

Triennial report on vaccination, Bihar and Orissa.

Contributors

Bihar and Orissa (India)

Publication/Creation

Ranchi : Government Branch Press, [1923]

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TRIENNIAL REPORT

ON

VACCINATION

BIHAR AND ORISSA

FOR THE YEARS

1920-21, 1921-22 & 1922-23.

BY

LT.-COL. W. C. ROSS, M.B., C.H.B., D.P.H., I.M.S.,

Director of Public Health, Bihar and Orissa.



PATNA

SUPERINTENDENT, GOVERNMENT PRINTING, BIHAR AND ORISSA.

1923.

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ON
VACCINATION
BIHAR AND ORISSA
FOR THE YEARS
1923-1924 & 1924-1925

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TRIENNIAL REPORT

ON

VACCINATION

BIHAR AND ORISSA

FOR THE YEARS

1920-21, 1921-22 and 1922-23.

Staff.—In municipalities and in the district of Puri, vaccination was done by paid vaccinators; but otherwise the work throughout the Province was carried out under the licensing system, except for the employment of paid vaccinators by District Boards, and employed temporarily by Civil Surgeons for short periods to deal with outbreaks of small-pox.

The total number of vaccinators, employed in the province during the last three years is shown below :—

Year.					Licensed.	Paid.
1					2	3
1920-21	...	...	...	...	1,088	227
1921-22	...	...	...	...	1,073	233
1922-23	...	...	...	...	1,089	222

or an average of 1,083 licensed and 227 paid vaccinators were employed in triennial period under review against 1,058 licensed and 210 paid of the previous triennial period.

The inspecting staff consisted of 20 District Inspectors of Vaccination and 69 Sub-Inspectors of Vaccination (including three deputed for duty at the vaccine Dépôt) in addition to the Sub-Assistant Surgeon combining vaccination inspection with other duties in Angul.

2. *Operations performed.*—The average number of operations performed each year between 1920-21 and 1922-23 was 1,001,073 as compared with an average of 1,041,667 of the previous triennium. Of these operations, 946,781 or 94.57 per cent. were primary and 54,291 or 5.42 re-vaccinations, as compared with 967,840 or 92.91 per cent. and 73,827 or 7.08 per cent. respectively, the average of the previous three years. The average number of operations performed annually by each vaccinator was 764 against 821 of the previous three years.

The total number of operations performed during the last three years has been as follows :—

Year.					Total number of operations.	Number performed by vaccinators.
1					2	3
1920-21	...	...	...	...	1,060,485	1,041,481
1921-22	...	...	...	...	939,851	925,134
1922-23	...	...	...	...	1,002,889	988,601

Of the total number of operations performed, the majority have been primary as shown in the following statement:—

Year.				Primary.	Re-vaccination.
1				2	3
1920-21	...	...	...	966,334	75,147
1921-22	...	...	...	902,286	22,848
1922-23	...	...	...	965,666	22,935

The average number of primary and re-vaccinations of the triennial period under review was 944,762 and 40,310 against 963,402 and 55,995 of the previous three years. Thus there was a fall in the primary operations by 18,640 and in the re-vaccination by 15,685. The fall in the primary operations was due to political unrest and active interference with the work of the staff. Many reports were received both in writing and verbally of the increasing difficulty in carrying on the work in face of opposition stirred up by agitators and of the unwillingness of the people either to permit the operation on their children or to pay for it. It appears, however, that the tide is on the turn and that the difficulties experienced are gradually becoming fewer and less serious. The decrease in the number of re-vaccinations performed is probably due to the decrease in the prevalence of small-pox during the last two years.

The percentage of successful operations out of the total number performed during the last three years has been as follows:—

1920-21	...	...	...	...	96-29
1921-22	...	...	...	...	98-26
1922-23	...	...	...	...	98-32

3. *Vaccination in districts.*—The average number of operations performed in this division during the triennial period has increased by 4,770 as compared with the previous period. Shahabad District showed an increase of 18,264.

In Tirhut division there was a fall of 18,260. The average number of operations in each of the districts of this division excepting the district of Darbhanga was less than that of the previous three years. The most marked fall was in the district of Saran (12,972).

The average number of vaccination operations performed in Bhagalpur Division during the triennial period under review was 215,852 as compared with 229,124 of the previous three years. Thus there has been a marked fall of 13,272 in the number of operations performed. The largest fall was in the district of Purnea (11,329) followed by Monghyr (4,171). There was an increase in the districts of Bhagalpur and Santal Parganas.

Orissa returns show an increase of 6,331 operations. The increase was shared by all the districts with the exception of the District of Angul which recorded a fall in the average number of operations by 2,690.

In the five districts of Chota Nagpur, there were decreases in the average number of operations performed during the triennial period under report, amounting to 13,895; in Hazaribagh 6,010, Palamau 4,100 and Manbhum 2,821.

4. *Vaccination in Towns and Compulsory Areas.*—During the triennial period under review the Vaccination Acts were extended to Husainabad Union in Palamau.

Statement VII shows the details of Municipal Vaccination from which it appears that in Darbhanga, Monghyr, Chapra, Bhagalpur, Cuttack and Hazaribagh, the work has been unsatisfactory.

5. *Work done in the Native States under the supervision of the Political Agent and Commissioner.*—During the triennium under report, the number of vaccination operations performed in the Native States is as follows:—

Year.	Primary.	Re-vaccination.	Total.
1920-21	201,433	348,149	549,582
1921-22	191,822	389,925	581,747
1922-23	145,836	283,289	429,125 (Excluding three states.)

6. *Protection of infants.*—During the year 1922-23, 1,031,900 children were available for vaccination. Of the available children 331 per thousand were successfully vaccinated against 396 per thousand of the previous year.

Protection of infants in Municipalities is shown separately in Statement No. VII. The number of children available for vaccination was 30,006, of this 452 per mille was successfully vaccinated against 593 per thousand, of the previous year.

7. *Incidence and Mortality of Small-pox.*—The death-rate from small-pox during the year 1922-23 was .07 in the province against .14 of the previous year and .32 the average of the last five years.

The death-rate from small-pox in the district of Patna was .05 against .46 of the previous year and .89 the average of the last five years. The districts of Gaya and Shahabad recorded a rate of .04 as compared with quinquennial rates of .40 and .23 respectively.

All the districts of this division, recorded low rates as usual. The districts Ch amparan and Darbhanga recorded a rate .06, while Saran and Muzaffarpur returned the rates of .02 and .04 respectively.

The mortality in the Bhagalpur division was .12 which was the same as that of Orissa and higher than the other divisions of the province. Of the four districts of this division, Purnea recorded the highest rate (.24) followed by Monghyr (.11). The districts of Santal Parganas and Bhagalpur recorded rates of .01 and .09 respectively. The quinquennial rates of the districts of Monghyr, Bhagalpur, Purnea and Santal Parganas were .17, .19, .66 and .20 respectively.

The mortality from small-pox in Orissa was higher than that of the other divisions of the province excepting only Bhagalpur Division. The district of Balasore recorded the highest rate (.17) followed by Cuttack (.15) and Puri (.13).

The rate of mortality from small-pox in the Chota Nagpur Division was .06 against .17 of the previous year and .33 the average of the last five years. Of the five districts of this division, the district of Singhbhum recorded the highest rate (.18).

8. *Prevention of Small-pox.*—Civil Surgeons and Assistant Directors of Public Health are unanimous in attributing the opposition to vaccination to be concerned more with the age of the child than with the operation itself, and, in view of the strong popular prejudice which exists against the vaccination of

infants at an early age, I consider that it is desirable that the Vaccination Act should be amended so as to raise the age for compulsory vaccination to one year instead of six months.

I do not consider that small-pox can be effectively dealt with and stamped out unless vaccination is made compulsory throughout the Province, and I would recommend that the Vaccination Act should be modified so as to extend the age within which vaccination is required, to one year, and should be generally enforced, that vaccination should be free; and that the supervision and control of vaccination should be delegated to District Boards and Municipalities and their Health Officers.

9. *Inspection of work* :—During the triennial period under review the Assistant Directors of Public Health inspected the number of children as shown below :—

1920-21	...	...	...	...	145,627
1921-22	...	...	...	...	61,401
1922-23	...	...	...	...	70,006

The Civil Surgeons of the province inspected a good number of operations as shown below :—

Year.					Primary	Re-vaccination.
1					2	3
1920-21	...	...	...	...	53,177	9,047
1921-22	...	...	...	...	31,207	8,600
1922-23	...	...	...	...	29,181	9,303

The officers of the subordinate inspecting staff inspected the number of primary and re-vaccination operations during the last three years as shown below :—

Year					Primary	Re-vaccination.
1					2	3
1920-21	...	...	...	...	517,082	9,488
1921-22	...	...	...	...	458,322	3,995
1922-23	...	...	...	...	478,185	8,587

The inspecting work done by the Assistant Directors of Public Health has been comprehensive and they have submitted valuable reports on the efficiency of the staff and work in 18 out of the 21 districts in the province.

The Civil Surgeons of the Province inspected 29,181 primary and 9,303 re-vaccination operations against 31,207 primary and 8,600 re-vaccination last year. It should be noted that the methods of inspection of Civil Surgeons and Assistant Directors of Public Health are different. Civil Surgeons inspect the new work which has just been done and the numbers returned by them are therefore smaller, whereas Assistant Directors of Public Health inspect all the children under ten years of age, and look at old work as well as new work and also look for unvaccinated children and children who are marked with small-pox, and they also examine vaccinators' registers and other records in the villages where they can be verified and checked.

10. *Supply of Vaccine.*—Vaccine for the province was supplied from the Vaccine Depot at Namkum, Ranchi, during the three years under report as shown in the detailed statement below :—

Year.	Number of calves purchased or hired.	Number of doses manufactured.	Average number of doses yielded per calf.	Number of doses issued.	Number of doses in reserve.	Total gross cost.	Total revenue.
1	2	3	4	5	6	7	8
						Rs.	Rs.
1920-21	362	1,869,908	5165.49	2,628,518	1,493,769	24,923	19,554
1921-22	957	5,589,930	5841.09	2,679,298	4,100,366	28,879	20,186
1922-23	246	1,426,146	5390.83	2,576,743	2,943,769	33,206	14,564

The large increase in manufacture during 1921-22 was required to create a reserve stock and the large decrease in manufacture during 1922-23 was due to outbreaks of epidemic disease and the shortage in the supply of calves. In fact, if it had not been the large reserve stock accumulated in the previous year, the Vaccine Depot would have been left a very small stock in hand at the end of March 1923.

The total gross cost has increased during the last two years partly owing to the large quantity manufactured in 1921-22 and partly owing to the heavy expenditure required to provide replacements and spare parts for the cold storage and pumping engines which had become worn out with many years constant running. The revenue has fallen off during the last year owing to the diminution of demands in Orissa Feudatory States.

11. *Vaccine Depot and Cold Storage.*—During the period under report the Vaccine Depot was repeatedly closed during the working season on account of outbreaks of epidemic disease—chiefly foot and mouth disease—amongst the calves. In spite of these interruptions, however, the supply of vaccine has been maintained and there is a sufficient stock in reserve. The risk of the supply failing has however been so great that it has been found necessary to fence the premises and put up segregation sheds and the work is now in hand. The cold storage room has been rebuilt and the engines and machineries have been overhauled during the last two years and a large stock of necessary spare parts has been provided.

Cholera and Influenza Vaccines are now stocked at the Depot and issued throughout the Province as required.

12. *Experimental Work.*—During the last three years, a considerable amount of experimental work has been carried out at the Vaccine Depot with a view to improving the quality and quantity of vaccine and thus reducing the cost of production.

Variations in the technique of operation were carried out with a view to increasing the output per calf and the production of crude pulp per calf has now been raised from 12.38 grammes in 1914 to 59.09 grammes. This is probably as near the maximum as we can go with advantage and may be taken as an approximately final figures on which to base our estimates of manufacture.

A series of experiments was also conducted with various oils and also with a preparation containing 5 per cent. starch and 2 per cent. Boric Acid in 93 per cent. water (after boiling to form a jelly) with a view to discovering a better vehicle than glycerine for the preparation of the vaccine but so far nothing more suitable has been found. Improvements have been made in the preparation of the seed vaccine for vaccinating calves from children and in the packing of vaccine in capillary tubes by sealing them with melted sealing wax.

13. *The cost of the vaccination department.*—The cost of the vaccination department (excluding the cost of the Vaccine Depot which is detailed in paragraph 10 above) has been as follows during the last three years :—

						Rs.
1920-21	...	...	...	...	...	1,56,912
1921-22	...	...	...	...	...	1,56,873
1922-23	...	...	...	...	...	1,54,489

The average cost per successful operation was 2 annas 7 pies against 1 anna 9 pies of the previous triennium.

14. *General.*—The work of the triennial period under report has been considerably interfered with by political agitation and by discontent amongst the vaccinators caused by obstruction to their work and increasing difficulties in realising their fees.

This state of affairs at present appears to be improving, but I doubt whether it will continue to do so. Owing to the rise in the prices and wages generally and the fact that vaccination fees have not been increased, vaccinators are underpaid and discontented. Some have already left their work and many more are likely to do so and already there is a shortage of vaccinators in a good many districts.

There is a serious risk of the province lapsing into an unvaccinated state by a progressive diminution in the amount of vaccination work done and I am convinced that a change of policy is urgently needed, introducing free and compulsory vaccination throughout the province and making the vaccinators paid servants instead of giving licenses to them to take fees from the people.

W. C. ROSS, LT.-COL. I.M.S.,

Director of Public Health, Bihar and Orissa.

No.		Name		Address		Occupation		Age		Sex		Marital Status		Religion		Education		Income		Assets		Liabilities		Total	
No.	Name	Address	Occupation	Age	Sex	Marital Status	Religion	Education	Income	Assets	Liabilities	Total													
1	John Doe	123 Main St.	Teacher	35	M	Married	Catholic	High School	\$10,000	\$50,000	\$10,000	\$50,000													
2	Jane Doe	123 Main St.	Homemaker	32	F	Married	Catholic	High School	\$5,000	\$50,000	\$10,000	\$50,000													
3	John Smith	456 Oak St.	Engineer	40	M	Married	Protestant	College	\$15,000	\$75,000	\$15,000	\$75,000													
4	Jane Smith	456 Oak St.	Homemaker	38	F	Married	Protestant	College	\$8,000	\$75,000	\$15,000	\$75,000													
5	John Brown	789 Pine St.	Doctor	45	M	Married	Jewish	College	\$20,000	\$100,000	\$20,000	\$100,000													
6	Jane Brown	789 Pine St.	Homemaker	42	F	Married	Jewish	College	\$10,000	\$100,000	\$20,000	\$100,000													
7	John Green	101 Elm St.	Lawyer	50	M	Married	Anglican	College	\$25,000	\$125,000	\$25,000	\$125,000													
8	Jane Green	101 Elm St.	Homemaker	48	F	Married	Anglican	College	\$12,500	\$125,000	\$25,000	\$125,000													
9	John White	202 Maple St.	Artist	30	M	Single	Buddhist	High School	\$8,000	\$40,000	\$8,000	\$40,000													
10	Jane White	202 Maple St.	Homemaker	28	F	Single	Buddhist	High School	\$4,000	\$40,000	\$8,000	\$40,000													
11	John Black	303 Cedar St.	Writer	35	M	Single	Hindu	College	\$12,000	\$60,000	\$12,000	\$60,000													
12	Jane Black	303 Cedar St.	Homemaker	32	F	Single	Hindu	College	\$6,000	\$60,000	\$12,000	\$60,000													
13	John Gray	404 Birch St.	Musician	25	M	Single	Sikh	High School	\$6,000	\$30,000	\$6,000	\$30,000													
14	Jane Gray	404 Birch St.	Homemaker	22	F	Single	Sikh	High School	\$3,000	\$30,000	\$6,000	\$30,000													
15	John Blue	505 Spruce St.	Scientist	40	M	Married	Muslim	College	\$18,000	\$90,000	\$18,000	\$90,000													
16	Jane Blue	505 Spruce St.	Homemaker	38	F	Married	Muslim	College	\$9,000	\$90,000	\$18,000	\$90,000													
17	John Red	606 Willow St.	Entrepreneur	45	M	Married	Christian	College	\$22,000	\$110,000	\$22,000	\$110,000													
18	Jane Red	606 Willow St.	Homemaker	42	F	Married	Christian	College	\$11,000	\$110,000	\$22,000	\$110,000													
19	John Purple	707 Poplar St.	Investor	55	M	Married	Christian	College	\$30,000	\$150,000	\$30,000	\$150,000													
20	Jane Purple	707 Poplar St.	Homemaker	52	F	Married	Christian	College	\$15,000	\$150,000	\$30,000	\$150,000													
21	John Yellow	808 Hickory St.	Teacher	30	M	Single	Buddhist	High School	\$8,000	\$40,000	\$8,000	\$40,000													
22	Jane Yellow	808 Hickory St.	Homemaker	28	F	Single	Buddhist	High School	\$4,000	\$40,000	\$8,000	\$40,000													
23	John Orange	909 Walnut St.	Engineer	35	M	Married	Protestant	College	\$12,000	\$60,000	\$12,000	\$60,000													
24	Jane Orange	909 Walnut St.	Homemaker	32	F	Married	Protestant	College	\$6,000	\$60,000	\$12,000	\$60,000													
25	John Pink	1010 Chestnut St.	Lawyer	40	M	Married	Anglican	College	\$18,000	\$90,000	\$18,000	\$90,000													
26	Jane Pink	1010 Chestnut St.	Homemaker	38	F	Married	Anglican	College	\$9,000	\$90,000	\$18,000	\$90,000													
27	John Brown	1111 Elm St.	Artist	25	M	Single	Buddhist	High School	\$6,000	\$30,000	\$6,000	\$30,000													
28	Jane Brown	1111 Elm St.	Homemaker	22	F	Single	Buddhist	High School	\$3,000	\$30,000	\$6,000	\$30,000													
29	John Green	1212 Maple St.	Writer	30	M	Single	Hindu	College	\$10,000	\$50,000	\$10,000	\$50,000													
30	Jane Green	1212 Maple St.	Homemaker	28	F	Single	Hindu	College	\$5,000	\$50,000	\$10,000	\$50,000													
31	John Blue	1313 Birch St.	Musician	20	M	Single	Sikh	High School	\$6,000	\$30,000	\$6,000	\$30,000													
32	Jane Blue	1313 Birch St.	Homemaker	18	F	Single	Sikh	High School	\$3,000	\$30,000	\$6,000	\$30,000													
33	John Red	1414 Spruce St.	Scientist	40	M	Married	Muslim	College	\$18,000	\$90,000	\$18,000	\$90,000													
34	Jane Red	1414 Spruce St.	Homemaker	38	F	Married	Muslim	College	\$9,000	\$90,000	\$18,000	\$90,000													
35	John Purple	1515 Willow St.	Entrepreneur	45	M	Married	Christian	College	\$22,000	\$110,000	\$22,000	\$110,000													
36	Jane Purple	1515 Willow St.	Homemaker	42	F	Married	Christian	College	\$11,000	\$110,000	\$22,000	\$110,000													
37	John Yellow	1616 Poplar St.	Investor	55	M	Married	Christian	College	\$30,000	\$150,000	\$30,000	\$150,000													
38	Jane Yellow	1616 Poplar St.	Homemaker	52	F	Married	Christian	College	\$15,000	\$150,000	\$30,000	\$150,000													
39	John Orange	1717 Hickory St.	Teacher	30	M	Single	Buddhist	High School	\$8,000	\$40,000	\$8,000	\$40,000													
40	Jane Orange	1717 Hickory St.	Homemaker	28	F	Single	Buddhist	High School	\$4,000	\$40,000	\$8,000	\$40,000													
41	John Pink	1818 Walnut St.	Engineer	35	M	Married	Protestant	College	\$12,000	\$60,000	\$12,000	\$60,000													
42	Jane Pink	1818 Walnut St.	Homemaker	32	F	Married	Protestant	College	\$6,000	\$60,000	\$12,000	\$60,000													
43	John Brown	1919 Chestnut St.	Lawyer	40	M	Married	Anglican	College	\$18,000	\$90,000	\$18,000	\$90,000													
44	Jane Brown	1919 Chestnut St.	Homemaker	38	F	Married	Anglican	College	\$9,000	\$90,000	\$18,000	\$90,000													
45	John Green	2020 Elm St.	Artist	25	M	Single	Buddhist	High School	\$6,000	\$30,000	\$6,000	\$30,000													
46	Jane Green	2020 Elm St.	Homemaker	22	F	Single	Buddhist	High School	\$3,000	\$30,000	\$6,000	\$30,000													
47	John Blue	2121 Maple St.	Writer	30	M	Single	Hindu	College	\$10,000	\$50,000	\$10,000	\$50,000													
48	Jane Blue	2121 Maple St.	Homemaker	28	F	Single	Hindu	College	\$5,000	\$50,000	\$10,000	\$50,000													
49	John Red	2222 Birch St.	Musician	25	M	Single	Sikh	High School	\$6,000	\$30,000	\$6,000	\$30,000													
50	Jane Red	2222 Birch St.	Homemaker	22	F	Single	Sikh	High School	\$3,000	\$30,000	\$6,000	\$30,000													
51	John Purple	2323 Spruce St.	Scientist	40	M	Married	Muslim	College	\$18,000	\$90,000	\$18,000	\$90,000													
52	Jane Purple	2323 Spruce St.	Homemaker	38	F	Married	Muslim	College	\$9,000	\$90,000	\$18,000	\$90,000													
53	John Yellow	2424 Willow St.	Entrepreneur	45	M	Married	Christian	College	\$22,000	\$110,000	\$22,000	\$110,000													
54	Jane Yellow	2424 Willow St.	Homemaker	42	F	Married	Christian	College	\$11,000	\$110,000	\$22,000	\$110,000													
55	John Orange	2525 Poplar St.	Investor	55	M	Married	Christian	College	\$30,000	\$150,000	\$30,000	\$150,000													
56	Jane Orange	2525 Poplar St.	Homemaker	52	F	Married	Christian	College	\$15,000	\$150,000	\$30,000	\$150,000													
57	John Pink	2626 Hickory St.	Teacher	30	M	Single	Buddhist	High School	\$8,000	\$40,000	\$8,000	\$40,000													
58	Jane Pink	2626 Hickory St.	Homemaker	28	F	Single	Buddhist	High School	\$4,000	\$40,000	\$8,000	\$40,000													
59	John Brown	2727 Walnut St.	Engineer	35	M	Married	Protestant	College	\$12,000	\$60,000	\$12,000	\$60,000													
60	Jane Brown	2727 Walnut St.	Homemaker	32	F	Married	Protestant	College	\$6,000	\$60,000	\$12,000	\$60,000													
61	John Green	2828 Chestnut St.	Lawyer	40	M	Married	Anglican	College	\$18,000	\$90,000	\$18,000	\$90,000													
62	Jane Green	2828 Chestnut St.	Homemaker	38	F	Married	Anglican	College	\$9,000	\$90,000	\$18,000	\$90,000													
63	John Blue	2929 Elm St.	Artist	25	M	Single	Buddhist	High School	\$6,000	\$30,000	\$6,000	\$30,000													
64	Jane Blue	2929 Elm St.	Homemaker	22	F	Single	Buddhist	High School	\$3,000	\$30,000	\$6,000	\$30,000													
65	John Red	3030 Maple St.	Writer	30	M	Single	Hindu	College	\$10,000	\$50,000	\$10,000	\$50,000													
66	Jane Red	3030 Maple St.	Homemaker	28	F	Single	Hindu	College	\$5,000	\$50,000	\$10,000	\$50,000													
67	John Purple	3131 Birch St.	Musician	25	M	Single	Sikh	High School	\$6,000	\$30,000	\$6,000	\$30,000													
68	Jane Purple	3131 Birch St.	Homemaker	22	F	Single	Sikh	High School	\$3,000	\$30,000	\$6,000	\$30,000													
69	John Yellow	3232 Spruce St.	Scientist	40	M	Married	Muslim	College	\$18,000	\$90,000	\$18,000	\$90,000													
70	Jane Yellow	3232 Spruce St.	Homemaker	38	F	Married	Muslim	College	\$9,000	\$90,000	\$18,000	\$90,000													
71	John Orange	3333 Willow St.	Entrepreneur	45	M	Married	Christian	College	\$22,000	\$110,000	\$22,000	\$110,000													
72	Jane Orange	3333 Willow St.	Homemaker	42	F	Married	Christian	College	\$11,000	\$110,000	\$22,000	\$110,000													
73	John Pink	3434 Poplar St.	Investor	55	M	Married	Christian	College	\$30,000	\$150,000	\$30,000	\$150,000													
74	Jane Pink	3434 Poplar St.	Homemaker	52	F	Married	Christian	College	\$15,000	\$150,000	\$30,000	\$150,000													
75	John Brown	3535 Hickory St.	Teacher	30	M	Single	Buddhist	High School	\$8,000	\$40,000	\$8,000	\$40,000													
76	Jane Brown	3535 Hickory St.	Homemaker	28	F	Single	Buddhist	High School	\$4,000	\$40,000	\$8,000	\$40,000													
77	John Green	3636 Walnut St.	Engineer	35	M	Married	Protestant	College	\$12,000	\$60,000	\$12,000	\$60,000													
78	Jane Green	3636 Walnut St.	Homemaker	32	F	Married	Protestant	College	\$6,000	\$60,000	\$12,000	\$60,000													
79	John Blue	3737 Chestnut St.	Lawyer	40	M	Married	Anglican	College	\$18,000	\$90,000	\$18,000	\$90,000													
80	Jane Blue	3737 Chestnut St.	Homemaker	38	F	Married	Anglican	College	\$9,000	\$90,000	\$18,000	\$90,000													
81	John Red	3838 Elm St.	Artist	25	M	Single	Buddhist	High School	\$6,000	\$30,000	\$6,000	\$30,000													
82	Jane Red	3838 Elm St.	Homemaker	22	F	Single	Buddhist	High School	\$3,000	\$30,000	\$6,000	\$30,000													
83	John Purple	3939 Maple St.	Writer	30	M	Single	Hindu	College	\$10,000	\$50,000	\$10,000	\$50,000													
84	Jane Purple	3939 Maple St.	Homemaker	28	F	Single	Hindu	College	\$5,000	\$50,000	\$10,000	\$50,000													
85	John Yellow	4040 Birch St.	Musician	25	M	Single	Sikh	High School	\$6,000	\$30,000	\$6,000	\$30,000													
86	Jane Yellow	4040 Birch St.	Homemaker	22	F	Single	Sikh	High School	\$3,000	\$30,000	\$6,000	\$30,000													
87	John Orange	4141 Spruce St.	Scientist	40	M	Married	Muslim	College	\$18,000	\$90,000	\$18,000	\$90,000													
88	Jane Orange	4141 Spruce St.	Homemaker	38	F	Married	Muslim	College	\$9,000	\$90,000	\$18,000	\$90,000													
89	John Pink	4242 Willow St.	Entrepreneur	45	M	Married	Christian	College	\$22,000	\$110,000	\$22,000	\$110,000													
90	Jane Pink	4242 Willow St.	Homemaker	42	F	Married	Christian	College	\$11,000	\$110,000	\$22,000	\$110,000													
91	John Brown	4343 Poplar St.	Investor	55	M	Married	Christian	College	\$30,000	\$150,000	\$30,000	\$150,000													
92	Jane Brown	4343 Poplar St.	Homemaker	52	F	Married	Christian	College	\$15,000	\$150,000	\$30,000	\$150,000													
93	John Green	4444 Hickory St.	Teacher	30	M	Single	Buddhist	High School	\$8,000	\$40,000	\$8,000	\$40,000													
94	Jane Green	4444 Hickory St.	Homemaker	28	F	Single	Buddhist	High School	\$4,000	\$40,000	\$8,000	\$40,000													
95	John Blue	4545 Walnut St.	Engineer	35	M	Married	Protestant	College	\$12,000	\$60,000	\$12,000	\$60,000													
96	Jane Blue	4545 Walnut St.	Homemaker	32	F	Married	Protestant	College	\$6,000	\$60,000	\$12,000	\$60,000													
97	John Red	4646 Chestnut St.	Lawyer	40	M	Married	Anglican	College	\$18,000	\$90,000	\$18,000	\$90,000													
98	Jane Red	4646 Chestnut St.	Homemaker	38	F	Married	Anglican	College	\$9,000	\$90,000	\$18,000	\$90,000													
99	John Purple	4747 Elm St.	Artist	25	M	Single	Buddhist	High School	\$6,000	\$30,000	\$6,000	\$30,000													
100	Jane Purple	4747 Elm St.	Homemaker	22	F	Single	Buddhist	High School	\$3,000	\$30,000	\$6,000	\$30,000													

STATEMENT NO. I.—Showing particulars of Vaccination in the

Number.	District.	Population of district according to the census of 1921.	Average population per square mile.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator.	Total.
					Male.	Female.	Total.		
1	2	3	4	5	6			7	8
Patna Division.									
1	Patna ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	1,674,267	761 { 18 63	4,830 27,485	4,537 26,670	9,367 54,065	619 858	9,986 54,923
2	Gaya ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	2,122,930	457 { 20 61	3,301 26,744	3,152 19,522	6,453 46,266	322 427	6,775 46,693
3	Shahabad ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	1,816,821	415 { 10 117	2,367 28,499	2,822 24,227	5,189 52,727	269 451	5,458 53,178
Total of Patna Division		{ By paid Vaccinators ... By licensed Vaccinators ... }	5,614,018	497 { 54 201	11,518 76,719	10,511 70,359	22,029 147,078	407 603	22,436 147,681
Tirhut Division.									
4	Saran ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	2,339,953	872 { 8 74	1,110 33,631	1,031 31,434	2,141 65,065	267 883	2,408 65,948
5	Champanan ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	1,040,841	549 { 4 68	1,363 21,601	917 20,576	2,280 42,177	509 642	2,789 42,819
6	Muzaffarpur ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	2,754,945	907 { 12 75	1,708 42,924	1,455 40,532	3,163 83,456	268 1,112	3,431 84,568
7	Darbhanga ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	2,915,519	870 { 7 88	1,066 44,175	1,021 42,026	2,087 86,201	298 979	2,385 86,180
Total of Tirhut Division		{ By paid Vaccinators ... By licensed Vaccinators ... }	9,049,268	789 { 31 303	5,296 142,731	4,424 134,568	9,720 277,299	313 915	10,033 278,214
Bhagalpur Division.									
8	Monghyr ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	2,020,065	518 { 7 30	1,873 31,211	706 30,079	2,579 61,290	305 2,043	2,884 63,333
9	Bhagalpur ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	2,033,770	481 { 11 63	1,475 30,761	1,269 29,403	2,744 60,164	231 955	2,975 60,619
10	Purnea ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	2,024,608	405 { 9 62	1,625 19,318	1,172 17,668	2,797 36,986	310 717	3,107 37,703
11	Santal Parganas ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	1,798,630	329 { 8 57	2,623 25,955	2,303 24,773	4,926 50,728	602 819	5,528 51,547
Total of Bhagalpur Division.		{ By paid Vaccinators ... By licensed Vaccinators ... }	7,886,912	423 { 35 302	7,099 107,245	5,431 102,233	12,530 209,468	259 1,037	12,789 208,541
Orissa Division.									
12	Cuttack ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	2,064,678	565 { 10 60	2,356 30,301	1,979 27,597	4,335 57,898	423 843	4,758 58,741
13	Balasore ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	980,504	470 { 6 30	1,804 12,130	1,021 10,133	2,825 22,263	471 742	3,296 23,005
14	Angul ...	By licensed Vaccinators ...	182,574	112 { 12	2,855	2,810	5,665	472	6,137
15	Parl ...	By paid Vaccinators ...	951,651	380 { 29	10,676	10,319	20,995	1,209	22,204
16	Sambalpur ...	{ By paid Vaccinators ... By licensed Vaccinators ... }	769,466	208 { 3 34	127 9,338	121 9,316	248 18,654	82 518	270 19,172
Total of Orissa Division		{ By paid Vaccinators ... By licensed Vaccinators ... }	4,968,873	361 { 48 145	23,963 54,014	19,610 50,165	43,573 104,780	905 722	44,478 105,492

districts of Bihar and Orissa during the year 1922-23.

Vaccination.				Re-vaccination.			Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
Successful.				Total.	Successful.	Unknown.	Primary.	Re-vaccination.		Primary.	Re-vaccination.	Number.	Ratio per 1,000 of population.	Number.	Ratio per 1,000 of population.
Under one year.	One year and under six years.	Total of all ages.	Unknown.												
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
8,098	5,355	6,618	126	314	103	6	96.64	33.11	29.76	1.39	1.91	68,653	43.22	1,468	.59
19,613	31,575	53,333	122	20	6	...	96.92	30.00		.22	...				
2,162	4,042	6,339	8	78	65	...	96.48	80.00		.08	...				
9,331	30,255	40,180	48	6	4	...	96.76	80.00		.11	...				
3,198	2,607	6,063	14	69	70	...	96.13	78.65		.22	...				
21,839	20,200	52,534	48	1	1	...	96.72	100	32.35	.09	...	53,461	20.42	438	.23
6,456	12,044	21,030	145	478	237	6	96.19	50.21	30.41	.07	1.25	179,307	32.33	2,714	.49
50,943	88,036	146,017	218	26	11	...	96.44	41.53		.14	...				
1,663	800	1,904	56	6	3	...	94.42	60.00	28.67	2.62	...	63,347	27.06	465	.16
16,795	46,704	64,597	374	7	7	...	96.52	100.00		.57	...				
663	761	1,462	50	723	338	203	97.07	65.00	23.92	3.21	29.07	49,549	25.67	317	.15
11,704	20,959	43,199	24	96	49	27	96.98	71.01		.05	29.12				
1,193	1,690	2,811	4	326	170	13	97.85	54.31	31.26	.13	3.98	85,129	31.29	236	.08
16,856	65,996	83,096	14	15	9	...	96.56	60.00		.01	...				
604	1,562	2,060	2	...	...	...	96.27	...	86.26	.09	...	90,100	30.92	280	.09
12,387	73,647	86,046	7	4	...	...	96.63	...		.008	...				
3,378	4,809	8,317	112	1,054	511	216	96.22	60.97	28.71	1.29	20.48	259,511	29.09	1,200	.12
56,623	216,206	275,887	419	122	65	27	96.68	68.43		.15	22.13				
693	831	1,437	6	667	251	26	96.15	39.15	31.03	.64	3.88	56,814	28.07	251	.17
15,636	45,557	61,233	12	17	17	...	96.88	100		.01	...				
1,415	900	2,405	10	390	186	17	96.79	67.58	31.12	.41	5.00	60,846	29.01	291	.19
26,316	33,680	60,001	7	136	79	...	96.90	69.09		.01	...				
615	702	1,322	19	1,549	713	158	96.24	51.25	19.25	1.62	10.20	48,441	23.94	1,355	.66
16,721	19,060	36,785	31	364	317	6	96.54	68.50		.08	1.37				
2,757	1,447	4,337	4	658	245	116	96.29	55.43	30.02	.09	20.78	46,625	27.14	360	.20
30,159	19,757	49,081	66	619	323	24	96.89	55.12		.17	8.05				
5,283	3,900	9,301	41	3,114	1,295	217	96.21	49.67	28.06	.43	10.17	216,907	27.53	2,458	.51
88,731	116,909	207,969	136	1,127	735	29	96.88	67.03		.06	2.67				
1,249	2,016	3,367	57	593	458	118	96.40	61.67	29.90	1.05	13.21	58,266	28.21	1,226	.40
25,619	28,767	57,233	223	605	128	269	96.74	36.50		.30	4.46				
245	370	635	27	2,104	1,034	483	96.32	63.78	24.01	8.74	23.65	24,672	25.06	344	.35
4,390	15,610	21,251	61	629	445	143	96.53	64.98		.39	17.97				
2,471	2,957	5,487	31	46	24	5	96.19	58.53	20.18	.56	10.83	5,685	31.19	47	.25
11,619	20,507	34,643	593	667	200	190	96.53	54.03		1.67	26.03				
96	127	223	4	18	4	6	96.67	33.33	24.06	1.73	33.33	18,379	23.28	196	.25
13,575	4,846	18,431	59	127	11	16	96.79	9.90		.03	12.69				
12,591	23,080	38,697	680	2,682	1,786	797	96.45	61.60	22.14	1.70	21.64	148,341	18.04	2,879	.17
45,622	52,390	102,392	397	1,607	602	434	96.62	51.92		.38	27.00				

districts of Bihar and Orissa during the year 1922-23—concl'd.

Vaccination.				Re-vaccination.			Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
Successful.				Total.	Successful.	Unknown.	Primary.	Re-vaccination.		Primary.	Re-vaccination.	Number.	Ratio per 1,000 of population.	Number.	Ratio per 1,000 of population.
Under one year.	One year and under six years.	Total of all ages.	Unknown.												
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
492	1,131	1,561	2	1,178	276	730	99.47	61.00	25.94	.13	61.97	33,813	26.46	130	.10
13,644	15,370	28,997	1	273	221	2	99.94	84.61		.003	.73				
1,072	174	1,333	...	194	149	5	100.00	73.54	31.23	...	...	39,304	29.63	712	.53
20,655	6,767	30,915	...	132	129	1	100.00	98.47		...	.78				
310	554	864	22	172	108	2	98.50	63.53	21.25	2.39	1.10	20,907	28.50	617	.70
10,518	2,791	14,600	109	46	45	...	99.85	97.30		.74	...				
2,220	11,019	14,560	515	6,672	6,153	774	94.45	77.90	33.85	3.23	8.02	46,936	30.30	209	.13
10,303	14,818	25,118	...	477	292	97	99.99	95.60		...	14.04				
407	272	686	0	22	2	...	98.99	14.28	22.28	.65	...	17,521	23.07	826	.42
10,449	5,121	15,624	8	559	490	0	90.63	98.36		.01	1.61				
5,350	13,150	18,893	645	10,338	6,683	1,511	98.04	72.03	29.00	2.08	14.75	159,027	29.08	1,593	.38
61,340	47,667	130,004	113	1,487	1,383	81	99.95	91.15		.08	5.62				
35,000	57,133	96,419	1,533	18,596	10,617	2,567	98.17	67.54	28.75	1.52	15.33	963,063	29.01	11,136	.33
323,496	523,328	863,280	1,183	4,360	2,697	571	99.72	71.01		.14	13.06				
558,555	591,301	1,149,856	2,616	27,935	13,314	3,418	99.58	68.21	...	.19	14.90	...	...	...	...
...	...	...	...	310	91	...	...	28.52		...	...				
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
60	...	343	200	1,160	372	699	90.73	92.53	...	85.27	69.45	...	...	...	...
293	217	735	29	11,505	5,807	812	99.07	54.29	...	3.05	7.05	...	...	...	...
356,011	561,178	959,707	3,045	35,802	19,581	4,928	99.56	63.30	...	.31	13.72	...	...	...	...

Summary.

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which the results were known.		Average number of persons vaccinated by each vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of Department.	Average cost of each successful case.			
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under 6 years.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14			
BY SPECIAL STAFF.																
Statement (I) ..	695,006	22,035	695,006	22,035	99.56	68.21	1,307	739	353,658	81,361	28.75	Rs. 1,54,488 15 0	Rs. 0 1			
BY DISPENSARY STAFF.																
Statement III ..	...	319	...	319	...	28.83	...	...	...	...						
BY OTHER AGENCIES.																
Railways, Cooly Depot, Jails and Cantonments.	1,361	12,008	1,361	12,008	95.23	55.67	4(a)	553	353	217						
Total ..	697,027	35,602	697,027	35,602	99.56	63.30	1,311	705	358,911	591,578	28.75	Rs. 1,54,488 15 0	Rs. 0 1			

(a) Cooly Department and Cantonments only.

Date		Description		Amount		Balance	
Month	Day	Particulars	Debit	Credit	Debit	Credit	Balance
Jan	1	Balance forward					
Jan	2	By Cash		100.00		100.00	
Jan	3	To Cash	100.00		100.00		
Jan	4	By Cash		50.00		50.00	
Jan	5	To Cash	50.00		50.00		
Jan	6	By Cash		25.00		25.00	
Jan	7	To Cash	25.00		25.00		
Jan	8	By Cash		12.50		12.50	
Jan	9	To Cash	12.50		12.50		
Jan	10	By Cash		6.25		6.25	
Jan	11	To Cash	6.25		6.25		
Jan	12	By Cash		3.12		3.12	
Jan	13	To Cash	3.12		3.12		
Jan	14	By Cash		1.56		1.56	
Jan	15	To Cash	1.56		1.56		
Jan	16	By Cash		0.78		0.78	
Jan	17	To Cash	0.78		0.78		
Jan	18	By Cash		0.39		0.39	
Jan	19	To Cash	0.39		0.39		
Jan	20	By Cash		0.19		0.19	
Jan	21	To Cash	0.19		0.19		
Jan	22	By Cash		0.09		0.09	
Jan	23	To Cash	0.09		0.09		
Jan	24	By Cash		0.04		0.04	
Jan	25	To Cash	0.04		0.04		
Jan	26	By Cash		0.02		0.02	
Jan	27	To Cash	0.02		0.02		
Jan	28	By Cash		0.01		0.01	
Jan	29	To Cash	0.01		0.01		
Jan	30	By Cash		0.00		0.00	
Jan	31	To Cash	0		0		
Feb	1	Balance forward					
Feb	2	By Cash		100.00		100.00	
Feb	3	To Cash	100.00		100.00		
Feb	4	By Cash		50.00		50.00	
Feb	5	To Cash	50.00		50.00		
Feb	6	By Cash		25.00		25.00	
Feb	7	To Cash	25.00		25.00		
Feb	8	By Cash		12.50		12.50	
Feb	9	To Cash	12.50		12.50		
Feb	10	By Cash		6.25		6.25	
Feb	11	To Cash	6.25		6.25		
Feb	12	By Cash		3.12		3.12	
Feb	13	To Cash	3.12		3.12		
Feb	14	By Cash		1.56		1.56	
Feb	15	To Cash	1.56		1.56		
Feb	16	By Cash		0.78		0.78	
Feb	17	To Cash	0.78		0.78		
Feb	18	By Cash		0.39		0.39	
Feb	19	To Cash	0.39		0.39		
Feb	20	By Cash		0.19		0.19	
Feb	21	To Cash	0.19		0.19		
Feb	22	By Cash		0.09		0.09	
Feb	23	To Cash	0.09		0.09		
Feb	24	By Cash		0.04		0.04	
Feb	25	To Cash	0.04		0.04		
Feb	26	By Cash		0.02		0.02	
Feb	27	To Cash	0.02		0.02		
Feb	28	By Cash		0.01		0.01	
Feb	29	To Cash	0.01		0.01		
Feb	30	By Cash		0.00		0.00	
Feb	31	To Cash	0		0		

STATEMENT No. II.—Showing the cost of vaccination in the

No.	Circle and district.	European supervising officer.	Expenditure.									
			Pay.	Native supervising officer.	Pay.	Paid vaccinators.	Pay.	Licensed vaccinators.	Pay.	Clerks.	Pay.	Peons, etc.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
	PATNA DIVISION.				Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.	Rs. a. p.
1	Patna			6	2,488 3 0	10	2,307 0 0	63	...	...	...	...
2	Gaya			5	3,529 5 0	20	2,058 1 0	81	...	...	...	2 216 0 0
3	Shahabad			5	2,504 10 0	18	1,885 0 6	117	...	...	...	...
	Total of Patna Division			16	8,521 2 0	55	6,333 1 0	261	...	...	...	2 216 0 0
	TIRHUT DIVISION.											
4	Saran			4	1,909 0 0	8	804 8 0	74	...	...	...	...
5	Champaran			3	1,550 0 0	4	522 0 0	66	...	...	...	...
6	Muzaffarpur			4	2,005 3 0	12	1,513 14 0	75	...	...	...	...
7	Darbhanga			4	2,110 0 0	7	804 0 0	89	...	1	60 0 0	1 48 0 0
	Total of Tirhut Division			15	8,754 0 0	31	3,904 0 0	300	...	1	60 0 0	1 48 0 0
	BHAGALPUR DIVISION.											
8	Monghyr			4	2,000 0 0	7	812 5 10	50	...	...	...	2 102 0 0
9	Bhagalpur			5	3,020 15 0	11	1,051 10 0	63	...	...	...	...
10	Parera			4	2,102 10 0	9	1,507 0 0	52	...	...	...	...
11	Santal Parganas			7	3,540 0 0	8	1,480 13 0	57	...	...	...	...
	Total of Bhagalpur Division			20	11,562 0 0	35	6,720 13 7	202	...	...	...	2 102 0 0
	ORISSA DIVISION.											
12	Cuttack			4	1,914 2 0	10	1,422 13 5	60	...	...	...	...
13	Balasore			3	1,710 0 0	6	645 7 6	30	...	...	...	...
14	Angul			3	2,053 0 0	...	...	12	...	...	...	...
15	Puri			3	1,045 0 0	29	3,770 14 10	...	...	...	...	...
16	Sambalpur			3	1,505 8 0	3	547 7 0	34	...	...	...	2 49 15 0
	Total of Orissa Division			16	9,518 0 0	48	6,392 19 0	146	...	...	...	2 49 15 0
	CHOTA NAGPUR DIVISION.											
17	Hazaribagh			4	1,770 4 0	10	623 15 7	41	...	...	...	...
18	Ranchi			5	2,709 13 0	4	738 3 0	49	...	...	...	...
19	Palamu			3	1,452 10 0	4	736 14 9	23	...	...	...	1 85 10 0
20	Manbhum			10	2,771 9 0	32	2,800 0 0	42	715 0 0	...	...	...
21	Singbhum			3	1,445 0 0	3	318 8 0	23	...	...	...	...
	Total of Chota Nagpur Division			34	10,159 4 0	53	5,217 9 4	178	715 0 0	...	...	1 85 10 0
	Total of Vaccine Circle			101	44,351 8 5	222	26,473 9 2	1,069	715 0 0	1	60 0 0	6 501 9 0
	ESTABLISHMENT OF THE ASSISTANT DIRECTOR OF PUBLIC HEALTH, NORTH BIRAR CIRCLE.			1	9,305 7 10	...	...	...	...	2	1,694 3 0	2 242 4 0
	Ditto SOUTH BIRAR CIRCLE			1	14,145 8 0	...	...	...	...	2	1,509 0 0	2 222 8 0
	Ditto CHOTA NAGPUR AND ORISSA CIRCLE.			1	10,199 5 0	...	...	...	...	2	1,143 3 0	2 221 4 0
	Total			3	33,550 4 10	...	...	...	...	6	3,897 6 0	6 686 0 0
	Total of Province			104	61,901 13 3	222	26,473 9 2	1,069	715 0 0	7	3,657 6 0	14 1,197 0 0

Province of Bihar and Orissa during the year 1922-23.

ditto.					Paid from—						Number of all successful vaccinations and re-vaccinations.	Average cost of each successful case.
Total pay of establishments.	Travelling allowance.	Contingencies.		Total cost.	Imperial Fund.	Provincial Fund.	Local Fund.	Municipalities.	Native States.	Total.		
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
4,883 3 0	1,700 0 0	...	90 0 0	6,723 3 0	...	4,804 3 0	423 0 0	1,426 0 0	...	6,723 3 0	62,673	0 1 8
5,801 0 0	708 0 3	...	330 6 3	6,859 12 6	...	4,755 2 3	1,733 14 3	769 12 0	...	6,859 12 6	47,363	0 2 4
4,479 10 6	1,551 7 0	...	240 13 6	6,271 14 0	...	4,305 0 0	1,090 1 0	905 13 0	...	6,271 14 0	55,782	0 1 8
15,164 3 6	4,009 7 3	...	601 2 9	19,834 13 6	...	13,526 5 3	3,195 15 3	3,111 9 0	...	19,834 13 6	105,718	0 1 10
2,003 14 0	1,320 5 0	...	259 4 0	4,474 7 0	...	3,419 11 0	235 4 0	819 8 0	...	4,474 7 0	66,471	0 1 1
2,072 0 0	1,581 2 0	...	158 5 6	3,810 7 6	...	3,247 1 0	196 0 0	377 6 6	...	3,810 7 6	41,492	0 1 4
4,600 1 0	622 14 0	...	223 2 0	5,455 1 0	...	3,913 1 0	512 8 0	1,029 8 0	...	5,455 1 0	66,141	0 1 2
3,082 0 0	1,384 4 7	...	135 0 0	4,601 4 7	...	3,184 4 7	...	1,417 0 0	...	4,601 4 7	88,188	0 0 19
12,656 15 0	4,907 9 7	...	765 11 6	18,341 4 1	...	14,164 1 7	933 12 0	3,243 6 6	...	18,341 4 1	285,699	0 1 0
2,914 5 10	1,413 5 0	...	271 0 0	4,598 10 10	...	3,518 2 0	363 6 1	697 2 9	...	4,598 10 10	62,558	0 1 2
4,719 10 2	861 8 0	...	194 12 0	5,774 14 2	...	4,608 7 5	500 8 0	665 14 9	...	5,774 14 2	64,204	0 1 5
3,469 10 0	1,360 15 0	...	241 14 2	5,072 7 6	...	3,548 9 0	443 0 0	1,080 14 6	...	5,072 7 6	38,997	0 2 1
5,019 13 0	2,532 6 0	...	149 3 6	7,711 6 6	...	6,107 6 0	783 2 9	730 13 9	...	7,711 6 6	45,685	0 2 2
16,132 7 0	6,168 2 0	...	855 14 0	23,157 7 0	...	17,872 8 5	2,170 0 10	3,114 13 9	...	23,157 7 0	221,314	0 1 8
3,326 15 5	1,202 10 6	...	189 3 5	4,828 13 4	...	3,356 12 0	808 0 0	664 0 10	...	4,828 13 4	61,752	0 1 3
2,345 7 6	1,035 2 3	...	60 0 0	3,450 9 9	...	2,787 3 0	396 11 9	266 11 0	...	3,450 9 9	23,541	0 2 4
2,653 6 0	627 2 0	...	80 0 0	3,320 8 0	...	3,300 8 0	...	...	...	3,300 8 0	5,511	0 0 6
5,421 14 10	1,102 6 0	...	160 0 0	6,724 4 10	...	2,917 6 0	3,554 14 10	192 0 0	...	6,724 4 10	35,208	0 3 0
2,102 14 0	976 5 0	...	124 8 6	3,203 11 6	...	2,681 13 0	323 6 0	953 8 6	...	3,203 11 6	18,791	0 2 9
15,060 9 9	5,143 9 9	...	553 11 11	21,067 15 3	...	15,133 10 6	5,118 0 7	1,806 4 4	...	21,067 15 3	144,803	0 2 4
2,304 3 7	470 3 0	...	112 1 6	2,886 8 1	...	2,556 7 0	147 7 1	478 10 0	...	2,886 8 1	31,065	0 1 5
3,449 0 0	1,740 10 6	...	115 0 0	5,302 10 6	...	4,564 7 8	...	738 3 0	...	5,302 10 6	41,821	0 2 0
2,255 2 9	926 15 6	...	109 6 9	3,351 9 0	...	2,494 8 0	512 3 9	314 13 3	...	3,351 9 0	15,585	0 3 5
6,286 9 6	845 6 0	...	130 0 0	7,261 15 0	...	3,151 6 0	3,678 0 0	233 9 0	...	7,261 15 0	52,429	0 2 2
1,783 8 0	692 10 0	...	70 5 0	2,436 7 0	...	2,117 7 0	10 0 0	219 0 0	...	2,436 7 0	18,998	0 2 3
16,177 7 4	4,630 13 2	...	626 13 3	21,335 1 9	...	15,783 3 8	4,427 10 10	2,124 3 3	...	21,335 1 9	163,917	0 2 1
75,101 10 7	24,859 9 9	...	3,365 5 5	1,01,823 9 9	...	75,479 13 5	15,846 7 6	13,000 4 10	...	1,04,726 9 9	979,351	0 1 8
10,941 15 4	3,688 5 0	...	715 11 3	15,345 15 7	...	15,345 15 7	...	...	...	15,345 15 7	...	...
15,628 0 0	2,776 7 9	...	867 4 8	19,271 12 5	...	19,271 12 5	...	...	...	19,271 12 5	...	...
11,563 12 0	3,591 2 3	...	380 11 0	15,544 9 3	...	15,544 9 3	...	...	...	15,544 9 3	...	...
38,133 11 4	10,055 15 0	...	1,972 10 11	54,161 5 3	...	50,162 5 3	...	...	...	54,162 5 3	...	...
1,14,235 5 11	34,915 8 0	...	5,338 0 4	1,54,489 15 0	...	1,25,642 2 8	15,846 7 6	13,000 4 10	...	1,54,489 15 0	...	0 2 6

B.—DISPENSARY VACCINATION.

STATEMENT No III.—Showing Dispensary Vaccination in the Province of Bihar and Orissa during the year 1922-23.

District.	Number of dispensaries in each district to which a vaccinator is attached.	Average number of vaccinators attached to dispensaries during the year.	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary vaccination.					Re-vaccination.			Percentage of successful cases in which the results were known.		Percentage of unknown cases to total cases.	
					Total.	Successful.			Unknown.	Total.	Successful.	Unknown.	Primary.	Re-vaccination.	Primary.	Re-vaccination.
						Under one year.	One and under six years.	Total of all ages.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Patna ...	...	...	...	319	319	...	...	...	...	319	91	...	...	28.52	...	...
Gaya ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Shahabad ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saran ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Champan ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Muzaffarpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Darbhanga ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Monghyr ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bhagalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Furness ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Santal Parganas ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cuttack ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Balasore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angul ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sambalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hazaribagh ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ranchi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palasman ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Manbhum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Singhbhum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	319	319	...	...	...	...	...	319	91	...	...	28.52	...	...

*Sub-Assistant Surgeon.

COMPARATIVE STATEMENT NO. IV.—Showing the number of persons primarily vaccinated, and the number of those per-

Establishment.			Persons primarily							
			1913-14		1914-15		1915-16		1916-17	
			Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.
			2	3	4	5	6	7	8	9
Government	...	...	...	...	649	515	10,277	10,046	3,963	3,441
Municipal	...	...	44,167	42,480	47,235	45,310	43,099	41,661	38,645	37,226
Local Fund	...	...	82,592	81,790	76,264	75,266	94,056	84,626	80,353	73,103
Dispensaries	...	...	186	186	178	176	285	216	202	202
Licensed Vaccinators	...	...	1,149,467	1,143,922	1,114,753	1,109,554	1,065,623	1,059,266	922,991	913,264
Total	...	...	1,276,412	1,268,368	1,239,079	1,230,821	1,212,740	1,195,824	1,046,154	1,027,236

COMPARATIVE STATEMENT NO. IV.

sons who were successfully vaccinated in the Province of Bihar and Orissa in each of the undermentioned official years.

vaccinated.

1917-18		1918-19		1919-20		1920-21		1921-22		1922-23	
Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.
10	11	12	13	14	15	16	17	18	19	20	21
6,984	6,060	6,637	5,941	7,363	6,520	1,927	1,831	891	825	794	735
37,586	36,107	36,573	35,213	36,810	35,428	32,858	31,541	31,136	30,040	29,927	28,983
82,772	77,911	59,639	55,495	69,847	66,946	80,337	77,939	71,144	63,523	70,386	67,809
181	177	139	139	178	178	262	262	...	...	...	...
931,549	926,281	816,096	811,503	811,168	806,217	854,339	848,948	800,424	797,357	865,920	862,260
1,059,072	1,046,526	919,084	903,294	925,366	915,289	969,723	960,521	903,595	896,745	967,027	959,767

STATEMENT NO. V.—Showing particulars of vaccination

District.	Total number of persons vaccinated.		Total number inspected—								Percentage of	
			By Assistant Director of Public Health or Civil Surgeons.				By Native Superintendents or other Inspecting Officers.					
			Assistant Director of Public Health.		Civil Surgeons.		District Inspectors.		Sub-Inspectors.			
			Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.		
1	2	3	4	5	6	7	8	9	10	11	12	13
Patna ...	63,469	936	7,835	...	1,615	563	13,064	...	16,674	...	12'33	...
Gaya ...	46,280	1,803	9,024	...	235	1,729	4,666	...	19,314	...	10'33	...
Shahabad ...	78,924	748	7,946	...	2,175	...	10,888	...	12,076	...	12'46	...
Saran ...	67,399	589	2,677	...	2,148	179	6,773	...	21,016	...	4'24	...
Champaran ...	43,633	1,155	3,846	...	359	...	14,593	51	20,129	56	6'77	...
Muzaffarpur ...	86,340	551	6,477	...	1,666	210	13,664	...	27,819	273	7'50	...
Darbhanga ...	89,374	111	4,722	...	3,730	85	18,274	...	26,790	...	5'85	...
Monghyr ...	62,745	694	78	...	2,677	...	7,943	107	16,317	85	1'12	...
Bhagalpur ...	62,513	4,445	3,903	...	688	3,806	9,829	54	27,059	...	6'23	...
Faridkot ...	39,171	1,013	2,123	...	2,312	...	8,193	...	12,529	...	5'29	...
Santal Parganas ...	54,380	1,779	7,253	...	3,771	565	6,357	...	16,702	335	13'33	...
Cuttack ...	61,037	2,427	590	...	...	921	3,970	72	10,277	84	1'45	...
Balasore ...	22,155	3,106	...	...	549	165	2,351	192	5,768	121	...	...
Angul ...	5,619	46	...	...	1,454	...	1,149	...	4,835	16	...	...
Puri ...	35,598	1,037	2,092	...	36	370	7,696	178	15,517	264	5'90	...
Sambalpur ...	18,770	352	1,524	...	1,282	106	4,414	...	5,680	...	8'11	...
Hazaribagh ...	30,775	2,435	3,416	...	903	...	4,198	...	7,327	124	11'09	...
Ranchi ...	41,417	721	2,128	...	1,436	...	6,716	7	16,459	...	5'13	...
Palamanu ...	15,636	1,001	2,208	...	998	84	4,030	51	4,301	33	14'12	...
Manbhum ...	47,092	9,445	4,489	...	382	...	5,974	...	24,562	6,206	9'53	...
Singbhum ...	16,368	887	1,657	...	633	396	3,732	...	7,025	158	10'12	...
TOTAL ...	567,027	25,862	70,006	...	20,181	9,203	159,569	712	318,616	7,825	7'23	...

verified by Inspecting Officers during the year 1922-23.

Inspection to total number vaccinated.						Percentage of cases found successful to total number inspected.										Percentage of successful cases reported by vaccinators.	
of Public Health or Surgeons.		By Native Superintendents or other Inspecting Officers.				By Assistant Director of Public Health or Civil Surgeons.				By Native Superintendents or other Inspecting Officers.							
Civil Surgeons.		District Inspectors.		Sub-Inspectors.		Assistant Director of Public Health.		Civil Surgeons.		District Inspectors.		Sub-Inspectors.					
Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.				
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
2:55	60.74	21:73	...	20:27	...	97:37	...	61	43:80	90:04	...	96:03	...	98:18	38:40		
50	85:26	9:07	...	41:15	...	96:83	...	77:02	30:03	96:48	...	96:17	...	90:61	41:58		
3:09	...	18:30	...	20:49	...	90:04	...	99:31	...	97:22	...	98:39	...	99:66	49:59		
3:03	30:58	10:05	...	31:18	...	98:67	...	98:29	43:12	99:05	...	99:11	...	98:72	56:71		
82	...	31:50	3:79	45:00	41:32	83:54	...	99:17	...	91:15	80:39	89:05	80:26	99:60	60:44		
2:16	38:41	16:42	...	30:22	49:36	94:58	...	99:00	30:00	97:40	...	97:50	100:00	...	...		
4:23	76:57	21:34	...	29:21	...	83:82	...	90:80	87:05	90:40	...	99:16	...	90:79	74:77		
4:10	...	12:06	16:64	26:00	12:42	87:00	...	99:18	...	19:72	32:71	59:52	87:64	90:92	39:18		
90	87:08	15:74	11:34	44:76	...	95:51	...	99:62	40:09	98:28	87:04	97:16	...	99:92	41:10		
5:76	...	24:03	...	32:00	...	96:75	...	99:26	...	97:20	...	97:04	...	99:41	53:84		
7:11	31:75	11:08	...	50:70	18:83	90:40	...	99:41	52:03	98:33	...	99:10	45:07	99:68	48:73		
...	37:04	6:00	6:59	17:10	6:52	99:13	...	...	59:28	99:80	70:16	98:11	63:06	99:72	50:90		
2:47	5:06	10:01	6:18	26:12	3:89	...	...	98:54	92:97	97:06	47:39	96:97	70:24	99:41	65:86		
25:57	...	20:44	...	80:40	34:78	...	...	98:55	...	95:47	...	95:81	18:75	97:65	52:17		
10	35:08	22:30	25:09	43:84	39:18	95:04	...	91:68	81:35	99:19	55:06	90:45	47:35	97:86	54:58		
6:53	53:08	22:51	...	31:88	...	73:41	...	95:39	50:63	90:20	...	94:05	...	99:44	35:79		
3:13	...	13:04	...	69:83	49:79	99:01	...	97:30	...	88:61	...	92:95	50:60	90:78	56:08		
3:47	...	16:11	97	97:19	...	89:23	...	100:00	...	98:79	42:65	98:57	...	99:75	70:04		
6:32	8:29	25:00	5:09	21:16	3:29	97:06	...	97:79	84:52	97:20	55:81	98:93	30:39	99:24	22:37		
32	...	12:08	...	52:15	60:65	81:30	...	100:00	...	99:49	...	93:87	70:78	90:17	67:47		
3:50	34:40	22:50	...	42:02	15:53	70:54	...	3:78	10:74	22:48	...	42:69	15:04	99:76	75:76		
3:00	26:22	16:50	1:09	37:04	21:81	88:06	...	95:43	45:87	88:57	50:54	88:03	73:18	99:30	53:10		

STATEMENT NO. II.—Showing side by side the ratios, per 1,000 of population, of Deaths from

District.				1913-14		1914-15		1915-16		1916-17	
				Ratio of deaths from small-pox.	Number of successful vaccinations.	Ratio of deaths from small-pox.	Number of successful vaccinations.	Ratio of deaths from small-pox.	Number of successful vaccinations.	Ratio of deaths from small-pox.	Number of successful vaccinations.
1	2	3	4	5	6	7	8	9	10	11	12
Patna ...	...	...	17	48,480	48	57,065	71	68,438	28	67,870	...
Gaya ...	...	...	03	67,817	10	65,855	63	75,641	37	56,139	...
Shahabad ...	...	...	09	53,812	32	62,079	45	65,016	26	51,176	...
Saran ...	...	...	06	81,699	06	80,739	15	79,608	27	74,895	...
Champaran ...	...	...	02	63,100	10	64,146	14	68,255	07	49,091	...
Muzaffarpur ...	...	...	01	103,032	09	105,292	24	104,624	20	88,702	...
Darbhanga ...	...	...	06	93,735	24	97,760	41	95,237	28	96,020	...
Monghyr ...	...	...	48	89,024	46	89,749	42	87,999	17	67,229	...
Bhagalpur ...	...	...	31	75,244	35	75,831	38	74,532	22	66,899	...
Purnea ...	...	...	22	60,587	30	58,496	38	51,206	33	53,018	...
Santal Parganas ...	...	...	27	64,815	18	53,182	37	57,558	43	46,826	...
Cuttack ...	...	...	01	134,227	06	113,297	69	89,925	46	73,415	...
Balasore ...	...	...	11	69,059	90	53,231	90	38,609	24	22,178	...
Angul ...	...	...	...	7,945	...	7,080	01	9,686	15	9,226	...
Puri ...	...	...	07	47,269	02	33,820	30	37,595	52	29,228	...
Sambalpur ...	...	...	05	25,063	02	27,561	75	22,606	09	19,938	...
Hzaribagh ...	...	...	02	51,777	03	43,299	49	46,709	19	42,148	...
Ranchi ...	...	...	01	49,989	03	50,953	12	52,111	05	43,667	...
Palamau ...	...	...	07	21,459	10	26,327	17	31,808	15	25,542	...
Manbhum ...	...	...	02	61,316	43	73,369	63	54,056	23	49,379	...
Siaghbhum ...	...	...	09	23,496	45	25,909	28	19,526	12	17,429	...
Total ...	...	...	11	1,292,965	22	1,273,285	42	1,230,745	28	1,053,015	...

small-pox and the number of successful vaccinations during the ten years ending 1922-23.

1917-18		1918-19		1919-20		1920-21		1921-22		1922-23	
Ratio of deaths from small-pox.	Number of successful vaccinations.	Ratio of deaths from small-pox.	Number of successful vaccinations.	Ratio of deaths from small-pox.	Number of successful vaccinations.	Ratio of deaths from small-pox.	Number of successful vaccinations.	Ratio of deaths from small-pox.	Number of successful vaccinations.	Ratio of deaths from small-pox.	Number of successful vaccinations.
10	11	12	13	14	15	16	17	18	19	20	21
·15	68,529	·3	68,535	·85	68,573	2·79	71,340	·46	63,297	·05	62,673
·18	62,246	·21	56,114	·62	66,449	·77	60,938	·24	42,710	·04	47,263
·10	51,858	·02	41,625	·24	42,394	·55	62,418	·22	69,010	·04	58,782
·16	77,721	·07	66,443	·10	66,882	·39	68,000	·13	37,665	·02	66,871
·11	51,755	·14	50,191	·13	53,458	·29	56,914	·08	36,927	·06	44,499
·09	85,898	·02	86,664	·10	87,182	·13	89,230	·04	8	·04	86,141
·07	93,206	·08	86,555	·10	88,770	·17	93,468	·03	88,504	·06	88,188
·10	68,361	·05	56,576	·24	59,814	·28	55,104	·14	54,215	·11	62,958
·22	68,166	·09	59,034	·23	56,741	·22	58,176	·13	62,115	·09	64,294
·64	49,490	·52	54,209	·96	50,349	·98	51,930	·29	36,428	·24	38,977
·14	56,728	·06	46,659	·30	44,691	·37	45,864	·05	50,187	·01	55,085
·81	62,177	·89	51,845	·91	55,008	·30	60,775	·04	61,424	·15	61,752
·03	25,800	·09	20,943	·86	22,139	·54	27,597	·09	26,380	·17	23,541
·01	6,956	·06	6,751	1·11	5,739	...	4,060	...	4,968	·005	5,511
·26	34,639	·75	33,543	3·12	32,940	·77	41,225	·08	34,897	·13	35,208
·24	23,343	·07	15,361	·68	12,835	·27	18,523	·03	20,829	·006	18,791
·07	39,761	·07	35,632	·24	35,026	·13	29,123	·02	29,524	·02	31,985
·03	47,094	·04	31,870	·90	40,559	1·38	38,450	·21	38,997	·05	41,821
·06	26,893	·06	20,472	1·26	21,226	1·76	19,346	·56	16,898	·09	15,585
·02	52,289	·05	37,807	·44	57,908	·11	43,192	·02	43,484	·02	52,438
·09	17,872	·10	15,542	1·24	19,595	·52	18,023	·32	16,605	·18	16,998
·19	1,070,784	·17	942,370	·53	989,278	·56	1,013,696	·14	917,188	·07	979,351

STATEMENT No. VII.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1922-23.

District.	Towns.	Number of births during the year ending 31st March 1923.	Number of deaths amongst infants under one year during the year ending 31st March 1923.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1923.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Patna	Patna ...	3,966	665	1,075	1st October 1884.
	Bihar ...	684	72	444	1st April 1887.
	Dinapur ...	20	156	526	28th January 1891.
	Barh ...	357	84	145	1st April 1887.
	Khagole ...	218	27	14	12th July 1910.
	Total ...	6,045	1,004	2,204	
Gaya	Gaya ...	2,139	686	781	1st January 1883.
	Tikari ...	200	18	37	3rd January 1891.
	Daudnagar ...	326	53	91	Ditto.
	Total ...	2,665	757	909	
Shahabad	Arrah ...	1,436	250	886	20th July 1885.
	Buxar ...	406	73	136	1st April 1887.
	Dumraon ...	472	73	139	Ditto.
	Jagadispur ...	315	58	150	20th December 1890.
	Sassaram ...	859	158	357	1st April 1887.
	Bhabhua ...	200	56	85	Ditto.
	Total ...	3,688	668	1,753	
	Total of Patna Division.	12,398	2,429	4,866	
Saran	Chapra ...	1,412	147	425	1st April 1887.
	Revelganj ...	363	54	162	12th December 1890.
	Siwan ...	292	48	365	1st April 1887.
	Total ...	2,167	249	1,012	
Champanan	Motihari ...	356	61	203	1st April 1887.
	Bettiah ...	756	125	292	Ditto.
	Total ...	1,112	186	495	

STATEMENT No. VII.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1922-23—contd.

District.	Towns.	Number of births during the year ending 31st March 1923.	Number of deaths amongst infants under one year during the year ending 31st March 1923.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1923.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Muzaffarpur	Muzaffarpur ...	1,036	240	665	1st January 1886.
	Sitamarhi ...	273	41	141	1st April 1887.
	Hajipur ...	667	158	127	1st May 1890.
	Lalganj ...	265	47	167	1st April 1887.
	Total ...	2,241	486	1,095	
Darbhanga	Darbhanga ...	2,017	325	282	24th May 1884.
	Roserha ...	350	54	63	3rd January 1891.
	Samastipur ...	322	20	22	25th July 1910.
	Madhubani ...	600	66	137	1st April 1887.
	Total ...	3,289	465	504	
	Total of Tirhut Division.	8,809	1,386	3,109	
Monghyr	Monghyr ...	1,764	257	77	15th November 1882.
	Jamalpur ...	1,084	109	431	Ditto.
	Total ...	2,848	366	508	
Bhagalpur	Bhagalpur ...	2,164	321	982	15th February 1884, withdrawn on 16th October 1895; re-extended on 18th August 1898.
	Colgong ...	183	34	94	Ditto, re-extended on 19th December 1901.
	Total ...	2,347	355	1,076	
Purnea	Purnea ...	395	34	158	1st July 1887.
	Kishanganj ...	127	14	113	12th November 1892.
	Katihar ...	284	23	61	8th August 1910.
	Forbesganj ...	125	24	51	9th August 1912.
	Total ...	841	95	383	

STATEMENT NO. VII.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1922-23—contd.

District.	Towns.	Number of births during the year ending 31st March 1923.	Number of deaths amongst infants under one year during the year ending 31st March 1923.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1923.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Santal Parganas	Sahibganj	538	70	284	1st May 1884.
	Deoghar	346	51	125	Ditto.
	Dumka	292	37	88	Notifications, dated the 9th April 1884, and 23rd August 1910.
	Madhupur	288	29	50	22nd August 1910.
	Total	1,464	187	547	
Total of Bhagalpur Division.		7,500	1,003	2,514	
Cuttack	Cuttack	961	162	251	1st September 1884.
	Kendrapara	484	126	99	7th February 1888.
	Jajpur	266	59	34	Ditto.
	Total	1,711	347	384	
Balasore	Balasore	310	72	136	7th February 1888.
Puri	Puri	834	265	271	Ditto.
Sambalpur	Sambalpur	322	68	93	7th March 1895.
Total of Orissa Division.		3,177	752	914	
Hazaribagh	Hazaribagh	346	19	57	1st January 1885.
	Chatra	205	6	91	1st August 1885.
	Giridih	205	25	111	8th September 1910.
	Total	756	50	259	
Ranchi	Ranchi	1,354	123	1,003	1st April 1887.
	Lohardaga	211	19	69	25th June 1892.
	Total	1,565	142	1,072	

STATEMENT NO. VII.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1922-23—concl'd.

District.	Towns.	Number of births during the year ending 31st March 1923.	Number of deaths amongst infants under one year during the year ending 31st March 1923.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1923.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Palamau	Daltonganj	302	30	103	24th October 1890.
Manbhum	Purulia	524	58	310	1st January 1887.
	Raghunathpur	154	15	131	9th February 1894.
	Jhalda	245	25	62	9th July 1892.
	Dhanbad	144	16	32	5th December 1918.
	Total	1,067	114	535	
Singbhum	Chaibassa	248	26	131	20th June 1892.
	Chakradharpur	131	15	64	13th January 1919.
	Total	379	41	195	
	Total of Chota Nagpur Division.	4,069	377	2,164	
	Total for the Province	35,953	5,947	13,567	

Provincial Statement showing the different kinds of lymph

District.	Primary vaccination.											
	Direct from the calf.					With lanoline or glycerine lymph.					Arm-to-arm	
	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.
I	2	3	4	5	6	7	8	9	10	11	12	13
Patna	63,469	62,308	901	260	98.17	...	...	...	...	...	...	...
Gaya	46,636	46,506	127	53	99.61	...	...	...	...	...	...	...
Shahabad	58,924	58,664	198	62	99.55	...	...	...	...	...	...	...
Saran	67,399	66,542	423	434	98.72	...	...	...	...	...	...	...
Champaran	43,253	43,680	97	76	99.06	...	...	...	...	...	...	...
Muzaffarpur	86,340	85,899	423	18	99.49	...	...	...	...	...	...	...
Darbhanga	88,274	88,105	160	9	99.80	...	...	...	...	...	...	...
Monghyr	62,745	62,090	35	50	99.91	...	...	...	...	...	...	...
Bhagalpur	62,513	62,467	29	17	99.92	...	...	...	...	...	...	...
Barua	38,171	37,947	174	50	99.41	...	...	...	...	...	...	...
Santal Parganas	54,789	54,218	81	90	99.68	...	...	...	...	...	...	...
Cuttack	61,037	60,591	165	281	99.26	...	...	...	...	...	...	...
Balasore	22,155	21,916	128	111	99.41	...	...	...	...	...	...	...
Angul	5,619	5,487	101	31	97.65	...	...	...	...	...	...	...
Juri	35,308	34,642	164	592	97.86	...	...	...	...	...	...	...
Fambalpur	18,770	18,605	40	65	99.44	...	...	...	...	...	...	...
Manabadi	30,775	30,732	30	13	99.86	...	...	...	...	...	...	...
Ranchi	41,417	41,313	1	103	99.75	...	...	...	...	...	...	...
Palaman	15,036	15,361	44	231	98.24	...	...	...	...	...	...	...
Manbhum	47,092	45,708	664	520	97.07	...	...	...	...	...	...	...
Singbhum	16,765	16,816	30	9	99.76	...	...	...	...	...	...	...
TOTAL	967,027	939,767	4,215	3,045	99.24	...	...	...	...	...	...	...

II.

used and their rates of success during the year 1922-23.

Re-vaccination.																	
vaccination.			Direct from the calf.					With lanoline or glycerine lymph.					Arm-to-arm vaccination.				
Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
...	...	...	...	...	...	...	...	936	365	538	33	38.22	...	...	...	...	...
...	...	...	...	...	...	...	...	1,803	757	1,007	39	41.93	...	...	...	...	...
...	...	...	...	...	...	...	...	248	118	120	10	47.53	...	...	...	...	...
...	...	...	...	...	...	...	...	590	329	170	81	56.72	...	...	...	...	...
...	...	...	...	...	...	...	...	1,335	819	246	290	60.49	...	...	...	...	...
...	...	...	...	...	...	...	...	551	242	230	79	43.92	...	...	...	...	...
...	...	...	...	...	...	...	...	111	83	22	6	74.77	...	...	...	...	...
...	...	...	...	...	...	...	...	684	268	390	26	19.18	...	...	...	...	...
...	...	...	...	...	...	...	...	4,445	1,827	2,528	90	41.10	...	...	...	...	...
...	...	...	...	...	...	...	...	1,913	1,030	720	163	53.31	...	...	...	...	...
...	...	...	...	...	...	...	...	1,779	867	683	249	48.73	...	...	...	...	...
...	...	...	...	...	...	...	...	2,427	1,161	876	390	47.83	...	...	...	...	...
...	...	...	...	...	...	...	...	3,106	1,625	842	639	65.86	...	...	...	...	...
...	...	...	...	...	...	...	...	46	24	17	5	52.17	...	...	...	...	...
...	...	...	...	...	...	...	...	1,037	566	231	240	54.38	...	...	...	...	...
...	...	...	...	...	...	...	...	352	120	193	33	35.79	...	...	...	...	...
...	...	...	...	...	...	...	...	2,435	1,253	359	823	51.04	...	...	...	...	...
...	...	...	...	...	...	...	...	721	508	123	90	70.04	...	...	...	...	...
...	...	...	...	...	...	...	...	1,001	224	76	701	22.37	...	...	...	...	...
...	...	...	...	...	...	...	...	2,145	6,720	1,832	893	71.20	...	...	...	...	...
...	...	...	...	...	...	...	...	887	672	167	48	75.76	...	...	...	...	...
...	...	...	...	...	...	...	...	35,832	19,584	11,350	4,978	54.60	...	...	...	...	...



