Trivandrum	None	3392 (76.3%)	2644 (58.1%)	2600 (89.8%)	2181 (70.3%)
	Childhood	982 (22.1%)	947 (20.8%)	285 (9.8%)	440 (14.2%)
	Adulthood	26 (0.6%)	571 (12.6%)	3 (0.1%)	356 (11.5%)
	Both	47 (1.1%)	386 (8.5%)	7 (0.2%)	127 (4.1%)
Total	None	41455 (75.5%)	34160 (63.3%)	26106 (86.4%)	23019 (75.4%)
	Childhood	12241 (22.3%)	5396 (10.0%)	3721 (12.3%)	2668 (8.7%)
	Adulthood	599 (1.1%)	10261 (19.0%)	228 (0.8%)	3376 (11.1%)
	Both	588 (1.1%)	4111 (7.6%)	167 (0.6%)	1479 (4.8%)

Table 11. Persons responsible for childhood ETS exposure of respondents of either gender in rural and urban areas at each centre

		Rural		Urban	
		Male	Female	Male	Female
Ahmedabad	Grandfather	152 (2.5%)	28 (0.5%)	53 (1.7%)	21 (0.7%)
	Grandmother	5 (0.1%)	1 (0.0%)	1 (0.0%)	0
	Father	2758 (45.5%)	1141 (19.2%)	511 (16.6%)	364 (12.1%)
	Mother	8 (0.1%)	2 (0.0%)	5 (0.2%)	0
	Brother	69 (1.1%)	4 (0.1%)	49 (1.6%)	6 (0.2%)
	Sister	0	0	0	0
Berhampur	Grandfather	4 (0.1%)	2 (0.0%)	0	0
	Grandmother	0	0	0	0
	Father	201 (3.3%)	92 (1.5%)	41 (2.9%)	20 (1.4%)
	Mother	0	0	0	0
	Brother	21 (0.3%)	1 (0.0%)	0	0
	Sister	0	0	0	0
Bikaner	Grandfather	152 (2.8%)	36 (0.8%)	122 (4.5%)	55 (2.3%)
	Grandmother	3 (0.1%)	1 (0.0%)	3 (0.1%)	0
	Father	1931 (35.3%)	1403 (29.5%)	721 (26.8%)	536 (22.0%)
	Mother	4 (0.1%)	2 (0.0%)	6 (0.2%)	1 (0.0%)
	Brother	471 (8.6%)	72 (1.5%)	80 (3.0%)	33 (1.4%)
	Sister	0	0	0	0
Chennai	Grandfather	86 (2.5%)	83 (1.5%)	64 (2.8%)	108 (2.9%)
	Grandmother	4 (0.1%)	11 (0.2%)	35 (1.5%)	77 (2.0%)
	Father	1663 (47.9%)	2226 (40.9%)	884 (38.1%)	1467 (38.9%)
	Mother	9 (0.3%)	16 (0.3%)	50 (2.2%)	129 (3.4%)
	Brother	20 (0.6%)	39 (0.7%)	70 (3.0%)	106 (2.8%)
	Sister	0	0	2 (0.1%)	6 (0.2%)
Guwahati	Grandfather	30 (0.6%)	40 (0.8%)	5 (0.2%)	5 (0.2%)
	Grandmother	44 (0.8%)	38 (0.8%)	0	4 (0.2%)
	Father	779 (14.5%)	617 (12.8%)	149 (5.8%)	199 (8.9%)
	Mother	126 (2.3%)	77 (1.6%)	3 (0.1%)	2 (0.1%)
	Brother	53 (1.0%)	30 (0.6%)	23 (0.9%)	10 (0.4%)
	Sister	1 (0.0%)	1 (0.0%)	0	0
Kolkata	Grandfather	52 (1.2%)	34 (0.8%)	7 (0.4%)	5 (0.3%)
	Grandmother	8 (0.2%)	8 (0.2%)	0	1 (0.1%)
	Father	1149 (25.4%)	1287 (30.3%)	240 (13.1%)	249 (12.8%)
	Mother	6 (0.1%)	7 (0.2%)	1 (0.1%)	2 (0.1%)
	Brother	167 (3.7%)	58 (1.4%)	44 (2.4%)	35 (1.8%)
	Sister	0	0	0	1 (0.1%)
Mumbai	Grandfather	35 (1.0%)	29 (0.8%)	3 (0.1%)	6 (0.2%)

	Grandmother	24 (0.7%)	17 (0.4%)	0	0
	Father	394 (10.7%)	112 (2.9%)	47 (1.4%)	25 (0.8%)
	Mother	55 (1.5%)	6 (0.2%)	0	0
	Brother	7 (0.2%)	1 (0.0%)	14 (0.4%)	4 (0.1%)
	Sister	0	0	0	0
Mysore	Grandfather	49 (1.0%)	30 (0.7%)	5 (0.2%)	3 (0.1%)
	Grandmother	1 (0.0%)	0	0	0
	Father	1234 (25.8%)	539 (12.4%)	224 (7.6%)	129 (4.4%)
	Mother	4 (0.1%)	2 (0.0%)	5 (0.2%)	1 (0.0%)
	Brother	263 (5.5%)	61 (1.4%)	27 (0.9%)	9 (0.3%)
	Sister	0	1 (0.0%)	0	0
Nagpur	Grandfather	14 (0.3%)	8 (0.2%)	22 (0.9%)	23 (0.9%)
	Grandmother	0	0	0	0
	Father	240 (4.6%)	111 (2.3%)	174 (6.8%)	152 (6.2%)
	Mother	0	0	0	0
	Brother	15 (0.3%)	0	17 (0.7%)	8 (0.3%)
	Sister	0	0	0	0
Secunderabad	Grandfather	-	-	10 (0.4%)	13 (0.6%)
	Grandmother	-	-	0	1 (0.0%)
	Father	-	-	42 (1.8%)	20 (0.9%)
	Mother	-	-	0	1 (0.0%)
	Brother	-	-	15 (0.7%)	3 (0.1%)
	Sister	-	-	2 (0.1%)	1 (0.0%)
Shimla	Grandfather	14 (0.2%)	8 (0.2%)	2 (0.1%)	3 (0.1%)
	Grandmother	25 (0.4%)	12 (0.2%)	0	0
	Father	243 (4.2%)	78 (1.5%)	88 (4.1%)	79 (3.8%)
	Mother	66 (1.2%)	12 (0.2%)	2 (0.1%)	0
	Brother	47 (0.8%)	8 (0.2%)	24 (1.1%)	6 (0.3%)
	Sister	1 (0.0%)	1 (0.0%)	2 (0.1%)	0
Trivandrum	Grandfather	7 (0.2%)	3 (0.1%)	0	0
	Grandmother	12 (0.3%)	8 (0.2%)	1 (0.0%)	0
	Father	1008 (22.7%)	1263 (27.8%)	285 (9.8%)	538 (17.3%)
	Mother	1 (0.0%)	3 (0.1%)	0	1 (0.0%)
	Brother	11 (0.2%)	5 (0.1%)	4 (0.1%)	2 (0.1%)
	Sister	4 (0.1%)	1 (0.0%)	1 (0.0%)	1 (0.0%)
Total	Grandfather	595 (1.1%)	301 (0.6%)	293 (1.0%)	242 (0.8%)
	Grandmother	126 (0.2%)	96 (0.2%)	40 (0.1%)	83 (0.3%)
	Father	11600 (21.1%)	8869 (16.4%)	3406 (11.3%)	3778 (12.4%)
	Mother	279 (0.5%)	127 (0.2%)	72 (0.2%)	137 (0.4%)
	Brother	1144 (2.1%)	279 (0.5%)	367 (1.2%)	223 (0.7%)
	Sister	6 (0.0%)	4 (0.0%)	7 (0.0%)	9 (0.0%)

Table 12. Persons responsible for ETS exposure in adulthood of respondents of either gender in rural and urban areas at each centre

		Rural		Urban	
		Male	Female	Male	Female
Ahmedabad	Father	9 (0.1%)	1213 (20.4%)	9 (0.3%)	168 (5.6%)
	Mother	0	5 (0.1%)	0	3 (0.1%)
	Brother	2 (0.0%)	41 (0.7%)	1 (0.0%)	7 (0.2%)
	Sister	0	4 (0.1%)	0	0
	Son	81 (1.3%)	208 (3.5%)	15 (0.5%)	49 (1.6%)
	Daughter	1 (0.0%)	4 (0.1%)	1 (0.0%)	0
	Spouse	19 (0.3%)	1964 (33.0%)	5 (0.2%)	370 (12.3%)
Berhampur	Father	4 (0.1%)	52 (0.9%)	0	6 (0.4%)
	Mother	0	0	0	0 (0.0%)
	Brother	0	0	0	0 (0.0%)
	Sister	0	0	0	0 (0.0%)
	Son	10 (0.2%)	33 (0.5%)	0	4 (0.3%)
	Daughter	0	0	0	0 (0.0%)
	Spouse	2 (0.0%)	328 (5.4%)	0	52 (3.7%)
Bikaner	Father	23 (0.4%)	641 (13.5%)	5 (0.2%)	213 (8.8%)
	Mother	0	2 (0.0%)	0	2 (0.1%)
	Brother	6 (0.1%)	264 (5.6%)	2 (0.1%)	34 (1.4%)
	Sister	0	0	0	0
	Son	71 (1.3%)	163 (3.4%)	11 (0.4%)	30 (1.2%)
	Daughter	0	4 (0.1%)	0	0
	Spouse	19 (0.3%)	1416 (29.8%)	6 (0.2%)	402 (16.5%)
Chennai	Father	483 (13.9%)	1007 (18.5%)	134 (5.8%)	346 (9.2%)
	Mother	1 (0.0%)	5 (0.1%)	6 (0.3%)	35 (0.9%)
	Brother	31 (0.9%)	16 (0.3%)	4 (0.2%)	18 (0.5%)
	Sister	0	0	0	0
	Son	2 (0.1%)	16 (0.3%)	5 (0.2%)	37 (1.0%)
	Daughter	0	1 (0.0%)	0	0
	Spouse	28 (0.8%)	1848 (34.0%)	23 (1.0%)	1124 (29.8%)
Guwahati	Father	0	0	0	29 (1.3%)
	Mother	0	0	0	1 (0.0%)
	Brother	0	0	0	1 (0.0%)
	Sister	0	0	0	0
	Son	0	0	0	2 (0.1%)
	Daughter	0	0	0	0
	Spouse	13 (0.2%)	410 (8.5%)	2 (0.1%)	144 (6.5%)

Kolkata	Father	15 (0.3%)	516 (12.2%)	3 (0.2%)	57 (2.9%)
	Mother	1 (0.0%)	13 (0.3%)	0	2 (0.1%)
	Brother	2 (0.0%)	77 (1.8%)	0	19 (1.0%)
	Sister	0	0	0	0
	Son	3 (0.1%)	45 (1.1%)	21 (1.1%)	47 (2.4%)
	Daughter	0	1 (0.0%)	0	1 (0.1%)
	Spouse	23 (0.5%)	1457 (34.3%)	4 (0.2%)	458 (23.6%)
Mumbai	Father	7 (0.2%)	257 (6.7%)	1 (0.0%)	17 (0.6%)
	Mother	4 (0.1%)	53 (1.4%)	0	0
	Brother	0 (0.0%)	2 (0.1%)	0	6 (0.2%)
	Sister	1 (0.0%)	1 (0.0%)	0	0
	Son	3 (0.1%)	16 (0.4%)	2 (0.1%)	17 (0.6%)
	Daughter	0	3 (0.1%)	0	0
	Spouse	23 (0.6%)	302 (7.9%)	2 (0.1%)	36 (1.2%)
Mysore	Father	26 (0.5%)	316 (7.3%)	7 (0.2%)	35 (1.2%)
	Mother	0	0	0	0
	Brother	29 (0.6%)	82 (1.9%)	10 (0.3%)	8 (0.3%)
	Sister	1 (0.0%)	0	0	0
	Son	125 (2.6%)	236 (5.4%)	6 (0.2%)	35 (1.2%)
	Daughter	0	0	0	0
	Spouse	25 (0.5%)	1320 (30.4%)	9 (0.3%)	373 (12.7%)
Nagpur	Father	0	76 (1.6%)	4 (0.2%)	63 (2.6%)
	Mother	0	0	0	0
	Brother	0	8 (0.2%)	0	0
	Sister	0	0	0	0
	Son	9 (0.2%)	24 (0.5%)	5 (0.2%)	9 (0.4%)
	Daughter	0	0	0	0
	Spouse	2 (0.0%)	236 (4.9%)	2 (0.1%)	160 (6.5%)
Secunderabad	Father	-	-	51 (2.2%)	38 (1.8%)
	Mother	-	-	0	0
	Brother	-	-	12 (0.5%)	19 (0.9%)
	Sister	-	-	0	0
	Son	-	-	9 (0.4%)	12 (0.6%)
	Daughter	-	-	2 (0.1%)	2 (0.1%)
	Spouse	-	-	1 (0.0%)	75 (3.5%)
Shimla	Father	4 (0.1%)	91 (1.8%)	5 (0.2%)	17 (0.8%)
	Mother	0	40 (0.8%)	0	0
	Brother	3 (0.1%)	25 (0.5%)	3 (0.1%)	4 (0.2%)
	Sister	1 (0.0%)	2 (0.0%)	0	0

	Son	14 (0.2%)	36 (0.7%)	8 (0.4%)	14 (0.7%)
	Daughter	0	0	0	0
	Spouse	15 (0.3%)	355 (7.0%)	1 (0.0%)	173 (8.4%)
Trivandrum	Father	34 (0.8%)	61 (1.3%)	5 (0.2%)	8 (0.3%)
	Mother	0 (0.0%)	2 (0.0%)	0	0
	Brother	6 (0.1%)	4 (0.1%)	0	0
	Sister	1 (0.0%)	2 (0.0%)	0	0
	Son	12 (0.3%)	48 (1.1%)	0	3 (0.1%)
	Daughter	3 (0.1%)	8 (0.2%)	0	5 (0.2%)
	Spouse	16 (0.4%)	870 (19.1%)	5 (0.2%)	469 (15.1%)
Total	Father	612 (1.1%)	4400 (8.2%)	224 (0.7%)	997 (3.3%)
	Mother	7 (0.0%)	200 (0.4%)	6 (0.0%)	43 (0.1%)
	Brother	81 (0.1%)	520 (1.0%)	32 (0.1%)	116 (0.4%)
	Sister	4 (0.0%)	9 (0.0%)	0	0
	Son	330 (0.6%)	843 (1.6%)	82 (0.3%)	259 (0.9%)
	Daughter	4 (0.0%)	23 (0.0%)	3 (0.0%)	8 (0.0%)
	Spouse	185 (0.3%)	10506 (19.5%)	60 (0.2%)	3836 (12.6%)

Table 13. Proportion of respondents of either gender regularly cooking in rural and urban areas

		Rural		Urban	
		Male	Female	Male	Female
Ahmedabad	Current	67 (1.1%)	5548 (93.3%)	77 (2.5%)	2747 (91.6%)
	Past	4 (0.1%)	336 (5.7%)	6 (0.2%)	173 (5.8%)
	Never	5997 (98.8%)	61 (1.0%)	2991 (97.3%)	80 (2.7%)
Berhampur	Current	56 (0.9%)	5171 (85.6%)	15 (1.0%)	1255 (88.8%)
	Past	9 (0.1%)	656 (10.9%)	1 (0.1%)	98 (6.9%)
	Never	6073 (98.9%)	212 (3.5%)	1418 (98.9%)	61 (4.3%)
Bikaner	Current	70 (1.3%)	4000 (84.1%)	55 (2.0%)	1910 (78.6%)
	Past	8 (0.1%)	392 (8.2%)	9 (0.3%)	157 (6.5%)
	Never	5397 (98.6%)	363 (7.6%)	2626 (97.6%)	364 (15.0%)
Chennai	Current	160 (4.6%)	4748 (87.3%)	139 (6.0%)	3303 (87.5%)
	Past	16 (0.5%)	441 (8.1%)	10 (0.4%)	206 (5.5%)
	Never	3296 (94.9%)	247 (4.5%)	2171 (93.6%)	264 (7.0%)
Guwahati	Current	99 (1.8%)	2918 (60.5%)	25 (1.0%)	1253 (56.1%)
	Past	18 (0.3%)	396 (8.2%)	4 (0.2%)	154 (6.9%)
	Never	5257 (97.8%)	1509 (31.3%)	2544 (98.9%)	825 (37.0%)
Kolkata	Current	64 (1.4%)	2951 (69.5%)	21 (1.1%)	1162 (59.9%)
	Past	12 (0.3%)	710 (16.7%)	6 (0.3%)	252 (13.0%)
	Never	4439 (98.3%)	583 (13.7%)	1801 (98.5%)	527 (27.2%)
Mumbai	Current	37 (1.0%)	3536 (92.0%)	256 (7.5%)	2443 (81.4%)
	Past	0	22 (0.6%)	8 (0.2%)	147 (4.9%)
	Never	3645 (99.0%)	285 (7.4%)	3152 (92.3%)	411 (13.7%)
Mysore	Current	68 (1.4%)	3793 (87.3%)	35 (1.2%)	2421 (82.6%)
	Past	7 (0.1%)	309 (7.1%)	4 (0.1%)	155 (5.3%)
	Never	4703 (98.4%)	245 (5.6%)	2921 (98.7%)	356 (12.1%)
Nagpur	Current	21 (0.4%)	3720 (76.5%)	25 (1.0%)	1918 (78.3%)
	Past	5 (0.1%)	926 (19.0%)	3 (0.1%)	258 (10.5%)
	Never	5183 (99.5%)	219 (4.5%)	2527 (98.9%)	274 (11.2%)
Secunderabad	Current	-	-	44 (1.9%)	1642 (74.4%)
	Past	-	-	2 (0.1%)	212 (9.6%)
	Never	-	-	2293 (98.0%)	353 (16.0%)
Shimla	Current	653 (11.4%)	3904 (76.8%)	276 (12.9%)	1583 (77.0%)
	Past	275 (4.8%)	176 (3.5%)	27 (1.3%)	67 (3.3%)
	Never	4797 (83.8%)	1003 (19.7%)	1835 (85.8%)	407 (19.8%)
Trivandrum	Current	140 (3.1%)	3861 (84.9%)	30 (1.0%)	2612 (84.1%)
	Past	11 (0.2%)	189 (4.2%)	1 (0.0%)	114 (3.7%)
	Never	4296 (96.6%)	498 (10.9%)	2864 (98.9%)	378 (12.2%)
Total	Current	1435 (2.6%)	44150 (81.9%)	998 (3.3%)	24249 (79.4%)
	Past	365 (0.7%)	4553 (8.4%)	81 (0.3%)	1993 (6.5%)
	Never	53083 (96.7%)	5225 (9.7%)	29143 (96.4%)	4300 (14.1%)

Table 14. Kitchen and cooking habits for respondents regularly cooking (currently or in past)

Ahmedabad

		Rural	Urban
Separate kitchen	No	1833 (30.8%)	533 (17.7%)
	Yes	4122 (69.2%)	2470 (82.3%)
Kitchen ventilation	No	2685 (45.1%)	272 (9.1%)
	Yes	3270 (54.9%)	2731 (90.9%)
Cooking days in a month	>21 days	5400 (90.7%)	2716 (90.4%)
	15-21 days	155 (2.6%)	50 (1.7%)
	8-14 days	121 (2.0%)	90 (3.0%)
	1-7 days	279 (4.7%)	147 (4.9%)
Cooking fuel	Electricity	3 (0.1%)	13 (0.4%)
	LPG	536 (9.0%)	2582 (86.0%)
	Kerosene	105 (1.8%)	331 (11.0%)
	Coal	0	3 (0.1%)
	Wood	5311 (89.2%)	72 (2.4%)
	Dung cake	0	0
	Crop residue	0	0
	Others	0	2 (0.1%)
Age started cooking (years)		13 (12-14)	15 (14-16)
Daily cooking hours		2 (2-3)	2 (2-3)

Berhampur

		Rural	Urban
Separate kitchen	No	136 (2.3%)	1 (0.1%)
	Yes	5756 (97.7%)	1368 (99.9%)
Kitchen ventilation	No	56 (1.0%)	1 (0.1%)
	Yes	5836 (99.0%)	1368 (99.9%)
Cooking days in a month	>21 days	5339 (90.6%)	1168 (85.3%)
	15-21 days	438 (7.4%)	195 (14.2%)
	8-14 days	115 (2.0%)	6 (0.4%)
	1-7 days	0	0
Cooking fuel	Electricity	16 (0.3%)	3 (0.2%)
	LPG	2100 (35.6%)	1129 (82.5%)
	Kerosene	56 (1.0%)	29 (2.1%)
	Coal	7 (0.1%)	0
	Wood	3587 (60.9%)	191 (14.0%)
	Dung cake	114 (1.9%)	17 (1.2%)
	Crop residue	12 (0.2%)	0
	Others	0	0
Age started cooking (years)		15 (14-16)	15 (13-15)
Daily cooking hours		3 (3-3)	3 (2-3)

Bikaner

		Rural	Urban
Separate kitchen	No	1667 (37.3%)	142 (6.7%)
	Yes	2803 (62.7%)	1989 (93.3%)
Kitchen ventilation	No	1809 (40.5%)	226 (10.6%)
	Yes	2661 (59.5%)	1905 (89.4%)
Cooking days in a month	>21 days	4425 (99.0%)	2104 (98.7%)
	15-21 days	10 (0.2%)	5 (0.2%)
	8-14 days	24 (0.5%)	17 (0.8%)
	1-7 days	11 (0.2%)	5 (0.2%)
Cooking fuel	Electricity	6 (0.1%)	1 (0.0%)
	LPG	395 (8.8%)	1539 (72.2%)
	Kerosene	8 (0.2%)	30 (1.4%)
	Coal	11 (0.2%)	2 (0.1%)
	Wood	2332 (52.2%)	180 (8.4%)
	Dung cake	1718 (38.4%)	378 (17.7%)
	Crop residue	0	0
	Others	0	1 (0.0%)
Age started cooking (years)		18 (17-19)	18 (18-20)
Daily cooking hours		2 (2-3)	2 (2-3)

Chennai

		Rural	Urban
Separate kitchen	No	1557 (29.0%)	424 (11.6%)
	Yes	3808 (71.0%)	3234 (88.4%)
Kitchen ventilation	No	1593 (29.7%)	163 (4.5%)
	Yes	3772 (70.3%)	3495 (95.5%)
Cooking days in a month	>21 days	4962 (92.5%)	3153 (86.2%)
	15-21 days	31 (0.6%)	65 (1.8%)
	8-14 days	99 (1.8%)	126 (3.4%)
	1-7 days	273 (5.1%)	314 (8.6%)
Cooking fuel	Electricity	12 (0.2%)	4 (0.1%)
	LPG	3145 (58.6%)	2644 (72.3%)
	Kerosene	195 (3.6%)	404 (11.0%)
	Coal	1 (0.0%)	1 (0.0%)
	Wood	2008 (37.4%)	596 (16.3%)
	Dung cake	0	0
	Crop residue	1 (0.0%)	8 (0.2%)
	Others	1 (0.0%)	0
Age started cooking (years)		15 (14-18)	16 (14-19)
Daily cooking hours		2 (2-3)	3 (3-4)

Guwahati

		Rural	Urban
Separate kitchen	No	88 (2.6%)	6 (0.4%)
	Yes	3343 (97.4%)	1430 (99.6%)
Kitchen ventilation	No	68 (2.0%)	4 (0.3%)
	Yes	3363 (98.0%)	1432 (99.7%)
Cooking days in a month	>21 days	3073 (89.6%)	1278 (89.0%)
	15-21 days	5 (0.1%)	0
	8-14 days	9 (0.3%)	1 (0.1%)
	1-7 days	344 (10.0%)	157 (10.9%)
Cooking fuel	Electricity	7 (0.2%)	3 (0.2%)
	LPG	854 (24.9%)	1356 (94.4%)
	Kerosene	14 (0.4%)	5 (0.3%)
	Coal	8 (0.2%)	1 (0.1%)
	Wood	2544 (74.2%)	69 (4.8%)
	Dung cake	0	1 (0.1%)
	Crop residue	0	0
	Others	1 (0.0%)	1 (0.1%)
Age started cooking (years)		18 (16-20)	21 (20-23)
Daily cooking hours		4 (4-5)	4 (4-5)

Kolkata

		Rural	Urban
Separate kitchen	No	134 (3.6%)	39 (2.7%)
	Yes	3603 (96.4%)	1402 (97.3%)
Kitchen ventilation	No	130 (3.5%)	40 (2.8%)
	Yes	3607 (96.5%)	1401 (97.2%)
Cooking days in a month	>21 days	3654 (97.8%)	1418 (98.4%)
	15-21 days	11 (0.3%)	11 (0.8%)
	8-14 days	62 (1.7%)	5 (0.3%)
	1-7 days	10 (0.3%)	7 (0.5%)
Cooking fuel	Electricity	1 (0.0%)	2 (0.1%)
	LPG	328 (8.8%)	1350 (93.8%)
	Kerosene	103 (2.8%)	49 (3.4%)
	Coal	81 (2.2%)	36 (2.5%)
	Wood	3207 (85.8%)	3 (0.2%)
	Dung cake	15 (0.4%)	0
	Crop residue	0	0
	Others	2 (0.1%)	0
Age started cooking (years)		17 (16-18)	21 (18-23)
Daily cooking hours		3 (3-4)	3 (3-3)

Mumbai

		Rural	Urban
Separate kitchen	No	1683 (46.8%)	410 (14.4%)
	Yes	1912 (53.2%)	2444 (85.6%)
Kitchen ventilation	No	1743 (48.5%)	393 (13.8%)
	Yes	1852 (51.5%)	2461 (86.2%)
Cooking days in a month	>21 days	3452 (96.0%)	2738 (95.9%)
	15-21 days	57 (1.6%)	31 (1.1%)
	8-14 days	85 (2.4%)	76 (2.7%)
	1-7 days	1 (0.0%)	9 (0.3%)
Cooking fuel	Electricity	1 (0.0%)	22 (0.8%)
	LPG	221 (6.1%)	2603 (91.2%)
	Kerosene	3 (0.1%)	178 (6.2%)
	Coal	2 (0.1%)	50 (1.8%)
	Wood	3362 (93.5%)	0
	Dung cake	6 (0.2%)	0
	Crop residue	0	1 (0.0%)
	Others	0	0
Age started cooking (years)		14 (14-16)	18 (16-20)
Daily cooking hours		3 (2-3)	2 (2-2)

Mysore

		Rural	Urban
Separate kitchen	No	472 (11.3%)	35 (1.3%)
	Yes	3705 (88.7%)	2580 (98.7%)
Kitchen ventilation	No	1887 (45.2%)	254 (9.7%)
	Yes	2290 (54.8%)	2361 (90.3%)
Cooking days in a month	>21 days	4147 (99.3%)	2613 (99.9%)
	15-21 days	6 (0.1%)	0
	8-14 days	14 (0.3%)	0
	1-7 days	10 (0.2%)	2 (0.1%)
Cooking fuel	Electricity	8 (0.2%)	7 (0.3%)
	LPG	703 (16.9%)	2209 (84.5%)
	Kerosene	73 (1.8%)	336 (12.9%)
	Coal	2 (0.0%)	0
	Wood	3357 (80.8%)	62 (2.4%)
	Dung cake	10 (0.2%)	0
	Crop residue	0	0
	Others	0	0
Age started cooking (years)		16 (14-16)	17 (15-19)
Daily cooking hours		3 (2-3)	3 (2-3)

Nagpur

		Rural	Urban
Separate kitchen	No	53 (1.1%)	107 (4.9%)
	Yes	4619 (98.9%)	2097 (95.1%)
Kitchen ventilation	No	28 (0.6%)	71 (3.2%)
	Yes	4644 (99.4%)	2133 (96.8%)
Cooking days in a month	>21 days	3241 (69.4%)	1755 (79.6%)
	15-21 days	48 (1.0%)	48 (2.2%)
	8-14 days	141 (3.0%)	42 (1.9%)
	1-7 days	1242 (26.6%)	359 (16.3%)
Cooking fuel	Electricity	0	2 (0.1%)
	LPG	634 (13.6%)	2045 (92.8%)
	Kerosene	34 (0.7%)	71 (3.2%)
	Coal	6 (0.1%)	3 (0.1%)
	Wood	3994 (85.5%)	81 (3.7%)
	Dung cake	4 (0.1%)	1 (0.0%)
	Crop residue	0	1 (0.0%)
	Others	0	0
Age started cooking (years)		11 (10-13)	14 (12-15)
Daily cooking hours		4 (3-4)	3 (2-4)

Secunderabad

		Rural	Urban
Separate kitchen	No	-	158 (8.3%)
	Yes	-	1742 (91.7%)
Kitchen ventilation	No	-	163 (8.6%)
	Yes	-	1737 (91.4%)
Cooking days in a month	>21 days	-	1811 (95.3%)
	15-21 days	-	7 (0.4%)
	8-14 days	-	10 (0.5%)
	1-7 days	-	72 (3.8%)
Cooking fuel	Electricity	-	36 (1.9%)
	LPG	-	1627 (85.7%)
	Kerosene	-	215 (11.3%)
	Coal	-	7 (0.4%)
	Wood	-	11 (0.6%)
	Dung cake	-	1 (0.1%)
	Crop residue	-	1 (0.1%)
	Others	-	1 (0.1%)
Age started cooking (years)		-	16 (15-18)
Daily cooking hours		-	2 (2-2)

Shimla

		Rural	Urban
Separate kitchen	No	180 (3.6%)	81 (4.1%)
	Yes	4828 (96.4%)	1872 (95.9%)
Kitchen ventilation	No	370 (7.4%)	86 (4.4%)
	Yes	4638 (92.6%)	1867 (95.6%)
Cooking days in a month	>21 days	4344 (86.7%)	1844 (94.4%)
	15-21 days	136 (2.7%)	18 (0.9%)
	8-14 days	352 (7.0%)	41 (2.1%)
	1-7 days	176 (3.5%)	50 (2.6%)
Cooking fuel	Electricity	56 (1.1%)	31 (1.6%)
	LPG	1857 (37.1%)	1865 (95.6%)
	Kerosene	156 (3.1%)	34 (1.7%)
	Coal	70 (1.4%)	4 (0.2%)
	Wood	2867 (57.2%)	12 (0.6%)
	Dung cake	0	0
	Crop residue	1 (0.0%)	3 (0.2%)
	Others	1 (0.0%)	1 (0.1%)
Age started cooking (years)		15 (12-18)	16 (14-19)
Daily cooking hours		2 (2-3)	2 (2-2)

Trivandrum

		Rural	Urban
Separate kitchen	No	3947 (94.0%)	2704 (98.1%)
	Yes	254 (6.0%)	53 (1.9%)
Kitchen ventilation	No	310 (7.4%)	40 (1.5%)
	Yes	3891 (92.6%)	2717 (98.5%)
Cooking days in a month	>21 days	4110 (97.8%)	2748 (99.7%)
	15-21 days	7 (0.2%)	2 (0.1%)
	8-14 days	27 (0.6%)	2 (0.1%)
	1-7 days	57 (1.4%)	5 (0.2%)
Cooking fuel	Electricity	33 (0.8%)	13 (0.5%)
	LPG	638 (15.2%)	1711 (62.1%)
	Kerosene	12 (0.3%)	39 (1.4%)
	Coal	7 (0.2%)	0
	Wood	3510 (83.6%)	991 (35.9%)
	Dung cake	0	0
	Crop residue	0	2 (0.1%)
	Others	1 (0.0%)	1 (0.0%)
Age started cooking (years)		15 (15-18)	16 (15-18)
Daily cooking hours		4 (3-4)	3 (2-3)

Total

		Rural	Urban
Separate kitchen	No	11750 (23.3%)	4640 (17.0%)
	Yes	38753 (76.7%)	22681 (83.0%)
Kitchen ventilation	No	10679 (21.1%)	1713 (6.3%)
	Yes	39824 (78.9%)	25608 (93.7%)
Cooking days in a month	>21 days	46147 (91.4%)	25346 (92.8%)
	15-21 days	904 (1.8%)	432 (1.6%)
	8-14 days	1049 (2.1%)	416 (1.5%)
	1-7 days	2403 (4.8%)	1127 (4.1%)
Cooking fuel	Electricity	143 (0.3%)	137 (0.5%)
	LPG	11411 (22.6%)	22660 (83.0%)
	Kerosene	759 (1.5%)	1721 (6.3%)
	Coal	195 (0.4%)	107 (0.4%)
	Wood	36079 (71.5%)	2268 (8.3%)
	Dung cake	1867 (3.7%)	398 (1.5%)
	Crop residue	14 (0.0%)	16 (0.1%)
	Others	6 (0.0%)	7 (0.0%)
Age started cooking (years)		15 (13-17)	16 (15-19)
Daily cooking hours		3 (2-4)	3 (2-3)

Data presented as number and percentage, or median and interquartile range, as appropriate

Table 15. Asthma in first degree relative of respondents of either gender in rural and urban areas at each centre

	Rural		Urban	
	Male	Female	Male	Female
Ahmedabad	729 (12.0%)	152 (2.6%)	236 (7.7%)	147 (4.9%)
Berhampur	330 (5.4%)	154 (2.6%)	70 (4.9%)	46 (3.3%)
Bikaner	904 (16.5%)	249 (5.2%)	325 (12.1%)	120 (4.9%)
Chennai	84 (2.4%)	88 (1.6%)	261 (11.3%)	430 (11.4%)
Guwahati	366 (6.8%)	253 (5.2%)	116 (4.5%)	82 (3.7%)
Kolkata	805 (17.8%)	548 (12.9%)	384 (21.0%)	267 (13.8%)
Mumbai	22 (0.6%)	31 (0.8%)	87 (2.5%)	68 (2.3%)
Mysore	57 (1.2%)	29 (0.7%)	9 (0.3%)	6 (0.2%)
Nagpur	68 (1.3%)	53 (1.1%)	43 (1.7%)	32 (1.3%)
Secunderabad	-	-	1 (0.0%)	0
Shimla	148 (2.6%)	132 (2.6%)	73 (3.4%)	75 (3.6%)
Trivandrum	335 (7.5%)	325 (7.1%)	125 (4.3%)	125 (4.0%)
Total	3848 (7.0%)	2014 (3.7%)	1730 (5.7%)	1398 (4.6%)

Table 16. Respiratory symptoms among respondents of either gender in rural and urban areas

Ahmedabad

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	149 (2.5%)	65 (1.1%)	66 (2.1%)	50 (1.7%)
Morning breathlessness	240 (4.0%)	166 (2.8%)	67 (2.2%)	70 (2.3%)
Breathlessness on exertion	496 (8.2%)	331 (5.6%)	153 (5.0%)	172 (5.7%)
Breathlessness without exertion	222 (3.7%)	134 (2.3%)	78 (2.5%)	81 (2.7%)
Breathlessness at night	305 (5.0%)	173 (2.9%)	54 (1.8%)	55 (1.8%)
Cough at night	433 (7.1%)	210 (3.5%)	86 (2.8%)	65 (2.2%)
Cough in morning	394 (6.5%)	183 (3.1%)	84 (2.7%)	49 (1.6%)
Phlegm in morning	360 (5.9%)	144 (2.4%)	76 (2.5%)	39 (1.3%)
Breathing never satisfactory	110 (1.8%)	72 (1.2%)	26 (0.8%)	14 (0.5%)
Usually breathless	325 (5.4%)	197 (3.3%)	102 (3.3%)	115 (3.8%)
Chest tightness on dust exposure	362 (6.0%)	253 (4.3%)	69 (2.2%)	69 (2.3%)
Breathlessness on dust exposure	365 (6.0%)	255 (4.3%)	63 (2.0%)	62 (2.1%)
Ever asthma	226 (3.7%)	136 (2.3%)	76 (2.5%)	65 (2.2%)
Attack of asthma	139 (2.3%)	79 (1.3%)	41 (1.3%)	33 (1.1%)
Inhaler use	173 (2.9%)	118 (2.0%)	70 (2.3%)	60 (2.0%)
Any of the above symptoms	647 (10.7%)	433 (7.3%)	205 (6.7%)	218 (7.3%)

Berhampur

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	123 (2.0%)	146 (2.4%)	41 (2.9%)	38 (2.7%)
Morning breathlessness	129 (2.1%)	147 (2.4%)	45 (3.1%)	37 (2.6%)
Breathlessness on exertion	325 (5.3%)	302 (5.0%)	101 (7.0%)	80 (5.7%)
Breathlessness without exertion	193 (3.1%)	207 (3.4%)	68 (4.7%)	55 (3.9%)
Breathlessness at night	118 (1.9%)	132 (2.2%)	36 (2.5%)	27 (1.9%)
Cough at night	252 (4.1%)	222 (3.7%)	106 (7.4%)	78 (5.5%)
Cough in morning	187 (3.0%)	172 (2.8%)	72 (5.0%)	53 (3.7%)
Phlegm in morning	161 (2.6%)	142 (2.4%)	52 (3.6%)	35 (2.5%)
Breathing never satisfactory	99 (1.6%)	134 (2.2%)	27 (1.9%)	26 (1.8%)
Usually breathless	66 (1.1%)	47 (0.8%)	20 (1.4%)	9 (0.6%)
Chest tightness on dust exposure	216 (3.5%)	203 (3.4%)	73 (5.1%)	48 (3.4%)
Breathlessness on dust exposure	190 (3.1%)	197 (3.3%)	68 (4.7%)	46 (3.3%)
Ever asthma	163 (2.7%)	176 (2.9%)	60 (4.2%)	52 (3.7%)
Attack of asthma	152 (2.5%)	170 (2.8%)	51 (3.6%)	44 (3.1%)
Inhaler use	160 (2.6%)	175 (2.9%)	61 (4.3%)	50 (3.5%)
Any of the above symptoms	446 (7.3%)	391 (6.5%)	174 (12.1%)	128 (9.1%)

Bikaner

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	252 (4.6%)	176 (3.7%)	64 (2.4%)	43 (1.8%)
Morning breathlessness	258 (4.7%)	191 (4.0%)	64 (2.4%)	43 (1.8%)
Breathlessness on exertion	302 (5.5%)	206 (4.3%)	91 (3.4%)	55 (2.3%)
Breathlessness without exertion	164 (3.0%)	120 (2.5%)	45 (1.7%)	22 (0.9%)
Breathlessness at night	219 (4.0%)	161 (3.4%)	55 (2.0%)	39 (1.6%)
Cough at night	241 (4.4%)	122 (2.6%)	60 (2.2%)	32 (1.3%)
Cough in morning	251 (4.6%)	129 (2.7%)	54 (2.0%)	35 (1.4%)
Phlegm in morning	252 (4.6%)	113 (2.4%)	61 (2.3%)	26 (1.1%)
Breathing never satisfactory	25 (0.5%)	14 (0.3%)	6 (0.2%)	2 (0.1%)
Usually breathless	232 (4.2%)	174 (3.7%)	70 (2.6%)	46 (1.9%)
Chest tightness on dust exposure	239 (4.4%)	185 (3.9%)	71 (2.6%)	48 (2.0%)
Breathlessness on dust exposure	238 (4.3%)	184 (3.9%)	71 (2.6%)	48 (2.0%)
Ever asthma	253 (4.6%)	175 (3.7%)	81 (3.0%)	51 (2.1%)
Attack of asthma	82 (1.5%)	52 (1.1%)	17 (0.6%)	9 (0.4%)
Inhaler use	193 (3.5%)	130 (2.7%)	64 (2.4%)	37 (1.5%)
Any of the above symptoms	356 (6.5%)	241 (5.1%)	104 (3.9%)	72 (3.0%)

Chennai

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	63 (1.8%)	82 (1.5%)	32 (1.4%)	61 (1.6%)
Morning breathlessness	52 (1.5%)	71 (1.3%)	26 (1.1%)	54 (1.4%)
Breathlessness on exertion	154 (4.4%)	218 (4.0%)	102 (4.4%)	216 (5.7%)
Breathlessness without exertion	66 (1.9%)	84 (1.5%)	17 (0.7%)	26 (0.7%)
Breathlessness at night	51 (1.5%)	69 (1.3%)	33 (1.4%)	75 (2.0%)
Cough at night	70 (2.0%)	65 (1.2%)	49 (2.1%)	78 (2.1%)
Cough in morning	68 (2.0%)	63 (1.2%)	50 (2.2%)	64 (1.7%)
Phlegm in morning	70 (2.0%)	71 (1.3%)	64 (2.8%)	86 (2.3%)
Breathing never satisfactory	57 (1.6%)	67 (1.2%)	18 (0.8%)	15 (0.4%)
Usually breathless	78 (2.2%)	111 (2.0%)	76 (3.3%)	168 (4.5%)
Chest tightness on dust exposure	41 (1.2%)	52 (1.0%)	96 (4.1%)	207 (5.5%)
Breathlessness on dust exposure	49 (1.4%)	84 (1.5%)	93 (4.0%)	192 (5.1%)
Ever asthma	73 (2.1%)	80 (1.5%)	63 (2.7%)	97 (2.6%)
Attack of asthma	66 (1.9%)	78 (1.4%)	52 (2.2%)	85 (2.3%)
Inhaler use	62 (1.8%)	76 (1.4%)	60 (2.6%)	102 (2.7%)
Any of the above symptoms	215 (6.2%)	280 (5.2%)	181 (7.8%)	381 (10.1%)

Guwahati

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	136 (2.5%)	102 (2.1%)	40 (1.6%)	25 (1.1%)
Morning breathlessness	142 (2.6%)	123 (2.6%)	44 (1.7%)	30 (1.3%)
Breathlessness on exertion	206 (3.8%)	186 (3.9%)	54 (2.1%)	34 (1.5%)
Breathlessness without exertion	122 (2.3%)	95 (2.0%)	33 (1.3%)	25 (1.1%)
Breathlessness at night	134 (2.5%)	110 (2.3%)	40 (1.6%)	30 (1.3%)
Cough at night	171 (3.2%)	135 (2.8%)	54 (2.1%)	26 (1.2%)
Cough in morning	137 (2.5%)	119 (2.5%)	37 (1.4%)	25 (1.1%)
Phlegm in morning	150 (2.8%)	108 (2.2%)	34 (1.3%)	25 (1.1%)
Breathing never satisfactory	118 (2.2%)	87 (1.8%)	20 (0.8%)	14 (0.6%)
Usually breathless	83 (1.5%)	80 (1.7%)	21 (0.8%)	13 (0.6%)
Chest tightness on dust exposure	123 (2.3%)	90 (1.9%)	37 (1.4%)	26 (1.2%)
Breathlessness on dust exposure	118 (2.2%)	91 (1.9%)	37 (1.4%)	26 (1.2%)
Ever asthma	101 (1.9%)	55 (1.1%)	22 (0.9%)	9 (0.4%)
Attack of asthma	99 (1.8%)	62 (1.3%)	33 (1.3%)	25 (1.1%)
Inhaler use	92 (1.7%)	67 (1.4%)	37 (1.4%)	25 (1.1%)
Any of the above symptoms	256 (4.8%)	246 (5.1%)	69 (2.7%)	41 (1.8%)

Kolkata

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	378 (8.4%)	298 (7.0%)	164 (9.0%)	123 (6.3%)
Morning breathlessness	285 (6.3%)	263 (6.2%)	161 (8.8%)	125 (6.4%)
Breathlessness on exertion	389 (8.6%)	368 (8.7%)	209 (11.4%)	187 (9.6%)
Breathlessness without exertion	106 (2.3%)	68 (1.6%)	99 (5.4%)	96 (4.9%)
Breathlessness at night	225 (5.0%)	221 (5.2%)	125 (6.8%)	120 (6.2%)
Cough at night	711 (15.7%)	474 (11.2%)	187 (10.2%)	147 (7.6%)
Cough in morning	626 (13.9%)	433 (10.2%)	204 (11.2%)	135 (7.0%)
Phlegm in morning	574 (12.7%)	359 (8.5%)	179 (9.8%)	121 (6.2%)
Breathing never satisfactory	83 (1.8%)	46 (1.1%)	66 (3.6%)	71 (3.7%)
Usually breathless	302 (6.7%)	308 (7.3%)	169 (9.2%)	163 (8.4%)
Chest tightness on dust exposure	159 (3.5%)	171 (4.0%)	263 (14.4%)	241 (12.4%)
Breathlessness on dust exposure	169 (3.7%)	203 (4.8%)	222 (12.1%)	225 (11.6%)
Ever asthma	207 (4.6%)	206 (4.9%)	128 (7.0%)	125 (6.4%)
Attack of asthma	201 (4.5%)	201 (4.7%)	123 (6.7%)	122 (6.3%)
Inhaler use	202 (4.5%)	205 (4.8%)	132 (7.2%)	129 (6.6%)
Any of the above symptoms	963 (21.3%)	743 (17.5%)	471 (25.8%)	412 (21.2%)

Mumbai

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	40 (1.1%)	17 (0.4%)	31 (0.9%)	29 (1.0%)
Morning breathlessness	142 (3.9%)	68 (1.8%)	52 (1.5%)	43 (1.4%)
Breathlessness on exertion	205 (5.6%)	128 (3.3%)	77 (2.3%)	68 (2.3%)
Breathlessness without exertion	32 (0.9%)	17 (0.4%)	17 (0.5%)	14 (0.5%)
Breathlessness at night	101 (2.7%)	50 (1.3%)	36 (1.1%)	20 (0.7%)
Cough at night	315 (8.6%)	160 (4.2%)	99 (2.9%)	61 (2.0%)
Cough in morning	478 (13.0%)	258 (6.7%)	123 (3.6%)	82 (2.7%)
Phlegm in morning	390 (10.6%)	209 (5.4%)	84 (2.5%)	54 (1.8%)
Breathing never satisfactory	4 (0.1%)	0	4 (0.1%)	4 (0.1%)
Usually breathless	57 (1.5%)	28 (0.7%)	40 (1.2%)	28 (0.9%)
Chest tightness on dust exposure	42 (1.1%)	28 (0.7%)	148 (4.3%)	144 (4.8%)
Breathlessness on dust exposure	21 (0.6%)	16 (0.4%)	106 (3.1%)	86 (2.9%)
Ever asthma	42 (1.1%)	18 (0.5%)	46 (1.3%)	39 (1.3%)
Attack of asthma	6 (0.2%)	4 (0.1%)	12 (0.4%)	15 (0.5%)
Inhaler use	39 (1.1%)	17 (0.4%)	38 (1.1%)	38 (1.3%)
Any of the above symptoms	611 (16.6%)	349 (9.1%)	266 (7.8%)	215 (7.2%)

Mysore

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	118 (2.5%)	57 (1.3%)	31 (1.0%)	31 (1.1%)
Morning breathlessness	120 (2.5%)	56 (1.3%)	29 (1.0%)	27 (0.9%)
Breathlessness on exertion	113 (2.4%)	60 (1.4%)	28 (0.9%)	26 (0.9%)
Breathlessness without exertion	67 (1.4%)	27 (0.6%)	14 (0.5%)	11 (0.4%)
Breathlessness at night	91 (1.9%)	42 (1.0%)	22 (0.7%)	15 (0.5%)
Cough at night	175 (3.7%)	52 (1.2%)	65 (2.2%)	29 (1.0%)
Cough in morning	161 (3.4%)	39 (0.9%)	48 (1.6%)	24 (0.8%)
Phlegm in morning	144 (3.0%)	32 (0.7%)	27 (0.9%)	19 (0.6%)
Breathing never satisfactory	20 (0.4%)	12 (0.3%)	1 (0.0%)	2 (0.1%)
Usually breathless	109 (2.3%)	40 (0.9%)	31 (1.0%)	21 (0.7%)
Chest tightness on dust exposure	97 (2.0%)	42 (1.0%)	17 (0.6%)	16 (0.5%)
Breathlessness on dust exposure	90 (1.9%)	42 (1.0%)	18 (0.6%)	15 (0.5%)
Ever asthma	102 (2.1%)	42 (1.0%)	30 (1.0%)	29 (1.0%)
Attack of asthma	103 (2.2%)	42 (1.0%)	28 (0.9%)	30 (1.0%)
Inhaler use	85 (1.8%)	31 (0.7%)	23 (0.8%)	26 (0.9%)
Any of the above symptoms	201 (4.2%)	87 (2.0%)	70 (2.4%)	40 (1.4%)

Nagpur

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	96 (1.8%)	70 (1.4%)	37 (1.4%)	38 (1.6%)
Morning breathlessness	112 (2.2%)	89 (1.8%)	44 (1.7%)	50 (2.0%)
Breathlessness on exertion	148 (2.8%)	138 (2.8%)	61 (2.4%)	85 (3.5%)
Breathlessness without exertion	139 (2.7%)	127 (2.6%)	50 (2.0%)	65 (2.7%)
Breathlessness at night	97 (1.9%)	71 (1.5%)	34 (1.3%)	35 (1.4%)
Cough at night	110 (2.1%)	73 (1.5%)	37 (1.4%)	41 (1.7%)
Cough in morning	124 (2.4%)	85 (1.7%)	43 (1.7%)	37 (1.5%)
Phlegm in morning	108 (2.1%)	71 (1.5%)	36 (1.4%)	28 (1.1%)
Breathing never satisfactory	29 (0.6%)	16 (0.3%)	23 (0.9%)	27 (1.1%)
Usually breathless	94 (1.8%)	84 (1.7%)	40 (1.6%)	42 (1.7%)
Chest tightness on dust exposure	71 (1.4%)	53 (1.1%)	53 (2.1%)	55 (2.2%)
Breathlessness on dust exposure	75 (1.4%)	51 (1.0%)	57 (2.2%)	52 (2.1%)
Ever asthma	103 (2.0%)	82 (1.7%)	43 (1.7%)	35 (1.4%)
Attack of asthma	79 (1.5%)	58 (1.2%)	20 (0.8%)	20 (0.8%)
Inhaler use	66 (1.3%)	43 (0.9%)	21 (0.8%)	21 (0.9%)
Any of the above symptoms	196 (3.8%)	166 (3.4%)	132 (5.2%)	130 (5.3%)

Secunderabad

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	-	-	18 (0.8%)	19 (0.9%)
Morning breathlessness	-	-	19 (0.8%)	20 (0.9%)
Breathlessness on exertion	-	-	31 (1.3%)	17 (0.8%)
Breathlessness without exertion	-	-	45 (1.9%)	22 (1.0%)
Breathlessness at night	-	-	31 (1.3%)	12 (0.5%)
Cough at night	-	-	50 (2.1%)	28 (1.3%)
Cough in morning	-	-	50 (2.1%)	25 (1.1%)
Phlegm in morning	-	-	31 (1.3%)	12 (0.5%)
Breathing never satisfactory	-	-	5 (0.2%)	5 (0.2%)
Usually breathless	-	-	31 (1.3%)	20 (0.9%)
Chest tightness on dust exposure	-	-	20 (0.9%)	18 (0.8%)
Breathlessness on dust exposure	-	-	20 (0.9%)	13 (0.6%)
Ever asthma	-	-	15 (0.6%)	9 (0.4%)
Attack of asthma	-	-	14 (0.6%)	8 (0.4%)
Inhaler use	-	-	14 (0.6%)	10 (0.5%)
Any of the above symptoms	-	-	109 (4.7%)	80 (3.6%)

Shimla

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	123 (2.1%)	115 (2.3%)	46 (2.2%)	31 (1.5%)
Morning breathlessness	118 (2.1%)	123 (2.4%)	42 (2.0%)	35 (1.7%)
Breathlessness on exertion	248 (4.3%)	241 (4.7%)	68 (3.2%)	80 (3.9%)
Breathlessness without exertion	93 (1.6%)	82 (1.6%)	36 (1.7%)	36 (1.8%)
Breathlessness at night	69 (1.2%)	74 (1.5%)	27 (1.3%)	36 (1.8%)
Cough at night	123 (2.1%)	93 (1.8%)	59 (2.8%)	36 (1.8%)
Cough in morning	150 (2.6%)	107 (2.1%)	56 (2.6%)	39 (1.9%)
Phlegm in morning	82 (1.4%)	61 (1.2%)	40 (1.9%)	25 (1.2%)
Breathing never satisfactory	16 (0.3%)	19 (0.4%)	20 (0.9%)	14 (0.7%)
Usually breathless	67 (1.2%)	49 (1.0%)	25 (1.2%)	34 (1.7%)
Chest tightness on dust exposure	101 (1.8%)	89 (1.8%)	37 (1.7%)	49 (2.4%)
Breathlessness on dust exposure	91 (1.6%)	90 (1.8%)	34 (1.6%)	47 (2.3%)
Ever asthma	65 (1.1%)	51 (1.0%)	27 (1.3%)	32 (1.6%)
Attack of asthma	31 (0.5%)	26 (0.5%)	16 (0.7%)	18 (0.9%)
Inhaler use	64 (1.1%)	51 (1.0%)	29 (1.4%)	34 (1.7%)
Any of the above symptoms	320 (5.6%)	288 (5.7%)	123 (5.8%)	107 (5.2%)

Trivandrum

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	340 (7.6%)	304 (6.7%)	71 (2.5%)	90 (2.9%)
Morning breathlessness	274 (6.2%)	309 (6.8%)	86 (3.0%)	101 (3.3%)
Breathlessness on exertion	623 (14.0%)	813 (17.9%)	175 (6.0%)	301 (9.7%)
Breathlessness without exertion	323 (7.3%)	453 (10.0%)	130 (4.5%)	186 (6.0%)
Breathlessness at night	334 (7.5%)	464 (10.2%)	98 (3.4%)	116 (3.7%)
Cough at night	842 (18.9%)	734 (16.1%)	331 (11.4%)	267 (8.6%)
Cough in morning	725 (16.3%)	612 (13.5%)	207 (7.2%)	179 (5.8%)
Phlegm in morning	710 (16.0%)	586 (12.9%)	231 (8.0%)	195 (6.3%)
Breathing never satisfactory	66 (1.5%)	97 (2.1%)	27 (0.9%)	21 (0.7%)
Usually breathless	370 (8.3%)	419 (9.2%)	144 (5.0%)	188 (6.1%)
Chest tightness on dust exposure	443 (10.0%)	546 (12.0%)	195 (6.7%)	250 (8.1%)
Breathlessness on dust exposure	442 (9.9%)	550 (12.1%)	176 (6.1%)	210 (6.8%)
Ever asthma	123 (2.8%)	217 (4.8%)	50 (1.7%)	70 (2.3%)
Attack of asthma	138 (3.1%)	234 (5.1%)	51 (1.8%)	67 (2.2%)
Inhaler use	166 (3.7%)	237 (5.2%)	69 (2.4%)	94 (3.0%)
Any of the above symptoms	1188 (26.7%)	1155 (25.4%)	474 (16.4%)	499 (16.1%)

Total

	Rural		Urban	
	Male	Female	Male	Female
Wheeze	1818 (3.3%)	1432 (2.7%)	641 (2.1%)	578 (1.9%)
Morning breathlessness	1872 (3.4%)	1606 (3.0%)	679 (2.2%)	635 (2.1%)
Breathlessness on exertion	3209 (5.8%)	2991 (5.5%)	1150 (3.8%)	1321 (4.3%)
Breathlessness without exertion	1527 (2.8%)	1414 (2.6%)	632 (2.1%)	639 (2.1%)
Breathlessness at night	1744 (3.2%)	1567 (2.9%)	591 (2.0%)	580 (1.9%)
Cough at night	3443 (6.3%)	2340 (4.3%)	1183 (3.9%)	888 (2.9%)
Cough in morning	3301 (6.0%)	2200 (4.1%)	1028 (3.4%)	747 (2.4%)
Phlegm in morning	3001 (5.5%)	1896 (3.5%)	915 (3.0%)	665 (2.2%)
Breathing never satisfactory	627 (1.1%)	564 (1.0%)	243 (0.8%)	215 (0.7%)
Usually breathless	1783 (3.2%)	1537 (2.9%)	769 (2.5%)	847 (2.8%)
Chest tightness on dust exposure	1894 (3.5%)	1712 (3.2%)	1079 (3.6%)	1171 (3.8%)
Breathlessness on dust exposure	1848 (3.4%)	1763 (3.3%)	965 (3.2%)	1022 (3.3%)
Ever asthma	1458 (2.7%)	1238 (2.3%)	641 (2.1%)	613 (2.0%)
Attack of asthma	1096 (2.0%)	1006 (1.9%)	458 (1.5%)	476 (1.6%)
Inhaler use	1302 (2.4%)	1150 (2.1%)	618 (2.0%)	626 (2.0%)
Any of the above symptoms	5399 (9.8%)	4379 (8.1%)	2378 (7.9%)	2323 (7.6%)

Table 17. Asthma diagnosis by centre, current residence, and gender

Centre	Residence	Male	Female	Total
Ahmedabad	Rural	163 (2.69%)	85 (1.43%)	248 (2.06%)
	Urban	57 (1.85%)	38 (1.27%)	95 (1.56%)
	Total	220 (2.41%)	123 (1.38%)	343 (1.90%)
Berhampur	Rural	128 (2.09%)	153 (2.53%)	281 (2.31%)
	Urban	44 (3.07%)	39 (2.76%)	83 (2.91%)
	Total	172 (2.27%)	192 (2.58%)	364 (2.42%)
Bikaner	Rural	240 (4.38%)	167 (3.51%)	407 (3.98%)
	Urban	70 (2.60%)	45 (1.85%)	115 (2.25%)
	Total	310 (3.80%)	212 (2.95%)	522 (3.40%)
Chennai	Rural	47 (1.35%)	64 (1.18%)	111 (1.25%)
	Urban	28 (1.21%)	52 (1.38%)	80 (1.31%)
	Total	75 (1.29%)	116 (1.26%)	191 (1.27%)
Guwahati	Rural	111 (2.07%)	71 (1.47%)	182 (1.78%)
	Urban	36 (1.40%)	25 (1.12%)	61 (1.27%)
	Total	147 (1.85%)	96 (1.36%)	243 (1.62%)
Kolkata	Rural	200 (4.43%)	196 (4.62%)	396 (4.52%)
	Urban	114 (6.24%)	94 (4.84%)	208 (5.52%)
	Total	314 (4.95%)	290 (4.69%)	604 (4.82%)
Mumbai	Rural	40 (1.09%)	16 (0.42%)	56 (0.74%)
	Urban	34 (1.00%)	31 (1.03%)	65 (1.01%)
	Total	74 (1.04%)	47 (0.69%)	121 (0.87%)
Mysore	Rural	101 (2.11%)	43 (0.99%)	144 (1.58%)
	Urban	28 (0.95%)	26 (0.89%)	54 (0.92%)
	Total	129 (1.67%)	69 (0.95%)	198 (1.32%)
Nagpur	Rural	90 (1.73%)	60 (1.23%)	150 (1.49%)
	Urban	27 (1.06%)	28 (1.14%)	55 (1.10%)
	Total	117 (1.51%)	88 (1.20%)	205 (1.36%)
Secunderabad	Rural	-	-	-
	Urban	9 (0.38%)	8 (0.36%)	17 (0.37%)
	Total	9 (0.38%)	8 (0.36%)	17 (0.37%)
Shimla	Rural	61 (1.07%)	47 (0.92%)	108 (1.00%)
	Urban	23 (1.08%)	26 (1.26%)	49 (1.17%)
	Total	84 (1.07%)	73 (1.02%)	157 (1.05%)
Trivandrum	Rural	162 (3.64%)	238 (5.23%)	400 (4.45%)
	Urban	50 (1.73%)	66 (2.13%)	116 (1.93%)
	Total	212 (2.89%)	304 (3.97%)	516 (3.44%)
Total	Rural	1343 (2.45%)	1140 (2.11%)	2483 (2.28%)
	Urban	520 (1.72%)	478 (1.57%)	998 (1.64%)
	Total	1863 (2.19%)	1618 (1.92%)	3481 (2.05%)

Table 18. Prevalence of bronchial asthma standardized to age distribution as per 2001 census

Centre	Gender	Observed prevalence (%)	Standardized prevalence (%)
Ahmedabad	Male	2.41	2.07
	Female	1.38	1.28
	Total	1.90	1.70
Berhampur	Male	2.27	2.06
	Female	2.58	2.49
	Total	2.42	2.27
Bikaner	Male	3.80	3.85
	Female	2.95	2.99
	Total	3.40	3.44
Chennai	Male	1.29	1.26
	Female	1.26	1.25
	Total	1.27	1.26
Guwahati	Male	1.85	1.87
	Female	1.36	1.47
	Total	1.62	1.68
Kolkata	Male	4.95	4.34
	Female	4.69	4.44
	Total	4.82	4.42
Mumbai	Male	1.04	0.96
	Female	0.69	0.64
	Total	0.87	0.80
Mysore	Male	1.67	1.42
	Female	0.95	0.91
	Total	1.32	1.20
Nagpur	Male	1.51	1.49
	Female	1.20	1.38
	Total	1.36	1.44
Secunderabad	Male	0.38	0.43
	Female	0.36	0.38
	Total	0.37	0.42
Shimla	Male	1.07	1.17
	Female	1.02	1.16
	Total	1.05	1.17
Trivandrum	Male	2.89	2.49
	Female	3.97	3.73
	Total	3.44	3.13
Total	Male	2.19	2.04
	Female	1.92	1.88
	Total	2.05	1.97

Table 19. Asthma diagnosis and current residence

Centre	Current residence	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	Rural	248 (72.3%)	11765 (66.3%)
	Urban	95 (27.7%)	5979 (33.7%)
Berhampur	Rural	281 (77.2%)	11896 (81.1%)
	Urban	83 (22.8%)	2765 (18.9%)
Bikaner ^a	Rural	407 (78.0%)	9823 (66.2%)
	Urban	115 (22.0%)	5006 (33.8%)
Chennai	Rural	111 (58.1%)	8797 (59.4%)
	Urban	80 (41.9%)	6013 (40.6%)
Guwahati ^a	Rural	182 (74.9%)	10015 (67.9%)
	Urban	61 (25.1%)	4744 (32.1%)
Kolkata ^a	Rural	396 (65.6%)	8363 (70.1%)
	Urban	208 (34.4%)	3561 (29.9%)
Mumbai	Rural	56 (46.3%)	7469 (54.0%)
	Urban	65 (53.7%)	6352 (46.0%)
Mysore ^a	Rural	144 (72.7%)	8981 (60.6%)
	Urban	54 (27.3%)	5838 (39.4%)
Nagpur	Rural	150 (73.2%)	9924 (66.7%)
	Urban	55 (26.8%)	4950 (33.3%)
Secunderabad	Rural	-	-
	Urban	17 (100%)	4529 (100%)
Shimla	Rural	108 (68.8%)	10700 (72.1%)
	Urban	49 (31.2%)	4146 (27.9%)
Trivandrum ^a	Rural	400 (77.5%)	8596 (59.4%)
	Urban	116 (22.5%)	5884 (40.6%)
Total	Rural	2483 (71.3%)	106329 (64.0%)
	Urban	998 (28.7%)	59767 (36.0%)

^a p <0.05

Table 20. Logistic regression for asthma and current residence

Centre	Residence	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Rural				1.000		
	Urban	-0.283	0.122	0.020	0.754	0.594	0.957
Berhampur	Rural				1.000		
	Urban	0.240	0.127	0.059	1.271	0.991	1.629
Bikaner	Rural				1.000		
	Urban	-0.590	0.107	0.000	0.554	0.450	0.684
Chennai	Rural				1.000		
	Urban	0.053	0.148	0.720	1.054	0.790	1.408
Guwahati	Rural				1.000		
	Urban	-0.346	0.149	0.020	0.708	0.528	0.948
Kolkata	Rural				1.000		
	Urban	0.210	0.088	0.017	1.234	1.038	1.466
Mumbai	Rural				1.000		
	Urban	0.311	0.183	0.089	1.365	0.953	1.954
Mysore	Rural				1.000		
	Urban	-0.550	0.160	0.001	0.577	0.421	0.790
Nagpur	Rural				1.000		
	Urban	-0.308	0.159	0.052	0.735	0.539	1.003
Shimla	Rural				1.000		
	Urban	0.158	0.173	0.362	1.171	0.834	1.644
Trivandrum	Rural				1.000		
	Urban	-0.859	0.107	0.000	0.424	0.344	0.522
Total	Rural				1.000		
	Urban	-0.335	0.038	0.000	0.715	0.664	0.720

Table 21. Asthma diagnosis and usual residence

Centre	Usual residence	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	Rural	246 (71.7%)	11814 (66.6%)
	Urban	77 (22.4%)	5337 (30.1%)
	Mixed	20 (5.8%)	593 (3.3%)
Berhampur	Rural	282 (77.5%)	11946 (81.5%)
	Urban	82 (22.5%)	2713 (18.5%)
	Mixed	0	2 (0.0%)
Bikaner ^a	Rural	407 (78.0%)	9861 (66.5%)
	Urban	112 (21.5%)	4835 (32.6%)
	Mixed	3 (0.6%)	133 (0.9%)
Chennai	Rural	131 (68.6%)	10110 (68.3%)
	Urban	56 (29.3%)	4552 (30.7%)
	Mixed	4 (2.1%)	148 (1.0%)
Guwahati ^a	Rural	186 (76.5%)	10208 (69.2%)
	Urban	57 (23.5%)	4550 (30.8%)
	Mixed	0	1 (0.0%)
Kolkata ^a	Rural	373 (61.8%)	8007 (67.2%)
	Urban	199 (32.9%)	3414 (28.6%)
	Mixed	32 (5.3%)	503 (4.2%)
Mumbai	Rural	57 (47.1%)	7488 (54.2%)
	Urban	64 (52.9%)	6199 (44.9%)
	Mixed	0	134 (1.0%)
Mysore ^a	Rural	144 (72.7%)	8957 (60.4%)
	Urban	52 (26.3%)	5744 (38.8%)
	Mixed	2 (1.0%)	118 (0.8%)
Nagpur	Rural	150 (73.2%)	10048 (67.6%)
	Urban	55 (26.8%)	4819 (32.4%)
	Mixed	0	7 (0.0%)
Secunderabad	Rural	0	24 (0.5%)
	Urban	17 (100%)	4502 (99.4%)
	Mixed	0	3 (0.1%)
Shimla	Rural	100 (63.7%)	10329 (69.6%)
	Urban	52 (33.1%)	4040 (27.2%)
	Mixed	5 (3.2%)	477 (3.2%)
Trivandrum	Rural	25 (4.8%)	919 (6.3%)
	Urban	490 (95.0%)	13533 (93.5%)
	Mixed	1 (0.2%)	28 (0.2%)
Total	Rural	2101 (60.4%)	99711 (60.0%)
	Urban	1313 (37.7%)	64238 (38.7%)
	Mixed	67 (1.9%)	2147 (1.3%)

^a p <0.05

Table 22. Logistic regression for asthma and usual residence

Centre	Residence	B	SE(B)	Sig	OR	LCI	UCI
						Lower	Upper
Ahmedabad	Rural				1.000		
	Urban	-.367	.132	.005	.693	.535	.897
	Mixed	.482	.236	.041	1.620	1.019	2.574
Berhampur	Rural				1.000		
	Urban	.247	.127	.052	1.280	.998	1.643
	Mixed	-17.465	28542.4	1.000	.000	.000	.
Bikaner	Rural				1.000		
	Urban	-.578	.108	.000	.561	.454	.694
	Mixed	-.604	.586	.303	.547	.173	1.723
Chennai	Rural				1.000		
	Urban	-.052	.161	.747	.949	.693	1.301
	Mixed	.735	.514	.153	2.086	.761	5.715
Guwahati	Rural				1.000		
	Urban	-.375	.152	.014	.688	.510	.927
	Mixed	-17.185	39531.2	1.000	.000	.000	.
Kolkata	Rural				1.000		
	Urban	.224	.090	.013	1.251	1.049	1.493
	Mixed	.312	.190	.101	1.366	.941	1.981
Mumbai	Rural				1.000		
	Urban	.305	.183	.096	1.356	.948	1.941
	Mixed	-16.325	3471.70	.996	.000	.000	.
Mysore	Rural				1.000		
	Urban	-.574	.163	.000	.563	.409	.775
	Mixed	.053	.718	.941	1.054	.258	4.306
Nagpur	Rural				1.000		
	Urban	-.268	.159	.090	.765	.560	1.043
	Mixed	-16.997	15163.1	.999	.000	.000	.
Secunderabad	Rural				1.000		
	Urban	15.624	8204.41	.998	6100244	.000	.
	Mixed	.000	24614.1	1.000	1.000	.000	.
Shimla	Rural				1.000		
	Urban	.285	.172	.098	1.329	.949	1.862
	Mixed	.079	.461	.863	1.083	.439	2.671
Trivandrum	Rural				1.000		
	Urban	.286	.208	.169	1.331	.886	2.000
	Mixed	.272	1.038	.793	1.313	.172	10.035
Total	Rural				1.000		
	Urban	-.030	.036	.392	.970	.905	1.040
	Mixed	.393	.126	.002	1.481	1.157	1.896

Table 23. Asthma diagnosis and gender

Centre	Gender	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	Male	220 (64.1%)	8922 (50.3%)
	Female	123 (35.9%)	8822 (49.7%)
Berhampur	Male	172 (47.3%)	7400 (50.5%)
	Female	192 (52.7%)	7261 (49.5%)
Bikaner ^a	Male	310 (59.4%)	7855 (53.0%)
	Female	212 (40.6%)	6974 (47.0%)
Chennai	Male	75 (39.3%)	5717 (38.6%)
	Female	116 (60.7%)	9093 (61.4%)
Guwahati ^a	Male	147 (60.5%)	7800 (52.8%)
	Female	96 (39.5%)	6959 (47.2%)
Kolkata	Male	314 (52.0%)	6029 (50.6%)
	Female	290 (48.0%)	5895 (49.4%)
Mumbai ^a	Male	74 (61.2%)	7024 (50.8%)
	Female	47 (38.8%)	6797 (49.2%)
Mysore ^a	Male	129 (65.2%)	7609 (51.3%)
	Female	69 (34.8%)	7210 (48.7%)
Nagpur	Male	117 (57.1%)	7647 (51.4%)
	Female	88 (42.9%)	7227 (48.6%)
Secunderabad	Male	9 (52.9%)	2330 (51.4%)
	Female	8 (47.1%)	2199 (48.6%)
Shimla	Male	84 (53.5%)	7779 (52.4%)
	Female	73 (46.5%)	7067 (47.6%)
Trivandrum ^a	Male	212 (41.1%)	7130 (49.2%)
	Female	304 (58.9%)	7348 (50.8%)
Total	Male	1863 (53.5%)	83242 (50.1%)
	Female	1618 (46.5%)	82852 (49.9%)

^a p <0.05

Table 24. Logistic regression for asthma and gender

Centre	Gender	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Male				1.000		
	Female	-.570	.114	.000	.565	.453	.706
Berhampur	Male				1.000		
	Female	.129	.106	.225	1.138	.924	1.401
Bikaner	Male				1.000		
	Female	-.261	.091	.004	.770	.645	.920
Chennai	Male				1.000		
	Female	-.028	.149	.851	.972	.726	1.303
Guwahati	Male				1.000		
	Female	-.312	.132	.018	.732	.565	.949
Kolkata	Male				1.000		
	Female	-.057	.083	.494	.945	.802	1.112
Mumbai	Male				1.000		
	Female	-.421	.187	.025	.656	.455	.947
Mysore	Male				1.000		
	Female	-.572	.150	.000	.564	.421	.757
Nagpur	Male				1.000		
	Female	-.228	.142	.108	.796	.602	1.051
Secunderabad	Male				1.000		
	Female	-.060	.487	.902	.942	.363	2.445
Shimla	Male				1.000		
	Female	-.044	.161	.783	.957	.698	1.311
Trivandrum	Male				1.000		
	Female	.330	.091	.000	1.391	1.164	1.663
Total	Male				1.000		
	Female	-.136	.034	.000	.873	.816	.933

Table 25. Asthma diagnosis and age

Centre	Age category	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	15-24 years	5 (1.5%)	4020 (22.7%)
	25-34 years	13 (3.8%)	4477 (25.2%)
	35-44 years	46 (13.4%)	3785 (21.3%)
	45-54 years	69 (20.1%)	2689 (15.2%)
	55-64 years	91 (26.5%)	1606 (9.1%)
	65-74 years	87 (25.4%)	903 (5.1%)
	75-84 years	25 (7.3%)	218 (1.2%)
	>=85 years	7 (2.0%)	46 (0.3%)
Berhampur ^a	15-24 years	39 (10.7%)	3591 (24.5%)
	25-34 years	52 (14.3%)	3272 (22.3%)
	35-44 years	59 (16.2%)	2845 (19.4%)
	45-54 years	71 (19.5%)	2134 (14.6%)
	55-64 years	71 (19.5%)	1567 (10.7%)
	65-74 years	47 (12.9%)	927 (6.3%)
	75-84 years	19 (5.2%)	263 (1.8%)
	>=85 years	6 (1.6%)	62 (0.4%)
Bikaner ^a	15-24 years	17 (3.3%)	4587 (30.9%)
	25-34 years	48 (9.2%)	3791 (25.6%)
	35-44 years	63 (12.1%)	2594 (17.5%)
	45-54 years	114 (21.8%)	1895 (12.8%)
	55-64 years	105 (20.1%)	1105 (7.5%)
	65-74 years	113 (21.6%)	599 (4.0%)
	75-84 years	50 (9.6%)	217 (1.5%)
	>=85 years	12 (2.3%)	41 (0.3%)
Chennai ^a	15-24 years	15 (7.9%)	3626 (24.5%)
	25-34 years	26 (13.6%)	3651 (24.7%)
	35-44 years	36 (18.8%)	2916 (19.7%)
	45-54 years	29 (15.2%)	2043 (13.8%)
	55-64 years	44 (23.0%)	1368 (9.2%)
	65-74 years	33 (17.3%)	822 (5.6%)
	75-84 years	5 (2.6%)	317 (2.1%)
	>=85 years	3 (1.6%)	67 (0.5%)
Guwahati ^a	15-24 years	39 (16.0%)	4186 (28.4%)
	25-34 years	27 (11.1%)	3638 (24.6%)

	35-44 years	36 (14.8%)	2783 (18.9%)
	45-54 years	43 (17.7%)	2403 (16.3%)
	55-64 years	39 (16.0%)	1148 (7.8%)
	65-74 years	49 (20.2%)	476 (3.2%)
	75-84 years	9 (3.7%)	99 (0.7%)
	>=85 years	1 (0.4%)	26 (0.2%)
Kolkata ^a	15-24 years	53 (8.8%)	2721 (22.8%)
	25-34 years	86 (14.2%)	2964 (24.9%)
	35-44 years	89 (14.7%)	2404 (20.2%)
	45-54 years	106 (17.5%)	1813 (15.2%)
	55-64 years	112 (18.5%)	1186 (9.9%)
	65-74 years	109 (18.0%)	579 (4.9%)
	75-84 years	47 (7.8%)	207 (1.7%)
	>=85 years	2 (0.3%)	50 (0.4%)
Mumbai ^a	15-24 years	8 (6.6%)	3746 (27.1%)
	25-34 years	7 (5.8%)	2895 (20.9%)
	35-44 years	13 (10.7%)	2586 (18.7%)
	45-54 years	30 (24.8%)	1952 (14.1%)
	55-64 years	24 (19.8%)	1404 (10.2%)
	65-74 years	26 (21.5%)	886 (6.4%)
	75-84 years	11 (9.1%)	271 (2.0%)
	>=85 years	2 (1.7%)	81 (0.6%)
Mysore ^a	15-24 years	5 (2.5%)	3721 (25.1%)
	25-34 years	17 (8.6%)	3440 (23.2%)
	35-44 years	22 (11.1%)	3063 (20.7%)
	45-54 years	35 (17.7%)	2148 (14.5%)
	55-64 years	39 (19.7%)	1285 (8.7%)
	65-74 years	50 (25.3%)	836 (5.6%)
	75-84 years	25 (12.6%)	260 (1.8%)
	>=85 years	5 (2.5%)	66 (0.4%)
Nagpur ^a	15-24 years	22 (10.7%)	4395 (29.5%)
	25-34 years	25 (12.2%)	3655 (24.6%)
	35-44 years	32 (15.6%)	2846 (19.1%)
	45-54 years	32 (15.6%)	1737 (11.7%)
	55-64 years	37 (18.0%)	1237 (8.3%)
	65-74 years	41 (20.0%)	772 (5.2%)
	75-84 years	14 (6.8%)	186 (1.3%)
	>=85 years	2 (1.0%)	46 (0.3%)

Secunderabad ^a	15-24 years	2 (11.8%)	1470 (32.5%)
	25-34 years	2 (11.8%)	1049 (23.2%)
	35-44 years	2 (11.8%)	907 (20.0%)
	45-54 years	3 (17.6%)	577 (12.7%)
	55-64 years	4 (23.5%)	315 (7.0%)
	65-74 years	0	152 (3.4%)
	75-84 years	0	50 (1.1%)
	>=85 years	0	9 (0.2%)
Shimla ^a	15-24 years	6 (3.8%)	4125 (27.8%)
	25-34 years	7 (4.5%)	3646 (24.6%)
	35-44 years	25 (15.9%)	3002 (20.2%)
	45-54 years	31 (19.7%)	2104 (14.2%)
	55-64 years	36 (22.9%)	1091 (7.3%)
	65-74 years	30 (19.1%)	579 (3.9%)
	75-84 years	18 (11.5%)	232 (1.6%)
	>=85 years	4 (2.5%)	67 (0.5%)
Trivandrum ^a	15-24 years	23 (4.5%)	2850 (19.7%)
	25-34 years	51 (9.9%)	2985 (20.6%)
	35-44 years	74 (14.3%)	2962 (20.5%)
	45-54 years	108 (20.9%)	2515 (17.4%)
	55-64 years	126 (24.4%)	1822 (12.6%)
	65-74 years	87 (16.9%)	971 (6.7%)
	75-84 years	42 (8.1%)	311 (2.1%)
	>=85 years	5 (1.0%)	61 (0.4%)
Total ^a	15-24 years	234 (6.7%)	43038 (25.9%)
	25-34 years	361 (10.4%)	39463 (23.8%)
	35-44 years	497 (14.3%)	32693 (19.7%)
	45-54 years	671 (19.3%)	24010 (14.5%)
	55-64 years	728 (20.9%)	15134 (9.1%)
	65-74 years	676 (19.4%)	8502 (5.1%)
	75-84 years	265 (7.6%)	2631 (1.6%)
	>=85 years	49 (1.4%)	622 (0.4%)

^a p < 0.05

Table 26. Logistic regression for asthma and age

Centre	Age	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	15-24 years				1.000		
	25-34 years	.848	.527	.107	2.335	.832	6.554
	35-44 years	2.279	.471	.000	9.771	3.878	24.617
	45-54 years	3.027	.464	.000	20.631	8.312	51.204
	55-64 years	3.819	.460	.000	45.557	18.482	112.291
	65-74 years	4.350	.461	.000	77.462	31.360	191.335
	75-84 years	4.524	.495	.000	92.202	34.959	243.177
	>=85 years	4.807	.604	.000	122.348	37.450	399.708
Berhampur	15-24 years				1.000		
	25-34 years	.381	.213	.074	1.463	.964	2.222
	35-44 years	.647	.208	.002	1.910	1.270	2.870
	45-54 years	1.120	.201	.000	3.063	2.065	4.544
	55-64 years	1.428	.202	.000	4.172	2.810	6.194
	65-74 years	1.541	.220	.000	4.668	3.035	7.181
	75-84 years	1.895	.287	.000	6.652	3.790	11.674
	>=85 years	2.187	.457	.000	8.911	3.639	21.816
Bikaner	15-24 years				1.000		
	25-34 years	1.229	.283	.000	3.416	1.962	5.950
	35-44 years	1.880	.274	.000	6.553	3.827	11.221
	45-54 years	2.787	.261	.000	16.232	9.724	27.096
	55-64 years	3.244	.264	.000	25.639	15.295	42.979
	65-74 years	3.930	.264	.000	50.902	30.355	85.355
	75-84 years	4.130	.289	.000	62.171	35.270	109.592
	>=85 years	4.369	.408	.000	78.973	35.471	175.825
Chennai	15-24 years				1.000		
	25-34 years	.543	.325	.095	1.721	.910	3.255
	35-44 years	1.093	.308	.000	2.984	1.631	5.461
	45-54 years	1.233	.319	.000	3.431	1.835	6.415
	55-64 years	2.051	.301	.000	7.775	4.313	14.016
	65-74 years	2.273	.314	.000	9.705	5.247	17.950
	75-84 years	1.338	.520	.010	3.813	1.377	10.559
	>=85 years	2.382	.644	.000	10.824	3.061	38.270

Guwahati	15-24 years				1.000		
	25-34 years	-.227	.251	.366	.797	.487	1.304
	35-44 years	.328	.232	.158	1.388	.880	2.190
	45-54 years	.653	.223	.003	1.921	1.242	2.971
	55-64 years	1.294	.229	.000	3.646	2.328	5.711
	65-74 years	2.402	.220	.000	11.049	7.179	17.005
	75-84 years	2.278	.384	.000	9.758	4.601	20.692
	>=85 years	1.418	1.032	.169	4.128	.547	31.183
Kolkata	15-24 years				1.000		
	25-34 years	.399	.177	.024	1.490	1.054	2.106
	35-44 years	.642	.176	.000	1.901	1.347	2.682
	45-54 years	1.099	.171	.000	3.002	2.147	4.196
	55-64 years	1.579	.170	.000	4.848	3.472	6.770
	65-74 years	2.269	.174	.000	9.665	6.878	13.582
	75-84 years	2.456	.213	.000	11.657	7.679	17.694
	>=85 years	.720	.734	.327	2.054	.487	8.661
Mumbai	15-24 years				1.000		
	25-34 years	.124	.518	.811	1.132	.410	3.126
	35-44 years	.856	.450	.057	2.354	.974	5.687
	45-54 years	1.974	.399	.000	7.196	3.293	15.727
	55-64 years	2.080	.409	.000	8.004	3.588	17.858
	65-74 years	2.620	.406	.000	13.741	6.200	30.453
	75-84 years	2.945	.469	.000	19.006	7.582	47.646
	>=85 years	2.448	.799	.002	11.562	2.417	55.298
Mysore	15-24 years				1.000		
	25-34 years	1.302	.509	.011	3.678	1.355	9.979
	35-44 years	1.676	.496	.001	5.345	2.022	14.132
	45-54 years	2.495	.479	.000	12.126	4.744	30.998
	55-64 years	3.117	.476	.000	22.587	8.883	57.428
	65-74 years	3.796	.471	.000	44.510	17.696	111.951
	75-84 years	4.271	.494	.000	71.558	27.170	188.459
	>=85 years	4.032	.645	.000	56.379	15.940	199.408
Nagpur	15-24 years				1.000		
	25-34 years	.312	.293	.287	1.366	.769	2.427
	35-44 years	.809	.278	.004	2.246	1.303	3.873
	45-54 years	1.303	.278	.000	3.680	2.133	6.351

	55-64 years	1.788	.271	.000	5.975	3.512	10.166
	65-74 years	2.362	.267	.000	10.610	6.285	17.910
	75-84 years	2.710	.350	.000	15.037	7.573	29.858
	>=85 years	2.162	.753	.004	8.686	1.984	38.019
Secunderabad	15-24 years				1.000		
	25-34 years	.337	1.001	.736	1.401	.197	9.964
	35-44 years	.483	1.001	.629	1.621	.228	11.526
	45-54 years	1.341	.914	.143	3.821	.637	22.929
	55-64 years	2.234	.868	.010	9.333	1.702	51.179
	65-74 years	2.962	.870	.001	19.342	3.514	106.469
	75-84 years	-14.603	5684.14	.998	.000	.000	.
	>=85 years	-14.603	13397.7	.999	.000	.000	.
Shimla	15-24 years				1.000		
	25-34 years	.278	.557	.618	1.320	.443	3.931
	35-44 years	1.745	.455	.000	5.725	2.346	13.973
	45-54 years	2.315	.447	.000	10.130	4.219	24.317
	55-64 years	3.122	.442	.000	22.686	9.534	53.977
	65-74 years	3.573	.449	.000	35.622	14.763	85.952
	75-84 years	3.977	.476	.000	53.341	20.975	135.646
	>=85 years	3.715	.657	.000	41.045	11.321	148.805
Trivandrum	15-24 years				1.000		
	25-34 years	.750	.253	.003	2.117	1.291	3.473
	35-44 years	1.130	.240	.000	3.096	1.933	4.957
	45-54 years	1.672	.231	.000	5.321	3.382	8.373
	55-64 years	2.148	.229	.000	8.569	5.473	13.416
	65-74 years	2.407	.237	.000	11.102	6.972	17.680
	75-84 years	2.817	.266	.000	16.734	9.932	28.196
	>=85 years	2.318	.510	.000	10.157	3.737	27.604
Total	15-24 years				1.000		
	25-34 years	.520	.084	.000	1.682	1.426	1.984
	35-44 years	1.028	.080	.000	2.796	2.392	3.268
	45-54 years	1.637	.076	.000	5.140	4.426	5.970
	55-64 years	2.180	.076	.000	8.847	7.627	10.263
	65-74 years	2.683	.077	.000	14.624	12.581	16.998
	75-84 years	2.919	.092	.000	18.525	15.471	22.182
	>=85 years	2.673	.162	.000	14.489	10.543	19.912

Table 27. Asthma diagnosis and socioeconomic status

Centre	Socioeconomic status	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	Low	163 (47.5%)	5621 (31.7%)
	Medium	179 (52.2%)	12015 (67.7%)
	High	1 (0.3%)	108 (0.6%)
Berhampur	Low	191 (52.5%)	7758 (52.9%)
	Medium	170 (46.7%)	6849 (46.7%)
	High	3 (0.8%)	54 (0.4%)
Bikaner ^a	Low	321 (61.5%)	8419 (56.8%)
	Medium	198 (37.9%)	6143 (41.4%)
	High	3 (0.6%)	267 (1.8%)
Chennai ^a	Low	52 (27.2%)	2185 (14.8%)
	Medium	130 (68.1%)	11931 (80.6%)
	High	9 (4.7%)	694 (4.7%)
Guwahati ^a	Low	116 (47.7%)	5542 (37.5%)
	Medium	124 (51.0%)	9049 (61.3%)
	High	3 (1.2%)	168 (1.1%)
Kolkata	Low	322 (53.3%)	6790 (56.9%)
	Medium	204 (33.8%)	3672 (30.8%)
	High	78 (12.9%)	1462 (12.3%)
Mumbai ^a	Low	46 (38.0%)	6821 (49.4%)
	Medium	73 (60.3%)	6966 (50.4%)
	High	2 (1.7%)	34 (0.2%)
Mysore	Low	45 (22.7%)	2821 (19.0%)
	Medium	124 (62.6%)	10131 (68.4%)
	High	29 (14.6%)	1867 (12.6%)
Nagpur	Low	124 (60.5%)	8024 (53.9%)
	Medium	81 (39.5%)	6826 (45.9%)
	High	0	24 (0.2%)
Secunderabad	Low	6 (35.3%)	1318 (29.1%)
	Medium	11 (64.7%)	3026 (66.8%)
	High	0	185 (4.1%)
Shimla ^a	Low	84 (53.5%)	7594 (51.2%)
	Medium	37 (23.6%)	4923 (33.2%)
	High	36 (22.9%)	2329 (15.7%)
Trivandrum ^a	Low	436 (84.5%)	10274 (71.0%)
	Medium	77 (14.9%)	4075 (28.1%)
	High	3 (0.6%)	131 (0.9%)
Total	Low	1906 (54.8%)	73167 (44.1%)
	Medium	1408 (40.4%)	85606 (51.5%)
	High	167 (4.8%)	7323 (4.4%)

^a p <0.05

Table 28. Logistic regression asthma and socioeconomic status

Centre	Socioeconomic status	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Medium				1.000		
	Low	.666	.109	.000	1.946	1.571	2.412
	High	-.476	1.007	.637	.622	.086	4.477
Berhampur	Medium				1.000		
	Low	-.008	.107	.939	.992	.805	1.223
	High	.806	.598	.178	2.238	.693	7.230
Bikaner	Medium				1.000		
	Low	.168	.092	.068	1.183	.988	1.416
	High	-1.054	.585	.072	.349	.111	1.097
Chennai	Medium				1.000		
	Low	.781	.166	.000	2.184	1.578	3.022
	High	.174	.347	.616	1.190	.603	2.349
Guwahati	Medium				1.000		
	Low	.424	.130	.001	1.527	1.183	1.972
	High	.265	.589	.653	1.303	.410	4.138
Kolkata	Medium				1.000		
	Low	-.158	.092	.085	.854	.713	1.022
	High	-.040	.137	.767	.960	.735	1.255
Mumbai	Medium				1.000		
	Low	-.441	.189	.020	.644	.444	.932
	High	1.725	.737	.019	5.613	1.324	23.801
Mysore	Medium				1.000		
	Low	.265	.175	.131	1.303	.924	1.838
	High	.238	.208	.252	1.269	.845	1.907
Nagpur	Medium				1.000		
	Low	.264	.144	.066	1.302	.982	1.726
	High	-16.769	8209.63	.998	.000	.000	.
Secunderabad	Medium				1.000		
	Low	.225	.509	.658	1.252	.462	3.393
	High	-15.586	2955.05	.996	.000	.000	.
Shimla	Medium				1.000		
	Low	.386	.198	.051	1.472	.998	2.170
	High	.721	.235	.002	2.057	1.296	3.263
Trivandrum	Medium				1.000		
	Low	.809	.125	.000	2.246	1.758	2.869
	High	.192	.595	.747	1.212	.377	3.891
Total	Medium				1.000		
	Low	.460	.035	.000	1.584	1.477	1.698
	High	.327	.083	.000	1.387	1.179	1.631

Table 29. Asthma diagnosis and history of asthma in immediate family member

Centre	Family history	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	No	231 (67.3%)	16592 (93.5%)
	Yes	112 (32.7%)	1152 (6.5%)
Berhampur ^a	No	317 (87.1%)	14108 (96.2%)
	Yes	47 (12.9%)	553 (3.8%)
Bikaner ^a	No	413 (79.1%)	13340 (90.0%)
	Yes	109 (20.9%)	1489 (10.0%)
Chennai ^a	No	141 (73.8%)	13997 (94.5%)
	Yes	50 (26.2%)	813 (5.5%)
Guwahati ^a	No	185 (76.1%)	14000 (94.9%)
	Yes	58 (23.9%)	759 (5.1%)
Kolkata ^a	No	217 (35.9%)	10307 (86.4%)
	Yes	387 (64.1%)	1617 (13.6%)
Mumbai ^a	No	104 (86.0%)	13630 (98.6%)
	Yes	17 (14.0%)	191 (1.4%)
Mysore ^a	No	187 (94.4%)	14729 (99.4%)
	Yes	11 (5.6%)	90 (0.6%)
Nagpur ^a	No	169 (82.4%)	14714 (98.9%)
	Yes	36 (17.6%)	160 (1.1%)
Secunderabad	No	17 (100%)	4528 (100%)
	Yes	0	1 (0.0%)
Shimla ^a	No	130 (82.8%)	14445 (97.3%)
	Yes	27 (17.2%)	401 (2.7%)
Trivandrum ^a	No	385 (74.6%)	13701 (94.6%)
	Yes	131 (25.4%)	779 (5.4%)
Total ^a	No	2496 (71.7%)	158091 (95.2%)
	Yes	985 (28.3%)	8005 (4.8%)

^a p <0.05

Table 30. Logistic regression for asthma and history of asthma in immediate family member

Centre	Asthma in family	B	SE(B)	Sig	OR	LCI	UCI
						Lower	Upper
Ahmedabad	No				1.000		
	Yes	1.944	.119	.000	6.983	5.529	8.819
Berhampur	No				1.000		
	Yes	1.330	.162	.000	3.782	2.752	5.198
Bikaner	No				1.000		
	Yes	.861	.111	.000	2.364	1.902	2.940
Chennai	No				1.000		
	Yes	1.809	.169	.000	6.105	4.388	8.494
Guwahati	No				1.000		
	Yes	1.755	.155	.000	5.783	4.268	7.836
Kolkata	No				1.000		
	Yes	2.431	.089	.000	11.368	9.549	13.532
Mumbai	No				1.000		
	Yes	2.457	.272	.000	11.665	6.850	19.863
Mysore	No				1.000		
	Yes	2.265	.328	.000	9.627	5.064	18.301
Nagpur	No				1.000		
	Yes	2.975	.200	.000	19.590	13.236	28.993
Secunderabad	No				1.000		
	Yes	-	-	-	-	-	-
Shimla	No				1.000		
	Yes	2.012	.217	.000	7.482	4.885	11.458
Trivandrum	No				1.000		
	Yes	1.789	.108	.000	5.984	4.846	7.390
Total	No				1.000		
	Yes	2.053	.039	.000	7.794	7.215	8.418

Table 31. Asthma diagnosis and ever smoking

Centre	Smoking habit	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	Never smoker	192 (56.0%)	15486 (87.3%)
	Ever smoker	151 (44.0%)	2258 (12.7%)
Berhampur ^a	Never smoker	334 (91.8%)	14016 (95.6%)
	Ever smoker	30 (8.2%)	645 (4.4%)
Bikaner ^a	Never smoker	307 (58.8%)	13147 (88.7%)
	Ever smoker	215 (41.2%)	1682 (11.3%)
Chennai ^a	Never smoker	140 (73.3%)	13352 (90.2%)
	Ever smoker	51 (26.7%)	1458 (9.8%)
Guwahati ^a	Never smoker	176 (72.4%)	14010 (94.9%)
	Ever smoker	67 (27.6%)	749 (5.1%)
Kolkata ^a	Never smoker	428 (70.9%)	9752 (81.8%)
	Ever smoker	176 (29.1%)	2172 (18.2%)
Mumbai ^a	Never smoker	93 (76.9%)	13196 (95.5%)
	Ever smoker	28 (23.1%)	625 (4.5%)
Mysore ^a	Never smoker	116 (58.6%)	13074 (88.2%)
	Ever smoker	82 (41.4%)	1745 (11.8%)
Nagpur ^a	Never smoker	173 (84.4%)	14162 (95.2%)
	Ever smoker	32 (15.6%)	712 (4.8%)
Secunderabad ^a	Never smoker	12 (70.6%)	4336 (95.7%)
	Ever smoker	5 (29.4%)	193 (4.3%)
Shimla ^a	Never smoker	107 (68.2%)	13728 (92.5%)
	Ever smoker	50 (31.8%)	1118 (7.5%)
Trivandrum ^a	Never smoker	417 (80.8%)	12629 (87.2%)
	Ever smoker	99 (19.2%)	1851 (12.8%)
Total ^a	Never smoker	2495 (71.7%)	150888 (90.8%)
	Ever smoker	986 (28.3%)	15208 (9.2%)

^a p <0.05

Table 32. Logistic regression for asthma and smoking

Centre	Smoking habit	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Never smoker				1.000		
	Ever smoker	1.685	.111	.000	5.394	4.339	6.706
Berhampur	Never smoker				1.000		
	Ever smoker	.669	.195	.001	1.952	1.332	2.859
Bikaner	Never smoker				1.000		
	Ever smoker	1.700	.093	.000	5.474	4.565	6.564
Chennai	Never smoker				1.000		
	Ever smoker	1.205	.166	.000	3.336	2.410	4.618
Guwahati	Never smoker				1.000		
	Ever smoker	1.963	.148	.000	7.121	5.324	9.524
Kolkata	Never smoker				1.000		
	Ever smoker	.613	.093	.000	1.846	1.540	2.214
Mumbai	Never smoker				1.000		
	Ever smoker	1.850	.219	.000	6.357	4.135	9.772
Mysore	Never smoker				1.000		
	Ever smoker	1.667	.147	.000	5.296	3.974	7.058
Nagpur	Never smoker				1.000		
	Ever smoker	1.303	.196	.000	3.679	2.504	5.405
Secunderabad	Never smoker				1.000		
	Ever smoker	2.237	.537	.000	9.361	3.265	26.836
Shimla	Never smoker				1.000		
	Ever smoker	1.747	.174	.000	5.738	4.079	8.071
Trivandrum	Never smoker				1.000		
	Ever smoker	.482	.115	.000	1.620	1.294	2.027
Total	Never smoker				1.000		
	Ever smoker	1.366	.039	.000	3.921	3.635	4.229

Table 33. Asthma diagnosis and tobacco smoking product

Centre	Smoking product	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	Cigarette	1 (0.3%)	26 (0.1%)
	Bidi	89 (25.9%)	1727 (9.7%)
	Hookah	3 (0.9%)	17 (0.1%)
	Others	58 (16.9%)	488 (2.8%)
	None	192 (56.0%)	15486 (87.3%)
Berhampur ^a	Cigarette	22 (6.0%)	370 (2.5%)
	Bidi	7 (1.9%)	242 (1.7%)
	Hookah	0	30 (0.2%)
	Others	1 (0.3%)	3 (0.0%)
	None	334 (91.8%)	14016 (95.6%)
Bikaner ^a	Cigarette	5 (1.0%)	127 (0.9%)
	Bidi	188 (36.0%)	1520 (10.3%)
	Hookah	2 (0.4%)	2 (0.0%)
	Others	20 (3.8%)	33 (0.2%)
	None	307 (58.8%)	13147 (88.7%)
Chennai ^a	Cigarette	16 (8.4%)	701 (4.7%)
	Bidi	35 (18.3%)	741 (5.0%)
	Hookah	0	0
	Others	0	16 (0.1%)
	None	140 (73.3%)	13352 (90.2%)
Guwahati ^a	Cigarette	16 (6.6%)	426 (2.9%)
	Bidi	48 (19.8%)	312 (2.1%)
	Hookah	3 (1.2%)	5 (0.0%)
	Others	0	8 (0.1%)
	None	176 (72.4%)	14008 (94.9%)
Kolkata ^a	Cigarette	59 (9.8%)	713 (6.0%)
	Bidi	117 (19.4%)	1451 (12.2%)
	Hookah	0	3 (0.0%)
	Others	0	5 (0.0%)
	None	428 (70.9%)	9752 (81.8%)
Mumbai ^a	Cigarette	5 (4.1%)	171 (1.2%)
	Bidi	23 (19.0%)	453 (3.3%)

	Hookah	0	0
	Others	0	1 (0.0%)
	None	93 (76.9%)	13196 (95.5%)
Mysore ^a	Cigarette	7 (3.5%)	233 (1.6%)
	Bidi	74 (37.4%)	1510 (10.2%)
	Hookah	0	0
	Others	1 (0.5%)	2 (0.0%)
	None	116 (58.6%)	13074 (88.2%)
Nagpur ^a	Cigarette	3 (1.5%)	171 (1.1%)
	Bidi	28 (13.7%)	526 (3.5%)
	Hookah	0	7 (0.0%)
	Others	1 (0.5%)	7 (0.0%)
	None	173 (84.4%)	14163 (95.2%)
Secunderabad ^a	Cigarette	2 (11.8%)	170 (3.8%)
	Bidi	3 (17.6%)	21 (0.5%)
	Hookah	0	1 (0.0%)
	Others	0	1 (0.0%)
	None	12 (70.6%)	4336 (95.7%)
Shimla ^a	Cigarette	10 (6.4%)	480 (3.2%)
	Bidi	40 (25.5%)	632 (4.3%)
	Hookah	1 (0.6%)	4 (0.0%)
	Others	0	2 (0.0%)
	None	106 (67.5%)	13728 (92.5%)
Trivandrum ^a	Cigarette	46 (8.9%)	980 (6.8%)
	Bidi	51 (9.9%)	838 (5.8%)
	Hookah	2 (0.4%)	32 (0.2%)
	Others	0	2 (0.0%)
	None	417 (80.8%)	12628 (87.2%)
Total ^a	Cigarette	192 (5.5%)	4568 (2.8%)
	Bidi	703 (20.2%)	9973 (6.0%)
	Hookah	11 (0.3%)	101 (0.1%)
	Others	81 (2.3%)	568 (0.3%)
	None	2494 (71.6%)	150886 (90.8%)

^a p <0.05

Table 34. Logistic regression for asthma and smoking product

Centre	Smoking product	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	None				1.000		
	Cigarette	1.132	1.022	.268	3.102	.419	22.976
	Bidi	1.425	.131	.000	4.157	3.217	5.370
	Hookah	2.656	.630	.000	14.233	4.137	48.969
	Others	2.260	.157	.000	9.586	7.051	13.033
Berhampur	None				1.000		
	Cigarette	.914	.226	.000	2.495	1.601	3.888
	Bidi	.194	.387	.617	1.214	.568	2.594
	Hookah	-17.466	7340.84	.998	.000	.000	.
	Others	2.638	1.156	.022	13.988	1.451	134.824
Bikaner	None				1.000		
	Cigarette	.522	.460	.256	1.686	.685	4.150
	Bidi	1.667	.096	.000	5.297	4.384	6.399
	Hookah	3.757	1.002	.000	42.824	6.013	305.005
	Others	3.256	.289	.000	25.954	14.724	45.748
Chennai	None				1.000		
	Cigarette	.778	.267	.004	2.177	1.291	3.672
	Bidi	1.505	.193	.000	4.505	3.088	6.572
	Hookah	-	-	-	-	-	-
	Others	-16.645	10048.2	.999	.000	.000	.
Guwahati	None				1.000		
	Cigarette	1.095	.266	.000	2.989	1.776	5.032
	Bidi	2.505	.173	.000	12.245	8.730	17.174
	Hookah	3.866	.734	.000	47.755	11.325	201.367
	Others	-16.826	14212.6	.999	.000	.000	.
Kolkata	None				1.000		
	Cigarette	.634	.144	.000	1.885	1.421	2.501
	Bidi	.608	.108	.000	1.837	1.487	2.271
	Hookah	-18.082	23324.3	.999	.000	.000	.
	Others	-18.080	18030.0	.999	.000	.000	.

Mumbai	None				1.000		
	Cigarette	1.423	.465	.002	4.149	1.666	10.331
	Bidi	1.975	.238	.000	7.204	4.521	11.480
	Hookah	-	-	-	-	-	-
	Others	-16.248	40193.0	1.000	.000	.000	.
Mysore	None				1.000		
	Cigarette	1.220	.395	.002	3.386	1.562	7.340
	Bidi	1.709	.151	.000	5.523	4.106	7.429
	Hookah	-	-	-	-	-	-
	Others	4.032	1.228	.001	56.353	5.075	625.811
Nagpur	None				1.000		
	Cigarette	.362	.587	.538	1.436	.454	4.542
	Bidi	1.472	.208	.000	4.358	2.896	6.558
	Hookah	-16.797	15183.8	.999	.000	.000	.
	Others	2.459	1.072	.022	11.695	1.431	95.567
Secunderabad	None				1.000		
	Cigarette	1.447	.768	.059	4.251	.944	19.143
	Bidi	3.944	.682	.000	51.619	13.573	196.313
	Hookah	-15.313	40187.1	1.000	.000	.000	.
	Others	-15.313	40187.1	1.000	.000	.000	.
Shimla	None				1.000		
	Cigarette	.993	.334	.003	2.698	1.402	5.193
	Bidi	2.104	.190	.000	8.197	5.649	11.895
	Hookah	3.477	1.122	.002	32.377	3.589	292.096
	Others	-16.340	28431.6	1.000	.000	.000	.
Trivandrum	None				1.000		
	Cigarette	.352	.159	.027	1.421	1.041	1.941
	Bidi	.611	.153	.000	1.843	1.367	2.485
	Hookah	.638	.731	.383	1.893	.452	7.924
	Others	-17.795	28461.5	1.000	.000	.000	.
Total	None				1.000		
	Cigarette	.933	.076	.000	2.543	2.189	2.954
	Bidi	1.450	.044	.000	4.265	3.913	4.648
	Hookah	1.885	.318	.000	6.589	3.532	12.292
	Others	2.155	.120	.000	8.628	6.813	10.925

Table 35. Asthma diagnosis and ever exposure to household ETS

Centre	ETS exposure	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	No	172 (50.1%)	10470 (59.0%)
	Yes	171 (49.9%)	7274 (41.0%)
Berhampur	No	345 (94.8%)	13785 (94.0%)
	Yes	19 (5.2%)	876 (6.0%)
Bikaner ^a	No	267 (51.1%)	8496 (57.3%)
	Yes	255 (48.9%)	6333 (42.7%)
Chennai ^a	No	67 (35.1%)	6264 (42.3%)
	Yes	124 (64.9%)	8546 (57.7%)
Guwahati ^a	No	179 (73.7%)	11942 (80.9%)
	Yes	64 (26.3%)	2817 (19.1%)
Kolkata ^a	No	445 (73.7%)	7264 (60.9%)
	Yes	159 (26.3%)	4660 (39.1%)
Mumbai	No	108 (89.3%)	12343 (89.3%)
	Yes	13 (10.7%)	1478 (10.7%)
Mysore	No	134 (67.7%)	10109 (68.2%)
	Yes	64 (32.3%)	4710 (31.8%)
Nagpur	No	183 (89.3%)	13585 (91.3%)
	Yes	22 (10.7%)	1289 (8.7%)
Secunderabad	No	14 (82.4%)	4214 (93.0%)
	Yes	3 (17.6%)	315 (7.0%)
Shimla	No	139 (88.5%)	13398 (90.2%)
	Yes	18 (11.5%)	1448 (9.8%)
Trivandrum ^a	No	309 (59.9%)	10510 (72.6%)
	Yes	207 (40.1%)	3970 (27.4%)
Total ^a	No	2362 (67.9%)	122380 (73.7%)
	Yes	1119 (32.1%)	43716 (26.3%)

^a p <0.05

Table 36. Logistic regression for asthma and exposure to household ETS

Centre	ETS	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Never exposed				1.000		
	Ever exposed	.358	.109	.001	1.431	1.156	1.772
Berhampur	Never exposed				1.000		
	Ever exposed	-.143	.238	.548	.867	.543	1.382
Bikaner	Never exposed				1.000		
	Ever exposed	.248	.089	.005	1.281	1.076	1.526
Chennai	Never exposed				1.000		
	Ever exposed	.305	.153	.046	1.357	1.006	1.829
Guwahati	Never exposed				1.000		
	Ever exposed	.416	.147	.005	1.516	1.136	2.022
Kolkata	Never exposed				1.000		
	Ever exposed	-.585	.094	.000	.557	.463	.670
Mumbai	Never exposed				1.000		
	Ever exposed	.005	.295	.986	1.005	.564	1.792
Mysore	Never exposed				1.000		
	Ever exposed	.025	.153	.871	1.025	.760	1.383
Nagpur	Never exposed				1.000		
	Ever exposed	.237	.228	.298	1.267	.811	1.979
Secunderabad	Never exposed				1.000		
	Ever exposed	1.053	.639	.099	2.867	.820	10.028
Shimla	Never exposed				1.000		
	Ever exposed	.181	.252	.473	1.198	.731	1.964
Trivandrum	Never exposed				1.000		
	Ever exposed	.573	.092	.000	1.773	1.482	2.123
Total	Never exposed				1.000		
	Ever exposed	.282	.037	.000	1.326	1.234	1.425

Table 37. Asthma diagnosis and ever exposure to household ETS (nonsmokers only)

Centre	ETS exposure	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	No	99 (51.6%)	9537 (61.6%)
	Yes	93 (48.4%)	5949 (38.4%)
Berhampur	No	315 (94.3%)	13148 (93.8%)
	Yes	19 (5.7%)	868 (6.2%)
Bikaner ^a	No	158 (51.5%)	7629 (58.0%)
	Yes	149 (48.5%)	5518 (42.0%)
Chennai ^a	No	47 (33.6%)	5661 (42.4%)
	Yes	93 (66.4%)	7691 (57.6%)
Guwahati ^a	No	122 (69.3%)	11279 (80.5%)
	Yes	54 (30.7%)	2731 (19.5%)
Kolkata ^a	No	285 (66.6%)	5454 (55.9%)
	Yes	143 (33.4%)	4298 (44.1%)
Mumbai	No	82 (88.2%)	11774 (89.2%)
	Yes	11 (11.8%)	1422 (10.8%)
Mysore	No	75 (64.7%)	8797 (67.3%)
	Yes	41 (35.3%)	4277 (32.7%)
Nagpur	No	152 (87.9%)	12923 (91.3%)
	Yes	21 (12.1%)	1239 (8.7%)
Secunderabad ^a	No	9 (75.0%)	4033 (93.0%)
	Yes	3 (25.0%)	303 (7.0%)
Shimla	No	93 (86.9%)	12361 (90.0%)
	Yes	14 (13.1%)	1367 (10.0%)
Trivandrum ^a	No	229 (54.9%)	9053 (71.7%)
	Yes	188 (45.1%)	3576 (28.3%)
Total ^a	No	1666 (66.8%)	111649 (74.0%)
	Yes	829 (33.2%)	39239 (26.0%)

^a p <0.05

Table 38. Logistic regression asthma and ETS exposure (nonsmokers only)

Centre	ETS	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Never exposed				1.000		
	Ever exposed	.409	.145	.005	1.506	1.133	2.002
Berhampur	Never exposed				1.000		
	Ever exposed	-.090	.239	.705	.914	.572	1.459
Bikaner	Never exposed				1.000		
	Ever exposed	.265	.116	.022	1.304	1.040	1.635
Chennai	Never exposed				1.000		
	Ever exposed	.376	.180	.037	1.456	1.024	2.072
Guwahati	Never exposed				1.000		
	Ever exposed	.603	.165	.000	1.828	1.323	2.525
Kolkata	Never exposed				1.000		
	Ever exposed	-.451	.104	.000	.637	.519	.781
Mumbai	Never exposed				1.000		
	Ever exposed	.105	.322	.745	1.111	.591	2.089
Mysore	Never exposed				1.000		
	Ever exposed	.117	.195	.548	1.124	.767	1.648
Nagpur	Never exposed				1.000		
	Ever exposed	.365	.235	.120	1.441	.910	2.283
Secunderabad	Never exposed				1.000		
	Ever exposed	1.490	.669	.026	4.437	1.195	16.474
Shimla	Never exposed				1.000		
	Ever exposed	.308	.288	.284	1.361	.774	2.394
Trivandrum	Never exposed				1.000		
	Ever exposed	.732	.100	.000	2.078	1.707	2.530
Total	Never exposed				1.000		
	Ever exposed	.348	.043	.000	1.416	1.302	1.540

Table 39. Asthma diagnosis and timing of ETS exposure

Centre	Timing of ETS exposure	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	None	172 (50.1%)	10470 (59.0%)
	Childhood	94 (27.4%)	3786 (21.3%)
	Adulthood	54 (15.7%)	2451 (13.8%)
	Both	23 (6.7%)	1037 (5.8%)
Berhampur	None	345 (94.8%)	13785 (94.0%)
	Childhood	1 (0.3%)	388 (2.6%)
	Adulthood	18 (4.9%)	488 (3.3%)
	Both	0	0
Bikaner ^a	None	267 (51.1%)	8496 (57.3%)
	Childhood	134 (25.7%)	3783 (25.5%)
	Adulthood	59 (11.3%)	1516 (10.2%)
	Both	62 (11.9%)	1034 (7.0%)
Chennai ^a	None	67 (35.1%)	6264 (42.3%)
	Childhood	39 (20.4%)	4141 (28.0%)
	Adulthood	38 (19.9%)	1931 (13.0%)
	Both	47 (24.6%)	2474 (16.7%)
Guwahati ^a	None	179 (73.7%)	11942 (80.9%)
	Childhood	45 (18.5%)	1977 (13.4%)
	Adulthood	19 (7.8%)	749 (5.1%)
	Both	0	91 (0.6%)
Kolkata ^a	None	445 (73.7%)	7264 (60.9%)
	Childhood	47 (7.8%)	2351 (19.7%)
	Adulthood	87 (14.4%)	1572 (13.2%)
	Both	25 (4.1%)	737 (6.2%)
Mumbai	None	108 (89.3%)	12343 (89.3%)
	Childhood	7 (5.8%)	747 (5.4%)

	Adulthood	6 (5.0%)	727 (5.3%)
	Both	0	4 (0.0%)
Mysore	None	134 (67.7%)	10109 (68.2%)
	Childhood	15 (7.6%)	2306 (15.6%)
	Adulthood	46 (23.2%)	2228 (15.0%)
	Both	3 (1.5%)	176 (1.2%)
Nagpur	None	183 (89.3%)	13585 (91.3%)
	Childhood	10 (4.9%)	713 (4.8%)
	Adulthood	12 (5.9%)	525 (3.5%)
	Both	0	51 (0.3%)
Secunderabad	None	14 (82.4%)	4214 (93.0%)
	Childhood	0	104 (2.3%)
	Adulthood	3 (17.6%)	204 (4.5%)
	Both	0	7 (0.2%)
Shimla	None	139 (88.5%)	13398 (90.2%)
	Childhood	3 (1.9%)	681 (4.6%)
	Adulthood	14 (8.9%)	761 (5.1%)
	Both	1 (0.6%)	6 (0.0%)
Trivandrum ^a	None	309 (59.9%)	10510 (72.6%)
	Childhood	95 (18.4%)	2559 (17.7%)
	Adulthood	67 (13.0%)	889 (6.1%)
	Both	45 (8.7%)	522 (3.6%)
Total ^a	None	2362 (67.9%)	122380 (73.7%)
	Childhood	490 (14.1%)	23536 (14.2%)
	Adulthood	423 (12.2%)	14041 (8.5%)
	Both	206 (5.9%)	6139 (3.7%)

^a p < 0.05

Table 40. Logistic regression for asthma and timing of ETS exposure

Centre	ETS exposure	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	None				1.000		
	Childhood	.413	.130	.001	1.511	1.172	1.949
	Adulthood	.294	.158	.063	1.341	.985	1.826
	Both	.300	.224	.181	1.350	.870	2.096
Berhampur	None				1.000		
	Childhood	-2.273	1.003	.023	.103	.014	.735
	Adulthood	.388	.246	.115	1.474	.910	2.387
	Both	-	-	-	-	-	-
Bikaner	None				1.000		
	Childhood	.120	.108	.266	1.127	.913	1.392
	Adulthood	.214	.147	.145	1.238	.929	1.650
	Both	.646	.145	.000	1.908	1.437	2.534
Chennai	None				1.000		.
	Childhood	-.127	.202	.530	.881	.592	1.309
	Adulthood	.610	.205	.003	1.840	1.232	2.748
	Both	.574	.192	.003	1.776	1.220	2.586
Guwahati	None				1.000		
	Childhood	.418	.169	.013	1.519	1.091	2.113
	Adulthood	.526	.244	.031	1.692	1.049	2.731
	Both	-17.002	4213.36	.997	.000	.000	.
Kolkata	None				1.000		
	Childhood	-1.120	.155	.000	.326	.241	.442
	Adulthood	-.102	.120	.399	.903	.713	1.144
	Both	-.591	.209	.005	.554	.368	.834

Mumbai	None				1.000		
	Childhood	.069	.392	.861	1.071	.497	2.308
	Adulthood	-.058	.421	.890	.943	.413	2.153
	Both	-16.464	20096.5	.999	.000	.000	.
Mysore	None				1.000		
	Childhood	-.712	.273	.009	.491	.287	.838
	Adulthood	.443	.172	.010	1.558	1.111	2.184
	Both	.251	.589	.669	1.286	.406	4.077
Nagpur	None				1.000		
	Childhood	.040	.327	.902	1.041	.548	1.976
	Adulthood	.529	.301	.079	1.697	.940	3.063
	Both	-16.896	5628.13	.998	.000	.000	.
Secunderabad	None				1.000		
	Childhood	-15.496	3941.24	.997	.000	.000	.
	Adulthood	1.488	.640	.020	4.426	1.262	15.525
	Both	-15.496	15191.5	.999	.000	.000	.
Shimla	None				1.000		
	Childhood	-.857	.585	.143	.425	.135	1.336
	Adulthood	.573	.283	.043	1.773	1.019	3.087
	Both	2.777	1.083	.010	16.065	1.921	134.319
Trivandrum	None				1.000		
	Childhood	.233	.119	.051	1.263	.999	1.596
	Adulthood	.941	.139	.000	2.563	1.951	3.368
	Both	1.076	.166	.000	2.932	2.119	4.058
Total	None				1.000		
	Childhood	.076	.050	.131	1.079	.978	1.190
	Adulthood	.445	.054	.000	1.561	1.405	1.734
	Both	.553	.074	.000	1.739	1.504	2.009

Table 41. Asthma diagnosis and timing of ETS exposure (nonsmokers only)

Centre	Timing of ETS exposure	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	None	99 (51.6%)	9537 (61.6%)
	Childhood	25 (13.0%)	2541 (16.4%)
	Adulthood	51 (26.6%)	2424 (15.7%)
	Both	17 (8.9%)	984 (6.4%)
Berhampur ^a	None	315 (94.3%)	13148 (93.8%)
	Childhood	1 (0.3%)	381 (2.7%)
	Adulthood	18 (5.4%)	487 (3.5%)
	Both	0 (0.0%)	0 (0.0%)
Bikaner ^a	None	158 (51.5%)	7629 (58.0%)
	Childhood	50 (16.3%)	3014 (22.9%)
	Adulthood	53 (17.3%)	1492 (11.3%)
	Both	46 (15.0%)	1012 (7.7%)
Chennai ^a	None	47 (33.6%)	5661 (42.4%)
	Childhood	20 (14.3%)	3543 (26.5%)
	Adulthood	36 (25.7%)	1872 (14.0%)
	Both	37 (26.4%)	2276 (17.0%)
Guwahati ^a	None	122 (69.3%)	11279 (80.5%)
	Childhood	37 (21.0%)	1912 (13.6%)
	Adulthood	17 (9.7%)	728 (5.2%)
	Both	0	91 (0.6%)
Kolkata ^a	None	285 (66.6%)	5454 (55.9%)
	Childhood	34 (7.9%)	2011 (20.6%)
	Adulthood	84 (19.6%)	1553 (15.9%)
	Both	25 (5.8%)	734 (7.5%)
Mumbai	None	82 (88.2%)	11774 (89.2%)
	Childhood	7 (7.5%)	732 (5.5%)

	Adulthood	4 (4.3%)	686 (5.2%)
	Both	0	4 (0.0%)
Mysore ^a	None	75 (64.7%)	8797 (67.3%)
	Childhood	4 (3.4%)	1988 (15.2%)
	Adulthood	34 (29.3%)	2135 (16.3%)
	Both	3 (2.6%)	154 (1.2%)
Nagpur	None	152 (87.9%)	12923 (91.3%)
	Childhood	9 (5.2%)	666 (4.7%)
	Adulthood	12 (6.9%)	522 (3.7%)
	Both	0	51 (0.4%)
Secunderabad ^a	None	9 (75.0%)	4033 (93.0%)
	Childhood	0	98 (2.3%)
	Adulthood	3 (25.0%)	198 (4.6%)
	Both	0	7 (0.2%)
Shimla ^a	None	93 (86.9%)	12361 (90.0%)
	Childhood	2 (1.9%)	632 (4.6%)
	Adulthood	11 (10.3%)	729 (5.3%)
	Both	1 (0.9%)	6 (0.0%)
Trivandrum ^a	None	229 (54.9%)	9053 (71.7%)
	Childhood	79 (18.9%)	2196 (17.4%)
	Adulthood	65 (15.6%)	881 (7.0%)
	Both	44 (10.6%)	499 (4.0%)
Total ^a	None	1666 (66.8%)	111649 (74.0%)
	Childhood	268 (10.7%)	19714 (13.1%)
	Adulthood	388 (15.6%)	13707 (9.1%)
	Both	173 (6.9%)	5818 (3.9%)

^a p < 0.05

Table 42. Logistic regression for asthma and ETS exposure (nonsmokers only)

Centre	ETS exposure	B	SE(B)	Sig	OR	LCI	UCI
						Lower	Upper
Ahmedabad	None				1.000		
	Childhood	-.054	.225	.812	.948	.610	1.473
	Adulthood	.706	.174	.000	2.027	1.442	2.850
	Both	.509	.265	.054	1.664	.991	2.796
Berhampur	None				1.000		
	Childhood	-2.211	1.003	.027	.110	.015	.782
	Adulthood	.434	.247	.079	1.543	.951	2.502
	Both	-	-	-	-	-	-
Bikaner	None				1.000		
	Childhood	-.222	.164	.175	.801	.581	1.104
	Adulthood	.540	.161	.001	1.715	1.250	2.353
	Both	.786	.171	.000	2.195	1.570	3.068
Chennai	None				1.000		.
	Childhood	-.386	.268	.150	.680	.402	1.149
	Adulthood	.840	.223	.000	2.316	1.496	3.587
	Both	.672	.221	.002	1.958	1.269	3.021
Guwahati	None				1.000		
	Childhood	.582	.189	.002	1.789	1.234	2.593
	Adulthood	.770	.262	.003	2.159	1.293	3.606
	Both	-16.676	4213.36	.997	.000	.000	.
Kolkata	None				1.000		
	Childhood	-1.128	.183	.000	.324	.226	.463
	Adulthood	.034	.127	.787	1.035	.806	1.329
	Both	-.428	.212	.044	.652	.430	.988

Mumbai	None				1.000		
	Childhood	.317	.396	.423	1.373	.632	2.982
	Adulthood	-.178	.514	.729	.837	.306	2.291
	Both	-16.236	20096.5	.999	.000	.000	.
Mysore	None				1.000		
	Childhood	-1.444	.514	.005	.236	.086	.646
	Adulthood	.625	.208	.003	1.868	1.242	2.809
	Both	.826	.594	.164	2.285	.713	7.325
Nagpur	None				1.000		
	Childhood	.139	.345	.688	1.149	.584	2.261
	Adulthood	.670	.303	.027	1.954	1.079	3.541
	Both	-16.760	5628.14	.998	.000	.000	.
Secunderabad	None				1.000		
	Childhood	-15.098	4060.10	.997	.000	.000	.
	Adulthood	1.915	.671	.004	6.790	1.824	25.274
	Both	-15.098	15191.5	.999	.000	.000	.
Shimla	None				1.000		
	Childhood	-.866	.716	.226	.421	.103	1.711
	Adulthood	.696	.321	.030	2.006	1.069	3.763
	Both	3.098	1.085	.004	22.152	2.641	185.815
Trivandrum	None				1.000		
	Childhood	.352	.133	.008	1.422	1.097	1.844
	Adulthood	1.070	.145	.000	2.917	2.196	3.875
	Both	1.249	.171	.000	3.486	2.494	4.873
Total	None				1.000		
	Childhood	-.093	.066	.160	.911	.800	1.037
	Adulthood	.640	.057	.000	1.897	1.696	2.122
	Both	.690	.081	.000	1.993	1.700	2.336

Table 43. Asthma diagnosis and regular cooking

Centre	Cooking	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	Currently cooking	93 (27.1%)	8346 (47.0%)
	Cooked in past	31 (9.0%)	488 (2.8%)
	Never cooked	219 (63.8%)	8910 (50.2%)
Berhampur ^a	Currently cooking	147 (40.4%)	6350 (43.3%)
	Cooked in past	40 (11.0%)	724 (4.9%)
	Never cooked	177 (48.6%)	7587 (51.7%)
Bikaner ^a	Currently cooking	142 (27.2%)	5893 (39.7%)
	Cooked in past	76 (14.6%)	490 (3.3%)
	Never cooked	304 (58.2%)	8446 (57.0%)
Chennai ^a	Currently cooking	95 (49.7%)	8255 (55.7%)
	Cooked in past	19 (9.9%)	654 (4.4%)
	Never cooked	77 (40.3%)	5901 (39.8%)
Guwahati ^a	Currently cooking	46 (18.9%)	4249 (28.8%)
	Cooked in past	34 (14.0%)	538 (3.6%)
	Never cooked	163 (67.1%)	9972 (67.6%)
Kolkata ^a	Currently cooking	168 (27.8%)	4030 (33.8%)
	Cooked in past	101 (16.7%)	879 (7.4%)
	Never cooked	335 (55.5%)	7015 (58.8%)
Mumbai ^a	Currently cooking	39 (32.2%)	6233 (45.1%)
	Cooked in past	3 (2.5%)	174 (1.3%)
	Never cooked	79 (65.3%)	7414 (53.6%)
Mysore ^a	Currently cooking	48 (24.2%)	6269 (42.3%)
	Cooked in past	23 (11.6%)	452 (3.1%)
	Never cooked	127 (64.1%)	8098 (54.6%)
Nagpur ^a	Currently cooking	48 (23.4%)	5636 (37.9%)
	Cooked in past	38 (18.5%)	1154 (7.8%)
	Never cooked	119 (58.0%)	8084 (54.3%)
Secunderabad	Currently cooking	7 (41.2%)	1679 (37.1%)
	Cooked in past	1 (5.9%)	213 (4.7%)
	Never cooked	9 (52.9%)	2637 (58.2%)
Shimla ^a	Currently cooking	71 (45.2%)	6345 (42.7%)
	Cooked in past	21 (13.4%)	524 (3.5%)
	Never cooked	65 (41.4%)	7977 (53.7%)
Trivandrum ^a	Currently cooking	268 (51.9%)	6375 (44.0%)
	Cooked in past	34 (6.6%)	281 (1.9%)
	Never cooked	214 (41.5%)	7824 (54.0%)
Total ^a	Currently cooking	1172 (33.7%)	69660 (41.9%)
	Cooked in past	421 (12.1%)	6571 (4.0%)
	Never cooked	1888 (54.2%)	89865 (54.1%)

^a p <0.05

Table 44. Logistic regression for asthma and regular cooking

Centre	Cooking	B	SE(B)	Sig	OR	LCI	UCI
						Lower	Upper
Ahmedabad	Never				1.000		
	Current	-.791	.125	.000	.453	.355	.579
	Past	.950	.197	.000	2.584	1.755	3.806
Berhampur	Never				1.000		
	Current	-.008	.113	.945	.992	.795	1.238
	Past	.862	.179	.000	2.368	1.666	3.366
Bikaner	Never				1.000		
	Current	-.401	.103	.000	.669	.547	.819
	Past	1.461	.136	.000	4.309	3.298	5.630
Chennai	Never				1.000		
	Current	-.126	.154	.416	.882	.652	1.193
	Past	.800	.259	.002	2.226	1.339	3.702
Guwahati	Never				1.000		
	Current	-.412	.168	.014	.662	.477	.921
	Past	1.352	.194	.000	3.866	2.645	5.651
Kolkata	Never				1.000		
	Current	-.136	.097	.159	.873	.722	1.055
	Past	.878	.119	.000	2.406	1.905	3.038
Mumbai	Never				1.000		
	Current	-.532	.196	.007	.587	.400	.863
	Past	.481	.593	.417	1.618	.506	5.175
Mysore	Never				1.000		
	Current	-.717	.170	.000	.488	.350	.682
	Past	1.177	.232	.000	3.245	2.060	5.110
Nagpur	Never				1.000		
	Current	-.547	.172	.001	.579	.413	.810
	Past	.805	.189	.000	2.237	1.545	3.240
Secunderabad	Never				1.000		
	Current	.200	.505	.692	1.222	.454	3.286
	Past	.319	1.056	.763	1.376	.173	10.909
Shimla	Never				1.000		
	Current	.317	.172	.066	1.373	.979	1.926
	Past	1.593	.255	.000	4.918	2.984	8.108
Trivandrum	Never				1.000		
	Current	.430	.093	.000	1.537	1.280	1.845
	Past	1.487	.194	.000	4.424	3.022	6.475
Total	Never				1.000		
	Current	-.222	.038	.000	.801	.744	.862
	Past	1.115	.055	.000	3.050	2.736	3.399

Table 45. Asthma diagnosis and cooking fuel use

Centre	Cooking fuel	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	Electricity	0	16 (0.1%)
	LPG	37 (10.8%)	3081 (17.4%)
	Kerosene	5 (1.5%)	431 (2.4%)
	Coal	0	3 (0.0%)
	Wood	82 (23.9%)	5301 (29.9%)
	Dung cake	0	0
	Crop residue	0	0
	Others	0	2 (0.0%)
	Not cooking	219 (63.8%)	8910 (50.2%)
Berhampur	Electricity	0	19 (0.1%)
	LPG	78 (21.4%)	3151 (21.5%)
	Kerosene	0	85 (0.6%)
	Coal	1 (0.3%)	6 (0.0%)
	Wood	103 (28.3%)	3675 (25.1%)
	Dung cake	5 (1.4%)	126 (0.9%)
	Crop residue	0	12 (0.1%)
	Others	0	0
	Not cooking	177 (48.6%)	7586 (51.7%)
Bikaner ^a	Electricity	0	7 (0.0%)
	LPG	44 (8.4%)	1890 (12.7%)
	Kerosene	3 (0.6%)	35 (0.2%)
	Coal	0	13 (0.1%)
	Wood	81 (15.5%)	2431 (16.4%)
	Dung cake	90 (17.2%)	2006 (13.5%)
	Crop residue	0	0
	Others	0	1 (0.0%)
	Not cooking	304 (58.2%)	8446 (57.0%)
Chennai	Electricity	0	16 (0.1%)
	LPG	78 (40.8%)	5748 (38.8%)
	Kerosene	3 (1.6%)	597 (4.0%)
	Coal	0	2 (0.0%)
	Wood	34 (17.8%)	2571 (17.4%)
	Dung cake	0	0
	Crop residue	0	9 (0.1%)
	Others	0	1 (0.0%)
	Not cooking	76 (39.8%)	5866 (39.6%)
Guwahati ^a	Electricity	2 (0.8%)	9 (0.1%)
	LPG	27 (11.1%)	2184 (14.8%)

	Kerosene	0	19 (0.1%)
	Coal	0	9 (0.1%)
	Wood	51 (21.0%)	2565 (17.4%)
	Dung cake	0	1 (0.0%)
	Crop residue	0	0
	Others	0	2 (0.0%)
	Not cooking	163 (67.1%)	9970 (67.6%)
Kolkata ^a	Electricity	0	3 (0.0%)
	LPG	93 (15.4%)	1585 (13.3%)
	Kerosene	19 (3.2%)	133 (1.1%)
	Coal	12 (2.0%)	105 (0.9%)
	Wood	145 (24.0%)	3065 (25.7%)
	Dung cake	0	15 (0.1%)
	Crop residue	0	0
	Others	0	2 (0.0%)
	Not cooking	334 (55.4%)	7016 (58.8%)
Mumbai ^a	Electricity	0	23 (0.2%)
	LPG	31 (25.6%)	2792 (20.2%)
	Kerosene	0	181 (1.3%)
	Coal	0	52 (0.4%)
	Wood	10 (8.3%)	3352 (24.3%)
	Dung cake	0	6 (0.0%)
	Crop residue	0	0
	Others	0	0
	Not cooking	79 (65.3%)	7414 (53.6%)
Mysore	Electricity	0	15 (0.1%)
	LPG	28 (14.1%)	2894 (19.5%)
	Kerosene	4 (2.0%)	408 (2.8%)
	Coal	0	2 (0.0%)
	Wood	40 (20.2%)	3402 (23.0%)
	Dung cake	0	0
	Crop residue	0	0
	Others	0	0
	Not cooking	126 (63.6%)	8080 (54.6%)
Nagpur ^a	Electricity	0	2 (0.0%)
	LPG	33 (16.1%)	2646 (17.8%)
	Kerosene	1 (0.5%)	104 (0.7%)
	Coal	0	9 (0.1%)
	Wood	51 (24.9%)	4024 (27.1%)
	Dung cake	0	4 (0.0%)
	Crop residue	0	1 (0.0%)

	Others	0	0
	Not cooking	119 (58.0%)	8083 (54.3%)
Secunderabad	Electricity	0	36 (0.8%)
	LPG	8 (47.1%)	1606 (35.6%)
	Kerosene	0	215 (4.8%)
	Coal	0	7 (0.2%)
	Wood	0	11 (0.2%)
	Dung cake	0	1 (0.0%)
	Crop residue	0	1 (0.0%)
	Others	0	1 (0.0%)
	Not cooking	9 (52.9%)	2636 (58.4%)
	Shimla ^a	Electricity	2 (1.3%)
LPG		49 (31.2%)	4299 (29.0%)
Kerosene		7 (4.5%)	194 (1.3%)
Coal		2 (1.3%)	73 (0.5%)
Wood		40 (25.5%)	2896 (19.5%)
Dung cake		0	0
Crop residue		0	4 (0.0%)
Others		0	2 (0.0%)
Not cooking		57 (36.3%)	7284 (49.1%)
Trivandrum ^a		Electricity	1 (0.2%)
	LPG	56 (10.9%)	2294 (15.8%)
	Kerosene	1 (0.2%)	50 (0.3%)
	Coal	1 (0.2%)	6 (0.0%)
	Wood	243 (47.1%)	4258 (29.4%)
	Dung cake	0	0
	Crop residue	0	2 (0.0%)
	Others	0	2 (0.0%)
	Not cooking	214 (41.5%)	7819 (54.0%)
	Total ^a	Electricity	5 (0.1%)
LPG		562 (16.1%)	34170 (20.6%)
Kerosene		43 (1.2%)	2452 (1.5%)
Coal		16 (0.5%)	287 (0.2%)
Wood		880 (25.3%)	37551 (22.6%)
Dung cake		96 (2.8%)	2169 (1.3%)
Crop residue		1 (0.0%)	29 (0.0%)
Others		0	13 (0.0%)
Not cooking		1877 (53.9%)	89110 (53.7%)

^a p < 0.05

Table 46. Logistic regression for asthma and cooking fuel use

Centre	Cooking fuel	B	SE(B)	Sig	OR	LCI	UCI
						Upper	Lower
Ahmedabad	Not cooking				1.000		
	Electricity	-17.497	10050.2	.999	.000	.000	.
	LPG	-.716	.179	.000	.489	.344	.694
	Kerosene	-.751	.455	.099	.472	.193	1.151
	Coal	-17.499	23229.7	.999	.000	.000	.
	Wood	-.463	.131	.000	.629	.487	.813
	Others	-17.500	28465.4	1.000	.000	.000	.
Berhampur	Not cooking				1.000		
	Electricity	-17.445	9220.9	.998	.000	.000	.
	LPG	.059	.138	.667	1.061	.810	1.389
	Kerosene	-17.445	4359.5	.997	.000	.000	.
	Coal	1.966	1.083	.069	7.143	.855	59.644
	Wood	.183	.126	.144	1.201	.939	1.536
	Dung cake	.531	.462	.251	1.701	.687	4.209
	Crop residue	-17.445	11602.7	.999	.000	.000	.
Bikaner	Not cooking				1.000		
	Electricity	-17.878	15191.5	.999	.000	.000	.
	LPG	-.436	.163	.008	.647	.470	.891
	Kerosene	.868	.604	.151	2.381	.728	7.786
	Coal	-17.878	11147.5	.999	.000	.000	.
	Wood	-.077	.127	.544	.926	.722	1.188
	Dung cake	.220	.123	.072	1.246	.980	1.585
	Others	-17.878	40192.9	1.000	.000	.000	.
Chennai	Not cooking				1.000		.
	Electricity	-16.857	10048.2	.999	.000	.000	.
	LPG	.046	.162	.775	1.047	.762	1.439
	Kerosene	-.947	.590	.109	.388	.122	1.233
	Coal	-16.857	28420.7	1.000	.000	.000	.
	Wood	.021	.208	.921	1.021	.679	1.533
	Crop residue	-16.857	13397.7	.999	.000	.000	.
	Others	-16.857	40193.0	1.000	.000	.000	.
Guwahati	Not cooking				1.000		
	Electricity	2.610	.786	.001	13.592	2.914	63.401
	LPG	-.279	.209	.181	.756	.502	1.139
	Kerosene	-17.089	9220.9	.999	.000	.000	.
	Coal	-17.089	13397.7	.999	.000	.000	.

	Wood	.196	.162	.227	1.216	.885	1.671
	Dung cake	-17.089	40193.0	1.000	.000	.000	.
	Others	-17.089	28420.7	1.000	.000	.000	.
Kolkata	Not cooking				1.000		
	Electricity	-18.158	23205.4	.999	.000	.000	.
	LPG	.209	.120	.083	1.233	.973	1.561
	Kerosene	1.099	.252	.000	3.001	1.833	4.913
	Coal	.876	.310	.005	2.401	1.308	4.406
	Wood	-.006	.102	.951	.994	.814	1.213
	Dung cake	-18.158	10377.8	.999	.000	.000	.
	Others	-18.158	28420.7	.999	.000	.000	.
Mumbai	Not cooking				1.000		
	Electricity	-16.661	8380.8	.998	.000	.000	.
	LPG	.041	.213	.847	1.042	.686	1.582
	Kerosene	-16.661	2987.5	.996	.000	.000	.
	Coal	-16.661	5573.8	.998	.000	.000	.
	Wood	-1.273	.336	.000	.280	.145	.541
	Dung cake	-16.661	16408.7	.999	.000	.000	.
	Crop residue	25.745	40193.0	.999	1.516x10 ¹¹	.000	.
Mysore	Not cooking				1.000		
	Electricity	-17.041	10377.2	.999	.000	.000	.
	LPG	-.476	.210	.023	.621	.411	.937
	Kerosene	-.463	.510	.364	.629	.231	1.711
	Coal	-17.041	28409.5	1.000	.000	.000	.
	Wood	-.282	.183	.123	.755	.528	1.079
	Dung cake	-17.041	12709.1	.999	.000	.000	.
	Crop residue						
Nagpur	Not cooking				1.000		
	Electricity	-16.985	28420.7	1.000	.000	.000	.
	LPG	-.166	.198	.402	.847	.575	1.249
	Kerosene	-.426	1.009	.673	.653	.090	4.719
	Coal	-16.984	13397.7	.999	.000	.000	.
	Wood	-.150	.168	.374	.861	.619	1.198
	Dung cake	2.832	1.122	.012	16.981	1.884	153.066
	Crop residue	-16.985	40193.0	1.000	.000	.000	.
Secunderabad	Not cooking				1.000		
	Electricity	-15.523	6698.8	.998	.000	.000	.
	LPG	.378	.487	.438	1.459	.562	3.789
	Kerosene	-15.523	2741.1	.995	.000	.000	.
	Coal	-15.523	15191.7	.999	.000	.000	.
	Wood	-15.523	12118.7	.999	.000	.000	.

	Dung cake	-15.523	40196.6	1.000	.000	.000	.
	Crop residue	-15.523	40196.6	1.000	.000	.000	.
	Others	-15.523	40196.6	1.000	.000	.000	.
Shimla	Not cooking				1.000		
	Electricity	1.022	.727	.160	2.778	.668	11.550
	LPG	.376	.196	.055	1.457	.992	2.138
	Kerosene	1.528	.407	.000	4.611	2.076	10.239
	Coal	1.253	.729	.086	3.501	.839	14.611
	Wood	.568	.207	.006	1.765	1.175	2.650
	Crop residue	-16.353	20096.5	.999	.000	.000	.
	Others	-16.353	28420.7	1.000	.000	.000	.
Trivandrum	Not cooking				1.000		
	Electricity	-.208	1.013	.837	.812	.111	5.918
	LPG	-.114	.152	.452	.892	.662	1.201
	Kerosene	-.314	1.012	.757	.731	.100	5.314
	Coal	1.807	1.082	.095	6.090	.730	50.802
	Wood	.735	.096	.000	2.085	1.729	2.515
	Crop residue	-17.605	28420.7	1.000	.000	.000	.
	Others	-17.605	28420.7	1.000	.000	.000	.
Total	Not cooking				1.000		
	Electricity	-.176	.452	.697	.839	.346	2.033
	LPG	-.247	.049	.000	.781	.710	.859
	Kerosene	-.183	.156	.239	.833	.614	1.129
	Coal	.973	.258	.000	2.647	1.597	4.388
	Wood	.107	.041	.010	1.113	1.026	1.206
	Dung cake	.743	.107	.000	2.101	1.704	2.591
	Crop residue	.493	1.017	.628	1.637	.223	12.025
	Others	-17.368	11588.7	.999	.000	.000	.

Table 47. Asthma diagnosis and separate kitchen in house

Centre	Kitchen	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	No separate kitchen	51 (14.9%)	2315 (13.0%)
	Separate kitchen	73 (21.3%)	6519 (36.7%)
	Not cooking	219 (63.8%)	8910 (50.2%)
Berhampur	No separate kitchen	3 (0.8%)	134 (0.9%)
	Separate kitchen	184 (50.5%)	6940 (47.3%)
	Not cooking	177 (48.6%)	7587 (51.7%)
Bikaner	No separate kitchen	52 (10.0%)	1757 (11.8%)
	Separate kitchen	166 (31.8%)	4626 (31.2%)
	Not cooking	304 (58.2%)	8446 (57.0%)
Chennai	No separate kitchen	25 (13.1%)	1956 (13.2%)
	Separate kitchen	89 (46.6%)	6953 (46.9%)
	Not cooking	77 (40.3%)	5901 (39.8%)
Guwahati	No separate kitchen	3 (1.2%)	91 (0.6%)
	Separate kitchen	77 (31.7%)	4696 (31.8%)
	Not cooking	163 (67.1%)	9972 (67.6%)
Kolkata	No separate kitchen	6 (1.0%)	167 (1.4%)
	Separate kitchen	263 (43.5%)	4742 (39.8%)
	Not cooking	335 (55.5%)	7015 (58.8%)
Mumbai ^a	No separate kitchen	11 (9.1%)	2082 (15.1%)
	Separate kitchen	31 (25.6%)	4325 (31.3%)
	Not cooking	79 (65.3%)	7414 (53.6%)
Mysore ^a	No separate kitchen	4 (2.0%)	503 (3.4%)
	Separate kitchen	67 (33.8%)	6218 (42.0%)
	Not cooking	127 (64.1%)	8098 (54.6%)
Nagpur	No separate kitchen	1 (0.5%)	159 (1.1%)
	Separate kitchen	85 (41.5%)	6631 (44.6%)
	Not cooking	119 (58.0%)	8084 (54.3%)
Secunderabad	No separate kitchen	0	158 (3.5%)
	Separate kitchen	8 (47.1%)	1734 (38.3%)
	Not cooking	9 (52.9%)	2637 (58.2%)
Shimla ^a	No separate kitchen	3 (1.9%)	258 (1.7%)
	Separate kitchen	89 (56.7%)	6611 (44.5%)
	Not cooking	65 (41.4%)	7977 (53.7%)
Trivandrum ^a	No separate kitchen	283 (54.8%)	6368 (44.0%)
	Separate kitchen	19 (3.7%)	288 (2.0%)
	Not cooking	214 (41.5%)	7824 (54.0%)
Total ^a	No separate kitchen	442 (12.7%)	15948 (9.6%)
	Separate kitchen	1151 (33.1%)	60283 (36.3%)
	Not cooking	1888 (54.2%)	89865 (54.1%)

^a p <0.05

Table 48. Logistic regression for asthma and separate kitchen in house

Centre	Kitchen	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Not cooking				1.000		
	Not separate	-.109	.157	.486	.896	.659	1.220
	Separate	-.786	.136	.000	.456	.349	.595
Berhampur	Not cooking				1.000		
	Not separate	-.041	.589	.944	.960	.303	3.042
	Separate	.128	.107	.230	1.136	.922	1.400
Bikaner	Not cooking				1.000		
	Not separate	-.196	.152	.199	.822	.610	1.108
	Separate	-.003	.098	.975	.997	.822	1.209
Chennai	Not cooking				1.000		
	Not separate	-.021	.232	.929	.980	.622	1.542
	Separate	-.019	.157	.902	.981	.722	1.333
Guwahati	Not cooking				1.000		
	Not separate	.702	.592	.236	2.017	.632	6.437
	Separate	.003	.139	.982	1.003	.763	1.318
Kolkata	Not cooking				1.000		
	Not separate	-.285	.419	.497	.752	.331	1.711
	Separate	.150	.085	.077	1.161	.984	1.371
Mumbai	Not cooking				1.000		
	Not separate	-.702	.323	.030	.496	.263	.933
	Separate	-.397	.213	.062	.673	.443	1.021
Mysore	Not cooking				1.000		
	Not separate	-.679	.510	.183	.507	.187	1.377
	Separate	-.375	.152	.013	.687	.510	.925
Nagpur	Not cooking				1.000		
	Not separate	-.850	1.007	.399	.427	.059	3.077
	Separate	-.138	.143	.333	.871	.658	1.152
Secunderabad	Not cooking				1.000		
	Not separate	-15.523	3197.59	.996	.000	.000	.
	Separate	.301	.487	.536	1.352	.521	3.510
Shimla	Not cooking				1.000		
	Not separate	.356	.594	.549	1.427	.446	4.570
	Separate	.502	.164	.002	1.652	1.198	2.279
Trivandrum	Not cooking				1.000		
	Not separate	.485	.092	.000	1.625	1.356	1.946
	Separate	.880	.247	.000	2.412	1.487	3.912
Total	Not cooking				1.000		
	Not separate	.277	.054	.000	1.319	1.188	1.465
	Separate	-.096	.038	.011	.909	.844	.979

Table 49. Asthma diagnosis and kitchen ventilation

Centre	Kitchen ventilation	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	None / Poor	60 (17.5%)	2897 (16.3%)
	Good	64 (18.7%)	5937 (33.5%)
	Not cooking	219 (63.8%)	8910 (50.2%)
Berhampur	None / Poor	2 (0.5%)	55 (0.4%)
	Good	185 (50.8%)	7019 (47.9%)
	Not cooking	177 (48.6%)	7587 (51.7%)
Bikaner	None / Poor	64 (12.3%)	1971 (13.3%)
	Good	154 (29.5%)	4412 (29.8%)
	Not cooking	304 (58.2%)	8446 (57.0%)
Chennai	None / Poor	17 (8.9%)	1739 (11.7%)
	Good	97 (50.8%)	7170 (48.4%)
	Not cooking	77 (40.3%)	5901 (39.8%)
Guwahati	None / Poor	3 (1.2%)	69 (0.5%)
	Good	77 (31.7%)	4718 (32.0%)
	Not cooking	163 (67.1%)	9972 (67.6%)
Kolkata	None / Poor	6 (1.0%)	164 (1.4%)
	Good	263 (43.5%)	4745 (39.8%)
	Not cooking	335 (55.5%)	7015 (58.8%)
Mumbai ^a	None / Poor	12 (9.9%)	2124 (15.4%)
	Good	30 (24.8%)	4283 (31.0%)
	Not cooking	79 (65.3%)	7414 (53.6%)
Mysore ^a	None / Poor	23 (11.6%)	2118 (14.3%)
	Good	48 (24.2%)	4603 (31.1%)
	Not cooking	127 (64.1%)	8098 (54.6%)
Nagpur	None / Poor	0	99 (0.7%)
	Good	86 (42.0%)	6691 (45.0%)
	Not cooking	119 (58.0%)	8084 (54.3%)
Secunderabad	None / Poor	2 (11.8%)	161 (3.6%)
	Good	6 (35.3%)	1731 (38.2%)
	Not cooking	9 (52.9%)	2637 (58.2%)
Shimla ^a	None / Poor	9 (5.7%)	447 (3.0%)
	Good	83 (52.9%)	6422 (43.3%)
	Not cooking	65 (41.4%)	7977 (53.7%)
Trivandrum ^a	None / Poor	25 (4.8%)	325 (2.2%)
	Good	277 (53.7%)	6331 (43.7%)
	Not cooking	214 (41.5%)	7824 (54.0%)
Total	None / Poor	223 (6.4%)	12169 (7.3%)
	Good	1370 (39.4%)	64062 (38.6%)
	Not cooking	1888 (54.2%)	89865 (54.1%)

^a p <0.05

Table 50. Logistic regression for asthma and kitchen ventilation

Centre	Ventilation	B	SE(B)	Sig	OR	95% Ci	
						Lower	Upper
Ahmedabad	Not cooking				1.000		
	None / Poor	-.171	.147	.245	.843	.631	1.125
	Good	-.824	.143	.000	.439	.331	.581
Berhampur	Not cooking				1.000		
	None / Poor	.444	.724	.540	1.559	.377	6.440
	Good	.122	.106	.252	1.130	.917	1.392
Bikaner	Not cooking				1.000		
	None / Poor	-.103	.140	.461	.902	.686	1.186
	Good	-.031	.101	.760	.970	.796	1.181
Chennai	Not cooking				1.000		
	None / Poor	-.289	.269	.284	.749	.442	1.270
	Good	.036	.154	.814	1.037	.767	1.401
Guwahati	Not cooking				1.000		
	None / Poor	.978	.595	.100	2.660	.829	8.538
	Good	-.002	.139	.991	.998	.760	1.312
Kolkata	Not cooking				1.000		
	None / Poor	-.266	.419	.525	.766	.337	1.743
	Good	.149	.085	.078	1.161	.983	1.370
Mumbai	Not cooking				1.000		
	None / Poor	-.634	.311	.041	.530	.288	.975
	Good	-.420	.215	.051	.657	.431	1.002
Mysore	Not cooking				1.000		
	None / Poor	-.368	.228	.107	.692	.443	1.082
	Good	-.408	.170	.017	.665	.476	.929
Nagpur	Not cooking				1.000		
	None / Poor	-16.984	4039.43	.997	.000	.000	.
	Good	-.136	.142	.341	.873	.660	1.154
Secunderabad	Not cooking				1.000		
	None / Poor	1.292	.786	.100	3.640	.780	16.985
	Good	.015	.528	.977	1.016	.361	2.858
Shimla	Not cooking				1.000		
	None / Poor	.905	.359	.012	2.471	1.223	4.994
	Good	.461	.166	.006	1.586	1.145	2.198
Trivandrum	Not cooking				1.000		
	None / Poor	1.034	.219	2.812	1.832	4.318	2.812
	Good	.470	.093	1.600	1.334	1.918	1.600
Total	Not cooking				1.000		
	None / Poor	-.137	.071	.056	.872	.758	1.003
	Good	.018	.036	.621	1.018	.949	1.092

Table 51. Asthma diagnosis and average cooking days per month

Centre	Average cooking days per month	All respondents with asthma	All respondents without asthma
Ahmedabad ^a	Not cooking	219 (63.8%)	8910 (50.2%)
	1-7 days	27 (7.9%)	399 (2.2%)
	8-14 days	8 (2.3%)	203 (1.1%)
	15-21 days	2 (0.6%)	203 (1.1%)
	>21 days	87 (25.4%)	8029 (45.2%)
Berhampur ^a	Not cooking	177 (48.6%)	7587 (51.7%)
	1-7 days	0	0
	8-14 days	1 (0.3%)	120 (0.8%)
	15-21 days	9 (2.5%)	624 (4.3%)
	>21 days	177 (48.6%)	6330 (43.2%)
Bikaner ^a	Not cooking	304 (58.2%)	8446 (57.0%)
	1-7 days	4 (0.8%)	12 (0.1%)
	8-14 days	2 (0.4%)	39 (0.3%)
	15-21 days	2 (0.4%)	13 (0.1%)
	>21 days	210 (40.2%)	6319 (42.6%)
Chennai	Not cooking	77 (40.3%)	5901 (39.8%)
	1-7 days	9 (4.7%)	578 (3.9%)
	8-14 days	2 (1.0%)	223 (1.5%)
	15-21 days	0	96 (0.6%)
	>21 days	103 (53.9%)	8012 (54.1%)
Guwahati ^a	Not cooking	163 (67.1%)	9972 (67.6%)
	1-7 days	27 (11.1%)	474 (3.2%)
	8-14 days	0	9 (0.1%)
	15-21 days	0	5 (0.0%)
	>21 days	52 (21.4%)	4299 (29.1%)
Kolkata	Not cooking	335 (55.5%)	7015 (58.8%)
	1-7 days	5 (0.8%)	12 (0.1%)
	8-14 days	1 (0.2%)	66 (0.6%)
	15-21 days	1 (0.2%)	21 (0.2%)
	>21 days	262 (43.4%)	4810 (40.3%)
Mumbai ^b	Not cooking	79 (65.3%)	7414 (53.6%)
	1-7 days	0	10 (0.1%)

	8-14 days	1 (0.8%)	160 (1.2%)
	15-21 days	1 (0.8%)	87 (0.6%)
	>21 days	40 (33.1%)	6150 (44.5%)
Mysore ^a	Not cooking	127 (64.1%)	8098 (54.6%)
	1-7 days	1 (0.5%)	11 (0.1%)
	8-14 days	1 (0.5%)	13 (0.1%)
	15-21 days	0	6 (0.0%)
	>21 days	69 (34.8%)	6691 (45.2%)
Nagpur ^a	Not cooking	119 (58.0%)	8084 (54.3%)
	1-7 days	40 (19.5%)	1561 (10.5%)
	8-14 days	0	183 (1.2%)
	15-21 days	0	96 (0.6%)
	>21 days	46 (22.4%)	4950 (33.3%)
Secunderabad	Not cooking	9 (52.9%)	2637 (58.2%)
	1-7 days	1 (5.9%)	71 (1.6%)
	8-14 days	0	10 (0.2%)
	15-21 days	0	7 (0.2%)
	>21 days	7 (41.2%)	1804 (39.8%)
Shimla ^a	Not cooking	65 (41.4%)	7977 (53.7%)
	1-7 days	8 (5.1%)	218 (1.5%)
	8-14 days	7 (4.5%)	386 (2.6%)
	15-21 days	2 (1.3%)	152 (1.0%)
	>21 days	75 (47.8%)	6113 (41.2%)
Trivandrum ^a	Not cooking	214 (41.5%)	7824 (54.0%)
	1-7 days	2 (0.4%)	60 (0.4%)
	8-14 days	1 (0.2%)	28 (0.2%)
	15-21 days	0	9 (0.1%)
	>21 days	299 (57.9%)	6559 (45.3%)
Total ^a	Not cooking	1888 (54.2%)	89865 (54.1%)
	1-7 days	124 (3.6%)	3406 (2.1%)
	8-14 days	25 (0.7%)	1440 (0.9%)
	15-21 days	17 (0.5%)	1319 (0.8%)
	>21 days	1427 (41.0%)	70066 (42.2%)

^a p < 0.05

Table 52. Logistic regression for asthma and average cooking days per month

Centre	Days per month	B	SE(B)	Sig	OR	LCI	UCI
						Lower	Upper
Ahmedabad	Not cooking				1.000		
	1-7 days	1.013	.210	.000	2.753	1.823	4.157
	8-14 days	.472	.367	.198	1.603	.781	3.291
	15-21 days	-.914	.714	.200	.401	.099	1.624
	>21 days	-.819	.128	.000	.441	.343	.566
Berhampur	Not cooking				1.000		
	1-7 days	-	-	-	-	-	-
	8-14 days	-1.029	1.007	.307	.357	.050	2.571
	15-21 days	-.481	.344	.162	.618	.315	1.214
	>21 days	.181	.108	.092	1.199	.971	1.480
Bikaner	Not cooking				1.000		
	1-7 days	2.226	.580	.000	9.261	2.970	28.880
	8-14 days	.354	.727	.626	1.425	.342	5.927
	15-21 days	1.453	.762	.057	4.274	.960	19.024
	>21 days	-.080	.091	.382	.923	.772	1.104
Chennai	Not cooking				1.000		
	1-7 days	.177	.355	.619	1.193	.595	2.393
	8-14 days	-.375	.719	.602	.687	.168	2.816
	15-21 days	-16.864	4102.20	.997	.000	.000	.
	>21 days	-.015	.152	.922	.985	.732	1.326
Guwahati	Not cooking				1.000		
	1-7 days	1.248	.213	.000	3.485	2.295	5.291
	8-14 days	1.917	1.057	.070	6.798	.856	53.965
	15-21 days	-17.089	17983.9	.999	.000	.000	.
	>21 days	-.301	.160	.060	.740	.540	1.013
Kolkata	Not cooking				1.000		
	1-7 days	2.166	.535	.000	8.725	3.056	24.909
	8-14 days	-1.148	1.009	.255	.317	.044	2.293
	15-21 days	-.003	1.025	.998	.997	.134	7.435
	>21 days	.132	.085	.120	1.141	.966	1.346

Mumbai	Not cooking				1.000		
	1-7 days	-16.661	12711.2	.999	.000	.000	.
	8-14 days	-.533	1.009	.597	.587	.081	4.242
	15-21 days	.076	1.012	.940	1.079	.148	7.841
	>21 days	-.494	.195	.011	.610	.417	.894
Mysore	Not cooking				1.000		
	1-7 days	1.757	1.048	.094	5.797	.743	45.236
	8-14 days	1.590	1.042	.127	4.905	.637	37.778
	15-21 days	-17.047	16398.4	.999	.000	.000	.
	>21 days	-.419	.150	.005	.658	.490	.883
Nagpur	Not cooking				1.000		
	1-7 days	.554	.185	.003	1.741	1.212	2.501
	8-14 days	-16.984	2971.11	.995	.000	.000	.
	15-21 days	-16.984	4102.09	.997	.000	.000	.
	>21 days	-.460	.175	.008	.631	.448	.889
Secunderabad	Not cooking				1.000		
	1-7 days	1.417	1.061	.182	4.127	.516	33.012
	8-14 days	-15.523	12710.3	.999	.000	.000	.
	15-21 days	-15.523	15191.8	.999	.000	.000	.
	>21 days	.128	.505	.799	1.137	.423	3.058
Shimla	Not cooking				1.000		
	1-7 days	1.505	.381	.000	4.504	2.135	9.502
	8-14 days	.800	.401	.046	2.226	1.014	4.886
	15-21 days	.479	.723	.507	1.615	.392	6.655
	>21 days	.409	.170	.016	1.506	1.078	2.102
Trivandrum	Not cooking				1.000		
	1-7 days	.198	.722	.784	1.219	.296	5.018
	8-14 days	.267	1.020	.794	1.306	.177	9.641
	15-21 days	-17.605	13421.9	.999	.000	.000	.
	>21 days	.511	.091	.000	1.667	1.394	1.992
Total	Not cooking				1.000		
	1-7 days	.550	.094	.000	1.733	1.440	2.085
	8-14 days	-.191	.203	.348	.826	.555	1.230
	15-21 days	-.489	.245	.046	.613	.379	.992
	>21 days	-.031	.035	.381	.969	.904	1.039

Table 53. Multiple logistic regression model for asthma

Ahmedabad

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	.097	.174	.575	1.102	.784	1.549
	Mixed	.559	.272	.039	1.749	1.027	2.979
Gender:	Male				1.000		
	Female	.163	.430	.705	1.177	.507	2.732
Age category:	15-24 years				1.000		
	25-34 years	.757	.528	.152	2.132	.757	6.004
	35-44 years	1.998	.475	.000	7.375	2.905	18.728
	45-54 years	2.764	.470	.000	15.864	6.314	39.861
	55-64 years	3.509	.468	.000	33.424	13.356	83.644
	65-74 years	4.050	.471	.000	57.388	22.801	144.444
	75-84 years	4.182	.509	.000	65.480	24.168	177.408
	>=85 years	4.520	.632	.000	91.853	26.607	317.099
Social status:	Low				1.000		
	Medium	-.320	.122	.009	.726	.572	.922
	High	-.595	1.024	.561	.552	.074	4.105
Asthma in family:	No				1.000		
	Yes	1.919	.134	.000	6.812	5.236	8.863
Smoking:	Never smoker				1.000		
	Cigarette	.329	1.112	.767	1.390	.157	12.283
	Bidi	.734	.178	.000	2.084	1.470	2.954
	Hookah	1.791	.682	.009	5.995	1.576	22.801
	Others	1.117	.218	.000	3.056	1.992	4.690
ETS exposure:	None				1.000		
	Childhood	-.040	.158	.799	.960	.704	1.309
	Adulthood	.260	.197	.188	1.297	.880	1.909
	Both	.073	.252	.771	1.076	.657	1.761
Cooking fuel:	Not cooking				1.000		
	Electricity	-17.820	9409.865	.998	.000	.000	.
	LPG	-.479	.454	.292	.620	.255	1.508
	Kerosene	-.390	.619	.529	.677	.201	2.276
	Coal	-16.040	22442.16	.999	.000	.000	.
	Wood	-.137	.447	.759	.872	.363	2.093
	Dung cake	-	-	-	-	-	-
	Crop residue	-	-	-	-	-	-
	Others	-17.882	27423.77	.999	.000	.000	.
Constant	-9.839	5240.649	.999	.000			

Berhampur

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	.326	.141	.021	1.385	1.051	1.826
	Mixed	-16.415	28378.61	1.000	.000	.000	.
Gender:	Male				1.000		
	Female	.668	.399	.094	1.951	.892	4.266
Age category:	15-24 years				1.000		
	25-34 years	.391	.218	.072	1.479	.965	2.266
	35-44 years	.671	.214	.002	1.957	1.286	2.977
	45-54 years	1.169	.208	.000	3.217	2.138	4.841
	55-64 years	1.479	.210	.000	4.390	2.909	6.625
	65-74 years	1.592	.228	.000	4.911	3.142	7.678
	75-84 years	2.052	.294	.000	7.784	4.373	13.856
	>=85 years	2.372	.467	.000	10.719	4.294	26.756
Social status:	Low				1.000		
	Medium	-.147	.136	.281	.864	.662	1.127
	High	.385	.613	.530	1.470	.442	4.893
Asthma in family:	No				1.000		
	Yes	1.624	.169	.000	5.073	3.640	7.071
Smoking:	Never smoker				1.000		
	Cigarette	.769	.242	.001	2.158	1.343	3.466
	Bidi	-.013	.398	.974	.987	.453	2.152
	Hookah	-17.890	7201.502	.998	.000	.000	.
	Others	2.342	1.181	.047	10.404	1.029	105.241
ETS exposure:	None				1.000		
	Childhood	-1.784	1.007	.077	.168	.023	1.210
	Adulthood	.240	.257	.350	1.271	.768	2.103
	Both	-	-	-	-	-	-
Cooking fuel:	Not cooking				1.000		
	Electricity	-17.845	8992.279	.998	.000	.000	.
	LPG	-.375	.411	.362	.688	.307	1.538
	Kerosene	-17.810	4280.375	.997	.000	.000	.
	Coal	1.552	1.158	.180	4.719	.488	45.619
	Wood	-.400	.410	.328	.670	.300	1.495
	Dung cake	-.011	.612	.986	.989	.298	3.284
	Crop residue	-17.517	11472.00	.999	.000	.000	.
	Others	-	-	-	-	-	-
Constant							

Bikaner

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	-.447	.129	.001	.639	.497	.823
	Mixed	-.482	.602	.423	.617	.190	2.008
Gender:	Male				1.000		
	Female	-.249	.340	.465	.780	.400	1.519
Age category:	15-24 years				1.000		
	25-34 years	1.018	.286	.000	2.767	1.578	4.851
	35-44 years	1.540	.280	.000	4.664	2.692	8.079
	45-54 years	2.446	.270	.000	11.543	6.804	19.585
	55-64 years	2.896	.272	.000	18.107	10.617	30.880
	65-74 years	3.563	.274	.000	35.273	20.606	60.378
	75-84 years	3.706	.303	.000	40.678	22.443	73.730
	>=85 years	4.057	.435	.000	57.774	24.619	135.577
Social status:	Low				1.000		
	Medium	.115	.111	.300	1.121	.903	1.393
	High	-.656	.604	.277	.519	.159	1.695
Asthma in family:	No				1.000		
	Yes	1.037	.129	.000	2.821	2.190	3.634
Smoking:	Never smoker				1.000		
	Cigarette	.262	.482	.586	1.300	.506	3.343
	Bidi	1.290	.138	.000	3.631	2.769	4.763
	Hookah	3.306	1.170	.005	27.268	2.755	269.876
	Others	1.933	.329	.000	6.910	3.625	13.169
ETS exposure:	None				1.000		
	Childhood	-.013	.125	.914	.987	.772	1.260
	Adulthood	-.297	.167	.076	.743	.535	1.032
	Both	.200	.170	.238	1.222	.876	1.704
Cooking fuel:	Not cooking				1.000		
	Electricity	-16.758	14376.44	.999	.000	.000	.
	LPG	.541	.372	.146	1.718	.829	3.562
	Kerosene	1.263	.692	.068	3.536	.910	13.735
	Coal	-16.775	10676.89	.999	.000	.000	.
	Wood	.611	.355	.085	1.842	.919	3.691
	Dung cake	.934	.356	.009	2.545	1.267	5.112
	Crop residue	-	-	-	-	-	-
	Others	-16.257	40192.99	1.000	.000	.000	.
Constant	-8.058	5500.221	.999	.000			

Chennai

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	-.410	.178	.021	.664	.468	.941
	Mixed	.109	.539	.840	1.115	.387	3.211
Gender:	Male				1.000		
	Female	.593	.389	.128	1.809	.843	3.880
Age category:	15-24 years				1.000		
	25-34 years	.392	.333	.240	1.479	.770	2.844
	35-44 years	.779	.323	.016	2.179	1.157	4.102
	45-54 years	.879	.335	.009	2.407	1.247	4.647
	55-64 years	1.731	.321	.000	5.647	3.008	10.600
	65-74 years	2.005	.337	.000	7.430	3.841	14.371
	75-84 years	1.141	.537	.034	3.131	1.093	8.970
	>=85 years	2.206	.673	.001	9.079	2.428	33.949
Social status:	Low				1.000		
	Medium	-.788	.188	.000	.455	.314	.658
	High	-.779	.390	.046	.459	.214	.986
Asthma in family:	No				1.000		
	Yes	2.123	.188	.000	8.360	5.780	12.090
Smoking:	Never smoker				1.000		
	Cigarette	.911	.330	.006	2.487	1.302	4.751
	Bidi	1.435	.278	.000	4.199	2.435	7.241
	Hookah	-	-		-	-	-
	Others	-16.977	9490.704	.999	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	-.044	.213	.835	.957	.631	1.451
	Adulthood	.463	.222	.037	1.589	1.028	2.455
	Both	.502	.205	.015	1.651	1.104	2.470
Cooking fuel:	Not cooking				1.000		
	Electricity	-17.132	9382.692	.999	.000	.000	.
	LPG	.018	.384	.963	1.018	.480	2.160
	Kerosene	-1.328	.689	.054	.265	.069	1.024
	Coal	-17.217	28363.78	1.000	.000	.000	.
	Wood	-.306	.416	.462	.736	.326	1.664
	Dung cake	-	-		-	-	-
	Crop residue	-18.546	11899.78	.999	.000	.000	.
	Others	-16.427	40192.96	1.000	.000	.000	.
Constant	-15.892	6857.831	.998	.000			

Guwahati

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	.031	.187	.868	1.032	.715	1.488
	Mixed	-15.717	40175.12	1.000	.000	.000	.
Gender:	Male				1.000		
	Female	-.195	.251	.437	.822	.503	1.346
Age category:	15-24 years				1.000		
	25-34 years	-.338	.263	.198	.713	.426	1.193
	35-44 years	.139	.253	.581	1.150	.700	1.887
	45-54 years	.488	.248	.049	1.629	1.002	2.649
	55-64 years	.992	.263	.000	2.697	1.611	4.515
	65-74 years	1.974	.264	.000	7.197	4.290	12.075
	75-84 years	1.552	.440	.000	4.720	1.994	11.175
	>=85 years	.761	1.067	.476	2.140	.264	17.318
Social status:	Low				1.000		
	Medium	-.290	.157	.064	.748	.550	1.017
	High	.028	.625	.964	1.028	.302	3.498
Asthma in family:	No				1.000		
	Yes	1.902	.168	.000	6.697	4.821	9.303
Smoking:	Never smoker				1.000		
	Cigarette	.699	.295	.018	2.012	1.128	3.590
	Bidi	1.655	.212	.000	5.235	3.455	7.932
	Hookah	3.106	.829	.000	22.328	4.400	113.319
	Others	-17.396	13742.72	.999	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	.454	.183	.013	1.575	1.099	2.256
	Adulthood	.331	.277	.232	1.393	.809	2.398
	Both	-16.860	4063.907	.997	.000	.000	.
Cooking fuel:	Not cooking				1.000		
	Electricity	3.021	.851	.000	20.503	3.867	108.705
	LPG	.226	.322	.484	1.254	.666	2.358
	Kerosene	-17.225	8627.793	.998	.000	.000	.
	Coal	-16.723	12860.83	.999	.000	.000	.
	Wood	.279	.293	.341	1.322	.744	2.348
	Dung cake	-17.337	40192.99	1.000	.000	.000	.
	Crop residue	-	-	-	-	-	-
	Others	-15.948	28407.64	1.000	.000	.000	.
Constant							

Kolkata

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	-.020	.143	.890	.981	.741	1.297
	Mixed	.099	.221	.655	1.104	.716	1.701
Gender:	Male				1.000		
	Female	-.087	.214	.686	.917	.602	1.396
Age category:	15-24 years				1.000		
	25-34 years	.205	.189	.277	1.228	.848	1.777
	35-44 years	.405	.191	.034	1.500	1.031	2.181
	45-54 years	.800	.191	.000	2.225	1.532	3.233
	55-64 years	1.497	.194	.000	4.470	3.059	6.532
	65-74 years	2.172	.200	.000	8.778	5.927	13.001
	75-84 years	2.678	.246	.000	14.560	8.990	23.582
	>=85 years	1.037	.764	.175	2.821	.631	12.614
Social status:	Low				1.000		
	Medium	-.091	.127	.473	.913	.712	1.171
	High	-.115	.182	.529	.892	.624	1.274
Asthma in family:	No				1.000		
	Yes	2.710	.097	.000	15.033	12.425	18.189
Smoking:	Never smoker				1.000		
	Cigarette	.587	.189	.002	1.799	1.242	2.607
	Bidi	.581	.148	.000	1.788	1.338	2.389
	Hookah	-20.264	20806.50	.999	.000	.000	.
	Others	-17.706	17662.67	.999	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	-.652	.168	.000	.521	.375	.725
	Adulthood	.060	.150	.688	1.062	.792	1.425
	Both	-.334	.239	.163	.716	.448	1.144
Cooking fuel:	Not cooking				1.000		
	Electricity	-18.645	21737.03	.999	.000	.000	.
	LPG	.595	.244	.015	1.813	1.124	2.926
	Kerosene	1.495	.358	.000	4.460	2.209	9.005
	Coal	1.393	.400	.001	4.026	1.837	8.822
	Wood	.520	.244	.033	1.682	1.043	2.712
	Dung cake	-17.645	9004.199	.998	.000	.000	.
	Crop residue	-	-	-	-	-	-
	Others	-16.274	28235.31	1.000	.000	.000	.
Constant							
		-16.302	7135.822	.998	.000		

Mumbai

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	-.290	.354	.413	.748	.374	1.497
	Mixed	-14.232	2925.106	.996	.000	.000	.
Gender:	Male				1.000		
	Female	-.236	.392	.547	.790	.367	1.702
Age category:	15-24 years				1.000		
	25-34 years	.149	.523	.776	1.161	.417	3.234
	35-44 years	.843	.458	.066	2.323	.946	5.704
	45-54 years	1.872	.414	.000	6.500	2.886	14.639
	55-64 years	1.964	.431	.000	7.130	3.065	16.587
	65-74 years	2.376	.431	.000	10.761	4.625	25.041
	75-84 years	2.767	.495	.000	15.915	6.031	41.996
	>=85 years	2.472	.816	.002	11.842	2.393	58.590
Social status:	Low				1.000		
	Medium	.318	.361	.379	1.374	.677	2.788
	High	.922	1.118	.410	2.514	.281	22.477
Asthma in family:	No				1.000		
	Yes	2.634	.297	.000	13.923	7.776	24.930
Smoking:	Never smoker				1.000		
	Cigarette	.846	.485	.081	2.331	.900	6.035
	Bidi	1.338	.302	.000	3.811	2.110	6.884
	Hookah	-	-	-	-	-	-
	Others	-16.775	40193.02	1.000	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	.763	.439	.082	2.145	.907	5.071
	Adulthood	.007	.453	.988	1.007	.414	2.446
	Both	-14.085	20091.28	.999	.000	.000	.
Cooking fuel:	Not cooking				1.000		
	Electricity	-16.583	8018.082	.998	.000	.000	.
	LPG	.310	.424	.464	1.364	.594	3.132
	Kerosene	-15.511	2724.948	.995	.000	.000	.
	Coal	-13.946	4493.632	.998	.000	.000	.
	Wood	-.593	.507	.242	.552	.205	1.492
	Dung cake	-16.145	15569.84	.999	.000	.000	.
	Crop residue	24.758	40192.90	1.000	5.65X10 ¹⁰	.000	.
	Others	-	-	-	-	-	-
Constant							
		-10.072	5844.631	.999	.000		

Mysore

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	-.219	.209	.295	.804	.534	1.210
	Mixed	-.070	.742	.925	.932	.218	3.993
Gender:	Male				1.000		
	Female	-.788	.431	.068	.455	.195	1.059
Age category:	15-24 years				1.000		
	25-34 years	1.092	.514	.034	2.981	1.088	8.169
	35-44 years	1.346	.507	.008	3.842	1.424	10.367
	45-54 years	2.068	.493	.000	7.908	3.007	20.794
	55-64 years	2.689	.492	.000	14.724	5.611	38.636
	65-74 years	3.380	.487	.000	29.373	11.313	76.262
	75-84 years	3.871	.512	.000	47.982	17.577	130.980
	>=85 years	3.829	.662	.000	46.034	12.577	168.489
Social status:	Low				1.000		
	Medium	-.184	.185	.320	.832	.578	1.196
	High	-.058	.257	.821	.943	.570	1.561
Asthma in family:	No				1.000		
	Yes	2.216	.375	.000	9.169	4.400	19.105
Smoking:	Never smoker				1.000		
	Cigarette	.880	.425	.039	2.411	1.047	5.549
	Bidi	1.156	.212	.000	3.177	2.095	4.817
	Hookah	-	-	-	-	-	-
	Others	4.848	1.345	.000	127.454	9.125	1780.244
ETS exposure:	None				1.000		
	Childhood	-.177	.298	.553	.838	.467	1.503
	Adulthood	.420	.201	.037	1.521	1.026	2.255
	Both	.528	.618	.392	1.696	.505	5.691
Cooking fuel:	Not cooking				1.000		
	Electricity	-15.330	9483.038	.999	.000	.000	.
	LPG	.766	.462	.097	2.152	.871	5.318
	Kerosene	.957	.660	.147	2.605	.714	9.496
	Coal	-15.001	28362.08	1.000	.000	.000	.
	Wood	.645	.453	.154	1.907	.784	4.635
	Dung cake	-16.189	12000.33	.999	.000	.000	.
	Crop residue	-	-	-	-	-	-
	Others	-	-	-	-	-	-
Constant							
		-8.026	4602.637	.999	.000		

Nagpur

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	-.168	.209	.422	.845	.561	1.274
	Mixed	-16.364	14807.26	.999	.000	.000	.
Gender:	Male				1.000		
	Female	.011	.581	.985	1.011	.324	3.158
Age category:	15-24 years				1.000		
	25-34 years	.296	.305	.330	1.345	.740	2.444
	35-44 years	.809	.293	.006	2.246	1.264	3.992
	45-54 years	1.250	.299	.000	3.490	1.944	6.267
	55-64 years	1.809	.293	.000	6.103	3.437	10.836
	65-74 years	2.405	.291	.000	11.076	6.264	19.584
	75-84 years	2.809	.373	.000	16.589	7.990	34.442
	>=85 years	2.127	.782	.007	8.388	1.812	38.829
Social status:	Low				1.000		
	Medium	-.262	.179	.143	.769	.542	1.093
	High	-16.935	7871.869	.998	.000	.000	.
Asthma in family:	No				1.000		
	Yes	3.210	.219	.000	24.780	16.120	38.093
Smoking:	Never smoker				1.000		
	Cigarette	.787	.604	.193	2.196	.672	7.176
	Bidi	.884	.240	.000	2.420	1.511	3.877
	Hookah	-17.983	14922.65	.999	.000	.000	.
	Others	1.649	1.260	.191	5.202	.440	61.464
ETS exposure:	None				1.000		
	Childhood	.530	.358	.138	1.700	.843	3.425
	Adulthood	.542	.321	.092	1.719	.916	3.227
	Both	-16.401	5416.029	.998	.000	.000	.
Cooking fuel:	Not cooking				1.000		
	Electricity	-15.879	28420.70	1.000	.000	.000	.
	LPG	.257	.602	.669	1.293	.397	4.208
	Kerosene	-.146	1.164	.900	.864	.088	8.463
	Coal	-16.147	13053.91	.999	.000	.000	.
	Wood	-.223	.597	.709	.800	.248	2.579
	Dung cake	3.397	1.282	.008	29.876	2.422	368.564
	Crop residue	-16.392	40192.96	1.000	.000	.000	.
Others	-	-	-	-	-	-	
Constant		-26.064	9081.078	.998	.000		

Secunderabad

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	14.754	7997.432	.999	2557334	.000	.
	Mixed	.286	22154.02	1.000	1.331	.000	.
Gender:	Male				1.000		
	Female	-.688	1.389	.621	.503	.033	7.655
Age category:	15-24 years				1.000		
	25-34 years	-.084	1.017	.934	.919	.125	6.744
	35-44 years	.007	1.030	.994	1.007	.134	7.583
	45-54 years	.761	.952	.425	2.139	.331	13.832
	55-64 years	1.511	.939	.107	4.533	.720	28.548
	65-74 years	2.562	.907	.005	12.955	2.188	76.698
	75-84 years	-15.080	5247.839	.998	.000	.000	.
	>=85 years	-14.464	13028.23	.999	.000	.000	.
Social status:	Low				1.000		
	Medium	-.068	.543	.900	.934	.322	2.705
	High	-15.972	2623.682	.995	.000	.000	.
Asthma in family:	No				1.000		
	Yes	-14.311	40192.93	1.000	.000	.000	.
Smoking:	Never smoker				1.000		
	Cigarette	1.525	.893	.088	4.597	.798	26.469
	Bidi	3.854	.852	.000	47.182	8.890	250.407
	Hookah	-14.311	40191.56	1.000	.000	.000	.
	Others	-	-	-	-	-	-
ETS exposure:	None				1.000		
	Childhood	-15.095	3593.712	.997	.000	.000	.
	Adulthood	1.962	.695	.005	7.110	1.823	27.739
	Both	-14.183	13940.48	.999	.000	.000	.
Cooking fuel:	Not cooking				1.000		
	Electricity	-14.635	6269.821	.998	.000	.000	.
	LPG	1.435	1.402	.306	4.200	.269	65.562
	Kerosene	-14.863	2519.173	.995	.000	.000	.
	Coal	-14.311	14743.30	.999	.000	.000	.
	Wood	-14.495	11746.73	.999	.000	.000	.
	Dung cake	-15.134	40190.13	1.000	.000	.000	.
	Crop residue	-15.134	40190.13	1.000	.000	.000	.
	Others	-13.698	40190.13	1.000	.000	.000	.
Constant							

Shimla

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	.208	.214	.331	1.231	.810	1.871
	Mixed	.337	.480	.482	1.401	.547	3.586
Gender:	Male				1.000		
	Female	.145	.222	.513	1.156	.748	1.786
Age category:	15-24 years				1.000		
	25-34 years	.144	.561	.798	1.154	.384	3.469
	35-44 years	1.549	.463	.001	4.705	1.897	11.670
	45-54 years	2.008	.460	.000	7.445	3.022	18.343
	55-64 years	2.801	.458	.000	16.467	6.712	40.404
	65-74 years	3.182	.467	.000	24.094	9.640	60.220
	75-84 years	3.554	.500	.000	34.956	13.116	93.158
	>=85 years	3.335	.679	.000	28.079	7.420	106.258
Social status:	Low				1.000		
	Medium	-.402	.217	.063	.669	.438	1.023
	High	.033	.249	.893	1.034	.634	1.685
Asthma in family:	No				1.000		
	Yes	2.070	.237	.000	7.923	4.976	12.615
Smoking:	Never smoker				1.000		
	Cigarette	.581	.360	.107	1.787	.882	3.622
	Bidi	1.322	.222	.000	3.751	2.428	5.794
	Hookah	2.126	1.145	.063	8.383	.889	79.057
	Others	-17.522	28365.86	1.000	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	.028	.602	.963	1.029	.316	3.347
	Adulthood	.120	.310	.699	1.127	.614	2.070
	Both	2.887	1.245	.020	17.944	1.563	206.076
Cooking fuel:	Not cooking				1.000		
	Electricity	.354	.801	.658	1.425	.297	6.848
	LPG	.266	.252	.292	1.305	.796	2.139
	Kerosene	.988	.444	.026	2.685	1.124	6.413
	Coal	.495	.792	.532	1.641	.348	7.746
	Wood	.053	.259	.837	1.055	.635	1.752
	Dung cake	-	-	-	-	-	-
	Crop residue	-15.717	19280.40	.999	.000	.000	.
	Others	-17.484	27598.50	.999	.000	.000	.
Constant	-9.426	7063.597	.999	.000			

Trivandrum

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Usual residence:	Rural				1.000		
	Urban	.209	.214	.328	1.233	.810	1.875
	Mixed	.549	1.047	.600	1.731	.222	13.481
Gender:	Male				1.000		
	Female	.191	.266	.472	1.211	.719	2.040
Age category:	15-24 years				1.000		
	25-34 years	.612	.263	.020	1.845	1.103	3.086
	35-44 years	.977	.253	.000	2.658	1.620	4.360
	45-54 years	1.542	.246	.000	4.673	2.886	7.566
	55-64 years	2.131	.245	.000	8.421	5.206	13.622
	65-74 years	2.361	.254	.000	10.606	6.452	17.436
	75-84 years	2.841	.283	.000	17.133	9.835	29.843
	>=85 years	2.186	.531	.000	8.899	3.140	25.220
Social status:	Low				1.000		
	Medium	.780	.139	.000	2.182	1.662	2.866
	High	-.022	.606	.971	.978	.298	3.212
Asthma in family:	No				1.000		
	Yes	1.774	.115	.000	5.894	4.707	7.380
Smoking:	Never smoker				1.000		
	Cigarette	.368	.186	.047	1.445	1.004	2.080
	Bidi	.380	.181	.036	1.463	1.026	2.086
	Hookah	-.019	.762	.980	.981	.220	4.369
	Others	-19.609	27875.88	.999	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	.314	.129	.015	1.369	1.064	1.762
	Adulthood	.429	.157	.006	1.536	1.129	2.090
	Both	.763	.183	.000	2.145	1.498	3.071
Cooking fuel:	Not cooking				1.000		
	Electricity	-.448	1.052	.670	.639	.081	5.019
	LPG	-.014	.298	.961	.986	.550	1.767
	Kerosene	-.525	1.058	.620	.592	.074	4.703
	Coal	.428	1.213	.724	1.535	.143	16.527
	Wood	.288	.268	.283	1.333	.788	2.255
	Dung cake	-19.351	26686.00	.999	.000	.000	.
	Crop residue	-	-	-	-	-	-
	Others	-17.392	28340.17	1.000	.000	.000	.
Constant							

Total

		B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Centre:	Ahmedabad				1.000		
	Berhampur	.685	.086	.000	1.983	1.676	2.346
	Bikaner	.669	.080	.000	1.952	1.669	2.282
	Chennai	-.204	.098	.037	.815	.673	.987
	Guwahati	.363	.092	.000	1.437	1.201	1.720
	Kolkata	.766	.078	.000	2.151	1.845	2.506
	Mumbai	-.341	.113	.002	.711	.570	.887
	Mysore	.082	.097	.395	1.086	.898	1.313
	Nagpur	.260	.097	.007	1.296	1.072	1.567
	Secunderabad	-.780	.254	.002	.459	.279	.755
	Shimla	-.190	.106	.074	.827	.672	1.019
	Trivandrum	.638	.087	.000	1.892	1.596	2.242
Usual residence:	Rural				1.000		
	Urban	.021	.049	.674	1.021	.927	1.124
	Mixed	.187	.137	.171	1.206	.923	1.576
Gender:	Male				1.000		
	Female	.061	.089	.492	1.063	.893	1.266
Age category:	15-24 years				1.000		
	25-34 years	.403	.086	.000	1.497	1.264	1.772
	35-44 years	.854	.083	.000	2.350	1.999	2.763
	45-54 years	1.438	.080	.000	4.214	3.600	4.933
	55-64 years	1.994	.080	.000	7.347	6.275	8.603
	65-74 years	2.523	.082	.000	12.468	10.618	14.640
	75-84 years	2.786	.098	.000	16.208	13.375	19.642
	>=85 years	2.590	.171	.000	13.327	9.540	18.617
Social status:	Low				1.000		
	Medium	.226	.043	.000	1.254	1.152	1.365
	High	.110	.091	.228	1.116	.934	1.334
Asthma in family:	No				1.000		
	Yes	2.009	.045	.000	7.458	6.833	8.140
Smoking:	Never smoker				1.000		
	Cigarette	.562	.086	.000	1.754	1.481	2.077
	Bidi	.998	.056	.000	2.713	2.431	3.026
	Hookah	.871	.342	.011	2.389	1.223	4.666
	Others	1.596	.143	.000	4.932	3.724	6.532
ETS exposure:	None				1.000		
	Childhood	-.023	.058	.686	.977	.872	1.094
	Adulthood	.257	.062	.000	1.293	1.146	1.459
	Both	.384	.085	.000	1.468	1.244	1.732

Cooking fuel:	Not cooking				1.000		
	Electricity	.088	.469	.852	1.092	.436	2.734
	LPG	.189	.097	.051	1.208	.999	1.461
	Kerosene	.304	.180	.091	1.355	.953	1.926
	Coal	.849	.286	.003	2.337	1.334	4.093
	Wood	.205	.094	.029	1.228	1.021	1.477
	Dung cake	.418	.149	.005	1.519	1.134	2.036
	Crop residue	.223	1.097	.839	1.250	.146	10.731
	Others	-16.869	10791.35	.999	.000	.000	.
Constant	-3.839	1199.0	.997	.022			

Table 54. Chronic bronchitis diagnosis by centre, current residence, and gender

Centre	Residence	Male	Female	Total
Ahmedabad	Rural	274 (8.55%)	108 (3.48%)	382 (6.05%)
	Urban	58 (3.58%)	22 (1.34%)	80 (2.45%)
	Total	332 (6.88%)	130 (2.74%)	462 (4.83%)
Berhampur	Rural	74 (2.16%)	56 (1.82%)	130 (2.00%)
	Urban	15 (1.86%)	10 (1.33%)	25 (1.60%)
	Total	89 (2.10%)	66 (1.72%)	155 (1.92%)
Bikaner	Rural	218 (9.34%)	100 (4.52%)	318 (7.00%)
	Urban	57 (4.75%)	20 (1.72%)	77 (3.26%)
	Total	275 (7.79%)	120 (3.55%)	395 (5.72%)
Chennai	Rural	55 (2.97%)	44 (1.54%)	99 (2.10%)
	Urban	46 (4.17%)	61 (3.26%)	107 (3.59%)
	Total	101 (3.42%)	105 (2.22%)	206 (2.68%)
Guwahati	Rural	75 (2.91%)	59 (2.83%)	134 (2.87%)
	Urban	8 (0.59%)	7 (0.64%)	15 (0.61%)
	Total	83 (2.11%)	66 (2.08%)	149 (2.10%)
Kolkata	Rural	65 (2.84%)	28 (1.43%)	93 (2.19%)
	Urban	92 (7.38%)	65 (5.36%)	157 (6.38%)
	Total	157 (4.45%)	93 (2.93%)	250 (3.73%)
Mumbai	Rural	34 (1.97%)	14 (0.78%)	48 (1.36%)
	Urban	20 (1.01%)	14 (0.79%)	34 (0.91%)
	Total	54 (1.46%)	28 (0.78%)	82 (1.13%)
Mysore	Rural	111 (4.52%)	23 (1.06%)	134 (2.89%)
	Urban	17 (1.04%)	15 (0.96%)	32 (1.00%)
	Total	128 (3.12%)	38 (1.02%)	166 (2.12%)
Nagpur	Rural	46 (1.85%)	24 (1.07%)	70 (1.48%)
	Urban	9 (0.73%)	6 (0.59%)	15 (0.67%)
	Total	55 (1.48%)	30 (0.92%)	85 (1.22%)
Secunderabad	Rural	-	-	-
	Urban	25 (2.34%)	8 (0.84%)	33 (1.63%)
	Total	25 (2.34%)	8 (0.84%)	33 (1.63%)
Shimla	Rural	50 (1.81%)	33 (1.41%)	83 (1.63%)
	Urban	24 (2.10%)	17 (1.75%)	41 (1.94%)
	Total	74 (1.90%)	50 (1.51%)	124 (1.72%)
Trivandrum	Rural	394 (14.88%)	327 (12.22%)	721 (13.54%)
	Urban	105 (5.79%)	83 (4.26%)	188 (5.00%)
	Total	499 (11.19%)	410 (8.87%)	909 (10.01%)
Total	Rural	1396 (5.03%)	816 (3.07%)	2212 (4.07%)
	Urban	476 (2.94%)	328 (2.06%)	804 (2.50%)
	Total	1872 (4.26%)	1144 (2.69%)	3016 (3.49%)

Table 55. Prevalence of chronic bronchitis standardized to age distribution as per 2001 census

Centre	Gender	Observed prevalence (%)	Standardized prevalence (%)
Ahmedabad	Male	6.88	6.84
	Female	2.74	2.77
	Total	4.83	4.86
Berhampur	Male	2.10	2.00
	Female	1.72	1.71
	Total	1.92	1.89
Bikaner	Male	7.79	7.51
	Female	3.55	3.65
	Total	5.72	5.69
Chennai	Male	3.42	3.28
	Female	2.22	2.22
	Total	2.68	2.67
Guwahati	Male	2.11	2.28
	Female	2.08	2.50
	Total	2.10	2.32
Kolkata	Male	4.45	4.22
	Female	2.93	2.82
	Total	3.73	3.58
Mumbai	Male	1.46	1.41
	Female	0.78	0.77
	Total	1.13	1.09
Mysore	Male	3.12	2.92
	Female	1.02	1.02
	Total	2.12	2.05
Nagpur	Male	1.48	1.48
	Female	0.92	0.93
	Total	1.22	1.26
Secunderabad	Male	2.34	2.52
	Female	0.84	1.07
	Total	1.63	1.80
Shimla	Male	1.90	2.16
	Female	1.51	1.76
	Total	1.72	1.98
Trivandrum	Male	11.19	10.95
	Female	8.87	9.13
	Total	10.01	10.08
Total	Male	4.26	4.20
	Female	2.69	2.73
	Total	3.49	3.50

Table 56. Diagnosis of asthma and/or chronic bronchitis in participants aged more than 35 years

		No chronic bronchitis	Chronic bronchitis
Ahmedabad	No asthma	8999 (98.8%)	248 (53.7%)
	Asthma	111 (1.2%)	214 (46.3%)
Berhampur	No asthma	7745 (97.8%)	53 (34.2%)
	Asthma	171 (2.2%)	102 (65.8%)
Bikaner	No asthma	6371 (97.8%)	80 (20.3%)
	Asthma	142 (2.2%)	315 (79.7%)
Chennai	No asthma	7433 (99.4%)	100 (48.5%)
	Asthma	44 (.6%)	106 (51.5%)
Guwahati	No asthma	6903 (99.1%)	32 (21.5%)
	Asthma	60 (.9%)	117 (78.5%)
Kolkata	No asthma	6131 (95.0%)	108 (43.2%)
	Asthma	323 (5.0%)	142 (56.8%)
Mumbai	No asthma	7130 (99.0%)	50 (61.0%)
	Asthma	74 (1.0%)	32 (39.0%)
Mysore	No asthma	7614 (99.3%)	44 (26.5%)
	Asthma	54 (.7%)	122 (73.5%)
Nagpur	No asthma	6796 (98.5%)	28 (32.9%)
	Asthma	101 (1.5%)	57 (67.1%)
Secunderabad	No asthma	1986 (99.8%)	24 (72.7%)
	Asthma	4 (.2%)	9 (27.3%)
Shimla	No asthma	7025 (99.0%)	50 (40.3%)
	Asthma	70 (1.0%)	74 (59.7%)
Trivandrum	No asthma	8099 (99.1%)	543 (59.7%)
	Asthma	76 (.9%)	366 (40.3%)
Total	No asthma	82232 (98.5%)	1360 (45.1%)
	Asthma	1230 (1.5%)	1656 (54.9%)

Table 57. Chronic bronchitis (CB) diagnosis and current residence

Centre	Current residence	All respondents with CB	All respondents without CB
Ahmedabad ^a	Rural	382 (82.7%)	5929 (65.1%)
	Urban	80 (17.3%)	3181 (34.9%)
Berhampur	Rural	130 (83.9%)	6383 (80.6%)
	Urban	25 (16.1%)	1533 (19.4%)
Bikaner ^a	Rural	318 (80.5%)	4228 (64.9%)
	Urban	77 (19.5%)	2285 (35.1%)
Chennai ^a	Rural	99 (48.1%)	4607 (61.6%)
	Urban	107 (51.9%)	2870 (38.4%)
Guwahati ^a	Rural	134 (89.9%)	4533 (65.1%)
	Urban	15 (10.1%)	2430 (34.9%)
Kolkata ^a	Rural	93 (37.2%)	4152 (64.3%)
	Urban	157 (62.8%)	2302 (35.7%)
Mumbai	Rural	48 (58.5%)	3486 (48.4%)
	Urban	34 (41.5%)	3718 (51.6%)
Mysore ^a	Rural	134 (80.7%)	4503 (58.7%)
	Urban	32 (19.3%)	3165 (41.3%)
Nagpur ^a	Rural	70 (82.4%)	4672 (67.7%)
	Urban	15 (17.6%)	2225 (32.3%)
Secunderabad	Rural	0	0
	Urban	33 (100.0%)	1990 (100.0%)
Shimla	Rural	83 (66.9%)	5023 (70.8%)
	Urban	41 (33.1%)	2072 (29.2%)
Trivandrum ^a	Rural	721 (79.3%)	4602 (56.3%)
	Urban	188 (20.7%)	3573 (43.7%)
Total ^a	Rural	2212 (73.3%)	52118 (62.4%)
	Urban	804 (26.7%)	31344 (37.6%)

^a p <0.05

Table 58. Logistic regression for chronic bronchitis and current residence

Centre	Residence	B	SE(B)	Sig	OR	LCI	UCI
Ahmedabad	Rural				1.000		
	Urban	-.941	.125	.000	.390	.306	.499
Berhampur	Rural				1.000		
	Urban	-.222	.220	.313	.801	.520	1.233
Bikaner	Rural				1.000		
	Urban	-.803	.130	.000	.448	.348	.578
Chennai	Rural				1.000		
	Urban	.551	.141	.000	1.735	1.315	2.289
Guwahati	Rural				1.000		
	Urban	-1.566	.273	.000	.209	.122	.357
Kolkata	Rural				1.000		
	Urban	1.113	.133	.000	3.045	2.344	3.955
Mumbai	Rural				1.000		
	Urban	-.409	.225	.069	.664	.427	1.033
Mysore	Rural				1.000		
	Urban	-1.080	.198	.000	.340	.230	.501
Nagpur	Rural				1.000		
	Urban	-.799	.286	.005	.450	.257	.788
Shimla	Rural				1.000		
	Urban	.180	.193	.350	1.198	.821	1.747
Trivandrum	Rural				1.000		
	Urban	-1.091	.085	.000	.336	.284	.397
Total	Rural				1.000		
	Urban	-.504	.042	.000	.604	.557	.656

Table 59. Chronic bronchitis (CB) diagnosis and usual residence

Centre	Usual residence	All respondents with CB	All respondents without CB
Ahmedabad ^a	Rural	384 (83.1%)	5961 (65.4%)
	Urban	67 (14.5%)	2759 (30.3%)
	Mixed	11 (2.4%)	390 (4.3%)
Berhampur	Rural	130 (83.9%)	6418 (81.1%)
	Urban	25 (16.1%)	1498 (18.9%)
	Mixed	0	0
Bikaner ^a	Rural	316 (80.0%)	4220 (64.8%)
	Urban	79 (20.0%)	2202 (33.8%)
	Mixed	0	91 (1.4%)
Chennai ^a	Rural	120 (58.3%)	5194 (69.5%)
	Urban	78 (37.9%)	2182 (29.2%)
	Mixed	8 (3.9%)	101 (1.4%)
Guwahati ^a	Rural	135 (90.6%)	4623 (66.4%)
	Urban	14 (9.4%)	2340 (33.6%)
	Mixed	0	0
Kolkata ^a	Rural	90 (36.0%)	3938 (61.0%)
	Urban	147 (58.8%)	2201 (34.1%)
	Mixed	13 (5.2%)	315 (4.9%)
Mumbai	Rural	48 (58.5%)	3497 (48.5%)
	Urban	34 (41.5%)	3637 (50.5%)
	Mixed	0	70 (1.0%)
Mysore ^a	Rural	134 (80.7%)	4504 (58.7%)
	Urban	31 (18.7%)	3082 (40.2%)
	Mixed	1 (0.6%)	82 (1.1%)
Nagpur ^a	Rural	70 (82.4%)	4725 (68.5%)
	Urban	15 (17.6%)	2172 (31.5%)
	Mixed	0	0
Secunderabad	Rural	1 (3.0%)	12 (0.6%)
	Urban	32 (97.0%)	1975 (99.2%)
	Mixed	0	3 (0.2%)
Shimla	Rural	77 (62.1%)	4808 (67.8%)
	Urban	41 (33.1%)	2038 (28.7%)
	Mixed	6 (4.8%)	249 (3.5%)
Trivandrum	Rural	55 (6.1%)	497 (6.1%)
	Urban	853 (93.8%)	7660 (93.7%)
	Mixed	1 (0.1%)	18 (0.2%)
Total ^a	Rural	1560 (51.7%)	48397 (58.0%)
	Urban	1416 (46.9%)	33746 (40.4%)
	Mixed	40 (1.3%)	1319 (1.6%)

^a p <0.05

Table 60. Logistic regression for chronic bronchitis and usual residence

Centre	Residence	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Rural				1.000		
	Urban	-.976	.134	.000	.377	.290	.491
	Mixed	-.826	.310	.008	.438	.238	.804
Berhampur	Rural				1.000		
	Urban	-.194	.220	.379	.824	.535	1.269
	Mixed	-	-	-	-	-	-
Bikaner	Rural				1.000		
	Urban	-.736	.129	.000	.479	.372	.616
	Mixed	-18.611	4212.61	.996	.000	.000	.
Chennai	Rural				1.000		
	Urban	.436	.148	.003	1.547	1.158	2.067
	Mixed	1.232	.379	.001	3.428	1.632	7.202
Guwahati	Rural				1.000		
	Urban	-1.585	.282	.000	.205	.118	.356
	Mixed	-	-	-	-	-	-
Kolkata	Rural				1.000		
	Urban	1.072	.136	.000	2.922	2.237	3.818
	Mixed	.591	.302	.051	1.806	.998	3.267
Mumbai	Rural				1.000		
	Urban	-.384	.225	.088	.681	.438	1.059
	Mixed	-16.914	4804.24	.997	.000	.000	.
Mysore	Rural				1.000		
	Urban	-1.084	.201	.000	.338	.228	.501
	Mixed	-.892	1.010	.377	.410	.057	2.967
Nagpur	Rural				1.000		
	Urban	-.763	.286	.008	.466	.266	.816
	Mixed	-	-	-	-	-	-
Secunderabad	Rural				1.000		
	Urban	-1.638	1.056	.121	.194	.025	1.540
	Mixed	-18.718	23202.0	.999	.000	.000	.
Shimla	Rural				1.000		
	Urban	.228	.195	.242	1.256	.857	1.841
	Mixed	.409	.429	.341	1.505	.649	3.487
Trivandrum	Rural				1.000		
	Urban	.006	.147	.966	1.006	.755	1.341
	Mixed	-.689	1.037	.506	.502	.066	3.833
Total	Rural				1.000		
	Urban	.264	.037	.000	1.302	1.210	1.401
	Mixed	-.061	.163	.707	.941	.684	1.294

Table 61. Chronic bronchitis (CB) diagnosis and gender

Centre	Gender	All respondents with CB	All respondents without CB
Ahmedabad ^a	Male	332 (71.9%)	4492 (49.3%)
	Female	130 (28.1%)	4618 (50.7%)
Berhampur ^b	Male	89 (57.4%)	4151 (52.4%)
	Female	66 (42.6%)	3765 (47.6%)
Bikaner ^a	Male	275 (69.6%)	3257 (50.0%)
	Female	120 (30.4%)	3256 (50.0%)
Chennai ^a	Male	101 (49.0%)	2853 (38.2%)
	Female	105 (51.0%)	4624 (61.8%)
Guwahati	Male	83 (55.7%)	3849 (55.3%)
	Female	66 (44.3%)	3114 (44.7%)
Kolkata ^a	Male	157 (62.8%)	3375 (52.3%)
	Female	93 (37.2%)	3079 (47.7%)
Mumbai ^a	Male	54 (65.9%)	3653 (50.7%)
	Female	28 (34.1%)	3551 (49.3%)
Mysore ^a	Male	128 (77.1%)	3970 (51.8%)
	Female	38 (22.9%)	3698 (48.2%)
Nagpur ^a	Male	55 (64.7%)	3667 (53.2%)
	Female	30 (35.3%)	3230 (46.8%)
Secunderabad ^a	Male	25 (75.8%)	1045 (52.5%)
	Female	8 (24.2%)	945 (47.5%)
Shimla	Male	74 (59.7%)	3826 (53.9%)
	Female	50 (40.3%)	3269 (46.1%)
Trivandrum ^a	Male	499 (54.9%)	3962 (48.5%)
	Female	410 (45.1%)	4213 (51.5%)
Total ^a	Male	1872 (62.1%)	42100 (50.4%)
	Female	1144 (37.9%)	41362 (49.6%)

^a p <0.05

Table 62. Logistic regression for chronic bronchitis and gender

Centre	Gender	B	SE(B)	Sig	OR	95% CI	
						Upper	Lower
Ahmedabad	Male				1.000		
	Female	-.965	.106	.000	.381	.310	.468
Berhampur	Male				1.000		
	Female	-.201	.164	.219	.818	.593	1.128
Bikaner	Male				1.000		
	Female	-.829	.112	.000	.436	.350	.544
Chennai	Male				1.000		
	Female	-.444	.141	.002	.641	.486	.846
Guwahati	Male				1.000		
	Female	-.017	.167	.917	.983	.709	1.363
Kolkata	Male				1.000		
	Female	-.432	.133	.001	.649	.500	.843
Mumbai	Male				1.000		
	Female	-.628	.234	.007	.533	.337	.844
Mysore	Male				1.000		
	Female	-1.143	.186	.000	.319	.221	.459
Nagpur	Male				1.000		
	Female	-.479	.228	.036	.619	.396	.969
Secunderabad	Male				1.000		
	Female	-1.039	.409	.011	.354	.159	.788
Shimla	Male				1.000		
	Female	-.235	.185	.204	.791	.551	1.136
Trivandrum	Male				1.000		
	Female	-.258	.070	.000	.773	.673	.887
Total	Male				1.000		
	Female	-.475	.038	.000	.622	.577	.670

Table 63. Chronic bronchitis (CB) diagnosis and age

Centre	Age category	All respondents with CB	All respondents without CB
Ahmedabad ^a	35-44 years	74 (16.0%)	3757 (41.2%)
	45-54 years	113 (24.5%)	2645 (29.0%)
	55-64 years	109 (23.6%)	1588 (17.4%)
	65-74 years	122 (26.4%)	868 (9.5%)
	75-84 years	36 (7.8%)	207 (2.3%)
	>=85 years	8 (1.7%)	45 (0.5%)
Berhampur ^a	35-44 years	30 (19.4%)	2874 (36.3%)
	45-54 years	44 (28.4%)	2161 (27.3%)
	55-64 years	34 (21.9%)	1604 (20.3%)
	65-74 years	34 (21.9%)	940 (11.9%)
	75-84 years	8 (5.2%)	274 (3.5%)
	>=85 years	5 (3.2%)	63 (0.8%)
Bikaner ^a	35-44 years	49 (12.4%)	2608 (40.0%)
	45-54 years	105 (26.6%)	1904 (29.2%)
	55-64 years	92 (23.3%)	1118 (17.2%)
	65-74 years	94 (23.8%)	618 (9.5%)
	75-84 years	44 (11.1%)	223 (3.4%)
	>=85 years	11 (2.8%)	42 (0.6%)
Chennai ^a	35-44 years	43 (20.9%)	2909 (38.9%)
	45-54 years	51 (24.8%)	2021 (27.0%)
	55-64 years	51 (24.8%)	1361 (18.2%)
	65-74 years	42 (20.4%)	813 (10.9%)
	75-84 years	15 (7.3%)	307 (4.1%)
	>=85 years	4 (1.9%)	66 (0.9%)
Guwahati ^a	35-44 years	26 (17.4%)	2793 (40.1%)
	45-54 years	32 (21.5%)	2414 (34.7%)
	55-64 years	33 (22.1%)	1154 (16.6%)
	65-74 years	50 (33.6%)	475 (6.8%)
	75-84 years	7 (4.7%)	101 (1.5%)
	>=85 years	1 (0.7%)	26 (0.4%)
Kolkata ^a	35-44 years	38 (15.2%)	2455 (38.0%)
	45-54 years	62 (24.8%)	1857 (28.8%)
	55-64 years	61 (24.4%)	1237 (19.2%)
	65-74 years	59 (23.6%)	629 (9.7%)
	75-84 years	28 (11.2%)	226 (3.5%)
	>=85 years	2 (0.8%)	50 (0.8%)
Mumbai ^a	35-44 years	17 (20.7%)	2582 (35.8%)
	45-54 years	25 (30.5%)	1957 (27.2%)

	55-64 years	16 (19.5%)	1412 (19.6%)
	65-74 years	14 (17.1%)	898 (12.5%)
	75-84 years	7 (8.5%)	275 (3.8%)
	>=85 years	3 (3.7%)	80 (1.1%)
Mysore ^a	35-44 years	24 (14.5%)	3061 (39.9%)
	45-54 years	40 (24.1%)	2143 (27.9%)
	55-64 years	31 (18.7%)	1293 (16.9%)
	65-74 years	44 (26.5%)	842 (11.0%)
	75-84 years	23 (13.9%)	262 (3.4%)
	>=85 years	4 (2.4%)	67 (0.9%)
Nagpur ^a	35-44 years	15 (17.6%)	2863 (41.5%)
	45-54 years	18 (21.2%)	1751 (25.4%)
	55-64 years	19 (22.4%)	1255 (18.2%)
	65-74 years	25 (29.4%)	788 (11.4%)
	75-84 years	5 (5.9%)	195 (2.8%)
	>=85 years	3 (3.5%)	45 (0.7%)
Secunderabad ^b	35-44 years	5 (15.2%)	904 (45.4%)
	45-54 years	11 (33.3%)	569 (28.6%)
	55-64 years	6 (18.2%)	313 (15.7%)
	65-74 years	10 (30.3%)	146 (7.3%)
	75-84 years	1 (3.0%)	49 (2.5%)
	>=85 years	0	9 (0.5%)
Shimla ^a	35-44 years	22 (17.7%)	3005 (42.4%)
	45-54 years	29 (23.4%)	2106 (29.7%)
	55-64 years	31 (25.0%)	1096 (15.4%)
	65-74 years	24 (19.4%)	585 (8.2%)
	75-84 years	13 (10.5%)	237 (3.3%)
	>=85 years	5 (4.0%)	66 (0.9%)
Trivandrum ^a	35-44 years	176 (19.4%)	2860 (35.0%)
	45-54 years	225 (24.8%)	2398 (29.3%)
	55-64 years	248 (27.3%)	1700 (20.8%)
	65-74 years	167 (18.4%)	891 (10.9%)
	75-84 years	75 (8.3%)	278 (3.4%)
	>=85 years	18 (2.0%)	48 (0.6%)
Total ^a	35-44 years	519 (17.2%)	32671 (39.1%)
	45-54 years	755 (25.0%)	23926 (28.7%)
	55-64 years	731 (24.2%)	15131 (18.1%)
	65-74 years	685 (22.7%)	8493 (10.2%)
	75-84 years	262 (8.7%)	2634 (3.2%)
	>=85 years	64 (2.1%)	607 (0.7%)

^a p < 0.05

Table 64. Logistic regression for chronic bronchitis and age

Centre	Age	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	35-44 years				1.000		
	45-54 years	.774	.152	.000	2.169	1.611	2.920
	55-64 years	1.248	.154	.000	3.485	2.579	4.709
	65-74 years	1.965	.152	.000	7.136	5.297	9.614
	75-84 years	2.178	.215	.000	8.830	5.789	13.467
	>=85 years	2.200	.401	.000	9.026	4.111	19.817
Berhampur	35-44 years				1.000		
	45-54 years	.668	.238	.005	1.951	1.222	3.113
	55-64 years	.708	.252	.005	2.031	1.238	3.330
	65-74 years	1.243	.253	.000	3.465	2.109	5.693
	75-84 years	1.029	.403	.011	2.797	1.270	6.161
	>=85 years	2.029	.500	.000	7.603	2.856	20.240
Bikaner	35-44 years				1.000		
	45-54 years	1.077	.176	.000	2.935	2.080	4.141
	55-64 years	1.477	.180	.000	4.380	3.075	6.238
	65-74 years	2.091	.182	.000	8.096	5.669	11.561
	75-84 years	2.352	.219	.000	10.502	6.835	16.134
	>=85 years	2.635	.368	.000	13.940	6.775	28.681
Chennai	35-44 years				1.000		
	45-54 years	.535	.209	.011	1.707	1.133	2.572
	55-64 years	.930	.210	.000	2.535	1.681	3.823
	65-74 years	1.251	.221	.000	3.495	2.268	5.385
	75-84 years	1.196	.306	.000	3.305	1.815	6.019
	>=85 years	1.411	.537	.009	4.100	1.430	11.754
Guwahati	35-44 years				1.000		
	45-54 years	.353	.265	.183	1.424	.846	2.396
	55-64 years	1.122	.265	.000	3.072	1.829	5.159
	65-74 years	2.425	.247	.000	11.308	6.971	18.343
	75-84 years	2.008	.438	.000	7.445	3.157	17.557
	>=85 years	1.419	1.038	.172	4.132	.540	31.594
Kolkata	35-44 years				1.000		
	45-54 years	.769	.208	.000	2.157	1.434	3.245
	55-64 years	1.159	.210	.000	3.186	2.113	4.804
	65-74 years	1.802	.213	.000	6.060	3.994	9.195
	75-84 years	2.080	.259	.000	8.004	4.822	13.287
	>=85 years	.949	.739	.199	2.584	.607	11.008
Mumbai	35-44 years				1.000		
	45-54 years	.663	.316	.036	1.940	1.045	3.603

	55-64 years	.543	.350	.121	1.721	.867	3.417
	65-74 years	.862	.363	.018	2.368	1.162	4.823
	75-84 years	1.352	.454	.003	3.866	1.589	9.404
	>=85 years	1.740	.636	.006	5.696	1.636	19.828
Mysore	35-44 years				1.000		
	45-54 years	.867	.260	.001	2.381	1.431	3.961
	55-64 years	1.118	.274	.000	3.058	1.788	5.231
	65-74 years	1.897	.257	.000	6.665	4.030	11.023
	75-84 years	2.416	.299	.000	11.196	6.233	20.111
	>=85 years	2.030	.554	.000	7.614	2.571	22.553
Nagpur	35-44 years				1.000		
	45-54 years	.674	.351	.055	1.962	.986	3.903
	55-64 years	1.061	.347	.002	2.890	1.464	5.705
	65-74 years	1.801	.329	.000	6.055	3.177	11.541
	75-84 years	1.588	.522	.002	4.894	1.760	13.606
	>=85 years	2.544	.650	.000	12.724	3.559	45.495
Secunderabad	35-44 years				1.000		
	45-54 years	1.251	.542	.021	3.495	1.208	10.112
	55-64 years	1.243	.609	.041	3.466	1.050	11.435
	65-74 years	2.516	.555	.000	12.384	4.173	36.746
	75-84 years	1.306	1.105	.237	3.690	.423	32.194
	>=85 years	-16.006	13397.6	.999	.000	.000	.
Shimla	35-44 years				1.000		
	45-54 years	.632	.284	.026	1.881	1.078	3.283
	55-64 years	1.352	.281	.000	3.863	2.227	6.701
	65-74 years	1.723	.299	.000	5.604	3.121	10.061
	75-84 years	2.014	.356	.000	7.492	3.727	15.062
	>=85 years	2.337	.511	.000	10.348	3.802	28.162
Trivandrum	35-44 years				1.000		
	45-54 years	.422	.104	.000	1.525	1.243	1.871
	55-64 years	.863	.103	.000	2.371	1.936	2.902
	65-74 years	1.114	.115	.000	3.046	2.433	3.813
	75-84 years	1.478	.152	.000	4.384	3.258	5.900
	>=85 years	1.807	.287	.000	6.094	3.471	10.697
Total	35-44 years				1.000		
	45-54 years	.686	.058	.000	1.986	1.774	2.224
	55-64 years	1.112	.058	.000	3.041	2.713	3.409
	65-74 years	1.625	.059	.000	5.077	4.519	5.705
	75-84 years	1.834	.078	.000	6.262	5.369	7.302
	>=85 years	1.893	.139	.000	6.637	5.058	8.710

Table 65. Chronic bronchitis (CB) diagnosis and socioeconomic status

Centre	Socioeconomic status	All respondents with CB	All respondents without CB
Ahmedabad ^a	Low	243 (52.6%)	2827 (31.0%)
	Medium	218 (47.2%)	6224 (68.3%)
	High	1 (0.2%)	59 (0.6%)
Berhampur	Low	90 (58.1%)	4133 (52.2%)
	Medium	63 (40.6%)	3748 (47.3%)
	High	2 (1.3%)	35 (0.4%)
Bikaner ^a	Low	273 (69.1%)	3511 (53.9%)
	Medium	120 (30.4%)	2859 (43.9%)
	High	2 (0.5%)	143 (2.2%)
Chennai ^a	Low	64 (31.1%)	1062 (14.2%)
	Medium	133 (64.6%)	6035 (80.7%)
	High	9 (4.4%)	380 (5.1%)
Guwahati ^a	Low	95 (63.8%)	2399 (34.5%)
	Medium	53 (35.6%)	4462 (64.1%)
	High	1 (0.7%)	102 (1.5%)
Kolkata ^a	Low	96 (38.4%)	3315 (51.4%)
	Medium	116 (46.4%)	2141 (33.2%)
	High	38 (15.2%)	998 (15.5%)
Mumbai	Low	41 (50.0%)	3171 (44.0%)
	Medium	41 (50.0%)	4008 (55.6%)
	High	0	25 (0.3%)
Mysore ^a	Low	49 (29.5%)	1395 (18.2%)
	Medium	103 (62.0%)	5256 (68.5%)
	High	14 (8.4%)	1017 (13.3%)
Nagpur ^a	Low	61 (71.8%)	3773 (54.7%)
	Medium	23 (27.1%)	3111 (45.1%)
	High	1 (1.2%)	13 (0.2%)
Secunderabad ^a	Low	16 (48.5%)	552 (27.7%)
	Medium	15 (45.5%)	1343 (67.5%)
	High	2 (6.1%)	95 (4.8%)
Shimla	Low	65 (52.4%)	3424 (48.3%)
	Medium	35 (28.2%)	2356 (33.2%)
	High	24 (19.4%)	1315 (18.5%)
Trivandrum ^a	Low	803 (88.3%)	5535 (67.7%)
	Medium	103 (11.3%)	2544 (31.1%)
	High	3 (0.3%)	96 (1.2%)
Total ^a	Low	1896 (62.9%)	35097 (42.1%)
	Medium	1023 (33.9%)	44087 (52.8%)
	High	97 (3.2%)	4278 (5.1%)

^a p <0.05

Table 66. Logistic regression for chronic bronchitis and socioeconomic status

Centre	SES	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Medium				1.000		
	Low	.898	.096	.000	2.454	2.033	2.962
	High	-.726	1.011	.473	.484	.067	3.509
Berhampur	Medium				1.000		
	Low	.259	.166	.118	1.295	.936	1.793
	High	1.224	.738	.097	3.400	.800	14.443
Bikaner	Medium				1.000		
	Low	.617	.112	.000	1.853	1.486	2.309
	High	-1.099	.718	.126	.333	.082	1.361
Chennai	Medium				1.000		
	Low	1.006	.156	.000	2.735	2.015	3.711
	High	.072	.348	.836	1.075	.543	2.128
Guwahati	Medium				1.000		
	Low	1.204	.173	.000	3.334	2.374	4.682
	High	-.192	1.014	.850	.825	.113	6.027
Kolkata	Medium				1.000		
	Low	-.626	.141	.000	.534	.406	.704
	High	-.353	.191	.065	.703	.484	1.021
Mumbai	Medium				1.000		
	Low	.234	.222	.292	1.264	.818	1.954
	High	-16.621	8040.84	.998	.000	.000	.
Mysore	Medium				1.000		
	Low	.584	.176	.001	1.792	1.269	2.531
	High	-.353	.287	.218	.702	.400	1.233
Nagpur	Medium				1.000		
	Low	.782	.246	.001	2.187	1.351	3.541
	High	2.342	1.059	.027	10.405	1.307	82.860
Secunderabad	Medium				1.000		
	Low	.954	.363	.009	2.595	1.274	5.286
	High	.634	.760	.404	1.885	.425	8.364
Shimla	Medium				1.000		
	Low	.245	.211	.246	1.278	.844	1.934
	High	.206	.267	.441	1.229	.728	2.074
Trivandrum	Medium				1.000		
	Low	1.276	.107	.000	3.583	2.903	4.423
	High	-.259	.595	.663	.772	.241	2.477
Total	Medium				1.000		
	Low	.845	.039	.000	2.328	2.155	2.515
	High	-.023	.107	.830	.977	.792	1.206

Table 67. Chronic bronchitis (CB) diagnosis and ever smoking

Centre	Smoking habit	All respondents with CB	All respondents without CB
Ahmedabad ^a	Never smoker	213 (46.1%)	7264 (79.7%)
	Ever smoker	249 (53.9%)	1846 (20.3%)
Berhampur ^a	Never smoker	131 (84.5%)	7332 (92.6%)
	Ever smoker	24 (15.5%)	584 (7.4%)
Bikaner ^a	Never smoker	168 (42.5%)	5288 (81.2%)
	Ever smoker	227 (57.5%)	1225 (18.8%)
Chennai ^a	Never smoker	125 (60.7%)	6334 (84.7%)
	Ever smoker	81 (39.3%)	1143 (15.3%)
Guwahati ^a	Never smoker	95 (63.8%)	6279 (90.2%)
	Ever smoker	54 (36.2%)	684 (9.8%)
Kolkata ^a	Never smoker	145 (58.0%)	4855 (75.2%)
	Ever smoker	105 (42.0%)	1599 (24.8%)
Mumbai ^a	Never smoker	55 (67.1%)	6608 (91.7%)
	Ever smoker	27 (32.9%)	596 (8.3%)
Mysore ^a	Never smoker	73 (44.0%)	6296 (82.1%)
	Ever smoker	93 (56.0%)	1372 (17.9%)
Nagpur ^a	Never smoker	68 (80.0%)	6311 (91.5%)
	Ever smoker	17 (20.0%)	586 (8.5%)
Secunderabad ^a	Never smoker	18 (54.5%)	1853 (93.1%)
	Ever smoker	15 (45.5%)	137 (6.9%)
Shimla ^a	Never smoker	72 (58.1%)	6148 (86.7%)
	Ever smoker	52 (41.9%)	947 (13.3%)
Trivandrum ^a	Never smoker	617 (67.9%)	6774 (82.9%)
	Ever smoker	292 (32.1%)	1401 (17.1%)
Total ^a	Never smoker	1780 (59.0%)	71342 (85.5%)
	Ever smoker	1236 (41.0%)	12120 (14.5%)

^a p <0.05

Table 68. Logistic regression for chronic bronchitis and smoking

Centre	Smoking status	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Never smoker				1.000		
	Ever smoker	1.526	.097	.000	4.600	3.804	5.562
Berhampur	Never smoker				1.000		
	Ever smoker	.833	.226	.000	2.300	1.477	3.583
Bikaner	Never smoker				1.000		
	Ever smoker	1.763	.107	.000	5.833	4.733	7.188
Chennai	Never smoker				1.000		
	Ever smoker	1.278	.146	.000	3.591	2.696	4.783
Guwahati	Never smoker				1.000		
	Ever smoker	1.652	.175	.000	5.218	3.702	7.355
Kolkata	Never smoker				1.000		
	Ever smoker	.788	.131	.000	2.199	1.700	2.844
Mumbai	Never smoker				1.000		
	Ever smoker	1.694	.239	.000	5.443	3.408	8.692
Mysore	Never smoker				1.000		
	Ever smoker	1.766	.159	.000	5.846	4.279	7.987
Nagpur	Never smoker				1.000		
	Ever smoker	.990	.275	.000	2.692	1.572	4.612
Secunderabad	Never smoker				1.000		
	Ever smoker	2.422	.361	.000	11.271	5.559	22.853
Shimla	Never smoker				1.000		
	Ever smoker	1.545	.185	.000	4.689	3.261	6.742
Trivandrum	Never smoker				1.000		
	Ever smoker	.828	.077	.000	2.288	1.968	2.660
Total	Never smoker				1.000		
	Ever smoker	1.408	.038	.000	4.087	3.792	4.406

Table 69. Chronic bronchitis (CB) diagnosis and tobacco smoking product

Centre	Smoking product	All respondents with CB	All respondents without CB
Ahmedabad	Cigarette	1 (0.2%)	20 (0.2%)
	Bidi	146 (31.6%)	1375 (15.1%)
	Hookah	3 (0.6%)	17 (0.2%)
	Others	99 (21.4%)	434 (4.8%)
	None	213 (46.1%)	7264 (79.7%)
Berhampur	Cigarette	11 (7.1%)	332 (4.2%)
	Bidi	11 (7.1%)	221 (2.8%)
	Hookah	0	29 (0.4%)
	Others	2 (1.3%)	2 (0.0%)
	None	131 (84.5%)	7332 (92.6%)
Bikaner	Cigarette	6 (1.5%)	76 (1.2%)
	Bidi	202 (51.1%)	1112 (17.1%)
	Hookah	1 (0.3%)	2 (0.0%)
	Others	18 (4.6%)	35 (0.5%)
	None	168 (42.5%)	5288 (81.2%)
Chennai	Cigarette	18 (8.7%)	502 (6.7%)
	Bidi	62 (30.1%)	628 (8.4%)
	Hookah	0	0
	Others	1 (0.5%)	13 (0.2%)
	None	125 (60.7%)	6334 (84.7%)
Guwahati	Cigarette	6 (4.0%)	376 (5.4%)
	Bidi	46 (30.9%)	298 (4.3%)
	Hookah	0	4 (0.1%)
	Others	0	7 (0.1%)
	None	94 (63.1%)	6278 (90.2%)
Kolkata	Cigarette	49 (19.6%)	564 (8.7%)
	Bidi	55 (22.0%)	1028 (15.9%)
	Hookah	1 (0.4%)	2 (0.0%)
	Others	0	5 (0.1%)
	None	145 (58.0%)	4855 (75.2%)
Mumbai	Cigarette	4 (4.9%)	149 (2.1%)
	Bidi	23 (28.0%)	446 (6.2%)

	Hookah	0	0
	Others	0	1 (0.0%)
	None	55 (67.1%)	6608 (91.7%)
Mysore	Cigarette	7 (4.2%)	170 (2.2%)
	Bidi	85 (51.2%)	1202 (15.7%)
	Hookah	0	0
	Others	1 (0.6%)	0
	None	73 (44.0%)	6296 (82.1%)
	Nagpur	Cigarette	1 (1.2%)
Bidi		16 (18.8%)	482 (7.0%)
Hookah		0	6 (0.1%)
Others		0	6 (0.1%)
None		68 (80.0%)	6312 (91.5%)
Secunderabad		Cigarette	9 (27.3%)
	Bidi	0	0
	Hookah	0	0
	Others	0	0
	None	18 (54.5%)	1853 (93.1%)
	Shimla	Cigarette	15 (12.1%)
Bidi		36 (29.0%)	583 (8.2%)
Hookah		1 (0.8%)	4 (0.1%)
Others		0	2 (0.0%)
None		72 (58.1%)	6147 (86.6%)
Trivandrum		Cigarette	114 (12.5%)
	Bidi	168 (18.5%)	648 (7.9%)
	Hookah	10 (1.1%)	20 (0.2%)
	Others	0	2 (0.0%)
	None	617 (67.9%)	6773 (82.9%)
	Total ^a	Cigarette	241 (8.0%)
Bidi		856 (28.4%)	8039 (9.6%)
Hookah		19 (0.6%)	84 (0.1%)
Others		121 (4.0%)	507 (0.6%)
None		1779 (59.0%)	71340 (85.5%)

^a p < 0.05

Table 70. Logistic regression chronic bronchitis and smoking product

Centre	Age	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	None				1.000		
	Cigarette	.534	1.027	.603	1.705	.228	12.764
	Bidi	1.287	.111	.000	3.621	2.911	4.505
	Hookah	1.795	.630	.004	6.018	1.750	20.691
	Others	2.051	.131	.000	7.779	6.014	10.062
Berhampur	None				1.000		
	Cigarette	.618	.319	.053	1.854	.993	3.465
	Bidi	1.025	.321	.001	2.786	1.484	5.229
	Hookah	-17.178	7462.99	.998	.000	.000	.
	Others	4.025	1.004	.000	55.969	7.824	400.362
Bikaner	None				1.000		
	Cigarette	.910	.431	.035	2.485	1.067	5.786
	Bidi	1.744	.110	.000	5.718	4.613	7.087
	Hookah	2.756	1.227	.025	15.738	1.420	174.417
	Others	2.784	.300	.000	16.188	8.983	29.169
Chennai	None				1.000		
	Cigarette	.597	.256	.020	1.817	1.099	3.003
	Bidi	1.610	.161	.000	5.003	3.650	6.857
	Hookah	-	-	-	-	-	-
	Others	1.360	1.042	.192	3.898	.506	30.026
Guwahati	None				1.000		
	Cigarette	.064	.424	.881	1.066	.464	2.449
	Bidi	2.333	.189	.000	10.309	7.112	14.945
	Hookah	3.914	.771	.000	50.090	11.057	226.913
	Others	-17.001	15192.9	.999	.000	.000	.
Kolkata	None				1.000		
	Cigarette	1.068	.171	.000	2.909	2.080	4.068
	Bidi	.583	.162	.000	1.791	1.304	2.461
	Hookah	2.818	1.228	.022	16.741	1.509	185.678
	Others	-17.692	17990.0	.999	.000	.000	.

Mumbai	None				1.000		
	Cigarette	1.171	.524	.026	3.225	1.154	9.016
	Bidi	1.824	.253	.000	6.196	3.773	10.175
	Hookah	-	-	-	-	-	-
	Others	-16.414	40193.0	1.000	.000	.000	.
Mysore	None				1.000		
	Cigarette	1.267	.403	.002	3.551	1.611	7.828
	Bidi	1.808	.163	.000	6.099	4.434	8.389
	Hookah	-	-	-	-	-	-
	Others	25.660	40192.9	.999	1.393E11	.000	.
Nagpur	None				1.000		
	Cigarette	.020	1.013	.984	1.020	.140	7.426
	Bidi	1.125	.282	.000	3.081	1.773	5.354
	Hookah	-16.672	16409.9	.999	.000	.000	.
	Others	-16.672	16409.9	.999	.000	.000	.
Secunderabad	None				1.000		
	Cigarette	2.036	.419	.000	7.657	3.369	17.403
	Bidi	3.653	.534	.000	38.604	13.552	109.966
	Hookah	-	-	-	-	-	-
	Others	-	-	-	-	-	-
Shimla	None				1.000		
	Cigarette	1.272	.289	.000	3.567	2.025	6.285
	Bidi	1.662	.209	.000	5.272	3.502	7.936
	Hookah	3.061	1.124	.006	21.344	2.356	193.320
	Others	-16.756	28421.4	1.000	.000	.000	.
Trivandrum	None				1.000		
	Cigarette	.536	.109	.000	1.710	1.380	2.117
	Bidi	1.046	.096	.000	2.846	2.357	3.437
	Hookah	1.703	.390	.000	5.489	2.558	11.778
	Others	-18.810	28473.5	.999	.000	.000	.
Total	None				1.000		
	Cigarette	1.018	.071	.000	2.768	2.409	3.180
	Bidi	1.452	.043	.000	4.270	3.923	4.648
	Hookah	2.205	.255	.000	9.071	5.501	14.957
	Others	2.259	.104	.000	9.570	7.806	11.734

Table 71. Chronic bronchitis (CB) diagnosis and ever exposure to household ETS

Centre	ETS exposure	All respondents with CB	All respondents without CB
Ahmedabad ^a	No	217 (47.0%)	5356 (58.8%)
	Yes	245 (53.0%)	3754 (41.2%)
Berhampur	No	148 (95.5%)	7547 (95.3%)
	Yes	7 (4.5%)	369 (4.7%)
Bikaner ^a	No	186 (47.1%)	3713 (57.0%)
	Yes	209 (52.9%)	2800 (43.0%)
Chennai	No	82 (39.8%)	2990 (40.0%)
	Yes	124 (60.2%)	4487 (60.0%)
Guwahati ^a	No	110 (73.8%)	5738 (82.4%)
	Yes	39 (26.2%)	1225 (17.6%)
Kolkata	No	189 (75.6%)	4555 (70.6%)
	Yes	61 (24.4%)	1899 (29.4%)
Mumbai	No	76 (92.7%)	6592 (91.5%)
	Yes	6 (7.3%)	612 (8.5%)
Mysore	No	113 (68.1%)	5674 (74.0%)
	Yes	53 (31.9%)	1994 (26.0%)
Nagpur	No	77 (90.6%)	6390 (92.6%)
	Yes	8 (9.4%)	507 (7.4%)
Secunderabad ^a	No	29 (87.9%)	1899 (95.4%)
	Yes	4 (12.1%)	91 (4.6%)
Shimla ^a	No	104 (83.9%)	6431 (90.6%)
	Yes	20 (16.1%)	664 (9.4%)
Trivandrum ^a	No	593 (65.2%)	6089 (74.5%)
	Yes	316 (34.8%)	2086 (25.5%)
Total ^a	No	1924 (63.8%)	62974 (75.5%)
	Yes	1092 (36.2%)	20488 (24.5%)

^a p <0.05

Table 72. Logistic regression for chronic bronchitis and exposure to household ETS

Centre	ETS	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Never exposed				1.000		
	Ever exposed	.477	.096	.000	1.611	1.336	1.943
Berhampur	Never exposed				1.000		
	Ever exposed	-.033	.390	.932	.967	.450	2.079
Bikaner	Never exposed				1.000		
	Ever exposed	.399	.104	.000	1.490	1.216	1.826
Chennai	Never exposed				1.000		
	Ever exposed	.008	.144	.958	1.008	.759	1.337
Guwahati	Never exposed				1.000		
	Ever exposed	.507	.189	.007	1.661	1.147	2.405
Kolkata	Never exposed				1.000		
	Ever exposed	-.256	.150	.087	.774	.577	1.038
Mumbai	Never exposed				1.000		
	Ever exposed	-.162	.426	.704	.850	.369	1.960
Mysore	Never exposed				1.000		
	Ever exposed	.289	.169	.087	1.335	.959	1.857
Nagpur	Never exposed				1.000		
	Ever exposed	.270	.374	.471	1.309	.629	2.727
Secunderabad	Never exposed				1.000		
	Ever exposed	1.057	.544	.052	2.878	.991	8.361
Shimla	Never exposed				1.000		
	Ever exposed	.622	.248	.012	1.863	1.147	3.026
Trivandrum	Never exposed				1.000		
	Ever exposed	.442	.074	.000	1.555	1.345	1.799
Total	Never exposed				1.000		
	Ever exposed	.556	.039	.000	1.745	1.617	1.882

Table 73. Chronic bronchitis (CB) diagnosis and ever exposure to household ETS (nonsmokers only)

Centre	ETS exposure	All respondents with CB	All respondents without CB
Ahmedabad ^a	No	109 (51.2%)	4559 (62.8%)
	Yes	104 (48.8%)	2705 (37.2%)
Berhampur	No	124 (94.7%)	6968 (95.0%)
	Yes	7 (5.3%)	364 (5.0%)
Bikaner ^a	No	76 (45.2%)	3020 (57.1%)
	Yes	92 (54.8%)	2268 (42.9%)
Chennai	No	41 (32.8%)	2515 (39.7%)
	Yes	84 (67.2%)	3819 (60.3%)
Guwahati ^a	No	67 (70.5%)	5126 (81.6%)
	Yes	28 (29.5%)	1153 (18.4%)
Kolkata	No	103 (71.0%)	3153 (64.9%)
	Yes	42 (29.0%)	1702 (35.1%)
Mumbai	No	50 (90.9%)	6049 (91.5%)
	Yes	5 (9.1%)	559 (8.5%)
Mysore	No	49 (67.1%)	4574 (72.6%)
	Yes	24 (32.9%)	1722 (27.4%)
Nagpur	No	60 (88.2%)	5830 (92.4%)
	Yes	8 (11.8%)	481 (7.6%)
Secunderabad	No	14 (77.8%)	1769 (95.5%)
	Yes	4 (22.2%)	84 (4.5%)
Shimla ^a	No	57 (79.2%)	5540 (90.1%)
	Yes	15 (20.8%)	608 (9.9%)
Trivandrum ^a	No	372 (60.3%)	4951 (73.1%)
	Yes	245 (39.7%)	1823 (26.9%)
Total ^a	No	1122 (63.0%)	54054 (75.8%)
	Yes	658 (37.0%)	17288 (24.2%)

^a p <0.05

Table 74. Logistic regression for chronic bronchitis and ETS exposure (nonsmokers only)

Centre	ETS	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Never exposed				1.000		
	Ever exposed	.475	.139	.001	1.608	1.224	2.113
Berhampur	Never exposed				1.000		
	Ever exposed	.078	.392	.843	1.081	.501	2.331
Bikaner	Never exposed				1.000		
	Ever exposed	.477	.157	.002	1.612	1.184	2.195
Chennai	Never exposed				1.000		
	Ever exposed	.300	.192	.119	1.349	.926	1.967
Guwahati	Never exposed				1.000		
	Ever exposed	.619	.227	.006	1.858	1.190	2.901
Kolkata	Never exposed				1.000		
	Ever exposed	-.281	.186	.131	.755	.525	1.087
Mumbai	Never exposed				1.000		
	Ever exposed	.079	.471	.867	1.082	.430	2.725
Mysore	Never exposed				1.000		
	Ever exposed	.263	.251	.294	1.301	.796	2.127
Nagpur	Never exposed				1.000		
	Ever exposed	.480	.379	.206	1.616	.768	3.399
Secunderabad	Never exposed				1.000		
	Ever exposed	1.795	.578	.002	6.017	1.939	18.674
Shimla	Never exposed				1.000		
	Ever exposed	.875	.293	.003	2.398	1.349	4.261
Trivandrum	Never exposed				1.000		
	Ever exposed	.581	.087	.000	1.789	1.509	2.120
Total	Never exposed				1.000		
	Ever exposed	.606	.050	.000	1.834	1.663	2.022

Table 75. Chronic bronchitis (CB) diagnosis and timing of ETS exposure

Centre	Timing of ETS exposure	All respondents with CB	All respondents without CB
Ahmedabad ^a	None	217 (47.0%)	5356 (58.8%)
	Childhood	152 (32.9%)	1583 (17.4%)
	Adulthood	70 (15.2%)	1470 (16.1%)
	Both	23 (5.0%)	701 (7.7%)
Berhampur	None	148 (95.5%)	7547 (95.3%)
	Childhood	0	57 (0.7%)
	Adulthood	7 (4.5%)	312 (3.9%)
	Both	0	0
Bikaner ^a	None	186 (47.1%)	3713 (57.0%)
	Childhood	119 (30.1%)	1205 (18.5%)
	Adulthood	42 (10.6%)	1021 (15.7%)
	Both	48 (12.2%)	574 (8.8%)
Chennai	None	82 (39.8%)	2990 (40.0%)
	Childhood	44 (21.4%)	1499 (20.0%)
	Adulthood	33 (16.0%)	1368 (18.3%)
	Both	47 (22.8%)	1620 (21.7%)
Guwahati ^a	None	110 (73.8%)	5738 (82.4%)
	Childhood	17 (11.4%)	665 (9.6%)
	Adulthood	22 (14.8%)	506 (7.3%)
	Both	0	54 (0.8%)
Kolkata ^b	None	189 (75.6%)	4555 (70.6%)
	Childhood	24 (9.6%)	600 (9.3%)
	Adulthood	26 (10.4%)	993 (15.4%)
	Both	11 (4.4%)	306 (4.7%)
Mumbai	None	76 (92.7%)	6592 (91.5%)
	Childhood	2 (2.4%)	145 (2.0%)

	Adulthood	4 (4.9%)	467 (6.5%)
	Both	0	0
Mysore ^a	None	113 (68.1%)	5674 (74.0%)
	Childhood	20 (12.0%)	490 (6.4%)
	Adulthood	30 (18.1%)	1433 (18.7%)
	Both	3 (1.8%)	71 (0.9%)
Nagpur	None	77 (90.6%)	6390 (92.6%)
	Childhood	3 (3.5%)	121 (1.8%)
	Adulthood	5 (5.9%)	367 (5.3%)
	Both	0	19 (0.3%)
Secunderabad	None	29 (87.9%)	1899 (95.4%)
	Childhood	2 (6.1%)	18 (0.9%)
	Adulthood	2 (6.1%)	70 (3.5%)
	Both	0	3 (0.2%)
Shimla ^b	None	104 (83.9%)	6431 (90.6%)
	Childhood	1 (0.8%)	148 (2.1%)
	Adulthood	19 (15.3%)	512 (7.2%)
	Both	0	4 (0.1%)
Trivandrum ^a	None	593 (65.2%)	6089 (74.5%)
	Childhood	154 (16.9%)	1096 (13.4%)
	Adulthood	98 (10.8%)	662 (8.1%)
	Both	64 (7.0%)	328 (4.0%)
Total ^a	None	1924 (63.8%)	62974 (75.5%)
	Childhood	538 (17.8%)	7627 (9.1%)
	Adulthood	358 (11.9%)	9181 (11.0%)
	Both	196 (6.5%)	3680 (4.4%)

^a p <0.05

Table 76. Logistic regression for chronic bronchitis and timing of ETS exposure

Centre	ETS exposure	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad ^a	None				1.000		
	Childhood	.863	.110	.000	2.370	1.912	2.938
	Adulthood	.162	.141	.250	1.175	.892	1.548
	Both	-.211	.223	.344	.810	.523	1.254
Berhampur	None				1.000		
	Childhood	-17.271	5323.82	.997	.000	.000	.
	Adulthood	.135	.391	.731	1.144	.532	2.462
	Both	-	-	-	-	-	-
Bikaner ^a	None				1.000		
	Childhood	.679	.122	.000	1.971	1.552	2.504
	Adulthood	-.197	.174	.259	.821	.583	1.156
	Both	.512	.168	.002	1.669	1.201	2.320
Chennai	None				1.000		.
	Childhood	.068	.190	.720	1.070	.738	1.552
	Adulthood	-.128	.209	.539	.880	.584	1.324
	Both	.056	.186	.762	1.058	.735	1.522
Guwahati ^a	None				1.000		
	Childhood	.288	.264	.275	1.334	.795	2.236
	Adulthood	.819	.238	.001	2.268	1.422	3.617
	Both	-17.249	5469.57	.997	.000	.000	.
Kolkata	None				1.000		
	Childhood	-.037	.221	.868	.964	.625	1.487
	Adulthood	-.460	.212	.030	.631	.416	.956
	Both	-.143	.316	.650	.866	.467	1.609

Mumbai	None				1.000		
	Childhood	.179	.721	.804	1.196	.291	4.918
	Adulthood	-.297	.515	.564	.743	.271	2.039
	Both	-	-	-	-	-	-
Mysore	None				1.000		
	Childhood	.718	.247	.004	2.049	1.263	3.327
	Adulthood	.050	.208	.810	1.051	.700	1.579
	Both	.752	.597	.208	2.122	.658	6.837
Nagpur	None				1.000		
	Childhood	.722	.596	.226	2.058	.640	6.612
	Adulthood	.123	.465	.792	1.131	.455	2.811
	Both	-16.784	9220.89	.999	.000	.000	.
Secunderabad	None				1.000		
	Childhood	1.985	.768	.010	7.276	1.613	32.811
	Adulthood	.626	.741	.398	1.871	.438	7.997
	Both	-17.021	23205.4	.999	.000	.000	.
Shimla ^b	None				1.000		
	Childhood	-.873	1.008	.387	.418	.058	3.014
	Adulthood	.831	.254	.001	2.295	1.396	3.773
	Both	-17.078	20096.5	.999	.000	.000	.
Trivandrum ^a	None				1.000		
	Childhood	.367	.096	.000	1.443	1.195	1.742
	Adulthood	.419	.116	.000	1.520	1.210	1.910
	Both	.695	.143	.000	2.004	1.513	2.653
Total	None				1.000		
	Childhood	.837	.050	.000	2.309	2.092	2.548
	Adulthood	.244	.059	.000	1.276	1.138	1.432
	Both	.556	.077	.000	1.743	1.499	2.027

Table 77. Chronic bronchitis (CB) diagnosis and timing of ETS exposure (nonsmokers only)

Centre	Timing of ETS exposure	All respondents with CB	All respondents without CB
Ahmedabad ^a	None	109 (51.2%)	4559 (62.8%)
	Childhood	24 (11.3%)	608 (8.4%)
	Adulthood	63 (29.6%)	1449 (19.9%)
	Both	17 (8.0%)	648 (8.9%)
Berhampur	None	124 (94.7%)	6968 (95.0%)
	Childhood	0	53 (0.7%)
	Adulthood	7 (5.3%)	311 (4.2%)
	Both	0	0
Bikaner ^a	None	76 (45.2%)	3020 (57.1%)
	Childhood	27 (16.1%)	715 (13.5%)
	Adulthood	34 (20.2%)	999 (18.9%)
	Both	31 (18.5%)	554 (10.5%)
Chennai	None	41 (32.8%)	2515 (39.7%)
	Childhood	19 (15.2%)	1055 (16.7%)
	Adulthood	30 (24.0%)	1315 (20.8%)
	Both	35 (28.0%)	1449 (22.9%)
Guwahati ^a	None	67 (70.5%)	5126 (81.6%)
	Childhood	10 (10.5%)	612 (9.7%)
	Adulthood	18 (18.9%)	487 (7.8%)
	Both	0	54 (0.9%)
Kolkata	None	103 (71.0%)	3153 (64.9%)
	Childhood	8 (5.5%)	423 (8.7%)
	Adulthood	23 (15.9%)	976 (20.1%)
	Both	11 (7.6%)	303 (6.2%)
Mumbai	None	50 (90.9%)	6049 (91.5%)
	Childhood	2 (3.6%)	134 (2.0%)

	Adulthood	3 (5.5%)	425 (6.4%)
	Both	0	0
Mysore ^a	None	49 (67.1%)	4574 (72.6%)
	Childhood	4 (5.5%)	317 (5.0%)
	Adulthood	17 (23.3%)	1347 (21.4%)
	Both	3 (4.1%)	58 (0.9%)
Nagpur	None	60 (88.2%)	5830 (92.4%)
	Childhood	3 (4.4%)	98 (1.6%)
	Adulthood	5 (7.4%)	364 (5.8%)
	Both	0	19 (0.3%)
Secunderabad	None	14 (77.8%)	1769 (95.5%)
	Childhood	2 (11.1%)	16 (0.9%)
	Adulthood	2 (11.1%)	65 (3.5%)
	Both	0	3 (0.2%)
Shimla	None	57 (79.2%)	5540 (90.1%)
	Childhood	0	123 (2.0%)
	Adulthood	15 (20.8%)	481 (7.8%)
	Both	0	4 (0.1%)
Trivandrum ^a	None	372 (60.3%)	4951 (73.1%)
	Childhood	89 (14.4%)	851 (12.6%)
	Adulthood	96 (15.6%)	655 (9.7%)
	Both	60 (9.7%)	317 (4.7%)
Total ^a	None	1122 (63.0%)	54054 (75.8%)
	Childhood	188 (10.6%)	5005 (7.0%)
	Adulthood	313 (17.6%)	8874 (12.4%)
	Both	157 (8.8%)	3409 (4.8%)

^a p < 0.05

Table 78. Logistic regression for chronic bronchitis and timing of ETS exposure (nonsmokers only)

Centre	ETS exposure	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	None				1.000		
	Childhood	.501	.230	.029	1.651	1.053	2.589
	Adulthood	.598	.161	.000	1.819	1.326	2.494
	Both	.093	.264	.725	1.097	.654	1.841
Berhampur	None				1.000		
	Childhood	-17.174	5521.64	.998	.000	.000	.
	Adulthood	.235	.393	.550	1.265	.586	2.731
	Both	-	-	-	-	-	-
Bikaner	None				1.000		
	Childhood	.406	.228	.075	1.501	.960	2.345
	Adulthood	.302	.210	.150	1.352	.897	2.039
	Both	.799	.218	.000	2.224	1.450	3.409
Chennai	None				1.000		.
	Childhood	.100	.280	.722	1.105	.638	1.912
	Adulthood	.336	.243	.166	1.399	.870	2.252
	Both	.393	.232	.091	1.482	.939	2.337
Guwahati	None				1.000		
	Childhood	.223	.342	.514	1.250	.640	2.442
	Adulthood	1.039	.270	.000	2.828	1.667	4.797
	Both	-16.866	5469.57	.998	.000	.000	.
Kolkata	None				1.000		
	Childhood	-.547	.371	.140	.579	.280	1.197
	Adulthood	-.327	.234	.162	.721	.456	1.140
	Both	.106	.323	.744	1.111	.590	2.092

Mumbai	None				1.000		
	Childhood	.591	.726	.416	1.806	.435	7.498
	Adulthood	-.158	.597	.791	.854	.265	2.749
	Both	-	-	-	-	-	-
Mysore	None				1.000		
	Childhood	.164	.523	.754	1.178	.422	3.285
	Adulthood	.164	.283	.563	1.178	.676	2.052
	Both	1.574	.609	.010	4.828	1.463	15.937
Nagpur	None				1.000		
	Childhood	1.090	.600	.069	2.974	.917	9.647
	Adulthood	.289	.469	.538	1.335	.533	3.344
	Both	-16.626	9220.90	.999	.000	.000	.
Secunderabad	None				1.000		
	Childhood	2.760	.797	.001	15.795	3.315	75.255
	Adulthood	1.358	.766	.076	3.888	.866	17.462
	Both	-16.364	23205.4	.999	.000	.000	.
Shimla	None				1.000		
	Childhood	-16.626	3624.08	.996	.000	.000	.
	Adulthood	1.109	.294	.000	3.031	1.703	5.394
	Both	-16.626	20096.5	.999	.000	.000	.
Trivandrum	None				1.000		
	Childhood	.331	.124	.008	1.392	1.092	1.774
	Adulthood	.668	.122	.000	1.951	1.536	2.477
	Both	.924	.151	.000	2.519	1.875	3.385
Total	None				1.000		
	Childhood	.593	.080	.000	1.810	1.546	2.118
	Adulthood	.530	.065	.000	1.699	1.496	1.930
	Both	.797	.087	.000	2.219	1.871	2.631

Table 79. Chronic bronchitis (CB) diagnosis and regular cooking

Centre	Cooking	All respondents with CB	All respondents without CB
Ahmedabad ^a	Currently cooking	99 (21.4%)	4171 (45.8%)
	Cooked in past	35 (7.6%)	480 (5.3%)
	Never cooked	328 (71.0%)	4459 (48.9%)
Berhampur ^a	Currently cooking	46 (29.7%)	3041 (38.4%)
	Cooked in past	22 (14.2%)	737 (9.3%)
	Never cooked	87 (56.1%)	4138 (52.3%)
Bikaner ^a	Currently cooking	76 (19.2%)	2772 (42.6%)
	Cooked in past	52 (13.2%)	507 (7.8%)
	Never cooked	267 (67.6%)	3234 (49.7%)
Chennai ^a	Currently cooking	84 (40.8%)	4217 (56.4%)
	Cooked in past	22 (10.7%)	488 (6.5%)
	Never cooked	100 (48.5%)	2772 (37.1%)
Guwahati ^a	Currently cooking	31 (20.8%)	2529 (36.3%)
	Cooked in past	38 (25.5%)	521 (7.5%)
	Never cooked	80 (53.7%)	3913 (56.2%)
Kolkata ^a	Currently cooking	50 (20.0%)	2016 (31.2%)
	Cooked in past	40 (16.0%)	930 (14.4%)
	Never cooked	160 (64.0%)	3508 (54.4%)
Mumbai ^a	Currently cooking	24 (29.3%)	3309 (45.9%)
	Cooked in past	3 (3.7%)	136 (1.9%)
	Never cooked	55 (67.1%)	3759 (52.2%)
Mysore ^a	Currently cooking	26 (15.7%)	3170 (41.3%)
	Cooked in past	14 (8.4%)	450 (5.9%)
	Never cooked	126 (75.9%)	4048 (52.8%)
Nagpur ^a	Currently cooking	15 (17.6%)	2065 (29.9%)
	Cooked in past	15 (17.6%)	1175 (17.0%)
	Never cooked	55 (64.7%)	3657 (53.0%)
Secunderabad	Currently cooking	8 (24.2%)	783 (39.3%)
	Cooked in past	1 (3.0%)	146 (7.3%)
	Never cooked	24 (72.7%)	1061 (53.3%)
Shimla	Currently cooking	51 (41.1%)	3405 (48.0%)
	Cooked in past	8 (6.5%)	521 (7.3%)
	Never cooked	65 (52.4%)	3169 (44.7%)
Trivandrum ^a	Currently cooking	366 (40.3%)	3998 (48.9%)
	Cooked in past	56 (6.2%)	256 (3.1%)
	Never cooked	487 (53.6%)	3921 (48.0%)
Total ^a	Currently cooking	876 (29.0%)	35476 (42.5%)
	Cooked in past	306 (10.1%)	6347 (7.6%)
	Never cooked	1834 (60.8%)	41639 (49.9%)

^a p <0.05

Table 80. Logistic regression for chronic bronchitis and regular cooking

Centre	Cooking	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Never				1.000		
	Current	-1.131	.117	.000	.323	.257	.406
	Past	-.009	.184	.962	.991	.691	1.422
Berhampur	Never				1.000		
	Current	-.329	.184	.073	.719	.502	1.032
	Past	.351	.242	.147	1.420	.884	2.281
Bikaner	Never				1.000		
	Current	-1.102	.133	.000	.332	.256	.431
	Past	.217	.159	.172	1.242	.910	1.696
Chennai	Never				1.000		
	Current	-.594	.150	.000	.552	.412	.741
	Past	.223	.241	.354	1.250	.780	2.002
Guwahati	Never				1.000		
	Current	-.512	.213	.016	.600	.395	.910
	Past	1.272	.202	.000	3.568	2.399	5.305
Kolkata	Never				1.000		
	Current	-.609	.164	.000	.544	.394	.751
	Past	-.059	.181	.745	.943	.662	1.343
Mumbai	Never				1.000		
	Current	-.702	.246	.004	.496	.306	.803
	Past	.411	.599	.493	1.508	.466	4.880
Mysore	Never				1.000		
	Current	-1.334	.217	.000	.264	.172	.403
	Past	.000	.286	.999	1.000	.571	1.751
Nagpur	Never				1.000		
	Current	-.728	.293	.013	.483	.272	.857
	Past	-.164	.293	.576	.849	.478	1.508
Secunderabad	Never				1.000		
	Current	-.795	.411	.053	.452	.202	1.011
	Past	-1.195	1.024	.244	.303	.041	2.255
Shimla	Never				1.000		
	Current	-.314	.189	.096	.730	.504	1.057
	Past	-.290	.378	.443	.749	.357	1.569
Trivandrum	Never				1.000		
	Current	-.305	.073	.000	.737	.639	.850
	Past	.566	.155	.000	1.761	1.299	2.387
Total	Never				1.000		
	Current	-.579	.042	.000	.561	.517	.608
	Past	.090	.063	.153	1.095	.967	1.239

Table 81. Chronic bronchitis (CB) diagnosis and cooking fuel use

Centre	Cooking fuel	All respondents with CB	All respondents without CB
Ahmedabad ^b	Electricity	0	11 (0.1%)
	LPG	25 (5.4%)	1714 (18.8%)
	Kerosene	4 (0.9%)	203 (2.2%)
	Coal	0	2 (0.0%)
	Wood	105 (22.7%)	2719 (29.8%)
	Dung cake	0	0 (0.0%)
	Crop residue	0	0 (0.0%)
	Others	0	2 (0.0%)
	Not cooking	328 (71.0%)	4459 (48.9%)
Berhampur	Electricity	0	9 (0.1%)
	LPG	30 (19.4%)	1579 (19.9%)
	Kerosene	0	39 (0.5%)
	Coal	1 (0.6%)	3 (0.0%)
	Wood	35 (22.6%)	2073 (26.2%)
	Dung cake	2 (1.3%)	71 (0.9%)
	Crop residue	0	4 (0.1%)
	Others	0	0
	Not cooking	87 (56.1%)	4137 (52.3%)
Bikaner	Electricity	0	3 (0.0%)
	LPG	20 (5.1%)	1058 (16.2%)
	Kerosene	1 (0.3%)	19 (0.3%)
	Coal	0	8 (0.1%)
	Wood	50 (12.7%)	1217 (18.7%)
	Dung cake	57 (14.4%)	973 (14.9%)
	Crop residue	0	0
	Others	0	1 (0.0%)
	Not cooking	267 (67.6%)	3234 (49.7%)
Chennai ^b	Electricity	0	9 (0.1%)
	LPG	67 (32.5%)	3067 (41.0%)
	Kerosene	5 (2.4%)	267 (3.6%)
	Coal	0	2 (0.0%)
	Wood	35 (17.0%)	1368 (18.3%)
	Dung cake	0	0
	Crop residue	0	5 (0.1%)
	Others	0	0
	Not cooking	99 (48.1%)	2759 (36.9%)
Guwahati	Electricity	2 (1.3%)	5 (0.1%)
	LPG	10 (6.7%)	1472 (21.1%)

	Kerosene	0	8 (0.1%)
	Coal	0	5 (0.1%)
	Wood	57 (38.3%)	1557 (22.4%)
	Dung cake	0	1 (0.0%)
	Crop residue	0	0 (0.0%)
	Others	0	1 (0.0%)
	Not cooking	80 (53.7%)	3914 (56.2%)
Kolkata ^b	Electricity	0	2 (0.0%)
	LPG	57 (22.8%)	1157 (17.9%)
	Kerosene	3 (1.2%)	81 (1.3%)
	Coal	5 (2.0%)	58 (0.9%)
	Wood	25 (10.0%)	1640 (25.4%)
	Dung cake	0	6 (0.1%)
	Crop residue	0	0 (0.0%)
	Others	0	1 (0.0%)
	Not cooking	160 (64.0%)	3508 (54.4%)
Mumbai	Electricity	0	15 (0.2%)
	LPG	17 (20.7%)	1786 (24.8%)
	Kerosene	0	96 (1.3%)
	Coal	0	27 (0.4%)
	Wood	10 (12.2%)	1517 (21.1%)
	Dung cake	0	0
	Crop residue	0	0
	Others	0	0
	Not cooking	55 (67.1%)	3759 (52.2%)
Mysore ^b	Electricity	0	5 (0.1%)
	LPG	14 (8.4%)	1634 (21.3%)
	Kerosene	3 (1.8%)	198 (2.6%)
	Coal	0	1 (0.0%)
	Wood	23 (13.9%)	1783 (23.3%)
	Dung cake	0	0
	Crop residue	0	0
	Others	0	0
	Not cooking	126 (75.9%)	4041 (52.7%)
Nagpur	Electricity	0	0
	LPG	7 (8.2%)	1206 (17.5%)
	Kerosene	0	61 (0.9%)
	Coal	0	2 (0.0%)
	Wood	23 (27.1%)	1967 (28.5%)
	Dung cake	0	3 (0.0%)
	Crop residue	0	1 (0.0%)

	Others	0	0
	Not cooking	55 (64.7%)	3656 (53.0%)
Secunderabad ^b	Electricity	0	20 (1.0%)
	LPG	9 (27.3%)	803 (40.4%)
	Kerosene	0	92 (4.6%)
	Coal	0	4 (0.2%)
	Wood	0	6 (0.3%)
	Dung cake	0	1 (0.1%)
	Crop residue	0	1 (0.1%)
	Others	0	1 (0.1%)
	Not cooking	24 (72.7%)	1061 (53.3%)
	Shimla	Electricity	2 (1.6%)
LPG		39 (31.5%)	2262 (31.9%)
Kerosene		1 (0.8%)	122 (1.7%)
Coal		0	48 (0.7%)
Wood		23 (18.5%)	1759 (24.8%)
Dung cake		0	0
Crop residue		0	2 (0.0%)
Others		0	2 (0.0%)
Not cooking		59 (47.6%)	2860 (40.3%)
Trivandrum ^b		Electricity	0
	LPG	64 (7.0%)	1542 (18.9%)
	Kerosene	2 (0.2%)	30 (0.4%)
	Coal	1 (0.1%)	4 (0.0%)
	Wood	355 (39.1%)	2648 (32.4%)
	Dung cake	0	0
	Crop residue	0	2 (0.0%)
	Others	0	1 (0.0%)
	Not cooking	487 (53.6%)	3919 (48.0%)
	Total ^a	Electricity	4 (0.1%)
LPG		359 (11.9%)	19280 (23.1%)
Kerosene		19 (0.6%)	1216 (1.5%)
Coal		7 (0.2%)	164 (0.2%)
Wood		741 (24.6%)	20254 (24.3%)
Dung cake		59 (2.0%)	1063 (1.3%)
Crop residue		0	16 (0.0%)
Others		0	9 (0.0%)
Not cooking		1827 (60.6%)	41307 (49.5%)

^a p < 0.05

Table 82. Logistic regression for chronic bronchitis and cooking fuel use

Centre	Cooking fuel	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Not cooking				1.000		
	Electricity	-18.593	12118.5	.999	.000	.000	.
	LPG	-1.618	.209	.000	.198	.132	.299
	Kerosene	-1.317	.508	.010	.268	.099	.725
	Coal	-18.593	28418.7	.999	.000	.000	.
	Wood	-.644	.115	.000	.525	.419	.657
	Others	-18.593	28418.6	.999	.000	.000	.
Berhampur	Not cooking				1.000		
	Electricity	-17.341	13397.7	.999	.000	.000	.
	LPG	-.102	.214	.635	.903	.594	1.374
	Kerosene	-17.341	6436.03	.998	.000	.000	.
	Coal	2.763	1.160	.017	15.851	1.632	153.902
	Wood	-.220	.202	.277	.803	.540	1.193
	Dung cake	.292	.725	.687	1.339	.323	5.548
	Crop residue	-17.341	20096.9	.999	.000	.000	.
Bikaner	Not cooking				1.000		
	Electricity	-18.709	23205.4	.999	.000	.000	.
	LPG	-1.474	.235	.000	.229	.145	.363
	Kerosene	-.450	1.028	.661	.637	.085	4.780
	Coal	-18.709	14210.4	.999	.000	.000	.
	Wood	-.698	.158	.000	.498	.365	.678
	Dung cake	-.343	.150	.023	.710	.528	.953
	Others	-18.709	40192.9	1.000	.000	.000	.
Chennai	Not cooking				1.000		.
	Electricity	-17.876	13399.6	.999	.000	.000	.
	LPG	-.496	.160	.002	.609	.445	.834
	Kerosene	-.650	.463	.160	.522	.211	1.293
	Coal	-17.876	28439.1	.999	.000	.000	.
	Wood	-.338	.199	.090	.713	.482	1.054
	Crop residue	-17.876	17979.5	.999	.000	.000	.
Guwahati	Not cooking				1.000		
	Electricity	2.974	.844	.000	19.570	3.741	102.380
	LPG	-1.102	.337	.001	.332	.172	.643
	Kerosene	-17.313	14210.4	.999	.000	.000	.
	Coal	-17.313	17974.8	.999	.000	.000	.
	Wood	.583	.176	.001	1.791	1.269	2.528

	Dung cake	-17.313	40193.0	1.000	.000	.000	.
	Others	-17.313	40193.0	1.000	.000	.000	.
Kolkata	Not cooking				1.000		
	Electricity	-18.115	28420.7	.999	.000	.000	.
	LPG	.077	.158	.625	1.080	.793	1.472
	Kerosene	-.208	.593	.726	.812	.254	2.599
	Coal	.637	.473	.178	1.890	.748	4.777
	Wood	-1.096	.217	.000	.334	.218	.512
	Dung cake	-18.115	16408.7	.999	.000	.000	.
	Others	-18.115	40193.0	1.000	.000	.000	.
	Mumbai	Not cooking				1.000	
Electricity		-16.978	10377.8	.999	.000	.000	.
LPG		-.430	.279	.123	.651	.377	1.124
Kerosene		-16.978	4102.18	.997	.000	.000	.
Coal		-16.978	7735.14	.998	.000	.000	.
Wood		-.797	.345	.021	.451	.229	.886
Dung cake		-16.978	23205.4	.999	.000	.000	.
Crop residue		-16.978	40193.0	1.000	.000	.000	.
Mysore		Not cooking				1.000	
	Electricity	-17.735	17979.4	.999	.000	.000	.
	LPG	-1.292	.283	.000	.275	.158	.479
	Kerosene	-.722	.589	.220	.486	.153	1.541
	Coal	-17.737	40244.3	1.000	.000	.000	.
	Wood	-.883	.229	.000	.414	.264	.647
	Dung cake	-17.735	17979.4	.999	.000	.000	.
	Crop residue	-17.735	40193.0	1.000	.000	.000	.
Nagpur	Not cooking				1.000		
	LPG	-.952	.403	.018	.386	.175	.849
	Kerosene	-17.006	5146.29	.997	.000	.000	.
	Coal	-17.007	28439.1	1.000	.000	.000	.
	Wood	-.252	.250	.313	.777	.476	1.268
	Dung cake	-17.007	23215.4	.999	.000	.000	.
	Crop residue	-17.008	40245.0	1.000	.000	.000	.
	Secunderabad	Not cooking				1.000	
Electricity		-17.414	8987.43	.998	.000	.000	.
LPG		-.702	.394	.074	.495	.229	1.072
Kerosene		-17.414	4190.41	.997	.000	.000	.
Coal		-17.414	20096.6	.999	.000	.000	.
Wood		-17.414	16408.8	.999	.000	.000	.
Dung cake		-17.414	40194.0	1.000	.000	.000	.
Crop residue		-17.414	40194.0	1.000	.000	.000	.

	Others	-17.414	40194.0	1.000	.000	.000	.
Shimla	Not cooking				1.000		
	Electricity	.885	.736	.229	2.424	.572	10.264
	LPG	-.179	.208	.389	.836	.556	1.257
	Kerosene	-.923	1.013	.362	.397	.055	2.892
	Coal	-17.322	5801.36	.998	.000	.000	.
	Wood	-.456	.248	.066	.634	.390	1.030
	Crop residue	-17.322	28420.7	1.000	.000	.000	.
	Others	-17.322	28420.7	1.000	.000	.000	.
Trivandrum	Not cooking				1.000		
	Electricity	-19.118	7735.14	.998	.000	.000	.
	LPG	-1.097	.136	.000	.334	.256	.436
	Kerosene	-.623	.732	.395	.536	.128	2.252
	Coal	.699	1.119	.532	2.012	.224	18.036
	Wood	.076	.074	.306	1.079	.933	1.248
	Crop residue	-19.118	28420.7	.999	.000	.000	.
	Others	-19.118	40193.0	1.000	.000	.000	.
Total	Not cooking				1.000		
	Electricity	-.479	.507	.345	.619	.229	1.674
	LPG	-.865	.058	.000	.421	.375	.472
	Kerosene	-1.041	.232	.000	.353	.224	.557
	Coal	-.036	.387	.927	.965	.452	2.059
	Wood	-.190	.044	.000	.827	.758	.902
	Dung cake	.227	.136	.095	1.255	.961	1.638
	Crop residue	-18.080	10005.3	.999	.000	.000	.
	Others	-18.077	13296.1	.999	.000	.000	.

Table 83. Chronic bronchitis (CB) diagnosis and separate kitchen in house

Centre	Kitchen	All respondents with CB	All respondents without CB
Ahmedabad ^a	No separate kitchen	63 (13.6%)	1231 (13.5%)
	Separate kitchen	71 (15.4%)	3420 (37.5%)
	Not cooking	328 (71.0%)	4459 (48.9%)
Berhampur ^b	No separate kitchen	0	79 (1.0%)
	Separate kitchen	68 (43.9%)	3699 (46.7%)
	Not cooking	87 (56.1%)	4138 (52.3%)
Bikaner ^a	No separate kitchen	31 (7.8%)	860 (13.2%)
	Separate kitchen	97 (24.6%)	2419 (37.1%)
	Not cooking	267 (67.6%)	3234 (49.7%)
Chennai ^a	No separate kitchen	27 (13.1%)	997 (13.3%)
	Separate kitchen	79 (38.3%)	3708 (49.6%)
	Not cooking	100 (48.5%)	2772 (37.1%)
Guwahati ^a	No separate kitchen	5 (3.4%)	43 (0.6%)
	Separate kitchen	64 (43.0%)	3007 (43.2%)
	Not cooking	80 (53.7%)	3913 (56.2%)
Kolkata ^a	No separate kitchen	5 (2.0%)	73 (1.1%)
	Separate kitchen	85 (34.0%)	2873 (44.5%)
	Not cooking	160 (64.0%)	3508 (54.4%)
Mumbai ^a	No separate kitchen	5 (6.1%)	1033 (14.3%)
	Separate kitchen	22 (26.8%)	2412 (33.5%)
	Not cooking	55 (67.1%)	3759 (52.2%)
Mysore ^a	No separate kitchen	4 (2.4%)	268 (3.5%)
	Separate kitchen	36 (21.7%)	3352 (43.7%)
	Not cooking	126 (75.9%)	4048 (52.8%)
Nagpur	No separate kitchen	0	66 (1.0%)
	Separate kitchen	30 (35.3%)	3174 (46.0%)
	Not cooking	55 (64.7%)	3657 (53.0%)
Secunderabad ^b	No separate kitchen	0	75 (3.8%)
	Separate kitchen	9 (27.3%)	854 (42.9%)
	Not cooking	24 (72.7%)	1061 (53.3%)
Shimla ^a	No separate kitchen	7 (5.6%)	145 (2.0%)
	Separate kitchen	52 (41.9%)	3781 (53.3%)
	Not cooking	65 (52.4%)	3169 (44.7%)
Trivandrum ^a	No separate kitchen	399 (43.9%)	4064 (49.7%)
	Separate kitchen	23 (2.5%)	190 (2.3%)
	Not cooking	487 (53.6%)	3921 (48.0%)
Total ^a	No separate kitchen	546 (18.1%)	8934 (10.7%)
	Separate kitchen	636 (21.1%)	32889 (39.4%)
	Not cooking	1834 (60.8%)	41639 (49.9%)

^a p <0.05

Table 84. Logistic regression for chronic bronchitis and separate kitchen in house

Centre	Kitchen	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Not cooking				1.000		
	Not separate	-.363	.141	.010	.696	.527	.918
	Separate	-1.265	.133	.000	.282	.218	.366
Berhampur	Not cooking				1.000		
	Not separate	-17.341	4522.03	.997	.000	.000	.
	Separate	-.134	.163	.411	.874	.635	1.205
Bikaner	Not cooking				1.000		
	Not separate	-.829	.194	.000	.437	.299	.638
	Separate	-.722	.122	.000	.486	.383	.616
Chennai	Not cooking				1.000		
	Not separate	-.287	.220	.192	.751	.488	1.155
	Separate	-.527	.153	.001	.591	.438	.796
Guwahati	Not cooking				1.000		
	Not separate	1.738	.486	.000	5.687	2.195	14.738
	Separate	.040	.169	.812	1.041	.747	1.451
Kolkata	Not cooking				1.000		
	Not separate	.407	.469	.386	1.502	.599	3.767
	Separate	-.433	.137	.002	.649	.496	.848
Mumbai	Not cooking				1.000		
	Not separate	-1.106	.468	.018	.331	.132	.829
	Separate	-.473	.254	.062	.623	.379	1.025
Mysore	Not cooking				1.000		
	Not separate	-.735	.512	.151	.480	.176	1.307
	Separate	-1.064	.190	.000	.345	.238	.501
Nagpur	Not cooking				1.000		
	Not separate	-17.006	4947.53	.997	.000	.000	.
	Separate	-.464	.228	.042	.628	.402	.983
Secunderabad	Not cooking				1.000		
	Not separate	-17.414	4641.10	.997	.000	.000	.
	Separate	-.764	.394	.052	.466	.215	1.008
Shimla	Not cooking				1.000		
	Not separate	.856	.407	.035	2.354	1.060	5.224
	Separate	-.400	.188	.033	.671	.464	.968
Trivandrum	Not cooking				1.000		
	Not separate	-.235	.071	.001	.790	.688	.909
	Separate	-.026	.226	.909	.975	.626	1.518
Total	Not cooking				1.000		
	Not separate	.328	.050	.000	1.388	1.258	1.531
	Separate	-.823	.047	.000	.439	.401	.481

Table 85. Chronic bronchitis (CB) diagnosis and kitchen ventilation

Centre	Kitchen ventilation	All respondents with CB	All respondents without CB
Ahmedabad ^a	None / Poor	74 (16.0%)	1539 (16.9%)
	Good	60 (13.0%)	3112 (34.2%)
	Not cooking	328 (71.0%)	4459 (48.9%)
Berhampur	None / Poor	1 (0.6%)	30 (0.4%)
	Good	67 (43.2%)	3748 (47.3%)
	Not cooking	87 (56.1%)	4138 (52.3%)
Bikaner ^a	None / Poor	38 (9.6%)	965 (14.8%)
	Good	90 (22.8%)	2314 (35.5%)
	Not cooking	267 (67.6%)	3234 (49.7%)
Chennai ^a	None / Poor	17 (8.3%)	888 (11.9%)
	Good	89 (43.2%)	3817 (51.0%)
	Not cooking	100 (48.5%)	2772 (37.1%)
Guwahati ^a	None / Poor	4 (2.7%)	38 (0.5%)
	Good	65 (43.6%)	3012 (43.3%)
	Not cooking	80 (53.7%)	3913 (56.2%)
Kolkata ^a	None / Poor	5 (2.0%)	72 (1.1%)
	Good	85 (34.0%)	2874 (44.5%)
	Not cooking	160 (64.0%)	3508 (54.4%)
Mumbai ^a	None / Poor	6 (7.3%)	1052 (14.6%)
	Good	21 (25.6%)	2393 (33.2%)
	Not cooking	55 (67.1%)	3759 (52.2%)
Mysore ^a	None / Poor	11 (6.6%)	1103 (14.4%)
	Good	29 (17.5%)	2517 (32.8%)
	Not cooking	126 (75.9%)	4048 (52.8%)
Nagpur	None / Poor	0	37 (0.5%)
	Good	30 (35.3%)	3203 (46.4%)
	Not cooking	55 (64.7%)	3657 (53.0%)
Secunderabad ^a	None / Poor	3 (9.1%)	80 (4.0%)
	Good	6 (18.2%)	849 (42.7%)
	Not cooking	24 (72.7%)	1061 (53.3%)
Shimla ^a	None / Poor	12 (9.7%)	259 (3.7%)
	Good	47 (37.9%)	3667 (51.7%)
	Not cooking	65 (52.4%)	3169 (44.7%)
Trivandrum ^a	None / Poor	37 (4.1%)	209 (2.6%)
	Good	385 (42.4%)	4045 (49.5%)
	Not cooking	487 (53.6%)	3921 (48.0%)
Total ^a	None / Poor	208 (6.9%)	6272 (7.5%)
	Good	974 (32.3%)	35551 (42.6%)
	Not cooking	1834 (60.8%)	41639 (49.9%)

^a p <0.05

Table 86. Logistic regression for chronic bronchitis and kitchen ventilation

Centre	Ventilation	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Not cooking				1.000		
	None / Poor	-.425	.132	.001	.654	.505	.847
	Good	-1.339	.142	.000	.262	.198	.346
Berhampur	Not cooking				1.000		
	None / Poor	.461	1.022	.652	1.585	.214	11.758
	Good	-.162	.164	.323	.850	.616	1.173
Bikaner	Not cooking				1.000		
	None / Poor	-.740	.177	.000	.477	.337	.675
	Good	-.753	.125	.000	.471	.369	.602
Chennai	Not cooking				1.000		
	None / Poor	-.634	.265	.017	.531	.316	.892
	Good	-.436	.148	.003	.646	.484	.864
Guwahati	Not cooking				1.000		
	None / Poor	1.639	.538	.002	5.149	1.795	14.769
	Good	.054	.169	.749	1.056	.758	1.469
Kolkata	Not cooking				1.000		
	None / Poor	.420	.469	.371	1.523	.607	3.821
	Good	-.433	.137	.002	.648	.496	.847
Mumbai	Not cooking				1.000		
	None / Poor	-.942	.431	.029	.390	.167	.908
	Good	-.511	.258	.047	.600	.362	.994
Mysore	Not cooking				1.000		
	None / Poor	-1.138	.316	.000	.320	.172	.595
	Good	-.994	.208	.000	.370	.246	.556
Nagpur	Not cooking				1.000		
	None / Poor	-17.006	6607.75	.997	.998	.000	.000
	Good	-.474	.228	.341	.038	.623	.398
Secunderabad	Not cooking				1.000		
	None / Poor	.505	.623	.417	1.658	.489	5.624
	Good	-1.163	.459	.011	.312	.127	.768
Shimla	Not cooking				1.000		
	None / Poor	.815	.321	.011	2.259	1.205	4.236
	Good	-.470	.193	.015	.625	.428	.912
Trivandrum	Not cooking				1.000		
	None / Poor	.354	.185	.055	1.425	.992	2.047
	Good	-.266	.072	.000	.766	.666	.882
Total	Not cooking				1.000		
	None / Poor	-.284	.074	.000	.753	.651	.871
	Good	-.475	.040	.000	.622	.575	.673

Table 87. Chronic bronchitis (CB) diagnosis and average cooking days per month

Centre	Average cooking days per month	All respondents with CB	All respondents without CB
Ahmedabad ^a	Not cooking	328 (71.0%)	4459 (48.9%)
	1-7 days	33 (7.1%)	385 (4.2%)
	8-14 days	12 (2.6%)	165 (1.8%)
	15-21 days	6 (1.3%)	134 (1.5%)
	>21 days	83 (18.0%)	3967 (43.5%)
Berhampur	Not cooking	87 (56.1%)	4138 (52.3%)
	1-7 days	0	0
	8-14 days	0	10 (0.1%)
	15-21 days	4 (2.6%)	57 (0.7%)
	>21 days	64 (41.3%)	3711 (46.9%)
Bikaner ^b	Not cooking	267 (67.6%)	3234 (49.7%)
	1-7 days	3 (0.8%)	13 (0.2%)
	8-14 days	1 (0.3%)	22 (0.3%)
	15-21 days	1 (0.3%)	4 (0.1%)
	>21 days	123 (31.1%)	3240 (49.7%)
Chennai ^a	Not cooking	100 (48.5%)	2772 (37.1%)
	1-7 days	5 (2.4%)	151 (2.0%)
	8-14 days	3 (1.5%)	90 (1.2%)
	15-21 days	1 (0.5%)	41 (0.5%)
	>21 days	97 (47.1%)	4423 (59.2%)
Guwahati	Not cooking	80 (53.7%)	3913 (56.2%)
	1-7 days	24 (16.1%)	469 (6.7%)
	8-14 days	2 (1.3%)	8 (0.1%)
	15-21 days	0	4 (0.1%)
	>21 days	43 (28.9%)	2569 (36.9%)
Kolkata	Not cooking	160 (64.0%)	3508 (54.4%)
	1-7 days	3 (1.2%)	4 (0.1%)
	8-14 days	0	13 (0.2%)
	15-21 days	0	6 (0.1%)
	>21 days	87 (34.8%)	2923 (45.3%)
Mumbai	Not cooking	55 (67.1%)	3759 (52.2%)
	1-7 days	0	4 (0.1%)

	8-14 days	0	72 (1.0%)
	15-21 days	2 (2.4%)	48 (0.7%)
	>21 days	25 (30.5%)	3321 (46.1%)
Mysore	Not cooking	126 (75.9%)	4048 (52.8%)
	1-7 days	0	7 (0.1%)
	8-14 days	0	11 (0.1%)
	15-21 days	0	2 (0.0%)
	>21 days	40 (24.1%)	3600 (46.9%)
Nagpur	Not cooking	55 (64.7%)	3657 (53.0%)
	1-7 days	15 (17.6%)	1140 (16.5%)
	8-14 days	0	54 (0.8%)
	15-21 days	0	19 (0.3%)
	>21 days	15 (17.6%)	2027 (29.4%)
Secunderabad	Not cooking	24 (72.7%)	1061 (53.3%)
	1-7 days	0	45 (2.3%)
	8-14 days	0	6 (0.3%)
	15-21 days	1 (3.0%)	4 (0.2%)
	>21 days	8 (24.2%)	874 (43.9%)
Shimla	Not cooking	65 (52.4%)	3169 (44.7%)
	1-7 days	2 (1.6%)	166 (2.3%)
	8-14 days	3 (2.4%)	306 (4.3%)
	15-21 days	0	119 (1.7%)
	>21 days	54 (43.5%)	3335 (47.0%)
Trivandrum	Not cooking	487 (53.6%)	3921 (48.0%)
	1-7 days	1 (0.1%)	13 (0.2%)
	8-14 days	0	5 (0.1%)
	15-21 days	0	0
	>21 days	421 (46.3%)	4236 (51.8%)
Total ^a	Not cooking	1834 (60.8%)	41639 (49.9%)
	1-7 days	86 (2.9%)	2397 (2.9%)
	8-14 days	21 (0.7%)	762 (0.9%)
	15-21 days	15 (0.5%)	438 (0.5%)
	>21 days	1060 (35.1%)	38226 (45.8%)

^a p < 0.05

Table 88. Logistic regression for chronic bronchitis and average cooking days per month

Centre	Days per month	B	SE(B)	Sig	OR	95% CI	
						Lower	Upper
Ahmedabad	Not cooking				1.000		
	1-7 days	.153	.190	.421	1.165	.803	1.692
	8-14 days	-.011	.304	.970	.989	.544	1.795
	15-21 days	-.496	.421	.239	.609	.267	1.390
	>21 days	-1.257	.125	.000	.284	.223	.363
Berhampur	Not cooking				1.000		
	1-7 days	-	-	-	-	-	-
	8-14 days	-17.341	12710.1	.999	.000	.000	.
	15-21 days	1.205	.528	.023	3.338	1.185	9.404
	>21 days	-.198	.166	.233	.820	.592	1.136
Bikaner	Not cooking				1.000		
	1-7 days	1.028	.644	.110	2.795	.792	9.870
	8-14 days	-.597	1.024	.560	.551	.074	4.100
	15-21 days	1.108	1.120	.322	3.028	.337	27.188
	>21 days	-.777	.112	.000	.460	.369	.572
Chennai	Not cooking				1.000		
	1-7 days	-.086	.466	.854	.918	.368	2.287
	8-14 days	-.079	.596	.894	.924	.288	2.970
	15-21 days	-.391	1.017	.700	.676	.092	4.964
	>21 days	-.498	.145	.001	.608	.458	.807
Guwahati	Not cooking				1.000		
	1-7 days	.917	.238	.000	2.503	1.570	3.989
	8-14 days	2.504	.799	.002	12.228	2.556	58.496
	15-21 days	-17.313	20100.0	.999	.000	.000	.
	>21 days	-.200	.191	.294	.819	.563	1.190
Kolkata	Not cooking				1.000		
	1-7 days	2.800	.768	.000	16.444	3.650	74.088
	8-14 days	-18.115	11145.5	.999	.000	.000	.
	15-21 days	-18.115	16402.2	.999	.000	.000	.
	>21 days	-.427	.136	.002	.653	.500	.851
Mumbai	Not cooking				1.000		
	1-7 days	-16.978	20096.5	.999	.000	.000	.

	8-14 days	-16.978	4736.79	.997	.000	.000	.
	15-21 days	1.047	.734	.154	2.848	.675	12.011
	>21 days	-.665	.242	.006	.514	.320	.827
Mysore	Not cooking				1.000		
	1-7 days	-17.734	15202.1	.999	.000	.000	.
	8-14 days	-17.734	12124.0	.999	.000	.000	.
	15-21 days	-17.736	28490.6	1.000	.000	.000	.
	>21 days	-1.030	.183	.000	.357	.249	.511
Nagpur	Not cooking				1.000		
	1-7 days	-.134	.293	.649	.875	.492	1.554
	8-14 days	-17.006	5469.45	.998	.000	.000	.
	15-21 days	-17.006	9220.33	.999	.000	.000	.
	>21 days	-.709	.293	.015	.492	.277	.873
Secunderabad	Not cooking				1.000		
	1-7 days	-17.414	5991.62	.998	.000	.000	.
	8-14 days	-17.414	16408.8	.999	.000	.000	.
	15-21 days	2.403	1.137	.035	11.052	1.190	102.613
	>21 days	-.905	.411	.028	.405	.181	.905
Shimla	Not cooking				1.000		
	1-7 days	-.532	.722	.461	.587	.143	2.420
	8-14 days	-.738	.594	.214	.478	.149	1.530
	15-21 days	-17.316	3684.45	.996	.000	.000	.
	>21 days	-.236	.186	.203	.789	.548	1.136
Trivandrum	Not cooking				1.000		
	1-7 days	-.479	1.039	.645	.619	.081	4.745
	8-14 days	-19.117	17974.9	.999	.000	.000	.
	15-21 days	-	-	-	-	-	-
	>21 days	-.223	.070	.001	.800	.697	.918
Total	Not cooking				1.000		
	1-7 days	-.205	.112	.068	.815	.654	1.015
	8-14 days	-.469	.222	.035	.626	.405	.968
	15-21 days	-.252	.264	.340	.778	.464	1.304
	>21 days	-.463	.039	.000	.630	.583	.680

Table 89. Multiple logistic regression model for chronic bronchitis

Ahmedabad

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	-.445	.163	.006	.641	.465	.882
	Mixed	-.449	.327	.170	.638	.336	1.212
Gender:	Male				1.000		
	Female	-.425	.402	.290	.654	.298	1.437
Age category:	35-44 years				1.000		
	45-54 years	.807	.155	.000	2.241	1.653	3.037
	55-64 years	1.196	.158	.000	3.308	2.425	4.513
	65-74 years	1.925	.160	.000	6.854	5.014	9.371
	75-84 years	2.191	.229	.000	8.947	5.710	14.018
	>=85 years	2.336	.430	.000	10.342	4.451	24.027
Social status:	Low				1.000		
	Medium	-.662	.104	.000	.516	.421	.632
	High	-1.246	1.021	.222	.288	.039	2.127
Smoking:	Never smoker				1.000		
	Cigarette	.477	1.049	.649	1.612	.206	12.593
	Bidi	.883	.151	.000	2.419	1.798	3.254
	Hookah	1.184	.650	.068	3.266	.914	11.669
	Others	1.164	.178	.000	3.204	2.261	4.540
ETS exposure:	None				1.000		
	Childhood	.250	.129	.052	1.284	.998	1.652
	Adulthood	.312	.179	.082	1.367	.962	1.942
	Both	-.146	.244	.549	.864	.536	1.393
Cooking fuel:	Not cooking				1.000		
	Electricity	-17.666	11793.86	.999	.000	.000	.
	LPG	-.351	.441	.426	.704	.297	1.670
	Kerosene	-.198	.631	.753	.820	.238	2.824
	Coal	-16.373	28232.78	1.000	.000	.000	.
	Wood	.037	.406	.928	1.037	.468	2.299
	Dung cake	-	-	-	-	-	-
	Crop residue	-	-	-	-	-	-
	Others	-18.025	27167.61	.999	.000	.000	.
Constant	-10.072	5844.631	.999	.000			

Berhampur

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	-.082	.240	.734	.922	.575	1.476
	Mixed	-	-	-	-	-	-
Gender:	Male				1.000		
	Female	-1.088	.731	.137	.337	.080	1.411
Age category:	35-44 years				1.000		
	45-54 years	.668	.239	.005	1.950	1.220	3.118
	55-64 years	.679	.255	.008	1.972	1.196	3.253
	65-74 years	1.237	.257	.000	3.444	2.080	5.702
	75-84 years	1.107	.406	.006	3.027	1.365	6.709
	>=85 years	2.127	.505	.000	8.392	3.121	22.568
Social status:	Low				1.000		
	Medium	-.361	.203	.075	.697	.468	1.038
	High	.808	.764	.290	2.244	.502	10.032
Smoking:	Never smoker				1.000		
	Cigarette	.723	.335	.031	2.060	1.068	3.974
	Bidi	.874	.340	.010	2.396	1.232	4.662
	Hookah	-17.543	7365.495	.998	.000	.000	.
	Others	3.797	1.050	.000	44.573	5.694	348.896
ETS exposure:	None				1.000		
	Childhood	-16.725	5264.851	.997	.000	.000	.
	Adulthood	.203	.416	.626	1.225	.542	2.767
	Both	-	-	-	-	-	-
Cooking fuel:	Not cooking				1.000		
	Electricity	-15.995	13058.27	.999	.000	.000	.
	LPG	1.386	.751	.065	4.001	.917	17.444
	Kerosene	-16.059	6326.011	.998	.000	.000	.
	Coal	3.320	1.297	.010	27.656	2.177	351.251
	Wood	.857	.744	.249	2.357	.549	10.125
	Dung cake	1.404	1.038	.176	4.071	.532	31.153
	Crop residue	-15.996	19969.08	.999	.000	.000	.
	Others	-	-	-	-	-	-
Constant	-17.034	3843.214	.996	.000			

Bikaner

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	-.376	.152	.013	.686	.510	.924
	Mixed	-17.950	3921.408	.996	.000	.000	.
Gender:	Male				1.000		
	Female	-.901	.418	.031	.406	.179	.921
Age category:	35-44 years				1.000		
	45-54 years	1.061	.180	.000	2.891	2.033	4.111
	55-64 years	1.443	.186	.000	4.235	2.942	6.097
	65-74 years	2.032	.191	.000	7.633	5.253	11.091
	75-84 years	2.314	.236	.000	10.114	6.371	16.055
	>=85 years	2.786	.405	.000	16.212	7.335	35.829
Social status:	Low				1.000		
	Medium	-.232	.132	.079	.793	.612	1.027
	High	-1.011	.743	.174	.364	.085	1.562
Smoking:	Never smoker				1.000		
	Cigarette	1.084	.462	.019	2.957	1.195	7.320
	Bidi	1.818	.170	.000	6.158	4.416	8.585
	Hookah	2.116	1.265	.094	8.297	.696	98.966
	Others	1.901	.351	.000	6.695	3.365	13.319
ETS exposure:	None				1.000		
	Childhood	.419	.135	.002	1.520	1.167	1.980
	Adulthood	-.060	.203	.766	.941	.632	1.402
	Both	.660	.198	.001	1.935	1.312	2.853
Cooking fuel:	Not cooking				1.000		
	Electricity	-17.259	23092.15	.999	.000	.000	.
	LPG	.949	.475	.046	2.582	1.019	6.547
	Kerosene	.494	1.121	.660	1.638	.182	14.752
	Coal	-16.243	13932.60	.999	.000	.000	.
	Wood	1.068	.434	.014	2.909	1.243	6.806
	Dung cake	1.399	.437	.001	4.053	1.723	9.536
	Crop residue	-	-	-	-	-	-
	Others	-15.424	40192.91	1.000	.000	.000	.
Constant							

Chennai

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	.470	.157	.003	1.600	1.176	2.176
	Mixed	.978	.399	.014	2.659	1.215	5.817
Gender:	Male				1.000		
	Female	.387	.393	.324	1.473	.682	3.183
Age category:	35-44 years				1.000		
	45-54 years	.452	.212	.033	1.572	1.037	2.382
	55-64 years	.832	.215	.000	2.297	1.507	3.502
	65-74 years	1.127	.231	.000	3.086	1.964	4.850
	75-84 years	1.197	.319	.000	3.311	1.770	6.192
	>=85 years	1.256	.570	.027	3.513	1.150	10.727
Social status:	Low				1.000		
	Medium	-.837	.179	.000	.433	.305	.616
	High	-.752	.385	.051	.471	.222	1.002
Smoking:	Never smoker				1.000		
	Cigarette	.942	.320	.003	2.564	1.370	4.800
	Bidi	1.781	.255	.000	5.935	3.604	9.775
	Hookah						
	Others	.961	1.102	.383	2.615	.302	22.656
ETS exposure:	None				1.000		
	Childhood	.064	.202	.751	1.066	.718	1.585
	Adulthood	.010	.225	.964	1.010	.651	1.569
	Both	.319	.199	.109	1.376	.932	2.032
Cooking fuel:	Not cooking				1.000		
	Electricity	-17.777	12693.79	.999	.000	.000	.
	LPG	.164	.390	.674	1.179	.548	2.533
	Kerosene	-.596	.581	.305	.551	.176	1.722
	Coal	-17.692	28113.78	.999	.000	.000	.
	Wood	-.029	.419	.945	.971	.428	2.207
	Dung cake	-	-	-	-	-	-
	Crop residue	-18.296	17491.45	.999	.000	.000	.
	Others	-	-	-	-	-	-
Constant	-10.187	5066.035	.998	.000			

Guwahati

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	-.735	.333	.027	.480	.250	.921
	Mixed	-	-	-	-	-	-
Gender:	Male				1.000		
	Female	-.699	.474	.140	.497	.196	1.259
Age category:	35-44 years				1.000		
	45-54 years	.336	.270	.214	1.399	.824	2.376
	55-64 years	.867	.278	.002	2.380	1.381	4.104
	65-74 years	1.993	.268	.000	7.338	4.344	12.396
	75-84 years	1.274	.473	.007	3.576	1.414	9.039
	>=85 years	.471	1.093	.666	1.602	.188	13.646
Social status:	Low				1.000		
	Medium	-.695	.202	.001	.499	.336	.741
	High	.038	1.058	.971	1.039	.131	8.270
Smoking:	Never smoker				1.000		
	Cigarette	.410	.451	.364	1.506	.622	3.648
	Bidi	1.532	.225	.000	4.626	2.979	7.183
	Hookah	3.282	.799	.000	26.634	5.566	127.450
	Others	-17.856	14719.91	.999	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	.330	.283	.243	1.392	.799	2.423
	Adulthood	.662	.278	.017	1.938	1.125	3.340
	Both	-17.158	5310.681	.997	.000	.000	.
Cooking fuel:	Not cooking				1.000		
	Electricity	3.710	1.006	.000	40.866	5.691	293.432
	LPG	.581	.575	.313	1.787	.579	5.519
	Kerosene	-17.362	13317.31	.999	.000	.000	.
	Coal	-16.699	16891.45	.999	.000	.000	.
	Wood	1.055	.482	.028	2.873	1.118	7.383
	Dung cake	-15.792	40192.97	1.000	.000	.000	.
	Crop residue	-	-	-	-	-	-
	Others	-14.595	40192.97	1.000	.000	.000	.
Constant							

Kolkata

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	1.184	.208	.000	3.267	2.174	4.911
	Mixed	.545	.321	.090	1.725	.919	3.238
Gender:	Male				1.000		
	Female	-.344	.373	.355	.709	.341	1.471
Age category:	35-44 years				1.000		
	45-54 years	.740	.211	.000	2.096	1.385	3.172
	55-64 years	1.116	.214	.000	3.054	2.008	4.644
	65-74 years	1.744	.219	.000	5.723	3.726	8.789
	75-84 years	2.057	.269	.000	7.826	4.615	13.271
	>=85 years	1.049	.758	.166	2.856	.646	12.615
Social status:	Low				1.000		
	Medium	-.142	.189	.451	.867	.599	1.256
	High	-.816	.250	.001	.442	.271	.722
Smoking:	Never smoker				1.000		
	Cigarette	.669	.218	.002	1.952	1.274	2.991
	Bidi	.783	.214	.000	2.188	1.438	3.328
	Hookah	2.379	1.267	.061	10.790	.900	129.350
	Others	-18.171	17660.80	.999	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	.466	.232	.045	1.593	1.011	2.509
	Adulthood	.011	.237	.963	1.011	.635	1.610
	Both	.735	.346	.034	2.086	1.058	4.113
Cooking fuel:	Not cooking				1.000		
	Electricity	-17.175	27837.84	1.000	.000	.000	.
	LPG	.417	.380	.273	1.517	.720	3.198
	Kerosene	.364	.696	.601	1.440	.368	5.631
	Coal	1.005	.613	.101	2.732	.821	9.087
	Wood	-.115	.439	.793	.891	.377	2.106
	Dung cake	-17.248	15923.78	.999	.000	.000	.
	Crop residue	-	-	-	-	-	-
	Others	-16.070	40192.95	1.000	.000	.000	.
Constant							

Mumbai

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	-.497	.437	.255	.608	.258	1.431
	Mixed	-15.209	4149.795	.997	.000	.000	.
Gender:	Male				1.000		
	Female	-.773	.524	.140	.462	.165	1.289
Age category:	35-44 years				1.000		
	45-54 years	.534	.321	.096	1.706	.909	3.204
	55-64 years	.284	.361	.431	1.329	.655	2.698
	65-74 years	.575	.380	.131	1.777	.843	3.747
	75-84 years	1.159	.475	.015	3.186	1.256	8.079
	>=85 years	1.748	.658	.008	5.742	1.581	20.860
Social status:	Low				1.000		
	Medium	.246	.424	.563	1.278	.557	2.936
	High	-16.262	8168.040	.998	.000	.000	.
Smoking:	Never smoker				1.000		
	Cigarette	1.049	.541	.053	2.854	.988	8.244
	Bidi	1.542	.321	.000	4.674	2.493	8.762
	Hookah	-16.568	40193.02	1.000	.000	.000	.
	Others	-	-	-	-	-	-
ETS exposure:	None				1.000		
	Childhood	.341	.741	.645	1.407	.329	6.012
	Adulthood	-.190	.544	.727	.827	.285	2.401
	Both	-	-	-	-	-	-
Cooking fuel:	Not cooking				1.000		
	Electricity	-15.869	10329.80	.999	.000	.000	.
	LPG	.801	.567	.158	2.229	.733	6.776
	Kerosene	-15.435	3876.578	.997	.000	.000	.
	Coal	-14.375	6432.140	.998	.000	.000	.
	Wood	.231	.613	.706	1.260	.379	4.189
	Dung cake	-16.096	23044.67	.999	.000	.000	.
	Crop residue	.672	41014.55	1.000	1.959	.000	.
	Others	-	-	-	-	-	-
Constant							

Mysore

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	-.593	.244	.015	.553	.343	.892
	Mixed	-.719	1.033	.486	.487	.064	3.689
Gender:	Male				1.000		
	Female	-.943	.526	.073	.389	.139	1.090
Age category:	35-44 years				1.000		
	45-54 years	.860	.265	.001	2.363	1.406	3.972
	55-64 years	1.145	.281	.000	3.141	1.810	5.451
	65-74 years	1.901	.265	.000	6.691	3.983	11.240
	75-84 years	2.442	.312	.000	11.500	6.241	21.192
	>=85 years	2.446	.578	.000	11.538	3.716	35.829
Social status:	Low				1.000		
	Medium	-.373	.187	.045	.689	.478	.992
	High	-.895	.321	.005	.409	.218	.766
Smoking:	Never smoker				1.000		
	Cigarette	1.115	.435	.010	3.050	1.299	7.161
	Bidi	1.265	.220	.000	3.544	2.300	5.460
	Hookah	-	-	-	-	-	-
	Others	25.477	40193.00	.999	1.16X10 ¹¹	.000	.
ETS exposure:	None				1.000		
	Childhood	.640	.265	.016	1.896	1.128	3.188
	Adulthood	.390	.237	.100	1.477	.928	2.351
	Both	1.174	.633	.063	3.236	.936	11.181
Cooking fuel:	Not cooking				1.000		
	Electricity	-15.647	16975.93	.999	.000	.000	.
	LPG	.620	.564	.272	1.860	.615	5.619
	Kerosene	1.075	.770	.163	2.930	.648	13.260
	Coal	-15.125	40190.85	1.000	.000	.000	.
	Wood	.269	.546	.623	1.308	.448	3.817
	Dung cake	-16.741	17629.31	.999	.000	.000	.
	Crop residue	-	-	-	-	-	-
	Others	-	-	-	-	-	-
Constant							

Nagpur

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	-.359	.363	.323	.699	.343	1.423
	Mixed	-	-	-	-	-	-
Gender:	Male				1.000		
	Female	-.225	.110	.041	.798	.643	.991
Age category:	35-44 years				1.000		
	45-54 years	.684	.357	.056	1.981	.983	3.991
	55-64 years	1.025	.357	.004	2.787	1.383	5.614
	65-74 years	1.750	.342	.000	5.754	2.943	11.252
	75-84 years	1.548	.531	.004	4.703	1.660	13.326
	>=85 years	2.446	.661	.000	11.542	3.157	42.200
Social status:	Low				1.000		
	Medium	-.563	.288	.050	.569	.324	1.001
	High	1.880	1.135	.098	6.553	.709	60.614
Smoking:	Never smoker				1.000		
	Cigarette	.380	1.032	.712	1.463	.194	11.049
	Bidi	.805	.307	.009	2.236	1.225	4.081
	Hookah	-17.841	16352.53	.999	.000	.000	.
	Others	-16.715	15743.32	.999	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	1.433	.633	.024	4.191	1.212	14.494
	Adulthood	.490	.487	.315	1.632	.628	4.243
	Both	-15.198	8975.461	.999	.000	.000	.
Cooking fuel:	Not cooking				1.000		
	Electricity	-	-	-	-	-	-
	LPG	-.498	1.667	.765	.608	.023	15.942
	Kerosene	-16.790	4996.666	.997	.000	.000	.
	Coal	-16.843	28254.80	1.000	.000	.000	.
	Wood	-.598	1.638	.715	.550	.022	13.627
	Dung cake	-16.738	23057.68	.999	.000	.000	.
	Crop residue	-16.110	40217.64	1.000	.000	.000	.
	Others	-	-	-	-	-	-
Constant							

Secunderabad

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	-3.056	1.174	.009	.047	.005	.470
	Mixed	-19.302	21035.53	.999	.000	.000	.
Gender:	Male				1.000		
	Female	-2.378	1.053	.024	.093	.012	.730
Age category:	35-44 years				1.000		
	45-54 years	1.375	.573	.016	3.954	1.286	12.159
	55-64 years	1.129	.664	.089	3.092	.842	11.357
	65-74 years	2.945	.613	.000	19.007	5.712	63.240
	75-84 years	1.486	1.217	.222	4.420	.407	47.970
	>=85 years	-14.941	12848.43	.999	.000	.000	.
Social status:	Low				1.000		
	Medium	-.967	.396	.014	.380	.175	.825
	High	-.784	.822	.340	.456	.091	2.284
Smoking:	Never smoker				1.000		
	Cigarette	1.855	.504	.000	6.390	2.380	17.157
	Bidi	3.593	.640	.000	36.334	10.361	127.411
	Hookah	-	-	-	-	-	-
	Others	-	-	-	-	-	-
ETS exposure:	None				1.000		
	Childhood	2.574	.951	.007	13.113	2.032	84.609
	Adulthood	.912	.793	.251	2.488	.525	11.785
	Both	-15.507	22628.38	.999	.000	.000	.
Cooking fuel:	Not cooking				1.000		
	Electricity	-15.698	7508.186	.998	.000	.000	.
	LPG	2.363	1.039	.023	10.626	1.386	81.443
	Kerosene	-16.114	3459.102	.996	.000	.000	.
	Coal	-13.929	19223.94	.999	.000	.000	.
	Wood	-15.480	14766.24	.999	.000	.000	.
	Dung cake	-13.628	40192.63	1.000	.000	.000	.
	Crop residue	-13.628	40192.63	1.000	.000	.000	.
	Others	-13.466	40192.63	1.000	.000	.000	.
Constant							

Shimla

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	.321	.236	.174	1.379	.868	2.190
	Mixed	.668	.454	.142	1.950	.800	4.752
Gender:	Male				1.000		
	Female	.284	.275	.302	1.328	.775	2.274
Age category:	35-44 years				1.000		
	45-54 years	.453	.288	.115	1.574	.896	2.765
	55-64 years	1.252	.288	.000	3.496	1.989	6.144
	65-74 years	1.547	.311	.000	4.699	2.556	8.638
	75-84 years	1.820	.372	.000	6.174	2.976	12.809
	>=85 years	2.063	.536	.000	7.870	2.755	22.479
Social status:	Low				1.000		
	Medium	-.374	.230	.104	.688	.438	1.080
	High	-.302	.285	.289	.739	.423	1.293
Smoking:	Never smoker				1.000		
	Cigarette	1.379	.315	.000	3.971	2.143	7.355
	Bidi	1.528	.236	.000	4.608	2.901	7.319
	Hookah	2.428	1.167	.037	11.334	1.151	111.564
	Others	-17.660	28341.48	1.000	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	-.700	1.020	.493	.497	.067	3.669
	Adulthood	1.190	.286	.000	3.286	1.876	5.755
	Both	-16.298	19676.46	.999	.000	.000	.
Cooking fuel:	Not cooking				1.000		
	Electricity	.018	.828	.983	1.018	.201	5.162
	LPG	-.194	.282	.491	.823	.474	1.432
	Kerosene	-1.546	1.040	.137	.213	.028	1.637
	Coal	-18.142	5160.203	.997	.000	.000	.
	Wood	-.904	.310	.004	.405	.220	.744
	Dung cake	-	-	-	-	-	-
	Crop residue	-16.709	27944.43	1.000	.000	.000	.
	Others	-17.938	28298.91	.999	.000	.000	.
Constant							

Trivandrum

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Usual residence:	Rural				1.000		
	Urban	.019	.152	.901	1.019	.757	1.372
	Mixed	-.610	1.072	.569	.543	.066	4.443
Gender:	Male				1.000		
	Female	-.271	.229	.237	.763	.487	1.195
Age category:	35-44 years				1.000		
	45-54 years	.406	.106	.000	1.501	1.218	1.849
	55-64 years	.980	.107	.000	2.664	2.162	3.283
	65-74 years	1.254	.120	.000	3.506	2.773	4.432
	75-84 years	1.649	.160	.000	5.203	3.805	7.116
	>=85 years	1.965	.299	.000	7.134	3.968	12.827
Social status:	Low				1.000		
	Medium	-1.093	.115	.000	.335	.268	.420
	High	-1.270	.595	.033	.281	.087	.902
Smoking:	Never smoker				1.000		
	Cigarette	.627	.128	.000	1.872	1.458	2.403
	Bidi	.859	.117	.000	2.362	1.878	2.969
	Hookah	1.339	.408	.001	3.817	1.716	8.489
	Others	-19.450	28091.50	.999	.000	.000	.
ETS exposure:	None				1.000		
	Childhood	.456	.103	.000	1.577	1.289	1.930
	Adulthood	.519	.131	.000	1.681	1.300	2.174
	Both	.903	.157	.000	2.466	1.813	3.355
Cooking fuel:	Not cooking				1.000		
	Electricity	-18.865	7485.517	.998	.000	.000	.
	LPG	-.179	.260	.493	.836	.502	1.393
	Kerosene	-.233	.766	.761	.792	.176	3.558
	Coal	1.016	1.159	.381	2.761	.285	26.763
	Wood	.312	.228	.171	1.367	.874	2.138
	Dung cake	-	-	-	-	-	-
	Crop residue	-18.547	27933.83	.999	.000	.000	.
	Others	-18.683	40192.90	1.000	.000	.000	.
Constant							

Total

		B	SE(B)	Sig	OR	95% CI	
						Lower	Urban
Centre:	Ahmedabad				1.000		
	Berhampur	-.583	.103	.000	.558	.457	.683
	Bikaner	.081	.079	.305	1.085	.928	1.267
	Chennai	-.421	.092	.000	.657	.548	.786
	Guwahati	-.433	.102	.000	.649	.532	.792
	Kolkata	-.251	.088	.004	.778	.655	.924
	Mumbai	-1.225	.126	.000	.294	.229	.377
	Mysore	-.581	.098	.000	.559	.462	.678
	Nagpur	-1.105	.125	.000	.331	.259	.423
	Secunderabad	-.500	.190	.008	.606	.418	.880
	Shimla	-.819	.113	.000	.441	.353	.550
	Trivandrum	.734	.079	.000	2.083	1.783	2.434
Usual residence:	Rural				1.000		
	Urban	.132	.055	.017	1.141	1.024	1.272
	Mixed	-.007	.169	.969	.993	.713	1.384
Gender:	Male				1.000		
	Female	-.221	.110	.045	.802	.646	.995
Age category:	35-44 years				1.000		
	45-54 years	.630	.059	.000	1.878	1.673	2.108
	55-64 years	1.034	.060	.000	2.813	2.501	3.164
	65-74 years	1.594	.062	.000	4.923	4.360	5.559
	75-84 years	1.821	.083	.000	6.181	5.255	7.270
	>=85 years	2.013	.147	.000	7.485	5.615	9.978
Social status:	Low				1.000		
	Medium	-.592	.047	.000	.553	.504	.607
	High	-.498	.116	.000	.608	.484	.762
Smoking:	Never smoker				1.000		
	Cigarette	.856	.081	.000	2.353	2.009	2.757
	Bidi	1.210	.056	.000	3.354	3.006	3.743
	Hookah	1.388	.271	.000	4.007	2.357	6.811
	Others	1.619	.123	.000	5.046	3.962	6.426
ETS exposure:	None				1.000		
	Childhood	.443	.057	.000	1.558	1.393	1.743
	Adulthood	.388	.068	.000	1.474	1.291	1.683
	Both	.632	.087	.000	1.881	1.587	2.231

Cooking fuel:	Not cooking				1.000		
	Electricity	-.201	.525	.702	.818	.292	2.289
	LPG	.105	.119	.375	1.111	.880	1.402
	Kerosene	-.351	.253	.166	.704	.429	1.157
	Coal	.558	.408	.172	1.747	.785	3.890
	Wood	.203	.112	.070	1.225	.983	1.526
	Dung cake	.232	.183	.203	1.262	.882	1.804
	Crop residue	-17.435	9572.40	.999	.000	.000	.
	Others	-17.454	12846.0	.999	.000	.000	.
Constant	-6.203	1779.58	.997	.002			

Table 90. Estimates of total national disease burden in Indian adults

A. Asthma

Age group	Indian population as per 2001 census		Persons with asthma in study population			Projected national burden			
	Men	Women	Total	Men	Women	Total	Men	Women	Total
15-24 years	100261141	89718881	189980022	115 / 21584	119 / 21689	234 / 43273	534193	492256	1026450
25-34 years	78919462	78776975	157696437	153 / 19549	208 / 20275	361 / 39824	617662	808168	1425830
35-44 years	65917442	60394940	126312382	226 / 16637	271 / 16553	497 / 33190	895434	988765	1884199
45-54 years	44719494	39277041	83996535	338 / 12778	333 / 11903	671 / 24681	1182907	1098820	2281727
55-64 years	27169369	28000757	55170126	418 / 8029	310 / 7833	728 / 15862	1414472	1108162	2522634
65-74 years	16999791	17515808	34515599	428 / 4672	248 / 4506	676 / 9178	1557344	964030	2521374
>=75 years	7182189	7407754	14589943	185 / 1856	129 / 1711	314 / 3567	715897	558504	1274401
Total	341168888	321092156	662261044	1863 / 85105	1618 / 84470	3481 / 169575	6917910 (2.03%)	6018706 (1.87%)	12936616 (1.95%)

B. Chronic bronchitis

Age group	Indian population as per 2001 census		Persons with chronic bronchitis in study population			Projected national burden			
	Men	Women	Total	Men	Women	Total	Men	Women	Total
35-44 years	65917442	60394940	126312382	299 / 16637	220 / 16553	519 / 33190	1184668	802688	1987355
45-54 years	44719494	39277041	83996535	451 / 12778	304 / 11903	755 / 24681	1578376	1003127	2581503
55-64 years	27169369	28000757	55170126	462 / 8029	269 / 7833	731 / 15862	1563364	961599	2524963
65-74 years	16999791	17515808	34515599	441 / 4672	244 / 4506	685 / 9178	1604646	948481	2553128
>=75 years	7182189	7407754	14589943	219 / 1856	107 / 1711	326 / 3567	847467	463255	1310723
Total	161988285	152596300	314584585	1872 / 43972	1144 / 42506	3016 / 86478	6778521 (4.18%)	4179150 (2.74%)	10957671 (3.48%)

Annexure I

Details of Samples of different Centres

Annexure I – 1 Ahmedabad (Gujarat)

Both urban and rural population of Ahmedabad district were studied.

Ahmedabad Municipal Corporation has 55 wards. The rural population of Sanand Taluka of Ahmedabad District has 71 villages. To include a sample of about 15,000, 35% i.e. 5000 adults in urban (Ahmedabad Municipal Corporation) and 10,000 adults in the Sanand Taluka of Ahmedabad rural district were studied.

Urban Sample

Of the 55, Ahmedabad Municipal Corporation, following 21 wards and areas were selected randomly. One hundred households were visited from each ward.

Ward name	No. of male members	No. of female members	Eligible adult males	Eligible adult females	Adult males interviewed	Adult females interviewed	Total
1. Odhav	184	178	139	132	136	132	268
2. Amariwadi	258	229	160	158	159	157	316
3. Naroda	213	184	139	146	138	146	284
4. Saijpur	241	206	147	153	145	153	298
5. Sharkhej	252	196	168	138	164	136	300
6. Maninagar	220	205	161	154	161	154	315
7. Ghatlodiya	174	172	128	132	114	130	244
8. Naranpura	200	197	130	159	103	158	261
9. Sabarmati	195	191	152	145	145	144	289
10. Shahpur	175	184	130	150	128	143	271
11. Ranip	205	186	155	141	152	140	292
12. Jodhpur	159	123	122	96	117	88	205
13. Vejalpur	226	197	135	148	127	146	273
14. Asarva	253	227	164	162	159	155	314
15. Beharampura	253	224	143	147	143	147	290
16. Giratharnagar	247	218	174	164	162	156	318
17. Gomtipur	219	203	155	143	155	142	297
18. Khadia	208	189	155	153	135	146	281
19. Bhapunagar	255	217	172	159	172	157	329
20. Paldi	218	200	168	159	163	154	317
21. Juna Vadaj	245	230	170	164	157	155	312
Total	4600	4156	3167	3103	3035	3039	6074

	Male	Female	Total
No. of Male and Female members	4600	4156	8756
No. of Eligible adult Males and Females	3167	3103	6270
No. of Adult Males & Females interviewed	3035	3039	6074

Rural Sample

Of the 71 villages, the following 41 were studied.

Ward name	No. of male members	No. of female members	Eligible adult males	Eligible adult females	Adult males interviewed	Adult females interviewed	Total
1. Sanand-1	247	215	155	153	155	153	308
2. Sanand-2	269	247	159	153	156	147	303
3. Telav	287	266	176	186	172	184	356
4. Santipura	279	272	176	180	165	172	337
5. Modasar	251	193	172	143	167	139	306
6. Nanidevti	275	219	171	157	165	155	320
7. Pipan	238	204	160	143	153	136	289
8. Soyla	248	254	153	154	150	151	301
9. Motoda	281	350	165	170	162	167	329
10. Sari	250	242	180	169	173	163	336
11. Daran	238	227	164	145	158	143	301
12. Lodaria	235	219	152	154	146	152	298
13. Changodar	267	219	152	152	138	151	289
14. Sanathal	262	230	167	161	154	155	309
15. Mainpur	254	217	154	152	145	150	295
16. Godhavi	246	221	159	161	144	155	299
17. Shela	252	240	159	153	148	152	300
18. Nidharad	235	205	151	147	139	145	284
19. Khoraj	241	218	152	143	146	137	283
20. Zolapur	239	244	148	151	139	139	278
21. Virochandnagar	212	196	150	140	141	136	277
22. Chharodi	247	231	135	148	128	144	272
23. Eyava	258	210	150	152	134	146	280
24. Vasna	235	200	154	157	144	151	295
25. Mhadhavnagar	255	217	149	143	138	137	275
26. Khoda	265	217	162	153	144	148	292
27. Chekhala	250	230	144	154	133	147	280
28. Upardal	231	212	146	130	139	127	266
29. Anadej	238	231	143	140	135	134	269
30. Rethal	230	202	150	143	141	139	280
31. Melasana	273	233	159	138	151	132	283
32. Kundal	235	216	151	144	146	140	286
33. Kuvar	248	213	147	137	141	131	272
34. Makhiyav	232	210	149	130	143	127	270
35. Mankol	254	248	162	148	155	144	299
36. Vichhiya	260	243	155	150	143	146	289
37. Ranmalgadhd	262	239	154	154	143	145	288
38. Gorag	230	230	158	145	149	139	288
39. Khicha	244	213	149	140	135	129	264
40. Fangadi	252	218	163	148	153	143	296
41. Vasodra	246	228	150	142	134	137	271
Total	10251	9239	6405	6163	6045	5968	12013

	Male	Female	Total
No. of Male and Female members	10251	9239	19490
No. of Eligible adult Males and Females	6405	6163	12568
No. of Adult Males & Females interviewed	6045	5968	12013

Annexure I – 2 Berhampur (Orissa)

A. Urban	Ankuli	386		
	Gajapatnagar	356		
	Tulasi Nagar	353		
	Niladri Bihar	354		
	Gandhinagar	316		
	Nehurunagar	368		
	Ambapua	392		
	Ashok Nagar	319		
B. Rural	Block Chatrapur	Borigaon	333	
		Bausiapalli	325	
		Godarapali	369	
		Samara jholo	340	
		Rai jholo	327	
		Kakudakhundi	362	
		Jagadalapur	383	
		Nimakhandi	412	
		Ankuspur	368	
		Block Kukudakhundi	Hal diapadar	394
	Kanisi		412	
	Lathi		464	
	Dasapur		365	
	Siala		381	
	Bendalia		430	
	Rangipur		414	
	Ralaba		356	
	Block Rangeilunda		Bada Kusastali	323
			Chamakhandi	349
		Gobindapur	397	
		Mandiapali	315	
		Sana Kusastali	341	
		Raghunathpur	327	
		Jaganathpur	327	
		Narendrapur	382	
		Dura	707	
		Pathara	201	
		Bahadurpeta	348	
		Ramachandrapur	407	
	Rangeilunda	314		
	Karapali	339		
	Gopalpur	366		
Narayanpur	304			

Annexure I – 3 Bikaner (Rajasthan)

Bikaner District Population (2001)

	Population	Male	Female	%
Rural (95 villages)	1262054	662821	599233	65%
Urban (55 wards)	640056	340214	299842	35%
Total	1902110	1003035	899075	

Level	Name	TRU	No. of Households	Total Population	Male	Female
District	Bikaner	Total	280087	1902110	1003035	899075
District	Bikaner	Rural	178307	1262054	662821	599233
District	Bikaner	Urban	101780	640056	340214	299842
Tehsil	Bikaner	Total	113257	725810	385605	340205
Tehsil	Bikaner	Rural	25285	180462	94531	85931
Tehsil	Bikaner	Urban	87972	545348	291074	254274
Tehsil	Dungargarh	Total	31127	227839	116960	110879
Tehsil	Dungargarh	Rural	24540	182819	93917	88902
Tehsil	Dungargarh	Urban	6587	45020	23043	21977
Tehsil	Nokha	Total	44159	329031	172126	156905
Tehsil	Nokha	Rural	36938	279343	146029	133314
Tehsil	Nokha	Urban	7221	49688	26097	23591
Tehsil	Khajuwala	Total	14261	91771	49245	42526
Tehsil	Khajuwala	Rural	14261	91771	49245	42526
Tehsil	Khajuwala	Urban	0	0	0	0
Tehsil	Chhatargarh	Total	10274	71682	37987	33695
Tehsil	Chhatargarh	Rural	10274	71682	37987	33695
Tehsil	Chhatargarh	Urban	0	0	0	0
Tehsil	Poogal	Total	11256	73935	39540	34395
Tehsil	Poogal	Rural	11256	73935	39540	34395
Tehsil	Poogal	Urban	0	0	0	0
Tehsil	Lunkaransar	Total	25067	174293	90906	83387
Tehsil	Lunkaransar	Rural	25067	174293	90906	83387
Tehsil	Lunkaransar	Urban	0	0	0	0
Tehsil	Kolayat	Total	30686	207749	110666	97083
Tehsil	Kolayat	Rural	30686	207749	110666	97083
Tehsil	Kolayat	Urban	0	0	0	0

Random Selection of 20 wards in first phase

Ward numbers 1, 2, 4, 6, 12, 22, 25, 26, 27, 28, 34, 36, 37, 41, 42, 43, 46, 47, 49, 53

Random Selection of 5 wards in second phase

Ward numbers 10, 11, 16, 19, 38

Annexure I – 4 Chennai (Tamil Nadu)

Study area and Sampling

The sample size for the study at Chennai was determined as 15,000 (9000 from rural area and 6000 from urban area). It was also decided that from each cluster 300 respondents will be studied. Accordingly the rural area had 30 clusters and urban area 20 clusters.

Rural

The Community Development (CD) block of Poonamallee in Thiruvallur Dist was selected as the rural study area. There are 78 villages in the Block and this list was used as sampling frame. Thirty clusters (villages) were selected randomly from the above using the random numbers. List of rural clusters (villages) and the map are furnished below.

Urban

The Poonamallee municipality was identified as the urban study area. It comprises of 199 streets distributed in 21 wards. Twenty clusters are to be selected. Considering the lesser number of Units in terms of wards, and the operational constraints of locating the centre point of the wards, the streets were taken as sampling units. The list of all the streets obtained from the Municipal Office was used as the sampling frame for identification of clusters (streets). Using random numbers, 20 streets of 199 were selected as clusters. List of Urban Clusters (streets) and map are furnished below.

Selection of study subjects

Cluster sampling method, as followed in WHO immunization coverage evaluation survey, was used to select the study subjects from each cluster as described hereunder.

After entering the village, the field workers ascertain and go to the center of the village. For identifying the street to commence the data collection, a pencil / ball pen was dropped on the ground. The street lying in the direction where the tip of the pencil pointed was selected.

Then they assessed the number of houses in the identified street either by physical observation approximately or by actual counting. Using a currency note, they selected a random number of appropriate digits. The first house was located using the random number. This formed the first house for commencing the data collection. They then, moved along the houses on the right side.

After reaching the house, the field workers introduced themselves and briefed about the nature, purpose and uses of the study to the adult members of the family and built up rapport. Then they got the informed consent form duly signed, and collected data as per the questionnaire.

The eligible members present in the family were surveyed and the absentees were contacted during the subsequent visits. However there was no refusal to participation. The tally sheets were filled simultaneously. It took approximately 25 minutes to fill up and complete the questionnaire.

Logistic management

A. Weekly collection, distribution and auditing of forms

The field workers attended this department on every Monday and handed over of filled up proforma and received new forms for next week's data collection. On average, data was collected from 90 respondents by each worker in the rural area and from 120 respondents by the worker in the urban area per week. To manage unforeseen circumstances wherein the workers would not be able to collect the forms during any week, it was decided to have some buffer stock with them. Accordingly, 150 forms were issued initially and during every Monday, new forms were issued to the extent of the number of filled up forms handed over by them.

This contact was also used to scrutinize the data collected. The field monitors - Faculty from the Department of Community Medicine - scrutinized the forms and tally sheets and identified the flaws and got it rectified.

B. Monitoring of the processes

Periodic monitoring of data collection activities was done by Faculty of the Department of Community Medicine. Monthly three visits were undertaken by them in all. The monitoring involved cross checking of data collected in the past week and also observing and overseeing the current work of the Field Workers. For purpose of Cross checking the data collected, all the tally sheets and 15 filled up proforma were randomly selected from the completed cluster (village) and carried by them.

Later in the afternoon, the Field Workers were visited for observing and overseeing the current work. During the supervision of current work, the Monitors observed the rapport building, techniques of interview and also discuss about selection of first household etc.

Before departure, the Monitors, discussed their observations with the workers and suggested for rectification if needed. Their good work was also complimented so as to encourage them.

C. Monthly Meeting

Monthly meetings were conducted regularly at the Department of Community Medicine SRMC between 5th and 7th of the following month as per the calendar. Discussions were made on the Observations during field monitoring, Constraints in Data collection; Data entry etc., and in the end appropriate suggestions were given to the field workers.

D. Data Management

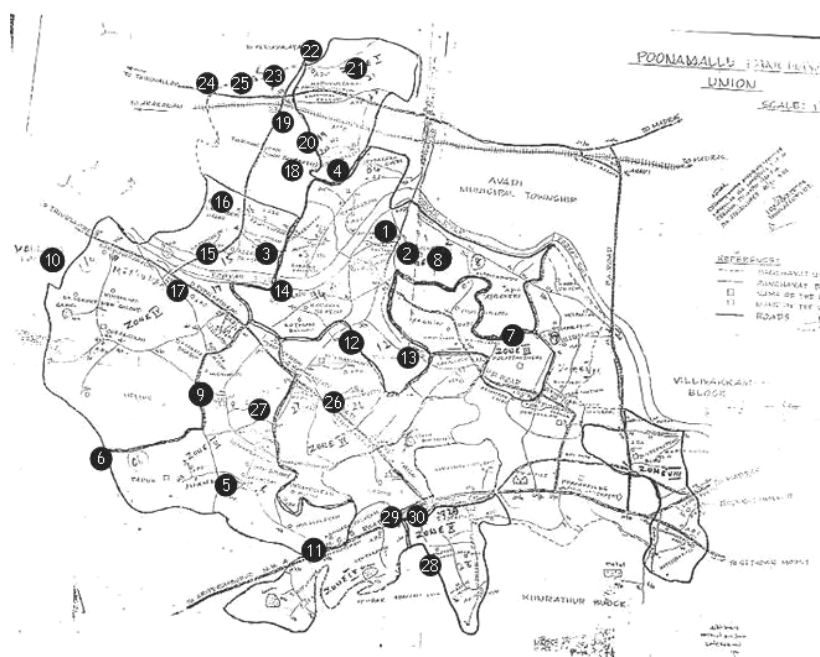
A separate computer was earmarked by the Head of the Department for the purpose of data entry. The computer was a Pentium-4 machine with the Windows-XP operating system. The data entry was done using the EpiData software provided by the PGIMER, Chandigarh. The data files were placed on a separate partition.

A separate Data entry operator (DEO) was engaged for Data Entry. Data entry was started after two weeks of the commencement of the data collection i.e. during mid February 2007. The DEO was instructed to check for inconsistencies in the filled forms, which included the coding of forms following which feedback was given to the field workers. All forms entered by the DEO were cross-checked by a designated faculty for correctness of data entry.

The randomly selected villages are highlighted in the following table:

Sl. No.	Name of Villages	Population	Sl. No.	Name of Villages	Population	Sl. No.	Name of Villages	Population
1	Anaikattucherry	1849	27	Puliyanthoppu	684	53	Moovendar Nagar	2979
2	Sorancherry	1064	28	Gudapakkam	1728	54	Gengureddikuppam	2970
3	Ayacherry	445	29	Ex-Serviceman Quarters	516	55	Thirunindravur*	10824
4	Annambedu	903	30	Kutchikadu	590	56	Lakshmiapuram*	10084
5	Karnakaracherry	470	31	Mettukandigai	343	57	Dasarpuram	492
6	Amudurmedu	1108	32	Meyyur	333	58	Nadukuthagai V	1100
7	Ramapuram	190	33	Pappanchatram	1405	59	Nadukuthagai C	1223
8	Kuthambakkam	1067	34	Pazhanjur	1350	60	Arunthathiyarpalayam	1172
9	South Colony	1485	35	Chembarambakkam V	2176	61	Natchiyarchatram	1357
10	North Colony	665	36	Chembarambakkam C	2007	62	Ramadoss Puram	665
11	Samathuvapuram	404	37	Thirumanam	1885	63	MTH Road, PH Road	1024
12	Ukkottai	265	38	Thirukovipathu	369	64	Vatchalapuram	840
13	Irulapalayam	542	39	Kavalcherry	858	65	Anthony Nagar	1210
14	Padur	977	40	Chatram	287	66	Krishnapuram	862
15	Mettupalayam	989	41	Kothapalayam	228	67	Dhamothara Nagar	367
16	Banavedu	451	42	Sithukadu	418	68	Sami Nagar, NGO Nagar	593
17	Melpakkam	707	43	Kothiyambakkam	698	69	Murugesan Nagar	487
18	Kannapalayam	945	44	Kammavarpalayam	70	70	Thirumazhisai TP	17848
19	Kuppathumedu	253	45	Kosavanpalayam	1229	71	Melmanambedu	2429
20	Vayalanallur	962	46	Rajankuppam	925	72	Kilmanambedu	1384
21	Arunachala Nagar	479	47	Kottamedu	1165	73	Vellavedu	2948
22	Chockanallur	965	48	Korattur	852	74	Varadarajapuram	3062
23	Nemam	1728	49	Puduchatram	775	75	Meppur	3009
24	Notchimedu	368	50	Nemilicherry A Ward	1037	76	Agaramel	3303
25	Subramani Kandigai	139	51	Nemilicherry B Ward	2095	77	Nazarathpet V	5380
26	Andarasanpet	714	52	Nagathamman Nagar	1488	78	Nazarathpet C	1747

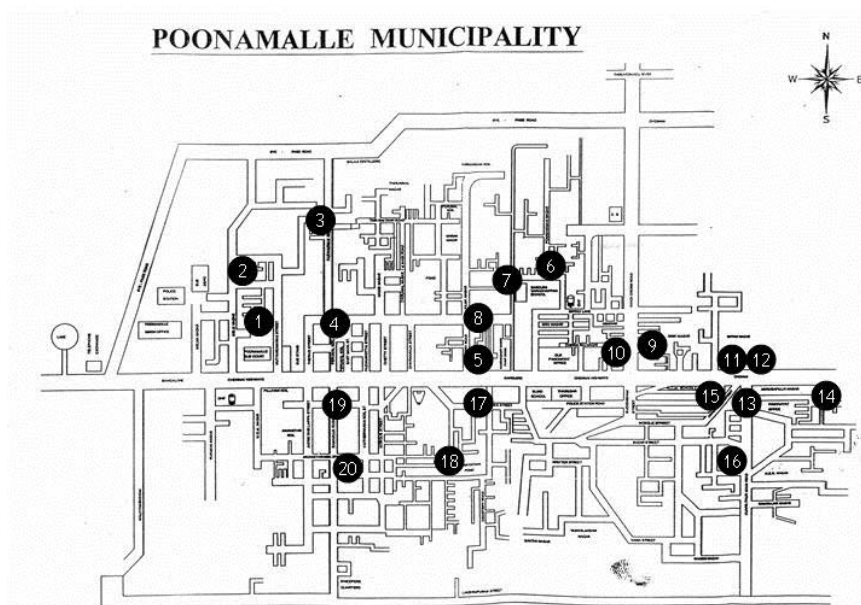
Map showing the distribution of Rural Clusters



List of the selected streets of Urban Area

1. Padavettamman Koil Street – Main
2. Ariyamandanallur
3. Kulakarai II Street
4. Vadakku Mada Street
5. Bajanai Koil Street
6. Kaveri Nagar
7. Kandasamy Nagar Extension, Kalyanasundaram Street
8. Chinnaraj nagar
9. Avadi Road II Cross street
10. T.R.R.Nagar Kamatchi Amman Street
11. Sippoy Nagar IV Street
12. Palla Street I Street
13. Muslim Street
14. Murugapillai Nagar
15. Amman Koil II street
16. Kundrathur Road from 24 to 130
17. James V Street
18. M.G.R. Salai
19. Rajeswari Nagar
20. Padmavathi Nagar

Map showing the distribution of Urban Clusters



Annexure I – 5 Guwahati (Assam)

Kamrup District

Total household: 2669

	Eligible	Studied:
Male	8551	7949
Female	7558	7055
Total	16109	15002

Rural Area Survey – Rangia Block

Murara	93
Balisatra	62
Bangaon	66
Bangalikhuchi	69
Garaka	91
Chepti	68
Dahara	65
Chirakhundi	95
Dobak	77
Simalua	88
Kaniha	74
Tarani	17

Urban Area Survey – Guwahati

Ward No. 48 – Bamunimaidam
Ward No. 25 – Ulubari
Ward No. 36 - Silpukhuri

Annexure I – 7 Mumbai (Maharashtra)

Mumbai city has an area of 437.72 sq km and population of 1,19,14,398 people. Municipal Corporation is the civic body regulating administration of Mumbai city. The city is divided into twenty-one administrative wards viz. A, B, C, D, F (North); F (South); G (North); G (South); H (East); H (West); K (East); K (West); P (North); P (South); R (North); R (South); R (Central), L, M (East); M (West).

We selected ward 'D' which was mainly a residential area of the main city. The area of 'D' ward is 6.63 sq. km and the population is 6,82,841 (ref. Census 2001). The electoral roll of Ward 'D' was used to select the study population. The total number of voters from this area were 4,43,490. The total sample comprised of 139,42 individuals – about 32 per cent of the total electoral roll.

Mumbai being a cosmopolitan city, Hindi translation of the questionnaire prepared by main centre was used.

Annexure I – 8**Mysore (Karnataka)**

Mysore District with population 2,641,027 was selected for the study. The urban population is 982,128 and rural population is 1,658,899. This is according to 2001 census. Mysore district has total of 1,340 villages and 11 towns. The proportion of urban population in Mysore district is 37.02%. As suggested in the sampling design, the sample size required to be covered in the urban area was 5,580 and in rural area, 9,420 persons.

Rural sample (list of villages)**Mysore taluk:**

Random No.	Name of village	No. of Households	Total population
35	Doddamaragoudanahalli	578	3071
25	Belvadi	961	3921
69	Anggalli	109	781
98	Doddakanya	264	2351
103	Vajamangalla	809	4229
123	Megalapura	112	537
45	Koorgalli	1369	5019
56	Nagana halli	698	3340
100	Kalasthavadi	280	1232
135	Sidalingapura	639	2810
28	Bhugathagalli	370	1926
112	Chikkahalli	393	1903
150	Alanahalli	465	2512
18	Inam-uthanahalli	217	1184
70	Madagalli	380	1818

Nanjangud taluk:

Random No.	Name of village	No. of Households	Total population
34	Malkundi	525	2824
92	Suttur	784	3850
162	Karya	514	2420
167	Kumbar Hatti	157	755
165	Shriramhalli	620	2881
46	Madanahalli	155	803
78	Hullahalli	1724	8278
65	Chennapatna	278	1388
36	Hadinaru	1301	6136
54	Thandavapura	1003	5156
14	Alathur	386	1806
27	Debur	677	3214
85	Thoremavu	343	1933
115	Golur	567	2851
74	Gaddanapura	213	1191

Urban sample (List of census wards)

Random No.	Name of Census ward	No. of Households	Total population
16	Agraahar Math	1878	9278
37	Gundu Rao Nagar	2541	11546
43	Kuvempu Nagar	3554	15030
6	Chamarajpuram	2006	9081
60	Nazarbad	1795	8859
12	Sri Rampura	6377	27076
38	Dattagalli	5474	23161
45	Siddhartha Nagar	3171	14425
18	Jayalakshmi Puram	3022	12402
05	Ittegegudu	1517	7494
29	Kalyangiri	4892	24156
41	Bannimantap	3263	17459
34	Metagalli	3250	14010
20	Yadavagiri	1553	6625
14	Gayatripuram	3388	16379
61	Udayagiri	2462	12910
56	Bamboo Bazaar	1285	6772
24	Tilak Nagar	1691	8957

Annexure I – 11 Shimla (Himachal Pradesh)

As per 1991 census, the population of Shimla was 617404. The sex ratio is 894 females per thousand males. Due to difficult topography and harsh weather condition prevailing in winter season, it was enormously difficult to collect epidemiological data on various diseases. The study area confined to Shimla city and adjoining rural areas.

Total population recruited for the study was 15,000. The urban rural composition of the sample selected matched the existing urban rural proportion of the district. In the sample design, village/urban localities formed the first stage units and households formed second stage units. We targeted approximately 100 households in each village/urban cluster. Houses in a particular area were selected randomly between the number of first house and last house in that area. In areas where houses were not numbered, field workers used to go to the central area of that segment and selected a direction randomly. In the selected direction, all households located were listed and a house was selected randomly from the list. In each household, the interviewer prepared a list of individuals eligible for the study. Members of the household not present on the first visit were contacted again at home or place of work and maximum three such attempts were made. A supervisor crosschecked 10% of the entries randomly. The field investigators carried out the study simultaneously in the urban and rural areas of Shimla. In the urban areas, survey was carried out by random selection of municipal wards. Field workers approached the ward counselors to enlist their cooperation and help in defining the boundaries of the ward. Approximately, 3000 urban subjects and 12,000 rural subjects were recruited randomly for the study.

Frequent supervising visits were carried out by the Principal Investigator and other co-investigators of the centre to check the data being collected by the field investigators.

The urban survey was conducted in the following municipal wards:

- | | |
|-----------------|-----------------|
| 1. Bharari | 8. Vikasnagar |
| 2. Jaku | 9. Totu |
| 3. Ruldu-Bhatta | 10. Engine Ghar |
| 4. Chakkar | 11. Cemetary |
| 5. Kaithu | 12. Shankli |
| 6. Dhalli | 13. Annandale |
| 7. Sanjauli | 14. Nabhi |

The rural survey was conducted in the following villages of the Mashobra block:

- | | |
|----------------|-----------------|
| 1. Jathia Devi | 9. Durgapur |
| 2. Dhammi | 10. Rangol |
| 3. Sangti | 11. Panesh |
| 4. Shoghi | 12. Kohbagh |
| 5. Dhanda | 13. Kalihatti |
| 6. Chail-koti | 14. Jubberhatti |
| 7. Ghannati | 15. Mashobra |
| 8. Baldean | 16. Kelti |

Annexure I-12 Trivandrum-Kerala

Total population was divided into Rural and Urban areas depending upon the population proportion; 9000 in rural and 6000 in urban areas. Assuming at least 2 eligibles in each household, it was decided to include 4500 households from rural and 3000 households from urban areas. Keeping 100 households per cluster, 45 clusters are needed in rural areas and 30 clusters in urban areas. These clusters are selected by taking villages as the basic unit in rural areas and wards as the unit in urban. The selected wards/villages in rural and urban areas, based on the cluster sampling technique were as follows:

Rural Cluster Distribution			Urban Cluster Distribution		
No. Village	Selected Village	Name Cluster	Selected Ward No.	Name of Wards	Cluster No.
1	Vilavoorkkal	C1	4	Cheruvakkal	1
2	Vilappil	C2,C3	7	Edavakkodu	2
3	Kulathummal	C4,C5	11	Pattam	3
4	Ottasekharamangalam	C6,C7	14	Anamugham	4
6	Vazhichal	C8	16	Kadakampally	5
8	Vellarada	C9,C10	20	Kunnukuzhi	6
9	Keezharoor	C11,C12	23	Muttada	7
10	Maranalloor	C13,C14	26	Kanjirampara	8
11	Malayinkeezhu	C15,C16	30	Palayam	9
12	Pallichal	C17,C18,C19	33	Thampanoor	10
13	Athiyannur (Part)	C20,C21	36	Perumthanni	11
14	Perumkadavila	C22,C23	38	Manacadu	12
15	Anavoor	C24	40	Chalai	13
16	Kunnathukal	C25,C26	44	Arannoor	14
17	Kollayil (Part)	C27,C28	48	Vattiyoorkavu	15
18	Parasuvaikkal	C29	50	Thirumala	16
19	Parassala	C30,C31	53	Chengallor	17
20	Karode	C32,C33	56	Nedumcad	18
21	Chenkai (Part)	C34	58	Kuriyathy	19
22	Kulathoor	C35,C36	60	Kamaleswaram	20
23	Thirupuram	C37,C38	62	Ambalathara	21
24	Kanjiramkulam	C39	65	Pappanamcodu	22
25	Karumkulam	C40,C41	68	Melamcodu	23
26	Kottukal (Part)	C42,C43	70	Punchakari	24
27	Vizhinjam (Part)	C44,C45	72	Vellar	25
			74	Poonthura	26
			77	Bheemapally	27
			78	Bheemapally East	28
			81	Vallakadavu	29
			83	Sanghumugham	30

Annexure II

STUDY QUESTIONNAIRE AND TRANSLATIONS

STUDY QUESTIONNAIRE

IDENTIFICATION AND DEMOGRAPHIC DATA

1. Centre code
2. Serial Number
3. Date of survey / /
4. Current residence Rural / Urban
5. Address and phone _____

6. Name _____
7. Date of birth / /
8. Age (in years)
9. Sex Male / Female
10. What has been your usual residence, where you have lived >75% of your life? Rural / Urban / Mixed
11. For how many years have you received education?
12. What is the occupation of the head of household?
- (1) Unemployed or retired
- (2) Housewife
- (3) Unskilled labourer
- (4) Skilled labourer
- (5) Business / Self employed professional
- (6) Agriculturist
- (7) Worker in a government or private service
- (8) Supervisor in a government or private service
- (9) Officer in a government or private service
13. What is your occupation?
- (1) Unemployed or retired
- (2) Housewife
- (3) Unskilled labourer
- (4) Skilled labourer
- (5) Business / Self employed professional
- (6) Agriculturist
- (7) Worker in a government or private service
- (8) Supervisor in a government or private service
- (9) Officer in a government or private service

RESPIRATORY SYMPTOMS

Please answer Yes or No. If Yes, specify duration of symptoms (years)

Years

WHEEZING AND TIGHTNESS IN THE CHEST

14. Have you ever had wheezing or whistling sound from your chest during the last 12 months? Yes / No

15. Have you ever woken up in the morning with a feeling of tightness in the chest or of breathlessness ? Yes / No

SHORTNESS OF BREATH

16. Have you ever felt shortness of breath after finishing exercises, sports or other heavy exertion during the last 12 months ? Yes / No

17. Have you ever felt shortness of breath when you were not doing some strenuous work during the last 12 months ? Yes / No

18. Have you ever had to get up at night because of breathlessness during the last 12 months ? Yes / No

COUGH AND PHLEGM

19. Have you ever had to get up at night because of cough during the last 12 months ? Yes / No

20. Do you usually cough first thing in the morning ? Yes / No

21. Do you usually bring out phlegm from your chest first thing in the morning ? Yes / No

22. Do you usually bring up phlegm from your chest most of the morning for at least 3 consecutive months during the year ? Yes / No

BREATHING

23. Select the most appropriate out of the following
(a) I hardly experience shortness of breath.
(b) I usually get short of breath but always get well
(c) My breathing is never completely satisfactory

DUST, FEATHERS AND PETS

24. When you are exposed to dusty areas, or pets like dog, cat or horse, or feathers or quilts or pillows, etc., do you
(a) Feel tightness in chest? Yes / No
(b) Feel shortness of breath? Yes / No

ASTHMA

25. Have you ever suffered from asthma ? Yes / No

26. Have you ever had an attack of asthma during the last 12 months ? Yes / No

27. Are you taking any inhaler, pump, rotahaler or nebulizer or other medicines for treatment of breathlessness ? Yes / No

ATOPY AND FAMILY HISTORY

28. Do you often develop skin rash (such as urticaria or eczema) which come and go off and on? Yes / No

29. Do you often develop sneezing or running nose? Yes / No

30. Do you often develop itchiness in eyes? Yes / No
31. Do any of your family members have any of the above three symptoms? Yes / No
32. If yes, who?
Grandparents / parents / brother / sister / children / others
33. Do any of your family members suffer from asthma? Yes / No
34. If yes, who?
Grandparents / parents / brother / sister / children / others

TOBACCO SMOKING AND CONSUMPTION

35. Have you ever smoked for one year or more than that? Yes / No
If answer to Question 35 is 'Yes', go to next question, else to Question 41.
36. What form of tobacco do/did you predominantly smoke?
(1) Cigarette (2) Bidi (3) Hookah (4) Cigar (5) Pipe (6) Others
37. How many cigarettes, bidis, cigar, pipe, hookah or chillum do you/did you usually smoke in 24 hours?
38. At what age did you start smoking?
39. Select only one depending on what is applicable to you
(a) I still smoke
(b) I have left smoking for less than a year
(c) I have left smoking for more than a year
If answer to Question 39 is (c), go to Question 40, else go to Question 41
40. Specify the number of years for which left smoking
41. Do you consume any type of tobacco product other than smoking? Yes / No
If answer to Question 41 is 'Yes', go to Question 42, else to Question 45.
42. What tobacco product do you consume?
1. Zarda 2. Khaini 3. Panmasala 4. Gutka 5. Snuff 6. Others _____
(specify)
43. For how many years have you been consuming these products?
44. How often do you consume this product each day?

Questions 45-46 should be filled only if answer to Question no. 35 is NO; else go to Question 47

ENVIRONMENTAL TOBACCO SMOKE EXPOSURE

45. Do/did any of your family members (i.e. people residing in the same household) regularly smoke in your presence? Yes / No
If 'Yes', go to Question 46, else go to Question 47
46. Who all in the family are/were regular smokers during childhood and adulthood?
- | Before marriage | | | <u>Product</u> | <u>Hours/day</u> | <u>Years</u> |
|-----------------|----------|--------------------------|--------------------------|---|---|
| Grandfather | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| Grandmother | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| Father | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |

Mother	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brother	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sister	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others (specify) _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
After marriage					
Father/Father-in-law	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mother/Mother-in-law	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brother/Brother-in-law	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sister/Sister-in-law	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Son	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Daughter	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Husband/Wife	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others (specify) _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Product: (1) Cigarette (2) Bidi (3) Hookah (4) Cigar (5) Pipe (6) Others

COOKING FUEL

47. Do you regularly cook now or have you regularly cooked in the past?

- 1) Regularly cook now
- 2) Cooked regularly in the past
- 3) Never cooked regularly

If answer to Question 47 is '3', go to Question 55, else to Question 48.

48. At what age did you start cooking regularly

49. At what age did you stop cooking (if already stopped)

50. How often do you cook?

1. Daily
2. days in a month

51. Does your house have a separate kitchen? Yes / No

52. Does the kitchen have windows/openings? Yes / No

53. How many hours do you daily spend in the kitchen?

54. What cooking fuel do you predominantly use for cooking?

- a) Electricity
- b) LPG
- c) Kerosene
- d) Coal
- e) Wood
- f) Dung cake
- g) Crop residue
- h) Others

TO BE FILLED BY THE INTERVIEWER

55. What, in your perception, is the overall socio-economic status of the individual?

1. Low 2. Middle 3. High

पहचान एवं जनसांख्यिकी विवरण

1. केन्द्र संख्या
2. क्रम संख्या
3. सर्वेक्षण तिथि / /
4. वर्तमान निवास गांव / शहर
5. पता एवं दूरभाष
6. नाम
7. जन्म की तिथि / /
8. आयु (वर्ष)
9. लिंग आदमी / स्त्री
10. निवास स्थान (जहां आपने तीन चौथाई से अधिक जिंदगी बिताई) गांव / शहर / मिश्रित
11. आपने कितने वर्ष शिक्षा प्राप्त की है ?
12. आपके घर के मुख्य सदस्य का क्या रोजगार है ?

 1. बेरोज़गार या सेवामुक्त
 2. गृहणी
 3. अकुशल मज़दूर
 4. कुशल मज़दूर
 5. व्यापार या स्वयं रोज़गार
 6. किसान
 7. सरकारी या गैरसरकारी मुलाज़िम
 8. सरकारी या गैरसरकारी सर्वेक्षक
 9. सरकारी या गैरसरकारी अफसर

13. इनमें से आपका क्या रोजगार है ?

 1. बेरोज़गार या सेवामुक्त
 2. गृहणी
 3. अकुशल मज़दूर
 4. कुशल मज़दूर
 5. व्यापार या स्वयं रोज़गार
 6. किसान
 7. सरकारी या गैरसरकारी मुलाज़िम
 8. सरकारी या गैरसरकारी सर्वेक्षक
 9. सरकारी या गैरसरकारी अफसर

श्वास रोग लक्षण

कृपया 'हाँ' या 'नहीं' में उत्तर दीजिये। यदि 'हाँ' तो लक्षण की अवधि का ब्यौरा वर्षों में दीजिये।

- छाती से सीटी जैसी आवाज़ आना तथा घुटन रहना वर्ष
14. क्या पिछले बारह महीनों में आपको कभी भी छाती से साँ-साँ की, या सीटी जैसी आवाज़, आई है ? हाँ / नहीं
15. क्या पिछले बारह महीनों में आप कभी सुबह छाती में घुटन या साँस लेने में कठिनाई के कारण उठे हैं ? हाँ / नहीं

साँस लेने में कठिनाई

16. क्या पिछले बारह महीनों में आपको कसरत या खेलकूद या ज्यादा घूमने के बाद साँस फूलने की तकलीफ हुई है ? हाँ / नहीं
17. क्या पिछले बारह महीनों में आपको कभी भी दिन के उस समय साँस लेने में कठिनाई हुई है जब आप कोई भी मेहनत का काम नहीं कर रहे थे ? हाँ / नहीं
18. क्या पिछले बारह महीनों में आपको रात को साँस की तकलीफ के कारण नींद से उठना पड़ा है ? हाँ / नहीं

खांसी एवं छाती में बलगम

19. क्या पिछले बारह महीनों में आपको रात को खांसी की वजह से नींद से उठना पड़ा है ? हाँ / नहीं
20. क्या आपको सुबह उठने पर अकसर खांसी आती है ? हाँ / नहीं
21. क्या आप सुबह उठते ही सबसे पहले छाती में से बलगम निकालते हैं ? हाँ / नहीं
22. क्या आपको एक साल में कम से कम तीन महीने से ज्यादा इसी तरह छाती में से बलगम निकालनी पड़ती है ? हाँ / नहीं

साँस लेना

23. इन तीन में से आपके लिए सबसे अधिक उचित क्या है ?
1. मुझे मुश्किल से कभी (या कभी भी नहीं) साँस लेने में कठिनाई होती है
 2. मुझे साँस लेने में कठिनाई बार बार होती है, पर हमेशा ठीक हो जाती है
 3. मेरा साँस बिल्कुल ठीक कभी भी नहीं रहता

धूल, पंख एवं पालतू जानवर

24. जब आप घर के धूल भरे भाग में, या जानवरों (जैसे कुत्ते, बिल्ली, घोड़े) के साथ, या पंखों, रजाइयों, तकियों, आदि के पास होते हैं तो क्या आपको कभी
- (क) छाती में घुटन महसूस होती है ? हाँ / नहीं
- (ख) साँस लेने में कठिनाई होती है ? हाँ / नहीं

दमा

25. क्या आपको कभी भी दमा रहा है ? हाँ / नहीं
26. क्या आपको पिछले बारह महीनों में कभी भी दमे का दौरा पड़ा है ? हाँ / नहीं
27. क्या आप साँस की तकलीफ के लिए किसी तरह की दवा (जैसे इन्हेलर, पम्प, रोटाहेलर, नैब्युलाइज़र, गोलियाँ, आदि) ले रहे हैं ? हाँ / नहीं

एलर्जी एवं पारिवारिक लक्षण

28. क्या आपकी त्वचा पर अकसर छपाकी (urticaria) या चम्बल (eczema) आदि हुआ है जो होकर ठीक हो जाता है ? हाँ / नहीं

29. क्या आपकी नाक अकसर बहती है या अकसर छींके आती हैं ? हाँ / नहीं
30. क्या आपकी आँखों में अकसर खुजली रहती है ? हाँ / नहीं
31. क्या आपके परिवार के किसी अन्य सदस्य को इन तीनों में से कोई तकलीफ है ? हाँ / नहीं
32. यदि हाँ, तो किसे ?
दादा-दादी / माता-पिता / भाई / बहन / बच्चे / अन्य
33. क्या आपके परिवार के किसी अन्य सदस्य को दमे की तकलीफ है ? हाँ / नहीं
34. यदि हाँ, तो किसे ?
दादा-दादी / माता-पिता / भाई / बहन / बच्चे / अन्य

धूम्रपान एवं तम्बाकू सेवन

35. क्या आपने एक या उससे अधिक वर्ष तक धूम्रपान किया है ? हाँ / नहीं
यदि 'हाँ' तो अगले प्रश्न का उत्तर दें, अन्यथा प्रश्न 41 पर जायें।
36. आप तम्बाकू का सेवन अकसर किस तरह से करते हैं या करते थे ?
1. सिगरेट 2. बीड़ी 3. हुक्का 4. सिगार 5. पाईप 6. अन्य
37. आप चौबीस घंटों में अकसर कितनी सिगरेट, बीड़ी, हुक्का, सिगार, या पाईप, आदि का सेवन करते हैं या करते थे ?
38. आपने किस उम्र में धूम्रपान शुरू किया था ?
39. केवल एक उत्तर चुनें जो आपके लिए उपयुक्त हो
1. मैं अभी भी धूम्रपान करता हूँ।
2. मुझे धूम्रपान छोड़े एक वर्ष से कम समय हुआ है।
3. मुझे धूम्रपान छोड़े एक वर्ष से अधिक समय हो गया है।
यदि प्रश्न 39 का उत्तर '3' है तो अगले प्रश्न का उत्तर दें, अन्यथा प्रश्न 41 पर जायें।
40. आपने कितने वर्षों से धूम्रपान छोड़ दिया है ?
41. क्या आप धूम्रपान के अलावा तम्बाकू का किसी और रूप में सेवन करते हैं ? हाँ / नहीं
यदि 'हाँ' तो अगले प्रश्न का उत्तर दें, अन्यथा प्रश्न 45 पर जायें।
42. आप तम्बाकू का सेवन इनमें से किस तरह करते हैं ?
1. ज़रदा 2. खैनी 3. पान मसाला 4. गुटका 5. नसवार
6. अन्य (स्पष्ट करें) _____
43. आप कितने वर्षों से तम्बाकू का सेवन इस तरह कर रहे हैं ?
44. आप एक दिन में कितनी बार तम्बाकू का सेवन इस तरह करते हैं ?

प्रश्न 45 एवं 46 के उत्तर तभी दें यदि प्रश्न 35 का उत्तर 'नहीं' है, अन्यथा प्रश्न 47 पर जायें।

पर्यावरण में तम्बाकू के धुंए के साथ सम्पर्क

45. क्या आपके परिवार के कोई सदस्य (उसी घर में रहने वाले व्यक्ति) अकसर आपकी उपस्थिति में धूम्रपान करते हैं या करते थे ? हाँ / नहीं
यदि 'हाँ' तो अगले प्रश्न का उत्तर दें, अन्यथा प्रश्न 47 पर जायें।
46. परिवार के कौन से सदस्य आपके बचपन और वयस्क जीवन में अकसर आपकी उपस्थिति में धूम्रपान करते हैं या करते थे ?

शादी से पहले		तम्बाकू का प्रकार	घंटे प्रतिदिन	वर्ष
दादा	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
दादी	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
पिता	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
माता	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
भाई	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
बहन	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
अन्य (स्पष्ट करें) _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
शादी के बाद				
पिता / ससुर	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
माता / सास	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
भाई / देवर	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
बहन / ननद / भाभी	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
बेटा	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
बेटी	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
पति / पत्नी	हाँ / नहीं	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
अन्य (स्पष्ट करें) _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

तम्बाकू का प्रकार: 1. सिगरेट 2. बीड़ी 3. हुक्का 4. सिगार 5. पाईप 6. अन्य

भोजन पकाने का ईंधन

47. क्या आप नियमित रूप से भोजन पकाते हैं या पकाते थे ?
- आजकल नियमित रूप से भोजन पकाते हैं
 - पहले नियमित रूप से भोजन पकाते थे
 - कभी नियमित रूप से भोजन नहीं पकाया
- यदि उत्तर '3' है तो प्रश्न 55 पर जायें , अन्यथा अगले प्रश्न का उत्तर दें।
48. आपने किस उम्र से नियमित रूप से भोजन पकाना शुरू किया ?
49. आपने किस उम्र में नियमित रूप से भोजन पकाना बंद किया (यदि आप अब नहीं पकाते)?
50. आप कितने नियम से भोजन पकाते हैं ?
- प्रतिदिन
 - महीने में दिन
51. क्या आपके मकान में अलग से रसोईघर है ?
52. क्या आपकी रसोई में खिड़की या रोशनदान है ?
53. आप प्रतिदिन कितने घंटे रसोई में गुजारते हैं ?
54. आपके भोजन पकाने का मुख्य ईंधन इनमें से कौन सा है ?
- बिजली
 - गैस
 - मिट्टी का तेल
 - कोयला
 - लकड़ी
 - गोबर के उपले
 - धान, फूस, आदि
 - अन्य

TO BE FILLED BY THE INTERVIEWER

55. What, in your perception, is the overall socio-economic status of the individual?

1. Low 2. Middle 3. High

Form filled by

Data verified by

Data entered into computer by

সমীক্ষাৰ প্ৰশ্নাবলী

চিনাক্তকৰণ আৰু পৰিসাংখ্যিক তথ্য :

১. কেন্দ্ৰৰ চিহ্ন
২. ক্ৰমিক সংখ্যা

দিন মাহ বছৰ
৩. সমীক্ষা কৰাৰ তাৰিখ
৪. বৰ্তমানৰ বাসস্থান গাওঁ/চহৰ
৫. সম্পূৰ্ণ ঠিকনা আৰু ফোন নং _____

৬. নাম _____
৭. জন্মৰ তাৰিখ

দিন মাহ বছৰ
৮. বয়স (বছৰ হিচাপে)
৯. লিংগ পুৰুষ /মহিলা
১০. আপোনাৰ প্ৰকৃত বাসস্থান ক'ত? য'ত আপুনি জীৱনৰ তিনি চতুৰ্থাংশ (৭৫%)
সময় অতিবাহিত কৰিলে। গাওঁ / চহৰ /মিশ্ৰিত
১১. কিমান বছৰ আপুনি শিক্ষা গ্ৰহণ কৰিলে? (শিক্ষাগত অৰ্হতা কিমান?)
১২. আপোনাৰ ঘৰৰ মুখিয়ালজনৰ কৰ্মসংস্থান কি?

 - (১) নিবনুৱা নে অৱসৰ প্ৰাপ্ত
 - (২) গৃহিণী
 - (৩) দক্ষতা বিহীন কৰ্মী
 - (৪) পটু/ দক্ষ কৰ্মী
 - (৫) ব্যৱসায়ী/ আত্মসংস্থাপনকাৰী
 - (৬) কৃষক
 - (৭) চৰকাৰী খণ্ডৰ নে বেচৰকাৰী (ব্যক্তিগত খণ্ডৰ) কৰ্মী
 - (৮) চৰকাৰী খণ্ডৰ নে বেচৰকাৰী (ব্যক্তিগত খণ্ডৰ) পৰ্য্যবেক্ষক
 - (৯) চৰকাৰী খণ্ডৰ নে বেচৰকাৰী খণ্ডৰ বিষয়া

১৩. আপোনাৰ কৰ্ম সংস্থান কি?

- (১) নিবনুৱা নে অৱসৰ প্ৰাপ্ত
- (২) গৃহিণী
- (৩) দক্ষতা বিহীন কৰ্মী
- (৪) পঢ়ু/দক্ষ কৰ্মী
- (৫) ব্যৱসায়/আত্মসংস্থাপনকাৰী
- (৬) কৃষক
- (৭) চৰকাৰী খণ্ডৰ নে বেচৰকাৰী (ব্যক্তিগত খণ্ডৰ) কৰ্মী
- (৮) চৰকাৰী খণ্ডৰ নে বেচৰকাৰী (ব্যক্তিগত খণ্ডৰ) পৰ্য্যবেক্ষক
- (৯) চৰকাৰী খণ্ডৰ নে বেচৰকাৰী খণ্ডৰ বিয়য়

শ্বাস-প্ৰশ্বাসৰ লক্ষণসমূহ :

আপুনি 'হয়' বা 'নহয়' উত্তৰ দিয়ক। যদি হয় তেন্তে তেনেধৰণৰ লক্ষণসমূহ কেতিয়াৰ পৰা বা কিমান দিনৰ পৰা আছে (বছৰ হিচাপে) উল্লেখ কৰক।

উশাহ নিশাহ লওতে সোঁ-সোঁওঁকৈ শব্দ হোৱা আৰু বুকু টানি ধৰা :

১৪. যোৱা ১২ মাহৰ ভিতৰত আপোনাৰ উশাহ নিশাহ লওঁতে সোঁ-সোঁওঁকৈ শব্দ বা সুৰ্ছৰি মৰাৰ দৰে শব্দ হৈছিল নেকি? হয় / নহয় কিমান বছৰ

১৫. কেতিয়াবা আপুনি বুকুৰ বিষ বা উশাহ- নিশাহ লওঁতে অসুস্থতা অনুভৱ কৰি পুৰা সাৰ পাই উঠিছিল নেকি? হয় / নহয় কিমান বছৰ

চুটি শ্বাস-প্ৰশ্বাস :

১৬. যোৱা ১২ মাহৰ ভিতৰত কেতিয়াবা আপুনি ব্যায়াম কৰা, খেলা- ধুলা কৰা বা অন্য কষ্টকৰ কাম কৰাৰ পাছত উশাহ নিশাহ চুটি চুটি হোৱা যেন অনুভৱ কৰিছিল নেকি? হয় / নহয়

১৭. যোৱা ১২ মাহৰ ভিতৰত কেতিয়াবা কোনো কষ্টকৰ কাম নকৰাকৈয়ো উশাহ নিশাহ চুটি চুটি হোৱা যেন অনুভৱ কৰিছিল নেকি? হয় / নহয়

১৮. যোৱা ১২ মাহৰ ভিতৰত কেতিয়াবা ৰাতি আপুনি উশাহ- নিশাহ লওঁতে কষ্ট পাই সাৰ পাই উঠিছিল নেকি? হয় / নহয়

কাহঁ আৰু শ্লেসা :

১৯. যোৱা ১২ মাহৰ ভিতৰত কেতিয়াবা ৰাতি আপুনি কাহঁ ধৰাৰ বাবে টোপনিৰ পৰা সাৰ পাই উঠিব লগীয়া হৈছিল নেকি? হয় / নহয়

২০. সাধাৰণতে ৰাতিপুৱা শুই উঠাৰ পিছতে কাহঁ উঠে নেকি? হয় / নহয়

২১. সাধাৰণতে ৰাতিপুৱা শুই উঠাৰ পিছতে শ্লেসা বা লালবীজ ওলাই নেকি? হয় / নহয়

২২. বছৰটোৰ ভিতৰত কমেও একেৰাহে ৩ মাহ ধৰি আপোনাৰ প্ৰায়ে ৰাতিপুৱা কাহোঁতে শ্লেসা বা লালবীজ ওলাই নেকি? হয় / নহয়

শ্বাস-প্ৰশ্বাস :

২৩. তলত দিয়া উক্তি কেইটাৰ ভিতৰত আপোনাৰ ক্ষেত্ৰত কোনটো সবাতোকৈ প্ৰযোজ্য :

(ক) মোৰ শ্বাস-প্ৰশ্বাস চুটি চুটি হোৱা অনুভৱ কৰাটো মনত নপৰে।

(খ) মই সাধাৰণতে শ্বাস-প্ৰশ্বাস চুটি চুটি হোৱা অনুভৱ কৰো কিন্তু সদায় সুস্থ হৈয়ো উঠো।

(গ) মোৰ শ্বাস-প্ৰশ্বাস কেতিয়াও সম্পূৰ্ণৰূপে সুস্থ বা সন্তোষজনক নহয়।

ধূলি-বালি, চৰাইৰ পাখি আৰু পোহনীয়া জীৱ-জন্তু :

২৪. ধূলিময় পৰিবেশ বা পোহনীয়া জীৱ-জন্তু যেনে- কুকুৰ, মেকুবী, ঘোৰা বা চৰাইৰ পাখি, লেপ, তুলি, গাৰু আদিৰ সংস্পৰ্শত আহিলে আপুনি কেতিয়াবা -

(ক) বুকু টানি ধৰাৰ নিচিনা অনুভৱ কৰে নেকি? হয় / নহয়

(খ) শ্বাস-প্ৰশ্বাস চুটি চুটি হোৱা যেন অনুভৱ কৰে নেকি? হয় / নহয়

হাপানী (উদফাই) বেমাৰ :

২৫. আপোনাৰ কেতিয়াবা হাপানী বা উদফাই বেমাৰ হৈছিল নেকি? হয় / নহয়

২৬. যোৱা ১২ মাহৰ ভিতৰত আপুনি কেতিয়াবা হাপানী বা উদফাই বেমাৰত আক্ৰান্ত হৈছিল নেকি?

হয় / নহয়

২৭. শ্বাস-প্ৰশ্বাসৰ কষ্টৰ বাবে আপুনি কোনো ধৰণৰ দৰৱ যেনে- ইনহেলাৰ' পাম্প, ৰটাহেলাৰ, নেবুলাইজাৰ (মেচিন) আদি বা অন্য কোনো ধৰণৰ দৰৱ ব্যৱহাৰ কৰি আছে নেকি?

হয় / নহয়

এলাৰ্জী আৰু পাৰিবাৰিক ইতিহাস :

২৮. আপোনাৰ সঘনাই ছালৰ ৰঙচুৱা হোৱা যেনে- দমলা-দমল হোৱা বা খৰৰ দৰে হৈ থাকে আৰু যি নিজে নিজে হৈ আৰু ভাল হৈ থাকে নেকি? হয় / নহয়

২৯. প্ৰায়ে আপোনাৰ হাৰি আহি থাকে নেকি বা নাকেদি পানী ওলাই থাকে নেকি? হয় / নহয়

৩০. আপোনাৰ প্ৰায়েই চকু খজুৱাই থাকে নেকি? হয় / নহয়

৩১. আপোনাৰ পৰিয়ালৰ কাৰোবাৰ ওপৰত উল্লেখ কৰা লক্ষণ কেইটা আছে নেকি? হয় / নহয়

৩২. যদি আছে তেন্তে কাৰ আছে ? আপোনাৰ ককা /আইতা , মা/দেউতা, ককাই /ভাই, বাই / ভনী, ল'ৰা-
ছোৱালী নে আন কাৰোবাৰ ? হয় / নহয়

৩৩. আপোনাৰ পৰিয়ালৰ কোনো সদস্যৰ হাপানী বেমাৰ আছে নেকি ? হয় / নহয়

৩৪. যদি আছে তেন্তে কাৰ আছে? আপোনাৰ ককা /আইতা , মা/দেউতা, ককাই /ভাই, বাই / ভনী, ল'ৰা-
ছোৱালী নে আন কাৰোবাৰ ? হয় / নহয়

ধূমপান আৰু ধপাত সেৱন :

৩৫. আপুনি এবছৰ বা ততোধিক কাল কেতিয়াবা ধপাত সেৱন কৰিছিল নেকি ? হয় / নহয়

যদি উত্তৰ 'হয়' তেন্তে পৰবৰ্তী প্ৰশ্ন কেইটা প্ৰযোজ্য হ'ব নতুবা ৪১ নং প্ৰশ্নলৈ যাব।

৩৬. আপুনি কেনেকুৱা ধৰণৰ ধপাত প্ৰধানকৈ সেৱন কৰে বা কৰিছিল ?
(ক) চিগাৰেট (খ) বিড়ি (গ) হোকা (ঘ) চিগাৰ (ঙ) পাইপ (চ) অন্য কিবা

৩৭. আপুনি সাধাৰণতে ২৪ ঘণ্টাত কিমান চিগাৰেট, বিড়ি, চিগাৰ, পাইপ, হোকা বা চিলিম ইত্যাদি সেৱন কৰে
বা কৰিছিল ?

৩৮. কিমান বছৰ বয়সত আপুনি ধূমপান আৰম্ভ কৰিছিল ?

৩৯. আপোনাৰ ক্ষেত্ৰত প্ৰযোজ্য হোৱা অনুসৰি তলত লিখা এটা উক্তি বাচক :
(ক) মই এতিয়াও ধূমপান কৰো ।

(খ) মই ধূমপান এৰি দিয়া এবছৰতকৈ কম হৈছে

(গ) মই ধূমপান এৰি দিয়া এবছৰতকৈ বেছি হ'ল

যদি ৩৯ নং প্ৰশ্নৰ উত্তৰ (গ) হয় তেন্তে ৪০ নং প্ৰশ্নলৈ যাব নতুবা ৪১ নং প্ৰশ্নলৈ যাব।

৪০. ধূমপান এৰি দিয়া কিমান বছৰ হ'ল ?

৪১. আপুনি ধূমপানৰ বাহিৰে অন্য কিবা ধপাত জাতীয় দ্ৰব্য সেৱন কৰে নেকি ?

যদি ৪১ নং প্ৰশ্নৰ উত্তৰ 'হয়' হয় তেন্তে ৪২ নং প্ৰশ্নৰ উত্তৰ দিয়ক নতুবা ৪৫ নং প্ৰশ্নলৈ আগবাঢ়ক।

৪২. কেনেধৰণৰ ধপাত জাতীয় দ্ৰব্য সেৱন কৰে ?
জৰ্দা, খৈনী, পানমচলা, গুটখা, নাকেৰে উজোৱা, অন্য কিবা (উল্লেখ কৰক)

৪৩. এই দ্ৰব্যবোৰ কিমান বছৰ ধৰি আপুনি সেৱন কৰি আছে ?

৪৪. আপুনি প্ৰতিদিনে কিমান সঘনাই এই দ্ৰব্যসমূহ সেৱন কৰে ?

যদি ৩৫ নং প্ৰশ্নৰ উত্তৰ 'নহয়' হয় তেন্তে ৪৫-৪৬ নং প্ৰশ্নৰ উত্তৰ দিব লাগিব। অন্যথাই ৪৭ নং প্ৰশ্নলৈ যাওঁক।

ধপাতৰ খোৱাৰ পৰিবেশত উন্মুক্ত হোৱা :

৪৫. আপোনাৰ একে ঘৰতে থকা পৰিয়ালৰ আন কোনো লোকে আপোনাৰ উপস্থিতিত নিয়মিয়াকৈ ধূমপান কৰি থাকে নেকি বা কৰিছিল নেকি?

যদি 'হয়' তেন্তে —

৪৬. আপোনাৰ ল'ৰালি কালত আৰু প্ৰাপ্তবয়স্ক কালত পৰিয়ালৰ কোন কোন লোকে নিয়মিয়াকৈ ধূমপান কৰে বা কৰিছিল

বিবাহৰ আগত		দ্রব্য	ঘণ্টা/ প্রতিদিন	বছৰ
ককা	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
আইতা	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
দেউতা	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
মা	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ভাই-ককাই	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
বাই-ভনী	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
অন্য কোনোবা (উল্লেখ কৰক)	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
বিবাহৰ পিছত				
দেউতা/ শহুৰ	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
মা/ শাহু	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ভাই / খুলশালী	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ভনী / খুলশালী	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
পুত্ৰ	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
জী	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
পতি/ পত্নী	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
অন্য কোনোবা (উল্লেখ কৰক)	হয় / নহয়	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ধপাত জাতীয় দ্রব্য : (ক) চিগাৰেট (খ) বিড়ি (গ) হোকা (ঘ) চিগাৰ (ঙ) পাইপ
(চ) অন্য কিবা

বন্ধনৰ ইন্ধন :

৪৭. আপুনি এতিয়া নিয়মিয়াকৈ বন্ধা-বঢ়া কৰে নেকি? বা আগতে নিয়মিয়াকৈ বন্ধা বঢ়া কৰিছিল নেকি?
(ক) বৰ্তমান নিয়মিয়াকৈ বন্ধা-বঢ়া কৰে (খ) আগতে নিয়মিয়াকৈ বন্ধা-বঢ়া কৰিছিল
(গ) কেতিয়াও নিয়মিয়াকৈ বন্ধা-বঢ়া কৰা নাছিল
- যদি ৪৭ নং প্ৰশ্নৰ উত্তৰ (গ) হয় তেন্তে ৫৫ নং প্ৰশ্নলৈ যাওঁক, অন্যথাই ৪৮ নং প্ৰশ্নলৈ যাওঁক।
৪৮. কিমান বছৰ বয়সত আপুনি নিয়মিয়াকৈ বন্ধা-বঢ়া আৰম্ভ কৰিছিল?
৪৯. কিমান বছৰ বয়সত আপুনি বন্ধা-বঢ়া কৰা এৰি দিলে? (যদি ইতিমধ্যে এৰি দিছে)
৫০. কিমান সঘনাই আপুনি বন্ধা-বঢ়া কৰে?
(ক) প্ৰতিদিনে (খ) দিন প্ৰতি মাহত
৫১. আপোনালোকৰ ঘৰত বান্ধনি ঘৰ (পাক ঘৰ) পৃথকে আছে নেকি? হয় / নহয়
৫২. বান্ধনি ঘৰ / পাক ঘৰত খিৰিকি বা বতাহ চলাচলৰ অন্য ব্যৱস্থা আছে নেকি? হয় / নহয়
৫৩. প্ৰতিদিনে কিমান ঘণ্টা আপুনি বান্ধনি ঘৰত কটাই?
৫৪. বন্ধা-বঢ়াৰ বাবে প্ৰধানকৈ আপুনি কোনবিধ ইন্ধন ব্যৱহাৰ কৰে?
(ক) বিজুলী (খ) বন্ধন গেছ (গ) কেৰাচিন (ঘ) কয়লা (ঙ) খৰি (চ) গোৱৰৰ পিঠা (ছ) শস্যৰ অৱশিষ্ট
(জ) অন্য কিবা

TO BE FILLED BY THE INTERVIEWER

55. What , in your perception, is the overall Socio-economic status of the individual ?
1. Low 2. Middle 3. High

Form filled by _____

Data verified by _____

Data entered into computer by _____

Gram : SISHUMANGAL
গ্রাম : শিশুমঙ্গল
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২৪৭৬-০৬৮০/৮১/৩১

RAMAKRISHNA MISSION SEVA PRATISHTHAN
VIVEKANANDA INSTITUTE OF MEDICAL SCIENCES

রামকৃষ্ণ মিশন সেবা প্রতিষ্ঠান
বিবেকানন্দ ইন্সটিটিউট অফ মেডিক্যাল সায়েন্সেস
99, SARAT BOSE ROAD, KOLKATA - 700 026
৯৯, শরৎ বোস রোড, কলকাতা - ৭০০ ০২৬

STUDY QUESTIONNAIRE

(পাঠ্য প্রশ্নমালা)

IDENTIFICATION AND DEMOGRAPHIC DATA (সনাক্তকরণ এবং পরিসংখ্যান তথ্যাবলী)

1. Centre Code (কেন্দ্রের নাম)
2. Serial Number (ক্রমিক সংখ্যা)
3. Date of Survey (পর্যবেক্ষণের তারিখ) / /
4. Current Residence (বর্তমান বাসস্থান) Rural / Urban গ্রাম / পৌরসভা
5. Address and phone (ঠিকানা এবং ফোন নম্বর)
6. Name (নাম)
7. Date of Birth (জন্ম তারিখ) / /
8. Age (in years) বয়স (বৎসর অনুযায়ী)
9. Sex (লিঙ্গ) Male / Female পুরুষ / মহিলা
10. What has been your usual residence, where you have lived >75% of your life ? Rural / Urban / Mixed গ্রাম / শহর / দুই-ই
(আপনার নিয়মিত বাসস্থান যেখানে আপনি পঁচাত্তর ভাগ জীবন অতিবাহিত করিয়াছেন?)
11. For how many years have you received education?
(কত বৎসর যাবৎ আপনি লেখাপড়া করেছেন?)
12. **What is the occupation of the head of household ?**
(পরিবারের গৃহকর্তার জীবিকা কি?)
 - (1) Unemployed or retired (কর্মহীন অথবা অবসর প্রাপ্ত)
 - (2) Housewife (গৃহবধু)
 - (3) Unskilled labourer (অদক্ষ শ্রমিক)
 - (4) Skilled labourer (দক্ষ শ্রমিক)

- (5) Business / Self employed professional (ব্যবসা / স্বনিযুক্ত পেশাদার)
- (6) Agriculturist (কৃষিজীবী)
- (7) Worker in a government or private service (সরকারী অথবা বেসরকারী কর্মে নিযুক্ত কর্মচারী।)
- (8) Supervisor in a government or private service (সরকারী অথবা বেসরকারী কাজ দেখাশুনা করেন)
- (9) Officer in a government or private service (সরকারী অথবা বেসরকারী কর্মে নিযুক্ত উচ্চপদস্থ কর্মচারী)

13. What is your occupation ? (আপনার জীবিকা কি?)

- (1) Unemployed or retired (কর্মহীন অথবা অবসর প্রাপ্ত)
- (2) Housewife (গৃহবধূ)
- (3) Unskilled labourer (অদক্ষ শ্রমিক)
- (4) Skilled labourer (দক্ষ শ্রমিক)
- (5) Business / Self employed professional (ব্যবসা / স্বনিযুক্ত পেশাদার)
- (6) Agriculturist (কৃষিজীবী)
- (7) Worker in a government or private service (সরকারী অথবা বেসরকারী কর্মে নিযুক্ত কর্মচারী।)
- (8) Supervisor in a government or private service (সরকারী অথবা বেসরকারী কাজ দেখাশুনা করেন)
- (9) Officer in a government or private service (সরকারী অথবা বেসরকারী কর্মে নিযুক্ত উচ্চপদস্থ কর্মচারী)

RESPIRATORY SYMPTOMS (শ্বাস - প্রশ্বাস জনিত কষ্টের লক্ষণ)

Please answer Yes or No. If Yes, specify duration of symptoms (years)

(উত্তর দিতে হবে হ্যাঁ অথবা না। যদি হ্যাঁ হয় তবে নির্দিষ্ট করিয়া উপসর্গগুলির স্থায়ীত্ব উল্লেখ করতে হবে) (কত বছর)

Years

WHEEZING AND TIGHTNESS IN THE CHEST (বুকে সাঁই সাঁই শব্দ ও দম আটকানো ভাব)

14. Have you ever had wheezing or whistling sound from your chest during the last 12 months ? Yes / No

গত বারো মাসের মধ্যে বুকে সাঁই-সাঁই বা বাঁশির মত শব্দ হয় কিনা? হ্যাঁ / না

15. Have you ever woken up in the morning with a feeling of tightness in the chest or of breathlessness ? Yes / No.

বুকে চাপ ভাব নিয়ে ঘুম ভাঙে কিনা? হ্যাঁ / না

SHORTNESS OF BREATH (শ্বাস প্রশ্বাসে ঘাটতি)।

16. Have you ever felt shortness of breath after finishing exercises, sports or other heavy exertion during the last 12 months ? Yes / No.

কোনো ব্যায়াম, খেলাধুলা অথবা শ্রমসাধ্য কাজ করার পর শ্বাসকষ্ট হয়েছে কিনা গত বারো মাসের মধ্যে? হ্যাঁ / না

17. Have you ever felt shortness of breath when you were not doing some strenuous work during the last 12 months ? Yes / No
 (কোন পরিশ্রম না করা অবস্থাতেও শ্বাসকষ্ট হয়েছে কিনা গত বারো মাসের মধ্যে) হ্যাঁ / না
18. Have you ever had to get up at night because of breathlessness during the last 12 months ? Yes / No
 (বিগত বার মাসে রাত্ৰিতে শ্বাস কষ্টের জন্য কখনও উঠে বসতে হয়েছে কিনা?) হ্যাঁ / না

COUGH AND PHLEGM (কাশি ও কফ)

19. Have you ever had to get up at night because of cough during the last 12 Months ? Yes / No
 (বিগত বারো মাসে আপনি কি কাশির জন্য রাত্রে উঠে পরেছেন?) হ্যাঁ / না
20. Do you usually cough first thing in the morning ? Yes / No
 (ভোরে ঘুম ভাঙার পরেই কাশি হয় কিনা?) হ্যাঁ / না
21. Do you usually bring out phlegm from your chest first thing in the morning ? Yes / No
 (ভোরে ঘুম থেকে ওঠার পর কফ উঠতে থাকে কি?) হ্যাঁ / না
22. Do you usually bring up phlegm from your chest most of the morning for at least 3 consecutive months during the year ? Yes / No
 (বছরে অন্তত লাগাতার তিন মাস ধরে আপনার বেশির ভাগ সকালেই কফ উঠে কি?) হ্যাঁ / না

BREATHING (শ্বাস - প্রশ্বাস)

23. Select the most appropriate out of the following
 (নিম্নলিখিত বিবরণ থেকে সঠিক নির্ণয় করুন)
- a) I hardly experience shortness of breath.
 ক) আমার কখনই শ্বাসকষ্ট হয় না।
- (b) I usually get short of breath but always get well
 খ) আমার শ্বাস কষ্ট হয়, তবে কমেও যায়।
- (c) My breathing is never completely satisfactory
 গ) আমার শ্বাস-প্রশ্বাস কখনোই সম্পূর্ণ স্বাভাবিক নয়

DUST, FEATHERS AND PETS (ধূলো, পাখির পালক এবং পোষ্য প্রাণী)

24. When you are exposed to dusty area, or pets like dog, cat or horse,

or feathers or quilts or pillows, etc., do you

(যদি আপনি ধূলা বালি অথবা পোষা কুকুর, বিড়াল, ঘোড়া, পাখীর পালক কিংবা লেপ বালিশ ইত্যাদির সংস্পর্শে আসেন তবে আপনার -

- | | | | | |
|---------------------------------|------------|--------------------------|--------------------------|--------------------------|
| (a) Feel tightness in chest ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ক) বুকের মধ্যে চাপ চাপ লাগে কি? | হ্যাঁ / না | | | |
| (b) Feel shortness of breath ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| খ) শ্বাস কষ্ট হয় কি? | হ্যাঁ / না | | | |

ASTHMA (হাঁপানি)

- | | | | | |
|---|------------|--------------------------|--------------------------|--------------------------|
| 25. Have you ever suffered from asthma ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| আপনার কখনও হাঁপানি হয়েছে কি? | হ্যাঁ / না | | | |
| 26. Have you ever had an attack of asthma the last 12 months ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| গত বারো মাসের মধ্যে আপনার কখনও হাঁপানির টান হয়েছে কি? | হ্যাঁ / না | | | |
| 27. Are you taking any inhaler, pump, rotahaler or nebulizer or other medicines for treatment of breathlessness ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (আপনি কি শ্বাসকষ্টের জন্য ইনহেলার, পাম্প, রোটাহলার, নেবুলাইজার অথবা কোন ওষুধ ব্যবহার করেন?) | হ্যাঁ / না | | | |

ATOPY AND FAMILY HISTORY (পারিবারিক ইতিহাস)

- | | | | | |
|---|------------|--------------------------|--------------------------|--------------------------|
| 28. Do you often develop skin rash (such as urticaria or eczema) which come and go off and on ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (আপনার চর্মরোগ (র্যাশ, একজিমা, আমবাত) মাঝে মাঝে হয় কি?) | হ্যাঁ / না | | | |
| 29. Do you often develop sneezing or running nose ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (আপনি কি প্রায়ই হাঁচি অথবা নাক দিয়ে জল পড়ায় ভোগেন ?) | হ্যাঁ / না | | | |
| 30. Do you often develop itchiness in eyes ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (আপনার চোখে কি প্রায়ই চুলকানি হয়?) | হ্যাঁ / না | | | |
| 31. Do any of your family members have any of the above three symptoms ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (আপনার পরিবারের কোনো সদস্যের ওপরের তিনটি উপসর্গের কোনোটি হয় কি?) | হ্যাঁ / না | | | |
| 32. If yes, who ? (যদি হয় তবে তিনি কে?) | | | | |
| Grandparents / parents / brother / sister / children / others | | | | |
| (দাদু-ঠাকুরমা / পিতা-মাতা / ভাই / বোন / বাচ্চারা / অন্যান্য) | | | | |
| 33. Do any of your family members suffer from asthma ? | Yes / No | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (আপনার পরিবারের কারোর হাঁপানি আছে কি?) | হ্যাঁ / না | | | |

34. If yes, who ? (যদি হয় তবে তিনি কে?)
Grandparents / parents / brother / sister / children / others
(দাদু-ঠাকুরমা / পিতা-মাতা / ভাই / বোন / বাচ্চারা / অন্যান্য)

TOBACCO SMOKING AND CONSUMPTION (ধূমপান এবং তামাকের ব্যবহার)

35. Have you ever smoked for one year or more than that ? Yes / No
(আপনি কি এক বছর বা তার বেশী সময় ধূমপান করেছেন কি?) হ্যাঁ / না
If answer to Question 35 is 'Yes', go to next question,
else to Question 41
(যদি ৩৫ নং প্রশ্নের উত্তর হ্যাঁ হয় তবে পরের প্রশ্নের নতুবা
৪১ নং প্রশ্নের উত্তর দিন)

36. What form of tobacco do/did you predominantly smoke ?
(কোন ধরনের ধূমপানে আপনি প্রাধান্য দেন বা দিয়েছেন ?)
(1) Cigarette (2) Bidi (3) Hookah (4) Cigar (5) Pipe (6) Others
১) সিগারেট ২) বিড়ি ৩) হুক্কা ৪) সিগার (চুরুট) ৫) পাইপ ৬) অন্যান্য

37. How many cigarettes, bidis, cigar, pipe, hookah or chillum do you/did you usually smoke in 24 hours ?
(আপনি ২৪ ঘন্টায় কতগুলি সিগারেট, বিড়ি, সিগার, পাইপ, হুক্কা ঐ ধরনের ধূমপান করেন?)

38. At what age did you start smoking ?
(কোন বয়স থেকে আপনি ধূমপান শুরু করেছেন?)

39. Select only one depending on what is applicable to you
(নিচের তালিকার মধ্যে কোনটি আপনার উপর প্রযোজ্য হবে ঠিক করুন)
(a) I still smoke (আমি এখনো ধূমপান করি)
(b) I have left smoking for less than a year
(আমি এক বছরের কম সময় ধূমপান ছেড়েছি)
(c) I have left smoking for more than a year
(আমি একবছরের বেশী সময় ধূমপান ছেড়েছি)

If answer to Question 39 is (c), go to Question 40, else go to Question 41
(যদি ৩৯ নং প্রশ্নের উত্তর (c) হয় তবে পরের ৪০ নং প্রশ্ন নতুবা ৪১ নং প্রশ্নের উত্তর দিন)

40. Specify the number of years for which left smoking
(ঠিক কত বছর হলো ধূমপান ছেড়েছেন?)

41. Do you consume any type of tobacco product other than smoking ? Yes / No
(আপনি কি ধূমপান ছাড়া অন্য কোনো উপায়ে তামাক ব্যবহার করেন?) হ্যাঁ / না
If answer to Question 41 is 'Yes' go to Question 42, else to Question 45.

(যদি ৪১ নং প্রশ্নের উত্তর হ্যাঁ হয়, তবে ৪২ নং প্রশ্নের নতুবা ৪৫ নং প্রশ্নের উত্তর দিন)

42. What tobacco product do you consume ?

নীচের কোন তামাকটি আপনি ব্যবহার করেন?

1. Zarda 2. Khaini 3. Panmasala 4. Gutka 5. Snuff 6. Others (specify)

জর্দা / খৈনি / পানমশলা / গুটকা / নস্য - অন্য কিছু

43. For how many years have you been consuming these products ?

(এগুলি আপনি কত বছর ধরে ব্যবহার করছেন?)

44. How often do you consume this product each day ?

(দিনে কতবার আপনি এগুলি ব্যবহার করেন?)

ENVIRONMENTAL TOBACCO SMOKE EXPOSURE (পরোক্ষ ধূমপান)

45. Do/did any of your family members (i.e. people residing in the same household) regularly smoke in your presence ?

Yes / No

(আপনার উপস্থিতিতে পরিবারের কেউ ধূমপান করেন কিনা?)

হ্যাঁ / না

If 'Yes', go to Question 46, else go to Question 47

(যদি হ্যাঁ হয় তবে ৪৬ নং প্রশ্নের নতুবা ৪৭নং প্রশ্নের উত্তর দিন)

46. Who all in the family are/were regular smokers during childhood and adulthood ?

(পরিবারের কজন ছোট থেকে অথবা বড় হয়ে নিয়মিত ধূমপান করেন?)

Before marriage (বিবাহের পূর্বে)

	Yes / No হ্যাঁ / না <input type="checkbox"/>	Product কি ধরনের তামাক <input type="checkbox"/>	Hours/day ঘন্টা/দিন <input type="checkbox"/> <input type="checkbox"/>	Years বছর <input type="checkbox"/> <input type="checkbox"/>
Grandfather (ঠাকুরদা)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Grandmother (ঠাকুরমা)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Father (পিতা)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Mother (মাতা)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Brother (ভাই)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Sister (বোন)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Others (specify) (অন্যান্য)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
After marriage (বিবাহের পরে)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Father/Father-in-law (বাবা / শ্বশুর)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Mother/Mother-in-law (মা / শ্বাশুড়ী)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Brother/Brother-in-law (ভাই/দেওর)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Sister/Sister-in-law (বোন/ননদ)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Son (পুত্র)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Daughter (কন্যা)	Yes / No হ্যাঁ / না <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Husband/Wife (স্বামী / স্ত্রী) Yes / No হ্যাঁ / না

Others (specify) (অন্যান্য) Yes / No হ্যাঁ / না

Product : (1) Cigarette (2) Bidi (3) Hookah (4) Cigar (5) Pipe (6) Others

তামাকের নাম ১) সিগারেট ২) বিড়ি ৩) হুকা ৪) সিগার ৫) পাইপ ৬) অন্যান্য

COOKING FUEL (রান্নার জ্বালানী)

47. Do you regularly cook now or have you regularly cooked in the past ?

(আপনি কি এখন নিয়মিত রান্না করেন অথবা আগে নিয়মিত রান্না করেছেন?)

- 1) Regularly cook now (এখনো নিয়মিত রান্না)
- 2) Cooked regularly in the past (অতীতে নিয়মিত রান্না)
- 3) Never cooked regularly (নিয়মিত কোন দিন রান্না করেননি)

If answer to Question 47 is '3', go to Question 55, else to Question 48.

(যদি প্রশ্ন নং ৪৭ এর উত্তর '৩' নম্বর হয় তবে প্রশ্ন ৫৫ নং লিখুন নতুবা প্রশ্ন ৪৮ লিখবেন।)

48. At what age did you start cooking regularly

(কোন বয়স থেকে আপনি নিয়মিত রান্না করা আরম্ভ করেছেন)

49. At what age did you stop cooking (if already stopped)

আপনি কোন বয়সে এসে রান্না বন্ধ করেছেন? (যদি বন্ধ করে থাকেন)

50. How often do you cook ? (আপনি কদিন রান্না করেন?)

1. Daily (প্রতিদিন)
2. days in a month (মাসের ক দিন)

51. Does your house have a separate kitchen ? Yes / No

(আপনার বাড়ীতে কি আলাদা রান্নাঘর আছে?)

হ্যাঁ / না

52. Does the kitchen have windows/openings ? Yes / No

রান্নাঘরে জানালা / ঘুলঘুলি আছে কি?

হ্যাঁ / না

53. How many hours do you daily spend in the kitchen ?

দিনে কত ঘন্টা আপনি প্রতিদিন রান্নাঘরে কাটান?

54. What cooking fuel do you predominantly use for cooking ?

রান্নার জন্য আপনি কি জ্বালানী ব্যবহার করেন?

- | | |
|--------------------------|-----------------------|
| a) Electricity (বিদ্যুৎ) | e) Wood (কাঠ) |
| b) LPG (গ্যাস) | f) Dung cake (ঘুঁটে) |
| c) Kerosene (কেরোসিন) | g) Crop residue (তুষ) |
| d) Coal (কয়লা) | h) Others (অন্যান্য) |

TO BE FILLED BY THE INTERVIEWER
সাক্ষাৎকার গ্রহণকারী দ্বারা পূরণ করিতে হইবে।



55. What, in your perception, is the overall socia-economic status of the individual ?

1. Low

2. Middle

3. High

আপনার কি উপলব্ধি? ইনি

(১) নিম্নবিত্ত

(২) মধ্যবিত্ত

(৩) উচ্চবিত্ত

মোটামুটি কোন আর্থসামাজিক ভুক্ত?

Form filled by (ফর্ম পূরণ কারী)

Data verified by (তথ্যাবলী যাচাইকারী)

Data entered into computer by
(তথ্যাবলী কম্পুটারে লিপিবদ্ধকারী)

STUDY QUESTIONNAIRE (અભ્યાસ પ્રશ્નાવલી)

IDENTIFICATION AND DEMOGRAPHIC DATA (ઓળખ અને જનસમુદાયનું વર્ણન)

1. Center Code (કેન્દ્ર નો કોડ)
2. Serial Number (અનુક્રમ નંબર)
3. Date of survey (મોજણી તારીખ) / /
4. Current residence (હાલનું સરનામું) Rural / Urban ગ્રામ્ય / શહેરી
5. Address and phone (સરનામું અને ફોન નંબર) _____

6. Name (નામ) _____
7. Date of birth (જન્મ તારીખ) / /
8. Age (in years) (ઉંમર - વર્ષમાં)
9. Sex (જાતી) Male / Female (પુરુષ / સ્ત્રી)
10. What has been your usual residence, where you have lived > 75% of your life ? Rural / Urban / Mixed ગ્રામ્ય / શહેરી / મિશ્ર
(જ્યાં તમોએ તમારી જીવનનો મોટો સમય (> 75%) વિતાવ્યો હોય તે સ્થળ)
11. For how many years have you received education ? (તમોએ કુલ કેટલા વર્ષો અભ્યાસ કરેલ છે ?)
12. What is the occupation of the head of household ? (ઘરના મુખ્ય વ્યક્તિનો વ્યવસાય શું છે ?)
(1) Unemployed or retired (બેકાર અથવા નિવૃત્ત)
(2) Housewife (ગૃહીણી)
(3) Unskilled labourer (અકુશળ કામદાર)
(4) Skilled labourer (કુશળ કામદાર)
(5) Business / Self employed professional (ધંધો/પોતાનો ધંધો)
(6) Agriculturist (ખેડૂત)
(7) Worker in a government or private service (સરકારી નોકરી / ખાનગી નોકરી)
(8) Supervisor in a government, or private service (સુપરવાઈઝર-સરકારી / ખાનગી - સુપરવાઈઝર)
(9) Office in a government or private service (સરકારી - અધિકારી / ખાનગી - અધિકારી)
13. What is your occupation ? (તમારો વ્યવસાય શું છે ?)
(1) Unemployed or retired (બેકાર અથવા નિવૃત્ત)
(2) Housewife (ગૃહીણી)
(3) Unskilled labourer (અકુશળ કામદાર)
(4) Skilled labourer (કુશળ કામદાર)
(5) Business / Self employed professional (ધંધો/પોતાનો ધંધો)
(6) Agriculturist (ખેડૂત)
(7) Worker in a government or private service (સરકારી નોકરી / ખાનગી નોકરી)
(8) Supervisor in a government, or private service (સુપરવાઈઝર-સરકારી / ખાનગી - સુપરવાઈઝર)
(9) Office in a government or private service (સરકારી - અધિકારી / ખાનગી - અધિકારી)

RESPIRATORY SYMPTOMS (શ્વસનતંત્રના રોગના લક્ષણો)

Please answer Yes or No. If Yes, specify duration of symptoms (years)

(મહેરબાની કરીને હા કે ના માં જવાબ આપો. જો હા તો લક્ષણોનો ચોક્કસ સમયગાળો બતાવો)

WHEEZING AND TIGHTNESS IN THE CHEST

(છાતીમાંથી સીટી જેવો અવાજ આવવો અને છાતીમાં મુઝારો રહેવો.)

Years (વર્ષમાં)

14. Have you ever had wheezing or whistling sound from your chest during the last 12 months? Yes / No (હા / ના)
- (છેલ્લા બાર માસમાં તમને ક્યારેય છાતીમાંથી સીટી જેવો અવાજ આવેલ હતો ?)
15. Have you ever woken up in the morning with a feeling of tightness in The chest or of breathlessness? Yes / No (હા / ના)
- (છેલ્લા બાર માસમાં તમે વહેલી સવારે ક્યારેય છાતીના ભાગે ભાર લાગવાને કારણે / આવવા શ્વાસ લેવામાં તકલીફને કારણે ઉઠી જવું પડ્યું છે ?)

SHORTNESS OF BREATH (શ્વાસ લેવામાં તકલીફ)

16. Have you ever felt shortness of breath after finishing exercises, sports or other heavy exertion during the last 12 months? Yes / No (હા / ના)
- (છેલ્લા બાર મહિનામાં તમને કસરત, રમતગમત અથવા વધુ ફરવાના કારણે શ્વાસ લેવામાં તકલીફ થઈ છે ?)
17. Have you ever felt shortness of breath when you were not doing some strenuous work during the last 12 months? Yes / No (હા / ના)
- (છેલ્લા બાર મહિનામાં તમે કોઈપણ મહેનતનું કામ ન કરતાં હોય તેમ છતાં પણ તમને શ્વાસ લેવામાં મુશ્કેલી થઈ છે ?)
18. Have you ever had to get up at night because of breathlessness during the last 12 months? Yes / No (હા / ના)
- (છેલ્લા બાર મહિનામાં તમારે શ્વાસની તકલીફના કારણે ઉંઘ માંથી જાગી જવું પડ્યું છે ?)

COUGH AND PHLEGM (કફ અને ગળકા)

19. Have you ever had to get up at night because of cough during the last 12 months? Yes / No (હા / ના)
- (છેલ્લા બાર મહિનામાં તમારે ઉઘરસના કારણે ઉંઘમાંથી જાગી જવું પડ્યું છે ?)
20. Do you usually cough first thing in the morning? Yes / No (હા / ના)
- (તમને રોજ સવારે ઉઠતાં ખાંસી આવે છે ?)
21. Do you usually bring out phlegm from your chest first thing in the morning? Yes / No (હા / ના)
- (તમે રોજ સવારે ઉઠો ત્યારે છાતીમાંથી ગળકા પડે છે ?)
22. Do you usually bring up phlegm from your chest most of the morning for at least 3 consecutive months during the year? Yes / No (હા / ના)
- (તમને એક વર્ષમાં ઓછામાં ઓછા ત્રણ માસ સુધી છાતી માંથી ગળકા કાઢવા પડ્યા છે ?)

BREATHING (શ્વાસ લેવો)

23. Select the most appropriate out of the following
- (નીચેના ત્રણમાંથી તમારા માટે સૌથી ઉચિત / યોગ્ય જવાબ કયો છે ?)
- (a) I hardly experience shortness of breath.
(મને ક્યારેય શ્વાસ લેવામાં તકલીફ પડી નથી.)
- (b) I usually get short of breath but always get well
(મને શ્વાસ લેવામાં કોઈ કોઈ વાર તકલીફ થાય છે પરંતુ તેની જાતે સારૂ થઈ જાય છે.)
- (c) My-breathing is never completely satisfactory
(મારા શ્વાસોચ્છવાસ ક્યારેય પણ સંતોષકારક રહેલ નથી)

DUST, FEATHERS AND PETS (ધૂળ, પીછાં અને પાલતું પ્રાણીઓ)

24. When you are exposed to dusty areas, or pets like dog, cat or horse, or feathers or quilts or pillows, etc., do you

(જ્યારે તમે ઘરના ધૂળ ભર્યા વાતાવરણ અથવા પાલતુ પ્રાણીઓ જેવા કે

કૂતરા, બિલાડા, ઘોડા અથવા પીછાં, રજાઈઓ, તકીયા વગેરેના સંપર્કમાં આવવાથી તમને ક્યારેય

(a) Feel tightness in chest ? (ક) છાતીમાં ઘૂટન નો અહેસાસ થાય છે ?

Yes / No (હા / ના)

(b) Feel shortness of breath ? (ખ) શ્વાસ લેવામાં તકલીફ થાય છે ?

Yes / No (હા / ના)

ASTHMA (દમ)

25. Have you ever suffered from asthma ?

Yes / No (હા / ના)

(તમે ક્યારેય દમના રોગથી પિડાયા છો ?)

26. Have you ever had an attack of asthma during the last 12 months ?

Yes / No (હા / ના)

(તમને છેલ્લા બાર માસમાં ક્યારેય દમનો ઉથલો માર્યો છે ?)

27. Are you taking any inhaler, pump, rotahaler or nebulizer pr other medicines for treatment of breathlessness ?

Yes / No (હા / ના)

(શું તમને શ્વાસની તકલીફના કારણે ક્યારેય દવા જેવી કે

(ઈન્હેલર, પમ્પ, રોટાહેલર, નેબ્યુલાઈઝર કે દવાઓ) લો છો ?

ATOPY AND FAMILY HISTORY (એલર્જી અને કૌટુંબિક લાક્ષણો)

28. Do you often develop skin rash (such as urticaria or eczema) which come and go off and on ?

Yes / No (હા / ના)

(શું તમને ક્યારેય શિળસ જેવો ચામડીનો રોગ થયો છે કે જે વારંવાર થઈને સારો થઈ જાય છે ?)

29. Do you often develop sneezing or running nose ?

Yes / No (હા / ના)

(શું તમને નાકમાંથી સતત પાણી વહ્યા કરે છે ? અથવા વારંવાર છીંક આવે છે ?)

30. Do you often develop itchininess in eyes ?

Yes / No (હા / ના)

(શું તમને વારંવાર આંખમાં ખંજવાળ આવે છે ?)

31. Do any of your family members have any of the above three symptoms ? Yes / No (હા / ના)

(શું તમારા કુટુંબના સભ્યોમાંથી કોઈને પણ ઉપરના ત્રણ ચિહ્નોમાંથી કાંઈપણ તકલીફ છે ?)

32. If yes, who ? (જો હાં તો કોને ?)

Grandparents / parents / brother / sister / children / others

(દાદા - દાદી / માતા - પિતા / ભાઈ / બહેન / બાળકો / અન્ય)

33. Do any of your family members suffer from asthma ?

Yes / No (હા / ના)

(શું તમારા કુટુંબમાંથી કોઈ સભ્ય દમના રોગથી પિડાય છે ?)

34. If yes, who ? (જો હાં તો કોને ?)

Grandparents / parents / brother / sister / children / others

(દાદા - દાદી / માતા - પિતા / ભાઈ / બહેન / બાળકો / અન્ય)

TOBACCO SOMKING AND CONSUMPTION (ધુમ્રપાન અને તમાકુનું સેવન)

35. Have you ever somked for one year or more than that ?

Yes / No (હા / ના)

(શું તમે એક અથવા તેનાથી વધારે વર્ષ સુધી ધુમ્રપાન કર્યું છે ?)

If answer to Question 35 is 'Yes', go to next question, else to Question 41.

(જો હાં તો આગળના પ્રશ્નનો જવાબ આપો અથવા પ્રશ્ન ૪૧ પર જાઓ.)

36. What form of tobacco do/did you predominantly smoke ?

(તમો ધુમ્રપાન કઈ રીતે કરો છો અથવા કરતાં હતાં ?)

(1) Cigarette (2) Bidi (3) Hookah (4) Cigar (5) Pipe (6) Others

(૧) સિગારેટ (૨) બીડી (૩) હુકો (૪) સિગાર (૫) પાઈપ (૬) અન્ય.

37. How many cigarettes, bidis, cigar, pipe, hookah or chillum do you/did you usually somke in 24 hours ?
(તમો ચોવીસ કલાકમાં કેટલી સિગારેટ, બીડી, હુકકા, સિગાર, અથવા પાઈપ વગેરેનું સેવન કરો છો ? અથવા કરતા હતાં ?)
38. At what age did you start somking ? (તમે કંઈ ઉંમરે ધુમપાન શરૂ કર્યું હતું ?)
39. Select only one depending on what is applicable to you
(ફક્ત એક જ જવાબ આપો કે જે તમને લાગુ પડતો હોય.)
(a) I still smoke (હું હાલમાં પણ ધુમપાન કરું છું.)
(b) I have left smoking for less than a year (મારે ધુમપાન છોડે એક વર્ષ કરતા ઓછો સમય થયો છે.)
(c) I have left smoking for more than a year (મારે ધુમપાન છોડે એક વર્ષ કરતાં વધારે સમય થયો છે.)
If answer to Question 39 is (c), go to Question 40, else go to Question 41
(જો પ્રશ્ન ૩૯ નો જવાબ - ૩ હોય તો આગળના પ્રશ્નનો જવાબ આપો અથવા પ્રશ્ન ૪૧ પર જાઓ.)
40. Sepecify the number of years for which left somking (તમોએ કેટલા વર્ષોથી ધુમપાન છોડી દીધું છે ?)
41. Do you consume any type of tobacco product other than somking ? Yes / No
(શું તમે ધુમપાન સિવાય કોઈ બીજા પ્રકારે તમાકુનું સેવન કરો છો ?)
If answer to Question 41 is 'Yes', go to Question 42, else to Question 45
(જો 'હાં' તો આગળના પ્રશ્નનો જવાબ આપો અથવા પ્રશ્ન ૪૫ પર જાઓ.)
42. What tobacco product do you consume ? (તમો તમાકુનું સેવન નીચેના કયા પ્રકારે કરો છો ?)
1. Zarda 2. Khaini 3. Panmasala 4. Gutka 5. Snuff 6. Others (specify) _____
૧. જરદા ૨. ખૈની ૩. પાન મસાલા ૪. ગુટખા ૫. છીંકણી ૬. અન્ય (દર્શાવો)
43. For how many years have you been consuming these products ?
(તમો આ તમાકુનું સેવન કેટલા વર્ષોથી કરો છો ?)
44. How ofthen do you consume this product each day ?
(તમો રોજ કેટલી વાર આ તમાકુનું સેવન કરો છો ?)

ENVIRONMENTAL TOBACCO SMOKE EXPOSURE (વાતાવરણમાં તમાકુના ધુમાડા સાથે સંપર્ક)

45. Do/did any of your family members (i.e. people residing in the same household) regularly smoke in your presence ? Yes / No (હા / ના)
(શું તમારા કુટુંબના કોઈ સભ્ય (એક જ ઘરમાં સાથે રહેવાવાળી વ્યક્તિ) તમારી હાજરીમાં નિયમિત ધુમપાન કરે છે અથવા કરતા હતાં ?) (જો હાં તો આગળના પ્રશ્નનો ઉત્તર આપો અથવા પ્રશ્ન ૪૭ પર જાઓ)
46. Who all in the family are/were regular smokers during childhood and adulthood ?
(પરિવારના કયા સભ્ય તમારા બાળપણથી અથવા મોટી ઉંમરે આપની ઉપસ્થિતિમાં / હાજરીમાં ધુમપાન કરે છે અથવા કરતાં હતાં ?)

Before marriage (લગ્ન પહેલાં)	Product (તમાકુનો પ્રકાર)	Hour/day (કલાક/પ્રતિદિવસ)	Years (વર્ષ)
Grandfather (દાદા)	Yes / No (હા / ના) <input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>
Grandmother (દાદી)	Yes / No (હા / ના) <input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>
Father (પિતા)	Yes / No (હા / ના) <input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>
Mother (માતા)	Yes / No (હા / ના) <input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>
Brother (ભાઈ)	Yes / No (હા / ના) <input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>
Sister (બહેન)	Yes / No (હા / ના) <input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>
Others (Specify) (અન્ય દર્શાવો)	_____ <input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>

Father / Father-in-law (પિતા/સસરા)	Yes / No (હા / ના)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
mother / Mother-in-law (માતા/ સાસુ)	Yes / No (હા / ના)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brother / Brother-in-law (ભાઈ / દિયર)	Yes / No (હા / ના)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sister / Sister-in-law (બહેન / નણંદ / ભાભી)	Yes / No (હા / ના)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Son (પુત્ર)	Yes / No (હા / ના)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Daughter (પુત્રી)	Yes / No (હા / ના)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Husband / Wife (પતિ / પત્ની)	Yes / No (હા / ના)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others (Specify) (અન્ય દર્શાવો) _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Product : (1) Cigarette (2) Bidi (3) Hookah (4) Cigar (5) Pipe (6) Others
(તમાકુના પ્રકાર ૧. સિગારેટ ૨. બીડી ૩. હુકકા ૪. સિગાર ૫. પાઈપ ૬. અન્ય

COOKING FUEL (ભોજન બનાવવાનું ઈંધણ / બળતણ)

47. Do you regularly cook now or have you regularly cooked in the past ?
(શું તમે હાલમાં નિયમિત રીતે રસોઈ બનાવો છો અથવા બનાવતાં હતાં ?)
- 1) Regularly cook now (હાલમાં નિયમિત રીતે સરોઈ બનાવો છો.)
2) Cooked regularly in the past (પહેલાં નિયમિત રીતે રસોઈ બનાવતાં હતાં)
3) Never cooked regularly (ક્યારેય નિયમિત રૂપથી રસોઈ બનાવતાં નથી.)
If answer to Question 47 is '3', go to Question 55, else to Question 48.
(ઉપરોક્ત પ્રશ્નનો જવાબ ૩ હોય તો પ્રશ્ન નં. ૫૫ પૂછો અન્યથા પ્રશ્ન નં. ૪૮ પૂછો.)
48. At what age did you start cooking regularly (તમોએ કંઈ ઉંમરથી નિયમિત રસોઈ બનાવવું શરૂ કર્યું ?)
49. At what age did you stop cooking (if already stopped)
(તમોએ કંઈ ઉંમરથી નિયમિત રીતે રસોઈ બનાવવાનું બંધ કર્યું ? (જો બંધ કરેલ હોય તો) ક્યારે)
50. How often do you cook ? (તમો રસોઈ બનાવો છો ?)
1. Daily (રોજ)
2. Days in a month (મહિનામાં કેટલા દિવસ)
51. Does your house have a separate kitchen ? Yes / No (હા / ના)
(શું તમારા મકાનમાં અલગ રસોડું છે ?)
52. Does the kitchen have windows / openings ? Yes / No (હા / ના)
(શું તમારા રસોડામાં બારી / વેન્ટિલેશન છે ?)
53. How many hours do you daily spend in the kitchen ?
(શું તમો દિવસમાં કેટલા કલાક રસોડામાં વિતાવો છો ?)
54. What cooking fuel do you predominantly use for cooking ?
(આપ રસોઈ બનાવવા માટે મુખ્યત્વે કયા બળતણનો ઉપયોગ કરો છો ?)
- a) Electricity (વિજળી) e) Wood (લાકડા)
b) LPG (ગેસ) f) Dung cake (છાણાં)
c) Kerosene (કેરોસીન) g) Crop residue (ભૂંસું - ઘાસ)
d) Coal (કોલસો) h) Others (અન્ય)

TO BE FILLED BY THE INTERVIEWER (ઈન્ટરવ્યુ લેનાર એ જાતે ભરવું)

55. What, in your perception, is the overall socio-economic status of the individual ?
(તમારી દૃષ્ટીએ વ્યક્તિનું સામાજિક આર્થિક ધોરણ કેવું છે ?)
1. Low (નીચું) 2. Middle (મધ્યમ) 3. High (ઊંચું)

Form filled by (ફોર્મ કોણે ભર્યું) _____

Data verified by (માહિતીની ચકાસણી કરનાર) _____

Data entered into computer by (માહિતી કોમ્પ્યુટરમાં નાખનાર) _____

ಐ.ಸಿ.ಎಂ.ಆರ್. ಅಸ್ತಮಾ ಸಂಶೋಧನಾ ಪ್ರಶ್ನಾವಳಿ

ಗುರುತು ಚಿಹ್ನೆ ಹಾಗೂ ಡೆಮೋಗ್ರಾಫಿ

1. ಕೇಂದ್ರ ಹಾಗೂ ಸ್ಥಳದ ಸೂಚಕ □□
2. ಸಿರಿಯಲ್ ನಂ. □□□□□
3. ಸರ್ವೆ ಮಾಡಿದ ದಿನಾಂಕ □□ / □□ / □□□□
4. ಈಗ ನೆಲೆಸಿರುವ ಸ್ಥಳ ಹಳ್ಳಿ / ಪಟ್ಟಣ □
5. ವಿಳಾಸ ಮತ್ತು ದೂರವಾಣಿ : _____

6. ಹೆಸರು _____
7. ಹುಟ್ಟಿದ ದಿನಾಂಕ □□ / □□ / □□□□
8. ವಯಸ್ಸು (ವರ್ಷಗಳಲ್ಲಿ) □□
9. ಲಿಂಗ ಗಂಡಸು / ಹೆಂಗಸು □
10. ನೀವು ನಿಮ್ಮ ಜೀವಿತದ ಶೇಕಡಾ 75% ಕ್ಕಿಂತ ಜಾಸ್ತಿ ಹಳ್ಳಿ / ಪಟ್ಟಣ / ಮಿಶ್ರ □
ನೆಲೆಸಿರುವ ಸ್ಥಳ ಯಾವುದು?
11. ನೀವು ಎಷ್ಟು ವರ್ಷಗಳವರೆಗೆ ವಿದ್ಯಾಭ್ಯಾಸವನ್ನು ಪಡೆದಿರುವಿರಿ? □□
12. ನಿಮ್ಮ ಮನೆಯ ಯಜಮಾನನ ಕೆಲಸವೇನು? □
 1. ಕೆಲಸವಿಲ್ಲ (ನಿರುದ್ಯೋಗಿ) ಅಥವಾ ನಿವೃತ್ತಿ / ವಿದ್ಯಾರ್ಥಿ
 2. ಮನೆಕೆಲಸ (ಹೆಂಗಸರಿಗೆ)
 3. ತರಬೇತಿಯಿಲ್ಲದ ಕೆಲಸಗಾರ
 4. ತರಬೇತು ಪಡೆದ ಕೆಲಸಗಾರ

5. ಬಿಸಿನೆಸ್ (ಸ್ವಂತ ಉದ್ಯೋಗ)
6. ಜಮೀನಿನ ಕೆಲಸ
7. ಸರ್ಕಾರದ ಅಥವಾ ಖಾಸಗಿ ಕೆಲಸಗಾರ
8. ಸರ್ಕಾರದ ಅಥವಾ ಖಾಸಗಿ ಸರ್ವಿಸ್‌ನಲ್ಲಿ ಸೂಪರ್‌ವೈಸರ್
9. ಸರ್ಕಾರದ ಅಥವಾ ಖಾಸಗಿ ಸರ್ವಿಸ್‌ನಲ್ಲಿ ಆಫೀಸರ್

13. ನಿಮ್ಮ ಕೆಲಸವೇನು?

1. ಕೆಲಸವಿಲ್ಲ (ನಿರುದ್ಯೋಗಿ) ಅಥವಾ ನಿವೃತ್ತಿ / ವಿದ್ಯಾರ್ಥಿ
2. ಮನೆಕೆಲಸ (ಹೆಂಗಸರಿಗೆ)
3. ತರಬೇತಿಯಿಲ್ಲದ ಕೆಲಸಗಾರ
4. ತರಬೇತು ಪಡೆದ ಕೆಲಸಗಾರ
5. ಬಿಸಿನೆಸ್ (ಸ್ವಂತ ಉದ್ಯೋಗ)
6. ಜಮೀನಿನ ಕೆಲಸ
7. ಸರ್ಕಾರದ ಅಥವಾ ಖಾಸಗಿ ಕೆಲಸಗಾರ
8. ಸರ್ಕಾರದ ಅಥವಾ ಖಾಸಗಿ ಸರ್ವಿಸ್‌ನಲ್ಲಿ ಸೂಪರ್‌ವೈಸರ್
9. ಸರ್ಕಾರದ ಅಥವಾ ಖಾಸಗಿ ಸರ್ವಿಸ್‌ನಲ್ಲಿ ಆಫೀಸರ್

ಎದೆಯಲ್ಲಿ ಶಿಲ್ಪಿನ ಶಬ್ದ ಮತ್ತು ಎದೆ ಕಟ್ಟುವುದು.

ವರ್ಷಗಳು

14. ನಿಮಗೆ ಕಳೆದ ಹನ್ನೆರಡು ತಿಂಗಳಲ್ಲಿ ಎಂದಾದರೂ ಎದೆಯಲ್ಲಿ ಶಿಲ್ಪಿನ ಶಬ್ದ / ಗೂರಲು ಉಂಟಾಗಿತ್ತೇ ?

ಹೌದು / ಇಲ್ಲ

15. ಬೆಳಗಿನ ಜಾವದಲ್ಲಿ ನಿಮಗೆ ಎಂದಾದರೂ ಎದೆ ಕಟ್ಟಿದ ಹಾಗಾಗಿ ಅಥವಾ ಉಸಿರಾಟಕ್ಕೆ ತೊಂದರೆ ಉಂಟಾಗಿ ಎಚ್ಚರವಾಗಿತ್ತೇ?

ಹೌದು / ಇಲ್ಲ

ಉಸಿರಾಟದ ತೊಂದರೆ

16. ನಿಮಗೆ ಕಳೆದ ಹನ್ನೆರಡು ತಿಂಗಳಲ್ಲಿ ವ್ಯಾಯಾಮ, ಆಟ ಅಥವಾ ಕಷ್ಟಕರವಾದ ಕೆಲಸ ಮಾಡಿದಾಗ ಎಂದಾದರೂ ಉಸಿರಾಟದ ತೊಂದರೆ ಉಂಟಾಗಿತ್ತೇ?

ಹೌದು / ಇಲ್ಲ

17. ನಿಮಗೆ ಕಳೆದ ಹನ್ನೆರಡು ತಿಂಗಳಲ್ಲಿ ಕಷ್ಟವಿಲ್ಲದ ಕೆಲಸ ಮಾಡಿದಾಗ ಎಂದಾದರೂ ಉಸಿರಾಟದ ತೊಂದರೆ ಉಂಟಾಗಿತ್ತೇ? ಹೌದು / ಇಲ್ಲ

18. ನಿಮಗೆ ಕಳೆದ ಹನ್ನೆರಡು ತಿಂಗಳಲ್ಲಿ ಎಂದಾದರೂ ರಾತ್ರಿ ಉಸಿರಾಟದ ತೊಂದರೆಯಿಂದ ಎಚ್ಚರವಾಗಿತ್ತೇ? ಹೌದು / ಇಲ್ಲ

ಕೆಮ್ಮು ಹಾಗೂ ಕಫ

19. ನಿಮಗೆ ಕಳೆದ ಹನ್ನೆರಡು ತಿಂಗಳಲ್ಲಿ ರಾತ್ರಿ ಎಂದಾದರೂ ಕೆಮ್ಮಿನಿಂದಾಗಿ ಎಚ್ಚರವಾಗಿತ್ತೇ? ಹೌದು / ಇಲ್ಲ

20. ನೀವು ಸಾಮಾನ್ಯವಾಗಿ ಬೆಳಿಗ್ಗೆ ಎದ್ದಾಕ್ಷಣ ಕೆಮ್ಮುತ್ತೀರಾ? ಹೌದು / ಇಲ್ಲ

21. ನೀವು ಬೆಳಿಗ್ಗೆ ಎದ್ದಾಕ್ಷಣ ನಿಮ್ಮ ಎದೆಯಿಂದ ಕಫವನ್ನು ಉಗಿಯುತ್ತೀರಾ? ಹೌದು / ಇಲ್ಲ

22. ನೀವು ಸಾಮಾನ್ಯವಾಗಿ ಬೆಳಿಗ್ಗೆ ನಿಮ್ಮ ಎದೆಯಿಂದ ಕನಿಷ್ಠ ಒಂದು ವರ್ಷದಲ್ಲಿ ಮೂರು ತಿಂಗಳಾದರೂ ಕಫವನ್ನು ಉಗಿಯುತ್ತೀರಾ? ಹೌದು / ಇಲ್ಲ

ಉಸಿರಾಟ

23. ಈ ಕೆಳಗಿನವುಗಳಲ್ಲಿ ನಿಮಗೆ ಸರಿಯಾಗಿ ಒಪ್ಪುವುದನ್ನು ಸೂಚಿಸಿ.

ಅ. ನನಗೆ ಎಂದೂ ಉಸಿರಾಟದ ತೊಂದರೆ ಉಂಟಾಗಿಲ್ಲ.

ಬ. ನನಗೆ ಉಸಿರಾಟದ ತೊಂದರೆ ಸಾಮಾನ್ಯವಾಗಿ ಉಂಟಾಗುತ್ತದೆ. ಆದರೆ ಮತ್ತೆ ಸಂಪೂರ್ಣವಾಗಿ ಸರಿಯಾಗುತ್ತೇನೆ.

ಸಿ. ನನ್ನ ಉಸಿರಾಟ ಯಾವತ್ತೂ ಸಮಾಧಾನಕರವಾಗಿಲ್ಲ.

ಧೂಳು, ಪುಕ್ಕ ಹಾಗೂ ಸಾಕು ಪ್ರಾಣಿಗಳು

24. ನೀವು ಧೂಳಿರುವ ಜಾಗಕ್ಕೆ ಹೋದಾಗ ಅಥವಾ ಸಾಕುಪ್ರಾಣಿಗಳ ಜೊತೆ ಉದಾ: ನಾಯಿ, ಬೆಕ್ಕು ಅಥವಾ ಕುದುರೆ ಅಥವಾ ಪುಕ್ಕ, ರೋಮ ಅಥವಾ ದಿಂಬಿನ ಸಾನಿಟೈಸಿಂಗ್ ಬಂದಾಗ ನಿಮಗೆ -

ಅ. ಎದೆ ಕಟ್ಟಿದ ಹಾಗೆ ಆಗುತ್ತಿದೆಯೇ ?

ಹೌದು / ಇಲ್ಲ

ಆ. ಉಸಿರಾಟದ ತೊಂದರೆ ಉಂಟಾಗುತ್ತಿದೆಯೇ?

ಹೌದು / ಇಲ್ಲ

ಅಸ್ತಮಾ

25. ನೀವು ಎಂದಾದರೂ (ದಮ್ಮು / ಶೂಲು) ಅಸ್ತಮಾ ರೋಗದಿಂದ ಬಳಲುತ್ತಿದ್ದೀರೆಯೋ? ಹೌದು / ಇಲ್ಲ

26. ನಿಮಗೆ ಕಳೆದ ಹನ್ನೆರಡು ತಿಂಗಳಲ್ಲಿ ಎಂದಾದರೂ ಅಸ್ತಮಾ / ದಮ್ಮು ರೋಗದಿಂದ ಬಳಲುತ್ತಿದ್ದೀರೆಯೇ? ಹೌದು / ಇಲ್ಲ

27. ನೀವು ಉಸಿರಾಟದ ತೊಂದರೆಗಾಗಿ ಇನ್‌ಹೇಲರ್, ಪಂಪ್, ರೋಟಾ ಹೇಲರ್, ನೆಬುಲೈಸರ್ ಅಥವಾ ಬೇರೆ ಔಷಧಗಳನ್ನು ಬಳಸುತ್ತಿದ್ದೀರೆಯೇ? ಹೌದು / ಇಲ್ಲ

ಅಟೋಪಿ ಹಾಗೂ ಕುಟುಂಬ ಚರಿತ್ರೆ

28. ನಿಮಗೆ ಆಗಾಗ್ಗೆ ಚರ್ಮದ ತೊಂದರೆ - ರ್ಯಾಷ್ (ಉದಾ : ಪಿತ್ತಗಂದೆ ಅಥವಾ ಎಕ್ಸಿಮೊ) ಬಂದು ಹೋಗುತ್ತದೆಯೇ? ಹೌದು / ಇಲ್ಲ

29. ನಿಮಗೆ ಆಗಾಗ್ಗೆ ಶೀನು ಅಥವಾ ನೆಗಡಿ ಆಗುತ್ತದೆಯೇ? ಹೌದು / ಇಲ್ಲ

30. ನಿಮಗೆ ಆಗಾಗ್ಗೆ ಕಣ್ಣಿನ ಕಡಿತ ಆಗುತ್ತದೆಯೇ? ಹೌದು / ಇಲ್ಲ

31. ನಿಮ್ಮ ಕುಟುಂಬದಲ್ಲಿ ಯಾರಿಗಾದರೂ ಈ ಮೇಲೆ ಹೇಳಿದ ತೊಂದರೆಗಳು ಆಗುತ್ತದೆಯೇ? ಹೌದು / ಇಲ್ಲ

32. ಇದೆ ಎಂದಾದಲ್ಲಿ, ಯಾರಿಗೆ? ಅಜ್ಜಿ ಅಥವಾ ಅಜ್ಜ / ತಂದೆ-ತಾಯಿ / ಸಹೋದರರು / ಸಹೋದರಿಯರು / ಮಕ್ಕಳು / ಇತರರು.

33. ನಿಮ್ಮ ಕುಟುಂಬದಲ್ಲಿ ಯಾರಾದರೂ ಅಸ್ತಮಾ ರೋಗದಿಂದ ನರಳುತ್ತಿದ್ದಾರೆರೆಯೇ? ಹೌದು / ಇಲ್ಲ

34. ಇದೆ ಎಂದಾದಲ್ಲಿ ಯಾರಿಗೆ? ಅಜ್ಜಿ ಅಥವಾ ಅಜ್ಜ / ತಂದೆ-ತಾಯಿ / ಸಹೋದರರು / ಸಹೋದರಿಯರು / ಮಕ್ಕಳು / ಇತರರು.

ತಂಬಾಕು ಸೇವನೆ ಮತ್ತು ಉಪಯೋಗ

35. ನೀವು ಎಂದಾದರೂ ಒಂದು ವರ್ಷ ಅಥವಾ ಅದಕ್ಕಿಂತ ಜಾಸ್ತಿ ತಂಬಾಕು ಸೇವಿಸಿದ್ದೀರೆಯೇ? ಹೌದು / ಇಲ್ಲ

35ನೇ ಪ್ರಶ್ನೆಗೆ ಉತ್ತರ ಹೌದು ಎಂದಾದಲ್ಲಿ ಮುಂದಿನ ಪ್ರಶ್ನೆಯನ್ನು ಉತ್ತರಿಸಿ. ಇಲ್ಲ ಎಂದಾದಲ್ಲಿ 41ನೇಯ ಪ್ರಶ್ನೆಗೆ ಹೋಗಿ.

36. ಯಾವ ತರಹದ ತಂಬಾಕನ್ನು ನೀವು ಚಾಸ್ತಿ ಉಪಯೋಗಿಸುತ್ತಿದ್ದೀರಿ?
- ಎ. ಸಿಗರೇಟು
- ಬಿ. ಬೀಡಿ
- ಸಿ. ಹುಕ್ಕ
- ಡಿ. ಸಿಗಾರ್
- ಇ. ಪೈಪ್
- ಎಫ್. ಇತರೆ
37. ನೀವು ಸಾಮಾನ್ಯವಾಗಿ 24 ಘಂಟೆಗಳಲ್ಲಿ ಎಷ್ಟು ಬೀಡಿ, ಸಿಗರೇಟು,
- ಸಿಗಾರ್, ಹುಕ್ಕ, ಚಿಲ್ಲಿನ್ನು ಸೇವಿಸುತ್ತೀರಿ?
38. ನೀವು ತಂಬಾಕು ಸೇವನೆಯನ್ನು ಯಾವ ವಯಸ್ಸಿನಲ್ಲಿ ಪ್ರಾರಂಭಿಸಿದ್ದೀರಿ?
39. ನಿಮಗೆ ಒಪ್ಪುವ ಕೆಳಗಿನ ಒಂದನ್ನು ಸೂಚಿಸಿ.
- ಎ. ನಾನು ಇನ್ನೂ ಸೇದುತ್ತಿದ್ದೇನೆ.
- ಬಿ. ನಾನು ಸೇದುವುದನ್ನು ಬಿಟ್ಟು ವರ್ಷಪೂರ್ತಿಯಾಗಿಲ್ಲ.
- ಸಿ. ನಾನು ಸೇದುವುದನ್ನು ಬಿಟ್ಟು ಒಂದು ವರ್ಷದ ಮೇಲಾಯಿತು.
- ನೀವು 39ನೇ ಪ್ರಶ್ನೆಗೆ 'ಸಿ' ಎಂದು ಉತ್ತರವಿದ್ದಲ್ಲಿ ಮುಂದಿನ ಪ್ರಶ್ನೆ ಉತ್ತರಿಸಿ.
- ಇಲ್ಲದಿದ್ದಲ್ಲಿ 41ನೆಯ ಪ್ರಶ್ನೆಗೆ ಹೋಗಿ.
40. ನೀವು ಸೇದುವುದನ್ನು ಬಿಟ್ಟು ಎಷ್ಟು ವರ್ಷಗಳಾದವು?
41. ನೀವು ತಂಬಾಕನ್ನು ಸೇದುವುದಲ್ಲದೆ ಬೇರೆ ತರಹದಲ್ಲಿ
- ಉಪಯೋಗಿಸುತ್ತೀರಾ? ಹೌದು / ಇಲ್ಲ
- 41ನೇ ಪ್ರಶ್ನೆಗೆ ನಿಮ್ಮ ಉತ್ತರ ಹೌದಾದಲ್ಲಿ 42ನೇ ಪ್ರಶ್ನೆಯನ್ನು ಉತ್ತರಿಸಿ.
- ಇಲ್ಲವಾದಲ್ಲಿ 45ನೇ ಪ್ರಶ್ನೆಗೆ ಹೋಗಿರಿ.
42. ಯಾವ ತಂಬಾಕು ಉತ್ಪಾದನೆಯನ್ನು ನೀವು ಉಪಯೋಗಿಸುತ್ತೀರಿ?
1. ಜರ್ದಾ 2. ಕೈನಿ 3. ಪಾನಮಸಾಲ
4. ಗುಟ್ಟಾ 5. ನಶ್ಕ 6. ಇತರೆ _____
43. ಕಳೆದ ಎಷ್ಟು ವರ್ಷಗಳಿಂದ ಈ ಉತ್ಪಾದನೆಯನ್ನು ನೀವು ಉಪಯೋಗಿಸುತ್ತಿದ್ದೀರಿ?

44. ನೀವು ಒಂದು ದಿನದಲ್ಲಿ ಈ ಉತ್ಪಾದನೆಯನ್ನು ಎಷ್ಟು ಬಾರಿ ಉಪಯೋಗಿಸುತ್ತೀರಿ?

ಇಟಿಎಸ್ ಎಕ್ಸ್‌ಪೋಷರ್

45. ನಿಮ್ಮ ಕುಟುಂಬದಲ್ಲಿ (ಅಂದರೆ ನಿಮ್ಮ ಮನೆಯಲ್ಲಿ ಇರುವವರು) ಈಗ ಅಥವಾ ಎಂದಾದರೂ ಸತತವಾಗಿ (Regularly) ನಿಮ್ಮ ಮುಂದೆ ತಂಬಾಕು ಸೇವನೆ ಮಾಡುತ್ತಿದ್ದರೇ?

ಹೌದು / ಇಲ್ಲ

46. ನಿಮ್ಮ ಕುಟುಂಬದಲ್ಲಿ ನೀವು ಸಣ್ಣವರಾಗಿದ್ದಾಗ ಅಥವಾ ಯೌವನದಲ್ಲಿ ಈಗ ಅಥವಾ ಮುಂಚೆ ದಿನನಿತ್ಯ ತಂಬಾಕು ಸೇವನೆ ಯಾರು ಮಾಡುತ್ತಿದ್ದರು?

ಮದುವೆಯ ಮುಂಚೆ / ಸಣ್ಣವರಾಗಿದ್ದಾಗ

		ಪದಾರ್ಥ	ಗಂಟೆ / ದಿನ	ವರ್ಷಗಳು
ಅ. ಅಜ್ಜ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಬಿ. ಅಜ್ಜಿ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಸಿ. ಅಪ್ಪ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಡಿ. ಅಮ್ಮ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಇ. ಸಹೋದರ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಎಫ್. ಸಹೋದರಿ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಜಿ. ಇತರರು (ಯಾರೆಂದು ಸೂಚಿಸಿ) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ಮದುವೆಯ ನಂತರ / ಯೌವನದಲ್ಲಿ

		ಪದಾರ್ಥ	ಗಂಟೆ / ದಿನ	ವರ್ಷಗಳು
ಅ. ಅಪ್ಪ / ಮಾವ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಬಿ. ಅಮ್ಮ / ಅತ್ತೆ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಸಿ. ಸಹೋದರ / ಭಾವ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಡಿ. ಸಹೋದರಿ / ನಾದಿನಿ	ಹೌದು / ಇಲ್ಲ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ಇ. ಮಗ	ಹೌದು / ಇಲ್ಲ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಎಫ್. ಮಗಳು	ಹೌದು / ಇಲ್ಲ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಜಿ. ಗಂಡ / ಹೆಂಡತಿ	ಹೌದು / ಇಲ್ಲ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ಹೆಚ್. ಇತರರು (ಯಾರೆಂದು ಸೂಚಿಸಿ)_____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ಪದಾರ್ಥ :- (1) ಸಿಗರೇಟ್ (2) ಬೀಡಿ (3) ಹುಕ್ಕ
(4) ಸಿಗಾರ್ (5) ಪೈಪ್ (6) ಇತರೆ.

ಅಡುಗೆ ಅನಿಲ

47. ಹಿಂದೆ ನೀವು ಪ್ರತಿದಿನ ಅಡುಗೆ ಮಾಡುತ್ತಿದ್ದೀರಾ ಅಥವಾ ಈಗ ಸತತವಾಗಿ ಅಡುಗೆ ಮಾಡುತ್ತಿದ್ದೀರಾ?
- 1) ಸತತವಾಗಿ ಅಡುಗೆ ಮಾಡುತ್ತೀರಾ
2) ಹಿಂದೆ ಪ್ರತಿದಿನ ಅಡುಗೆ ಮಾಡುತ್ತಿದ್ದೀರಾ
3) ಯಾವಾಗಲೂ ಅಡುಗೆ ಮಾಡುತ್ತಿರಲಿಲ್ಲವೆ
- 47ನೇ ಪ್ರಶ್ನೆಗೆ ಉತ್ತರ '3' ಎಂದಾದಲ್ಲಿ ಪ್ರಶ್ನೆ 55ಕ್ಕೆ ಹೋಗಿ,
ಬೇರೆಯಾದರೆ ಪ್ರಶ್ನೆ 48ಕ್ಕೆ ಹೋಗಿ.
48. ನೀವು ದಿನನಿತ್ಯ ಅಡುಗೆ ಮಾಡುವುದನ್ನು ಯಾವ ವಯಸ್ಸಿನಲ್ಲಿ ಪ್ರಾರಂಭ ಮಾಡಿದ್ದೀರಿ?
49. ನೀವು ಯಾವ ವಯಸ್ಸಿನಲ್ಲಿ ಅಡುಗೆ ಮಾಡುವುದನ್ನು ನಿಲ್ಲಿಸಿದಿರಿ?
(ಈಗಾಗಲೇ ಅಡುಗೆ ಮಾಡುವುದನ್ನು ನಿಲ್ಲಿಸಿಬಿಟ್ಟಿದ್ದರೆ)
50. ನೀವು ಎಷ್ಟುಸಲ ಅಡುಗೆ ಮಾಡುತ್ತೀರಾ?
- 1) ಪ್ರತಿದಿನ
2) ತಿಂಗಳಲ್ಲಿ ಎಷ್ಟು ದಿನ
51. ನಿಮ್ಮ ಮನೆಯಲ್ಲಿ ಪ್ರತ್ಯೇಕವಾದ ಅಡುಗೆ ಮನೆ ಇದೆಯೇ ? ಹೌದು / ಇಲ್ಲ
52. ಅಡುಗೆ ಮನೆಯಲ್ಲಿ ಕಿಟಕಿಯ (Opening) ಸೌಲಭ್ಯ ಇದೆಯೇ? ಹೌದು / ಇಲ್ಲ
53. ಪ್ರತಿದಿನ ಎಷ್ಟು ಸಮಯ ಅಡುಗೆ ಮನೆಯಲ್ಲಿ ಕಾಲ ಕಳೆಯುತ್ತೀರಿ?

54. ನೀವು ಮುಖ್ಯವಾಗಿ ಅಡುಗೆಗೆ ಯಾವ ಬಗೆಯ ಇಂಧನವನ್ನು

ಉಪಯೋಗಿಸುವಿರಿ?

a) ವಿದ್ಯುತ್

b) ಅನಿಲ (ಗ್ಯಾಸ್)

c) ಸೀಮೆಎಣ್ಣೆ

d) ಇದ್ದಿಲು

e) ಮರ / ಸೌದೆ

f) ಸೆಗಣೆ ಬೆರಣೆ

g) ಹಿಪ್ಪನೇರಳೆ ಕಡ್ಡಿ / ಹುಲ್ಲು / ಸೋಗು

h) ಇತರೆ _____



ಸಂದರ್ಶಕರು ತುಂಬಿಸಬೇಕಾದ್ದು

55. ನಿಮ್ಮ ಎಣಿಕೆಯಲ್ಲಿ ಈತನ / ಈಕೆಯ ಸಾಮಾಜಿಕ ದರ್ಜೆ ಯಾವುದು?

ಕೆಳ / ಮಧ್ಯಮ / ಮೇಲ್ಮರ್ಜೆ



◆ ಈ ಪ್ರಶ್ನಾವಳಿಯನ್ನು ತುಂಬಿಸಿದವರ ಹೆಸರು

◆ ಈ ಪ್ರಶ್ನಾವಳಿಯನ್ನು ಸರಿಯಾಗಿ ತುಂಬಿಸಿದೆಯೆ ಎಂದು ನೋಡಿದವರು

◆ ಈ ಪ್ರಶ್ನಾವಳಿಯನ್ನು ಕಂಪ್ಯೂಟರಿನಲ್ಲಿ ಎಂಟರ್ ಮಾಡಿದವರು

- १) केंद्र आणि विभाग कोड
 २) अनु क्रमांक
 ३) सर्वेक्षण दिनांक
 ४) सध्याचा पत्ता
 ५) पत्ता
 ६) नाव
 ७) जन्म तारीख
 ८) वय
 ९) लिंग पुरुष - १, स्त्री - २
- १०) तुम्ही तुमच्या जिवनात जास्तीत जास्त काळ ७५% पेक्षा जास्त कुठे राहिलात
 ११) तुम्ही किती वर्षे शिक्षण घेतले ?
 १२) कुटूंब प्रमुख कुठला व्यवसाय करतो. कोड
- | | |
|--|---|
| १) बेरोजगार/सेवानिवृत्त | १ |
| २) गृहीनी | २ |
| ३) अकुशल कामगार | ३ |
| ४) कुशल कामगार | ४ |
| ५) व्यवसाय / स्वतःचा व्यवसाय | ५ |
| ६) शेतकरी | ६ |
| ७) सरकारी नोकरदार / खासगी नौकरी | ७ |
| ८) सरकारी देखरेख अधिकारी / खासगी नौकरी | ८ |
| ९) सरकारी अधिकारी / खासगी नौकरी | ९ |
- १३) तुमचा व्यवसाय काय आहे ? कोड
- | | |
|--|---|
| १) बेरोजगार/सेवानिवृत्त | १ |
| २) गृहीनी | २ |
| ३) अकुशल कामगार | ३ |
| ४) कुशल कामगार | ४ |
| ५) व्यवसाय / स्वतःचा व्यवसाय | ५ |
| ६) शेतकरी | ६ |
| ७) सरकारी नोकरदार / खासगी नौकरी | ७ |
| ८) सरकारी देखरेख अधिकारी / खासगी नौकरी | ८ |
| ९) सरकारी अधिकारी / खासगी नौकरी | ९ |
- १४) तुमच्या छतितुन मागील १२ महिन्यापासुन घरघरल्यासारखा किंवा शिट्टी वाजल्यासारखा आवाज येतो का ?
 होय १, नाही ०
- १५) सकाळी उठल्यावर तुमच्या छातीत जखडल्यासारख वाटत का किंवा श्वासोच्छ्वासास त्रास होतो का ?
 होय १, नाही ०
- १६) मागील १२ महिन्यापासुन व्यायाम केल्यानंतर किंवा खेळल्यानंतर किंवा जड काम केल्यानंतर स्वाच्छेश्वास घेण्यास त्रास होतो का ?
 होय १, नाही ०
- १७) मागील १२ महिन्यापासुन काही तणावमुक्त किंवा जड काम न करता ही तुम्हाला स्वाच्छेश्वास घेताना त्रास होतो का ?
 होय १, नाही ०

- मागील १२ महिण्यापासुन कधी श्वासोच्छ्वास अडकल्यामुळे तुम्ही कधी झोपेतुन जागे झालात काय ?
होय १, नाही ०
- १९) मागील १२ महिण्यापासुन कधी खोकला आल्यामुळे तुम्ही कधी झोपेतुन जागे झालात काय ?
होय १, नाही ०
- २०) सकाळी तुम्हाला खोकल्याचा त्रास होतो काय ?
होय १, नाही ०
- २१) सकाळी उठल्यावर तुमच्या छातीतुन ठसा बाहेर पडतो काय ?
होय १, नाही ०
- २२) a) या वर्षात लगातार ३ महिण्यापासुन तुमच्या छातीतुन सकाळी ठसा बाहेर पडतो काय ?
होय १, नाही ०
b) जर 'होय' असेल तर किती वर्षापासुन
- २३) खालील विधानापैकी योग्य विधान लिहा.
a) मला स्थिरपणे श्वासोच्छ्वास अडकल्याचा अनुभव येतो. - ०
c) माझा नेहमी श्वासोच्छ्वास अडकतो पण लगेच बरा होतो. - १
d) माझा श्वासोच्छ्वास कधीच समाधानकारक नसतो. - २
- २४) तुम्ही जेव्हा धुळीच्या ठिकाणी जाता किंवा पाळीव प्राणी जसे, कुत्रा, मांजर, घोडा, पक्षी, कापूस असलेल्या ठिकाणी जाता तेव्हा.
a) छातीत जखडल्या सारखे पाडते. - ०
b) श्वासोच्छ्वास घेण्यास त्रास होतो. - १
- दम**
- २५) तुम्ही कधी दम्याच्या त्रासातुन गेलात काय.
होय १, नाही ०
- २६) तुम्हाला मागील १२ महिण्यापासुन दम्याचा अट्याक आला काय ?
- २७) तुम्ही श्वासोच्छ्वासाच्या उपचारार्थ कधी ईनव्हेलर पंप, रोटहेलर किंवा नेबीयु लायस्झर चा वापर केला आहे काय ?
होय १, नाही ०
- २८) तुमच्या त्वचेला बेगा पडुन जातात काय ? की लचेवर चट्टे पडतात काय ?
होय १, नाही ०
- २९) नेहमी तुमचे नाक गळते काय ? सर्दीचा त्रास होतो काय ?
होय १, नाही ०
- ३०) नेहमी तुमच्या डोळ्यात जळजळ होते काय ?
होय १, नाही ०
- ३१) वरील तीन लक्षणान पैकी तुम्हच्या कुटूंबापैकी कोणाला त्रास होतो काय ?
होय १, नाही ०
- ३२) जर 'होय' असेल तर कोणाला ?
आजी-आजोबा / आई - बाबा / भाऊ / बहीण / मुल / इतर
- ३३) तुमच्या कुटूंबापैकी कोणाला दम्याचा त्रास होतो काय ?
होय १, नाही ०
- ३४) जर हो असेल तर कोणाला ?
आजी-आजोबा / आई - बाबा / भाऊ / बहीण / मुल / इतर

- ३५) तुम्ही १ वर्ष किंवा त्यापेक्षा जास्त काळासाठी धुम्रपान केले काय ?
होय १, नाही ०
- ३६) तुम्ही नेहमी धुम्रपानामध्ये तंबाखु सारख्या पदार्थाचा वापर करता काय ? जसे
a) सिगारेट - १
b) बिडी - २
c) हुक्का - ३
d) सिगार - ४
e) पाईप - ५
f) इतर - ९
- ३७) २४ तासात धुम्रपाणासाठी तुम्ही किती सिगारेट, बिडी, हुक्का, सिगार, पाईप, किंवा चिलमचा, वापर करता
होय १, नाही ०
- ३८) वयाच्या कोणत्या वर्षापासुन तुम्ही धुम्रपाणास सुरवात केली ?
- ३९) खालील विधानान पैकी तुम्हाला लागु होणारा पर्याय निवडा.
a) मी धुम्रपाण करतो - १
b) मी १ वर्षा पेक्षा कमी काळ धुम्रपान केले आहे - २
c) मी १ वर्षा पेक्षा जास्त काळ धुम्रपाण केले आहे - ३
- ४०) तुम्ही नेमके किती वर्षा पासुन धुम्रपाण करता ?
- ४१) धुम्रपाणापेक्षा वेगळ्या प्रक्रीयेसाठी तुम्ही तंबाखु सारख्या पदार्थाचा वापर करता काय ?
होय १, नाही ०
- ४२) कुठल्या प्रकारच्या तंबाखु युक्त पदार्थाचा तुम्ही सेवन करता ?
होय १, नाही ०
- ४३) अशा तंबाखु युक्त पदार्थाचे तुम्ही किती वर्षा पासुन सेवन करता ? -- ९९
- ४४) तुम्ही एका दिवसात किती प्रमाणात तंबाखु युक्त पदार्थाचे सेवन
इत्यादी कारणे
- ४५) तुमच्या कुटूंबापैकी कोणी व्यक्ती नेहमी तुम्ही हजर असतांचो तुम्हाच्या समोर धुम्रपान करतो काय ?
होय १, नाही ०
- ४६) जर हे असेल तर तुम्हाच्या बालपनी किंवा तरुन पणात तुम्हाच्या कुटूंबातील कोणत्या व्यक्ती तुम्हाच्या समोर
धुम्रपान करता ?

- a) आजोबा
b) आजी
a) वडील / सासरे
b) आई / सासु
c) बहीण / साळी
d) मुलगा
e) मुलगी
f) पती / पत्नी
g) इतर
Total Number
(एकुण संख्या)

बालपनी

- हो -१ / नाही - ०
हो -१ / नाही - ०
हो -१ / नाही - ०
हो -१ / नाही - ०
हो -१ / नाही - ०
हो -१ / नाही - ०
हो -१ / नाही - ०
हो -१ / नाही - ०
हो -१ / नाही - ०
हो -१ / नाही - ०

- 9

പഠന ചോദ്യാവലി

ജനസംഖ്യ വിവരശേഖരണവും തിരിച്ചറിയലും

1. സെന്ററിന്റെ കോഡ് □□
2. ക്രമ നമ്പർ □□□□□□
3. സർവ്വേ ചെയ്യുന്ന തീയതി □□ / □□ / □□□□
4. ഇപ്പോഴത്തെ താമസസ്ഥലം (നഗരം, ഗ്രാമം) □
5. മേൽവിലാസം, (ഫോൺ നമ്പർ ഉൾപ്പെടെ) _____

6. പേര് _____
7. ജനനതീയതി □□ / □□ / □□□□
8. പ്രായം (വർഷത്തിൽ) □□
9. ലിംഗം (സ്ത്രീ, പുരുഷൻ) □
10. സ്ഥിരതാമസസ്ഥലം (ജീവിതത്തിന്റെ മൂക്കാൽ ഭാഗവും ചിലവഴിച്ചത്) □
 നഗരം/ഗ്രാമം/ രണ്ടിലും കൂടെ
11. എത്രവർഷം താങ്കൾ വിദ്യാഭ്യാസത്തിനായി ചിലവഴിച്ചു? □□
12. ഗൃഹനാമന്റെ തൊഴിൽ? □
 - (1) തൊഴിൽ രഹിതൻ / വിരമിച്ചയാൾ / വിദ്യാർത്ഥി, രോഗി, വികലാംഗർ
 - (2) വീട്ടമ്മ
 - (3) കുലിപ്പണി
 - (4) സാങ്കേതിക തൊഴിൽ
 - (5) വ്യാപാരം/സ്വയംതൊഴിൽ/(ഡോക്ടർ, ഇഞ്ചിനീയർ, വക്കീൽ, ചാർട്ടേർഡ് അക്കൗണ്ടന്റ്)
 - (6) കർഷകൻ
 - (7) സർക്കാർ / സ്വകാര്യസ്ഥാപനം - (ക്ലാർക്ക്, പ്യൂൺ, ഫാക്ടറി, തൊഴിലാളി)
 - (8) ഉദ്യോഗസ്ഥൻ - സർക്കാർ / സ്വകാര്യസ്ഥാപനം (ഓഫീസർ, സൂപ്പർവൈസർ)
 - (9) മേലുദ്യോഗസ്ഥൻ - സർക്കാർ / സ്വകാര്യസ്ഥാപനം (ഉന്നത ഉദ്യോഗസ്ഥൻ)
13. എന്താണ് താങ്കളുടെ തൊഴിൽ □
 - (1) തൊഴിൽ രഹിതൻ / വിരമിച്ചയാൾ / വിദ്യാർത്ഥി, രോഗി, വികലാംഗർ
 - (2) വീട്ടമ്മ
 - (3) കുലിപ്പണി
 - (4) സാങ്കേതിക തൊഴിൽ
 - (5) വ്യാപാരം/സ്വയംതൊഴിൽ/(ഡോക്ടർ, ഇഞ്ചിനീയർ, വക്കീൽ, ചാർട്ടേർഡ് അക്കൗണ്ടന്റ്)
 - (6) കർഷകൻ
 - (7) സർക്കാർ / സ്വകാര്യസ്ഥാപനം - (ക്ലാർക്ക്, പ്യൂൺ, ഫാക്ടറി, തൊഴിലാളി)
 - (8) ഉദ്യോഗസ്ഥൻ - സർക്കാർ / സ്വകാര്യസ്ഥാപനം (ഓഫീസർ, സൂപ്പർവൈസർ)
 - (9) മേലുദ്യോഗസ്ഥൻ - സർക്കാർ / സ്വകാര്യസ്ഥാപനം (ഉന്നത ഉദ്യോഗസ്ഥൻ)

ശ്യാസകോശ സംബന്ധമായ രോഗലക്ഷണങ്ങൾ

(അതെ അല്ലെങ്കിൽ അല്ല എന്ന് ഉത്തരം രേഖപ്പെടുത്തുക ഉത്തരം അതെ എന്നാണെങ്കിൽ രോഗലക്ഷണം തുടങ്ങിയിട്ട് എത്രകാലമായി എന്നു കൂടി രേഖപ്പെടുത്തുക)

വലിവു വിമ്മിഷ്ടവും

വർഷത്തിൽ

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| 14. താങ്കൾക്ക് കഴിഞ്ഞ ഒരു വർഷത്തിനുള്ളിൽ എപ്പോഴെങ്കിലും നെഞ്ചിൽനിന്നും വലിവിന്റെയോ, കുറുകലിന്റെയോ ചുളമിടുന്നതുപോലെയോ ഉള്ള ശബ്ദം ഉണ്ടായിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. താങ്കൾക്ക് എപ്പോഴെങ്കിലും രാവിലെ ഉറക്കത്തിൽനിന്നും വിമ്മിഷ്ടമോ ശ്യാസതടസ്സം മൂലമോ ഉണരേണ്ടി വന്നിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |

ശ്യാസംമുട്ട്

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| 16. താങ്കൾക്ക് കഴിഞ്ഞ ഒരു വർഷത്തിനുള്ളിൽ എപ്പോഴെങ്കിലും വ്യാധാമം, കായികാഭ്യാസം, കഠിനാധ്വാനം എന്നിവയെ തുടർന്ന് ശ്യാസംമുട്ടൽ അനുഭവപ്പെട്ടിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. മേൽപ്പറഞ്ഞ അവസ്ഥകളിലല്ലാതെ എപ്പോഴെങ്കിലും കഴിഞ്ഞ ഒരു വർഷമായി താങ്കൾക്ക് ശ്യാസം മുട്ടൽ അനുഭവപ്പെട്ടിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. താങ്കൾ കഴിഞ്ഞ ഒരു വർഷത്തിനിടയിൽ എപ്പോഴെങ്കിലും രാത്രിയിൽ ശ്യാസതടസ്സം മൂലം എഴുന്നേറ്റിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |

ചുമയും കഫവും

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| 19. താങ്കൾ കഴിഞ്ഞ ഒരു വർഷത്തിനുള്ളിൽ എപ്പോഴെങ്കിലും രാത്രിയിൽ ചുമ കാരണം എഴുന്നേറ്റിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. താങ്കൾ സാധാരണയായി രാവിലെ ഉണർന്നാലുടനെ ചുമക്കാറുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. താങ്കൾ സാധാരണയായി രാവിലെ എഴുന്നേറ്റാലുടനെ കഫം തുപ്പാറുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. കഴിഞ്ഞ ഒരുവർഷത്തിനുള്ളിൽ തടർച്ചയായി മൂന്ന് മാസം താങ്കളുടെ നെഞ്ചിൽ നിന്നും കഫം തുപ്പാറുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |

ശ്യാസോച്ഛ്വാസം

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| 23. ഏറ്റവും ഉചിതമായത് തിരഞ്ഞെടുക്കുക
(മ) എനിക്ക് ഇതുവരെ ശ്യാസംമുട്ട് ഉണ്ടായിട്ടില്ല
(യ) സാധാരണയായി ശ്യാസംമുട്ട് ഉണ്ടാവാറുണ്ട് എന്നാൽ എപ്പോഴും സുഖം പ്രാപിക്കും
(ര) എനിക്ക് എപ്പോഴും ശ്യാസംമുട്ടാണ്. | | <input type="checkbox"/> | <input type="checkbox"/> |
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പൊടി, തുവൽ, വളർത്തുമൃഗങ്ങൾ

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| 24. പൊടിയുള്ള സ്ഥലം, പൂച്ച, പട്ടി, കുതിര തുടങ്ങിയ വളർത്തുമൃഗങ്ങൾ തുവൽ, തലയിണ ഇവയൊക്കെയായി സമ്പർക്കം വരുമ്പോൾ എപ്പോഴെങ്കിലും താങ്കൾക്ക്
(മ) വിമ്മിഷ്ടം അനുഭവപ്പെട്ടിട്ടുണ്ടോ?
(യ) ശ്യാസം മുട്ട് അനുഭവപ്പെട്ടിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |
| | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |

ആസ്ത്മ

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| 25. എപ്പോഴെങ്കിലും താങ്കൾക്ക് ആസ്ത്മ ഉണ്ടായിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. കഴിഞ്ഞ ഒരു വർഷത്തിനിടയിൽ എപ്പോഴെങ്കിലും താങ്കൾക്ക് ആസ്ത്മയുടെ ശല്യം ഉണ്ടായിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |
| 27. ഗുളിക, ഇൻഹേലർ, നെബുലൈസർ, പമ്പ്, റോട്ടാഹേലർ തുടങ്ങിയ മരുന്നുകൾ ഏതെങ്കിലും അവസരത്തിൽ ശ്യാസതടസ്സത്തിന്റെ ചികിത്സയ്ക്കായി ഉപയോഗിച്ചിട്ടുണ്ടോ? | അതെ / അല്ല | <input type="checkbox"/> | <input type="checkbox"/> |

താലിപ്പുറത്തെ അലർജിയും, കുടുംബ പാരമ്പര്യവും

28. താങ്കൾക്ക് ഇടയ്ക്കിടയ്ക്ക് താലിപ്പുറത്ത് ചൊരിച്ചിലോടുകൂടിയ ചുവന്നുതടിച്ച പാടുകൾ ഉണ്ടാകാറുണ്ടോ? അതെ / അല്ല
29. താങ്കൾക്ക് മിക്കപ്പോഴും തുമലും, മൂക്കൊലിപ്പും ഉണ്ടാവാറുണ്ടോ? അതെ / അല്ല
30. താങ്കൾക്ക് മിക്കപ്പോഴും കണ്ണിൽ ചൊരിച്ചിൽ അനുഭവപ്പെടാറുണ്ടോ? അതെ / അല്ല
31. താങ്കളുടെ കുടുംബത്തിൽ ആർക്കെങ്കിലും മേൽപ്പറഞ്ഞ 3 ലക്ഷണങ്ങളിൽ ഏതെങ്കിലും ഉണ്ടോ? അതെ / അല്ല
32. ഉണ്ടെങ്കിൽ ആർക്ക്?
അപ്പപ്പൻ, അമ്മമ്മ/മാതാപിതാക്കൾ/സഹോദരി/
സഹോദരൻ/കുട്ടികൾ/മറ്റുള്ളവർ
33. താങ്കളുടെ കുടുംബത്തിൽ ആർക്കെങ്കിലും ആസ്ത്മയുടെ ശല്യം ഉണ്ടോ? അതെ / അല്ല
34. ഉണ്ടെങ്കിൽ ആർക്ക്?
അപ്പപ്പൻ, അമ്മമ്മ/മാതാപിതാക്കൾ/സഹോദരി/
സഹോദരൻ/കുട്ടികൾ/മറ്റുള്ളവർ

പുകയിലയുടെ ഉപഭോഗം

35. താങ്കൾ ഒരു വർഷമോ അതിൽ കൂടുതലോ പുക വലിച്ചിട്ടുണ്ടോ? അതെ / അല്ല
ഉത്തരം അതെയെങ്കിൽ അടുത്ത ചോദ്യം. അല്ല എങ്കിൽ ചോദ്യം 41.
36. ഉണ്ടെങ്കിൽ താങ്കൾ സാധാരണയായി എന്താണ് വലിക്കുന്നത്?
(1) സിഗരറ്റ് (2) ചുരുട്ട് (3) ബീഡി (4) പൈപ്പ് (5) ഹൂക്ക (6) മറ്റുള്ളവ
37. ഒരു ദിവസത്തിൽ താങ്കൾ സിഗരറ്റ്, ബീഡി, ചുരുട്ട്, പൈപ്പ്, ഹൂക്ക, ചില്ലം എന്നിവ എത്രയെണ്ണം വലിക്കും?
38. എത്രമത്തെ വയസ്സിൽ താങ്കൾ പുകവലി തുടങ്ങി?
39. ഉചിതമായതു തിരഞ്ഞെടുക്കുക
(മ) ഞാനിപ്പോഴും പുകവലിക്കുന്നു
(യ) ഞാൻ പുകവലി നിർത്തിയിട്ട് ഒരു വർഷത്തിൽ താഴെയെ ആയിട്ടുള്ളു.
(ര) ഞാൻ പുകവലി നിർത്തിയിട്ട് ഒരു വർഷത്തിൽ കൂടുതലായി
- ഈ ചോദ്യത്തിന് (ര) ആണ് ഉത്തരമെങ്കിൽ അടുത്തചോദ്യം, അല്ലെങ്കിൽ 41.
40. പുകവലി നിർത്തിയിട്ട് ഒരു വർഷത്തിൽ കൂടുതലായെങ്കിൽ എത്ര വർഷമായി?
41. പുകവലി അല്ലാതെ, പുകയില മറ്റേതെങ്കിലും വിധത്തിൽ ഉപയോഗിക്കുന്നുണ്ടോ? അതെ / അല്ല
42. ഏതുതരം പുകയില ഉൽപ്പന്നമാണ് താങ്കൾ ഉപയോഗിക്കുന്നത്?
1. സർദ, 2. കൈനി, 3. പാൻമസാല, 4. ഗഡ്ക, 5. മൂക്കുപൊടി, 6. മറ്റുള്ളവ _____
43. എത്ര വർഷമായി താങ്കൾ ഇതൊക്കെ ഉപയോഗിക്കുന്നു?
44. ഒരു ദിവസത്തിൽ എത്ര പ്രാവശ്യം താങ്കൾ ഇത് ഉപയോഗിക്കും?
താങ്കൾ പുകവലി ശീലം ഇല്ലാത്ത ആളാണെങ്കിൽ 45,46. ചോദ്യങ്ങൾക്ക് ഉത്തരം എഴുതുക. അല്ലെങ്കിൽ 47-ന്റെ ഉത്തരം എഴുതുക.
45. താങ്കളുടെ കുടുംബത്തിൽ ആരെങ്കിലും പതിവായി താങ്കളുടെ സാന്നിദ്ധ്യത്തിൽ പുക വലിക്കുന്നുണ്ടോ? അതെ / അല്ല
അതെ എങ്കിൽ 46ന്റെ ഉത്തരം എഴുതുക അല്ലെങ്കിൽ 47 ന്റെ ഉത്തരം എഴുതുക.

46. വീട്ടിലാരൊക്കെയാണ് പതിവായി താങ്കളുടെ കുട്ടിക്കാലത്തും മുതിർന്ന ശേഷവും പുകവലിക്കാറുള്ളത്?

വിവാഹത്തിനു മുമ്പ്		ഉൽപ്പന്നം	മണിക്കൂർ/ദിവസം	വർഷത്തിൽ
അപ്പപ്പൻ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
അമ്മമ്മ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
അച്ഛൻ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
അമ്മ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
സഹോദരൻ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
സഹോദരി	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
മറ്റുള്ളവർ (ആരൊക്കെ) _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
വിവാഹത്തിനു ശേഷം				
അച്ഛൻ/അമ്മാവൻ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
അമ്മ/അമ്മായിഅമ്മ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
സഹോദരൻ/അളിയൻ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
സഹോദരി/നാത്തുൻ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
പുത്രൻ/പുത്രി	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ഭർത്താവ്/ഭാര്യ	അതെ / അല്ല	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
മറ്റുള്ളവർ (ആരൊക്കെ) _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ഉൽപ്പന്നം. 1. സിഗരറ്റ് 2. ബീഡി 3. റൂക്ക 4. ചുരുട്ട് 5. പൈപ്പ് 6. മറ്റുള്ളവ.

പാചക ഇന്ധനം

47. നിങ്ങൾ സ്ഥിരമായി പാചകം ചെയ്യാറുണ്ടോ/ചെയ്തിട്ടുണ്ടോ?
- (ശ) ഇപ്പോൾ സ്ഥിരമായി പാചകം ചെയ്യും
 (ശശ) സ്ഥിരമായി പാചകം ചെയ്തിരുന്നു
 (ശശശ) പാചകം ചെയ്തിട്ടേയില്ല.
- 47-ാം ചോദ്യത്തിന് ഉത്തരം '3' എങ്കിൽ 55-ാം ചോദ്യത്തിന് ഉത്തരം നൽകുക, അല്ലെങ്കിൽ 48-ാം ചോദ്യത്തിന് ഉത്തരം എഴുതുക.
48. എത്രമാത്രത്ത വയസ്സിൽ സ്ഥിരമായി പാചകം തുടങ്ങി?
49. എത്രമാത്രത്ത വയസ്സിൽ പാചകം നിർത്തി? (പാചകം നിറുത്തിയതാണെങ്കിൽ)
50. എത്ര തവണ പാചകത്തിൽ ഏർപ്പെടും
- (1) ദിവസേന
 (2) ദിവസങ്ങൾ/ ഒരുമാസത്തിൽ
51. നിങ്ങളുടെ വീട്ടിൽ പ്രത്യേക അടുക്കള ഉണ്ടോ അതെ / അല്ല
52. അടുക്കളയിൽ ജനാലകളുണ്ടോ? അതെ / അല്ല
53. ദിവസവും എത്ര മണിക്കൂർ പാചകത്തിൽ ഏർപ്പെടും?
54. ഏതുതരം ഇന്ധനമാണ് പ്രധാനമായും പാചകത്തിന് ഉപയോഗിക്കുന്നത്?
- (1) വൈദ്യുതി
 (2) പാചകവാതകം
 (2) മണ്ണെണ്ണ
 (4) കൽക്കരി
 (5) വിറക്
 (6) ചാണകം
 (7) മരപ്പൊടി
 (8) മറ്റുള്ളവ

ചോദ്യകർത്താവ് പൂരിപ്പിക്കേണ്ടത്.

55. താങ്കളുടെ നിരീക്ഷണത്തിൽ ഇവരുടെ സാമൂഹിക സാമ്പത്തിക നിലവാരം എങ്ങനെ?

1. താഴ്ന്നത് 2. ഇടത്തരം 3. മേൽത്തരം

ഫോറം പൂരിപ്പിച്ചയാൾ

വിവരങ്ങൾ പരിശോധിച്ച ആൾ

വിവരങ്ങൾ കമ്പ്യൂട്ടറിൽ പകർത്തിയ ആൾ

**INDIAN COUNCIL OF MEDICAL RESEARCH PROJECT
"EPIDEMIOLOGY OF ASTHMA & ATOPY IN ADULTS"**

ପ୍ରଶ୍ନାବଳୀ

ପରିଚୟ ଓ ଜନସଂଖ୍ୟା ସମ୍ବନ୍ଧୀୟ ତଥ୍ୟ

୧. କେନ୍ଦ୍ର ଏବଂ ଅଞ୍ଚଳ କୋଡ 0 2
୨. କୁମ୍ଭିଳ ସଂଖ୍ୟା [] [] [] [] [] []
୩. ସର୍ବେ ତାରିଖ [] [] / [] [] / [] [] [] []
୪. ବର୍ତ୍ତମାନ ବାସିନ୍ଦା ଗ୍ରାମ / ସହର []
୫. ଠିକଣା ଏବଂ ଫୋନ୍

୬. ନାମ

୭. ଜନ୍ମ ତାରିଖ [] [] / [] [] / [] [] [] []
୮. ବୟସ (ବର୍ଷ) [] []
୯. ଲିଙ୍ଗ ପୁରୁଷ / ସ୍ତ୍ରୀ []
୧୦. ତୁମର ପ୍ରକୃତ ବାସସ୍ଥାନ କେଉଁଠି ଯେଉଁଠି ତୁମେ ତୁମ ଜୀବନର
୭୫% ଭାଗରୁ ଅଧିକ ସମୟ ବିତାଇଛ ? ଗ୍ରାମ / ସହର / ମିଶାମିଶି []
୧୧. ତୁମେ କେତେ ବର୍ଷ ଯାଏଁ ପାଠ ପଢ଼ିଛ ? [] []
୧୨. ଘରର ମୁରବୀ କ'ଣ କାମ କରନ୍ତି ? []
୧. ବେକାର କିମ୍ବା ଅବସର ପ୍ରାପ୍ତ
୨. ଗୃହିଣୀ
୩. ଅଣକୃଷକ କାରିଗର
୪. କୃଷକ କାରିଗର
୫. ବ୍ୟବସାୟ/ସ୍ୱରୋଜଗାର
୬. କୃଷକ
୭. ସରକାରୀ କିମ୍ବା ବେସରକାରୀ କର୍ମଚାରୀ
୮. ସରକାରୀ କିମ୍ବା ବେସରକାରୀ ସଂସ୍ଥାର ନିରୀକ୍ଷକ
୯. ସରକାରୀ କିମ୍ବା ବେସରକାରୀ ସଂସ୍ଥାର ଉଚ୍ଚ ପଦସ୍ଥ କର୍ମଚାରୀ
୧୩. ତୁମେ କି କାମ କର ? []
୧. ବେକାର କିମ୍ବା ଅବସର ପ୍ରାପ୍ତ
୨. ଗୃହିଣୀ
୩. ଅଣକୃଷକ କାରିଗର
୪. କୃଷକ କାରିଗର
୫. ବ୍ୟବସାୟ/ସ୍ୱରୋଜଗାର
୬. କୃଷକ
୭. ସରକାରୀ କିମ୍ବା ବେସରକାରୀ କର୍ମଚାରୀ
୮. ସରକାରୀ କିମ୍ବା ବେସରକାରୀ ସଂସ୍ଥାର ନିରୀକ୍ଷକ
୯. ସରକାରୀ କିମ୍ବା ବେସରକାରୀ ସଂସ୍ଥାର ଉଚ୍ଚ ପଦସ୍ଥ କର୍ମଚାରୀ

ଶ୍ୱାସରୋଗ ଲକ୍ଷଣ

ଦୟାକରି ହଁ ବା ନାଁ ରେ ଉତ୍ତର ଦିଅନ୍ତୁ । ଯଦି ହଁ ତେବେ ଲକ୍ଷଣର ବ୍ୟବଧାନ ନିର୍ଦ୍ଦିଷ୍ଟ କରନ୍ତୁ ।

(ବର୍ଷ)

କୁଁ କୁଁ ଶବ୍ଦ ହେବା ଓ ଛାତି ରୁନ୍ଧି ହେବା

୧୪. ବିଗତ ୧୨ ମାସ ଭିତରେ ତୁମ ଛାତିରେ କେବେ କୁଁ କୁଁ ଶବ୍ଦ ହୋଇଥିଲା କି ? (ହଁ / ନାଁ)
୧୫. ଅଣନିଶ୍ୱାସୀ କିମ୍ବା ଛାତି ରୁନ୍ଧି ହୋଇ କେବେ ଭୋରରୁ ନିଦ ଭାଙ୍ଗିଛି କି ? (ହଁ / ନାଁ)

ଅଣ ନିଶ୍ୱାସୀ ହେବା

୧୬. ବିଗତ ୧୨ ମାସ ଭିତରେ ବ୍ୟାୟାମ କରିବା ସମୟରେ ବା ଖେଳିବା ସମୟରେ କିମ୍ବା ଆଉ କିଛି ଭାରି କାମ କରିବା ସମୟରେ ତୁମେ କେବେ ଅଣନିଶ୍ୱାସୀ ହୋଇ ପଡ଼ି କି ? (ହଁ / ନାଁ)
୧୭. ବିଗତ ୧୨ ମାସ ଭିତରେ ତୁମେ ଭାରି କାମ ନ କରିଲା ବେଳେ ମଧ୍ୟ କେବେ ଅଣନିଶ୍ୱାସୀ ଅନୁଭବ କରିଛ କି ? (ହଁ / ନାଁ)
୧୮. ବିଗତ ୧୨ ମାସ ଭିତରେ ତୁମେ କେବେ ରାତି ଅଧରେ ଅଣନିଶ୍ୱାସୀ ଅନୁଭବ କରି ଉଠି ପଡ଼ିଛ କି ? (ହଁ / ନାଁ)

କାଶ ଏବଂ କଫ

୧୯. ବିଗତ ୧୨ ମାସ ଭିତରେ ତୁମେ କେବେ ରାତିରେ କାଶି କାଶି ଉଠି ପଡ଼ିଛ କି ? (ହଁ / ନାଁ)
୨୦. ତୁମର ସକାଳେ ଉଠିଲା ମାତ୍ରେ କାଶ ହୁଏ କି ? (ହଁ / ନାଁ)
୨୧. ତୁମର ସକାଳେ ଉଠିବା ସଂଗେ ସଂଗେ ଛାତିରୁ କଫ ବାହାରେ କି ? (ହଁ / ନାଁ)
୨୨. ବର୍ଷକ ଭିତରେ ଲାଗୁ ଲାଗୁ ୩ ମାସ ଧରି ସକାଳେ ଉଠିବା ସଂଗେ ସଂଗେ ଛାତିରୁ କଫ ବାହାରିଛି କି ? (ହଁ / ନାଁ)

ନିଶ୍ୱାସ ପ୍ରଶ୍ୱାସ ନେବା

୨୩. ତଳେ ଦିଆଯାଇଥିବା ସୂଚୀ ଭିତରୁ ସବୁଠାରୁ ଠିକ୍ ସୂଚୀ ବାଛ ।
- a) ମୁଁ କୃତ୍ରିମ ଅଣ ନିଶ୍ୱାସୀ ହୁଏ ।
- b) ମୁଁ ପ୍ରାୟ ଅଣନିଶ୍ୱାସୀ ହୁଏ କିନ୍ତୁ ଠିକ୍ ହୋଇଯାଏ ।
- c) ମୋର ନିଶ୍ୱାସ ପ୍ରଶ୍ୱାସ କେବେବି ସନ୍ତୋଷ ଜନକ ନୁହେଁ ।

ଧୂଳି, ପର, ପୋଷା ପଶୁ ଓ ପକ୍ଷୀ

୨୪. ତୁମେ ଧୂଳି, ପୋଷା କୁକୁର, ବିଲେଇ, ଘୋଡ଼ା ଆଦି କିଛି କିମ୍ବା ପକ୍ଷୀ, ପକ୍ଷୀର ପର, କମଳ, ତକିଆ ଆଦି ଜନିଷ୍ଠର ସମ୍ପର୍କରେ ଆସିଲେ ତୁମକୁ
- a. ଛାତିରେ ରୁନ୍ଧି ହେବା ଭଳି ଲାଗେ କି ? (ହଁ / ନାଁ)
- b. ଅଣନିଶ୍ୱାସୀ ଲାଗେ କି ? (ହଁ / ନାଁ)

ଶ୍ୱାସ ରୋଗ

୨୫. ତୁମର କେବେ ଶ୍ୱାସ ରୋଗ ହୋଇଛି କି ? (ହଁ / ନାଁ)
୨୬. ବିଗତ ୧୨ ମାସ ଭିତରେ କେବେ ଶ୍ୱାସ ରୋଗରେ ପିଡ଼ିତ ହୋଇଛ କି ? (ହଁ / ନାଁ)
୨୭. ତୁମେ କେବେ ଇନ୍ଦ୍ରହେଲର, ପମ୍ପ, ରୋଟା ହେଲର କିମ୍ବା ନେଚୁଲାଇଜର କିମ୍ବା ଅନ୍ୟ କିଛି ଔଷଧ ଅଣନିଶ୍ୱାସୀ ପାଇଁ ବ୍ୟବହାର କରୁଛ କି ? (ହଁ / ନାଁ)

ଆଲର୍ଜି ଓ ପାରିବାରିକ ଇତିହାସ

୨୮. ତୁମ ଚମଡ଼ାରେ କେବେ କିଛି ଫଳି ଯିବା ଭଳି ହୋଇଛି କି (ଅର୍ଚ୍ଚିକାରିଆ କିମ୍ବା ଏକ୍ଜିମା) ଯାହା ବେଳେ ବେଳେ କମିଯାଏ ଏବଂ ପୁଣି ହୋଇଯାଏ । (ହଁ / ନାଁ)
୨୯. ତୁମର ଅନେକ ସମୟରେ ଛିଙ୍କ କି ନାକରୁ ପାଣି ବହେ କି ? (ହଁ / ନାଁ)
୩୦. ତୁମର ଆଖି ଅନେକ ସମୟରେ କୁଣ୍ଡାଇ ହୁଏ କି ? (ହଁ / ନାଁ)
୩୧. ଉପରୋକ୍ତ ଗାଟି ଲକ୍ଷଣ ତୁମ ପରିବାରରେ କାହାର ଅଛି କି ? (ହଁ / ନାଁ)
୩୨. ଯଦି ହଁ ତେବେ କିଏ ?
ଅଜା ଆଇ/କେକେ କେକି/ବାପା ମା/ ଭାଇ/ ଭଉଣୀ/ ପିଲାମାନେ କିମ୍ବା ଅନ୍ୟ କେହି
୩୩. ତୁମ ପରିବାରର କୌଣସି ସଦସ୍ୟ ଶ୍ୱାସରୋଗରେ ପିଡ଼ାତ କି ? (ହଁ / ନାଁ)
୩୪. ଯଦି ହଁ ତେବେ କିଏ ?
ଅଜା ଆଇ/କେକେ କେକି/ବାପା ମା/ ଭାଇ/ ଭଉଣୀ/ ପିଲାମାନେ କିମ୍ବା ଅନ୍ୟ କେହି

ତମାଖୁ ସେବନ ଓ ଧୂମପାନ

୩୫. ତୁମେ ଏକ ବର୍ଷ କିମ୍ବା ତା' ଠାରୁ ଅଧିକ ସମୟ ଧୂମପାନ କରିଛ କି ? (ହଁ / ନାଁ)
ଯଦି ୩୫ ନମ୍ବର ପ୍ରଶ୍ନର ଉତ୍ତର ହଁ ତେବେ ପରବର୍ତ୍ତୀ ପ୍ରଶ୍ନକୁ ଯାଆନ୍ତୁ ନଚେତ୍ ୪୧ ନମ୍ବର ପ୍ରଶ୍ନ କୁ ଯାଆନ୍ତୁ ।
୩୬. କି ପ୍ରକାର ଧୂମପାନ ତୁମେ ପ୍ରାୟ କର ?
- a) ସିଗାରେଟ୍
b) ବିଡ଼ି
c) ହୁଙ୍କା
d) ସିଗାର୍
e) ପାଇପ୍
f) ଅନ୍ୟ କିଛି
୩୭. ତୁମେ ୨୪ ଘଣ୍ଟା ଭିତରେ କେତେ ସିଗାରେଟ୍, ବିଡ଼ି, ସିଗାର, ପାଇପ୍, ହୁଙ୍କା ଟିଲମ ଆଦି ଟାଣ ?
୩୮. ତୁମେ କେତେ ବର୍ଷ ବୟସରୁ ଧୂମପାନ ଆରମ୍ଭ କରିଛ ?
୩୯. ତୁମ ପାଇଁ ପ୍ରୟତ୍ନ କେବଳ ଗୋଟିଏ ବାଛ ।
- a. ମୁଁ ଏବେ ବି ଧୂମପାନ କରୁଛି ।
b. ମୁଁ ବର୍ଷକରୁ କମ୍ ହେବ ଧୂମପାନ ଛାଡ଼ି ଦେଇଛି ।
c. ମୁଁ ବର୍ଷକରୁ ଅଧିକ ସମୟ ହେବ ଧୂମପାନ ଛାଡ଼ି ଦେଇଛି ।
- ଯଦି ୩୯ ନମ୍ବର ପ୍ରଶ୍ନର ଉତ୍ତର c ହୁଏ ତେବେ ୪୦ ନମ୍ବର ପ୍ରଶ୍ନକୁ ଯାଆନ୍ତୁ ନଚେତ୍ ୪୧ ନମ୍ବର ପ୍ରଶ୍ନ କୁ ଯାଆ ।
୪୦. ନିର୍ଦ୍ଦିଷ୍ଟ କେତେବର୍ଷ ହେଲା ଧୂମପାନ ଛାଡ଼ିଛ ?
୪୧. ତୁମେ ଧୂମପାନ ବ୍ୟତିତ ଅନ୍ୟ କିଛି ତମାଖୁ ସେବନ କର କି ? (ହଁ / ନାଁ)
ଯଦି ୪୧ ନମ୍ବର ପ୍ରଶ୍ନର ଉତ୍ତର ହଁ ହୁଏ ତେବେ ୪୨ ନମ୍ବର ପ୍ରଶ୍ନ କୁ ଯାଆନ୍ତୁ ନଚେତ୍ ୪୫ ନମ୍ବର ପ୍ରଶ୍ନ ପଢ଼ାନ୍ତୁ ।
୪୨. ତୁମେ କି ପ୍ରକାର ତମାଖୁ ସେବନ କର ?
- ୧) ଗୁରୁଖା
୨) କର୍ଦ୍ଦୀ
୩) ଖଇନି
୪) ପାନ ମସଲା
୫) ନାସ
୬) ଅନ୍ୟାନ୍ୟ (ନିର୍ଦ୍ଦିଷ୍ଟ କର) _____
୪୩. ତୁମେ ଏହି ଦ୍ରବ୍ୟ କେତେ ବର୍ଷ ହେଲା ବ୍ୟବହାର (ସେବନ) କରୁଛ ?
୪୪. ତୁମେ ଦିନକୁ କେତେଥର ଏହି ଦ୍ରବ୍ୟ ବ୍ୟବହାର (ସେବନ) କରୁଛ ?
- ଯଦି ୩୫ ନଂ ପ୍ରଶ୍ନର ଉତ୍ତର ନା ହୁଏ ତେବେ ୪୫, ୪୬ ପ୍ରଶ୍ନ ପୂରଣ କର ନଚେତ୍ ୪୭ ନଂ ପ୍ରଶ୍ନକୁ ଯାଆ ।

ପରିବେଶରେ ତମାଖୁ ଧୂଆଁ ସଂସ୍ପର୍ଶ- (ETS Exposure)

୪୫. ତୁମ ପରିବାରର କୌଣସି ବ୍ୟକ୍ତି (ସେହି ଏକା ପରେ ଉତ୍ତୁଅବ) ତୁମ ଉପସ୍ଥିତି ରେ ନିୟମିତ ଧୂମପାନ କରୁଥିଲେ ବା କରୁଛନ୍ତି କି ? ଯଦି ହଁ, ତେବେ ପରବର୍ତ୍ତୀ ପ୍ରଶ୍ନକୁ ଯାଆନ୍ତୁ, ନହେଲେ ୪୭ ନମ୍ବର ପ୍ରଶ୍ନକୁ ଯାଆନ୍ତୁ । (ହଁ / ନାଁ)

୪୬. ପରିବାରର କେଉଁ ବ୍ୟକ୍ତି ନିୟମିତ ଭାବେ ତୁମର ପିଲାଦିନେ ବା ପ୍ରାୟ ବୟସରେ ଧୂମପାନ କରୁଥିଲେ ବା କରୁଛନ୍ତି ।

ବିବାହ ପୂର୍ବରୁ	ହାଁ/ନାଁ	ଦ୍ରବ୍ୟ	ଘଣ୍ଟା/ଦିନ	ବର୍ଷ
କେକେବାପା	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
କେକେମା	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ବାପା	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ମା	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ଭାଇ	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ଭଉଣୀ	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ଅନ୍ୟାନ୍ୟ (ନିର୍ଦ୍ଦିଷ୍ଟ କର) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ବିବାହ ପରେ	ହାଁ/ନାଁ	ଦ୍ରବ୍ୟ	ଘଣ୍ଟା/ଦିନ	ବର୍ଷ
ବାପା/ଶଶୁର	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ମା/ଶାଶୁ	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ଭାଇ/ଶଳା	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ଭଉଣୀ/ଶାଳୀ	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ପୁଅ	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ଝିଅ	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ସ୍ୱାମୀ/ସ୍ତ୍ରୀ	ହାଁ/ନାଁ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ଅନ୍ୟାନ୍ୟ (ନିର୍ଦ୍ଦିଷ୍ଟକର) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ଦ୍ରବ୍ୟ : (୧) ସିଗାରେଟ୍ (୨) ବିଡି (୩) ହୁକା (୪) ସିଗାର୍ (୫) ପାଇପ୍ (୬) ଅନ୍ୟାନ୍ୟ

ରକ୍ଷା ଇକ୍ଷନ

- ୪୭. ତୁମେ ବର୍ତ୍ତମାନ ନିୟମିତ ରୋଷେଇ କର କି କିମ୍ବା ଅତୀତରେ ତୁମେ ନିୟମିତ ରୋଷେଇ କରୁଥିଲ କି ?
- ୧. ବର୍ତ୍ତମାନ ରୋଷେଇ କରିବା
- ୨. ଅତୀତରେ ରୋଷେଇ କରିବା
- ୩. କେବେବି ନିୟମିତ ରୋଷେଇ ନ କରିବା
- ଯଦି ଏହି ପ୍ରଶ୍ନର ଉତ୍ତର ୩ ହୁଏ ତେବେ ୫୫ ନମ୍ବର ପ୍ରଶ୍ନକୁ ଯାଅ ନଚେତ୍ ୪୮ ନମ୍ବରକୁ ଯାଅ
- ୪୮. କେଉଁ ବୟସରେ ତୁମେ ନିୟମିତ ରୋଷେଇ ଆରମ୍ଭ କଲ ?
- ୪୯. କେଉଁ ବୟସରେ ତୁମେ ରୋଷେଇ କରିବା ବନ୍ଦ କଲ ? (ଯଦି ବନ୍ଦ କରିସାରିଛ)
- ୫୦. ତୁମେ କେତେ ଥର ରୋଷେଇ କର ?
- ୧. ପ୍ରତିଦିନ
- ୨. ଦିନ ମାସକୁ
- ୫୧. ତୁମ ଘରେ ଅଲଗା ରନ୍ଧାଖାଳ ଅଛି କି ? (ହଁ/ନାଁ)
- ୫୨. ରୋଷେଇ ଘରେ ଝରକା କିମ୍ବା ଖୋଳାସ୍ଥାନ ଅଛି କି ? (ହଁ/ନାଁ)
- ୫୩. ତୁମେ ରନ୍ଧାଖାଳରେ ପ୍ରତିଦିନ କେତେ ଘଣ୍ଟା ବିତାଅ ?
- ୫୪. ତୁମେ ରନ୍ଧା ପାଇଁ ପ୍ରାୟତଃ କି ପ୍ରକାର ଇକ୍ଷନ ବ୍ୟବହାର କର ?
- ୧. ବିଦ୍ୟୁତ୍ ଚାଳିତ (ହିଟ୍ରେ)
- ୨. ଗ୍ୟାସ୍
- ୩. କିରୋସିନ୍
- ୪. କୋଇଲା
- ୫. କାଠ
- ୬. ଘସି
- ୭. କୁଣ୍ଡା
- ୮. ଅନ୍ୟାନ୍ୟ

TO BE FILLED BY INTERVIEWER

୫୫. What, in your perception, is the overall socio-economic status of the individual ?

1. Low 2. Middle 3. High

Form filled by _____

Data verified by _____

Data entered into computer by _____

இந்திய மருத்துவ ஆராய்ச்சி கழகம்
மற்றும்
ஸ்ரீ ராமச்சந்திரா மருத்துவக் கல்லூரி & ஆராய்ச்சி நிறுவனம்
இணைந்து நடத்தும்
இளைப்பு (ஆஸ்த்மா) நோய் பற்றிய ஆய்வு
ஆய்வு வினாப்படிவம்

அடிப்படை மற்றும் அடையாளம் காட்டும் தகவல்கள்

1. மைய குறியீட்டு எண் : 04

2. வ.எண் : □□□□□

3. ஆராய்வுத் தேதி : □□/□□/□□□□

4. தற்போது வசிக்கும் இடம்: 1.ஊரகப் பகுதி 2.நகரப் பகுதி □

5. விலாசம் / தொலைபேசி எண்:

6. பெயர் :

7. பிறந்த தேதி : □□/□□/□□□□

8. வயது (வருடங்களில்) □□

9. பாலினம் : 1.ஆண் 2.பெண் □

10.உங்கள் வாழ்வில் பெரும்பாலும் (> 75%)
வாழ்ந்த இடம் எந்த வகை? 1.ஊரகப் பகுதி 2.நகரப் பகுதி
3.இரண்டும் கலந்த பகுதி □

11. எத்தனை ஆண்டு காலம் கல்வி பயின்றுள்ளீர்கள்
(பள்ளி கல்வியே இல்லையெனில் '0' என எழுதவும்) □□
□

12. குடும்பத்தலைவரின் தொழில் என்ன?
(1) தொழில் ஏதும் இல்லை / ஓய்வு பெற்றவர் / மாணவர்
(2) இல்லத் தலைவி
(3) தொழில் நுட்பம் சாரா உழைப்பாளி
(4) தொழில் நுட்பம் சார்ந்த உழைப்பாளி
(5) வணிகம் (வியாபாரம்) / சுய தொழில் / தொழில் நுட்ப வல்லுனர்
(6) விவசாயம்
(7) அரசு / தனியார் நிறுவன ஊழியர்
(8) அரசு / தனியார் நிறுவன மேற்பார்வையாளர்
(9) அரசு / தனியார் நிறுவன அலுவலர்

13. உங்களுடைய தொழில் என்ன?



- (1) தொழில் ஏதும் இல்லை / ஓய்வு பெற்றவர் / மாணவர்
- (2) இல்லத் தலைவி
- (3) தொழில் நுட்பம் சாரா உழைப்பாளி
- (4) தொழில் நுட்பம் சாரந்த உழைப்பாளி
- (5) வணிகம் (வியாபாரம்) / சுய தொழில் / தொழில் நுட்ப வல்லுனர்
- (6) விவசாயம்
- (7) அரசு / தனியார் நிறுவன ஊழியர்
- (8) அரசு / தனியார் நிறுவன மேற்பார்வையாளர்
- (9) அரசு / தனியார் நிறுவன அலுவலர்

சுவாசம் சம்மந்தப்பட்ட அறிகுறிகள்

- கேள்வி எண்கள் 14 முதல் 27 வரை
- ஆம் அல்லது இல்லை என பதில் அளிக்கவும்
- ஆமெனில், எத்தனை ஆண்டுகள் என குறிப்பிடவும்
- இல்லையெனில், ஆண்டுகளுக்கான கட்டத்தில் 99 என நிரப்பவும்

மூச்சு இரைப்பு/மார்பில் இறுக்கம்

14. கடந்த 12 மாதங்களுக்குள், மூச்சு இரைப்பு அல்லது மூச்சு விடும்போது விசில் சத்தம் போல அனுபவித்து இருக்கிறீர்களா?:

1.ஆம் 0.இல்லை

1 ஆண்டுகள்
(அ) 0 (அ) 99

15. காலையில் தூங்கி எழும்போது மார்பில் இறுக்கமான உணர்வை எப்போதாவது உணர்ந்திருக்கிறீர்களா?

1.ஆம் 0.இல்லை

மேல்மூச்சு வாங்குதல்

16. கடந்த 12 மாதங்களுக்குள், உடற்பயிற்சி / விளையாட்டு / கடின உழைப்பிற்கு பின் மேல் மூச்சு வாங்குதலை உணர்ந்திருக்கிறீர்களா?

1.ஆம் 0.இல்லை

17. கடந்த 12 மாதங்களுக்குள், உடற்பயிற்சி / விளையாட்டு / கடின உழைப்பு இல்லாதபோதும் மேல் மூச்சு வாங்குவதை உணர்ந்திருக்கிறீர்களா?

1.ஆம் 0.இல்லை

18. கடந்த 12 மாதங்களுக்குள், மூச்சு திணரலால் இரவில் எழுந்திருக்க நேர்ந்ததா?

1.ஆம் 0.இல்லை

இருமல் / சளி

1 ஆண்டுகள்
(அ) 0 (ஆ) 99

19. கடந்த 12 மாதங்களுக்குள், இருமலால் இரவில் எழுந்திருக்க நேர்ந்ததா?

1.ஆம் 0.இல்லை

20. வழக்கமாகவே, காலையில் எழுந்தவுடன் இருமுவீர்களா?

1.ஆம் 0.இல்லை

21. வழக்கமாகவே, காலையில் எழுந்தவுடன் முதன் முதலாக மார்பிலிருந்து சளியை வெளிக் கொண்டு வருவீர்களா?

1.ஆம் 0.இல்லை

22. கடந்த ஒரு வருடத்தில், குறைந்தது3 தொடர்ச்சியான மாதங்களில், பெரும்பாலான நாட்களில் காலையில் எழுந்தவுடன் மார்பிலிருந்து சளியை வெளிக் கொண்டு வருவீர்களா?

1.ஆம் 0.இல்லை

சுவாசம்

23. கீழ்க்கண்டவற்றுள் மிக சரியானதை தேர்ந்தெடுக்கவும் / கூறவும்

0. மேல் மூச்சு வாங்குவதை எப்போதும் நான் உணர்ந்ததில்லை

1. வழக்கமாக மேல் மூச்சு வாங்கும் ஆனால் எப்போதும் சரியாகிவிடும்

2. என் சுவாசம் எப்போதும் திருப்திகரமாக இருந்ததில்லை

தூசிகள், இறகுகள் மற்றும் செல்லப் பிராணிகள்

24. தூசிபடிந்த பகுதிகளுக்குள் செல்லும்போதோ, நாய், பூனை அல்லது குதிரை போன்ற பிராணிகளிடம் பழகும்போதோ அல்லது பறவை இறகுகளினாலோ அல்லது போர்வை மற்றும் தலையணை முதலியனவற்றால் உங்களுக்கு

(a) மார்பில் இறுக்கமாக உணர்ச்சியுண்டாகுமா?

1.ஆம் 0.இல்லை

(b) மேல் மூச்சு வாங்குமா?

1.ஆம் 0.இல்லை

இளைப்பு நோய் (ஆஸ்த்மா)

1 ஆண்டுகள்
(அ) 0 (அ) 99

25. எப்போதாவது இளைப்பு நோயால் (ஆஸ்த்மா) அவதிபட்டு இருக்கிறீர்களா?

1.ஆம் 0.இல்லை

26. கடந்த 12 மாதங்களுக்குள் எப்போதாவது இளைப்பு நோயால் (ஆஸ்த்மா) அவதிபட்டு இருக்கிறீர்களா?

1.ஆம் 0.இல்லை

27. மூச்சுதிணரலுக்கான மருந்து நிவாரண கருவிகள் (இன்ஹேலர், பம்பு, நெபுலைசர்) அல்லது பிற மருந்துகளையோ உபயோகப்படுத்தி வருகிறீர்களா?

1.ஆம் 0.இல்லை

ஒவ்வாமை மற்றும் குடும்ப வரலாறு

28. தோலில் சிவந்தபுள்ளிகள் அல்லது அரிப்பு நோய் அடிக்கடி வந்து போகுமா?

1.ஆம் 0.இல்லை

29. தும்மல் அல்லது மூக்கில் நீர் ஒழுகுதல் அடிக்கடி ஏற்படுமா?

1.ஆம் 0.இல்லை

30. கண்களில் அடிக்கடி அரிப்பு ஏற்படுமா?

1.ஆம் 0.இல்லை

31. மேற்கூறிய தொந்தரவுகள் குடும்பத்தில் எவருக்கேனும் இருக்கிறதா?

1.ஆம் 0.இல்லை

32. ஆமெனில் யாருக்கு:

1.தாத்தா,பாட்டி / பெற்றோர் / சகோதரர் / சகோதரி / குழந்தைகள்
0.மற்றவர் 9. எவருக்கும் இல்லையெனில்

33. குடும்பத்தில் யாருக்காவது இளைப்பு நோய் (ஆஸ்த்மா) இருக்கிறதா?

1.ஆம் 0.இல்லை

34. ஆமெனில் யாருக்கு:

1.தாத்தா,பாட்டி / பெற்றோர் / சகோதரர் / சகோதரி / குழந்தைகள்
0.மற்றவர் 9.எவருக்கும் இல்லையெனில்

புகைபிடித்தல் மற்றும் புகையிலை உபயோகித்தல்

35. எப்போதாவது ஓராண்டுக்கும் மேலாக புகை பிடித்து இருக்கிறீர்களா?

1.ஆம் 0.இல்லை

(கேள்வி 35 க்கு பதில் ஆம் என்றால், அடுத்த கேள்வியை தொடரவும்.
இல்லை என்றால், கேள்வி எண் 41க்கு செல்லவும்)

36. புகை பிடிக்க எதை பெரும்பாலும் உபயோகிப்பீர்கள்?

1.சிகரெட் 2.பீடி 3.ஹூக்கா 4.சுருட்டு 5.பைப் 6.மற்றவை
9.இல்லையெனில்

37. வழக்கமாக ஒருநாளைக்கு எத்தனை (சிகரெட்,பீடி,சுருட்டு முதலியன) பிடிப்பீர்கள்?

எண்ணிக்கை (அ) 99 எனக் குறிப்பிடவும்

38. எந்த வயதில் புகை பிடிப்பதை ஆரம்பித்தீர்கள்?

வயது (அ) 99 எனக் குறிப்பிடவும்

39. கீழ்க்கண்டவற்றுள் உங்களுக்கு எது பொருத்தமானது?

1. இப்போதும் புகை பிடிப்பவர்
2. ஒரு வருடத்திற்கும் குறைவாக புகை பிடிப்பதை நிறுத்தி விட்டவர்
3. ஒரு வருடத்திற்கு மேலாக புகை பிடிப்பதை நிறுத்தி விட்டவர்
9. இல்லையெனில்

(கேள்வி 39 க்கு பதில் '3' என்றால், அடுத்த கேள்வியை தொடரவும்.
இல்லை என்றால், கேள்வி எண் 41க்கு செல்லவும்)

40. எத்தனை ஆண்டுகளாக புகை பிடிப்பதை நிறுத்தி விட்டீர்கள்?

ஆண்டுகள் (அ) 99 எனக் குறிப்பிடவும்

41. புகை பிடிப்பது அல்லாது வேறு எந்த வகையிலாவது புகையிலையை உபயோகப்படுத்துகிறீர்களா?

1.ஆம் 0.இல்லை

(கேள்வி 41 க்கு பதில் ஆம் என்றால், அடுத்த கேள்வியை தொடரவும்.
இல்லை என்றால், கேள்வி எண் 45க்கு செல்லவும்)

42. எந்த வகையில் புகையிலையை உபயோகப்படுத்துகிறீர்கள்?

1. ஜார்தா 2. கைனி 3. பான்மசாலா 4. குட்கா 5. மூக்குப்பொடி
6. மற்றவை (குறிப்பிடுக) 9. இல்லையெனில்

43. எத்தனை ஆண்டுகளாக மேற்கூறிய புகையிலையை உபயோகப்படுத்துகிறீர்கள்?

ஆண்டுகள் (அ) 99 எனக் குறிப்பிடவும்

44. ஒரு நாளைக்கு எத்தனை முறை மேற்கூறிய புகையிலையை உபயோகப்படுத்துகிறீர்கள்?

எத்தனை முறை (அ) 99 எனக் குறிப்பிடவும்

(கேள்வி 35 க்கு 'இல்லை' என்று பதில் அளித்திருந்தால் மட்டுமே, கேள்வி எண் 45 & 46 ஐ கேட்கவும். மற்றபடி கேள்வி 47க்கு செல்லவும்)

சுற்றுபுறத்தில் உள்ள புகையிலை புகைக்கு ஆளான விவரம்

45. உங்கள் வீட்டில் உள்ள எவரேனும் உங்கள் முன்னிலையில் வழக்கமாக புகை பிடிப்பார்களா?

1.ஆம் 0.இல்லை

(கேள்வி 45 க்கு பதில் ஆம் என்றால், அடுத்த கேள்வியை தொடரவும். இல்லை என்றால், கேள்வி எண் 47க்கு -செல்லவும்)

46. குழந்தை பருவம் மற்றும் பெரியவர்களான பின்பும் வழக்கமாக வீட்டில் யாரெல்லாம் உங்கள் முன்னிலையில் புகை பிடிப்பார்கள்?

திருமணத்திற்கு முன்

	ஆம் / இல்லை (1) (0)	புகைக்கும் வகை*	ஒரு நாளைக்கு எத்தனை மணிகள் (அல்லது 99)	எத்தனை வருடங்கள் (அல்லது 99)
தாத்தா	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
பாட்டி	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
அப்பா	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
அம்மா	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
சகோதரர்	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
சகோதரி	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
மற்றவர் (குறிப்பிடுக)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>

*புகைக்கும் வகை: 1. சிகரெட் 2. பீடி 3. ஹூக்கா 4. சுருட்டு 5. குழாய்
6. மற்றவை (குறிப்பிடுக). 9. எதுவும் இல்லையெனில்

திருமணத்திற்கு பின்

	ஆம் / இல்லை (1) (0)	புகைக்கும் வகை*	ஒரு நாளைக்கு எத்தனை மணிகள் (அல்லது 99)	எத்தனை வருடங்கள் (அல்லது 99)
அப்பா / மாமனார்	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
அம்மா / மாமியார்	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
சகோதரர் / மைத்துனர் (மூத்தார்)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
சகோதரி / நாத்தனார் / மைத்துனி	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
மகன்	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
மகள்	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
கணவர் / மனைவி	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
மற்றவர் (குறிப்பிடுக)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*புகைக்கும் வகை: 1. சிகரெட் 2. பீடி 3. ஹூக்கா 4. சுருட்டு 5. குழாய்
6. மற்றவை (குறிப்பிடுக). 9. எதுவும் இல்லையெனில்

சமையலுக்கான எரிபொருள்

47. நீங்கள் தற்போது வழக்கமாக சமைக்கிறீர்களா அல்லது கடந்த காலங்களில் வழக்கமாக சமைத்தீர்களா?

- 1) தற்போது வழக்கமாக சமைக்கிறேன்
- 2) கடந்த காலங்களில் வழக்கமாக சமைத்தேன்
- 3) எப்போதும் சமைத்தது இல்லை

(கேள்வி 47 க்கு பதில் '3' என்றால் கேள்வி எண் 55க்கு -செல்லவும்.
மற்றபடி கேள்வி எண் 48 ஐ தொடரவும்)

48. எந்த வயதில் நீங்கள் சமைக்கத் தொடங்கினீர்கள்?

1. வயது (அ) 99. இல்லையெனில்

49. எந்த வயதில் நீங்கள் சமைப்பதை நிறுத்திவிட்டீர்கள்? (நிறுத்தி இருந்தால்)

வயது (அ) 99 எனக் குறிப்பிடவும்

50. எவ்வளவு அடிக்கடி சமைப்பீர்கள்?

A. தினசரி : 1. ஆம் 0. இல்லை 9. கேள்வி 47 க்கு இல்லையெனில்

B. முந்தைய கேள்விக்கு பதில் '2' என்றால்,
மாதத்தில் எத்தனை நாட்கள் (1-29)
மற்றபடி 99

51. வீட்டில் சமையல் அறை தனியே உள்ளதா?

1. ஆம் 0. இல்லை 9. சமையல் அறையே இல்லையெனில்

52. சமையல் அறையில் ஜன்னல்கள் / மற்ற திறப்பிடங்கள் உள்ளதா?

1.ஆம் 0.இல்லை 9. சமையல் அறையே இல்லையெனில்

53. தினசரி எத்தனை மணி நேரம் சமையல் அறையில் செலவிடுவீர்கள்?

மணிகள் (அ) 99 எனக் குறிப்பிடவும்

54. பெரும்பாலும் எந்த வகையான எரிபொருளை சமையலுக்கு பயன் படுத்துகிறீர்கள்?

1. மின்சாரம்
2. கேஸ்
3. கெரோசின் / மண்ணெண்ணெய்
4. நிலக்கரி
5. விறகு
6. எருமட்டை / வறட்டி
7. சக்கை
8. மற்றவை (குறிப்பிடுக)
9. சமைப்பதே இல்லையெனில்

களப்பணியாளரின் கருத்துப்படி

55. உங்களுக்கு தோன்றும் வகையில், இந்த நபரின் சமூக-பொருளாதார நிலை

1. குறைந்த தரம்
2. நடுத்தரம்
3. உயர் தரம்

விவரம்

பெயர்

கையொப்பம்
(தேதியுடன்)

தகவல் சேகரித்தவர் :

தகவல்களை சரிபார்த்தவர்:

தகவல்களை கணினியில்
பதிவு செய்தவர் :

Annexure III

PROJECT MANUAL

INVESTIGATORS

A. Coordinating Centre

Principal Investigator Dr. S. K. Jindal
Professor and Head
Department of Pulmonary Medicine
Postgraduate Institute of Medical Education and Research
Chandigarh

- Co-investigators***
1. Dr. Dheeraj Gupta
Additional Professor
Department of Pulmonary Medicine
Postgraduate Institute of Medical Education and Research
Chandigarh
 2. Dr. Ashutosh N. Aggarwal
Associate Professor
Department of Pulmonary Medicine
Postgraduate Institute of Medical Education and Research
Chandigarh
 3. Dr Rajesh Kumar,
Professor and Head
Department of Community Medicine
Postgraduate Institute of Medical Education and Research
Chandigarh

B. Participating Centres and Investigators

1. Dr P. Baruwa, Professor & Head, Dept. of Chest Diseases & TB, Medical College, Guwahati
2. Dr Rohini Chowgule, Hon. Professor, Bombay Hospital, MRC Building, Mumbai.
3. Dr Prasanna Raj, Dept. of Community Medicine, JSS Medical College, Mysore
4. Prof. SK Kashyap, Prof. & Head, Dept. of Pulmonary Medicine, Indira Gandhi Medical college Hospital, Shimla, HP
5. Dr Dhiman Ganguly, Professor, Dept. of Medicine, Vivekananda Institute of Medical Sciences, Ramakrishna Mission Seva Pratisthan, 99 Sarat Bose Road, Kolkata.
6. Dr Vijaylakshmi Thanasekaran, Head of Pulmonology, Sri Ramachandra Medical College & Research Institute, Chennai.
7. Dr KJR Murthy, Research Coordinator, Mahavir Medical Research Centre, Bhagwan Mahavir Marg, Hyderabad.
8. Dr N. Misra, Dept. of Chest Diseases, MKCG Medical College, Berhampur, Orissa.
9. Dr V.K. Jain, Prof. & Head, Dept. of Tuberculosis & Respiratory Diseases, SP Medical College, Bikaner.
10. Dr R.M. Sarnaik, Chest Hospital, Parvati Vishram, Tikekar Road, Dhantoli, Nagpur. /
Dr AP Jain, Head, Department of Medicine, Kasturba Hospital, Mahatma Gandhi Institute of Medical Sciences, Sevagram.
11. Dr C.S. Ghosh, Department of Respiratory Diseases, Medical College, Trivandrum
12. Dr R. Solanki, Department of Chest diseases, BJ Medical College, Ahmedabad
(Correspondence: H-3/21, Nidhi Apartment, Nr. Pragatinagar Bus Stop, Naranpura, Ahmedabad-380 063).

STUDY PROTOCOL

I. TITLE

A Multicentric study on Epidemiology of Asthma and Atopy in Adults

II. SUMMARY

We have recently completed the ICMR study for prevalence of asthma at Chandigarh, Delhi, Kanpur and Bangalore with involvement of i.) VP Chest Institute, Univ. of Delhi, Delhi (Prof. V.K. Vijayan & Prof. S.K. Chhabra); ii.) GSVM Medical College, Kanpur (Prof. S.K. Katiyar); and iii.) St. John Medical College Hospital, Bangalore (Prof. George A.D'Souza).

Data on over 73000 individuals has been analysed and the final report submitted to ICMR. The results are very meaningful to estimate the national disease burden and assess the influence of risk factors and exposure variables such as the tobacco smoking exposure to passive smoking (Environmental Tobacco Smoke) and combustion of biomass or solid fuels used for cooking and heating. It is now proposed to study other centres to have a more comprehensive multicentre data from different regions. We have gained adequate experience and expertise in multicentric studies. Expansion of the proposal should provide us with meaningful epidemiological information on asthma for the whole country.

The initial proposal itself envisaged the study at almost 20 centres in different parts of India. This was designed on the model of the ISAAC study (International Study on Asthma and Allergies in Children). It is a type of multicluster sampling from different areas. Within the cluster, the sample selection was made on random basis. It was decided at the first ICMR Asthma Task Force meeting that a relatively smaller number of Centres should be selected initially so that the methodology is streamlined and the data analysis is manageable. By now, we have standardized our methodology for data collection and analysis. We are well geared to implement the original design to study the

epidemiology at other centers simultaneously. It is therefore, proposed to extend the study to other centers with the following objectives.

Essentially the same methodology will be used as has been already designed and tested. The questionnaire will once again be discussed and restructured. Supplementary questionnaires will be used for food habits, life style and vaccination status etc. for one or two centers each on limited populations. Translation will be made in the local language and questionnaire reproducibility tested. Randomization will be done as per earlier method. Data collection will be done in the field at each center, pooled and analysed at the coordinating center at PGIMER, Chandigarh.

III. OBJECTIVES

5. To find differences in epidemiology of asthma and atopy including in the prevalence rates and other causal variables (age, gender, place of residence, income and occupation etc.) if any in different parts of India (employing a uniform design).
6. To corroborate/strengthen the results on asthma epidemiology by including more than one independent center from a particular region. This would serve as a kind of validation of study outcome (unless some obvious, explanatory reasons are detected for the difference).
7. To find the national median (or mean) prevalence of asthma and arrive at the national disease burden.
8. To assess the influence of exposures to tobacco smoking, ETS exposure and combustion of solid fuels.
9. To assess the effects of life style and food habits on prevalence and burden of asthma.

IV. LINK WITH OTHER LOCAL ICMR PROJECTS

We have completed the following ICMR projects on asthma and chronic obstructive pulmonary disease (COPD) in the last few years.

1. Multicentric study on prevalence of asthma (cited above)

2. Multi-centric study on the use of indigenous drugs for bronchial asthma.
3. Estimation of costs of management and other losses due to tobacco related COPD
4. Community study of excess expenditure on health care in smokers' families.

The present study is essentially an expanded and revised form of the study just completed. We shall utilize the experience and expertise of this work to seek comprehensive answer to the questions on asthma burden.

V. PRESENT KNOWLEDGE AND BACKGROUND INFORMATION

India is a vast country with immense geographical, economical, racial, religious and socio-political diversity. There are obvious differences in prevalence of disease and approach to management of health problems. It is an enormously difficult and costly proposition to collect national statistics on diagnosis and management of common diseases, since it requires coordination and cooperation between several centers spread across the country. An attempt to comprehend different studies suffers from scientific drawbacks, the principle being a lack of uniformity of definition methodology and analysis of data.

Asthma is a common problem encountered in routine medical practice. There are only a few studies from India on field epidemiology of asthma. In a study conducted more than 30 years ago, prevalence of asthma was reported as 2.78% in an urban population aged 30-49 years [1]. It was also reported in the same study that the prevalence in morbidity surveys of Government employees and their families in Delhi was 1.8%. These rates are unlikely to represent the current prevalence, which is believed to be much higher by most clinicians. Unpublished figures, from 1.5% to 15% or higher, have been quoted from time to time. Most of these assumptions do not reflect general prevalence. They also suffer from several other drawbacks such as (a) lack of uniform definition of asthma, (b) inappropriate and/or non-standardized methodology, (c) inadequate sample size, (d) demographic variations in different populations and samples, and (e) inadequate or inappropriate analytic techniques.

Prevalence figures reported from clinic or hospital based surveys do not accurately reflect general prevalence. In recent years, few well-designed and large population

based studies in adults have been published in India. In a study from Mumbai, conducted as part of the European Community Respiratory Health Survey, asthma prevalence in adults aged 20-44 years was reported to be 3.5% using clinician diagnosis, and 17% using a very broad definition (which included prior physician diagnosis and/or a positive bronchoprovocation test) [2]. Prevalence was similar in men (3.8%) and women (3.4%). However, “physician-diagnosed asthma” may possibly underestimate the true prevalence of disease in the general population.

Little information is available regarding asthma epidemiology in this country. Asthma is a chronic inflammatory disorder characterized by airway hyper-responsiveness to a variety of stimuli and results from complex interactions among inflammatory cells, mediators and airways. A clinico-physiological definition is more appropriate for routine diagnosis and management of this disorder. For practical purposes, asthma may be defined as a disorder of airways characterized by the following:

1. Paroxysmal and/or persistent symptoms such as dyspnea, chest tightness, wheezing and cough, with or without mucus production
2. Variable airflow limitation demonstrated by chest auscultation and/or repeated measurements of peak expiratory flow (PEF) or other spirometric indices
3. Airway hyper-responsiveness to a variety of nonspecific inhalational stimuli

Of these criteria, the last is not essential.

Although recognition of these features helps in diagnosis and management of disease in patients presenting to clinicians, they are inappropriate for epidemiological purposes. While defining population characteristics through large population surveys, one needs a simple operational definition of asthma that is understood by field workers with little or no clinical background, and involves minimal use of laboratory investigations. We have recently adapted a questionnaire to assist in field diagnosis of asthma for epidemiological purposes and have estimated prevalence of disease in the local population, both in children and adults [3]. We used a Hindi adaptation of the International Union against Tuberculosis and Lung Disease (IUATLD) 1984 questionnaire for this purpose. This questionnaire was validated and tested against physician-diagnosed asthma before assessing population prevalence in 958 men and 1158 women.

True population prevalence was reported as 3.94% in urban men, 3.99% in rural men, and 1.27% in both urban and rural women. We now propose to extend this methodology to several other areas in the country to arrive at an estimate of national figures.

References

1. Viswanathan RM, Prasad M, Thakur AK, Sinha SP, Prakash N, Mody RK, Singh TRBPN, Prasad SN. Epidemiology of asthma in an urban population: a random morbidity survey. *J Med Assoc India* 1966;46:480-483.
2. Chowgule RV, Shetye VM, Parmar JR, Bhosale AM, Khandagale MR, Phalnitkar SV, Gupta PC. Prevalence of respiratory symptoms, bronchial hyperreactivity, and asthma in a megacity. Results of the European Community Respiratory Health Survey in Mumbai (Bombay). *Am J Respir Crit Care Med* 1998;158:547-554.
3. Jindal SK, Gupta D, Aggarwal AN, Jindal RC, Singh V. Study of the prevalence of asthma in adults in north India using a standardized field questionnaire. *J Asthma* 2000;37:345-351.

VI. STUDY DESIGN

It is proposed to study the prevalence of asthma in different parts of the country using a multi-centric design with the help of uniform methodology. The essential components of this design are as follows:

1. A single scientific definition of asthma developed at the beginning, as applicable to this study for field prevalence.
2. A standardized and validated study-questionnaire developed at the Central Coordinating Centre at Chandigarh. The questionnaire will however be translated in local languages and modifications done depending upon local needs.
3. Uniform method of collecting data from the field in each region.
4. Data analysis at the Central Coordinating Centre for area wise prevalence.

Central Coordinating Centre

The Central Coordinating Centre will be located at the Postgraduate Institute of Medical Education and Research, Chandigarh.

Subcentres

Presently we have included 12 centres. Each centre will select a field sample and discuss different modalities with the coordinating cell. One member of the central team shall visit each centre to finalize the methodology, sample size, and validation of the questionnaire in local language (if required). In view of the known enthusiasm, credibility and dedication of these investigators, and their liaison with the central team, we do not anticipate any major methodological problem.

Study at each Subcentre

A random sample considering the district as a unit will be selected. A sample of 12421 subjects will be required to obtain a 95% confidence interval of $\pm 0.3\%$ around a prevalence estimate of 3.0%, using the formula $N = p \times (1-p) \times (t/m)^2$, where N is the estimated sample size, p is the estimated prevalence of asthma in the population being surveyed, t is the standard normal deviate associated with the confidence level (1.96 for a 95% confidence level), and m is the margin of error. Accordingly, a target sample of about 12000 - 15000 subjects will be recruited at each centre. The urban – rural composition of the sample will be similar to the distribution in the population from that district.

The sample design at each of the participating centres will be a two stage stratified (urban/rural) sampling, where villages/urban localities form the first stage units and households form the second stage units. Both the urban and rural units were confined to municipal limits.

In the urban setting, the locations where the survey will be carried out will be decided by a random selection of a number of areas defined by boundaries of municipal wards or census blocks or city sectors as appropriate. In the rural setting, the sample area will be identified using community development block as a unit. Villages will be selected at random from among all villages in the block. Field workers will approach the village sarpanch or other community leaders to enlist their cooperation and help in defining the boundary of the area in which the survey is to be carried out. With their

help, a rough map of the village will be drawn and the number of households identified in different areas. Approximately 100 households will be targeted in each village/urban cluster. In case the villages were small, two or more neighbouring villages will be combined till the group has approximately 100 households. In case the village is substantially large, it will be partitioned into two or more areas, each with approximately 100 households.

For this purpose, help will be obtained from persons knowledgeable about the area. The household in a particular segment from where the survey is to be started will be then randomly selected. In case the houses in a particular area are serially numbered, this will be accomplished by a random selection of number between the numbers of the first and the last house in the area. In case houses are not numbered such, the field worker will go to the central area of the segment, and chose a direction (north, east, south or west) randomly. In the selected direction, all households located till the end of the street will be listed, and a house selected at random from this list. This random selection will be accomplished in both instances by using random number tables to pick a number between the first and last numbers of the houses. Alternatively, the field worker can draw out a single currency note from his/her purse and selected the number represented by the last one, two, three or four digits of its serial number. Interview will start in the selected household and the field worker will then move on to the next nearest house. The process will continue till the required number of individuals have been interviewed in that particular area. Once the field worker reaches the target sample in any segment, all adults in this last household will be interviewed.

A household will be defined as a person or a group of persons who commonly live together and take meals from a common kitchen unless exigencies of work prevented them from doing so. There could be households of persons related by blood or a household of unrelated persons or a mix of both. Collective living arrangements such as boarding houses, hotels, messes, jails, army camps, boarding schools, ashrams, (etc.) will not be considered households and will not be included in the survey. The head of the household will be designated the person acknowledged as such by members of household, and is the person who makes important decisions for the household and is

responsible for its upkeep and maintenance.

Subjects will be selected randomly from the households in the population to be studied. All subjects aged >15 years in a household will be interviewed. A field investigator will make home-to-home visits to administer the questionnaire, and will ask the questions exactly as per the questionnaire and fill up the responses. Members of the household, not available on the first visit, will be contacted again at home and/or place of work. A maximum of three such attempts will be made. A diagnosis of asthma will subsequently be established on the basis of questionnaire-definition, already defined in the previous phase.

For the purposes of execution, an investigators meeting will be held at the start of the project as well as for review in the 2nd year. Training Workshops for the field and computing teams will be held in each region in the South, West and East.

Statistical methods

Responses to the questionnaires will be stored on computer using the epidemiological software EpiInfo. Analysis will be performed using this software as well as SPSS for Windows. All calculations will be performed on individual data sets from each centre.

A supervisor will crosscheck entries from 10% of records selected at random from each centre. He will visit these households and administer the questionnaire again to assess validity of data collected by the field investigator.

Comparisons between groups will be carried out using the chi-square test (for categorical variables) and Student's t-test (for continuous variables). Agreement between categorical variables will be calculated using the Kappa measure (K).

Strength of the coordinating centre

The Department of Pulmonary Medicine at Postgraduate Institute of Medical Education and Research, Chandigarh is one of the few departments in the country solely dedicated to pulmonary sciences, especially at a postdoctoral level. It is the only centre in India, which offers a DM programme in Pulmonary and critical care Medicine.

The department has a very firm infrastructure with a fully equipped pulmonary function laboratory and a Respiratory Epidemiology Cell. We have excellent cooperation with the Department of Community Medicine.

We have conducted and completed several research projects of ICMR and other agencies. Different members of the department faculty are working on asthma and other airway disorders. We have several publications on asthma, including the latest on its prevalence in North India, published in Journal of Asthma this year (Jindal SK, Gupta D, Aggarwal AN, Jindal RC, Singh V. Study of the prevalence of asthma in adults in north India using a standardized field questionnaire. J Asthma 2000;37:345-351). This study has received wide appraisal from several centres around the world. However, one single study from one centre cannot truly represent national figures for a diverse population as that of India. Almost a similar methodology will be used for this study.

VII. TIME SCHEDULE

A. Each Centre

- | | | |
|--|-----------|-------------|
| • Questionnaire restructuring/translation/
validation and staff recruitment | 3 months | } 18 months |
| • Prevalence study | 15 months | |

B. Coordinating Centre

- | | | |
|--|-----------|-------------|
| • Questionnaire restructure/refinement | 3 months | } 24 months |
| • Supervision, Monitoring and coordinating | 15 months | |
| • Final data compilation, analysis and
report preparation | 6 months | |

QUESTIONNAIRE

IDENTIFICATION AND DEMOGRAPHIC DATA

- | | |
|---|-------------------|
| 1. Centre code | ## |
| 2. Serial Number | ##### |
| 3. Date of survey | dd/mm/yyyy |
| 4. Current residence | Rural/Urban |
| 5. Address and phone | _____ |
| | _____ |
| 6. Name | _____ |
| 7. Date of birth | dd/mm/yyyy |
| 8. Age (in years) | ## |
| 9. Sex | Male/Female |
| 10. What has been your usual residence, where you have lived >75% of your life? | Rural/Urban/Mixed |
| 11. For how many years have you received education? | ## |
| 12. What is the occupation of the head of household? | # |
| (1) Unemployed or retired | |
| (2) Housewife | |
| (3) Unskilled labourer | |
| (4) Skilled labourer | |
| (5) Business / Self employed professional | |
| (6) Agriculturist | |
| (7) Worker in a government or private service | |
| (8) Supervisor in a government or private service | |
| (9) Officer in a government or private service | |
| 13. What is your occupation? | # |
| (1) Unemployed or retired | |
| (2) Housewife | |
| (3) Unskilled labourer | |
| (4) Skilled labourer | |
| (5) Business / Self employed professional | |
| (6) Agriculturist | |
| (7) Worker in a government or private service | |
| (8) Supervisor in a government or private service | |
| (9) Officer in a government or private service | |

RESPIRATORY SYMPTOMS

Please answer Yes or No. If Yes, specify duration of symptoms (years)

Years

WHEEZING AND TIGHTNESS IN THE CHEST

- | | | | |
|-----|--|----------|----|
| 14. | Have you ever had wheezing or whistling sound from your chest during the last 12 months ? | Yes / No | ## |
| 15. | Have you ever woken up in the morning with a feeling of tightness in the chest or of breathlessness? | Yes / No | ## |

SHORTNESS OF BREATH

- | | | | |
|-----|--|----------|----|
| 16. | Have you ever felt shortness of breath after finishing exercises, sports or other heavy exertion during the last 12 months ? | Yes / No | ## |
| 17. | Have you ever felt shortness of breath when you were not doing some strenuous work during the last 12 months ? | Yes / No | ## |
| 18. | Have you ever had to get up at night because of breathlessness during the last 12 months ? | Yes / No | ## |

COUGH AND PHLEGM

- | | | | |
|-----|--|----------|----|
| 19. | Have you ever had to get up at night because of cough during the last 12 months ? | Yes / No | ## |
| 20. | Do you usually cough first thing in the morning ? | Yes / No | ## |
| 21. | Do you usually bring out phlegm from your chest first thing in the morning ? | Yes / No | ## |
| 22. | Do you usually bring up phlegm from your chest most of the morning for at least 3 consecutive months during the year ? | Yes / No | ## |

BREATHING

- | | | | |
|-----|--|---|----|
| 23. | Select the most appropriate out of the following
(a) I hardly experience shortness of breath.
(b) I usually get short of breath but always get well
(c) My breathing is never completely satisfactory | # | ## |
|-----|--|---|----|

DUST, FEATHERS AND PETS

- | | | | |
|-----|--|----------------------|----------|
| 24. | When you are exposed to dusty areas, or pets like dog, cat or horse, or feathers or quilts or pillows, etc., do you
(a) Feel tightness in chest?
(b) Feel shortness of breath? | Yes / No
Yes / No | ##
|
|-----|--|----------------------|----------|

ASTHMA

- | | | | |
|-----|---|----------|----|
| 25. | Have you ever suffered from asthma ? | Yes / No | ## |
| 26. | Have you ever had an attack of asthma during the last 12 months ? | Yes / No | ## |
| 27. | Are you taking any inhaler, pump, rotahaler or nebulizer or other medicines for treatment of breathlessness ? | Yes / No | ## |

ATOPY AND FAMILY HISTORY

- | | | | |
|-----|--|----------|--|
| 28. | Do you often develop skin rash (such as urticaria or eczema) which come and go off and on? | Yes / No | |
| 29. | Do you often develop sneezing or running nose? | Yes / No | |
| 30. | Do you often develop itchiness in eyes? | Yes / No | |
| 31. | Do any of your family members have any of the above three symptoms? | Yes / No | |
| 32. | If yes, who?
Grandparents / parents / brother / sister / children / others | # | |
| 33. | Do any of your family members suffer from asthma? | Yes / No | |
| 34. | If yes, who?
Grandparents / parents / brother / sister / children / others | # | |

TOBACCO SMOKING AND CONSUMPTION

- | | | | |
|-----|--|----------|--|
| 35. | Have you ever smoked for one year or more than that?
If answer to Question 35 is 'Yes', go to next question, else to Question 41. | Yes / No | |
| 36. | What form of tobacco do/did you predominantly smoke?
(a) Cigarette
(b) Bidi
(c) Hookah
(d) Cigar
(e) Pipe
(f) Others | # | |
| 37. | How many cigarettes, bidis, cigar, pipe, hookah or chillum do you/did you usually smoke in 24 hours? | ## | |
| 38. | At what age did you start smoking? | ## | |

39. Select only one depending on what is applicable to you #
 (a) I still smoke
 (b) I have left smoking for less than a year
 (c) I have left smoking for more than a year
 If answer to Question 39 is (c), go to Question 40, else go to Question 41
40. Specify the number of years for which left smoking ##
41. Do you consume any type of tobacco product other than smoking? Yes / No
 If answer to Question 41 is 'Yes', go to Question 42, else to Question 45.
42. What tobacco product do you consume?
 Zarda / Khaini / Panmasala / Gutka / Snuff / Others (specify) # _____
43. For how many years have you been consuming these products? ##
44. How often do you consume this product each day? ##

Questions 45-46 should be filled only if answer to Question no. 35 is NO. If answer to Question 35 is 'Yes' go to Question 47

ETS EXPOSURE

45. Do/did any of your family members (i.e. people residing in the same household) regularly smoke in your presence? Yes / No
 If 'Yes'
46. Who all in the family are/were regular smokers during childhood and adulthood?
- | | | Product | Hours/day | Years |
|------------------------|--------|---------|-----------|-------|
| Before marriage | | | | |
| Grandfather | Yes/No | # | ## | ## |
| Grandmother | Yes/No | # | ## | ## |
| Father | Yes/No | # | ## | ## |
| Mother | Yes/No | # | ## | ## |
| Brother | Yes/No | # | ## | ## |
| Sister | Yes/No | # | ## | ## |
| Others (Specify) | _____ | # | ## | ## |
| After marriage | | | | |
| Father/Father-in-law | Yes/No | # | ## | ## |
| Mother/Mother-in-law | Yes/No | # | ## | ## |
| Brother/Brother-in-law | Yes/No | # | ## | ## |
| Sister/Sister-in-law | Yes/No | # | ## | ## |
| Son | Yes/No | # | ## | ## |

Daughter	Yes/No	#	##	##
Husband/Wife	Yes/No	#	##	##
Others (Specify)	_____	#	##	##

Product: (a) Cigarette (b) Bidi (c) Hookah (d) Cigar (e) Pipe (f) Others

COOKING FUEL

47. Do you regularly cook now or have you regularly cooked in the past?
- 1) Regularly cook now
 - 2) Cooked regularly in the past
 - 3) Never cooked regularly
48. At what age did you start cooking regularly ##
49. At what age did you stop cooking (if already stopped) ##
50. How often do you cook? ##
1. Daily
 2. ____ days in a month
51. Does your house have a separate kitchen? Yes / No
52. Does the kitchen have windows/openings? Yes / No
53. How many hours do you daily spend in the kitchen? ##
54. What cooking fuel do you predominantly use for cooking? #
- i) Electricity
 - j) LPG
 - k) Kerosene
 - l) Coal
 - m) Wood
 - n) Dung cake
 - o) Crop residue
 - p) Others

TO BE FILLED BY INTERVIEWER

55. What, in your perception, is the overall socio-economic status of the individual? Low / Middle / High

Form filled by _____

Data verified by _____

Data entered into computer by _____

GENERAL INSTRUCTIONS FOR FILLING UP THE QUESTIONNAIRE

1. Read and understand the questionnaire thoroughly to know the language and meaning of each question. Go through this manual carefully before going to the field to understand how the interview is to be conducted, questions asked and responses recorded and coded.
2. Follow all instructions carefully and exactly so that methodology used by all interviewers is identical. This is to ensure that the quality of data collected is uniform.
3. The questionnaire should be completed by a fieldworker during an interview with adult persons in the household visited. All persons aged more than 15 years should be interviewed. A separate questionnaire form should be completed for each respondent.
4. Before the interview, introduce yourself to the respondent and inform him/her about the study and the fact that he/she has to answer a few questions.
5. Questions should be asked exactly in the sequence in which they are printed in the questionnaire.
6. Each question should be read aloud exactly as written, without altering the wording. If the question is not understood, you may use additional explanations or examples given subsequently in instructions for individual questions. If no additional instructions are given, repeat the question in its original form. Do not probe for an answer. However, you may listen to additional comments as this may help in improving your rapport with the respondent. If, even after a brief explanation, doubt remains as to whether the answer is 'Yes' or 'No', the answer should be recorded as 'No'.
7. Once you have completed the questionnaire, write the codes for each categorical response in the spaces provided alongside each question for this purpose.
8. Once finished, go through the questionnaire again to ensure that all responses have been correctly coded. Do not leave any code field blank.

INSTRUCTIONS FOR FILLING UP EACH ITEM IN THE QUESTIONNAIRE

1. Centre code

This is a unique two digit number and should be filled in as follows:

01 Ahmedabad	07 Kolkata
02 Berhampur	08 Mumbai
03 Bikaner	09 Mysore
04 Chennai	10 Sevagram
05 Guwahati	11 Shimla
06 Hyderabad	12 Trivandrum

2. Serial Number

An unique 5 digit numerical serial number should be given to each respondent interviewed. Once allotted, the serial number should not be changed, and should not be repeated for another individual. The scheme for allotment of serial numbers may be decided by investigators at each centre, but should be consistent at that centre. As an example, the first digit may be code for the area in which survey is carried out, and the next four digits represent the number of the respondent interviewed in that particular area. All five digits should be entered in Arabic numerals. Roman numerals or alphabets should not be used.

3. Date of survey

Record the date of interview in <dd/mm/yyyy> format.

4. Current residence

The current residence of the respondent should be classified as rural or urban, and coded as '1' or '2' respectively.

5. Address and phone number

Note the complete postal address and the contact telephone number.

6. Name

Note the name of the respondent.

7. Date of birth

Record the date of birth of respondent in <dd/mm/yyyy> format. Leave blank if the date is not known. May also ask other family members in case of difficulty.

8. Age (in years)

If date of birth is known, calculate the age (in completed years). If not, ask the respondent his age and record the response.

9. Sex

Self explanatory. Record 'male' or 'female'.

Codes: Male = 1, Female = 2

10. What has been your usual residence, where you have lived >75% of your life

Emphasize the term 'usual' and the definition provided in parenthesis. The response may be different from the residential status recorded in Identification Data.

Codes: Rural = 1, Urban = 2, Mixed = 3

11. For how many years have you received education?

To calculate the number of years of education, sum the number of years spent in school and college (if applicable). Record '0' if the respondent has never formally been to school.

12. What is the occupation of the head of household?

(1) Unemployed or retired

(2) Housewife

(3) Unskilled labourer

(4) Skilled labourer

(5) Business / Self employed professional

(6) Agriculturist

(7) Worker in a government or private service

(8) Supervisor in a government or private service

(9) Officer in a government or private service

Select a single option that best describes the occupation of the head of the household. Head of the household refers to the person responsible for making decisions regarding the household, and may or may not be the eldest male member in the household. Option '1' means that the person never been gainfully employed, cannot work due to disease, disability, etc., or was previously employed but has now retired and is not pursuing any occupation at present. Option '2' means that the woman is staying at home and is not working, either full-time or part-time. Option '3' means that the person is working as a labourer and is engaged in activities that do not call for any specific knowledge or coordination (e.g. worker at a construction site, farm help, etc.). Option '4' means that the person is working a labourer and is employed in activities that require specific knowledge, coordination and experience (e.g. mason, carpenter, etc.). Option '5' means that the person runs and owns his own business, and includes shops, supplies, etc. It also includes professionally qualified persons running and owning their own enterprise; this includes doctors, engineers, chartered accountants, lawyers, etc. Option '6' means that the person is a farmer who owns his own land. Option '7' means that the person is employed in a government or private organization at a lower level in hierarchy, e.g. worker in a factory, clerk or peon at an office, etc. Option '8' means that the person is employed in a government or private organization at a middle level in hierarchy and whose job requires supervision of people working under them, e.g. supervisor at a factory, section officer at an office, etc. Option '9' means that the person is working at a government or private organization at a higher level in hierarchy, is part of management at his/her office, and is involved in decision making, e.g. executives, managers, etc.

Codes: (1) = 1, (2) = 2, (3) = 3, (4) = 4, (5) = 5, (6) = 6, (7) = 7, (8) = 8, (9) = 9

13. What is your occupation?

- (1) Unemployed or retired**
- (2) Housewife**
- (3) Unskilled labourer**
- (4) Skilled labourer**
- (5) Business / Self employed professional**
- (6) Agriculturist**
- (7) Worker in a government or private service**
- (8) Supervisor in a government or private service**
- (9) Officer in a government or private service**

Select a single option that best describes the occupation of the respondent.

Explanation of various choices, as well as coding, is same as in Question 12.

14. Have you ever had wheezing or whistling sound from your chest during the last 12 months ?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0.

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

15. Have you ever woken up in the morning with a feeling of tightness in the chest or of breathlessness?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0.

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

16. Have you ever felt shortness of breath after finishing exercises, sports or other heavy exertion during the last 12 months ?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0.

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

17. Have you ever felt shortness of breath when you were not doing some strenuous work during the last 12 months ?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0.

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

18. Have you ever had to get up at night because of breathlessness during the last 12 months ?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0.

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

19. Have you ever had to get up at night because of cough during the last 12 months ?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0.

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

20. Do you usually cough first thing in the morning ?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0.

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

21. Do you usually bring out phlegm from your chest first thing in the morning ?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0.

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

22. Do you usually bring up phlegm from your chest most of the morning for at least 3 consecutive months during the year ?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0.

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

23. Select the most appropriate out of the following

(a) I hardly experience shortness of breath.

(b) I usually get shortness of breath but always get well

(c) My breathing is never completely satisfactory

Self explanatory. Select the most appropriate choice.

Codes: (a) = 0, (b) = 1, (c) = 2

If answer is (b) or (c), specify the number of years for which present; else enter '99'.

24. When you are exposed to dusty areas, or pets like dog, cat or horse, or feathers or quilts or pillows, etc., do you

(a) Feel tightness in chest?

(a) Feel shortness of breath?

Self explanatory. Give answer in 'Yes' or 'No', separately for each of (a) and (b). In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

25. Have you ever suffered from asthma ?

Self explanatory. Ask if the diagnosis was made by a doctor. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

26. Have you ever had an attack of asthma during the last 12 months ?

An attack of asthma means rapid worsening in breathlessness requiring increase in the dose of medicines or requiring hospitalization. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

27. Are you taking any inhaler, pump, rotahaler, nebulizer, or bronchodilator tablets for treatment of breathlessness ?

Self explanatory. The bronchodilator tablets should be one from the list given below or identified with the help of local practitioner. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Bronchodilator tablets: Albutamol, Ambro, Aminophyllin, Asmanil, Asmatide, Asthalin, Bambudil, Betaday, Betasma, Biryth, Bricanyl, Broncophyl, Broncure, Bronkomed, Bronkoplus, Bronkotab, Brosmin, Carbasma, Curamol, Deriphyllin, Duralyn, Durasal, Eloxin, Etophylate, Etosal, Lungful, ODPhylin, Phylobid, Relasmin, Remetuss, Salbetol, Salbouxine, Salbutamol, Salmaplone, Salphylate, Salvent, Slowthylene, Somavent, Terbutaline, Tergil, Terfex, Theoasthalin, Theobric, TheoPA, Theophyllin, TRPhylin, Unicontin, Vent, Ventil, Ventorlin.

Codes: Yes = 1, No = 0

If 'Yes', specify the number of years for which present. If 'No', enter '99'.

28. Do you often develop skin rash (such as urticaria or eczema) which come and go off and on?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

29. Do you often develop sneezing or running nose?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

30. Do you often develop itchiness in eyes?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

31. Do any of your family members have any of the above three symptoms?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

If answer to Question 31 is 'Yes', go to next question, else to Question 33.

32. If yes, who?

Grandparents / parents / brother / sister / children / others

Record who in the family has the above-mentioned symptoms out of the choices listed in the question.

Codes: If grandparents, parents, brothers, sister or children has symptoms, code '1'.

If any other family member has symptoms, code '0'. Code for missing value = 0.

33. Do any of your family members suffer from asthma?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

If answer to Question 33 is 'Yes', go to next question, else to Question 35.

34. If yes, who?

Grandparents / parents / brother / sister / children / others

Record who in the family suffers from asthma out of the choices listed in the question.

Codes: If any of grandparents, parents, brothers, sister or children has symptoms, code '1'. If any other family member has symptoms, code '0'. Code for missing value = 0.

35. Have you ever smoked for one year or more than that?

It means at least one cigarette/bidi per day or one or more cigar per week or 10 or more hookah/chillum per month for one year or more. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

If answer to Question 35 is 'Yes', go to next question, else to Question 41.

36. What form of tobacco do/did you predominantly smoke?

(a) cigarette

(b) bidi

(c) hookah

(d) cigar

(e) pipe

(f) others

Chose the type of product which the respondent often smokes. In case he/she predominantly smokes a product not listed in choices (a) to (e), select option (f).

Codes: (a) = 1, (b) = 2, (c) = 3, (d) = 4, (e) = 5, (f) = 6, Missing value = 9

37. How many cigarettes, bidis, cigar, pipe, hookah or chillum do you/did you usually smoke in 24 hours?

Self explanatory. Record the number as quoted by respondent. In case he tells the number of packets, ask as to how many cigarettes or bidis does his packet contain and calculate the number of cigarettes or bidis.

Code for missing value = 99

38. At what age did you start smoking?

Record the age (in years) when the respondent started smoking.

Code for missing value = 99

39. Select only one depending on what is applicable to you

(a) I still smoke

(b) I have left smoking for less than a year

(c) I have left smoking for more than a year

Self explanatory. Select the most appropriate choice.

Codes: (a) = 1, (b) = 2, (c) = 3, Missing value = 9

If answer to Question 39 is (c), go to Question 40, else go to Question 41

40. Specify the number of years for which left smoking

Record the number of years the respondent has quit smoking, as told by him.

Code for missing value = 99

41. Do you consume any type of tobacco product other than smoking?

It includes use of other forms of tobacco, which are not smoked, such as eating, sniffing, chewing, etc. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0

If answer to Question 41 is 'Yes', go to Question 42, else to Question 45.

42. What tobacco product do you consume?

Zarda / Khaini / Panmasala / Gutka / Snuff / Others (specify)

Record the type of tobacco product used, as stated by the respondent. If he/she uses a product not mentioned among the available choices, mark 'others' and specify the product used.

Codes: Zarda = 1, Khaini = 2, Panmasala = 3, Gutka = 4, Snuff = 5, Others = 6, Missing value = 9

43. For how many years have you been consuming these products?

Self explanatory

Code for missing value = 99

44. How often do you consume this product each day?

Record the usual number of times the respondent consumes this product over 24 hours.

Code for missing value = 99

Questions 45-46 should be filled only if answer to Question no. 35 is NO. If answer to Question 35 is 'Yes' go to Question 47

45. Do/did any of your family members (i.e. people residing in the same household) regularly smoke in your presence?

This question aims at assessing exposure to passive smoke at home during early years of life. Family members include persons regularly residing in the same household. Lay stress on regularity of smoking to exclude occasional or casual smokers. Emphasize that smokers must have been smoking at home in the presence of respondent. Include ex-smokers as well as smokers who are now dead, but were alive during the period for which data is collected. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0, Missing value = 9

If answer to Question 45 is 'Yes', go to the next question, else to Question 47.

46. Who all in the family are/were regular smokers during your childhood and adulthood?

Before marriage		Product	Hours/day	Years
Grandfather	Yes/No	_____		
Grandmother	Yes/No	_____		
Father	Yes/No	_____		
Mother	Yes/No	_____		
Brother	Yes/No	_____		
Sister	Yes/No	_____		
After marriage				
Father/Father-in-law	Yes/No	_____		
Mother/Mother-in-law	Yes/No	_____		
Brother/Brother-in-law	Yes/No	_____		
Sister/Sister-in-law	Yes/No	_____		
Son	Yes/No	_____		
Daughter	Yes/No	_____		
Husband/Wife	Yes/No	_____		

Ask the respondent to tell which all family members regularly smoked at home in

his/her presence, both during his childhood and during adulthood. Family members include persons regularly residing in the same household. Lay stress on regularity of smoking to exclude occasional or casual smokers. Emphasize that smokers must have been smoking at home in the presence of respondent. Include ex-smokers as well as smokers who are now dead, but were alive during the period for which data is collected. For married women, replace father, mother and siblings with corresponding relatives of husband while recording family members during adulthood. Tick each relative appropriately as 'Yes' or 'No'. In case of doubt, record 'No'. After the respondent has enumerated his response, specifically ask for the relatives whose data is still missing. For relatives not listed among choices, select 'Others' and mention the relationship.

Codes: Yes = 1, No = 0, Missing value = 9

For each answer recorded as 'Yes', ask the respondent about the main smoked tobacco product he/she was exposed to, as well as the number of hours of daily exposure and the approximate number of years for which this exposure occurred. Use codes for tobacco product: Cigarette = 1, Bidi = 2, Hookah = 3, Cigar = 4, Pipe = 5, Others = 6

For each answer recorded as 'No' fill up '99' in each of 'Products', 'Hours per day' and 'Years'.

47. Do you regularly cook now or have regularly cooked in the past?

- 1) Regularly cook now**
- 2) Cooked regularly in the past**
- 3) Never cooked regularly**

Self explanatory. Enter 1, 2, or 3 as per choices

If answer to Question 47 is '1' or '2', go to next question, else to Question 55.

48. At what age did you start cooking regularly?

Record the age of starting regular cooking as stated by respondent. In case of missing value, code '99'

49. At what age did you stop cooking (if already stopped)?

Record the age of stopping regular cooking, as stated by respondent, in case he/she has already stopped cooking regularly. In case of missing value, code '99'

50. How often do you cook?

1. Daily

2. ____ days in a month

Select (1) if the respondent cooks daily. In case he/she does not cook daily, enter a number between 1 and 29 in the second choice of the question. In case of missing value, code '99'

51. Does your house have a separate kitchen?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0, Missing value = 9

52. Does the kitchen have windows/openings?

Self explanatory. Give answer in 'Yes' or 'No'. In case of doubt, give answer as 'No'.

Codes: Yes = 1, No = 0, Missing value = 9

53. How many hours do you daily spend in the kitchen?

Self explanatory. Record the usual number of hours spent daily by the respondent in the kitchen while cooking. Code for missing value '99'

54. What cooking fuel do you predominantly use for cooking?

a) Electricity

b) LPG

c) Kerosene

d) Coal

e) Wood

f) Dung cake

g) Crop residue

h) Others

Chose the type of cooking fuel which the respondent usually uses for cooking. In case he/she predominantly uses a fuel not listed in choices (a) to (g), select option (h).

Codes: (a) = 1, (b) = 2, (c) = 3, (d) = 4, (e) = 5, (f) = 6, (g) = 7, (h) = 8, Missing value = 9

55. What, in your perception, is the overall socio-economic status of the individual?

Low / Middle/ High

Select the response that best describes the overall socio-economic status of the individual. The response is based on an overall subjective assessment by the interviewer, and should take into account (a) the responses obtained to questions on residence, education, and occupation, and (b) the observations made by the interviewer regarding the type of house (whether kutcha or pucca), area of house, and nature and amount of consumable items in the house. No specific or leading questions need to asked for making such assessment.

Codes: Low = 1, Medium = 2, High = 3

Annexure IV

REPORTS OF TRAINING WORKSHOPS

Annexure IV-1
REPORT OF FIRST REGIONAL TRAINING WORKSHOP
Chennai, February 2-3, 2007

The first of a series of regional workshops aimed at training field staff for the ICMR sponsored multicentric study on prevalence of asthma and atopy in adults was conducted for the southern region at Chennai from February 2-3, 2007. The meeting was attended by investigators and field staff from Chennai, Secunderabad, Mysore and Trivandrum. Dr V. Thanasekaran from Chennai along with her coinvestigators and field staff, Dr Vijai Kumar from Secunderabad along with his field staff, and Dr Jayaraju BS from Mysore along with his field staff were present. Dr CS Ghosh from Trivandrum could not attend the meeting, though his field staff was present. The proceedings were supervised by the ICMR team of Dr Bela Shah, Dr Kishore Chaudhry, and Dr Tanvir Kaur. Training was delivered by Prof. SK Jindal and Dr Ashutosh N. Aggarwal from the coordinating centre at the Postgraduate Institute of Medical Education and Research, Chandigarh.

The workshop began with Dr Bela Shah and Dr Kishore Chaudhry welcoming the participants and outlining the importance and relevance of the study, and the necessity of standardization and uniformity of data collection. Dr Jindal provided a brief summary of the project and initiated the training process for field staff.

The initial session was devoted to finalizing the sampling strategy and sampling frame at each of the four centres. This was achieved through group work by participants from each of the four centres and was supervised by teams from ICMR and the coordinating centre. The sampling strategy was explained to field staff in detail, and specific local problems sorted out. After a subsequent joint session by all participants, the uniform strategy for sampling was adopted for all centres.

In the next session, the team from the coordinating centre discussed each item of the study questionnaire in detail with the field staff, explaining to them the method of asking each question, answering respondent queries, recording, collected information and coding of responses. All queries were sorted out. Next, in a practical exercise, all field staff filled up a dummy questionnaire, which was later checked and potential problems solved.

The next day's session was devoted to imparting training on data entry into computer. Participants were familiarized with EpiData Software and its installation and operation. The computer programme to be used for data entry demonstrated in detail.

All participating centres were provided with copies of the detailed project manual, as well as CDs containing the project manual, and software and files related to data entry.

Annexure IV-2
REPORT OF SECOND REGIONAL TRAINING WORKSHOP
Kolkata, February 25, 2007

The second of a series of regional workshops aimed at training field staff for the ICMR sponsored multicentric study on prevalence of asthma and atopy in adults was conducted for the eastern region at Kolkata on February 25, 2007. The meeting was attended by field staff and investigators from Kolkata, Guwahati and Behrampur. The proceedings were organized by Dr Dhiman Ganguly from Kolkata and supervised by the ICMR team of Dr Bela Shah, Dr Tanvir Kaur and Dr Ashoo Grover. Training was delivered by Dr Ashutosh N. Aggarwal from the coordinating centre at the Postgraduate Institute of Medical Education and Research, Chandigarh.

The workshop began with an outline of the importance and relevance of the study, and the necessity of standardization and uniformity of data collection. One session was devoted to finalizing and sampling strategy and sampling frame at each of the three centres. This was achieved through group work by participants from each of the four centres and was supervised by teams from ICMR and the coordinating centre. The sampling strategy was explained to field staff in detail, and specific local problems sorted out. After a subsequent joint session by all participants, the uniform strategy for sampling was adopted for all centres.

In the next session, each item of the study questionnaire was discussed in detail with the field staff, explaining to them the method of asking each question, answering respondent queries, recording, collected information and coding of responses. All queries were sorted out. Next, in a practical exercise, all field staff filled up a dummy questionnaire, which was later checked and potential problems solved. Subsequently, training on data entry into computer was provided. Participants were familiarized with EpiData Software and its installation and operation. The computer programme to be used for data entry demonstrated in detail.

All participating centres were provided with copies of the detailed project manual, as well as CDs containing the project manual, and software and files related to data entry.

Other specific issues that were discussed were:

1. The draft consent form provided by the coordinating centre was slightly modified; this needs to be finalized and distributed to all centres after ICMR approval.
2. The details on uniform sampling strategy need to be written in detail by the coordinating centre and sent to all centres.
3. Principal Investigators at each centre should hold a monthly meeting with research staff to monitor the progress and quality of data collection.

Annexure IV-3
REPORT OF THIRD REGIONAL TRAINING WORKSHOP
Ahmedabad, March 2, 2007

The third of a series of regional workshops aimed at training field staff for the ICMR sponsored multicentric study on prevalence of asthma and atopy in adults was conducted for the western region at Ahmedabad on March 2, 2007. The meeting was attended by field staff and investigators from Ahmedabad, Mumbai, Nagpur and Bikaner. The proceedings were organized by Dr Rajesh Solanki from Ahmedabad and supervised by the ICMR team of Dr Shukla and Dr Ashoo Grover. Training was delivered by Prof. SK Jindal and Dr Ashutosh N. Aggarwal from the coordinating centre at the Postgraduate Institute of Medical Education and Research, Chandigarh.

The workshop began with an outline of the importance and relevance of the study, and the necessity of standardization and uniformity of data collection. One session was devoted to finalizing the sampling strategy and sampling frame at each of the four centres. This was achieved through group work by participants from each of the four centres and was supervised by teams from ICMR and the coordinating centre. The sampling strategy was explained to field staff in detail, and specific local problems sorted out. After a subsequent joint session by all participants, the uniform strategy for sampling was adopted for all centres.

In the next session, each item of the study questionnaire was discussed in detail with the field staff, explaining to them the method of asking each question, answering respondent queries, recording, collected information and coding of responses. All queries were sorted out. Next, in a practical exercise, all field staff filled up a dummy questionnaire, which was later checked and potential problems solved. Subsequently, training on data entry into computer was provided. Participants were familiarized with EpiData Software and its installation and operation. The computer programme to be used for data entry demonstrated in detail.

All participating centres were provided with copies of the detailed project manual, as well as CDs containing the project manual, and software and files related to data entry.

Investigators from all participating centres expressed their difficulty in carrying out field work, especially in the rural areas, in view of insufficient funds to provide travel allowances to field staff. Similarly, the Principal Coordinator also expressed that no funds were provided to carry out monitoring and supervisory visits. It was therefore, decided to ask ICMR to provide additional funds to carry out these activities (details furnished separately). It was also decided to carry on the work using the available contingency funds till further funding is sanctioned. Similarly, the coordinating centre will use the funds from the amount available to hold regional workshops and investigator meetings for supervisory visits, till fresh funds are sanctioned.

Annexure V

MONITORING LOG

Multicentric Study on Epidemiology of Asthma and Atopy in Adults

Sponsored by ICMR

MONITORING VISIT LOG

Centre _____

Date _____

Monitor from Coordinating Centre S. K. Jindal D. Gupta A. N. Aggarwal

Investigators present during visit _____

Total number of field staff enrolled _____

Total number of field staff present _____

Drawn up sampling frame As per protocol
 Minor deviations from protocol, but overall satisfactory
 Major deviations from protocol (specify)

Study performas

Printed in local language(s) Yes No

Total number filled up and verified _____

Random check of ten study performas

Number on which identifier data mentioned _____

Number with completely filled up data _____

Number on which coding performed _____

Number having field staff signatures _____

Number having consent sheet properly filled _____

Overall quality assessment Good Fair Poor

Any specific comments _____

Data entry into computer

EpiData and study files correctly installed

Yes No

Total number of records entered to database

Random check on five records

Number satisfactorily filled up

Overall quality assessment

Good Fair Poor

Any specific comments

Household register maintained

Yes No

Number of households visited so far

Number of eligible respondents screened

Number of respondents actually interviewed

Average daily interviews by one field staff

Any specific problems faced by investigators and/or field staff

Any other specific comments

Signature of Investigator

Signature of monitor