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VACCINATION REPORT

BIHAR AND ORISSA

FOR THE YEAR

1926-27

BY

LIEUT-COL. J. A. S. PHILLIPS, D.P.H., I.M.S., Offg. Director of Public Health, Bihar and Orissa.



PATNA :

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ANNUAL VACCINATION REPORT

BIHAR AND ORISSA.

FOR THE YEAR

1926-27.

1. Staff.—Lieutenant-Colonel W. C. Ross, I.M.S., held charge of the department up to 14th April 1926 and Lieutenant-Colonel J. A. S. Phillips, I.M.S., for the remaining period of the year.

The undermentioned officers held charge of the three circles for periods as noted against their names:—

- (1) South Bihar Circle.—Captain S. L. Mitra, I.M.S., from 1st April 1926 to 31st March 1927.
- (2) North Bihar Circle.—Dr. J. L. Das from 1st April to 13th December 1926.
- Dr. B. P. Mazoomdar from 14th December 1926 to 31st March 1927.
- (3) Chota Nagpur and Orissa Circle.—Dr. T. Sebastian from 1st April to 18th April 1926 and from 24th May 1926 to 31st March 1927. Lieutenant-Colonel J. A. S. Phillips, I.M.S, from 19th April to 23rd May 1926.

Dr. T. Sebastian held charge of the Vaccine Depôt at Namkum throughout the year except for the period when he was on leave (19th April to 23rd May) when Lieutenant-Colonel J. A. S. Phillips, I.M.S., held charge.

The Inspecting staff consisted of 20 District Inspectors of Vaccination and 69 Sub-Inspectors of Vaccination (including three deputed for duty at the Vaccine Depôt) in addition to the one Sub-Assistant Surgeon combining vaccination inspection with other duties in Angul. The total number of vaccinators employed in the province during the year was 1,111 licensed and 278 paid against 1,105 licensed and 226 paid in the previous year.

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.

- 2. Operations performed.—The total number of operations performed during the year amounted to 1,351,084 as compared with 1,297,768 last year. This increase is most satisfactory and is attributable to three main causes:—
 - (a) The increasing area where vaccination is compulsory.
 - (b) The widespread epidemic of small-pox in the province which induced the people to seek protection by vaccination.
 - (c) Increased efforts on the part of the vaccination staff.

From information I have been able to elicit I do not consider that the difficulties experienced by the vaccination staff in performing operations have in any way diminished, or that the opposition on the part of parents to allow their children to be vaccinated decreased. Reports from all Civil Surgeons and the three Assistant Directors of Public Health bear this out. In my

opinion the increase in the number of vaccinations done in 1926 is largely due to fear of infection in a year when small-pox prevailed in epidemic form in all districts of the province.

Of the total number of operations performed 1,332,312 were done by the staff of the vaccination department as compared with 1,277,814 done last year. 1,130,934 operations were primary and 201,378 were re-vaccinations against 1,084,230 primary operations and 193,584 re-vaccinations done last year.

There was an increase of 46,704 in the number of primary operations and 7,794 in the number of re-vaccinations during the year. Of the total operations performed (1,332,312), 1,239,476 equal to 93.03 per cent. were successful as compared with 1,191,042 equal to 93.21 last year.

The number of operations performed in municipalities decreased by 21,075 as compared with last year's returns. The total number of operations performed was 72,587 and the number of successful operations was 50,762, of which 34,780 were primary and 15,952 were re-vaccinations as compared with 39,370 and 26,036, respectively, last year. The ratios of success in municipalities were 96.41 per cent. for primary operations and 43.77 per cent. for re-vaccinations as compared with 97.64 per cent. and 48.80 per cent., respectively, last year.

The number of operations performed in rural areas was 1,259,725 as compared with 1,184,152 last year and the ratios of successes were 99.49 per cent. for primary operations and 60.33 for re-vaccinations.

3. Vaccination in districts.—All the three districts of the Patna division reported an increase in the number of operations performed, Patna (26,574), Gaya (5,092), and Shahabad (20,811).

The districts of Muzaffarpur, Darbhanga and Champaran recorded increases of 9,711, 5,353 and 11,607 respectively, whereas Saran recorded a decrease of 5,186.

All the districts of the Bhagalpur division recorded increases. The Santal Parganas district recorded the highest increase in this division, viz., 7,045.

With the exception of Balasore, all the other districts of Orissa recorded decreases in the number of operations, the greatest decrease being in Puri (24,448). The district of Balasore recorded an increase of 10,763.

With the exception of Manbhum and Hazaribagh, the three other districts recorded decreases in the number of operations, the greatest decrease being in Singhbhum (4,525).

4. Vaccination in towns and compulsory areas.—Statement VII shows that during the year, 16,720 children under one year of age, out of an available number of 31,529 or 53 03 per cent. were successfully vaccinated.

The towns of Muzaffarpur, Darbhanga and Monghyr show the smallest proportion of work done, and the towns of Barh and Daltonganj also made unsatisfactory returns.

5. Work done in the Native States under the supervision of the Political Agent and Commissioner.—Vaccination work in the Orissa Feudatory States has steadily developed during recent years under the direction and encouragement of the Political Agent and Commissioner.

Both vaccination and to a large extent re-vaccination are practically compulsory in the majority of these States.

During the year under report 177,286 primary operations and 294,729 re-vaccinations were performed as compared with 178,698 and 277,553, respectively, in the previous year.

6. Protection of infants.—During the year under report the number of children under one year available for vaccination was 1,080,668 and the number of successful operations was 417,112 equal to 386 per thousand against 378,345 or 356 per thousand successful operations out of 1,063,708 children available during the previous year. The protection of infants in municipalities is separately shown in statement VII. It gives a ratio of 540 per thousand of the surviving infant population as compared with 570 in the previous year.

These figures are unsatisfactory inasmuch as they show that far more than half of the total number of operations is performed on children over one year of age. 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, as there is a strong prejudice against vaccination of infants at an early age. The advantages in retaining the limit of age for compulsory primary vaccination as it now stands are obvious, but prejudices in India die hard and it will take years of education to dispel this one.

7. Incidence and mortality of small-pox.—During the last ten years, the total number of deaths from small-pox in the districts of this province has been 128,998.

During the first quinquennium the number of deaths was 55,691, and during the second 73,307. In each of the last five years the mortality was as follows:—2,695, 3,893, 8,345, 22,748 and 35,626.

This shows a progressively increasing annual total, but does not necessarily mean that this steady increase is going to continue. Small-pox is endemic in the province, and will continue to be so until and unless vaccination and re-vaccination are made compulsory. Epidemics of the disease occur at intervals of about five or six years and at these times the number of both primary and secondary vaccinations done increases. The epidemic persists in varying intensity for two or three years and then dies out, but small-pox still continues in endemic form. At the end of another five or six years there is a recrudescence and it appears in epidemic form again. In 1926 we were at the height of the epidemic and there are already signs of its lessening in most of the districts.

The provincial ratios of the mortality from small-pox per thousand of population during the last five years have been 0.07, 0.11, 0.24, 0.67 and 1.05.

8. Prevention of small-pox.—The statistics given in the previous paragraphs indicate the insufficiency and inefficiency of the existing arrangements for vaccination, and it almost appears as if we relied more on natural causes to eventually arrest an epidemic, than in our efforts at prevention by vaccination.

Small-pox is a preventible disease and vaccination can prevent it, as it has in countries where it is properly carried out. In the light of this knowledge and in face of the above facts there is a great necessity for a stronger and more complete vaccination policy.

The question of compulsory vaccination throughout the province has been under consideration for some time and primary vaccination has been and is being extended to whole districts and areas in districts. Difficulty is still being experienced in certain areas and amongst certain classes notably the Brahmans, Rajputs and Bunniahs and in some cases the Muhammadans, of almost every district, and where these difficulties become acute, the Vaccination Act is extended on application from the district officials.

But the process is a slow one, and the time has now come when vaccination should be made compulsory throughout the province and should be free. Compulsory primary vaccination alone, although it will be beneficial, will not solve the difficulty completely. The immunity conferred by vaccination in infancy is by no means lifelong, and if it is seriously desired that small-pox should be eradicated, re-vaccination will also have to be compulsory, until such time as the people themselves come to appreciate the benefits of it.

9. Inspection of work.—During the year under report the Assistant Directors of Public Health inspected 78,083 primary vaccinations as against 71,574 in the previous year.

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 all the 21 districts in the province.

The Civil Surgeons of the province inspected 30,934 primary and 7,071 re-vaccination operations against 25,046 primary and 5,684 re-vaccinations last year.

It should be noted that the methods of inspection of Civil Surgeons and Assistant Directors of Public Health are different. Civil Surgeons inspected 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.—The Vaccine Depôt at Namkum supplied the province with vaccine throughout the year. A large supply of vaccine is held in reserve and the necessary stores and supplies for manufacture are in ample stock. 4,297,874 doses of vaccine were manufactured during the year as compared with 4,596,543 doses last year. The number of doses issued was 3,238,632 against 2,881,416 in 1925-26. The number of doses in stock at the end of the year was 5,692,121. The number of cattle used during the year was 707 as compared with 828 in the previous year, and the average yield of crude vaccine was over 59 grammes per animal as compared with 56 grammes in the previous year. The working cost of the depôt for the year amounted to Rs. 25,686 as compared with Rs. 28,643 in the previous year. The average cost of the vaccine per dose works out at 1·14 pies on the gross expenditure, and as the sale-proceeds of vaccine lymph including a large quantity supplied to Bengal, exceeded the working cost of the depôt by Rs. 3,454-11-8, this sum constituted a nett profit for the year.
- 11. Vaccine depôt and cold storage.—During the year under report there was no serious epidemic amongst calves except a mild outbreak of foot and mouth disease in the latter part of December 1926 which was brought under control at once by the prompt isolation of the infected calves and disinfection.

The total mortality amongst calves was exceptionally low, being only 1.3 per cent. as compared with 4.3 per cent. in 1925-26, 6 per cent. in 1924-25 and 12 per cent. in 1923-24 and 22 per cent. in 1922-23.

Since the cold storage plant was duplicated in 1924-25 there has been no trouble with regard to the storage of vaccine, and the cold storage and machinery worked satisfactorily throughout the year.

Throughout the year cholera vaccine and influenza vaccine were stocked in the depôt and issued throughout the province as required.

12. Experimental work.—All seed vaccine was manufactured at the depôt and worked satisfactorily. 4,590 grammes of seed vaccine was prepared and some of this was sold to the Calcutta Corporation to start their work.

The rejuvenation of the seed vaccine was maintained by passage through children, buffalo calves and cow calves.

Experiments with regard to maintaining a low temperature in the bamboo reeds in which the vaccine is supplied during the hot weather were carried out with some success. Experiments were also made with a view to destroying extraneous germs in the vaccine without affecting its potency—these are being continued.

13. Cost of the department.—The total cost of the Vaccination Department (excluding the Vaccine Depôt) during the year, as detailed in Statement II, was Rs. 162,082 or Rs. 7,418 more than the previous year. This increase is due partly to the increase of pay earned by the Assistant Director of Public Health, South Bihar Circle, and the leave salary drawn by the Assistant Director of Public Health, North Bihar Circle.

The cost per successful operation was two annas and one pie against two annas in the previous year.

- 14. Personal.—In conclusion I desire to bring to the notice of Government the good work done by Assistant Directors of Public Health—Captain S. L. Mitra, Dr. T. Sebastian and Dr. J. L. Das in charge of South Bihar Circle, Chota Nagpur and Orissa Circle, and North Bihar Circle, respectively, in connection with the inspection of vaccination in their respective circles.
- Dr. T. Sebastian was in charge of the Vaccine Depôt in addition to his other duties throughout the year, except for a brief period when he was on leave.
- Dr. C. N. Banerji, the Superintendent of the depôt, worked hard and well.

J. A. S. PHILLIPS, LIEUT.-COLONEL, I.M.S., Offg. Director of Public Health. Digitized by the Internet Archive in 2019 with funding from Wellcome Library

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	(By paid Vaccinators	22	,		(85	27,071	16,642	41,713	758	24,687
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	Champaran By licensed Vaccinators	***	1,940,841	549	1 67	36,749	22,993	49,741	712	41,718
	Muraffarpur By paid Vaccinators	***	2,754,945	907	{ 13	7,863	4,457	19,319	947	3,099
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7	Darbhanga By licensed Vaccinators		3,913,529	870	£ 88	52,446	48,956	101,402	1,152	98,813
	(By paid Vaccinstors)		(53	25,758	14,953	40,709	768	12,152
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11	Santal Parganas By licensed Vaccinators		1,798,639	329	E 57	31,108	27,635	58,743	1,050	63,663
	(By paid Vaccinators		,		C 40	22,607	18,211	26,018	900	15,154
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	Orissa Division.			-		-				
	Cuttack S By paid Vaccinators	***	2,064,678	565	§ 21	12,969	7,851	20,820	991	20,867
12	Cuttack 'Ily licensed Vaccinators (By paid Vaccinators	***)		13	18,126 7,241	14,069 3,256	32,195 10,497	1,490	20,014
13	Balasore By licensed Vaccinators	***	\$ 980,504	470	{ 30	21,975	17,492	39,467	1,815	26,237
14	Angul By licensed Vaccinators		182,674	112	10	10,770	9,942	20,712	2,071	6,412
	Puri By paid Vaccinators		951,651	380		34,294	20,034	54,328	1,393	39,192
15	(By paid Vaccinators		759,466	206	C 4	371	209	580	145	305
36	Sambalpur "By licensed Vaccinators	•••	5 789,000	200	24	10,237	10,076	20,513	607	20,163
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7,529 99,114	7,218	14,893 238,503	123 107	20,864 10,923	12,158 7,203	3,171	99-08	69:71 74:96	} 34.88	0°e1 0°04	15:19	} 228,239	28-93	1,234	0.10
4,115	5,529	10,646	141	9,953	4,191	2,680	99-25	57-69	} 21'99	1:29	27:01	} 55,451	26.55	1,602	0.75
11,549	15,787 876	28,985 1,583	87	3,181 8,912	1,181 5,509	1,400	99'85 100'00	53°10 73°33	1	0.15	30-06 15-71)	1000		
5,939	17,677	28,192	39	13,230	2,349	1,590	99-97	80°11	} 42.43	0'14	11*79	\$ 28,180	26:74	528	0.24
3,929 9,256	2,443	6,543 58,018	1,021	14,300	11,123 8,458	3,007	99-11	77-91	95'66	2160	25-81	5,549 47,953	43:04	1,095	6*006 1*78
161	133	295	7	275	49	93	98-90	29:37 79:08	26:31	2:29	33'82 17'33	} 21,349	27:04	125	6-16
15,090	28,680	20,012 50,542	1,171	34,276	18,203	8,060	99.23	69-53	3 3 100 {	2:25	23-50	} 154,485	31.00	3,900	: 0,79
36,407	40,756	81,431	207	30,851	21,751	2,507	99*76	76-87	3 3000	0.25	8-31	3		1	

The same of the sa			A STANKE OF THE PARTY OF THE PA	would be to	ayataneed complete	district according to the census of	ille.	vaccinators employed through-	Total numb	er of persons	vaccinated,	vaccinated by each	Primary
Number.			District			Population of district accordi	Average population per square mile	Average number of vaccinators out the season,	Male.	Female.	Total,	Average number of persons vaccinator.	Total,
1	4	H	2	12	er ,	1 3	1.	5	41 17	6	11	7	100
11 17 18 19 19 20 11 0 12 1	Hasariba Ranchi Palamau Manbhu Singhbh	gh	{By lie {By pa	id Vaccinator ansed Vaccinator ansed Vaccinator consed Vaccinator	nators rs nators nators nators rs nators	} 1,276,04 } 1,334,47 } 783,39 } 1,548,77 } 759,43	3 187 4 149 7 373	{ 11	4,306 21,114 3,705 30,042 1,219 10,891 20,262 25,666 432 11,947	1,632 19,682 1,714 25,740 956 10,393 14,808 24,301 357	5,937 40,693 5,419 65,782 2,175 21,284 35,070 40,907 789 23,228	840 004 602 1,186 362 861 1,031 1,349 263 685	1,983 59,993 1,571 48,228 1,128 21,265 18,775 47,359 651 19,003
100	Total of Divisio	Chota Na	gpur { By lie	id Vaccinato	ators	6,653,00	8 208	{ 63 183	29,903 90,000	19,467 90,297	49,300 189,957	784 1,038	24, 109 176,177
100	Total o	f Vaccine	10000	id Vaccinate		34,000,18	409	1,111 1,389	160,433 865,979 720,411	93,623 \$12,268 605,901	254,065 1,076,267 1,332,312	914 970 959	127,950 1,002,994 1,130,984
	10.1	1111	fotal Dispens	ary Departm Total Rails					1,951	756	2,707		664
	125			y Department and Cantonm					1,319	450	1,709		601
100	V3.	1000	25,3	Grand T	otal		-	1,389	742,970	607,914	1,351,094	959	1,132,463

Vaccinati	ion. Succes	esful.		Re-	raccination		ful cases	of success- in which alts were	1,000 of paper-	Peremtage cases to t	of unknown otal cases.	ber of pers fully v during	annal num- ons success- accini tet previous years,	death smal during	ge amuna ober of he from H-pox a previou
Under one year.	One year and under six years.	Total of all ages,	Unknown,	Total.	Successful,	Unknown,	Primary.	Re-taceleation.	Persons successfully vaccinated per 1,000 lation.	Primary.	Re-ruccleation.	Number.	Eatlo per 1,000 of population.	Number.	Ratio per 1,000 of pegulation.
15 .	10	n	12	13	14	15	1è	17	18	19	30	21	22	23	24
961 17,573 1,175 38,700 276 14,990 5,983 24,005 237 13,156 7,901	1,034 21,564 365 9,492 698 5,791 12,736 25,010 327 0,561	1,961 39,383 1,570 48,218 1,975 21,241 17,573 47,350 006 19,791	111 3 41 16 333 16 105	3,954 1,973 3,848 7,954 1,047 19 16,295 2,005 138 2,205 25,782 13,783	2,007 689 3,689 5,008 250 3 7,055 1,815 99 1,091	691 251 344 641 415 10 3,690 91 12 948 5,093 1,065	90°44 90°94 90°93 90°98 18°89 90°98 18°09 45°27 90°97	70°54 65°50 76°73 78°08 40°28 10°30 6°44 72°19 78°57 80°90	35'97 45'03 30'84 48'92 19'44 20'65	0°45 0°07 0°07 0°07 28'39 2'45 0°52	17:47 19:64 8:94 8:48 30:03 84:21 22:17 3:00 8:00 41:28	} 55,563 } 40,477 } 17,981 } 55,933 } 19,561	27'86 34'82 24'51 35'66 25'75	125 172 116 130 233	0°13 6°18 6°03 0°31
42,929 374,183 417,113	69,791 591,455 661,246	123,993 1,000,124 1,124,025	2,292 601 3,173	126,105 71,273 201,378	64,219 51,231 115,450	25,152 7,213 82,365	98°59 90°80 99°07	63:61 73:27 68:31	30.45	1.78 0.78 . 0.78	19-91 9-58 16-07	1,025,128	36-34	8,616	6*25
479	284	790	36	1949	9:0			-			-				
	204	110	35	1,943	879	1,700	95:77	20.05		4°16 50°72	3:18				
172	200	275	11	13,695	6,595	1,192	07:41	53-60		1:83	10-16				
417,761	661,730	1,125,391	3,278	218,616	127,934	35,523	99'66	67'14	-	0.50	16:25		-		

Summary.

		-	Total nun	ber of	Percent	age of	Average nur persons yac	mber of .	Numb	er of			
	Total nur persons vi		operatio perform	ns	in which th were kn	e results;	by each vi	secina-	fully vac	cinated.	Ratio		
	Primary.	Re-vacelnation.	Primary.	Re-vaceination.	Primary.	Re-vacelnation.	Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under 6 years.	of success- ful vaccina- tions per 1,000 of popula- tion,	Total cost of Department.	Average cost of each suc- easiful case,
1	2	3	4	5	6	7	8	9	10	11	22	18	14
												Rs. a. p.	Rs. a. :
BY SPECIAL STAFF.	- 1												100
	1,110,934	201,378	1,130,904	201,378	59.65	63-31	1,389	909	417,112	661,216			
BY DISPENSABY STAFF. Statement III		-	-					-		-	3671	1,62,082 3 5	0 3
BY OTHER AGENCIES. Railways, Cooly Depat, Jalls and Cantonments.	1,536	17,255	1,524	17,238	94:21	63-10			651	484			
Total	1,132,408	218,616	1,132,468	218,616	59-68	67-1	1,500	. 600	417,763	661,734	96'71	162,062 3 5	0 2

STATEMENT II.

-													
		g officer.	- 1	floor.		-		2	1		- 1	1	Expen
No.	Circle and district.	European supervising officer,	Pay.	Native supervising officer.	Pay.	vaccinators.	Pay.	Licensed vaccinators.	Pay.		Pay.		Pay.
		European		Native sup		Paid vacc		Licensed		Clerks.		Peons, etc.	
1	2	3	4	5	6	7	8	9.	10 .	11	12	18	14
					Rs. a. p.		Rs. a. p.	18 1	Rs. a. p.		Bs. a. p.		Rs. a. p.
	PATNA DIVISION.			5	2,384 1 0	25	3,294 7 6	62				2	240 0 0
2	Patna			6	2,431 15 0	17	2,223 13 0	83	100	100		2	216 0 0
3				5	2,460 0 0	13	1,112 5 9	82					
	Total of Patna Division	-		15	7,276 0 0	- 55	6,630 .0 3	227			***	4	455 0 0
		-		-				-		-		-	
	TIRHUT DIVISION.					11	1,180 5 0	63					
4	Saran			3	2,115 0 0 1,610 0 0	1.9	1,218 12 0	67	100				
6				4	2,040 0 0	13	1,474 4 0	1 37 30					-
7	Darbhanga	-		4	2,432 7 0	10	774 0 0	88	***				
	Total of Tirbut Division			15	8,197 7 0	53	4,647 5 0	317				-	-
	BHAGALPUR DIVISION.					-		-					
				4	2,000 0 0	8	925 0 0	61				1	95 5 0
9	Bhagalpur			5	3,615 13 0	11	1,616 6 0	63	-	100	-		100
10				.6	1,800 0 0	11	C.A. Trees	0.50	-		-		
11	Santal Parganas	_		7	3,310 13 0	10	1,875 0 6	57	-				
	Total of Bhagalpur Division			20	10,916 10 0	40	5,554 15 - 6	237				1	95 5 0
	ORISSA DIVISION.												
11				6	2,160 0 0	21	2,319 10 5	73	100			-	-
13	Balasore	-		3	1,950 0 0	7	077 9 0	20	-		***		
14		-		3	2,505 0 0	***		10	-				
16	1	-	300	3	1,500 0 0	35	3,314 5 0 670 9 0						***
		-				-		-		-			
	Total of Orissa Division			16	9,510 0 0	.67	6,981 8 5	107					
	CHOTA NAGPUR DIVISION.	-					-	1		1			
17	In the contract of the contrac	1		4	2,661 13 0	11	1,836 0 6	1 1500			***	200	
10	Peners	1		3	2,550 0 0 1,439 8 0	9	712 8 9	1			***		
20	Pasterna			17	2,630 0 0	34	4,153 11 0				**		
31		-		3	1,472 6 0	3	635 11 0	26					
	Total of Chota Nagpur Division			32	10,736 11 0	63	_8,492 10 3	183		-	g/s1		
	Total of Vaccine Circle	-	-	29	43,537 5 0	278	32,007 1 5	1,111	-	-		6	651 5 0
	ESTABLISHMENT OF THE ASSES	-	-	1	8,918 8 0			-		2	1,200 0 0	2	252 5 0
	HEALTH, NORTH BINAR CIRCLE.						4.				1.000 0 0	2	227 8 0
	DITTO SOUTH BINAR CIRCLE DITTO CHOTA NAGPUR AND		***	1	17,649 0 0		-		***	2 2	1,759 11 0	9	209 0 0
	Onista Cincia.	-											
	Total	_		. 3	38,397 12 0		240			6	4,979 11 0	6	749 3 0
	Total of Province	-	-		81,925 1 0	278	32,007 1 5	1,111		6	4,279 11 0	11	1,300 8 0
-								-		1000	-		

Province of Bihar and Orissa during the year 1926-27.

diture.							Paid fr	- 200			nacel ms.	processful
pay of establish-	Travelling allowance.	Cost of lymph.	pencies.	l cost.	Imperial Fund.	Provincial Fund.	Local Fund.	Municipalities.	ve States.	-	Number of all successful racel- nations and re-raceinations.	Average cost of each succ
Total ment.	Tar	Cost	Other	Total	Imp	Prog	Loca	Men	Nativo	Total.	Nan	Are 888
15	16	17	18	19	20	21	23	23	24	25	26	27
Bs. a. p.	Rs. a. p.	Bs. s. p.	Es. a. p.	Rs. s. p.		Rs. s. p.	Rs. a. p.	Be. a. p.	Rs. s. p.	Rs. a, p.		Rs. s. p
5,918 8 6	1,380 4 0		100 0 0	7,398 12 6	***	4,005 7 6	1,589 8 0	1,833 13 0		7,398 12 6	95,281	0 1 3
4,871 13 0	1,526 1 0	-	245 15 3	6,643 12 3 5,406 8 9	***	4,128 0 0 4,246 5 0	1,631 1 0	884 :1 3		6,643 12 3	69,343 74,284	0 1 0
8,573 5: 9	1,658 5 0	- 100	177 14 0	0,400 0 0	-	9,240 5 0	258 0 3	936 3 6		5,400 8 9	19,403	
14,362 10 3	4,582 10 0	48	523 13 3	19,449 1 6		12,379 13 6	3,415 9 3	3,653 11 9		19,449 1 6	2:7,808	0 1 3
											- 40	0 1 0
3,295 5 0	1,286 6 0		325 8 9 147 0 8	4,887 3 9	-	3,501 6 0 2,956 11 0	479 10 0 757 0 3	906 3 9 356 14 0		4,697 3 9 4,070 9 3	78,650 58,019	0 1 1
3,514 4 0	516 4 0		377 14 0	4,408 6 0		2,000 4 0	670 12 0	1,071 8 0		4,608 6 0	100,008	0 0 8
3,206 7 0	1,226 11 4		120 7 0	4,563 9 4		3,746 1 4		816 8 0		4,503 9 4	104,475	0 0 8
12,644 12 0	4,106 2 4		970 16 0	17,928 13 4		12,870 6 4	1,907 6 3	3,150 15 9		17,628 12 4	339,351	0 0 10
-				7-1-								
3,053 5 0	1,254 12 0		274 0 0	4,532 1 0		3,374 12 0	286 0 0	841 5 0		4,553 1 0	76,993	0 0 11
5,232 3 0	533 7 0	-	211 8 0	5,197 0 0		4,238 4 0 3,518 1 0	1,076 6 0 586 9 0	1,093 6 0		5,976 2 0	79,116 51,540	01;
3,295 9 0 5,185 13 6	1,633 1 0 2,939 11 0		268 8 0 159 5 0	8,284 13 6		0,350 8 0	1,081 6 0	853 15 6	-	5,197 0 0 8,294 13 6	67,398	0 11
16,766 14 6	6,359 15 O		913 3 0	14,049 0 6		17,481 0 0	3,110 5 0	3,448 2 6		24,040 0 6	275,045	0 1 4
											Fire and	
4,479 10 6 2,607 9 0	1,359 3 0		100 6 0	3,909 11 0		3,619 3 0	1,414 7 11	216 0 0		5,938 13 5 3,909 11 0	45,413 42,633	0 1
2,505 0 0	1,182 1 0		270 12 0	3,839 7 0		3,839 7 0	-			3,839 7 0	17,465	0 3
4,729 14 0	917 2 0		215 0 0	5,862 0 0		2,617 11 0	3,119 9 0	194 12 0		8,863 0 0	44,560	0 2
2,170 0 0	878 11 0		118 3 0	3,105 14 0		2,477 4 0	443 0 0	247 10 0		3,168 14 0	20,771	0 2
16,493 1 5	5,400 13 0		824 0 0	22,710 13 5		16,177 4 0	4,978 0 11	1,563 8 6	-	29,716 13 5	172,942	0 2
-												
4,500 13 6	532 12 0		100 0 0	5,133 9 6		3,207 9 0	1,273 4 6	562 13 0	- 110	5,133 9 6	45,942	0 1
3,705 11 0 2,152 0 0	945 4 0		53 0 0	3,149 4 0	-	4,401 11 0 2,415 4 0	180 0 0 375 7 9	785 0 0 258 8 3		3,149 .4 0	58,174 22,634	0 2
6,763 11 0	795 10 0		F8 8 0	7,617 13 0		2,706 0 0	4,5:9 12 0	423 1 0		7,647 13 0	74,816	0 1
2,107 1 9	784 6 0		66 7 6	2,057 15 3		2,316 12 0	* 100	611 3 3		2,957 15 3	21,506	0 3
19,229 5 3	4,630 0 0		396 15 6	24,256 4 9		15,137 4 0	6,348 0 3	2,770 8 6		21,250 4 9	223,183	0 1
79,695 11 5	25,007 7 4		3,637 13 9	1,08,391 0 6		74,046 3 10	19,707 13 8	14,586 15 0		1,68,391 0 6	1,248,328	0 1
10,430 13 0	3,549 13 0		759 15 11	14,740 8 11		14,740 8 11		114		14,740 8 11		
18,156 8 0	2,329 8 0		405 5 0	20,981 5 0		20,981 5 0				20,981 5 0		
14,829 5 0	2,900 0 0	-	340 0 0	17,900 5 0		17,969 5 0				17,969 5 0		
43,416 10 0	8,679 4 0	-	1,595 4 11	53,691 2 11		53,701 2 11				53,601 2 11		
1,23,112 5 6	83,730 11 4			1,62,082 3 6	-	1,27,737 6 9	10.7/7.13 8	14,556 15 0		1,63,083 3 5		0 2

B.—DISPENSARY VACCINATION.

STATEMENT NO. III.—Showing Dispensary Vaccination in the Province of Bihar and Orissa during the year 1926-27.

		istrict to	attached to	od.	raccinated by		Primar	y vaccinat	don.		Re-	raccination	on.	Percent successf in whice results know	the were	Percent unknow to total	tage of ra cases cases-
		in each d		vaccinsted.	persons the		St	scoensful.				1		2			The second
District.		Number of dispensaries in each district which a vaccinator is attached.	Average number of vaccinators dispensaries during the Jear.	Total number of persons	Average number of per- each vaccinator.	Total.	Under one year.	One and under six years.	Total of all ages.	Unknown.	Total.	Successful.	Unknown,	Primary.	Re-vaccination.	Primary.	Re-racelnation.
1	110	2	3	4	5	6	7	8	0	10	11	12	13	14	15	16	17
Patna													-		-		-
Gaya				***			***			***	***	***	100	***			-
Shahabad			***	***		***					***				***		
Saran							801	-			***		***				-
Champaran			100						***	***		***	***	101	***		
Muraffarpur	441					***	-		***	***		***	,	***	-		-
Darbhanga	***			***	***	***					***	***			-		
Monghyr	***					***	***			-		***	***	101	***		
Bhagalpur			***	-		***	***		***	test		-		-			
Purnea	941		-	***		- ***			***		***						
Santal Pargana														***		-	
Cuttack	1001			***					***		***				***	-	-
Balasore	441		100			444		111	200	***	***	***		***	***		
Asgal	***	-		100	1			177	***							-	150
Pari	***	110				***			***		***	***			***		
Sambalpur	***				311				***		***	***	-	***	101		1
Hararibagh Ranchi	***			1		1	-						-	-			-
		-		100	***			101	***					-		10.00	in
Palamau Manbhum						141	-	***		***			-		-		-
Singhbhum		-		-	-		-				-	-		-	-	-	100
	2 22 3						-	-				1 11			9 12		2.00
Total												1					

OF

			10,000	3007

COMPARATIVE STATEMENT No. IV.

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

	1							Per	rsons primari
Establishment.		1917-1	18.	191	8-19-	191	9-20,	1920	D-21.
		Total number.	Number successfully vaccinated,	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated,	Total number.	Number successfully vaccinated
1	1	2	. 3 _		5	6	7	8	
Government		6,984	6,050	6,637	5,941	7,363	6,520	1,927	1,831
Municipal		37,586	36,107	36,573	35,213	36,810	35,428	32,858	31,541
Local Fund		82,772	77,911	59,639	56,495	69,847	66,946	80,337	77,939
Dispensaries		181	177	139	139	178	178	262	262
Licensed Vaccinators		931,549	926,281	816,096	811,508	811,168	806,217	854,339	848,948
Total		1,059,072	1,046,526	919,084	909,294	925,366	915,289	969,723	960,521

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

vaccinated.

1921-2	2.	190	23-23.	1	923-24.	192	4-25.	19	25-26.	192	16-27.
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	ıı	12	13	14	15	16	17	18	19	20	21
891	825	794	735	1,104	1,018	785	725	885	772	3,877	3,636
31,136	30,040	29,927	28,963	33,760	32,833	32,110	30,816	40,318	39,370	36,075	34,780
71,144	68,523	70,386	67,809	74,767	71,969	75,649	72,592	89,670	85,927	88,599	86,061
				1	1			P			
800,424	797,357	865,920	862,260	892,018	888,273	882,812	679,951	954,242	951,893	1,002,984	1,000,124
903,595	896,745	967,027	959,767	1,001,650	994,094	991,356	984,084	1,085,085	1,077,962	1,131,535	1,124,601

STATEMENT NO. V .- Showing particulars of vaccination

1											-	-		
.000			at-trei					Total numb	er inspected-				Pero	entage of
	Select Andreas	the last	Total numl	er of per- columned.	By Assist	ant Director Civil i	tors of Publishing	ic Health	By Nati	ve Superint Inspecting	tendents or or of Officers.	other	Ry Assists	or Civil
	District.		61	II.	Assistant of Public	Directors Health.	Civil Sur	geons.	Distr	ict lors.	Bub-Insp	ectors.	Assistant of Public	Director Healths
	178.8	27		1	327	160	81	1,5	MAL	808	100	-	1	100
			2.93	gon.	80,500	tion.	8 88	ties.	80,700	Hop.	720,	Hon.	0,01	tion.
	046,80	10	Primary.	Re-vaceination	Primary.	Re-raceination.	Primary.	Re-raceination	Primary.	Re-vaceination.	Primary.	Re-vaceination	Primary.	Re-raceination.
1910001	100,000,1	55	2110	18,410	112 010	5 2 18	50 6 67	7	010 803	9	10	11	12	13
_		- 1400	90,851	10,847	4,565		421		9,955	1,419	14,993	43	5-01	
Pati		***	65,308	4,845	2,854	10,725	100 10	1 1000	14,640	292.00	13,630	727	4:36	-
- market and a	habad	See	09,185	9,166	3,345	***	2,870	23	8,606	62	16,266	95	4'88	
Sara	an	***	76,817	1,810	4,209	***	3,650		7,367		16,071		5-51	
Cha	mparan	***	44,525	21,010	5,710	+41	199	292	7,280	206	14,211	933	12-82	***
Mua	affarpur		95,057	14,523	6,224	***	8,683	998	19,497	78	31,119	419	6'54	
Dar	bhanga	411	1,01,006	8,419	6,021		***		16,984	304	30,998	90	2.50	
Mot	ogbyr	***	75,713	2,000	5,318	800	275	***	15,034		19,331	***	0.80	***
Bhy	igalpur	111	70,931	13,271	6,719		202		10,665	650	28,723	423	6.62	100
Pur			40,439	4,961	3,314		1,190	7	22,200	94	9,910	83	6-70	
	tal Parganas	***	58,169	15,758	5,066	***	2,981	975	5,064		22,485	2,251	10.25	
	tack	441	29,684	14,211	2,643	***	117	1,077	6,351	291	11,294	246	7-12	***
	asore	-	27,622	22,143	1,940	***	147	11	772	188	5,746	1,260	6-97	***
Ang			6,436	15,313	1,650	101	1,046	1,613	5,174	3,742	5,537	13,265	25-63	
Pur		100	39,192	15,456	2,083	***	1,377	380	5,450	3,742	8,028	4,534	5:31	***
	nbalpur raribagh	401	20,408	1 2000	5,791	***	700		3,358	41	7,708	30	10.01	***
			42,158 49,808		2,123	***	125	1	9,673		24,924	1,818	13-73	-
	laman	***	80 400	1000	2,771	***	3,910		6,806	62	11,383	103	12:35	100
	meddas		66,138		2,069		713	1		7,637	4,773	471	3-12	
	oghbhum		00.00		2,611		983	100	5,410	7,007	6,628	345	12.68	***
515		***	21,000	5,160	2,011						1,120	340	12 68	
	Tetal		11,82,468	2,18,616	78,083	-,	30,934	7,671	202,276	15,560	307,612	27,254	0.85	-

Inspection	to total nu	mber vacci	nated.	os-sart .		P	ercentage o	of cases four	nd successi	ul to total	number is	aspected.			
tors of Pub Surgeons.	die Health	By Nat		itendents of		By Assist	ant Direct or Civil	ors of Publ Surgeons.	ic Health		re Superint aspecting			success	ntage of ful cases orted inators.
Civil Se	argeons.	Dist Inspe	riet ctors.	Sub-In	spectors.	Assistant of Public	Directors Health.	Civil S	argeons.	Dist	riet eters.	Sub-Is	aspectors.		
Primary.	Re-racelastion.	Primary.	Re-vaceination.	Primary.	Re-vaccination,	Prinary.	Re-raceination.	Primary.	Re-raccination.	Primary.	Re-raceination,	Prinary.	Re-vaceination,	Primary.	Re-vaccination.
16	15	16	17 6	18	19	20	21	22	23	24	25	26	27	28	29
0°46 4°15 4°78 2°24 9°13 0°26 0°28 2°41 5°12 0°29 0°63 16°25 1°63 6°72 1°67 1°742 1°97	0°24 1°10 6'87 0°74 6'18 7'48 0°05 10'53 2'72 37'54 5'23 4'33	10:96 22:19 12:44 6:45 16:35 10:45 10:05 10:54 16:01 44:89 8:70 15:92 2:77 16:32 13:46 20:63 7:96 19:45 30:9 82:75	13°08 0°67 0°95 0°53 3°61 4°96 1°89 2°04 6°86 8°77 24°72 2°17 0°57 4°75 35°16	15-73 20-85 23-51 21-05 31-91 32-64 30-20 25-53 40-49 20-04 38-65 28-31 20-65 86-03 20-48 23-18 18-28 40-84 50-73 7-22	6'39 (5'00 1'03 	95'00 98'45 94'82 99'81 90'84 95'01 95'19 93'85 82'95 82'95 82'12 83'21 83'21 83'24 93'83 91'02 87'41 95'44 95'95 98'70 94'83		99°34 98°63 \$9°39 99°97 99°27 100°00 98°64 99°39 100°00 98°64 98°76 98°76 98°76 98°76 99°85	95-45 49-13 30-47 100'00 73-95 47-07 81-91 73.03 22-98 41-94 50-83	100°00 99°04 99°03 98°07 98°37 99°51 98°45 98°53 98°01 97°74 99°48 97°03 97°73 95°53 95°55 95°50	100'00 96'77 59'70 65'12 61'18 99'83 92'35 79'38 84'57 68'75 35'46 45'45 53'65 31'70 60'26	99°80 99°82 98°03 98°46 99°22 99°04 90°03 99°06 90°85 97°25 98°17 98°17 98°17 97°83 88°30 97°63 98°79 90°42 99°29	88°19 88°19 88°19 60°00 75°11 100°00 88°27 45°50 75°16 70°81 43°43 20°06 47°19 55°72 36°83 64°96	99°29 99°60 99°63 99°54 99°54 99°57 99°33 99°64 99°69 99°13 99°86 96°91 99°21 99°75 99°21 99°48 99°48	40-79 61:55 60:53 58:28 65:19 38:17 34:58 60:04 60:08 40:34 60:05 41:35 62:58 77:78 55:30 45:85 54:59 71:25 17:46 40:18
4:28	0.50	26.28	923	32-19	14:00	8,16	100	100'00	100.00	99:77		99-33	85-79	99-00	.48-93
2-73	3'23	17-80	7'12	27-16	6.07	93'64	200	99-28	51-83	98-36	63-73	98-45	68-91	99-43	53-45-

16
STATEMENT NO.FI.-Showing side by side the ratios, per 1,000 of population, of Deaths from

Janua	line .	and later		1917-18.	19	18-19.		1919-20.	and training	1930-21.
Di	istrict.	Maria et	Ratio of deaths from small-pox.	Number of successful vaccing- tions.	Ratio of deaths from small-por.	Number of successful vaccing-	Ratio of deaths from small-pox.	Number of successful vaccina-	Ratio of deaths from small-pox,	Number of successful vaccina- tions.
	1		2	3		8	6	,	8	9
Patna			0-15	68,529	0:13	68,535	0.85	68,573	2:79	71,340
Gaya			0.18	62,246	0:21	56,114	0.62	66,449	0-77	60,938
Shahabad			0.10	51,858	0.02	41,625	0.24	42,394	0.55	62,418
Saran			0-16	77,721	0.07	66,443	0.10	66,882	0-39	68,000
Champaran			0.11	51,755	0-14	50,191	0.13	53,458	0.29	56,914
Muzaffarpur			0-09	85,898	0.02	86,664	0.10	87,182	0.13	89,230
Darbhanga			0.07	93,206	0.08	86,555	0.10	88,770	0.17	93,468
Monghyr			0.10	68,361	0.05	56,576	0.24	59,814	0-28	55,104
Bhagalpur			0-22	68,166	0.09	59,034	0.23	56,741	0.22	58,176
Purnea			0:64	49,490	0:52	54,209	0.96	50,349	0.98	51,930
Santal Parganas			0.14	56,728	0.06	46,659	0.30	44,691	0.37	45,864
Cuttack			0.81	62,177	0.89	51,845	0-91	55,008	0.30	60,775
Balasore			0.03	25,800	0.09	20,942	0.86	22,139	0.54	27,597
Angul			0.01	6,956	0.06	6,751	1.11	5,739		4,060
Puri	***		0.26	34,639	0.75	33,543	3.12	32,940	0:77	41,225
Sambalpur			0.24	23,345	0.07	15,361	Q·63	13,835	0.27	18,523
Hazaribagh			0.07	39,761	0-07	35,632	0.24	35,026	0.13	29,123
Ranchi		****	0.03	47,094	0.04	31,870	0.90	40,559	1.38	38,450
Palamau			0.06	26,893	0.06	20,472	1.26	21,226	1.76	19,346
Manbhum			0-02	52,289	0-05	37,807	0.44	57,908	0.11	43,192
Singhbhum			0-09	17,872	0.10	15,542	1.24	19,595	0-52	18,023
	Total		0.19	1,070,784	0.17	942,370	0.53	989,278	0.56	1,013,696

17

s mall-pox and the number of successful vaccinations during the ten years ending 1926-27.

		1931-23,	530171	1922-23,	1	923-24.	1	994-25,	192	5-20.		1926-27.
	Ratio of deaths from small-pox.	Number of successful vaccina- tions.	Ratio of deaths from small-pox.	Number of successful vaccina-	Batic of deaths from small-you.	Number of successful vaccina-	Ratio of deaths from small-pox.	Number of successful vaccina-	Ratio of deaths from small-pox.	Number of successful vaccina- tions,	Ratio of deaths from small-pox.	Number of successful vaccina-
	10	n	12	13	14	15	16	17	18	19	20	21
1	0:46	63,297	0.05	62,673	0.06	61,595	0.13	65,558	0.19	72,006	1.69	95,281
	0.24	42,710	0.04	47,263	0.04	51,137	0.04	54,569	0.46	63,986	2.21	68,243
1	0.22	69,010	0-04	58,782	0.02	59,661	0.10	40,418	0.16	56,596	0.99	74,284
١	0.13	37,665	0.02	66,871	0.05	72,449	0.44	76,858	0.50	81,358	0.50	76,650
١	0.08	36,927	0.06	44,499	0 09	45,103	0.38	45,011	0.65	50,934	0.98	58,018
	0.01	82,124	0.04	86,141	0.12	92,087	0.21	91,519	0.24	97,064	0.36	100,208
ı	0.03	88,504	0.06	88,188	0.05	98,651	0.15	90,640	0.12	101,040	0.27	104,475
ı	014	54,215	0-11	62,958	0.09	70,828	0-12	61,341	0.11	71,423	0.62	76,993
1	0.13	62,115	0.09	64,294	0.48	65,464	0.46	66,255	0.13	74,520	0-65	79,116
1	0.29	36,428	0.24	38,977	0.06	35,218	0.01	43,877	0.17	48,715	0-69	51,540
1	0.05	50,187	0.01	55,085	0.03	56,056	0.06	60,838	0.17	62,352	0.90	67,396
	0 04	61,424	0-15	61,752	0.28	46,041	0-77	45,282	2.50	62,758	2.92	45,413
J	0.09	26,380	0-17	23,541	0.37	32,195	0-34	25,376	1.71	35,409	2.34	42,633
ı		4,968	0.005	5,511		6,159		6,168		19,937	0.06	17,465
1	0.08	34,897	0.13	35,203	0.25	36,479	1.21	36,877	7-21	61,320	3.54	46,560
	0.03	20,829	0.006	18,791	0.01	23,757	0.12	21,487	0.60	21,881	0.68	20,771
-	0.02	29,524	0.02	31,985	0.03	35,784	0.05	36,243	0.34	44,380	1.00	45,942
-	0.21	38,997	0.02	41,821	0.01	44,812	0.02	49,358	0.34	57,397	1.02	58,274
	0.56	16,898	0.09	15,585	0.04	16,466	0.01	19,747	0.06	21,210	0.28	22,624
	0.02	43,484	0.02	52,428	0.01	58,031	0.03	50,700	0:32	71,523	0.42	74,816
-	0.32	16,605	0.18	16,998	0-14	16,058	0.36	22,511	0.52	25,635	0.16	21,596
-	0-14	917,188	0.07	979,351	0-11	1,017,031	0.24	1,010,628	0-67	1,201,444	1.05	1,248,328

1,625

STATEMENT NO. VII.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1926-27.

pistriet.	Towns.	Number of births dur- ing the year ending 31st March 1927,	Number of deaths amongst infants under one year during the year coding list March 1987.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1927.	
		3	4		
Patna	11	1			6
		4,070	648	1,862	1st October 1884.
Bihar		1,613	215	278	1st April 1887.
Patna { Dinapt	ır	1,134	216	697	28th January 1891.
Barh	100,00	360	66	67	1st April 1887.
Khago	le	315	57	88	12th July 1910.
439AT 000 000 00	0.000	100,00	10.0 16%	a 100 00	1,00 120
Tot	al	7,492	1,205	2,492	6,28 - 3450
C Come		2,165	785	1,346	1st January 1883.
Gaya	04300				
Gaya Tikari	1450	257	183	47	3rd January 1891.
Daudn	agar	362	64	180	Ditto.
Tot	al	2,784	982	1,573	AE (80)
Arrah		1.070	267	687	20th July 1885.
1000 1000 1000 1100	450.40	1,373	700 717	a wearing	
Buxar	Lary T	387	64	254	1st April 1887.
Shahabad Shahabad	on	497	75	193	Ditto.
Jagadis	pur	314	38	257	20th December 1890.
Sassara	m	862	147	707	1st April 1887.
Bhabh	ia	230	41	152	Ditto.
Tot	115,00	0.700	200	2.050	11 139
Tot		3,663	632	2,250	100
	of Patna Divi- sion.	13,989	2,819	6,315	
200,100,1 392 A18,000,1 TO		-	- 110		1777 440
Chapra	,	1,445	203	903	1st April 1887.
Saran Revelg	anj	393	64	307	12th December 1890.
Siwan		425	82	315	1st April 1887.
Tot	al	2,263	299	1,525	-
Champaran Motiha	ri	466	-90	305	1st April 1887.
Bettiah		932	116	258	Ditto.
Tot	al	1,398	206	563	

STATEMENT NO. VII.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1926-27—contd.

	1					
District,	Town	adapable too attend of the control o	Number of births dur- ing the year ending 31st March 1927.	Number of deaths amongst infants under one year during the year ending 31st March 1927.	Number of sheceasful vaccinations amongst infants under one year during the year coding 31st March 1927.	Date of extension of Vacci- nation Act to town.
- 01	3 2		3		8 5	's -
ABEL WALL BELL	Muzaffarpur	71	1,386	301	270	1st January 1886.
Dino.	Sitamarhi	es	333	55	92	1st April 1887.
Muzaffarpur	Hajipur	8b	857	278	139	1st May 1890.
Northeathous, dated the Othe Othe April 1884,	Lalganj	()	371	71	78	1st April 1887.
1910. August	Total		2,947	700	579	
	Darbhanga	185	2,042	280	620 Talas	24th May 1884.
Darbhanga	Roserha		408	48	163	3rd January 1891.
Daronanga	Samastipur	1,00,1	302	60	112	25th July 1910.
(Madhubani		692	68	337	1st April 1887.
	Total		3,444	456	1,232	
	Total of T		10,052	1,661	3,899	abid)ali
	Monghyr	100	2,057	323	649	15th November 1882.
Monghyr {	Jamalpur		1,045	166	378	Ditto.
	Total	88	3,102	489	1,027	eroedeli
Name (1819)	Bhagalpur	10	1,926	278	1,248	15th February 1884, withdrawn on 16th
Bhagalpur	-	800	102	Orien	to lead?	October 1895; re- extended on 18th August 1898.
	Colgong		138	20	55	Ditto, re-extended or 19th December 1901
1st Pennsy 1885.	Total	00	2,064	293	1,303	Andrew B
let August 1885.	Purnea	35 47	248	33	191	lst July 1887.
8th September 1910.	Kishanganj		107	10	90	12th November 1892
Purnea {	Katihar	381	299	21	1a 10 T 37	Sth August 1910.
	Forbesganj		133	20	63	9th August 1912.
Int April 1887.	108	00	- 010		Ideas S 3	
	UI Total	11	787	84	381	idsachi

STATEMENT NO. VII.—Showing the protection afforded to infants in each town in the Province of Bihar and Oressa during the year 1926-27—contd.

District.	Towns.	The State of the S	Number of births during the year ending 31st March 1927,	amo und dur	ober of deaths ngst infants der one year ing the year oding 31st farch 1927.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1927.	Date of extension of Vaccination Act to town.
1	3 3		3		4	5	6
Tel January 1886.	Sahibganj	me	616		73	243	1st May 1884.
De April 1587.	Deoghar	60	278		24	110	Ditto.
Santal Parganas	Madhupur	US	326		43	131	22nd August 1910.
ild April 1887, - C	Dumka	17	237	1	45	145	Notifications, dated the 9th April 1884, and 23rd August
	e ta		144			letoU .	1910.
and May 1881.	Total	182	1,457		185	629	
Sith January 1801.	Total of B Division	hagalpur	7,410		1,051	8,840	- market
Let April 1887	188		90%	-		10-1-15-25	
[Cuttack		651		114	147	1st September 1884.
Cuttack	Kendrapara	-100	220		57	30	7th February 1888.
į	Jajpur	1,001	124		28	90	Ditto.
	Total	823	995		199	267 Nongley	vrdgaott
Balasore	Balasore		329		88	67	7th February 1888.
Puri	Puri	***	576	-	260	244	Ditto.
Sambalpur	Sambalpur	.618	301		61	161	7th March 1895.
	Total of Division.	Orissa	2,201		608	739	anglegatti
	Hazaribagh		465		60	303	1st January 1885.
Hazaribagh {	Chatra	- ···	466	-	55	248	1st August 1885.
Jai Jaly 1815.	Giridih	19	473		47	167	8th September 1910.
	10		1000	-			-
	Total	12	1,404		162	718	Tanata
	2 -		1 000	1-			
Ranchi {	Ranchi Lohardaga				95		1st April 1887. 25th June 1882.
	Total		1,163	1	106	1,004	

STATEMENT NO. VII.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1926-27—concld.

political variables of the contract of the con	irlet.		Tow	os.	Number of births during the year ending 31st March 1927.	among under during endi	r of deaths st infants ome year the year ng 31st th 1127.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1927.	Date of extension of Vaccination Act to town.
	1			,	3	- Anna		5	6
Palamau	Licharo		Daltonganj		425	late	44	78	9th October 1890.
		1	Purulia		394		33	212	1st January 1887.
100			Raghunath	pur	188		20	27	9th February 1894.
Manbhum		1	Jhalda	1	207		21	120	9th July 1892.
		U	Dhanbad		143		9	11	5th December 1918.
			Total		1,857		127	370	
		1	X 600			200			
		1	Chaibassa	200.00	238		32	108	20th June 1892.
Singhbhum	20 00	1	Chakradhar	our	106		21	41	13th January 1919.
		1	Jugsalai	100,10	269		23	108	1st April 1924.
		1	Total	101,563	613	TAIL	76	257	- 495
		1		f Chota Division,	4,537		471	2,427	
		0.			coled .				
	\$1.40 \$1.40	-	Total for the	Province	38,139		6,610	16,720	

ANUXANNAMENT SO. VII.—Showing the protection afferhed to infante in each town in the Freeince of Bilar and Origin during the year 1920-27—concld.

Provincial Statement showing the different kinds of lymph

	the militates	to store	100	days or so	Sentinosion Sentinosion Titudo (Inc.)	120		m sy	danne in	-5	1997		Pr	imary vacc	ination
				Di	reet from	the est	ıf.	212	W	ith lanoline o	r glyoerii	e lymph.			Arm-to-arm
				T	0	1	>	CARCE.					casees.		
Di	strict.	Octo		37		14		successful c	425		imagno	HaCI .		Dinn	Pale
		Jases		110		88		sucoc	103		sil	Perm	впосе	100	
.5		Pebr	190	10	fal.	essful	-E	age of	1 188	i a	la sector	gargi	lo ege		ful.
		July	Total.	02	Saccessfal.	Unsuccessful.	Unknown.	Percentage	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of snocessful	Total.	Successful.
.8.	Ol roden	Dec	2	1	3	4	5	6	805 7	8	9	10	11	12	13
				1			L		90,851	90,205	469	177	99-29	M A	PART I
Patna	100000	***			***		***	100	65,368	65,093	161	177	99.58		
Gaya	12000	III level	0=	80	***		***		69,186	69,063	79	44	99.82	***	
Shahabad	mary 191	nt d	118	13	***	118		-	76,317	75,595	378	344	99 05	maddal	Sine
Saran	1000		LI	and	***	-	100	***	41,525	44,321	133	72	99-54	1000	
Champaran	, San II	Till on	-	94		1-35	***		95.057	94,576	443	38	99-49		
Musaffarpur		***	1	-					101,996	101,563	373	6)	99-37		
Darbhanga	***	444	-	197	***				75,713	75,654	48	11	99-92		
Mongbyr	***	111	1		1000				70,921	70,672	187	63	99-61	***	
Bhagalpur Puruca	***	***	1	754	2	11			49,439	49,246	168	27	99-60		
			T		***				58.169	57,933	106	130	99-59	100	
Santal Parg Cuttack		***	T	1			-		39,884	30,534	122	228	99-12		
Cuttack	***	***	1	DAP	'9t	1001	0,5		27,822	27,7,5	6	41	19-83		
Angul			-	-			***		6,436	6,342	57	37	98.23		
Puri	••		-	1				"	39,192	38,018	153	1,021	97.00		
Fambalpur			-		-				20,468	20,307	86	75	19-21		
Hazaribagh			-						42,158	42,053	55	50	99-75		
Ranchi								1	49,808	49,795	11	2	99-97		
Palaman			1						22,438	22,321	29	83	99-47		
Manbhum			1						66,135	64,932	670	533	98-18		
Singhbhum						-			20,585	20,398	66	121	99-09		
	TOTAL								1,132,468	1,125,894	3,799	3,275	9937		

II.
used and their rates of success during the year 1926-27.

										Re-vaccina	tion.						
Taec	ination	1.		Direc	t from	the ca	alf.	-	With lan	oline or gly	roerine lym	ph.		Arm	-to-arr	n vaccinat	ion.
Unsuccessful,	Unknown.	Percentage of successful cases.	Total.	Successful,	Unsuccessful.	Unknown.	Percentage of successful cares.	Total.	Successful	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful	Unemonearful	Unknown.	Decomplement
14	15	16	17	18	19	20	21	22	23	25	25	26	27	28	29	30	31
		-		-				10,847	5,076	3,714	2,057	46.79			1		
								4,846	3,150	1,081	615	65:00					
								9,166	5,221	3,700	245	56-96				-	
		***		***				1,810	1,055	543	212	58:28	***				
								21,010	13,697	3,921	3,892	65-19					
								14,523	5,632	5,852	3,039	38-77					
				***				8,419	2,912	4,405	1,102	34:58					
ı					***			2,660	1,339	891	430	50'34					
3			141	***	***			13,271	8,444	3,575	1,232	63-62					
		***	***					4,961	2,296	2,103	562	46:28					
		***						15,758	9,463	3,632	2,663	€0:05					
	***							14,211	5,879	4,640	3,692	41:36					-
	***			***				22,142	14,858	4,324	2,960	67:10	***	444			-
			200	101	***			15,313	11,123	3,153	1,037	72-65					***
				***		***		15,456	8,542	2,965	3,949	55-26		***			
			***	100	***			1,021	464	400	148	45 85		***			
		***		***			100	7,123	3,889	1,998	1,236	54:59		111			,,,,,
	***							11,900	8,479	2,400	1,021	71-25		***			
	***			100			***	1,726	303	433	990	17-55		***	***		
				***				20,014	9,914	6,139	3,961	49-53		100			
		44						2,443	1,198	290	960	48-93					
				110				218,616	122,934	60,159	35,523	56-23					-

B. & O. G. P. (D. P. H.) no. 4-500-8-9-1926-V. M. M.

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