

ANNUAL REPORT
OF THE
PUBLIC HEALTH COMMISSIONER
WITH THE GOVERNMENT OF INDIA
FOR 1939.



With Appendices

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To

THE PUBLIC HEALTH COMMISSIONER
WITH THE GOVERNMENT OF INDIA,
NEW DELHI.
(INDIA).



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OF THE
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TABLE OF CONTENTS.

SECTION I.

(ON THE STATE OF PUBLIC HEALTH IN BRITISH INDIA AND SOME INDIAN STATES DURING 1939.)

PARA.	PAGE
1. Introduction	1
2. Population	2
3. Live-births and deaths	3
4. Infantile mortality	6
5. Mortality among children	7
6. Still-births	8
7. Rainfall	8
8. Agricultural conditions	9
9. Famine relief	10
10. Indian States	11

SECTION II

MATERNITY AND CHILD WELFARE.

11. Introduction	12
12. Maternal mortality	12
13. Provision for maternity and child welfare work	17

SECTION III

VACCINATION AGAINST SMALLPOX.

14. Vaccination and revaccination statistics	20
15. Vaccine institutes and supply of vaccine	25
16. Indian States	25

SECTION IV

PUBLIC HEALTH WORKS.

17. General	27
18. North-West Frontier Province	27
19. Punjab	27
20. United Provinces	28
21. Bihar	28
22. Orissa	29
23. Bengal	29
24. Central Provinces	29
25. Bombay	30
26. Sind	30
27. Madras	30
28. Assam	32

SECTION V

HEALTH OF JAILS IN INDIA.

PARA.	PAGE
29. General	33
30. Jails of all classes	33
31. District and central jails	37
32. Reforms	38
33. Andamans	38
34. Conclusions	40

Appendices I to VIII (see details on page 41 *et seq.*)

LIST OF ILLUSTRATIONS

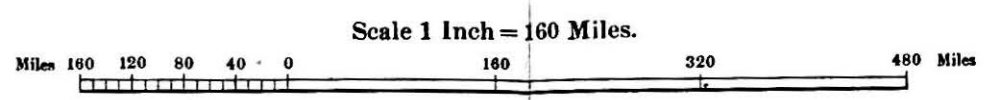
	FACING PAGE
Key map of India	1
Comparative diagrams of deaths by causes in British India during 1939 and the decennial mean 1929-38	1

KEY MAP OF INDIA (SHOWING PROVINCES AND DISTRICTS).

REFERENCE.
 Boundaries - International demarcated, undemarcated
 Do, Province or State Do, Do
 Do, District and minor State

- REFERENCES
- ORISSA (O.)
 - 1 ANBUL
 - PUNJAB STATES (P. S.)
 - 1 RAJPUTHANA
 - 2 NASHA
 - 3 MALER KOTLA
 - 4 LOHANA
 - 5 BILASPUR
 - 6 PATIALA
 - 7 JIND
 - PUNJAB (P.)
 - 1 DUAJANA
 - 2 PATAUDI
 - 3 FERROZPORE
 - 4 HISAR
 - 5 LUDHIANA
 - 6 KALSA
 - BARODA (Bb.)
 - 1 AMRELI
 - 2 NAVSARI
 - RAJPUTANA (R.)
 - 1 KISHANGARH
 - 2 PARTHAGARH
 - 3 TOKI
 - 4 DANTA
 - DECCAN STATES (D. S.)
 - 1 ANALKOT
 - 2 ANKOLI
 - 3 JATH
 - 4 DOLAJPUR
 - 5 JAMSHANDI
 - 6 MUDHOL
 - 7 KURANAVAD
 - 8 BAVANUR
 - 9 KANDURG
 - 10 SAVANTVADI
 - 11 MIRAJ (Sole & Junior)
 - 12 JINDH
 - 13 PHALTAN
 - 14 JANAJA
 - 15 BHOR
 - COORG (C.)
 - 1 NORTH COORG
 - 2 SOUTH COORG
 - BOMBAY (Bo)
 - 1 MEHWAS
 - 2 BRADACH & PANCH MAHALS
 - 3 DAMAN (Portuguese)
 - 4 BOMBAY SUBURBAN
 - 5 AHMADNAGAR
 - 6 SHOLAPUR
 - 7 AHMADABAD
 - 8 SURAT
 - 9 GWALIOR (G.)
 - 1 GIRD GWALIOR
 - UNITED PROVINCES (U. P.)
 - 1 BENARES STATE
 - CENTRAL INDIA (C. I.)
 - 1 SITAMAU
 - 2 INDORE
 - 3 BHOPAL AGENCY
 - 4 ALI-RAJPUR
 - 5 BANTHAR
 - 6 PANNA
 - 7 BARAUNDA
 - 8 JASO
 - 9 CHAMBHARI
 - GUJARAT STATES (G. S.)
 - 1 SURGANA
 - 2 JAMNAR
 - 3 CAMBAT
 - MADRAS (M.)
 - 1 KUTHA
 - MADRAS STATES (M. S.)
 - 1 BAHODR
 - 2 BANGARAPALLE
 - 3 PUDUKOTTAI
 - 4 OODCHI
 - BALUCHISTAN (B.)
 - 1 BOLAN PASS

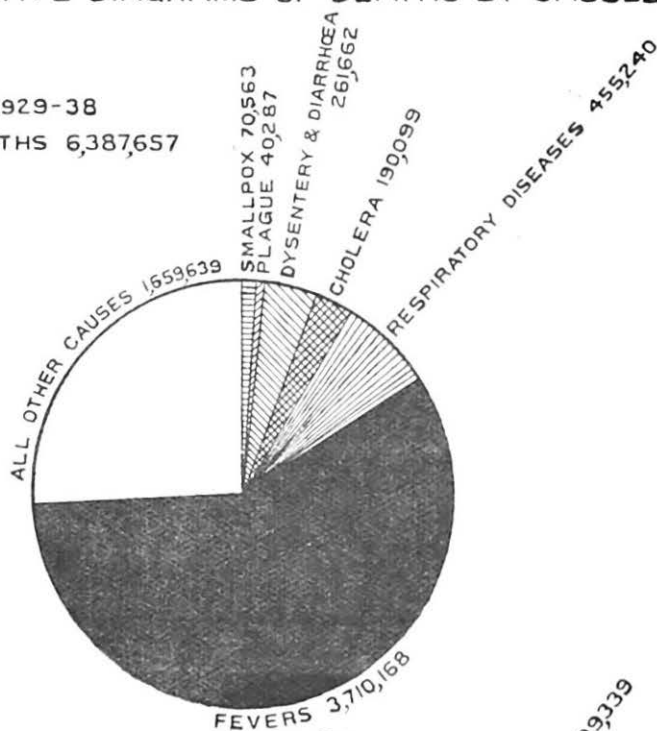
- REFERENCES
- EASTERN STATES (E. S.)
 - 1 SARAIKELA
 - 2 KAWARDHA
 - 3 BASTI
 - 4 SARANGARH
 - 5 KHARAGARH
 - 6 NANOAGARH
 - 7 CHHURIMADAN
 - 8 KHARISWAN
 - 9 NILGIRI
 - 10 ATHGARH
 - 11 TIGIRA
 - 12 BARAMBIA
 - 13 HINDOL
 - 14 NARSINGPUR
 - 15 KHANPARA
 - 16 NATAGARH
 - 17 RANPUR
 - 18 ATHMALLIK
 - 19 TALCHER
 - 20 PAL LAMARA
 - 21 RAIRAKHOL
 - STATES OF WESTERN INDIA (S. W. I.)
 - 1 WESTERN KATHIWAR AGENCY
 - 2 EASTERN KATHIWAR AGENCY
 - 3 SASAR KANTHA AGENCY
 - 4 RADHANPUR
 - 5 DHANBADRA
 - 6 WADHWAN
 - 7 PALTANA
 - 8 LIMBDI
 - 9 BHAINAGAR
 - 10 VIJAYNAGAR
 - BENGAL (B.)
 - 1 HOWRAH



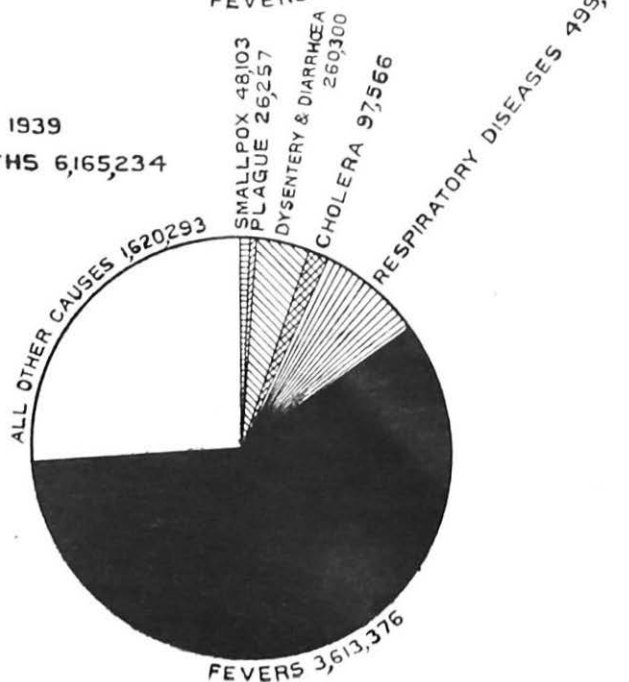
BRITISH INDIA

COMPARATIVE DIAGRAMS OF DEATHS BY CAUSES

MEAN 1929-38
TOTAL DEATHS 6,387,657



YEAR 1939
TOTAL DEATHS 6,165,234



Annual Report of the Public Health Commissioner with the Government of India for 1939

SECTION I.

ON THE STATE OF PUBLIC HEALTH IN BRITISH INDIA AND SOME INDIAN STATES DURING 1939.

Introduction.

1. In June 1940 a Preliminary Annual Report of the Public Health Commissioner for 1939 was published in order to meet the general desire on the part of the authorities and of the public for a review of the health conditions in India as early as possible after the close of the year. The survey of public health activities in that report was confined to an account of the general trend of events without any detailed discussion supported by relevant statistics, since the necessary figures were not available soon after the close of the year. Further, certain subjects such as maternity and child welfare, vaccination against smallpox, public health works, and jail health administration were not included in the preliminary report. Brief accounts of the activities under these heads have therefore been incorporated in this report, which is intended to supplement the information already given in the Preliminary Annual Report. The two reports should therefore be read in conjunction.

The main vital statistics for British India for 1939 are summarised below. The figures for 1938 and the corresponding averages for the previous quinquennium (1934-38) are also given for comparison.

	1939.	1938.	Average of 1934-38.
Mid-year estimated population	278,308,876	275,540,813	269,156,840
Density per square mile	385	361	351
Births { Number	9,346,145	9,398,011	9,315,007
{ Rate per mille	33·6	34·1	34·6
Deaths { Number	6,165,234	6,685,120	6,369,425
{ Rate per mille	22·2	24·3	23·7
Infantile death rate per 1,000 live- births	155·6	167·1	167·4
Vital index	151·6	140·6	146·2

The figures of the above table and a comparison of the two diagrams facing this page, which classify deaths under certain groups of causes, give some indication of the health of the population during the year under review. The table shows that both the general and infantile death rates were smaller in 1939 than those for 1938 and the corresponding average rates for the previous quinquennium. The diagrams show that, in regard to the mortality from the three widely prevalent epidemic diseases smallpox, plague and cholera, the figures for 1939 were only 68, 65 and 51 per cent respectively of the average numbers of deaths from these diseases during the previous ten years.

Malaria continues to be the most important public health problem in India. Although absence of medical certification makes it impossible to secure correct figures regarding the incidence of the disease, all the available evidence seems to suggest that malaria is responsible for more deaths than any other infectious disease prevalent in the country.

Population.

2. The birth rate during 1939 was slightly smaller than that for 1938 but there was a reduction in the death rate also, the net increase in population being in the neighbourhood of 2,800,000. The two tables given below provide interesting information regarding the growth of population in British India. The first table covers a period of nearly seventy years, 1871-1939, and from an examination of the decennial averages for excess of births over deaths and of the corresponding annual figures since 1931, it will be seen that the tendency has been for the rate of growth to rise steadily. The fluctuations in the birth rate since the beginning of the present century appear to have been negligible but recent years have witnessed a decline in the death rate which has been responsible for this growth of population. It is not perhaps unreasonable to assume that the expansion of health services in many parts of the country during the past two decades has contributed its share to this reduction in mortality.

The second table provides an interprovincial comparison of the rates of growth during a period of nearly eight years and four months since the 1931 census. Wide differences exist between the different provincial rates of growth. Coorg recorded the minimum rate of 0.53 per cent and the Punjab the highest, 15.68 per cent. Owing to the creation in 1936 of the province of Orissa from territories belonging to the provinces of Madras, the Central Provinces and Bihar and Orissa and the separation of Sind from Bombay Presidency, it has not been possible to give separate rates of growth for these different provinces.

TABLE I (i).

	Annual number of births.	Birth rate <i>per mille.</i>	Annual number of deaths.	Death rate <i>per mille.</i>	Annual excess of births over deaths.
1871—1880	Not available	Not available	3,540,202	19	Not available
1881—1890	4,565,687	23	5,058,578	26	492,891
1891—1900	7,174,694	33	6,662,417	31	512,277
1901—1910	8,591,136	37	7,657,513	33	933,623
1911—1920	8,810,018	37	8,142,364	34	667,654
1921—1930	8,345,364	33	6,347,063	25	1,995,301
1931	8,814,836	35	6,404,990	25	2,409,846
1932	8,718,620	34	5,596,246	22	3,122,374
1933	9,317,918	36	5,870,336	23	3,447,582
1934	8,923,169	34	6,606,697	25	2,316,472
1935	9,299,021	35	6,331,576	24	2,967,445
1936	9,566,379	36	6,111,358	23	3,455,021
1937	9,388,457	35	6,112,375	22	3,276,082
1938	9,398,011	34	6,685,120	24	2,712,891
1939	9,246,145	34	6,165,234	22	3,180,911

TABLE I (ii).

	Estimated population on 30th June 1938.	Estimated population on 30th June 1939.	Percentage increase or decrease.	Total percentage increase from 1st March 1931 (last census) to the end of June 1939.
British India	275,540,813	278,308,876	+1·00	9·74
N.-W. F. P.	2,539,059	2,562,618	+0·93	8·64
Punjab	26,597,656	27,138,533	+2·03	15·68
Delhi	715,419	731,870	+2·30	15·03
U. P.	52,994,705	53,618,255	+1·18	10·76
Bengal	52,583,541	52,798,320	+0·41	5·81
Bombay	19,620,735	19,832,832	+1·08	10·65
Sind	4,265,564	4,299,306	+0·79	
Bihar	35,084,665	35,448,534	+1·04	9·76
Orissa	7,251,906	7,290,415	+0·53	
C. P.	16,748,481	16,758,046	+0·06	
Madras	47,872,410	48,496,423	+1·30	
Coorg	164,109	164,187	+0·05	0·53
Assam	8,506,974	8,566,451	+0·70	8·07
Ajmer-Merwara	595,589	603,086	+1·26	7·64

Live-births and Deaths.

3. Provincial birth and death rates are given in tables I (iii) and I (iv) below. The total number of live-births registered in British India during 1939 was 9,346,145, a decrease of a little over 50,000 in comparison with that of the previous year. The figures of the last column of table I (iii) bear close resemblance to similar figures given in the previous reports and they tend to confirm the impression that, in certain provinces, female births escape registration to a greater extent than in others.

Another striking feature of these two tables is the difference between individual provinces in respect of the recorded birth and death rates. Sind shows the lowest rate among the provinces for births and deaths and it is almost certain that defective registration is responsible for such low figures. In the provinces of the Punjab, Delhi, Orissa, the Central Provinces, Bombay, Madras and Ajmer-Merwara the recorded birth rate is higher than that for British India while the figure for the United Provinces is practically the same as the rate for the country as a whole. In the remaining provinces it is desirable that the health authorities should investigate whether an appreciable number of births is being omitted from registration. Such an investigation is more particularly required in Coorg, the N.-W. F. Province and Assam.

Urban and rural birth rates for British India and the provinces are given in table C of appendix I. For British India the urban rate during 1939 was 36·8 *per mille* and the rural 33·2 *per mille*. In the provinces the urban rate varied from 18·6 *per mille* in Bihar to 60·9 *per mille* in Coorg. Sind recorded the lowest rural rate, namely, 15·0 *per mille* and Delhi the highest, 45·5 *per mille*.

As regards the death rate the differences between the provincial figures are not so large as in the case of the birth rate. However, Assam and the N.-W. F. Province have recorded relatively low rates and it is desirable that suitable action should be taken by the authorities.

TABLE I (iii).

	Births.			Rate per mille		No. of males- born per 100- females in 1939.
	Male.	Female.	Total.	1939	1938	
British India	4,865,309	4,480,836	9,346,145	33·6	34·1	109
N.-W. F. P.	40,746	30,961	71,707	28	28	132
Punjab	588,531	523,073	1,111,604	41	44	113
Delhi	16,422	15,463	31,885	44	48	106
U. P.	934,192	821,220	1,755,421	33	34	114
Bihar	564,244	523,539	1,077,783	30	32	106
Orissa	127,106	119,902	247,008	34	33	106
Bengal	829,317	768,334	1,597,651	30	29	108
C. P.	326,065	308,843	634,908	33	40	106
Bombay	399,681	375,864	775,545	39	39	106
Sind	45,091	35,855	80,946	19	18	126
Madras	805,144	829,607	1,634,751	35	36	104
Coorg	1,994	1,788	3,782	23	23	112
Assam	125,573	116,855	242,428	28	28	107
Ajmer-Merwara	11,203	9,523	20,726	34	35	118

TABLE I (iv).

	Deaths.			Death rate per mille.		
	Male.	Female.	Total.	Male.	Female.	Total.
British India	3,232,250	2,932,984	6,165,234	23·5	21·7	22·2
N.-W. F. P.	24,244	20,032	44,276	17·4	17·1	17·3
Punjab	323,204	279,988	603,192	22·0	22·5	22·2
Delhi	8,470	8,430	16,900	20·2	27·0	23·1
U. P.	604,402	513,607	1,118,009	21·5	20·2	20·9
Bihar	395,388	349,377	744,765	22·3	19·7	21·0
Orissa	99,611	99,701	199,312	23·6	26·2	27·3
Bengal	569,534	520,996	1,090,530	20·7	20·6	20·7
C. P.	270,609	244,691	515,300	32·4	29·1	30·7
Bombay	253,113	241,774	494,887	24·6	25·3	25·0
Sind	25,394	19,385	44,779	10·5	10·3	10·4
Madras	563,478	547,803	1,111,281	23·4	22·4	22·9
Coorg	2,014	1,736	3,750	22·2	23·6	23·8
Assam	85,429	78,690	164,119	18·9	19·4	19·2
Ajmer-Merwara	7,360	6,774	14,134	23·0	24·0	23·4

Death rates for rural and urban areas in the provinces during 1939 are given in tables G and H in appendix I. The rural rate was 21·8 *per mille* and that for urban areas was 25·3 *per mille*. The provincial rural rates varied

from 8·8 in Sind to 30·7 in the Central Provinces, and those of urban areas from 12·4 in Bihar to 57·7 in Coorg.

Special mention was made, in last year's report, of the high rates of mortality recorded in the Central Provinces during the past few years and the rate for 1939 (30·7) is again the highest among the provinces. The desirability of urgent attention to this question by the health authorities of the Central Provinces is again emphasised.

A comparison of the death rates of males and females during the age period 15—40 years throws light on the part that the factors associated with child-bearing play on the health of the women. In the more advanced countries of the West, where more adequate provision exists for the safeguarding of the health of mothers, the female death rate at this age period does not exceed that of the male. On the other hand the figures of table I(v) show that the recorded mortality rate at this age period among women has been higher than that of males in every province in India, except Bihar.

TABLE I(v).

	Deaths, 15—40 years.		Death rates, 15—40 years.	
	Males	Females	Males	Females
British India	550,749	609,625	9·4	10·9
N.-W. F. P.	5,159	5,072	9·3	10·4
Punjab	40,670	43,992	7·0	9·1
Delhi	1,255	1,752	6·1	12·7
U. P.	95,738	98,783	8·2	9·4
Bihar	85,404	77,359	12·2	10·7
Orissa	19,592	23,332	13·4	14·0
Bengal	123,910	144,656	10·8	13·2
C. P.	41,560	43,578	12·3	12·7
Bombay	35,973	43,784	8·3	11·0
Sind	5,579	5,330	5·2	6·5
Madras	76,990	98,134	8·0	9·6
Coorg	686	682	15·2	20·4
Assam	17,304	21,846	9·4	12·8
Ajmer-Merwara	929	1,325	6·9	11·4

Infantile Mortality.

4. Tables I (vi), (vii) and (viii) give figures relating to infant mortality. These figures bear close resemblance to similar data presented in the reports for previous years and, while no new information has therefore been presented, these figures tend to emphasise the importance of certain facts in relation to infant life. Of the total infantile deaths 47·3 per cent took place during the first month of life and, of these neonatal deaths, 61·2 per cent occurred during the first week after birth. The causes associated with death during these two periods relate largely to the uterine life of the infant and preventive work must therefore be on the lines of providing adequate prenatal care to the pregnant woman. In the succeeding months environmental causes begin to play an increasingly important part in affecting the health of the child and hygiene of the home and the various factors that may be summarised in the term "Mothercraft" together determine largely the chance of survival for the infant. The measures that are being adopted for the welfare of mothers and children are briefly discussed in the section on maternity and child welfare (page 17).

Table I (viii) gives death rates for male and female infants and it will be seen that the male rate is almost invariably higher than that of the female baby. In table I (iii) it was shown that nature provides for more males to be born than female infants and this reduced rate of mortality for the latter appears to be a compensatory mechanism for making the proportions of the two sexes in the community approximate to each other.

TABLE I(vi).

	Under one month.		One to six months.		Six to twelve months.		Total deaths under one year.	Death rates per 1,000 live-births.	
	Number.	% of total.	Number.	% of total.	Number.	% of total.		1929.	1928.
British India	687,880	47·3	441,166	30·3	325,632	22·4	1,454,678	155·6	167·1
N.-W. F. P.	8,482	37·2	3,010	32·2	2,867	30·6	9,359	130·5	154·1
Punjab	72,232	38·8	57,277	30·7	56,764	30·5	186,273	167·6	166·8
Delhi	1,669	31·7	1,800	34·2	1,789	34·0	5,258	164·9	149·7
U. P.	94,702	38·7	89,886	36·7	60,207	24·6	244,794	139·5	148·6
Bihar	60,175	49·3	38,051	31·2	28,818	19·5	122,044	113·2	110·9
Orissa	23,736	48·7	16,274	33·4	8,753	18·0	48,763	197·4	221·9
Bengal	137,798	58·8	64,150	27·4	32,353	13·8	234,301	146·7	184·7
C. P.	68,631	49·4	39,096	28·2	31,079	22·4	138,806	219·8	238·2
Bombay	47,572	40·2	41,345	34·9	29,508	24·9	118,425	152·7	174·2
Sind	3,344	39·1	3,217	37·6	1,999	23·4	8,560	105·7	121·8
Madras	156,239	52·5	72,095	24·5	68,240	22·9	297,474	175·5	160·1
Coorg	284	53·7	119	22·5	126	23·8	529	139·9	168·8
Assam	16,989	46·8	12,546	34·6	6,764	18·6	36,299	149·7	164·7
Ajmer-Merwara	1,027	27·1	1,401	36·9	1,365	36·0	3,793	163·0	211·5

TABLE I (vii).

	Deaths under one week.	Rate per mille of live-births.	Percentage of	
			Deaths under one month.	Total infant deaths.
British India	420,715	45.0	61.2	28.9.
N.-W. F. P.	1,775	24.8	51.0	19.0.
Punjab	39,543	35.6	54.7	21.2.
Delhi	936	29.4	56.1	17.8.
U. P.	60,089	34.2	63.5	24.5.
Bihar	42,461	39.4	70.6	34.8.
Orissa	13,328	54.0	56.2	27.3.
Bengal	82,040	51.4	59.5	35.0.
C. P.	38,919	61.3	56.7	29.0.
Bombay	27,365	35.3	57.5	23.1.
Sind	1,784	22.0	53.3	20.8.
Madras	101,604	60.0	65.0	34.2.
Coorg	172	45.5	60.6	32.5.
Assam	10,068	41.5	59.3	27.7.
Ajmer-Merwara	631	30.4	61.4	16.6.

TABLE I (viii).

	Infant deaths.		Rates per mille of corresponding live-births.	
	Males.	Females.	Males.	Females.
British India	794,339	660,339	163.3	147.4
N.-W. F. P.	5,504	3,855	135.1	124.5.
Punjab	102,921	83,352	174.9	159.4.
Delhi	2,807	2,451	170.9	158.5.
U. P.	136,247	108,547	145.8	132.2.
Bihar	67,066	54,978	121.0	105.0.
Orissa	26,311	22,452	207.0	187.3.
Bengal	127,641	106,860	153.9	138.8.
C. P.	74,645	64,161	228.9	207.7.
Bombay	63,838	54,587	159.7	146.2.
Sind	4,748	3,812	105.3	106.3.
Madras	160,612	136,862	185.6	165.0.
Coorg	268	261	134.4	146.0.
Assam	19,666	16,633	156.6	142.3.
Ajmer-Merwara	2,065	1,728	184.3	181.5.

Mortality among Children.

5. The proportion of children under 10 years of age to the total population as enumerated at the 1931 census was 28 per cent. But, as will be seen from table I(x) below, of the total mortality at all ages 47.0 per cent occurred among children under ten. Further, of the total child mortality 50 per cent occurred among infants. The problems of child and particularly infant health are therefore so important that they must be given a prominent place in the public health programme of the country.

TABLE I (ix).

	Under one year.	% of total deaths.	1—5 years.	% of total deaths.	5—10 years.	% of total deaths.	Total under 10 years.	% of total deaths.
British India	1,454,678	23·6	1,111,314	18·0	331,599	5·4	2,897,591	47·0
N.-W. F. P.	9,359	21·1	7,642	17·3	2,728	6·2	19,729	44·6
Punjab	186,273	30·9	126,602	21·0	29,370	4·9	342,245	56·7
Delhi	5,258	31·1	3,615	21·4	733	4·3	9,606	56·8
U. P.	244,794	21·9	231,684	20·7	54,288	4·9	530,766	47·5
Bihar	122,044	16·4	143,592	19·3	47,465	5·4	313,101	42·0
Orissa	48,763	24·5	29,877	15·0	10,050	5·0	88,690	44·5
Bengal	234,301	21·5	150,155	13·8	75,457	6·9	459,913	42·3
C. P.	138,806	26·9	104,244	20·2	25,487	4·9	268,537	52·1
Bombay	118,425	23·9	103,725	21·0	24,333	4·9	246,483	49·8
Sind	8,560	19·1	6,717	15·0	2,522	5·6	17,799	39·7
Madras	297,474	26·8	172,998	15·6	46,595	4·2	517,067	46·5
Coorg	529	14·1	365	9·7	201	5·4	1,095	29·2
Assam	36,299	22·1	26,048	16·4	11,888	7·2	75,135	45·8
Ajmer-Merwara	3,798	26·8	3,150	22·3	482	3·4	7,425	52·5

Still-births.

6. The figures for still-births in British India and the different provinces are given below :—

TABLE I (x).

	Male.	Female.	Total.	Rate per mille of live-births.	Male still-births per 100 female still-births.
British India	107,258	85,383	192,641	20·6	126
N.-W. F. P.	124	72	196	2·7	172
Punjab	4,633	2,982	7,615	6·9	155
Delhi	295	205	500	15·7	144
U. P.	7,231	5,575	12,806	7·3	130
Bihar	15,816	12,757	28,573	26·5	124
Orissa	5,800	4,922	10,722	43·4	118
Bengal	35,987	28,956	64,943	40·6	124
C. P.	9,267	7,352	16,619	26·2	126
Bombay	7,696	6,051	13,747	17·7	127
Sind	610	423	1,033	12·8	144
Madras	14,830	11,995	26,825	15·8	124
Coorg	19	20	39	10·3	95
Assam	4,881	4,015	8,896	36·7	122
Ajmer-Merwara	69	58	127	6·1	119

Rainfall.

7. Taking the year as a whole the rainfall was 27 per cent or more in defect in the Punjab, Sind, Rajputana, Gujarat and North Hyderabad. Over the rest of the country, it was within 20 per cent of the normal. The following table I (xi) gives for each province the actual and normal rainfall figures for different periods of the year.

For further details reference should be made to the "Memorandum on the rainfall and other weather conditions of India in 1939," by the Director General of Observatories, India, from which this table has been compiled.

TABLE I(xi).

	January to February.		March to May.		June to September.		October to December.		Total.	
	Actual.	Normal.	Actual.	Normal.	Actual.	Normal.	Actual.	Normal.	Actual.	Normal.
Mean of India . . .	1.0	1.1	3.3	3.9	29.8	32.1	4.7	4.3	38.8	41.4
N.-W. F. P.	3.7	2.5	7.0	4.2	5.1	8.0	0.4	1.2	16.2	15.9
Punjab	2.5	1.9	2.1	2.0	9.8	15.3	0.1	0.8	14.5	20.0
U. P.	1.3	1.5	0.4	1.4	31.7	33.5	0.5	1.8	33.9	38.2
Bihar	2.1	1.4	2.1	3.4	45.5	42.0	3.5	3.0	53.2	49.8
Orissa	0.8	1.4	3.0	5.7	43.8	43.4	9.0	6.9	56.6	57.4
Bengal	0.7	1.3	8.1	12.6	62.6	54.4	9.0	6.0	80.4	74.3
C. P.	0.8	1.8	2.0	1.7	41.2	40.6	1.5	2.8	45.5	46.4
Bombay	0.0	0.2	0.5	1.5	34.8	39.3	2.5	3.4	37.8	44.4
Sind	1.4	0.3	1.1	0.5	0.2	5.2	0.0	0.3	2.7	6.3
Madras	0.9	1.2	7.7	0.0	25.6	28.6	21.0	16.2	55.2	52.0
Assam	1.4	2.2	20.7	25.1	64.0	65.9	7.3	7.0	93.4	100.2
Rajputana	0.8	0.6	0.4	0.9	12.3	19.1	0.0	0.8	13.5	21.4
Central India	0.7	0.8	0.1	0.9	33.1	33.1	0.1	1.6	34.0	36.4
Hyderabad	0.0	0.5	1.0	2.0	18.8	26.0	4.3	3.7	24.1	32.2
Mys	0.2	0.3	5.7	5.3	20.4	22.4	11.9	8.2	38.2	36.2

Agricultural Conditions.

8. Table I(xii) gives the cultivated and uncultivated acreage† in British India and different provinces during the years 1938-39 and 1939-40.—

TABLE I(xii).

		Cultivated.		Uncultivated.	
		Net area actually sown.	Current fallows.	Culturable waste other than fallows.	Not available for cultivation.
		Acres.	Acres.	Acres.	Acres.
British India	1939-40	209,971,545	47,118,573	97,381,198	89,312,019
	1938-39	209,377,838	48,325,002	94,180,437	91,807,971
N.-W. F. P.	1939-40	2,000,617	630,467	2,924,018	2,668,715
	1938-39	2,070,207	607,739	2,866,660	2,679,231
Punjab	1939-40	25,744,129	4,984,732	14,489,389*	13,984,273
	1938-39	25,151,597	5,790,871	14,275,353*	12,983,323
Delhi	1939-40	198,976	24,251	63,683	81,647
	1938-39	172,314	50,829	62,604	82,709
U. P.	1939-40	36,499,642	2,479,406	9,888,666	9,906,391
	1938-39	36,081,950	2,795,085	9,964,452	9,928,409
Bihar	1939-40	17,991,700	6,778,600	6,801,745	6,148,162
	1938-39	17,978,400	6,791,000	6,800,775	6,148,185
Orissa	1939-40	6,434,576	1,680,608	3,177,386*	6,211,600
	1938-39	6,507,729	1,646,240	3,138,765*	6,211,434
Bengal	1939-40	24,916,400	4,742,823	6,630,162*	9,468,752
	1938-39	24,730,100	5,015,347	6,638,732*	9,300,924
C. P.	1939-40	24,212,756	4,085,887	14,040,108*	4,882,156
	1938-39	24,369,333	3,950,319	14,017,848*	4,881,011
Bombay	1939-40	28,540,030	5,232,279	951,007*	5,665,135
	1938-39	28,779,649	4,994,829	913,021*	5,712,230
Sind	1939-40	4,945,843	5,165,818	8,144,707	11,202,677
	1938-39	5,108,271	5,005,638	5,505,834	13,798,854
Madras	1939-40	31,472,163	9,572,246	11,096,766	14,508,070
	1938-39	31,383,337	9,860,540	10,862,821	14,497,180
Coorg	1939-40	148,608	160,757	11,690	359,474
	1938-39	144,696	164,667	11,690	359,474
Assam	1939-40	6,638,768	1,412,955	18,689,408	4,577,400
	1938-39	6,618,912	1,412,955	18,774,650	4,577,400
Ajmer-Merwara.	1939-40	227,339	167,746	472,473	647,567
	1938-39	281,343	238,943	347,232	647,607

*Culturable area included.

†NOTE—The figures are provisional and subject to revision.

Table I (*xiii*) gives the areas in acres under food crops in British India and the provinces during 1939-40—

TABLE I (*xiii*).

	Area under food grains.	Area under other ¹ food crops.	Total area under food crops.
	Acres.	Acres.	Acres.
British India.	187,050,270	10,400,518	197,450,788
N.-W. F. P.	1,945,031	144,131	2,089,162
Punjab	19,898,397	926,607	20,825,004
Delhi	178,470	7,437	185,907
U. P.	38,717,287	2,892,686	41,609,973
Bihar	19,625,900	1,417,100	21,043,000
Orissa	6,164,618	251,174	6,415,792
Bengal	24,173,700	1,592,800	25,766,500
C. P.	20,542,572	337,375	20,879,947
Bombay	19,951,487	560,046	20,511,533
Sind	4,244,286	69,445	4,313,731
Madras	25,701,444	1,663,209	27,364,653
Coorg	89,783	19,270	109,053
Assam	5,610,638	499,746	6,110,384
Ajmer-Merwara	206,657	19,492	226,149

NOTE.—The figures are provisional and subject to revision.

Famine Relief.

9. During 1939, scarcity conditions prevailed in the following areas:—

Madras.—Owing to the general failure of the north-east monsoon conditions of scarcity existed in the districts of Coimbatore and Chingleput, where relief works were opened in a number of areas. Cyclones and floods visited the districts of Tanjore, West Godavari, Kistna, Guntur and Trichinopoly resulting in a damage to property and loss of cattle and human lives. Prompt measures were taken for the relief of the people rendered homeless.

Bengal.—The Burdwan, Presidency, Chittagong and Dacca Divisions were visited by high floods, causing damage to crops and to human and cattle lives in certain districts. The timely distribution of paddy seedlings, agricultural loans and gratuitous relief enabled cultivators in most of the affected areas to harvest a good crop.

Punjab.—Owing to the failure of the monsoon during 1938 and 1939 famine conditions in the Hissar and Rohtak districts were considerably intensified. Consequently relief had to be afforded on a large scale. With the onset of the cold weather following a long period of inadequate nutrition, the general health of the people in some parts of the Hissar district showed signs of deterioration. Special measures were carried out for meeting the situation and these included

the provision of medical relief and the supply of germinated grain and *amla* to the people for improving the quality of their diet.

Central Provinces and Berar.—On account of the sudden cessation of the monsoon, relief had to be provided on an extensive scale in order to provide employment for agricultural labour. Relief works were opened at 75 places in C. P. and 183 places in Berar and the works were closed by the end of November 1939.

Sind.—Famine conditions prevailed in the desert portion of the Thar Parkar district and relief measures were organised on a large scale by the Government and by other agencies.

Delhi.—Test works (construction of roads) were undertaken south of Mahrauli and west of Alipur.

Ajmer-Merwara.—Famine conditions continued to prevail in the province throughout the year. In addition to the ordinary scheduled programme 29 famine works for the relief of distress were started and concession rates for the import of fodder were introduced. Free grazing was allowed in all open areas throughout the period.

Assam.—The situation created by floods did not improve much in 1939. Gratuitous relief and other measures were undertaken by the Government.

Indian States.

10. The birth, death and infantile mortality rates of a number of Indian States are given in table P of appendix I. As was pointed out last year, birth and death rates as low as five *per mille* or even less were recorded in a certain number of States and these must necessarily be due to defective registration. It is to be hoped that the health authorities concerned will pay attention to the improvement of vital statistics in their States.

SECTION II.

MATERNITY AND CHILD WELFARE.

Introduction.

11. Vital statistics are an index of the health of the nation and provide evidence of the relative importance of the different health problems of the community. The figures given in the statistical section of this report indicate that the welfare of mothers and children is one of the most pressing public health problems in India to-day. Of the 6,165,234 total deaths in 1939, 47·0 per cent occurred in children under the age of 10 years and 41·6 per cent among those below five years of age. In order to complete the picture of maternal and child mortality, to these figures must be added 192,641 still-births and some 200,000 maternal deaths arising out of childbirth. Deaths among women of all ages during the year totalled 2,932,984 and of these 609,625 took place between the ages of 15 and 40. In this age period the female death rate exceeded that of the male as will be seen from the table below, while in all the other age periods the male rate was the higher. The risks attendant on pregnancy and parturition are largely responsible for these higher rates of mortality :—

Age period	Death rate per 1,000	
	Males	Females
15—20	7·2	8·6
20—30	8·7	11·0
30—40	11·6	12·1

The loss of life among the sections of the community who come within the scope of the maternity and child welfare services amounted to the figure of 3,368,258 in 1939. This serious loss of life is accompanied by much illhealth among the mothers and children who survive. Many who escape death are left with varying degrees of disability of a temporary or permanent nature. An appreciable proportion of this mortality and suffering would undoubtedly have been prevented if the services of an efficient maternity and child welfare organisation were generally available to the people.

Maternal Mortality.

12. The information received in the office of the Director-General, Indian Medical Service, relating to maternal deaths occurring in 1939 in certain hospitals in India having more than 300 deliveries a year is summarised below. Tabulation has been done with respect to the cause of death, age and gravidity. The re-classification of the various causes of death shown on individual returns from hospitals into those which are in accordance with the International List of the Causes of Death was carried out by Dr. M. I. Neal Edwards, W. M. S.

The total number of maternal deaths for which the information has been classified is 1,257 of which 1,044 are due directly to childbearing causes (83·0 per cent) and 213 to diseases associated with childbearing (17·0 per cent). The proportion of deaths due to anaemia is high in relation to other causes and this disease has been shown as a separate heading in the tables below. Similarly acute yellow atrophy which is classed under diseases of the liver in the International List has been shown separately in the following tables and the figures have also been included among the deaths due directly to childbearing.

Table II (i) presents the distribution by causes of the total maternal deaths.

TABLE II(i).

Cause of death.	Number of deaths during 1939.	Percentage of the total (1,044) during 1939.	Percentage of the total (1,368) during 1938.
Abortion (septic)	14	1.34	1.39
Abortion (non-septic)	5	0.48	0.73
Ectopic gestation	6	0.57	0.51
Other accidents of pregnancy	6	0.57	0.58
Ante and post-partum haemorrhages	162	15.52	13.24
Puerperal sepsis	243	23.28	25.88
Puerperal tetanus	7	0.67	0.15
Eclampsia, albuminuria and chronic nephritis	168	16.09	22.44
Other toxæmias of pregnancy	22	2.11	1.97
Embolism, thrombosis and sudden death	31	2.97	2.41
Accidents of labour and operative shock	172	16.48	11.99
Other and unspecified conditions	5	0.48	0.07
Anæmia	185	17.72	18.64
Acute yellow atrophy	18	1.72	..
Total deaths due directly to childbearing	1,044	100.00	100.00
Disease associated with childbearing	213	..	190
Grand total	1,257	..	1,558

In last year's report a similar classification of the information received from different hospitals in India for the year 1938 was published. These figures are shown in the last column of the above table. It will be seen that the percentages for the different causes of death during 1938 and 1939 closely correspond. Puerperal sepsis, toxæmias of pregnancy and anaemia rank high as causes of maternal deaths in both the years.

AGE AND CAUSE OF DEATH.

Table II(ii) presents the distribution of maternal deaths according to age and cause of death. Of the total maternal deaths analysed (1,257) 12 occurred below 15 years of age, nine in the age group 41 to 45 and one at the age of 46. On the other hand the proportions of maternal deaths at the age periods 16-20, 21-25, 26-30 were nearly 26 per cent, 28 per cent and 29 per cent respectively.

TABLE II(ii).

Age groups.

Cause of death.	13—15	16—20	21—25	26—30	31—35	36—40	41—45	46—50*
Abortion (septic)	..	1.09	1.06	2.35	..	2.08	..	..
Abortion (non-septic)	..	..	0.35	1.34	..	..	..	..
Ectopic gestation	..	0.73	..	1.34	..	..	..	..
Other accidents of pregnancy	..	0.36	1.41	0.34	..	..	..	..
Ante and post-partum haemorrhages	8.33	11.68	14.54	17.45	21.67	18.75	11.11	..
Puerperal sepsis	33.33	22.64	25.18	22.15	20.83	27.08	22.22	..
Puerperal tetanus	..	1.09	0.35	1.01	..	..	..	..
Eclampsia and albuminuria	41.68	26.28	17.38	8.06	10.00	10.43	11.11	..
Other toxæmias of pregnancy	..	2.19	3.19	2.01	0.83	..	..	..
Embolism, thrombosis and sudden death	8.33	2.55	3.19	2.68	2.50	6.25	..	..
Accidents of labour and operative shock	8.33	12.05	9.58	21.14	27.50	27.08	11.11	100.00
Other and unspecified conditions	..	..	1.06	0.67	..	..	..	..
Anæmia	..	17.15	20.58	18.12	16.67	8.33	22.22	..
Acute yellow atrophy	..	2.19	2.13	1.34	..	..	22.23	..
Total deaths due to childbearing	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*This single case of maternal death was at the age of 46.

The importance of eclampsia and albuminuria compared with other causes of maternal deaths in the earlier age periods (13-15 and 16-20) is emphasised in this table. It is more important than even sepsis in these age groups. On the other hand haemorrhages and accidents of labour rise in importance in the later age periods. Puerperal sepsis has claimed a high proportion of deaths in practically all the age groups. Anaemia too is responsible for a relatively high proportion of mortality at all ages.

GRAVIDITY OF MOTHERS AND CAUSE OF DEATHS.

The distribution of deaths by gravidity and cause in table II(iii) shows that eclampsia and albuminuria form the most important cause of death in primigravidae. From the fourth pregnancy onwards this cause becomes relatively less important. Sepsis and anaemia claim large proportions of mortality at practically every age period, while haemorrhages and accidents of labour are less important among primigravidae than among women undergoing later pregnancies.

TABLE II (iii).

Gravidity.

Cause of death.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Abortion (septic)	2.07	1.22	0.85	0.85	2.44	1.20	...	...	...	...	...	16.67	...	...	...
Abortion (non-septic)	0.84	0.61	0.85	...	...	...	2.08	2.13	...	...	...	...	...	...	...
Ectopic gestation	1.38	...	1.71	...	...	...	...	...	...	...	...	...	...	...	...
Other accidents of pregnancy	0.69	0.61	0.85	0.85	...	1.20	...	...	...	...	...	...	...	...	...
Ante and post-partum hæmorrhages	8.62	13.41	10.27	17.80	21.95	18.07	22.93	14.89	32.56	36.00	31.25	16.67	25.00	...	100.00
Puerperal sepsis	25.86	23.78	23.08	18.64	21.95	28.93	12.50	25.53	25.58	28.00	6.25	...	25.00	...	...
Puerperal tetanus	0.69	0.61	0.85	1.69	1.22	...	...	...	...	...	...	...	...	...	...
Eclampsia and albuminuria	26.90	17.68	17.95	8.47	4.88	8.43	14.58	10.64	9.30	4.00	12.50	...	...	...	...
Other toxæmias of pregnancy	1.73	3.66	4.27	2.54	1.22	1.20	2.08	...	...	...	...	16.67	...	...	...
Embolism, thrombosis and sudden death.	4.48	1.22	4.27	1.69	3.66	...	6.25	...	...	...	12.50	40.99	...	...	...
Accidents of labour and operative shock.	10.69	14.03	12.82	19.48	23.17	20.48	18.75	21.28	25.58	28.00	18.75	...	25.00	...	...
Other and unspecified conditions	...	1.22	1.71	...	1.22	...	...	...	...	...	...	...	...	...	...
Anæmia	14.14	20.73	19.67	24.60	17.07	19.29	20.83	23.40	6.98	...	18.75	...	25.00	...	...
Acute Yellow Atrophy	2.41	1.22	0.85	3.39	1.22	1.20	...	2.13	...	4.00	...	...	...	...	...
Total deaths due directly to child-bearing.	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It will be seen that the information relating to the specific causes of death given in tables II (ii) and II (iii) show considerable resemblance to one another.

Provision for Maternity and Child Welfare Work.

13. Table B in appendix III gives the numbers of welfare centres and of the staff employed in them in British India during 1939. The number of centres was 1,021 as against 993 in 1938, local bodies and voluntary organisations being mainly responsible for their maintenance. The number of centres and the staff employed vary widely from province to province.

The information given in the provincial public health reports regarding maternity and child welfare work is summarised below.

In the North-West Frontier Province 3,074 confinements were conducted by trained *dais* in 1939 as against 2,517 in 1938. The number of maternity beds in 15 hospitals in the province was 177 and 1,049 deliveries took place in hospitals in 1939.

The maternity and child welfare staff employed in schemes approved by the Madras Public Health Department, cared for 105,679 expectant mothers, 36,571 infants and 22,997 pre-school children while 60,783 labour cases were attended. Fiftysix medical women, 54 health visitors and 481 midwives were employed in these approved schemes. Compared with 1938, the number of medical women employed increased by 16 during 1939 and of health visitors and midwives by 12 and 42 respectively.

The amounts spent for maternity and child welfare work by the local boards and municipalities respectively in Madras Presidency rose from Rs. 1,06,947 and Rs. 3,12,460 in 1938 to Rs. 1,22,718 and Rs. 3,56,083 in 1939.

A post of Supervisor of Maternity and Child Welfare attached to the Bengal Public Health Department was created and a medical woman was appointed to it in September 1939. Further, provision was made for Government grants-in-aid for the building and maintenance of maternity and child welfare centres in that province. The maintenance grant provided covers also the salary of a health visitor. Building grants are on the scale of half the capital cost up to a maximum of Rs. 3,000 for a welfare centre and up to Rs. 4,000 for a welfare centre with a lying-in ward. The response from local authorities was good; nine schemes were approved during the year and of these three were sanctioned. Standard plans for the building and equipment of the centres were drawn up and circulated to local authorities.

During the year the Bombay Mofussil Maternity, Child Welfare and Health Council appointed in addition to the touring honorary adviser, who is a medical man, a touring woman doctor and a touring health visitor. The Council maintains 50 centres in 14 districts, an increase of three over the 1938 figure. The Satara Health Association maintains six maternity centres in the district which are supervised by a touring health visitor. The response in Bombay Province to the Government offer to bear four-fifths of the cost of maintaining four nurse-midwives in District Board areas as part of the programme of medical relief in rural areas, was not encouraging. With the object of utilising the material available for the training of midwives in mofussil hospitals and of eliminating the indigenous *dai*, the Bombay Government sanctioned during the year a course for assistant midwives.

As a first step towards the eight-year plan for the provision of a trained midwifery service the Sind Government decided to train five candidates. Government scholarships of Rs. 20 p.m. tenable for 12 months were sanctioned and in order to attract suitable persons, appointments were guaranteed after the training.

In the United Provinces the provincial training centre for assistant midwives commenced work in the Silver Jubilee Health School in September 1939. The school was planning to start a health visitors' class in 1940. The linking up of the midwifery and health visiting courses is a step towards a comprehensive training in public health nursing and the experiment will be watched with interest.

In the Punjab eight new welfare centres were opened in 1939 bringing the total number of such institutions to 102. It is stated that a number of welfare centres situated in urban areas include within the range of their activity the surrounding rural area also. The training of *dais* has shown progress. In 1939 the number of *dais* under training throughout the province numbered 2,593 and 627 *dais* obtained their certificates. In addition to the above, 2,246 previously trained *dais* practised in the areas served by the various health centres. It is stated that refresher courses for these women were arranged once a month at most of the centres. A total of 39,524 labour cases was conducted by *dais*, either trained or under training, and of these health visitors supervised 11,055 cases. Medical aid was called in for 502 cases.

The health visitors have been trained as vaccinators and they carried out 3,335 primary and 16,250 revaccinations.

Eleven students were trained as health visitors during the year at the Punjab Health School and all of them succeeded in obtaining the diploma at the end of the course.

In Delhi Province the maternity and child welfare organisation worked during the year with varying degrees of efficiency in the different urban and rural areas. In New Delhi there were six centres in 1939 and, of them, only one was housed properly in a building constructed for the purpose. In spite of the fact that the centres were not suitably housed it is pointed out that much good work was done during 1939. The number of confinements rose from 1,004 in 1938 to 1,218 during the year under review. The attendances at the clinics increased from 26,310 to 35,505 and the number of home visits from 31,192 to 31,880. No maternal death took place among the cases undertaken by the centres while the maternal mortality rate for the rest of New Delhi was 3.3 *per mille*.

The infant mortality rate of the population served by the centres however rose from 65 *per mille* in 1938 to 75 in 1939, although this figure compared favourably with that for the rest of the infant population, namely, 85 *per mille*.

In the Notified Area Civil Lines 64 per cent of the total births in the year were attended to by the centres. The maternal mortality rate was 3.3 *per mille*. On the other hand the infant mortality rate continued to be relatively high, 101 and 107 *per mille* during 1938 and 1939 respectively. The Chief Health Officer points out the necessity for emphasising the preventive aspect of child welfare work and for an increase in home visiting, which should be supervised by an active health visitor.

In Delhi city it is reported that, although another centre was opened in 1939 bringing the total to 12, little progress was made in improving the work carried on by the welfare organisation. It is stated that the educative and preventive aspects of welfare work were ignored, that the centres functioned mainly as dispensaries and that health visitors limited their functions to the duties of midwives. The infant mortality rates for 1938 and 1939 were 156 and 170 *per mille* respectively. The Delhi Municipal Committee employed during the year only 20 health visitors. The Chief Health Officer considers that the number ought to be increased to 80 if a serious attempt was to be made to reduce the rate of infant mortality.

As regards the rural areas the activities under this head may be described (1) in relation to the Najafgarh Health Unit and (2) the rest of the province. In Najafgarh the appointment of a woman doctor for the control of the organisation had a salutary effect by improving the quality of the work. Medical aid was given to 48 cases of labour which, in the absence of this doctor, would have had to be brought to the city for treatment. A rise in the clinic attendances and in the number of prenatal cases was further evidence of the growing popularity of the maternity service provided for this rural population.

In the rural areas exclusive of Najafgarh it is reported that some improvement was recorded during the year. A woman doctor supervises the activities of the welfare centres and her appointment was followed by a marked rise in the number of attendances at the clinics from 12,813 in 1938 to 25,753 in 1939. Three centres existed at Narela, Nangloi and Mahrauli. The areas served by these centres were widened during the year and, out of a possible 1,361 cases available to the health staff, it is stated that over 80 per cent were cared for by them. In 1938 the number of confinements dealt with by the centres was 548 and in 1939 the figure was 1,088. It is reported that no maternal death took place among the cases treated by the centre staff. As regards infant mortality the general rate in the rural area was 206 *per mille* while for the populations served by the centres the figures were much lower, *e.g.*, Narela 98, Nangloi 86 and Mahrauli 56.

SECTION III.

VACCINATION AGAINST SMALLPOX.

Vaccination and Revaccination Statistics.

14. Smallpox continues to be one of those epidemic diseases which are widely prevalent in this country from year to year. The average figures for annual mortality from this disease during quinquennial periods from 1877 to 1936 have ranged between 162,942 and 66,075. The corresponding figure for the period, 1935-39, was 67,130. It is true that, in spite of increasing completeness of registration during recent years, a reduction in the number of deaths from this disease is becoming noticeable; but the fact that vaccination and revaccination should eliminate the disease altogether emphasises the importance of making further efforts for the effective immunisation of the people.

In 1939 primary vaccination was compulsory in 80·7 per cent of the towns and 62·8 per cent of the rural circles in British India as a whole. In the provinces the proportion for towns was as low as 52 per cent and 59 per cent respectively for Bombay Presidency and the United Provinces. With respect to rural circles, in Bombay primary vaccination was compulsory only in one among the twenty circles of the province while, in the Central Provinces, the rate was 15 per cent. On the other hand, in the provinces of Bengal and Madras, primary vaccination was compulsory throughout the rural and urban areas. It will thus be seen that wide differences exist between the provinces in regard to the areas where primary vaccination can be enforced.* As regards revaccination, the law makes no provision for its enforcement in most parts of the country. In Madras Presidency revaccination was made compulsory in both urban and rural areas in 1932 and provision exists for the enforcement of the measure at intervals of ten years. It is also understood that compulsory revaccination was in force in 1939 in 26 out of the 32 towns and in 11 among the 117 rural circles of Assam, in four of the five towns of Ajmer-Merwara and in certain areas of Bengal where the Epidemic Diseases Act was brought into operation for urgent measures against outbreaks of the disease.

The protection that primary vaccination confers on the individual lasts only for a limited period. In an article, "The General Problem of Smallpox in 1929" in the monthly Epidemiological Report of the Health Section of the Secretariat of the League of Nations for November 1929, the results were described of repeated vaccination at varying intervals of 44 children after their primary vaccination. It is stated that "Of the vaccinees, four per cent had lost their immunity after one year and 83 per cent after four years. For all practical purposes, immunity may be said to have disappeared at the end of eight years."

The results of certain studies in revaccination made by the King Institute, Guindy, during an extensive revaccination campaign in Madras city in 1939 throw further light on this problem. Of 1,990 cases of revaccination investigated, it is stated that "33·6 per cent were complete 'failures', 39·4 per cent showed the reaction of immunity, 19 per cent showed a modified reaction

*See table B, in appendix V.

and eight per cent showed typical 'takes'. The results classified under the different age-groups according to the number of previous revaccinations are shown below*:

Age-group.	Revaccination.	Total number.	Total take.	Percentage of take.
5—10 years	Previously Nil	315	158	50.2
	Do. One or more	89	25	28
11—20 years	Do. Nil	117	46	39.2
	Do. One or more	235	65	27.5
20—30 years	Do. Nil	122	62	50.8
	Do. One or more	330	86	26
30—40 years	Do. Nil	63	20	31.7
	Do. One or more	205	48	23.4
40—50 years	Do. Nil	18	7	38.9
	Do. One or more	43	14	32.5

A striking feature of this table is that, among 315 children in the age group 5—10 years with no history of previous revaccination, nearly 50 per cent became unprotected by the tenth year of their life. In every age group, the percentage of 'takes' among those who have had one or more previous revaccinations is smaller than among those who have had only their primary vaccination. The Director also quotes examples to show the effect of repeated and organised revaccination in conferring protection. In a group of 114 employees in the harbour workshop, who had periodical revaccination, only 0.9 per cent reacted to revaccination on the present occasion. Similarly among 79 persons on the clerical establishment of one office, who had been repeatedly revaccinated, the proportion of 'takes' was only 6.3 per cent in comparison with 30.1 per cent for 63 persons in another office with no history of revaccination.

These studies again emphasise the importance of repeated revaccination of the individual if the level of his immunity is to be kept sufficiently high to protect him from smallpox. Vaccinations at intervals of four to five years can alone produce the desired effect. In regard to both primary and revaccination the position is unsatisfactory in this country and unless the provincial health authorities can take more vigorous steps for fully protecting the people, the disease will continue to be responsible for much preventable suffering, incapacitation and mortality.

The statistics relating to vaccination in British India and some Indian States are given in the tables of this section and in appendix V to this report. All the figures relate to the official year 1939-40. In all the other sections of the report and in all the appendices except appendix V the statistics are for the calendar year 1939.

Table III (i) sets out the figures for primary and revaccinations during 1939-40 in the provinces of British India.

* Page 31, Report of the King Institute of Preventive Medicine, Guindy, for the year ending 30th September 1939.

TABLE III (i).

	Primary vaccination.		Revaccination.		Total.	
	Number of vaccinations performed during 1939-40.	Increase (+) or decrease (-) from last year.	Number of revaccinations performed during 1939-40.	Increase (+) or decrease (-) from last year.	Total 1939-40.	Increase (+) or decrease (-) from last year.
British India	10,399,676	+195,028	15,301,134	+1,812,228	25,700,810	+2,007,256
N.-W. F. P.	161,873	+18,025	152,482	+6,655	314,355	+24,680
Punjab	1,072,841	+15,744	3,430,138	-142,002	4,502,979	-126,348
Delhi	34,862	+2,005	208,867	+75,083	241,729	+77,088
U. P.	1,635,158	+28,823	471,111	+162,017	2,106,269	+190,840
Bihar	1,017,374	+22,579	820,087	+314,118	1,837,461	+336,097
Orissa	231,214	-6,809	475,061	+72,393	706,275	+65,584
Bengal	2,909,956	+33,337	5,017,380	+44,927	7,927,336	+78,264
C. P.	495,950	-18,802	284,766	+166,560	780,746	+147,758
Bombay	667,049	+36,866	510,152	+255,110	1,177,201	+293,976
Sind	143,228	+6,215	80,937	-2,225	224,165	+3,990
Madras	1,516,894	+35,047	3,320,875	+730,426	4,837,769	+765,473
Coorg	2,809	+288	3,420	-63	6,229	+225
Assam	471,571	+7,771	474,305	+83,071	945,876	+90,842
Ajmer-Merwara	38,697	+11,939	53,523	+46,248	92,420	+58,187

An increase of two million vaccinations has been recorded during the year under review in British India, of which 90 per cent is under revaccination and the remainder under primary vaccination. In last year's report it was pointed out that there had been a fall in respect of both primary and revaccinations as compared with the previous year. An increase of two million vaccine operations during 1939-40 is therefore a satisfactory record of progress. As regards primary vaccination Orissa and the Central Provinces have alone shown decreases in 1939 while, in respect of revaccination, the Punjab has recorded a large reduction in the number of vaccine operations and Sind and Coorg relatively smaller decreases.

Table III (ii) affords a comparison of the progress of primary and revaccinations during the nine years, 1931-32 to 1939-40.

TABLE III (ii).

Year.	Number of primary vaccinations.	Number of revaccinations.	Percentage of children under one year successfully vaccinated to total births during the calendar year.
1931-32	9,012,950	5,334,148	46
1932-33	9,365,226	10,082,421	45
1933-34	9,284,821	11,604,663	43
1934-35	9,506,666	12,443,590	44
1935-36	10,022,554	14,011,904	45
1936-37	10,404,125	12,805,764	45
1937-38	10,419,989	14,913,397	46
1938-39	10,204,648	13,488,906	46
1939-40	10,399,676	15,301,134	46
Annual average 1934-35 to 1938-39	10,111,596	13,532,712	45

There has been a consistent increase in the number of vaccinations performed and this no doubt reflects the concern of the provincial health authorities to raise the level of immunity of the population.

The percentages shown in the last column give some measure of the protection conferred on the infant population. There is no indication of any real progress having been made during the period. The rates are based on the number of births during the calendar year while the vaccinations relate to the official year. This fact is not likely to introduce any serious margin of error because the birth rate is relatively stable at specific seasons of the year and the proportion of deaths during the three months, January, February and March, to the total annual figure will not therefore show any considerable variation from year to year.

Table III (iii) gives the percentages of success for primary and revaccinations during 1938 and 1939 in the different provinces.

TABLE III (iii).

	Primary.		Revaccination.	
	1938.	1939.	1938.	1939.
British India	98	97	48	46
N.-W. F. P.	98	99	82	80
Punjab	99	99	65	63
Delhi	98	97	60	52
U. P.	98	97	48	36
Bihar	99	98	56	34
Orissa	97	97	64	60
Bengal	86	85	31	31
C. P.	98	97	58	56
Bombay	100	100	49	45
Sind	100	100	26	27
Madras	98	97	24	21
Coorg	96	97	55	55
Assam	95	95	60	59
Ajmer-Merwara	92	99	85	98

The percentage of success for primary vaccinations in 1939 was as low as 85 per cent in Bengal while in all the other provinces the rate was 95 per cent or higher. During the previous four years, 1935-38, the corresponding rates for Bengal were 88, 95, 88 and 86. This continued low rate of success for primary vaccination in the province requires investigation. In the paragraph on the Bengal Vaccine Institute in the annual report for 1939 the Director of Public Health states that all samples of vaccine lymph were tested,

before issue, for potency both bacteriologically and on human beings, "with the result that no complaint has been received from anywhere as regards its purity and potency". The responsibility for the vaccine becoming ineffective in many cases must then lie on the several factors that may lessen the potency of the lymph after its issue from the Vaccine Institute, such as want of adequate care in protecting it from exposure to heat, undue delay in the use of the lymph or various practices adopted by the parents of the infants for preventing the action of the vaccine. A higher rate of success than that achieved during the past few years should be attainable if adequate administrative measures are taken to improve the practice of vaccination among the people.

The desirability of making the vaccinators perform more vaccinations than they do in many provinces has been repeatedly stressed in these annual reports. Table III (*iv*) sets out the average number of vaccinations performed by a vaccinator in 1939 in the different provinces. The figures for 1938 are also given for comparison:

TABLE III (*iv*).

	Average number of vaccinations performed by a vaccinator-	
	1938.	1939.
British India	2,809	2,951
N.-W. F. P.	6,294	5,715
Punjab	7,720	7,587
Delhi	4,658	6,043
U. P.	1,995	2,219
Bihar	1,242	1,520
Orissa	2,245	2,436
Bengal	3,008	2,772
C. P.	1,705	2,175
Bombay	2,395	3,200
Sind	2,661	2,635
Madras	3,025	3,456
Coorg	1,001	1,038
Assam	1,645	1,833
Ajmer-Merwara	2,140	4,201

Most of the provinces have increased the average number of vaccinations carried out by the vaccinator. However, the differences between the provinces continue to be striking. The Punjab and Delhi lead with figures about six or seven times higher than that of Coorg which has shown the smallest record of work for the vaccinator. Another striking fact is that, although the figure for 1938 was high in Delhi Province, the rise during 1939 was nearly 30 per cent. The large numbers of vaccinations that have been performed in the Punjab and in Delhi by individual vaccinators suggest that, if adequate efforts are made, it should be possible to raise considerably the existing level of performance in the other provinces also.

Vaccine Institutes and Supply of Vaccine.

15. Table III (v) shows the quantities of vaccine produced by and issued from the different provincial institutes during 1939-40 :—

TABLE III (v).

Vaccine Institutes.	Output in doses.	Issue in doses-
Punjab	9,129,375	9,377,255
U. P.	3,402,900	3,525,513
Bihar	3,179,171	3,358,815
Bengal	8,077,200	9,202,606
C. P.	789,040	790,250
Bombay	2,698,295	1,781,745
Madras	4,678,560	3,363,555
Assam	1,110,290	1,096,208

The average yield of pulp from buffalo and cow calves differed widely in the different institutes. In the Punjab the yield of a buffalo calf was 130·2 grammes, in the United Provinces 69·2, the Central Provinces 65·5, Bombay 61·8, Bihar 60·8, Madras 27·9 and Bengal 26·6. The average yield from cow calves also varied, the highest yield being 40·5 grammes in the Central Provinces and the lowest in Bengal and the United Provinces, 25·3.

In the School of Tropical Medicine, Calcutta, experimental studies were carried out on animals with variola virus. In monkeys intradermal injections produced only local necrotic lesions while in splenectomised monkeys the infection produced generalised lesions. In guinea pigs also the virus produced papular lesions in 2-4 days. From the nasopharynx of 76 convalescent cases of smallpox and from 16 healthy persons it is reported that a virus was recovered which produced lesions in animals resembling those of variola virus. It is also reported that work was done on the pathogenicity and antigenic structure of various strains of vaccinia virus which were in use in the different vaccine institutes of India.

Indian States.

16. Vaccination statistics relating to a large number of Indian States are shown in table D in appendix V. The percentage of success for primary vaccination may be taken as an index of the quality of the vaccine lymph and of the care and expedition with which it is used for vaccination after issue from the vaccine institute. It will be seen that the rate is over 90 per cent in the majority of States although in some the figure is definitely lower. Examples of States with percentages below 80 are Alwar (76), Tehri Garhwal (77), Ramdrug (34), Raigarh (76), Dhar (78), Sitamau (65) and Sailana (67). The causes for such low rates require investigation by the health authorities concerned. Brief notes on certain important States are given below :—

Hyderabad State.—Though the number of primary vaccinations has been on the increase year by year, further increase is still desirable since the number of primary vaccinations performed continues to fall short of the number of births each year. It is stated that the number of children born in the State each year would be in the neighbourhood of six and a half lakhs as against a little over four lakhs of primary vaccinations performed during the year.

In 1939-40, 12,207 revaccinations were carried out as compared with 20,028 during the previous year. This discrepancy is stated to be due to the wrong entry of "secondary" vaccinations under revaccinations in the past and this mistake has now been corrected. Revaccination is not popular with the public and it is therefore stated that under a proposed Vaccination Act, provision will be made for the compulsory revaccination of all persons every tenth year. The success rates of primary and revaccinations were 96·1 per cent and 54·5 per cent respectively. The average number of vaccinations performed by each vaccinator rose from 2,570 during the previous year to 2,752 during the year under review. In order to encourage vaccination on as extensive a scale as possible instructions have been issued that Assistant Health Officers, Health Inspectors and Sub-health Inspectors should vaccinate all unprotected children whom they come across during the course of their duties.

Travancore State.—An intensive campaign for the immunisation of the people by primary and revaccinations has been in progress from 1933-34 onwards. The Director of Public Health states that by 1936 the whole State was once covered by this intensive effort and that successive campaigns are in progress so as to include the whole population within a period of three years. It is stated that, in consequence, the incidence of smallpox has been effectively controlled in the State.

Cochin State.—A total of 160,515 vaccinations was performed during the year with a success rate of 91·2 per cent for primary vaccination and 7·4 per cent for revaccination. It is stated that the public offers no opposition to the vaccinators, that primary and revaccinations have been compulsory in the State for a number of years and that sanitary inspectors verify about 80 per cent of the vaccinations carried out in the State.

Mysore State.—During the year a whole-time health officer was appointed to check the work of the vaccination staff. Special campaigns for intensive vaccination were carried out in a number of areas. The average success rate for primary vaccination was 95·9 per cent and for revaccination 50·6 per cent. The rate for primary vaccination is reported to have been uniformly high in all the districts, it being nowhere less than 92 per cent.

Kashmir State.—Smallpox occurred in mild epidemic form in several tehsils of Kashmir Province and it is reported that mass vaccination was carried out and that the outbreak was soon brought under control. Jammu Province remained free from smallpox during the whole of the year 1939-40. The success rate for primary vaccination was 98·6 per cent and for revaccination 89·0 per cent.

SECTION IV.

PUBLIC HEALTH WORKS.

17. Information regarding the total public health expenditure of municipalities and district boards and expenditure under separate heads such as conservancy, water supply and drainage is given in tables B and C of appendix VI. While these figures are being published for the sake of continuity in respect of the information incorporated in the annual report from year to year, there is so little yearly variation in the public health expenditure incurred by local bodies that no special comments are required on the present occasion. Brief remarks regarding individual provinces are given below.

N.-W. F. Province.

18. The district boards of the province had during 1939-40 a total income of Rs. 21,01,331 of which only Rs. 93,090 or 4.4 per cent was spent on public health. The expenditure on water supplies was Rs. 22,232, an increase of Rs. 9,871 over that of the previous year. The contribution made by Government to the district boards for public health purposes amounted to Rs. 24,385 the money being spent in connection with anti-malarial measures in certain villages around Kohat district and the improvement of water supply in some villages of four districts in the province.

The total income of municipal and notified area committees during the year was Rs. 24,18,751 and, of this amount Rs. 4,65,589 or 19.2 per cent was spent on public health activities. It will thus be seen that a relatively larger proportion of the income was devoted to public health in the urban areas than in the villages. Compared with the previous year the expenditure on water supplies was reduced from Rs. 1,33,629 to Rs. 72,824. The Government grants-in-aid during the year to municipal and notified area committees for public health purposes amounted to Rs. 4,060.

Punjab.

19. It is reported that rural water supply schemes received considerable attention from the authorities in the Punjab. During the financial year 1939-40 a sum of Rs. 2,75,200 was allotted by the Government for various sanitary works such as the re-modelling of well-heads in order to protect drinking water from contamination, the sinking of new wells, and the paving and drainage of village lanes. It is also stated that, in addition to this amount, the villagers themselves contributed a sum of Rs. 1,41,547 towards these works, besides making contributions in labour and material when they were not in a position to make payment in money. The Director of Public Health points out that the amount of money spent by the Provincial Government on rural water supply schemes within the last few years totalled Rs. 9 lakhs. A gratifying feature of the situation, it is stated, is that, wherever health officers show initiative and resource in stimulating the interest of the people, the villagers have been willing and anxious to contribute a share towards these works which are meant for the improvement of their own health.

In nine towns schemes for water supply were completed and in five other towns the work was in progress during the year. As regards drainage scheme

for urban areas an important event was the commencement in 1939 of work on the Lahore sewerage scheme. Drainage works were completed in five other towns and were in progress in four more.

United Provinces.

20. In regard to rural water supplies, the provincial Government provided in the budget for 1939-40 a sum of Rs. 3 lakhs from the Government of India grant for rural development and another amount of Rs. 34,000 from provincial funds. It is reported that large numbers of wells were constructed in several districts and that hand pumps were installed in many places. Government had framed some years ago model byelaws regulating the future construction of wells in villages, but it is reported that local bodies have not generally adopted these byelaws and put them into effect, with the result that the construction of wells on insanitary lines continues as in the past.

Attempts were being made during the past few years to popularise the use of latrines and urinals in the villages. Borers for the construction of bore-hole latrines were obtained in some districts while in others little progress was made in soil sanitation.

It is reported that the rural health staff continued to maintain close touch with the provincial programme of rural development and that advice was given regarding the carrying out of sanitary improvements in the villages.

The results of periodical analyses of samples of water from 28 towns with piped water supply are given in the report of the Director of Public Health. In a number of towns bacteriological analyses showed that the quality of the water was below the required standard. A few glaring instances are :—

Name of the town.	Number of samples examined bacteriologically.	Number found to be unsatisfactory bacteriologically.
1. Muttra	101	52
2. Allahabad	281	118
3. Jhansi	149	130
4. Naini Tal	256	82
5. Lucknow	251	124

These are all important towns and the results shown above indicate that the question of improving the quality of the water supplied to the inhabitants of these towns requires urgent attention.

Bihar.

21. In the rural areas expenditure on sanitation by districts boards during 1938-39 included Rs. 2,36,588 on conservancy, Rs. 11,170 on drainage, Rs. 1,34,175 on water supply and Rs. 12,118 on markets and fairs.

In the municipalities the Director of Public Health reports that all the minor recommendations made by the Department were carried out but that major schemes, such as those for the provision of protected water supply, drainage, sanitary markets and the opening up of congested areas were not taken up because of the chronically low financial condition of these local bodies. The total amounts spent in the municipalities of the province under the four heads of conservancy, drainage, water supply and markets and fairs were Rs. 10,10,534, Rs. 1,72,139, Rs. 3,65,980 and Rs. 39,081 respectively.

Orissa.

22. Of the total income of district boards in the province during 1938-39 which amounted to Rs. 28,44,403, public health expenditure accounted for 6.0 per cent as against 7.7 per cent during the previous year. The Director of Public Health rightly points out that, in the rural areas, the expenditure on public health is wholly inadequate and that this fall in expenditure during the year under review is all the more regrettable. It is pointed out that a wide prevalence of bowel diseases takes place at the beginning of the rainy season and that this points to the contamination of water supplies with human excreta. In order to help the campaign for the prevention of soil pollution, borers for the construction of bore-hole latrines were purchased and supplied by the Public Health Department to some of the district boards. The necessity of expanding the rural health organisation in order to make it possible to render more prompt and effective service to the people for the control of communicable disease is stressed by the Director of Public Health in his report.

There are eight municipalities in the province and, of these, only two Puri and Berhampur, have piped water supplies. In the other towns drinking water is derived mainly from shallow wells, rivers and in some cases from masonry wells and tube wells. It is stated that lack of funds has stood in the way of major water supply and drainage works being undertaken in these towns.

Bengal.

23. The amounts spent by district boards during 1938-39 under the heads water supply, drainage and sanitation in the rural areas of the province were Rs. 8,64,418, Rs. 66,332 and Rs. 21,30,503 respectively. In addition, Union Boards spent Rs. 9,60,747 on water supply, Rs. 93,272 on drainage and Rs. 87,521 on conservancy.

In municipal areas the total amount spent on sanitary works during 1938-39 was Rs. 53,68,314. The sum included varying amounts of expenditure on the water supply and drainage of a number of towns.

Central Provinces.

24. The Government made a grant of Rs. 21,055 for the construction of 80 wells from the Government of India grant for rural reconstruction, and a sum of Rs. 15,306 for another group of 66 wells from the provincial funds.

Under the provisions of the village Sanitation and Public Management Act, which was in operation, in 65 villages, a total sum of Rs. 1,42,696 was collected, and of this amount a sum of Rs. 1,42,201 was spent on water supply, drainage, cleaning of village sites, roads and other miscellaneous charges.

From the Town and Village Fund under Mukaddam Rules, a sum of Rs. 8,403 was spent for similar purposes, while an additional sum of Rs. 1894 was spent in the improvement of water supply in ryotwari villages in the districts of Betul, Jubbulpore, Bilaspur and Nimar.

It is reported that, in municipal towns, the situation regarding water supply showed a little improvement during the year and that the total expenditure under this head was Rs. 11,94,006.

A sum of Rs. 2,34,195 was spent on drainage and Rs. 11,67,258 on conservancy in municipal areas.

Bombay.

25. For the purpose of encouraging village improvements a Provincial Board of Rural Development was established by the Government. Its main function is to advise Government on general principles and policy regarding rural development activities. Village improvement work, which used to be carried out under the auspices of the District Village Improvement Committees, was transferred during the year to District Rural Development Boards, the financial control being vested in the Registrar of Cooperative Societies and Director of Rural Development.

The Director of Public Health states that the protected water supplies of municipal towns were regularly sterilized and that a high standard of purity was maintained. In regard to rural water supply the provincial Government placed at the disposal of the Commissioners of Divisions grants totalling Rs. 8,55,000 for their improvement. An investigation was in progress during the year for preparing a list of villages which are in urgent need of provision or adequate drinking water. It is reported that 687 new draw-wells were constructed during the year and that 268 step-wells were converted into draw-wells.

Improvements were carried out to Surat and Ahmedabad drainage schemes. Methods of purification of trade effluents were under investigation and it is reported that satisfactory results were obtained. The expenditure on public health measures was approximately Rs. 3-5-2 per head of the population in Ahmedabad and averaged about Rs. 2-13-1 for the remaining municipalities.

Sind.

26. Improvement of rural water supplies is being carried on by the revenue authorities in the district as well as by the Rural Reconstruction Department. Government grants are distributed by the Revenue Commissioner for Sind in consultation with the Public Health Department. It is reported that 85 tube-wells and 107 draw-wells were constructed during the year.

The percentage of income spent on public health measures by district boards varied from seven in Larkana district to 3.6 in Dadu district. Public health expenditure per head of the population ranged from Re. 0-1-7 in Larkana district to Re. 0-0-4 in Sukkur district.

In municipalities the *per capita* expenditure on public health was approximately Rs. 2-7-10 in Karachi and averaged Rs. 2-2-8 for the remaining municipalities employing health staffs.

Madras Presidency.

27. In this province the rural sanitation campaign has been continuously maintained by six rural sanitation units, each consisting of a medical officer and suitable subordinate personnel. The activities of these units during the year under review may be grouped under :—

- (1) hookworm survey,
- (2) educational propaganda on hookworm disease and the dangers of soil pollution,
- (3) mass treatment against hookworm and
- (4) construction of latrines in rural areas and the encouragement of their use by the people.

It is reported that 723 latrine seats were put up and that 146 seats were either repaired or reconstructed.

Mass treatment for hookworm infection was given to 205,444 persons.

The ultimate success of soil sanitation work in any area depends on the construction and use of latrines by the people, and to popularise their use provision was made by the local authorities for the supply of squatting slabs for borehole latrines in private houses either at half the cost or at concession rates. Suitable staff were also maintained by the district boards of many districts to assist the rural sanitation units in the construction of public and private latrines.

Reference was made in previous reports to the programme for the expansion of rural water supply. In view of the administrative and technical difficulties experienced in the carrying out of the programme, a committee was appointed during the year for the consideration of the following points :—

- (a) types of water supply suited to different villages and soil conditions,
- (b) suitable and economical agencies for the sinking of bore-wells,
- (c) suitable agency for the maintenance of bore-wells,
- (d) centralisation of purchases for rural water supplies, and
- (e) the extent to which local manufacture of the requisite articles can be made.

The committee held several sittings and their final report was submitted to Government towards the close of the official year (1939-40). Although variations exist in the conditions prevailing in the different provinces, it is certain that the investigations carried out by this committee would be of interest to the health authorities of other provinces also.

It is reported that no new water supply scheme was brought into operation during the year in the municipalities of the province. The number of municipalities with protected water supply was 43 in 1939. Improvements or extensions of existing schemes were under execution in 19 municipalities, while plans and estimates for water supply schemes were either completed or were under preparation in three other municipalities.

The execution of drainage schemes in eight municipalities was started during the year under review, while plans and estimates for three other municipalities were under preparation. The investigation of schemes for ten municipalities and two panchayats were either in progress or were completed during the year.

The Madras Public Health Act which came into force with effect from 7th March 1939 contains many provisions which are calculated to help considerably towards the improvement of environmental sanitation. In particular, attention may be drawn to the following provisions :—

- (1) local authorities are required to ear-mark a definite percentage of their income for public health expenditure,
- (2) local authorities can be required by the provincial Government to provide a sufficient supply of drinking water, and to levy a compulsory water tax for financing water supply schemes,
- (3) provision should be made by local authorities for proper drainage and for an adequate number of public latrines.

Other provisions include measures for the prevention and abatement of nuisance, reservation of areas for residential purposes, control over insanitary buildings and the abatement of overcrowding.

Assam.

28. There were 18 municipal boards and ten town committees in Assam during the year under review and their total income was Rs. 11,58,372. The percentage of this income spent on sanitary works was 48·4 as against 44·5 per cent during the previous year. An expenditure of Rs. 11,565 was made by the Public Works Department on the maintenance of water supplies and drainage and on town improvements.

For the rural areas local boards spent a sum of Rs. 1,86,816 on public health measures during 1939 compared with Rs. 1,77,479 in the previous year.

SECTION V.

HEALTH OF JAILS IN INDIA.

General.

29. As in other years, it has been found convenient this year to discuss the health of the jails in British India, under the headings :—

(i) all classes of jails,

(ii) district and central jails, with a separate paragraph devoted to the health of the jail population in the Andamans.

Jails of all Classes.

30. *Population, accommodation and overcrowding.*—Information regarding accommodation and average daily population for the years 1938 and 1939 is given in table V(i) below—

TABLE V(i).

Province.	Authorised accommodation, excluding hospitals and observation cells.		Average daily population.	
	1938.	1939.	1938.	1939.
N.-W. F. P.	5,263	5,263	5,757	5,666
Punjab	14,713	14,713	19,660	20,543
U. P.	32,523	36,067	28,768	32,895
Bihar	13,013	13,013	10,896	11,876
Orissa	2,257	2,257	1,666	1,620
Bengal	15,911	16,584	19,006	19,057
C. P.	6,515	6,697	4,522	5,044
Bombay*	15,805	13,271	8,518	8,433
Sind	5,205	5,205	4,675	4,758
Madras	18,720	18,401	13,140	14,157
Assam	3,772	3,776	3,304	3,216

The usual fluctuations are noted in the authorised accommodation. Bombay has reduced accommodation by 2,534 but reports that a new sub-jail at Nadiad will be completed in 1940-41, which will increase available accommodation and relieve the present overcrowding in that province.

The United Provinces on the other hand, have increased accommodation by 3,544 over the previous year and show an increase of 4,127 in the average daily population. The reason for this increase is due to the arrests following

* Including Dharwar Borstal School.

the Madhe-Sahaba, Tabarra and Khaksar movements which were launched during the year. Three camp jails and the Allahabad and Benares lockups were used to accommodate the unusual influx of prisoners.

The Punjab, where overcrowding was reported last year, has shown a further increase in the daily population while the authorised accommodation remained the same.

The six central jails in Bengal with a total daily average of 9,867 still remain very overcrowded.

The provinces of Sind, Madras, Bihar and the Central Provinces while recording increases in the daily average population over that of the previous year are still below their authorised accommodation and show little or no tendency towards overcrowding. The Central Provinces report the opening of a new subsidiary jail at Narsinghpur and a new barrack in the Borstal Institution at the same place.

Constantly sick.—Table V(ii) shows the average daily number of constantly sick and the rate per 1,000 of the average daily population among all classes of prisoners in the various provinces during 1938 and 1939.

TABLE V(ii).

Province.	Average number of constantly sick.		Constantly sick rate per 1,000 of average daily population.	
	1938.	1939.	1938.	1939.
N.-W. F. P.	30	99	23	17
Punjab	334	336	17	16
U. P.	497	532	17	16
Bihar	209	211	19	18
Orissa	33	32	20	20
Bengal	676	735	36	39
C. P.	64	65	14	13
Bombay*	146	142	17	17
Sind	80	79	19	17
Madras	176	176	13	12
Assam	78	77	24	24

Bengal, besides showing the highest sick rate in India is the only province to record an increase over the constantly sick rate for 1938. There seems no apparent reason for the high rate as no epidemic was reported from any of the jails although hookworm disease is said to be on the increase.

Admission to hospitals and deaths.—Table V(iii) shows the number of annual hospital admissions and deaths for the years 1938 and 1939.

*Including Dharwar Borstal School.

TABLE V(iii).

Province.	Admissions.				Deaths.			
	Number.		Rate per 1,000 of average daily population.		Number.		Rate per 1,000 of average daily population.	
	1938.	1939.	1938.	1939.	1938.	1939.	1938.	1939.
N.-W. F. P.	2,229	2,008	387	354	43	20	7	4
Punjab	8,439	9,163	429	446	13	132	6	6
U. P.	12,338	14,275	429	434	03	244	7	7
Bihar	3,932	3,968	361	334	08	110	10	9
Orissa	690	714	414	441	26	16	16	10
Bengal	17,657	18,814	929	987	194	204	10	11
C. P.	1,571	1,679	347	333	93	76	21	15
Bombay*	4,937	5,082	580	603	74	58	9	7
Sind	3,341	3,845	715	808	60	31	13	7
Madras	4,295	3,965	327	280	96	88	7	6
Assam	1,155	1,092	350	340	64	85	19	26

The North-West Frontier Province, Madras and Assam recorded slight decreases in the numbers of admissions to hospitals while the remaining provinces showed increases. Concurrent with the great increase in the average daily population over 1938, the United Provinces also recorded the greatest increase in admissions to hospitals over the figures for 1938. Bengal recorded the highest admission rate and Assam the highest death rate.

Weight of prisoners.—Table V(iv) shows the percentage of prisoners at the time of discharge from the jail who had (a) gained weight, (b) remained stationary and (c) lost weight. The same information with regard to 1938 is added for easy comparison, while in table V(v) is shown the percentage of prisoners who had gained in weight at the time of their discharge, over a period of 15 years in the different provinces. A table showing the percentage of prisoners over a 15-year period who had lost weight on release from jail was published in last year's report. A study of both these tables presents an interesting sidelight on the nutrition of a selected population. In spite of improved diets during the past few years the percentage of prisoners who had gained on release is not very materially affected. In the Central Provinces and in Madras a high percentage of prisoners has consistently gained weight while the Punjab and the North-West Frontier Province have remained at the other end of the scale. Orissa since her separation from Bihar has maintained a high percentage whereas Sind has shown a downward trend.

The remaining provinces maintained an average gain with Bengal falling off somewhat during the past four years.

On the whole this state of affairs is a favourable reflection on the general nutrition standards in jails but, as suggested in last year's report, this question might with profit be made the subject of investigation within the provinces. A study of the types of prisoners admitted, age and sex distribution, amount of sickness, regular and adequate dieting and a comparison with nutritional standards of the community, might serve as a useful check-up on individual jails.

*Including Dharwar Borstal School.

TABLE V(v)

Province.	Gained weight.		Stationary.		Lost weight.	
	1938.	1939.	1938.	1939.	1938.	1939.
N.-W. F. P.	49	55	43	39	8	6
Punjab	49	47	44	45	7	8
U. P.	56	50	34	41	10	9
Bihar	54	57	32	30	14	13
Orissa	62	68	28	27	10	5
Bengal	47	44	38	41	15	15
C. P.	63	66	28	25	9	9
Bombay	50	52	32	32	18	16
Sind	50	57	17	18	33	25
Madras	64	60	32	36	4	4
Assam	57	57	28	29	15	14

TABLE V(v).

Table showing the percentage of prisoners who had gained in weight at the time of their release from jail.

Province.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	1939.
N.-W. F. P.	50	49	62	62	57	52	52	56	58	60	49	53	59	49	55
Punjab	44	48	54	44	47	46	39	39	45	45	40	41	45	49	47
U. P.	65	66	68	59	60	57	55	56	57	57	58	57	60	56	50
Bihar	63	58	57	57	56	50	49	55	53	52	59	57	56	54	57
Orissa															
Bengal	50	53	53	52	54	50	56	58	67	50	50	49	47	47	44
C. P.	63	64	65	57	55	49	56	64	60	62	62	62	68	63	66
Bombay	48	51	51	57	53	53	54	51	55	51	52	54	58	50	52
Sind															
Madras	73	74	75	75	71	67	75	75	74	70	67	64	63	64	60
Assam.	55	53	51	56	57	58	55	54	55	55	54	59	56	57	57

District and Central Jails.

31. *Morbidity and mortality statistics.*—Figures for diseases are available from all provinces only for the populations of district and central jails. These figures for individual provinces are shown in appendix VIII. A consolidated statement of causes of sickness is shown in table V(vi) while in table V(vii) the chief causes of mortality are shown. Figures for the previous year are also given for comparison.

TABLE V(vi).

	1938.		1939.	
	Admissions.	Rate per 1,000 of average daily population.	Admissions	Rate per 1,000 of average daily population.
Malaria	12,383	113	9,819	86
Dysentery	3,999	37	3,944	34
Other respiratory diseases	3,229	30	3,671	32
Influenza	3,212	29	3,444	30
Diarrhœa	1,824	17	1,690	15
Pyrexia of uncertain origin	1,099	10	1,228	11
Pneumonia	933	9	1,038	9
Tubercle of the lungs	716	7	720	6
Enteric fever	301	3	301	3
Smallpox	25	0·2	31	0·3
Cholera	17	0·2	13	0·1

TABLE V(vii).

	1938.		1939.	
	Deaths.	Rate per 1,000 of average daily population.	Deaths.	Rate per 1,000 of average daily population.
Pneumonia	195	1·8	194	1·7
Tubercle of the lungs	177	1·6	141	1·2
Other respiratory diseases	53	0·5	132	1·2
Dysentery	81	0·7	81	0·7
Anæmia and debility	33	0·3	33	0·3
Enteric fever	26	0·2	33	0·3
Malaria	24	0·2	23	0·2
Diarrhœa	17	0·2	12	0·1
Influenza	10	0·1	16	0·1
Cholera	3	0·03	5	0·04
Pyrexia of uncertain origin	2	0·02	4	0·03
Smallpox	1	0·01	3	0·03

Cerebrospinal meningitis.—Bengal reported two cases and one death. There were five cases and no death in the Punjab while the Central Provinces reported seven cases and two deaths.

Malaria.—It is satisfactory to note that the number of admissions for the country as a whole continues to fall. Bengal recorded 457 fewer admissions in 1939 than in the previous year. The province of Sind recorded an increase in the incidence of malaria; the Sukkur district prison was mainly responsible. The remaining provinces showed an average malaria incidence.

Influenza.—The total admissions for influenza amounted to 3,444, a slight increase over the previous year. An epidemic of influenza was reported from Orissa with 106 cases and one death as well as from Bombay where 160 cases were admitted with one fatality. These epidemics were localised in one or two central jails. It is such outbreaks as these that often are the forerunners of a pandemic and the sudden appearance of numerous cases of peculiar respiratory infections should be a warning for careful investigation, especially in view of the present world instability, a condition which favours pandemic spread of influenza.

Cholera.—There was a widespread epidemic of cholera among the civil population in the United Provinces. It speaks well for the preventive methods used by the jail authorities that only 11 cases with five deaths were reported amongst the jail inmates. Bihar and Bengal with one case each, were the only other provinces to report cases of cholera amongst the jail population.

Plague.—No attacks were recorded in the jails of British India during the year under review.

Dysentery.—The admission rate for dysentery dropped from 37 in 1938 to 34 in 1939 and with the exception of the United Provinces where an increase of 318 cases was reported over the figures for 1938, the condition as regards dysentery may be considered satisfactory.

Pneumonia.—The death rate *per mille* has dropped from 1.8 in 1938 to 1.7 in 1939. From Sind comes a report of the efficacy of M. and B. 693 where the number of deaths was two as compared with 17 in the previous year. The number of cases was 40 in 1939 and 104 in 1938. With the extended use of this modern treatment of pneumonia, further reductions in the all-India mortality rate for pneumonia should be expected.

Tubercle of the lungs.—The number of admissions into hospitals for this disease has shown a slight increase over the figures of the previous year, the Punjab continues to show a declining rate while the number of admissions in Bombay was more than doubled in 1939.

Reforms.

32. The institution of jail reforms has had a beneficial influence on the physical and mental health of prisoners. It is gratifying to note the additions to the jail diets, especially to the diets of those engaged on hard labour, and the increasing tendency for jail gardens to produce more green vegetables for home consumption.

The lot of the prisoner in most jails has been improved by the issue of newspapers, books and periodicals. More radio sets are being installed and the prisoners are being encouraged to play games. Vocational training, Boy Scout and Girl Guide movements, cinema shows and literacy campaigns continue to serve their useful purpose in making jail life reformatory rather than punitive. The formation of after-care associations is a valuable adjunct to good jail administration.

Andamans.

33. The year 1939 is reported to have been one of the healthiest on record for the jail population in spite of the apparent increase in the death rate for cellular jails where the average daily strength was only 368 compared with the average daily strength of 5,666 of the *talabdar* and self-supporting convict population. There was no overcrowding in any part of the jail and a high standard of sanitation was maintained.

It is convenient to discuss the health of (1) the cellular jails and barracks population, and (2) *talabdars* and self-supporting prisoners, separately. Table V(viii) below shows the death rates from all causes, the constantly sick rates and the hospital admission rates for the years 1938 and 1939.

TABLE V(viii).

	Death rate per 1,000 of average daily population.		Constantly sick rate per 1,000 of average daily population.		Hospital admission rate per 1,000 of average daily population.	
	1938.	1939.	1938.	1939.	1938.	1939.
	Cellular jails	12	22	20	26	760	622
<i>Talabdars</i> and self-supporting convicts	13	9	31	24	598	508

Table V(ix) shows the incidence of the principal diseases for the whole settlement, excluding the cellular jails.

TABLE V(ix).

Principal diseases.	Whole Settlement excluding cellular jails.	
	1938.	1939.
Malaria	1,122	981
Dysentery	121	138
Diarrhœa	53	24
Influenza	96	49
Gonorrhœa	30	29
Pneumonia	10	9
Weil's disease	152	49
Tuberculosis	13	17
Syphilis	49	37
Ankylostomiasis	21	94

The incidence of malaria during the past ten years has shown a steady tendency to decline and with the exception of 1936, the year under review records the lowest admissions into hospital for malaria during the last decade. There has also been a welcome drop in the number of admissions for Weil's disease. It is significant to note in this connection that there has been a considerable reduction in the rainfall during the year. The study of the bacteriology of the disease has been intensified and an anti-leptospiral serum prepared from local strains is being tried out. There has been a considerable increase in the incidence of ankylostomiasis reported, which is probably the result of a concerted search during a recent survey. Dysentery and enteric were maintained at a low level and the introduction of carrier testing on foodhandlers should still further reduce the incidence of these intestinal diseases.

There were three cases of smallpox during the year; 2,574 vaccinations, of which 14 per cent were successful revaccinations, were carried out.

Conclusions.

34. The health of the jail population in British India during 1939 may be stated to have been satisfactory. The constantly sick rate and hospital admission rate were 20 and 473 respectively compared with 21 and 479 in 1938. The death rate remained the same as in the previous year, 9 *per mille*. There has been a satisfactory decline in the admission rate for malaria from 113 *per mille* in 1938 to 86 in 1939 and from all provinces come encouraging reports on jail reforms which indirectly have their beneficial effects on the general health and wellbeing of the prisoners.

NEW DELHI ;
The 31st May 1941.

E. COTTER,
Lieut.-Colonel, I. M. S.,
Public Health Commissioner with
the Government of India.

APPENDICES.

TABLE OF CONTENTS.

TABLE.	PAGE.
A. Estimated population on 30th June 1939 in rural and urban areas and by sex	44
B. Estimated population on 30th June 1939 by age and sex	45
C. Births in rural and urban areas	46
D. Births by months	46
E. Deaths by months	47
F. Death rates <i>per mille</i> by months	48
G. Deaths by months in rural areas	48
H. Deaths by months in urban areas	49
I. Deaths according to age and sex	50
J. Death rates according to age and sex	51
K. Deaths according to age and sex in rural areas	52
L. Deaths according to age and sex in urban areas	53
M. Infantile mortality rates in certain towns in British India	54
N. Infantile mortality in rural and urban areas	56
O. Crude and standardised death rates <i>per mille</i> (direct method) for different provinces in India	57
P. Vital statistics for Indian States	59
APPENDIX II.	
A. Deaths and rates <i>per mille</i> from certain causes or groups of causes of mortality	64
B. Deaths and rates <i>per mille</i> from certain causes or groups of causes of mortality in rural and urban areas	65
C. Deaths from cholera from 1905 to 1939	67
D. Deaths and rates <i>per mille</i> from cholera in rural and urban areas	68
E. Deaths from cholera by months	68
F. Deaths from plague by months in—	
(i) British provinces	69
& (ii) Indian States and Agencies	69
G. Deaths and rates <i>per mille</i> from smallpox in rural and urban areas	70
H. Deaths from smallpox by months	70
I. Deaths and rates <i>per mille</i> from fevers and malaria in rural and urban areas	71
J. Deaths from fevers by months	71
K. Deaths and rates <i>per mille</i> from dysentery and diarrhoea in rural and urban areas and by sex	72
L. Deaths from dysentery and diarrhoea by months	72
M. Deaths and rates <i>per mille</i> from respiratory diseases in rural and urban areas and by sex	73
N. Deaths from respiratory diseases by months	73
O. Distribution of quinine, cinchona febrifuge, totaquina and other cinchona alkaloids during 1939	74

TABLE.	PAGE.
APPENDIX III.	
A. Maternal death rates <i>per</i> 1,000 of live and still-births for certain towns in British India	78
B. Maternity and child welfare centres in rural and urban areas.	80
APPENDIX IV.	
A. Expenditure on public health by central and provincial Governments during 1939-40	82
B. Distribution of health staffs in rural and urban areas	83
APPENDIX V.	
A. Vaccination operations performed in British India and in different provinces during 1939-40	86
B. Number of towns and rural circles in the different provinces in which compulsory primary vaccination was in force during 1939	87
C. Areas in the provinces in which revaccination was compulsory in 1939	87
D. Vaccination statistics relating to some Indian States for 1939-40	88
APPENDIX VI.	
A. Number of towns having protected water supplies in different provinces	96
B. Expenditure on public health by municipalities in different provinces during 1938-39	97
C. Expenditure on public health by district boards in different provinces during 1938-39	98
APPENDIX VII.	
A. Papers published in the Indian Journal of Medical Research	100
B. Papers published in the Indian Medical Gazette	104
C. Papers published in the Journal of the Malaria Institute of India	111
APPENDIX VIII.	
Sickness and mortality of all classes of prisoners in district and central jails in India	114

Appendix I.

Deaths in the rural areas of British India and the provinces are given in table G distributed according to months and in table K by age and sex. The total figure for British India does not, however, correspond in the two cases. This is because, for Madras Presidency, the figures shown in table G are for the area exclusive of municipalities alone, whilst those of table K relate to an area excluding municipalities and rural towns. For this reason the total figure in table G is greater than that of table K by 61,577.

Deaths in urban areas are given in tables H and L. For the above reason the total figure in table L is greater by 61,577 than that in table H.

The figures in tables G and H together equal those in tables K and L.

TABLE A.—ESTIMATED POPULATION ON 30TH JUNE 1939, IN RURAL AND URBAN AREAS AND BY SEX.

	Rural.	Urban.	Total.	Male.	Female.	Area in square miles.	Density per square mile.
BRITISH INDIA	251,908,612	26,405,264	278,303,876	143,352,470	134,956,406	762,658	365
N.-W. F. P.	2,216,334	346,384	2,562,618	1,390,729	1,171,889	13,308	193
Punjab	23,589,499	3,549,034	27,138,533	14,717,005	12,421,528	96,614	281
Delhi	225,691	506,179	731,870	420,188	311,682	572	1,279
U. P.	47,587,337	6,080,918	53,618,255	28,151,681	25,466,574	106,248	505
Bihar	24,084,169	1,414,865	25,448,584	17,781,906	17,716,628	69,348	511
Orissa	7,064,738	225,679	7,290,415	3,482,582	3,807,833	21,492	339
Bengal	49,262,512	3,535,808	52,798,320	27,451,587	25,346,733	72,514	723
C. P.	14,905,623	1,852,423	16,758,046	8,856,969	8,401,077	92,730	170
Bombay	16,079,629	3,753,003	19,832,632	10,273,780	9,559,052	76,839	260
Sind	3,528,681	770,625	4,299,306	2,412,192	1,887,114	46,663	92
Madras	44,437,878	4,003,550	48,496,423	24,043,661	24,452,762	125,433	337
Coorg	154,793	9,394	164,187	90,702	73,485	1,593	103
Assam	3,350,534	215,917	3,566,451	4,508,943	4,057,503	81,332	273
Ajmer-Merwara	416,101	186,985	603,086	320,545	282,541	2,367	255

TABLE B.—ESTIMATED POPULATION ON 30TH JUNE 1939, BY AGE AND SEX.

	N.-W. F. P.		Punjab.		Delhl.		U. P.		Bihar.		Orissa.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	41,226	33,734	606,898	608,869	11,532	11,617	827,272	831,127	425,128	435,337	95,738	99,069
1—5 years	169,707	163,593	1,674,489	1,622,284	39,048	38,892	3,214,895	3,249,227	2,178,993	2,318,170	379,627	401,848
5—10 years	197,746	169,275	1,932,476	1,686,144	44,766	38,833	3,591,585	3,103,577	2,543,853	2,339,025	426,775	415,990
10—15 years	176,504	181,759	1,795,621	1,485,363	45,127	36,659	3,328,464	2,720,260	2,189,328	1,941,262	405,219	382,437
15—20 years	122,440	103,609	1,375,017	1,146,659	45,154	33,846	2,548,570	2,283,995	1,443,592	1,495,808	329,836	358,244
20—30 years	239,486	223,877	2,551,762	2,160,555	92,745	68,508	5,028,067	4,647,711	3,016,302	3,179,652	621,398	729,336
30—40 years	191,238	159,391	1,916,622	1,514,399	68,361	41,029	4,074,974	3,644,618	2,556,335	2,542,711	508,834	584,139
40—50 years	121,119	96,460	1,321,697	1,054,711	40,068	24,258	2,842,834	2,471,553	1,741,824	1,662,507	367,883	412,001
50—60 years	72,812	55,374	869,740	668,440	20,221	13,696	1,635,310	1,469,666	987,586	1,003,269	225,391	257,836
60 years and over	58,451	39,617	772,688	580,404	13,166	9,544	1,059,690	1,074,845	648,965	798,887	122,381	167,127

	Bengal.		O. P.		Bombay.		Sind.		Madras.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	875,233	877,628	269,268	297,100	5,298,053	302,833	59,617	56,447	667,197	687,756
1—5 years	3,178,505	3,266,635	990,003	1,048,440	1,155,748	1,185,266	274,835	262,906	2,788,376	2,864,965
5—10 years	3,755,513	3,329,429	1,074,663	1,042,117	1,327,439	1,280,531	316,536	246,393	3,140,611	3,076,908
10—15 years	3,285,861	2,932,469	972,514	924,052	1,198,990	1,076,70	272,956	192,026	2,896,422	2,743,015
15—20 years	2,405,267	2,678,406	786,065	775,372	899,263	889,02	208,900	162,861	2,100,726	2,238,283
20—30 years	5,023,361	5,007,714	1,481,971	1,517,788	1,859,325	1,781,80	472,339	381,560	4,035,302	4,618,706
30—40 years	4,065,858	3,252,418	1,163,285	1,141,435	1,585,351	1,318,59	384,708	273,083	3,429,357	3,385,067
40—50 years	2,570,024	1,994,925	833,548	784,384	1,009,606	869,41	231,478	162,553	2,401,525	2,249,387
50—60 years	1,371,974	1,170,495	482,715	480,509	570,555	528,356	115,411	86,910	1,455,833	1,438,387
60 years and over	915,291	836,594	332,952	394,360	369,445	376,539	74,912	62,375	1,119,012	1,158,389

	Coorg.		Assam.		Ajmer-Merwara.		British India.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	2,180	2,208	142,121	143,802	10,140	10,035	4,251,448	4,297,366
1—5 years	7,551	7,746	583,297	603,413	38,729	35,712	16,671,303	17,068,897
5—10 years	9,540	9,181	609,508	553,480	39,416	34,395	19,019,417	17,267,085
10—15 years	10,007	9,051	518,124	468,487	37,247	31,177	17,182,404	15,069,740
15—20 years	9,142	7,585	372,007	413,338	33,008	27,953	12,627,992	12,564,532
20—30 years	19,647	15,392	801,808	781,100	59,883	51,800	25,308,841	25,159,999
30—40 years	16,382	10,416	678,960	511,753	43,212	37,334	20,677,057	18,416,371
40—50 years	9,391	5,984	427,110	301,831	34,188	27,835	13,952,304	12,117,806
50—60 years	4,424	3,481	232,526	170,943	19,137	16,024	8,063,136	7,378,835
60 years and over	2,508	2,441	148,978	114,361	9,735	10,776	5,648,169	5,621,276

TABLE C.—BIRTHS IN RURAL AND URBAN AREAS.

	Rural.	Urban.	Total.	Rate per mille		
				Rural.	Urban.	Total.
BRITISH INDIA	8,374,804	971,341	9,346,145	38.2	38.8	38.6
N.-W. F. P.	61,874	10,093	71,707	27.8	29.0	28.0
Punjab	980,893	130,711	1,111,604	41.6	36.8	41.0
Delhi	10,258	21,627	31,885	45.5	42.7	43.6
U. P.	1,507,890	247,531	1,755,421	31.7	41.0	32.7
Bihar	1,051,425	26,358	1,077,783	30.9	18.6	30.4
Orissa	241,303	5,705	247,008	34.2	25.3	33.9
Bengal	1,514,020	88,631	1,597,651	80.7	23.7	80.3
C. P.	558,618	76,292	634,908	37.5	41.2	37.9
Bombay	611,233	164,312	775,545	38.0	43.8	39.1
Sind	52,094	27,952	80,046	15.0	36.3	18.8
Madras	1,539,836	161,115	1,694,751	34.5	40.2	34.9
Coorg.	3,210	572	3,782	20.7	60.9	23.0
Assam	235,793	6,635	242,428	28.2	80.7	28.3
Ajmer-Merwara	11,859	8,867	20,726	28.5	47.4	34.4

TABLE D.—TOTAL BIRTHS BY MONTHS.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
BRITISH INDIA	772,135	872,755	755,684	695,907	695,835	632,518	748,820	832,514	862,955	914,304	885,900	854,768
N.-W. F. P.	6,627	5,781	6,384	6,214	4,945	5,407	6,082	5,708	5,585	6,138	5,805	7,086
Punjab	98,500	79,391	86,298	72,844	72,627	78,044	95,874	104,468	108,744	108,959	102,061	108,599
Delhi	2,503	1,988	2,157	1,860	2,135	2,508	2,761	3,214	3,824	3,468	3,184	2,893
U. P.	148,148	125,209	138,071	126,574	117,667	123,387	148,688	174,621	180,292	179,529	147,603	150,688
Bihar	85,126	81,234	97,040	84,626	82,648	74,510	78,926	95,838	99,261	107,125	89,797	91,652
Orissa	17,829	16,946	21,471	22,667	25,788	23,724	21,283	20,403	18,828	19,149	19,498	19,417
Bengal	143,473	136,280	150,853	124,503	106,929	88,148	79,021	97,429	123,180	163,820	194,297	189,718
C. P.	46,978	40,712	47,480	45,380	45,411	45,059	51,282	60,517	60,298	69,658	61,176	54,367
Bombay	57,704	51,319	59,781	58,355	62,115	64,328	70,858	75,111	78,866	73,219	66,894	68,029
Sind	7,518	5,986	5,977	5,342	5,528	5,547	6,158	6,976	7,225	8,809	7,632	7,648
Madras	119,957	104,769	124,505	128,269	141,646	153,957	170,965	169,814	156,031	148,861	189,977	136,000
Coorg	311	282	337	442	342	368	370	304	04	250	280	242
Assam	25,604	21,471	19,895	18,941	16,402	14,377	14,912	16,156	17,862	23,371	26,694	26,743
Ajmer-Merwara	1,857	1,437	1,425	1,399	1,702	1,459	1,919	1,960	2,066	1,967	1,612	1,748

TABLE E.—TOTAL DEATHS BY MONTHS.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	Rate p.m.
BRITISH INDIA	543,307	449,896	494,168	483,560	505,281	476,938	482,655	530,303	515,788	528,315	562,875	592,178	6,165,234	22·2
N.-W. F. P.	5,773	4,178	3,746	3,209	3,241	3,861	3,756	3,048	2,739	2,924	3,395	4,408	44,276	17·3
Punjab	59,533	49,725	48,478	42,867	54,866	54,792	50,390	47,839	45,494	45,714	50,348	58,646	603,192	22·2
Dalhi	1,559	1,177	1,309	1,389	2,082	1,579	1,349	1,428	1,236	1,306	1,251	1,285	16,900	28·1
U. P.	87,153	75,708	83,434	89,474	97,864	100,251	97,368	101,534	100,540	99,127	90,959	95,099	1,118,009	20·9
Bihar	57,438	42,178	50,568	55,262	57,785	58,637	60,480	75,741	74,056	72,680	68,785	71,800	744,765	21·0
Orissa	18,122	15,282	16,688	16,204	15,096	18,279	15,043	19,360	18,164	16,045	16,824	19,260	199,312	27·8
Bengal	112,667	88,835	98,297	98,947	80,978	71,186	78,040	82,939	79,766	87,171	103,464	118,275	1,090,530	20·7
C. P.	40,850	34,307	40,982	37,652	44,534	34,065	32,174	41,648	49,148	58,326	56,431	50,183	515,300	80·7
Bombay	42,397	37,742	44,043	41,538	40,584	32,362	37,919	42,963	40,950	42,918	44,356	46,115	494,887	25·0
Sind	5,397	4,672	4,265	3,632	3,425	2,909	2,825	2,751	2,727	3,330	4,246	4,600	44,779	10·4
Madras	93,991	82,189	87,942	78,419	89,645	88,568	92,389	95,586	88,045	89,585	107,693	117,384	1,111,281	22·9
Coorg	299	291	384	363	321	368	424	299	320	226	241	264	3,750	22·8
Assam	16,828	12,363	11,999	13,735	13,848	14,088	14,630	14,360	11,594	12,857	13,853	13,964	164,119	19·2
Ajmer-Merwara	1,400	1,224	1,268	1,269	1,567	998	920	807	1,009	1,096	1,079	1,497	14,134	28·4

TABLE F.—DEATH RATES PER MILLE BY MONTHS.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
BRITISH INDIA	23.4	19.4	21.3	20.8	21.8	20.6	20.8	22.9	22.2	22.8	24.3	25.5
N.-W. F. P.	27.0	19.6	17.5	15.0	15.2	18.1	17.6	14.3	12.8	13.7	15.9	20.6
Punjab	26.3	22.0	21.4	18.7	24.3	24.2	22.3	21.2	20.1	20.2	22.3	23.7
Delhi	25.6	19.3	21.5	22.8	34.1	25.9	22.1	23.4	20.3	21.4	20.5	20.2
U. P.	19.5	16.9	18.7	20.0	21.8	22.4	21.8	22.7	22.5	22.2	20.4	21.3
Bihar	19.4	14.3	17.1	18.7	19.5	19.8	20.5	25.6	25.1	24.6	23.3	24.1
Orissa	29.8	25.2	27.4	26.7	24.8	21.9	24.8	31.9	29.9	28.4	27.7	31.7
Bengal	25.6	20.2	22.3	22.5	18.4	16.2	16.6	18.9	18.1	19.8	23.5	25.7
O. P.	29.3	24.6	29.3	27.0	31.9	24.4	23.0	29.8	35.2	38.2	40.4	35.9
Bombay	25.7	22.8	27.2	25.2	24.6	19.6	22.9	26.0	24.8	26.0	26.8	27.9
Sind	15.1	13.0	11.9	10.1	9.6	8.1	7.9	7.7	7.6	9.3	11.9	12.8
Madras	23.2	20.3	21.8	19.4	22.2	21.9	22.9	23.7	21.8	22.2	26.6	29.0
Coorg	21.9	21.4	24.4	26.5	28.5	26.9	31.0	21.9	28.4	16.5	17.6	19.3
Assam	23.6	17.3	16.8	19.2	19.4	19.7	20.5	20.1	16.2	18.0	19.4	19.6
Ajmer-Merwara	27.9	24.4	25.2	25.3	31.2	19.9	18.3	16.1	20.1	21.8	21.5	29.8

TABLE G.—DEATHS BY MONTHS IN RURAL AREAS.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	Rate Per mille.
BRITISH INDIA	488,860	401,647	440,223	436,988	446,002	424,023	425,513	468,167	480,443	473,942	504,658	533,092	5,496,714	21.8
N.-W. F. P.	5,169	3,762	3,345	2,876	2,799	3,338	3,249	2,613	2,384	2,604	2,974	3,920	39,093	17.6
Punjab	53,164	44,591	43,471	37,215	43,413	45,066	43,679	41,406	40,004	40,938	44,610	47,710	533,268	22.6
Delhi	651	409	398	481	780	572	466	468	434	403	447	399	5,848	25.9
U. P.	74,823	65,491	71,235	76,410	80,832	84,763	81,659	83,435	84,944	85,333	77,854	82,053	948,332	19.9
Bihar	56,188	41,144	40,220	53,863	56,330	57,272	58,665	73,744	72,424	71,222	67,285	69,869	727,226	31.4
Orissa	17,712	14,929	16,230	15,827	14,761	12,926	14,580	18,857	17,799	15,665	16,403	18,777	194,468	27.5
Bengal	105,602	82,751	91,515	92,019	74,949	65,954	67,280	76,951	74,277	81,774	96,560	106,473	1,016,105	20.6
O. P.	36,153	30,174	36,431	33,436	39,460	30,599	28,002	36,322	43,851	47,703	50,898	45,148	458,225	30.7
Bombay	32,169	28,468	34,297	31,851	31,224	24,526	28,683	32,465	31,424	32,875	34,444	35,232	377,643	23.5
Sind	3,854	3,528	3,156	2,541	2,297	1,876	1,816	1,759	1,827	2,340	2,918	3,086	30,998	8.6
Madras	83,891	73,237	78,218	69,928	79,687	79,538	83,405	85,507	78,978	79,802	95,968	105,741	993,895	22.3
Coorg	242	247	276	304	272	321	372	265	279	197	209	224	3,208	20.7
Assam	16,475	12,142	11,729	13,457	13,499	13,774	14,800	13,972	11,282	12,580	13,495	13,666	160,321	19.2
Ajmer-Merwara	777	779	762	727	749	497	467	403	540	556	595	794	7,646	18.4

TABLE H.—DEATHS BY MONTHS IN URBAN AREAS.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	Rate per mille.
BRITISH INDIA	56,447	48,219	53,885	52,574	59,379	52,916	56,042	62,136	55,346	54,373	58,217	59,036	668,520	23·3
N.-W. F. P. . . .	604	416	401	333	442	523	507	435	355	320	421	486	5,343	15·1
Punjab	6,869	5,134	5,007	5,151	6,458	6,726	6,711	6,433	5,490	4,776	5,738	5,936	69,924	19·7
Delhi	908	768	911	908	1,352	1,007	893	960	802	903	804	836	11,052	21·8
U. P.	12,330	10,217	12,199	13,064	16,532	15,488	15,707	18,099	15,596	13,794	13,105	13,046	169,177	28·1
Bihar	1,250	1,029	1,348	1,399	1,405	1,865	1,765	1,997	1,632	1,468	1,450	1,431	17,539	12·4
Orissa	410	353	403	377	335	353	463	503	365	380	421	483	4,846	21·5
Bengal	7,065	6,084	6,752	6,923	6,024	5,292	5,760	5,933	5,489	5,397	6,904	6,802	74,425	21·0
C. P.	4,697	4,133	4,551	4,166	5,074	3,466	4,172	5,326	5,297	5,623	5,535	5,035	57,075	30·8
Bombay	10,238	9,279	10,646	9,737	9,360	7,836	9,236	10,493	9,526	10,043	9,912	10,383	117,244	31·2
Sind	1,543	1,144	1,109	1,091	1,123	1,033	1,009	992	900	990	1,323	1,514	13,781	17·9
Madras	10,000	8,952	9,724	8,491	9,958	9,025	8,984	10,079	9,072	9,783	11,725	11,593	117,386	29·3
Coorg	57	44	53	59	49	47	52	34	41	29	32	40	543	57·7
Assam	353	221	270	276	349	314	330	333	312	327	353	293	3,733	17·6
Almcr-Merwara . .	623	445	506	542	313	501	453	404	469	540	484	703	6,433	34·7

TABLE I.—DEATHS ACCORDING TO AGE AND SEX.

	Under one year.		1-5 years.		5-10 years.		10-15 years.		15-20 years.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
BRITISH INDIA	794,339	660,339	571,761	539,553	174,638	156,961	98,066	85,242	91,101	108,278
N.-W. F. P.	5,504	3,855	4,069	3,573	1,448	1,280	892	923	928	909
Punjab	102,921	83,352	60,447	60,155	15,637	13,833	9,646	9,068	9,732	9,904
Delhi	2,807	2,461	1,758	1,857	364	369	276	286	284	419
U. P.	136,247	108,547	122,947	108,737	29,550	24,728	18,179	16,244	15,199	15,252
Bihar	67,066	54,978	74,461	69,131	26,105	21,360	15,486	11,086	13,739	12,186
Orissa	26,311	22,452	14,836	15,041	5,154	4,896	2,652	2,301	2,881	3,639
Bengal.	127,641	106,660	75,443	74,712	39,587	35,870	21,738	16,741	20,139	28,895
C. P.	74,645	64,161	65,317	43,927	13,519	11,968	6,673	5,797	6,703	7,604
Bombay	63,838	54,567	51,070	52,655	11,900	12,433	5,378	5,739	4,821	6,554
Sind	4,748	3,812	3,591	3,126	1,876	1,146	893	739	845	843
Madras	160,612	136,862	86,330	86,668	23,425	23,170	12,446	12,598	12,265	17,212
Coorg	263	261	193	172	98	103	94	65	110	134
Assam	19,668	16,633	13,638	13,310	6,311	5,577	3,567	2,886	3,260	4,427
Ajmer-Merwara	2,035	1,728	1,661	1,459	254	228	148	169	145	250
	20-30 years.		30-40 years.		40-50 years.		50-60 years.		60 years & over.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
BRITISH INDIA	220,226	277,699	239,422	223,643	253,984	184,201	264,376	205,166	524,357	491,897
N.-W. F. P.	2,011	2,164	2,220	1,999	1,868	1,665	1,985	1,478	3,299	2,261
Punjab	15,952	18,845	14,988	16,443	17,027	14,231	20,315	15,838	50,641	38,919
Delhi	520	521	451	512	455	413	473	357	1,082	940
U. P.	39,147	43,960	41,392	39,571	47,091	33,227	52,046	37,318	102,694	66,023
Bihar	34,998	34,911	36,317	30,262	34,756	25,636	35,900	31,799	56,210	57,978
Orissa	7,976	10,964	6,735	8,679	8,014	8,923	9,817	9,681	13,235	15,075
Bengal	49,607	68,864	54,164	48,397	54,331	36,840	48,994	37,239	77,890	68,278
C. P.	16,613	20,079	18,244	15,895	19,572	13,754	20,413	16,455	38,910	40,051
Bombay	14,322	20,421	16,830	16,309	19,180	18,115	20,475	14,204	45,301	45,257
Sind	2,299	2,395	2,435	2,092	2,538	1,404	2,271	1,051	4,398	2,777
Madras	29,591	43,442	35,134	37,480	41,145	31,422	44,086	34,188	118,444	124,761
Coorg	263	297	313	251	307	158	177	125	191	170
Assam	6,537	10,113	7,507	7,306	7,164	5,072	6,780	5,008	10,999	8,358
Ajmer-Merwara	390	623	394	452	496	356	644	430	1,163	1,049
			M.—Males.		F.—Females.					

TABLE J.—DEATH RATES ACCORDING TO AGE AND SEX.

	Under 1 year.		1—5 years.		5—10 years.		10—15 years.		15—20 years	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
BRITISH INDIA	163·3	147·4	34·3	31·6	9·2	9·1	5·7	5·7	7·2	8·6
N.-W. F. P.	185·1	124·5	24·0	21·8	7·3	8·0	5·1	7·0	7·6	8·8
Punjab	174·9	159·4	39·7	37·1	8·0	8·2	5·4	6·5	7·1	8·6
Delhi	170·9	158·6	45·0	47·7	8·1	9·6	6·1	7·8	6·8	12·4
U. P.	145·8	132·2	38·2	33·5	8·2	8·0	5·5	6·0	6·0	6·8
Bihar	121·0	105·0	34·2	29·8	10·3	9·1	7·1	5·7	9·6	8·1
Orissa	207·0	187·8	39·1	37·4	12·1	11·8	6·5	6·0	8·7	10·3
Bengal	153·9	138·8	23·7	22·9	10·5	10·8	6·6	5·7	8·4	10·8
C. P.	228·9	207·7	55·9	46·9	12·6	11·5	6·9	6·3	9·1	9·3
Bombay	159·7	145·2	44·2	44·4	9·0	10·1	4·6	5·3	5·4	7·4
Sind	105·3	108·3	18·1	11·9	4·3	4·7	3·3	3·8	4·0	5·2
Madras	185·6	165·0	31·0	30·3	7·4	7·5	4·3	4·6	5·8	7·7
Coorg	134·4	146·0	25·6	22·2	10·3	11·2	9·4	7·2	12·0	17·7
Assam	156·6	142·3	23·4	22·1	10·4	10·1	6·9	6·2	8·8	10·7
Ajmer-Merwara	184·8	181·5	46·5	41·7	6·4	6·6	4·0	5·4	4·5	8·9

*Ratios have been worked out per 1,000 of live births.

	20—30 years.		30—40 years.		40—50 years.		50—60 years.		60 years & over.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
BRITISH INDIA	8·7	11·0	11·6	12·1	18·2	15·2	32·8	27·8	92·8	87·5
N.-W. F. P.	8·4	9·7	11·6	12·5	15·6	16·5	27·3	26·6	56·4	57·1
Punjab	6·8	8·6	7·8	10·2	12·9	13·5	23·4	23·7	65·5	67·1
Delhi	5·6	12·9	6·6	12·5	11·4	17·2	23·4	26·1	82·2	98·5
U. P.	7·8	9·5	10·2	10·9	16·6	13·4	31·8	25·1	96·8	80·0
Bihar	11·6	11·0	14·3	11·9	20·0	15·5	36·4	31·7	86·6	72·6
Orissa	12·8	15·0	17·2	14·9	21·8	18·8	43·6	37·5	108·1	90·2
Bengal	9·9	13·8	13·3	14·4	21·1	18·5	35·7	31·6	85·1	81·6
C. P.	11·2	13·2	15·7	13·9	23·5	17·5	42·3	34·2	116·9	101·6
Bombay	7·7	11·5	10·6	12·7	19·0	15·1	35·9	26·9	122·6	120·2
Sind	4·9	6·3	6·3	7·7	11·0	8·6	19·7	12·1	58·7	44·5
Madras	7·3	9·4	10·2	11·1	17·1	14·0	30·3	23·9	105·8	108·2
Coorg	13·4	19·3	19·1	24·1	32·7	26·4	40·0	35·9	76·2	69·6
Assam	8·2	12·9	11·1	14·8	16·8	16·8	29·2	29·8	73·8	73·1
Ajmer-Merwara	6·5	12·1	9·1	12·1	14·5	12·8	33·7	26·8	119·5	97·3

M.—Males.

F.—Females

TABLE K.—DEATHS ACCORDING TO AGE AND SEX IN RURAL AREAS.

	Under one year.		1—5 years.		5—10 years.		10—15 years.		15—20 years.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
BRITISH INDIA	689,593	572,136	508,053	476,368	159,515	143,233	89,108	74,940	80,777	92,702
N.-W. F. P.	4,834	3,369	3,663	3,188	1,340	1,189	810	818	808	780
Punjab	90,785	73,047	59,349	52,909	14,073	12,321	8,809	8,437	8,637	8,298
Delhi	893	870	682	732	139	113	73	66	61	71
U. P.	109,377	85,995	105,803	91,448	28,048	21,219	16,242	13,504	13,936	11,413
Bihar	85,386	53,643	73,083	47,989	25,540	20,906	15,074	10,731	13,343	11,748
Orissa	25,790	21,968	14,542	14,801	5,080	4,795	2,599	2,236	2,802	3,579
Bengal	120,356	100,419	71,232	70,890	37,325	33,995	20,201	15,531	18,449	27,203
C. P.	65,942	56,844	49,897	43,901	12,419	10,314	5,971	5,035	5,844	6,178
Bombay	47,366	40,611	40,357	41,724	9,770	10,238	4,316	4,478	3,455	4,660
Sind	2,642	2,035	2,418	2,066	1,144	913	729	562	628	559
Madras	136,713	116,131	72,508	72,760	20,196	20,090	10,644	10,802	10,080	13,795
Coorg	258	249	179	159	93	94	75	61	95	127
Assam	19,256	16,297	13,400	13,045	6,209	5,469	3,468	2,809	3,166	4,312
Ajmer-Merwara	880	709	960	756	139	134	97	70	93	114
	20—30 years.		30—40 years.		40—50 years.		50—60 years.		60 years & over.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
BRITISH INDIA	191,929	239,324	212,036	198,523	225,226	165,157	235,193	186,730	462,029	432,565
N.-W. F. P.	1,735	1,855	1,965	1,796	1,654	1,441	1,714	1,321	2,831	1,923
Punjab	13,927	15,791	13,279	13,573	15,122	12,832	18,047	14,327	45,073	34,622
Delhi	145	213	129	169	154	133	163	109	476	357
U. P.	34,326	35,142	36,096	34,169	42,174	29,549	46,624	39,654	88,327	78,493
Bihar	34,064	32,971	35,646	29,495	33,844	25,135	35,120	31,266	54,711	56,541
Orissa	7,742	10,720	3,478	3,469	7,773	6,740	9,521	9,484	12,799	14,548
Bengal	43,690	63,872	49,823	43,684	49,977	33,870	45,104	34,780	72,663	63,531
C. P.	14,569	17,054	16,230	14,136	17,450	12,482	18,243	15,046	34,637	35,538
Bombay	9,902	14,249	12,048	12,629	14,105	10,190	15,365	11,321	35,255	35,704
Sind	1,727	1,702	1,816	1,644	1,835	1,085	1,632	803	3,245	1,818
Madras	23,358	35,323	28,418	31,079	33,673	25,355	36,521	29,286	100,377	105,554
Coorg	210	255	220	218	216	134	140	119	163	143
Assam	6,309	9,862	7,232	7,163	6,936	4,990	6,594	4,912	10,723	8,164
Ajmer-Merwara	225	315	256	284	313	221	405	302	739	634
			M.—Males.		F.—Females.					

TABLE L.—DEATHS ACCORDING TO AGE AND SEX IN URBAN AREAS.

	Under one year.		1—5 years.		5—10 years.		10—15 years.		15—20 years	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
BRITISH INDIA	104,748	88,153	63,708	63,185	15,123	14,678	8,958	10,308	10,324	15,571
N.-W. F. P.	670	487	406	385	108	91	82	105	120	129
Punjab	12,136	10,805	7,098	7,246	1,464	1,512	837	1,231	1,095	1,606
Delhi	1,814	1,581	1,076	1,125	225	256	203	220	223	348
U. P.	26,870	22,552	17,144	17,289	8,512	8,516	1,937	2,740	1,868	3,839
Bihar	1,670	1,335	1,898	1,142	565	454	412	355	448	433
Orissa	521	484	294	240	74	101	53	65	79	110
Bengal	7,285	6,241	4,211	3,822	2,262	1,875	1,537	1,210	1,690	1,692
C. P.	8,703	7,317	5,420	5,026	1,100	1,154	702	782	859	1,431
Bombay	16,472	13,976	10,713	10,931	2,130	2,195	1,060	1,261	1,366	1,994
Sind	2,106	1,777	1,173	1,060	232	233	164	177	217	284
Madras	24,894	20,731	13,822	13,908	3,229	3,080	1,802	1,996	2,205	3,447
Coorg	10	12	14	13	5	9	19	4	15	7
Assam	410	386	238	265	102	108	99	77	94	115
Ajmer-Merwara	1,185	1,019	701	733	115	94	51	99	52	136
	20—30 years.		30—40 years.		40—50 years.		50—60 years.		60 years & over.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
BRITISH INDIA	23,297	37,475	27,386	25,125	29,738	19,044	29,183	18,436	62,328	59,332
N.-W. F. P.	276	309	255	203	234	154	271	152	468	338
Punjab	2,025	2,854	1,707	1,865	1,905	1,399	2,268	1,511	5,663	4,297
Delhi	376	608	322	343	301	285	310	248	606	583
U. P.	4,821	8,818	4,896	5,402	4,917	3,678	5,422	3,664	14,267	12,530
Bihar	934	940	971	787	912	551	780	533	1,499	1,437
Orissa	234	244	257	210	241	183	296	197	436	527
Bengal	5,917	4,992	4,841	3,293	4,354	2,970	3,690	2,459	5,227	4,747
C. P.	2,044	3,025	2,014	1,759	2,122	1,272	2,170	1,409	4,273	4,513
Bombay	4,420	6,172	4,762	4,180	5,075	2,925	5,110	2,383	10,046	9,553
Sind	572	693	619	448	703	319	639	248	1,153	964
Madras	6,233	8,219	6,716	6,401	7,472	5,067	7,565	4,902	18,067	19,207
Coorg	53	42	93	83	91	24	37	6	28	27
Assam	228	251	275	143	228	82	186	96	271	194
Ajmer-Merwara	165	308	133	163	133	135	239	123	424	415

M.—Males.

F.—Females.

TABLE M.—INFANTILE MORTALITY RATE IN THE LARGE TOWNS DURING 1939.

Towns.	Rate p.m. of live- births.	Towns.	Rate p.m. of live- births.
<i>N.-W. F. Province.</i>		<i>Bengal Presidency—contd.</i>	
Peshawar	132.5	Titagarh	182.9
Dera Ismail Khan	101.7	Naihati	103.7
<i>Delhi.</i>		Bhatpara	222.6
Delhi City	169.9	Calcutta	205.4
New Delhi	85.7	Sirajganj	122.6
<i>United Provinces.</i>		Dacca	162.7
Dehra Dun	220.1	Narayanganj	209.3
Saharanpur	331.5	Mymensingh	159.8
Hardwar Union	288.0	Barisal	146.1
Muzaffarnagar	197.6	Chittagong	149.3
Meerut	161.0	<i>Central Provinces.</i>	
Khurja	249.5	Nagpur	226.2
Aligarh	209.7	Jubbulpore	264.4
Hathras	297.9	Saugor	277.0
Muttra	171.0	Khandwa	261.7
Agra	183.1	Burhanpur	180.7
Bareilly	147.3	Raipur	194.7
Budaun	238.9	Bilaspur	227.1
Moradabad	192.9	Amraoti	161.7
Amroha	204.9	Akola	211.4
Sambhal	235.9	<i>Bombay Presidency.</i>	
Shahjahanpur	281.6	Bombay	212.2
Pilibhit	230.2	Jalgaon	163.9
Farrukhabad-cum-Fatehgarh	276.2	Dhulia	110.4
Etawah	327.4	Surat	246.9
Cawnpore	301.0	Broach	138.0
Allahabad	188.2	Nadiad	242.1
Jhansi	254.6	Godhra	184.4
Benares	218.4	Ahmedabad	267.4
Mirzapur-Bindhachal	169.9	Ahmednagar	140.0
Jaunpur	162.4	Poona	229.7
Gorakhpur	213.1	Nasik	254.5
Lucknow	212.2	Malegaon	224.5
Fyzabad-Ajodhya	160.5	Bandra	149.2
Bahraich	150.1	Kurla	130.5
<i>Bengal Presidency.</i>		Belgaum	103.4
Asansol	98.1	Gadag-Betigeri	287.9
Bankura	84.6	Bijapur	82.0
Hooghly-Chinsura	112.1	Sholapur	186.7
Serampur	159.3	<i>Sind.</i>	
Howrah	240.8	Karachi	135.7
South Suburban	117.9	Hyderabad	182.4
Baranagar	163.7	Sukkur	71.4
		Shikarpur	179.6

TABLE M.—INFANTILE MORTALITY RATE IN THE LARGE TOWNS DURING
1939—*contd.*

Towns.	Rate <i>p.m.</i> of live- births.	Towns.	Rate <i>p.m.</i> of live- births.
<i>Madras Presidency.</i>		<i>Madras Presidency—contd.</i>	
Bellary	199.4	Tellicherry	105.6
Adoni	131.1	Nellore	201.2
Conjeevaram	177.6	Vellore	168.1
Saidapet	233.1	Virudhunagar	167.5
Combatore	134.3	Srivilliputtur	168.0
Erode	160.9	Salem	149.7
Cocanada	225.9	Cuddalore	148.4
Rajahmundry	174.2	Tanjore	157.1
Guntur	239.0	Kumbakonam	131.1
Tenali	203.0	Negapatam	170.1
Bezwada	234.7	Mayavaram	129.9
Masulipatam	212.2	Tuticorm	216.9
Madras	241.6	Tinnevelly	231.1
Madura	171.3	Palamcottah	162.1
Dindigul	163.9	Trichinopoly	169.2
Calicut	130.9	Vizagapatam	204.8
Palghat	175.2	Vizianagram	18.8
Cannanore	114.1		

TABLE N.—INFANTILE MORTALITY IN RURAL AND URBAN AREAS.

	Rural.		Urban.	
	Deaths.	Rate p. m. of live-births.	Deaths.	Rate p. m. of live-births.
BRITISH INDIA	1,261,779	150.7	192,899	198.6
N.-W. F. P.	8,202	133.0	1,157	115.3
Punjab	163,832	187.0	22,441	171.7
Delhi	1,863	181.6	3,395	157.0
U. P.	195,372	129.6	49,422	199.7
Bihar	119,039	113.2	3,005	114.0
Orissa	47,758	197.9	1,005	176.2
Bengal	220,775	145.8	13,526	161.7
C. P.	122,786	219.8	16,020	210.0
Bombay	87,977	143.9	30,448	185.3
Sind	4,677	88.3	3,883	138.9
Madras	251,849	164.2	45,625	283.2
Coorg	507	157.9	22	38.5
Assam	35,553	150.8	746	112.4
Rajmer-Merwara	1,589	134.0	2,204	248.6

TABLE O.—CRUDE AND STANDARDISED DEATH RATES *PER MILLE* (DIRECT METHOD) FOR DIFFERENT PROVINCES IN INDIA. THE 1931 CENSUS POPULATION DISTRIBUTION FOR INDIA HAS BEEN TAKEN AS THE STANDARD.

		1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	1939.
N.-W. F. P.	Standardised	20.5	20.3	21.2	20.7	18.8	17.1	20.4	21.8	17.8
	Crude	20.2	19.7	20.8	20.4	18.6	17.0	19.9	21.3	17.3
Punjab	Standardised	23.4	22.0	24.5	24.6	21.1	20.5	19.2	20.8	20.1
	Crude	25.9	24.2	27.1	26.3	23.3	22.0	23.1	23.4	22.2
Delhi	Standardised	23.4	23.9	31.8	30.6	28.9	25.6	23.4	22.8	22.9
	Crude	23.7	24.2	31.9	28.5	28.7	23.8	23.8	23.4	23.1
U. P.	Standardised	26.1	21.4	17.2	25.7	23.1	21.2	19.4	23.2	20.6
	Crude	26.9	22.0	18.2	25.6	23.6	21.2	19.8	23.6	20.9
Bihar	Standardised	26.0†	19.9†	20.9†	26.2†	23.6†	21.3	20.7	21.4	20.9
	Crude	26.5†	20.4†	21.6†	25.1†	24.1†	20.5	21.0	21.8	21.0
Orissa	Standardised	..	..	..	..	..	28.2	27.0	28.5	26.8
	Crude	..	..	..	..	..	27.0	27.6	28.8	27.3
Bengal	Standardised	23.5	21.8	25.0	23.5	22.7	24.0	24.0	26.3	21.5
	Crude	22.2	20.3	23.7	23.2	22.1	23.7	23.6	25.0	20.7
C. P.	Standardised	31.8	23.5	23.0	*	*	31.1	28.4	35.2	29.0
	Crude	36.4	26.5	25.7	35.5	32.6	32.4	30.1	37.6	30.7
Bombay	Standardised	23.5†	22.4†	23.9†	20.9†	24.2†	26.6	24.8	27.1	24.1
	Crude	23.7†	22.7†	24.1†	24.5†	24.4†	26.0	25.4	27.9	25.0
Sind	Standardised	..	..	..	..	..	12.3	13.0	13.2	12.1
	Crude	..	..	..	..	..	11.5	11.1	11.3	10.4
Madras	Standardised	21.3	19.8	21.3	24.3	22.3	22.1	20.9	20.8	21.6
	Crude	23.6	21.6	22.9	23.9	23.6	22.0	22.3	21.6	22.9

* Figures not available.

† Including Orissa.

‡ Including Sind.

TABLE O.—*contd.*

		1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	1939.
Coorg	Standardised	25.7	24.9	26.5	25.0	24.6	25.6	29.8	26.6	24.8
	Crude	23.8	23.3	24.0	23.1	22.9	23.7	27.2	24.3	22.8
Assam	Standardised	19.7	19.4	20.6	19.6	21.4	19.5	21.8	22.1	20.2
	Crude	18.6	18.7	19.8	19.0	20.5	18.6	20.9	20.9	19.2
Ajmer-Merwara	Standardised	30.0	24.5	27.4	28.9	27.8	24.2	29.3	25.0	29.5
	Crude	30.1	24.8	28.1	28.7	28.4	24.1	29.8	25.1	23.4

TABLE P—VITAL STATISTICS FOR INDIAN STATES.

State.	Estimated population on 30th June 1939.	Births.	Birth rate per mille.	Deaths.	Death rate per mille.	Deaths under one year.	Infantile mortality per 1000 births.
Hyderabad State	16,073,123	168,166	10.5	145,065	9.0	†	†
Mysore State	7,039,308	138,120	19.6	98,759	14.0	15,068	109.1
Jammu and Kashmir	3,917,079	86,913	22.2	63,533	16.2	8,474	97.5
<i>Madras States.</i>							
Sandur	15,183	416	27.4	282	18.6	69	165.0
Banganapallee	41,397	1,383	33.4	979	23.6	63	45.6
Cochin*	1,393,209	18,944	13.6	13,720	9.8	1,377	72.7
Pudukkottal	378,927	7,211	19.0	5,961	15.7	579	80.3
Travancore	6,004,233	119,257	19.9	60,477	10.1	11,069	92.8
<i>Rajputana States.</i>							
Jalpur	2,875,917	19,893	6.9	15,873	5.4	3,791	190.6
Jodhpur (City only)	112,449	3,005	26.7	2,382	21.2	647	182.0
Mewar	1,738,517	18,326	10.6	10,384	6.0	2,439	133.1
Kotah	732,254	26,713	36.5	19,024	26.0	†	†
Bharatpur	479,054	14,314	29.9	9,042	18.9	1,996	139.4
Dholpur	275,653	4,763	17.3	2,603	9.4	†	†
Dungarpur	260,269	1,080	4.1	1,667	7.2	134	124.1
Banswara	254,056	2,344	9.2	2,825	11.1	11	4.5
Bundi	241,430	5,354	22.2	3,216	13.3	803	150.0
Sirohi	241,435	367	1.5	238	1.0	40	109.0
Karauli	146,192	1,782	12.1	2,099	14.4	423	240.1
Jhalawar	117,648	533	4.5	418	3.6	74	138.8
Kishangarh	92,419	2,060	22.3	1,539	16.7	467	226.7
Partabgarh	84,397	1,849	21.9	2,070	24.5	115	62.2
Jaisalmer	83,422	765	9.2	698	8.4	†	†
Palanpur	287,083	3,053	12.7	3,248	11.3	†	†
Tonk	341,910	10,628	31.1	9,443	27.6	1,127	108.0
Shahpura	69,316	1,369	23.1	972	10.4	164	119.8
Lawa Chiefship	3,232	57	17.6	14	4.3	3	52.6
Kushalgarh Chiefship	40,897	165	4.0	292	7.1	33	200.0
Bikaner City	99,991	1,104	11.1	821	8.2	197	178.4
<i>Eastern States Agency.</i>							
Athgarh	56,645	1,680	29.7	2,041	36.0	488	290.5
Baramba	51,569	2,235	43.3	1,487	28.8	529	236.7
Baudh	144,278	6,503	45.1	4,000	27.7	1,327	204.1
Bonai	90,192	3,571	39.6	2,604	29.0	901	252.3
Daspalla	60,812	2,194	43.2	1,686	33.2	566	258.0
Hindol	57,461	2,291	39.9	1,492	26.0	580	253.2
Dhenkanal	326,526	10,926	33.5	8,365	25.6	2,722	249.1
Rhandpara	89,295	4,092	45.8	2,635	29.5	934	228.8
Kharsawan	209,554	1,199	5.7	864	4.1	117	97.6
Narsingpur	47,441	1,933	40.7	1,983	29.2	435	225.0
Nayagarh	158,799	7,005	44.1	3,129	19.7	824	117.6
Nilgiri	71,493	1,036	23.6	1,507	21.1	287	170.2
Pal-Lahara	31,461	1,229	39.1	832	26.4	320	260.4
Rairakhol	39,447	3,758	95.3	3,092	78.4	1,065	283.4
Rampur	53,098	1,486	28.0	1,094	20.6	305	205.2
Sonepur	247,227	8,872	35.9	5,305	21.5	2,055	231.6
Tigra	29,228	918	31.4	988	33.8	291	317.0
Mayurbhanj	1,002,343	31,426	31.4	21,251	21.2	3,849	122.5
Suruja	562,842	9,651	17.1	8,199	14.4	1,095	113.5
Athmallik	68,039	3,434	50.5	2,388	35.1	1,686	491.0
Bamra	164,665	6,336	38.5	5,271	32.0	1,494	235.8

†Figures not available.

*Figures for Cochin State are for the year 1115 Malayalam Era.

State.	Estimated population on 30th June 1939.	Births.	Birth rate per mille.	Deaths.	Death rate per mille.	Deaths under one year.	Infantile mortality per 1000 births.
<i>Eastern States Agency—</i>							
<i>contd.</i>							
Gangpur	896,174	13,552	34.2	9,634	24.3	2,266	167.2
Keonjhar	528,201	19,475	36.9	12,742	24.1	3,183	183.4
Seraikela	167,133	3,033	18.1	2,227	13.3	327	107.6
Talcher	85,277	717	8.4	516	6.1	128	178.5
Cooch Behar	589,514	13,478	22.9	13,472	22.8	1,767	131.1
Tripura	447,461	19,944	44.6	9,972	22.3	2,493	125.0
Bastar	575,204	18,910	32.9	11,798	20.6	2,760	146.0
Changbhakar	24,572	440	17.9	458	18.6	35	79.5
Chhukhadan	36,293	1,219	33.6	920	25.3	370	303.5
Jashpur	226,648	6,273	27.7	4,271	18.8	975	155.4
Kalahandi	595,200	15,430	25.9	13,847	23.3	3,805	246.6
Kanker	145,445	5,191	35.7	2,942	20.2	716	137.9
Kawardha	82,020	3,220	39.3	2,730	33.3	1,014	314.9
Khairagarh	185,225	5,785	31.2	4,345	23.5	987	170.6
Korea	100,613	2,512	25.0	2,019	20.1	609	202.6
Nandgaon	209,738	7,958	37.9	6,043	28.8	2,192	275.4
Patna	627,126	29,900	47.7	16,979	27.1	5,804	194.1
Raigarh	307,519	10,114	32.9	6,517	21.2	1,627	160.9
Sakti	54,243	1,927	35.5	1,308	24.1	474	246.0
Sarangarh	138,294	4,079	29.5	2,656	20.7	653	160.1
Udaipur	119,913	3,659	30.5	2,594	21.6	664	181.5
<i>Central India Agency.</i>							
Rewa	1,742,378	725	0.4	820	0.5	210	289.7
Orchha	339,421	9,588	28.2	7,462	22.0	•	•
Datia	167,313	2,301	13.8	784	4.7	•	•
Samthar	33,382	911	27.3	481	14.4	•	•
Panna	224,238	2,341	10.4	2,038	9.1	•	•
Charkhari	117,506	1,639	15.6	1,107	9.4	•	•
Ajajgarh	86,615	2,271	26.2	1,424	16.4	•	•
Bijawar	119,292	2,574	21.6	1,810	15.2	•	•
Baoni	16,630	740	39.7	503	27.0	•	•
Chhatarpur	156,865	5,107	32.6	3,188	20.8	•	•
Baraundha	16,203	213	13.1	374	23.1	•	•
Nagod	79,941	2,779	34.8	1,907	23.9	•	•
Maihar	71,038	1,925	27.1	1,325	18.7	•	•
Alipura Jagir	15,929	549	34.5	380	23.9	•	•
Banka Pabari Jagir	1,068	56	52.4	29	27.2	•	•
Beri Jagir	4,080	95	23.6	54	13.4	•	•
Bhalsondha Jagir	4,164	159	38.2	72	17.8	•	•
Bihat Jagir	4,380	156	35.6	124	28.3	•	•
Bijna Jagir	1,668	57	34.3	59	35.5	•	•
Dhurwal Jagir	2,154	100	46.4	85	39.5	•	•
Garrouli Jagir	9,902	157	15.9	81	8.2	•	•
Jaso Jagir	3,324	118	14.2	63	7.6	•	•
Jigni Jagir	3,660	167	45.6	123	33.6	•	•
Kamta Rajaula Jagir	1,168	37	31.8	24	20.6	•	•
Kothi Jagir	22,538	151	6.7	290	10.2	•	•
Lughasi Jagir	6,200	846	55.8	233	37.6	•	•
Naigawan Rabi Jagir	2,551	122	47.8	78	30.6	•	•
Pakra Jagir	3,756	68	18.1	65	17.3	•	•
Paldeo Jagir	7,972	291	36.5	159	17.4	•	•
Sarila State	5,972	334	55.9	224	37.5	•	•
Sohawal State	45,620	591	13.0	569	12.5	•	•
Taraon Jagir	3,352	31	9.2	11	3.8	•	•
Tori Petahpur Jagir	4,778	184	38.5	99	20.7	•	•
Bhopal	761,213	20,489	26.9	21,580	28.3	5,686	277.6
Dewas Senior Branch	8,588	777	90.6	1,269	147.8	•	•
Rajgarh	151,708	2,145	14.1	2,157	14.2	•	•
Pethari	2,557	111	43.4	89	34.8	46	414.4
Makrai	17,786	561	31.5	740	42.1	200	356.5
Narsingarh	124,248	1,465	11.8	1,541	12.4	484	296.2

* Figures not available.

State.	Estimated population on 30th June 1939.	Births.	Birth rate per mille.	Deaths.	Death rate per mille.	Deaths under one year.	Infantile mortality per 1000 births.
<i>Central India Agency—contd.</i>							
Kurwai	23,934	286	11.9	354	14.8	73	255.2
Khilchipur	50,200	695	13.8	797	15.9	115	165.5
Mohammadgarh	2,666	70	26.3	76	28.5	6	85.7
Ratlam	125,513	2,089	16.6	1,855	14.8	445	213.0
Sitamau	29,980	600	20.0	451	15.0	"	...
Barwadi	168,577	2,591	16.3	2,041	12.9	"	...
Alirajpur	112,463	1,247	11.1	1,249	11.1	187	150.0
Jobat	21,702	308	14.2	298	13.6	"	...
Piploda	9,510	196	20.6	229	24.1	25	127.6
Sailana	42,123	487	11.6	511	12.1	65	133.5
Bakhatgarh	8,874	124	14.3	206	23.7	"	...
Kathlawara	6,846	148	21.6	83	12.1	16	108.1
Bharudpura	3,301	11	3.3	12	3.6	1	90.9
Nimkhera	7,179	61	8.6	152	21.2	"	...
<i>Baroda and Gujarat States Agency.</i>							
Balasnor	59,608	2,552	42.8	1,195	20.0	396	155.2
Bansda	56,040	955	17.0	971	17.3	127	133.0
Baria	177,879	1,954	11.0	1,673	9.4	"	...
Baroda	2,706,749	108,222	39.2	62,379	23.0	14,052	132.3
Cambay	101,136	3,516	34.8	2,326	23.0	661	188.0
Chhota Udepur	160,423	3,264	20.3	2,141	13.3	120	36.8
Dharampur	126,081	3,131	24.8	2,118	16.8	142	45.4
Jawhar	63,594	2,187	34.4	1,877	29.5	306	139.9
Lunawada	105,187	1,570	14.9	1,465	13.9	115	73.2
Rajpipla	237,468	7,536	31.7	5,520	23.2	1,259	167.1
Sachin	23,882	708	29.6	527	22.1	79	111.6
Sant	93,998	2,586	27.5	1,187	12.6	190	73.5
Azar	3,586	45	12.5	90	25.1	23	511.1
Bhaderwa	12,281	315	25.6	220	17.9	45	142.9
Chhallar	3,179	105	33.0	70	22.0	25	238.1
Gad Borlad	14,371	200	13.9	147	10.2	63	315.0
Jambughoda	12,927	487	37.7	224	17.3	42	86.2
Kadana	19,385	581	30.0	380	17.5	51	87.8
Mandwa	6,678	104	15.6	116	17.4	23	221.2
Palasni	3,166	92	29.1	43	13.6	13	141.3
Sihora	5,084	143	28.1	100	19.7	24	167.4
Sanor	2,073	80	38.6	50	24.1	16	200.0
Surgana	15,520	311	20.0	201	13.0	27	86.
Uchad	3,754	110	29.3	58	15.5	22	200.0
Umeta	7,315	240	32.8	123	16.8	42	175.0
Vajiria	5,696	189	33.2	143	25.1	35	185.2
Sanjell	9,150	324	35.4	125	13.7	22	67.9
Pandu Mewas	23,140	601	26.0	422	18.2	64	106.5
<i>Kolhapur and Deccan States.</i>							
Kolhapur	1,059,979	37,823	36.7	24,385	23.0	3,079	81.4
Akalkot	102,072	3,552	34.8	3,200	31.4	235	66.2
Bhor	150,821	5,799	38.4	3,277	21.7	829	148.0
Jamkhandi	125,100	4,810	38.8	2,732	21.8	646	140.1
Kurundwad (Senior)	46,737	1,989	40.8	1,011	20.7	200	130.7
Kurundwad (Junior)	44,000	1,944	44.2	1,272	28.9	266	136.8
Miraj (Senior)	103,426	2,807	27.1	2,128	20.6	346	123.3
Miraj (Junior)	45,736	1,603	35.0	940	20.6	200	124.8
Mudhol	65,074	2,378	36.5	1,245	19.1	181	76.1
Phaltan	65,694	2,671	40.7	1,516	23.1	427	159.9
Ramdurg	36,707	1,220	33.2	777	21.2	204	167.2
Sangli	280,395	10,501	36.3	5,093	20.4	1,469	139.9
Sawan(wadi)	250,714	7,939	31.7	4,261	17.0	758	95.5
Savanur	23,228	904	38.9	470	20.2	90	90.6
Aundh	86,465	3,428	39.6	1,815	21.0	557	162.5

*Figures not available.

State.	Estimated population on 30th June 1939.	Births.	Birth rate per mille.	Deaths.	Death rate per mille.	Deaths under one year.	Infantile mortality per 1000 births.
<i>Western India States Agency.</i>							
Nawanagar	462,391	3,125	6.8	1,042	2.3	122	39.0
Radhanpur	72,814	2,360	32.4	1,589	21.8	309	130.9
Morvi	131,080	2,608	19.9	2,543	19.4	471	180.6
Gondal	238,158	12,055	50.6	6,784	28.5	2,555	211.9
Jafrahad	12,989	559	43.0	445	34.3	111	198.6
Wankaner	50,455	2,700	53.5	1,280	25.4	465	172.2
Palitana	65,667	3,511	53.5	1,924	29.3	493	140.4
Dhrol	30,971	1,454	46.9	629	20.3	201	138.2
Limbdi	43,976	2,020	45.9	1,016	23.1	261	129.2
Rajkot	87,662	2,002	22.8	1,808	20.6	771	385.1
Wadhwan	46,482	1,936	41.7	998	21.5	250	129.1
Rajkot Civil Station	13,159	807	61.3	325	24.7	83	102.9
<i>U. P. States.</i>							
Tehri (Garhwal)	596,467	10,458	17.7	6,508	10.9	1,831	175.1
Benares	414,857	10,768	26.0	6,835	16.5	1,286	119.4
Rampur	474,344	9,474	20.0	7,028	14.8	1,888	199.3
<i>Punjab States.</i>							
Patiala	1,730,337	66,469	38.4	42,120	24.3	10,722	161.3
Nabha	307,774	7,783	25.3	5,853	19.0	300	38.5
Jind	338,418	14,939	44.1	10,671	31.5	2,163	144.8
Bahawalpur	1,154,129	23,321	20.2	10,568	9.2	*	*
Sirmoor	155,335	2,218	14.3	2,530	16.3	331	149.2
Bilaspur	103,486	2,605	27.1	2,886	27.9	579	206.4
Mandi	226,148	6,739	29.8	5,023	22.2	885	131.3
Kapurthala	343,324	9,622	28.0	4,690	13.6	967	100.5
Malerkotia	85,364	2,229	26.1	1,568	18.4	324	145.4
Faridkot	175,781	8,920	50.7	4,908	27.9	1,386	155.4
Chamba	151,037	1,926	12.8	1,734	11.5	8	4.2
Pataudi	19,523	912	46.7	621	31.8	330	361.8
Kalsia	61,915	2,253	36.4	1,660	26.8	371	164.7
Suket	61,808	1,284	20.8	1,446	23.4	126	98.1
Nalagarh	52,640	1,024	19.5	1,072	20.4	146	142.6

*Figures not available.

Appendix II

TABLE A.—DEATHS AND RATES PER MILLE FROM CERTAIN CAUSES OR GROUPS OF CAUSES OF MORTALITY.

Province.	Cholera.		Smallpox.		Plague.		Fevers.		Dysentery and Diarrhoea.		Respiratory Diseases.		Other causes.		Total.	
	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.
BRITISH INDIA .	97,566	0·4	48,103	0·2	26,257	0·1	3,613,376	13·0	260,300	0·9	499,339	1·8	1,620,293	5·8	6,165,234	22·2
N-W. F. P. .	...	...	675	0·3	...	...	34,564	13·5	312	0·1	3,243	1·3	5,482	2·1	44,276	17·3
Punjab . .	19	0·0	4,311	0·2	...	...	408,676	15·0	10,489	0·4	79,775	2·9	99,922	3·7	608,192	22·2
Delhi . .	96	0·1	606	0·3	...	...	4,470	6·1	1,081	1·5	5,055	6·9	5,592	7·7	16,900	23·1
U. P. . .	27,732	0·5	10,205	0·2	21,662	0·4	858,491	16·1	17,962	0·3	41,398	0·8	140,559	2·6	1,118,009	20·9
Bihar . .	16,771	0·5	8,362	0·2	1,938	0·1	601,893	16·9	4,141	0·1	3,113	0·1	108,547	3·1	744,765	21·0
Orissa . .	11,141	1·5	3,282	0·5	...	...	101,344	13·9	17,403	2·4	4,696	0·6	61,446	8·4	199,312	27·3
Bengal . .	33,221	0·8	7,029	0·1	2	0·0	637,587	13·1	54,453	1·0	83,458	1·7	219,730	4·2	1,090,530	20·7
C. P. . .	1,661	0·1	762	0·0	852	0·1	300,322	17·9	30,435	1·3	44,131	2·6	137,137	3·2	515,800	30·7
Bombay . .	1,786	0·1	6,769	0·3	1,472	0·1	168,788	3·5	25,567	1·3	109,922	5·5	180,583	9·2	494,887	25·0
Sind . . .	3	0·0	565	0·1	...	...	23,973	5·5	1,150	0·3	3,444	2·0	10,644	2·5	44,779	10·4
Madras . .	2,115	0·0	3,120	0·1	324	0·0	307,942	6·3	34,906	1·3	102,130	2·1	610,744	12·6	1,111,281	22·9
Coorg. . .	...	...	1	0·0	5	0·0	2,364	17·5	103	0·6	170	1·0	607	3·7	3,750	22·8
Assam . .	3,020	0·4	2,197	0·3	...	...	103,892	12·0	11,641	1·4	5,981	0·7	37,338	4·4	164,119	19·3
Ajmer-Merwara .	1	0·0	219	0·4	2	0·0	8,570	14·1	657	1·1	2,823	4·7	1,862	3·1	14,134	23·4

p. m.—per mille.

TABLE B.—DEATHS AND RATES PER MILLE FROM CERTAIN CAUSES OR GROUPS OF CAUSES OF MORTALITY IN RURAL AND URBAN AREAS.

Province.	Cholera.				Smallpox.				Plague.			
	Rural.		Urban.		Rural.		Urban.		Rural.		Urban.	
	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.	Deaths.	Rate p. m.
BRITISH INDIA	90,621	0.4	6,945	0.3	36,898	0.1	11,205	0.4	24,156	0.1	2,101	0.1
N.-W. F. P. . . . .	...	...	...	...	599	0.3	76	0.2	...	...	...	...
Punjab	17	0.0	2	0.0	3,381	0.1	980	0.3	...	...	...	...
Delhi	2	0.0	94	0.2	13	0.1	593	1.2	...	...	...	...
U. P.	25,289	0.5	2,443	0.4	7,410	0.2	2,795	0.5	19,985	0.4	1,677	0.3
Bihar	16,305	0.5	466	0.3	7,790	0.2	572	0.4	1,330	0.1	108	0.1
Orissa	11,087	1.6	104	0.5	3,079	0.4	203	0.9	...	...	...	...
Bengal	30,008	0.6	3,213	0.9	3,890	0.1	3,139	0.9	...	...	2	0.0
O. P.	1,494	0.1	167	0.1	490	0.0	272	0.1	751	0.1	101	0.1
Bombay	1,493	0.1	293	0.1	5,347	0.3	1,422	0.4	1,322	0.1	150	0.0
Sind	3	0.0	...	...	434	0.1	131	0.2	...	...	...	...
Madras	1,969	0.0	146	0.0	2,235	0.1	885	0.2	261	0.0	63	0.0
Coorg . . . . .	...	...	...	...	1	0.0	...	...	5	0.0	...	...
Assam	3,004	0.4	16	0.1	2,146	0.3	51	0.2	...	...	...	...
Ajmer-Merwara . . . . .	...	...	1	0.0	88	0.2	136	0.7	2	0.0	...	...

p. m.—per mille.

TABLE B.—DEATHS AND RATES PER MILLE FROM CERTAIN CAUSES OR GROUPS OF CAUSES OF MORTALITY IN RURAL AND URBAN AREAS—*contd.*

Province.	Fevers.				Dysentery and Diarrhoea.				Respiratory diseases.			
	Rural.		Urban.		Rural.		Urban.		Rural.		Urban.	
	Deaths.	Rate P. m.	Deaths.	Rate P. m.	Deaths.	Rate P. m.	Deaths.	Rate P. m.	Deaths.	Rate P. m.	Deaths.	Rate P. m.
BRITISH INDIA	3,412,844	13.5	200,532	7.6	201,663	0.8	58,638	2.2	344,309	1.4	155,030	5.9
N.-W. F. P.	32,336	14.6	2,228	6.4	120	0.1	192	0.6	2,002	0.9	1,241	3.6
Punjab	379,266	16.1	29,410	8.3	6,141	0.8	4,348	1.2	63,466	2.7	16,309	4.6
Delhi	3,538	15.7	932	1.8	198	0.9	883	1.7	963	4.3	4,092	8.1
U. P.	791,440	16.6	67,051	11.1	5,280	0.1	12,682	2.1	8,637	0.2	32,761	5.4
Bihar	593,667	17.4	8,226	5.8	3,330	0.1	811	0.6	2,471	0.1	642	0.5
Orissa	99,748	14.1	1,596	7.1	16,746	2.4	657	2.9	4,304	0.6	392	1.7
Bengal	673,741	13.7	13,846	3.9	46,985	1.0	7,468	2.1	71,160	1.4	17,298	4.9
C. P.	279,316	18.7	21,006	11.3	25,796	1.7	4,639	2.5	35,320	2.4	8,811	4.8
Bombay	144,867	9.0	23,921	6.4	19,029	1.2	6,539	1.7	74,510	4.6	35,412	9.4
Sind	21,465	6.1	2,508	3.3	177	0.1	973	1.3	4,117	1.2	4,327	5.6
Madras	280,375	6.3	27,567	6.9	66,621	1.5	18,285	4.6	71,785	1.6	30,345	7.6
Coorg	2,808	18.1	56	6.0	75	0.5	28	3.0	73	0.5	97	10.3
Assam	102,372	12.3	1,020	4.7	11,156	1.3	485	2.2	5,488	0.7	493	2.3
Ajmer-Merwara	7,405	17.8	1,165	6.2	9	0.0	648	3.5	13	0.0	2,810	15.0

P. m.—per mille.

TABLE C.—DEATHS FROM CHOLERA FROM 1905 TO 1939.

Year.	British India.		N.-W. F. P.	Punjab.	Delhi.	U. P.	Bihar.		Orissa.	Bengal.	C. P.	Bombay.		Sind.	Madras.	Coorg.	Assam.	Burmā.	Aimer-Merwara.	Indian States.			
							Raj-putana.	Central India.				Hyder-abad.	Mysore										
1905—1909.	2,371,385	3,545	20,354	324	399,144	555,350	677,816	61,011	89,644	422,658	410	95,927	44,897	285	5,928	13,366	2,227	16,600					
1910—1914.	1,767,770	5,421	17,643	503	331,970	394,482	451,025	78,258	96,929	289,444	254	81,967	19,800	74	6,219	25,896	9,210	17,672					
1915—1919.	2,098,749	5,557	25,030	242	346,359	598,862	453,864	110,998	97,606	321,297	191	99,088	38,713	942	7,070	16,652	26,647	13,062					
1920—1924	1,069,136	4,390	22,843	781	228,540	229,512	276,455	72,680	25,793	131,845	34	54,379	21,805	79	3,911	6,826	9,254	8,023					
1925	115,645	116	3,049	50	7,653	17,336	34,276	124	57	44,815	4	6,233	1,932	...	...	43	22	...				
1926	133,151	...	87	18	6,168	27,268	59,106	4,565	73	24,407	2	10,275	6,182	2	269	26	6						
1927	304,710	2	11,286	16	28,285	49,022	118,377	16,311	26,153	35,334	...	15,392	4,528	4	1,357	2,5	4	8,913	1,36				
1928	351,305	...	2,034	34	44,941	77,103	136,245	12,198	6,881	57,677	...	6,915	7,209	68	1,371	7,520	4,314	413					
1929	395,434	30	2,309	193	50,924	104,034	81,090	6,168	9,034	25,846	1	7,765	7,970	20	722	1,155	450	140					
1930	337,322	449	1,131	8	61,334	155,216	54,963	23,250	15,142	18,746	...	6,332	661	41	2,101	11,165	18,369	535					
1931	220,909	105	391	61	31,118	40,943	79,073	14,135	13,646	30,232	116	5,523	534	32	294	1,411	5,653	6,385					
1932	67,219	70	614	4	9,734	9,348	33,910	854	1,353	5,278	...	4,971	1,082	1	122	168	71	83					
1933	63,318	...	160	...	1,915	17,514	29,242	2,152	7,797	3,851	...	5,508	179	...	35	642	4,838	90					
1934	199,708	...	178	19	31,903	57,289	50,742	27,329	11,362	18,153	1	1,904	822	1	969	4,471	4,95	346					
1935	217,162	245	714	181	10,412	64,876	59,605	20,140	11,235	35,456	...	7,436	6,858	4	33	1,043	10,553	1,407					
1936	159,720	68	1,762	48	6,793	6,070	7,977	76,100	10,691	11,304	8	34,117	2	3,816	934	21	776	604	9,065	1,793			
1937	*99,054	24	105	...	6,341	13,949	5,076	32,710	1,107	10,992	2	23,307	1	5,440	†	...	1,042	2,351	4,842				
1938	*236,143	740	5,760	182	70,622	14,750	1,309	71,133	45,332	3,813	343	10,252	...	11,907	†	...	2,070	11,702	8,687	880			
1939	*97,566	...	19	96	27,732	16,771	11,141	33,221	1,661	1,786	3	2,115	...	3,020	†	†	201	729	3,964	533			

*Excluding Burma.

†Burma was separated from India since April 1937.

TABLE D.—DEATHS AND RATES PER MILLE FROM CHOLERA IN RURAL AND URBAN AREAS.

	Deaths.			Rate Per mille			Number of anti-cholera inoculations.	Total Villages.	Number infected.
	Rural.	Urban.	Total.	Rural.	Urban.	Total.			
BRITISH INDIA	90,621	6,945	97,566	0·4	0·3	0·4	5,355,457	451,187	24,023
N.-W. F. P. . . . .	...	...	...	...	...	...	274	2,802	...
Punjab	17	2	19	0·0	0·0	0·0	196,858	34,852	4
Delhi	2	94	96	0·0	0·2	0·1	39,039	809	1
J. P.	25,289	2,443	27,732	0·5	0·4	0·5	821,716	105,640	4,302
Bihar	16,305	400	16,771	0·5	0·3	0·5	913,715	67,879	3,789
Orissa	11,037	104	11,141	1·6	0·5	1·5	634,244	19,466	1,089
Bengal	30,008	3,213	33,221	0·6	0·9	0·6	1,947,125	86,381	11,290
C. P.	1,494	187	1,681	0·1	0·1	0·1	251,721	39,246	472
Bombay	1,493	293	1,786	0·1	0·1	0·1	293,160	21,455	478
Sind	3	...	3	0·0	...	0·0	...	9,095	1
Madras	1,969	146	2,115	0·0	0·0	0·0	143,549	34,830	525
Coorg . . . . .	...	...	...	...	...	...	251	298	...
Assam	3,004	16	3,020	0·4	0·1	0·4	113,727	23,333	1,192
Ajmer-Merwara . . . . .	...	1	1	..	0·0	0·0	38	621	...

TABLE E.—DEATHS FROM CHOLERA BY MONTHS.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
BRITISH INDIA	8,009	3,845	5,773	7,673	4,873	5,851	11,563	13,857	10,964	9,830	9,118	6,061
N.-W. F. P. . . . .	...	...	...	...	...	...	...	...	...	...	...	...
Punjab . . . . .	...	...	...	...	...	...	...	11	7	...	1	...
Delhi . . . . .	...	...	...	1	...	...	...	...	1	78	13	3
U. P.	168	55	118	860	1,159	3,021	6,448	7,052	4,677	2,760	1,094	320
Bihar	108	130	376	1,041	671	840	1,778	3,273	2,445	2,321	2,869	919
Orissa	43	111	95	213	206	215	910	961	2,029	2,388	1,951	2,010
Bengal	5,034	2,302	4,636	5,108	2,521	1,577	1,805	1,722	1,134	1,928	2,842	2,562
C. P.	51	24	32	72	55	16	32	395	479	361	180	24
Bombay	154	100	48	51	101	48	481	446	163	103	71	20
Sind . . . . .	...	...	...	...	...	...	...	...	3	...	...	...
Madras	931	661	133	37	16	14	64	23	16	3	70	93
Coorg . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
Assam	1,470	462	279	290	144	120	35	34	11	38	27	110
Ajmer-Merwara . . . . .	...	...	...	...	...	...	1	...	...	...	...	...

TABLE F.—DEATHS FROM PLAGUE BY MONTHS.

(i) British Provinces.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	Rate p.m.	No. of anti- plague inoculations.
GRAND TOTAL	3,039	4,848	8,850	6,447	2,003	440	604	1,384	2,647	2,355	1,868	2,754	37,235	...	...
BRITISH INDIA	2,405	4,153	8,005	5,973	1,701	264	92	244	638	718	679	1,385	26,257	0·1	481,971
N.-W. F. P.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Punjab	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Delhi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
U. P.	2,037	3,635	7,086	5,313	1,595	217	35	118	183	220	303	920	21,662	0·4	262,843
Bihar	157	228	644	454	77	35	34	26	73	71	19	122	1,938	0·1	48,081
Orissa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bengal	...	...	1	1	...	...	...	...	...	...	...	...	2	0·0	...
C. P.	104	192	210	178	8	...	...	17	36	39	48	28	862	0·1	34,611
Bombay	38	21	29	25	7	2	16	77	331	364	294	278	1,472	0·1	80,200
Sind	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madras	74	79	85	6	13	6	7	6	13	24	20	42	324	0·0	59,757
Coorg	...	...	...	1	1	8	...	...	...	...	...	...	5	0·0	1,479
Assam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ajmer-Merwara	...	...	...	...	...	2	...	...	...	...	...	...	2	0·0	...

*Not available

(ii) Indian States* and Agencies.

Benares State	45	115	273	236	88	...	...	19	14	14	26	36	816	...	...
Kollapur State	5	23	26	9	2	1	35	32	55	19	29	17	253	...	...
Akalkot State	...	...	...	...	...	...	...	12	138	114	137	286	667	...	...
Jamkhandi State	...	...	...	...	...	...	...	...	...	6	2	2	10	...	...
Kurundwad State (Senior)	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...
Kurundwad State (Junior)	2	...	...	1	2	...	...	2	10	11	16	82	1·6	...	...
Sangli State	5	2	...	1	...	...	...	...	...	...	...	...	8	...	...
Bhupal Agency	...	14	34	2	11	...	...	...	6	4	9	1	33	...	...
Bundelkhand Agency	...	...	...	...	...	...	...	...	...	16	17	21	54	...	...
Kotah State	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
Hyderabad State	827	346	341	107	170	...	307	821	1,487	1,249	706	745	6,806	...	...
Mysore State	250	193	171	118	79	175	169	254	297	204	245	197	2,362	...	...
Cochin State	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...

* Among the Indian States from which plague returns have been received, only those States in which at least one death from plague was reported have been included in the above table.

TABLE G.—DEATHS AND RATES *PER MILLE* FROM SMALLPOX IN RURAL AND URBAN AREAS.

	Deaths.			Death rate <i>per mille</i> .			Deaths in children.			Percentage of deaths to total mortality from smallpox.	
	Rural.	Urban.	Total.	Rural.	Urban.	Total.	Under 1 year.	1—10 years.	Total.	Under 1 year.	1—10 years.
	BRITISH INDIA	36,898	11,205	48,103	0·1	0·4	0·2	9,434*	14,623*	24,057*	19·7*	30·5*
N.-W. F. P.	599	76	675	0·3	0·2	0·3	158	393	551	23·4	58·2
Punjab	3,381	930	4,311	0·1	0·3	0·2	1,177	2,131	3,308	27·3	49·4
Delhi	13	693	606	0·1	1·2	0·8	204	347	551	33·7	57·3
U. P.	7,410	2,795	10,205	0·2	0·5	0·2	2,320	3,582	6,402	27·6	35·1
Bihar	7,790	572	8,362	0·2	0·4	0·2	677	996	1,673	8·1	11·9
Orissa	8,079	203	3,282	0·4	0·9	0·5	473	779	1,252	14·4	23·7
Bengal	3,800	3,139	7,029	0·1	0·9	0·1	408	748	1,156	5·8	10·6
O. P.	490	272	762	0·0	0·1	0·0	241	348	589	31·6	45·7
Bombay	5,347	1,422	6,769	0·3	0·4	0·3	2,150	3,688	5,738	31·8	53·0
Sind	434	131	565	0·1	0·2	0·1	52	227	279	9·2	40·2
Madras	2,235	885	3,120	0·1	0·2	0·1	724	954	1,678	23·2	30·6
Goorg	1	...	1	0·0	...	0·0	1	...	1	100·0	...
Assam	2,146	51	2,197	0·3	0·2	0·3	349	530	879	15·9	24·1
Ajmer-Merwara	83	136	219	0·2	0·7	0·4	†	†	†	†	†

*Excluding Ajmer-Merwara.

†Not available.

TABLE H.—DEATHS FROM SMALLPOX BY MONTHS.

	Jan.	Feb.	Mar.	Aprl.	May.	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.
BRITISH INDIA	3,373	4,152	6,073	7,547	7,610	5,481	3,534	2,299	1,438	1,160	1,580	3,856
N.-W. F. P.	83	53	37	26	40	52	53	38	22	21	138	112
Punjab	580	566	551	475	511	427	255	112	68	42	194	530
Delhi	59	66	95	104	154	60	20	14	3	2	3	20
U. P.	725	756	1,079	1,494	2,055	1,564	707	381	153	134	179	978
Bihar	287	401	792	1,341	1,533	1,245	974	543	324	210	219	493
Orissa	271	275	384	467	467	233	208	213	169	129	121	275
Bengal	531	932	1,254	1,581	1,065	554	329	201	128	95	140	219
O. P.	18	33	148	167	126	85	34	14	8	15	25	85
Bombay	291	475	1,011	1,106	913	648	505	369	217	150	312	772
Sind	77	66	63	98	73	43	31	15	13	10	13	63
Madras	308	355	407	381	234	202	251	239	163	210	164	156
Goorg . . . . .	...	1	...	...	...	...	...	...	...	...	...	...
Assam	122	156	222	269	358	233	156	169	136	142	71	123
Ajmer-Merwara	21	17	30	39	41	29	7	1	4	...	1.	80

TABLE I.—DEATHS AND RATES PER MILLE FROM FEVERS AND MALARIA IN RURAL AND URBAN AREAS.

	Fever deaths.			Death rate per mille.			Reported malaria deaths.		
	Rural.	Urban.	Total.	Rural.	Urban.	Total.	Rural.	Urban.	Total.
BRITISH INDIA	3,412,844	200,532	3,613,376	13.5	7.6	13.0	1,355,325	56,289	1,411,614
N.-W. F. P.	82,336	2,228	34,564	14.6	6.4	13.5	*	30†	30
Punjab	379,266	29,410	408,676	16.1	8.8	15.1	1,606	871	2,477
Delhi	3,538	932	4,470	15.7	1.8	6.1	18	225	248
U. P.	791,440	67,051	858,491	16.0	11.1	16.0	725,699	28,469	754,168
Bihar	593,667	8,226	601,893	17.4	5.8	17.0	*	4,373†	4,373
Orissa	99,748	1,596	101,344	14.1	7.1	13.9	*	592†	592
Bengal	673,741	13,846	687,587	13.7	3.9	13.0	339,285	2,036	341,321
C. P.	279,316	21,006	300,322	18.7	11.3	17.9	262,171	14,261	276,432
Bombay	144,867	23,921	168,788	9.0	6.4	8.5	26,160	2,664	28,833
Sind	121,465	2,508	23,973	6.1	3.3	5.6	377	1,169	1,546
Madras	280,375	27,667	307,942	6.3	6.9	6.3	*	1,394†	1,394
Coorg	2,808	56	2,864	18.1	6.0	17.4	...	...	...
Assam	102,872	1,020	103,892	12.3	4.7	12.1	*	202†	202
Ajmer-Merwara	7,405	1,165	8,570	17.8	6.2	14.2	*	3	3

* Not available.

† For municipalities only.

71

TABLE J.—DEATHS FROM FEVERS BY MONTHS.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
BRITISH INDIA	314,401	257,913	282,904	285,625	305,403	290,392	278,045	303,459	300,836	313,474	330,529	350,395
N.-W. F. P.	4,448	3,172	2,924	2,564	2,449	3,065	2,940	2,346	2,161	2,348	2,627	3,520
Punjab	36,947	31,030	30,216	27,617	33,384	39,760	35,733	33,455	31,964	32,020	34,920	36,080
Delhi	412	237	322	382	677	537	388	348	359	281	271	256
U. P.	69,036	58,405	61,415	67,010	76,824	78,763	71,461	72,142	74,825	77,417	73,882	77,511
Bihar	47,373	34,994	40,928	44,376	47,593	47,671	46,907	58,353	58,673	58,195	58,082	60,348
Orissa	9,992	8,570	9,192	8,939	7,747	6,577	6,802	9,423	8,483	7,469	8,481	9,669
Bengal	70,677	56,180	60,677	62,500	51,214	45,954	47,029	53,818	50,764	58,567	63,391	71,286
C. P.	22,588	19,060	23,760	22,474	28,320	21,176	17,858	22,378	27,054	31,435	34,040	30,179
Bombay	14,206	13,006	16,125	15,489	14,928	10,690	11,579	13,357	12,944	14,668	16,045	15,702
Sind	2,946	2,592	2,367	2,056	2,084	1,671	1,568	1,384	1,307	1,713	2,075	2,280
Madras	25,081	22,570	26,054	22,547	24,570	24,106	24,372	25,832	23,915	24,922	29,667	33,706
Coorg	221	217	241	282	228	283	328	242	260	172	186	204
Assam	9,044	7,034	7,256	8,596	8,941	9,533	10,539	9,916	7,657	8,043	8,403	8,880
Ajmer-Merwara	871	346	827	793	864	556	541	465	680	644	659	924

TABLE K.—DEATHS AND RATES PER MILLE FROM DYSENTERY AND DIARRHOEA IN RURAL AND URBAN AREAS AND BY SEX.

	Deaths.					Rate per mille		
	Rural.	Urban.	Total.	Male.	Female.	Rural.	Urban.	Total.
BRITISH INDIA	201,862	58,638	260,500	136,113	124,187	0·8	2·2	0·9
N.-W. F. P.	120	192	312	183	129	0·1	0·6	0·1
Punjab	6,141	4,348	10,489	5,746	4,743	0·3	1·2	0·4
Delhi	193	883	1,081	545	536	0·9	1·7	1·5
U. P.	5,280	12,882	17,962	9,266	8,696	0·1	2·1	0·3
Bihar	3,330	811	4,141	2,462	1,679	0·1	0·6	0·1
Orissa	16,746	657	17,403	8,972	8,431	2·4	2·9	2·4
Bengal	46,985	7,468	54,453	28,703	25,750	1·0	2·1	1·0
C. P.	25,796	4,939	30,435	15,718	14,717	1·7	2·5	1·8
Bombay	19,028	6,539	25,567	13,366	12,201	1·2	1·7	1·3
Sind	177	973	1,150	639	511	0·1	1·3	0·3
Madras	66,621	18,285	84,906	43,858	41,048	1·5	4·6	1·8
Coorg	75	23	103	57	46	0·6	3·0	0·6
Assam	11,156	485	11,641	6,264	5,377	1·3	2·2	1·4
Ajmer-Merwara	9	643	657	334	323	0·0	3·5	1·1

TABLE L.—DEATHS FROM DYSENTERY AND DIARRHOEA BY MONTHS.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
BRITISH INDIA	21,189	16,907	19,508	19,423	20,589	19,197	23,077	28,920	24,594	22,096	22,329	22,466
N.-W. F. P.	18	15	17	14	47	39	34	25	22	24	35	22
Punjab	537	442	604	703	1,252	1,126	1,047	1,146	1,029	839	963	801
Delhi	44	25	60	80	130	128	125	143	116	100	80	52
U. P.	871	771	964	1,251	1,526	1,502	2,208	2,643	2,000	1,663	1,343	1,220
Bihar	201	160	252	430	272	230	439	688	453	463	315	238
Orissa	1,708	1,299	1,459	1,220	1,232	1,176	1,427	2,139	1,872	1,356	1,210	1,305
Bengal	5,825	4,184	5,262	5,418	4,102	3,791	3,981	4,411	3,819	4,282	4,839	4,539
C. P.	2,326	1,872	2,277	1,953	1,806	1,330	2,065	3,727	4,271	3,753	2,966	2,084
Bombay	1,838	1,458	1,673	1,651	1,848	1,578	2,704	3,790	2,953	2,363	1,880	1,831
Sind	72	61	71	79	99	98	97	126	102	110	111	124
Madras	6,417	5,826	5,894	5,401	7,046	7,038	7,847	9,064	7,126	6,208	7,614	9,425
Coorg	6	4	10	7	12	14	23	10	7	2	4	4
Assam	1,378	772	922	1,164	1,119	1,106	1,028	962	743	850	919	773
Ajmer-Merwara	48	18	43	57	98	43	52	46	76	78	50	48

TABLE M.—DEATHS AND RATES PER MILLE FROM RESPIRATORY DISEASES IN RURAL AND URBAN AREAS AND BY SEX.

	Deaths.					Rate per mille.					Reported deaths from pulmonary tuberculosis.	
	Rural	Urban	Total.	Male	Female	Rural	Urban	Total.	Male	Female	Rural	Urban
	BRITISH INDIA	344,309	155,030	499,339	284,376	214,963	1·4	5·9	1·8	2·0	1·6	35,339	30,247
N.-W. F. P.	2,002	1,241	3,243	1,883	1,360	0·9	3·6	1·3	1·4	1·2	*	289†
Punjab	63,466	16,309	79,775	45,222	34,553	2·7	4·6	2·9	3·1	2·8	9,821	2,698
Delhi	983	4,092	5,055	2,578	2,477	4·3	8·1	6·9	6·1	7·9	167	841
U. P.	8,637	32,761	41,398	22,151	19,247	0·2	5·4	0·8	0·8	0·8	608	5,035
Bihar	2,471	642	3,113	1,870	1,243	0·1	0·5	0·1	0·1	0·1	*	159†
Orissa	4,304	892	4,696	2,737	1,959	0·6	1·7	0·6	0·8	0·5	*	109†
Bengal	71,160	17,298	88,458	56,499	31,959	1·4	4·9	1·7	2·1	1·3	8,164	4,258
O. P.	35,320	8,911	44,131	25,819	18,312	2·4	4·8	2·6	3·1	2·2	652	511
Bombay	74,510	35,412	109,922	59,490	50,432	4·6	9·4	5·5	5·8	5·3	15,446	7,749
Sind	4,117	4,327	8,444	5,102	3,342	1·2	5·6	2·0	2·1	1·8	481	978
Madras	71,785	30,345	102,130	55,860	46,270	1·6	7·6	2·1	2·3	1·9	*	6,965†
Coorg	73	97	170	128	42	0·5	10·3	1·0	1·4	0·6	...	...
Assam	5,488	493	5,981	3,622	2,359	0·7	2·3	0·7	0·8	0·6	*	48†
Ajmer-Merwara	13	2,810	2,823	1,415	1,408	0·0	15·0	4·7	4·4	5·0	*	607†

*Not available.

† For municipalities only.

TABLE N.—DEATHS FROM RESPIRATORY DISEASES BY MONTHS.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
BRITISH INDIA	54,625	47,727	49,327	42,068	39,886	33,645	33,719	34,815	34,291	36,579	43,486	49,171
N.-W. F. P.	587	420	368	207	216	252	160	168	142	142	214	337
Punjab	12,819	10,605	9,402	6,518	6,102	4,804	4,252	3,965	3,773	4,025	5,617	7,868
Delhi	660	529	467	407	576	342	315	343	239	301	388	498
U. P.	4,600	3,730	3,666	3,492	3,406	3,228	3,076	3,041	2,977	2,942	3,311	3,929
Bihar	308	190	309	236	214	211	1291	267	249	267	249	322
Orissa	462	412	414	385	355	304	369	392	386	386	422	436
Bengal	9,341	8,630	8,765	8,350	6,765	5,724	5,570	5,703	5,673	6,295	8,405	9,147
O. P.	4,210	3,722	4,200	3,528	3,671	2,713	2,840	3,131	3,635	3,757	4,407	4,317
Bombay	10,592	9,660	11,374	9,785	8,814	6,882	7,672	8,404	8,220	8,959	9,150	10,410
Sind	1,311	1,244	1,069	639	466	442	409	374	381	433	685	941
Madras	8,833	7,827	8,540	7,642	8,382	8,072	8,108	8,311	8,069	8,383	9,806	10,157
Coorg	20	22	23	16	11	16	7	11	11	15	12	6
Assam	557	513	509	571	504	536	457	518	358	482	512	464
Ajmer-Merwara	335	223	221	242	404	119	163	157	178	19	218	344

TABLE O.—DISTRIBUTION OF QUININE, CINCHONA FEBRIFUGE, TOTAQUINA AND OTHER CINCHONA ALKALOIDS DURING 1939.

Province	RURAL AREAS													Total columns 10-13
	Distributed free				Sold				Total					
	Quinine	Cinchona febrifuge	Tota-quina	Other Cinchona alkaloids.	Quinine	Cinchona febrifuge	Tota-quina	Other Cinchona alkaloids	Quinine	Cinchona febrifuge	Tota-quina	Other Cinchona alkaloids		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
BRITISH INDIA	32,313	26,305	2,121	399	32,722	278	250	7	64,935	26,683	2,371	406	94,695	
N. W. F. P.	478	317	6	...	...	...	...	...	478	317	6	...	801
Punjab	1,393	268	...	7	...	...	...	...	1,393	268	...	7	1,668
Delhi	48	11	...	...	...	...	...	...	48	11	...	...	69
U. P.	2,248	3,789	11	...	246	6	1	...	2,404	3,795	12	...	6,301	
Bihar	2,406	...	...	...	†	...	...	...	2,406	...	...	...	2,406
Orissa	529	434	80	58	135	...	...	...	664	434	80	58	1,236
Bengal	15,949	17,613	118	88	27,910	38	...	1	43,869	17,651	118	89	61,717	
C. P.	1,167	498	...	17	1,759	39	5	...	2,926	537	14	17	3,494	
Bombay†	...	...	...	...	...	...	...	...	...	...	...	...	...
Sind	1,837	199	30	63	727	1	...	...	2,664	200	30	63	2,857
Madras	3,384	471	1,593	138	1,743	22	244	6	5,127	493	1,837	144	7,601	
Coorg	540	521	120	5	12	...	...	...	552	521	120	5	1,198
Assam	2,215	2,182	154	23	190	572	...	...	2,405	2,754	154	23	5,363
Ajmer-Merwara	19	2	...	...	...	...	...	...	19	2	...	...	21
URBAN AREA														
BRITISH INDIA	8,756	4,017	1,115	230	7,315	416	2,768	505	16,071	4,433	3,881	735	25,120	
N. W. F. P.	352	221	9	...	...	...	...	...	352	221	9	...	582
Punjab	2,288	182	...	27	...	...	...	...	2,288	182	...	27	2,497
Delhi	132	53	...	...	...	...	...	...	132	53	...	...	185
U. P.	1,429	1,125	24	...	...	...	...	...	1,429	1,125	24	...	2,578
Bihar	...	...	...	...	†	...	...	...	...	...	...	...	...
Orissa	325	184	15	7	62	...	16	1	387	184	31	8	610	
Bengal	1,253	825	6	24	3,507	...	...	...	4,710	825	6	24	5,565
C. P.	857	649	14	27	979	46	...	...	1,836	695	14	27	2,572
Bombay†	...	...	...	...	...	...	...	...	...	...	...	...	...
Sind	372	161	21	55	40	1	5	1	412	162	26	56	656	
Madras	1,012	61	945	69	2,680	256	2,745	503	3,692	317	3,690	572	8,271	
Coorg	111	101	51	...	9	...	...	...	120	101	51	...	272
Assam	605	397	30	21	38	113	...	...	643	510	30	21	1,204
Ajmer-Merwara	70	59	...	...	...	...	...	...	70	58	...	...	128

*Less than half pound.

†Details according to rural and urban areas are not available. See total on the next page.

TOTAL													
1	2	3	4	5	6	7	8	9	10	11	12	13	14
BRITISH INDIA	45,322	30,947	3,419	893	43,515	1,095	3,016	512	85,637	32,042	6,435	1,405	125,719
N. W. F. P.	1,237†	692†	18**	...	...	...	...	...	1,237	692	18	...	1,947
Punjab	3,681	450	...	84	...	...	...	...	3,681	450	...	84	4,165
Delhi	180	64	...	...	...	...	...	...	180	64	...	...	244
U. P.	3,677	4,914	35	...	246	6	1	...	3,923	4,920	36	...	8,879
Bihar	2,406	...	...	...	378	...	...	...	2,784	...	...	...	2,784
Orissa	854	618	95	65	197	...	16	1	1,051	618	111	66	1,846
Bengal	17,152	18,438	124	112	31,417	38	...	1	48,569	18,476	124	113	67,282
C. P.	2,024	1,147	23	44	2,735	85	5	...	4,762	1,232	28	44	6,068
Bombay	3,946	471	180	264	3,100	1	...	...	7,046	472	180	264	7,962
Sind	2,209	360	51	118	767	2	5	1	2,976	362	56	119	3,513
Madras	4,396	582	2,538	207	4,423	278	2,989	509	8,819	810	5,527	718	15,872
Coorg	651	622	171	5	21	...	...	...	672	622	171	5	1,470
Assam	2,820	2,579	184	44	228	685	...	...	3,048	3,264	184	44	6,540
Ajmer-Merwara	89	60	...	...	...	...	...	...	89	60	...	...	149

*Less than half pound.
†Including 407 lbs. distributed free in tribal areas.
‡Including 154 lbs. distributed free in tribal areas.
**Including 8 lbs. distributed free in tribal areas.

Appendix III.

TABLE A.—MATERNAL DEATH RATES PER 1,000 OF LIVE AND STILL-BIRTHS FOR CERTAIN TOWNS IN BRITISH INDIA.

	1939.		1939.	
	Deaths.	Rate. <i>p. mille</i>	Deaths.	Rate. <i>p. mille</i>
<i>North-West Frontier Province.</i>				
Peshawar	19	6.1	Etawah	35 12.9
Dera Ismail Khan	5	3.0	Budaun	11 5.4
<i>Punjab.</i>				
Bhiwani	10	5.9	Amroha	31 11.4
Rohtak	2	1.3	Sambhal	20 7.6
Panipat	16	10.8	Dehra Dun	28 13.0
Ambala City	6	4.4	Hathras	19 7.8
Jullundur	14	3.3	Jaunpur	17 11.1
Ludhiana	30	8.3	Pilibhit	15 7.5
Ferozapore	5	2.9	Muzaffarnagar	10 6.7
Lahore	82	4.9	Bahraich	8 4.8
Kasur	7	3.7	Hardwar Union	37 25.8
Amritsar	63	5.9	Khurja	6 3.7
Batala	1	0.5	<i>Bihar.</i>	
Sialkot	7	1.6	Patna	0 0.0
Gujranwala	0	0.0	Bihar	0 0.0
Rawalpindi	2	0.5	Gaya	0 0.0
Lyallpur	20	8.0	Arrah	0 0.0
Jhang Maghiana	13	6.8	Chapra	0 0.0
Multan	63	11.4	Muzaffarpur	18 26.1
<i>Delhi Province.</i>				
Delhi City	82	4.7	Darbhanga	15 7.3
New Delhi	10	3.1	Monghyr	11 9.1
<i>United Provinces.</i>				
Lucknow	102	7.3	Jamalpur	8 7.5
Cawnpore	113	8.9	Bhagalpur	0 0.0
Agra	72	5.3	Ranchi	0 0.0
Benares	169	13.6	Jamshedpur	0 0.0
Allahabad	76	9.2	<i>Orissa.</i>	
Bareilly	28	4.0	Berhampur	15 9.0
Moradabad	59	9.3	Cuttack	12 10.3
Meerut	39	9.3	Puri	3 2.7
Koili (Aligarh)	43	11.4	<i>Bengal Presidency.</i>	
Shahjahanpur	8	2.7	Calcutta	80 2.5
Saharanpur	30	7.4	Howrah	68 9.7
Jhansi	30	7.9	Dacca	65 11.0
Mirzapur-Bindhachal	17	6.1	Bhatpara	28 12.4
Muttra	15	4.3	Garden Reach	10 9.4
Fyzabad-Ajodhya	19	12.1	Chittagong	30 17.4
Gorakhpur	27	10.6	Titagarh	6 7.6
Farrukhabad-cum-Fatehgarh	7	2.6	Burdwan	17 14.4
			South Suburban	1 1.1
			Serampur	2 2.3
			Baranagar	11 11.8
			Barisal	10 13.1

TABLE A.—MATERNAL DEATH RATES PER 1,000 OF LIVE AND STILL-BIRTHS
FOR CERTAIN TOWNS IN BRITISH INDIA—*contd.*

1939.			1939.		
Deaths. Rate.			Deaths. Rate.		
<i>p. mille</i>			<i>p. mille</i>		
<i>Bengal Presidency—contd.</i>			<i>Sind.</i>		
Narayanganj	14	10.8	Karachi	93	6.2
Hooghly-Chinsura	12	10.2	Hyderabad	52	12.3
Sirajganj	9	15.5	Sukkur	14	5.4
Midnapur	14	18.9	Shikarpur	58	25.0
Bankura	12	29.7	<i>Madras Presidency.</i>		
Comilla	10	29.5	Bellary	44	18.7
Asansol	16	16.3	Adoni	15	9.5
Naihati	5	16.4	Conjeeveram	57	19.0
Mymensingh	6	15.3	Saidapet	3	2.5
Kamarhati	9	16.2	Coimbatore	50	10.2
Bally	3	5.2	Erode	23	15.1
<i>Central Provinces.</i>			Cocanada	24	11.5
Nagpur City	135	11.7	Rajahmundry	38	15.4
Nagpur Civil Station				Ellore	26	10.9
Jubbulpore	66	10.3	Guntur	77	19.9
Saugor	18	7.9	Tenali	24	16.3
Khandwa	14	8.8	Bezwada	47	17.5
Burhanpur	36	15.4	Masulipatam	38	16.0
Raipur	21	10.3	Kurnool	24	12.8
Amraoti	62	23.4	Madras	245	7.4
Akola	2	0.8	Madura	114	10.5
<i>Bombay Presidency.</i>			Dindigul	29	13.0
Bombay City	165	4.1	Calicut	28	7.4
Ahmedabad	163	7.5	Palghat	19	8.8
Surat	44	6.5	Cannanore	12	12.8
Broach	33	14.4	Tellicherry		7.8
Nadiad	19	10.2	Nellore	61	20.4
Godhra	0	0.0	Vellore	37	10.7
Jalgaon	32	19.5	Virudhunagar	20	12.8
Dhulia	1	0.7	Srivilliputtur	17	12.5
Ahmednagar	23	9.0	Salem	48	11.5
Poona	83	10.5	Cuddalore	42	16.8
Nasik	6	3.3	Mangalore	30	12.1
Bandra	0	0.0	Tanjore	47	15.5
Kurla	0	0.0	Kumbakonam	59	20.3
Belgaum	27	19.1	Negapatam	17	10.1
Dharwar	6	4.3	Mayavaram	19	15.9
Hubli	24	8.9	Tuticorin	31	10.3
Gadag-Betigeri	12	6.0	Tinnevely	34	15.5
Bijapur	12	7.3	Trichinopoly	94	15.9
Sholapur	43	5.4	Vizagapatam	10	4.3
			Vizianagram	23	11.4
			<i>Ajmer-Merwara.</i>		
			Ajmer	53	8.3

TABLE B.—MATERNITY AND CHILD WELFARE CENTRES IN RURAL AND URBAN AREAS.

	Centres maintained by								Trained visitors.		Trained midwives.		Trained doct.	
	Government.		Local and municipal bodies.		Other agencies.		Total.		R.	U.	R.	U.	R.	U.
	R.	U.	R.	U.	R.	U.	R.	U.						
BRITISH INDIA	10	14	367	367	68	195	445	576	75	277	1,459	1,367	2,572	2,767
N.-W. F. P. . . . .	..	2	..	..	1	6	1	8	..	6	..	5	34	7
Punjab.	1	1	20	24	11	41	32	66	32	70	6	31	655	1,270
Delhi	4	..	4	21	2	2	10	23	8	29	10	23	12	48
U. P. . . . .	..	..	180	157	..	..	160	157	1	20	154	193	64	50
Bihar . . . . .	..	6	..	7	3	8	3	21	..	11	34	46	26	49
Orissa . . . . .	..	..	2	4	1	2	3	6	..	8	14	9	10	9
Bengal . . . . .	..	..	4	29	4	..	8	29	6	7	26	75	1,613	755
C. P. . . . .	..	..	..	7	16	51	16	58	17	63	1	..	37	453
Bombay	1	2	26	19	15	41	41	62	2	15	41	173	54	37
Sind . . . . .	..	..	30	9	5	14	35	23	..	5	7	32	48	43
Madras. . . . .	..	..	122	84	10	16	136	100	9	44	1,160	738	..	..
Coorg . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	11	..
Assam . . . . .	..	3	..	4	..	6	..	13	..	4	6	23	8	7
Ajmer-Merwara . . . . .	..	..	..	2	..	8	..	10	..	..	..	19	..	39

R.—Rural. U.—Urban.

Appendix IV.

TABLE A.—EXPENDITURE ON PUBLIC HEALTH BY CENTRAL AND PROVINCIAL GOVERNMENTS DURING 1939-40.

	Total.	Public Health establish-ment.	Grants for public health purposes.	Expenses in connection with epidemic diseases.	Bacteriological laboratories.	Pasteur Institutes.	Works.	Special Development programme.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Total	1,80,17,859	66,24,505	56,09,790	25,00,737	11,65,567	2,10,581	12,65,737	6,40,942
Central Govt.	12,61,147	4,73,556	3,01,839	2,39,966	2,34,441	6,306	5,039	..
N.-W. F. P.	1,53,948	1,09,953	30,545	13,450	..	..	..	..
Punjab	17,73,971	8,03,637	6,77,832	1,03,970	19,511	17,801	20,003	1,31,217
U. P.	23,44,409	15,60,634	4,29,023	2,96,719	..	..	58,033	..
Bihar	12,02,832	3,98,776	3,19,449	2,58,148	30,205	16,453	1,79,801	..
Orissa	2,60,032	99,123	64,946	46,414	15,878	2,427	31,244	..
Bengal	39,23,256	6,78,066	25,19,409	5,77,761	81,775	39,958	26,287	..
C. P.	5,05,868	94,972	74,697	3,33,470	2,729	..	..	..
Bombay	27,88,516	6,73,266	1,30,087	2,10,366	3,32,210	9,752	9,21,110	6,09,725
Sind	2,65,708	1,13,004	85,828	41,353	21,584	3,939	..	..
Madras	27,07,039	12,62,623	8,72,434	1,56,481	4,15,237	..	264	..
Coorg	21,425	10,328	2,458	8,639	..	..	..	..
Assam	8,11,708	3,46,567	1,01,243	2,14,000	11,997	1,13,945	23,956	..

TABLE B.—DISTRIBUTION OF HEALTH STAFFS IN RURAL AND URBAN AREAS.

	Rural Areas.									
	Medical Officers of Health.				Epidemic Staffs.	Sanitary and Health Inspectors.	Vaccinators.		School Medical Officers.	Other Health Staffs.
	Medical graduates holding public health qualifications.		Medical Licentiates holding public health qualifications.				M.	F.		
	Whole time.	Part time.	Whole time.	Part time.						
Total	151	2	84	...	642	1,403	6,531	85	26	1,589
N.-W. F. P.	...	...	...	...	4*	...	30	...	7	4*
Punjab	28	...	11	...	...	46	422	...	4	629
Delhi	1	1	...	...	...	8	3	...	5	24
U. P.	46	1	32	...	43	162	821	...	...	...
Bihar	10	...	10	...	227	90	1,079	...	8	184
Orissa	4	...	1	...	29	66	205	7	2	16
Bengal	30	...	8	...	124	668	2,266	59	..	688
C. P.	...	...	...	...	82	...	259	...	...	35
Bombay	2	...	...	...	47	25	303	...	...	59
Sind	...	...	1	...	...	1	75	1	...	...
Madras	27	...	20	...	23	345	619	17	...	...
Coorg	1	...	1	...	...	2	4	...	...	...
Assam	2	...	...	...	63	...	435	1	...	...
Ajmer-Merwara	...	...	...	...	...	...	10	...	...	...

* Appointments sanctioned for rural as well as for urban areas.

	Urban Areas.									
	Medical Officers of Health.				Sanitary and Health Inspectors.	Vaccinators.		Inspectors of Vaccination.	School Medical Officers.	Other Health Staffs.
	Medical Graduates holding public health qualifications.		Medical Licentiates holding public health qualifications.			M.	F.			
	Whole time.	Part time.	Whole time.	Part time.						
Total	151	8	114	8	1,154	977	50	35	89	12,966
N.-W. F. P.	1	7	3	2	10	8	1	6	6	...
Punjab	16	...	4	6	176	143	6	7	33	12,381
Delhi	3	...	...	...	24	17	...	...	12	19
U. P.	21	...	13	...	176	177	...	...	18	..
Bihar	10	1	2	...	100	75	...	...	2	13
Orissa	2	...	2	...	13	16	4	2	...	22
Bengal	29	...	...	...	106	151	19	9	10	157
C. P.	2	...	2	...	59	83	...	...	4	8
Bombay	34	...	49	...	121	56	...	1	8	254
Sind	6	...	3	...	25	12	2	1	1	...
Madras	24	...	36	...	316	191	18	17	6	...
Coorg	...	...	...	...	2	2	...	...	...	...
Assam	1	...	...	...	14	29	...	41	..	98
Ajmer-Merwara	2	...	...	...	12	12	...	1†	...	19

*Thirty-five assistant superintendents of vaccination shown under the column heading "Other health staff" for rural areas are for the urban areas also.

†For both rural and urban areas.

‡There are no officers appointed particularly for the medical inspection of schools. The work is done by the Sub-assistant Health Officers on epidemic duty and Assistant Medical Officers incharge of branch dispensaries.

Appendix V.

TABLE A—VACCINATION OPERATIONS PERFORMED IN BRITISH INDIA AND IN DIFFERENT PROVINCES DURING 1939-40.

Provinces.	Operations performed.			Percentage of success.		Children successfully vaccinated.		Successfully vaccinated children under one year of age as a percentage of live-births during the year 1939.
	P.	R.	Total.	P.	R.	Children successfully vaccinated.		
						Under 1 year.	1 to 6 years.	
BRITISH INDIA	10,399,676	15,301,134	25,700,810	97	46	4,333,410	4,093,823	46
N.-W. F. P.	161,878	152,482	314,355	99	80	78,641	58,196	110
Punjab	1,072,841	3,430,138	4,502,979	99	68	809,001	145,003	78
Delhi	34,862	206,867	241,729	97	52	25,505	5,288	80
U P.	1,635,158	471,111	2,106,269	97	36	991,678	441,890	56
Bihar	1,017,374	820,087	1,837,461	98	34	280,046	634,768	26
Orissa	231,214	475,061	706,275	97	60	68,837	118,527	28
Bengal	2,909,956	5,017,380	7,927,336	85	31	388,954	1,527,539	24
C. P.	495,950	284,796	780,746	97	56	364,718	86,560	57
Bombay	667,049	510,152	1,177,201	100	45	467,169	151,464	60
Sind	142,228	80,937	224,165	100	27	68,188	56,900	84
Madia	1,516,894	3,820,875	4,837,769	97	21	682,500	574,866	40
Coorg	2,809	3,420	6,229	97	55	540	1,587	14
Assam	471,571	474,305	945,876	95	59	87,889	281,175	36
Ajmer-Merwara	38,897	53,528	92,425	99	98	19,799	10,065	96

P = Primary.
R = Revaccination.

TABLE B.—NUMBERS OF TOWNS AND RURAL CIRCLES IN THE DIFFERENT PROVINCES IN WHICH COMPULSORY PRIMARY VACCINATION WAS IN FORCE DURING 1939.

	Towns.			Rural Circles.		
	Total number.	Number in which vaccination Act was in force.	Number to which the Act had not been extended.	Total number.	Number in which vaccination Act was in force.	Number to which the Act had not been extended.
BRITISH INDIA	1,594	1,286	308	3,581	2,219	1,312
N.-W. F. P.	17	10	7	6	...	6
Punjab	259	250	9	29	*28	1
Delhi	6	6	...	1	1	...
U. P.	442	262	180	748	...	748
Bihar	54	54	...	1,540	1,518	22
Orissa	8	8	...	8	2	6
Bengal	119	119	...	575	575	...
C. P.	114	95	19	392	59	333
Bombay	183	96	87	20	†1	19
Sind	26	26	...	61	...	61
Madras	324	324	...	24	24	...
Coorg	5	5	...	...	...	...
Assam	32	26	6	117	11	106
Ajmer-Merwara	5	5	...	10	...	10

* This figure includes five districts in which the Vaccination Act was enforced only in a part of the district in each case.

† Only 10 villages in Belgaum district.

TABLE C.—AREAS IN THE PROVINCES IN WHICH REVACCINATION WAS COMPULSORY IN 1939.

	Towns.			Rural circles.		
	Total number.	Number in which revaccination was in force.	Number in which it was not in force.	Total number.	Number in which revaccination was in force.	Number in which it was not in force.
Orissa	8	...	8	8	1	7
Madras	324	324	...	24	24	...
Assam	32	26	6	117	11	106
Ajmer-Merwara	5	4	1	10	...	10
Delhi	Revaccination was compulsory for school children when seeking admission in the recognised schools of Delhi province.					
Bengal	Revaccination was made compulsory only in the epidemic areas in the province where regulations for the control of smallpox under the Epidemic Diseases Act were enforced as a temporary measure during the year.					
C. P.	Information for revaccination is not available.					
N.-W. F. P.	} Revaccination was not compulsory in any area, urban or rural, in these provinces.					
Punjab						
U. P.						
Bihar						
Bombay						
Sind						
Coorg						

TABLE D.—VACCINATION STATISTICS RELATING TO SOME INDIAN STATES DURING 1939-40.

State.	Population (1931 census).	Total number of vaccinations performed.			Percentage of successful vaccinations to total vaccinations performed.		Children successfully vaccinated.	
		Primary.	Revacci- nation.	Total.	Primary.	Revacci- nation.	Under 1 year.	1-6 years.
Hyderabad	14,436,148	415,469	12,207	427,676	96	55	99,442	198,792
Mysore	6,895,667	195,915	165,503	361,418	96	51	62,005	91,515
RAJPUTANA STATES.								
Jaipur	2,631,775	86,436	3,817	90,253	94	62	66,350	5,349
Marwar	2,134,848	73,804	138,827	212,631	96	45	44,996	7,135
Mewar	1,611,373	39,986	2,359	42,345	100	100	25,213	13,022
Bikaner	936,218	23,576	35,869	59,445	99	53	15,674	6,255
Alwar	749,751	23,207	730	23,937	76	74	15,437	1,736
Kotah	685,804	25,586	..	25,586	100	..	22,686	2,812
Bharatpur	486,954	16,694	505	17,199	94	48	10,911	3,224
Dholpur	254,986	9,133	..	9,133	100	..	6,951	2,122
Dungarpur	227,544	3,406	..	3,406	94	..	871	1,971
Banswara	225,106	3,840	..	3,840	100	..	1,406	2,234
Bundi	216,722	5,913	..	5,913	100	..	3,864	1,799
Sirohi	216,528	4,969	12	4,981	100	100	4,672	297
Palanpur	264,179	6,893	359	7,252	100	100	5,486	635
PUNJAB STATES.								
Nabha	287,574	11,628	3,918	15,546	94	69	3,553	5,720
Bahawalpur	984,612	45,407	12,932	58,339	96	90	22,009	13,692
Patiala	1,625,520	67,439	77,121	144,560	98	72	46,145	11,008

TABLE D.—*contd.*

State.	Population (1931 census).	Total number of vaccinations performed.			Percentage of successful vaccinations to total vaccinations performed.		Children successfully vaccinated.	
		Primary.	Revacci- nation.	Total.	Primary.	Revacci- nation.	Under 1 year.	1—8 years.
PUNJAB STATES—<i>contd.</i>								
Kapurthala	316,757	12,974	19,081	32,055	96	38	7,982	2,784
Jind	324,676	13,002	9,534	22,536	95	70	6,113	3,439
Faridkot	164,364	6,736	4,886	11,622	99	43	3,816	2,513
Baghal	26,352	744	1,731	2,475	99	61	373	261
Balsan	6,864	336	13	349	100	54	1	207
Bilaspur	100,994	4,350	4,359	8,708	99	54	2,522	1,528
Koti Kiar	8,785	224	30	254	100	54	70	102
Throach	4,568	263	8	371	100	67	58	104
Darkoti	531	22	14	36	100	57	1	16
Delath	1,400	63	1	64	100	100	61	1
Dhadi	212	10	..	10	100	..	1	9
Dhami	5,232	113	39	152	99	54	39	66
Ghund	1,963	84	7	91	100	67	..	55
Khaneti	2,797	93	..	..	100	..	34	49
Kumhar Sain	12,781	240	17	257	100	77	53	145
Kuthar	8,760	131	150	281	100	56	80	38
Madhan	4,315	119	..	119	100	..	..	46
Mangal	1,248	46	43	89	100	62	17	25
Mehlog	8,155	386	2,251	2,637	100	66	200	110
Ratesh	558	12	13	25	100	78	2	7
Rawingarh	939	44	8	52	100	50	7	30
Sangri	3,497	90	24	114	100	53	48	37
Theog	6,912	106	5	111	99	100	8	84
Kalsia	59,848	1,561	4,857	6,418	100	75	1,201	199

TABLE D.—*contd.*

State.	Population (1931 census).	Total number of vaccinations performed.			Percentage of successful vaccinations to total vaccinations performed.		Children successfully vaccinated.	
		Primary.	Revacci- nation.	Total.	Primary.	Revacci- nation.	Under 1 year.	1—6 years.
PUNJAB STATES—<i>contd.</i>								
Sirmoor	148,568	1,647	2,472	4,119	99	77	1,073	383
Suket	58,408	817	6,698	7,515	100	67	460	271
U. P. STATES.								
Tehri (Garhwal)	470,109	9,660	1,992	11,652	77	97	4,049	3,807
Benares	391,165	7,919	3,653	11,572	98	100	2,115	4,598
Rampur	465,226	25,754	12,078	37,832	94	52	13,000	5,672
CENTRAL INDIA AGENCY.								
Indore	1,325,089	50,357	26,010	76,367	78	17	29,079	8,778
Rewa	1,596,971	62,293	371	62,664	99	51	39,059	21,979
Orchha	314,661	8,517	1,461	9,978	95	91	5,940	995
Datia	158,834	5,139	380	5,519	97	100	4,696	239
Samthar	33,307	1,333	4	1,337	99	100	1,000	292
Panna	212,130	6,104	49	6,153	95	100	4,421	477
Charkhari	120,351	4,809		4,809	96	..	2,689	1,838
Ajaigarh	85,895	1,957	60	2,017	90	79	1,257	257
Bijawar	115,852	6,028	..	6,028	85	..	5,126	..
Baoni	19,132	322	..	322	100	..	261	54
Chhatarpur	163,652	5,193	..	5,193	99	..	4,076	517
Baraundha	16,071	*	*	*	*	*	*	*
Nagod	74,589	2,712	58	2,770	96	..	1,772	374
Maihar	68,991	1,930	72	2,002	94	67	1,055	653
Bhopal	729,955	29,339	119	29,458	80	92	13,161	10,369
Dewas Senior Branch	83,321	2,071	8	2,079	..	..	1,047	547

*Information not available.

TABLE D.—*contd.*

State.	Population (1931 census).	Total number of vaccinations performed.			Percentage of successful vaccinations to total vaccinations performed.		Children successfully vaccinated.	
		Primary.	Revacci- nation.	Total.	Primary.	Revacci- nation.	Under 1 year.	1—6 years.
CENTRAL INDIA AGENCY— <i>contd.</i>								
Dewas Junior	70,513	2,656	41	2,697	96	83	1,041	1,485
Rajgarh	135,271	3,315	3,736	7,051	100	100	2,020	1,254
Narsingarh	113,873	12,942	1,252	14,194	99	100	2,417	1,897
Khilchipur	45,583	1,358	11	1,369	99	100	630	728
Dhar	187,304	1,860	566	2,426	78	24	1,612	814
Jaora	100,166	2,850	<i>NH</i>	2,850	100	<i>NH</i>	2,080	770
Ratlam	107,321	1,928	86	2,014	96	84	962	718
Sitamau	28,422	504	332	836	65	4	419	85
Sailana	35,223	850	<i>NH</i>	850	67	<i>NH</i>	403	447
Jhabua	145,522	5,528	78	5,606	87	..	1,269	2,129
Barwani	141,110	7,880	<i>NH</i>	7,880	95	<i>NH</i>	3,756	3,757
Alirajpur	101,963	2,960	19	2,979	81	11	185	2,018
Jammu and Kashmir	3,646,243	106,243	60,177	166,420	99	89	63,625	34,474
KOLHAPUR AND DECCAN STATES.								
Kolhapur	957,137	35,753	62,277	98,030	100	99	30,961	3,770
Akalkot	92,605	3,127	59	3,186	100	100	2,341	845
Aundh	76,507	2,657	938	3,595	100	13	1,442	897
⊙ Bhor	141,546	4,179	2,119	6,298	99	33	2,929	1,119
Kurundwad (Senior)	44,204	1,639	391	2,030	97	51	1,216	323
Kurundwad (Junior)	39,583	1,575	305	1,880	100	27	1,207	349

TABLE D.—*contd.*

State.	Population (1931 census).	Total number of vaccinations performed.			Percentage of successful vaccinations to total vaccinations performed.		Children successfully vaccinated.	
		Primary.	Revaccina- tion.	Total.	Primary.	Revaccina- tion.	Under 1 year.	1—6 years.
KOLHAPUR AND DEOGAN STATES—<i>contd.</i>								
Janjira	98,296	2,843	450	3,293	99	58	1,407	1,364
Jamkhandi	114,282	4,024	2,663	6,687	97	68	2,930	901
Jath	91,099	2,816	2,505	5,321	98	9	1,924	850
Miraj (Junior)	40,686	1,356	955	2,311	100	65	1,150	206
Miraj (Senior)	93,938	3,585	973	4,558	100	100	2,527	1,014
Mudhol	62,832	2,088	454	2,542	97	19	1,582	437
Ramdurg	35,401	1,185	141	1,326	34	58	884	300
Phaltan	58,731	1,802	3,978	5,780	89	81	1,366	283
Sangli	258,442	10,079	14,233	24,312	99	16	7,300	2,411
Savanur	20,320	838	518	1,356	97	97	700	100
Sewantwadi	230,589	6,682	3,052	9,734	100	90	4,746	1,882
Khatav	1,331	120	..	120	100	..	35	85
Bavchi	373	30	..	30	100	..	6	24
EASTERN STATES.								
Bastar	524,721	21,147	16,537	37,684	96	56	4,694	11,510
Jashpur	193,698	5,703	17,004	22,707	86	33	3,451	2,190
Kalabandi	513,716	25,429	20,857	46,286	97	95	1,703	20,343
Kanker	136,101	4,851	2,368	7,219	99	94	3,695	868
Khairagarh	157,400	4,664	10,198	14,762	95	42	3,717	1,562
Korea	90,886	2,028	717	2,745	87	53	1,382	385

TABLE D.—*concl'd.*

State.	Population (1931 census).	Total number of vaccinations performed.			Percentage of successful vaccinations to total vaccinations performed.		Children successfully vaccinated.	
		Primary.	Revacci- nations.	Total.	Primary.	Revacci- nations.	Under 1 year.	1-6 years.
EASTERN STATES—<i>cont'd.</i>								
Nandgaon	182,380	7,025	6,989	14,014	99	70	5,991	742
Patna	566,924	22,281	59,464	81,745	99	97	882	21,216
Raigarh	277,569	8,658	1,412	10,070	76	43	4,556	2,652
Sarangarh	128,967	3,539	2,745	6,284	97	5	1,618	231
Surguja	501,939	10,630	12,110	22,740	81	70	3,630	4,653
Cooch Behar	590,866	15,308	44,361	59,669	85	80	1,271	*
Mayurbhanj	889,603	34,433	32,023	66,456	97	96	7,336	15,398
Bamra	151,047	4,313	31,302	35,615	100	82	1,151	3,113
Baudh	135,248	5,077	12,836	17,913	87	64	329	4,048
Dhenkanal	284,326	10,174	22,831	33,005	84	55	3,314	8,695
Gangpur	356,674	11,629	25,485	37,114	87	85	4,807	13,016
Nayagarh	142,406	7,650	16,505	24,155	80	72	*	*
Keonjhar	460,609	22,544	26,320	48,864	91	83	306	18,260
Seraikela	143,525	7,667	3,577	11,244	100	70	3,182	3,756
Sonepur	237,920	6,051	19,304	25,355	99	59	3,352	2,684
Talcher	69,702	2,449	2,489	4,938	91	43	57	1,550
Tripura	382,450	10,715	5,404	16,119	87	67	2,256	5,865
MADRAS STATES.								
Travancore	5,095,973	217,078	884,646	1,101,724	91	56	28,830	*
Cochin	1,200,000	60,698	99,817	160,515	91	7	2,689	30,964
Pudukkottai	400,694	14,555	4,271	18,826	93	66	4,025	7,204

* Information not available.

Appendix VI.

TABLE A.—NUMBER OF TOWNS HAVING PROTECTED WATER SUPPLIES IN DIFFERENT PROVINCES.

1	Towns having a population of over 50,000.		Towns having a population between 30,000—50,000.		Towns having a population below 30,000.		Total.			
	No. of towns.	Towns having a protected water supply.	No. of towns.	Towns having a protected water supply.	No. of towns.	Towns having a protected water supply.	No. of towns.	Aggregate population.	Towns having a protected water supply.	Population of towns included in col. 10.
	2	3	4	5	6	7	8	9	10	11
BRITISH INDIA	75	60	87	45	1,809	148	1,471	26,140,161	253	12,669,503
N.-W. F. P.	1	1	1	1	15	6	17	299,284	8	206,293
Punjab	8	6	11	4	162	30	181	3,020,278	40	1,436,384
Delhi	3	2	...	...	4	3	6	516,101	5	506,306
U. P.	17	12	13	4	412	11	442	5,439,702	27	1,830,376
Bihar	6	5	6	3	57	2	69	1,495,138	10	760,243
Orissa	1	...	2	2	5	...	8	286,056	2	79,841
Bengal	5	5	17	12	96	33	118	2,351,407	55	1,442,223
O. P.	2	2	7	4	103	3	112	1,679,546	9	560,338
Bombay	7	6	12	5	112	13	131	3,806,892	29	2,507,163
Sind	4	3	...	...	22	2	26	685,202	5	456,507
Madras	21	18	18	10	284	23	323	6,190,709	51	2,755,063
Coorg . . . . .	...	...	...	...	2	1	2	9,827	1	5,995
Assam . . . . .	...	...	...	...	31	10	31	1,229,825	10	111,879
Ajmer-Merwara	1	...	...	...	1	1	6	180,199	1	21,397

TABLE B.—EXPENDITURE ON PUBLIC HEALTH BY MUNICIPALITIES IN DIFFERENT PROVINCES DURING 1938-39.

	Income.	Public Health expenditure.	Percentage of total income expended on public health.	Expenditure on			Percentage of the total of cols. 4, 5 & 6 to column 2.
				Conservancy. Water supply: Drainage.			
				1	2	3		4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
N.-W. F. P.	24,18,751	4,65,589	19.2	2,41,481	72,824	51,760	78.6
Punjab	2,17,45,771	50,70,556	23.3	17,01,230	12,12,251	14,36,435	85.8
Delhi	1,09,06,490	25,59,666	23.5	7,56,903	10,17,516	4,30,943	86.2
U. P.	2,35,28,922	66,98,316	28.5	27,86,166	24,35,625	7,30,806	88.9
Bihar	55,95,044	18,82,251	33.6	10,60,797	4,54,564	2,17,400	92.1
Orissa	10,70,836	3,00,770	28.1	2,09,733	26,522	28,637	88.1
Bengal†	1,10,82,799	34,95,822	31.5	11,67,258	11,94,006	2,34,195	74.2
C. P.	6,40,43,303	1,36,18,430	21.3	54,02,230	38,20,305	25,02,946	86.1
Sind†	3,50,97,460	88,80,512	25.3	26,40,425	37,00,269*	14,35,158	87.6
Madras	15,68,113	5,57,565	35.6	3,03,821	1,69,636	31,829	90.6
Assam							

*Includes certain amount of expenditure on drainage as well.

† Information not available.

TABLE C.—EXPENDITURE ON PUBLIC HEALTH BY DISTRICT BOARDS IN DIFFERENT PROVINCES DURING 1938-39.

	Income.	Public Health expenditure.	Percentage of total income expended on public health.	Expenditure on			Percentage of the total of cols. 4, 5 & 6 to column (2).
				Conservancy. Water supply. Drainage.			
				1	2	3		4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
N.-W. F. P.	21,01,331	93,090	4.4	7,499	22,232	1,532	33.6
Punjab	2,59,60,055	9,13,802	3.5	*	*	*	..
Delhi	3,68,286	53,721	14.6	18,939	..	..	35.3
U. P.||							
Bihar	1,72,06,940	6,33,438	36.8	†	1,42,696	8,918	23.9
Orissa	28,44,403	1,70,665	6.0	11,496	23,335	1,210	21.1
Bengal||							
C. P.	1,02,92,378	2,36,792	2.3	..	43,441	.. 50	18.4
Bombay	2,36,67,839	7,29,481	3.1	..	4,04,458	..	55.4
Sind||							
Madras	6,05,95,168	47,37,204	7.8	9,71,736	2,59,337‡	.. §	26.0
Assam	41,77,067	1,58,598	3.8	..	76,657	2,400	49.8

*Figures are not available.

†Separate figures are not available.

‡Includes expenditure on drainage as well.

§Included under expenditure on water supply.

||Information not available.

Appendix VII.

List of scientific papers published in the Indian Journal of Medical Research, the Indian Medical Gazette and the Journal of the Malaria Institute of India during 1939*.

A.—PAPERS PUBLISHED IN THE INDIAN JOURNAL OF MEDICAL RESEARCH.

Ahuja, M. L. and Singh, G.

Observations on the 'H' antigen of vibrios. (Volume XXVII, No. 2).

Anderson, W. M. E.

Observations on *P. papatasi* in the Peshawar district, Part I. (Volume XXVII, No. 2).

Aykroyd, W. R., and Krishnan, B. G.

A diet survey of families with leprosy. (Volume XXVI, No. 4). The defects of tapioca as a staple food. (Volume XXVII, No. 1). A further experiment on the value of calcium lactate for Indian Children. (Volume XXVII, No. 2).

Bagchi, K. N. Ganguly, H. D. and Sirdar, J. N.

Lead in human tissues. (Volume XXVI, No. 4).

Basu, B. C. and Rao, S. S.

Studies on filariasis transmission. (Volume XXVII, No. 1).

Basu, K. P. and Basak, M. N.

Studies in human metabolism. Part I. Protein metabolism in Indians. (Volume XXVII, No. 1).

Basu, K. P., Basak, M. N., and Rai Sircar, B. C.

Studies in human metabolism. Part II. Calcium and phosphorus metabolism in Indians on rice and on wheat diets. (Volume XXVII, No. 2).

Basu, K. P., Bose, S. P., Quader, M. A., and De, H. N.

Available carbohydrate and acid-base balance in pulses. (Volume XXVI, No. 3).

Basu, P. N.

Flocculation test with *Clostridium septique* toxin and antitoxin. (Volume XXVII, No. 2).

Biswas, H. G., and Das, K. L.

Vitamin C content of the chillies, onion and garlic, both in the raw state and when boiled with water. (Volume XXVII, No. 1).

Bose, J. P., and De, U. N.

Relations of inorganic phosphate to carbohydrate metabolism in normal and diabetic subjects. (Volume XXVI, No. 3).

Bose, S.

The nutritive value of papain-mutton broth. (Volume XXVII, No. 1).

Note on the preparation of an unpurified mannose solution for bacteriological use. (Volume XXVII, No. 1).

Chopra, R. N., and Chopra, G. S.

The present position of hemp-drug addiction in India, *Indian Medical Research Memoir*, No. 31.

Chopra, R. N., and Ganguly, S. O.

Abstinence symptoms in opium addiction and rôle of glucose in their treatment. (Volume XXVI, No. 3).

Chopra, R. N., and Rao, S. S.

Chemotherapy of filarial infection. (Volume XXVII, No. 2).

* It is not claimed that the list is complete.

Choudhury, S. C., and Basu, U. P.

On copper content of foods. (Volume XXVI, No. 4).

Das Gupta, C. R.

The action of leucopoietic drugs. (Volume XXVI, No. 4).

David, J. C., and Krishnaswami, R.

The use of dogs for the standardization of digitalis. (Volume XXVII, No. 1).

De, S. S.

Studies on haemolysin of cobra venom. Part I. Investigations on the isolation of haemolysin from cobra (*Naja Naja*) venom. (Volume XXVII, No. 2).

Dhayagude, R. G., and Khadilkar, V. N.

True achlorhydria and anæmia. (Volume XXVI, No. 3).

Fernando, P. B., D'Silva, M., Stork, G. K. B. and Sinnatamby, G. R.

Tetrachlorethylene in the treatment of hookworm disease, with special reference to toxicity. (Volume XXVI, No. 3).

Ghosh, B. N., De., S. S., and Bhattacharya, D. P.

Investigation on the isolation of the active principles from venoms of *Bungarus fasciatus* and *Vipera russelii*. (Volume XXVI, No. 3).

Ghosh, B. N., and Ray, N. N.

Investigation on the occurrence of the Danysz phenomenon in diphtheria toxin-antitoxin mixtures under a variety of conditions. (Volume XXVI, No. 3).

Giri, K. V.

Indian gooseberries (*Phyllanthus emblica* Linn.) as a source of vitamin C. (Volume XXVII, No. 2).

Giri, K. V., and Shouri, K. L.

Serum-phosphatase activity in rats fed on a poor South Indian diet variously supplemented. (Volume XXVII, No. 1).

Gokhale, S. K.

Non-protein nitrogenous constituents of blood: A study based on the examination of 120 normal Indian men. (Volume XXVI, No. 3).

Goyle, A. N.

Observations on haemolysis by vibrios. (Volume XXVI, No. 3).

Greval, S. D. S., Chandra, S. N., and Das, B. C.

On Wassermann reaction. Part IV. The antigen. (Volume XXVII, No. 2).

Greval, S. D. S., Chandra, S. N., and Woodhead, L. S. F.

On M and N in blood groups: the technique of typing, the antifuids, findings in 300 Indians, and associated considerations. (Volume XXVI, No. 4).

Greval, S. D. S., Lowe, J., and Bose, R.

Complement fixation in leprosy with Witebsky, Klingenstein and Kuhn (W. K. K.) antigen. A new technique. (Volume XXVI, No. 3).

Greval, S. D. S., Sen Gupta, P. C., and Napier, L. E.

Serological reactions in kala-azar: complement-fixation, false Wassermann reaction and high anti-complementary titre. (Volume XXVII, No. 1).

Guha, R. C., and Ahmad, B.

Observations on the vitamin B excretion of four healthy subjects living on different Indian diets. (Volume XXVII, No. 2).

Iyengar, M. O. T.

Differentiation of microflarise of *Wuchereria bancrofti* and *Filaria malayi*. (Volume XXVII, No. 2).

Iyer, P. V. S., and Reghavachari, T. N. S.

The technique of the methyl-red and Voges-Proskau tests used in the bacteriological analysis of water. (Volume XXVI, No. 4).

Krishnan, B. G.

Calorie requirements of South Indian children. (Volume XXVI, No. 3).

Diet surveys in the Nilgiris and Travancore. (Volume XXVI, No. 4).

Lahiri, D. C.

Absence of specific antitoxin in persons exposed to risk of tetanus infection. (Volume XXVII, No. 2).

Effect of viscosity of serum on the rate of absorption of antibodies. (Volume XXVII, No. 1).

Effect of tryptic digestion on the toxicity and the anti-genicity of the tetanus toxin broth. (Volume XXVI, No. 4).

Physico-chemical changes in a therapeutic serum due to concentration and their effect on its absorption. (Volume XXVI, No. 3).

Lal, R. B., Ghosal, S. C., and Mukherji, B.

Investigations on the variation of vibrios in the house fly. (Volume XXVI, No. 3).

Lal, R. B., Mukherji, S. P., Roy, S. C., and Sankaran, G.

Investigations into the epidemiology of epidemic dropsy. Part VIII. Studies on the nature and origin of certain (toxic) substances present in the supplies of mustard oil associated with outbreaks of epidemic dropsy. (Volume XXVII, No. 1).

Lal, R. B., and Roy, S. C.

Investigations into the epidemiology of epidemic dropsy. Part VII. Further field studies and controlled experiments. (Volume XXVII, No. 1).

Lowe, J., and Greval, S. D. S.

Complement-fixation in leprosy and other diseases by the Witebsky, Klingenstein and Kuhn (W. K. K.) antigen. (Volume XXVI, No. 3).

Macdonald, G.

A study of anæmia affecting labourers on Assam tea-estates. (Volume XXVI, No. 4).

Maitra, N. M.

On inhibition of individual types of cholera-bacteriophage by vibrio extracts. (Volume XXVII, No. 1).

Majumdar, B. N.

Note on the assimilation of carotene by rats from a fat-free diet. (Volume XXVII, No. 2).

Maplestone, P. A., and Panja, D.

Molluscum contagiosum and its virus. (Volume XXVII, No. 1). The complement-fixation test in tuberculous disease of the skin. (Volume XXVII, No. 2).

Mertens, W. K., and Mochart, A.

An investigation of vibrios in the Netherlands East Indies. (Volume XXVII, No. 1).

Mitra, D. D.

A study of diet and nutrition in North Bengal, Upper Assam and Calcutta. (Volume XXVII, No. 2).

Napier, L. E., and Das Gupta, C. R.

Hæmatological studies in Indians. Part XI. The choice of an anticoagulant. (Volume XXVII, No. 2).

Napier, L. E., Sankaran, G., Swaroop, S., and Rao, M. N.

Hæmatological studies in Indians. Part X. Mean red-cell diameters: standard curves for a Bengalee population. (Volume XXVII, No. 1).

Nath, M. C., and Sen Gupta, T. N.

Sex-hormone activities of artostenone derivatives. Part I. Action of artosterone on sexually immature male rats. (Volume XXVII, No. 1).

Niyogi, S. P., Patwardhan, V. N., and Mordecia, J.

Studies on basal metabolism in Bombay. Part I. (Volume XXVII, No. 1).

Orr, I. M., and Rao, M. V. R.

A contribution to the study of the pathogenesis of peptic ulcer in Indians. (Volume XXVII, No. 1).

Raghavachari, T. N. S., and Iyer, P. V. S.

The Coli-Aerogenes index of pollution used in the bacteriological analysis of water (Volume XXVI, No. 4).

Longevity of *Coliform* organisms in water stored under natural conditions. (Volume XXVI, No. 4).

Rao, M. S.

The nutritional requirements of the plague bacillus. (Volume XXVII, No. 1).

Read, W. D. B.

Differential isolation of *V. cholerae*. (Volume XXVI, No. 4).

Read, W. D. B., Singh, G., Seal, S. C., and Bose, S.

Growth and survival of *V. cholerae* with special reference to growth and survival in water. (Volume XXVII, No. 1).

Saha, K. C., and Guha, B. O.

Nutritional investigations on Bengal fish. (Volume XXVI, No. 4).

Seal, S. O.

A preliminary note on the relative efficiency of bismuth sulphite medium and peptone-water enrichment in the isolation of *V. cholerae* from human and other sources. (Volume XXVII, No. 2).

Seal, S. C., and Mitra, B. N.

Oxidation-reduction potentials of *V. cholerae* and related organisms. (Volume XXVI, No. 3).

Shourie, K. L.

A survey of diet and nutrition in Najafgarh, Delhi Province. (Volume XXVI, No. 4).

Singh, N.

A study of diet and nutrition in Orissa. (Volume XXVII, No. 2).

Sokhey, S. S.

Experimental studies in plague. Part I. Introduction. (Volume XXVII, No. 2).

Experimental studies in plague. Part II. The solid medium of choice and the optimal temperature of incubation for the growth of the plague bacillus. (Volume XXVII, No. 2).

Experimental studies in plague. Part III. A method for determining the number of viable plague organisms in broth cultures. (Volume XXVII, No. 2).

Experimental studies in plague. Part IV. Experimental animal of choice for plague work. (Volume XXVII, No. 2).

Experimental studies in plague. Part V. A method for measuring the virulence of plague cultures. (Volume XXVII, No. 2).

Experimental studies in plague. Part VI. A method for maintaining the virulence of *Pasteurella pestis*. (Volume XXVII, No. 2).

Sokhey, S. S., Chitre, G. D., and Gokhale, S. K.

The relative value of some proprietary cyanide preparations for the extermination of rats and fleas as a plague-preventive measure. (Volume XXVII, No. 2).

Sokhey, S. S., and Malandkar, M. A.

Basal metabolism of Indians: a study based on the examination of sixty normal Indian men. (Volume XXVII, No. 2).

Strickland, C., and Roy, D. N.

Ticks found on man. (Volume XXVII, No. 1).

Swaminathan, M.

The influence of varying levels of calcium intake on the biological value of proteins. (Volume XXVII, No. 1).

The urinary excretion of nicotinic acid. (Volume XXVII, No. 2).

Vishwa Nath, and Grewal, K. S.

Cancer in India. (Volume XXVI, No. 3).

Wats, R. C., Wagle, P. M., and Puduval, T. K.

A serological study of some strains of *Pasteurella pestis*. (Volume XXVII, No. 2).

B.—PAPERS PUBLISHED IN THE INDIAN MEDICAL GAZETTE DURING 1939. VOLUME LXXIV.

Ahmed, N.

Five years of antimalaria work at Barwadih Railway Settlement. (Page 472).

Aldrich, H. O.

Calcification of renal tumours. (Page 727).

Transplantation of Ureters for inoperable vesico-vaginal fistula. (Page 604).

Allen, F. R. W. K.

Suprapubic lithotomy. (Page 156).

Allen, F. R. W. K., Sharma, G. L., Basu, I. B., Jamdar, C. M., and Panse, K. B.

Failure of sulphanilamide therapy in the treatment of coliform and gonococcal infection of the genito urinary tract. (Page 209).

Allinson, F. W., and Paul, S.

Some experiments on the absorption of insulin with special reference to absorption through the nasal passages. (Page 267).

Ananthachari, M. D.

A typical amyloid disease of the liver. (Page 84).

Bagchi, K. N.

Importance of chemical tests for detection of seminal stains in medico-legal investigations. (Page 683).

Bagchi, K. N., Ganguli, H. D., Mukerji, P. N., and Banerjee, J. N.

A new method for the determination of small quantities of cocaine in presence of novocaine. (Page 29).

Bajaj, N. L.

A note on pellagra with special reference to the district of Kangra (Punjab). (Page 145).

Bakhsh, I.

Preliminary tuberculosis survey of rural areas in the Punjab. (Page 414)
Treatment of nervous diseases by vitamin B₁ with special reference to trigeminal neuralgia (a report of seven cases).- (Page 456).

Bakhsh, I., and Rabbani, M.

Vitamin C in pulmonary tuberculosis. (Page 274).

Banerjee, S., and Guha, B. C.

The intradermal test as an index of vitamin C nutrition. (Page 335).

Barton, R. M.

Prognostic importance of blood examinations in pulmonary tuberculosis. (Page 572).

Benjamin, P. V., Verghese, M. C., Jesudian, K. T., and Varkkey, C. E.

A tuberculosis survey in a South Indian town. (Page 516).

Bhargava, R. C.

Protection of antiplague workers. (Page 87):

Bose, I. B., Mukerji, B., and Chopra, R. N.

Quality of quinine preparations in Indian hospitals and dispensaries. (Page 609).

Bose, J. P.

Further observations on protamine zinc insulin in clinical diabetes. (Page 719).

Caplan, A.

Treatment of lobar pneumonia with M. & B. 693. (Page 451).

Chand, A., Taylor, G. F., and Chitkara, N. L.

The treatment of pneumonia by May & Baker's 693. Report on 50 cases with controls. (Page 257).

Chopra, R. N.

The drug industry in India and its difficulties. (Page 230).

Chopra, R. N., Basu, B. C. and Sen, S.

Rat-bite fever in Calcutta. (Page 449).

Chopra, R. N., and Chowhan, J. S.

Snake bites and their treatment in India. Part II. The management of sequelae and complications. (Page 422).

Chopra, R. N., and Das Gupta, B. M.

'M. & B. 693' (2-Sulphanilylamino-pyridine) in the ape malaria. (Page 201).

Chopra, R. N., Das Gupta, B. M., Sen, B. and Ahmed, Z.

Infection with *Giardia lamblia*—Its pathogenicity and treatment. (Page 458).

Chopra, R. N., Das Gupta, B. M., Sen, B., and Hayter, R. T. M.

Frontosil in Indian strains of malaria. (Page 321).

Chopra, R. N., Hayter, R. T. M., and Sen, B.

'M. & B. 693' in Indian strains of malaria. (Page 658).

Chopra, R. N., Pasricha, C. L., Goyal, R. K., Lal, S., and Sen, A. K.
The experimental production of epidemic dropsy in man. (Page 193).

Chopra, R. N., and Ray, P. N.

Chronic ulcerative colitis. (Page 65).

Cruickshank, M. M.

Aberrant pancreatic tissue in the alimentary tract. (Page 74).

Tuberculosis of lymphatic glands in the neck. (Page 554).

Cummins, S. L.

The tuberculosis of tropical countries. (Page 513).

Daengsvang, S.

An abdominal tumour caused by *Gnathostoma spinigerum*. (Owen, 1836). (Page 399).

Das, S. K.

Evolution of gold therapy in phthisis. Part I. (Page 277).

Evolution of gold therapy in phthisis. Part II. (Page 326).

Das Gupta, B. M.

Further observations on leptospiral infections in Calcutta. (Page 31).

On the intrauterine infection of the foetus with *Leptospira icterohæmorrhagiar*. (Page 28).

Malarial infection in the placenta and transmission to the foetus. (Page 397).

A note upon an interesting serological type of leptospira in the Andamans. (Page 88).

Observations on some immunological aspects of leptospiral infections. (Part I). (Page 220).

Observations on some immunological aspects of leptospiral infections. (Part II). (Page 617).

Some anomalies in the morphology of *plasmodium vivax* occurring in a newborn baby. (Page 273).

Das Gupta, C. R., and Napier, L. E.

Thrombocytosis and spleen extracts. (Page 602).

De, M. N., and Tribedi, B. P.

Chordoma. (Page 465).

The pathogenesis of the commoner types of splenomegaly met with in India. (Page 9).

De, P., and De, B. N.

The vital capacity of the Bengalees. (Page 409).

De, R. K.

Simple technique of giving intravenous quinine with saline. (Page 740).

Dutta, S. C.

Clinical observations on pneumonia occurring in a tea garden in Assam. (Page 260).

Edis-Myers, J.

Willetts's forceps. (Page 729).

Frimodt-Møller, C.

Planning of tuberculosis institutions in India. (Page 559).

Ganguli, M. C.

A simple and inexpensive method of intratracheal anaesthesia. (Page 266).

Ghosh, H.

A probable cause of the difficulty of treating chronic amoebic infection in this country. (Page 27).

Ghosh, H., and Mukherjee, S.

The source of streptococcal infection in puerperal fever. (Page 342).

Ghosh, L. M.

A case of moniliasis with a secondary allergic patch or 'Moniliide'. (Page 476).

Gollerkeri, P. G.

Cardio-vascular syphilis and cerebral symptoms. (Page 725).

Primary and secondary tuberculosis. (Page 82).

Goyal, R. K., and Lal, S.

An investigation of Calcutta milk supply for presence of tubercle bacilli. (Page 86).

Titre of complement in a sample of hospital population in Calcutta. (Page 616).

Greval, S. D. S.

The use of blood tests in excluding paternity and maternity. (Page 388).

Greval, S. D. S., and Chandra, S. N.

Difficulties and dangers in providing donors of blood. (Page 461).

Guha Roy, S. C.

Lacithin and glucose in the treatment of the opium habit. (Page 265).

Hamburger, H. J.

Observation on the pathology and therapy of the so-called frontier sore. (Page 151).

Hamid, A.

From warfare to welfare. (Page 753).

Hamilton, C. S. P.

Investigation into the natural breeding places of the *Siphunculina funicola* fly in Assam. (Page 210).

Hare, K. P.

On certain cyclical changes observed in the blood pictures of cases of untreated anaemia complicating pregnancy in tea-estate coolies. (Page 467).

An experiment in coolie line sanitation: effects on health. (Page 340).

Hare, K. P., and Dutta, S. C.

The comparative value of oil of chenopodium and tetrachlorethylene as anthelmintics for use in mass treatment. (Page 198).

Iyengar, N. K., and Mukerji, B.

The quality of medicinal cod-liver oil and its preparations on the Indian market. (Page 215).

James, E. R.

The incidence of plague in Mawchi mines and the advantage of adopting early preventive and prophylactic measures. (Page 347).

Jekyll, N. D.

Treatment of lobar pneumonia with M. & B. 693. (Page 599).

Jones, W. M. G.

Collapse therapy of pulmonary tuberculosis. (Page 537).

Jones, W. M. G., and Bradley Bourton, E. W.

A home made 'Tomoscope'. (Page 618).

Kaikini, V. M.

Tumours of the upper jaw and its immediate neighbourhood. (Page 406).

Kelly, G.

Some notes on clinical heart disease. (Page 129).

Kini, M. G., and Rao, S. V.

A study of treatment of tetanus based on a review of 38 cases from the year 1932-1937. (Page 14).

Konar, N. R., Roy, H. K., and De, M. N.

Clinical observations on Weil's disease in India. (Page 596).

Naphthalene poisoning. (Page 723).

Lahiri, M. N., Das, P. O., and Malik, K. S.

Viability of *vibrio cholerae* in natural waters. (Page 742).

Lall, R., and Townsend, R. S.

Ages of epiphysial union at the elbow and wrist joints amongst Indian girls. (Page 614).

Lambert, D. P.

Preliminary report on the medico-legal value of the finding of blood on nail parings. (Page 744).

Lowe, J.

Leprosy and tuberculosis. (Page 482).

Maplestone, P. A., and Dey, N. C.

A microsporum new to India. (Page 148).

The use of dyes in various fungal infections. (Page 391).

Maplestone, P. A., and Mukerji, A. K.

Eradication of *Hymenolepis nana* infection. (Page 195).

Treatment of trichuris infection with iron. (Page 607).

McRobert, G. R., and Reddy, D. G.

The heart in anæmia. (Page 75).

Mehta, P. M.

Basic principles of solarium treatment. (Page 291).

Minchin, R. L. H.

Clinical and prognostic factors in typhoid in India. (Page 591).

Min Sein.

Clinical notes on the treatment of acute cardiac beri-beri. (Page 344).

Injection method of treating enlarged inguinal glands in early cases of lymphoparthritis venereum. (Page 270).

Thrombo-angiitis obliterans. Report of a case treated by lumbar ganglionectomy. (Page 404).

Mitra, D. D.

A study of the diet of the Bengali Hindus and their nutrition. (Page 226).

Study of diet in two industrial areas in Assam, with special reference to the incidence of anæmia. (Page 671).

Muktha Bai, B.

Infant mortality in India. (Page 354).

Napier, L. E.

Diagnosis of kala-azar in dispensary practice. (Page 600).

Etiology of tropical macrocytic anæmia. (Page 1).

Pellagra. (Page 136).

Tropical sprue. A résumé of a lecture. (Page 688).

Napier, L. E., Shorten, J. A., and Das Gupta, C. R.

Cooley's erythroblastic anæmia. (Page 660).

Niyogi, S. P., and Sukhatankar, D. R.

Diet survey in Bombay. (Page 674).

Pal, J. C.

Ionisable iron in cows' and mothers' milk. (Page 470).

Pasricha, C. L., Banerjee, K., and Wordsworth, R. F.

Schiok test amongst a group of Indians and Anglo-Indians in Calcutta. (Page 395)

Pasricha, C. L., Chatterjee, D. N., and Paul, B. M.

H. & O. agglutinins in cholera patients. (Page 330).

Pasricha, C. L., deMonte, A. J. H., and Gupta, S. K.

A method of filling screw-capped bottles with fluids under sterile conditions. (Page 222).

Pasricha, C. L., deMonte, A. J. H., Chatterjee, B. C., and Samad Mian, A.

Treatment of cholera (a note on the results of treatment by different methods). (Page 400).

Pasricha, C. L., Lahiri, M. N., Das, P. C., and Paul, B. M.

The serological types of vibrios isolated from cholera patients in Calcutta. (Page 680).

Pasricha, C. L., Lahiri, M. N., and Paul, B. M.

Use of the domestic fowl for the preparation of diagnostic antisera. (Page 741).

Pasricha, C. L., and Lal, S.

Bacteriophage in an experimental infection in mice. (Page 681).

Incidence of monilias in human fæces. (Page 682).

Pasricha, C. L., Lal, S., Malik, K. S., and Biswas, P. K.

Outbreak of epidemic dropsy in a closed community. (Page 733).

Pasricha, C. L., Lal, S. and Banerjee, K.

Aschheim Zondek and the Friedman tests in the diagnosis of the life and death of a fetus. (Page 736).

Pasricha, C. L., and Panja, G.

A macroscopic method for the detection of motility of bacteria and for the study of flagellar antigen relationship. (Page 348).

Patwardhan, K. A.

The disposal and utilization of horse dung and stable litter by composting. (Page 88).

Phipson, E. S.

A note on the medical ethnology of tuberculosis in the hills and frontier tracts of Assam. (Page 624).

Patent medicines, the public and the doctor. (Page 98).

Rajam, R. V., Rangiah, P. N., and Masilamani, T.

Chemotherapy of gonorrhœa and other minor venereal diseases with sulphanilamide compounds. A clinical study. (Page 202).

Rajam, R. V., and Rao, N. V.

Mapharside in the treatment of syphilis: a clinical study. (Page 24).

Raman, T. K.

Coarctation of the aorta. (Page 401).

Rao, K. K.

Treatment of perri-tonsillar abscess. (Page 334).

Rao, M. N.

Diet and peptic ulcer. (Page 167).

Rawlings, G. R.

Intravenous anæsthesia with pentothal sodium. (Page 722).

Reddy, D. G., and Subramaniam, R.

Sternal puncture in kala-azar. (Page 664).

Roy, B. N. C.

The treatment of otitis media. (Page 80).

Roy, K. L., Pal, J. C., and Guha, B. C.

Ionisable iron in certain Indian food-stuffs and in students' dietaries. (Page 281).

Russell, A. J. H.

Public Health—the foundation of nation building. Broadcast talk. (Page 290).

The yellow fever position. (Page 164).

Russell, P. F., and Mohan, B. N.

Experimental malaria infections in two races of *A. stephensi*. (Page 469).

Saha, K. C., Roy, K. L., and Guha, B. C.

The calcium and phosphorus content of students' dietaries. (Page 324).

Salomon, H.

The treatment of acute and chronic diarrhoea with a salt-free diet. (Page 268).

Sanjivi, K. S.

Observations on some epidemiological factors of tuberculosis in South India. (Page 527).

Sarkar, M. N., and Tribedi, B. P.

Arrhenoblastoma. (Page 284).

Sen, P. K.

Pneumoconiosis with special reference to silicosis, anthracosis and tuberculosis. (Page 547).

Sen Gupta, P. C., Rai Chaudhuri, M. N., Chaudhuri, R. N., and Napier, L. E.

Notes on cases of pellagra encountered in Calcutta. (Page 143).

Shah, M. J.

Lung abscess. (Page 668).

Shah, S. R. A.

Note on some cases of lathyrism in a Punjab village. (Page 385).

Shaha, A. N.

'Neuropoietin principle in gastric secretion'. The aetiology of central nervous symptoms in pernicious anaemia. (Page 692).

Shrikhande, Y. G.

Comparative value of different gold preparations in the treatment of pulmonary tuberculosis. (Page 545).

Sinha, G. N.

Yaws in Chatra subdivision of Hazaribagh district, Chotanagpur. (Page 728).

Sprawson, O.

A medical tour in Russia. (Page 39).

Sreenivasan, A.

Nutritive value of rice. (Page 35).

Strickland, O.

Malaria in Chotanagpur. (Page 737).

Strickland, O., and Roy, D. N.

Scarabiasis or the presence of beetles in the intestine. (Page 416).

A simple means of preventing spider-lick. (Page 285).

Swamy, T. V.

Suggestion for a new type of tube for bacteriological cultures. (Page 741).

Szamek, L. M.

What may we expect from the sub-total hysterectomy? (Page 605).

Taylor, M.

Early schizophrenia. (Page 665).

Taylor, G. F., and Chitkara, N. L.

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On malaria transmission around the Chilka lake. (Page 395).

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Appendix VIII.

TABLE SHOWING SICKNESS AND MORTALITY OF ALL CLASSES

Provinces.	Average daily population.	Constantly sick.	Influenza.				Cholera.			
			Actuals.		Ratios.		Actuals.		Ratios.	
			A.	D.	A.	D.	A.	D.	A.	D.
India (excluding the Andamans) *.	114,331	20	3,444	16	30	0.1	13	5	0.1	0.04
	109,347	21	3,212	10	29	0.1	17	3	0.2	0.03
	118,795	23	4,230	23	36	0.2	17	4	0.1	0.03
N.-W. F. P.	5,424	18	9	...	3	...	...	...	...	...
	5,643	23	60	1	11	0.2	...	...	...	...
	6,236	25	66	...	14	...	...	...	...	...
Punjab	13,350	17	213	3	12	0.3	...	...	...	...
	17,824	18	159	2	9	0.1	1	...	0.06	...
	19,040	22	167	1	9	0.05	...	...	...	...
U. P.	32,895	16	372	...	11	...	11	5	0.3	0.2
	28,769	17	433	1	15	0.03	15	3	0.5	0.1
	30,637	19	582	7	39	0.2	13	3	0.4	0.1
Bihar	9,707	19	323	3	33	0.3	1	...	0.1	...
	9,036	20	146	...	16	...	...	...	...	...
	9,479	23	323	3	34	0.3	3	...	0.2	...
Orissa	987	21	106	1	107	1.0	...	...	...	...
	1,076	20	24	...	22	...	...	...	...	...
	1,016	25	25	...	25	...	...	...	...	...
Bengal	16,774	39	1,856	6	117	0.4	1	...	0.66	...
	16,992	38	1,803	3	106	0.2	...	...	...	...
	19,267	38	2,078	6	103	0.3	2	...	0.1	...
C. P.	4,404	14	84	1	19	0.2	...	...	...	...
	3,996	15	111	...	28	...	...	...	...	...
	4,360	10	111	3	25	0.7	...	...	...	...
Bombay	6,696	18	160	1	24	0.1	...	...	...	...
	6,926	18	93	...	13	...	...	...	...	...
	7,516	20	95	...	13	...	...	...	...	...
Bihar	3,975	18	...	...	...	...	...	...	...	...
	3,722	21	...	...	...	...	1	...	0.3	...
	3,789	23	8	...	3	...	...	...	...	...
Madras	10,530	11	186	...	13	...	...	...	...	...
	10,255	14	187	...	18	...	...	...	...	...
	11,665	16	310	7	27	0.09	...	...	...	...
Assam	3,216	24	37	1	12	0.3	...	...	...	...
	3,304	24	102	2	31	0.6	...	...	...	...
	3,782	23	104	1	27	0.3	...	...	...	...

* The sickness and mortality figures relating to the Andamans have been dealt with in Paragraph 33 of this report.

A.—Admissions; D —Deaths.

OF PRISONERS IN DISTRICT AND CENTRAL JAILS IN INDIA.

Smallpox.				Enteric fever.				Malaria.			
Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.	
A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
31	3	0.3	0.03	301	33	3	0.3	9,819	23	86	0.2
25	1	0.2	0.01	301	26	3	0.2	12,383	24	113	0.2
46	3	0.4	0.03	247	31	2	0.3	17,148	63	144	0.4
...	...	...	...	21	2	4	0.4	450	2	83	0.4
3	...	0.5	...	23	1	5	0.2	607	2	108	0.4
1	...	0.2	...	32	4	6	0.6	378	3	141	0.5
...	...	...	...	78	10	4	0.5	1,232	5	67	0.3
4	...	0.2	...	88	3	4	0.2	1,607	1	91	0.0
6	...	0.3	...	62	6	3	0.3	3,389	10	178	0.6
20	1	0.6	0.03	91	1	3	0.03	4,139	5	126	0.2
14	...	0.5	...	51	6	2	0.3	3,396	2	118	0.1
20	1	0.7	0.03	32	3	1	0.1	4,373	6	143	0.2
2	...	0.2	...	44	7	5	0.7	388	3	40	0.3
1	1	0.1	0.1	51	4	6	0.4	436	3	48	0.3
2	...	0.2	...	28	4	3	0.4	455	4	48	0.4
...	...	...	...	...	...	...	...	41	...	49	...
...	...	...	...	2	...	2	...	56	...	52	...
...	...	...	...	...	...	...	...	64	...	63	...
2	2	0.1	0.1	38	4	2	0.2	2,961	16	32	0.6
2	...	0.2	...	40	4	2	0.2	3,418	10	201	0.6
12	1	0.6	0.05	28	6	1	0.3	4,368	18	226	0.9
...	...	...	...	2	...	0.5	...	329	3	75	0.7
...	...	...	...	3	1	0.8	0.3	335	...	84	...
1	...	0.2	...	3	...	0.7	...	225	1	52	0.2
3	...	0.4	...	18	5	3	0.7	1,149	1	173	0.1
...	...	...	...	14	1	2	0.1	930	2	134	0.3
...	...	...	...	15	2	2	0.3	1,275	3	170	0.4
...	...	...	...	5	...	1	...	1,086	...	296	...
...	...	...	...	19	2	6	0.5	1,015	1	273	0.3
...	...	...	...	17	2	4	0.6	1,181	1	312	0.3
...	...	...	...	4	2	0.4	0.2	111	...	10	...
...	...	...	...	12	1	1	0.1	198	...	19	0.2
1	...	0.09	...	14	2	1	0.2	229	3	20	0.3
2	...	0.6	...	4	2	1	0.6	223	3	69	0.9
...	...	...	...	10	...	3	...	203	1	61	0.3
...	...	...	...	8	1	2	0.3	360	2	95	0.5

NOTE.—The three figures against each administrative group are those for (1) 1930, (2) 1938 and (3) 1934-38. The rates have been calculated *per mille* of the average daily population.

TABLE SHOWING SICKNESS AND MORTALITY OF ALL CLASSES

Provinces.	Average daily population.	Constan- tly sick.	Pyrexia of uncertain origin.				Tubercle of the lungs.			
			Actuals.		Ratios.		Actuals.		Ratios.	
			A.	D.	A.	D.	A.	D.	A.	D.
India (excluding Andamans)*	114,331	20	1,228	4	11	0.03	720	141	6	1.2
	109,347	21	1,099	2	10	0.02	716	177	7	1.6
	118,796	23	922	4	8	0.03	699	231	6	1.9
N.-W. F. P.	5,424	18	27	...	5	...	41	2	8	0.4
	5,643	23	15	...	3	...	58	12	10	1.1
	6,236	25	24	...	4	...	57	19	9	3.0
Punjab	18,350	17	390	1	21	0.05	83	5	5	0.3
	17,824	18	201	2	11	0.1	134	29	8	1.6
	19,040	22	220	2	12	0.1	153	50	8	2.6
U. P.	32,895	16	234	1	7	0.03	143	36	4	1.0
	28,768	17	219	...	8	...	137	28	5	1.0
	30,637	19	246	...	8	...	106	34	3	1.1
Bihar	9,707	19	60	...	6	...	32	17	8	1.8
	9,036	20	59	...	7	...	78	20	9	2.2
	9,479	23	17	...	2	...	76	35	8	3.7
Orissa	987	21	...	...	...	...	9	3	9	3.0
	1,076	20	...	...	...	...	...	2	...	1.0
	1,016	25	...	...	...	...	4	2	4	2.0
Bengal	16,774	39	262	...	16	...	146	28	9	1.7
	16,992	38	468	...	27	...	132	35	8	2.1
	19,267	38	320	...	17	...	117	35	6	1.8
C. P.	4,404	14	58	...	13	...	31	5	7	1.1
	3,990	15	20	...	5	...	19	4	5	1.0
	4,360	10	31	1	7	0.2	19	6	4	1.4
Bombay	6,696	18	13	1	2	0.1	59	12	9	1.8
	6,920	18	7	...	1	...	25	9	4	1.3
	7,516	20	7	...	1	...	20	14	4	1.9
Sind	3,675	16	60	...	16	...	14	3	4	0.8
	3,722	21	18	...	5	...	21	8	0	2.1
	3,730	23	6	...	2	...	15	6	4	1.6
Madras	10,580	11	97	...	9	...	66	17	6	1.6
	10,255	14	70	...	7	...	64	16	6	1.6
	11,665	16	28	...	2	...	72	17	6	1.6
Assam	3,216	24	5	...	2	...	38	12	12	3.7
	3,304	24	13	...	4	...	39	12	12	3.6
	3,782	23	9	...	2	...	40	11	11	3.9

* The sickness and mortality figures relating to the Andamans have been dealt with in Paragraph 33 of this report.

A.—Admissions; D.—Deaths.

OF PRISONERS IN DISTRICT AND CENTRAL JAILS IN INDIA—*contd.*

Pneumonia.				Other respiratory diseases.				Dysentery.			
Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.	
A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
1,038	194	9	1.7	3,671	132	32	1.2	3,944	81	34	0.7
933	195	9	1.8	3,229	53	30	0.5	3,999	81	37	0.7
1,235	265	10	2.2	3,627	51	31	0.4	4,082	92	34	0.8
65	5	12	0.9	306	...	56	...	17	1	3	0.2
63	15	11	2.7	121	...	21	...	25	...	4	...
115	22	18	3.5	235	2	38	0.3	40	1	6	0.2
144	21	8	1.1	686	31	37	1.7	53	...	3	...
130	22	7	1.2	709	2	44	0.1	67	1	4	0.06
169	35	9	1.8	779	4	41	0.2	231	5	12	0.3
332	81	10	2.5	945	23	29	0.7	830	9	25	0.8
233	50	8	1.7	687	22	24	0.8	512	7	18	0.2
260	63	8	2.1	787	15	26	0.5	444	8	14	0.3
75	11	8	1.1	258	3	27	0.3	303	7	31	0.7
74	13	8	1.4	245	4	27	0.4	480	16	53	1.8
101	22	11	2.3	277	4	29	0.4	492	14	52	1.5
1	...	1	...	24	2	24	2.0	9	1	9	1.0
4	1	4	0.9	16	1	17	0.9	30	2	28	1.9
8	3	8	3.0	18	...	18	...	41	2	40	2.0
194	29	12	1.7	792	39	47	2.3	1,415	30	84	1.8
138	28	8	1.7	634	7	37	0.4	1,498	22	88	1.8
224	46	12	2.4	748	9	39	0.5	1,353	28	70	1.5
50	13	11	3.0	63	6	14	1.4	408	6	93	1.4
50	15	13	4.0	35	7	9	1.8	428	8	107	2.0
41	12	9	2.8	43	4	10	0.9	196	6	45	1.4
42	6	6	0.9	159	16	24	2.4	101	1	15	0.1
32	5	5	0.7	150	1	22	0.1	177	3	26	0.4
43	8	6	1.1	160	2	21	0.3	192	2	26	0.3
40	2	11	0.5	128	...	35	...	149	...	41	...
104	17	23	4.6	172	...	46	...	147	3	39	0.8
113	19	30	5.0	179	1	47	0.3	275	4	73	1.1
45	12	4	1.1	99	2	9	0.2	264	5	25	0.5
44	11	4	1.1	143	4	14	0.4	289	6	28	0.6
63	14	5	1.2	131	6	11	0.5	362	10	33	0.9
43	12	13	3.7	107	6	33	1.9	348	21	108	6.5
47	12	14	3.6	135	...	41	...	315	13	95	3.9
69	15	13	4.0	178	2	47	0.5	362	11	96	2.9

NOTE.—The three figures against each administrative group are those for (1) 1939, (2) 1938 and (3) 1934-38. The rates have been calculated *per mille* of the average daily population.

TABLE SHOWING SICKNESS AND MORTALITY OF ALL CLASSES

Provinces.	Average daily population.	Constantly sick.	Diarrhoea.			
			Actuals.		Ratios.	
			A.	D.	A.	D.
India (excluding the Andamans)*	{ 114,331	20	1,690	12	15	0.1
	{ 109,347	21	1,824	17	17	0.2
	{ 118,796	23	2,316	19	19	0.2
N.-W. F. P.	{ 5,424	18	9	1	2	0.2
	{ 5,043	34	34	1	6	0.2
	{ 6,236	25	27	1	4	0.2
Punjab	{ 18,350	17	191	2	10	0.1
	{ 17,024	18	140	...	8	...
	{ 19,040	22	216	4	11	0.2
U. P.	{ 32,895	16	483	6	14	0.2
	{ 28,708	17	420	6	15	0.2
	{ 30,637	19	390	5	13	0.2
Bihar	{ 9,707	19	56	...	6	...
	{ 9,086	20	108	1	12	0.1
	{ 9,479	23	128	...	14	...
Orissa	{ 987	21	7	...	7	...
	{ 1,076	20	17	...	16	...
	{ 1,016	26	32	...	31	...
Bengal	{ 16,774	39	615	...	37	...
	{ 16,992	38	644	6	38	0.4
	{ 19,267	38	1,053	3	55	0.3
C. P.	{ 4,404	14	94	1	21	0.2
	{ 3,990	15	41	2	10	0.5
	{ 4,360	10	60	2	16	0.6
Bombay	{ 6,696	18	110	1	16	0.1
	{ 6,926	18	169	...	24	...
	{ 7,515	20	182	...	24	...
Sind	{ 3,675	18	105	...	29	...
	{ 3,722	21	183	...	49	...
	{ 3,789	23	133	1	35	0.3
Madras	{ 10,580	11	23	1	2	0.09
	{ 10,255	14	31	...	3	...
	{ 11,605	16	29	1	2	0.09
Assam	{ 3,216	24	12	...	4	...
	{ 3,304	24	13	1	4	0.3
	{ 3,782	23	28	...	7	...

* The sickness and mortality figures relating to the Andamans have been dealt with in Paragraph 33 of this report.

A.—Admissions; D.—Deaths.

OF PRISONERS IN DISTRICT AND CENTRAL JAILS IN INDIA—concl'd.

Anæmia and Debility.				All Causes.			
Actuals.		Ratios.		Actuals.		Ratios.	
A.	D.	A.	D.	A.	D.	A.	D.
1,051	33	9	0·3	54,100	982	473	9
912	33	8	0·3	52,828	1,002	479	9
973	36	8	0·3	63,455	1,804	536	11
10	...	3	...	1,858	20	343	4
32	...	6	...	2,128	44	378	8
36	...	4	...	2,766	69	443	11
104	5	6	0·3	6,985	114	381	6
83	1	5	0·06	7,978	105	436	6
113	3	6	0·2	10,778	195	566	10
249	5	8	0·2	14,275	244	434	7
164	5	6	0·2	12,338	203	429	7
171	4	6	0·1	14,378	235	469	8
11	...	1	...	2,717	91	280	9
14	2	15	0·2	2,801	95	310	11
19	2	2	0·2	3,205	146	338	15
1	1	1·0	1·0	372	10	377	10
11	...	10	...	310	18	288	17
8	...	9	...	392	15	386	15
411	5	25	0·3	16,755	187	999	11
324	8	10	0·5	15,204	179	900	11
352	8	15	0·4	18,690	230	970	12
63	3	14	0·7	1,535	68	349	15
45	4	11	1·0	1,417	84	355	21
30	3	7	0·7	1,144	71	262	16
78	1	12	0·1	3,164	48	473	7
104	2	15	0·3	3,075	55	444	8
78	3	10	0·4	3,691	70	491	9
35	2	10	0·5	2,443	22	666	6
37	1	10	0·3	2,637	53	705	14
27	1	7	0·3	2,347	61	761	16
38	2	4	0·2	2,061	74	195	7
44	3	4	0·3	2,396	79	234	8
74	5	6	0·4	2,670	121	229	10
26	3	8	2·5	1,022	85	340	28
39	6	12	1·8	1,155	64	350	19
53	6	15	1·6	1,673	64	442	17

NOTE.—The three figures against each administrative group are those for (1) 1939, (2) 1938 and (3) 1934-35. The rates have been calculated *per mille* of the average daily population.

GIPD—562 PHC—30-7-41—1,150.