Report on the sanitary administration of the Punjab and proceedings of the Sanitary Board for the year ... and the report on sanitary works for.

Contributors

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Punjab Sanitary Report for 1920.

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REPORT

ON THE

SANITARY ADMINISTRATION OF THE PUNJAB

AND

PROCEEDINGS OF THE SANITARY BOARD

for the year 1920

BY

LIEUTENANT-COLONEL W. H. C. FORSTER, D.P.H., I.M.S.,

Sanitary Commissioner, Punjab.

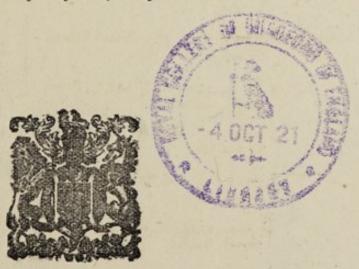
AND

THE REPORT ON SANITARY WORKS FOR 1920

BY

MR. A. R. ASTBURY,

Sanitary Engineer, Punjab.



Lahore :

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, PUMPLE.

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Section II.-European Army.

No remarks.

Section III.-Native Army.

No remarks.

Section IV.-Jails.

No remarks.

Section VII.-Vaccination.

(Separate report.)

Section VIII.-Sanitary Works, Military.

No remarks,

SANITARY DEPARTMENT.

Memo. of Errata in the Annual Sanitary Report of the Punjab for 1920.

- 1. On page 13, paragraph 23, line 1, against 1913 for " 38,6)7" read " 38,687."
- 2. ., ,, 24, line 23, for "1,617" and '309" read "1,642" and "177" respectively.
 - 3. Ap, endix B. page vi, line 20, for "In " read " For."
 - 4. 34 for "at Handsera River" read "Tangri river."
 - 5] , Cagainst Rawalpindi, sub-column 7 for "2.8" read "2.3."
 - 6. Annual Ferm No. I against Gurdaspur, st b-column 16 for ' 2.8" read " 21.8."
 - 7. Gujranwala, sub-column 16 for " 19 " read " 19.0."
 - 8. , No. II against Jullundur, sub-column 12 for "31,052" read
 - 9. No. II against Lahore, sub-column 13 for " 119 6 " read " 119 5."
 - 10. , , Mianwali, sub-column 8 for " 15 67 " read " 15,267.4
 - 11. ,, Heshiarpur, sub-column 2d for " 38.5" read " 38.6."
 - 12. ,, ,, Sialkot, sub-column 25 for "89.2" read " 39.2."
- 13. , No. IV against Ratio per 1,000 living for the Province, sub-column 76 for "24:58" read "24:50"
 - 14. Annual Form No. IV against Hissar, sub-column 136 for "24-99" read " 24-91."
 - 15. Annual Form No. IV A. against Gujrat, sub-column 13 for "1882" read "1,282."
- 16. Annual Form No. VI B. Rohtak District, against Rohtak, town, sub-column 29 for "12.59" read "12.44"."
- 17. Annual Form No. VI B. Sialkot District, against Jamke town, sub-column 24' for "1'28" read "0'28."
- 18. Annual Form No. VI B. Rawalpindi District against Murree town, sub-column 7 for "41'41" read "40'4i."
- 19. Annual Form No. VI B. Mianwali District, against Bhakkar town, sub-column 25 for "26 19" read "26:17."
- 20. Annual Form No. VI B. Mianwali District, against Kalabagh town, sub-column 29 for "13.80" read "13.82."
- 21. Annual Form No. VI B. Lyallpur District, against Gojra town, sub-column 25 for '6.01" read "7.01."
- 22. Annual Form No. VI B. Dera Ghazi Khan District, against Rajanpur town, subcolumn 25 for " 3.15" sead " 31.05."
- 23. Annual Form No. 1X sgainst Montgemery, sub-column 9 for "392 " read" 892."
 - 24. Annual Form No. IX against Karnal sub-column 22 for " \$8.46" read " 38.39.".
 - 25. State ment No. I against Gujist, sub-column 15 for "5" read " 15."
 - 26. " Lyallpur " , 14 for " 34 " read " 24."
 - 27. " Patiala " " 27 for " 147 " read " 1,647. "

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(The text of the Sanitary Report is limited to 20 pages and that of the Sanitary Engineer to 4 pages.)

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Proceedings of the Punjab Government (Ministry of Education) in the Home (Medl. & Sany.) Department, No. 984-S., dated 10th June 1921.

READ :-

The Report on the Sanitary Administration of the Punjab for the year 1920.

Remarks.—During 1920 rainfall over the Province as a whole was either normal or defective during most months, a considerable excess being recorded only in May; the monsoon failed after the first week in August. The resultant health conditions were similar to those of 1919 and the year was a healthy one. The prices of food-grains continued high, particularly in Rawal-pindi, though a good rabi and restricted exports produced some improvements. Wages continued to rise.

- 2. The birth rate was 42.9, and was identical with the rate for the previous quinquennium. The greatest increase was in the new and prosperous colony district of Montgomery, the greatest decrease in Karnal. The rate for towns was 44.5, Multan showing a large decrease owing to local conditions. The Punjab still holds the premier position among the provinces for birth rate, while it stands low on the list of death rates. The death rate was 28.6, a very small increase on the previous year, but considerably below the last quinquennial average. Simla shows the very high rate of 55.3; in that district, and in those of Ambala and Gurdaspur, respiratory diseases play a large part. The unusual feature of the figures for seasonal mortality was the rise in the second quarter, due to simultaneous epidemics of relapsing fever and measles. Usually the last quarter is the worst.
- 3. The mortality from cholera touched the lowest point since 1899 and except for the third quarter, the Province remained practically free from the disease. The figures 138 in 1920 as against 8,561 in 1919 speak for themselves, and the little cholera the Punjab had was probably imported by pilgrims returning from Hardwar. The small-pox epidemic continued from the previous year, but showed a decrease: rigorous vaccination measures helped the natural wane of the disease, and a comparison with the last epidemic in 1912-13 shows the improvement in methods for tackling the disease at the outset.
- 4. The year 1920 was a mild plague year, the weak monsoon and the plague department co-operating to make conditions unfavourable for the flea to breed. Gujranwala and Attock suffered 1,565 deaths each from plague. Rawalpindi and Jhelum con-

tinued to be badly infected, but several districts in the centre of the Province remained uninfected throughout the year. Dissemination centres are now receiving particular attention, and rat destruction is being carried out on a larger scale. Government wishes to record its thanks to the officers to whose efforts the improvement is due.

- 5. Deaths shown as due to "fever" during the year amount to 371,432: this is an increase over the year before of 6,387. The rate is 19.2 per mille, which is considerably below the quinquennial average of 29.2; it is, as usual, higher in the rural areas than in the urban. Influenza re-appeared in a few districts, particularly Karnal, Simla and Muzaffargarh. Relapsing Fever also broke out, and has been made the subject of a special study, as it appears to be fairly widespread throughout the east of the Province. An Assistant Surgeon was deputed to enquire into the outbreak in the Simla Hills, and another put on special duty to deal with the matter generally. Government hopes that the steps taken to make the main features of the disease and the methods of prevention more widely known will enable the Sanitary and Medical Departments to cope with it.
- 6. An important feature of the year has been the attention paid to rural health measures. Village sanitation is still checked by the antipathy of the villagers themselves to the necessary measures, though it is hoped that the rules recently sanctioned will be adopted by a number of villages in the districts of Lyallpur and Muzaffargarh. District medical officers of health are being appointed, but there is great difficulty in obtaining trained men. In this connection Government attaches great importance to the newly formed Faculty of Public Health, and the facilities which it is hoped to provide for the training of students.
- Sanitary Engineer, while Rai Sahib Diwan Amar Nath officiated for him during six months' leave. Government wishes to commend the work of both these gentlemen during the year under review. Their work as regards sewage has lain chiefly in Lahore where important schemes have been carried out in connection with the new Legislative Council Buildings. Government trusts that the work of regrading the storm drains at Amritsar will soon be taken in hand. The chief water supply problems are at Ambala and Simla; Government notes with regret that there is a lack of efficient management by the Municipal Committee of the former town, In Simla the Guma project is still under consideration.

8. Lieutenant-Colonel Forster remained in charge of the office of Sanitary Commissioner during 1920. Government cannot commend too highly the keenness with which he has continued to apply his great abilities to the new and difficult problems arising in his department as old remedies are seen to be inadequate and new fields of research and development are surveyed. Thanks are also due to Lieutenant-Colonel Mackenzie who has been in charge of the Vaccine Institute, and to Dr. K. A. Rahman whose jurisdiction extended over the whole Province, a charge too big for one man to hold, but held efficiently by him.

ORDER.—Ordered that a copy of the foregoing remarks be circulated with the report and be furnished with the usual number of copies of the report to the Government of India; also that the review be published in the *Punjab Government Gazette*.

Ordered also that a copy be furnished to the Sanitary Commissioner, Punjab, for information.

By order of the Government (Ministry of Education).

FAZL-I-HUSAIN,

Minister.

E. JOSEPH,

Secretary to Government, Punjab,

Transferred Departments.

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By order of the Government (Ministry of Education),

FAZI-T-HUSAIN

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Secretary to Concernment, Paulat.

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SECTION I.

THE following brief summary of the Chief Meteorological features of the Punjab during the year 1920 was supplied by the Director-General of Observatories:—

Except for a slight excess in the south-west Punjab in January, rainfall was normal or in slight defect during the first three months of the year. In April it was largely below normal, but in May there was an excess of 60 per cent. in the east and north Punjab and of 169 per cent. in the south-west Punjab. The total amount for June was also slightly above normal in the south-west Punjab, but in defect over the rest of the province. In July the east and north Punjab had its normal fall, while the south-west Punjab registered a moderate defect. The monsoon gave only scattered falls after the first week of August except on one day on the 17th September, and the total rainfall for August and September was in moderate to large defect. The last quarter of the year was rainless except for a few falls about Christmas day.

The departures from normal of the other elements agreed on the whole with those of rainfall. Cloud proportion was normal or in slight defect in the first four months of the year and in distinct excess in May and June. Maximum temperature was slightly below normal ir April, both maximum and minimum temperatures were below normal by 7° in May and 2° in June. From the middle of August to the end of the year skies were much clearer than usual, humidity was low and maximum temperature above the average. The highest temperature recorded in the Province during the year was 121.6° at Peshawar on the 5th July and the lowest in the plains 27° at Rawalpindi on the 21st December.

2. The return supplied by the Director of Land Records, Punjab, shows that the average retail price of wheat during the year 1920 was $7\frac{1}{8}$ seers per rupee at Lahore, $7\frac{1}{16}$ at Multan, $6\frac{7}{8}$ at Ambala and $6\frac{1}{4}$ at Rawalpirdi.

The average rates of barley were 10_{16}^{5} seers each at Lahore and Rawalpindi, 10_{16}^{3} at Multan and 10 at Ambala; that of jawar 8_{16}^{3} , 7_{8}^{3} , 9_{4}^{1} and 10_{16}^{1} , respectively.

As regards lajra the average rates varied from 7_{16}^3 to 7_{16}^3 seers at the principal markets of Ambala, Lahore, Rawalpindi and Multan; that of maize from 7_4^3 to 9_8^5 and of gram 6_{16}^{13} to 7_8^3 seers per rupee.

It will be seen that owing to good harvests and restricted exports the prices were lower than in the preceding year.

3. The wages have risen considerably since the second regular wages survey of the Punjab was taken in December 1917.

with the day of Multan and to at Ambala: that of

areas 3,5. 75. 34 and 10; . respectively.

SECTION V.-VITAL STATISTICS.

- The population of the Punjab to which the statistics in the report relate is that of the census Population. of 1911, namely, 19,337,146 (10,608,101 males and 8,729,045 females), but a rough estimate of the population for the year under report, which has been prepared by adding births and subtracting deaths since the last census report, works out to 20,713,647 (11,374,675 males and 9,338,972 females). Calculated on this estimated population the birth rate is 40°1, i.e., 2.8 per mille less than the rate calculated on the census figures, and similarly the death rate 21.8 is less by 6.8. In individual districts the rates calculated on the census figures are in excess in all the districts in the province except Gurgaon, Simla and Dera Grazi Khan, these being those districts in which the estimated population showed a reduction as compared with the census figures both in the previous as well as in the year under report.
- 5. The year 1920 was, like last year, a healthy one; the death rate (28.6) was low and only slightly in excess of that of the previous year. As usual "Fevers" accounted for the highest death rate and the rate is in excess of that for 1919. The rates for "Dysentery and diarrhœa" "Respiratory Diseases" and "all other causes" are also slightly in excess of those for last year. Cholera, Small-pox and Plague show an appreciable reduction as compared with last year. The death rate under "injuries" remained practically stationary. The birth rate is higher than that recorded for the two previous years.
- Births .- The total number of births registered this year was 829,803, of which 437,257 were males and 392,546 females, the respective A. F. No. 1. rates being 42.9, 22.6 and 20.3. The total rate shows an increase of 2.6 as compared with the previous year but is identical with the average for the previous five years. A comparison by districts with the quinquennial average reveals the fact that in the Lahore Division, the Rawalpindi Division and the Multan Division, the rate in 1920 was in excess. In the remaining two Divisions of the Province the rate in 1920 was less than the average for the previous five years except in the districts of Simla in the Ambala Division and Kangra in the Jullurdur Division where it was in excess. Compared with the previous year the rate was greater in the whole of the Jullundur Division, the Lahore Division and the Rawalpindi Division. In the Ambala Division it was in defect in the districts of

Karnal and Ambala and also in two districts of the Multan Division, viz., Jhang and Multan.

Compared with the average for the previous five years 20 districts out of the 29 show an increase which in Montgomery amounts to 7.5 per mille, in Lyallpur 3.8, in Rawalpindi and Mianwali 3.7, in all others it ranges from 2.3 in Sialkot to 0.1 in Lahore. Among those which have a rate lower than the quinquennial average Karnal shows the greatest decrease 8.7 and next to it come Ambala 7.3 and Gurgaon 5.1.

The birth rate for 1920 is satisfactory as showing a gradual return to normal conditions after the ravages of War and pestilence. In accordance with the Biological theory of reaction it should steadily increase to a figure in excess of pre-war rates.

7. The Punjab again shows the highest birth rate 42.91; the Central Provinces coming next with Provinces.

Birth rates of other 39.17. The rate in the other provinces was as follows:—

United Provinces 35.55, Burma 33.78, Bihar and Orissa 32.28, Assam 31.53, Bombay 30.28, Bengal 30.0, North-West Frontier Province 29.82 and Madras 28.42.

8. The birth rate in the 39 principal towns amounted to 44.5 per mille as against 45.6 in 1919 and 44.7 the average for the previous five years.

The rates in the three largest towns were as follows:—

Amritsar 46, Multan 40, and Lahore 39, the corresponding rates last year were 47, 49 and 41. Lahore and Amritsar show a slight reduction but Multan shows a fairly large reduction compared with both the rates recorded in the previous year and the average for the previous five years. The Multan figures are probably the product of two conditions (1) the prevalence of plague leading to practical evacuation and (2) no influx of the more virile rural population.

9. Montgomery again recorded the highest birth rate 53.0 against 50.7 last year. It was closely followed by Lyallpur 51.8, Amritsar 49.7 Rohtak 47.8, Sheikhupura 47.6, Sialkot and Lahore 47.3 each and Gurdaspur 47.1. Simla as usual recorded the lowest rate (21.8) while next in order comes Dera Ghazi Khan with 27.6. In the other districts it varied from 35.2 in Jhelum to 46.6 in Ludbiana. Of the 29 districts in the Province 14 had a birth rate higher than the provincial rate of 42.9.

- for the whole Province, as compared with for the whole Province, as compared with 12.0 in 1919, but in individual districts the excess in some cases was very great, e.g., 27.7 in Lyallpur; 26.0 in Sheikhupura; 24.3 in Montgomery and 22.2 in Jhang. In the others it varied from 20.5 in Lahore to 9.0 in Dera Ghazi Khan. Only 4 districts had a death rate in excess of the birth rate, and in them the excess amounted to 7.9 in Karnal, 10.7 in Ambala, 33.5 in Simla and 3.3 in Kangra.
- the year was 552,073, of which 298,444 were males and 253,629 females, the resulting rates being 28.6, 28.1 and 29.1. The corresponding rates for the previous year were 28.3, 27.5 and 29.4 and the averages for the last five years 43.0, 40.3 and 46.0. Of the provincial death rate 19.2 was attributable to fevers, 5.0 to all other causes, 2.7 to respiratory diseases, 0.5 to small-pox, and dyser tery and diarrhæa and 0.3, 0.3 and 0.01 to plague, injuries and cholera, respectively. Compared with the quinquennial average, the total death rate in 1920 showed a decrease of 14.4 per mille and an increase of 0.3 when compared with the ratio for the previous year.

The decrease as compared with quinquennial average is due to the lessened incidence of "Fevers" "Plague" and the infectious diseases. The slight increase as compared with 1919 is due to the greater incidence of Influenza and Relapsing Fever coupled with a widespread epidemic of Measles in the early part of the year.

- 12. The highest provincial death rate was recorded in the Central Provinces 40·11, United Provinces coming next with 37·23 followed by Bengal 32·7, Bihar and Orissa 30·94, Assam 28·98 and Bombay 28.65. The other provinces whose death rate is lower than that of the Punjab (28·55) are Burma 26·44, North-West Frontier Province 23·36 and Madras 21·87.
- 13. The provincial death rate of 28.6 was exceeded in 10 districts, namely, Simla in which it was Deaths by districts (A. F. 55.3, Karnal 48.4, Ambala 46.4, Kangra 40.1, Rohtak 31.4, Gurdaspur 30.9, Hoshiarpur 20.5, Amritsar 29.5, Gurgaon 29.3 and Montgomery 28.7. The marked increase in the death rate in these ten districts was due chiefly to Fevers, though in the Ambala, Simla

and Gurdaspur Districts "Respiratory Diseases" was in no small measure responsible for the increase in the mortality. Among the districts which recorded a rate lower than the provincial death rate were Dera Ghazi Khan 18.6, Sheikhupura 21.6, Jhang 22.7, Shahpur 23.1, Attock 23.6, Ferozepore 23.9, and in the remaining districts the rate ranged between 24.1 and 27.6.

With the exception of Karnal, Ambala, Simla and Kangra in which the average death rate of 43.0 was exceeded, the remaining districts shew a considerable reduction in the death rate as compared with the average for the five previous years.

14. The highest death rate was recorded in the months of
May and June when it amounted to 3.18

Seasonal mortality (A. F. and 3.01, respectively. These rates were followed by 2.52 in December and 2.44 in

January. In the other months the rates varied from 1.93 in August to 2.33 in April. August as usual was the healthiest month and was closely followed by October, February and November.

The quarterly death rate was January-March 6.87, April-June 8.52, July-September 6.41, October-December 6.76.

The highest death rate this year was in the second quarter, the period during which Relapsing Fever is at its height, and the rate is a fair indication of the importance of that disease. The rate was also swollen by the co-incident epidemic of Measles. In an ordinary year the last quarter, when the effects of Malaria become evident, is usually the worst.

Death rates according to different sge periods (A. F. No. IV.)

Death rates according to different sge periods (A. F. No. IV.)

1919, a combined form (No. IV) has this year been substituted to take the place of forms No. IV and V and in the former four additional columns (4—7) have been provided in order to meet the wishes of the Government of India in respect to the recording of deaths under one year in greater detail, but as the population for the age groups under one year is not available in the census of 1911, it has not been possible to give the figures for population and ratio in respect of the four additional columns in the new statement referred to above.

The highest death rate among infants under one year was recorded under "Other Classes," being 859.65 for males and 573.17 for females, next in order coming Hindus 203.66 and

200 · 52, Muhammadans 183 · 47 and 154 · 33 and Christians 165 · 33 and 138 · 90. The next age group which recorded the highest mortality were old people above 60 and children between 1 and 5, the rates in these groups varied between 200 · 00 among males of "other classes" in the former group and 46 · 57 among Muhammadan females in the latter. In the remaining age groups the rate did not exceed 102 · 44 for males and 63 · 93 for females.

During the year under report 38,047 deaths were registered among infants under one week, the districts in which the mortality was most marked being Jullundur, Kangra, Ferozepore and Gurdaspur in which as many as 2,601, 2,567, 2,197 and 2,175 deaths were recorded. Among infants of one week and under one month the total deaths amounted to 29,469, of these Kangra accounted for 2,047. Lahore 1,765, Karnal 1,678, Gurdaspur 1,547 and Jullundur 1,486, in the remaining districts the deaths ranged from 1,327 in Ferozepore to 11 in Simla. In the age group of one month and under six months the total mortality did not exceed 41,921, the districts of Karnal, Lyallpur, Amritsar, Gurdaspur, Lahore, being responsible for the largest number of deaths. the figures being 2,672, 2,514, 2,386, 2,158 and 2,130, respectively. the lowest number of deaths was recorded in Simla, viz., 89. Among those of six months and under one year the total number of deaths recorded was 42,162, the figures for districts recording the highest number of deaths being Amritsar 2,843, Karnal 2,535, Hoshiarpur 2,476, Lahore 2,383, Ferozepore 2,289 and Ambala 2.257, the lowest being Simla 98, Dera Ghazi Khan 426, Shahpur 466 and Muzaffargarh 571.

Among Muhammadan infants under one week the number of deaths reported was 11,106 males and 8,846 females, Hindus 9,354 and 8,364, Indian Christians 203 and 139 and other classes 22 and 13, respectively. Under the next age group "One week and under one month."—the figures are Muhammadan males 8,410, females 7,376, Hindus 7,049 and 6,379, Indian Christians 136 and 99, respectively, while among those of "one month and under six months" the number of deaths amounted to Muhammadans 12,776 males and 9,949 females, Hindus 10,220 and 8,558, respectively. In the age group of six months and under one year the number of recorded deaths among Muhammadan infants was 12,023 males, 9,746 females, Hindus 9,721 and 10,308.

The total number of deaths among infants under one year was 44,315 Muhammadans males and 35,917 females as compared with 36,344 Hindu males and 33,609 females.

Among the different age periods the population ratio of mortality is as under—

Ages.	Males.	Females.		
Under one year			191.85	173.40
1 under 5 years			52.46	50.96
5 ,, 10 ,,			11.09	11.45
10 ,, 15 ,,			7.93	10.09
15 ,, 20 ,,			9.47	- 12.16
20 ,, 30 ,,	C. Land		10.56	12.25
30 ,, 40 ,,		100	14.03	15.76
40 ,, 50 ,,	The Target		19.35	17.85
50 ,, 60 ,,			29.64	26.72
60 and upwards			70.05	67.75

Calculated on the number of births during the year the death rate for infants under one year was 186.32 (males) and 178.65 (females) as against 189.33 and 188.04 in the year preceding.

- 16. In the year 1920 the mortality amongst Indian Christians was 34.66 for males and 32.64 for D(a the by classes (A. F. females, among the Hindu population it amounted to 28.77 and 31.85 Muhammadar 27.52 and 26.87 and other classes 28.31 and 24.00.
- The urban rate which was 32.75 exceeded the rural rate 28.12 under all the heads of mortality except small-pox and fevers, under which heads the recorded excess over urban rates was 0.20 and 3.41, respectively. This increase is due principally to misclassification as deaths from Measles and Chicken-pox are mostly snown under the head of Small-pox while those from Plague under the head of Small-pox while those from Plague under the head of Fevers. The rates recorded in the three largest towns were Multan 41.34, Amritsar 34.47 and Lalore 34.05 as against 35.67, 36.22 and 34.03 in the previous year and 46.50, 51.63 and 42.18 the average for the preceding five years.

Among the minor towns in the province the lowest rate was recorded in Giddarbaha 3·49, Abohar comirg next with 8·64, Akalgarh 10·91, Sambrial 13·68, Nankana Sahib 14·68 a.d. Ichhra 14·76. In the following towns the rate was below 20·0 per mille.— Murree 19·84, Montgomery 19·81, Eminabad 19·54, Moga 19·09, Zafiarwal 18·72, Pakpattar 18·58, Gojra 18·28, Dinga 18·14, Lyallpir 17·01 and Shahpur 16·36. These low rates are due to the absence of Plague and Cholera in the localities in question. The highest rates were recorded in Burya 62·03, Jagadhri 56·04, Gujranwala 58·95, and Jhelum 51·39. The high

rate in these towns was due to the excessive mortality from plague and tevers while in Gujranwala respiratory diseases helped to swell the death rate.

18. Compared with the previous year there has been a decrease of 16,641 in the number of entries checked in both the birth and death registers.

The actual number checked was 791,564 entries in the birth and 548,259 in the death register against 693,767 and 662,697 in the previous year. This slight decrease, which occurred in the number of entries checked in the death registers, requires no explanation.

The percentages of omissions detected to the total number of entries checked by Divisional Inspectors worked out to 1.66 and 1.78 for male and female births and 0.77 and 0.71 for male and female deaths, those checked by Superintendents of Vaccination and vaccinators at 1.30 and 1.48 for male and female births and 0.70 and 0.74 for deaths. The revenue staff detected omissions at the rate of 2.02 and 1.47 among births and 1.54 and 1.63 among deaths. The number of Chowkidars fined for neglecting to report births and deaths during the year was 24, the fines amounting to Rs. 9. In Municipal towns 89 persons were fined for failing to register births and 141 to register deaths, the total fines amounting to Rs. 185.

The highest number of omissions were discovered in the Mianwali District, 1856, in Gujrat and Ferozepore 1021 each, in Karnal and Multan 796 each and in Gujranwala 795. The fact that no fines were levied in any of these districts, except for annas 12 in the Multan District, shows a lack of ir terest on the part of the district officials who obviously do not seem to attach as much importance to the matter as it deserves.

19. During the year 48 births and 34 deaths were recorded at railway stations outside municipal limits as against 71 and 63 respectively in the previous year. Of the deaths fevers accounted for 19, all other causes 8 and respiratory diseases 7.

20. There were 252 births and 182 deaths among Europeans and Anglo-Indians during the year under report as against 201 and 167 respectively last year, the deaths were distributed as follows:—All other causes 90, disease of the respiratory organs 38, fevers 31, injuries 14 and dysentery and diarrheea 9.

21. Of the 3,367 deaths recorded among the non-military population of the cantonments in the Pro-Births and deaths among vince, at a rate of 16 per mille, 1,813 were due to fevers, 1,095 to all others causes, 334 to respiratory diseases, 64 to dysentery and diarrhœa 38 to injuries and 16 to plague. There were only two deaths from cholera and five from small-pox. During the previous year there were 3,340 deaths at a rate of 16 per mille. The total number of births amounted to 3,897 at a rate of 18 per mille which is slightly in excess of the number registered flast year.

SECTION VI.—CHIEF DISEASES.

22. The mortality from cholera during 1920 was the lowest on record since 1899 and Cholera (A. F. No. VII). amounted to 138 as compared with 8,561 deaths in the previous year, the rate being 0.01 per mille as compared with 0.44 in 1919 and 0.26, the average for the previous five years.

Deaths were recorded in twenty out of the twenty-nine districts, but with the exception of a few localities, the disease no where prevailed in an epidemic form. The localities referred to above and in which the disease was prevalent in a slightly epidemic form were Lodhran in the Jullundur District, Bhatti in Kangra District, Bhiwani in the Hissar District and Ichhra in the Lahore District. Only one death each was reported from the districts of Simla, Sialkot, Rawalpindi, Attock, Mianwali and Jhang, while 2 were recorded in Gurgaon, 4 each in Gujranwala and Gujrat, 5 each in Gurdaspur and Multan, 8 each in Ambala, Jullundur, Amritsar and Montgomery and 7 in Karnal. The largest number of deaths from cholera was recorded in Lahore 29, next in order coming Hissar with 21, Kangra 13, and Hoshiarpur 10.

The province was practically free of cholera during the 1st quarter of the year; while in the second quarter only one death was reported from Mianwali and two each from Gujrarwala and Gurgaon. It was not till the third quarter of the year that the mortality showed signs of increase, the number of deaths during that quarter amounting to 132. Thereafter the province was again free of cholera with the exception of one suspected death from the disease reported from the town of Gujrat.

Out of the 138 deaths recorded from Cholera, 63 were directly due to the importation of infection from Harowar and if it were not for the fact that a large number of pilgrims visit Hardwar annually, the mortality from cholera would have been very much less than that which actually occurred during the year.

23. The deaths registered from small-pox ir the province amounted 9,319, giving a ratio of 0.48 per mille which was 0.23 higher than the mean ratio during the preceding quirquennium and 0.31 lower as compared with the rate for the previous year. Continued from the previous year when the disease was widespread the number of deaths recorded from small-pox was 1,425 in January, 1,153 in February, 1,193 in March and 1,119 in April. The disease attained its maximum intensity in the month of May

wher 1,426 deaths were registered. It ther began to decline, the number of deaths in the following two morths falling to 1,117 and 756 respectively. A further decline in the mortality occurred in August when 311 deaths were recorded and by September the disease reached its lowest ebb, the number of deaths registered in that month being 124 and in October 125. The infection again began to spread in November and December when 209 and 361 deaths respectively were recorded.

The highest death rate from small-pox was recorded in Montgomery 3.92, Sharpur coming next with 1.87, Lyallpur 1.31, Jhelum 1.12 and Gujrat 1.03. In the the districts of Mianwali, Jhang, Hoshiarpur and Attock the death rate varied between 0.51 and 0.70 while in the remaining districts it was below the provincial rate of 0.48. The lowest rate recorded was 0.01 ir Rohtek and Kangra. Of the deaths registered under this head 2,583 were under one year of age and 4,750 from one to ten years of age as against 3,848 and 7,862, respectively, in the previous year. This improvement was partly the result of the natural wane of the epidemic and partly the result of a Circular letter to all Civil Surgeons and Health Officers issued by me in which I had emphasized the necessity of their carrying out vaccination operations in the areas which had already been invaded and of the continuance of the measures recommended until the infection in those areas had been completely stamped out. Some of the districts at my suggestion engaged extra vaccinators and the services of members of the special Vaccination staff were also lent to some districts for this purpose. tion of male and female deaths from small-pox was equal, the rate in 1920 being 0.48 in both cases.

The death rate from small-pox ir urban areas was 0.30 as compared with 0.50 ir rural circles and the average rate for towrs in which the compulsory Vaccination Act is in force was 0.27 as against 1.14 in the previous year. Among the largest towns of the province Multan headed the list with a death rate of 0.86, Lahore and Amritsar coming next with 0.05 and 0.03, the corresponding figures for the previous year for these three towns were 0.41, 0.38 and 0.63.

In the smaller towns the highest death rates were recorded at Shahpur (3.89), Narowal (3.36), Pattoki Mandi (3.72), Fattehabad (2.49) and Pind Dadan Khan (2.36). In all these towns except Pind Dadan Khan provisions of the Vaccination Act are not in force. Regarded as a whole the small-pox epidemic of 1919-20 shows what can be done by instituting a rigorous

campaign at the outset. The last epidemic of this nature occurred in 1912-13 and a comparison of the deaths is as follows:—

> 1912 ... 30,389 | 1919 - ... 15,865 1913 ... 38,607 | 1920 - ... 9,819

Incidentally I may note that the special staff of Vaccinators has been increased by six for the purpose of assisting the District staff when in difficulties. Steps are also being taken to work up to the programme outlined in the last Report.

Plague.—General Review.—There were altogether 7,972 deaths in the Punjab from plague in the year under report, 6,153 in British districts and 1,819 in Native States. On the whole it was a mild year in comparison with 1919 when the total mortality from plague amounted to 12,683 of which 11,089 deaths occurred in British districts and 1,594 in Native States. The mortality for the districts most infected was Rohtak 667, Gujranwala 1,565. Jhelum 363, Rawalpindi 220, Attock 1,402, Lyallpur 460 and Multan 372. The districts of Gurgaon, Ambala, Simla, Kangra, Hoshiarpur, Jullundur, Amritsar and Gurdaspur remained free of infection throughout the year while a few sporadic and imported cases were reported from the districts of Ludhiana, Ferozepore, Lahore, Shahpur, Mianwali, Jhang and Dera Ghazi Among the Native States only Patiala and Kapurthala were infected and contributed as many as 1,647 and 309 deaths respectively.

The preumonic type of the disease was confined to two villages, namely, Shinka and Nartopa in Chhach Ilaqa of the Campbellpore Tahsil in Attock District. Fortunately the infection was localised and did not spread to the adjoining villages.

The mildress of the epidemic is chiefly attributable to the comparatively weak monsoon affording unfavourable conditions for flea breeding. The anti-plague measures resorted to by the plague department belped materially in keeping the infection in check and in preventing its spread.

Seasonal Variations.—This was typical of an ordinary mild plague year. Starting with 636 deaths in January, the disease reached its maximum in April when 1,509 deaths were registered. It then began to decline in intensity and reached its lowest in September when only seven deaths were recorded; and the Province was once free of infection during the week ending the 25th September.

The monthly figures are as under :-

January	 		636
February	 		735
March	 		826
April			1,509
May	 	1	1,404
June	 		828
July			80
August	 May be a second		26
September			7
October	 4.		21
November	 		44
December	 		37

The comparatively low mortality reported in December was chiefly dueto the special efforts that were directed to stamp out the infection which had appeared in Rohtak District and Multan city early in November.

Type of disease.—The majority of cases were of the bubonic type though pneumonic and septicaemic cases were also reported from Montgomery, Shahpur and Attock districts.

Anti-Plague Measures—Rat Destruction.—This was attempted on a larger scale than in the previous year and efforts were directed to reducing the rat population by systematic trapping, baiting and smoking operations especially in those localities that were infected late in the spring or those which had a bad plague history. The object of concentrating special attention in these localities was to reduce dissemination centres as much as possible. In certain towns and villages these methods were carried on throughout the year as in the districts of Hissar, Karnal, Hoshiarpur, Jullundur, Amritsar, Lahore, Gurdaspur, Rawalpindi, Attock and Multan.

Barium carbonate, the new rat poison, proved its superiority to the old rat posion especially when it was combined with smoking and trapping. Flea destruction by fumigation with cresol vapour was also carried out wherever thought necessary.

Evacuation.—The people only evacuate their houses when plague is severe.

Inoculation.—During the year under report 9,721 inoculations were performed as compared with 12,994 done in the pervious year, but considering the mildness of the year the number was satisfactory.

Attitude.—No special change was noticed in the attitude of the people towards the plague staff or towards the anti-plague measures resorted to. Apathy and opposition are gradually disappearing and the people generally are beginning to realize the value of the measures.

Staff.—In the beginning of the year the staff consisted of one Special Medical Officer, 14 Assistant Surgeons, two Sub-Assistant-Surgeons and 20 Plague Supervisors. During the month of July the Assistant Surgeons

previously on plague duty reverted to the general line and 22 new Assistant Surgeons were recruited in their place. The services of eight Plague Supervisors were dispensed with. Towards the close of the year the total strength of the plague department was one Special Medical Officer, 22 Assistant Surgeons, two Sub Assistant Surgeons and 12 Plague Supervisors. The plague medical staff though engaged primarily for plague, is also expected to deal with the prevention or mitigation of all epidemic diseases, as well as to treat not only plague cases but the sick generally in all villages which they may visit in the course of their tours. In this connection the work done by the staff was quite satisfactory.

25. Fevers.—There were 371,432 deaths registered under the head of fevers during the year under report, as against 365,045 in 1919 showing an increase of 6,387 deaths. The fever mortality by months was as follows:—

January 31,076, February 26,698, March 28,396, April 29,460, May 42,350, June 40,765, July 30,620, August 24,536, September 28,789, October 26,931, November 28,452, December 33,359.

The fever rate works out at 19.21 per mille of population as compared with 18.88 in the preceding year and 29.20 for the quinquennium. The largest number of deaths was recorded in the months of May and June, viz., 42,350 and 40,765 respectively as against 26,498 and 30,498 in the corresponding months of the previous year. All the districts of the Ambala, Jullundur and Lahore Divisions except Hissar, Gurgaon, Ferozepore Gujranwala and Sheikhupura recorded a death rate higher than that of the previous year while the remaining districts showed a decrease except Rawalpindi.

The following 10 districts had a rate higher than the provincial rate (19·21). Karnal 38·42, Simla 34·14, Kangra 27·47, Ambala 25·69, Muzaffargarh 22·46, Hoshiarpur 22·31, Rohtak 21·13, Amritsar 20·60, Mianwali 19·65 and Montgomery 19·59.

The urban and rural death rates from fevers were 16.12 and 19.53 compared with 15.50 and 19.22 in the previous year and 21.86 and 29.94 the quinquennial average. The three largest towns in the Punjab, Lahore, Amritsar and

Multan recorded rates of 18 · 26, 16 · 99 and 15 · 57 as against 17 · 66, 14 · 87 and 14 · 86 in the previous year and 24 · 59, 22 · 96 and 21 · 85 the average for the previous five years; it will be observed that in these three towns the death rate was considerably below the quinquennial average. In the case of smaller towns rates as high as 38 · 86 were recorded in Burya, 36 · 89 in Kot Adu, 34 · 45 in Jagahdri, in Palwal 31 · 42, in Paripat 31 · 24, in Rajanpur 81 · 05 and in the remaining towns it ranged between 30 · 12 and 1 · 53. The lowest rates were recorded in Gidarbaha (1 · 53), Rewari (3 · 39), Shahpur (4 · 46), Abohar (4 · 95) and Mitranwali (5 · 03).

Owing to the failure of the monsoon Malaria was very little in evidence and as previously noted Relapsing Fever, with some assistance from measles, was able to peak the curve in the second quarter of the year.

26. Influenza was prevalent during April and May in Bhiwani town and Mills in the Hissar District.

The total number of cases in town was 153 with 60 deaths and in the Bhiwani Mills 271 cases with 26 deaths.

In the Karnal District the disease made its appearance in the latter part of February in the villages of Sanghaur thana and spread to villages in the Karnal and Kaithal Tahsils. Altogether 1,239 cases with 370 deaths were registered.

In the Ambala District influenza also prevailed to a certain extent.

In Simla Municipality influenza was very prevalent during the first half of the year, 980 cases being notified during this period out of the total of 1,045 for the whole year. After the end of June cases were only reported from time to time except during September when no case was reported. At first the epidemic affected Kashmiri coolies in a preponderating degree but later on Indians of all classes suffered equally. Europeans appear to have suffered less than Indians. Total number of deaths returned were 186 out of which 41 were from Pneumonia.

In the Jhelum District only 42 mild cases of influenza occurred in Khewra village in the last week of December. The Civil Surgeon himself visited the place and measures to prevent the spread of the disease were taken.

In Rawalpindi City influenza appeared in a mild form towards the end of the year—13 cases with two deaths were recorded.

In the Attock District there was an epidemic of Influenza in the village Magian. The disease began about the middle of October and continued throughout December and was of pneumonic type.

In the Muzaffargarh district the disease was present in four villages of the southern part of the district at the end of 1919. It spread gradually to other 14 villages in the beginning of the year with 323 deaths out of 952 cases. The disease disappeared in the middle of June and after this the district was free from the disease till the middle of December when the infection again broke out at Hajipur, a village some four miles from the Sadar

and spread from there to the northern part of the district.

No cases of Encephalitis Lethargica were reported since the epidemic described on the last Report.

27. There was an epidemic of Relapsing Fever in some villages of the Hissar District from May to July but it did not assume any serious dimension.

Early in March when Influenza was prevalent ir the Karnal District, Relapsing Fever also appeared in a number of villages in Thanesar Tahsil and from there spread to villages in other three tahsils of the district. The disease was prevalent in this district last year and it appears that after remaining quiescent for a short time, it assumed an epidemic form in the Spring. Altogether 688 cases with 216 deaths were returned between the months of March and June.

In the Ambala District Relapsing Fever was reported from a few villages in the Jagadhri Tahsil during May 1920.

About the end of August Relapsing Fever was diagnosed in the Simla Municipality and altogether 19 cases at irregular intervals before the end of the year occurred in various parts of that city. The diagnosis in all these was confirmed by microscopic examination of blood. None of the cases occurred in those houses which were affected by the epidemic of the previous year and at first the source of introduction to Simla was not traced, but the cases occurring in November and December were definitely traced to infection introduced from the neighbouring Hill States—

Simla Hill States.—Towards the end of September the Superintendent, Hill States, reported a severe epidemic of Influenza in the Hill States adjoining Simla and a peripatetic investigation into its nature was done by this Department. The epidemic was found to be one of Relapsing Fever. The conclusions drawn from the investigation were:—

- (1) A large part of the Simla Hill States is infected with Relapsing Fever.
- (2) Infection dates from November 1919.
- (3) Seasonal prevalence.—A July and August peak period with the disease prevalent throughout the year. There is also evidence of a spring exacerbation.
- (4) Mortality is high.

A small outbreak amongst menials in Kasauli Cantonment was noticed on 7th October. Thirteen cases were reported mostly amongst sweepers. Necessary precautions were taken by the Cantonment authorities and the further spread of the infection was controlled.

In the Amritsar District 80 cases with 24 d aths reported from the villages Awan in Ramdas Police Station at the end of December and on an investigation these proved to be of Relapsing Fever.

Attock District.—Relapsing Fever appeared in village Gungla of the Pindigheb Tahsil in the latter part of March 1920 and accounted for 31 cases and 11 deaths up to the 21st June. Infection was imported from Peshawar.

In the plains there is an autumn peak followed by a period of comparative quiescence from January to February. In March the epidemic flares up again and from March to the middle of June appears to be the period of greatest intensity. By the end of June all reporting stations generally give a clean bill of health and the Province is apparently free until September. Speaking generally it may be said that as soon as hot weather conditions are definitely established the disease disappears on the plains.

Classes affected.—In the rural areas the poorer classes are chiefly affected.

In the towns the disease has so far been confined to sweepers, mochis and coolies. No cases in Europeans have yet been reported.

Mortality.—The mortality is high, death usually occurring in the first period of pyrexia. In this connection it is worth noting that all officers who have used it, describe, Novo Arsanobillon in a dose of 0.3 grammes as a specific. The intravenous route is of course the most efficacious but intra muscular injections have given excellent results in Simla.

Method of spread :-

- (1) In the hills.—Information is at present indefinite.
- (2) In the plains.—The period of maximum intensity synchronises with the maturation of the spring crops and more especially the wheat crop.

It is conceivable that insect life—apart from lice or conditions of human livelihood associated with the crop periods referred to—may be important factors in the epidemic spread of the disease.

(3) In the Karnal District the disease is definitely attributed to mosquitoes by the rural population.

Relapsing Fever is undoubtedly wide-spread throughout the Province and as Medical Officers turn their attention to the matter more and more foci of infection are reported. The old type of practitioner who regards every patient with "Fever" as a case of Malaria to be drenched with quinine cannot be expected to change his habits rapidly and consequently very little of the disease is reported as such. With the aid of the more modern school of practitioner we have been able to work out fairly accurately the seasonal prevalence of the disease and by the seasonal "Fever" rate the extent of the disease can be roughly estimated. In this way reported epidemics of Influenza and "Yellow Fever" have been traced to their true cause.

As regards preventive measures an Assistant Surgeon was deputed to enquire into the outbreak in the Simla Hills and another has been

put on special duty to deal with the matter generally. Leaflets describing the main features of the disease and the methods of prevention have been distributed in quatities to Medical Officers. A general Note summarising the position was submitted to all Medical Officers and also to the Military Department. "Barrel" disinfectors which proved so useful during the war, are being manufactured and sent to head-quarters of infected districts for peripatetic disinfection.

As the disease yields so remarkably to treatment reliance must be placed chiefly on the Medical Department. The practitioner must first learn to diagnose the disease and thereafter a system of itinerating medical officers competent to give the Aresenical treatment would work wonders. This system has been adopted in Assam to deal with Kala-Azar and Relapsing Fever is incomparably easier to treat than Kala Azar.

- 28. During the year under report 19 cases of enteric fever were recorded in Simla town and one case in Jullundur City. Of the 19 cases in Simla six were Europeans and 13 Indians. Fourty-five deaths from this disease were reported from Rawalpindi City and two from Lahore while a few cases occurred among Europeans and Indians residing in the Dalhousie Civil Lines.
- 29. A case of Typhus Fever was diagnosed as such by the Civil Surgeon, Lahore, or 24th May.

 The patient who died in Lahore on the 28th idem was a European sent from the Dhariwal Woollen Mills. An investigation into the source of infection was made by the Civil Surgeon, Gurdaspur, who ascribes it to some Persian carpets purchased by the deceased and which he thinks may have contained infected vermin. The Mil authorities were advised to take the necessary precautionary measures. No more typhus tever case occurred there.
- Dysentery and Diarrhoes. Diarrhoes amounted to 9,185 as against 8,639 in the previous year, the rates being 0.47 and 0.45, respectively. The quinquennial average was 0.65. The provincial rate was exceeded in nine districts but the excess was as usual most marked in Rawalpir di and Simla where the rate was 2.89 and 1.80, respectively. Of the remaining districts the rate recorded in Kangra was 0.97, Ambala and Gurdaspur 0.95 each and Sialkot 0.94. In the other districts it did not exceed 0.57 while it was as low as 0.02 in Hoshiarpur.

The urban and rural rates were 1.41 and 0.38 as against 1.65 and 0.33 in the year preceding.

Respiratory (A. F. No. XI.)

Respiratory (A. F. No. XI.)

Diseases.

at a rate of 2.73 per mille. This rate is in excess of the previous year (0.77) and the average for the last five years (0.23).

The district of Ambala returned a rate of 13.89 the highest recorded in the province, Simla coming next with 11.41, Gurdaspur 9.70, Kangra 6.45 and Sialkot 4.00. It was as low as 0.30 in Montgomery, 0.32 in Muzaffargarh and 0.36 in Dera Ghazi Khan.

The urban rate was 6.43 and the rural rate 2.35, the corresponding rates for the previous year being 5.32 and 1.62.

32. Injuries accourted for 6,490 deaths at a rate of 0.34 per mille as compared with 0.36, the quinquennial rate being 0.36. The deaths were classified as follows:—

Suicide 331 (153 males and 178 females), wounds 633 (480 and 153), accident 4,592 (2,767 and 1,825), snake-bite 671, injuries inflicted by wild beasts 98 and rabies 165.

- 33. 96,602 deaths were recorded under the head of "All Other Causes" at a rate of 5.00 per mille. This rate is in excess of the previous year's rate by 0.10. The rate for the last year and the average for the preceding five years were 4.90 and 6.10, respectively. The highest rates were recorded in Ludhiana 8.8, Gurgaon 8.0, Karnal 7.9, Simla 7.8, Rohtak 7.1, Ferozepore 7.0 and Jhang 6.9 while the lowest rates were recorded in Dera Ghazi Khan 1.7, Muzaffargarh 2.0 and Gurdaspur 2.1.
- Rabies. Standard The Standard T

SECTION IX.—SANITARY WORKS.

- 35. The Report on Sanitary Works during 1920, furnished by the Sanitary Engineer to Government, Punjab, is contained in Appendix B to this report.
- 36. During the year under report no new village was supsanitary note-books. plied with village Sanitary Note books.
- 37. No reward was assigned to the village communities by any District Board for sanitation during the year.
- 38. During the year under report 6,873 wells were cleaned and 720 parapets constructed at a total cleaning of wells and cost of Rs. 1,12,924. This shows an increase in the amount spent as well as in the number of wells and parapets constructed as compared with the previous year.
- 39. The income derived from the sale of street sweepings in municipal towns during the year under report amounted to Rs. 2,58,554 as against 2,06,603 realized in the previous year. The largest sums were realized in Sialkot, Lahore and Amritsar.
- 40. There were 1342.98 acres of land under sewage irrigation in the principal towns and Rs. 52,834

 Land under sewage irriwere realized for its use during the year showing a decrease of 213.21 acres of land thus irrigated and an increase of Rs. 8,006 in the amount realized.
- 41. Although a few attempts have been made to improve village sanitation they have not met with Village sanitation. any great success. The chief obstacle to progress in this direction is the attitude of the villagers themselves who evince scarcely any desire to change their habits and customs and unless this barrier can be broken down no real progress will be possible. The rules framed by the District Boards of Ludhiana and Ambala and sanctioned by Government for the improvement of rural sanitation were not adopted in any of the villages in those districts. The bye-laws prepared by the District Boards of Lyallpur and Muzaffargarh for the improvement of village sanitation and which were under the consideration of Government have now been sanctioned. A number of the villages in the Lyallpur District have expressed their willingness to adopt them and it is hoped that they will also be

adopted by the villages in the Muzaffargarh district. In the Attock District a sanitation scheme for certain villages is under consideration and the proposals to impose a tax to carry it out has been submitted to Government for sanction. In the Hissar District a sum of Rs. 1,000 was sanctioned by the District Board to help the villagers to carry out schemes of sanitation but nothing of this sum was spent for the purpose for which it was allotted. A separate Sanitary Inspector continued to be employed by the District Board, Rohtak, to look after the sanitary condition of rural areas.

Village sanitation is not a subject to be dealt with by spasmodic attempts at bye-laws and regulations with occasional doles. It requires to be regarded from a much broader aspect and a note dealing comprehensively with the whole subject will be submitted to Government in due course.

42. During 1919-20 the number of municipalities in this province was 101. The total income during the year, excluding the opening balance of Rs. 40,11,211 and under head "Extraordinary" and debts amounting to Rs. 8,01,372 was Rs. 98,27,759. The total municipal expenditure on sanitation and vaccination was Rs. 34,42,809 as deatiled below.

		Rs.
(1) Water Supply		8,58,690
(2) Drainage		3,64,415
(3) Conservancy, including establishment,	road	
cleaning and watering, latrines, etc.		12,71,796
(4) Health Officers and Sanitary Inspectors		1,15,048
(5) Vaccination		26,432
(6) Markets and Slaughter Houses		61,086
(7) Roads		7,13,796
(8) Burning and burial of paupers		7,306
(9) Other sanitary requirements		24,240

The total income of District Boards excluding opening balance amounted to Rs. 1,07,69,243 and the expenditure on sanitation and vaccination to Rs. 1,48,379.

The information regarding grants made for sanitary works by the Sanitary Board is given in Appendix A appended to this report.

43. A list of works of public utility constructed during the year 1919-20 by private individuals at their own expense is given below:—

Ambala Division.—Hissar District.—A well in village Thalaur, Tahsil Bhiwani, at a cost of Rs. 4,000 by Hem Raj, Data Ram and Harnam, sons of Lalji, Mahajan. A well in village Jitwanalias, Tahsil Bhiwani, at a cost

of Rs. 2,000 by Hardawari and Sheo Ram, sons of Khushi Ram, Mahajan. A well in village Nakta, Tahsil Bhiwani, at a cost of Rs. 1,000 by Moti Ram, son of Sheoji Ram, Mahajan. A well in village Legha Hetwan, Tahsil Bhiwan, at a cost of Rs. 2,000 by Parbhu Lal, son of Mutsaddi Lal and Chiranji Lal, son of Ramji Lal, Mahajan.

Rohtak District.—A pakka well on Gohana-Mahmud Road at a cost of Rs. 600 by Harphul Singh, Lambardar of Mahmudpore. A dharmsala ghât and tank on Aunli-Bhainswon-Kalan Road at a cost of Rs. 1,400 by Rati Ram, son of Dewan Singh, Mahajan of Aunli.

Karnal District.—A pakka kotha with well constructed on Karnal-Kaithal Road near Khoda Johar on Shamilat land in the Karnal Tahsil at a cost of Rs. 550 by Nand Lal, son of Nanha, Lodha of Vakilpura, Sadar Karnal. A pakka ghát with three sehdaries constructed on Johar of Shamilat Patti in Mauza Thera in the Kaithal Tahsil at a cost of Rs. 2,700 by Chetangir, chela of Daseragir, Gusain, of Mauza Thera.

Ambala District.—Construction of a pakka well at Raipore Khurd in Tahsil Kharar at a cost of Rs. 600 by Harnam Singh, son of Attar Singh, Jat, of Raipore Khurd. Construction of a pakka well at Mani Mazra, Tahsil Kharar, at a cost of Rs. 2,400 by Mussammat Ganeshi, widow of Ramji Das, Gongi, widow of Mangal, of Mani Mazra. Construction of a dharmsala at Burail Tahsil Kharar, at a cost of Rs. 800 by Partap Singh, son of Gurdial Singh, Jat, of Burail. Construction of a dharmsala at Kalka, Tahsil Kharar, at a cost of Rs. 2,000 by Mussammat Basanti, widow of Nihala, Khatri, of Taksal. Construction of a pukka well at Mullana on Mullana-Bilaspore Road at a cost of Rs. 750 by Daula, son of Bahadur Ali, Mula, son of Natha, Rain, of Mullana.

Simla District.—Sarai at Kakar Hatti, Tata Pain and Theog and, several wells at Nalagarh at a cost of R. 30,000 by Lala Ram Rattan, late Sureriter dent, Vernacular Office, District Office, Simla.

Juilundur Division:—Kangra District.—A pakha well on Dharmsala-Daudh Road at Mant village at a cost of Rs. 450 by Sidhu, son of Ghasitu, caste Mahajan, of Kangra town.

Jullundur District.—A well in village Mahatpur, Tahsil Nakodar, at a cost of Rs. 600 by Muhammad Akbar Khan, Zaildar of Mahatpur, Tahsi Nakodar.

Ludhiana District.—A pukhta well at village Man, Tahsil Jagraon, at a cost of Rs. 100 by Chanda Singh, son of Jiwan Singh, Blacksmith, of Man. A pukhta well at village Mughlewal, Tahsil Samrala, at a cost of Rs. 150 by Chuni Mal, son of Jana Mal, Goldsmith, of Muhglewal. A pukhta well at village Indorpur, at a cost of Rs. 700 by Ram Ditta, son of Jamna, Jat, of Todarpur. A pukhta well at village Mushkabad, Tahsil Samrala, at a cost of Rs. 425, by Kahla Singh alias Nand Singh, son of Kahan Singh, of Mushkabad.

Ferozepore District.—A well on Zira-Jharrika Road near village Khudur, at a cost of Rs. 50 by Nizam-ud-Din, son of Jaimal, Arain, Khudur, Tahsil Zira.

Iahore Division.—Lahore District.—A well for drinking purposes and a kotha Chak 35, Tahsil Chunian, on the Pattoki-Hala Road, at a cost of Rs. 740 by Nur Din, son of Muhammada, Arain.

Sheikhupura District.—A pakka well and a house at a cost of Rs. 500, by Mussammat Atkaur, widow of Atar Singh, of Thothian No. 10, R. B. and Mussammat Tabkaur, widow of Maya Singh, Kamboh, of Thothian No. 10 R. B.

Rawalpindi Division.—Shahpur District:—A drinking well near the Railway Station, Sargodha, at a cost of Rs. 1,200 by Chaudhri Sita Ram of Sargodha. A well near Ghari Ban at a cost of Rs. 1,400 by Lala Jawinda Mal, Contractor, Sargodha. A drinking well in the town abadi of Nurpur at a cost of Rs. 1,900 by Amir Chand, son of Godha Ram, caste Ahuja, of Nurpur, Tahsil Khushab.

Jhelum District.—A drinking well in Pind Dadan Khan at a cost of Rs. 2,000 by Chaudhri Nanak Chand of Pind Dadan Khan. A drinking well in Pind Dadan Khan, at a cost of Rs. 2,000 by Lala Gurdas Mal, Municipal Commissioner, Pind Dadan Khan. A drinking well in Pind Dadan Khan at a cost of Rs. 2,000 by Lala Ram Lal of Pind Dadan Khan. A plot of land donated for the construction of a well on Khewra-Choa Road and supply of stones worth Rs. 400 for the construction of well in addition to cash contributed (Rs. 200) by Lala Mangal Sen of Khewra. Three water pumps were fixed on the river bank for public use at a cost of Rs. 1,000 by Lala Ishar Das, Municipal Commissioner of Pind Dadan Khan.

Multan Division.—Lyallpur District.—A well in Chak No. 303, G. B., for public use at a cost of Rs. 1,400 by Labh Singh, son of Nehala, Kamboh, of Chak 303, G. B., in Toba Tek Singh Tahsil. A well on road from Samundri to Dichkot at a cost of Rs. 1,100 by Panchayat of Chak 467, G. B., village community in Tahsil Samundari. A well on road from Samundri to Dichkot at a cost of Rs. 1,200, by Sham Singh Saini and Ghaman, Jat, in equal shares, of 390, G. B., in Tahsil Samundri. A well on road from Samundri to Dichkot at a cost of Rs. 800 by Basant Singh, son of Waryam Singh, Jat, of 465, G. B. in Tahsil Samundri.

Jhang District.—Eight public water pumps in Jhang and Maghiana at a cost of Rs. 640 by Lala Devi Ditta Mal, a sweatmeat vendor at Jhang.

Multan District.—A well near Khangah in village Kurai Timak for the use of public for all sections at a cost of Rs. 1,200 by Hayat, Saweja, of Kurai Timak. A well at Gawen for the use of public of all sections at a cost of Rs. 580 by Mangla Mal, son of Ranjha Mal, of Gawen. A well in Basti Mithu for public use at a cost of Rs. 500 by Rana Muhammad Hussain. son of Rana Palya, of Basti Mithu and Rana Sultan Ahmed, son of Rana Khuda Yar. A well in Pukarnawali lane in Shujabad town for public use at a cost of Rs. 758 by Bhai Lachman Singh, son of Bhai Gulab Singh, of Shujabad. A well at Khankah (shrine) of Hazrat Pir Kotal in Jalalpur for public use at a cost of Rs. 1,000 by Dewan Muhammad Ghaus, Sajada Nashin. A well at the Khankah (shrine) of Hazrat Data Ibrahim for public use at a cost of Rs. 1,000 by Sayad Miran Shah of Mauza Pakki Pul in Tahsil Mailsi.

SECTION X.

44. I acted as Sanitary Commissioner throughout the year. Lieutenant-Colonel H. M. Mackenzie, I.M.S., held the post of Deputy Sanitary Commissioner as a collateral charge whilst acting for me as Professor of Pathology, King Edward Medical College, until June 3rd when he was confirmed as Deputy Sanitary Commissioner vice Lieutenant-Colonel E. L. Perry, I.M.S., transferred. This was a mere book transaction whereby the Professorship became the collateral charge. Khan Sahib Dr. K. A. Rahman held the post of the Additional Deputy Sanitary Commissioner throughout the year, the post of Chief Plague Medical Officer as an additional charge from the 1st of June, and that of Chief Malaria Medical Officer as a further additional charge from the 21st July. Dr. Rahman had intended proceeding on leave but owing to departmental difficulties deferred his leave and took over the additional charges referred to above. In recognition of his many valuable services the title of "Khan Sahib" was conferred on him by Government, an honour which was greatly

In the last report I gave an outline of the general re-orgarisation of Sanitary Policy approved by Government and during the year under report important steps were taken towards the realization of that policy.

appreciated by the Department as a whole.

Special Departments.—On March 1st the Plague and Malaria Departments, both under the charge of Lieutenant-Colonel C. A. Gill, I.M.S., were transferred to the Sanitary Department by the Inspector-General of Civil Hospitals. Lieutenant-Colonel Gill proceeded on eight months' combined leave as from the 21st July having previously handed over charge of the Plague and Malaria Departments to Dr. Rahman. These Departments will continue as separate budget units until the complete re-organization scheme has been sanctioned by the Secretary of State. In the meantime special Plague and Malaria reports have disappeared, the scheme for building a special Malaria Laboratory has been cancelled, and both Departments under the direction of the Sanitary Commissioner are being employed on epidemiological work generally.

General re-organization:—The proposals of Government are slowly working their way to the Secretary of State.

Hygiene Institute.—The Financial Secretary to Government was deputed to visit Lahore with me in September and examine the proposals on the spot. General approval was accorded to the scheme and a provision of two lakhs towards it was made in the budget. Owing to financial stringency this amount was subsequently reduced but sufficient has been allotted to enable important works to be carried out in the coming year. The

Hygiene Institute is an important project and will not suffer from being carried out at a slower pace than was originally anticipated.

District Health Officers.—Guragon, Jullundur and Kangra have each a District Health Officer but Rohtak lags behind. Further appointments are not likely to mature until the supply of qualified officers is increased.

State Faculty of Public Health.—After much discussion this long cherished scheme finally materialised and the Faculty was instituted by Government. It would be impossible to over-estimate the importance of this step as by means of the Faculty and the classes organised in connection with it we are now in a position to give medical graduates both the training and qualification which formerly required at least a year's residence and study in England. I am glad to say that medical graduates are now beginning to take an interest in the prospects offered by the Sanitary Department and, judging by the number of inquiries I have received, next year's report should be able to record very satisafactory progress in the work of putting out qualified Health Officers.

Town improvements and Town-planning.—The subject was considered by another special Committee and the Bill finally drafted. Further progress in this respect now rests with the Legislative Council.

Increase of the Special Staff of Vaccinators.—The desirability of having a reserve trained staff to assist districts in times of epidemic stress requires no emphasis and this year sanction was given to an increase of the Special Staff by six vaccinators. Vaccinators receive a special course of training in dealing with epidemic diseases other than small-pox and this small reserve staff has already proved its utility.

Education Bureau.—Proposals for the creation of a Bureau having for its object the education of the general public in elementary hygiene were sanctioned. A whole-time Photographer has now been added to the Department and work on the preparation of lantern slides from local conditions to illustrate popular lectures is well advanced. When a sufficient number of standard lectures has been prepared it will be possible to prepare sets of slides for individual districts dealing with matters of special local interest. The Bureau has a great future before it and as work progresses proposals for its extension will be put forward.

Sanitary Surveys.—Thanks to the activities of the Sanitary Board, great progress can be recorded in this respect. All preliminaries have now been completed and the Survey Department has commenced work in Lahore. Unless financial considerations intervene the Survey of Lahore and Amritsar will be steadily proceeded with in the coming year.

On the whole I think it will be admitted that material progress towards realizing the ideal has been made.

The usual inspections were carried out but as far as I personally am concerned it was chiefly a year of office work in connection with large and important schemes. Revision of the Report of the 1914 Committee on Simla Improvements, the Water-Supply of Simla, the State Faculty of Public Health, and the amending of the Punjab Municipal Act claimed a.

large share of my time, and the bulk of the routine work fell on Dr. Rahman who cheerfully shouldered the burden. The Vaccine Institute and the Vaccination Department under Lieutenant-Colonel Mackenzie worked with faultless precision. Both officers deserve the thanks of Government for their labours. Lieutenant-Colonel Gill was only a short time on duty but he published papers on Malaria which have added considerably to his reputation as an enthusiastic worker at that subject. When the re-organization scheme materialises it will be possible to give a much wider scope to his activities.

- 1,412 of smaller towns and villages during the year as against 135 of towns and 1,416 of villages in 1919. Assistant Surgeons inspected 32 towns and 572 smaller towns and villages as compared with 38 and 350, respectively, in the previous year.
- 46. Notwithstanging that malaria was hardly in evidence auring the year, a good deal of quinine was Free distribution distributed free of cost throughout the of quinine. Province. This is a subject or which I have always held very strong views, and put precisely the amount to the opinion that the present system is merely a system for wasting money and a valuable drug. As soon as the Maleria Department was transferred to me I took up the cudgels and Government agreed to apply my principles to schools with considerable saving of morey in consequerce. I have embodied my views in a special note to Government and am confident that a more rational policy will be the result.
 - 47. In some of the districts gangs were employed to fill up small depressions during the year under report, notably Rohtak, Ambala, Gurdaspur, Muzaffargarh and Dera Ghazi Khan.
- 48. The Deputy Sanitary Commissioner remained ex-officion Professor of Hygiene of the King Edward Medical College, Lahore, throughout the year and delivered the prescribed course of lectures to the M.B., B.S. Class.
- District Vaccinators received instructions in Principles of Principles of Elementary Hygiene, etc., at the Punjab Vaccine Institute. Ten classes each lasting a fortnight were held during January, February and March and again in November and December 1920.

The number of Municipal Health Officers on paper was increased from 7 to 9. Ferozepore and Municipal and District Ambala cities were added to the list of municipalities in which a Health Officer is to be provided but of the nine municipalities three only, viz., Lahore, Amritsar and Jullundur had each a qualified Health Officer. The remaining municipalities are still without a Health Officer owing to the difficulty in getting men with the necessary qualifications.

As regards the District Health Officers, two (Gurgaon and Jullundur) out of the three selected districts have taken advantage of the Government offer of bearing the entire cost of the Health Officer's pay and establishment for five years and each have appointed one.

The District Board, Kangra, also appointed a Health Officer during the year, though Kangra is not one of the selected districts.

Under the orders of Government a Conference of Health Officers under the presidency of the Sanitary Commissioner was convened during the year in connection with the revision of the Punjab Muncipal Act, 1911. The Conference which was held in the month of December lasted three days and was attended by the following Health Officers:—

Major H. Falk, I.M.S., Health Officer, Simla.

Dr. A. B. Arora, Municipal Health Officer, Lahore.

Dr. S. Rozdon, Municipal Health Officer, Amritsar.

Dr. G. C. Sahgal, Municipal Health Officer, Jullurdur.

Dr. M. R. Kochhar, District Health Officer, Jullundur.

Dr. M. J. Thakor, District Health Officer, Gurgaon.

All important matters relating to the various sections of the Municipal Act were discussed and fully thrashed out and the conclusions arrived at in connection therewith are being submitted for the consideration of Government.

I have to record the sad death of Dr. Kochhar which occurred a few days after the Conference had broken up. As Municipal Officer of Health, Jullundur, he had done excellent work and by his death the District Board, Jullundur, under whom he had been transferred in the capacity of District Health Officer has lost a capable and efficient official.

51. The usual class for Sanitary Inspectors was held during Sanitary Inspectors. the year.

52. The following new towns which are being built up and expanded, were formed during the Formation of new towns in the vicinity of the North-Western Railway.

Mian Channu town with mandi; Chichawatni new town with mandi; Khanewal new town and mandi with Sub-Divisional Head-quarters; Jahanian new town and tahsil; Montgomery Tahsil and mandi, Okara mandi; Malout (in course of construction).

Kutcha huts and kutcha-pakka shops are springing up outside the Railway boundary in the vicinity of nearly all the railway stations between Lala Musa and Rawalpindi, more specially at Mandra, Gujar Khan and Sihala.

The work done by the Provincial Pathological Laboratory showed a large increase on the pre-Work of the Provincial vious year's work. During the year under Laboratory. report specimens were received from all over the Province and from various Military Hospitals both in the Punjab and the North-West Frontier Province for examination and report but again the great majority of tumours and other histological specimens were received from the Mayo and Albert Victor Hospitals. Blood films for diagnoses of relapsing fever were also received from Civil Surgeons and the Spirillum Carteri was identified in the case of some from Attock, Sirsa and Rohtak. Several shaving brushes were also examined for Anthrax but in no case was Anthrax infection found to be present.

A synopsis of the work done during the year is given below :—

The following examinations were made—

(i) Blood examinations		1,903
(ii) Bacteriological examinations		831
(ii) Tumours and Histological specimens	***	147
Total		2,881

Sources of specimens sent for examination :-

(i) Blood examinations-

(a) From the Mayo and Albert 'Hospitals	Victor	757
(b) From Civil Surgeons, etc.	pelb la pel	1,146
Total		1,903

(ii) Bacteriological examinations-		
(a) From the Mayo and Albert	t Victor	
Hospitals	Action	210
(b) From Civil Surgeons, etc.		621
Total	#105 / ** C 100	831
3	E. H. E. Hally	
(iii) Tumours and other Histological s	pecimens—	
(a) From the Mayo and Alber	rt Victor	
Hospitals		119
(b) From Civil Surgeons, etc.		28
Total	er week	147
Details of various examinations		
(i) Blood examination—	Figure 1.	
Widal Reaction. Po	sitive. Negative	e. Total.
(a) B. Typhosus 1	03 210	313
(b) B. Paratyph A	3 294	297
(c) B. Paratyph B	1 296	297
	38 236 4 9	374
(e) B. Dysenteries (f) Mic-melitensis	4 9 6 105	13 111
	00 77	177
Miscellaneous including		
films for malaria,		
blood-counts, differ-		
ential and total, ex-		
aminations for spirilla		
of relapsing fever, etc.,		
etc		321
Total 3	55 1,227	1,908
(ii) Bacteriological examinations :-		
(a) Sputa		241
(b) Urines	Harris Harry H	111
(c) Water samples		32
(d) Shaving brushes		18
(e) Pathological discharges, etc	• • • • •	429
Total	130.49	831

(iii) Tumours and other Histological specimens—

(a) Simple Tumours		39
(b) Malignant Tumours		54
(1) Caroinemata		33
(2) Sarcomata		12
(3) Endothelicmata		9
(c) Other Histological specimens		54
Total	4.	147
Vaccines prepared		188
Anti-typhoid inoculations done	-	108
Small-pox vaccinations done		12
Anti-Influenza inoculations done		12
Doses of vaccines issued		6,015

Patients treated with Tuberculin and other vaccines 98.

Office work during the year was exceptionally heavy and my thanks are due to Mr. Jennings, Superintendent, M. Maula Bakhsh, Head Assistant, and Pandit Kailas Nath, Sanitary Board's clerk, for hard and valuable work.

W. H. C. FORSTER,

LAHORE:

The 24th Feby. 1921.

LIUET. Col., I.M.S.,

Sanitary Commissioner, Punjab.

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APPENDIX A.

PROCEEDINGS OF THE SANITARY BOARD, PUNJAB.

I HELD the post of the Secretary to the Board throughout the year.

The Board met ten times during the year—four times in Simla and six in Lahore. A Town-planning Committee under the Chairmanship of Sir John Maynard was also appointed during the year.

A Chemist was appointed during the year in connection with the investigation of the Chemical nature of well water supplies in the Punjab.

The following is the detail of the grants sanctioned out of the last year's balance of Rs. 3,42,542-12-0:

		Rs.	Α.	P.
(1)	Panipat Drainage Scheme .	. 5,682	2 0	0
(2)	Beef Market at Rohtak	15,375	0	0
(3)	Investigation of the Chemical na- ture of well water supplies in the Punjab	9,000	0	0
(4)	Drainage Scheme of the Railway Road, Gujrat	1. 200	0	0
(5)	Earth filling in the Municipal garden at Chunian	. 1,200	0	0
(6)	Maghiana Drainage Scheme	1,02,662	0	0
(7)	Rupar Drainage Scheme	10,229	0	0
(8)	Ambala Water Supply Extension Scheme	65,800	0	0
(9)	Rewari Water Supply Scheme	1,00,000	0	0
10)	Khem Karan Drainage Scheme	34,027	12	0
	Total	3,42,542	12	0

A fresh grant of four lakhs was placed at the disposal of the Sanitary Board, for allotment during 1920-21 and from this the following grants

were made upto 31st December 1920 leaving a balance of Rs. 1,42,873-1-1 which will be accounted for in the next year's report:—

	A XIDERIUM	Rs.	Α.	P.
(1)	Chunian Female Latrines	4,820		0
(2)	Majitha Drainage Scheme	1,000	0	0
(3)	Investigation of Chemical nature of			
	well water supplies in the			
	Punjab	2,747	14	11
(4)	Paving the streets of Khanna vil-			
	lage in the Gurdaspur Dis-			•
	trict	961	0	0
	Hazro Storm Water Channel	4,150	0	0
	Hoshiarpur Drainage Scheme	41,890	0	0
(7)	Widening the verandahs of the			
	King Edward Sanitorium at	4 = 400	0	•
(0)	Dharampur	15,162	0	0
	Filling condemned tanks at Sangla	1,306	0	0
	Tandlianwala Water Supply	17,962	0	0
	Rohtak Drainage Scheme	30,000	0	0
17000	Purchase of books, maps, etc	150	0	0
(12)	Investigation of the Chemical na-			
	ture of well water supplies in	9.000	0	0
/101	the Punjab	3,000	0	0
(11)	Ambala Water Supply Scheme Tube-wells for Empress Garden,	1,845	0	U
(14)	Jullundur City	10,216	0	0
(15)	Muktsar Water Su ply Scheme		0	0
(16)	Trial boring for the Chunian Water-	1,10,000		
(10)	Supply Scheme	1,049	0	0
(17)	Khem Karan Drainage Scheme	92	0	0
	Metering of house connections at	02		
(20)	Sialkot	5,915	0	0
(19)	Trial boring at Rohtak	1,206	0	0
()	O O STATE OF THE SECOND	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	Total	2,57,126	14	11
		Control of the last	-	_

The schemes noted below were approved by the Sanitary Board and administrative approval accorded in each case—

political and the property of the party of t	Rs.
(1) Kine Slaughter House at Jullundur	10,695
(2) Beef Market at Rohtak	30,750
(3) Ambala Water Supply Extension	
Scheme	65,800
(4) Sew erage Scheme of the Shishmahal	
Area, Lahore	96,034
(5) Drainage Scheme of the Davis Road	
Area, Lahore	41,757
(6) Excavating Kurkshetra Tank at Thanesar	14,079

The Board accorded revised administrative approval to the Rupar Drainage Scheme at a revised cost of Rs. 55,730.

The Government in the Civil Department accorded administrative approval to the schemes noted below—

(1) Lahore Conservancy Scheme .. 1,72,000

(2) Maghiana Drainage Scheme .. 2,05,098

Revised administrative approval was also accorded in the case of the following schemes—

		Rs.
(1)	Rewari Water Supply Scheme	 4,18,476
(2)	Hoshiarpur Drainage Scheme	 2,10,144
(3)	Rohtak Drainage Scheme	 2,43,101
(4)	Jullundur Drainage Scheme	 5,21,477

Technical sanction of the Public Works Department was accorded to the Sewerage Scheme of the Shishmahal are a at a cost of Rs. 96,034 and revised technical sanction in the case of the following schemes—

	R :.
(1) Rupar Drainage Scheme	 53,436
(2) Rewari Water Supply Scheme	 4,18,476
(3) Rohtak Drainage Scheme	 2,43,101
(4) Jullundur Drainage Scheme	 5,41,044

During the year the number of non-official Indian Members was raised from two to five and the tenure of office of nominated members fixed at three years.

Mr. Astbury was on leave during the hot weather and his place was taken by Rai Sahib Dewan Amar Nath, Nanda, B.A., Assistant Sanitary Engineer. The summer season proved to be a busy one and the Board was fortunate in training as Mr. Astbury's locum tenans an officer with such intimate knowledge of Punjab problems as Rai Sahib Amar Nath, Nanda. The honour of K.C.I.E. was conferred on our distinguished President whose services in connection with the Board would of themselves constitute a lasting memorial. Under the reformed system of Government Sir John Maynard will be called to a higher sphere and he will take with him the profound admiration and sincere good wishes of technician and layman alike.

In the year under report the Board made considerable progress in the policy of directing technical Sanitary policy. The problem of the everopen tap is one with which all administrations are faced and the remedy comes to be a question of "Millions versus Metering." Not having millions to spend the Board adopted the policy of enforcing compulsory metering of private connections and all grants-in-aid for water supply purposes are now "Conditioned" on this basis.

An enquiry into the expenditure of grants-in-aid revealed many disquieting features and the Board has finally decided to adopt the principle of auditing its grants.

The systematic investigation of rural water supplies was taken upby the Board and a Chemist was placed on special duty under the Sanitary Commissioner in this connection. Sanction was also obtained to the employment of a Geologist. The enquiry in the first instance relates to areas where salt deposits restrict the available water supply and already valuable, results, in the sense that a possible practical remedy has been discovered have been obtained.

APPENDIX B

ANNUAL REPORT OF THE SANITARY ENGINEER TO GOV-ERNMENT, PUNJAB, FOR THE YEAR 1920.

Mr. A. R. Astbury, M. Inst. C.E., continued to hold the post of Sanitary Engineer, but during his absence on six months' privilege leave Rai Sahib Diwan Amar Nath Nanda, B.A., Assistant Sanitary Engineer, officiated, and his services in this respect were the subject of a commendatory resolution of the Sanitary Board.

The post of Personal Assistant to the Sanitary Engineer has fallen temporarily into abeyance as the holder of it, Mr. Dina Nath Gautam, B.Sc., Bar.-at-Law, has been posted to the Jullundur Drainage Sub-Division which was formed on the 13th December.

Two new appointments of Assistant Sanitary Engineer were sanctioned by the Secretary of State during the year and were filled by Mr. D. A. Howell, A. M. Inst. C.E., and Mr. J. A. R. Bromage, A. M. Inst. C.E., who joined at Lahore on the 28th December. Both these officers have war service to their credit and have had considerable experience in water works and drainage undertakings in England and abroad. Their addition to the staff of the Sanitary Engineer is likely to prove most valuable.

The work of the Sanitary Sub-Division in Lahore, under Lala Lal Chand, Assistant Engineer, continues to expand, and has included the sanitary equipment on the water flushed system of the Punjab Legislative Council building. This is the first public office in Lahore to be so equipped and it is hoped that the convenience and cleanliness of the modern system of drainage will make its appeal to the Members of the Legislative Council and that they will spread the desire for sanitary advance. Lala Lal Chand and Lala Nand Lal who officiated for three months were the recipients of letters of thanks from Government for the efficient manner in which their share of the work was executed.

During the year the Sanitary Engineer visited 23 different towns in connection with Sanitary Schemes. He also conducted the usual examinations for Sanitary Inspectors, and those under the Boilers Act While on leave Mr. Astbury was deputed to Italy to study the methods of construction adopted by the Italian Government in rebuilding Messina and Reggio di Calabria.

While in England he availed himself of the opportunity of visiting a number of important water works and drainage undertakings. He was also appointed by the Secretary of State to serve on the Board of Selection at the India Office for the appointments of Sanitary Engineers and Assistant Sanitary Engineers for several Local Governments.

Lahore.—A 7" tube well has been sunk to supply water for the Sanitary installation in the Punjab Legislative Council building. It is pumped by a duplicate set of direct coupled electric motors (direct current, shuntwound) and centrifugal pumps. The quality and quantity of the discharge is very satisfactory. The sewage from the area in which this building is situated gravitates to a temporary sewage pumping station near the Veterinary College. The sewerage in this area has been laid during the year by the Lahore Municipality from designs prepared by Mr. A. F. Henderson, late Municipal Engineer, in consultation with the Sanitary Engineer. It enables

sanitary installations to be fitted in several important public buildings including the new Government College Hostel.

The revised scheme of sewerage for the Anarkali and adjoining areas of Lahore has been supplied by Messrs. Lane-Brown and Hewlett, and is under consideration. The private sewage purification plant at Government House, Lahore, is still under experimental remodelling, the problem being to dispose of a large quantity of sewage on a small area surrounded by residential buildings without creating a nuisance. The extremes of climate in Lahore do not lessen the difficulties. The storm water drainage of the Gazetted Officers' Residence was completed in time to be of service in the rains, when it worked most effectively. It is a great pity, however, that the scheme proposed by the Sanitary Engineer for a dhobi-ghat to serve the entire estate has not been sanctioned and that instead a separate dhobi-ghat has been built for each residence. The single ghat would be sanitary and provide for a general vegetable garden, whereas the single ghats tend to be insanitary and their irregular discharge into the storm-drains causes a mosquito breeding ground. The municipality have made no headway with their scheme for improving the very insanitary channel for storm water which crosses Lawrence road. This is a blot in the civil station. The municipal tube well at Lake road has given considerable trouble. In reasons which are not very clear the Ashford strainer parted company and sand came in. The accessible part of the strainer is being withdrawn and a new strainer will be sunk.

The second-Hatborn Davy engine and pump has not arrived in India and the work will evidently be much delayed. The industrial conditions in England are the cause. In the meantime the condition of the water supply of Lahore is growing steadily worse.

Ambala.—The difficulty of obtaining a satisfactory supply of water at Ambala at a reasonable cost is well-known, and is exercising not only the Sanitary Engineer but the North-Western Railway, the East Indian Railway and the Military authorities. Thanks to the liberality and support of the Sanitary Board the Sanitary Engineer has undertaken a somewhat novel experiment at Sarangpur, a desolate spot on the right bank of the Tangri River about a mile from the existing well-system of the Ambala water-works "at Handsera River" is a courtesy title for the Tangri; except for periods in the monsoon it is dry sand. The main trouble at Ambala is that the soil is clay, or clayey sand; ordinary percolation wells gradually deteriorate in yield, probably owing to colloidal clay choking the water passages through the sand grains; the subsoil does not provide an opportunity for the well-known device of a "spring" well and deep borings have only yielded a monotonous succession of multi-coloured beds of clay.

At Sarangpur an attempt has been made to take advantage of the horizontal extension of the sandy river bed, by laying a home-made strainer of large diameter in the sand about seven feet below spring level. The making and subsequent laying of this strainer in a quicksand was very troublestme and great credit is due to Lala Nand Lal, Overseer, for the ingenuity and perseverance he displayed, and the way in which he stuck to the work in very adverse surroundings. The makeshifts reverted to in laying the strainer would have stimulated Mr. Heath Robinson. Any how the work has been completed and promises to be a considerable help to Ambala should 1921 be a dry season. Whether it will deteriorate like ordinary wells, remains to be seen.

Laxity in municipal control is resulting in extreme inefficiency in the distribution of water in Ambala, and the general public is suffering for the benefit of the unmetered private consumer.

At Handesra the engine-house has been made water tight, so should the spring level rise again like it did in 1917 it is to be hoped that the engines will not be flooded out again.

Amritsar.—The municipality have not yet started on the regrading of their system of storm water drains. The penalty will be another malaria epidemic with excessive mortality.

The analysis of the statistics is very difficult but the figures seem to show that the hydro-electric pumping scheme is lowering the spring level in the municipal area, and if this continues the water-works will soon be in difficulties through the suction lift on the pumps becoming excessive or even out of range altogether. The municipality should consider their water requirements very carefully in this connection and in connection with the projected sewerage scheme which is hanging fire.

Jullundur.—The Empress garden tube-well which met with such illfortune has had to be abandoned, and the work has been handed over to the
Sanitary Engineer to commence afresh. Arrangements are being made by the
Sanitary Engineer for an early start on the execution of the Jullundur drainage scheme. This is the first large drainage scheme in the plains undertaken
by the Sanitary Engineer. The executive direction of the work has been
placed under Rai Sahib Diwan A. N. Nanda, with Mr. D. N. Gautam as
Sub-Divisional Officer.

Simla.—The Sanitary Engineer served on a special committee to advise Government as to the best means of increasing the water supply of Simla. The Committee has advised what is known as the Guma project. Mr. A. F. Henderson, formerly Municipal Engineer, Lahore, has been engaged by the Simla Municipality to prepare the project in addition to other Simla improvements, and excellent progress has been made. The scheme when carried out will be a unique one with regard to the magnitude of the lift. The difficulty now rests in finding a source of electric power suitable to the scheme and the resources of the municipality, aided by the Governments concerned.

The municipality have carried out protective works in the ravine below Ruldu Bhatta at a cost of about quarter of a lakh of rupees. The erosion in progress in this ravine is a very serious matter.

The principal projects prepared during the year are—

Preliminary—

Male health to have			14	Rs.
Bhiwani water, works				5,25,000
" drainage				2,00,000
Sheikhupura storm drain:	age			54,294
Sialkot main drainage				6,03,998
Sargodha, flushing				13,072
Batala surface drainage		Kare		1,91,580
Jagraon-survey only.				

Detailed-

Rs.

Rohtak ... 2,43,101

Panipat, extra-mural ... 1,35,392

The projects which have received the technical scrutiny of this office were 55 in number, and valued at about 36 lakhs of rupees.

The usual statement of statistics with regard to water-supplies is attached and as usual is incomplete for want of timely information from local bodies. Owing to the expansion of the work of the Sanitary Engineer, especially in the direction of the executive work, great need is felt for proper office accommodation. A scheme has been submitted to Government for consideration for an office building, which will at the same time provide for housing plant and stores.

A. R. ASTBURY,

Sanitary Engineer to Government, Punjab.

The 13th May 1921.

STATISTICS OF PUNJAB UNDER WATER WORKS FOR THE YEAR ENDING 31st MARCH 1920.

Statistics of Punfab Water Works for

-			bo 1	. 1					1000
			during	pula	RECEIPTS.				
No.	Name of Municipality.	Population at census of 1911,	Average daily quantity pumped d the year ending 31st March.	Average daily supply per head of population.	Water rate.	Sale of water.	Rent of meters.	Other receipts.	Total receipts.
1	2	3	4	5	6	7	8	9	10
			Gallone.		Rs.	Rs.	Rs.	Rs.	Rs.
1	Simla	30,316	318,393	10.4	46,895	60,150	6,343	2,197	115,585
, 2	Lahore	228,687	3,832,968	21					
3	Ambala	24,491	171,437	7		12,164		3,599	15,763
		2 - Lette	177	T A	DEN D		. 33	1	
4	Amritsar	140,697	2,054,449	14.6					
1 5	Sargodha	15,000	125,870	9.6		' ·			
6	Lyallpur	19,578							
7	Ludhiana	44,170	544,070	12.3		14,189			14,189
8	Sialkot	51,900	796,146	15.3		9,163		98	9,251
9	Dera Ghazi Khan.	16,853	99,292	5.8			- "		
10	Gojra	5,417	24,500	4.5		539			539
11	Toba Tek Singh.	3,029	***			١		-	
12	Pind Dadan Khan.	10,590	18,240	1.7		138			138
13	Jaranwala	3,000	51,840	17.25		132		-	132
14	Rawalpindi		650,000			4,349			4,349
15	Murree	22,580						1	
16	Dharmsala Cantonment.	3,700	22,500	7.7	1,674		-		1,674
17	Dharm sala Municipal Committee.	3,223					-		

the year ending 31st March 1920.

	AL.	-									
		1200	F	XPEND	ITURE.	10			BALA	NCE OF	
Establishment.		Fumping.	Intake.	Settling tank and filter.	Distribution.	Repairs.	Water analysis.	Total expenditure.	Receipt.	Expenditure.	REMARES.
11	1	12	13	14	15	16	17	18	19	20	21
Rs	3.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
46,4	142	43,597	43	5,562	30,754	1,003	1,155	1,28,556		12,971	
											Not received.
7,	895	7,964	868		1,441	810		22,578		6,814	Rs. 3,599 re- funded as Government
											grant. Not received
				• • • •				-			Not received.
1											Not received.
7,	827	9,591						17,418		3,229	and the same of th
8,	685	24,182			1,209	270		34,296		25,035	
1,	,474	3,150						5,648		5,648	Rs. 1,024 de- partmenta l
1,	,397	1,729	750			166		4,042		3,503	charges.
8.											Not received.
]	799	2,978			476	871		4,624		4,486	E Tomas
1	,031	3,538				1,222	762	6,553		6,421	- Liganosia
2	,425				3,788	734		6,947		2,598	- 1946
1.											Not received
1	274				-	1,677		1,951		277	1 1 1 2
-			>01								i radio on?
-		1	1	1		-		-	-		

xì

APPEN

Statement showing the death rates from cholera, small-pox, fevers and the introduction of drainage or water-supply or

		The same			DATE OF CO	OMPLETION RES OF	AVERAGE AND DUCTION OF	DEAINAGE OB
		Towns.			Drainage.	Water-sup- ply.	Cholers.	Small-pox.
		1			2	. 3	4	5
Ambala .						1895	0.5	C·5
Simla .					1893	1893	0.02	0.4
Ludhiana .					1895	1909	0.3	0.8
Jagraon .			-	***	1907		0.5	1.2
Ferozepore					1916		C·5	0.7
Zira .					1913		0.6	2.0
Fazilka .					1913		1.3	1.4
Lahore						1881	0-7	0.7
Amritear					1885	1904	0.6	1.2
Gurdaspur					1914		0.2	0.7
Dalhousie						1894	0.04	0.04
Pathankot					1915		0.7	0.8
Sialkot						1915	C·7	0.2
Gujranwala					1892		0.6	0.8
Gujrat					1906		1.0	0.4
Bhera					1917			0.3
Sargodha					1907	1907		0.4
Jhelum					1903		0.1	0.5
Pind Dadan	Khan				1909	1909	0.1	1.0
Rawalpindi					1907	1887	0-6	0.3
Murree	. 040	:				1894	0.1	0.1
Mianwali						1904	0.2	0.6
Lyalipur	- 151				1904	1904	0.1	0.7
Gojra						1916	0:1	0-4
Multan	. 542				1907		0.3	0.7
Dera Ghazi I	Chan					1913	0.1	0-5
Kalka						1890	0.4	0.1

^{*} Figures available for † Figures for 1914 and

DIX C.

dysentery and diarrhoa for the five years preceding and for the period since both in the undermentioned towns.

RATE SINCE TO OR WAT BOTH.	THE INTRO-	YEARS'	PERIOD PRE	BATH RATE FO CEDING THE INT WATER-SUPPLY O	RODUCTION	
Fevers.	Dysenter y and diar-	Cholera.	Small-pox.	Fevers.	Dysenter y and diar-rboa.	REMARKS.
6	7	8	9	10	11	12
13.2	3.4	0.2	0.4	19.3	6.4	
14.0	0.9		1:1	17.1	1.4	
18.7	1.8	0.4	2.7	2/):8	1.6	
14.0	1.8	0.6	1.5	9.3	2.0	
13.0	1.5	0.2	0.7	9.8	1:1	
18.8	C·8	0.3	4.0	16.6	c.9	
23.5	1.9	2.2	2.6	21.4	1.7	-
17.6	1.3	1.9	1.6	27-8	2.3	
22-9	1.9	C-4	0.7	31.3	1.8	
19:1	3.2	0.8	0.5	13-2	2.6	
12.4	1.9			9-6	2.4	
22.2	8.7	0.8	0.7	12.4	2.8	
12.1	2.4	3.0	1.2	9.6	2.3	
18.8	1.3	0.5	0.6	19.7	1.7	
20.2	1.8	0.3	0.2	16.9	1.9	
23.2	2.6	0.03	0-7	17.8	1.7	
8.5	0.7	1	I No	t available.		
14.0	1.7	1.5	0.8	14.0	2.1	
22.5	3·1	1.1	0.7	23.1	3.6	
18.9	2.8	0.5	0.1	16.4	3.4	
16.2	2.0	0.7	0.4	14.8	09	
21.1	2.2	0 1000	No	t available.		
11.8	0.9	*2.8	*0.4	* 16.3	* 2.1	
8.2	0.6	+	t	† 0.5	t	
19.4	2.4	0.01	1.9	16.9	2.4	
16.9	2.2	2.0	0-6	15.9	1.6	
14.6	,25	1.7	0.2	15.2	3.9	

four years only. 1915 only.

ANNUAL FORM No. I.

STATEMENT SHOWING THE BIRTHS REGISTERED IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1920.

ANNUAL FORM

STATEMENT SHOWING THE BIRTHS REGISTERED IN THE

1	2			3			4	
				TION ACCOU			MBER OF BIR	
No.	DISTRICT	S.	Males.	Females,	Total.	Males.	Females.	Total.
1	2		3	4	5	6	7	8
1 2 3 4 5	AMBALA D SION. Hisssar Rohtak Gurgaon Karnal Ambala		433,458 885,401 389,215 437,698 357,470	366,481 329,483 389,952 362,059 275,083 12,955	729,167 799,787 632,553	18,475 17,848 15,519 17,311 11,730 421	16,698 16,340 14,225 15,083 10,842 341	35,173 34,188 29,744 32,394 22,572 762
6 7 8 9 10	JULLUND DIVISION Kangra Hoshiarpur Jullundur Ludhiana Ferozepore		398,401 501,510 440,599 293,531 520,868	368,285 417,059 347,357 223,661 412,631	766.686 918,569 787,956 517,192 933,499	14,537 19,256 17,916 12,570 21,700	13,546 17,462 16,741 11,510 19,245	28,183 36,718 34,657 24,080 40,945
12 13 14 15 16	SION. i.ahore Amritear Gurdaspur Sialkot Gujranwala Sheikhupura	:::	560,285 495,533 466,115 503,694 337,538 228,987	419,452 383,778 - 366,446 411,276 268,049 175,159	979,737 879,311 832,561 914,970 605,587 404,146	24,544 22,876 20,526 22,422 13,035 10,338	21,766 20,831 18,720 20,891 11,618 8,888	46,310 43,707 39,246 43,313 24,653 19,226
18 19 20 21 22 23	RAWALPIN DIVISION Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali	NDI	400,596 376,386 262,228 267,724 270,392 179,897	345,038 310,480 241,967 239,918 244,894 161,480	745,634 687,366 504,195 507,642 515,286 341,377	16,361 14,316 9,534 10,806 10,084 8,055	14,680 12,394 8.189 10.180 8,895 7,212	31,041 26,704 17,723 20,986 18,979 15,267
24 25 26 27 28	MULTAN DI SION. Montgomery Lyallpur Jhang Multan Muzaffargarh Dera Ghazi Kh		276,119 503,644 277,128 435,410 308,350 272,409	227,996 385,251 238,398 365,935 261,111 227,451	504.115 889.895 515,526 801,375 569,461 499,860	14,460 24,102 12,163 17,728 10,928 7,702	12,242 21,986 11,002 15,541 9,267 6,111	26,702 46,088 23,165 33,269 20,195 13,813
	Fotal		10,608,101	8,729,045	19,337,146	437,257	392,546	829,803

^{*}Excluding population of

No. I.
DISTRICTS OF THE PUNJAB DURING THE YEAR 1920.

	5		6 .	7	8	2 3 4 5	9		10
	OF BIRTH		males born 100 females	ths over 1,000 of	ths over	MEAN RAT	IO OF BIRT	VIOVS	
Males.	Females.	Total.	Number of males born to every 100 females born.	Excess of births over deaths per 1,000 of population.	Excess of deaths over births per 1,000 of population.	Males.	Females.	Total.	No.
9	10	11	12	13	14	15	16	17	18
23.0 25.0 21.3 21.6 18.5 12.0	20·7 22·9 19·5 18·9 17·1 9·8	43·7 47·8 40·8 40·5 35·7 21·8	110.6 109.2 169.1 114.8 108.2 123.5	18·1 16·4 11·5	7·9 10·7 38·5	23.9 25.1 24.1 25.8 22.3 11.5	21.7 24.1 21.9 28.4 20.6 9.9	45.6 50.2 45.9 49.2 43.0 21.4	1 2 3 4 5 6
19.0 21.0 22.7 24.3 23.2	17 8 19·0 21·2 22·3 20·6	36·8 40·0 44·0 46·6 43·9	106·5 110·3 107·0 109·2 112·8	9·5 17·3 19·8 20·0	3.3	18·4 21·3 22·7 24·6 24·8	17·2 19·5 21·3 22·8 22·3	35·7 40·9 44·1 47·3 47·1	7 8 9 10 11
25·1 26·0 24·7 24·5 21·5 25·6	22·2 23·7 22·5 22·8 19·2 22·0	47·3 49·7 47·1 47·3 40·7 47·6	112·8 109·8 109·6 107·8 112·2 116 3	2)·5 20·4 16·2 2(·2 14·4 26·0		24·8 24·9 23·7 23·5 21·4 24·8	22·4 22·8 2·8 21·4 19· 21·4	47 2 47 7 45·6 45·0 40 4 45·7	15 13 14 16 16 17
21·9 20·8 18·9 21·3 19·6 23·6	19 7 18·0 16·2 20·1 17·3 21·1	41·6 38·8 35·2 41 3 36·8 44·7	111.5 115.5 116.4 106.1 113.4 111.7	16·1 15·7 9·8 13·7 13·2 17·1		20·8 20·1 18·5 19·6 19·3 21·9	18·8 17·6 16·2 17·9 17·0 19·1	39.6 37.7 34.7 37.6 3°.3 41.0	18 19 20 21 21 21 21
28·7 27·1 23·6 22·1 19·2 15·4	24·3 24·7 21·3 19·4 16·3 12·2	53·0 51 8 44·9 41·5 35·5 27·6	118·1 109·6 110·6 114·1 117·9 126·0	24·3 27·7 12·2 16·8 9·9 9·0		25·2 23·7 21·1 18·2 15·0	21 4 22·8 20·9 18·4 15·3 12·0	45.5 48.0 44.7 39.4 33.5 27.0	2: 2: 2: 2: 2: 2: 2:
22.6	20.3	42.9	111-1	14.3		22.5	20.3	42.9	-

military cantonments.

ANNUAL FORM
STATEMENT OF BIRTHS AND DEATHS REGISTERED IN EACH

1	2	3	4	5				
		C8.		ation per	POPULATI	on (Census	1911).	
No.	DISTRICTS.		Area in square miles.	Average population square mile.	Males.	Females.	Total,	
1	2		3	4	5	6	7	
- 5-	AMBALA DIVISION	N.						
1	Hissar		5,213	154	438,458	366,431	804,889	
2	Rohtaw		2,248	318	385,401	329.433	714 834	
3	Gurgaon		2,264	322	389 215	339,952	729,167	
5	Karnal		3,153 1,851	254	437,698 357,470	362,089 275,083	799,787 632,553	
6	Simla		101	342 346	22,015	12 955	34,970	
-	JULLUNDUR DIVISI	ON.						
7	Kangra		9,978	77	398,401	368,285	766,686	
8	Hoshiarpur		2,247	409	501,510	417.059	918,569	
9	Jullundur Ludhiana		1,431 1,452	551	440,599 293,531	347,357 223,661	787,956 517,192	
11	Ferozepore		4,286	356 218	520,868	412,631	933,499	
	LAHORE DIVISION							
12	Lahore		2,824	347	560,285	419,452	979,737	
13	Amritsar		1,601	549	495,533	383,778	879,31	
14	Gurdaspur		1,889	441	466,115	366,446	832,561	
15	Sialkot Gujranwala		1,991	460	5 3,694	411,276 268,049	914,970	
17	Sheikhupura		4,082	247	228,987	175,159	404,146	
	RAWALPINDI DIVIS	ION.						
18	Gujrat		2,051	364	400,596	345,038	745,63	
19	Shahpur		5, 97	135	376,886	310,480	687,366	
20	Jhelum Rawalpindi		2,813	179	2 2.228	241,967	504,193	
21 22	Attock		2,010 4,025	253 128	267,724	239 918	507,645 515.286	
28	Mianwali		5,395	. 63	179,897	161,480	341,377	
	MULTAN DIVISIO	N.	-				100	
24	Montgomery		4,465	113	276,119	227,996	504,111	
25	Lyallpur		3,340	266	503,644	385,251	888,89	
26 27	Jhang Multan	***	3,363 6,107	153 131	277,128 435,410	238,398 365,965	515,520 801.371	
28	Musaffargarh		6,052	94	308,550	361,111	569 46	
29	Dera Ghazi Khan		. 5,325	94	272,409	227,451	499,860	
	Total		96,654	200	10,608,101	8,729,045	19,337,14	

No. II.
DISTRICT OF THE PUNJAB DURING THE YEAR 1920.

. 6			7		8	
Birti	18.	NUMBER OF I	EATHS REGIS	TERED.	of females.	
Total number.	Birth rate per 1,000 of population.	Males.	Females.	Total.	Number of deaths of males to every 100 deaths of females.	No.
8	9	10	11	12	13	
35,173	43·7	10,968	9,636	20,604	113·8	1
34,188	47·8	12,053	10,335	22,438	116·1	2
29,744	40·8	11,510	9 841	21,351	119·0	3
32,394	40·5	20,969	17,750	38,719	118·1	4
22,572	35·7	16,016	13,324	29,340	120·2	5
762	21·8	1,283	699	1,932	176·4	6
28,183	36·8	15,923	14,812	30,785	107.5	7
36,718	40·0	15,198	12,813	28,011	118.6	8
34,657	44·0	11,006	10,046	31,052	109.6	9
24,080	46·6	7,190	6,652	13,842	108.2	10
40,945	43·9	12,139	10,131	22,270	119.8	11
46,310	47·3	14,317	11,973	26,290	119 6	12
43,707	49·7	13,978	11,922	25,900	117·2	13
39,246	4/·1	14,290	11,409	25,699	1·25·3	14
43,313	47·3	13,409	11,339	24,748	118·3	15
24,653	40·7	8,750	7,200	15,950	120·1	16
19,226	47·6	4,938	8,777	8,715	130·7	17
31,041	41.6	10,377	8,633	19,010	120·2	18
26,704	38.8	8,716	7,190	15,903	121·1	19
17,723	35.2	6,810	5,981	12,791	113 9	20
20,986	41.3	7,579	6,405	13,984	118·3	21
18,979	36.8	6,422	5,747	12,169	111·8	22
15,167	44.7	5,050	4 375	9,425	115·2	23
26,702	53·0	8,075	6,367	14,442	126·8	24
46,688	51·8	11,334	10,069	21,403	111·5	25
23,165	44·9	6,313	5,384	11,597	117·2	26
33,269	41·5	10,696	9,117	19,813	117·3	27
20,195	35·5	7,990	6,577	14,567	121·5	28
13,813	27·6	5,195	4,075	9,270	127·5	29
823,803	42.9	298,444	253,629	552,073	117.7	

ANNUAL FORM
STATEMENT OF BIRTHS AND DEATHS REGISTERED IN EACH

1	2						9	
		2 100	W Age			DEATHS P	er 1,000	OF POPU
No.	DISTRICTS.		Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory diseases.
1	2		14	15	16	17	18	19
1 2 3 4 5 6	AMBALA DIVISIO CONCLUDED. Hissar Rohtak Gurgaon Karnal Ambala Simla		0·03 0·02 0·01 0·01 0·03	0·2 6·01 0·03 0·04 0·3 0·03	0·3 0·9 0·1 	18.6 21.1 19.0 38.4 25.7 34.1	0·3. 0·3 0·4 0·4 1·0 1·8	1·2 1·5 1·5 1·3 13·9 11·4
7 8 9 10 11	JULLUNDUR DIVIS CONCLUDED Kangra Hoshiarpur Jullundur Ludhiana Ferozepore	 	0·01 0·01 0·01	0·01 0·5 0·1 0·3 0·2	0.02 0.002	27·5 22·3 18·7 14·9 14·7	1·0 0·02 0·3 0·4 0·3	6·5 2·9 2·5 2·2 1·4
12 13 14 15 16 17	LAHORE DIVISI CONCLUDED. Lahore Amritsar Gurdaspur Sialkot Gujranwala Sheikhupura		0.03 0.01 0.01 0.01 0.01	0·4 0·2 0·1 0·3 0·03 0·04	0·01 0·1 2·6 0·6	16·9 20·6 17·7 16·9 18·7 16·2	0.6 0.4 1.0 0.9 0.2 0.1	2·4 3·4 9·7 4·0 0·8 0·4
18 19 20 21 22 23	RAWALPINDI DIVIS CONCLUDED. Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali	SION—	0·01 0·001 0·002 0·002	1.0 1.9 1.1 0.2 0.5 0.7	0·2 0·01 0·7 0·4 2·7 0·01	17·0 13·9 16·1 16·5 15·3 19·7	0·3 0·3 0·4 2·9 0·2 0·6	2·1 1·5 2·1 3·8 1·2 1·0
24 25 26 27 28 29	MULTAN DIVISIO CONCLUDED. Montgomery Lyallpur Jhang Multan Muzaffargarh Dera Ghazi Khan	N—	0·02 0·601 0·01	3·9 1·3 0·6 0·2 0·2 0·2	0·5 0·5 0·03 0·5 0·1 0·01	19·6 15·8 13·7 17·3 22·5 15·8	0·1 0·2 0·5 0·4 0·1 0·2	0·3 0·9 0·8 1·7 0·3
	Total		0.01	0.5	0.8	19:2	0.5	2.7

II—concluded.
DISTRICT OF THE PUNJAB DURING THE YEAR 1920—concluded

						Vary n	10	~112	
LATIC	ON FROM				PER 1,	OOO DURING	3		
		uses,	A	ll causes.					
	injuries.	All other causes.	Males.	Females.	Total.	Males.	Females.	Total.	No.
	20	21	22	23	24	25	26	27	
	0.3 0.4 0.4 0.3 0.2	4·7 7·1 8·0 7·9 5·4 7·8	25·0 31·3 29·6 47·9 44·8 56·0	26·3 31·5 29·0 49·0 48·4 54·0	25.6 31.4 29.3 48.4 46.4 55.3	40·4 44·6 55·2 42·2 39·1 26·3	48·4 53·0 64·7 49·2 47·9 33·2	44.0 48.7 59.6 45.3 42.9 28.8	1 2 3 4 5 6
	0·3 6·2 0·3 0·3	4·9 4·5 4·7 8·8 7·0	40·0 30·3 25·0 24·5 28·3	40·2 30·7 28·9 29·7 24·6	40·1 30·5 26·7 26·8 23·9	35·6 34·4 36·5 42·7 40·3	37·1 38·5 44·6 54·1 46·6	36·3 36·3 40·0 47·6 43·1	111
	0.4 0.8 0.3 0.3 0.3 0.4	6·1 4·5 2·1 4·6 3·6 3·8	25·6 28·2 30·7 26·6 25·9 21·6	28·5 31·1 31·1 27·6 26·9 21·6	26·8 29·5 30·9 27·1 26·3 21·6	41·4 43·5 41·9 89·2 48·1 45·0	48.9 51.7 48.5 44.5 53.1 51.3	44.6 47.1 44.8 41.6 50.1 47.7	11 11 11 11 11 11
	0·3 0·3 0·4 0·5 0·3 0·4	4·8 5·2 4·5 3·3 3·4 5·4	25·9 23·1 26·0 28·3 23·3 28·1	25·0 23·2 24·7 26·7 23·5 27·1	25·5 23·1 25·4 27·6 23·6 27·6	42·4 36·0 39·4 41·2 38·1 40·3	46.8 40.0 41.9 44.9 39.6 42.0	44·4 37·8 40·6 43·0 38·8 41·4	1 1 2 2 2 2 2
THE PERSON NAMED IN	0.3 0.3 0.4 0.4 0.2	3·7 4·9 6·9 4·2 2·0 1·7	29·3 22·5 22·8 24·6 25·9 19·1	27·9 26·1 22·6 24·9 25·2 17·9	28·7 24·1 22·7 24·7 25·6 18·6	41·3 31·1 36·2 40·4 39·6 37·2	46·1 38·5 39·5 43·7 40·4 38·5	43.5 34.3 37.7 41.9 40.1 37.8	2 2 2 2 2 2
	0.3	5.0	28'1	29.1	28.6	40.3	46.0	. 43 0	-

in this or any other statement.

ANNUAL FORM

DEATHS REGISTERED IN THE DISTRICTS OF THE

1	2					
No.	DISTRICTS.	January.	February.	March.	April.	May.
1	2	3	4	5	6	7
1 2 3 4 5 6	AMBALA DIVISION. Hissar Rohtak Gurgaon Karnal Ambala Simla	1,308 1,378 1,889 2,093 1,913 203	1,448 1,338 1,535 1,827 1,663 224	1,621 1,483 1,634 2,218 2,067 197	1,944 1,904 1,418 3,183 2,525 171	2,481 2,541 1,727 4,617 3,811 231
7 8 9 10	JULLUNDUR DIVISION. Kangra Hoshiarpur Jullundur Ludhiana Ferozepore LAHORE DIVISION.	2,483 2,218 1,692 1,094 1,704	2,241 2,111 1,568 978 1,878	2,596 2,332 1,583 981 1,980	2,434 2,723 1,692 1,041 1,848	3,608 3.114 2,133 1,323 2,225
12 13 14 15 16 17	Lahore Amritsar Gurdaspur Sialkot Gujranwala Sheikhupura RAWALPINDI DIVI-	2,245 1,924 1,753 2,062 1,593 892	1,785 1,775 1,649 1,859 1,316 689	1,933 1,807 1,728 2,031 1,407 644	1,937 1,578 1,702 1,937 1,458 639	3,216 2,908 3,006 3,105 1,915 870
18 19 20 21 22 23	SION. Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali -,	2,307 1,516 1,501 1,469 1,548 776	1,848 1,418 1,229 1,394 1,396 743	1,862 1,495 1,153 1,434 1,192 805	1,611 1,571 1,118 1,151 827 852	1,821 1,672 1,323 1,235 938 1,055
24 25 26 27 28 29	MULTAN DIVISION. Montgomery Lyallpur Jhang Multan Muzaffargarh Dera Ghazi Khan Total for the Province	1,669 1,842 1,202 2,196 1,735 985	1,388 1,602 887 1,868 1,184 867	1,398 1,819 1,017 1,906 1,129 741	1,231 1,991 921 1,697 1,076 940 45,693	1,753 2,861 1,130 2,026 1,923 921 61,489
	Ratio of deaths per 1,000 in each month.	2:41	2.16	2 27	2:33	3.18

No. III.
PUNJAB DURING EACH MONTH OF THE YEAR 1920.

	3						4	
Jane.	July.	August.	September.	October.	November,	per	Total deaths registered during the year.	No.
8	9	10	31	12	13	14	15	
2,475	2,030	1,573	1,559	1,199	1,416	1,550	20,604	1 2 3 4 6 6
2,605	1,916	1,855	1,944	1,680	1,779	2,015	22,438	
1,692	1,282	1,482	2,442	1,907	2,003	2,340	21,351	
5,302	3,192	2,888	4,463	3,255	2,881	2,800	38,719	
4,586	2,103	1,693	2,691	2,327	1,878	2,080	29,340	
162	136	158	149	105	95	101	1,932	
3,466	2,257	2,116	2,683	2,607	2,224	2,220	30,735	10
2,820),926	1,790	2,322	2,258	2,141	2,253	28,011	
2,110	1,685	1,521	1,762	1,686	1,782	1,838	21,052	
1.478	1,191	1,032	1,218	1,104	1,203	1,199	13,842	
2,154	1,950	1,561	1,539	1,561	1,697	2,178	22,270	
2.737	2,273	1,809	1,898	1,721	2,089	2,647	26,290	12 14 14 16 17
2,781	2,427	1,993	2,052	2,054	2,062	2,506	25,900	
2,517	2,145	1,841	2,280	2,250	2,317	2,515	25,699	
2,523	1 940	1,788	1,842	1 777	1,753	2,131	24,748	
1,633	1,354	1,058	948	833	1,053	1,379	15,950	
966	815	631	550	563	591	865	8,715	
1,651	1,336	1,182	1,124	1,203	1,419	1,646	19,010	18
1,693	1.409	956	827	902	1,072	1,875	15,903	19
1,146	930	730	729	808	940	1,184	12,791	20
1,065	1.013	863	799	914	1,131	1,516	13,984	21
- 997	972	741	711	788	927	1,132	12,169	21
993	746	680	674	692	614	795	9,425	21
1,424	983	827	679	802	1,077	1,236	14,442	2 2 2 2 2
2,187	1,820	1,355	1,317	1,368	1,465	1,776	21,403	
1,061	1,045	825	740	801	925	1,143	11,697	
1,668	1,555	1,074	1,168	1,368	1,460	1,827	19,813	
1,423	1,072	764	745	910	1,183	1,423	14,567	
882	684	498	474	612	694	972	9,270	
58,197	44,193	37,287	42,359	40,055	41,871	48,642	552,073	-
3.01	2.29	1.93	2.19	2.07	2.17	2.52	28.55	

1	2				
	24.2				
			Po	PULATION ACCO	BDING TO TH
	Districts.				
		Muhamma	dans.	Hinds	18.
		Males.	Females.	Males	Females.
No.					
1	2	3	4	5	6
1	Hissar	117,477	101,123	320.821	265,17
2	Rohtak	59,843	54,650	325,928	274 24
3	Gurgaon	123,984	111,669	2°4,834	227,85
4	Karnal	120,683	104.237	316.506	257,44
5	Ambala	104,142	84,110	252,739	190,48
6	Simla	3,502 21 262	1 273	17,102	9,99 348.56
7 8	Kangra Hoshiarpur	152,891	17.508 128,914	375,001 346,926	288,86
9	Inllandar	193,442	158,887	246,450	188,05
10	Lndhiana	98,058	77,985	194,994	145,25
11	Ferozapore	224,362	184,018	295,851	228,20
12	Lahore	331,617	261,153	217,502	149,51
13	Amritsar	226,350	182,221	266,707	199,49
14	Gurdaspur	226,546	181,155	226,805	174,82
15	Sialkot	310,706	256,934	168,636	134,11 71,58
16	Gujranwala	240,334	193,475	93,485 84,227	61.58
17 18	Sheikhupura Gujrat	138,596 350,088	108,690 300,905	50,167	44,00
19	Chahana	312,988	259,577	59,015	47,14
20	Jhelum	234,033	215,520	28,0:8	26.34
21	Rawalpindi	231,043	211,047	35,985	28,22
23	Attock	246,935	223,220	28,422	2:.64
23	Mianwal!	158,333	141 638	21,461	19,77
24	Montgomery	205,736	170,438	70,043	57,32 127,75
25	Lyallpur	304,659	243,178 193,939	181.263 48,482	44,3
26	Jhang	228,529 357,900	302,420	77 153	63,20
28	Man Managarh	268,381	226,534	39,926	34,55
29	Dera Ghazi Khan	241,654	200,590	30,717	26,83
	Total	5,833,074	4,896.898	4,680,169	3,75+,41
	Population according to census of 1911.				
	Ratio per 1,000 living for the Province.				

No. IV.

TO SFECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YEAR 1920.

						UNDER	NE VEA
						- CNDER (ME IEA
ENSUS OF 1	911.					UNDERO	NE MONT
						UNDER O	NE WEEK.
Indian Cl	ristians.	Other	classes.	T	otal.	Muhan	madans.
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females
7	8	9	10	11	12	13	14
41	38	119	96	438 458	366,431	161	10
614	522	16	21	395 401	329,433	150	13
320 474	367	77	66	389,215	339,952	334	29
872	362 373	35	49	437.698	362,089	221	32
308	225	1,103	137 1,466	357.470	275,093	225	18
115	105	2,023	2,103	22,015 398,401	12.955 368,285	57	4
1,682	1,272	11	13	501,510	417,059	394	29
706	401	11	16	440,599	347,357	619	57
419 557	312	60	97	293,531	223,661	197	9
8,858	358	98	50	520,968	412,631	900	10
2,804	6,996 1,885	2,308 172	1.791	560,285	419,452	617	63
12,715	10,353	49	115	495,533	383,778 366,446	365 637	26 49
24,184	20,126	168	102	503,694	411,276	684	54
*3,680	* 2,962	* 89	* 28	337.538	268,049	380	28
* 6,139 277	4,871	* 25	* 15	228,987	175,159	399	31
4.757	186	64	43	400,596	345,038	297	45
96	3,662	126 81	100	376.886	310,480	798 358	50 35
544	388	152	259	262,238 267,724	241,967 239,918	533	49
19	12	16	13	270,392	244 894	169	17
55	36	48	29	179,897	161,480	4:0	34
278 17,649	186	67	47	276,119	227.996	152	16
106	14.240	73 11	75	503,644	985,251	5-5	50
209	175	145	167	277,128 435,410	238 398 365,985	528 463	38 40
25	15	18	7	808,350	261,111	298	25
	12	25	29	272,409	227,451	170	14
87,511	70,567	7,347	7,166	10,609,101	8,729,045	11,105	8,84
						(
1000	1			13			

^{*} Approximate figures.

1	2	,						
a a a a a	december of the			- 1			UND	ER ONE
TROS	an miner	-		· -			UND	ER ONE
	DISTRICTS.			Undi	ER ONE WEI	EK—concld.		A STATE
			Hin	dus.	Indian Ch	ristians.	Other c	lasses.
			Males.	Females.	Males.	Female:	Males.	Females.
No.		1						
1	2		15	16	17	18	19	20
1	Hissar		298	271	0			***
2	Rohtak		610 65 i	481 542	3 2		***	
3 4	Gurgaen Karnal		453	637			1	T
5	Ambala		463	413				
6	Simla		4	5	1			
7	Kangra		1,305	1,158				
8	Hoshiarpur Juliundur		778 665	667 743	***	2		-
9	Ludhiana		134	173]	1		
11	Ferozepore		745	450	1		1	
12	Lahere		315	315	13	11		
13	Amritsar		49)	269	2	- 04		
14 15	Gurdaspur Siarkot		508 303	487 260	27 56	24 40	1	
16	Gujranwala		148	202	17	13	1	
17	Sheikhupura		107	78	7	3	1	r
18	Gujrat		134	85	***		7	
19	Shahpur		. 78	47	4	3	2	1
20 21	Jhelum Rawalpindi		90	21 94	1	3		1
22	Attock		29	36			s	5
23	Mianwali		50	56				
24	Montgomery		73	211	4	5	1 1	2 3
25 26	Lyallpur Jhang		. 501 158	276 116	58	29	2	
27	Multan		107	92	6	4		
28	Muzaffargarh		67	39				
29	Dera Ghazi Kha	ın	46	38			4	
	Tetal		9,354	8,364	203	139	22	13
	Population acco		Muhamma	dan Males	241,538 M	Inhammadan	Females,	232,726
	Ratio per 1,000 for the Provin		Muhamma	dan Males	. 183-47	Muhammadaı	r Females	154-3

IV-CONTINUED.

TO SPECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YEAR 1920—continued.

4

YEAR-CONTD.

MONTH- CONCLD.

Hindu Males ... 178,453

205 66

Hindu Males ...

Muhamm	adans.	Hin	dus.	Indian C	hristians.	Other	lasses.
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females
21	22	23	24	25	26	27	28
120	100	270	301				
108	106	490	339	3			
245	187	434	387	***			
244	472	445	517				
170	136	373	366	···		***	
40	41	1.048	918			***	
296	263	392	323	1		***	
328	317	356	485				
146	141	833	160		1		
100	17	555	650	1	1	1	
6597	579	321	246	12	10	101	
292	290	341	345	1	1 1		
383	376	397	367	18	11	***	***
3 19	310	207	151	35	39	***	
290	178	157	116	18	9		
236	185	109	39	8	2	- "	Mar a
613	409	80 95	71 34	2			
320	292	31	27		4		
410	330	56	54		2		
295	239	29	12			5	
359	251	69	32				
40	121	60	101	2	1	1	
508	510	49	69	38	15		
517	346	152	88				
436	322	86	79	2	3		
322	256	56	-57				
222	189	54	43				
8,410	7,376	7,049	6,379	136	99	7	1

Hindu Females ... 167,613.

Hindu Females ... 200.52.

DISTRICTS. 2 ssar htak rgaon rnal hb da ngra shiarpur llundur dhiana		29 380 140 211 443 238 9 51 388	303 121 175 331 208 3 36 274	### ### ### ### ### ### ### ### ### ##	1	MONTH AND Indian Ch	
ssar btak rgaon rnal ib ila nla ngra shiarpur Ilundur dhiana		29 380 140 211 443 238 9 51 388	303 121 175 331 208 3 36	758 845 425 1,244 498 45	32 523 724 413 654 573	Males.	E Females.
ssar htak rgaon rnal db da nla ngra shiarpur llundur dhiana		29 380 140 211 443 238 9 51 388	303 121 175 331 208 3 36	758 845 425 1,244 498 45	523 724 413 654 573	33	- 34
ssar htak rgaon rnal db da nla ngra shiarpur llundur dhiana		29 380 140 211 443 238 9 51 388	303 121 175 331 208 3 36	758 845 425 1,244 498 45	523 724 413 654 573	33	34
ssar htak rgaon rnal db da nla ngra shiarpur llundur dhiana		380 140 211 443 238 9 51 388	303 121 175 331 208 3 36	758 845 425 1,244 498 45	523 724 413 654 523		
otak rgaon rnal db da nla ngra shiarpur llundur dhiana		140 211 443 238 9 51 388	121 175 331 208 3	845 425 1,244 498 45	724 413 654 523	1	1
rgaon rnal db da nla ngra shiarpur llundur dhiana		211 443 238 9 51 388	175 331 208 3 36	425 1,244 498 45	418 654 523	" 1	
rnal ab da nla ngra shiarpur llundur dhiana		238 9 51 388	208 3 36	498 45	5 23	" 1	
nla ngra shiarpur Ilundur dhiana		9 51 388	3 36	45		40.00	1000
ngra shiarpur Ilundur dhiana		51 388	36		20		1
shiarpur Hundur dhiana			974	733	611		
dhiana		900		696	586	1	2
		377 278	307	422 490	430 585		
		445	50	400	629	" 2	4
ozepore hore		826	592	390	295	16	11
ritear		699	517	565	603	2	
rdaspur lkot		673 544	895 554	658 301	387 203	24 51	21 51
	***	386	312	89	77		7
eikhupura		189	100	88	87	4	8
	1						
							1
walpindi		561	447	95	71	1	2
tock		358	315	24	18		
						22	2
						2000	57
ang		847	554	178	. 174		,
ltan		731	100000000000000000000000000000000000000		100000	7	4
							171
	jranwala pikhupura jrat ahpur elum walpindi oock anwali ontgomery allpur ang ltan zaffargarh	jranwala pikhupura jrat chpur chum walpindi cock anwali ontgomery allpur ung ltan zaffargarh ra Ghazi Khan	jranwala 386 hkhupura 189 jrat 410 hpur 687 elum 425 walpindi 561 bock 358 anwali 443 ntgomery 732 allpur 810 ltan 347 ltan 731 ra Ghazi Khan 374	jranwala 386 312 ekhupura 189 100 jrat 410 363 ehpur 687 811 elum 425 366 walpindi 561 447 ock 358 315 enwali 443 350 entgomery 732 41 elum 810 603 entgomery 847 554 entgomery 847 856 entgomery 848 856 entgomery 848 866 entgomery 848	jranwala 386 312 89 ekhupura 189 100 88 jrat 410 363 73 chpur 687 811 31 elum 425 366 47 walpindi 561 447 95 cock 358 315 24 anwali 443 350 61 ontgomery 732 41 80 allpur 810 603 637 ang 347 554 178 ltan 731 695 105 ra Ghazi Khan 621 486 106 ra Ghazi Khan 374 308 76	jranwala 386 312 89 77 ekkupura 189 100 88 87 jrat 410 363 73 61 chpur 687 811 31 18 elum 425 366 47 36 walpindi 561 447 95 71 cock 358 315 24 18 anwali 443 350 61 52 ortgomery 732 41 80 120 allpur 810 603 637 345 ang 347 554 178 174 ltan 731 695 105 186 ra Ghazi Khan 374 308 76 53	

No. IV-CONTINUED.

TO SPECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YEAR 1920-CONTINUED.

TO.		
HC.		

SIX M	ONTHS.			SIX MONT	HS AND U	UNDER ONE	YEAR.		
Other o	lasses.	Muhamm	adons.	Hin	dus.	Indian Ch	ristians.	Other c	lasses.
Males.	Females.	Males.	Females.	Males.	Femules.	Males.	Females.	Males.	Females.
35	36	37	38	39	40	41	42	43	44
	1 2 4 2 2 2	321 168 196 608 380 14 39 213 360 336 371 834 659 223 651 523 158 909 224 294 329 438 266 979 624 316 1,054 268 218	220 150 148 600 345 3 33 258 343 281 100 655 645 234 593 324 181 534 202 280 299 383 220 818 567 226 750 214 140	666 835 356 937 746 52 614 1,098 574 510 476 441 819 241 322 57 100 95 27 38 41 31 55 49 250 67 138 53 31	604 790 393 390 784 26 455 905 488 644 1,340 375 716 376 301 138 150 66 8 41 59 31 57 176 692 79 148 36 35	2 2 2 1 17 3 22 47 19 6 3 2 29 39 5 5	1 1 1 1 1 1 1 26 56 11 2 1 2 1 2 7 28	2 2 2 1 1	
14	9	12,023	9,746	9,721	10,308	198	148	6	12

Other classes Males ...

57

Other classes Females ...

82)

Other classes Males ... 859.65

Other classes Females ... 573-17)

. 1	2			4				
				TOTAL	UNDER ON	E YEAR.		
		Muhammadans.				Indian Christiano.		
	Districts.					3403		
		Males	Females.	Males	Females.	Males.	Females.	
No.								
1	2	45	46	47	48	49	50	
1	Hissar	982	781	1,992	1,699			
2 3	Rohiak Gurgaon	566	509	2,780	2,334	6	2	
4	Karnal	986 1,516	801 1,726	1,869 3,079	1.740 2,198	2	"	
-5	Ambala	1,013	870	2,082	2,086	" 1		
.6	Simla	31	9	106	61	6	2	
.7	Kangra	187	157	3,700	3,172			
-8	Hoshiarpur	1,281	1,088	2,964	2,481	4	4	
9	Jullundur	1,684	1,541	2,017	2,146		***	
10 11	Ludhiana Ferozepore	957	844 267	1,467	1,542	2	7	
12	Lahore	1,816 2,924	2,456	2,176 1,467	3,069 1,231	58	1 43	
13	An ritsar	2,015	1,713	2,215	2,033	8	3	
14	Gurdaspur	1,916	1,497	1,804	1,617	86	82	
15	Sialkot	2,248	2,004	1,133	915	189	186	
16	Gujranwala	1 579	1,103	451	533	75	40	
17	Sheikhupura Gujrat	982	781	404	354	25	10	
18	Shahpur	1,987 2,322	1,760 1,930	382 231	283 107	14		
20	Jhelum	1,397	1,291	157	125	1	12	
21	Rawalpindi	1,833	1,569	252	278	4	9	
22	Attock	1,260	1,111	112	97			
23	Mianwali	1,488	1,165	235	197			
24 25	Montgomery	1,908 2,527	1,140 2,191	262	608	65	8	
26	Jhang	1,738	1,506	1,437 555	1,382 459	191	129	
27	Multan	2,684	2,167	496	505	20	18	
28	Muzaffargarh	1,509	1,208	282	188	1	15	
.29	Dera Ghazi Khan	984	752	207	169			
- 18 1	Total	44,315	35,917	36,344	33,609	761	557	
	Population according to census of 1911.	241,538	232,726	178,456	167,613	4,603	4.010	
	Ratio per 1,000 living for the Province.	183-47	154:33	203.66	200.52	165.33	138:90	

No. IV- CONTINUED.

TO SPECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YAER 1920—continued.

		. 5		5					
	ERY IN	piton a	ONE YE	AR AND UN	DER FIVE	YEARS,			
Other c	lasses.	Muhame	nadans.	Hinds	us.	Indian Christians.		Other c	lasses.
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
51	52	53	54	55	56	57	58	59	60
1 6 2 2 1 3 17 6 4 7	1 3 4 2 5 1 15 4 3	611 285 547 932 893 27 72 1,039 1,021 306 1,544 2,228 1,225 1,360 2,136 358 696 1,759 1,747 1,049 986 941 808 727 1,424 657 1,138 770 459	521 263 461 514 899 13 68 955 1,063 276 950 1,851 1,330 1,326 2,271 769 486 1,624 1,434 990 900 911 764 749 1,394 620 823 606 377	1.605 1,584 1,094 2,640 2,110 98 1,872 2,515 1,212 526 446 824 1,551 1,392 1,070 211 103 113 87 124 175 77 120 362 1,018 176 139 105 70	1,417 1,399 1,062 2,665 1,912 67 1,773 2,268 1,256 407 815 843 1,228 1,249 886 157 93 80 109 126 161 51 108 215 854 116 301 130 57	11 1 2 1 42 5 5 8 208 35 25 5 1 1 32 126 1 32	2 2 36 3 71 213 31 15 4 2 5 127 1 1	1 5 1 2 1 4 3	
49	47	28,345	25,148	23,379	21,805	579	513	21	18
57	82	568,303	539,982	420,315	391,128	11,059	10,616	144	143
859.65	573.17	49.88	46.57	55.62	55.75	52:36	48.32	166.67	125.87

1	2	1			6					
	a same	FIVE YEARS AND UNDER TEN YEARS.								
		Muhan	nmadans.	Htne	dus.		Indiane Christian.			
	Districts.									
No.		Males.	Females.	Males.	Femles.	Males.	Females.			
1	2	61	62	63	64	65	66			
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Hissar Rohtsk Gurgaon Karnal Ambala Simia Kangra Hoshiarpur Jullundur Ludhiana Ferozepore Lahore Amritsar Gurdaspur Sialkot Gujranwala	181 123 219 344 269 26 39 204 215 179 375 506 260 383 422 575	211 116 106 203 230 6 42 180 197 143 264 403 260 319 385 404	562 604 503 506 567 102 690 428 261 207 174 251 251 316 199 82	415 540 512 588 513 57 651 390 204 289 278 207 187 272 166 87	1 3 1 1 1 10 4 19 39 21	 1 2 2 11 7 20 45			
17 18 19 20 21 22 23 24 25	Sheikhapura Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali Montgomery Lyallpur	244 593 539 400 325 376 319 544 498	186 539 395 369 343 381 216 303 403	87 69 83 37 29 24 24 141 187	55 70 124 31 37 15 23 189 159	11 11 1 2 14 48	13 5 40			
26 2 28 29	Jhang Multan Muzaffargarh Dera Ghazi Khan Total	275 405 412 249 9,499	255 377 372 219 7 927	64 125 48 24 6,745	45 147 47 18 	189	164			
-	Fopulation according to census of 1911.	850,907	733,588	616,128	512,996	15,053	12,928			
77.57	Ratio per 1,000 living for the Province.	11.16	10.81	10.95	12:31	12.56	12.69			

No. IV-continued.

TO SPECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YEAR 1920-CONTINUED.

					7		6		
	T ROTE	124 12	Т	BN YEARS	ND UND	BR PIFTREN	YEARS.		
Other el	asses.	Muhamn	nadans.	H4n	dus.	Indian Christians.		Other cl	ass es.
Males.	Females.	Males.	Females.	Males,	Fen ales.	Males.	Females.	Males,	Females.
67	68	69	70	71	72	73	74	75	76
	1 1 1 1 2 2 1 3 2	121 96 118 274 :68 24 36 102 1:2 223 230 281 135 214 187 429 195 321 2'8 202 203 221 148 315 250 174 325 293 186	120 95 82 131 135 6 24 105 111 202 200 267 95 174 210 430 125 293 181 197 194 247 120 308 255 186 284 220 130	254 389 387 427 389 97 445 224 137 257 163 140 157 174 116 99 65 51 95 22 26 18 18 149 120 51 114 22 20	208 802 282 481 298 72 411 214 121 213 193 143 176 153 88 67 37 128 22 34 13 9 95 115 30 152 28 15	1 5 5 7 10 12 28 14 21 7 7 23 7 23 1	1 2 1 8 4 13 17 8 7 14 1 6 24 2 2		
2	2	186	130	20	-	137	108	8	
13	14	5,801	5,132	4,526 584,409	4,168	11,658	8,744	208	20
236 55·08	63-98	725,002 8.00	9.84	7.74	10.37	11.76	12:35	38-46	24.5

ANNUAL FORM
DEATHS REGISTERED BY SEXES AND CLASSES ACCORDING
PUNJAB DURING

1	2				8		
	ser or wife	after the state	Fre	THEN YEARS	AND UN	DER 20 Y	BARS.
		Muhamm	adans.	Hindu	s	Indian Ch	ristians.
	DISTRICTS.						
No.		Males.	Females	Males	Females.	Males.	Females.
11	2	77	78	79	80	81	82
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	Lyallpur Jhong Multan Muzaffargarh Dera Ghazi Khan	98 107 112 269 130 22 31 87 70 211 250 242 197 179 160 500 159 257 127 161 161 212 97 316 182 143 322 239 119	81 87 89 150 112 5 41 73 77 163 245 272 293 126 151 468 103 247 144 144 147 228 79 259 189 169 273 142 100	144 808 80 90 493 333 94 431 189 99 313 134 123 177 134 87 56 89 54 94 23 33 14 15 108 64 36 110 26 13	151 353 802 442 255 64 558 207 118 256 115 140 128 139 99 65 88 41 43 27 41 20 21 101 80 25 120 34 26		1 1 8 9 5 18 14 10 9 4 19 1
	Total	5,160	4,657	4,089	4,064	-	105
	Population according to census of 1911.	500,906	385,840	484,345	334,276	8,638	6,496
	Ratio per 1,000 living for the Province.	10:30	12:07	8.44	12-16	17.71	16.16

No. IV—continued.

TO SPECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YEAR 1920—continued.

					-	9		-	
	ESIL CO		\T	TWENTY	YEARS AN	D UNDER	30 YEARS.		
Other c	lasses.	Muhan	Muhammadans.		ndus.	Indian (Indian Ohristians.		lasses.
Males.	Females.	Males,	Females.	Males,	Females.	Males.	Females.	Males.	Females.
83	84	85	86	87	88	89	90	91	92
1 1 1	 	301 129 314 632 409 28 43 206 223 289 550 554 501 415 424 592 298 436 389 394 457 499 223 379	211 158 209 451 346 8 51 189 206 210 355 540 465 342 389 520 230 430 434 392 474 458 274 335	622 684 583 1,125 988 122 1,094 474 230 295 153 331 381 442 175 152 66 62 53 42 68 26 34	587 657 568 1,130 795 77 1,633 659 259 255 303 259 430 899 163 103 47 63 68 57 80 21	1 1 1 3 3	2 1 1 2 2 3 19 12 16 33 11 9 8 1 8		
5	2	331	329	100	102	20	23	1	
1		322 606	323 638	111	27 130	1			
:::		653 445	661 388	72 48	107			1	
9	13	10,992	10,016	8,733	9,203	196	151	8	11
201	241	975,648	852,840	878,718	714,860	31,077	14,202	476	48
44.78	53.94	11:27	11.75	9.94	12.87	5.99	10.63	16.81	30-99

. ANNUAL FORM

1	2	1			10)		
	.27272 11 00	140	il Bay	THIRTY	YEARS AT	ND UNDER	40 YRAR	
. 10	241 - 413 and 1811/5 N	Muhammadans.				Indian Christian		
No.	DISTRICTS.	Males.	Females,	Males.	Females.	Males.	Females.	
1	2	93	94	95	96	97	98	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 19 20 21 22 28 25 26 27 28 29	Hissar Robtak Gurgaon Karnal Ambala Simla Kangra Hoshiarpur Jullundur Ludbiana Ferozepore Lahore Amritsar Gurdaspur Sialkot Gujranwala Sheikhupura Gujrat Shahpur Jhelum Rawalpindi Rawalpindi Montgomery Lyallpar Jhang Multan Mazaffargarh Dera Ghazi Khan Population according to	397 435 566 569 249 456 270 269 712 779 474	821 135 115 489 362 10 59 175 186 126 345 369 851 343 862 421 154 520 349 438 498 512 274 381 298 309 702 753 459 9,815	407 567 553 1,303 965 92 1,225 492 216 332 333 241 427 501 167 224 177 93 66 37 45 38 26 82 107 61 148 78 43 9,045 643,288	631 603 666 1,288 731 70 1,296 545 218 327 283 291 339 363 167 198 100 66 126 36 44 22 25 60 97 18 129 105 51 8,895	1 1 1 1 3 3 3 16 8 8 22 41 57 27 2 10 1 10 13 4 222 14,759	1 2 1 1 12 3 16 31 23 13 15 5 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	census of 1911.	788,475	000,104	010,200	020,037	19,700	10,122	
	Ratio per 1,000 living for the Province,	13.96	14.74	14.06	17.09	15.04	13.52	

No. IV-CONTINUED.

TO SPECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YEAR 1920—CONTINUED.

11

FORTY YEARS AND UNDER 50 YEARS.

Othe	r classe	s.	Muhammadans.		Hindus. In		Indian Ch	ristians.	Other classes.	
99 Xales.	3 2 2 1 4	Pemales.	101 261 129 347 620 301 14 38 237 222 209 295 523 365 470 450 470 230 660 395 380 481 478 236	201 102 201 127 219 304 802 36 27 175 154 184 355 355 242 259 300 448 140 548 235 878 352 406 212	103 435 686 627 1,424 1,121 93 1,161 643 270 302 567 229 415 462 174 113 69 122 82 45 64 24 29	104 414 553 491 1,353 725 39 894 424 213 291 278 174 330 329 161 77 75 72 114 23 35 25 33	105	106 1 2 1 6 4 17 35 34 11 14	107	108
	1 1	1	363 318 269 743 668 431	230 213 530 604 319	141 108 43 119 106 63	90 101 42 147 70 45	17 14 1 	3 3	2 4 2	2 3 5
-	17	372	10,643 565,63 3	8,182 482,940	9,727	7,619 403,592	9,110	7,277	327	290
41	77 3	37.63	18.82	16.94	19.83	18.88	25.69	20.48	61.18	48:28

1	2				12	
					FIFTY YEAR	as and under
			Muhamm	adans.	Hine	lus.
	DISTRICTS.					
No.			Males.	Females.	Males,	Females
1	2	-	109	110	111	112.
1	Hissar		285	298		251
3 4	Robtak		149	119	880	570
3	Gurgaon		312	244	725	506
6	Karnal Ambala		523	219	1,991	1,29
6	Simla		332	319	1,039	580
7	Kangra		49	84	1 228	848
8	Hoshiarpur		288	156	679	391
9	Jullundur		270	158	411	220
11	Ludhiana Ferozepore	[178	203	236	25
12	Lahore		520	286	488	42
13	Amritsar		487	3º8 299	239	16:
14	Gurdaspur		476	251	448	220 264
15	Sialkot		477	246	214	15
16	Gujranwala Sheikhupura		452	447	146	89
18	Gujrat		160	149	96	60
19	Shahpar		789 387	486 221	158	12
20	Jhelum		426	295	62	99
21	Rawalpindi		443	300	76	38
23	Attock Mianwali		444	374	39	16
24	Montgomery		294 347	210	33	30
25	Lyallpur		321	194	121 82	61
26	Jhang		324	241	60	4
27	Multan	-	637	387	170	146
29	Muzaffargarh Dera Ghazi Khan		587	289	96	51
		-	459	273	52	35
	Total		10,791	7,337	10,092	7,100
	Population accord to census of 1911	ing .	376,703	290,410	329,274	250,498
	Ratio per 1,000 liv		28.65	25.26	30-65	28:37

No. IV-CONTINUED.

TO SPECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YEAR 1920—CONTINUED.

		115			1	3	
YBARS.	issance-i		by super	Sr	XTY YEARS	AND UPWAR	DS.
Indian Ch	bristians.	Other cl	asses.	Muhamm	adans.	Hinds	
Males.	Females.	Males.	Female .	Males.	Females.	Males.	Females.
113	114	115	116	117	118	119	120
2 1 1 1 4 1 1 1 1 2 5 25 38 24 19 3 18 	1 1 1 1 2 9	1 1 4 1 2 3 2 1 1 5	1 1 2 1 1 1 1 2 1 1 2 2 1 1 2 2 2	412 291 573 818 883 4 142 765 1,345 151 869 1,307 945 1,181 1,527 676 391 1,677 1,115 1,249 1,175 931 568 818 995	334 224 326 605 428 3 122 577 699 194 872 1,111 677 796 972 482 272 1,214 719 8°1 758 737 408 619 807	1,081 1 6°1 1,0°6 2 015 2,147 71 3,395 2,131 1,117 309 622 605 1,877 1,250 823 150 85 228 112 165 144 76 101 210 428	829 1,238 1,117 1,509 1,421 2,950 1,551 904 255 264 411 1,063 889 552 120 112 129 101 128 101 56 70 63
1 	1	1		922 1,278 1,089 690	558 825 746 463	88 262 156 93	16° 28° 11° 7
5,053		205	9 191	23,982 374,292	283,231	21,988	228,50
34.83	27.85	102:44	47.12	64:07	61.54	77.71	75-2

1	2		13		
	ACEA WAS DEAL STAN	Sixts	YEARS AND UP	WARDS—conclude	d.
		Indian Ch	ristians.	Other Old	18868.
	DISTRICTS.				
No.		Males.	Females.	Males.	Females.
1	2	121	122	123	124
1 2 3 4 5 6 6 7 7 8 9 100 111 122 133 144 155 166 177 188 199 200 211 222 24 25 26 26	Montgomery Lyallpur Jhacg	16 2 7 72 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 4 1 .	2 5 5 1 3 2 3 2 3 2 3 4 3	1 1 2 2 1 7 1 7 1 1 7 1 1
27 28 29	Muzaffargarh	4		1	1
	Total	396	310	89	23
	Population according to census of 1911.	5,034	3,445	195	188
	Ratio per 1,000 living for the I rovince.	78.67	89-99	200.00	122-34

No. IV-CONTINUED.

TO SEECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YEAR 1920-CONTINUED.

				14					
		,	To	OTAL.					
Mulam	Mul ammadans.		Mulammadans. Hi		dus.	Indian G	hristians.	Other O	lasses.
Males.	Females	Males.	Females.	Males.	Females.	Males.	Females.		
125	126	127	128	129	130	131	132		
3,421 1 997 3,827 6,552 4,320 228 680 4,445 5,035 2,839 6,899 9,654 6,503 7,016 8,453 6,672 3,498 9,022 7,626 6,093 6,630 5,931 4,425 6,168 7,116 5,093 8,850 6,999 4,546	3,029 1,838 2,592 4,791 4,003 105 625 3 673 4,386 2,545 4,089 7,932 5,725 5,433 7,290 5,490 2,625 7,634 6,042 5,375 5,535 5,365 3,822 4,677 6,290 4,410 7,006 5,698 3,510	7,547 10,043 7,677 14,408 11,691 960 15,241 10,739 5,970 4,344 5,200 4,460 7,397 6,903 4,158 1,684 1,241 1,332 965 714 927 448 625 1,710 3,651 1,215 1,794 991 633	6,606 8,544 7,246 12,952 9,316 584 14,183 9,130 5,659 4,093 6,025 8,861 6,192 5,674 3,348 1,487 1,051 962 1,023 605 8,44 337 553 1,618 3,283 974 2,065 878 548	13 5 5 5 45 2 14 1 7 10 208 78 369 785 387 192 9 111 3 18 180 539 4 48	1 8 3 4 5 10 4 10 11 14 5 180 54 802 691 217 95 107 1 21 58 472 89 1	1 4 1 4 30 2 13 7 7 14 14 14 4 43 20 28 1 4 16	1 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1		
160,588	131,560	134,668	119,591	3,033	2,303	208	17:		
				1					

DEATHS REGISTERED BY SEXES AND CLASSES ACCORDING PUNJAB DURING

1	2		- 15		
1		1 1 1 1	1	RATIO OF DEAT	ня рек 1,000
		Muhamme	adans.	Hindu	
		22.00			
1	DISTRICTS.				
			4		i
No.		Males.	Females	Males.	Female
1	2	133	184	135	136
1	Hissor	29:12	29.95	23.52	24-99
2	Rohtak	33.94	33.54	80.81	31.16
3	Gurgaon	39 87	23.21	28.99	31.80
4	Karnal	54.29	45.96	45.52	50.31
6	A bala	41·48 65·11	47·59 82·48	46·26 56·13	48·91 58·44
7	Kangra	31 98	35.70	40.64	40.69
8	Hoshiarpur	29.07	28 49	30.95	31.83
9	Jullurdur	26.03	27.60	24.22	80.08
10	Ludhiana	25.95	32.63	22.28	28 18
11 12	Ferozepore	80·75 29·11	22:22	17.58	26·40 25·82
13	Amritsar	28.73	30.37	20·51 27·73	30.79
14	Gardaspur	30.97	29.99	30.44	82.46
15	Sialkot	27.21	28.37	21:66	24 96
16	Gujranwala	27.78	28.38	:8:01	20.77
17	Shiekhupura	25.24	24.15	14.73	17.07
18	Gujrat Shabpur	25 77 24 37	25·48 23·2;	26·55 16· 5	21·86 21·70
19 20	Tholmy	26.03	24.91	25.48	2:93
21	Rawalpindi	28.70	26 23	25.76	29.90
22	Attock	24.02	24.03	19 13	15.67
2	Mianawli	27.95	26.98	29.12	27.96
24	Montgomery	29.98	27.44	24'41	28·23 25·70
25 26	Lyalipur	28·36 22·29	25 87	20·14 25·06	21.95
27	Multan	24.78	23.17	23 25	32.67
28	Muzaffargarh	26.08	25 15	24.82	25.41
29	I era Ghazi Khan	18:81	17.50	20.61	20.42
	Total	27.52	26.87	28.77	31.85
	Population according to census of 1911.			1.0-	
	Ratio per 1,000 living				

Note.—The population of Military Cantonments by different ages cannot be excluded Note.—As the correct population of the different age periods according to the censu columns 45 to 124 are calculated under the orders of the Local Government on the population of ernment notification No. 2943-S., dated 1st October 1912.

• Figures incorrect due

No. IV—concluded.

TO SPECIFIED AGE PERIODS IN THE DISTRICTS OF THE THE YEAR 1920—concluded.

POPULATIO	N.	4				
Indian Ch	ristians.	Other Cl	asses.	Total		
Males.	Femsles.	Males.	Females.	Males.	Females.	No.
187	138	189	140	141	142	143
21·17 15·63 16·55 13·44 146·10 17·39 8·32 1·42 16·71 17·95 22·92 33·85 29·02 32·46 105·16 31·28 32·49 23·34 31·25 33·09	26·32 15·38 8·17 11·05 13·40 44·44 37·74 7·88 2·49 44·87 13·97 25·73 28·65 29·17 34·33 73·26 19·50 29·22 18·18 54·12	12·99 114·29 306·12 40·82 77·38 179·49 286·00 218·75 111·11 26·32 ?	61·22 240·00 5·65 98·04 214·29 400·00 162·79 180·00	25·01 31·27 29·57 47·91 44·80 56·01 39·97 30·80 24·98 24·49 23·31 25·55 28·21 30·66 26·62 25·92 21·56 25·90 23·13 25·97 28·31 28·75 28·07	26·30 31·52 28·95 49·02 48·44 53·96 40·22 30·72 28·92 29·74 24·55 28·54 31·06 31·13 27·57 26·86 21·56 25·02 23·16 24·72 26·70 23·47 27·09	1 1 1 1 1 1 1 1 1 1 2 2 2 2 2
659·34 80·54 37·74 229·67	311·83 33·15 222·86 66·67	298-51 383-56 90-91 27-59	284·04 320 00 41·92 653·85	29·25 22·50 22·78 24·57 25·91 19 07	27·93 26·14 22·88 24·91 25·19 17·92	2 2 2 2 2 2 2 2
34.66	32.61	• 29:31	¢ 24.00	28.13	29.06	

as it is not shown separately in the census returns.
of 1911 of the Punjab Province as at present constituted is not available, the ratios shown in subthe Punjab as constituted prior to the separation of the (new) Delhi Province,—vide Punjab Gov-

Annual Form No. V cancelled and incorporated in Annual Form No. IV.

ANNUAL FORM No. VI.

DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE DISTRICTS (RURAL CIRCLES) OF THE PUNJAB DURING THE YEAR 1920.

ANNUAL FORM
DEATHS REGISTERED FROM DIFFERENT CAUSES AND
OF THE PUNJAB

1	2		3		4		
-					BIRTHS.		
	A-RUBAL CIROL	88.	Population according to Census of 1911.	•			Birth rate per 1,000 of population.
No.				Males	Females.	Total.	Birth rat
1	2		3	4	5	6	7
	AMBALA DIVISIO	N.					-
1 2 3 4 5 6	Hissar Rohtuk Gurgaon Ka'nal Ambula Simla		725,016 647,018 675,175 723,742 577,034 16,036	16,575 16,131 14,329 15,401 10,643 244	14,974 14,520 18,167 18,365 9,882 191	31,549 30,851 27,496 28,766 20,475 435	48·51 47·68 40·72 39·75 35·48 27·13
	JULLUNDUR DIVIS	ION.	washer to				
7 8 9 10 11	Kangra Hoshiarpur Jullundur Ludbiana Ferozepore LAHORE DIVISION	 	759 950 864,823 691,816 448,172 855,577	14,429 18,140 15,790 10,876 20,240	13.553 16,424 14,748 9,82 17,944	27,982 34,564 30,538 20,808 38,184	36·82 39·97 44·14 46·48 44·63
12 18 14 15 16 17	Lahore Amritsar Gurdaspur Sialkot Gujranwala Sheikhupura		706,459 711,530 784,343 897,090 528,890 389,378	18 694 18,797 19,395 19,766 11,369 10,008	16,374 17,043 17,680 18,387 10,216 8,569	35.068 35,840 37,025 38,153 21,585 18,577	49.64 50.87 47.21 47.27 40.82 47.71
	RAWALPINDI DIVIS!	ON.		1 - 1	i		
18 19 20 21 22 28	Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali		702,886 630,940 481,307 459,639 496,291 316,243	15,366 18,018 9,098 9,752 9,693 7,435	13,729 11,236 7,816 9,177 8,530 6,672	29,095 24,254 16,914 18,529 18,226 14,107	41:89 38:44 35:14 41:18 36:73 44:61
	MULTAN DIVISION						818
24 25 26 27 28 29	Montgomery I yallpur Jhang Multau Muzaffargarh Dera Ghazi Khan		479,887 863,900 475,527 709,2:4 542,830 463,304	14,012 23,693 10,954 15,788 10,422 6,839	11,831 21,550 9.795 13,739 8,777 5,400	25,843 45,248 20,7 9 29,518 19,159 12,289	58:86 52:87 43:68 41:62 85:87 26:52
	Total of the Eural Circles		17,588,987	396,950	355,312	752,262	42.90

No. VI.
BIRTHS REGISTERED IN THE DISTRICTS (RURAL CIRCLES)
DURING THE YEAR 1920.

5	6	7	8	9	10		-	11			
		See Co.		. 88 				INJUB	IES.		
Cholera.	Small-pox.	Plague,	Fevers.	Dyentery and diarrhosa.	Respiratory diseases.	Males.	Females.	Wounds and acci-	Snake-bite and killed by wild beasts.	Rabies.	Totul.
8	9	10	11	12	13	14	15	16	17	18	19
 2 6 7	99 8 16 30 173	200 648 54	13,879 14,089 13,077 28,538 15,096 787	123 98 159 187 463 22	558 768 879 780 8,370 205	1 18 14 4 8	1 56 42 4 4	170 176 210 213 86	33 24 12 22 7	5 5 1 11 6 	210 279 279 254 111
13 10 8 	11 473 82 133 128	 8 2	26,990 19,551 13,457 6.671 12,923	725 14 103 71 190	4,882 2,415 1,353 710 988	6 6 6 3 13	4 3 6 5 10	169 151 182 101 196	35 28 8 4 20	 5 10 2 8	214 193 212 115 247
2 1	383 202 77 228 19 15	82 1,154 230	11,623 15,298 13,950 14,075 10,065 6,383	168 203 712 676 56 29	542 1,118 7,524 2,820 198 130	2 4 5 6 1	5 6 6 2 2 1	184 169 20+ 154 95 100	35 10 17 26 58 55	6 11 11 9 3	232 200 243 197 159 160
2 1	746 1,214 532 96 247 225	168 5 124 171 1,395 2	8,987 7,779 7,663 7,625	206 144 172 1,386 89 131	555	6 4 2 2 2		154 183 137 205 158 96	28 22 31 23 17 6	4 8 	192 209 172 230 177 102
7 1	1,961 1,155 274 105 99 100	14 45 44	13,834 6,492 12,373 12,224	162 63 16	726 288 345 112	2 8 4 1	2 8 2 1 2	226 252 96 211 142 76	12 26 49	6 14 1 14 1	289 294 125 319 198 108
60	8,781	5,057	342,366	6,640	41,172	130	173	4,536	745	136	5,720

xxxiv

DEATHS REGISTERED FROM DIFFERENT CAUSES AND OF THE PUNJAB

	1			1 .			1	
1		2		3	12	13	1	
		-III			-	Te Te	-	-
					12.00			RATI
				Population		from		
	1	-		according to	1see.	9		
	A-RUB	AL CIRCLES.		Census of 1911.	r car	deaths		н
	1				the	d des.	era.	1-po
No.					All other causes.	Total d	Cholera.	Small-pox.
1	-	2		3	20	21	22	23
-	AMPAT	A DIVISION	7					
1	Hissar			725,016	2,899	17,968		0.14
2	Rohtak			647,018	4,315	20,205		0.01
3	Gurgaon		***	675,175	5,201	19,613	0.002	0.02
4	Karnal	***	***	723.742 577,034	5,877 2,955	35,226	0.01	0.30
5	Ambala Simla	10000		16,036	118	27,175 1,032		
0		un Divier		20,000		1,052		
	JULLUND	UR DIVISIO	JN.					100
7	Kangra			759,950	3,715	39,550	0.02	0.01
8	Hoshiarpur		***	864,823	3,692	26,338	0.01	0.55
H	Jullundur	1 0 mm		691,816 448,172	3,192	18,407	0.01	0.12
10	i ndhiana Ferozepore	1		. 855,577	6,060	11,560 20,588		0.15
11				, , , , , , ,		20,000		
	LAHORE	DIVISION.	4 0	THE TA		(1) F (2)		
12	Lahore	***		706,459	4,298	17,203		0.47
13	Amritsar			711,530	3,273	20,294		0.28
14	Gurdaspur		***	784,343	1,582	24.090	0.002	0.10
15	Sialkot		***	807,090 523,830	3,530 1,653	21,608 13,305	0.001	0.28
16	Gujranwala Sheikhupura			389,378	1,457	8,404		0.04
17			1			0,102		
	RAWALPIN	DI DIVISIO	JN.	TOP I	2 79			
18	Gujrat			702,886	3,194	17,764	0.002	1.06
19	Shahpur			630,940	3,104	14,470		1.92
20	Jhelum	***	***	481,307 459,639	2,097	11,804		1·11 0·21
21	Rawalpindi		***	496,291	1,636	12,079	0.002	0.50
22 23	Attock Mianwali			316,243	1,624	8,552		0.71
	MULTAN	DIVISION.			. 3			
94	Montgomery			479,837	1,759	13,895	0.01	4.09
24 25	Lyallpur			863,900	4,302	20,971		1.34
26	Jhang			475,527	2,994	10,350	0.002	0.58
27	Multan	***		709,294	2,734	15,981		0.15
28	Muzaffargarh			542,830	9:2	13,665		0.18
29	Dera Ghazi Kh	an	***	463,304	515	8,192		0:22
100		Rural Circles		17,533,987	83,218	493,014	0.003	0.50

No. VI—continued.

BIRTHS REGISTERED IN THE DISTRICTS (RURAL CIRCLES)

DURING THE YEAR 1920—continued.

			14					15
F DEATHS	PER 1,000 C	OF POPULATI	on.			FROM ALL	CAUSES.	
Plague.	Fevers.	Dy sentery and diarrhose.	Respiratory diseases.	Injaries.	All other causes.	For the year,	Mean ratio of pre- vious five years.	No.
. 24	25	26	27	28	29	30	31	82
0·28 1·00 0·07	19·14 21·78 19·37 39·43 26·16 45·96	0·17 0·15 0·24 0·26 0·80 1·37	0.77 1.19 1.30 1.08 14.51 12.78	0·29 0·43 0 41 0·35 0·19	4·00 6·67 7·70 7·43 5·12 7·36	24·78 31·23 29·05 49·67 47·09 67·47	43·10 48·42 60·15 45·20 42·95 29·57	3 4 5 6
0.02 0.002	27 62 22 61 19 45 14 88 15 10	0.95 0.02 0.15 0.16 0.22	6·4? 2°79 1·96 1·58 1·15	0°28 0°22 0°31 0°23 0°29	4··9 4·26 4·61 8·59 7·08	40·20 30·45 26·61 25·79 24·00	36·85 36·26 40·08 47·75 43·67	10
0·01 0·10 2·18 0·59	16:45 21:50 17:79 17:44 19:03 16:39	0·24 9·29 0·91 0·84 0·11 0·07	0.77 1 57 9 59 3.49 0.37 0.38	0 33 0·28 0·31 0 24 0.30 0·41	6.08 4.60 2.02 4.37 3.13 3.74	24·35 28·52 30·71 26·77 25·16 21·58	45·60 46·22 44·90 42·04 51·31 48·36	1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1
0°24 0°01 0°26 0°37 2°81 0°01	17·04 14·24 16·16 16·87 15·36 19·62	0·29 0·23 0·36 3·02 0·17 0·41	1·82 1·28 1·98 3·06 1·12 0·88	0.27 0.33 0.36 0.50 0.36 0.36 0.32	4·54 4·92 4·36 2·45 3·80 5·13	25:27 22:93 21:52 26:28 23:63 27:04	44 68 37.83 40.26 42.83 39.09 41.45	1 1 2 2 2 2 2
0·51 0·53 0·03 0·06 0·08 0·01	19·80 16·01 13·65 17·44 22·52 15·77	0.06 0.23 0.34 0.09 0.03 0.10	0·23 0·84 0·61 0·49 0·21 0·25	0.60 0.34 0.26 0.45 0.36 0.23	3·67 4·98 6·30 3 85 1·79 1·11	28 96 24·27 21·77 22·53 25·17 17·68	43.67 34.71 37.23 41.27 39.82 37.47	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
0.28	19.53	0.38	2.35	0.33	4.75	28.12	42.80	13

ANNUAL FORM

DEATHS FFOM DIFFERENT CAUSES AND BIRTHS DURING THE

_	1							-
1		3		3		4		
						BIR	rus.	
No.	В	-Towns.		Fopulation according to Census of 1911.	Males.	Females.	Total.	Birth rate per 1,000 of population,
1		2		3	4	5	6	7
-			-					
1 2 8 4 5	HISSAR Hissar Hansi Bhiwani Sirsa Fatte habad	 		17,162 14,576 31,100 14,629 2,406	424 344 777 308 47	423 318 688 250 45	847 6F2 1,465 558 92	49·35- 45·42: 47·11 38·14- 38·24
	ROHTAN	DISTRIC	r.					
6 7 8 9 10 11 12	Rohtak Jhajjar Beri Gohana Bahadurgarh Sonepat Mehm			19,862 10,617 7,798 5,438 4,990 12,014 7,097	522 263 191 130 152 291 168	466 288 192 95 150 275 154	988 551 383 225 302 566 322	49.74 51.90 45.12 41.38 60.52 47.11 45.37
	GURGAON	DISTRICT						
13 14 15 16 17 18	Rewari Palwal Firozpur Hodal Balabgarh Faridabad	DISTRICT		24,780 9,485 5,719 5,468 4,053 4,487	535 217 105 179 69 85	449 198 110 143 82 76	984 415 215 322 151 161	39·71 43·75 37·59 58·89 37·25 35·88
10	Variation	DISTRICT			400	4-11	055	4.44
19 20 21 22 23	Kaithal Panipas Shahabad Thanesar	DISTRICT		21,018 12,912 26,342 11,054 4,719	482 402 735 230 61	473 350 647 202 46	955 762 1,382 432 107	45·44 58·24 52·46 39·08 22·67
24 25 26 27 28	Ambala Jagadhri Burya Sadhaura Rupar			24,493 12,045 4,272 7,774 6,935	497 212 58 157 163	480 221 59 144 156	927 433 117 301 319	37·85 35·95 27·39 38·72 45·00

No. VI—CONTINUED.

REGISTERED IN THE TOWNS OF THE PUNJAB
YEAR 1920—CONTINUED.

5	6	7	8	9	10			11			
				BB.				Inini	RIES.		
				diarrho	iseases.	Suie	Suicide.		d killed		
Cholera.	Small-pox.	Plague,	Fevers.	Dysentery and diarrhoa.	Respiratory diseases.	Males.	Femsles.	Woundse and cident.	Snake bite and killed by wild beasts.	Rabies.	Total.
8	9	10	11	12	13	14	15	16	17	18	19
21	7 14 6		267 147 501 168 17	22 14 61 38 4	98 77 167 61 5	-	:::::::::::::::::::::::::::::::::::::::	6 5 16 3 2	:::		6 5 16 3 2
		2 	279 129 82 96 131 217 84	18 10 32 1 3 24 2	87 56 24 28 14 54 53	 	1 ₁ 	5 2 2 3 6 	"1 "1 "		6 2 4 4 6
-			84 298 94 125 76 98	56 22 6 4 2 4	155 39 15 8 20 7	- 1 		11 3 1 			12 1 3 1 2
			633 329 823 288 117	48 14 30 19 2	78 45 92 37 8			3 2 111 3 1	1		8 2 11 3 1
	5		363 415 166 104 109		175 88 36 77 37			5 2 2 1 1	1		5 3 3 1 1

ANNUAL FORM
DEATHS FROM DIFFERENT CAUSES AND BIRTHS
DURING THE

1		2		8	12	13		
No.	Р	-Towns.		Population according to Census of 1911.	All other causes. Total deaths from all causes.		Cholera.	Small-pox.
1		2		3	20	21	22	23
		ISTRICT—CONC	LD.					
1 2	Hissar			17,162	284 161	627 404	***	
3	Bhiwani			31,100	396	1,162	0.68	
4	Sirsa			14,629	108	892		0.9
5	Fattehabad ROHTAK D	 DISTRICT—cond	OLD.	2,406	17	51		2.4
6	Rohtak		1	19,862	248	640		
7	Jhajjar			10,617	108	305		
8	Beri			7,798	80	223		
9	Gohana Bahadurgarh	1	65	5,438	84	204		
11	Sonepat	:		4,990 12,014	31 130	183 431		
19	Mehm			7,097	92	248		
	GURGAON I	DISTRICT-CON	CLD.					
13	Rewari			24,780	312	619		
14	Pálwal			9,485	. 118	478		
15 16	Firozpur			5,719	46	164		
17	Balabgarh		***	5,468 4,053	78	211		
18	Faridabad			4,487	19	133		0.6
	KARNAL D	ISTRICT—cond	ELD.					
19	Karnal		-	21,018	271	1,033		
20	Kaithal			12,912	146	536		·
21	Panipat Shahabad		•••	26,348	356	1,312		
28	Thanesar	:::		11,054 4,719	101	164	0.21	
		ISTRICT-con		-,120		203		-
34	Ambala		37.5	24,493	145	738		3 63
25	Jagadhri			12,045	131	675	0.08	
26	Burys			4,272	40	265		1.1
27 28	Sadhaura			7,774	65	262		
20	Rupar			6,985	54	230		0.2

No. VI—CONTINUED.

REGISTERED IN THE TOWNS OF THE PUNJAB
YEAR 1920—CONTINUED.

				14				15
	RATI	O OF DEAT	HS PER J,00	O OF POPUL	ATION.			
		Bud	seases,		*	From a	ll causes.	
Plague.	Fevers.	Dysentery diarrhea.	Respiratory diseases	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	No.
24	25	26	27	28	29	30	31	82
	15 56 10·09 16·11 11·48 7·67	1·28 0·6 1·96 2·60 1·66	5·71 5·28 5·37 4·17 2·08	0·35 0·34 0·51 0·21 0·83	13:63 11:05 12:73 7:38 7:07	36 53 27 72 37 36 26 80 21 20	49.76 57.40 55.92 48.26 26.18	1 2 3 4 5
0.10	14.05 12.15 10.52 17.65 26.25 18.06 11.84	0.91 0.94 4.10 0.18 0.60 2.00 0.28	4 38 5 27 3 08 4 23 2 81 4 49 7 47	0·30 0·19 0·51 0·80 0·50	12:59 10:17 10:26 15:45 6:21 10:82 12:96	32·22 28·73 28·47 37·51 36·67 35·87 34·94	46.88 54.80 64.70 58.59 6C.84 43.25 Not avail- able.	6 7 8 9 10 11 12
	3·39 31·42 16·44 22 86 18·75 21·84	2 26 2·32 1·05 0·73 0·49 0.89	6·26 4·11 2·62 1·46 4·93 1·56	0·48 0·11 0·52 0 18 0·45	12·59 12·44 8·04 13·35 8·64 4·13	24·98 50·10 28·68 38·59 32·82 29·64	39 99 65 47 66 41 71 36 48 31 63 29	13 14 15 16 17 18
	30·12 25·48 31·24 26·05 24·79	2·28 1·08 1·14 1·72 0·42	3·49 3·49 3·35 1·70	0·14 0·15 0·42 0·27 0·21	12·89 11·31 13·51 9·14 7·42	49·15 41·51 49·81 40·53 34·75	48·24 47 88 51·91 35·72 34·84	19 20 21 22 23
::::::	14·82 34·45 38·86 13·38 15·72	1.84 3.07 3.51 1.93 3.89	7·14 7·31 8·43 9·90 5·34	0 20 0·25 0·70 0·13 0·14	5·92 10·88 9·86 8·36 7·79	29 93 56 04 62 03 33 70 33 17	39·70 53·9 3 46·11 35·76 88·21	24 25 26 27 28

ANNUAL FORM
DEATHS FROM DIFFERENT CAUSES AND BIRTHS
DURING THE

1		2		3	-		4	
					BIRTHS. Males. Females. Total. P P P P P P P P P			
.0	В-	Towns.		Population according to Census of 1911.	Males.	Females.	Total.	Birth rate per 1,000 of popula- tion.
1 No.		2		3	4	5	6	7
_						-		-
	STMT.A T	DISTRICT.	-					
29	Simla			18,984	177	150	327	17:27
			9				- 10	
	KANGRA	DISTRICT			1	134		1 18
80	V		- 1	3,620	61	46	107	29.56
31	Kangra Dharmsala			2,518				33.76
32	Palampur			598		4	9	
	HOSHIARPI	JR DISTRI	CT.					
33	Hoshiarpur			16,980				30.52
34 35	Khanpur			2,523 5,895				30.2
36	Hariana Garhdiwala			3,093				27.48
87	Dasuyah		- :::	3,597	115			63.3
88	Tanda Urmar			7,016			Book and the second sec	46.3
39	Miani			3,870 2,053				45.75
40	Mukerian			4,178				29 20
42	Anandpur	***		4,041		53		23.20
	JULLUNDU	R DISTRIC			2			
48	Jullundur			55,354	1,297			45.50
44	Kartarpur			8,631 4,602				45.8
46	Rahon			6,292		96		33-2
47	Phillour			5,224	76			26.9
48	Nurmahal			7,178				42.2
49	Nakodar			8,859	189	109	010	920
	LUDHIAN	A DISTRIC	T.	Red .		1	- 75	
50	Ludhiana		!	48,152				44.0
51	Jagraon			15,039 7,510				58.0
52 58	Raekot Khanna		1	8,819	63	70	133	40.0
00	Khanna	***		-,020			-	

No. VI—CONTINUED.

REGISTERED IN THE TOWNS OF THE PUNJAB
YEAR 1920—CONTINUED.

-											
5	6	7	8	9	10	1.			11		
				ea.				Inj	URIES.		-
				Dysentery and diarrhoea.	eases.	Sui	oide.	nd ac-	Snake-bite and killed by wild beasts.		
	ij.			and '	ry die			ds 18.	te and I beast		
Cholera.	Small-pox.	Plague.	Fevers.	sentery	Respiratory diseases.	Males.	Females.	Wounds and ac-	aake-bite and k	Rabies.	Total.
-	Sm		Fer	Dye	Re			*	-	-	
8	9	10	11	13	13	14	15	16	17	18	19
1	1		457	41	194						
			24	16	32		1				1
			42 10	3 1	26			"1			1
						1000					
			109	1	134	. 1		3			4
	7		193 43 79		11 16			,	020		
	4		58		13			1		2	1 2 1 1
	9		89 165		20 42 14 18		1	-1			1
			138 51	1	18		***	3		3	
1 ::	8		66 63		8 8			,			
-			00								
	1		650	117	453			33		1	34
			111	11	43	:::		1 4			1 4
	***		176 94	1 5	10 43		***	1 2			4 1 2 4 4
			67 148	9	61			4			4
-		•	140		0.5						
1 .						100		1			
	1	-::	759 I13	67	277 92			8 8		1	9
	4		94 70	4	25 19			1 1		1	2
1 =			10		10		""	1			1

ANNUAL FORM
DEATHS FROM DIFFERENT CAUSES AND BIRTHS
DURING THE

1	2 .		3	12	13		
-			\$		all all	-	
			50				100
			seco-ding 1911.		rom		
	BTowns.		1911	ses l	8		
	D.— 10 W N S.	,	of Jo	Can	ath		W
			Population Census of	All other causes.	Total deaths from causes.	F.B.	Small-pox.
			Paris	otl	tal d	h lera.	nal
No.			Pol	AII	To.	2	S
1	2	-	3	20	21	22	23
							-
		1				-1	1000
	SIMLA DISTRICT	r.		1			
29	Simla		10.004	150	850	0.05	0.05
29			18,934	156	000	0.00	000
	KANGRA DISTRICT-C	ONCLD.					37 188
30	Kangra		3,620	13	86		
31	Dharmsala		2,518	111	82		
32	Palampur		598	1	17		
	HOSHIARPUR DISTR	CT_					
	CONCLD.						
33	Hoshiarpur		16,980	170	508		
34	K hanpur	"	2,528	176	65		
35	Hariana	:::	5,395	15	118		1.30
86	Garbdiwala		3,093	- 14	86		1.29
37	Dasuyah		8 597	49	119	***	1.00
38	Tanda Urmar		7,016	30	247	•••	1.28
39	Miani		4,870	43	195	•••	***
40	Mukerian		2,053 4,178	30	101		0.72
42	Una	- ""	4,041	12	87		0.99
	Ananopur		2,021				
	JULLUNDUR DISTR	ICT-					
	CONCLD.						100
43	Jullundur		55,354	298	1,552		0.02
44	Kartarpur	- :::	8,631	40	2.6	2	
45	Bungah		4,602	28	. 97		
46	Rabon		6,292	22	212		
47	Phillour		5,224	27	171		•••
48	Nurmahal		7,178	20	161		•••
49	Nakodar		8,859	49	246		***
	LUDHIANA DISTRIC	CT-		14 1	3	BALL!	
	CONCLD.				333	2	
50	Ludhiana		43.152	402	1,515		0.02
551	Y	1	15,039	227	478		
532	Raekot		7,510	57	182		
202	Khanna	:::	3,319	13	107		1.21
				1		AFRICA	100

No. VI - CONTINUED.

REGISTERED IN THE TOWNS OF THE PUNJAB
YEAR 1920 - CONTINUED.

-				14	-			15
•				14				
	RATIO OF	DEATHS PSI	R 1,000 OF	POPULATION				
1		p u ı	dis-		ises.	From al	ll causes	33 34 35 36 37 38 39 40 41 42
Plague.	Fevers,	Dysentery a diarrhos.	Respiratory cases.	Injuries.	All other causes.	For the year.	Mean ratio of pre- vious five years.	No.
24	25	26	27	28.	29	30	31	32
						in auch	20.00	00
1.	24-14	2.17	10.25		8.24	44.89	28.33	29
	6.63 16.68 16.72	4·42 1·19 1·67	8.84 10.33 6.69	0.28	3·59 4·37 1·67	23.76 32.57 28.43	30-22 25-89 Not avail- able.	31
	11·37 17·04 14·64 17·14 24·74 23·52 28·34 24·84 15·80 15·59	0.06	7·89 4·36 2·97 4·20 5·56 5·9.) 2·87 8·77 1·91 1·93	0·24 0·19 0·65 0·23 0·14 1·46	10·37 4·36 2·78 4·53 13·62 4·28 8·83 13·64 7·18 2·97	29·9·2 25·76 21·87 27·80 44·20 35·21 40·04 49·20 25·61 21·53	38·02 32·42 29·43 51·75 58·71 37·31 82·60 60·59 31·50 24·05	34 35 36 37 38 39 40 41
	11.74 12.86 12.82 28.29 17.99 9.38 16.17	2·11 1·27 0·87 0·16 0·96 1·25 1·02	8·17 4·98 0·43 1 59 8·23 8·80 4·06	0.61 (.12 0.87 0.16 0.38 0.56 0.45	5·38 4·63 6·69 3·50 5·17 2·79 5·53	28:04 23:87 21:08 33:69 32:73 22:43 27:77	37-74 42-36 34-94 39-3 3 46-06 41-36 44-72	44 45 46 47 48
	17.79 7.51 12.52 21.09	1.55 2.46 0.53	6·42 6·12 3·33 5·72	0.81 0.60 0.27 0.30	9·32 15·09 7·59 3·92	35·11 31·78 24·23 32·24	45.38 52.92 46.15 41.88	51 52

ANNUAL FORM

DEATHS FROM DIFFERENT CAUSES AND BIRTHS DURING THE

1	2		1-1	3	4					
						Вівт	нв.			
No.	В—То	WNS.		Population according to Census of 1911.	Males.	Females.	Total.	Birth rate per 1,000 of population.		
1	2			3	4	5	6	7		
	FEROZEPORI	DISTR	ICT.							
54	Ferozepore			24,678	451	425	876	35.50		
55	Zira			4.378	118	94	212	48.42		
56 57	Dharmkot Muktsar			5,859	152 210	120 190	400	46.45		
58	Fazilka			8,834 10,985	298	293	576	52.4		
59	Moga			9,113	147	116	263	28-8		
60	Abohar			9,492	80	61	141	14.8		
61	Gidarbaha			4,583	9	12	21	4.5		
	LAHORE I	DISTRIC	т.							
62	Lahore			210,271	4,310	3,589	8,119	38-9		
63	Chunian			7,151	170	190	360 163	50.3		
64	Khudian Kasur			2,992 24,783	90 594	73 613	1,207	48.7		
66	Khem Karan			5,732	145	125	270	47-1		
67	Patti			7,987	200	189	389	48.7		
68	Baghbanpura, Bh	ogiwal		6,993	193	191	384	54.9		
69 70	Ichhra Pattoki Mandi			5,489 1,880	77	61	138 132	25.1		
10	Tactor Mandi			1,000	"	01	103	102		
	AMRITSAR	DISTRI	CT.		-					
71	Amritsar	IF		151,339	3,631	3,395	7,026	46.4		
72	Majitha			5,223	148	119	267	51.1		
73 74	Jandiala Tarn Taran			6,959	180 120	164 110	230	49·4 53·9		
19	l arm taran		- ""	4,260	120	110	200	90.5		
	GURDASP	UR DIST	TRICT.				12/16/			
75	Gurdaspur			5,133	121	106	227	44.5		
76	Dina Nagar			4,154	116	109	225	54.1		
77 78	Pathankot Lalhorsie			7,007 938	160	152	312	20:		
79	Batala			28,420	643	626	1,269	48		
80	Dera Nanak	18 . 18 7 .		4,556	78	91	169	37.0		

No. VI—CONTINUED.

REGISTERED IN THE TOWNS OF THE PUNJAB
YEAR 1920—CONTINUED.

The same of	5	6	7	8	9	10			1	1		
200			100		œa.				lal	UBIES.		
					diarri	seases.	Suic	eide.	acci-	kiiled sts.		
		pox.			Dysentery and diarrhosa.	Respiratory diseases.		es.	ls and	Snake-bite and kiiled by wild beasts.		
	Cholera.	Small-pox.	Plague.	Fevers.	Dysent	Respir	Males.	Females.	Wounds dents.	Snake	Rabies.	Total.
	8	9	10	11	12	13	14	15	16	17	18	19
,		1 1 1 8		238 76 51 105 207 78 47 7	35 1 5 8 11 9 7 2	99 10 26 26 102 31 6	 		7 1 1 4 3 1 	2 1 	1 	10 1 2 4 4 1
	19 10	11 7 1 4 4 3 4 		3,839 150 48 445 81 127 168 33 46	935 5 1 30 4 17 3 3 4	1,570 20 13 89 28 32 27 16 9	6 1 	 	119 5 1 5 1 6 1 1 2	1 	5 2 1 	132 5 1 8 1 7 1 1 2
	7 ₁	1 8		2,571 71 121 51	1,120 4 8 5	1,841 10 8 18	3 1 		85 2 3 2		₁	88 4 3 2
こうして こうしょう こうかいかい		5 1 8		77 89 103 16 420 67	21 9 14 1 28 4	38 38 126 12 2-1 57	:::		2 1 3 1 15 1	 1 	1 1 2 	3 3 5 1 17 1

ANNUAL FORM
DEATHS FROM DIFFERENT CAUSES AND BIRTHS
DURING THE

1	2		3	12	13		
No.	B-Towns.		Population according to census of 1911.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.
1	2		3	20	21	22	23
	FEROZEPORE SISTRIC	CT—					
54	Ferozepore		24,678	121	503		
55	Zira		4,878	48	137		0.2
56	Diarmkot		4,859	85	169		
57	Mukhtsar		8,834	92	236		0.1
58	Fazilka		10,985	90	415		0.0
59	Mog i		9,118	47	174		0.8
60	Abobar		9,492	22	82		
61	Gidarba' a		4,583	6	16		
						I STATE OF	1136
	LAHORE DISTRICT-co	NCLD.	910.971	1.050	5.150	0.09	0.0
62	Lahore		210,271 7.151	1,253	7,159 250		0.9
68	Chunian		2.992	62	84		0.3
64	Khudian	***	24,783	177	753	**	0.1
65	Kasur		5,782		187	***	0.7
66	Khem Karan	•••	7,987	69	242		0.3
67	l atti		6, 93	39	242	•••	0.2
68	Paghbanpura, Bhogiwal	***	5,489	18	81	1.82	1000
69 70	Ichhra Paticki Mandi	***	1.880	21	89	20000000	8.7
10	Patioki Mandi	***	1.000	21	0.	•••	
	AMRITSAR DISTRICT	г—					
71	Amritsar		151,339	594	5,217	C.C5	0.0
72	Majitha		5,223	:6	115		
73	Jandia a		- 6,959	27	169	0.14	0.1
74	Tarn Taran		4,260	26	105		1.8
	GURDASPUR DISTRIC						411
75			5,133	21	165	1	0.9
75 76	Curdaspur		4,154	17	157	***	0.3
77	Dina Nagar Pathanket	***	7,007	22	270	***	
78	D.11 !-		£38	2	32		
79	Detale		26,430	90	847	0.11	03
80	Dera Nanak	***	4,558	9	138		
-0	Dire Linius	***	2,00				

No. VI—CONTINUED.

REGISTERED IN THE TOWNS OF THE PUNJAB
YEAR 1920—CONTINUED.

				14		8		15
	RATIO	OF DEATHS	PER 1,000	OF POPULAT	104.			
		and	seasos.	State To	**	From all	causes.	
Plague.	Fevers.	Dysentery diarrhos.	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	No.
24	25	26	27	28	- 29	30	31	32
						310 SOE		
	9.04 17:36 8:10 11:89 18:85 8:56 4:45 1:53	1.42 0.23 0.85 0.91 1.00 0.99 0.74 0.44	4.01 2.28 4.44 2.94 9.29 3.40 0.68 0.22	0·41 0·23 0·34 (·45 6·36 0·11	4:30 10:96 14:51 10:41 8:19 5:16 2:32 1:31	20:38 31:29 23:84 26:71 37:78 19:09 8:64 3:49	31.57 43.83 37.48 .9.33 63.55 Not avail- able.	54 55 56 57 58 59 60 61
0:14	-18:26 20:98 16:04 17:96 14:13 15:90 24:02 6:01 24:47	1·59 6·70 0·38 1·21 6·70 2·13 0·43 0·55 2·13	7-47 2-80 4-34 3-59 4-88 4-01 3-86 2-91 4-79	0.63 0.70 0.33 0.32 0.17 0.88 0.14 0.18 1.06	5.96 8.67 6.68 7.14 12.04 7.01 5.58 3.28 11.17	34·05 34·96 28·07 30·38 32·62 30·29 34·61 14·76 47·34	42·18 57·44 47·99 44·66 42·01 44·60 Not avail- ab.e.	62 63 64 65 66 67 68 69 70
	16·99 13·59 17·39 11·97	0·74 0·77 1·15 1·17	12:16 1:91 1:15 3:05	0.43		22·02 24·28	43.73	71 72 73 74
	15·00 21·42 14·70 17·06 15·89 14·70	2·17 2·00 1·07 1·66	9 15 17·98 12·79 10·62	0.72 0.72 1.07 0.64	4·09 3·14 2·13 3·52	37·79 33·53 34·12 32·05	52.91 53.63 30.50 41.44	75 76 77 78 79 80

ANNUAL FORM
DEATHS FROM DIFFERENT CAUSES AND BIRTHS
DURING THE

1	2		3		4		
			d stop in the		BIRT	ras.	
No.	B—Towns.		Population according to Census of 1911.	Males.	Females.	Total.	Birth rate per 1,000 of population.
1	2		3	4	5	6	7.
	SIALKOT DISTRIC	r.			7		
81 82 83 84 85 86 87 88 89 90 91 92 93	Sialkot Daska Jamke Pasrur Zaffarwal Narowal Sambrial Sahowala Begowala Bhopalwala Mitranwali Badomali Kalaswala		45,595 8,046 3,542 7,564 3,633 4,464 6,285 3,558 3,768 3,336 3,183 2,815 2,915	1,390 140 78 155 63 124 76 64 86 84 79 67	1,300 120 98 158 78 112 62 73 70 68 85 70 68	2,690 260 171 313 141 236 138 137 156 152 164 137	55:35 48:00 48:28 41:38 38:81 52:87 21:96 38:50 41:40 45:56 51:52 48:37 49:40
94 95	Daud Chawinda GUJRANWALA DISTI	RICT.	3,431 4,695	109	63 84	128 193	36·77 41·11
			l-10p				
96 97 98 99 100 101 102 103 104	Gujranwala Wazirabad Eminabad Kila Didar Singh Akalgarh Ramnegar Sohdara Hafizabad Pindi Bhattian SHEIKHUPURA DISTI	 	28,637 17,146 5,526 2,210 3,943 5,256 4,666 5,742 3,631	624 368 133 63 81 103 107 99 88	534 307 101 58 89 67 100 66 85	1,158 675 234 116 170 170 207 165 173	40·44 39·37 42·35 52·49 43·11 32·34 44·36 28·74 47·65
105 106	Khangah Dogran Sangla		1,267 980 4,482	26 69 70	32 59 81	58 128 151	45.78 130.61 33.69
107 108 109 110	Sharakpur Sbahkot Chuharkana Mandi Nankana Sahib		1,054 854 6,131	32 36 97	23 32 92	55 68 189	52·18 79·68 30·82

No. VI-CONTINUED.

REGISTERED IN THE TOWNS OF THE PUNJAB YEAR 1920—CONTINUED.

	1						_				
5	6	7	8	9	10		,	1	L		
-				ea.				Inj	URIES.		
				Dysentery and diarrhea.	ases.	Suic	ide.	and ac-	illed		
				and d	y dis-		_		and k		
era.	Small-pox.	ne.	9	ntery	Respiratory dis: ascs.		ales.	Wounds cidents.	Snake-bite and killed by wild beasts.	es,	-
Cholera.	Smal	Plague.	Fevers.	Dyse	Resp	Males.	Females.	W o	Snak	Rabies.	Total.
8	9	10	11	12	13	14	15	16	17	18	19
	4		672	85	556	1		18	3	3	25
1	2	1	71 35	7 7	15 21			2			2
:::			65 22	11 2	50 28	:::		1			1
	15 2		22 73 48 38 63	11 4 3	28 18 3			1 1 2 1 2 1		"1	3
	4 4 5 2	6	63	6 5	15 10			2			2
			41 16 55	17 5	18 13			,	1		1 1 3 1 2 1 1 1
	3	1	20 92 48	14	36			"1			1
			40	10	24						1
2	3	071	077	10	750	-		28	2		31
		371	677 201 79	19 16 2	158 76 9			1 2	****		2 2
	·	32 3 2	79 35 16 78 82 64 50	1	4						2
-:			78 82	7 1 2	18 6 7	:::		1 1	:::		1 1 3 1
1		3	50	- 2	23 8			2	"1	1	1
							brich	1			
	1	1	20	1 1	3 3						
-	- 1		20 8 48 19	4 1	15	"1		3	1		
	-		18 65		1 3	-	-	2			2

ANNUAL FORM
DEATHS FROM DIFFERENT CAUSES AND BIRTHS
DURING THE

1	2		3	12	13	7	
			\$		9.	-	11111
					Total deaths from all causes.		
			according	148 34	11 6		1
			ord I.		B 0	100	2
	B-Towns.		ассот	All other causes.	ron		
				ne	20		10
			Census of	0	ati		OX.
	以其是可能的。		llat	the	- de	era	1
No.			Population Census of	10	ota	Cholera,	Small-pox.
			A .		-		-
1	2		3	20	21	22	23
	SIALKOT DISTRIC	г—					
				070			0.0
81	Sialkot		45,595	379	1,721	0.17	0.0
82	Daska Jamke		6,046 3,542	26	125 93		
84	Pasrur		7,564	41	175		0.5
85	Zaffarwal		3,633	15	68		
86	Narowal		4,464	19	147		3.3
87	Sambrial		6,285	11	86		0.3
88	Sahowala		3,558	23	72		1.13
89	Begowala	***	3,768	13	103		1.00
90	Bhopalwala		3,336	18	86		1.50
91	Mitranwali	.,,	3,183	23 16	77		0.6
92 93	Badomali Kalaswala		2,815 2,915	13	90 89		1.3
94	D3		3,481	12	110		C.8
95	Chawinda		4,695	11	95		
	GUJRANWALA DISTR	ICT-					
	CONCLUDED.	101					
96	Gujranwala		28,637	284	1,545	0.07	0.1
:97	Wazirabad	***	17,146	88	385		
:98	Eminabad		5,526	16	108		***
99	agent a result of the second o		2,210 3,943	6	43		***
100	Akalgarh Ramnagar		5,256	49	143	•••	
102	Sohdara		4,666	14	105		
163	Hafizabad		5,742	47	142		
104	Pindi Bhattiau		3,631	27	17	0.28	
	SHEIKHUPURA DISTE	ICT—			-		
105	Khangah Dogran		1,267	14	89		
106	Sangla		980	3	20		10
107	Sharakpur		4,482	32	104		
108	Shahkot		1,054	8 7	32		0.9
109	Chuharkana Mandi		854 6,131	20	26 90	***	
110	Nankana Sahib	***	0,101	20	30	***	***

No. VI-CONTINUED.

REGISTERED IN THE TOWNS OF THE PUNJAB YEAR 1920-CONTINUED.

				14		-		15
		RATIO OF	1	в 1,000 от			l causes.	
Piague.	Fevers.	Dysentery diarrhosa,	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	No.
24	25	26	27	23	29	30	31	32
1·28 1·80 0·21	13·83 11·74 10·16 8·59 6·06 16·35 7·64 10·68 16·72 12·29 5·03 19·54 6·86 26·43 10·22	1.75 1.16 1.98 1.15 0.55 2.46 0.64 0.84 1.59 1.50 5.34 1.78 4.80	11·44 2·48 5·93 6·61 7·71 6·27 2·86 0·84 3·98 3·00 5·66 4·62 12·35 0·86 5·11	0·51 0·56 0·53 0·28 0·22 0·48 0·28 0·53 0·30 0·31 0·36 0·69	7·80 5·29 7·34 5·42 4·13 4·26 1·75 6·46 3·45 5·40 7·23 5·68 4·46 3·45 2·84	35·42 21·17 26·26 23·14 18·72 32·93 13·68 20·24 27·34 25·78 24·19 31·97 30·53 31·60 20·23	40.61 31.99 38.28 34.96 42.11 41.89 26.92 40.87 51.86 33.21 47.57 28.12 34.65 38.21 34.59	81 81 81 81 81 81 81 91 91 91 91 91
12·96 14·48 0·76 0·38 0·52	23.64 11.72 14.30 1£.84 4.06 14.84 17.57 11.15 18.77	0.66 0.93 0.36 0.45 1.33 0.21 0.35	5·52 4·43 1·63 1·81 4·57 1·14 1·50 4·01 2·20	1·09 0·23 0·36 0·90 0·19 0·21 0·52 0·28	9·92 5·13 2·90 5·88 1·52 9·32 3·00 8·19 7·44	58.95 22.45 19.54 39.37 10.91 27.21 22.50 24.73 23.96	48·89 40·67 39·92 51·57 23·21 45·66 47·32 40·20 34·32	96 97 98 100 101 102 104
0.79	15·79 8·16 10·70 18·03 21·08 10·60	0·79 1·02 0·89 0·95	2:37 3:06 3:35 2:85 1:17 0:49	1.12	11:05 3:06 7:14 7:59 8:20 3:26	30·78 20·41 23·20 30·36 30·44 14·68	32.83 36.53 45.38 44.41 Not svailable.	108 108 108 108 (108 (110

ANNUAL FORM

DEATHS FROM DIFFERENT CAUSES AND BIRT IS DURING THE

_								
1	1	2		3		4		
			az ibto	AND MET SEE	la star s	BIRT	rus.	
No.		B—Towns.		Population according a to Census of 1911.	Males.	Females.	Total.	Birth rate per 1,000 of population.
1		2	-83	3	'4	5	6	7
	GUJR	AT DISTRI	CT.					
111 112 113 114	Gujrat Jalalpur Kunjah Dingah			18,192 11,615 7,090 5,351	488 232 154 121	485 246 135 85	978 478 289 296	52.05 41.15 40.76 38.50
	SHAHP	UR DISTRI	CT.			100	1944	
115 116 117 118 119 120	Shabpur Sabiwa! Phera Miani Khushab Sargodha			8,739 7,658 15,202 5,819 10,159 8,849	98 186 439 116 212 241	84 157 393 122 196 206	182 343 832 235 408 447	20.88 44.78 54.72 40.90 40.16 50.51
	JHELU	M DISTRIC	CT.					
121 122	Jhelum Pind Dadan	Khan		12,298 10,590	225 211	206 167	431 878	35-05 85-69
	RAWALPI	INDI DISTE	RICT.				180	
123 124	Rawalpindi Murree			46,642 13,361	1,027	975 28	2,002 55	42·92 41·41
	ATTOC	K DISTRIC	T.					
125 126	Pindigheb Hazro			9,045 9,950	189 199	164 201	353 400	39°02 40°20
	MIANWA	LI DISTRI	CT.	1003		135		1000
127 128 129 130	Mianwali Bhakkar Isa Khel Kalabagh	 		6,224 5,388 6,868 6,651	174 148 148 150	142 136 122 140	316 294 270 299	50·77 52·71 89·31 43·58

No. VI-CONTINUED.

REGISTERED IN THE TOWNS OF THE PUNJAB YEAR 1920—CONTINUED.

-		-		-						Lot	_
5	6	7	8	9	10			1	1		
				pa.				Inju	RIES.		
				nd diarrho	diseases.	Sui	cide.	and ac-	t e and by wild		-
Cholera.	Small-pox.	Plague.	Fevers.	Dysentary and diarrhoa.	Respiratery diseases.	Males.	Females.	Wounds and accidents.	S n a k e-b i t e and k illed by wild beasts.	Rabies.	Total.
8	9	10	11	12	13	14	15	16	17	18	19
2	7 13 	1 3	312 176 132 55	21 9 4 1	144 69 18 24	 1 		9 5 1	2	::	14 5 2
	34 16 1 2 11 11	1 1	39 66 235 85 67 95	3 3 50 10 9 17	30 13 65 36 39 30			2 2 9 6 1 6			2 2 9 6 1 6
	8 25	237	161 179	15 15	87 48		200	9 6	"1		9 7
1	6	45	678 13		498	1	::	40	1		41
1:	5 9	7	152 93	3 4	17 41			1 1	::	:::	1 1
1	5 2 7		80 141 190 90	6 8 26 25	13 4 7 43		::	4 1 6 6		1 : : :	4 1 6 6

DEATHS FROM DIFFERENT CAUSES AND BIRTHS-DURING THE

1		2		3	12	13		
	I	-Towns.		Population according to Census of 1911.	All other causes.	Total deaths from all causes.		
No.				Population Census of	All oth	Total de	Cholera.	Small pox.
1		2		3	20	21	22	28
		DISTRICT-					0.7.1	0.37
111 112 113 114	Gujrat Jalalpur Kunjah Dinga		•	18,692 11,615 7,090 5,351	186 47 84 17	687 319 193 97	0.11	1.12
	SHAHP	UR DISTRICT	-					
115 116. 117 118	Shahpur Sahiwal Bhera Miani			8,739 7,658 15,202 5,819	85 63 188 88	148 164 498 178		3·89 2·09 0·07 0·34
119 120	Khushab Sargodba JHELU	 M DISTRICT	_ :::	10,159 8,849	106	233 220		1.08
121 122	Jhelum Pind Dadan	Kban		12,298 10,590	115 79	682 355		0.65 2.36
	RAWALP	INDI DISTRI CONCLD.	CT-					
128 124	Rawaipindi Murree	::		46,642 1,361	529	1,878 27	0.02	0.13
	1645	CONCLD.						
125 126	Pindigheb Hazro	ALI DISTRIC	·	9,045 9,950	45 66	223 221		0.51
		CONCLD.	1-	4		. 151		0.0
127 128 129 130	Isa Khel			6,224 5,388 6,868 6,654	46 37 83 92	154 194 262 263	0.19	0.80

No. VI-continued.

REGISTERED IN THE TOWNS OF THE PUNJAB YEAR 1920-CONTINUED.

		nii)		14				15
	RATIO	O OF DEATHS	PER 1,000	OF POPULA	TION.			
35	1	y and	eases.		68.	From all	causes.	
Plague.	Fevers.	Dysenter;	Respiratory diseases.	Injuries.	All other causes.	For the year.	Meanratio of previous five years.	No.
24	25	26	27	28	29	30	31	32
100.00			-					186
0.05	16·70 15·15 18·62 10·28	1·12 0·77 0·56 0·19	7·70 5·94 2·54 4·49	0.75 0.43 0.28	7·28 4·05 4·80 3·18	34·08 27·46 27·22 18·14	45.05 35.18 39.10 36.92	111 112 113 114
0·13 0·17 	4·46 8·62 15·46 14·61 6·59 16·74	0·34 0·39 3·29 1·72 0·89 1·92	3:43 1:70 4:28 6:18 3:84 3:39	0·2 : 0·26 0·59 1·03 0·10 0·68	4·01 8 23 9·08 6·53 10·43 6·89	16:36 21:42 32:76 30:59 22:94 24:86	30°92 43°67 41°78 47°02 44°83 16°43	115 116 117 118 119 120
19·27 0·19	13-09 16-90	1·22 1·42	7·07 4·53	0·73 0·86	9·35 7·48	51·39 33·52	42·69 52·33	121 122
0.95	14·54 9·55	1.72	10.68 7.35	0·88 0·73	11:34	40-26	49·45 32·48	123
ö ' 70	16·80 9·35	0·83 0·40	1·88 4·12	0.11	4·98 6·63	24·65 22·21	32·66 30·37	125 126
	12·85 26·19 27·66 13·53	0.96 1.49 3.79 3.76	2·09 6·74 1·02 6·46	0·64 0·19 0·87 0·90	7·39 6·87 4·80 13·80	24·74 36·01 38·15 39·53	33·13 51·63 38·61 39·43	127 128 129 130

DEATHS FROM DIFFERENT CAUSES AND BIRTHS DURING THE

1	2		3	-	4		
					BIRTI	is.	
No.	B—Towns.		Population according to Census of 1911.	Males.	Females.	Total.	Birth rate per 1,000 of population
1	2		3	4	5	8	7
		-			-		-
	MONTGOMERY DISTRIC	T.			1		
131	Montgomery		8,129	108	105	213	26.20
182	Kamalia		8,237 7,912	206	193	399	48.44 31.22
188	Pakpattan		1,912	134	113	247	31.58
	LYALLPUR DISTRICT.	-	100 L L 195		20 1.00	1	
134	Lyallpur		19,578	323	337	660	33-71
135	Gojra	***	5,417	86	99	185	84.15
	JHANG DISTRICT.				I		
	JHANG DISTRICT.		No.			1918	
136	Jhang Maghiana		25,914	699	707	1.406	54.26
137	Chiniot	***	14,085	810	500	1,010	71.71
	MULTAN DISTRICT.					- 37	
138	Multan		85,747	1,778	1,651	3,429	39.99
139	Shujabad		6,334	128	123	251	39.63
140	Jaharian		Not available	8	12	20	
141	Mian Channu	***	Not available	26	25	51	
	MUZAFFARGARH DISTRI	CT.			23		
140	Muzaffargarh		4,119	62	62	194	30-10
142 143	Khangarh		8,849	69	60	124 129	38.52
144	Alipur		3,312	75	61	136	41.08
145	Leish		8,173	165	171	836	41.11
146	Karor	***	3,503	68	88	151	43.11 28.74
147	Kot Adu		4,175	67	58	120	20 14
	DERA GHAZI KHAN DISTR	ICT.					
148	Dera Ghazi Khau		16, 53	365	342	707	41.95
149	Jampur		6,517	157	137	294	45·11 38·01
150	Dajal Rajanpur		6,893 3,7(4	144 96	118	262 158	42.36
151 152	Kot Mithan		2,589	51	52	103	39.78
	Total		1,803,159	40,807	37,234	77,541	43.00
	10:00						
	TOTAL OF THE PROVINCE		19 337,146	j			
_	MANAGEMENT OF THE PARTY OF THE	-	NA TON THE REAL PROPERTY.		William William		-

No. VI-continued.

REGISTERED IN THE TOWNS OF THE PUNJAB YEAR 1920-CONTINUED.

5	6	7	8	9	10			1	1		
				œa.				INJUE	IES.		
				nd diarrh	diseases.	Suic	oide.	and ac-	ite ard by wild		
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhea,	Respiratory diseases.	Males.	Females.	Wounds cidents.	Snake-bite Rilled by w bessts.	Rabies.	Total.
8	9	10	11	12	18	14	15	16	17	18	19
							Banna	and the			
1	2 7 5		104 159 112	2	30 12 2			1	₁	::	1
=	5 4		170 38	9 7	83 28	-	::	1 2			1 2
	15 16	1 1	374 177	63 29	72 29	::		6 3			6 3
5	74 12 	316 2 	1,385 115 22 38	194 21 	1,004 22 1	:::		14 8 	1 		15 3-
	7 1 1 3 1 8	17	63 64 33 142 61 154	4 5 11 9 6	23 11 10 7 14 8			1 3 2 3 	1 	 1	3 3 2 3 1 1
	10 5 	2	209 118 90 115 77	29 10 6 	30 17 14 2 3			1 1 1			1 1
78	538	1.080	29,066	2,545	11,598	23	5	689	24	29	770
138	9,319	6,137	371,432	9,185	52,770	153	178	5.225	769	165	6,490

DEATHS FROM DIFFERENT CAUSES AND BIRTHS DURING THE

1	2		3	12	13	1	1 4
-	ana-feti i		3		.ses.	-	
No.	B-Towns.		Population according Census of 1911.	All other causes.	Total deaths from all causes	Cholera.	Small-pox.
1	2	5	3	20	21	22	23
	MONTGOMERY DISTRIC	CT—					
131 132 133	Montgomery Kamalia Pakpattan		8,129 8,237 7,912	22 61 27	161 239 147	0.13	0.25 0.85 0.63
	LYALLPUR DISTRICT-co	ONCLD,					
184 186	Lyallpur Gojra		19,578 5,417	65 20	333 99	:::	0·26 0·74
	JHANG DISTRICT-cond	CLD.					
186 187	Jhang Maghiana Chiniot		25,914 14,085	309 253	839 508		0.58
	MULTAN DISTRICT-co	NCLD.					
138 139 140 141	Multan Shujabad Jahanian Mian Channu		85,747 6,334 Not available Not available	602 39 9 2	3,545 214 32 41	0.06	0.86
	MUZAFFARGARH DIS- TRICT—CONCLD.						
142 143 144 145 146 147	Musaffargarh Kbangarh Alipur I eiah Karcr Kot Adu		4,119 3,349 3,312 8,173 3,503 4,175	14 13 48 46 44 12	180 97 155 210 127 183		1.70 0.30 0.30 0.30 0.29 1.92
	DERA GHAZI KHAN DIST	RICT					
148 149 150 151 152	Dera Ghazi Khan Jampur Dajal Rajanpur Kot Mithan	=======================================	16,853 6,517 6,893 3,704 2,589	161 55 97 6 11	206 208 128 96		0·59 0·77 0·77
	Total		1,808,159	13,384	59,059	0.04	0.30
77	TOTAL FOR THE PROVINCE		19,337,146	96,+02	552,078	0.01	0.48

No. VI-concluded.

REGISTERED IN THE TOWNS OF THE PUNJAB YEAR 1920—CONCLUDED.

			1.	1				15
		RATIO	P DEATHS	PER 1,000	OF POPULA	TION		
		and base	Seases.		ei .	From al		
Plague.	Fevers.	Dysentery diarrhosa	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	No.
24	25	26	27	28	29	30	31	32
	12·79 19·18 14·16	. C-25 	3·69 1·46 0·25	0·12 (·12 	2·71 7·41 3·41	19·81 29·02 18·58	27·73 47·52 41·92	131 132 138
	868 6.01	0.46 1.29	4:24 5:17	0·05 0·37	3·32 3·69	17·01 18·28	21·76 15·10	154 138
0.04	14:43 12:57	2·39 2·06	278 2.06	0·23 0·21	11·92 17·96	32·38 36·07	42:15 44:46	136
3·69 0·32	15·57 18·16 	2·26 3·32 	11·71 3·47 	0·17 0·47 	7·02 6·16	41·34 33·79 	46·50 49·89 	138 139 140 141
4·13	15·27 19·11 25·06 17·37 17·41 36·89	0 97 1:49 2:32 1:10 1:71	5·58 3·28 3·02 0·86 4·00 1·92	0·49 0·90 0·60 0 37 0·29 0·24	3·4·) 3 88 14·49 5·62 12·56 2·87	81·56 28·96 46·80 25·69 36·25 43·83	37 82 55 65 48:19 38:91 58:98 Not available.	142 148 144 145 146 147
0.12	12:40 18:11 13:06 3:05 29:74	1·72 1·53 0·87	1 78 2·61 2·03 0·54 1·16	0 24 0·15 0·15 0·39	9:55 8:44 14:07 -1:62 4:25	26:40 - 31:61 30:18 38:21 37:09	33-93 41-10 49-58 55-56 52-22	148 149 150 151 152
0.60	16.12	1.41	6.43	0.43	7.42	32.75	48.35	
0.32	19:21	0.47	2.73	0.34	5.00	28 55	42.95	

APPENDIX TO ANNUAL BIRTHS AND DEATHS REGISTERED IN THE

		All and the second	an a physical						Not be to be	
1 No.	CAN	NTONMENT.		Population according to the Census of 1911.	Cholera.	ca Small-pox.	Plague.	- Fevers.	σ Dysentery and Diarrhoea.	co Respiratory Diseases.
- 1										
2	Ambala			54,223		1	.,.	754	24	180
3	Kasauli			3,194				39	14	18
4	Dagshai			2,032				13	1	12
5	Subathu			1,847				28		
6	Jategh			471				11		
7	Dharmsala			3,700				19		
8	Jullundur			13,934				1.3	5	18
9	Ferozepore			26,158	1			262	7	35
10	Lahore	111111		18,416	1	1		184	3	29
11	Amritsar			1,417				20	1	28
12	Dalhousie			644				11		. 1
13	Bakleh			3,566				21		
14	rialkot			16,274				75	4	1
15	Jbelum			7,380				4		
16	Rawalpindi			39,841		3	4	156	4	57
17	Campbellpur			3,357				22		
18	Murree			844		•••		1		die l
19	Attock Multan			630					8	
19	Multan			13,496			12	80	1	10
	1000	Total		210,954	2	5	16	1,813	64	884

FORM No. VI-B.

CANTONMENTS OF THE PUNJAB DURING THE YEAR 1920.

-		Injuni	ES.				-od a	g the	-ndoc	
Sui	cide.	coidents.	killed by			rom all causes.	s per 1,000 of	gistered during	Ratio of births per 1,000 of population.	
Males.	Females.	Wounds and accidents.	Snake-bite or kill e d wild beasts.	Total	All other causes.	Total deaths from all causes.	Ratio of deaths per 1,000 of pulation.	Total births registered during the year.	Ratio of births lation.	No.
10	11	12	13	14	15	16	17	18	19	20
					-	700				
					331	1,240	23	1,370	25	1
		1	12	13	29	108	34	82	26	2
		3			46	72	35	34	17	3
		1		1	. 7	36	19	44	24	4
					16	27	57	- 7	15	5
					11	30	8	102	28	6
		2		2	61	199	14	201	14	7
1		5	1	7	213	525	20	806	31	8
		1		1	136	355	19	307	17	9
		2		2	10	61	43	36	25	10
1		2		3	14	29	45	15	23	11
					11	32	9	65	18	12
	1	1		2	74	156	10	258	16	13
					3	. 7	1	12	2	14
	1	3	1	5	79	308	8	399	10	15
					7	29	9	52	15	16
		2		2	13	15	44	14	41	17
1								1	2	18
	-				35	138	10	92	7	19
2	2	20	14	38	1,095	3,367	16	3,897	18	

ANNUAL FORM
DEATHS REGISTERED FROM CHOLERA IN THE DISTRICTS

1	2		3		-4	
		5 4	CIRCLES OF		VILL	AGES,
No.	DISTRICTS.		Number in each district.	N umberfrom which death's from cholera were reported.	Number in each district.	Number from which deaths from cholers were reported.
1	2		3	4	5	6
	AMBALA DIVISI	on.				
1 2 3 4 5 6	Hissar		27 20 24 25 19 3	1 1 2 2 2 1	963 730 1,367 1,382 1,715 23	
7 8 9 10 11	Kangra Hoshiarpur Jullundur Ludhiana Ferozepore		17 23 17 14 24	2 3 2 	712 2,108 1,215 858 1,497	
12 13 14 15 16 17	Lahore		30 15 22 30 20 16	2 2 2 1 3	1,100 1,039 2,238 2,220 1,223 740	
18 19 20 21 22 23	RAWALPINDI DIVI Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali MULTAN DIVISI		17 23 14 14 13 15	3 1 1 1	1,326 1,054 893 1,177 628 396	
24 25 26 27 28 29	Montgomery Lyallpur Jhang Multan Muzaffargarh Dera Gtazi Khan		23 21 13 22 24 28	3 1 1 	2,438 1,277 935 1,351 859 707	
	Total for the Pro	vince	568	35	34,196	1

No. VII.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1920.

-			1		Б	-			
-				Мо	NTHS.				
	January.	February.	March.	April.	May.	June,	July.	August.	
L	7	8	9	10	11	12	13	14	
-						, '	13		8
-						2			
-							1		7
1						:::		***	1
-						-	1		19
1									12
1							4		1
						"."	/		
-					li lines	as a star star	Att dieses		
1								ASSESSED ASSESSED.	26
١								THE REAL PROPERTY.	8 4 1
1				,					1 2
1					1				
-						-90,97	o intak	247	2
1									
1									1
1									-
1					1				
-						o-LEMES	THE KLAS	38	
1		***							
1							1		
-						-			
1					- :::				
1				1	2	2	20		77

ANNUAL FORM DEATHS REGISTERED FROM CHOLERA DURING EACH MONTH

1		2	\ ·				5	
				The l	75-4-3-2	Months-	concluded.	
		DISTRIC	TE.					116
					aber	;	ber.	ber.
No.					September.	Oetober.	November.	December.
1		2			15	16	17	18
	AMBA	LA DIVIS	ION-conc	LD.				
1	Hissar							
,	Rohtak							
3	Gurgaon						1	
4	Karnal							
5	Ambala Simla				7			
0	Simia							***
	JULLUN	DUR DIVI	SION-con	CLD.				
7	Kangra							
8	Hosbiarpur				6			
9	Jullundur				. 3	•••		
10	Ludhiana							
11	Ferozepore							
	LAHO	RE DIVIS	ION-conc	LD.				
12	Labore				3			
13	Amritsar							
14	Gurdaspur		***		1			
1.5	Sialkot	***						
16	Gujranwala							***
17	Sheikhupura	***	***	***				***
	RAWALPI	NDI DIVI	ISION-con	NCLD.				
18	Gujrat	-	The state of		1	1	The second	
19	Shabpur				The carried Williams	The second second		
20	Jhelum							
21	Rawalpindi				9			
22	Attock				1			•••
28	Mianwali							
	MULTA	AN DIVIS	ION-conci	D.				
24	Montgomery				8		THE REAL PROPERTY.	100
25	Lyallpur						-"	***
26	Jhang						"	****
27	Multan				5		100	
28	Muzaffargarl	h	25					
29	Dera Ghazi I	Khan						***
10 00				-				-
		Total for t	he Province		35	1		

No. VII—CONCLUDED.

IN THE DISTRICTS OF THE PUNJAB

OF THE YEAR 1920—CONCLUDED.

	6			7		8	9_
	Total.	in the same	RATIO OF	DEATHS PER 1 LATION.	,000 of Popu-	00 for	
Males,	Females.	Total	Males.	Females.	Total.	Mean ratio per 1,000 for previous five years.	No.
19	20	21	23		24	25	26
12 1 4 5 1	9 1 3 3 3	21 2 7 8 1	0·03 0·002 0·01 0·01 0·05	0.02 0.002 0.01 0.01	0·03 0·002 0·01 0·01 0·03	0.21 0.19 0.21 0.31 0.12 0.02	1 2 3 4 5
4 8 5 	9 2 3	13 10 8 	0.01 0.02 0.01	0·02 0·004 0·01	0.01 0.01 0.01	0.22 0.04 0.07 0.26 0.72	7 8 9 10 11
16 6 5 2	13 2 1 2	29 8 5 1 4	0.01 0.01 0.01	0.03 0.01 0.002 0.01	0.03 0.01 0.01 0.001 0.01	0.69 0.33 0.07 0.12 0.21 0.50	12 13 14 15 16 17
2 1 1	2 1	4 1 1	0·004 0·003 0·01	0.01	0·01 0·001 0·002 0·002	0.45 6.14 0.08 0.32 0.78 0.20	18 19 20 21 22 23
5 1 1	3 4 	8 1 5	0.003 0.003	0.01	0.02 0.001 0.01	0.23 0.43 0.06 0.06 0.01 0.03	24 25 26 27 28 29
80	58	138	0.01	0:01	0.01	0.28	

ANNUAL FORM
DEATHS REGISTERED FROM SMALL-POX IN THE DISTRICTS

1		2			3		1	4
		The State	1999	CIRCLE	S OF R	EGISTRATION.	VIL	LAGES.
No.		DISTRICTS.				Number from which deaths from small-pox were reported.	Number in e a c h district.	N u m b e r from which deaths from small-pox were reported.
1		2		3		4	5	6
	AMBAI	A DIVISION.					9	411
1 2 3 4 5 6	Hissar Rohtak Gurgaon Karnal Ambala Simla				27 20 24 25 19 3	15 3 6 10 14 1	963 730 1,367 1,882 1,715 23	46 4 6 13 107
	JULLUN	DUR DIVISIO	N.					
7 8 9 10 11	Kangra Hozhiarpur Jullundur Ludhiana Ferozepore	 EE DIVISION.			17 28 17 14 24	6 18 10 11 24	712 2,108 1 215 858 1,497	171 48 54 93
12 13 14 15 16 17	Lahore Amritsar Gurdaspur Sialkot Gujranwala Sheikhupura				30 15 22 30 20 16	28 14 17 26 8 10	1,100 1,039 2,238 2,220 1,223 740	113- 75 61 116- 14 15-
		NDI DIVISIO						
18 19 20 21 22 28	Gujrat Shahpur Jhelum Rawalpindi Atteck Mianwali	n division.			17 23 14 14 13 15	17 23 14 12 12 12 14	1,826 1,054 898 1,177 628 396	378 237 151 44 49 90
24 25 26 -27 28 29	Montgomery Lyallpur Jhang Multan Muzaffargarh Dera Ghazi Kl	1969			23 21 13 22 24 23	10 21 13 20 23 15	2,488 1,277 955 1,351 859 707	101 388 35 48 45 20
	Total for	the Province			568	415	34,196	2,526

No. VIII.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1920.

				5					
				Mon	rns.				
January.	February.	March.	April.	May.	June.	July.	August.	September.	October.
7_	8	9	10	11	12	13	14	15	16
6 3 3 22 1	8 3 18	15 1 45	7 5 2 4 14	45 2 1 9 24	27 2 7 21	11 1 2 5	2 3 15	 5 	7
112 6 8 52	3 81 14 9 58	73 3 13 20	1 72 12 22 9	3 77 13 25	1 51 13 27	1 24 8 15	1 6 4 6	2	::: 1
51 24 ·20 54 3 4	28 21 18 31 7	48 21 13 33 	48 23 8 32 7 2	54 26 12 54 2	58 35 9 29 2 2	29 24 9 23 	15 15 1 6 	12 11 1 	4 5 2
56 108 171 21 62 2	63 97 112 6 44 5	103 130 67 19 25 19	103 155 42 4 10 36	94 235 63 6 25 23	129 183 44 17 10 32	82 191 28 10 6 39	26 48 6 6 9	13 16 2 8 2 6	3 32 2 4
367 221 27 12 4 5	326 135 3b 17 4 10	316 147 40 24 9 6	264 133 44 23 10 27	305 214 53 9 22 30	205 116 37 26 20 14	65 70 36 38 23 16	42 35 12 26 8 6	20 11 6 1 3	9 17 2 4 3 2
1,425	1,153	1,193	1,119	1,426	1,:17	756	311	124	125

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ANNUAL FORM DEATHS REGISTERED FROM SMALL-POX DURING EACH MONTH OF

1	2				5		6	
				Months-	-concld.		TOTAL.	4
No.	DISTBI	DISTBICTS.				Yales.	Females.	Total.
1	2			17	18	19	20	21
	AMBALA DIVIS	ION—conc	LD.					
1 2 3 4 5 6	Hissar Robtak Gurgaon Karnal Ambala Simla			2 4		64 5 10 18 104	55 3 9 12 76	119 8 19 30 180
7 8 9 10 11	JULLUNDUR CONCL Kaugra Hoshiarpur Jullundur Ludbiana Ferozepore			2 6	4 7 4	9 - 268 40 64 85	2 232 43 74 54	11' 500 83 138 139
12 13 14 15 16 17	Lahore Amritsar Gardaspur Sialkot ' ujranwala Sheikhupura	:::	LD.	5 5 8	22 5 5 1 7	185 106 54 154 15	189 109 37 123 7 5	374 215 91 277 22 17
18 19 20 21 22 23	RAWALPINDI conc: Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali		_ ::::::	27 27 2 3 22 27	67 67 26 2 22 30	434 733 293 52 136 128	332 556 272 50 125 111	766 1,289 565 102 261 239
24 25 26 27 28 29	MULTAN DIVIS Montgomery Lyallpur Jharg Multan Muzaffargarh Dera Ghazi Khan	ION · cond	 	23 24 7 3 12	33 41 6 9 2	1,117 632 162 106 55 76	858 532 143 86 65 41	1,975 1,164 305 192 120 117
198	Total for the Pr			209	361	5,118	4,201	9,319

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No. VIII—concluded.
IN THE DISTRICTS OF THE PUNJAB
THE YEAR 1920 - CONCLUDED.

7					8		9	10
NUMBER OF P		RATIO	of DE.	ATHS P	ER 1,000 OF	POPULATION.	,000 for ears.	
Under one year.	Over one year and under ten years.	Males.		Sunkley .	Females.	Total.	Mean ratio per 1,000 for previous five years.	No.
22	23	2	4		25	26	27	28
					0.15	0.15		
30 3 4 11 47	74 5 13 17 92		0·15 0·01 0·03 0·04 0·29 0·05		0.15 0.01 0.03 0.03 0.28	0·15 0·01 0·03 0·04 0·28 0·03	0.36 0.10 0.1 0.19 0.14 0.10	1 2 3 4 5 6
1 98 16 34 41	1 268 40 71 73		0·02 0·53 0·09 0·22 0·16		0.56 0.12 0.33 0.18	0·01 0·54 0·11 0·27 0·15	0.04 0.46 0.17 0.39 0.60	10
101 47 23 68 14 11	243 120 53 174 8 5	CT THE WAY IN THE TAIL THE THE TAIL THE TAIL THE TAIL THE TAIL THE TAIL THE THE THE THE THE T	0·33 0·21 0·12 0·31 0·04 0·05	0.05	0·45 0·28 0·10 0·80 0·03 0·03	0.38 0.24 0.11 0.30 0.03 0.03	0.64 0.38 0.18 0.18 0.15 0.11	1:
251 279 164 29 85 67	372 727 397 30 137 123		1:08 1:94 1:12 0:19 6:50 0:71		0.96 1.79 1.12 0.21 0.51 0.69	1.63 1.87 1.12 0.20 0.51 0.70	0·13 0·15 0·36 0·09 0·12 0·06	11 12 22 22 23 23
670 331 88 42 20 18	824 634 136 100 51 52	181	4 05 1·25 0·58 0·24 0·18 0·28	200	3·76 1·38 0·60 0·23 0·25 0·18	3·92 1·31 0·39 0·24 0·21 0·23	0.67 0.40 0.10 0.13 0.09 0.03	2 2 2 2 2 2 2 2
2,583	4,750	110	0.48	-	0 48	0.48	0.25	

ANNUAL FORM
DEATHS REGISTERED FROM FEVERS IN THE
OF THE

1		2			3	. 4		
		e dans		CIRCLES OF E	EGISTRATION.	VILLAGES.		
No.	Dist	RICTS.		Number in each district.	Number from which deaths from fever were reported.	Number in each district,	Number from which deaths from fever were reported.	
1		2		3	4	5	6	
	AMBALA	DIVISIO	N.	158				
1	Hissar	***		27	27	963	963	
2	Robtak			20	20	730	780	
8	Gurgaon			24	24	1,367	1,337	
4 1	Karnal		***	25	25	1,382	1,382	
5	Ambala			19		1,715	1,715	
6	Simla .		***	3	3	23	23	
	JULLUNDU	R DĪVIS	ION.					
7	Kangra			17	17	1 710	710	
8	Hoshiarpur	***		23	26	712 2,108	1,995	
9	Jullundur	***		1 17		1,215	947	
10	Ludhiana	***		14	14	858	791	
11	Ferozepore			21	24	1,497	1,429	
	rerozepore			-		1,401	1,300	
	LAHORE	DIVISI	ON.					
. 12	Lahore	+		30	80	1,100	1,029	
13	Amrit-ar			11	15	1,039	1,032	
14	Gurdaspur			. 25		2,238	2,238	
15	Sialkot			30		2,120	2,105	
16	Gujranwala			0,		1,223	1,223	
17	Sheikhupura			1			740	
31	RAWALPIN			1	100	1		
		DIV.	LOION.	1 10 10 10	0 1			
18	Gujrat		•••			1,326	1,235	
19	Shahpir					1,054	1,054	
20	Jhelum	1		1			898	
21	Rawalpindi Attock		***				987 628	
22 23	Mianwali	***		1			395	
28	Mishwan			1	5 15	396	999	
-	MULTAN	DIVISI	ON.			1		
24	Montgomery						1,102	
25	Lvallpur		**			1,277	1,256	
26	Jhang Multan		•••				721	
27 28	Muzaffargarh						1,351	
29	Dera Ghazi H						559	
29	Dera Guazi E	THAIR.		. 2	3 23	707	618	
	Total for	the Provi	nces	. 56	8 568	34,196	31,234	

No. IX.
DISTRICTS OF THE PUNJAB DURING EACH MONTH
YEAR 1920.

THE REAL PROPERTY.			5		
			MONTHS.		
January.	February.	March.	April.	May.	June.
7	8	9	10		
876	994	1,152	1,457	1,961	1,893
893	770	908	1,188	1,783	1,937
1,265	1,026	1,103	998	1,242	1,173
1,550	1,377	1,708	2,601	3,843	4 481
1,260	1,020	1,094	1,299	1,934	2,379
1,44	168	135	102	147	80
1,595	1,485	1.576	1,677	2,591	2,417
1,494	1,317	1,588	1,976	2,368	2,326
1,109	1,017	1,000	1,185	1,684	1,628
571	446	438	577	780	920
1,049	1,090	1,325	1,140	1,396	1,392
1,283	1,069	1,130	1,158	2,233	1,880
1,292	1,213	1,234	1,078	2,134	2,015
936	825	886	945	1,695	1,559
1,311	1,076	1,178	1,161	1 965	1,644
1,278	1,048	1,052	684	1,110	1,179
715	543	484	413	669	746
1,586	1,179	1,201	990	1,114	1,072
890	847	883	985	960	1,064
950	729	744	684	743	709
864	825	818	661	790	621
729	661	734	597	670	623
607	559	587	608	700	717
1,049	824	392	737	1,155	980
1,059	941	1,018	1,200	1,948	1,572
741	493	643	538	672	672
1,594	1,345	1,361	1,130	1,536	1,211
1,539	1,088	982	933	1,754	1,265
867	779	642	808	773	760
31,076	26,698	28,896	29,460	42,350	40,765

DEATHS REGISTERED FROM FEVERS IN THE MONTH OF THE

1	2		The second second		5			
,		1			Months	-concl4.		
	Districts.					188	-	
No.			July.	August.	September.	October.	November	December.
1	2		13	14	15	16	17	18
-	AMBALA DIVISION							
	CONCLD.			BILL STEE			118	-
1	Hissar		1,537	1,063	1,092	811	1,0 5	1,138
2	Rohtak		1,277	1,261	1,320	1,128	1,223	1,424
8	Gurgaon		753	851	1,510	1,118	1,278 2,174	1,541 2,293
5	Ambola	***	2,519 1,145	2,087 959	3,501	2,594 1,859	1,074	1,090
6	Simla		65	84	72	65	63	69
	JULLUNDUR DAVISIO					7		
-	CONCLD.		1 507	1 -10	7.00	1 000	1,456	1,431
7 8	Kangra Hoshiarpur		1,587 1,476	1,516 1,310	1,907 1,777	1,828 1,734	1 584	1,641
9	Jullundur		1,228	1,07	1,257	1,149	1,231	1,269
10	Ludhiana	-	700	603	721	640	655	656
11	Ferezepore		1,203	869	945	911	1,080	1,432
	LAHORE DIVISION	-				-		
12	Lahore		1,531	1,108	1,180	1,037	1,354	1,597
13	Amritsar		1,701	1,268	1,469	1,450	1,497	1,776
14	Gurdaspur		1,370	1,062	1,348	1,254	1,361	1 481
15	Sialkot		1,282	1,121	1,154	1,092	1,095	1,356
16	Gujranwala	***	1,055	788	677	607	799 437	1,070
17	Sheikhupura	***	676	467	376	400	301	000
-	RAWALPINDI DIVIS	ON-					. 7	
18	Gujrat	***	916	811	781	868	984	1,147
19	Shahpur		835	607	505	518	661	869
20	Jhelum		624	474	495	545	634	788
21	Rawalpindi		621	489	461	555	707	942
22 23	Attock Mianwali	***	699 473	494	526 500	567	£90 429	880 561
20	MULTAN DIVISION		370	496	500	470	320	001
	CONOLD.	The same	- 1	SIE		12 11 12	10000	1
24	Montgomery		756	F26	465	597	536	1,008
25	Lyalipur		1,334	914	887	921	981	1,237
26	Jhang		651	477	468	492	567	689
27	Multan		1,078	693	767	923	982	1,263
28	Muzaffargarh Dera Ghazi Khan		938 560	642 394	646 392	776 522	1,615	1,233 823
20	Dera Guazi Kuan			994	- 002	022		020
	Total for the Province		30,620	24,536	23,789	26,931	28,452	33,359

No. IX—concluded.

DISTRICTS OF THE PUNJAB DURING EACH
YEAR 1920—concluded.

1	6		10	7		8	9
	TOTAL.			DBATHS PE POPULATION		1,000 for years.	
Males.	Females.	Total,	Males.	Femsles.	Total.	Mean ratio per 1 previous five y	No.
19	20	21	22	23	24	25	26
7,890	7,089	14,979	17:99	19·35	18·61	\$2.90	1
8,154	6,953	15,107	21:16	21·11	21·13	\$4.92	2
7,483	6,369	13,852	19:23	18·73	19·00	\$42.81	3
16,803	18,925	30,728	88:46	38·46	38·42	\$2.20	4
8,813	7,440	16,253	24:65	27·05	25·69	\$26.88	5
753	441	1,194	34:20	34·04	34·14	\$14.42	6
10,911	10,155	21,066	27·39	27·87	27·47	23·87	7
10,877	9,614	20,491	21·69	23·05	22·31	24·83°	8
7,717	7,047	14,764	17·51	20·29	18·74	23·69	9
4,025	3,682	7,707	13·71	16·46	14·91	24·46	10
7,407	6,325	13,732	14·22	15·33	14·71	28·15	11
8,872	7,688	16,560	15.83	18:33	16:90	25·26	12
9,754	8,358	18,112	19.68	21:78	20:60	29·29	18
8,091	6,631	14,722	17.36	18:09	17:68	25·71	14
8,343	7,092	15,435	16.56	17:24	16:87	25·11	15
6,262	. 5,085	11,347	18.55	18:97	18:74	39·27	16
8,718	2,848	6,561	16.21	16:25	16:23	33·23	17
6,881	5,768	12,649	17·18	16·69	16.96	27·01	18
5,145	4,429	9,574	13·65	14·26	13.90	26·39	19
4,259	3,860	8,119	16·24	15·95	16.10	23·99	20
4,486	3,868	8,354	15·76	16·12	16.46	24·09	21
4,168	3,702	7,870	15·41	15·12	15.27	27·70	22
3,510	3,197	6,707	19·51	19·80	19.65	35·20	23
5,441	- 4,434	9,875	19·71	19.45	19·59	34.96	24
7,398	6,644	14,042	14·69	17.25	15·80	24.87	25
3,723	3,320	7,043	18·43	13.93	13·66	27.34	26
7,412	6,471	13,883	17·02	17.68	17·82	34.34	27
7,038	5,753	12,791	22·82	22.03	22·46	36.50	28
4,432	3,483	7,915	16·27	15.31	15·83	34.02	29
199,761	171,671	371,432	18-83	19-67	19.21	29-20	

ANNUAL FORM.
DEATHS REGISTERED FROM DYSENTERY AND DIARRHŒA.
OF THE

-	1	7	2			3		
					CIRCLES OF R	EGISTRATION.	VILL	AGES.
	No.	DIST	RICTS.		Number in each district.	Number from which deaths from dysentery and diarrhosa were reported.	Number in each district.	Number from which deaths from dysentery and diarrhoea were reported.
	1		2		3	4	5	6
		AMBALA	DIVISIO	N.				
	1 2 3 4 5 6	Hissar Rohtak Gur: aon Karnal Ambala Simla			27 20 24 25 19 3	15 20 23 25 18 3	963 730 1,367 1,382 1,715 23	119 74 136 137 503 3
	7	JULLUNDU Kangra	R DIVIS	ION.	17	17	712	225
	7 8 9 10 11	Hoshiarpur Jullundur Ludhiana Ferozepore			23 17 14 24	11 17 13 24	2,108 1,215 858 1,497	14 99 65 38
	12 13 14 15 16 17	LAHORE Lahore Amritsar Gurdaspur Sialkot Gujranwala Sheikhupura	DIVISIO	N	30 15 22 30 20 16	29 15 22 29 17 10	1,100 1,039 2,238 2,220 1,223 740	89 143 517 209 56 17
		RAWALPIN						
	18 19 20 21 22 23	Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali MULTAN	DIVISIO	 ON.	23 14 14	17 22 14 13 11 15	1,326 1,054 898 1,177 628 396	72 93 120 341 20 60
	24 25 26 27 28 29	Montgomery Lyallpur Jhang Multan Muzaffargarh Dera Ghazi K	 han		21 13 22 24	12 20 13 16 15 16	2,438 1,277 955 1,351 859 707	18 83 98 37 16 31
		· Total for	the Provinc	e	568	492	34,196	3,433

No. X.
IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH
YEAR 1920.

	1020							•					_
					,		5				1 - 2		
1	- arr	3000	1300	meas			Mont	нв.					
*	.5.		ury.										
	January.		February.			March.			April.		Мау.	June.	
1	7		8			9		300	10		11	12	_
	18 14 13 18 33 4	AND STREET		6 12 10 8 15 3		10 to	21 13 18 5 14			30 10 11 31 56	21 16 20 44 88	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	31 23 29 30 66 9
The state of the s	20 1 13 22 9			9 2 10 8 15		12	17 20 16 12			20 1 34 14 21	121 3 37 26 37	11 1 1 1	19 1 26 19 27
The state of the s	52 20 19 27 4 1			27 20 15 32 5 7			57 10 15 33 4			76 13 44 70 5 4	67 35 199 195 22 4	12 12 12	67 43 21 21 12 4
The state of the s	5 19 8 195 2 7			12 15 10 219		4	19 13 16 283 3 12			52 17 14 18 2 20	33 31 36 23 19 33		31 30 40 31 27 27
	3 27 5 21 8 9			1 16 9 9 2 3		44	8 12 17 17 11 1 618			2 42 15 21 5 7	2 51 30 25 10 13	1,05	5 26 26 25 3 9

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DEATHS REGISTERED FROM DYSENTERY AND DIARRHŒA OF THE

1	2			,	5		
				Months	-concld.		
No.	DISTRICTS.	July.	Angust.	September.	October.	November.	December.
1 0	2	13	14	15	16	17	18
1 2 3 4 5	AMBALA DIVISION— CONCLD. Hissar Rohtak Gurgaon Karnal Ambala Simla	28 27 25 18 44 15	24 15 25 25 53 11	33 11 23 41 80 12	18 19 24 26 78 3	14 12 26 35 39 3	18 16 29 19 86 8
7 8 9 10 11	JULLUNUR DIVISION— CONCLD. Kangra Hoshiarpur Jullundur Ludhiana Ferozepere	73 2 24 8 62	55 15 18 22	89 4 34 17 10	94 17 8 13	71 2 18 13 13	57 11 15 27
12 13 14 15 16 17	LAHORE DIVISION— CONCLD. Lahore Amritsar Gurdaspur Sialkot Gujranwala Sheikhupura	43 35 64 79 7	36 33 60 60 17 3	39 38 68 57 13	42 35 72 68 5	36 26 68 64 6 3	28 24 44 57 4 5
18 19 20 21 22 23	RAWALPIND1 DIVISION— CONCLD. Gujrat	19 29 82 74 20 14	14 19 7 130 4 8	15 14 13 135 6 22	20 17 7 116 8 22	11 16 12 145 4 12	10 16 7 147 1 8
25 25 26 27 28 29	Montgomery Lyallpur Jhang Multan Muzaffargarh Dera Ghazi Khan	16 22 29 1 7	1 5 13 19 2 3	1 4 28 37 1 2	7 23 23 1 1	5 27 39 5 17	5 38 13 2 9
100,0	Total for the province	821	692	848	780	745	649

No. X—concluded.

IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH
YEAR 1920—concluded.

	6			7		8	9
	TOTAL.		RATIO	OF DEATHS PER P POPULATION.	1,000	00 for	
Males,	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 for previous five years.	No.
19	20	21	22	23	24	25	26
148 123 137 163 345 52	114 65 116 137 257 11	262 188 253 300 602 63	0·34 0·32 0·35 0·37 0·97 2·36	0·31 0·20 0·34 0·88 0·93 0·85	0.33 0.76 0.35 0.38 0.95 1.80	0·59 0·52 0·91 0·41 0·80 1·76	3 4 6
384 15 151 109 151	361 1 108 70 117	745 16 259 179 268	0.96 0.03 0.34 0.37 0.21	0-98 0-002 0-31 0-31 0-28	0.97 0.02 0.33 0.35 0.29	1·21 0·04 0·47 0·46 0·50	10
322 192 441 473 59 26	248 140 348 390 45 10	570 332 789 863 104 36	0.57 0.39 0.95 0.94 0.17 0.11	0·59 0·36 0·95 0·95 0·95 0·17 0·05	0.58 0.38 0.95 0.94 0.17 0.08	0.63 0.95 1.32 1.12 0.32 0.18	12 14 16 16 17
145 140 114 808 44 125	96 96 88 659 52 71	241 231 202 1,466 96 196	0·36 0·37 0·43 3 02 0·16 0·69	0.28 0.39 0.36 2.74 0.21 0.44	0.82 0.34 0.40 2.89 0.19 0.57	0·47 0 41 0 41 3·65 0·67 0·59	19 19 20 21 22 23
20 121 147 168 31 54	9 95 106 110 20 38	29 216 253 278 51 92	0.07 0.24 0.53 0.37 0.10 0.20	0·04 0·25 0·44 0·30 0·03 0·17	0·06 0·24 0·49 0·35 0·09 0·18	0·11 0·39 0·62 0·33 0·15 0·45	24 25 26 27 28 29
5,208	3,977	9,185	0.49	0.46	0.47	0.65	

ANNUAL FORM
DEATHS REGISTERED FROM RESPIRATORY DISEASES
OF THE

1		2		3	3		4	
		1000	Nie	CIRCLES OF R	EGISTRATION.	VILLAGES.		
				ach	from deaths respir- liseases eported.	ach	from laths respira- diseases recorted.	
	Dist	RICTS.		Number in each district.		Number in . ach district,	umber from which deaths from respira- tory diseases were reported	
				umber in	Number which from atory were r	umber ir district,	Number which from tory	
No.				Nur	Naw w fr	Na	Nu	
1		2		3	4	5	6	
	AMBALA	DIVISION	٧.			-		
1						000	27	
2	Hissar Rohtak		•••	27	23	963 730	57	
2 3	Gurgaon			20 24	20 24	1,367	53'	
4	Karnal	***	***	25	25	1,382	41	
5	Ambala		***	19	19	1,715	1,34	
6	Fimla			3	3	23	2	
	JULLUNDU	R DIVISI	ON.					
7 8 9	Kangra			17	17	712	43	
8	Hoshiarpur			23	93	2,108	84	
	Jullundur			17	17	1,215	37	
10	Ludhiana			14	14	858	37- 23	
11	Ferozepore	•••		24	24	1,497	23	
	LAHORE	DIVISION	N.	The same				
12	Lahore			30	30	1,100	33	
18	Amritsar			15	15	1,039	58	
14	Gurdaspur	****		23	22	2,238	2,09	
15	Sialkot		•	30	30	2,220	1,11	
16	Gujranwala			20	20	1,223	19	
17	Sheikhupura			16	15	740	8	
	RAWALPINI	DI DIVIS	10N.		92			
18	Gujrat			17	17	1,326	50	
19	Shahpur			23	23	1,054	31	
20	Jhelum			14	14	898	39	
21	Rawalpindi	****		1 14	14	1,177	68	
22	Attock			13	13	628	15 12	
23	Mianwali			15	14	398	12	
	MULTAN	DIVISIO	N.					
24	Montgomery			23	23	2,438	32	
25 26	Lyallpur			21	21	1,277	28	
27	Jhang			13	13	955	17	
28	Multan		•••	22	21	1,351	4	
29	Muzaffargarh Dera Ghazi K	han		24 23	23 21	859 707	6	
	The second second		***					
1703	Total for the	Province		568	558	34,196	12,94	

No. XI IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH YEAR 1920.

		5			
		Monte	is.		
January.	co February.	6 March.	01 April.	11 May.	Jane 12
95 75 127 95 817 40	105 106 114 100 363 44	95 116 121 108 630 37	74 118 95 94 854 43	99 122 89 91 1,459 57	95 96 103 80 1,803 48
49s 278 187 95 131	393 371 198 120 171	433 347 217 95 120	428 254 185 77 105	545 223 158 108 123	573 199 163 104 75
265 253 286 292 71 22	196 221 258 365 66 15	210 222 710 390 51 14	191 225 580 301 24 10	270 324 886 358 33 10	172 341 720 329 36
207 118 131 209 70 24	159 140 144 208 57 30	111 115 83 193 57 35	106 88 85 271 53 21	132 72 83 203 42 36	123 75 74 181 57 22
33 105 32 41 45 12	27 69 56 157 23 17	12 97 58 163 17 20	11 87 55 202 4 15	16 77 39 160 15 6	15 52 29 159 7 21
4,156	4,293	4,876	4,643	5,836	5,759

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ANNUAL FORM
DEATHS REGISTERED FROM RESPIRATORY DISEASES
OF THE

1	3			5			
			art	Months	- CONCLD		
	DISTRICTS.	٧.	ust.	September.	ber.	November.	December.
No.		Jaly.	August.	Sept	October.	Nov	Dec
1	2	13	14	15	16	17	18
1 2 3 4 5	AMBALA DIVISION— CONCLD. Hissar Rohtak Gurgaon Karnal Ambala	58 81 65 44 658	54 53 61 81 415	50 55 68 77 588	49 57 54 53 534	58 93 95 126 478	134 167 131 91 684
6 7 8	Simla JULLUNDUR DIVISION— CONCLD. Kangra Heshiarpur	307 141	28 250 131	364 148	345 151	369 180	444 276
9 10 11	Lationa Lationa Ferozepore LAHORE DIVISION—	153 64 80	119 69 72	140 58 60	156 74 95	159 111 76	145 147 181
12 18 14 15 16 17	Lahore	139 290 572 245 43 11	117 257 650 260 36 9	127 196 774 260 20 16	122 193 872 276 19 4	182 211 839 248 41 17	365 257 929 334 67 23
18 19 2) 21 22 23	RAWALPINDI DIVISION— CONCLD. Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali	95 57 67 114 56 26	104 37 72 81 64 24	94 25 52 58 26 22	103 56 68 81 40 \$1	117 111 71 96 39 21	186 126 133 218 53 34
24 25 26 27 28 29	M LTAN DIVISION— CONCLD. Montgomery Lyallpur Jhang Multan Muzaffargarh Dera Ghazi Khan	8 51 25 99 9	5 49 12 56 9	2 35 23 86 7 10	3 46 9 74 12 12	4 70 7 98 16 15	16 99 44 77 21 30
	Total for the Province	3,608	3,204	3,471	3,605	3,960	5,359

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No. IX—concluded.

IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH YEAR 1929 CONCLUDED.

	6			7		8	9
	TOTAL			DE THE PER		o for	
Meles.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 for previous five years.	No.
19	20	21	22	28	24	25	26
539 562 628 543 4,915 249	427 517 500 497 3,868 150	966 1,079 1,123 1,040 8,783 399	1·23 1·46 1·60 1·24 13·75 11·31	1·17 1·57 1·47 1 37 14·06 11·58	1·20 1·51 1·54 1·30 13·89 11·41	1·39 1·69 1·95 1·75 5·33 5·30	1 2 3 4 5
2,612 1,645 1,085 641 712	2,332 1,054 915 482 577	4,944 2,699 2,000 1,123 1,289	6·56 3 28 2·46 2·18 1·37	6 33 2·53 2·63 2·15 1·40	6·45 2·94 2·54 2·17 1·38	3 70 2·63 3·03 2·47 1·83	7 8 9 10 11
1,356 1,597 4,549 2,0 8 310 97	990 1,393 3,527 1,620 197 61	2,846 2,990 8,076 8,658 507 158	2:42 3:22 9:76 4:05 0:92 0:42	2.96 3.63 9.62 3.94 0.73 0.35	2:59 3:40 9:70 4:00 0:84 C:39	2:19 4:57 10:45 5:00 1:13 0:61	12 13 14 15 16 17
856 606 616 1,088 360 192	681 414 447 825 253 137	1,537 1,020 1,063 1,913 613 329	2·14 1·61 2·35 4·06 1·33 1·07	1.97 1.33 1.85 3.44 1.03 0.85	2·16 1·49 2·11 3·77 1·19 0·96	2 62 1·29 2·04 2·74 1·59 0·67	18 19 20 21 22 23
107 488 246 760 109 122	45 349 143 612 76 58	152 837 389 1,372 185 180	0·39 0·97 0·89 1·75 0·35 0·45	0·20 0·91 0·60 1·67 0·29 0·25	0.30 0.94 0.75 1.71 0.32 0.26	0·32 0 89 1·03 0·52 0·34 0·68	24 25 26 27 28 29
19,628	23,147	52,770	2.79	2.65	2.73	2.50	

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ANNUAL FORM DEATHS REGISTERED FROM PLAGUE IN THE OF THE YEAR

1		2	1/2			3		4	
	1		112117	1000		S OF REGIST-	VILLAGES.		
No.		DISTRICT	rs.		Number in each district.	Number from which deaths from plague were reported	Number in each district.	Number from which deaths from plague were renorted.	
1	-					- 4		6.	
	AM	BALA D	IVISION.						
-7	Hissar	72	4.00		2	7 2	963		
2 3	Rohtak				2		730	1	
3	Gurgaon			***	2		1,367		
4	Karnal				2	5 1	1,582	HEAL PROPERTY.	
5	Ambala				- 1		1,715	****	
6	Simla	***				3	23	***	
	JULL	UNDUR	DIVISION.						
7	Kangra				1	98	712		
7 8 9	Hoshiarpur				2		2,108		
9	Jullundur				1		1,215		
10 11	Ludhiana				1.	4 2	858		
11	Ferozepore				2	1 1	1,497		
	LA	HORE DI	VISION.						
12	Lahore			1313	0.0	3	1100	1	
13	Amritsar				30		1,100 1,039		
14	Gurdaspur	***			2		2,238		
15	Sialkot				30	8	2,220	1	
16	Gujranwala				2	13	1,223	5	
17	Sheikhupura				10		740	1	
-	RAWA	LPINDI	DIVISION.						
18	Gujrat			111.29	17	10	1,326	-2	
19	Shahpur			***	2		1,054	-	
20	Jhelum				14		898	1	
21	Rawalpindi				14	8	1,177	2	
22	Attock				18	7	628	2	
23	Mianwali				15	1	396		
-	MU	LTAN DI	VISION.			-			
24	Montgomery				23	6	2,438	3	
25	Lyallpur .				21	9	1,277	3	
26	Jhang				18	5	955		
27	Multan	***			22	5	1,351	10	
28 29	Muzaffargarh Dera Ghazi E				24		859 707		
20	Dera Guazi E	THE II			23		707	-	
	m.i.s	for the P			568	110	34,196	29.	

No. XII.
DISTRICTS OF THE PUNJAB DURING EACH MONTH
1920.

5												
-			М	ONTHS.								
January.	Rebruary.	March.	OI April.	11 May.	- 12	ring 13	August 14					
18	79 91 	68 124 13	28 199 22 	12 135 19 	13 38 		23					
		1	3	4								
24	11	 1 142 4	28 573 108	1 27 551 64	 32 226 59	 38	### ### ### ##########################					
 3 7 491	 8 2 454	 13 14 192 	9 91 29 32	91 177 43 68 2	50 6 71 62 160	13 14 5	2					
81	63	12 1.7 108 6	69 192 6 81 16 5		78 24 3 11 	5 1 2	1 26					
	7 18 24 3 7 491 9 81	7 8	7 8 9 18 79 68 124 13	18	MONTHS. Months M	MONTHS. A	MONTHS.					

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ANNUAL FORM DEATHS REGISTERED FROM PLAGUE IN THE OF THE

_		2			5								
							MONT	н8с	oneld.				
No.		Distric	TS.		September.		October.		November.		December.		
Z	-	-			v)		O		Z		D		
1		2			15		13		17		18		
	AMBALA	DIVISIO	ON-concl	D.	-							*	
1	Hissar					137				1			
2	Rohtak					6				17		1	
3	Gurgaon					1919		113					
4 5	Karual Ambala									F			
6	Simla			:::									
	JULLUNDU	R D:VI	slon—con	CLD.									
7	Kangra				***								
8.	Hoshiarpur Jullundur	***								13			
10	Ludhiana		***							1			
11	Ferozepore						***					1	
12	LAHORE Lahore												
14					***				***		***		
	Amritant		400										
13	Amritsar Gurdaspur					-		-					
13 14 15	Gurdaspur Sialkot					7		1					
13 14 15 16	Gurdaspur Sialkot G jranwala						:	-					
13 14 15	Gurdaspur Sialkot						: ::						
13 14 15 16 17	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND		-	934							: ' ()		
13 14 15 16 17	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat		-	934						7			
13 14 15 16 17 18 19	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat Shahpur	 or prairi	SION—con	 						7 1		-	
13 14 15 16 17 18 19 20	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat Shahpur Jhelum	 or divi	SION—con	CLD.		1		21		1			
13 14 15 16 17 18 19	Gurdaspur Sialkot G jranwala Sheikhupura EAWALPIND Gujrat Shahpur Jhelum Rawalpindi Attock	 or prairi	SION—con	 		1		21					
13 14 15 16 17 18 19 20 21	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat Shahpur Jhelum Rawalpindi	 or divi	SION—con	CLD.		1		21		1			
13 14 15 16 17 18 19 20 21 22	Gurdaspur Sialkot G jranwala Sheikhupura EAWALPIND Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali	DI DIVI	SION—con	CLD.		1		21		1			
13 14 15 16 17 18 19 20 21 22 23	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali MULTAN Montgomery	DI DIVI	SION—con	CLD.		1		21		1			
13 14 15 16 17 18 19 20 21 22 23 24 25	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali MULTAN Montgomery Lyallpur	DIVISI	SION—conor	CLD.		1		21		1			
13 14 15 16 17 18 19 20 21 22 23 24 25 26	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali MULTAN Montgomery Lyallpur Jhang	DIVISI	SION—conor	CLD.		1		21		1			
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali MULTAN Montgomery Lyallpur Jhang Multan	DIVISI	SION—conor	CLD.		1		21		1			
13 14 15 16 17 18 19 20 21 22 23 24 25 26	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali MULTAN Montgomery Lyallpur Jhang	DIVISI	SION—conor	CLD.		1		21		1		1	
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	Gurdaspur Sialkot G jranwala Sheikhupura RAWALPIND Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali MULTAN Montgomery Lyallpur Jhaug Multan Muzaffargarh Dera Ghazi Kh	DIVISI	SION—OON ON—CONOL	CLD.		7		21		1			

No. XII---CONCLUDED.

DISTRICTS OF THE PUNJAB DURING EACH MONTH YEAR 1920-concluded.

	6			8	9		
	TOTAL.		RATIO OF	,000 of	1,000 for years.		
Males.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 for previous five years.	No.
19	20	21	22	23	24	25	26
98 355 23 	102 312 31	200 667 54 	0·22 0·92 0·05	0.28 0.95 0.09	0·25 6·93 0·07	1.72 1.93 1.16 1.17 3.40	1 2 3 4 5 6
 4 1	 4 1	8	 0.01 0.001	0·62 0·002	0.02 0.002	0·03 8·27 6·71 8·30 1·69	7 8 9 10 11
6 41 750 126	2 49 815 109	90 1,565 235	0·01 0·08 2·22 0·55	0.004 0.12 3.04 0.62	0.01 0.10 2.58 0.58	7.06 5.16 5.22 4.49 3.96 7.31	12 13 14 15 16 17
81 3 182 112 666 1	51 4 181 104 736 1	172 7 363 216 1,402 2	0·20 0·01 0·69 0·42 2·46 0·01	0.26 0.01 0.75 0.43 3.01 0.01	0·23 6·01 0·72 0·43 2·72 0·01	8·77 2·83 5·24 8·04 3·88 0·03	18 19 20 21 22 23
117 208 11 208 35 6	126 252 5 152 25	243 460 16 360 61	0.42 0.41 0.04 0.48 0.12 0.02	0.55 0.65 0.02 0.42 0.10	0.48 0.52 0.45 0.45 0.11 0.01	1.79 1.26 0.74 0.74 0.04 0.002	24 25 26 27 28 29
3,035	3,102	6,137	0.29	0.36	0.33	3.52	

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MONTHLY STATEMENT OF PLAGUE OCCURRENCES IN THE PUNJAB

			Y.		RY.	MA	всн.	АР	RIL	M	AY.	Ju	NE.
0.	Districts and Native States.												
Serial No.		Cases.	Deatins.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1	2	3	4	5	6	7	8	9	10	11	13	13	14
1	Hissar	-	-	79	79	73	68	38	28	17	12	14	13
2	Rohtak	30	18	156	91	146	124	217	199	179	135	47	38
3 4	Gurgaon								00				
5	Karnal		***			20	13	26	22	22	19		
6	Simla												
7 8	Kangra												
9	Hoshiarpur Jullandur								***				
10	Ludhiana					1	1	3	3	8	4		
11	Ferozepore Isabore	***						8	7		,	- CASE	***
13	Au.ritsar								1	3	1		
14	Gurdaspur											18	***
15 16	Sialkot	0.1	94		ii	190	144	32 683	28 573	28 652	27 551	38	32 226
17	Gujranwala Sheikhupura	34	24	.6	11	7	4	143	108	80	64	80	59
18	Gujrat	2				1		9	9	150	91	1:1	50
19	Shahpur	-				16	13	177	91	213	177	67	6 71
2.	Jhelum Rawalpindi	5 11	3 10	13 5	8	25	14	50	29	63	43	74	62
22	Atteck	517	491	481	454	210	192	60	32	89	68	204	160
23	Mianwali	1		1000		14	10	100	69	2	2	85	73
24 25	Montgomery Lyallpur	23	9	39	26	185	127	267	192	102	84	25	34
26	Jhang					2		7	6	7	6	3	3
27	Multan	174		138	63	210 10	109	140	92	24	12	15 9	11
28 29	A uzaffargarh Dera Ghazi		:::				6	34	16	36	25 1		11
	Khan.											14	
	Total British Districts.	796	636	927	785	1,113	826	2,029	1,509	1,865	1,404	1,133	828
1	Patiala	50	50	28	28	266	266	495	495	461	461	233	233
2	Bahawalpur												
3 4	Jind							158	73	136	94	- 8	8
5	Nabha Kapurthala								***				
6	Maler Kotla											·	
7 8	Faridkot		-					1000					***
9	Kalsia Pataudi	1				1		""					
10	Nalagarh										/		
11	Bilaspur		13 15										
	Total Native States.	50	50	28	28	266	266	653	568	597	555	241	241
	GEAND TOTAL	846	698	955	763	1,379	1,092	2,682	2,077	2,462	1,959	1,374	1,069
		100	1	37		The second	-	1	19	20 21 31	100 100 100	- 10 10 10 10	

The total deaths during the year in the Cantonments of Rawalpindi and

No. I.

IN BRITISH DISTRICTS AND NATIVE STATES
DURING THE YEAR 1920.

-	ULY.	Auc	JUST.	1 1000	P-	Oc)TO-	Nove	MBER,	DECEMBER.		Ton	FAL.		
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Свеев.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Serial No.	REMARKS.
10		17	18	19	20	21	22	23	24	25	26	27	28	29	30
-	- -	-	-	-	-	-	-					221	200	1	
1	1	45	23	10	6			26	17	23	16	9(9	667	2	
												68	54	3 4	
														5	
	1000			***			,							6 7	Wall State
	3													8	
	1								***			12	₈	9 10	
1				***					***	2	2	2	2	11	
	10000	4										15	8	12 13	
														14	
	2											102	90	15	
96	38					1						2,061 310	1,565 235	16 17	
5	13					***		9	7	3	2	298	172	18	
								2 3	1			9 494	363	19 20	
ie		5	2	9	1	26	21	25	19	3	2	312	220	21	
1												1,567	1,402	22 28	
is		1							***	"1		321	243	24	
								***				692 20	460	25	
1		1				ï		"1	***	33	15	735	16 372	26 27	
2	2	1	ï			1						92	61	28	
1										***		8	6	29	
155	80	55	28	19	7	27	21	66	44	64	87	8 249	6,153		
65	65	44	44					4		1		1, 47	1,642	1	- 1
1		100									1.40			2 8	
		7	2									309	177	4	
														5	100
10								***						6 7	337
1:::											***			8	
1														9	
1														11	
65		51	46					4		1		1,956	1,819		
-	-	106	72	19	7	27	21	70	44	65	37	10,205	7,972		
	1	'		-	-										

ultan were 4 and 12 respectively which are included in the district totals,

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94 SC-333-23-5-21-SGPP Lahore.