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Government of Bengal

Annual Statistical Returns and Short Notes on Vaccination in Bengal

> For the Year 1926-27

by Dr. C. A. BENTLEY, M.B., D.P.H., D.T.M.&H., K.H.G., F.S.S. Director of Public Health, Bengal

> CALCUITTA Bengul Secretariat Book Depot 1927

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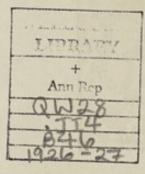
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BENGAL PUBLIC HEALTH DEPARTMENT.

No. 18103-V.

FROM DR. C. A. BENTLEY, M.B., D.P.H., D.T.M. & H., Director of Public Health, Bengal.

TO THE SECRETARY TO THE GOVERNMENT OF BENGAL, LOCAL SELF-GOVERNMENT DEPARTMENT.

Calcutta, the 19th October 1927.

SIR,

I have the honour to submit, for the information of the Government of Bengal, the Provincial Statistical Vaccination Returns for the year 1926-27, with short notes by Dr. Sufi, Assistant Director of Public Health in charge of Vaccination in the Bengal Public Health Department.

I have the honour to be,

SIR,

Your most obedient servant,

C. A. BENTLEY, Director of Public Health, Bengal. Digitized by the Internet Archive in 2019 with funding from Wellcome Library

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Short Notes on Vaccination in Bengal for the year 1926-27.

As the Officer in charge of Vaccination in the Provincial Public Health Department, I have the honour to submit the following brief report on vacci-nation in Bengal during the year 1926-27. In furtherance of the policy of expansion of local self-government, the entire provincial vaccination establishment of Inspectors and Sub-Inspectors was transferred to the District Boards (except Darjeeling) with the close of the year for future direct administration and control, the Local Government having agreed to meet the whole estimated cost at Rs. 95 a month for an Inspector and at Rs. 65 a month for a Sub-Inspector. Due to the employment of all available qualified Sanitary Inspectors for the ruarl Public Health organisation, recruitment for the Vaccination Branch is practically suspended, nor is it desired to keep such a separate branch service permanently alive, in view of the provi-sion of thana health circles throughout the province, except the Darjeeling district and the Chittagong Hill Tracts. When the scheme for a rural public health organisation is in full operation, it will be unnecessary to provide separately for the inspection of vaccination alone, as the duties of the rural Assistant Health Officers and Sanitary Inspectors include such vaccination work. But District Board will still be required to maintain their complement of public vaccinators in addition to the rural Circle Health Assistants. The cost of of such establishments will be met from the present annual district provisions for public health including vaccination, which will be increasingly relieved by the general public health organisation, the whole cost of which, estimated at twelve lakhs of rupees per annum. will be borne by provincial revenues.

2. Strength of Staff.—Because of the provision of vaccinators, whether salaried or licensed, from the very origin of the Provincial Sanitary Departments, it has been customary to report the strength of the vaccination staff employed annually, with its successive variations. But with the general amalgamation of vaccination with

public health and the provision of general health staffs, both in rural and in municipal areas, it will no longer be useful to record the numbers of vaccinators and inspectors employed in Bengal, without giving an erroneous impres-sion. During the year 1926-27, the number of Vaccination Inspectors employed in rural areas increased to 143, against 137 during the previous year, the District Boards of the 24-Parganas, Jalpaiguri and Dinajpur having appointed additional Inspectors. aggregate number of vaccinators The employed by District Boards was 1,596 in 1926-27, against 1,555 in 1925-26. Mufassal Municipalities (Dacca and South Suburban) employed two Inspectors, against 4 in the prece-ding year. The Corporation of Calcutta retained the same number of Inspectors (16) as in the preceding year, while only a female vaccinator was added to the number of vaccinators (58) entertained. Two special Inspectors-one for Western and the other for Eastern Bengalwere retained by the Provincial Department for assistance in executive and research work.

3. General Vaccination Statistics.-During the year 1926-27, a provincial aggregate of 3,278,581 vaccinations were performed on 3,276,975 persons, against 3,030,178 vaccinations on 3,028,136 persons during the preceding year, yielding an increase of 248,403 vaccinations, or 8.2 per cent. The total number was divided between prunary and re-vaccinations in the proportion of 1,741,801 (53.1 per cent.) and 1,536,780 (46.9 per cent.) during 1926-27, against 1,751,091 and 1,279,087 respectively during 1925-26. Comparing the two years, primary vaccinations decreased by 9,290 (.53 per cent.), while re-vaccinations increased by 257,693 (20.1 per cent.). Each vaccinator averaged 1,761 vaccinations during 1926-27, against 1,713 during 1925-26. Vaccination was reported to have been successful in 95.1 per cent. of the primary and 52.09 per cent. of the re-vaccination cases in which the results were known.

4. Vaccination in Rural Areas.-Compared with the preceding year's work, some districts performed more and some a lesser number of vaccinations during the year, the increases being shared mostly by Pabna (97,724), Murshidabad (45,777), Birbhum (26,623), Faridpur (26,400), Rangpur (25,077), Midnapur (19,804), Malda (18,168), Rajshahi (17,434), Bogra (11,618) and Dinajpur (10,915), while the decreases occurred chiefly in Burdwan (37,460), Chittagong (20,029), 24-Parganas (17,080), Howrah (14,428) and Darjeeling (9,751). Both primary and re-vaccinations increased in Pabna, Birbhum, Faridpur, Rangpur, Bogra and Bakarganj, while they decreased in Burdwan, 24-Parganas, Darjeeling, Chittagong, Howrah, Bankura and the Chittagong Hill Tracts. In Dacca, Mymensingh, Tippera and Nadia, primary vaccinations increased but re-vaccinations decreased, while in the other ten districts the position was the reverse. The increases in both classes of vaccinations, particularly re-vaccinations were the direct results of the smallpox epidemics in several districts. The Burdwan District Health Officer's explanation of the marked decrease in his jurisdiction as attributable to the large number of vaccinations having been already carried out during the preceding two epidemic years is untenable, because of the severer epidemic of smallpox during the year 1926-27. Vaccination might, however, have suffered by the reported diversion of vaccinators to do anti-cholera work. The Civil Surgeon of Darjeeling attributes the decrease in his district to the thorough vaccination in previous years of the coolies employed on the tea-gardens and also to the absence of the necessary stimulus of a small-pox epidemic in the tea-gardens during the year 1926-27. The presence of cholera and the low small-pox mortality are reported to account for the decrease in Chittagong and the 24-Parganas, while Howrah puts it down to the milder prevalence of small-pox. The setback in the 24-Parganas and Howrah cannot be considered to be satisfactory, all the more because of their contiguity to Calcutta, which suffered most severely from January to May 1927, as it is notorious that the two adjacent districts are the first to be affected with any epidemic which springs up in Calcutta.

The poor increase in the aggregate number of vaccinations is practically negligible, in view of the continued prevalence of small-pox since December 1924 throughout the province, particularly in the northern, southern and western portions.

5. Vaccination in Municipalities.-The total number of vaccinations performed in Calcutta during 1926-27 was 216,700, of which 29,162 were primary and 187,538 re-vaccinations, against a total of 149,322 vaccinations (including 25,607 primary and 123,715 re-vaccinations) during the preceding year. In mufassal Municipalities, 160,948 vaccinations (including 67,938 primary and 93,010 re-vaccinations) were performed during the year, against 167,238 (66,276 primary and 100,962 re-vaccinations) during the preceding year, showing a decrease of 6,290 vaccinations in the aggregate and of 7,952 in re-vaccinations. The decline in re-vaccinations is deplorable, in view of the severity of small-pox during the year under review.

6. Vaccinations performed by Other Agencies.—The following comparative statement shows the number of vaccinations performed by other agencies :—

| Agencies. | Prim | ary. | Re-vaccio | nations. | Tota | a. |
|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 16 20 | 1926- 27. | 1925- 26, | 1926- 27. | 1925- 26. | 1926- 27. | 1925- 26, |
| Tea- gardens | 5,203 | 9,194 | 2,349 | 15,368 | 7,552 | 24,562 |
| Factories | 8,605 | 8,769 | 28,742 | 17,154 | 37,347 | 25,923 |
| Railways | 1,424 | 1,761 | 8,139 | 10,133 | 9,563 | 11,894 |
| Steamers | | | 9,534 | 5,935 | 9,534 | 5,935 |
| Dispen- saries | 15 | | 16 | | 31 | |
| Jails | 275 | 32 | 32,565 | 30,812 | 32,840 | 30,844 |
| Total | 15,522 | 19,756 | 81,345 | 79,402 | 96,867 | 99,158 |

Out of 7,552 vaccinations performed in tea-gardens, Darjeeling reported 5,972 and Jalpaiguri 1,580, against 17,052 and 7,510 in the previous year. The Civil Surgeon of Darjeeling states that the decrease was due to the whole local labour force having been thoroughly vaccinated and re-vaccinated during the previous year, owing to the prevalence of small-pox in some of the tea-gardens from April to June, 1925. The case of the Jalpaiguri tea-gardens is, however, different. In spite of the criticisms made in these reports year after year and in spite of the attempts made by the Public Health Department, Jalpaiguri the with its numerous tea-gardens reported only 1,580 operations during the year. Railway vaccinations also decreased by 19.6 per cent., but factories, steamers, dispensaries and jails reported increases.

7. Potection afforded to Infants.-Although the number of available infants successfully vaccinated decreased by 41,775 (or 13.3 per cent.) as compared with the previous year, the rate of success was higher, being 273.4 per mile in the year 1926-27, against 269.5 in the preceding year. In the rural areas, this rate was 249.7 against 253.3; in the mufassal Municipalities, 589.2 against 482.4; and in Calcutta, 1,664.7 against 960.7. An analysis of the figures of the various districts shows that only in three districts-Malda, Rajshahi and Darjeeling-the proportion of such successfully vaccinated infants was over 500 per mille, against four-Malda, Rajshahi, Darjeeling and and Jalpaiguri-during the previous year. In seven districts the proportion was between 300 and 400 per mille, in eight between 200 and 300 per mille, in seven others between 100 and 200 per mille, while in the remaining two districts-Bogra and Bakarganj-it was 77.3 and 33.4 per mille respectively.

8. Recess Vaccination.-Although the Vaccination Act, 1880, as Bengal amended up to date, does not recognise or prescribe any vaccination or recess season, as in the India Vaccination Act, 1883, the differentiation is recognised in actual practice based on the statutory rules and executive orders. The total number of operations performed during 1926-27 was the recess season of 393,875 (primary 113,119 and re-vacci-nations 280,756), against 365,374 (pri-mary 118,606 and re-vaccinations 246,698) operations during the preceding year, showing an increase of 28,571, for which the prevalence of small-pox was surely responsible.

9. Six-puncture Vaccination.— During 1926-27, only 73,514 six-puncture vaccinations were performed, against 115,902 during the preceding year. This gradual decrease noticed year after year is due to its unpopularity with the parents of the children and to the failure of the vaccinators to impress upon the former its utility in securing an area of the foveated scar just necessary to confer immunity against small-pox.

10. Cost and Contribution towards Vaccination.—The total cost of vaccination during the year 1926-27 was Rs. 4,52,819-14-9, of which Rs. 164 841-6 was contributed from provincial revenues, Rs. 1,69,685-2-9 from district funds and Rs. 118,293-6 from municipal funds, against Rs. 4,52,901-13-4, Rs. 2,16,868-1-4, Rs. 1,64,908-14-9 and Rs. 71,124-13-3, respectively, in 1925-26. The chief increase in expenditure by the Municipalities is noticeable in Calcutta —Rs. 88,361 against Rs. 47,674 during the previous year. The Local Government repeated the annual contribution of Rs. 50,000 to assist the provision of free vaccination against small-pox. The average cost of each successful case was 2 annas 11 pies during the year against 3 annas 2 pies during the previous year.

11. Diagram illustrating Death Rates from Small-pox and the Degree of Protection afforded since the year 1917-18.—The death rates from small-pox in each district and the proportion of population protected against the disease by vaccination during the past ten years are shown side by side in the diagram printed overleaf.

12. Deaths from Small-pox.-Deaths from small-pox numbered 31,936, against 18,618 in 1925-26 and 10,443 in 1924-25. The disease was prevalent in almost all the districts. The largest number of deaths was reported from Pabna (4,295) followed by Midnapur (3,258), Murshidabad (3,101), 24-Par-ganas (2,540), Calcutta (2,401), Howrah (1,944), Burdwan 1,814), Bogra (1,610), Mymensingh (1,581), Birbhum (1,387), Rangpur (1,324), Hooghly (797), Dinajpur (686), Dacca (669), Tippera (635), Chittagong (592), Malda (552), Nadia (479), Jessore (477), Noakhali (403), Faridpur (377), and Bankura (375). In the remaining four districts (Khulna, Rajshahi, Jalpaiguri and Bakarganj), it was between 100 to 200. Darjeeling reported only seven deaths. From the local reports, it appears that the quinquennial outbreak of small-pox, which started in December 1924, continued its ravages throughout the year 1925 and 1926 and exacted the heaviest toll from November 1926 to May 1927. The Public Health Department co-operated health staff in the with the district attempts to arrest the progress of the disease. On the recommendation of the Director of Public Health, the Local Government sanctioned an additional grant for the appointment of extra vaccinators by those District Boards in whose areas the epidemic was severe. The two Inspectors of the Public Health

DIAGRAM ILLUSTRATING DEATH-RATES FROM SMALLPOX AND DEGREE

| population |] | | | wan i on | | | | | | Ide | ncy | , | | | | 1 | hah sic | | | | Da | vis | | | Chit Div | | | of otected |
|--------------------|---------|---|---------|--|-----------------------|--------|-------------|--|-------|-----------------------|---|--|----------|--|--|--|------------|--------------------------|--|---|-----------------------|------------|-------------------|---|---|--|---|---------------------------------------|
| from smal | Burdwan | Birbhum | Bankura | Midnapur | Hooghly | Howrah | 24-Parganas | Calcutta | Nadia | Murshidabad | Jessore | Khulna | Rajshahi | Dinajpur | Jalpaiguri | Darjeeling | Rangpur | Bogra | Pabna | Malda | Dacca | Mymensingh | Faridpur | Bakarganj | Chittagong | Noakhali | Tippera | Proportion of Population protected |
| 80 | | | 1 1 1 1 | | 10 10 10 | 120 | | H B K I L | | | | 1000 | | | | | | | | | | 120 0 | The second second | Lange and | 100000000000000000000000000000000000000 | | NAN AV | -7000 - |
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| 50 | | | | | | | | | | | | | | | | | | 1 1 1 1 1 1 1 | | | | | | | V. C. C. C. C. | | | -5000 |
| 40 - | | and the second se | | And the second s | | | | and a second sec | | and the second second | | A State of the sta | | Contraction of the local division of the loc | | and the second second | | | And and a second se | and the second se | | | | | And and a lot of the lot of the | Contraction of the local division of the loc | | 4000 3000 |
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| . 10 _ | | | | | | | | | | | | | | | | | | | | | | - | | | | | - | - 1000 |
| hs the | 5826 | 360I | 434 | 4285 | 3508 | 3380 | 3562 | 4867 | 3659 | 3946 | 3650 | 4031 | 4881 | 4651 | 3728 | 7291 | 3559 | 3103 | 3960 | 4716 | 3677 | 4720 | 3529 | 4015 | 4032 | 4310 | 4760 | Successful |
| Smallpox deaths | 6.4 | 3.8 | L.1 | 5.2 | 1.4 | 9.6 | 4.8 | 13.2 | 1.0 | 2.0 | 1.3 | 4. | 6.I | 1.2 | 1.9 | 1.4 | 5.4 | 1.7 | 1.8 | 6.3 | 3.5 | 2.5 | 2.6 | 4 | 2.4 | 9.I | 2.2 | Suco |

OF PROTECTION AFFORDED DURING 1917-18 TO 1926-27.

Indicate the proportion of population protected by vaccination.

Department were promptly deputed to the affected places as soon as any information of an outbreak was received and were constantly kept on tour during the period from November 1926 to May 1927. A hundred temporary Sanitary Inspectors and 20 temporary Sub-Assistant Surgeons placed on epidemic duty in several districts were instructed to help the local authorities in vaccinating the people. The District Inspectors and Sub-Inspectors of Vaccination were also directed to do vaccination themselves, in addition to inspection. I also visited several districts to investigate the cause of the local continuance of the epidemic and advised the local health authorities.

13. Different Methods of Vaccination .- No vaccination performed with lymph taken direct from the calf is done any more in Bengal. Glycerinated lymph was generally used, though a few Municipalities in the districts of Midnapur, Hooghly and Murshidabad indented for lanoline paste and performed with it a total number of 3,895 primary and 7,939 re-vaccination operations, of which 92.8 per cent. and 24:7 per cent., respectively, were successful. A success of 84:8 per cent. in re-vaccination was reported from Midnapur Municipality, but this figure is apparently erroneous and requires investigation. The total number of primary vaccinations and re-vacciations performed with glycerine lymph was 1,737,906 and 1,748,675 1.528.841. and against 1,275,712 respectively during the previous year, and the percentages of success were 95.1 and 51.5, against 96.2 and 55.5 respectively.

Inspections.-The District 14. Health Officer of Chittagong inspected 15.7 per cent. and that of Noakhali 11.8 per cent. of the total number of vaccinations performed. The record of inspection work of some of the District Health Officers is extremely disappointing. The District Health Officers of Midnapur, where small-pox was very severe and widespread, spent only 47 days on tour, the number of persons inspected not being by him stated in The District Health Offihis report. cer of Birbhum was out on tour for only 39 days and inspected 721 persons, while that of Nadia for only 3 days, inspecting 96 persons during the whole course of the year. It is regretted that some of the District Health Officers have not vet sufficiently realised their heavy responsibilities. Vigilant and careful inspection

is necessary to give an impetus to the staff under them to discharge their duties vigorously, especially when the number of deaths from small-pox is increasing year after year. Such a personal control is demanded to prevent unreliable figures being returned only to give a false sense of security. The district vaccination inspecting staff inspected 424,002 primary and 164,435 re-vaccination cases, or 24.5 and 11:3 per cent. of the total number of vaccinations performed in the province during 1926-27, against 676,201 primary and 220,625 re-vaccinations, or 41.2 and 22.6 per cent., respectively, during the previous year. The decrease was due to their having been kept very busy in coping with the epidemic in the various parts of their districts, and so they could not possibly spare much time in undertaking regular inspection work. In the rural areas, the highest percentage of primary cases (102.7) was inspected by the Assistant Superintendents of Vaccination of the Howrah district and that of re-vaccinations (51.8) by those of the Chittagong Hill Tracts, while the lowest percentage of inspections, both of primary and revaccination cases (3.9 and 2.8), was returned from the Malda district where the small-pox cases were very percenscattered. The highest of inspection of both tage pri mary and re-vaccination operations by the Municipal Superintendents of Vaccination was recorded in the Rajshahi district, while the lowest was returned from Jessore in case of primary vaccinations and from Bakarganj in that of vaccinations.

Bengal Vaccine Depôt.-The 15. central depôt at Intally is the present sole source of supply of vaccine lymph. The total output of lymph during the year was 2,680,464, against 2,470,607 and 1,975,780 grains of the two previous years. Two thousand, eight hundred and eighty-three calves were vaccinated during the year, against, 2,654 and 2,440 of the two preceding years, but pulp was collected from 2,668 only. The average yield of pulp per calf during the year was 251 grains, against 204.29 grains and 182.14 grains of the previous two years. Owing to the heavy demands on account of the prevalence of small-pox, 195,840 grains of lymph were purchased from Bihar and Orissa and Madras; 2,654,690 grains of lymph were issued during the year, of which 2,650,635 grains were glycerinated and

4,055 grains lanolinated vaccine paste. These figures show the necessity of an adequate supply of lymph being kept in reserve at the Bengal Vaccine Depôt. The discovery by Dr. Blaxall of the Government Lymph Establishment at Hendon, London, that lymph could be kept without losing its potency for a long period of time, if stored at 10° Farenheit, will enable a reserve supply of lymph to be maintained in sufficient amount to meet the demand which would arise should small-pox become epidemic. Due to the failure of all efforts to in-crease the local calf-supply for the central depôt at Intally, a scheme is being matured to open a branch depôt at Ramna (Dacca) and it is hoped to complete it in time for its inclusion in the budget for the year 1929-30. Meanwhile, it may be necessary to supplement the local production of lymph by purchase from other provinces.

16. English Vaccination Committee. —As an item of the greatest interest to all engaged in the administration and execution of vaccination, it appears useful to report the appointment of a Committee in February 1926 by the Minister of Health in England, in conjunction with the Medical Research Council of England, for the purpose of inquiring and reporting from time to time—

- (i) on matters relating to the preparation, testing and standardisation of vaccine lymph;
- (ii) on the practical methods which are available in the light of modern knowledge to diminish or remove any risks which may result from vaccination;
- (iii) on the methods of vaccination which are most appropriate to give protection against risk of small-pox infection in epidemic and non-epidemic periods;

and to co-ordinate the work of investigation on these questions in England and abroad, having regard to corresponding work undertaken by international health organisations.

17. The reasons which led to the appointment of the above Committee may briefly be stated. The vaccine lymph used for public vaccinations in England is prepared at the Government Lymph Establishment in London, which also supplies vaccine for the public services. As a result, however, of the English Therapeutic Substances Act, 1925, which will shortly come into operation, responsibilities will also be imposed on the British Government Departments concerned for the control of commercial vaccines. Establishments in which vaccine lymph is prepared for sale and use in this country will in future need to be licensed, and the control established will be applicable also to the products of institutes in foreign countries from which lymph is imported. A principal duty of the new Committee, therefore, will be to advise on the standard requirements and tests which should be imposed in consequence of the new legislation.

Since the Royal Commission on 18. Vaccination presented their final report in 1896, considerable advancement has taken place in general medical knowledge. The substitution of calf lymph for humanised lymph has had beneficial results, and the adoption of modern methods has made the complication of septic infection of the vaccinated arm a relatively rare occurrence. Nevertheless, examples of possible risk from vaccination occasionally arise, and in this connection attention has been directed on the Continent, as well as in England, to cases in which symptoms of encephalitis or other nervous conditions have occurred shortly after vaccination.

19. Under the last heading of the terms of reference, the Committee has been asked to consider whether, in certain circumstances, advantage could be secured by varying the methods of vaccination, for example, in order to provide temporary immunity during outbreaks of small-pox.

Summary.-From the 20.facts stated in the preceding paragraphs, some broad and simple conclusions may be drawn. It is quite clear that the incidence of small-pox has shown a notable increase in Bengal since the year 1921, and there appears to be no evidence that the zenith of the present recrudescence has been reached. I must again draw attention to the grave risks incurred in respect of small-pox as a result of the large proportion of the population which is not vaccinated. Statistics indicate quite clearly the falling percentage of primary vaccinations to births. In view of the apprehended pandemic of smallpox forecasted as likely to occur in or about the year 1930, it becomes incumbent on all local authorities to put forth all their efforts in preparing the population to meet it whenever it comes. This

preparation should consist in wholesale vaccination and re-vaccination of the whole population.

21. The protection which vaccination and re-vaccination affords cannot be disputed by anyone who has had actual experience in dealing with small-pox. The long experience of the country has taught us—

- (a) that, beyond all question, the mortality from small-pox is much less now than in pre-vaccination times;
- (b) that the greatest diminution in the small-pox mortality is found in the early years of life, in which there is most vaccination;
- (c) that in countries in which there is adequate vaccination and revaccination relatively to the population, there is little smallpox;
- (d) that in houses invaded by smallpox in the course of an outbreak, not nearly so many of the inmates are attacked as of the unvaccinated in proportion to their numbers;
- (e) that the fatality rate among persons attacked by samll-pox is much greater, age for age, among the unvaccinated than among the vaccinated;
- (f) that the degree of protection conferred by vaccination corresponds to the quality of the vaccine and to the thoroughness with which the operation of vaccination has been performed;
- (g) that the protection afforded by vaccination wanes with the lapse of time;
- (h) that improved sanitation, however beneficial in itself, cannot account for these facts; and
- (i) that though early diagnosis, prompt isolation of small-pox patients in suitable hospitals. effective disinfection, supervi-

sion of "contacts" and other such public health methods are invaluable, they are no substitute for vaccination.

22. Insufficiency and inefficiency of vaccinators, coupled with inadequacy of pay, should be remedied without further delay. No evasion of the statutory rules for the qualifications of public vaccinators should be allowed, and their prescribed duties should be strictly enforced. For this reason, a living wage must be ensured before good work, satisfactory both in quality and quantity, can be reasonably expected from the vaccinators. The local funds, set free by the Local Government's provision of a complete public health organisation, should be utilised in employing an adequate number of qualified vaccinators of the right stamp, whom to adequate remuneration should be offered. The Health Officers, Assistant Health Officers, Sanitary Inspectors and Vaccination Inspectors should keep a close watch over the vaccination condition of their jurisdiction and exercise a strict supervision over the Health Assistants and public vaccinators' work. Those District Boards and Municipalities which still employ only season vaccinators should abandon this false economy, which costs so much in human lives, and begin at once to keep all the year round wholetime Health Assistants, who are qualified public vaccinators and whose services will be available in the other lines of public health work also.

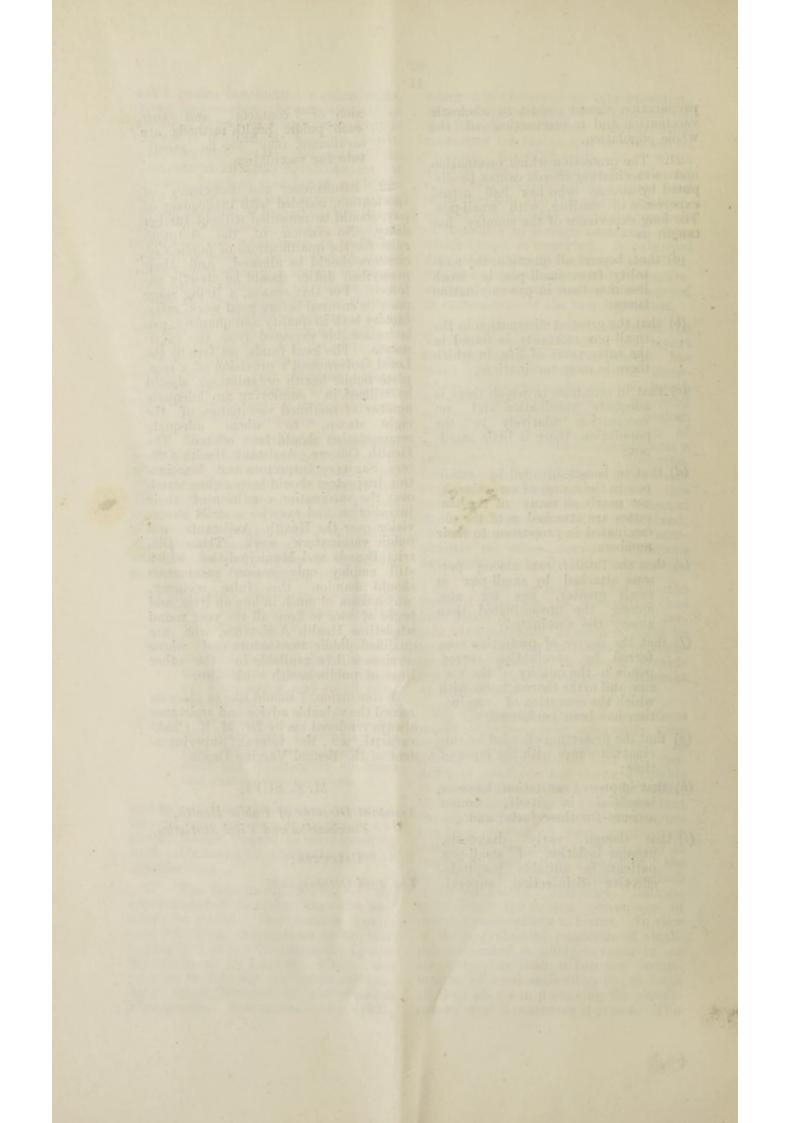
In conclusion. I should like to place on record the valuable advice and assistance always rendered me by Dr. M. K. Chakravartti, M.B., the veteran Superintendent of the Bengal Vaccine Depôt.

M. E. SUFI.

Assistant Director of Public Health, Vaccination and Vital Statistics.

CALCUTTA :

The 18th October 1927.



Statistical Tables

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STATEMENT

Showing particulars of vaccination performed

| | | | rural areas of eding to the | n per square | of vaccina- throughout | Total num | ber of persons v | vaccinated. | of persons each vacel- | Primary |
|--|--|----------------|--|--|--|--|---|---|---|--|
| Number. | Dist | rlet. | Population of the rural the districts according Census of 1921. | Average population mile. | Average number tors employed the year. | Male. | Female. | Total. | Average number vaccinated by nator. | Total. |
| 1 | | 2 * | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 01034-0-0 | Burdunan I Burdwan Asaansol Mining S Birbhum Bankura Midnapur Hooghly Howrah | | 838,655 964,487 2,595,071 900,802 | 500 479 369 516 780 1,502 | 32 14 20 116 45 27 | 33,342 36,469 42,044 39,333 115,128 23,246 | 22,390 26,363 32,626 29,324 75,265 15,574 12,523 | 55,132 62,832 75,279 68,657 190,303 38,622 35,769 | 1,741 [°] 4,488 3,763 1,634 1,634 1,641 882 1,302 | 33,710 16,736 36,616 32,524 83,207 20,867 22,680 |
| | | Total | 7,421,093 | 540 | 296 | 313,210 | 214,065 | 527,275 | 1,781 | 245,740 |
| 7 8 9 10 11 | Presidency 24-Parganas Nadia Murshidabad Jessore Khulna | Division. | 1,390,704 1,182,983 1,700,924 | 527 507 566 587 301 492 | 147 50 57 86 44 384 | 61,215 41,704 76,822 48,523 36,725 264,989 | 38,507 30,127 51,750 34,561 30,608 185,553 | 99,722 71,831 128,572 83,084 67,333 450,542 | 678 1,436 2,255 966 1,530 | 61,990 38,612 49,071 47,505 45,793 242,971 |
| | | 20400 11 | 1,001,010 | | | 201,000 | 100,000 | 400,042 | 1,110 | 242,971 |
| $12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 19$ | Rajshahi L Rajshahi Dinajpur Jalpaiguri Darjeeling Ranggur Bogra Pabna Malda | Hipision. | 1,687,328 921,740 254,045 2,488,778 1,032,300 1,344,633 | 557 428 314 215 713 751 809 523 | 00 72 31 16 60 18 42 27 | 55,719 64,969 33,156 10,226 77,172 45,051 92,394 45,504 | 38,404 44,438 16,495 9,650 41,565 26,249 05,316 31,263 | 94,123 109,407 49,651 19,876 118,737 71,300 157,710 76,767 | 1,568 1,519 1,601 1,242 1,978 3,961 3,754 2,843 | 41,902 77,263 21,227 10,392 75,354 27,460 77,275 32,312 |
| | | Total | 10,141,700 | 534 | 326 | 424,191 | 273,380 | 697,571 | 2,139 | 363,275 |
| | Dacca D | | | - | | | | | | - |
| 20 21 22 22 22 22 22 22 22 | Dacca Mymensingh Faridpur Bakarganj | ······· | 4,710,669 2,202,783 | 1,007 759 934 734 | 60 237 40 48 | $\substack{89,100\\232,379\\64,854\\63,292}$ | 66,540 136,783 47,289 44,978 | 155,640 369,162 112,143 108,270 | 2,594 1,557 2,803 2,255 | 131,199 256,094 53,578 101,091 |
| | | Total | 12,453,216 | 845 | 385 | 449,625 | 295,590 | 745,215 | 1,930 | 541,957 |
| 24 25 25 27 | Chittagong Chittagong Noakhall Tippera Chittagong Hill | g Division. | 1,465,071 2,678,627 | 630 968 1,051 34 | 60 50 84 11 | 59,354 80,752 87,976 5,372 | 38,403 42,559 63,302 4,612 | 97,757 123,311 151,278 9,984 | 1,662 2,466 1,800 907 | 54,530 62,983 110,913 6,810 |
| | | Total | 5,887,701 | 503 | 205 | 233,454 | 148,876 | 382,330 | 1,865 | 235,236 |
| | Total of the Ben | gal Presidency | 43,597,755 | 578 | 1,596 | 1,685,469 | 1,117,464 | 2,802,933 | 1,756 | 1,629,179 |

Sum

| | Total numbe vace | r of persons inated. | Total num tions per | ber of opera- formed. |
|--|---------------------|-------------------------|------------------------|--------------------------|
| | Primary. | Re-vaccina- tion. | Primary. | Re-vaccina- tion. |
| 1.—By staff. Under District Boards, Municipalities, Provincial Government, Calcutta Corporation and Assansol Mines Board of Health | 1,724,796 | 1,455,321 | 1,726,279 | 1,455,435 |
| 2.—By other agencies. Jails, Cantonments, Dispensaries, Railways, Steamers, Tea-gardens and Factories | 15,513 | 81,345 | 15,522 | 81,345 |
| Total | 1,740,309 | 1,536,666 | 1,741,801 | 1,536,780 |

No. I.

in the districts of Bengal during the year 1926-27.

| raccination. | 1 | 1000 | | Re | -vaccinati | on. | Percent successf in which were k | ul cases a results | ly vaccinated ation. | Percei of unk case total c | nown s to | Average as number of p successfu vaccinated the previ five yea | ersons ally during ous | Average numbe deaths small- during t vious five | from pox he pre- |
|--|--|---|--|---|--|--|--|---|---|--|---|---|--|--|---|
| | Successful. | | | 818 | | | Ŧ | on. | popul | | on. | | 000 B. | | 10 of |
| Under one year. | One year and under six years. | Total of all ages. | Unknown. | Total. | Successful. | Unknown. | Primary. | Re-vaccination | Persons successfully va per 1,000 of population. | Primary. | Re-vaccination | Number. | Ratio per 1,000 of population. | Number. | Ratio per 1,000 of population. |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 4,088 7,200 5,610 7,179 9,326 8,940 4,356 | 18,926 9,028 23,413 23,115 50,504 16,610 15,989 | 32,353 16,719 35,509 32,412 80,555 20,731 21,993 | 109 184 50 1,543 41 16 | 22,022 46,096 38,654 36,133 107,186 17,755 13,689 | 7,615 33,585 23,851 17,901 58,958 14,361 5,809 | 481 151 1,997 1,335 14,033 427 2,475 | 95-9 93-9 96-8 99-3 99-6 | 34-5 72-8 61-7 49-5 55-05 80-9 42-3 | 67 · 1 52 · 1 53 · 7 38 · 7 35 · 7 | · 32 · 502 · 12 1 · 8 · 19 · 07 | 2:1 32 5:1 3:69 2:3 13:09 17:1 | 78,972 27,780 46,804 116,582 28,018 28,018 28,170 | $58 \cdot 7$ $38 \cdot 1$ $47 \cdot 1$ $41 \cdot 6$ $31 \cdot 1$ $36 \cdot 1$ | 511 | 38 .558 5577 |
| 41,699 | 157,585 | 240,272 | 1,943 | 281,535 | 162,080 | 20,899 | 97.7 | 57-4 | 54-2 | .79 | 7.4 | 326,326 | 43.8 | 2,585 | -33 |
| 7,120 11,539 13,604 7,198 10,583 | 43,936 23,456 31,412 37,038 29,993 | 61,075 35,999 47,410 47,067 45,479 | 334 1,600 231 241 135 | 37,732 33,219 79,501 35,579 21,344 | 21,790 20,380 51,290 20,583 12,886 | 3,991 6,075 4,676 2,822 1,649 | 98.5 93.2 96.6 99.7 99.3 | 57-7 61:4 64:5 59:8 58:4 | $41 \cdot 4$ $40 \cdot 5$ $83 \cdot 4$ $33 \cdot 3$ $41 \cdot 08$ | -53 4-1 -47 -507 -29 | 10·5 18·2 5·8 7·9 7·7 | 79.951 53.863 45.704 61.370 60,605 | 40· 38·7 38·7 36·7 42·6 | 924 113 346 143 35 | -46 -08 -29 -08 -02 |
| 50,044 | 165,835 | 237,030 | 2,541 | 207,375 | 126,929 | 19,213 | 97.6 | 61-2 | 46- | 1.04 | 9.2 | 301,493 | 39.1 | 1,561 | ·22 |
| 22,653 15,128 9,353 4,384 12,293 1,444 7,975 19,784 | 17,713 46,369 8,940 3,646 52,063 16,322 54,860 10,904 | 41,717 71,924 20,027 9,596 71,785 23,013 74,069 30,754 | 140 1,333 8 761 2,010 3,689 1,118 677 | $\begin{array}{c} 52,131\\32,144\\29,399\\9,498\\43,383\\43,840\\80,435\\44,455\end{array}$ | 40,940 24,926 10,526 3,272 30,209 17,302 40,7.66 27,229 | 1,939 2,198 1,349 2,355 2,766 9,610 4,922 8,041 | 99-3 93-08 94-3 92-3 93-2 83-8 95-8 92-08 | 78:5 777:5 35:7 34:4 39:6 39:6 50:6 61:2 | 55-2 57-4 33-1 40- 39-05 85-3 60-6 | . 23 1 · 7 · 03 7 · 3 1 · 4 1 · 4 1 · 4 2 · 9 | $3.7 \\ 6.8 \\ 4.5 \\ 24.7 \\ 6.3 \\ 21.9 \\ 6.1 \\ 5.5 $ | 59,533 79,251 30,198 13,443 61,632 28,817 39,189 45,232 | 40 · 8 47 · 4 32 · 7 24 · 7 27 · 9 29 · 07 47 · 2 | 70 207 492 6 216 220 157 126 | -048 -12 -53 -02 -08 -11 -11 -13 |
| 93,015 | 210,817 | 342,885 | 9,736 | 335,285 | 195,170 | 33,180 | 94-3 | 58.2 | 53.5 | 2.1 | 9.9 | 357,295 | 35.2 | 1,494 | 1.4 |
| 10,534 9,172 5,556 1,835 | 99,143 157,397 35,245 53,225 | 123,460 235,186 52,378 96,290 | 4,848 7,447 553 2,144 | 24,441 113,168 58,769 7,179 | 15,188 80,422 31,379 3,665 | 2,608 8,616 5,749 533 | 94 · 1 91 · 8 97 · 7 95 · 2 | 62·1 71·06 55·2 51·05 | $46.6 \\ 66.9 \\ 38.4 \\ 31.1$ | $3.6 \\ 2.9 \\ 1.03 \\ 2.1$ | 10-6 7-6 9-7 7-04 | 100,639 238,259 52,130 71,816 | $33 \cdot 8 \\ 50 \cdot 5 \\ 23 \cdot 6 \\ 27 \cdot 01$ | 732 617 100 42 | -24 -13 -04 -01 |
| 27,097 | 345,010 | 507,314 | 14,992 | 203,557 | 130,654 | 17,506 | 93.6 | 61.1 | 51.2 | 2.7 | 8.6 | 462,844 | 37.09 | 1,491 | ·11 |
| 6,411 7,219 11,869 1,115 | 44,022 42,671 88,690 4,797 | 52,078 58,690 108,359 6,749 | 1,061 2,010 1,221 12 | 43,240 60,356 40,365 3,174 | 17,146 22,439 27,735 907 | 8,426 13,481 3,043 77 | 95·4 93·1 97·8 99·1 | 39.6 37.1 68.7 28.5 | 44.07 55.3 50.8 44.1 | 1.9 3.1 1.1 .18 | 19·4 22·3 7·5 2·4 | 73,[80 62,351 141,309 8,288 | 46.5 42.5 52.3 47.8 | 607 133 150 | -33 -08 -04 |
| 26,614 | 180,186 | 225,876 | 4,304 | 147,135 | 68,227 | 25,027 | 96.1 | 46-3 | 49-9 | 1.8 | 17. | 285,128 | 48.4 | 890 | ·15 |
| 238,469 | 1,059,433 | 1,553,377 | 33,516 | 1,174,887 | 683,060 | 115,825 | 94-7 | 58.1 | 50.8 | 2.05 | 9.2 | 1,733,086 | 39.7 | 8,021 | .18 |

mary.

| Percentag cases in v were k | e of successful which results nown. | | number of reinate 1 by reinator. | Number of successful na | | Rates of successfu! | Todal and of | Average cost |
|-----------------------------------|---|-------------------------------|---|-------------------------------|-------------------------------------|---|------------------------------|--------------------------------|
| Primary. | Re-vaccina- | Vaccina- tors employed. | Persons vaccinated by each vaccinator. | Under one year. | One year and under six years. | vaccinations per 1,000 of population. | Total cost of department, | of each successful case. |
| 95-2 | 52-8 | 1,807 | 1,761 | 271,511 | 1,107,589 | 1 | Rs. A. P. | Rs. A. P. |
| | | N. dallal | Babba | 2,887 | 2,167 | 52-8 | 4,52,819 14 9 | 0 2 11 |
| 90.4 | 39-4 | No statisti | es available. | | | , | | |
| 95-1 | 52-09 | | | 271,398 | 1,109,756 | | | |

STATEMENT

Showing the cost of vaccination in the districts of

| 1.12 | | | | | | - | 1000 | | | | | _ | | |
|-----------|---|---------------------------------------|------------|-----------------------------------|--------------------------|---------------------|---------------------------|-------------------------------|--------|-----------|------------|----------|------------|--|
| - Number. | Circles and districts. | as Superior supervis- ing officer. | Salary, | er Indian supervising officer, | Pay. | - Paid vaccinators. | Pay. | e Lincensed vaccina- tors. | 0 Pay. | E Clerks. | Pay. 12 | E Peons. | Pay. | Total pay of establishment. |
| - | | - | R8. A. P. | - | Rs. A. P. | - | Rs. A. P. | Ê | | | RS. A. | | Rs. A. P. | Rs. A. P. |
| | Burdwan Division. | | M. A. F. | | ALC: A. T. | | | | | | 2401 21 | 1.1 | | |
| 1 | Burdwan | 14 | | 11 | 3,030 9 0 | 46 | 11,574 4 8 | | | | | 2 | 310 9 D | 14,915 6 8 |
| 2 | Birbhum | | | 3 | 1,252 3 0 | 20 | 3,525 5 5 | | | | | | **** | 4,777 8 5 |
| 3 | Bankura | | | 3 7 | 1,451 11 0 2,419 6 0 | 42 | 3,500 12 0 10,104 13 9 | | | | | ** | | 4,952 7 0 12,524 3 9 |
| 4 5 | Midnapur | | | 4 | 2,419 6 0 | 45 | 4,125 12 6 | | | | | | | 5,275 12 6 |
| 6 | Hooghly Howrah | | | 3 | 1,819 6 0 | 27 | 3,705 7 0 | | | | | | | 5,524 13 0 |
| | Total of the Burdwan | | | 31 | 11,123 3 0 | 296 | 36,536 7 4 | | | | | 2 | 310 9 0 | 47.970 3 4 |
| | Division. | | | | | | | - | | - | | - | | A STREET |
| | Presidency Division. | | | 10/10 | | | 10.000 0 0 | | | | | | | 10.000 10 0 |
| 7 | 24-Parganas | | | 13(1) | 2,900 9 0 10,991 7 0 | 147 | 10,022 3 3 | | | ··· 2 | 861 1 | | 355 14 0 | 12,922 12 3 12,208 6 0 |
| -8 | Bengal Vaccine Depot | | | 8 | 10,991 7 0 26,160 0 0 | 68 | 42,101 0 0 | ** | | 6.63 | | 29 | 5,460 0 0 | 73,721 0 0 |
| 9 | Calcutta (2) · · · | | | 6 | 2,486 1 0 | - 50 | 5,554 6 0 | | | | | | | 8,040 7 8 |
| 10 | Murshidabad | | | 5 | 2,100 0 0 | 57 | 8,013 14 0 | | | | | | | 10,113 14 0 |
| 12 | Jessore | | | 6 | 2,365 3 0 | 86 | 5,934 2 0 | | | | | | | 8,299 5 0 |
| 13 | Khulna | | | 4 | 1,679 10 0 | 44 | 3,042 8 0 | | | | | | | 4,722 2 0 |
| | Total of the Presidency | | | 59 | 48,682 14 0 | 452 | 74,668 1 3 | | | 2 | 861 1 | 31 | 5,815 14 0 | 1,30,027 14 3 |
| | Division. | - | | | | | | | | | | | | |
| | Rajshahi Division. | | | | 1 770 0 0 | - | 5169 14 0 | | | | | | 100 | 0.000 11 0 |
| 14 | Rajshahi | ••• | | 4 8(J) | 1,730 0 0 3,100 2 0 | 60 72 | 5,163 14 0 8,109 14 0 | | | | | | | 6,893 14 0 11,210 0 0 |
| 15 | Dinajpur | ** | | 5(4) | 2,299 13 0 | 31 | 4,342 6 11 | 1 | | | | | | 6,642 3 11 |
| 16 17 | Jalpaiguri | | | 4 | 1,422 4 0 | 16 | 2,696 13 0 | | | | | | | 4,119 1 0 |
| 18 | Rangpur | | | 5 | 2,122 14 0 | 60 | 7,852 12 0 | | | | | | | 9,975 10 0 |
| 19 | Bogra | | | 2 | 723 0 0 | 18 | 2,479 11 0 | | | | | | | 3,202 11 0 |
| 20 | Pabna | | | 3 | 1,490 0 0 | 42 | 5,595 8 0 | 1000 | | | | | | 7,085 8 0 |
| 21 | Malda | | | 2 | 1,036 13 0 | 27 | 5,081 6 9 | | | | | | | 6,118 3 9 |
| | Total of the Rajshahi | | | 33 | 13,924 14 0 | 326 | 41,522 5 8 | | | | | | | 55,247 3 8 |
| | Division. | | | | | | | | | | | - | | |
| | Dacea Division. | 2 | | 5 | 1,763 11 0 | 60 | 5,412 9 6 | | | | | | | 7,176 4 6 |
| 22 23 | Dacca Mymensingh | | | 7 | 2,485 0 0 | 237 | 24,025 0 0 | 100 | | | | | | 26,510 0 0 |
| 24 | Faridpur | | | 5 | 1,631 10 0 | 40 | 2,861 4 0 | | | | | | | 4,492 14 0 |
| 25 | Bakarganj | | | 5 | 1,785 9 0 | 48 | 5,462 0 0 | | | | | | | 7,247 9 0 |
| | Total of the Dacca | | | 22 | 7,665 14 0 | 385 | 37,760 13 6 | - | | | | | | 45,426 11 6 |
| | Division. | | | | | | | - | | - | | | | |
| | Chittagong Division. | | | | 1,771 10 0 | 60 | 6,460 14 0 | | | | 1 | | | 8,232 8 0 |
| 26 | Chittagong | | | 4 | 2,089 3 0 | 50 | 4,993 0 0 | | | | | | | 8,232 8 0 7,082 3 0 |
| 27 | Noakhali | | | 4 | 1.830 0 0 | 84 | 6,871 2 0 | 1000 | | | | | | 8,701 2 0 |
| 28 29 | Tippera Chittagong Hill Tracts | | | 3 | 1,423 0 0 | 11 | 1,363 3 0 | | | | | | | 2,786 3 0 |
| | Total of the Chittagong | | | 15 | 7,113 13 0 | 205 | 19,688 3 0 | - | | | | | | 26,802 0 0 |
| | Division. Total of the Vaccination | | | 160 | 88,510 10 0 | 1,664 | 2,09,975 14 9 | - | | 2 | 861 1 | 33 | 6,126 7 0 | 3,05,474 0 9 |
| | Circles. | - | . Sugar | - | | | Walter State | | | | | | | The second second |
| | | | 14 200 0 0 | | 9.975 0 0 | 1.000 | a second second | | | 100 | | | | 17.015 0 0 |
| 30 | Vaccination Bureau (5) | 1 | 14,300 0 0 | 2 162 | 3,375 0 0 91,885 10 0 | 1,664 | 2,09,975 14 9 | | | | 861 1 | 33 | 6,126 7 0 | 17,675 0 0 3,23,149 0 9 |
| | Total of the Presidency Municipalities | 1 | | 102 | 462 0 0 | 1,004 | 27,418 14 4 | | | - | | 2 | 387 4 6 | 28,268 2 10 |
| 31 32 | Municipalities Railways, tea gardens | | | | | | | - | | | | | | |
| 45 | and factories | | | | | | | | | | | | | |
| 33 | Jails | | | | | 55 | | | | | | | | |
| | Grand total | 1 | 14,300 0 0 | 164 | 92,347 10 0 | 1,863 | 2,37,394 13 1 | | | 2 | 861 1 | 35 | 6,513 11 6 | 3,51,417 3 7 |
| - | | | | | | | | | | F | | - | | and the second s |

Includes 4 sanitary inspectors of the District Board but their pay has not been shown. The cost of the establishment of the Animal Vaccine Depot of the Calcutta Corporation for the entertainment of one Includes 3 sanitary inspectors and one sampernumerary doctor. One Sub-Inspector and one kaviraj were appointed by the District Board. Pay and travelling allowances drawn by Cost of the establishment of the Assistant Directors of Public Health has been excluded from this statement. (1)(3)(4)(5)

No. II.

Bengal during the year 1926-27.

| | Co | ntingencies. | | Des. | | | | | | nation ectina- | cost of successful |
|--------------------------|-------------|-----------------|----------------|----------|-------------------------|--------------|------------------------------------|---------|---------------|---|-------------------------|
| Travelling allowance. | Cost of | Other | Total cost. | revenues | Provincial revenues, | Local fund. | Municipalities and Railways. | States. | Total. | r of success- vaccination re-vaccina- | |
| ed proper | lymph. | contingencies. | Contrar on 1 | Central | | | | Native | | ful v and tion. | verage cach case. |
| | 1 100 | | | Cer | | - | | Nat | and and | Nun t | APO |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| RS. A. P. | Rs. A. P. | R8. A. P. | R8. A. P. | | RS. A. P. | R8. A. P. | RS. A. P. | 3 | R8. A. P. | | Rs.A. P |
| 4,284 0 8 | | 3,764 12 0 | 22,964 3 4 | | 6,949 3 0 | 16,015 0 4 | | | 22,964 3 4 | 90,272 | 0 4 |
| 973 15 10 | | 68 10 6 | 5,820 2 9 | | 2,024 6 0 | 3,795 12 9 | | | 5,820 2 9 | 59,360 | 0 1 |
| 881 12 0 | | 224 14 0 | 6,059 1 0 | | 3,239 14 0 | 2,819 3 0 | | | 6,059 1 0 | 50 313 | 0 1 |
| 1,843 13 0 | | 204 0 3 | 14,572 1 0 | | 4,263 3 0 | 10,308 14 0 | | | 14,572 1 0 | 139,513 | 0 1 |
| 1,197 10 6 | | 85 2 0 | 6,558 9 0 | | 3,124 10 0 | 3,433 15 0 | | | 6,558 9 0 | 35,092 | 0 3 |
| 569 11 0 | | 118 0 0 | 6,212 8 0 | | 2,389 1 0 | 3,823 7 0 | | | 6,212 8 0 | 27,802 | 0 3 |
| 9,750 15 0 | | 4,465 6 9 | 62186 9 1 | | 21,990 5 0 | 40,196 4 1 | | | 62,186 9 1 | 402,352 | 0 2 |
| | | | | | | | | | | | |
| 1.778 2 0 | | 741 15 6 | 15,437 18 9 | | 8,073 11. 0 | 7,364 2 9 | | | 15,437 13 9 | 82,865 | 0 3 |
| | 15,110 11 0 | | 44,945 5 0 | | 44,945 5 0 | | | | 44,945 5 0 | | |
| 1,800 0 0 | | 12,840 0 0 | 88,361 0 0 | | | | 88,361 0 0 | | 88,361 0 0 | 77,359 | 1 2 |
| 1,571 11 0 | | 219 10 0 | 9,831 12 0 | | 4,057 12 0 | 5,774 0 0 | | | 9,831 12 0 | 56,379 | 0 2 |
| 2,810 9 0 | | 535 6 6 | 13,459 13 6 | | 4,574 15 0 | 8,884 14 6 | | | 13,459 13 0 | 98,700 | 0 2 |
| 1,328 12 0 | | 275 2 0 | 9,903 3 0 | | 5,993 15 0 | 3,909 4 0 | | | 9,903 3 0 | 67,650 | 0 2 |
| 671 3 0 | | 1:2 1 0 | 5,565 6 0 | | 2,350 13 0 | 3,214 9 0 | | | 5,565 6 0 | 58,365 | 0 1 |
| 9,955 5 0 | 15,110 11 0 | | 1,87,504 5 3 | | 69,996 7 0 | 29,146 14 3 | 88,361 0 0 | | 1.87,504 5 3 | | 0 6 |
| 0,100 0 0 | | | | | | | | | | | - |
| and the second | | | | | | Course In | Colores and | | | - dente | |
| 1,763 5 0 | | 1,353 1 0 | 10,010 4 0 | | 3,561 1 0 | 6,449 3 0 | | | 10,010 4 0 | 82,657 | 0 1 1 |
| 1,740 6 0 | | 148 11 0 | 13,099 1 0 | | 1,966 4 0 | 11,132 13 0 | | | 13,099 1 0 | 96,850 | 0 2 : |
| 1,543 10 0 | | 153 0 0 | 8,338 13 11 | | 3,641 10 0 | 4,697 3 11 | | | 8,338 13 11 | 30,553 | 04. |
| 2,398 6 0 | | 93 2 0 | 6,610 9 0 | •• | 2,887 6 0 | 3,723 3 0 | | | 6,610 9 0 | 12,868 | 0 8 3 |
| 1,784 0 0 | | 632 2 0 | 12,391 12 0 | | 4,760 14 0 | 7,630 14 0 | | •• | 12,391 12 0 | 101,994 | 0 1 1 |
| 754 13 0 | | 10 7 6 | 3,967 15 6 | | 1,877 13 0 | 2,090 2 6 | | | 3,967 15 6 | 40,315 | 0 1 |
| 633 4 0 | | 384 15 0 | 8,103 11 0 | ••• | 4,723 4 0 | 3,380 7 0 | | | 8,103 11 0 | 114,835 | 0 1 : |
| 529 2 0 | | 120 1 0 | 6,767 6 9 | | 2,265 15 0 | 4,501 7 9 | | | 6,767 6 9 | 57,983 | 0 1 1 |
| 11,146 14 0 | | 2,895 7 6 | 69,289 9 2 | | 25,684 3 0 | 43,605 6 2 | | | 69,289 9 2 | 538,055 | 0 2 3 |
| | | | | 1000 | | | | | | | 12 |
| 1,141 4 0 | | 300 7 6 | 8,618 0 0 | | 3,618 0 0 | 5,000 0 0 | | | 8,618 0 0 | 138,648 | 0 1 0 |
| 1,267 13 0 | | 549 11 0 | 28,327 8 0 | | 3,752 13 0 | 24,574 11 0 | | | 28,327 8 0 | | 0 1 |
| 1,438 12 0 | | 466 6 .0 | 6,298 0 0 | | 3,018 6 0 | 3,379 10 0 | | | 6,398 0 0 | 83,757 | 10000 |
| 1,043 5 0 | | 205 4 6 | 8,496 2 6 | | 2,642 8 0 | 5,853 10 6 | | | 8,496 2 6 | 99,955 | 1.0 |
| 4,891 2 0 | | 1,521 13 0 | 51,839 10 6 | | 13,031 11 0 | 38,807 15 6 | | | 51,839 10 6 | 637,968 | |
| | - | | | - | | | | | | 1000 | |
| | | | | | | | | | | | |
| 1,125 8 0 | | 463 15 0 | 9,821 15 0 | | 2,174 11 0 | 7,647 4 0 | | | 9,821 15 0 | 69,224 | a cr |
| 1,226 5 0 | | 51 8 0 | 8,360 0 0 | | 4,115 8 0 | 4,244 8 0 | | | 8,350 0 0 | 81,129 | |
| 1,510 15 0 | | 269 0 9 | 10,481 1 9 | | 4,444 3 0 | 6,036 14 9 | | | 10,481 1 9 | 136,094 | |
| 1,293 7 0 | | 30 0 0 | 4,109 10 0 | | 4,109 10 0 | | | | 4,109 10 0 | 7.656 | |
| 5,156 3 0 | | 814 7 9 | 32,772 10 9 | | 14,844 0 0 | 17,928 10 9 | | | 32,772 10 9 | 294,103 | |
| 40,900 7 0 | 15,110 11 | 42,107 10 0 | 4,03,592 12 9 | | 1,45,546 10 0 | 1,69,685 2 9 | 88,361 0 0 | | 4,03,592 12 9 | 2,236.437 | 0 2 |
| | 1 1 1 1 | | Parts Pressin | 7 | | 1 | | | ** ** ** | mindred and it | |
| 1,619 12 0 | | | 19,294 12 0 | | 19,204 12 0 | | | | 19,294 12 0 | | |
| 42,520 3 0 | 15,110 11 | 42,107 10 0 | 4,22,887 8 9 | | 1,64,841 6 0 | | 88,361 0 0 | | 4,22,187 8 9 | second and a second second | 0 3 |
| 423 1 3 | | 1,241 1 11 | 29,932 6 0 | | | | 29,932 6 0 | | 29,932 € 0 | | 0 2 |
| Second 10.0 | and a state | - 201 4 4 20 20 | CHIPMENT PARTY | 1.486 | 1. | | CARE ENG B | 1.554 | 152 2 2 11 | India Search | |
| | | | | ** | | | | | | 32,032 | |
| | | | | | | | | | | 14,053 | |
| 42,943 4 3 | 15,110 11 | 43,348 11 11 | 4,52,819 14 9 | | 1,64,841 6 0 | 1,69,685 2 9 | 1,18,293 6 0 | | 4,52,819 14 9 | 2,458,200 | 0 2 1 |

1

Superintendent, one calf Vaccinator and nine menials has been included.

them have been shown.

٩.

STATEMENT No. III.

| | Districts. | Number of municipalities, dispen- saries, etc., in each district to which a vaccinator is attached. | vaccinators attach- municipality, dis- | persons vacci- | r of persons ch vaccinator. | | Numbe | r of case vaccinat | s primar ed. | ily | | imber of e rvacelnat | | of succa ca w resul | entage ccessful ses in which ts were own, | of u | rentage nknown uses to l cases. |
|----------|----------------------------------|---|---|-----------------|--------------------------------------|-----------------|--------------|-------------------------------------|--------------------|----------|-----------|-------------------------|---------|------------------------------|--|-----------|--|
| | Distances | unici in cinat | vace c., d | er of | timbe by ca | | 8 | luccessfu | l. | | 1000 | | | | ġ | | 4 |
| | | etc., | each n | number | ated in | | one | 1 2 2 2 | all | i i | | -i | 4 | | Inatio | | matio |
| Number, | | Number saries, which a | Number of ed to ea | Total, n | Average number vaccinated by each | Total. | Under o | One year and under six years. | Total of all ages. | Unknown. | Total. | Successful | Unknown | Primary | Re-vaccination. | Primary | Re-vaccination. |
| _1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 1 | Burdwan | 6 | 8 | 7,046 | 880 | 3,115 | 1,410 | 1,327 | 2,998 | | 3,931 | 2,507 | 56 | 96-2 | 63-7 | | |
| 2 | Birbhum | 1 | 4 | 3,216 | 804 | 777 | 40 | 579 | 753 | | 2,439 | 1,868 | | 96-9 | 1.10 | | 1-4 |
| 3 | Bankura | 3 | 3 | 4,970 | 1,656 | 2,719 | 439 | 1,827 | 2,688 | 2 | 2,251 | 414 | 115 | 98-8 | 18-3 | -0 | 10000 |
| 4 | Midnapur | 7 | 7 | 12,644 | 1,793 | 2,809 | 304 | 1,733 | 2,556 | 231 | 9,835 | 2,741 | 2,604 | 90-9 | 27.8 | 8.2 | 26.4 |
| 5 | Hooghly | 10 | 12 | 16,724 | 1,393 | 7,479 | 1,054 | 4,848 | 7,107 | 196 | 9,245 | 4,477 | 1,438 | 97.0 | 2 48 . 4 | 2.6 | 15.5 |
| 6 | Howrah | 2 | 7 | 11,616 | 1,659 | 4,825 | 2,194 | 2,336 | 4,625 | 98 | 6,799 | 1,281 | 810 | 95.8 | 18.8 | 2.0 | 8 11 . 9 |
| 7 | 24-Parganas | 25 | 29 | 23,818 | 821 | 12,643 | 3,684 | 5,639 | 12,314 | 73 | 11,200 | 5,589 | 1,003 | 97.3 | 49-9 | -57 | 8-9 |
| 8 | Calcutta | 1 9 | (1) 67 | 216,700 | 3,234 | 29,162 3,203 | 16,496 | 9,211 2,366 | 26,288 3,045 | 1,166 | 187,538 | 51,071 | 35,624 | 90.1 | 27-2 | 3.9 | 18-9 |
| 10 | Murshidabad | 6 | 7 | 7,825 | 1,117 | 2,596 | 877 | 1,576 | 2,538 | 108 | 2,169 | 2,366 | 979 | 95-0 | 45-2 | 3.3 | 45-1 |
| 11 | Jessore | 8 | 3 | 782 | 260 | 324 | 37 | 263 | 324 | | 458 | 164 | | 100 | 35-8 | | 13.7 |
| 12 | Khulna | 3 | 3 | 1,657 | 562 | 505 | 159 | 301 | 496 | 5 | 1,152 | 373 | 142 | 98-2 | 32-3 | 1000 | 12-3 |
| 13 | Rajshahi | 2 | 3 | 2,156 | 718 | 1,004 | 387 | 539 | 961 | 12 | 1,329 | 542 | 232 | 95-7 | 40-7 | 1000 | 18-2 |
| 24 | Dinajpur | 1 | 1 | 1,902 | 1,902 | 459 | 130 | 276 | 453 | 1 | 1,443 | 506 | 350 | 98-6 | 35-06 | | 24-2 |
| 15 | Jalpaiguri | 1 | 1 | 854 | 854 | 398 | 180 | 206 | 396 | | 458 | 149 | 20 | 99-2 | 32.5 | | 4-3 |
| 16 | Darjeeling | 2 | 2 | 3,926 | 1,963 | 884 | 522 | 214 | 856 | 28 | 3,042 | 968 | 452 | 96-8 | 31.8 | 3-1 | 14.5 |
| 17 | Rangpur | 2 | 3 | 3,174 | 1,058 | 900 | 113 | 663 | 895 | 5 | 2,274 | 1,219 | 261 | 99-4 | 43.6 | -55 | 11-03 |
| 18 | Bogra | 2 | 2 | 816 | 408 | 264 | 40 | 153 | 207 | 14 | 552 | 144 | 67 | 78.4 | 26.08 | 5-3 | 12-1 |
| 19 | Pabna | 2 | 3 | 3,853 | 1,284 | 1,677 | 383 | 1,089 | 1,606 | 2 | 2,176 | 675 | 48 | 95-7 | 31.02 | -11 | 2.2 |
| 20 21 | Malda Dacca | 3 2 | 3 | 3,227 16,810 | 1,075 | 1,376 | 395 2,037 | 866 | 1,334 | 12 | 1,851 | 1,508 | 96 | 97-01 | 10000 | -87 | 1000000 |
| 22 | Mymensingh | 8 | 8 | 6,777 | 847 | 3,630 | 537 | 3,870 | 6,172 3,274 | 177 236 | 9,757 | 1,275 | 348 | 86-3 | 13-006 | 1 2 2 2 3 | 3.5 |
| 23 | Faridpur | 3 | 4 | 3,468 | 867 | 2,082 | 243 | 1,535 | 1,983 | 200 | 3,148 | 1,082 | 274 | 90-1 | 34-3 | 6.5 | 20.3 |
| 24 | Bakarganj | 6 | 5 | 5,917 | 1,183 | 2,317 | 279 | 1,142 | 2,197 | 40 | 3,600 | 1,406 | 309 | 94-8 | 39.5 | 1.7 | 8.5 |
| 25 | Chittagong | 2 | 3 | 2,580 | 860 | 1,122 | 93 | 857 | 980 | 20 | 1,458 | 265 | 349 | 87-3 | 18.1 | 1.7 | 23-9 |
| 26 | Noakhali | 1 | 3 | 5,510 | 1,836 | 1,367 | 150 | 1,020 | 1,237 | 61 | 4,143 | 1,306 | 609 | 90.5 | 31.4 | 4-4 | 14.6 |
| 27 | Tippera | 3 | 3 | 3,845 | 1,281 | 2,282 | 397 | 1,467 | 1,965 | 65 | 1,685 | 485 | 1 466 | 86.1 | 28.9 | 2.8 | 27.6 |
| | Total | 116 | 211 | 377,184 | 1,788 | 97,100 | 33,042 | 48,156 | 90,248 | 2,579 | 280,548 | 85,400 | 47,465 | 92.9 | 30.4 | 2.6 | 16.9 |
| | | | | | | | | | | | | | | | | | - |
| | Vaccinations performed by- | | | | | | | | | | | | | | | | a. erea |
| | Railways | | | 9,563 | | 1,424 | 363 | 549 | 1,334 | 5 | 8,139 | 6,076 | 29 | 93-6 | 74.6 | .35 | · 35 |
| | Steamers | | | 9,534 | | | | | | | 9,534 | | 9,534 | | | | 100 |
| | Tea Gardens | | | 7,543 | | 5,203 | 2,524 | 1,607 | 4,727 | 411 | 2,349 | 934 | 322 | 90-8 | 39.7 | 7.8 | 13.7 |
| | Factories | | •• | 37,347 | | 8,605 | | | 7,786 | | (2)28,742 | 11,151 | | 90-4 | 51.4 | | |
| | Dispensaries | | | 31 | | 15 | | 11 | 15 | | 16 | 9 | | 100 | 56.2 | | |
| | Jails | | 55 | 32,840 | 597 | 275 | | | 170 | 51 | 32,565 | 13,913 | 4,203 | 61.8 | 42.7 | 18-5 | 12.9 |
| | Grand total | 116 | 266 | 474,042 | 1,782 | 112,622 | 35,929 | 50,323 | 104,280 | 3,046 | 361,893 | 117,483 | 61,553 | 92-5 | 32-4 | 27.04 | 17.008 |

Showing particulars of vaccination performed by vaccinators attached to municipalities, dispensaries, and other agencies in the Presidency of Bengal during the year 1926-27.

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(1) 8 Extra vaccinators were entertained for epidemic work.
 (2) This figure includes 7,052 operations performed in the Ludlow Jute Mills in the Howrah District which did not furnish any detail.

Showing the number of persons Primarily vaccinated and the number of those persons who were successfully vaccinated in each of the undermentioned official years. COMPARATIVE STATEMENT No. IV.

| - | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--------------------------------------|--|--|---|-----------------------------------|---|---|---|---|---|--|--|---|--|
| | | | | | | | | | 4 | ersons prim | Persons primarily vaccinated. | uted. | | | | | | | | |
| Establishment. | 1917-18. | -18. | 1918-19. | 19. | 1919-20 | -20. | 1920-21 | -21. | 11 | 1921-22. | 1922-23. | 23. | 1923-24. | 24. | 1024-25, | 25. | 1925-26. | -26. | 192(| 1926-27. |
| - | Total number. 2 | Number success- fully vacci- nated. 3 | Total number, | Number success- fully vacci- nated. 5 | Total number. 6 | Number success- fully vacel- nated. 7 | Total number. 8 | Number success- fully vacel- nated. 9 | Total number. 10 | Number success- fully vacei- nated. | Total number, 12 | Number success- fully vacci- nated. 13 | Total number, 14 | Number success- fully vacci- nated. 15 | Total number. 16 | Number success- fully vacci- nated. | Total number. | Number success- fully vacci- nated. | Total number. | Number susconsa- fully vacci- nated. |
| Government Municipalities District Boards Dispersaries, Tea- Gardens, Fac- Gardens, Fac- Jails Work done by Licensed Vac- dinators. | 7,473 82,457 191,830 7,083 1,061,246 | 7,296 78,439 158,953 6,915 1,025,332 | 7,261 61,729 257,532 6,410 9,410 | 7,105 67,325 277,772 5,973 6,973 | - 7,108 5,640 5,581 87,328 114,722 110,026 277,372 476,163 462,171 5,973 13,893 12,500 917,348 1,001,025 1,006,245 | 5,581 110,026 462,171 12,500 12,500 | 405,8 978,59 298,57 758,570 | 6,432 06,1355 581,686 7,451 7,451 7,451 | 6,489 76,194 786,737 5,793 8,793 | 6,404 73,253 770,282 5,294 5,294 | 6,640 79,473 7,038 7,038 | 6,516 75,966 1,232,857 6,017 1,40,775 | 5,800 73,402 1,480,827 13,573 3,033 | 5,781 74,734 1,430,198 12,220 | 7,337 102,119 1,529,956 13,908 | 7,273 97,918 1,477,762 12,047 12,047 810 | 8,675 91,550 1,599,810 19,756 29,529 | 8,039 86,961 1,543,133 18,016 18,016 28,827 | 6,810 96,813 1,621,173 15,513 15,513 NII | 6,740 90,248 1,546,628 14,032 NII |
| Total | 1,349,579 | 1,306,935 | 1,286,420 | 1,265,129 | 1,256,420 1,265,129 1,641,449 1,596,613 1,414,437 | 1,596,613 | | | 1,203,677 | 1,999,312 | 1,522,701 | 1,462,131 | 1,370,764 1,203,677 1,222,312 1,622,701 1,462,131 1,557,745 1,525,503 | 1,525,503 | 1,653,320 | 1,595,000 1,749,320 1,685,516 | 1,749,320 | 1,685,516 | 1,740,309 | 1,657,657 |

ILVLENEMA NO'

STATEMENT No. V.

Particulars of vaccination verified by the Inspecting Officers during the year 1926-27.

| International Internat | | | | | Tota | Total number inspected. | Inspected | - | | | | - | Percenta | Percentage of inspection to total number vaccinated. | inated. | o total n | unber | | | Percentage of cases found successful to total number inspected. | age of o | ases for mber in | und succ | cessful t | | | | |
|---|--------------------------|---------------------------|----------------------|---------------------------------|-----------------------------------|--------------------------------------|-----------|--|----------------------|--|---|---|--|---|---|---|----------|-------|-----------------------------------|--|---|---------------------|---|-----------|--|---------|---|---------|
| Control Contro Control Control <th< td=""><td>district.</td><td>Total nu persons na</td><td></td><td>By As Directs Pul Heal</td><td>sistant ons of blic tth.</td><td>By C Surgeon District Offic</td><td></td><td>By Mun Superints of Vaccia and Mun Sanit Inspec</td><td></td><td>By Assist Superinten of Vaccinal</td><td>and the second se</td><td>r Assist lirectors Public Health</td><td>to the second se</td><td>By Civil Surgeons of Distric Health Officers.</td><td>the second se</td><td>Munici- superin- ents of clination District altary pectors.</td><td></td><td></td><td>By Ass Directo Publ Heal</td><td></td><td>By Civ Surgeo nd Dist Healt Officer</td><td></td><td>Sy Mund ad Supe cendents (accinat und Mun al Sanit Inspecto</td><td></td><td>Assista uperinte dents of accinatio</td><td></td><td>ercenta f success eported accimato</td><td>8.55</td></th<> | district. | Total nu persons na | | By As Directs Pul Heal | sistant ons of blic tth. | By C Surgeon District Offic | | By Mun Superints of Vaccia and Mun Sanit Inspec | | By Assist Superinten of Vaccinal | and the second se | r Assist lirectors Public Health | to the second se | By Civil Surgeons of Distric Health Officers. | the second se | Munici- superin- ents of clination District altary pectors. | | | By Ass Directo Publ Heal | | By Civ Surgeo nd Dist Healt Officer | | Sy Mund ad Supe cendents (accinat und Mun al Sanit Inspecto | | Assista uperinte dents of accinatio | | ercenta f success eported accimato | 8.55 |
| 1 | | .vnemir¶ | Re-vacel- nation. | Primary. | Ro-vacel- | Primary. | Re-vacei- | Primary. | Re-vacel- nation. | Primary. | .moltan | | .molten | Re-vacel- | | -Isoev-s& | Primary. | | .viamir4 | | Primary. | Re-vacel- | | | | .noitan | | notion. |
| Model Model <th< td=""><td>1</td><td></td><td>**</td><td>4</td><td>5</td><td>9</td><td>-</td><td>8</td><td>0</td><td>10</td><td></td><td>-</td><td></td><td>_</td><td></td><td>17</td><td>18</td><td>19</td><td>20</td><td>100</td><td>21</td><td>100</td><td>24</td><td>25</td><td></td><td></td><td></td><td>0</td></th<> | 1 | | ** | 4 | 5 | 9 | - | 8 | 0 | 10 | | - | | _ | | 17 | 18 | 19 | 20 | 100 | 21 | 100 | 24 | 25 | | | | 0 |
| 1100 110 101 101 | URA | 199'83 | 72,049 | : | | 3,708 | 1,982 | 196 | 1,191 | 31,970 | 16,470 | | | 61 50 | 31 | | 63.3 | | ** | : | | | 1 | 1.000 | | 16 | 1.23 | 1 10 |
| 13.84 1 <td> un</td> <td>37,393</td> <td>41,093</td> <td>:</td> <td>:</td> <td>203</td> <td>518</td> <td>237</td> <td>727</td> <td>6,837</td> <td>1,850</td> <td>:</td> <td>:</td> <td></td> <td>-02</td> <td></td> <td>18.6</td> <td>4.8</td> <td>:</td> <td>:</td> <td></td> <td></td> <td>1000</td> <td>100</td> <td>-29 6.</td> <td></td> <td></td> <td>-</td> | un | 37,393 | 41,093 | : | : | 203 | 518 | 237 | 727 | 6,837 | 1,850 | : | : | | -02 | | 18.6 | 4.8 | : | : | | | 1000 | 100 | -29 6. | | | - |
| Model Model <th< td=""><td> un</td><td>35,243</td><td>38,384</td><td>:</td><td>:</td><td>611</td><td>526</td><td>1,176</td><td>969</td><td>3,198</td><td>5,018</td><td>:</td><td> 1</td><td>-</td><td>÷2</td><td></td><td></td><td>13.8</td><td>:</td><td>:</td><td></td><td>10.</td><td>22</td><td>-</td><td></td><td></td><td></td><td>-0</td></th<> | un | 35,243 | 38,384 | : | : | 611 | 526 | 1,176 | 969 | 3,198 | 5,018 | : | 1 | - | ÷2 | | | 13.8 | : | : | | 10. | 22 | - | | | | -0 |
| Norm Norm <th< td=""><td> indu</td><td>86,016</td><td>117,021</td><td>:</td><td>:</td><td>:</td><td>:</td><td>749</td><td>2,173</td><td>5,549</td><td>5,992</td><td>:</td><td>:</td><td></td><td></td><td>31</td><td></td><td>9.9</td><td>:</td><td>:</td><td>:</td><td></td><td></td><td>122</td><td>5</td><td></td><td>1000</td><td>02</td></th<> | indu | 86,016 | 117,021 | : | : | : | : | 749 | 2,173 | 5,549 | 5,992 | : | : | | | 31 | | 9.9 | : | : | : | | | 122 | 5 | | 1000 | 02 |
| Model Model <th< td=""><td>hby</td><td>28,346</td><td>27,000</td><td>:</td><td>:</td><td>1,812</td><td>4,119</td><td>1,593</td><td>2,118</td><td>9,344</td><td>3,133</td><td></td><td>2</td><td>8</td><td>5</td><td>6. 21</td><td>44.8</td><td>17.6</td><td></td><td></td><td>1.5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<> | hby | 28,346 | 27,000 | : | : | 1,812 | 4,119 | 1,593 | 2,118 | 9,344 | 3,133 | | 2 | 8 | 5 | 6. 21 | 44.8 | 17.6 | | | 1.5 | | | | | | | |
| 10.00 10.01 <th< td=""><td>ah</td><td>168'97</td><td>20,488</td><td>:</td><td>:</td><td>168</td><td>69</td><td>2,578</td><td>3,040</td><td>22,682</td><td>1,326</td><td>:</td><td>+</td><td>-</td><td>-23</td><td>2-77</td><td>102.7</td><td></td><td>:</td><td> 96</td><td>80</td><td>-0</td><td>-</td><td>6</td><td>20.</td><td></td><td></td><td>00</td></th<> | ah | 168'97 | 20,488 | : | : | 168 | 69 | 2,578 | 3,040 | 22,682 | 1,326 | : | + | - | -23 | 2-77 | 102.7 | | : | 96 | 80 | -0 | - | 6 | 20. | | | 00 |
| Norm Norm <th< td=""><td>rganas</td><td>74,608</td><td>48,932</td><td>:</td><td>:</td><td>372</td><td>360</td><td>6,131</td><td>4,018</td><td>8,180</td><td>4,674</td><td></td><td>:</td><td></td><td>\$</td><td></td><td>13.1</td><td></td><td>:</td><td></td><td>-</td><td>-</td><td></td><td>1.</td><td>-1 20-</td><td></td><td>10</td><td>1-</td></th<> | rganas | 74,608 | 48,932 | : | : | 372 | 360 | 6,131 | 4,018 | 8,180 | 4,674 | | : | | \$ | | 13.1 | | : | | - | - | | 1. | -1 20- | | 10 | 1- |
| $ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$ | tta | 29,162 | 187,538 | - | : | : | : | 15,055 | 57,253 | : | : | | | - | -19 | | : | : | : | . : | 100 | | | +- | : | . 90 | | 01 |
| 0.10 0.11 0.11 0.10 <th< td=""><td></td><td>41,814</td><td>35,358</td><td></td><td>:</td><td>65</td><td>31</td><td>1,133</td><td>808</td><td>8,649</td><td>3,599</td><td></td><td>:</td><td>-</td><td>35.</td><td>-</td><td>22-3</td><td>10.8</td><td>:</td><td>:</td><td>-</td><td></td><td>100</td><td>91</td><td>1000</td><td>-</td><td>19</td><td>-</td></th<> | | 41,814 | 35,358 | | : | 65 | 31 | 1,133 | 808 | 8,649 | 3,599 | | : | - | 35. | - | 22-3 | 10.8 | : | : | - | | 100 | 91 | 1000 | - | 19 | - |
| No. No. <td>idabad</td> <td>51,667</td> <td>84,730</td> <td>:</td> <td></td> <td>1,175</td> <td>2,425</td> <td>108</td> <td>1,834</td> <td>11,433</td> <td>12,793</td> <td>-</td> <td>00</td> <td>-</td> <td>â</td> <td></td> <td>23.2</td> <td>16.09</td> <td></td> <td></td> <td></td> <td>9.</td> <td>123</td> <td>1532</td> <td>1</td> <td>1</td> <td>-</td> <td>.0</td> | idabad | 51,667 | 84,730 | : | | 1,175 | 2,425 | 108 | 1,834 | 11,433 | 12,793 | - | 00 | - | â | | 23.2 | 16.09 | | | | 9. | 123 | 1532 | 1 | 1 | - | .0 |
| 11 11< | | 47,829 | 36,037 | | : | -1,864 | 67 | 41 | 56 | 29,633 | 4,663 | | ** | 0 | - | ii. | 62-1 | 13-1 | : | | - 00 | - | ·27 8- | 8 | - | - | | 8 |
| 420063333510.11.06900813,01.13,02.14,02.1 | ·· • | 46,248 | 22,742 | : | : | 311 | 528 | 96 | 201 | 5,023 | 1,802 | | : | | | | 10-9 | 8.4 | : | 96 | - | - | | + | - | 0 | | - |
| $ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$ | IV | 42,996 | 53,283 | : | : | 129 | 166 | 808 | 862 | 11,940 | 2,195 | | 1 | | -98 | 24.8 | 28.4 | 4.5 | : | 96 | | | | - | -18 2- | | | 5 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | ID | 77,722 | 33,587 | : | | 3,452 | 1,423 | 378 | 845 | 14,594 | 4,015 | - | + | + | | 58.5 | 19-01 | 12-4 | | | | | SIDY | | 8 73 | 83 | | - |
| 11.202 11.304 10.4 0.3 0.3 0.4 0.14 0.3 0.4 0.314 0.4 0.314 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0.4 0.34 0. | ··· junz | 20,648 | 29,857 | : | : | 22 | 257 | 174 | 213 | 188/6 | 4,654 | | : | | - | | 43.8 | 15-8 | : | : | 1- | - | | | | | - | |
| M.244 4.5607 1.56 1.74 5.440 0.571 0.440 0.571 0.470 0.571 0.47 0.64 0.67 0.64 0.67 0.64 0.67 0.64 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.61 0.72 0.71 0.72 0.71 0.72 0.71 0.72 0.71 0.72 0.71 0.72 0.71 0.71 0.72 0.71 0.72 0.71 | Sult | 11,262 | 12,540 | : | | 226 | 00 | 010 | 72: | 6,189 | 3,150 | | æ : | | | 23.8 | 9.65 | 32-1 | : | | 00 | | | - | - | | 1.10 | - |
| 17.77314.3021.11.851.951.004.001.33.101.03.001.33.101.03.001.33.101.03.001.33.10 | ur | 76,254 | 45,657 | : | | 1,588 | 179 | 395 | 240 | 9,460 | 5,334 | | 61 | - | - | 32.1 | 12.5 | 12.6 | | 90 | - | 1- | | | - | | 1.8 | |
| $ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$ | T not ut | 9月1.1月 | 44,392 | | - | 181 | 137 | 100 | 400 | 13,349 | 10,205 | | | - | 18 | | | | | | | - | | 1. | 10 | 1 | | |
| | | 78,952 | 82,611 | : | : | 3,384 | 3,856 | 812 | 175 | 5,310 | 2,810 | | * | + | 48. | | | 7.0 | : | | - | 1.5 | .4 31 | | | | | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | \$3,688 | 46,306 | : | | 2,072 | 875 | 396 | 108 | 1,271 | 1,279 | 1 12. | | - | 1221 | ŵ | 8.9 | | : | : | | 08 | 1.5 | - | 00 | | | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | 138,252 | 34,198 | | : | 763 | : | 4,555 | 4,487 | 34,491 | 1,905 | | | 89 | | | 26.2 | | | 8 | | | | | 01 | | - | - |
| $ 5.5.517 60.004 \dots 2.508 934 1.045 710 2.7.73 6.9.72 11.301 \dots 14 \cdot 8 1\cdot 6 60\cdot 1 51\cdot 6 50\cdot 6 19\cdot 4 \dots 12 86 76 76 90\cdot 4 15\cdot 7 60\cdot 1 65\cdot 7 96 76 76 76 76 76 76 $ | nsingh | 259,723 | 116,216 | : | : | 462 | 58 | 945 | 1,034 | 23,507 | 4,901 | | : | | 1.1 | ġ | 9.1 | | | * : | - | + | - | - | | | 1.1 | 8 |
| | IN | 55,517 | 60'094 | | : | 2,598 | 934 | 1,045 | 716 | 20,722 | 165,11 | | | - | Ś | 1 | | 19-4 | : | | | - | | 1- | | | 12.68 | 94 |
| 35,639 44,046 8,673 2.015 146 27,901 11.5 11.67 4.6 13.91 14.6 39.07 11.6 01.0 22.2 06.5 30.4 05.6 30.97 11.7 11.6 11.7 11.7 11.8 11.6 11.6 11.6 11.7 11.7 11.6 11.6 11.6 11.7 11.7 11.6 11.6 11.6 11.6 11.7 11.7 11.7 11.7 11.7 11.7 11.7 11.7 11.7 11.7 11.6 11.6 11.6 11.7 11.7 11.7 11.7 11.7 11.7 11.7 11.7 11.7 11.7 </td <td> funz</td> <td>103,408</td> <td>10,779</td> <td></td> <td></td> <td>2,354</td> <td>00</td> <td>446</td> <td>134</td> <td>27,139</td> <td>608</td> <td></td> <td></td> <td>_</td> <td>19</td> <td>ė</td> <td></td> <td>8.8</td> <td>:</td> <td>:</td> <td>00</td> <td></td> <td>-0</td> <td>-</td> <td></td> <td>00</td> <td></td> <td>50</td> | funz | 103,408 | 10,779 | | | 2,354 | 00 | 446 | 134 | 27,139 | 608 | | | _ | 19 | ė | | 8.8 | : | : | 00 | | -0 | - | | 00 | | 50 |
| 64.344 64.477 7.472 319 470 479 57.383 9.986 11.6 91.006 15.6 12.6 91.006 15.6 12.6 14.7 12.6 12.7 12.6 | song | 55,639 | 44,698 | | : | 8,573 | 2,015 | 146 | 216 | 21,305 | 7,891 | | 15 | - | | 14- | 20-62 | 11.3 | : | 8 | 13 | | | | | | 1 | |
| 113.073 42.040 80.5 11.1 407 501 13.175 17.50 07.7 78 29-7 11.8 4-2 01.3 67.7 71.9 77.7 75.9 97.8 03 6.810 3.174 41 51.8 96.3 22.2 99.1 25 6.810 3.174 1.647 1.1 51.8 96.3 22.2 99.1 25 6.810 3.134 96.3 22.2 99.1 25 15.513 81.345 96.3 22.2 99.1 25 15.513 81.345 96.3 22.2 99.1 25 15.513 81.345 | Ile | 64,344 | 64,477 | | | 7,472 | 319 | 470 | 479 | 67,828 | 9,382 | | 11 | | - | 9-11 | 00-16 | | : | | | - | | | - | 1 | 1.5 | - |
| 0.810 3.174 2.487 1.647 | R | 1.1 | 42,050 | | : | 805 | 111 | 407 | 501 | 13,175 | 1,709 | | | - | 18 | | | | : | | 19 | 19 | -0 | - | - | | | 1- |
| 15,513 81,345 | gong Hill | | 3,174 | | : | | : | | | 2,937 | 1,647 | : | : | - | | | 13-1 | 8-15 | : | : | : | : | : | | | | - | |
| 1.30.000 1.30.000 40,971 80,049 424,002 164,435 2.6 1.4 2.3 5.9 24.5 11.3 85.9 00.2 93.9 28.6 92.2 02.9 94.7 53 | Factories, Factories, | _ | 81,345 | : | : | : | : | : | : | : | : | : | : | : | - | : | : | : | : | : | : | : | : | : | : | | ; | : |
| | Tea Gar- | and the owner where the | 1,526,666 | 1 | | 46,445 | 21,000 | 126'01 | 10 | - | 64,435 | | 04 | 0 | 04 | ia | | | | 1 26 | 0 | 08 | 0 | | | | 13 | 1- |

STATEMENT No. VI.

Showing, side by side, the ratios per mille of population of deaths from small-pox and the number of successful vaccinations during the ten years ending 1926-27.

| 926-27. | Yumber of successful Yaccinations. | 12 | 96,777 62,1165 53,415,573 47,1100 47,1100 47,1100 66,1133 106,1133 66,1133 66,1133 66,1133 66,1133 106,1130 114,728 114,7588 114,7588 114,7588 114,7588 114,7588 114,7588 114, | 2,458,200 |
|----------|--|----|--|-----------|
| 1 | mori suite of deaths from | 20 | 11:2 11:6 11:6 11:6 11:6 11:6 11:0 11:1 11:6 11:6 | 89. |
| 1925-26. | Yumber of successful vaccinations. | 19 | 141,733 41,773 41,775 41,775 41,775 41,776 41,776 41,776 41,776 41,776 41,776 41,776 41,776 41,776 41,776 41,776 53,772 53,772 53,774 53,774 53,774 53,774 53,774 53,774 53,774 53,774 53,774 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,7775 54,77755 54,7775555555555 | 2,395,739 |
| 192 | mort static of deaths from | 18 | 1:000 580 580 580 580 580 1:7700 1:770 1:7700 1:770 1:770 1:770 1:770 1: | 4. |
| 924-25. | Xumber of successful vaccination. | 17 | 22,484 45,508 45,508 45,508 41,717 41,717 41,717 41,717 41,717 41,717 41,717 41,717 110,916 66,512 66,512 71,252 71,252 71,252 71,252 71,252 71,252 71,252 71,252 71,252 71,252 71,252 71,252 71,252 71,252 71,552 752 71,552 752 752 752 752 752 752 752 752 752 | 2.096.383 |
| 195 | mont addates to of the from trom | 16 | 251 112 113 113 113 113 113 113 113 113 11 | - 22- |
| 24. | Number of successful vaccinations. | 15 | 70,205 20,205 20,710 20,710 20,710 20,710 20,710 20,710 20,710 20,710 20,710 20,710 20,710 20,710 21,005 20 | 1.790.927 |
| 1923-24 | mont states to of deaths from | 14 | 000 000 000 000 000 000 000 000 000 00 | -08 |
| 922-23. | Number of successful vaccinations. | 13 | 0,025 20,025 20,025 20,025 20,025 20,025 20,025 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,044 20,025 20,044 20,025 20,044 20,025 20,044 20,025 20,044 20,025 20,0000000000 | 1.738.386 |
| 192 | Ratio of deaths from .xoq-flams | 12 | 002 002 002 002 002 002 002 002 002 002 | -16 |
| 921-22. | Number of successful vaccinations. | 11 | 77, 293 96,661 96,661 294,270 294,270 294,270 294,2945 294,2945 244,095 244,055 245,055 245,055 245,055 245,055 245,055 245,05 | 1.516.502 |
| 192 | mont safate to of destine from a work and the second secon | 10 | Not | -14 |
| 920-21. | Number of successful vaccinations. | 6 | 83,234 27,146 46,003 245,566 245,566 245,566 245,566 245,566 245,566 245,511 246,202 245,511 246,202 255,513 34,511 246,202 255,513 34,511 26,202 255,513 34,512 255,513,513 255,513,515,513 255,513,515,515,515,515,515,515,515,515,5 | 2.006.692 |
| 192 | mont adstast of deaths from super- | 00 | 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | .48 |
| 1919-20. | Number of successful vaccinations. | | 110,575 53,109 53,109 53,109 50,395 40,395 40,395 111,572 71,572 | 2.636.589 |
| 161 | Ratio of deaths from small-pox. | 9 | 445 57 57 57 58 58 58 58 4 58 58 58 58 58 58 58 58 58 58 58 58 58 | 06. |
| 1918-19. | Number of successful vaccinations. | 9 | 51,101 51,101 51,101 52,650 52,650 52,650 52,126 | 1.556.000 |
| 161 | Ratio of deaths from small-pox. | 4 | 112 00 012 012 012 012 012 012 012 012 0 | .26 |
| 1917-18. | Yumber of successful vaccinations. | 00 | 54,296 31,553 31,553 31,553 31,553 31,553 31,553 31,553 31,553 31,553 31,553 31,553 31,553 35,473 35 | 1.481.921 |
| 191 | mon attact of deaths from | 01 | 41 41 41 41 41 40 40 40 40 40 40 40 40 40 40 | 15 |
| I.cl. | THE DEST SHE | 1 | | : |
| | District. | 1 | Bardwan Brabaura Mataspura Mataspura Mataspura Howrah Howrah Howrah Cal-Pargamas Cal-Pargamas Cal-Pargaura Cal-Pargaura Desort Mada Magama Darjeeling Rangpur Rangpur R | Total |

STATEMENT No. VII.

Showing the protection afforded to infants in each town in the Presidency of Bengal during the year 1926-27.

| District. I | Town. | ⁴⁰ Number of births during the year. | Number of deaths amongst children under one year during the year. | Number of successful vaccinations on child- or ren under one year during the year cuding 81st March 1927. | | | | |
|--|---|--|--|---|---|--|--|--|
| | | 237 | | 1000 | 6 | | | |
| | Burdwan . Kalna . | 104 | 9 49 | 160 194 | 1st July 1883. 1st ., ., | | | |
| Burdwan | Katwa . | . 56 | 5 | 56 | lst ,, ,, | | | |
| | Dainhat . | | 13 | 129 | lst ,, ,, | | | |
| | Raniganj . Asansol . | 907 | 54 53 | 513 358 | 1st 14th September 1910. | | | |
| | | | | | 14th September 1910. | | | |
| | Total . | . 1,188 | 183 | 1,410 | | | | |
| Birbhum | Suri . | . 59 | 8 | 40 | 1st July 1881. | | | |
| | | . 491 | 41 | 262 | 1st July 1883. | | | |
| Bankura { | Sanamulthi | . 480 . 375 | 75 65 | 60 | lst ,, ,, | | | |
| | | | 00 | 117 | 6th June 1892. | | | |
| | Total . | . 1,346 | 181- | 439 | | | | |
| | | . 550 | 54 | 176 | 1st July 1883. | | | |
| 181 18 18 | Khanan | · 368 · 102 | 37 16 | 17 8 | lst " " | | | |
| Midnapur | Chandrakona | . 146 | 51 | 2 | 16th August 1889. 1st July 1883. | | | |
| | Damilhannun | . 144 | 21 | 15 | lst " " | | | |
| | | . 91 | 18 | 17 | lst " " | | | |
| | Tamluk . | . 154 | 23 | 69 | lst ", " | | | |
| | Total . | . 1,555 | 220 | 304 | TE IN | | | |
| | Hooghly-Chinsura | 807 | 143 | 235 | 1st September 1881. | | | |
| | | . 123 | 25 | 19 | 1st July 1883. | | | |
| | | . 151 | 38 | 44 | 11th February 1889. | | | |
| | Litteman | · 659 · 174 | 77 30 | 266 | 1st March 1883. | | | |
| Hooghly | Kotming | . 174 | 20 | 14 5 | lst April " lst July " | | | |
| accent, | Daidmahati | . 405 | 65 | 248 | lot | | | |
| | | . 357 | 94 | 148 | lst "" | | | |
| | Rishra-Konnagar . | . 336 | 80 | 61 | (It formerly formed a | | | |
| 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | | | 12.2 | a second a | part of the Seram | | | |
| | Champdani . | . 316 | 78 | 14 | pur Municipality.) | | | |
| | Champdan . | . 510 | 10 | 14 | (It formerly formed a part of the Baidya | | | |
| | | | | | bati and Bhadreswar | | | |
| | Total . | . 3,466 | 650 | 1,054 | Municipalities.) | | | |
| | | | | | | | | |
| Howrah | Howrah . | . 4,157 | 1,472 | 1,760 | Ist April 1882. | | | |
| | Bally . | . 398 | 61 | 434 | 1st October 1884. | | | |
| | Total . | . 4,555 | 1,533 | 2,194 | | | | |
| | Total of the Burdwa | an 12,169 | 2,775 | 5,441 | and and | | | |
| | Division. South Suburban . | . 772 | 125 | 768 | 1st October 1883. | | | |
| 24-Parganas | Tallygari | 101 | | | | | | |
| | Tollyganj . | . 401 | 61 | 443 | lst " " | | | |
| | () + + + () = (+ + + + + + + + + + + + + + + + + + | 1 2 2 2 3 | 10 | | (It formerly formed a part of the South | | | |
| | | | 1 | | Suburban Munici- | | | |
| | A PARTY AND A PARTY OF A | Contraction of the | 7 | | pality.) | | | |

| District. | Town. | | Number of births during the year. | Number of deaths amongst children - under one year during the year. | Number of successful vaccinations on child- ren under one year during the year ending 31st March 1927. | Date of extension of Vac- cination Act to town. | | | | |
|-------------------------|---|----------|--|---|--|---|--|--|--|--|
| Andre 1993 | Budge-Budge Baranagar Kamarhati | | 273 581 401 | $13 \\ 146 \\ 59$ | 166 251 140 | 18th February 1902. 1st October 1883. 1st ,, ,, (It formerly formed a part of the Baranagar Municipality.) | | | | |
| Tana 1010 | Rajpur Baruipur Jaynagar North Dum Dum South Dum Dum Khardah Barrackpur inclu Barrackpur Cant ment. Panihati | ding | 245 71 85 112 256 109 111 279 | $ \begin{array}{r} 43 \\ 8 \\ 21 \\ 34 \\ 44 \\ 15 \\ 26 \\ 45 \\ \end{array} $ | 39 46 21 20 88 13 25 51 | 1st October 1883. 1st """""""""""""""""""""""""""""""""""" | | | | |
| 24-Parganas— concld. | North Barrackpu Tittagarh | r | 316 648 | 43 157 | 169 332 | 1st October 1883. 1st ,, ,, (It formerly formed a part of the South Barrackpur Munici pality.) | | | | |
| 1941 19 | Garulia | | 156 | 18 | 54 | 1st October 1883. (It formerly formed a part of the North Barrackpur Munici pality.) | | | | |
| TRET CARL | Naihati Halisahar Kanchrapara Bhatpara | | 367 98 188 1,226 | 64 17 7 157 | 336 18 8 258 | Ist October 1883. lst ", ", (They formerly former parts of the Naihat Municipality.) | | | | |
| | Barasat Gobardanga Basirhat Baduria Taki | | $74 \\ 31 \\ 522 \\ 134 \\ 144$ | 6 4 102 11 36 | $11 \\ 9 \\ 323 \\ 46 \\ 49$ | 1st October 1893. 1st ,, ,, 1st ,, ,, 1st ,, ,, 1st ,, ,, 1st ,, ,, | | | | |
| | Total | | 7,600 | 1,262 | 3,684 | | | | | |
| Attel aslanced | dane line la | | | | 1 | The party of the second | | | | |
| Calcutta | Calcutta | | 16,788 | 6,879 | 16,496 | 1880. | | | | |
| 1211 121 (| Krishnagar Nadia Ranaghat Birnagar | | $315 \\ 202 \\ 180 \\ 49$ | 43 44 29 18 | $123 \\ 20 \\ 122 \\ 24$ | 1st October 1883. 1st ,, ,, 1st ,, ,, 1st ,, ,, | | | | |
| Nadia { | Santipur Chakdaha Kushtia Kumarkhali Meherpur | | 658 74 116 76 79 | $ \begin{array}{r} 147 \\ 9 \\ 16 \\ 18 \\ 21 \end{array} $ | 62 55 21 12 23 | 1st " 28th January 1887. 1st October 1883. 1st " 1st " | | | | |
| | Total | | 1,749 | 345 | 462 | | | | | |

.

.

| District. | Town. 2 | | " Number of births during the year. | Number of deaths amongst children under one year during the year. | Number of successful vertinations on child- ren under one year during the year ending 31st March 1927. | Date of extension of Vaccination Act to town. |
|--------------------|--------------------------------------|----------|-------------------------------------|---|--|--|
| | Berhampur Murshidabad Azimganj | | $395 \\ 169 \\ 235$ | 73 29 37 | $129 \\ 25 \\ 162$ | 1st October 1883. 1st ", " 1st ", " (It formerly formed a |
| Murshidabad { | Kandi Jangipur Dhulian | | $229 \\ 351 \\ 216$ | 32 29 47 | 337 167 57 | part of the Murshida- bad Municipality.) 1st October 1883. 1st """ 26th June 1910. |
| | Total | | 1,595 | 247 | 877 | Alter House Mark |
| Jessore { | Jessore Kotchandpur Maheshpur | | 134 71 35 | 3 1 9 | 31 6 | 1st October 1883. 1st February 1884. 1st October 1883. |
| | Total | | 240 | 13 | 37 | |
| Khulna { | Khulna Satkhira Debhatta | | $155 \\ 108 \\ 51$ | 10 27 8 | $\begin{array}{c}13\\82\\64\end{array}$ | 1st July 1887. 7th July 1883. 1st October 1883. |
| | Total | | 314 | 45 | 159 | |
| z bound with all a | Total of the dency Divisi | | 28,286 | 8,791 | 21,715 | |
| Paistati | Rajshahi | | 505 | 70 | 363 | 1st June 1881. |
| Rajshahi{ | Nator | | 113 | 22 | 24 | 1st January 1881. |
| | Total | | 618 | 92 | 387 | The second |
| Dinajpur | Dinajpur | | 165 | 19 | 130 | 1st January 1887. |
| Jalpaiguri | Jalpaiguri | | 121 | 16 | 180 | 1st January 1887. |
| Darjeeling{ | Darjeeling | | 512 | 57 | 261 | 1st September 1884. |
| Surforming | Kurseong | | 280 | 27 | 261 | 1st January 1887. |
| | Total | •• | 792 | 84 | 522 | |
| Rangpur { | Rangpur Gaibandha | | 229 47 | 32 6 | 84 29 | 1st July 1881. 20th November 1924. |
| | Total | | 276 | 38 | 113 | Auto In a standard |
| Bogra{ | Bogra | | 104 | 13 | 36 | 1st January 1882. |
| | Sherpur | | 53 | 8 | 4 | 1st October 1884. |
| | Total | ••• | 157 | 21 | 40 | annes - |
| | Pabna | | 187 | 19 | 172 | 1st February 1882. |
| Pabna { | Sirajganj | | 345 | 83 | 211 | 1st January 1887. |
| | Total | | 532 | 102 | 383 | |

.

| District. | Town. | Number of births during the year. | Number of deaths amongst children under one year during the year. | Number of successful vaccinations on child- ren under one year during the year ending 31st March 1927. | Date of extension of Vac cination Act to town. |
|---------------------|--|---|--|--|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Malda | English Bazar Malda Nawabganj | 269 56 356 | 28 26 73 | $250 \\ 14 \\ 131$ | 1st March 1883. 1st April 1887. 12th May 1904. |
| | Total | 681 | 127 | 395 | |
| | Total of the Rajshahi Division. | 3,342 | 499 | 2,150 | |
| Dacca | Dacca | 3,582 | 789 | 1,941 | 1st July 1887. |
| Dacca | Narayanganj | 927 | 220 | 96 | lst ", " |
| | Total | 4,509 | 1,009 | 2,037 | |
| | Mymensingh Muktagacha Netrokona | 460 116 224 | 82 31 34 | $25 \\ 11 \\ 33$ | 1st October 1887. 1st """ 20th January 1890. |
| fymensingh \ldots | Jamalpur Sherpur Kishorganj | $548 \\ 508 \\ 404$ | 50 44 47 | 266 57 120 | 1st October 1887. 1st ,, ,, 1st ,, ,, |
| | Bajitpur Tangail | $ \begin{array}{r} 121 \\ 267 \end{array} $ | 17 39 | 25 | 1st "" 19th February 1890. |
| | Total | 2,648 | 344 | 537 | |
| aridpur | Faridpur Madaripur | 219 518 | 29 89 | 113 91 | 1st October 1887. |
| anupur | Rajbari | 275 | 89 45 | 39 39 | 20th November 1924. |
| | Total | 1,012 | 163 | 243 | |
| (iteration is a | Barisal Jhalakati | 268 39 | 67 25 | 52 3 | 1st October 1887. 1st ,, ,, |
| | Nalchiti | 28 | 6 | | lst ,, ,, |
| Bakarganj | Pirojpur Patuakhali | 234 112 | 50 22 | $\frac{222}{2}$ | 1st January 1890. 25th January 1891. |
| A RIVE | Bhola | 112 | 1 | 2 | 8th November 1922. |
| | Total | 693 | 171 | 279 | |
| | Total of the Dacca Division | 8,862 | 4,557 | 3,096 | |
| hittagong | Chittagong | 854 | 156 | 74 | 1st April 1887. |
| moragong | Cox's Bazar | 82 | 11 | 19 | 14th November 1892. |
| | Total | 936 | 167 | 93 | |
| | Comilla | 217 | 23 | 85 | 1st April 1887. |
| Yippera≺ | Brahmanbaria Chandpur | 700 176 | 110 24 | 196 116 | 1st "," ", 22nd July 1898. |
| | Total | 1,093 | 147 | 397 | |
| loakhali | Noakhali | 75 | 8 | 150 | 1st April 1887. |
| | Total of the Chitta- gong Division. | 2,104 | 322 | 640 | |
| | Total for the Presi- dency. | 54,763 | 16,944 | 33,042 | |

PROVINCIAL STATEMENT A.

| District. | | Rural population among which vaccinations were per- formed. | Number of births during the year. | Mortality among infants under one year, | Surviving population under one year available for vaccination. | Number successfully vaccinated. | Proportion of persons successfully vaccinated per 1,000 of population as shown in column 5. | Proportion of persons successfully vaccinated per 1,000 or population during 1925-26. |
|-------------------------|----------------------------|--|---|--|--|---------------------------------------|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| Malda | | 955,830 | 29,602 | 4,356 | 25,246 | 19,784 | 787.5 | 774-2 |
| Rajshahi | | 1,457,037 | 44,225 | 9,603 | 34,622 | 22,653 | 654 . 2 | 762 |
| Darjeeling | | 254,045 | 8,650 | 1,370 | 7,280 | 4,384 | 602 · 1 | 688-3 |
| Nadia | | 1,390,704 | 38,156 | 9,113 | 29,043 | 11,539 | 397-3 | 384 · 1 |
| Murshidabad | | 1,182,983 | 46,626 | 9,425 | 37,201 | 13,604 | 392.5 | 385-6 |
| Dinajpur | | 1,687,328 | 55,098 | 12,071 | 43,027 | 15,128 | 353-9 | 390-6 |
| Khulna | | 1,421,116 | 37,263 | 7,201 | 30,062 | 10,583 | 352.03 | 366-9 |
| Chittagong Hill Tracts | | 173,243 | 4,746 | 931 | 3,815 | 1,115 | 318.4 | 272 . 2 |
| Jalpaiguri | | 921,749 | 28,979 | 5,425 | 23,554 | 9,353 | 312.1 | 590.9 |
| Pabna | | 1,344,633 | 32,321 | 6,568 | 25,753 | 7,976 | 309.7 | 207-1 |
| Burdwan | | 1,343,185 | 51,196 | 10,125 | 41,071 | 11,288 | 274.8 | 278.8 |
| Howrah | | 778,893 | 23,065 | 5,252 | 17,813 | 4,356 | 244.5 | 319-1 |
| Tippera | | 2,678,627 | 59,923 | 8,841 | 51,082 | 11,869 | 232.3 | 267-4 |
| Bankura | | 964,487 | 38,371 | 7,104 | 31,267 | 7,179 | 229.6 | 255.3 |
| Rangpur | | 2,488,778 | 68,560 | 14,434 | 54,126 | 12,293 | 227 · 1 | 201.8 |
| Noakhali | | 1,465,071 | 48,919 | 6,999 | 31,920 | 7,219 | 226.1 | 274 . 1 |
| Hooghly | | 900,802 | 21,769 | 4,147 | 17,622 | 3,940 | 223.5 | 234.5 |
| Birbhum | | 838,655 | 34,493 | 7,554 | 26,939 | 5,610 | 208.02 | 161-1 |
| Chittagong | | 1,570,760 | 43,634 | 6,650 | 36,984 | 6,411 | 173.5 | 139.1 |
| 24-Parganas | | 1,998,318 | 49,298 | 8,240 | 41,058 | 7,120 | 173.4 | 168 |
| Jessore | | 1,700,924 | 48,332 | 6,694 | 41,638 | 7,198 | 172.8 | 245 |
| Dacca | | 2,975,915 | 75,328 | 12,655 | 62,673 | 10,534 | 168.07 | 125-1 |
| Midnapur | | 2,595,071 | 76,726 | 14,081 | 62,645 | 9,326 | 148.8 | 164-8 |
| Faridpur | | 2,202,783 | 55,715 | 11,353 | 44,362 | 5,556 | 125-4 | 96.7 |
| Mymensingh | | 4,710,669 | 111,628 | 20,781 | 90,847 | 9,172 | 100.9 | 100.2 |
| Bogra | | 1,032,300 | 23,343 | 5,075 | 18,268 | 1,444 | 77.3 | 82.3 |
| Bakarganj | | 2,563,849 | 70,218 | 15,389 | 54,829 | 1,835 | 33.4 | 27.8 |
| Total of the Rural Circ | Total of the Rural Circles | | | 231,437 | 954,747 | 238,469 | 249.7 | 253-3 |
| Calcutta | | 1,077,264 | 16,788 | 6,879 | 9,909 | 16,496* | 1,664.7 | 960-7 |
| Mufassal Municipali | ties | 2,020,517 | 37,975 | 10,065 | 27,910 | 16,546 | 589•2 | 482.4 |
| Grand total | | 46,695,536 | 1,240,947 | 248,381 | 992,566 | 271,511 | 273 -4 | 269.5 |

Showing the degree of protection afforded to infants during the year 1926-27.

*During the epidemic period of small-pox children and infants from outside of Calcutta were brought in and vaccinated. Hence this increase in the number of successful vaccinations compared with the surviving population.

...

PROVINCIAL STATEMENT B.

Showing different kinds of lymph used and the percentage of success during the year 1926-27.

| 1 | | Percentage of suc- | 32 | 600 0 22 0 22 0 22 0 22 0 22 0 22 0 22 0 | 1.95 | 900-55 20 20-55 20-55 20 20-55 20 20-55 20 20-55 | 44-7 | 80110000000000000000000000000000000000 | 57-5 | 40-8 60-3 48-1 48-1 | 2.09 | 38-9 37-01 05-6 28-5 | 45-3 | 74-0 38-7 50-1 | 8-29 |
|----------------------|--------------------------|--------------------|----|--|-----------|--|-----------|---|-----------|--|-----------|--|---------|--|-----------------------------|
| | ä | .awoanlaU | 31 | 0688 2,005 1,450 14,228 1,881 4,585 | 24,867 | 5,460 35,624 7,190 4,748 2,822 1,823 1,823 | 57,667 | 2,837 2,548 | 35,222 | 5,852 5,852 6,194 6,192 901 | 23,139 | 8,775 14,201 3,622 77 | 26,675 | 20 9,534 322 | 177,455 |
| | With giveerinated lymph. | Unsuccessful. | 30 | 27,054 13,009 18,009 36,568 6,258 6,258 10,113 | 112,851 | 25,382 100,843 7,264 96,223 12,668 7,709 | 680'083 | 10,378 5,607 17,881 17,881 11,350 11,350 11,350 36,200 36,200 36,200 | 113,885 | 12,357 26,181 22,682 5,162 | 66,382 | 18,512 26,831 11,344 2,190 | 58,877 | 10,539 1,0539 1,093 7 | 545,757 |
| | glycerin. | Successful. | 50 | 43,707 25,903 25,903 18,131 18,131 8,135 | 176,296 | 31,702 51,071 51,071 221,393 53,784 20,762 13,684 | 92,396 | 41,861 25,485 111,112 11,112 1 | 202,178 | 18,113 82,352 32,398 5,778 | 38,648 | 17,411 23,956 28,622 907 | 70,896 | 6,076 11,151 '934 9 | 798,577 |
| | With | JafoT. | 8 | 72,049 41,577 38,384 112,901 26,270 26,270 | 314,014 1 | 62,544 187,538 187,538 35,847 84,756 26,252 28,2766 28,2766 28,2766 | 430,152 1 | 54,566 33,587 30,432 12,703 45,877 45,877 44,555 44,555 44,555 44,555 44,555 | 351,285 2 | 36,322 118,727 61,272 11,841 | 228,162 1 | 44,698 64,988 43,588 3,174 | 156,448 | *28,742 9,534 2,349 2,349 | 1,528,841 |
| | | Percentage of auc- | 53 | ::::::::::::::::::::::::::::::::::::::: | 24-8 | :::5 | 24-1 | | : | :::: | : | :::: | | ::::: | 24-7 |
| Re-vaccination. | mph. | Unknown. | 26 | 2,686 | 2,593 | | : | | : | :::: | : | ::: : | : | ::::: | 2,593 |
| Re-vao | oline ly | Unsuccessful. | 53 | 2,795 204 | 2,999 | ::: ;;; ::: | 381 | | : | :::: | : | ::::: | | ::::: | 3,380 |
| | With hasoline lymph. | Successful. | 24 | 664 1,181 | 1,845 | :::::::::: | 121 | | : | :::: | : | :::: : | | :::: | 1,966 |
| | - | .IntoT | 53 | 6,045 1,392 | 7,43 7 | ::: 502 ::: | 502 | | : | :::: | : | :::: | | ::::: | 7,939 |
| | | Percentage of suc- | 81 | | | | : | | : | n | | | | ::::: | : |
| | from calf. | .awomlaU | 13 | | | ::::: | | | : | :::: | : | ::::: | : | ::::: | : |
| | Direct fro | Unsuccessful. | 20 | :::::: | | | | | : | :::: | | : : : | : | ::::: | : |
| | Di | gaccesstal. | 19 | | : | ::::: | : | | : | :::: | : | ::::: | : | ::::: | : |
| | | .letoT | 18 | ::::: | : | ::::: | : | ::::::: | : | :::: | : | :::: | : | ::::: | : |
| | | Percentage of suc- | 17 | 56.98 56.98 56.98 56.98 56.98 | 97-6 | 90-1 90-3 90-3 90-3 90-3 | 5-96 | 92-1-1-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2 | 94.3 | 93-6 91-8 97-6 95-2 | 93.4 | 95-03 93-1 97-4 99-1 | 92-8 | 93-6 90-4 90-8 90-8 | 96-1 |
| | ıph. | .awoasaU | 16 | 109 184 52 1,549 236 114 | 2,244 | 11,166 1,708 1,708 2318 241 140 | 3,908 | 1,334 1,334 789 2,013 3,703 1,120 689 | 9,848 | 5,025 7,683 573 2,184 | 15,465 | 1,081 2,071 1,286 1,286 | 4,450 | 5 .411 | 30,331 |
| | glycerinated lymph | Unsuccessful. | 15 | 1,382 947 1,127 1,127 1,127 1,127 1,73 | 3,951 | 861 1,708 1,063 1,063 1,472 183 | 5,484 | 194 1,194 1,194 1,194 35 1,566 801 2,157 911 | 10,869 | 3,723 13,581 2,737 | 20,763 | 1,513 2,352 1,585 49 | 5,499 | 85 819 | 47,534 |
| | With glyceri | Successful. | 14 | 52,070 36,202 35,100 82,329 26,318 26,318 | 258,697 | 73,483 290,288 39,049 48,949 47,391 47,391 | 280,843 | 42,712 72,877 20,423 20,423 10,455 72,685 72,685 75,675 75,675 75,675 | 349,636 | 129,632 238,465 54,361 96,487 | 520,945 | 53,058 59,927 110,324 6,749 | 230,058 | 1,334 7,786 4,727 15 | 1,654,041 |
| Primary vaccination. | | JatoT | 13 | 53,561 37,393 35,243 35,243 85,005 26,785 26,905 | 264,892 | 74,759 29,162 41,820 50,397 47,829 46,238 | 290,235 | 45,006 11,720 11,270 11,270 11,270 12,191 12,910 13,900 13,000 | 370,353 | 128,388 259,729 55,655 103,408 | 557,172 | 55,652 64,350 113,195 6,810 | 240,007 | 1,424 8,605 5,203 15 | 92-8 1,737,906 |
| vaceli | | Percentage of suc- | 12 | 77.8 | 89.5 | 99:3 | 99.3 | ::::::: | : | :::: | : | ::::: | : | ::::: | 92-8 |
| mary | 4 | Unknown. | 11 | :::87:: | 226 | ::::: | | | : | | : | :::: | : | ::::: | 2:26 |
| Pris | lymp | Unsuccessful. | 10 | :::*\$: | 44 | :::*:: | 8 | ::::::: | : | :::: | : | :::: | : | ::::: | 53 |
| | With lasoline lymph | Successful. | 0 | :: 806 1,520 | 2,825 | :: :: :: | 1,291 | | | :::: | : | :::: | : | ::::: | 3,616 |
| | With I | .fatoT | 80 | 1,034 1,561 | 2,595 | :::300 | 1,300 | | | :::: | : | :::: | | ::::: | 3,895 |
| | | Percentage of suc- | 1. | :::::: | 1 | ::::: | : | | : | :::: | : | :::: | : | ::::: | : |
| | alf. | .awoaslaU | 0 | ::::: | : | ::::: | : | | : | :::: | : | :::: | : | ::::: | : |
| | rom e | Unsuccessful. | 10 | :::::: | : | ::::: | : | | : | :::: | : | ::::: | : | ::::: | : |
| | Direct from calf. | Successful. | 4 | ::::: | : | ::::: | : | ::::::: | : | :::: | : | ::::: | : | ::::: | : |
| | D | .latoT | ** | ::::: | : | ::::: | : | | : | | : | ::::: | : | ::::: | : |
| | | District. | 01 | Burdwan Burdwan Bankura Midnapur Howrah | Total | 24-Parganas Calcutta Nadia Murshidabod Jessore Khudna | Total | Rajshahi Dinajpur Jalpakuri Darjeekuri Rangpur Bogra Pahna Maida | Total | Dacca Mymensingh Paridpur Bakarganj | Total | Chittagong Noakhail Tippera Chittagong Hill Tracts | Total | Railways Factories Steamers Tea Gardens | Total for the Presidency |
| N | | | | | | | | | | | | | | | |

*Results of 7,052 operations performed in the Ludlow Jute Mills of the Howrah District have not been furnished.

B. G. Press-16-11-1927-948M-405-W, G.

