

SERIES - 3

NO. 30



SURVEY OF CAUSES OF DEATH (RURAL)
INDIA
1997

{BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES (ICD) 10TH REVISION}

ANNUAL REPORT

OFFICE OF THE REGISTRAR GENERAL, INDIA
NEW DELHI

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FOREWORD

This report is the thirtieth annual report on the results of the 'Survey of Causes of Death' in rural areas and relates to the year 1997. The survey is conducted continuously in sample villages of selected Primary Health Centres (PHCs). It bridges an important gap in statistics on causes of death for rural areas. During 1997, 2059 PHC villages were covered under the survey and 44,409 deaths were reported and causes of death were identified based on lay diagnosis reporting (Post Death Verbal Autopsy).

This report is the third in the series of reports where the presentation and analysis of major causes of death has been attempted according to the **International Classification of Diseases (ICD) 10th Revision**. The first report given the analysis according to ICD classification pertains to the year 1995. The presentation of causes of death has been done by age and sex of the deceased. The specific causes of death have been analysed on the earlier pattern and corresponding ICD codes have been provided wherever possible. Attempt has also been made to identify diseases of the old age. Besides this, as in previous years, ten top killer diseases among all deaths excluding senility have been analysed.

This survey, conducted since 1965, would not have been successful without the active cooperation of the State Health and Statistics Directorates, who shouldered the major responsibility of field implementation of the scheme through the Medical Officers of the concerned Primary Health Centres. The present report has been prepared by Shri Anand Kumar, then Deputy Director and Shri Lokeswar Das, Investigator, finalised by Shri D.K. Dey, Assistant Director under overall guidance of Shri S.K. Sinha, Deputy Registrar General and ably assisted by the staff of the Survey of Causes of Death Unit.

July 2000
New Delhi

J.K.BANTHIA
Registrar General, India

CHAPTER - I

INTRODUCTION

1.1 Background

Mortality influences the rate of growth of the population and provides the dimension of demographic perspective which is vital for socio-economic planning. The pattern of deaths by causes reflects the health status of the community and in turn provides a rational basis for health planning. It is not feasible to build up statistics of mortality by causes based on "Medical Certification of Causes of Death (MCCD)" due to paucity of medical institutions in rural India, where three-fourth of the population of country live. This important statistical gap has been bridged, to some extent, by the Survey of Causes of Death in selected villages of sample Primary Health Centres in rural areas.

1.2 History

1.2.1 The Office of the Registrar General, India initiated in the 1960s a scheme called "**Model Registration Scheme**" (MRS) pursuant to the recommendations made in the '**Conference on improvement of Vital Statistics**' held in 1961. The Model Registration Scheme [MRS] was renamed in 1982 as "*Survey of Causes of Death (Rural) (SCD)*".

1.2.2 The Third Conference of Chief Registrars of Births and Deaths in the year 1980, considered the matter of expansion of the scheme and recommended that attempts should be made to cover two Primary Health Centres per million rural population under this survey, as per 1981 Census. During 1992, on the basis of recommendations of Technical Advisory Committee on Vital Statistics and Survey (1990-91), Survey of Causes of Death (Rural) was planned to be extended to 2500 selected PHCs at the rate of 4 PHCs per one million rural population based on 1991 census. Following changes in basic concept and coverage were enforced w.e.f. 1995,

- i) A complete sub-centre 3-6 Kms away from the Head quarter of the Primary Health Centre having 5000 population to be selected for the survey.
- ii) All the events of deaths and births related to the "Usual resident" of the villages under sub-centre irrespective of place of occurrence should be covered under survey.

- iii) "Population at risk" concept was introduced during 1994 with a view to study causes of death in relation to the population of the survey unit by age and sex.

1.3 Objective

The primary objective of the survey is to build up statistics on "Most Probable Cause of Death" for rural India, states and union territories, using "Lay diagnosis reporting (Post Death Verbal Autopsy)" method through post death enquiry based on symptoms, conditions, duration and anatomical site of the disease as reported by family members of the deceased.

1.4 Coverage

- 1.4.1 During 1997 the survey was conducted in 1909 selected PHCs spread over 23 States and 3 Union territories . However, from the states of Jammu & Kashmir, no returns of causes of death were received during the year. In respect of Andhra Pradesh and Bihar, the returns were received only for 183 and 105 units out of 200 and 130 units respectively while from West Bengal, the data were received from 16 PHCs only out of 100 PHCs. In case of Punjab also, data were received in respect of 65 PHCs out of 70 sample PHCs. As regards smaller states of Meghalaya and Nagaland, data were received for 7 units each out of 10 PHCs of each state. Details of 1909 selected PHCs and population covered during 1997 are given in Statement 1. The survey is presently not being implemented in Andaman & Nicobar Islands, Chandigarh, Daman & Diu, Lakshadweep, Mizoram, while in Pondicherry the scheme has been implemented w.e.f. 1.1.1997 and in Sikkim the scheme is being implemented w.e.f. 1-1-98.

1.5 Receipt of monthly returns

- 1.5.1 Statewise details of coverage of selected PHCs, monthly returns received from the field and total number of deaths reported from the survey centres for the year 1996 & 1997 have been presented in Statement 1. For the year 1997, survey data was received completely (i.e. more than 95 percent) from the states of Arunachal Pradesh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Orissa, Rajasthan, Tamil Nadu, Tripura, Dadra & Nagar Haveli, Delhi and Pondicherry. Monthly returns received from the rest of state implementing agencies are below 95 percent. Analysis of the survey data for the year 1997 at the national level is based on 96 percent of the expected returns. Thus, the monthly returns from the scheme of survey of causes of death were, being received from 1909 sample units out of 2059 selected PHCs.

1.5.2 Number of deaths reported

During 1997, 44,409 deaths were reported from the survey units, as against 43,168 deaths in 1996. The number of deaths reported during 1997 were higher

than those in 1996 in respect of the states of Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, Manipur, Meghalaya, Nagaland, Orissa, Punjab, Rajasthan, Tripura, Uttar

Pradesh, Dadra and Nagar Haveli and Delhi. In the states of Goa, Gujarat, Karnataka, Maharashtra, Tamil Nadu the number of deaths reported in 1997 were on the lower side as compared to 1996. However, significant improvement in reporting of the number of deaths has been noticed in the states of Andhra Pradesh, Haryana, Orissa, Rajasthan and Dadra & Nagar Haveli.

Statement 1

Number of selected PHCs , receipt of monthly returns, total number of reported deaths and population covered under survey 1997

Sl. No.	State/UTs	No. of selected PHCs	Monthly returns received			Number of deaths reported		Population covered under survey
			Number	Percentage		1996	1997	
			1997	1996	1997	1996	1997	
1	Andhra Pradesh	200	1829	100.0	83.3	3861	4785	411705
2	Arunachal Pradesh	12	140	89.6	97.2	59	81	4390
3	Assam	59	566	85.7	98.3	470	507	100951
4	Bihar	130	1260	93.8	100.0	1726	1763	342350
5	Goa	10	100	97.5	83.3	226	217	37918
6	Gujarat	100	1200	100.0	100.0	1351	1299	182589
7	Haryana	50	600	96.5	100.0	1029	1162	130151
8	Himachal Pradesh.	35	418	95.2	100.0	714	729	52206
9	Jammu & Kashmir		NA	NA		NA	NA	
10	Karnataka	100	1200	100.0	100.0	1841	1780	136292
11	Kerala	74	888	99.2	100.0	947	954	145075
12	Madhya Pradesh	200	2329	97.9	97.0	5988	6035	322340
13	Maharashtra	250	3000	100.0	100.0	8561	7616	1127885
14	Manipur	10	118	96.7	98.3	98	104	16069
15	Meghalaya	10	82	53.3	97.6	147	187	4768
16	Nagaland	10	78	84.3	92.9	107	118	17392
17	Orissa	46	538	94.7	99.6	1147	1413	156920
18	Punjab	70	771	95.4	98.8	1306	1372	198131
19	Rajasthan	60	720	99.0	100.0	2015	2137	249421
20	Tamil Nadu	150	1800	100.0	100.0	5916	5738	267835
21	Tripura	10	118	91.7	98.3	146	177	17658
22	Uttar Pradesh	350	3758	87.7	89.5	5018	5220	554441
23	West Bengal	100	150		78.1		104	N.A.
24	D & N Haveli	6	72	38.9	100.0	387	543	NA
25	Delhi	5	60	100.0	100.0	108	118	16100
26	Pondicherry	12	144	NA	100.0	NA	250	70688
	India	2059	21939	95.6	95.8	43,168	44,409	45,63,275

1.5.3 To highlight the progress and coverage at all India level, information for the last 10 years (1988-1997) has been compiled and presented in Statement 2. This statement gives a comparative picture at all India level showing the number of selected survey units, receipt of monthly returns and total number of reported deaths for the years 1988-97.

Statement 2

**Number of selected survey units (PHCs), receipt of monthly returns,
total reported deaths,
India, 1988-1997**

Year	Selected no. of Sample Units	Monthly Returns		Per-centage	Reported deaths			Deaths per PHC
		Expected.	Recd.		Persons	Male	Female	
1988	1305	15,660	14,169	90.5	22,950	12,667	10,283	18
1989	1305	15,660	13,875	88.6	21,409	11,915	9,494	16
1990	1305	15,660	13,465	86.0	21,028	11,848	9,180	16
1991	~ 1303	15,636	13,070	83.5	22,629	12,604	10,025	17
1992	1305	15,660	13,668	87.3	26,118	14,745	11,373	20
1993	1407	16,884	14,991	95.3	29,597	16,306	13,291	21
1994	1731	20,772	20,120	97.1	36,799	20,084	16,715	21
1995	1731	20,772	19,945	96.0	37,831	20,819	17,012	22
1996	1883	22,080	21,110	95.6	43,168	23,903	19,265	23
1997	1909	22,908	21,939	95.7	44,409	25,081	19,328	23

1.6 Implementing Agencies

1.6.1 The implementing agencies for the survey at the state level are the Directorates of Health & Family Welfare and the State Bureau of Economics & Statistics. In most cases, the implementing agencies for the Survey of Causes of Deaths are the Chief Registrars of Births and Deaths under the Registration of Births and Deaths Act, 1969.

1.7 Methodology

1.7.1 Officials engaged in the survey and their duties

The survey is confined to the sample village of population 2000-5000 persons of the selected PHC. The Medical Officer Incharge of the PHC, Recorder (Statistical Computer), Field agent (para medical staff - Lady Health Visitor, ANM, Sanitary Inspector, etc.) and Statistical Officer are main functionaries of the survey. The assigned work for each official as defined in Part I of the Manual of Instructions are given in the following paragraphs.

1.7.2 Medical Officer Incharge

Medical Officer Incharge is the technical advisor for the survey work at PHC level. He guides the field agent regarding probable cause of death, as per the manual of Non-Medical List II. He certifies the probable cause of death in the prescribed combined Form 6A+7. He appoints the field workers for the survey and ensures the smooth transfer of records in the event of change of field workers.

1.7.3 Recorder

He collects the basic information of the survey and prepares two copies of a notional map of the complete sub-centre, listing of the residential/non-residential houses in Form 1 and details of family members of the residential houses in Form 1A as part of Base line survey. After six months (July/January) he updates the household register (Form 1A) by visiting each residential house and prepares the list of births and deaths and updates the population of survey unit by age & sex. After listing of all deaths and births he matches the events listed in **Birth Register (Form 3A) and Death Register (Form 3).** Unmatched left out events of deaths and births are to be recorded in registers. In the case of death events, a combined Form 6A+7 has to be filled in by field agent.

1.7.4 Field agent

Field agent is the most important worker under the survey. Normally the field agent is appointed from the beat area of the selected sub-centre and he/she does the survey work during his/her normal duty/work. Field agent has to establish information system selecting the informants (Dai, Nai, Chowkidar, Social Worker, Village Head etc.) by localities on the basis of notional map and their names are to be written on Death Register (Form 3, 3A). During his/her normal visit to the area of sub-centre he/she collects information about deaths/births from the informants and visits the concerned households. For every death event, a combined Form 6A+7 i.e. Symptom Record Form and Medical Officer's Check Report has to be filled in and enclosed with monthly returns. Field agent prepares copies of Form 3A, 3 and along with Form 6A+7 duly signed by the Medical Officer Incharge and sends them to State Headquarters within 15 days of the next month.

1.7.5 Statistical Officer

The Investigator of the Census Directorates deputed for SCD is designated as "Statistical Officer" and posted to the State implementing agency in major states to co-ordinate and assist the implementing agency for conduct of the survey effectively and to inquire into the completeness of coverage of events with

special reference to infant deaths and maternal deaths. Guidance and corrective instructions have to be given by him to the field staff. He is supposed to visit at least 4 PHCs in a month.

1.8 Limitations of the Survey

- 1.8.1 The probable causes of death as revealed by this survey on the basis of the post-death investigation adopting the 'Lay diagnosis Technique (Post death Verbal Autopsy)' by the para-medical staff of the primary health centre with reference to the prescribed non-medical list are just proxies for exact causes that could have been known firmly through medical certification procedure, had medical attendance been availed of during the last illness of the deceased.
- 1.8.2 The reliability of information on symptoms at the time of death given by the family members is based on the cooperation and coherent description on the part of respondents.
- 1.8.3 Recording of symptoms is undertaken by the field agent having working knowledge of symptoms of specific causes of death. The cause of death statistics given by this survey therefore is reliable depending upon the respondent's efficiency in describing the symptoms and conditions.
- 1.8.4 Number of maternal deaths netted by the survey are extremely small and as such proportion, so worked out are subject to large yearly fluctuations. Hence, reliability of the estimates cannot be guaranteed.
- 1.8.5 Coverage of the survey is limited **only to rural areas**. The urban areas being completely left out, no valid estimates can be built up from the survey either for the state as a whole or for India.

1.9 Review-cum-training workshop on SCD (R)

- 1.9.1 During 1996-97, 'Review-cum-reorientation training programmes' on Survey of Causes of Death (Rural) were organised at State/Divisional level for the states of Andhra Pradesh, Bihar, Gujarat, Goa, Haryana, Kerala, Orissa, Pondicherry, Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal which were attended by Medical Officers, Field agents, Field Recorders and other statistical personnel involved in the scheme covering more than 1200 PHCs of these states.
- 1.9.2 Though the analysis of the data in this report has been done according to ten major cause-groups, an attempt has been made to present the survey data on the basis of ICD Codes - Xth revision by giving corresponding ICD Codes for better comparative study and analysis of data. List of ten major cause-groups with corresponding ICD Codes has been given at the end of this report.

CHAPTER II

ANALYSIS OF DATA

(AS PER INTERNATIONAL CLASSIFICATION OF DISEASES (ICD) 10th REVISION)

- 2.1 In this chapter, the data collected through the Survey of Causes of Death (Rural) according to ten major cause-groups has been presented as per International classification of Diseases-10th Revision. This is for the third year in succession that the data has been classified according to ICD.
- 2.1.1 **International Classification of Diseases 10th revision (ICD)** was adopted in the "Survey of Causes of Death (Rural)" during 1995. In 1997 also, an attempt has been made to present the data based on ICD Classification for the major cause groups. **All the specific causes have been grouped according to ICD major causes** and a comparative analysis have been presented for the last five years.
- 2.1.2 The most useful information provided by the survey relates to the distribution of deaths according to ten **major cause-groups of deaths**. These ten major cause-groups comprise number of specific diseases, which have associated symptoms usually observed during the advanced stage of the diseases. There are **56 specific cause grouped into these 10 major cause-groups** as per non-medical list used in the survey. These 56 specific causes have been classified and presented according to **International Classification of Diseases** structured in **19 major cause-groups**.
- 2.1.3 The percentage distribution of deaths by major cause-groups according to **International Classification of Diseases (ICD)** for the last five years has been presented in Statement 3. Graphical representation according to ICD classification is presented in Bar diagram I.

Statement 3

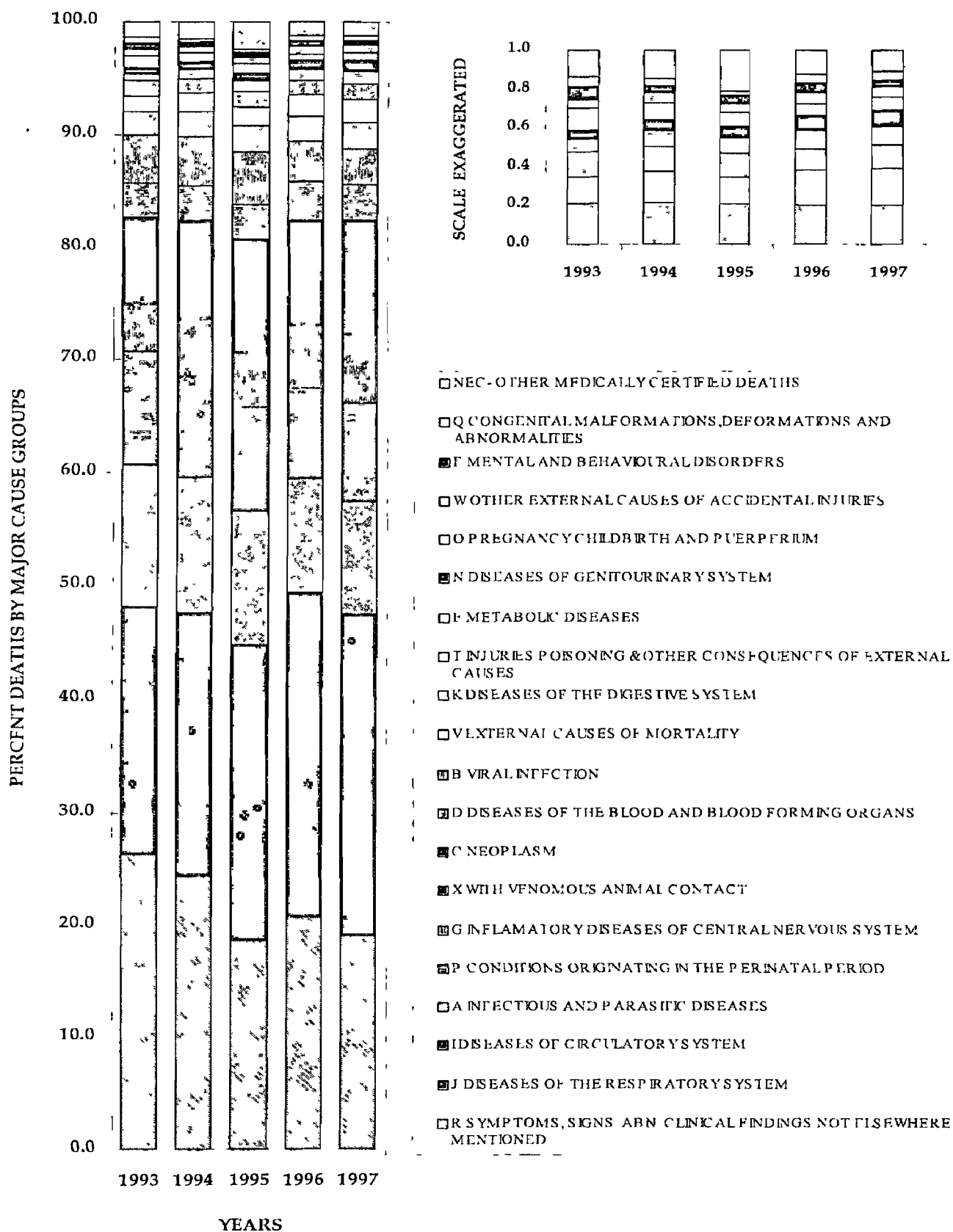
**PERCENTAGE DISTRIBUTION OF DEATHS BY MAJOR CAUSE-GROUPS
INDIA (RURAL), 1993-1997
(AS PER INTERNATIONAL CLASSIFICATION OF DISEASES - X REVISION)**

SL. NO	CODE	MAJOR CAUSES OF DEATH	Percent				
			1993	1994	1995	1996	1997
1	R	SYMPTOMS, SIGNS AND ABNORMAL CLINICAL FINDING NOT ELSEWHERE MENTIONED	26.2	24.3	18.6	20.6	19.0
2	J	DISEASES OF THE RESPIRATORY SYSTEM	14.4	15.1	16.6	17.8	16.4
3	I	DISEASES OF CIRCULATORY SYSTEM	7.6	8.2	9.5	10.9	12.1
4	A	INFECTIOUS AND PARASITIC DISEASES	12.5	12.0	11.9	10.2	10.0
5	P	CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	10.0	9.0	9.2	7.9	8.7
6	G	INFLAMMATORY DISEASES OF CENTRAL NERVOUS SYSTEM	4.2	5.0	4.8	5.6	6.0
7	X	WITH VENOMOUS ANIMAL CONTACT	4.7	5.0	6.0	5.5	5.9
8	C	NEOPLASM	3.1	3.9	4.2	3.9	4.3
9	D	DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS	3.1	3.0	3.0	3.4	3.2
10	B	VIRAL INFECTION	4.2	4.4	4.7	3.6	3.1
11	V	EXTERNAL CAUSES OF MORTALITY	2.1	2.2	2.4	2.1	2.3
12	K	DISEASES OF THE DIGESTIVE SYSTEM	1.4	1.6	1.6	2.0	2.1
13	T	INJURIES POISONING & OTHER CONSEQUENCES OF EXTERNAL CAUSES	1.3	1.3	1.4	1.1	1.4
14	E	METABOLIC DISEASES	0.6	0.8	0.9	1.0	1.1
15	N	DISEASES OF GENITOURINARY SYSTEM	0.5	0.6	0.7	0.8	1.0
16	O	PREGNANCY, CHILDBIRTH AND PUERPERIUM	1.1	0.9	0.8	0.7	0.7
17	W	OTHER EXTERNAL CAUSES OF ACCIDENTAL INJURIES	0.5	0.5	0.5	0.6	0.6
18	F	MENTAL AND BEHAVIOURAL DISORDERS	0.6	0.4	0.5	0.5	0.5
19	Q	CONGENITAL MALFORMATIONS, DEFORMATIONS AND ABNORMALITIES	0.5	0.3	0.3	0.4	0.4
		OTHER MEDICALLY CERTIFIED DEATHS	1.4	1.5	2.4	1.3	1.2
GRAND TOTAL			100.0	100.0	100.0	100.0	100.0

2.1.4 To highlight their relative importance, the major cause-groups have been arranged in descending order of percentage of deaths, accounted for each of them during 1997. The major killer according to ICD classification is the cause-group "Symptoms, signs and abnormal clinical findings" which is the top killer over the years. This major cause-group is comprised of "Acute abdomen, Jaundice, Senility & Toxaemia". It has shown the declining trend over the years, except 1996 as intensive monitoring has brought down the number of deaths reported under senility. The percentage of reported deaths during 1993 under this category is 26.2 which came down to 19.0 during 1997 except during 1996.

Diagram - I

PERCENTAGE DISTRIBUTION OF DEATHS BY ICD MAJOR CAUSES, 1993-1997



- 2.1.5 The "**Diseases of respiratory system**" has been reported as 2nd major killer according to ICD Classification under the survey. It includes specific causes like **Influenza, Pneumonia, Bronchitis and Asthma**. These causes have shown an increasing trend from 1993 to 1996 but a slight decrease has been observed in 1997. The reported percentage was 15.1 during 1993 which increased to 17.8 percent in 1996 but decreased to 16.4 percent in 1997.
- 2.1.6 The major cause-group "**Diseases of Circulatory System**" which comprises of **Heart attack and Congestive and Other Heart Diseases** ranks as 3rd major killer and shows all along an increasing trend over the years in rural areas of India. The percentage of deaths reported during 1997 was 12.1 as against 7.6 in 1993.
- 2.1.7 "**Infectious & Parasitic diseases**" has been reported as the next major killer. This major cause-group comprises of **Cholera, Typhoid & Para Typhoid, Dysentery, Diarrhoea and Gastro-enteritis, T.B. of lungs, Leprosy, Tetanus, Neo-natrum and Other Tetanus, Whooping Cough, Poliomyelitis and Rabies**. This major cause-group of diseases which accounted for over 12 percent of deaths to total reported deaths in 1993 has shown a declining trend over the years.
- 2.1.8 The major cause-group "**Conditions Originating in the Perinatal Period**" is comprised of infant deaths due to **Prematurity, Birth Injury, Respiratory infection of new born, Diarrhoea of new born and Congenital Malformation**. This major cause-group has reported the percentage of deaths in the range of 8 - 10 percent during 1993-97. Except 1996 which has decreased to 7.9 percent.
- 2.1.9 The major cause-group of "**Inflamatory diseases of Central Nervous System**" consists of **Meningitis, Convulsions and Paralysis of Cerebral Apoplexy**. The percentage of reported deaths to total deaths in this category ranges between 4.2 to 5.6 percent during 1993-96 which has marginally increased to 6.0 percent in 1997. Deaths due to **Paralysis** is an important cause in this major cause-group.
- 2.1.10 The above cause-group is closely followed by the cause-group, "**Venomous animal contact**" which is one of the important cause-groups for the rural areas. This group consists of **Snake-bite, Scorpion bite, Exposure to excessive Heat & Cold, Victims of Natural Calamity, Intentional Self Harm (Suicide), Drowning, Assault by (Homicide)**. During 1997 such deaths were 5.9 percent of the total reported deaths as against 4.7 percent during 1993.

2.1.11 Deaths due to "**Neoplasm**", another major cause-group is showing an increasing trend over the years 1993 to 1995, but the percentage has come down

to 3.9 during 1996 but has shown an increase to 4.3 percent. This major cause-group comprises of '**Cancer**'.

2.1.12 Deaths due to major cause-group "**Diseases of the Blood and Blood forming Organs**" comprises mainly of **Anaemia** (other than pregnancy). Deaths due to this cause group is more or less of the same order of around 3 percent over the years 1993-97.

2.1.13 Deaths due to "**Viral infection**" major cause-group have been reported to be in the range of 4.2 percent to 3.1 percent over the years 1993-97 and shows a decreasing trend. This major cause-group consists of **Chicken pox, Measles and Malaria**.

2.1.14 Major cause-group "**External Causes of Mortality**" consists of **Vehicular Accidents** and the percentage of such deaths has been reported to be around 2 percent over the period 1993-97. This major cause comprises of all Vehicular accidents according to kind and type of vehicles like Car, Truck, Cycle, Pedestrian etc.

2.1.15 The major cause-group "**Diseases of the digestive system**" is comprised of **Peptic or Gastric Ulcer, Obstructed Hernia and Cirrhosis & Chronic liver diseases**. The percentage of deaths due to this cause group has slightly gone up to 2.1 percent in 1997 as against 1.4 percent in 1993.

2.1.16 The major cause-group "**Injuries, poisoning and other consequences of external causes**" includes deaths due to **Burns and Food poisoning** etc. Deaths due to **Burns** is one of the important specific causes in this group. The percentage of deaths due to this cause-group is almost constant over the years.

2.1.17 **Other major cause groups** account for around one percent of the total reported deaths which can be seen from the Statement.

2.2 Age and Sex Distribution

2.2.1 **Age and sex** are the two important demographic variables for the study of **mortality differentials**. Statement 4 shows a comparative study of percentage distribution of deaths by sex and age-groups for the year 1996 and 1997. Diagrammatic representation in Bar diagram II elaborates such distribution of deaths by age and sex.

Statement 4

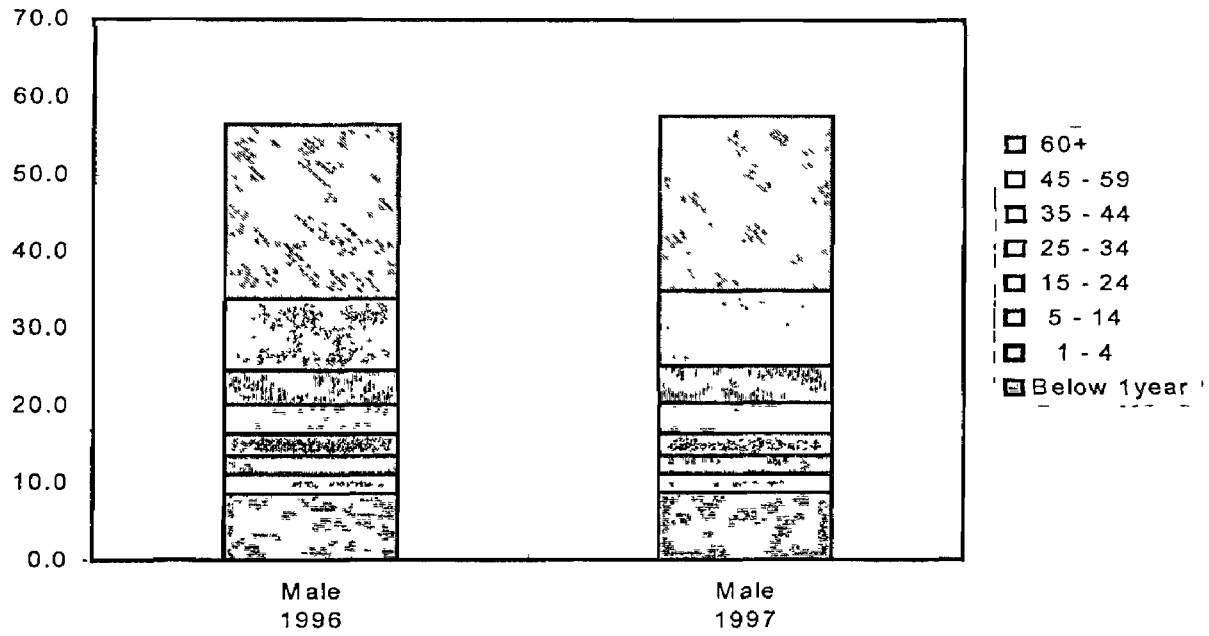
Number of reported deaths and their percentages by age & sex, 1996 and 1997

Age-group in years	1996			1997		
	Male	Female	Persons	Male	Female	Persons
Below 1 year	2999 8.5	2836 8.0	5835 16.4	3231 8.7	3031 8.1	6262 16.8
1 - 4	924 2.6	1081 3.0	2005 5.7	915 2.5	1005 2.7	1920 5.2
5 - 14	829 2.3	825 2.3	1654 4.7	867 2.3	822 2.2	1689 4.5
15 - 24	1010 2.8	1087 3.1	2097 5.9	1080 2.9	1071 2.9	2151 5.8
25 - 34	1327 3.7	1148 3.2	2475 7.0	1474 4.0	1155 3.1	2629 7.1
35 - 44	1594 4.5	919 2.6	2513 7.1	1777 4.8	1008 2.7	2785 7.5
45 - 59	3290 9.3	1695 4.8	4985 14.1	3641 9.8	1718 4.6	5359 14.4
60 & over	8041 22.7	5869 16.5	13910 39.2	8449 22.7	5957 16.0	14406 38.7
Total	20014 56.4	15460 43.6	35474 100.0	21434 57.6	15767 42.4	37201 100.0

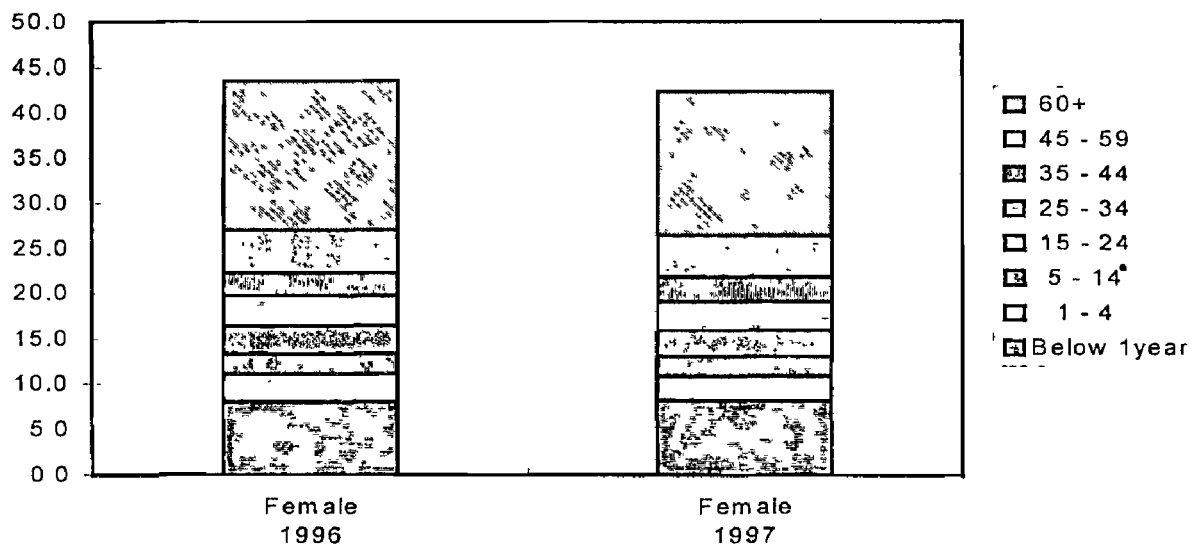
2.2.2 Total number of deaths excluding senility reported in 1997 were 37201. It was 2.8 percent higher than the reported number of deaths in 1996 (35474). This increase in percentage of reported deaths at all India level in 1997 may be attributed to better coverage and field work resulting in higher number of reported deaths from Andhra Pradesh besides significant increase in number of reported deaths from Orissa, Uttar Pradesh and Dadra & Nagar Haveli over 1996 and the reported deaths from Pondicherry which came under the scheme w.e.f. 1997. Out of the 38.7 percent reported deaths in the age group 60 & over during 1997, 22.7 percent were accounted for male deaths and 16.0 percent were that of female. With a nominal decreasing trend to the corresponding percentages for male and female deaths in 1996. The Percentage of reported deaths for infants (below 1 year) and child deaths (1-4 years) during 1997 was 16.8 and 5.2 percent while in 1996, these percentages were 16.4 and 5.7 respectively. Sex differentials in the percentage of reported deaths in the age-groups 5-14, 15-24 and 25-34 both during 1996 & 1997 are not significant.

Diagram - II

Agewise Percent of Male Deaths, 1996-97



Agewise Percent of Female Deaths, 1996-97



- 2.2.3 The analysis of distribution of deaths by age and sex is presented in Statement 5 for major cause-groups for the year 1997. As per **International Classification of Diseases (ICD)** it is seen that percentage of deaths due to **Infectious and parasitic diseases (A)** in the age-groups 45-59 and 60 & over are significantly higher than other age-groups for both sexes. Deaths due to **Viral infection (B)** have mostly affected both the sexes in the older age group of 60 and over while deaths due to **Neoplasm (C)** have affected both males and females in the age group of 35-44 to 60 & over years of age.
- 2.2.4 **Diseases of Blood and Blood forming organs (D)** have affected lower age-groups i.e. below one year, 1-4 years, 45-59 and old age-group of 60&over for both sexes. **The Metabolic diseases (E)** have affected both male and female in the age group of 45-59 and 60 years and over . Both in the case of male & female deaths, over three-fifth of deaths have occurred in the age group 35 years & over due to the cause-group **Mental and Behavioural disorders (F)** .
- 2.2.5 Inflammatory diseases of **Central Nervous System (G)** has mostly affected both the sexes in the age group of 60 & over . Similar trend has been observed in the deaths due to **Diseases of Circulatory System (I)**. Over three-fourth of total reported deaths in the category of **Diseases of Respiratory system (J)** have affected infants and old age persons of both sexes .
- 2.2.6 Deaths due to **Diseases of Digestive System (K)** have been reported in higher age group of 25 year and over for both the sexes. **Diseases of Genitourinary System (N)** have affected 45-59 and 60 years and over age group for both males and females.
- 2.2.7 Most of the deaths due to **Pregnancy, Childbirth and Puerperium (O)** have affected the females in the age group of 15-44 years. **Injuries, Poisoning and Other Consequences of External Causes (T)** have affected mostly the age-group of 15-59 and over years in the case of males while for females, it has affected the age-group of 15-44 years .
- 2.2.8 Over three-fifth of total deaths due to **External causes of Mortality (V)** have affected both males and females in the age-group of 15-60 and over years. Deaths due to **Other External Causes of Accidental Injuries (W)** have affected the old persons to a large extent.
- 2.2.9 Deaths due to **Venomous Animal Contact (X)** have occurred in the age-group of 15-44 years for both males and females.

Statement 5

**Percentage distribution of deaths for selected major cause-groups by age and sex
1997**

Sl. No.	ICD Code	Major Cause groups	Age-group (in years)									
			Sex	Below 1 Year	1-4	5-14	15-24	25-34	35-44	45-59	60& over	Total
1	A	Infectious and Parasitic diseases	M	6.6	6.3	5.8	5.6	11.8	12.2	21.9	29.8	100.0
			F	9.3	14.1	8.9	6.3	10.3	11.3	12.0	27.7	100.0
2	B	Viral Infection	M	11.3	14.1	11.7	5.9	5.2	6.2	12.3	33.3	100.0
			F	11.9	16.5	13.9	6.4	5.2	4.7	8.4	33.0	100.0
3	C	Neoplasm	M	0.3	0.8	1.7	2.2	5.0	9.0	31.6	49.4	100.0
			F	0.5	0.9	1.8	3.2	7.4	14.0	30.7	41.4	100.0
4	D	Diseases of Blood and Blood forming organs	M	13.7	12.8	4.2	2.7	4.4	5.1	13.8	43.4	100.0
			F	12.0	11.6	4.5	4.8	7.4	5.8	9.8	44.1	100.0
5	E	Metabolic diseases	M	0.4	0.0	0.4	3.0	3.4	6.0	23.5	63.4	100.0
			F	3.0	0.5	1.5	2.0	3.5	4.0	19.0	66.5	100.0
6	F	Mental and Behavioural disorders	M	0.0	8.3	9.3	11.1	13.0	19.4	21.3	17.6	100.0
			F	1.1	2.2	6.5	15.2	13.0	15.2	13.0	33.7	100.0
7	G	Inflammatory diseases of - Central Nervous System	M	4.1	4.0	3.6	2.8	3.1	5.4	16.0	61.0	100.0
			F	3.7	5.3	6.0	3.3	3.9	3.2	11.4	63.1	100.0
8	I	Diseases of Circulatory System	M	1.2	0.6	0.8	3.0	4.9	9.5	25.9	53.9	100.0
			F	2.2	1.0	2.3	3.6	6.1	7.9	17.1	59.7	100.0
9	J	Diseases of Respiratory System	M	13.0	6.1	2.7	1.1	1.6	3.1	11.4	61.0	100.0
			F	16.2	9.4	3.1	1.3	1.6	2.2	8.2	58.0	100.0
10	K	Diseases of Digestive System	M	2.0	2.1	2.6	3.8	10.1	16.4	28.7	34.3	100.0
			F	3.9	4.2	6.7	6.4	8.1	11.0	15.9	43.8	100.0
11	N	Diseases of Genitourinary System	M	1.9	0.6	3.5	2.9	2.9	8.0	25.5	54.8	100.0
			F	0.7	4.3	1.4	7.8	2.8	6.4	19.9	56.7	100.0
12	O	Pregnancy Child birth & Puerperium	F	0.0	0.0	0.0	44.4	43.8	10.8	1.0	0.0	100.0
13	P	Conditions Originating in the Perinatal Period	M	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
			F	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
14	Q	Congenital Malformations, Deformations and abnormalities	M	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
			F	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
15	R	Symptoms, Signs and Abnormal Clinical finding not elsewhere mentioned	M	1.8	1.2	1.5	1.3	1.4	1.9	2.7	88.1	100.0
			F	1.3	1.2	1.5	2.4	2.0	0.8	1.7	89.1	100.0
16	T	Injuries Poisoning & Other Consequences of external causes	M	4.2	4.2	8.0	19.8	19.4	12.2	16.9	15.2	100.0
			F	1.9	4.6	10.9	25.1	27.2	11.7	7.6	10.9	100.0
17	V	External Causes of Mortality	M	0.3	2.8	8.1	15.6	22.9	18.2	16.4	15.7	100.0
			F	1.3	6.3	13.8	14.2	16.3	13.8	12.5	22.1	100.0
18	W	Other external causes of accidental injuries	M	4.8	7.3	14.5	12.1	14.5	7.9	12.7	26.1	100.0
			F	4.0	7.1	15.2	10.1	8.1	6.1	7.1	42.4	100.0
19	X	With Venomous Animal contact	M	1.6	3.8	9.4	19.8	19.4	16.4	14.6	15.1	100.0
			F	1.9	3.9	11.2	27.7	18.7	12.5	10.4	13.7	100.0
			M	3.9	10.8	5.9	9.5	9.5	11.1	13.1	36.3	100.0
		Other Medically Certified deaths	F	7.9	11.6	8.3	8.7	8.3	8.7	10.8	35.7	100.0

CHAPTER III

TOP TEN KILLER DISEASES IN RURAL INDIA

- 3.1.1 The primary aim of the survey is to highlight the **over all cause profile of deaths** prevailing in rural India. In this section, identification of ten top killer diseases resulting in death has been attempted on the basis of percentage share of deaths pertaining to the specific diseases among the reported deaths for all major causes based on ICD classification enumerated in the survey during 1997 excluding **Senility**. The top ten killers accounted for 60.1 percent of all deaths during 1997 excluding **senility** as against 60.5 percent in 1996. The details are presented in the Statement 6.
- 3.1.2 The ten top killer diseases by specific cause-groups during the last two years have indicated that '**Bronchitis & Asthma**' is the top killer in rural India which accounted for 13.7 percent of the total reported deaths under survey during 1997. It is interesting to note that ten top causes of deaths have remained the same over the years 1996-97 while ranks have changed at some places due to slight increase/decrease of percent deaths over the years. It is alarming that in rural areas '**Suicide**' is among the ten top killers during 1996-97 occupying IX th position. Among these ten top killers, '**Bronchitis & Asthma**' 13.7 percent, '**Heart attack**' 10.6 percent, '**T.B. of lungs**' 6.2 percent, '**Paralysis of cerebral appoplexy**' 5.4 percent and '**Cancer**' 5.2 percent are the top 5 killers followed by '**Prematurity**' 5.0 percent, '**Pneumonia**' 4.4 percent, '**Anaemia**' 3.8 percent, '**Suicide**' 3.1 percent and '**Vehicular accidents**' 2.7 percent.

Statement 6

**Top Ten Killer Diseases in rural India
(Excluding Senility) 1996 and 1997
(Percentage distribution of specific causes to the total deaths)**

Rank of ten top killers	Years					
	1996			1997		
	ICD code	Specific Causes of Death	Percentage	ICD code	Specific Causes of Death	Percentage
I	J 20 & 45	Bronch. & Asthma	15.1	J 20 & 45	Bronch. & Asthma	13.7
II	I 21-25	Heart attack	9.5	I 21-25	Heart attack	10.6
III	A 15	T.B. of lungs	6.6	A 15	T.B. of lungs	6.2
IV	P 07	Prematurity	5.1	G 80-83	Paralysis of cerebral apoplexy	5.4
V	G 80-83	Paralysis of cerebral apoplexy	5.1	C 00-97	Cancer	5.2
VI	J 18	Pneumonia	4.8	P 07	Prematurity	5.0
VII	C 00-97	Cancer	4.7	J 18	Pneumonia	4.4
VIII	D 50-64	Anaemia	4.2	D 50-64	Anaemia	3.8
IX	X 60-84	Intentional self harm (Suicide)	2.8	X 60-84	Intentional self harm (Suicide)	3.1
X	V 01-99	Vehicular accidents	2.6	V 01-99	Vehicular accidents	2.7

3.1.3 Age-Groups most affected by these ten top killer diseases is one of the important aspects of the cause-profile. Age-wise percent deaths to total deaths by top ten killers is presented in Statement 7. It may be observed from the statement that **Bronchitis & Asthma**, **Heart Attack**, **T.B. of lungs**, **Paralysis and Cancer** have affected the higher age-group i.e. 45 years & over while obviously **Prematurity** has affected infants (below one year). **Pneumonia** has affected mostly in lower age-groups i.e. below 5 years and **Anaemia** has affected in lower as well as higher age-groups i.e. below 5 years and above 45 years of age-group. **'Suicide'** is mainly concentrated and **'Vehicular Accidents'** have taken higher toll in the age-group 15-24 years & over.

Statement 7

Age-wise percent deaths to total deaths of ten top killers in rural India - 1997

ICD codes	Ten top killers	Age-groups								Total reported deaths
		0-1	1-4	5-14	15-24	25-34	35-44	45-59	60& over	
J 20&45	Bronchitis & asthma	1.2	0.9	0.8	0.8	1.3	3.0	12.7	79.2	5094
I 21-25	Heart attack	0.2	0.2	0.5	2.2	4.3	9.0	25.6	58.0	3930
A 15	Tuberculosis of lungs	0.3	0.9	1.9	5.3	15.1	17.8	26.2	32.4	2317
G 41	Paralysis of cerebral apoplexy	0.0	0.6	0.8	1.2	1.8	3.5	15.2	76.8	2014
C 00-97	cancer	0.4	0.8	1.8	2.6	6.1	11.3	31.2	45.8	1927
P 07	Prematurity	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1871
J 18	Pneumonia	55.5	26.5	7.3	1.4	1.0	0.9	2.3	5.2	1642
D 50-64	Anaemia	12.8	12.1	4.4	3.8	6.0	5.5	11.7	43.8	1419
X 60-84	Intentional Self harm (Suicide)	0.2	0.0	2.9	29.8	24.0	16.3	14.1	12.6	1156
V 1-99	Vehicular accidents	0.5	3.6	9.4	15.3	21.4	17.1	15.5	17.2	1016

The spatial distribution in affected states is another concern of the survey. These ten top killers are not having same impact in all the states, which is analysed in the following paragraphs.

3.1.4 Statement 8 reveals that **Bronchitis & Asthma** which has been reported at 1st rank among the ten top killers of the rural population of India accounts for 5094 deaths in 1997 as against 5351 deaths during 1996. Such deaths have occurred mostly after 45 years of age which constitutes 92.0 percent of total Bronchitis & Asthma deaths. Deaths due to Bronchitis & Asthma had been reported from all the States & UTs. The percentage of deaths in the states of Gujarat, Haryana, Karnataka, Kerala, Maharashtra, is higher than the national level (13.7 percent).

Statement 8

**Age-wise percent deaths to the total reported deaths (excluding senility)
under "Bronchitis & Asthma" States/All India - 1997**

India/States	Reported deaths	Percent age of total deaths	Age groups							
			0-1	1-4	5-14	15-24	25-34	35-44	45-59	60& over
INDIA	5094	13.7	1.2	0.9	0.8	0.8	1.3	3.0	12.7	79.2
Andhra Pradesh	406	10.9	2.5	1.0	2.5	1.0	1.2	4.2	12.1	75.9
Bihar	108	9.4	0.0	0.0	0.0	0.9	2.8	8.3	19.4	68.5
Gujarat	209	19.1	1.0	0.5	1.0	1.0	1.4	1.4	12.9	81.3
Haryana	131	14.4	0.0	0.0	0.0	0.0	1.5	1.5	20.6	76.3
Karnataka	291	20.3	0.0	1.4	1.0	1.0	0.7	1.0	16.5	78.7
Kerala	136	15.7	0.0	0.0	0.0	0.0	0.0	0.7	10.3	88.2
Madhya Pradesh	482	9.7	0.4	1.0	1.0	0.2	2.3	3.3	10.8	81.3
Maharashtra	1850	24.5	0.3	0.3	0.2	0.3	0.7	1.5	7.7	88.8
Orissa	120	9.1	9.2	7.5	4.2	2.5	2.5	5.0	14.2	59.2
Punjab	91	8.6	0.0	0.0	0.0	1.1	2.2	3.3	22.0	70.3
Rajasthan	227	13.3	1.3	3.1	4.8	3.5	3.1	7.9	12.3	64.8
Tamil Nadu	346	7.0	4.3	1.7	1.7	1.7	1.7	4.6	17.9	66.5
Uttar Pradesh	446	11.5	0.2	0.2	0.9	0.7	1.1	2.7	17.9	76.0

3.1.5 Heart attack ranks 2nd among the ten top killers of rural India and the data is presented in Statement 9. During 1997, 3930 deaths have been reported as against 3371 in 1996. The percentage of deaths due to "Heart Attack" are considerably higher than national level in the states of Kerala (22.5 percent), Punjab (28.2 percent). All such deaths are concentrated mostly in the age-group of 35 years and above as revealed through the age-wise analysis.

Statement 9

**Age-wise percent deaths to the total reported deaths (excluding senility)
under "Heart attack" States/All India - 1997**

India/States	Reported deaths	Percentage of total deaths	Age - groups							
			0-1	1-4	5-14	15-24	25-34	35-44	45-59	60 & over
INDIA	3930	10.6	0.2	0.2	0.5	2.2	4.3	9.0	25.6	58.0
Andhra Pradesh	553	14.8	0.0	0.0	0.4	2.5	5.6	10.7	27.8	53.0
Bihar	83	7.2	0.0	0.0	0.0	1.2	3.6	12.0	28.9	54.2
Gujarat	124	11.3	0.8	0.8	0.0	3.2	4.8	11.3	24.2	54.8
Haryana	79	8.7	1.3	0.0	0.0	7.6	12.7	6.3	26.6	45.6
Karnataka	146	10.2	0.0	0.0	0.7	2.7	5.5	12.3	30.1	48.6
Kerala	195	22.5	0.0	0.0	0.0	2.1	2.1	7.2	26.7	62.1
Madhya Pradesh	284	5.7	0.0	1.1	1.8	1.8	6.7	11.3	23.9	53.5
Maharashtra	819	10.8	0.0	0.0	0.0	0.0	0.0	4.6	22.0	73.4
Orissa	103	7.8	1.0	0.0	2.9	1.9	5.8	10.7	23.3	54.4
Punjab	297	28.2	0.0	0.3	0.7	5.7	6.4	9.4	28.6	48.8
Rajasthan	108	6.3	0.0	0.0	0.0	3.7	6.5	13.0	33.3	43.5
Tamil Nadu	782	15.8	0.0	0.0	0.0	0.8	3.1	8.6	26.6	61.0
Uttar Pradesh	137	3.5	2.2	2.9	2.2	9.5	13.1	14.6	11.7	43.8

3.1.6 **T.B. of lungs** is reported at the 3rd rank under the survey. As represented in Statement-10, 2317 deaths have been reported during 1997 as against 2329 deaths in 1996. Such deaths have been reported from all the states but comparatively higher percentages than the national level have been reported from Gujarat, Rajasthan, Madhya Pradesh, Bihar and Uttar Pradesh. Such deaths are mainly concentrated in the age-group of 25 years over.

Statement 10

**Age-wise percent deaths to the total reported deaths
(excluding senility) under "T.B. of lungs"
States/All India - 1997**

India/States	Reported deaths	Percentage of total deaths	Age-groups							
			0-1	1-4	5-14	15-24	25-34	35-44	45-59	60& over
INDIA	2317	6.2	0.3	0.9	1.9	5.3	15.1	17.8	26.2	32.4
Andhra Pradesh	217	5.8	0.0	0.9	0.9	1.4	12.0	17.1	32.7	35.0
Bihar	86	7.5	0.0	0.0	5.8	2.3	16.3	12.8	34.9	27.9
Gujarat	100	9.1	0.0	0.0	1.0	3.0	18.0	12.0	26.0	40.0
Haryana	42	4.6	0.0	2.4	2.4	2.4	19.0	14.3	14.3	45.2
Karnataka	79	5.5	0.0	1.3	3.8	2.5	15.2	22.8	29.1	25.3
Kerala	22	2.5	0.0	0.0	0.0	4.5	0.0	18.2	27.3	50.0
Madhya Pradesh	426	8.6	0.5	0.5	2.3	8.9	14.6	20.0	22.3	31.0
Maharashtra	332	4.4	0.0	1.2	0.9	6.6	19.9	20.8	23.5	27.1
Orissa	71	5.4	0.0	4.2	0.0	4.2	15.5	29.6	28.2	18.3
Punjab	37	3.5	0.0	0.0	0.0	2.7	18.9	21.6	10.8	45.9
Rajasthan	154	9.0	0.0	1.9	0.6	3.2	13.6	22.1	29.2	29.2
Tamil Nadu	225	4.6	2.7	0.4	0.9	3.6	11.6	15.6	31.6	33.8
Uttar Pradesh	280	7.2	0.0	1.8	4.6	5.7	15.4	13.9	23.2	35.4

3.1.7 **Paralysis** deaths have been reported at 4th rank under the survey and 2014 deaths have been reported during 1997 as against 1820 in 1996. The percent deaths to total deaths in the states of Andhra Pradesh, Karnataka, Kerala, Orissa, Tamil Nadu are higher than all India. Such deaths are mainly concentrated in the age group of 45 and over.

Statement 11

**Age-wise percent deaths to the total reported deaths
(excluding senility) under "Paralysis"
States/All India - 1997**

India/States	Reported deaths	Percentage of total deaths	Age - groups							
			0-1	1-4	5-14	15-24	25-34	35-44	45-59	60 & over
INDIA	2014	5.4	0.0	0.6	0.8	1.2	1.8	3.5	15.2	76.8
Andhra Pradesh	359	9.6	0.0	0.0	0.0	0.6	0.3	1.7	13.4	84.1
Bihar	45	3.9	0.0	0.0	0.0	8.9	0.0	6.7	28.9	55.6
Gujarat	37	3.4	2.7	2.7	0.0	2.7	0.0	8.1	27.0	56.8
Haryana	24	2.6	0.0	0.0	0.0	0.0	4.2	0.0	20.8	75.0
Karnataka	85	5.9	0.0	0.0	0.0	0.0	1.2	3.5	20.0	75.3
Kerala	82	9.4	0.0	0.0	0.0	0.0	1.2	3.7	17.1	78.0
Madhya Pradesh	215	4.3	0.0	2.3	0.9	1.9	3.7	4.2	18.6	68.4
Maharashtra	371	4.9	0.0	0.8	1.9	1.3	1.3	3.0	8.6	83.0
Orissa	123	9.3	0.0	0.0	0.0	0.0	4.9	4.1	17.1	74.0
Punjab	43	4.1	0.0	0.0	0.0	0.0	0.0	2.3	20.9	76.7
Rajasthan	54	3.2	0.0	1.9	3.7	1.9	3.7	7.4	16.7	64.8
Tamil Nadu	403	8.2	0.0	0.5	0.7	1.2	0.5	1.5	13.6	81.9
Uttar Pradesh	76	2.0	0.0	1.3	2.6	2.6	6.6	15.8	17.1	53.9

3.1.8 During 1997, 1927 deaths have been reported due to **Cancer** which occupies the 5th rank under survey. Deaths due to cancer as more predominant in the states of Andhra Pradesh, Gujarat, Haryanan, Karnataka, Kerala Punjab and Tamil Nadu. Such deaths are mainly concentrated in the age-group of 35-44 years over.

Statement 12

**Age-wise percent deaths to the total reported deaths
(excluding senility) under "Cancer"
States/All India - 1997**

India/States	Reported deaths	Percent age of total deaths	Age - groups							
			0-1	1-4	5-14	15-24	25-34	35-44	45-59	60 & over
INDIA	1927	5.2	0.4	0.8	1.8	2.6	6.1	11.3	31.2	45.8
Andhra Pradesh	239	6.4	0.4	0.4	4.2	5.0	4.6	10.9	31.8	42.7
Bihar	31	2.7	0.0	0.0	0.0	3.2	16.1	0.0	41.9	38.7
Gujarat	71	6.5	0.0	0.0	2.8	1.4	4.2	8.5	43.7	39.4
Haryana	80	8.8	2.5	0.0	2.5	2.5	8.8	22.5	33.8	27.5
Karnataka	110	7.7	0.0	1.8	1.8	0.9	6.4	16.4	30.9	41.8
Kerala	111	12.8	0.0	0.9	2.7	2.7	4.5	5.4	36.0	47.7
Madhya Pradesh	170	3.4	0.0	1.8	2.4	3.5	5.3	11.2	30.0	45.9
Maharashtra	367	4.9	0.3	0.8	1.4	2.5	6.0	10.6	27.2	51.2
Orissa	44	3.3	0.0	2.3	4.5	6.8	6.8	15.9	18.2	45.5
Punjab	67	6.4	0.0	0.0	1.5	1.5	3.0	7.5	16.4	70.1
Rajasthan	67	3.9	1.5	0.0	0.0	3.0	4.5	14.9	31.3	44.8
Tamil Nadu	266	5.4	0.8	0.8	0.8	0.8	7.9	11.7	32.7	44.7
Uttar Pradesh	113	2.9	0.0	1.8	0.0	1.8	7.1	13.3	29.2	46.9

1.9 **Pneumonia** occupies the 7th rank among the top ten killer diseases under survey. During 1997, 1642 deaths have been reported as against 1718 deaths in 1996. Higher percentages of such deaths than the all India level have been reported from Bihar, Haryana, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh. Deaths due to Pneumonia are mostly concentrated in the lower age-groups i.e. below 14 years in almost all the states covered under the survey.

Statement 13

**Age-wise percent deaths to the total reported deaths
(excluding senility) under "Pneumonia"
States/All India - 1997**

India/States	Reported deaths	Percentage of total deaths	Age - groups							
			0-1	1-4	5-14	15-24	25-34	35-44	45-59	60& over
INDIA	1642	4.4	55.5	26.5	7.3	1.4	1.0	0.9	2.3	5.2
Andhra Pradesh	19	0.5	36.8	15.8	10.5	5.3	0.0	0.0	15.8	15.8
Bihar	127	11.1	42.5	33.1	13.4	1.6	0.0	4.7	0.8	3.9
Gujarat	29	2.6	37.9	3.4	10.3	0.0	3.4	0.0	13.8	31.0
Haryana	71	7.8	64.8	28.2	2.8	1.4	1.4	1.4	0.0	0.0
Karnataka	20	1.4	0.0	55.0	15.0	5.0	10.0	0.0	5.0	10.0
Kerala	10	1.2	30.0	50.0	0.0	0.0	10.0	0.0	0.0	10.0
Madhya Pradesh	390	7.9	66.9	24.6	5.1	0.8	0.8	0.0	0.3	1.5
Maharashtra	237	3.1	56.1	17.7	5.5	0.0	1.3	0.8	3.4	15.2
Orissa	71	5.4	45.1	22.5	8.5	5.6	1.4	2.8	9.9	4.2
Punjab	21	2.0	47.6	14.3	4.8	0.0	4.8	0.0	19.0	9.5
Rajasthan	152	8.9	59.9	28.3	7.9	1.3	0.7	0.7	1.3	0.0
Tamil Nadu	39	0.8	46.2	15.4	2.6	2.6	0.0	5.1	2.6	25.6
Uttar Pradesh	356	9.2	53.7	33.4	8.4	2.0	0.8	0.0	0.3	1.4

3.1.10 **Anaemia has ranked at 8th position** among the ten top killer diseases netted through the survey. During 1997, 1419 deaths were reported as against 1485 in 1996. Such deaths have been reported comparatively in higher percentages in Bihar (8.6), Madhya Pradesh (6.1), Orissa (6.5), Rajasthan (4.5), and Uttar Pradesh (4.8), than the national level.

Statement 14

**Age-wise percent deaths to the total reported deaths
(excluding senility) under "Anaemia"
States/All India - 1997**

India/States	Reported deaths	Percentage of total deaths	Age - groups							
			0-1	1-4	5-14	15-24	25-34	35-44	45-59	60 & over
INDIA	1419	3.8	12.8	12.1	4.4	3.8	6.0	5.5	11.7	43.8
Andhra Pradesh	77	2.1	0.0	0.0	2.6	1.3	2.6	2.6	15.6	75.3
Bihar	98	8.6	12.2	13.3	2.0	5.1	9.2	6.1	13.3	38.8
Gujarat	24	2.2	8.3	41.7	8.3	0.0	0.0	12.5	4.2	25.0
Haryana	29	3.2	34.5	10.3	3.4	0.0	3.4	3.4	3.4	41.4
Karnataka	49	3.4	0.0	18.4	6.1	4.1	2.0	2.0	12.2	55.1
Kerala	5	0.6	0.0	0.0	0.0	20.0	0.0	0.0	40.0	40.0
Madhya Pradesh	303	6.1	21.5	20.1	4.0	4.6	7.6	5.9	8.6	27.7
Maharashtra	227	3.0	3.5	4.0	2.6	3.5	4.4	3.5	8.8	69.6
Orissa	86	6.5	11.6	9.3	4.7	2.3	7.0	4.7	9.3	51.2
Punjab	8	0.8	25.0	25.0	0.0	0.0	0.0	0.0	12.5	37.5
Rajasthan	77	4.5	29.9	29.9	5.2	1.3	10.4	7.8	5.2	10.4
Tamil Nadu	153	3.1	3.9	1.3	2.6	3.3	4.6	4.6	17.0	62.7
Uttar Pradesh	187	4.8	16.0	13.4	7.0	6.4	5.3	7.0	15.5	29.4

3.1.11 'Intentional self harm' (Suicide) deaths were first reported among the ten top killers of rural population in 1995. During 1997 also, 1156 intentional self harm deaths have been reported under the survey which occupy 9th position among the ten top killers. Among the states, Tamil Nadu (371) has reported the highest number of suicidal deaths followed by Andhra Pradesh (177) and Maharashtra (122) while only 9 deaths have been reported due to suicide in Bihar. Age-wise percentages vary in different states.

Statement 15

**Age-wise percent deaths to the total reported deaths
(excluding senility) under "Intentional self harm" (Suicide)
States/All India - 1997**

India/States	Reported deaths	Percentage of total deaths	Age - groups							
			0-1	1-4	5-14	15-24	25-34	35-44	45-59	60&over
INDIA	1156	3.1	0.2	0.0	2.9	29.8	24.0	16.3	14.1	12.6
Andhra Pradesh	177	4.7	0.0	0.0	5.1	28.2	27.7	12.4	14.1	12.4
Bihar	9	0.8	0.0	0.0	0.0	22.2	0.0	33.3	44.4	0.0
Gujarat	29	2.6	0.0	0.0	3.4	44.8	27.6	13.8	3.4	6.9
Haryana	40	4.4	0.0	0.0	2.5	37.5	27.5	10.0	5.0	17.5
Karnataka	61	4.3	0.0	0.0	0.0	24.6	18.0	21.3	21.3	14.8
Kerala	51	5.9	0.0	0.0	3.9	13.7	21.6	17.6	21.6	21.6
Madhya Pradesh	102	2.1	1.0	0.0	3.9	36.3	22.5	14.7	12.7	8.8
Maharashtra	122	1.6	0.0	0.0	3.3	32.8	28.7	17.2	11.5	6.6
Orissa	25	1.9	0.0	0.0	0.0	40.0	32.0	20.0	8.0	0.0
Punjab	18	1.7	0.0	0.0	0.0	50.0	22.2	16.7	0.0	11.1
Rajasthan	23	1.4	0.0	0.0	0.0	30.4	34.8	17.4	4.3	13.0
Tamil Nadu	371	7.5	0.0	0.0	2.4	29.6	22.4	16.7	13.5	15.4
Uttar Pradesh	64	1.7	1.6	0.0	3.1	15.6	23.4	20.3	23.4	12.5

3.1.12 **Vehicular Accidents** has accounted for 2.7 percent of total deaths at all India level. The percentages of such deaths in the states of Haryana, Kerala, Maharashtra, Punjab, Rajasthan and Uttar Pradesh are higher than the all India level (2.7 percent). Deaths due to Vehicular accidents are mainly concentrated in the young age group of 15-24 to 60&over.

Statement 16

**Percentage of deaths to the reported total deaths
(excluding senility) under "Vehicular accidents"
States/All India - 1997**

India/States	Reported deaths	Percentage of total deaths	Age - groups							
			0-1	1-4	5-14	15-24	25-34	35-44	45-59	60& over
INDIA	1016	2.7	0.5	3.6	9.4	15.3	21.4	17.1	15.5	17.2
Andhra Pradesh	79	2.1	0.0	2.5	8.9	13.9	30.4	15.2	20.3	8.9
Bihar	14	1.2	0.0	0.0	7.1	0.0	14.3	7.1	35.7	35.7
Gujarat	21	1.9	0.0	0.0	0.0	23.8	23.8	14.3	19.0	19.0
Haryana	51	5.6	0.0	13.7	11.8	11.8	19.6	15.7	7.8	19.6
Karnataka	30	2.1	0.0	0.0	16.7	20.0	6.7	23.3	13.3	20.0
Kerala	28	3.2	0.0	0.0	3.6	21.4	32.1	17.9	7.1	17.9
Madhya Pradesh	83	1.7	0.0	0.0	9.6	24.1	28.9	8.4	14.5	14.5
Maharashtra	227	3.0	0.4	4.0	8.4	10.6	26.0	22.9	12.8	15.0
Orissa	14	1.1	0.0	7.1	7.1	21.4	14.3	7.1	14.3	28.6
Punjab	71	6.7	0.0	2.8	4.2	28.2	18.3	19.7	15.5	11.3
Rajasthan	88	5.2	0.0	6.8	5.7	11.4	19.3	23.9	18.2	14.8
Tamil Nadu	127	2.6	1.6	1.6	14.2	12.6	20.5	11.8	16.5	21.3
Uttar Pradesh	125	3.2	1.6	6.4	15.2	15.2	8.0	16.8	15.2	21.6

CHAPTER IV

ANALYSIS OF CAUSES OF DEATH BY AGE & SEX

In this chapter, an attempt has been made to analyse the causes of death of infants, child deaths in the age-group (1-4) and (5-14) years, maternal mortality and female deaths in the reproductive age-group (15-44) years and old age deaths of persons aged 60 & over according to Tenth revision of International classification of diseases.

4.1 INFANT DEATHS(BELOW ONE YEAR)

- 4.1.1 **Infant mortality** is often considered as an index of the state of public health and hygiene, environmental sanitation, cultural and socio-economic development. Important gains have been made in reducing mortality in infancy and early childhood, but even in most advanced countries, the risk of death immediately after birth and in subsequent months remains higher than in all later years before the onset of young age. **Infancy** is subject to great risks from infections and respiratory diseases specially in rural environment without adequate medical care.
- 4.1.2 All infant deaths by major cause-groups reported under the survey for the year 1997 have been compiled alongwith corresponding data for 1996 and presented in Statement 17. It may be seen from the statement that over 62 percent of infant deaths occur due to major cause group "**Conditions originating in the perinatal period**" followed by "**Diseases of the respiratory system**" which account for over 16 percent of infant deaths in 1997. Deaths due to "**Infectious and parasitic diseases**" account for over 5 percent of total infant deaths. The major cause-groups like "**Congenital malformations, deformation & abnormalities**", "**Diseases of the blood and blood forming organs**", "**Viral infection**" account for around 2 to 3 percent of total infant deaths while the deaths due to other cause groups like "**Inflammatory diseases of central nervous systems**", "**Symptoms, signs and abnormal clinical findings not elsewhere mention**", & "**Diseases of circulatory system**" are around 1 to 2 percent.

Statement 17

Percentage distribution of infant deaths by major cause-groups 1996 and 1997

ICD Code	MAJOR CAUSE OF DEATH	PERCENT DEATHS					
		1996			1997		
		M	F	P	M	F	P
P	Conditions originating in the perinatal period	60.0	57.0	58.3	62.1	62.1	62.1
J	Diseases of the respiratory system	18.8	19.3	19.1	16.7	17.0	16.8
A	Infectious and parasitic diseases	5.6	6.2	5.9	5.6	5.3	5.5
Q	Congenital malformations, deformations & abnormalities	3.0	3.5	3.3	3.0	3.2	3.1
D	Diseases of the blood and blood forming organs	2.4	3.7	3.0	2.8	3.0	2.9
B	Viral infection	2.3	3.8	3.0	2.4	2.8	2.6
G	Inflammatory diseases of central nervous systems	2.1	1.6	1.9	2.0	1.4	1.7
R	Symptoms, signs and abnormal clinical findings not elsewhere mention	1.9	1.3	1.6	1.4	1.4	1.4
I	Diseases of circulatory system	1.4	1.1	1.2	1.3	1.5	1.4
X	With venomous animal contact	0.6	1.1	0.9	0.8	0.6	0.7
K	Diseases of the digestive system	0.3	0.4	0.4	0.4	0.4	0.4
T	Injuries poisoning & other consequences of external causes	0.2	0.2	0.2	0.3	0.2	0.3
W	Other external causes of accidental injuries	0.2	0.1	0.1	0.3	0.1	0.2
C	Neoplasm	0.2	0.1	0.2	0.1	0.1	0.1
N	Diseases of genitourinary system	0.1	0.1	0.1	0.2	0.0	0.1
E	Metabolic diseases	0.1	0.1	0.1	0.0	0.2	0.1
V	External causes of mortality	0.1	0.0	0.1	0.1	0.1	0.1
F	Mental and behavioural disorders	0.0	0.0	0.0	0.0	0.0	0.0
	Other Medically certified deaths	0.7	0.4	0.6	0.4	0.6	0.5
	Total Infant deaths	100.0 (3006)	100.0 (2837)	100.0 (5843)	100.0 (3196)	100.0 (3018)	100.0 (6214)

Top ten killer diseases of infant deaths

1.1.3 Like 1996, "Prematurity" remained top killer among the ten top killer diseases of infants accounting for 29.9 percent deaths of the total reported 70 percent deaths due to ten specific cause-groups (Statement 18). Among the 13 selected states, "Prematurity" remained the top killer except in the states of Bihar and Uttar Pradesh where "Pneumonia" was the top killer while in Andhra Pradesh and TamilNadu, "Respiratory infection of new born" and in Kerala "congenital malformation" emerged as the top killer among infants. The states of Bihar, Haryana, Madhaya Pradesh, Orissa, Punjab, Rajasthan and Uttar Pradesh showed higher percentage of deaths than the national average of 2.9 percent in respect of the disease "Anaemia" which ranked as fifth major killer at the national level. Likewise in the states of Andhra Pradesh, Bihar, Karnataka, Punjab, Rajasthan and Uttar Pradesh also showed higher percentage of deaths than national level of 2.9 percent in respect of disease "Diarrhoea of new born"

which ranked as sixth major killer at national level. Other top killers of infants at the national level are **Birth injury, Tetanus new-natorum, Typhoid & Paratyphoid and Bronchitis & Asthma** which accounted for 1.9, 1.6, 1.0 and 1.0 percent deaths respectively. The percentage varied from 0.0 to 5.4 in the selected states.

Statement 18

Percentage distribution of Top Ten killer diseases of infant in rural India, 1996 and 1997.

Sl. No.	India/ States	Rank	year	Premat- urity I	Pneu- monia II	Respirat- ory infection of new born III	Congenit- al mal- forma- tion IV	Anae- mia V	Diarrho- ea of new born VI	Birth Injury VII	Tetanus neonat- orum VIII	Typh- oid & Paratyp- hoid IX	Bronch- itis & Asthma X	Total
				P 07	J 18	P 22	Q 00-99	D 50-64	P 75-78	P 10-15	A 33	A 01	J 20&45	
	INDIA		1997	29.9	14.5	11.0	3.1	2.9	2.9	1.9	1.6	1.0	1.0	69.8
			1996	31.2	16.6	10.8	3.3	3.1	3.7	1.5	1.6	0.6	1.1	73.5
1	Andhra Pradesh		1997	21.7	1.7	26.4	3.2	0.0	4.7	1.2	1.0	0.2	2.5	62.8
			1996	31.6	3.7	11.6	3.4	1.2	1.5	3.7	0.6	0.0	2.8	60.1
2	Bihar		1997	16.2	30.2	2.8	2.8	6.7	7.8	1.7	1.7	2.8	0.0	72.6
			1996	17.8	35.6	2.0	2.0	5.9	7.4	1.0	1.5	1.0	0.0	74.2
3	Gujarat		1997	36.7	6.5	5.9	7.1	1.2	1.2	1.8	0.0	0.6	1.2	62.1
			1996	33.0	4.9	7.7	6.0	1.1	3.3	1.1	0.0	0.0	1.1	58.2
4	Haryana		1997	27.5	22.2	4.8	5.8	4.8	1.0	0.0	1.4	0.5	0.0	68.1
			1996	12.0	24.6	5.7	2.9	6.9	1.1	0.6	1.1	1.7	0.6	57.2
5	Karnataka		1997	42.4	0.0	18.7	4.0	0.0	4.0	3.0	2.5	0.0	0.0	74.7
			1996	45.8	4.4	16.3	4.9	1.0	3.0	2.9	0.5	0.0	0.5	79.3
6	Kerala		1997	18.9	8.1	21.6	27.0	0.0	0.0	0.0	0.0	0.0	0.0	75.7
			1996	13.8	20.7	17.2	3.4	0.0	0.0	0.0	0.0	0.0	0.0	55.2
7	Mahara- shtra		1997	55.1	13.1	6.9	3.1	0.8	0.7	0.7	0.1	0.0	0.6	81.1
			1996	55.8	14.5	5.2	3.7	0.6	0.8	0.5	0.0	0.0	0.9	82.0
8	Madhya Pradesh		1997	27.6	21.7	7.1	2.4	5.4	2.1	1.9	0.8	0.7	0.2	70.0
			1996	35.6	22.2	12.0	3.0	4.6	3.3	0.4	1.9	0.5	0.2	83.7
9	Orissa		1997	38.5	15.4	8.7	0.0	4.8	0.5	1.0	2.9	0.0	5.3	76.9
			1996	35.7	9.3	4.7	1.0	11.4	0.0	0.0	2.2	0.9	4.7	69.9
10	Punjab		1997	19.0	15.9	11.1	3.2	3.2	6.3	0.0	4.8	0.0	0.0	63.5
			1996	0.0	10.0	2.0	0.0	0.0	18.0	0.0	0.0	0.0	4.0	34.0
11	Rajasthan		1997	23.2	22.7	7.5	3.2	5.7	4.5	1.2	0.7	2.2	0.7	71.8
			1996	21.0	26.9	6.4	2.6	7.7	4.6	1.5	0.5	1.6	0.8	73.6
12	Tamil Nadu		1997	20.6	2.4	24.1	4.6	0.8	2.8	2.9	0.1	0.1	2.0	60.4
			1996	22.7	16.2	25.8	5.3	0.3	5.0	3.0	0.7	0.1	0.5	79.6
13	Uttar Pradesh		1997	17.5	20.2	9.0	1.4	3.2	5.3	2.4	5.4	3.6	0.1	68.1
			1996	19.7	25.4	8.9	2.4	3.7	5.1	1.9	4.4	1.3	0.0	72.8

4.2 CHILD DEATHS (1-4 YEARS)

4.2.1 Child deaths in the age-group (1-4) years reported under survey are presented in Statement 19. Both during 1996 & 1997 the major cause-group "Diseases of Respiratory System" was responsible for over one-fourth of child deaths in the age-group (1-4) years followed by "Infectious and Parasitic diseases" and "Viral infection" which accounted for 21.6 and 11.1 percent respectively in 1997.

Statement-19

Child deaths (1-4) years reported by major cause-groups - All India 1996 and 1997

ICD CODES	Major cause-groups	Percentage of child deaths					
		1996			1997		
		M	F	P	M	F	P
J	Diseases of the respiratory system	27.4	30.8	29.2	28.5	30.3	29.4
A	Infectious and parasitic diseases	17.5	20.5	19.1	19.5	24.9	22.3
B	Viral infection	11.6	14.5	13.0	11.1	11.8	11.5
D	Diseases of the blood and blood forming organs	7.7	11.1	9.5	9.6	9.0	9.3
G	Inflammatory diseases of central nervous systems	8.8	4.9	6.7	7.0	6.1	6.6
R	Symptoms, signs and abnormal clinical findings not elsewhere mention	6.3	5.1	5.6	6.0	5.2	5.6
X	With venomous animal contact	8.0	4.6	6.1	6.8	3.1	5.4
I	Diseases of circulatory system	2.3	2.4	2.4	2.5	2.0	2.2
V	External causes of mortality	2.3	1.3	1.8	2.5	1.5	1.9
T	Injuries poisoning & other consequences of external causes	2.5	1.2	1.8	1.1	1.7	1.5
K	Diseases of the digestive system	1.7	1.6	1.6	1.6	1.2	1.4
W	Other external causes of accidental injuries	1.5	0.8	1.2	1.4	0.7	1.0
C	Neoplasm	0.6	0.4	0.5	1.0	0.8	0.9
F	Mental and behavioral disorders	1.1	0.4	0.8	1.0	0.2	0.6
N	Diseases of genitourinary system	0.4	0.3	0.4	0.2	0.6	0.4
E	Metabolic diseases	0.3	0.1	0.3	0.0	0.1	0.0
	Total child deaths	100.0 (908)	100.0 (1049)	100.0 (1957)	100.0 (882)	100.0 (977)	100.0 (1859)

4.2.2 The specific causes responsible under major cause-group "Diseases of the blood and blood forming organs" includes "Anaemia" while under the major cause-group "Inflammatory diseases", the specific causes of deaths mainly are 'Convulsions' and 'Meningitis'.

- 4.2.3 A decreasing trend is observed in the child deaths due to major cause group "Symptoms, signs and abnormal clinical *findings* not elsewhere mentioned" and "with venomous animal contact" while "Diseases of circulatory system", the percentage in 1996 and 1997 are of same order.
- 4.2.4 The information in respect of 13 selected states for top ten killer diseases of children by specific causes in the age-group (1-4) years is presented in Statement 20. At national level "Pneumonia" is the major killer of children (22.7 percent) followed by "Anaemia" and "Typhoid & Paratyphoid". All these ten top killers account for 61.0 percent total deaths in 1997 while in 1996, this percentage is 59.0.

Statement 20

Top Ten killer diseases of children (1-4 years) by specific causes, 1996 and 1997

Sl. No.	India/ States	Year	Pneumonia	Anaemia	Typhoid & Paratyphoid	Diarrhoea & Gastroenteritis	Dysentery	Malaria	Acute Abdomen	Drowning	Jaundice	Meningitis	Total
		ICD code	J 18	D 50-64	A 01	A 09	A 06	B 50-54	R 10	X 71	R 17	G 00-02	
	INDIA	1997	22.7	9.0	6.3	5.8	4.0	2.8	2.8	2.7	2.7	2.4	61.0
		1996	21.7	9.3	5.8	4.4	3.8	3.7	2.7	2.9	2.7	2.0	59.0
1	Andhra Pradesh	1997	4.9	0.0	0.0	9.8	9.8	1.6	3.3	8.2	8.2	1.6	47.5
		1996	2.8	8.6	0.9	7.6	2.8	1	1	1.9	8.6	1.1	35.2
2	Bihar	1997	39.3	12.1	3.7	4.7	1.9	4.7	2.8	0.9	1.9	0.9	72.9
		1996	36.5	11.3	4.3	4.3	3.4	3.4	3.5	0.0	1.7	0.9	76.2
3	Gujarat	1997	2.0	20.0	0.0	2.0	0.0	4.0	4.0	4.0	0.0	2.0	38.0
		1996	11.7	6.7	1.7	6.7	0	0	0	5.0	1.7	3.3	33.5
4	Haryana	1997	27.0	4.1	6.8	4.1	0.0	4.1	0.0	1.4	2.7	1.4	51.4
		1996	25.4	5.6	9.9	1.4	0.0	5.6	0.0	2.8	0.0	0.0	50.7
5	Karnataka	1997	15.5	12.7	4.2	4.2	2.8	0.0	1.4	2.8	12.7	2.8	59.2
		1996	14.5	11.6	2.9	10.1	1.4	0	2.9	2.9	14.5	4.3	69.5
6	Kerala	1997	62.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5
		1996	38.0	0.0	0.0	12.7	0.0	0.0	0.0	12.7	0.0	0.0	63.4
7	Madhya Pradesh	1997	23.9	15.2	10.4	9.0	2.7	7.2	2.7	2.0	1.5	2.2	76.9
		1996	23.8	14.4	6.5	3.7	2.5	13	3.7	2.0	1.7	1.4	75
8	Maharashtra	1997	19.5	4.2	0.9	0.5	0.5	0.0	3.3	7.0	1.4	3.7	40.9
		1996	27.8	7.4	0.7	0.4	0.7	0.0	5.5	4.8	1.1	2.2	48.4
9	Orissa	1997	22.5	11.3	1.4	7.0	0.0	1.4	2.8	2.8	7.0	1.4	57.7
		1996	6.1	12.1	6.1	6.1	3	9.1	3.0	3.0	9.1	5.4	60.6
10	Punjab	1997	11.5	7.7	0.0	3.8	7.7	3.8	0.0	0.0	0.0	0.0	34.6
		1996	27.9	8.0	0.0	0.0	8.0	4.0	0.0	0.0	0.0	4.0	51.9
11	Rajasthan	1997	25.4	13.6	7.7	3.0	1.8	2.4	1.2	1.8	2.4	0.6	59.8
		1996	43.6	10.9	3.6	3.6	1.8	0.9	0.0	2.7	0.9	1.8	68.9
12	Tamil-Nadu	1997	6.3	2.1	1.1	2.1	9.5	0.0	0.0	9.5	4.2	2.1	36.8
		1996	7.2	6.6	0.0	4.6	4.6	0.0	2.0	8.6	3.3	5.3	42.1
13	Uttar - Pradesh	1997	27.2	5.7	10.5	8.0	7.3	0.7	3.4	0.7	0.7	4.3	68.6
		1996	24.7	8.5	13.8	6.6	7.6	1.1	2.2	0.6	1.3	1.8	69.9

4.3 CHILD DEATHS (5-14 YEARS)

4.3.1 Percent distribution of child deaths in the age-group(5-14) years by major cause-groups for the years 1996 & 1997 according to ICD codes is given in Statement 21.

Statement 21
Child deaths (5-14 years)by major cause-groups in rural India
1996 and 1997

ICD code	Major Cause-Groups	Year	Numbers			Percentages to total deaths for the major cause-groups		
			M	F	P	M	F	P
A	Infectious and Parasitic Diseases	1997	160	153	313	18.5	18.6	18.5
		1996	164	164	328	19.8	19.9	19.8
X	With Venomous Animal Contact	1997	154	109	263	17.8	13.3	15.6
		1996	141	81	222	17.0	9.8	13.4
J	Diseases of the respiratory System	1997	112	98	210	12.9	11.9	12.4
		1996	99	118	217	12.0	14.3	13.1
B	Viral Infection	1997	81	97	178	9.3	11.8	10.5
		1996	81	115	197	9.8	14.0	11.9
R	Symptoms, Signs and Abnormal Clinical Findings not elsewhere Mentioned	1997	67	63	130	7.7	7.7	7.7
		1996	59	65	124	7.2	7.9	7.5
G	Inflammatory Diseases of Central Nervous Systems	1997	56	68	124	6.5	8.3	7.3
		1996	80	65	145	9.7	7.9	8.8
V	External Causes of Mortality	1997	63	33	96	7.3	4.0	5.7
		1996	51	18	69	6.1	2.2	4.2
I	Diseases of Circulatory System	1997	28	46	74	3.2	5.6	4.4
		1996	28	43	71	3.4	5.2	4.3
D	Diseases of the Blood and Blood Forming Organs	1997	28	34	62	3.2	4.1	3.7
		1996	21	52	73	2.6	6.3	4.4
T	Injuries Poisoning & Other Consequences of External Causes	1997	19	40	59	2.2	4.9	3.5
		1996	19	20	39	2.2	2.5	2.3
W	Other External Causes of Accidental Injuries	1997	24	15	39	2.8	1.8	2.3
		1996	12	13	25	1.4	1.6	1.5
K	Diseases of the Digestive System	1997	17	19	36	2.0	2.3	2.1
		1996	16	15	31	1.9	1.8	1.9
C	Neoplasm	1997	18	16	34	2.1	1.9	2.0
		1996	20	16	36	2.4	1.9	2.2
F	Mental and Behavioral disorders	1997	10	6	16	1.2	0.7	0.9
		1996	10	11	21	1.2	1.4	1.3
N	Diseases of Genitourinary System	1997	11	2	13	1.3	0.2	0.8
		1996	5	3	8	0.6	0.4	0.5
E	Metabolic Diseases	1997	1	3	4	0.1	0.4	0.2
		1996	2	5	8	0.3	0.6	0.5

4.3.2 Child deaths in 1997 have been reported mainly due to 'Infectious & Parasitic diseases' and the percentage of such deaths is 18.5 followed by

major cause group 'with venomous animal contact' which account for 15.6 percent deaths in rural areas. 'Diseases of the respiratory system' come next with 12.4 percent of total child deaths while deaths due to 'viral infection' account for 10.5 percent deaths. Sex-wise differential is not significant in the case of child deaths due to 'Infectious & Parasitic diseases', 'Symptom, signs and abnormal clinical findings not elsewhere mentioned', and 'Diseases of digestive system', Neoplasm. The figures for 1996 are also given for comparison.

4.3.3 Ten top killer diseases of children (5-14 years) by specific causes has been compiled and presented in Statement 22. These top ten killer diseases account for 45.4 percent of total deaths at all India level.

Statement 22

**Percentage of Top Ten killer diseases of child deaths (5-14 years)
India, 1996 and 1997**

SL No.	India/ State	Year	Pneumonia	Drowning	Vehicle accidents	Acute abdomen	Typhoid & Paratyphoid	Anaemia	Snake bite	Diarrhoea & Gastroenteritis	Convulsion	Dysentery	Total
	ICD code		J 18	X 71	V 01-99	R 10	A 01	D 50-64	X 20	A 09	G 40	A 06	
	INDIA	1997	7.1	6.0	5.7	5.3	5.2	3.7	3.4	3.3	3.0	2.8	45.4
		1996	7.1	5.9	4.2	4.7	6.3	4.4	2.9	3.6	2.2	1.7	43.0
1	AndhraPradesh	1997	2.6	8.7	6.1	4.3	3.5	1.7	4.3	0.0	8.7	0.0	40.0
		1996	0.0	7.4	5.9	3.7	1.5	6.6	3.5	5.1	7.0	2.6	43.3
2	Bihar	1997	17.3	4.1	1.0	5.1	4.1	2.0	1.0	8.2	2.0	5.1	50.0
		1996	22.2	3.7	0.0	6.2	2.5	2.5	1.2	8.6	1.2	3.7	51.8
3	Gujarat	1997	7.7	0.0	0.0	2.6	2.6	5.1	10.3	0.0	0.0	0.0	28.2
		1996	2.0	8.0	12.0	6.0	0.0	4.0	4.0	0.0	4.0	0.0	40.0
4	Haryana	1997	5.7	2.9	17.1	5.7	11.4	2.9	2.9	2.9	2.9	0.0	54.3
		1996	2.0	2.0	8.3	0.0	10.4	4.2	0.0	4.2	0.0	0.0	31.1
5	Karnataka	1997	4.6	10.8	7.7	3.1	1.5	4.6	4.6	1.5	9.2	3.1	50.8
		1996	3.2	8.1	3.2	4.8	3.2	3.2	3.2	4.8	3.2	0.0	36.9
6	Kerala	1997	0.0	8.3	8.3	0.0	0.0	0.0	0.0	0.0	8.3	0.0	25.0
		1996	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
7	Maharashtra	1997	5.6	8.6	8.2	4.3	1.7	2.6	5.6	0.0	4.7	0.0	46.8
		1996	5.9	4.9	3.9	6.8	1.6	2.9	5.2	0.0	4.8	0.0	36.0
8	MadhyaPradesh	1997	6.8	6.1	2.7	6.1	11.3	4.1	4.1	4.4	0.3	0.7	41.2
		1996	7.4	8.7	3.5	4.3	14.3	6.5	1.6	8.2	0.7	2.3	57.5
9	Orissa	1997	9.8	1.6	1.6	4.9	0.0	6.6	3.3	14.8	3.3	1.6	47.5
		1996	7.8	2.6	0.0	2.6	2.6	6.5	4.6	2.6	4.6	2.3	36.2
10	Punjab	1997	4.2	0.0	12.5	4.2	0.0	0.0	0.0	0.0	0.0	12.5	33.3
		1996	0.0	4.0	12.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
11	Rajasthan	1997	12.5	6.3	5.2	0.0	1.0	4.2	2.1	1.0	0.0	3.1	35.4
		1996	13.0	14.1	3.3	0.0	7.6	5.4	1.4	0.0	1.4	0.0	46.2
12	Tamil Nadu	1997	0.7	12.2	12.2	2.7	0.7	2.7	3.4	0.0	3.4	2.0	40.1
		1996	0.8	8.9	6.5	0.8	2.4	2.4	4.8	4.0	3.2	0.8	34.6
13	UttarPradesh	1997	9.3	2.5	5.9	8.4	9.6	4.0	0.3	4.6	3.1	6.2	53.9
		1996	13.5	3.6	4.4	7.6	12.0	5.1	2.5	3.6	0.0	2.5	54.8

- 4.3.4 **Pneumonia** specific cause with 7.1 percent deaths is the top killer of children at all India level, while its intensity in various states varies. In the states of Bihar, Gujarat, Orissa and Rajasthan and Uttar Pradesh the percent deaths due to this cause is higher than the national average.
- 4.3.5 **Drowning** is second among ten top killer diseases of the children responsible for 6.0 percent of the child deaths at national level reported under the survey. Percent deaths due to Drowning are higher than the national average in the states of Andhra Pradesh, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Rajasthan and Tamil Nadu.
- 4.3.6 Deaths due to **Vehicular accidents** with 5.7 percent of total reported child deaths is third among ten top killers of this age group. Among the states, significant percentage of deaths have been reported from Haryana (17.1), Karnataka (7.7), Kerala (8.3), Maharashtra (8.2), Punjab (12.5) and Tamil Nadu (12.2).
- 4.3.7 Deaths due to **Acute Abdomen** with 5.3 percent occupies fourth position. Among the states, Uttar Pradesh accounts for highest percentage (8.4) of deaths in this category which is higher than national average.
- 4.3.8 The fifth top killer diseases is **Typhoid and Paratyphoid** with 5.2 percent reported deaths at national level. The states of Haryana (11.4 percent), Madhya Pradesh (11.3 percent) and Uttar Pradesh (9.6 percent) have reported deaths higher than the national average.
- 4.3.9 **Anaemia** with 3.7 percent deaths at national level holds the sixth rank among ten top killer diseases. Among the states, Orissa has reported highest percentage of deaths (6.6 percent) in this cause group.
- 4.3.10 The next top killer disease is **Snakebite**, which accounts for 3.4 percent deaths at national level. Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Madhya Pradesh have reported higher percentage of deaths than the national average.
- 4.3.11 Deaths due to **Diarrhoea & Gastro Enteritis** with 3.3 percent deaths is eighth among the ten top killer diseases. The percentage of such deaths is higher than national average in Bihar (8.2 percent), Madhya Pradesh (4.4 percent), Orissa (14.8 percent), Uttar Pradesh (4.6 percent).
- 4.3.12 Child deaths due to **Convulsion** have been reported as 3.0 percent at the national level which is the ninth among ten top killer diseases of children and such deaths are highest in Karnataka.
- 4.3.13 **Dysentery** is the tenth top killer accounting for 2.8 percent deaths at national level. States of Bihar (5.1 Percent), Karnataka (3.1 percent), Punjab (12.5

percent), Rajasthan (3.1 percent) and Uttar Pradesh (6.2 percent) have reported higher percentages than the national average.

4.4 MATERNAL MORTALITY & FEMALE DEATHS

4.4.1 There has been persistent demand from data users and from departments such as Department of Women & Child development and Ministry of Health & Family Welfare to compile and analyse data on female deaths collected through 'Survey of Causes of Death (Rural)'. An attempt has been made to present data on female deaths, specifically restricted to the **reproductive age-group (15-44)** in the following paragraphs.

4.4.2 The percentage of female deaths in the reproductive age-group according to major cause-groups as per International Classification of Diseases for the year 1997 along with the corresponding percentages for 1996 are presented in the Statement 23 below.

Statement-23

**Percentage of Maternal Mortality and Female deaths (15 - 44 years)
by Major Cause Groups , India , 1996 and 1997**

ICD Codes	Major Cause of Death	Percentage	
		1996	1997
X	With Venomous Animal Contact	17.3	18.0
A	Infectious and Parasitic Diseases	16.9	15.1
I	Diseases of Circulatory System	10.2	11.0
O	Pregnancy, Childbirth and Puerperium	9.2	9.3
T	Injuries, Poisoning & Other Consequences of External Causes	7.0	7.4
C	Neoplasm	5.7	6.8
R	Symptoms, Signs and Abnormal Clinical Findings Not Elsewhere Mentioned	7.1	6.7
J	Diseases of the Respiratory System	6.2	5.0
D	Diseases of the Blood and Blood Forming Organs	4.6	4.3
G	Inflammatory Diseases of Central Nervous Systems	4.4	3.7
B	Viral Infection	5.0	3.6
V	External Causes of Mortality	1.8	3.3
K	Diseases of the Digestive System	1.8	2.3
F	Mental and Behavioural Disorders	0.9	1.3
N	Diseases of Genitourinary System	0.7	0.8
W	Other External Causes of Accidental Injuries	0.7	0.8
E	Metabolic Diseases	0.5	0.6
	Total deaths	100.0	100.0

4.4.3 It may be interesting to note from the above statement that major cause of female deaths in the reproductive age-groups in rural areas is due to major cause group 'with venomous animal contact' which accounts for 18.0

percent of total female deaths in 1997 while the corresponding percentage is 17.3 in 1996. This is followed by 15.1 percent of deaths due to 'Infectious and parasitic diseases' and 11.0 percent of deaths accounted for 'Diseases of circulatory system'. Deaths due to 'pregnancy, child birth and puerperium' account for 9.3 percent of total female deaths. Deaths due to other major cause-groups like 'Neoplasm', 'Injuries', 'Poisoning' & other consequences of external causes' 'Symptoms, signs and abnormal clinical findings not elsewhere mentioned', and 'Diseases of the respiratory system' account for 5-8 Percent of total female deaths.

4.4.4 Ten top killer diseases of females in the reproductive age-groups by specific causes of death in respect of major states/India for the years 1996 & 1997 has been compiled and presented in Statement 24. Top ten specific causes of female deaths account for 56.3 percent deaths at all India level during 1997.

Statement 24

Percentage of Top Ten killer diseases of females in reproductive age-group (15-44 years) major states/India, 1997

Sl. No.	India/ State	Year	Suicide	T.B. of lungs	Cancer	Heart Attack	Burns	Anaemia	Vehicle Accident	Acute Abdomen	Bronchitis & Asthma	Puerperium	Total
ICD code →			X 60-84	A 15	C 00-97	I 21-25	T 20-32	D 50-64	V 1-99	R 10	J 20&45	O 10	
	INDIA	1997	11.1	9.4	6.7	6.6	6.5	4.2	3.3	3.1	3.1	2.4	56.3
		1996	10.1	10.9	5.5	5.3	6.4	4.5	1.7	3.4	3.8	2.7	54.3
1	Andhra Pradesh	1997	14.8	7.1	7.9	9.3	7.9	0.8	2.9	3.7	2.9	0.3	57.7
		1996	13.4	10.1	5.6	11.8	7.5	1.6	1.2	3.9	4.9	0.8	60.8
2	Bihar	1997	1.6	11.4	1.6	6.5	3.3	8.9	0.0	8.9	6.5	7.3	56.1
		1996	1.5	13.1	2.2	8.0	5.1	8.0	0.0	10.2	3.6	7.3	59.0
3	Gujarat	1997	14.6	10.4	6.3	7.3	8.3	1.0	4.2	2.1	1.0	0.0	55.2
		1996	12.8	6.4	7.4	10.6	8.5	1.1	3.2	5.3	4.3	2.1	61.7
4	Haryana	1997	11.5	6.4	20.5	12.8	7.7	0.0	6.4	1.3	2.6	0.0	69.2
		1996	9.1	7.6	4.5	7.6	9.1	3.0	0.0	0.0	4.5	3.0	48.4
5	Karnataka	1997	18.6	2.3	14.0	14.0	2.3	2.3	4.7	0.0	0.0	0.0	58.1
		1996	21.4	3.6	28.6	3.6	0.0	0.0	9.1	0.0	3.6	0.0	69.9
6	Kerala	1997	12.4	12.4	13.2	7.4	4.1	2.5	3.3	0.8	2.5	2.5	61.2
		1996	11.8	11.8	11.8	4.5	5.5	3.6	0.0	4.5	1.8	2.7	58.0
7	Maharashtra	1997	3.8	14	3.8	4.4	3.1	7.4	1.3	3.2	4.2	3.8	49.0
		1996	6.7	14.1	4.4	2.8	5.4	7.5	2.0	4.8	2.4	4.0	54.2
8	Madhya Pradesh	1997	5.7	9.0	7.0	2.0	15.2	3.5	2.7	2.5	4.5	2.0	54.1
		1996	6.9	8.8	7.1	1.7	15.3	3.3	6.1	1.7	3.6	0.6	55.1
9	Orissa	1997	8.4	7.6	3.4	1.7	3.4	5.0	0.0	5.0	5.0	4.5	44
		1996	10.0	6.7	3.3	4.0	2.0	7.3	0.7	4.0	2.0	7.3	47.3
10	Punjab	1997	5.6	1.1	4.4	26.7	4.4	2.2	0.0	2.2	3.3	1.4	51.3
		1996	5.3	5.3	6.3	23.2	8.4	0.0	10.5	1.1	2.1	0.0	62.1
11	Rajasthan	1997	1.4	12.8	6.4	0.0	9.9	3.5	7.2	1.4	2.8	3.6	49
		1996	4.9	13.3	2.1	3.5	6.3	7.7	6.3	3.5	7.0	2.8	57.3
12	Tamil Nadu	1997	37.1	3.8	4.5	2.2	2.4	4.8	1.7	1.9	1.9	1.2	61.5
		1996	29.7	6.4	8.1	7.6	2.5	2.7	2.2	0.7	2.7	2.7	65.4
13	Uttar Pradesh	1997	23.0	16.5	3.4	5.0	5.5	5.2	1.8	4.5	3.1	2.6	70.6
		1996	6.5	5.7	3.9	9.8	3.9	5.7	0.9	5.1	1.5	3.6	46.4

4.4.5 In Statement 25 top ten killer diseases of females in reproductive age-groups has highlighted very useful and vital information of female deaths. During 1997, deaths due to **Suicide** in females under reproductive age-group has been reported as top killer in India. Among the selected states, **suicide** is the top

killer disease of females in Andhra Pradesh, Gujarat, Kerala, Orissa and Tamil Nadu while in Bihar, Madhya Pradesh and Rajasthan, **T.B. of lungs** is the top killer. In Haryana and Karnataka, **Cancer** accounts for 20.5 and 13.2 percent respectively of the total female deaths and is the top killer while in Punjab and Uttar Pradesh, **Heart attack** and in Maharashtra **Burns** are the top killer diseases. **T.B. of lungs** is the 2nd major killer disease at the national level and accounts for 9.4 percent deaths followed by **Cancer** (6.7 percent) **Heart attack** (6.6 percent), **Burns** (6.5 percent). Deaths due to **Anaemia**, **Vehicular accident**, **Acute abdomen** and **Bronchitis & Asthama** and **Puerperium** have affected less than 5 percent of female deaths at all India level .

4.4.6 **Suicide**, which is the top killer of females in the reproductive age-groups has accounted for 82 percent of deaths in age-group of 15 to 34 years while **T.B. of lungs** has accounted for over 85 percent of deaths in the age-group of 25 to 44 years. **Cancer**, **Heart attack** and **Bronchitis & Asthama** follows the same pattern. In the case of **Burns**, **Acute abdomen** and **Puerperium** which rank 5th, 8th and 10th respectively among the ten top killer diseases have affected comparatively younger age-groups while **Anaemia** and **Vehicular accident** with rank 6th & 7th respectively have affected more or less all ages in the reproductive age-groups.

Statement - 25

Percent distribution of top ten killer diseases of females in the reproductive age-group (15-44 years), India, 1997.

Rank	Specific Causes (Top killer diseases)	ICD code	Year	Reproductive age-groups						No. of deaths
				15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	
I	Intentional self harm (suicide)	X	97	22.3	26.5	18.7	14.5	10.6	7.5	359
		60-84	96	23.3	30.2	17.0	14.5	9.1	6.0	345
II	T.B of lungs	A	97	4.9	9.5	22.4	15.8	28.0	19.4	304
		15	96	9.3	12.8	20.9	17.4	23.2	16.5	318
III	Cancer	C	97	6.0	6.9	15.3	14.8	26.4	30.6	216
		00-97	96	6.3	10.2	13.6	16.5	21.6	31.8	176
IV	Heart attack	I	97	5.2	8.5	20.3	13.2	26.9	25.9	212
		21-25	96	4.2	15.0	17.4	20.4	21.0	22.2	167
V	Burns	T	97	12.4	27.1	28.1	15.2	13.3	3.8	210
		20-32	96	15.3	28.1	22.7	19.2	8.9	5.9	203
VI	Anaemia	D	97	10.3	16.2	28.8	18.4	18.4	14.0	136
		50-64	96	8.5	20.4	19.7	23.9	15.5	12.0	142
VII	Vehicular accidents	V	97	14.2	17.9	23.6	13.2	17.0	14.2	106
		1-99	96	13.3	14.7	23.31	17.8	16.9	13.7	56
VIII	Acute Abdo men	R	97	21.0	31.0	13.0	17.0	9.0	9.0	100
		10	96	16.1	23.8	13.3	16.2	12.4	18.1	105
IX	Bronchitis & Asthma	J	97	8.1	6.1	16.2	11.1	25.3	33.3	99
		20&45	96	7.4	9.9	13.2	20.7	19.8	28.9	121
X	Puerperium	O	97	10.1	34.2	29.1	15.2	8.9	2.5	79
		10	96	1.2	34.1	27.0	20.8	12.6	4.5	85

4.5 OLD AGE DEATHS (60 Years & over)

4.5.1 Data on deaths for the age-group 60 years & over has been compiled according to major-cause groups as per ICD classification and percent deaths with respect to the total number of reported deaths by the major cause groups in the same age-group is presented in the Statement 26.

Statement-26

Percentage distribution of deaths to persons aged 60 years & above by sex and major cause for India , 1996 and 1997

ICD CODES	Major cause of death	Percent deaths					
		1996			1997		
		M	F	P	M	F	P
R	Symptoms, signs and abnormal clinical findings not elsewhere mentioned	34.3	40.8	37.2	31.8	38.9	34.9
J	Diseases of the respiratory system	22.5	20.4	21.6	20.9	19.4	20.3
I	Diseases of circulatory system	13.5	11.4	12.5	15.3	12.5	14.1
G	Inflammatory diseases of central nervous systems	6.9	6.9	6.9	7.9	7.5	7.7
A	Infectious and parasitic diseases	6.9	4.8	5.9	6.8	5.1	6.0
C	Neoplasm	3.8	3.8	3.8	4.3	3.8	4.1
D	Diseases of the blood and blood forming organs	2.5	4.0	3.2	2.4	3.5	2.9
B	Viral infection	2.2	2.3	2.2	1.9	2.5	2.2
X	With venomous animal contact	1.7	1.4	1.5	2.1	1.4	1.8
K	Diseases of the digestive system	1.6	1.1	1.4	1.9	1.3	1.6
E	Metabolic diseases	1.5	0.9	1.3	1.4	1.4	1.4
N	Diseases of genitourinary system	1.1	0.7	0.9	1.4	0.9	1.2
V	External causes of mortality	0.8	0.4	0.6	1.0	0.6	0.8
W	Other external causes of accidental injuries	0.4	0.4	0.4	0.4	0.5	0.4
F	Mental and behavioral disorders	0.2	0.3	0.3	0.2	0.3	0.2
T	Injuries poisoning & other consequences of external causes	0.1	0.4	0.3	0.3	0.4	0.4
	Total	100.0	100.0	100.0	100.0	100.0	100.0

4.5.2 The cause-group 'Symptoms, signs and abnormal clinical findings not elsewhere mentioned' which includes deaths due to senility is the major killer for the age-group 60 years & over in 1997 and the percent deaths due to this cause-group is 34.9 percent . This is followed by the major cause-group 'Diseases of the respiratory system' which account for one-fifth of the total old age deaths. 'Diseases of the circulatory system' account for 14.1 percent deaths while 'Inflammatory diseases of central nervous systems' are responsible for 7.7 percent deaths. The deaths due to 'Infectious and parasitic diseases', 'Neoplasm', 'Diseases of the blood and blood forming organs' and 'viral infection' are in the

range of 2-6 percent. Other major cause-groups account for less than 2 percent of total old age deaths. A similar trend is observed for the year 1996.

4.5.3 The percentage of female deaths in the case of major cause-group 'Symptoms, signs and abnormal clinical findings not elsewhere mentioned' are higher than male deaths in this age-group while a reverse trend is seen in the case of major cause group 'Diseases of circulatory system'. As regards other major cause-groups, sex-wise differential is not significant.

Ten top killer diseases of old age (excluding senility)

4.5.4 The analysis of ten top killer diseases of old age by specific cause for the last two years presented in statement 27 has indicated the trend among ten top killers in this age-group. **Bronchitis & Asthma** is the major killer occupied 1st position which accounted for 28.0 percent deaths in 1997 as against 31.0 percent in 1996. It is evident from the Statement that **T.B. of lungs** being equal 5.2 percent in both the years 1996 and 1997 occupied 5th position while in 1st and 6th position **Bronchitis & Asthma** and **Anaemia** showing a decreasing trend i.e. 28.0 and 4.3 percent in the year 1997 in comparison to 31.0 and 4.9 in the year 1996 respectively. The position occupied in 2nd, 3rd, 4th, 7th, 8th, 9th, 10th, are in increasing trend in the year 1997 in comparison to the year 1996.

Statement 27

**Percent distribution of Top Ten Killer diseases of old age (60 years & over)
India, 1996 and 1997**

ICD Codes	Causes	Percent Deaths	
		1996	1997
J 20&45	Bronchitis & Asthma	31.0	28.0
I 21-25	Heart attack	14.4	15.8
G 41	Paralysis of cerebral apoplexy	10.0	10.7
C 00-97	Cancer	5.9	6.1
A 15	T.B. of lungs	5.2	5.2
D 50-64	Anaemia	4.9	4.3
E 10-14	Diabetes	1.9	2.1
R 10	Acute abdomen	1.4	1.5
N 17-19	Uraemia	1.1	1.4
K 27-28	Peptic or gastric ulcer	1.1	1.2

TABLE - I
SURVEY OF CAUSES OF DEATH (RURAL) - INDIA 1997
[AS PER INTERNATIONAL CLASSIFICATION OF DISEASES - 10TH REVISION]

CODE NO.	PROBABLE CAUSE OF DEATH	NUMBER			PERCENTAGE			
		M	F	P	M	F	P	P
1	2	3	4	5	6	7	8	
A	INFECTIOUS AND PARASITIC DISEASES	2736	1718	4454	10.9	8.9	10.0	
B	VIRAL INFECTION	693	699	1392	2.8	3.6	3.1	
C	NEOPLASM	1051	876	1927	4.2	4.5	4.3	
D	DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS	666	753	1419	2.7	3.9	3.2	
E	METABOLIC DISEASES	268	200	468	1.1	1.0	1.1	
F	MENTAL AND BEHAVIOURAL DISORDERS	108	92	200	0.4	0.5	0.5	
G	INFLAMMATORY DISEASES OF CENTRAL NERVOUS SYSTEM	1548	1126	2674	6.2	5.8	6.0	
I	DISEASES OF CIRCULATORY SYSTEM	3394	1975	5369	13.5	10.2	12.1	
J	DISEASES OF THE RESPIRATORY SYSTEM	4120	3158	7278	16.4	16.3	16.4	
K	DISEASES OF THE DIGESTIVE SYSTEM	654	283	937	2.6	1.5	2.1	
N	DISEASES OF GENITOURINARY SYSTEM	314	141	455	1.3	0.7	1.0	
O	PREGNANCY CHILD BIRTH AND PUERPERIUM	0	297	297	0.0	1.5	0.7	
P	CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	1985	1876	3861	7.9	9.7	8.7	
Q	CONGENITAL MALFORMATIONS, DEFORMATIONS AND ABNORMALITIES	98	96	194	0.4	0.5	0.4	
R	SYMPTOMS, SIGNS AND ABNORMAL CLINICAL FINDING NOT ELSEWHERE MENTIONED	4324	4120	8444	17.2	21.3	19.0	
T	INJURIES POISONING & OTHER CONSEQUENCES OF EXTERNAL CAUSES	237	367	604	0.9	1.9	1.4	
V	EXTERNAL CAUSES OF MORTALITY	776	240	1016	3.1	1.2	2.3	
W	OTHER EXTERNAL CAUSES OF ACCIDENTAL INJURIES	165	99	264	0.7	0.5	0.6	
X	WITH VENOMOUS ANIMAL CONTACT	1638	971	2609	6.5	5.0	5.9	
	OTHER MEDICALLY CERTIFIED DEATHS	306	241	547	1.2	1.2	1.2	
	GRAND TOTAL	25081	19328	44409	100.0	100.0	100.0	

TABLE -II
DISTRIBUTION OF DEATHS BY MAJOR CAUSE-GROUPS INDIA (RURAL), 1993-1997
(AS PER INTERNATIONAL CLASSIFICATION OF DISEASES - X REVISION)

SL. NO.	CODE NO.	MAJOR CAUSES OF DEATH	NUMBER					PERCENTAGE				
			1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
1	2	3	4	5	6	7	8	9	10	11	12	13
1	R	SYMPTOMS, SIGNS AND ABNORMAL CLINICAL FINDING NOT ELSEWHERE MENTION	7755	8951	7028	8905	8444	26.2	24.3	18.6	20.6	19.0
2	J	DISEASES OF THE RESPIRATORY SYSTEM	4269	5569	6292	7677	7278	14.4	15.1	16.6	17.8	16.4
3	I	DISEASES OF CIRCULATORY SYSTEM	2238	3025	3595	4410	5369	7.6	8.2	9.5	10.2	12.1
4	A	INFECTIOUS AND PARASITIC DISEASES	3704	4400	4505	4719	4454	12.5	12.0	11.9	10.9	10.0
5	P	CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	2961	3309	3471	3405	3861	10.0	9.0	9.2	7.9	8.7
6	G	INFLAMMATORY DISEASES OF CENTRAL NERVOUS SYSTEM	1247	1856	1797	2375	2674	4.2	5.0	4.8	5.5	6.0
7	X	WITH VENOMOUS ANIMAL CONTACT	1389	1850	2270	2426	2609	4.7	5.0	6.0	5.6	5.9
8	C	NEOPLASM	907	1432	1577	1533	1927	3.1	3.9	4.2	3.6	4.3
9	D	DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS	912	1091	1130	1485	1419	3.1	3.0	3.0	3.4	3.2
10	B	VIRAL INFECTION	1253	1612	1792	1679	1392	4.2	4.4	4.7	3.9	3.1
11	V	EXTERNAL CAUSES OF MORTALITY	625	792	910	909	1016	2.1	2.2	2.4	2.1	2.3
12	K	DISEASES OF THE DIGESTIVE SYSTEM	409	577	592	854	937	1.4	1.6	1.6	2.0	2.1
13	T	INJURIES POISONING & OTHER CONSEQUENCES OF EXTERNAL CAUSES	397	493	533	566	604	1.3	1.3	1.4	1.3	1.4
14	E	METABOLIC DISEASES	178	284	357	495	468	0.6	0.8	0.9	1.1	1.1
15	N	DISEASES OF GENITOURINARY SYSTEM	159	219	274	354	455	0.5	0.6	0.7	0.8	1.0
16	O	PREGNANCY CHILD BIRTH AND PUERPERIUM	335	337	318	415	297	1.1	0.9	0.8	1.0	0.7
17	W	OTHER EXTERNAL CAUSES OF ACCIDENTAL INJURIES	138	173	199	265	264	0.5	0.5	0.5	0.6	0.6
18	F	MENTAL AND BEHAVIOURAL DISORDERS	166	162	172	285	200	0.6	0.4	0.5	0.7	0.5
19	Q	CONGENITAL MALFORMATIONS, DEFORMATIONS AND ABNORMALITIES	149	118	110	221	194	0.5	0.3	0.3	0.5	0.4
		OTHER MEDICALLY CERTIFIED DEATHS	406	550	909	190	547	1.4	1.5	2.4	0.4	1.2
		GRAND TOTAL	29597	36799	37831	43168	44409	100.0	100.0	100.0	100.0	100.0

TABLE III

SURVEY OF CAUSE OF DEATH (RURAL)

DISTRIBUTION OF DEATHS BY AGE AND SEX ACCORDING TO MAJOR AND SPECIFIC CAUSES

INTERNATIONAL CLASSIFICATION OF DISEASES Xth REVISION

INDIA - 1997

CODE NO.	OLD CODE NO.	PROBABLE CAUSE OF DEATH	AGE-GROUP (IN YEARS)																			
			TOTAL		0-1		1-4		5-9		10-14		15-19		20-24		25-29					
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F				
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			
A		INFECTION AND PARASITIC DISEASES	2736	1718	4454	180	159	172	243	88	89	72	64	52	53	101	56	166	106			
B		VIRAL INFECTION	693	699	1392	78	83	98	115	49	68	32	29	22	18	19	27	21	20			
C		NEOPLASM	1051	876	1927	3	4	8	8	9	3	9	13	10	13	13	15	31	33			
D		DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS	666	753	1419	91	90	85	87	20	22	8	12	6	14	12	22	20	31			
E		METABOLIC DISEASES	268	200	468	1	6	0	1	1	0	0	3	2	3	6	1	4	5			
F		MENTAL AND BEHAVIOURAL DISORDERS	108	92	200	0	1	9	2	3	3	7	3	7	4	5	10	9	11			
G		INFLAMMATORY DISEASES OF CENTRAL NERVOUS SYSTEM	1548	1126	2674	63	42	62	60	32	42	24	26	22	20	21	17	28	25			
I		DISEASES OF CIRCULATORY SYSTEM	3394	1975	5369	41	44	22	19	18	16	10	30	47	28	55	44	83	73			
J		DISEASES OF THE RESPIRATORY SYSTEM	4120	3158	7278	534	513	251	296	75	67	37	31	25	23	22	17	35	32			
K		DISEASES OF THE DIGESTIVE SYSTEM	654	283	937	13	11	14	12	8	9	9	10	10	4	15	14	35	11			
N		DISEASES OF GENITOURINARY SYSTEM	314	141	455	6	1	2	6	7	1	4	1	2	3	7	8	4	3			
O		PREGNANCY, CHILD BIRTH AND PUERPERIUM	0	297	297	0	0	0	0	0	0	0	0	0	26	0	106	0	77			
P		CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	1985	1876	3861	1985	1876	0	0	0	0	0	0	0	0	0	0	0	0			
Q		CONGENITAL MALFORMATIONS, DEFORMATIONS AND ABNORMALITIES	98	96	194	98	96	0	0	0	0	0	0	0	0	0	0	0	0			
R		SYMPTOMS, SIGNS AND ABNORMAL CLINICAL FINDING NOT ELSEWHERE MENTIONED	4324	4120	8444	79	54	53	51	46	35	21	28	21	34	37	65	33	49			
T		INJURIES POISONING & OTHER CONSEQUENCES OF EXTERNAL CAUSES	237	367	604	10	7	10	17	12	16	7	24	18	30	29	62	24	65			
V		EXTERNAL CAUSES OF MORTALITY	776	240	1016	2	3	22	15	36	13	27	20	40	15	81	19	95	25			
W		OTHER EXTERNAL CAUSES OF ACCIDENTAL INJURIES	165	99	264	8	4	12	7	12	8	12	7	13	5	7	5	12	2			
X		WITH VENOMOUS ANIMAL CONTACT OTHER MEDICALLY CERTIFIED DEATHS	1658	971	2609	27	18	62	38	67	48	87	61	133	126	191	143	182	100			
		305	242	547	12	19	33	28	7	10	11	10	11	14	11	15	10	16	13			
		GRAND TOTAL	25080	19329	44409	3231	3031	915	1005	490	450	377	372	444	430	636	641	798	681			

CODE NO.	OLD CODE NO.	PROBABLE CAUSE OF DEATH	AGE-GROUP (IN YEARS)																	
			30-34		35-39		40-44		45-49		50-54		55-59		60+					
			M	F	M	F	M	F	M	F	M	F	M	F	M	F				
I		2	20	21	22	23	24	25	26	27	28	29	30	31	32	33				
A		INFECTIOUS AND PARASITIC DISEASES	157	71	176	115	79	202	79	221	63	175	65	815	476					
B		VIRAL INFECTION	15	16	24	24	19	9	26	14	30	24	29	21	231	231				
C		NEOPLASM	22	32	50	57	45	66	96	73	118	104	118	92	519	363				
D		DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS	9	25	23	25	11	19	33	25	36	18	23	31	289	332				
E		METABOLIC DISEASES	5	2	8	6	8	2	18	9	24	8	21	21	170	133				
F		MENTAL AND BEHAVIOURAL DISORDERS	5	1	10	9	11	5	7	5	8	4	8	3	19	31				
G		INFLAMMATORY DISEASES OF CENTRAL NERVOUS SYSTEM	20	19	43	22	41	14	68	36	81	36	99	56	944	711				
I		DISEASES OF CIRCULATORY SYSTEM	84	47	180	86	143	71	264	108	276	103	340	126	1831	1180				
J		DISEASES OF THE RESPIRATORY SYSTEM	30	18	68	35	60	36	92	60	169	83	208	115	2514	1832				
K		DISEASES OF THE DIGESTIVE SYSTEM	31	12	61	15	46	16	68	21	59	10	61	14	224	124				
N		DISEASES OF GENITOURINARY SYSTEM	5	1	14	7	11	2	31	10	18	6	31	12	172	80				
O		PREGNANCY CHILD BIRTH AND PUERPERIUM	0	53	0	25	0	7	0	3	0	0	0	0	0	0				
P		CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Q		CONGENITAL MALFORMATIONS, DEFORMATIONS AND ABNORMALITIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
R		SYMPTOMS, SIGNS AND ABNORMAL CLINICAL FINDING NOT ELSEWHERE MENTIONED	28	33	50	15	31	17	42	24	36	28	38	16	3844	3684				
T		INJURIES POISONING & OTHER CONSEQUENCES OF EXTERNAL CAUSES	22	35	12	33	17	10	15	17	16	6	9	5	36	40				
V		EXTERNAL CAUSES OF MORTALITY	83	14	84	18	57	15	63	17	33	9	31	4	122	53				
W		OTHER EXTERNAL CAUSES OF ACCIDENTAL INJURIES	12	6	9	5	4	1	3	5	9	2	9	0	43	42				
X		WITH VENOMOUS ANIMAL CONTACT	135	82	161	77	107	44	101	51	86	30	52	20	247	133				
		OTHER MEDICALLY CERTIFIED DEATHS	13	7	15	9	18	12	11	8	15	6	15	12	110	87				
		GRAND TOTAL	676	474	988	583	788	425	1140	565	1235	540	1267	613	12130	9532				

CODE NO.	OLD CODE NO.	PROBABLE CAUSE OF DEATH	AGE-GROUP (IN YEARS)																							
			TOTAL		0-1		1-4		5-9		10-14		15-19		20-24		25-29									
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F								
1		DEATH	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19							
A		INFECTIOUS AND PARASITIC DISEASES																								
A 00	4.12	CHOLERA	49	48	97	8	4	12	15	3	8	7	5	1	1	2	3	1	0							
A 01	3.31	TYPHOID & PARATYPHOID	305	322	627	30	32	37	84	19	34	14	21	12	14	18	8	24	14							
A 06	4.14	DYSENTERY	179	168	347	16	17	28	48	21	11	9	6	2	4	1	3	6	6							
A 09	4.11	DIARRHOEA & GASTROENTERITIS	186	201	387	24	28	48	63	13	17	15	10	4	4	6	7	3	5							
A 15	5.11	T B OF LUNGS	1604	713	2317	4	4	13	9	13	9	12	11	16	15	62	29	112	68							
A 30	8.23	LEPROSY	30	18	48	1	2	1	0	0	0	0	1	0	0	0	0	2	1							
A 33	9.32	TETANUS NEONATORUM	54	46	100	54	46	0	0	0	0	0	0	0	0	0	0	0	0							
A 35	8.31	OTHER TETANUS	76	40	116	23	13	6	6	3	3	2	0	4	5	1	0	6	3							
A 37	5.30	WHOOPING COUGH	33	24	57	5	4	7	3	0	0	1	0	1	0	2	1	1	0							
A 80	8.41	POLIOMYLITIS	17	8	25	0	0	2	2	2	2	2	1	1	0	0	1	1	0							
A 82	1.13	RABIES	58	27	85	0	0	4	2	12	3	7	5	6	1	4	3	4	3							
	(4.00)	DEATHS DUE TO OTHER DIGESTIVE DISORDERS	145	103	248	15	9	14	11	2	2	3	4	5	9	5	1	6	6							
		TOTAL	2736	1718	4454	180	159	172	243	88	89	72	64	52	53	101	56	166	106							
B		VIRAL INFECTIONS																								
B 01	8.21	CHIKENPOX	10	9	19	3	2	2	3	2	1	0	2	0	0	1	0	0	0							
B 05	8.22	MEASLES	18	25	43	3	5	7	9	3	8	0	1	3	0	0	0	0	0							
B 50-54	3.11	MALARIA	204	192	396	10	19	24	30	10	14	12	10	7	7	8	12	10	9							
	(3.00)	OTHER DEATHS DUE TO VIRAL FEVERS	461	473	934	62	57	65	73	34	45	20	16	12	11	10	15	11	11							
		TOTAL	693	699	1392	78	83	98	115	49	68	32	29	22	18	19	27	21	20							
C		NEOPLASM																								
C 00-97	8.61	CANCER	1051	876	1927	3	4	8	8	9	3	9	13	10	13	13	15	31	33							
		TOTAL	1051	876	1927	3	4	8	8	9	3	9	13	10	13	13	15	31	33							
D		DESEASES OF THE BLOOD AND BLOOD FORMING ORGANS																								
D 50-64	7.10	ANAEMIA	666	753	1419	91	90	85	87	20	22	8	12	6	14	12	22	20	31							
		TOTAL	666	753	1419	91	90	85	87	20	22	8	12	6	14	12	22	20	31							
E		METABOLIC DISEASES																								
E 10-14	8.71	DEABETES	268	200	468	1	6	0	1	1	0	0	3	2	3	6	1	4	5							
		TOTAL	268	200	468	1	6	0	1	1	0	0	3	2	3	6	1	4	5							

CODE NO.	OLD CODE NO.	PROBABLE CAUSE OF DEATH	AGE-GROUP (IN YEARS)																	
			30-34		35-39		40-44		45-49		50-54		55-59		60+					
			M	F	M	F	M	F	M	F	M	F	M	F	M	F				
1		DEATH	20	21	22	23	24	25	26	27	28	29	30	31	32	33				
		2																		
A		INFECTIOUS AND PARASITIC DISEASES																		
A 00	4.12	CHOLERA	2	0	2	0	1	1	0	1	0	1	0	0	0	10	9			
A 01	3.31	TYPHOID & PARATYPHOID	12	13	14	15	15	7	18	5	16	7	11	6	65	62				
A 06	4.14	DYSENTERY	2	2	3	5	2	3	10	1	12	3	3	6	64	53				
A 09	4.11	DIARRHOEA & GASTROENTERITIS	4	6	5	4	3	5	3	4	4	1	10	1	44	46				
A 15	5.11	T B OF LUNGS	121	48	138	85	131	59	149	60	171	45	136	46	526	225				
A 30	8.23	LEPROSY	0	0	1	1	3	0	4	0	2	0	1	1	15	12				
A 33	9.32	TETANUS NEONATORUM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
A 35	8.31	OTHER TETANUS	4	0	3	1	2	0	3	0	2	1	5	0	12	8				
A 37	5.30	WHOOPING COUGH	2	0	1	2	0	1	0	2	3	0	3	2	7	9				
A 80	8.41	POLIOMYELITIS	0	0	0	0	0	0	1	0	1	1	1	0	6	1				
A 82	1.13	RABIES	4	0	1	0	0	1	2	3	1	0	1	1	12	5				
	(4.00)	DEATHS DUE TO OTHER DIGESTIVE DISORDERS	6	2	8	2	2	2	12	3	9	4	4	2	54	46				
		TOTAL	157	71	176	115	159	79	202	79	221	63	175	65	815	476				
B		VIRAL INFECTIONS																		
B 01	8.21	CHIKENPOX	0	0	0	0	0	0	0	0	1	0	0	0	1	1				
B 05	8.22	MEASLES	0	0	0	0	1	0	0	0	0	0	1	0	0	2				
B 50-54	3.11	MALARIA	4	6	13	11	3	0	10	4	9	6	12	6	72	58				
	(3.00)	OTHER DEATHS DUE TO VIRAL FEVERS	11	10	11	13	15	9	16	10	20	18	16	15	158	170				
		TOTAL	15	16	24	24	19	9	26	14	30	24	29	21	231	231				
C		NEOPLASM																		
C 00-97	8.61	CANCER	22	32	50	57	45	66	96	73	118	104	118	92	519	363				
		TOTAL	22	32	50	57	45	66	96	73	118	104	118	92	519	363				
D		DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS																		
D 50-64	7.10	ANAEMIA	9	25	23	25	11	19	33	25	36	18	23	31	289	332				
		TOTAL	9	25	23	25	11	19	33	25	36	18	23	31	289	332				
E		METABOLIC DISEASES																		
E 10-14	8.71	DEABETES	5	2	8	6	8	2	18	9	24	8	21	21	170	133				
		TOTAL	5	2	8	6	8	2	18	9	24	8	21	21	170	133				

CODE NO.	OLD CODE NO.	PROBABLE CAUSE OF DEATH	AGE-GROUP (IN YEARS)																	
			30-34		35-39		40-44		45-49		50-54		55-59		60+					
			M	F	M	F	M	F	M	F	M	F	M	F	M	F				
1		DEATH	20	21	22	23	24	25	26	27	28	29	30	31	32	33				
		2																		
F		MENTAL AND BEHAVIOURAL DISORDERS																		
F 01-99	8.51	MENTAL-DISEASES	5	1	10	9	11	5	7	5	8	4	8	3	3	19	31			
		TOTAL	5	1	10	9	11	5	7	5	8	4	8	3	3	19	31			
G		INFLAMMATORY DISEASE OF CENTRAL NERVOUS SYSTEM																		
G 00-01-6.20		MENINGITIS	7	0	6	3	5	2	6	3	4	0	2	2	24	6				
G 40	6.30	CONVULSIONS	6	3	8	1	6	0	7	3	4	3	3	5	7	9				
G 41	6.10	PARALYSIS OF CEREBRAL APOPLEXY	7	10	28	12	21	9	50	26	61	30	93	46	868	678				
	[6.00]	DEATHS DUE TO OTHER INFLAMMATORY DISEASES	0	6	1	6	9	3	5	4	12	3	1	3	45	18				
		TOTAL	20	19	43	22	41	14	68	36	81	36	99	56	944	711				
I		DISEASES OF CIRCULATORY SYSTEM																		
I 21-25	7.30	HEART ATTACK	47	28	121	57	120	55	213	85	236	75	295	102	1443	836				
		(ISCHAEMIC HEART DISEASE)																		
I 51	7.00	CONGESTIVE AND OTHER HEART DISEASES	37	19	59	29	23	16	51	23	40	28	45	24	388	344				
		TOTAL	84	47	180	86	143	71	264	108	276	103	340	126	1831	1180				
J		DISEASES OF THE RESPIRATORY SYSTEM																		
J 10 & J1	3.21	INFLUENZA	5	2	6	3	3	0	0	3	5	5	3	4	49	43				
J18	5.21	PNEUMONIA	2	3	4	3	6	1	4	3	11	3	7	9	39	46				
J 20 & J	5.12	BRONCHITIS & ASTHMA	20	11	50	25	46	33	82	51	147	73	194	100	2337	1698				
	[5.00]	OTHER DEATHS DUE TO RESPIRATORY SYSTEM	3	2	8	4	5	2	6	3	6	2	4	2	89	45				
		TOTAL	30	18	68	35	60	36	92	60	169	83	208	115	2514	1832				
K		DISEASES OF THE DIGESTIVE SYSTEM																		
K 27-28	4.21	PEPTIC OR GASTRIC ULCER	12	5	24	9	20	9	22	11	25	5	30	9	108	74				
K 40-TO	8.90	OBSTRUCTED HARNIA	2	0	1	1	2	0	1	2	5	0	3	1	14	5				
K 74	8.11	CIRRHOSIS & CHRONIC LIVER DISEASES	17	7	36	5	24	7	45	8	29	5	28	4	102	45				
		TOTAL	31	12	61	15	46	16	68	21	59	10	61	14	224	124				
N		DISEASES OF GENITOURINARY SYSTEM																		
N 17-19	8.82	URAEAMIA	5	1	14	7	10	2	18	10	13	5	20	12	126	80				
N 40	8.81	HYPERPLASIA OF PROSTATE	0	0	0	0	1	0	13	0	5	1	11	0	46	0				
		TOTAL	5	1	14	7	11	2	31	10	18	6	31	12	172	80				

CODE NO.	OLD CODE NO.	PROBABLE CAUSE OF DEATH	AGE-GROUP (IN YEARS)																							
			TOTAL		0-1		1-4		5-9		10-14		15-19		20-24		25-29									
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F								
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19							
O		PREGNANCY CHILD BIRTH AND PUERPERIUM																								
O 03-TO	21	ABORTION	0	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
O 10	231	PUERPERIUM	0	82	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
O 25	222	ANAEMIA OF PREGNANCY	0	52	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	
O 64	232	MALPOSITION OF CHILD (LEADING TO DEATH OF MOTHER)	0	39	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
O 85	233	PUERPERAL SEPSIS	0	34	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
O 90	[2 000]	UNCLASSIFIED	0	61	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
P		TOTAL	0	297	297	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	
P		CONDITIONS ORIGINATING IN THE PERINATAL PERIOD																								
P 07	91	PREMATURITY	999	872	1871	999	872	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P 10-TO	923	BIRTH INJURY	63	54	117	63	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P 22	931	RESPIRATORY INFECTION OF NEW BORN	362	324	686	362	324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P 75-78	933	DIARRHOEA OF NEW BORN	87	93	180	87	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	[9 000]	DEATHS OF INFANTS UNCLASSIFIED	474	533	1007	474	533	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Q		TOTAL	1985	1876	3861	1985	1876	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Q		CONGENITAL MALFORMATION																								
Q 00-99	922	DEFORMATIONS AND ABNORMALITIES	98	96	194	98	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R		CONGENITAL MALFORMATION	98	96	194	98	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R		SYMPTOMS, SIGNS AND ABNORMAL CLINICAL FINDING NOT ELSEWHERE MENTIONED																								
R 10	431	ACUTE ABDOMEN	407	323	730	19	13	30	23	36	20	13	20	11	21	21	31	12	13							
R 17	812	JAUNDICE	270	201	471	25	28	23	28	10	15	8	8	10	8	16	27	21	22							
R 54	10	SENILITY	3647	3561	7208			0	0	0	0	0	0	0	0	0	0	0	0							
R 68 8	221	TOXEMIA	0	35	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
		TOTAL	4324	4120	8444	79	54	53	51	46	35	21	28	21	34	37	65	33	49							

CODE	OLD NO.	PROBABLE CAUSE OF DEATH	AGE-GROUP (IN YEARS)																	
			30-34		35-39		40-44		45-49		50-54		55-59		60+					
			M	F	M	F	M	F	M	F	M	F	M	F	M	F				
1		2	20	21	22	23	24	25	26	27	28	29	30	31	32	33				
O		PREGNANCY CHILD BIRTH AND PUERPERIUM																		
O 03-TO	2.1	ABORTION	0	6	0	3	0	0	0	0	0	0	0	0	0	0	0	0		
O 10	2.31	PUERPERIUM	0	12	0	7	0	2	0	3	0	0	0	0	0	0	0	0		
O 25	2.22	ANAEMIA OF PREGNANCY	0	14	0	4	0	3	0	0	0	0	0	0	0	0	0	0		
O 64	2.32	MALPOSITION OF CHILD (LEADING TO DEATH OF MOTHER)	0	8	0	3	0	2	0	0	0	0	0	0	0	0	0	0		
O 85	2.33	PUERPERAL SEPSIS	0	5	0	4	0	0	0	0	0	0	0	0	0	0	0	0		
O 90	[2.00]	UNCLASSIFIED	0	8	0	4	0	0	0	0	0	0	0	0	0	0	0	0		
P		TOTAL	0	53	0	25	0	7	0	3	0	0	0	0	0	0	0	0		
P		CONDITIONS ORIGINATING IN THE PERINATAL PERIOD																		
P 07	9.1	PREMATURITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
P 10-TO	9.23	BIRTH INJURY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
P 22	9.31	RESPIRATORY INFECTION OF NEW BORN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
P 75-78	9.33	DIARRHOEA OF NEW BORN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	[9.00]	DEATHS OF INFANTS UNCLASSIFIED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Q		TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Q		CONGENITAL MALFORMATION																		
Q 00-99	9.22	DEFORMATIONS AND ABNORMALITIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
R		CONGENITAL MALFORMATION																		
R		TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
R		SYMPTOMS, SIGNS AND ABNORMAL CLINICAL FINDING NOT ELSEWHERE MENTIONED																		
R 10	4.31	ACUTE ABDOMEN	19	17	30	9	18	9	26	19	23	17	25	14	124	97				
R 17	8.12	JAUNDICE	9	10	20	6	13	5	16	5	13	11	13	2	73	26				
R 54	10	SENILITY	0	0	0	0	0	0	0	0	0	0	0	0	3647	3561				
R 68.8	2.21	TOXEMIA	0	6	0	0	0	3	0	0	0	0	0	0	0	0				
		TOTAL	28	33	50	15	31	17	42	24	36	28	38	16	3844	3684				

CODE NO.	OLD CODE NO.	PROBABLE CAUSE OF DEATH	AGE-GROUP (IN YEARS)																	
			TOTAL		0-1		1-4		5-9		10-14		15-19		20-24		25-29			
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
T		INJURIES POISONING AND OTHER CONSEQUENCES OF EXTERNAL CAUSES	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
T 20-32	1 24	BURNS	152	304	7	456	5	5	13	6	12	3	14	11	26	21	57	14	59	
T 62	4 13	FOOD POISONING	85	63	3	148	2	5	4	6	4	4	10	7	4	8	5	10	6	
V		TOTAL	237	367	10	604	7	10	17	12	16	7	24	18	30	29	62	24	65	
V 1-99	1 23	EXTERNAL CAUSE OF MORTALITY	776	240	2	1016	3	22	15	36	13	27	20	40	15	81	19	95	25	
W		VEHICULAR ACCIDENTS	776	240	2	1016	3	22	15	36	13	27	20	40	15	81	19	95	25	
W 00-19	1 22	TOTAL	165	99	8	264	4	12	7	12	8	12	7	13	5	7	5	12	2	
X		OTHER EXTERNAL CAUSES OF ACCIDENTAL INJURIES	165	99	8	264	4	12	7	12	8	12	7	13	5	7	5	12	2	
X 20	1 11	DEATH DUE TO FALL	176	115	2	291	0	4	6	17	9	20	12	16	9	10	10	15	9	
X 22	1 12	TOTAL	31	17	2	48	2	4	2	4	0	3	4	5	3	0	1	3	1	
X 30	1 51	WITH VENOMOUS ANIMAL CONTACT	15	6	2	21	0	2	1	0	0	2	0	1	0	0	0	1	0	
X 31	1 52	SNAKEBITE	21	11	2	32	2	6	1	0	0	0	0	0	0	2	0	0	0	
X 30-39	1 53	SCORPION BITE	38	18	3	56	4	0	2	1	0	1	0	2	0	4	1	4	0	
X 60-84	1 3	EXPOSURE TO EXCESSIVE HEAT	679	477	1	1156	1	0	0	4	1	12	17	52	80	118	95	88	67	
X 71	1 21	EXPOSURE TO EXCESSIVE COLD	289	157	7	446	1	34	18	23	29	31	18	33	17	13	11	29	6	
X 85-Y0	1 4	VICTIM OF OTHER NATURAL CALAMITY	160	61	3	221	4	1	3	6	1	8	5	15	4	22	11	21	9	
[1 00]		INTENTIONAL SELF HARM (SUICIDE)	229	109	5	338	4	11	5	12	8	10	5	9	13	22	14	21	8	
[8 00]		TOTAL	1638	971	27	2609	18	62	38	67	48	87	61	133	126	191	143	182	100	
		OTHER MEDICALLY CERTIFIED DEATHS	305	242	12	547	19	33	28	7	10	11	10	14	11	15	10	16	13	
		GRAND TOTAL	25080	19329	44409	3231	3031	915	1005	490	450	377	372	444	430	636	641	798	681	

CODE NO.	OLD CODE NO.	PROBABLE CAUSE OF DEATH	AGE-GROUP (IN YEARS)													
			30-34		35-39		40-44		45-49		50-54		55-59		60+	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F
T		2	20	21	22	23	24	25	26	27	28	29	30	31	32	33
		INJURIES POISONING AND OTHER CONSEQUENCES OF EXTERNAL CAUSES														
T 20-32	1.24	BURNS	18	32	7	28	13	8	9	13	15	6	5	5	18	26
T 62	4.13	FOOD POISONING	4	3	5	5	4	2	6	4	1	0	4	0	18	14
		TOTAL	22	35	12	33	17	10	15	17	16	6	9	5	36	40
V		EXTERNAL CAUSE OF MORTALITY														
V 1-99	1.23	VEHICULAR ACCIDENTS	83	14	84	18	57	15	63	17	33	9	31	4	122	53
		TOTAL	83	14	84	18	57	15	63	17	33	9	31	4	122	53
W		OTHER EXTERNAL CAUSES OF ACCIDENTAL INJURIES														
W 00-19	1.22	DEATH DUE TO FALL	12	6	9	5	4	1	3	5	9	2	9	0	43	42
		TOTAL	12	6	9	5	4	1	3	5	9	2	9	0	43	42
X		WITH VENOMOUS ANIMAL CONTACT														
X 20	1.11	SNAKEBITE	8	10	24	10	11	6	12	5	8	5	6	4	23	20
X 22	1.12	SCORPIAN BITE	0	0	2	1	0	1	1	0	0	0	1	1	6	1
X 30	1.51	EXPOSURE TO EXCESSIVE HEAT	1	0	1	0	0	1	1	0	1	1	0	0	3	3
X 31	1.52	EXPOSURE TO EXCESSIVE COLD	0	0	0	1	1	1	0	1	1	0	0	0	9	5
X 30-39	1.53	VICTIM OF OTHER NATURAL CALAMITY	2	1	1	2	1	0	3	1	3	0	2	1	11	6
X 60-84	1.3	INTENTIONAL SELF HARM (SUICIDE)	70	52	73	38	51	27	40	26	45	19	26	7	99	47
X 71	1.21	DRÖWNING	18	10	16	7	14	6	11	4	11	0	8	3	41	27
X 85-Y0	1.4	ASSAULT BY (HOMICIDE)	13	5	19	7	14	0	13	5	5	1	2	1	18	5
	[1.00]	OTHER ACCIDENTAL DEATHS	23	4	25	11	15	2	20	9	12	4	7	3	37	19
		TOTAL	135	82	161	77	107	44	101	51	86	30	52	20	247	133
	[8.00]	OTHER MEDICALLY CERTIFIED DEATHS	13	7	15	9	18	12	11	8	15	6	15	12	110	87
		GRAND TOTAL	676	474	988	583	788	425	1140	565	1235	540	1267	613	12130	9532

9. 1. 1954

**LIST OF CAUSES OF DEATH
AS PER INTERNATIONAL CLASSIFICATION OF
DISEASES (ICD)- 10TH REVISION
(SURVEY OF CAUSES OF DEATH (RURAL))**

ICD CODE Xth REV.	CODES USED IN SCD(R)	CAUSES OF DEATH AS PER Xth REVISION	SYMPTOMS OF CAUSES OF DEATH AS PER NON-MEDICAL LIST [SCD (R)]
1	2	3	4
A			
INFECTIOUS AND PARASITIC DISEASES			
A 00	4.12	CHOLERA	PROFUSE WATERY MOTIONS RESEMBLING RICE WATER FOLLOWED BY VOMITTING STOPPAGE OF URINE EXCESSIVE THIRST COLLAPSE--DEATH DUE TO DEHYDRATION
A 01	3.31	TYPHYOID & PARATYPHOID	FEVER LONG DURATION PROGRESSIVELY INCREASING DURING DAY SEVERE HEADACHE ,TONGUE HIGHLY COATED,ABDOMINAL PAIN,CONSTIPATION,TOXIC,DEATH OCURED IN 2nd OR 3rd WEEK DUE TO DELIRIUM,SEVERE ABDOMINAL PAIN,OR PASSING BLOOD IN STOOLS
A 06	4.14	DYSENTERY (IRRITABLE BOWEL SYNDROME)	FREQUENT MOTIONS WITH LOWER BELLY-ACHE CONTAINING MUCUS OR BLOOD CONSTANT DESIRE TO DEFECATE WITHOUT ACTUAL DEFECATING
A 09	4.11	DIARRHOEA AND GASTROENTERITIS OF PRESUMED INFECTIOUS ORIGIN	VOMITTING & DIARRHOEA OF SUDDEN ON SET DEHYDRATION WITH SHALLOW EYES VOMITING & DIARRHOEA NUMEROUS IN NUMBER DIARRHOEA MEANS ABNORMAL FREQUENT DISCHARGE OF FLUID FAECES FROM BOWL
A 15	5.11	T B OF LUNGS (RESPIRATORY TUBERCULCULOSIS HISTOLOGICALLY CONFIRMED)	HISTORY OF CRONIC COUGH LOSS OF WEIGHT RAPIDLY BLOOD IN COUGHED MATERIAL PURE BLOOD MIGHT HAVE COUGHED OUT CONTINUED EMACIATION WITH LOSS OF WEIGHT, FEVER &SWEATS
A30	8.23	LEPROSY	IT IS A CHRONIC DISEASE IN THE FORM OF PATCHES ON THE SKIN WITH BLEBS TO START WITH AND ENDS ATROPHY OF THE SKIN ANDLOSS OF HAIR ON THE SKIN GIVING IT A PECULIAR APPEARANCE. THERE MAY BE NODULES ON THE BODY DISFIGURING THE PERSON WITH SWOLLEN EARS ,DEFORMED PALMS AND AMPUTATED FINGERS
A 33	9.32	TETANUS NEONATORUM	CORD INFECTION-CHILD MAY HAVE AN ABSCESS OF UMBILICAL CORD,OR SEPSIS OF THE CORD,EVEN OF THEUMBILICUS ITSELF AT A LATER STAGE DEATH DUE TOTETANIC CONVULSIONS OF NEW BORN TO BE INCLUDED HERE
A 35	8.31	OTHER TETANUS	HISTORY OF INJURY OR ULCER THERE IS A LOCK JAW WHOLE BODY BECOMES RIGID AND ADOPTS PARTICULAR POSTURE LIKE RAINBOW PERSON IS NOT ABLE TO OPEN HIS MOUTH EXTREME EXHAUSTION, BUT MIND IS HOWEVER CLEAR.

A37	5.30	WHOOPING COUGH	COUGH WITH WHOOP AT THE END OF SEVERE BOUT OF COUGH VOMITING OF FOOD LEADING TO EMACIATION DURING SHORT ILLNESS FEVER IS NOT ESSENTIAL GENERALLY IN THE CASE OF CHILDREN
A80	8.41	POLIOMYELITIS	IT IS A SUDDEN IN ONSET THERE IS A SUDDEN FEVER AND PARALYSIS OF ANY PART OF THE BODY, USUALLY ONE OF THE LOWER LIMB MAY OCCUR CHILD MAY ESCAPE DEATH WITH RESIDUAL PARALYSIS OR THE PARALYSIS MAY INVOLVE MORE AND MORE OF OTHER PARTS IN ASCENDING TYPE AND FINALLY DEATH APPROACHES RAPIDLY DUE TO BREATHLESSNESS
A 82	1.13	RABIES	SLEEPLESSNESS AND FEAR FROM WATER EYES ARE BULGING OUT, PERSON IS IN TENSION AND ANXIETY PAINFUL SPASM OF THE THROAT ON ATTEMPTING TO DRINK LIQUIDS THERE ARE CONVULSIONS THICK TENACIOUS, MUCOUS FLOWS OUT OF THE MOUTH PARALYSIS OCCUR AND PATIENT DIES IN A FEW DAYS

B VIRAL INFECTIONS

B01	8.21	CHICKENPOX	HIGH FEVER FOLLOWED BY SKIN ERUPTION ON THE NEXT DAY THESE ERUPTION APPEARS FIRST ON THE TRUNK AND SOON SPREAD TO FACE, SCALP AND PROXIMAL PARTS OF LIMBS DEATH OCCURS DUE TO HAEMORRHAGIC VARIETY WHERE THERE IS BLEEDING INTO SKIN RASH AND SURROUNDING AREAS
B05	8.22	MEASLES	WATERY EYES; ERUPTION OCCURS AFTER AN ATTACK OF FEVER FOR FOUR DAYS; ERUPTION RED IN COLOUR AND UNIFORM ALL OVER THE BODY COLD COUGH AND RAPID BREATHING AND DIARRHOEA
B 50-54	3.11	MALARIA	THERE IS A FEVER DAILY, ON ALTERNATE DAYS OR EVERY FOURTH DAY FEVER RISE HIGH WITH CHILLS AND HEADACHE RETURNS NORMAL WITH SWEATING HIGH FEVER MAY BE ACCOMPANIED BY DELIRIUM LOSS OF APPETITE, VOMITTING AND PAIN IN LIMBS IN CHRONIC CASES, IT IS ASSOCIATED WITH ANAEMIA AND DEBILITY

C NEOPLASM

C 00-97	8.61	CANCER	SWELLING OF SMALL SIZE IN BREAST TONGUE, MOUTH, FACE, PENIS, SKIN IT TAKES A RAPID GROWTH
C 21		CANCER OF ANUS OR RECTUM	IN CASE ANUS OR RECTUM THE MOTION IS NOT BEING PASSED DUE TO PAIN. THERE IS BLEEDING AT THE PASSING OF MOTION ETC.
C 32		CANCER OF THROAT	IN CASE OF THROAT, THERE IS CHANGE OR LOSS OF VOICE AND DIFFICULTY IN SWALLOWING
C 34		CANCER OF LUNG	IN CASE OF LUNG CANCER THERE IS UNEXPLAINABLE COUGH
C 50 & 60		CANCER OF BREAST AND PENIS	IN CASE OF BREAST AND PENIS THE GROWTH GOES ON LIKE MUSHROOM

C52-55

CANCER OF CERVIX
OR UTERUSIN CASE OF MALIGNANCY OF THE CERVIX
OR UTERUS, THERE WILL BE LITTLE BLEEDING NOT
RELATED TO THE MENSES
OR IN A WOMEN WHO IS IN MENOPAUSE
THERE IS EXTREME EMACIATION AND LOSS OF WEIGHT

D DISEASES OF THE BLOOD AND
BLOOD FORMING ORGANS

D 50-64	7.10	ANAEMIA (OTHER THAN PREGNANT WOMEN)	COMPLAINED OF WEAKNESS, MARKED PALENESS OF SKIN, EYES AND TONGUE LETHARGY AND LOSS OF WEIGHT PRESENCE OF BREATHLESSNESS AT REST, AGGRAVATED ON WALKING DEATH IS USUALLY DUE TO INFECTIONS, SWELLING OF FEET OR BREATHLESSNESS
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E METABOLIC DISEASES

E 10-14	8.71	DIABETES	OCCURS TO MIDDLE AGED OR ELDERLY PERSONS WITH FATTY, INDISPOSITION, COMPLAINTS OF WEAKNESS AND DEBILITY, FREQUENT URINATION, THIRST, BAD EYE SIGHT, ITCHING OF THE SKIN, BOILS, ULCERS NOT HEALING PROPERLY SUSCEPTIBLE TO REPEATED RESPIRATORY INFECTIONS LIKE COUGH, BURNING AT URINATION THE PERSON DIES OF DIABETIC COMA. THE DOCTOR MIGHT HAVE TOLD HIM THAT HE HAD SUGGER IN THE URINE.
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F MENTAL AND BEHAVIOURAL DISORDERS

F 01-99	8.51	MENTAL DISEASES	CHRONIC IN NATURE PERSON GOING ABOUT IS MENTALLY ILL AND DOES NOT CARE FOR FOOD OR CLOTHES
F 06			MENTAL DISORDERS DUE TO BRAIN DAMAGE AND DYSFUNCTION AND TO PHYSICAL DISEASE
F 07			PERSONALITY AND BEHAVIOURAL DISORDERS DUE TO BRAIN DISEASE, DAMAGE AND DYSFUNCTION

G INFLAMMATORY DISEASE OF CENTRAL
NERVOUS SYSTEM

G 00-01-02-03	6.20	MENINGITIS	FEVER OF SHORT DURATION REGIDITY OF NECK, CONVULSIONS AND HEADACHE PATIENT IS IRRITATED AND DOES NOT LIKE LIGHT, SOUND ETC PATIENT BECOMES UNCONSCIOUS AND DIES
G 40		CONVULSIONS	CHILD HAD CONVULSIONS OVER AND OVER DUE TO SEVERAL UNDERLYING CAUSES MAY HAVE CONVULSIONS WITH HIGH FEVER, DIARRHOE AND INFECTION OF BRAIN ETC. CONVULSIONS MEAN VIOLENT INVOLUNTARY MUSCULAR CONTRACTION, FOLLOWED BY UNCONSCIOUSNESS LEADING TO DEATH

G 80-83	6.10	PARALYSIS OF CEREBRAL APOPLEXY	AN ELDERLY PERSON MOVING ABOUT FREELY SUDDENLY GETS SICK AND LOSS CONSCIOUSNESS AND BECOMES COMATOSE PARALYSIS OF THE HALF OF THE BODY, OR OF ALL LIMBS, OR FACE IS NOTICED LATER PERSON MAY REGAIN SENSE AND REMAIN PARALYTIC, OR MAY DIE WITHOUT COMING TO CONSCIOUS LEVEL DUE TO CEREBRAL APOPLEXY
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I DISEASES OF CIRCULATORY SYSTEM

I 21-25	7.30	HEART ATTACK (ISCHAEMIC HEART DISEASE)	PATIENT MIGHT HAVE COMPLAINED OF SEVERE AND ACUTE PAIN IN CHEST OR ARM
I 51	7.00	CONGESTIVE AND OTHER HEART DISEASES	CHRONIC BREATHLESSNESS AND COUGH WITH SWELLING OF FEET AND ABDOMEN AND PALPITATION OF HEART BREATHLESSNESS INCREASES IN WALKING AND RELIEF BY SITTING DEATH IS DUE TO ACUTE AND SEVERE BREATHLESSNESS IN CASE OF CONGESTIVE HEART DISEASE OTHER HEART DISORDERS (NOT DUE TO HEART ATTACK) IF DIAGNOSED DURING LAST ILLNESS MAY ALSO BE INCLUDED

J DISEASES OF THE RESPIRATORY SYSTEM

J 10 & J11	3.21	INFLUENZA	HIGH FEVER OF SHORT DURATION SEVERE PAIN IN BODY AND BACK COLD AND RUNNING OF NOSE WITH SEVERE COUGH TEMPERATURE MAY RISE VERY HIGH RESULTING IN DEATH MUSCULAR PAIN ALL OVER THE BODY SEVERE HEADACHE INSOMINIA, CONVULSIONS, DELIRIUM IT IS USUALLY IN EPIDEMIC FORM
J 18	5.21	PNEUMONIA	COUGH OF SHORT DURATION WITH HIGH FEVER OF SUDDEN ONSET PAIN IN CHEST, MAY BE RAPID BREATHING IF CHILD- THERE MAY BE CONVULSIONS AND VOMITING RESPIRATORY FAILURE CAUSING DEATH
J 20	5.12	BRONCHITIS	COUGH OF LONG DURATION ELDERLY PERSON SHORTNESS OF BREATH BOUNTS OF COUGH RESULTING IN FROTHY MUCOUS EXPECTORATION SOMETIMES WITH FEVER PATIENT USUALLY HAS NO SLEEP AND SLOW DETERIORATION OF HIS CONDITION
J 45	5.13	ASTHMA	COUGH OF LONG DURATION – ELDERLY PERSONS SHORTNESS OF BREATH BOUNTS OF COUGH RESULTING IN FROTHY MUCUS EXPECTORATION PATIENT HAS NO SLEEP AND SLOW DETERIORATION OF PATIENT'S CONDITION SUFFERING IS USUALLY SEASONAL DIFFICULTY IN BREATHING WITH "CATCALL" (WHEEZING) LIKE SOUND. COUGH IS OF PAROXYMAL IN NATURE WITH BREATHLESSNESS. HOUSEHOLD GIVES A HISTORY OF SEVERAL YEARS

K		DISEASES OF THE DIGESTIVE SYSTEM	
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K 27-28	4.21	PEPTIC OR GASTRIC ULCER	HISTORY OF CHRONIC PAIN IN UPPER ABDOMEN, PERIODIC IN NATURE ON EMPTY STOMACH OR AFTER TAKING FOOD, RELIEVED BY ALKALIES AND MILK, FOOD OR MEDICINES VOMITING OF DARK BLOOD OR PASSING OF BLOOD IN MOTIONS OR SEVERE ACUTE PAIN IN STOMACH MIGHT HAVE LEAD TO DEATH.
K 40-41-42-43-44-45-46-	8.90	OBSTRUCTED HERNIA	HISTORY OF REDUCIBLE SWELLING IN SCROTUM WHICH USED TO COME ON COUGHING OR STRAINING. OBSTRUCTION OF SWELLING FROM GOING BACK INTO ABDOMEN IS CALLED OBSTRUCTED HERNIA. PAINFUL TENDER AND BRING HIGH FEVER DEATH OCCURS DUE TO DEHYDRATION OR SEPSIS.
K 74	8.11	CIRRHOSIS & CHRONIC LIVER DISEASES	MIGHT HAVE FELT MARKED WEAKNESS, UNEASINESS AND FULLNESS OF ABDOMEN MARKED SWOLLEN, BLOATED ABDOMEN WITH SWELLING OF FEET AND THEN FACE AND HANDS HISTORY OF JAUNDICE OR PROLONGED ALCOHOLIC ADDICTION IS KNOWN AT THE TIME OF DEATH, THERE MIGHT BE JAUNDICE, UNCONCIOUSNESS OR BLEEDING FROM ANY SOURCE SPECIALLY VOMITTING OF BLOOD

N		DISEASES OF GENITOURINARY SYSTEM	
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N 17-19	8.82	URAEMIA	THERE IS PROGRESSIVE RENAL IMPAIRMENT FOLLOWED BY RENAL FAILURE, IN CASE OF CHRONIC URAEMIA INITIALLY HE PASSES LARGE QUANTITY OF URINE AND LATER THERE IS RAISE OF BLOOD PRESSURE TERMINALLY THERE IS MARKED DIMINUTION IN AMOUNT OF URINE PRODUCED BEFORE COMPLETE RENAL FAILURE
N 40	8.81	HYPERPLASIA OF PROSTATE	ELDERLY MAN OF ABOVE 40 YEARS DIFFICULT IN PASSING URINE WITH FREQUENT URGING THERE IS NO PASSAGE OF URINE LOWER ABDOMEN ACTS PAINFULLY TENSE PATIENT BECOMES DULL AND DROWSY WITH HICUPS AND VOMITINGS AND FACE IS SWOLLEN. THERE IS DELIRIUM OR COMA AND PATIENT DIES WITH OUT RECOVERING CONSCIOUSNESS.

O		PREGNANCY CHILDBIRTH AND PUERPERIUM	
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O 03-04-05-06	2.10	ABORTION	SEVERE PAIN IN LOWER ABDOMEN FOLLOWED BY BLEEDING PER VAGINA. EXPULSION OF THE PRODUCTS OF CONCEPTION. SOME TIMES VERY PROFUSE BLEEDING, CONTINUOUS AND FOUL SMELLING, PATIENT DIES DUE TO BLEEDING AND SHOCK.
O 10	2.31	PUERPERIUM	BLEEDING BEFORE THE ONSET OF DELIVERY BLEEDING IS RECURRENT, PAINLESS AND SUDDEN IN ONSET EXCESSIVE BLEEDING AT THE TIME OF DELIVERY THERE MAY BE EXCESSIVE BLEEDING AT THE TIME OF DELIVERY IT IS IMPORTANT TO NOTE THAT BLEEDING OCCURRED AFTER 7 MONTHS OF PREGNANCY OR DURING DELIVERY OR JUST AFTER DELIVERY BLEEDING IN SUDDEN, VERY PROFUSE, LEADING TO COLLAPSE, SHOCK AND DEATH

O 25	2.22	ANAEMIA OF PREGNANCY	'PREGNANT WOMEN WAS EXTREMELY PALE BLOODLESS BREATHLESSNESS & SWELLING IN FEET ASSOCIATED WITH MALNUTRITION, REPEATED .FEVERS .CHRONIC DIARRHOEA OR DYSENTRY
O 64	2.32	MALPOSITION OF CHILD (LEADING TO DEATH OF MOTHER)	CONDITION FOETUS INSIDE THE WOMB THAT MAY RESULT IN INJURY TO THE BABY OR THE MOTHER PROLONGED AND DIFFICULT LABOUR WHICH LEADS TO EXHAUSTION AND DEATH NON-AVAILABILITY OF OPERATIONAL FACILITIES AT HOME THE DELIVERY IN NATURAL METHODS MOTHER GETS EXHAUSTED DUE TO REPEATED INEFFECTIVE PAINS PULSE OF THE MOTHER RAPIDLY FALLS DUE TO HEAVY BLEEDING AND MOTHER DIES BEFORE THE EXPULSIONS
O 85	2.33	PUERPERAL SEPSIS	WITH IN TEN DAYS OF DELIVERY, HIGH FEVER, WITH FOUL SMELLING OF VAGINAL DISCHARGE MOTHER HAD SEVERE HEADACHE, SHIVERING, AND SWEATING LOWER ABDOMEN WAS TENSE AND VERY PAINFUL THERE MAY BE TRAUMA TO THE PRIVATE PARTS, EITHER EXTERNAL OR INTERNAL
O 90	2.00	UNCLASSIFIED	MATERNAL DEATHS WITH SPECIFIC SYMPTOMS

P **CONDITIONS ORIGINATING IN THE PERINATAL PERIOD**

P 07	9.10	PREMATURITY	ALWAYS REFER TO THE NEW BORN BABY BABY IS VERY SMALL IN SIZE AND MARKEBLY UNDER WEIGHT EITHER IT SI BORN EARLY, OR ONE OF THE PLURAL BIRTHS CHILD HAS FEEDING AND SUCKING DIFFICULTY SKIN IS VERY SOFT, AND NAILS ARE NOT FULLY DEVELOPPED HAIR ON HEAD ARE ALSO NOT DEVELOPED CRY OF THE BABY IS VERY FEEBLE AND WEEK
P 10-11-12-13-14-15	9.23	BIRTH INJURY	THERE IS A HISTORY OF PROLONGED LABOUR, WITH OR WITHOUT USE OF INSTRUMENTS. CHILD AFTER BIRTH IS USUALLY BLUE IN COLOUR. CRIES INA LOW VOICE HAD CONVULSIONS OR FACIAL PARALYSIS INJURIES ON THE FACE, UPPER EXTREMITIES, COLLAR BONE, ETC.
P 22	9.31	RESPIRATORY INFECTION OF NEW BORN	INFECTION OF THE RESPIRATORY TRACT ARE MOST COMMON
P 75-78	9.33	DIARRHOEA OF NEW BORN (DIGESTIVE SYSTEM DISORDERS OF NEW BORN)	INFANT SUDENTLY PASSES COUNTLESS NUMBER OF MOTIONS AND VOMITTINGS THE SKIN BECOMES DRY, THE TONGUE IS DRY AND PARCHED FONTANELLE ARE DEPRESSED THE EYES ARE SUNKEN URINE IS YELLOW AND SCANTY HIGH TEMPERATURE, AND THE CHILD SOON GOES INTO COMA AND PASSED MOTION IN THE UNCONSCIOUS STATE AND DIES

Q **CONGENITAL MALFORMATION, DEFORMATIONS AND ABNORMALITIES**

Q 00-99	9.22	CONGENITAL MALFORMATION	CHILD HAS AN ABNORMAL HEAD , TOO BIG OR TOO SMALL SOME TIMES THE URINARY SYSTEM HAS SOME MALFORMATION SOME TIMES THE ANUS IS NOT PERFORATED TO PASS MOTION IN MAJOR ABNORMALITIES LIFE IS NOT COMPATIBLE
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R **SYMPTOMS, SIGNS AND ABNORMAL CLINICAL FINDINGS NOT ELSEWHERE MENTION**

R 10	4.31	ACUTE ABDOMEN	ASSOCIATED WITH HIGH TEMPERATURE AND VOMITING BUT NO MOTION DUE TO INFLAMATION OF INTESTINES, OR APPENDIX IN CHILDREN DUE TO VOLVULOUS (i.e TWISTING OF THE BOWL) OR MULTIPLE ROUND WORMS etc. THE PATIENT IS SEEN ACTUALLY RINGLING IN BED AFTER SEVERE PAIN , THERE IS SUDDEN CALMNESS. PATIENT GOES INTO COMA AND DIES.
R 17	8.12	JAUNDICE	EYES ARE YELLOW IN COLOUR , AND THE SKIN IS YELLOW FEVER, HEADACHE, NAUSEA, VOMITTING, AND LOSS OF APPETITE URINE IS OF YELLOW IN COLOUR.
R 54	10.00	SENILITY	DECEASED PERSON SHOULD BE ABOVE 60 YEARS AND NONE OF THE SPECIFIC CAUSES NOTED ABOVE CAN TRACED
R 68.8	2.21	TOXEMIA	SWELLING OF THE FEET BREATHLESSNESS AND FINALLY CONVULSIONS THERE MAY BE VOMITTING DEATH OCCURS DUE TO SEVRE CONVULSIONS OR BREATHLESSNESS

T **INJURIES POISONING, AND OTHER CONSEQUENCES OF EXTERNAL CAUSES**

T 20-32	1.24	BURNS	
T 36-50		POISONING BY DRUGS MEDICAL SUBSTANCES & BIOLOGICAL SUBSTANCES	
T 51-65		TOXIC EFFECT OF ALCOHOL	
T 62	4.13	FOOD POISONING	GROUP OF PERSONS HAVING SIMILAR ATTACK OF VOMITTING AND DIARRHOEA ONSET IS SUDDEN IN NATURE VOMIT MAY CONTAIN BLOOD OR FOUL SMELLING MATTER ACUTE PAIN IN THE STOMACH HIGH TEMPERATURE AND UNCONSCIOUSNESS

T 80-88 **COMPLICATIONS
OF SURGICAL &
MEDICAL CARE
NOT ELSEWHERE
CLASSIFIED**

V EXTERNAL CAUSES OF MORTALITY

V 01-99 1.23 **VEHICULAR
ACCIDENTS**

V 01-09 PEDESTRIAN INJURED IN
TRANSPORT ACCIDENT

V 10-19 CYCLIST INJURED IN
TRANSPORT ACCIDENT

V 20-29 MOTORCYCLE RIDER
INJURED IN TRANSPORT
ACCIDENT

V30-39 OCCUPANT OF THREE-
WHEELED MOTOR
VEHICLE INJURED IN
TRANSPORT ACCIDENT

V 40-49 CAR OCCUPANT INJURED
IN TRANSPORT
ACCIDENT

V50-79 OCCUPANT OF HEAVY
TRANSPORT VEHICLE
INJURED IN TRANSPORT
ACCIDENT

V 80-89 OTHER LAND
TRANSPORT ACCIDENT

**W OTHER EXTERNAL CAUSES OF ACCIDENTAL
INJURIES**

W 00-19 1.22 **DEATH DUE TO
FALL**

W 65-74 1.21 **DROWNING**

W 85-87 **DEATH DUE TO
ELECTRIC
CURRENT**

X WITH VENOMOUS ANIMAL CONTACT

X 20 1.11 **SNAKEBITE** EVIDENCE OF PUNCTURED WOUNDS USUALLY TWO IN
NUMBERS SET ONE INCH APART
BITTEN PART IS SWOLLEN AND PAINFULL
PATIENT IS DULL AND UNABLE TO STAND UP
SALIVA FLOWING OUT OF MOUTH
VOICE IS LOST ,DIFFICULTY IN BREATHING AND FINALLY
THE RESPIRATION STOPS

X 22	1.12	SCORPIAN BITE	SWELLING OF LOCAL AREA VERY SEVERE PAIN PATIENT BECOMES COLD ,GETS EXHAUSTED AND DIES
X 30	1.51	EXPOSURE TO EXCESSIVE HEAT	
X31	1.52	EXPOSER TO EXCESSIVE COLD	
X30-39	1.53	VICTIM OF OTHER NATURAL CALAMITY	SUCH AS LIGHTNING,EARTHQUAKE,FLOOD,LANDSLIDE. STORM OR UNSPECIFIED FORCES OF NATURE
X 40-49		ACCIDENTAL POISONING BY AND EXPOSER TO NOXIOUS SUBSTANCE	
X 60-84	1.30	INTENTIONAL SELF HARM	SUICIDE
X60-64 X 65-69		SELF POISONING - DO -	ANALGESIC,SEDATIVES,NARCOTICS,DRUGS ALCOHOL ,ORGANIC SOLVENTS,PESTICIDES
X70		HANGING , STRANGULATION	
X 71		DROWNING	
X72-74		FIRE ARMS	HANDGUN ,RIFLE.OTHER FIRE ARMS
X85-Y09	1.40	ASSAULT	HOMICIDE

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