

## **Notes and statistics on vaccination in Burma.**

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NOTES AND STATISTICS  
ON  
VACCINATION IN BURMA

FOR THE YEAR 1909-10



RANGOON  
OFFICE OF THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA

1910

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OF

VACATIONERS IN 1909

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# NOTES AND STATISTICS

ON

# VACCINATION IN BURMA

FOR THE YEAR 1909-10

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NOTES AND STATISTICS  
 VACCINATION IN BURMA  
 FOR THE YEAR 1909-10

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# NOTES AND STATISTICS ON VACCINATION IN BURMA

FOR THE YEAR 1909-10.

1. *Establishment.*—The number of vaccinators employed was 266, against Statement II. 259 in the previous year. The number of Native Superintendents of Vaccination remained as in the previous year at 48.

The 7 additional vaccinators were employed in the following districts:—

Rangoon Town District (Municipal) 1, Hanthawaddy District 3, Pegu District 2, Pakókku District 1.

A Native Superintendent has been sanctioned for Katha District, and will be trained during the current year.

2. *Work performed during the year.*—There was an increase in the total of Statements I. & III. operations performed in towns and rural areas (excluding Dispensary Vaccination) of 10,144. There was a decrease of operations performed at Dispensaries amounting to 1,826. The total increase in the number of operations for the province was therefore 8,318 as compared with the returns of 1908-09.

3. *District Vaccination.*—Twenty-five districts show an increase on the work Statement I. of the previous year, and fifteen show a decrease.

*Arakan Division.*—In three out of the four districts of this division there was a falling off in the number of operations performed. In Akyab District the decrease was 2,699, in Kyaukpyu District 4,135. There was a creditable increase of 1,500 operations in Sandoway District. The decrease in the other districts is attributed by the Civil Surgeons to apathy on the part of the people and to the lack of the stimulus created in previous years by epidemics of small-pox.

*Pegu Division.*—There was a slight decrease amounting to 59 operations in Rangoon Municipality, and a decrease of 1,274 operations in Prome District, which was probably due to the prevalence of epidemic plague and cholera.

Hanthawaddy and Tharrawaddy Districts show a distinct improvement in the work done, with 1,200 and 1,813 operations respectively in excess of the previous year. Pegu shows a small increase of 477 only.

*Irrawaddy Division.*—All districts show an increase in the work done. The increase in Ma-ubin District is trifling, being only 33, while in Henzada it is 938, and in Myaungmya 761. The Civil Surgeons of these two districts deserve credit for improving the position of Vaccination among communities who have in recent years shown themselves to be very backward in receiving the operation.

*Tenasserim Division.*—Four districts, Amherst, Mergui, Toungoo and Thatôn show increased work, the increase in Thatôn being 3,087. There was a falling off in Tavoy District of 4,066 operations, and in Salween District of 128. The decrease in Tavoy is attributed by the Civil Surgeon to excessive zeal on the part of the vaccinators in previous years. This does not however satisfactorily explain the decrease of 978 in primary operations, since the birth-rate is maintained at a high level, and infant mortality is exceptionally low.

*Mandalay Division.*—Four districts, Mandalay, Bhamo, Katha and Ruby Mines show an increase. In Myitkyina District there was a falling off of 109 operations. The increases in Mandalay (3,292), and in Katha (3,751), show that the greater interest displayed by the Superintendents of Vaccination in these districts is bearing fruit.

*Sagaing Division.*—All four districts of this division show a decrease in the work done. In Sagaing District the deficit amounts to 2,014, and was confined to re-vaccinations; in Lower Chindwin District it was 2,478. The explanation



offered by the Civil Surgeons of these districts that the decrease was due to the wide-spread prevalence of plague and cholera during the year must be accepted as correct. The influence of the plague epidemic was felt in Upper Chindwin, where there was a serious decrease in the number of operations for vaccination caused by the belief entertained by the people in the truth of rumours emanating from the Lower Chindwin District, to the effect that Government were spreading plague by means of vaccination.

*Magwe Division.*—Thayetmyo District alone shows a decrease amounting to 1,388 cases. Pakòkku, on the other hand, shows an increase of 5,347 cases and Magwe of 2,183. The decrease in Thayetmyo is attributable to rumours arising in connection with the plague outbreak, and partly to the apathy of the people.

*Meiktila Division.*—Yamèthin District shows a decrease of 413 cases. Myingyan declares an increase of 861.

In the Northern Shan States there was an increase of 2,203 cases, and in the Chin Hills of 985. In the Southern Shan States there was a decrease of 2,857.

The serious instances of decrease in the number of operations performed in the districts of Akyab, Kyaukpyu, Tavoy, Prome, Thayetmyo, Sagaing and Lower Chindwin have all been enquired into, and except in the case of the three first-named districts the pleas advanced by the Civil Surgeons are more or less convincing. The large increases in the outturn of work in the Mandalay, Pakòkku, Magwe, Katha and Thatôn Districts, and in the Northern Shan States are very encouraging. Appreciable progress was also shown in the Henzada, Myaungmya, Hanhawaddy, Tharrawaddy, Sandoway and Myingyan Districts. However there is still very great room for improvement in all the districts of the Pegu Division excepting Prome, and in the Ma-ubin and Pyapôn Districts. In some of these districts the number of primary operations performed appears almost ludicrous when the outlay on Establishments is considered. The apathy of the people presents, undoubtedly a serious obstacle to progress in popularizing the operation.

Statement  
III.

4. *Dispensary Vaccination.*—The total number of persons vaccinated was 12,261, against 14,087 in 1908-09. The falling off was mainly among persons over six years of age submitting to primary operation. The total decrease of successful cases was 981. There was a decrease in successful operations in infants of only ten and in children under six years of 91. In revaccinations there was an increase of 261 operations and of 558 successful results. The percentage successes were in primary operations 94.87 per cent. and in re-vaccinations 70.03 against 94.24 and 64.25 in the previous year, a definite improvement. The decrease in operations performed in dispensaries was 1,820, the major share in this decrease occurring in the Arakan Division (1,017). In the Pegu Division there was an increase in the number of operations of 1,766. In the Irrawaddy Division the decrease was 165, mainly at Bassein and Henzada, while Myaungmya and Ma-ubin show an increase. Tenasserim Division shows a decrease of 137. Mandalay Division an increase of 1 case. Sagaing Division an increase of 66 operations. Magwe Division a decrease of 731, affecting all districts. In Meiktila Division the decrease was 357, all in Meiktila District. In the Chin Hills there was a decrease of 1,289, and in the Shan States a small increase.

The decrease in dispensary vaccination is to a large extent apparent rather than real. Orders were issued to Civil Surgeons during the year to cease including in the return of dispensary vaccination those operations performed by the town vaccinators at the dispensaries when these institutions were used as vaccination stations, and to include such operations in Table I. The increase on the previous year in the operations shown in Table I is therefore to this extent exaggerated.

The decrease in dispensary operations in Thayetmyo District is attributed by the Civil Surgeon to lack of interest on the part of the medical subordinates in charge of those institutions.

Statement V.

5. *Verification.*—A marked improvement in the work of verification of operations is shown in the reports from the districts for the year under review. The total number of primary operations verified was 215,730 as compared with 178,661 in the previous year, an increase of 37,069. The whole of this increase

is to the credit of the Native Superintendents of Vaccination. The total primary operations verified by Native Superintendents was 179,114 which is an increase of nearly 40,000 on the work of each of the two preceding years, of 120,000 on that of 1906-07, and of over 80,000 on that of 1905-06.

The number of re-vaccinations verified was 35,430 of which Civil Surgeons verified 9,254 and Native Superintendents of Vaccination 26,176. The work of the Civil Surgeons showed a falling off of 2,057 verifications, while that of the Native Superintendents of Vaccination showed an increase of 4,934.

Second only in importance to the great increase of work performed by Native Superintendents of Vaccination during recent years is the outstanding fact of the continuous decrease of verification work by Civil Surgeons. The number of primary operations verified by this agency has fallen steadily since 1905-06 from 75,650 in that year to 38,589 in 1908-09, with a slight recovery in the year under review. No doubt there is not the same necessity for the Civil Surgeon to see so large a proportion of the operations as before the institution of Native Superintendents of Vaccination. But the fall from 17.72 per cent. verifications of total primary operations in 1905-06 to 10.42 in the year under review is too rapid to give confidence that supervision of the work of the Native Superintendents of Vaccination is everywhere thorough. An average of 10 per cent. implies that the ratio is much less in some districts, and the low rate of 0.87 in Tharrawaddy requires explanation as also do the ratios for Shwebo (2.02), Ruby Mines (0.20), Magwe (1.48).

6. *Infant Vaccination in Towns*—The proportion of infants vaccinated out of the number available for vaccination in Municipal Towns where the Vaccination Act is in force was 19,721 out of 25,232. In previous years the number vaccinated has always equalled, if it has not exceeded, the survivors among children born during the previous twelve months. Appendix B.

7. *Lymph Supply*.—1196.4 ounces of vaccine pulp, sufficient for 614,644 operations were issued during the year, against 179.2 ounces equivalent to 529,189 operations in the preceding year. The average cost of lymph per case provided for was 3.2 pies against 2.8 pies in the previous year. This increased cost was mainly due to increased expenditure on apparatus and other Europe stores much of which is non-recurring, and to loss of calves by rinderpest and foot-and-mouth disease, and increased expenditure on feeding a large stock of calves which could not be disposed of during the continuance of the epidemics. Only Glycerinated lymph was issued. The quality of the lymph has been extremely good, successful operations averaging 95.00 per cent. against 93.00 in the previous year, and 91.2 per cent. in 1907-08.

In Thayetmyo District the percentage of success in primary cases increased from 88.41 in the previous year to 93.34 in the year under review; and in Mogök from 82.44 to 96.25.

It was found that capillary tubes sealed by heat gave 3.5 per cent. better results than tubes sealed with wax. An experiment was initiated in the early months of 1910 for testing the keeping powers of lymph placed in cold storage in Rangoon. The lymph will be tested after successive intervals of three months.

The severe outbreaks of foot-and-mouth disease and rinderpest which were especially prevalent in March, April, and May 1909, resulted in the death of 91 calves. Much difficulty was experienced in maintaining the strain of vaccine lymph owing to the prevalence of these epizootics and the difficulty experienced in obtaining healthy calves for operation. Great credit is due to the successive Superintendents for the successful efforts made to overcome these difficulties.

An improved system of water-supply to the Depôt, and a larger class-room for the training of students are both urgently needed. Attention will be directed to the provision of these requirements during the current year.

8. *Training School*.—To avoid the inconvenience caused by students for training arriving at different dates, and the overlapping of periods of training, I have arranged that in future there will be two courses for the instruction of Native Superintendents of Vaccination commencing on the 1st January and the 1st July, and four courses for vaccinators commencing on the 1st of January, April, July, and October, respectively. A considerable strain has been thrown upon the

teaching staff of the Depôt throughout the year by the advent of large numbers of vaccinators sent from Districts and Municipalities to undergo a short course of training followed by examination.

During the year 8 Native Superintendents of Vaccination and 38 Apprentice Vaccinators completed a full course of training at the Depôt.

Captain J. Good, I.M.S., held charge as Superintendent of the Vaccine Depôt and Training School from April 1st to November 26th, 1909. He devoted much time and attention to the training of students and several of the apprentices and Native Superintendents of Vaccination attained marked success in the examinations, which must be attributed to a great extent to his personal efforts towards their instruction. He was succeeded by Captain Walker, I.M.S., on 26th November, by Captain R. D. Saigol, I.M.S., on 26th February 1910, and by Captain H. A. Dougan, I.M.S., on 23rd March. All these officers have rendered excellent service in maintaining the high quality of the lymph prepared at the Depôt, and in supervising the training of students.

Statement II. 9. *Expenditure.*—The total expenditure from Provincial, Municipal, Native States and Local Funds on the Vaccination Department during 1909-10 was Rs. 1,80,784-3-3 against Rs. 1,49,847-3-4 in the previous year. The increase amounted to Rs. 30,936-15-11. The increase was distributed among the several funds as follows:—Provincial, Rs. 21,622-7-6; Local, Rs. 7,958-5-6; Municipal, Rs. 707-1-6; Native States Rs. 649-1-5.

The increased expenditure was mainly due to numerical increase of the establishment, to increased cost of travelling allowances, and of contingencies. The increase on contingencies at the Meiktila Vaccine Depôt has already been alluded to; it amounted to Rs. 3,940-13-1.

The actual increase under the headings of Establishment, Travelling Allowances and Contingencies, respectively, was Rs. 13,573-5-6, Rs. 10,764-7-11 and Rs. 6,599-2-6.

10. *Re-organization and Legislation.*—The Act for the prevention of inoculation passed in 1909, came into force in the Pegu and Hanthawaddy Districts on the 15th October of that year. A complete re-organization of the vaccination establishments of these two districts was effected during the year, and although it has been in force for too short a time for any marked effect to be produced yet there is evidence to show that energetic support of the vaccinators by the Civil and Medical authorities cannot fail to produce a large augmentation in the number of persons vaccinated annually.

11. During the year all Civil Surgeons were requested to map out their districts into circles with a view to systematising the tours of the vaccinators, and simplifying supervision, and considerable progress was made in carrying out this procedure.

12. *Vaccination in the Port of Rangoon.*—In the Port of Rangoon Section 9 of the Burma Vaccination Law Amendment Act came into force from the 24th of May 1909. The work of organizing a special vaccination staff and of carrying out the rules under this Act was performed by the Port Health Officer, Dr. F. A. Foy, in a most capable manner. Owing to insuperable difficulties associated with the provision of sufficient accommodation at the wharf connected with the vaccination station for the vast number of immigrant deck passengers who arrive at the Port of Rangoon every week, the application of the Act to the Port of Rangoon was restricted to passengers from Calcutta only, and the Act was brought into abeyance from the 15th October, in view of the increase of immigrants with the commencement of the busy shipping season. The number of deck passengers from incoming vessels inspected for the purposes of the Act was 32,968. Of these, 55.45 per cent. were found to be protected by vaccination, and 27.97 per cent. by previous small-pox, while the remaining 16.58 per cent. were unprotected. The total unprotected amounted to 5,466 persons of whom 5,017, or 15.22 of the total deck immigrants, were vaccinated by the Port Health Staff, 1.36 per cent. being considered unfit to undergo the operation, owing to old age or disease.

C. E. WILLIAMS, M.D., D.P.H., *Major, I.M.S.*,  
*Superintendent-General of Vaccination, Burma.*

RANGOON, 18th May 1910.

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DEPARTMENT.

Province of Burma during the year 1909-10 (Paragraphs 2 and 3).

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.		No.
Total.	Successful.	Unknown.	Primary.	Re-vaccination.		Primary.	Re-vaccination.	No.	Ratio per 1,000.	No.	Ratio per 1,000.	
13	14	15	16	17	18	19	20	21	22	23	24	25
475	342	17	91.40	74.67	22.41	64	3.68	12,524	26.00	168	35	1
20	24	...	95.76	80.00	51.35	99	...	928	44.88	...	...	2
*850	218	37	93.37	69.65	35.29	9.86	10.57	6,677	25.31	184	79	3
145	114	25	94.05	95.00	89.36	1.39	17.24	2,664	22.70	6	07	4
1,000	698	79	92.07	75.79	27.71	3.48	7.90	21,592	28.33	908	42	...
21,678	8,416	7,658	99.15	86.02	55.62	13.16	83.76	14,492	57.12	365	1.45	5
875	445	96	93.74	87.05	12.06	1.91	10.96	3,887	8.31	615	1.10	6
668	539	55	97.66	87.91	21.75	3.27	8.73	9,334	27.19	160	47	7
...	...	...	94.51	...	28.39	5.3	...	11,810	23.86	27	83	8
951	343	118	97.19	65.98	29.00	2.79	12.41	13,354	36.50	185	51	9
25,173	9,788	7,924	96.20	86.72	20.57	3.77	31.48	62,688	24.94	1,532	85	...
224	60	...	88.19	26.79	10.38	0.97	...	3,250	11.47	278	73	10
412	271	24	95.40	89.36	9.22	1.98	5.33	2,726	12.12	192	96	11
*1,910	1,022	315	95.04	64.45	33.85	4.47	16.43	15,981	38.33	131	83	12
454	211	81	95.31	92.36	2.92	3.48	16.74	26,143	54.06	281	58	13
...	...	...	95.87	...	32.28	4.20	...	7,977	27.48	269	56	14
3,030	1,870	420	96.14	60.18	24.25	3.65	13.86	54,927	33.12	1,181	71	...
1,735	561	89	90.66	80.30	68.83	2.42	8.60	19,261	64.17	112	37	15
826	338	117	89.17	43.95	59.00	7.78	13.21	7,671	69.75	4	04	16
143	72	17	90.63	57.14	65.06	0.8	11.89	5,578	62.63	7	08	17
1,863	676	287	94.78	32.90	24.17	4.10	18.34	6,501	24.73	95	36	18
118	63	...	90.82	53.33	31.12	...	...	6,801	19.80	140	41	19
612	240	...	85.96	46.57	21.88	...	...	799	21.18	...	...	20
4,250	1,940	510	92.65	82.01	44.5	2.60	11.97	47,017	49.55	369	83	...
*5,157	3,204	166	96.35	64.21	39.94	85	3.22	12,041	31.85	87	25	21
128	114	21	95.16	70.51	45.41	4.55	11.94	3,414	42.91	...	...	22
...	...	...	95.88	...	41.95	0.8	...	3,098	17.58	...	...	23
359	185	19	96.25	75.00	62.29	31.88	7.95	2,665	25.11	...	...	24
...	...	...	91.36	...	15.28	...	...	1,113	16.51	...	...	25
5,978	3,433	206	96.20	64.84	38.04	5.51	3.60	22,131	28.47	...	...	...
407	247	44	94.85	88.04	95.28	2.05	16.81	10,922	33.07	33	12	26
3,035	2,524	130	97.37	86.20	62.05	2.18	4.25	15,960	56.43	48	17	27
1,192	918	...	99.29	77.01	45.00	...	...	13,474	4.75	22	08	28
1	...	...	94.87	...	39.83	3.9	...	8,250	33.25	...	...	29
4,658	3,689	174	96.94	82.27	46.15	1.35	3.74	48,877	48.55	104	12	...
*1,192	1,138	116	93.34	54.82	44.99	7.23	5.29	12,064	50.83	24	10	30
42	20	...	97.20	47.62	14.78	2.85	...	9,423	20.43	234	78	31
371	141	7	95.64	87.23	39.54	0.2	1.00	6,564	21.08	2	01	32
347	2.2	9	91.84	65.64	55.63	0.9	2.99	11,852	43.54	34	14	33
2,762	1,538	132	95.84	69.51	48.85	2.82	4.80	39,823	36.72	294	50	...
16	8	7	38.80	88.89	21.88	2.83	13.75	8,112	39.02	82	13	34
151	116	20	95.01	88.55	35.30	3.89	13.25	9,552	39.28	68	21	35
110	82	18	97.98	84.34	30.80	2.41	11.92	4,842	22.16	1	...	36
148	70	18	94.07	56.00	36.60	3.31	12.59	11,349	31.88	162	46	37
420	276	58	96.00	76.14	32.48	3.49	13.51	33,776	31.02	293	26	...
225	39	167	95.92	67.24	9.24	21.02	74.21	3,524	11.01	...	...	38
202	144	11	92.96	70.39	16.06	6.95	5.45	10,069	12.36	...	...	39
427	183	178	93.48	73.49	14.00	10.15	41.60	13,623	11.95	...	...	...
*6	1	5	95.33	100.00	27.43	26.60	83.33	1,581	19.13	...	...	40
*47,303	21,166	9,696	95.27	61.58	32.66	3.82	20.48	335,424	32.01	...	...	...

Vaccination which are shown separately in Statement III. Pakikka Chin Hills have been excluded. Included.

## A.—VACCINATION

STATEMENT NO. II.—Showing the cost of the Department in the

No.	Circles and Districts.	European super- vising officers.	EXPENDITURE.									Total pay of establish- ment.	
			Pay.	Native supervi- sing officers.	Pay.	Vaccinators.	Pay.	Clerks.	Pay.	Poons, etc.	Pay.		
1	2	3	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	13		
<b>ARAKAN DIVISION.</b>													
1	Akyab ...	2	1,000 7 11	10	2,887 13 4						3,897 8 3		
2	Hill Tracts, Northern Arakan...			2	876 12 0						876 12 0		
3	Kyaukpadaung ...	1	783 8 1	6	1,831 14 10						2,615 6 11		
4	Sandoway ...	1	650 0 0	3	793 7 4						1,443 7 4		
	<b>Total</b>		<b>4</b>	<b>2,365 0 0</b>	<b>21</b>	<b>5,928 15 6</b>					<b>5,928 15 6</b>		
<b>PEGU DIVISION.</b>													
5	Rangoon...			4	4,788 14 4		1,110 7 1 4		1,120 11 4		7,027 0 9		
6	Hanthawaddy ...	3	1,300 0 0	9	2,456 4 7						4,152 13 4		
7	Pegu ...	3	1,994 3 1	10	2,495 10 3						5,489 3 5		
8	Tharawaddy ...	1	600 0 0	8	2,617 3 3						3,217 3 3		
9	Prome ...	1	600 0 0	12	3,411 11 10						4,011 11 10		
	<b>Total</b>		<b>8</b>	<b>4,494 3 1</b>	<b>43</b>	<b>13,654 12 5</b>		<b>1,110 7 1 4</b>		<b>1,120 11 4</b>	<b>22,380 1 11</b>		
<b>IRRAWADDY DIVISION.</b>													
10	Maubin ...	1	600 0 0	4	1,021 0 0						1,621 0 0		
11	Pyapon ...	1	600 0 0	6	1,915 9 8						2,515 9 8		
12	Basseln ...	2	840 0 0	10	2,674 4 0						3,514 4 0		
13	Henzada ...	1	600 0 0	13	1,040 14 0						1,640 14 0		
14	Myaungmya ...	1	600 0 0	7	1,878 1 4						2,478 1 4		
	<b>Total</b>		<b>6</b>	<b>3,240 0 0</b>	<b>42</b>	<b>11,749 13 0</b>					<b>14,599 13 0</b>		
<b>TEMASSERIN DIVISION.</b>													
15	Amherst ...	2	1,300 0 0	9	2,562 0 0	1	120 0 0				3,982 0 0		
16	Tavoy ...	1	600 0 0	5	1,282 0 0						1,882 0 0		
17	Mergol ...	1	600 0 0	4	970 0 0						1,570 0 0		
18	Toungoo ...	1	600 0 0	7	1,622 0 0						2,222 0 0		
19	Thabon ...	1	567 7 9	6	1,353 0 0						1,920 7 9		
20	Salween ...			1	350 0 0						350 0 0		
	<b>Total</b>		<b>6</b>	<b>3,667 7 9</b>	<b>32</b>	<b>8,669 0 0</b>	<b>1</b>	<b>120 0 0</b>			<b>12,319 7 9</b>		
<b>MANDALAY DIVISION.</b>													
21	Mandalay ...	1	611 5 0	10	3,632 3 0						4,243 8 0		
22	Bhamo ...			4	1,280 13 8						1,280 13 8		
23	Katha ...			4	912 9 3						912 9 3		
24	Ruby Mines ...	1	780 0 0	4	1,746 0 0						2,526 0 0		
25	Myittha ...			2	707 0 0						707 0 0		
	<b>Total</b>		<b>2</b>	<b>1,391 5 0</b>	<b>24</b>	<b>8,277 9 11</b>					<b>9,671 14 11</b>		
<b>SAGAING DIVISION.</b>													
26	Shwebo ...	1	550 0 0	3	1,021 0 0						1,571 0 0		
27	Sagaing ...	1	550 0 0	6	1,813 2 5						2,363 2 5		
28	Lower Chindwin ...	1	550 0 0	6	1,171 14 6						1,821 14 6		
29	Upper Chindwin ...	1	550 0 0	5	1,170 2 0						1,720 2 0		
	<b>Total</b>		<b>4</b>	<b>1,650 0 0</b>	<b>20</b>	<b>7,775 2 11</b>					<b>9,425 2 11</b>		
<b>MAGWE DIVISION.</b>													
30	Thayetmyo ...	1	600 0 0	8	2,347 5 3						2,947 5 3		
31	Pakkata ...	1	611 15 10	10	2,394 5 10						3,006 5 8		
32	Mianbu ...	1	600 0 0	7	1,969 0 0						2,569 0 0		
33	Magwe ...	2	489 0 5	8	1,709 0 0						2,198 0 5		
	<b>Total</b>		<b>5</b>	<b>1,900 0 3</b>	<b>33</b>	<b>8,419 11 1</b>					<b>10,380 11 4</b>		
<b>MEIKTILA DIVISION.</b>													
34	Meiktila Vaccine Depot ...	2	405 5 9	1	1,174 11 5	†	1,013 1 9	2	1,470 0 0	8	1,297 4 9	5,165 9 8	
35	Nektila ...	11	1,816 6 2	6	1,532 0 0						3,348 6 2		
36	Yamethin ...			7	1,369 12 0						1,369 12 0		
37	Kyaukse ...	2	720 0 0	3	973 0 0						1,693 0 0		
38	Myingyan ...	1	600 0 0	7	1,973 11 8						2,573 11 8		
	<b>Total</b>		<b>1</b>	<b>405 5 9</b>	<b>27</b>	<b>7,113 3 7</b>	<b>23</b>	<b>7,384 9 3</b>	<b>2</b>	<b>1,470 0 0</b>	<b>8</b>	<b>1,297 4 9</b>	<b>14,668 7 6</b>
<b>SHAN STATES.</b>													
39	Northern Shan States ...	2	1,400 0 0	8	1,920 8 9						3,320 8 9		
40	Southern Shan States ...	5	3,447 11 1	11	6,019 10 0						9,466 11 1		
	<b>Total</b>		<b>7</b>	<b>4,847 11 1</b>	<b>19</b>	<b>7,939 9 9</b>					<b>12,786 10 0</b>		
41	Chin Hills ...			3	1,016 0 0						1,016 0 0		
	<b>GRAND TOTAL</b>		<b>1</b>	<b>405 5 9</b>	<b>48</b>	<b>27,143 14 9 2 3</b>	<b>87,352 13 6</b>	<b>3</b>	<b>2,700 7 1 12</b>	<b>2,418 0 1</b>	<b>1,116,020 8 8</b>		

\*This amount includes the

† Apprentice

‡ This amount includes pay of Native Superintendents of Vaccination of certain other

DEPARTMENT.

Province of Burma during the year 1909-10 (Paragraphs 1 and 9)

Travelling allowance.	Contingencies.	Total cost.	PAID FROM					Total.	Number of all successful vaccinations and re-vaccinations.	Average cost of each successful case.	No.
			Imperial Funds.	Provincial Funds.	Local Funds.	Municipalities.	Native States.				
14	15	16	17	18	19	20	21	22	23	24	25
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.	
1,495 15 3	148 5 0	5,512 9 6	.....	.....	5,066 6 6	466 3 0	.....	5,512 9 6	15,755	0 8 2	1
176 0 0	.....	851 12 0	.....	851 12 0	.....	.....	.....	851 12 0	1,062	0 12 10	2
1,858 13 0	.....	4,177 3 11	.....	.....	4,032 3 11	125 0 0	.....	4,157 3 11	5,952	0 11 3	3
329 7 0	.....	1,73 14 4	.....	1,100 0 0	917 14 4	120 0 0	.....	1,737 14 4	3,306	0 8 5	4
3,840 3 3	148 5 0	12,279 7 9	.....	1,951 12 0	9,616 8 9	711 3 0	.....	12,279 7 9	21,115	0 9 4	
177 10 0	6,505 8 3	13,293 3 3	.....	5,963 3 6	.....	7,919 15 9	.....	13,883 3 3	14,025	0 15 10	5
2,413 14 6	81 8 0	6,151 11 7	.....	.....	6,151 11 7	.....	.....	6,151 11 7	5,638	1 1 6	6
1,990 13 6	.....	6,483 10 0	.....	.....	5,60 10 0	421 0 0	.....	6,438 10 0	7,338	0 14 0	7
1,872 2 0	.....	5,021 5 5	.....	.....	5,0 1 5 5	.....	.....	5,021 5 5	11,230	0 7 2	8
1,533 2 6	.....	5,564 14 4	.....	.....	4,937 14 4	927 0 0	.....	5,864 14 4	10,640	0 8 10	9
8,407 10 9	6,617 0 9	27,404 12 5	.....	5,968 8 6	22,071 10 2	9,339 15 9	.....	37,404 12 5	28,921	0 12 3	
885 14 6	.....	2,506 14 6	.....	.....	2,506 14 6	.....	.....	2,506 14 6	2,097	0 13 5	10
1,095 8 9	36 5 0	2,647 7 5	.....	.....	2,074 7 5	573 0 0	.....	2,647 7 5	2,075	1 12 1	11
1,504 8 9	.....	5,034 12 0	.....	.....	4,238 12 0	796 0 0	.....	5,034 12 0	13,251	0 6 1	12
1,921 10 0	.....	6,365 3 0	.....	.....	4,941 3 0	1,424 0 0	.....	6,365 3 0	11,011	0 7 6	13
1,466 13 0	.....	5,744 14 4	.....	.....	2,422 6 4	252 8 0	.....	3,741 14 4	9,013	0 6 8	14
6,377 7 0	36 5 0	21,503 9 0	.....	.....	18,282 1 0	221 8 0	.....	21,503 9 0	21,747	0 8 4	
1,649 10 6	52 12 0	3,584 6 0	.....	.....	4,519 10 0	1,064 12 0	.....	5,584 6 0	20,692	0 4 4	15
1,633 10 0	.....	2,975 10 0	.....	.....	2,735 10 0	240 0 0	.....	2,975 10 0	5,169	0 7 9	16
880 15 0	1 8 0	4,492 7 0	.....	.....	4,238 7 0	254 0 0	.....	4,492 7 0	6,933	0 6 5	17
1,317 12 9	.....	3,569 12 9	.....	.....	3,044 12 9	525 0 0	.....	3,569 12 9	6,751	0 8 6	18
1,235 6 9	.....	4,698 14 6	.....	.....	3,431 14 6	126 0 0	.....	3,698 14 6	10,826	0 5 6	19
127 0 0	.....	427 0 0	.....	.....	427 0 0	.....	.....	427 0 0	828	0 8 3	20
6,304 6 6	51 4 0	18,708 2 2	.....	.....	16,379 6 2	2,328 12 0	.....	18,708 2 2	51,319	0 5 10	
991 1 6	10 5 8	5,246 15 2	.....	3,066 5 6	.....	2,180 9 8	.....	5,246 15 2	14,837	0 5 9	21
427 3 6	.....	1,708 1 2	.....	1,391 13 2	.....	316 4 0	.....	1,708 1 2	3,611	0 7 7	22
625 8 8	.....	1,508 1 11	.....	1,335 1 11	.....	.....	.....	1,508 1 11	7,294	0 3 4	23
1,373 15 4	2 9 0	3,991 15 4	.....	.....	2,73 15 4	.....	1,138 0 0	3,991 15 4	2,832	1 6 1	24
425 11 5	.....	1,135 11 5	.....	.....	1,1 5 11 5	.....	.....	1,135 11 5	1,096	1 0 7	25
3,846 8 8	12 5 8	11,330 13 3	.....	9,911 15 7	.....	2,416 13 8	1,118 0 0	12,330 13 3	29,569	0 7 4	
1,451 13 6	10 0 0	4,141 17 6	.....	3,802 13 6	.....	210 0 0	.....	4,012 13 6	10,469	0 6 3	26
1,194 4 0	.....	3,357 6 8	.....	3,197 6 8	.....	.....	.....	3,357 6 8	17,589	0 3 3	27
598 1 6	.....	2,920 0 0	.....	2,574 0 0	.....	346 0 0	.....	2,920 0 0	15,049	0 3 11	28
1,076 5 6	20 0 0	3,266 5 6	.....	3,096 5 6	.....	.....	.....	3,266 5 6	6,079	0 8 7	29
4,320 6 6	40 0 0	13,756 9 6	.....	12,400 9 5	.....	586 0 0	.....	13,756 9 6	46,076	0 4 9	
1,327 2 0	.....	4,2 4 7 3	.....	1,460 0 0	2,238 7 4	605 15 11	.....	4,284 7 3	20,775	0 6 4	30
2,154 12 0	.....	5,121 1 8	.....	4,841 1 8	.....	277 0 0	.....	5,121 1 8	19,529	0 4 2	31
606 3 2	.....	2,665 3 2	.....	1,910 3 2	.....	605 0 0	.....	2,665 3 2	5,295	0 3 11	32
1,016 4 2	.....	3,174 4 7	.....	2,874 4 7	.....	300 0 0	.....	3,174 4 7	12,971	0 3 8	33
5,114 5 4	.....	15,145 0 8	.....	11,628 9 2	2,245 7 4	1,897 15 11	.....	15,145 0 8	62,380	0 4 7	
451 13 6	5,073 8 8	13,900 15 10	.....	12,900 15 10	.....	.....	.....	13,900 15 10	.....	.....	34
1,060 4 6	.....	3,118 10 8	.....	3,685 10 8	.....	420 0 0	.....	3,118 10 8	6,277	0 10 6	35
1,193 1 6	.....	3,782 13 6	.....	3,074 13 6	.....	708 0 0	.....	3,782 13 6	8,556	0 7 1	36
487 1 6	.....	1,519 1 6	.....	1,359 1 6	.....	.....	.....	1,519 1 6	4,351	0 5 3	37
1,377 6 6	82 11 0	3,931 0 2	.....	3,407 0 2	.....	524 0 0	.....	3,931 0 2	13,032	0 4 10	38
4,460 11 6	5,155 6 8	27,194 9 8	.....	25,610 9 8	.....	1,684 0 0	.....	27,294 9 8	22,216	0 13 7	
2,431 5 0	.....	5,900 3 9	.....	2,801 12 9	.....	.....	3,659 1 0	5,960 13 9	3,000	1 15 9	39
3,523 2 0	223 15 0	13,519 6 1	.....	13,519 6 1	.....	.....	.....	13,519 6 1	13,602	0 16 11	40
6,651 7 0	228 15 0	19,480 3 10	.....	18,421 2 10	.....	.....	3,660 1 0	19,480 3 10	16,602	1 2 9	
634 2 0	0 12 0	1,650 14 0	.....	1,650 14 0	.....	.....	.....	1,650 14 0	2,392	0 11 1	41
50,460 4 6	15,291 6 1	1,50,794 3 3	.....	85,261 12 5	64,098 1 6	22,206 4 4	4,777 1 0	1,80,784 3 3	342,167	0 8 6	

cost of Port Health Vaccination.

Vaccinators.

districts for the period of their training at Meiktila.



## B.—DISPENSARY

STATEMENT No. III.—Showing *Dispensary Vaccination in the*

No.	Districts.	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
						Total.
1	2	3	4	5	6	7
<b>ARAKAN DIVISION.</b>						
1	Akyab	...	...	...	...	...
2	Hill Tracts, Northern Arakan	...	...	3	...	3
3	Kyaukpadaung	...	...	656	...	520
4	Sandoway	...	...	5	...	5
	Total	...	...	664	...	527
<b>PEGU DIVISION.</b>						
5	Rangoon	...	...	...	...	...
6	Hanthawaddy	...	...	3,053	...	1,662
7	Pegu	...	...	624	...	495
8	Tharrawaddy	...	...	395	...	329
9	Prome	...	...	...	...	...
	Total	...	...	4,072	...	1,941
<b>ISRAWADDY DIVISION.</b>						
10	Ma-ahin	...	...	848	...	98
11	Pyawda	...	...	...	...	...
12	Bassein	...	...	142	...	9
13	Henzada	...	...	1,394	...	273
14	Myaungmya	...	...	1,171	...	142
	Total	...	...	3,555	...	522
<b>TENASSERIM DIVISION.</b>						
15	Amherst	...	...	68	...	50
16	Tavoy	...	...	...	...	...
17	Mergol	...	...	5	...	4
18	Toungoo	...	...	16	...	3
19	Thabein	...	...	32	...	30
20	Salween	...	...	88	...	57
	Total	...	...	208	...	144
<b>MANDALAY DIVISION.</b>						
21	Mandalay	...	...	308	...	216
22	Bhamo	...	...	...	...	...
23	Katha	...	...	314	...	141
24	Ruby Mines	...	...	80	...	65
25	Myitkyna	...	...	111	...	109
	Total	...	...	1,813	...	531
<b>SAGAING DIVISION.</b>						
26	Shwebo	...	...	107	...	97
27	Sagaing	...	...	...	...	...
28	Lower Chindwin	...	...	78	...	78
29	Upper Chindwin	...	...	236	...	204
	Total	...	...	411	...	379
<b>MAGWE DIVISION.</b>						
30	Thayemyo	...	...	810	...	324
31	Pakka	...	...	90	...	90
32	Minbo	...	...	...	...	...
33	Magwe	...	...	...	...	...
	Total	...	...	900	...	314
<b>MEIKTILA DIVISION.</b>						
34	Meiktila	...	...	122	...	73
35	Yamethin	...	...	63	...	63
36	Kyaukse	...	...	...	...	...
37	Mylagan	...	...	...	...	...
	Total	...	...	185	...	136
<b>SHAN STATES.</b>						
38	Northern Shan States	...	...	566	...	130
39	Southern Shan States	...	...	30	...	28
	Total	...	...	596	...	158
40	Chin Hills	...	...	825	...	817
	<b>GRAND TOTAL</b>	...	...	<b>12,261</b>	...	<b>5,475</b>

## VACCINATION.

Province of Burma for the year 1909-10 (Paragraphs 2 and 4).

VACCINATION.			RE-VACCINATION.			PERCENTAGE OF SUCCESSFUL CASES IN WHICH THE RESULTS WERE KNOWN.		PERCENTAGE OF UNKNOWN CASES TO TOTAL CASES.		No.				
Successful.			Unknown.	Total.	Successful.	Unknown.	Primary.	Re-vaccination.	Primary.		Re-vaccination.			
Under one year.	One and under six years.	Total of all ages.								8		9	10	11
...	1	...	...	...	...	...	...	...	...	100-00	...	...	...	1
...	35	170	477	32	198	99	21	...	...	97-75	87-61	6-15	16-91	2
...	...	5	...	...	...	...	...	...	...	100-00	...	...	...	3
...	...	5	...	...	...	...	...	...	...	...	...	...	...	4
...	36	171	484	32	197	99	21	97-78	86-84	6-07	16-79	...	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
...	1-9	6-0	992	42	1,991	1,711	2	97-25	86-02	3-95	10-10	...	...	7
...	74	235	487	2	151	64	18	99-79	56-64	4-1	13-74	...	...	8
...	9-7	246	366	4	6	4	...	95-16	68-67	1-03	...	...	...	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	370	1,191	1,845	43	2,128	1,779	70	97-31	84-94	2-47	7-94	...	...	10
...	...	2	75	13	740	590	11	100-00	79-94	19-27	1-47	...	...	11
...	...	9	...	...	141	82	33	100-00	62-00	...	24-81	...	...	12
...	5	4	108	119	921	422	57	70-13	48-84	43-80	6-19	...	...	13
...	18	8	123	22	1,529	450	80	74-62	47-42	8-45	7-77	...	...	14
...	20	70	...	...	...	...	...	...	...	...	...	...	...	...
...	41	44	625	144	2,833	1,524	191	85-28	57-47	27-59	6-29	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	8	27	47	3	18	6	12	100-00	100-00	6-00	68-67	...	...	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
...	1	1	4	...	1	...	...	100-00	...	...	...	...	...	17
...	2	...	3	...	12	6	2	100-00	60-00	...	16-67	...	...	18
...	13	12	80	...	2	2	...	100-00	100-00	...	...	...	...	19
...	...	16	49	...	31	10	...	85-95	72-16	...	...	...	...	20
...	14	56	158	3	64	24	14	94-33	48-00	2-08	21-87	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	16	74	178	34	592	349	108	97-80	72-11	15-74	18-94	...	...	21
...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
...	...	11	139	1	203	153	18	99-19	80-10	7-1	5-91	...	...	23
...	...	25	56	12	12	8	2	98-21	80-00	17-65	16-67	...	...	24
...	16	43	106	...	2	1	...	97-25	50-00	...	...	...	...	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	62	161	478	47	809	511	122	98-15	74-38	8-80	15-08	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	18	51	80	5	30	9	...	86-95	90-00	5-15	...	...	...	26
...	...	...	...	...	...	...	...	...	...	...	...	...	...	27
...	37	37	76	...	...	...	...	97-14	...	...	...	...	...	28
...	35	59	190	13	22	15	1	98-95	71-43	6-37	4-55	...	...	29
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	95	187	345	18	32	21	1	95-97	77-42	4-75	2-12	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	45	67	215	1	586	451	2	96-41	73-80	4-5	7-94	...	...	30
...	5	58	88	...	...	...	...	97-78	...	...	...	...	...	31
...	...	...	...	...	...	...	...	...	...	...	...	...	...	32
...	...	...	...	...	...	...	...	...	...	...	...	...	...	33
...	50	120	303	1	596	431	2	96-81	73-80	3-2	7-94	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	12	2	71	2	50	45	4	100-00	97-88	2-74	8-00	...	...	34
...	44	39	63	...	...	...	...	100-00	...	...	...	...	...	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	56	21	124	2	30	45	4	100-00	97-83	1-47	8-00	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	8	29	65	35	136	92	4	89-42	39-39	16-92	2-94	...	...	38
...	1	12	25	1	2	2	...	92-59	100-00	3-87	...	...	...	39
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	9	41	90	36	128	94	4	79-77	40-30	20-78	2-90	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	16	47	167	60-5	9	1	1	78-77	12-50	7-40	11-11	...	...	40
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	764	1,981	4,304	90-6	6,786	4,492	372	94-82	70-03	17-10	5-48	...	...	...

COMPARATIVE STATEMENT NO. IV.—*Showing the number of persons primarily vaccinated  
Burma in each of the under*

Establishments.	PERSONS PRIMARILY									
	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.
	1900-01.		1901-02.		1902-03.		1903-04.		1904-05.	
	1	2	3	4	5	6	7	8	9	10
Government	106,629	95,392	91,530	81,082	120,884	101,166	105,894	109,036	138,435	109,301
Municipal	62,338	58,008	52,227	48,695	55,332	47,049	53,775	44,879	49,410	46,163
Local Funds	215,111	198,789	181,107	166,183	165,218	149,545	179,917	160,516	166,339	141,626
Native States	1,574	1,420	1,782	1,873	7,033	5,351	6,712	5,724	6,985	4,989
Dispensary	6,053	4,229	8,971	3,043	6,622	5,038	8,924	6,915	9,616	7,152
<b>ARMY.</b>										
Europeans	28	10	20	9	25	11	...	...	25	14
Natives	391	207	114	67	859	283	380	222	370	215
<b>Total</b>	<b>392,719</b>	<b>358,055</b>	<b>333,791</b>	<b>300,722</b>	<b>315,013</b>	<b>308,548</b>	<b>326,102</b>	<b>327,172</b>	<b>381,660</b>	<b>309,365</b>

STATEMENT NO. V.—*Showing particulars of Vaccination verified*

No.	Districts.	TOTAL NUMBER OF PERSONS VACCINATED.		TOTAL NUMBER INSPECTED			
		Primary.	Re-vaccination.	By Deputy Sanitary Commissioners or Civil Surgeons.		By Native Superintendents or other inspecting officers.	
				Primary.	Re-vaccination.	Primary.	Re-vaccination.
2	3	4	5	6	7	8	
1	Akyab	11,492	475	919	375	4,593	82
2	Hill Tracts, Northern Arakan	1,087	31	...	...	2	1
3	Kyaukpada	7,333	397	899	205	3,790	331
4	Sandoway	3,447	145	221	...	410	49
5	Sangoon	6,509	92,778	196	775	4,896	13,045
6	Hanthawaddy	6,710	2,867	1,471	561	5,904	1,186
7	Pegu	7,743	799	1,079	199	6,670	431
8	Tharawaddy	12,288	6	107	...	7,155	6
9	Prome	10,834	951	1,031	167	5,784	531
10	Ma-abin	3,090	974	474	651	3,090	926
11	Pyawda	1,921	412	1,037	42	1,696	308
12	Bassein	19,240	2,741	551	1,191	5,179	1,656
13	Heuzada	16,118	1,405	1,679	879	5,791	812
14	Myaungmya	9,965	1,029	280	897	5,891	163
15	Amberst	21,495	1,033	492	55	15,037	819
16	Tavoy	6,389	886	1,039	417	5,163	886
17	Mergul	6,430	144	286	28	3,610	90
18	Tonngoo	6,690	1,577	499	318	3,768	310
19	Thatón	11,881	120	4,014	...	5,187	...
20	Salween	741	543	104	...	27	26
21	Mandalay	11,597	5,741	2,619	837	7,800	1,332
22	Rhango	8,848	132	987	40	116	3
23	Katha	7,778	203	1,068	194	193	179
24	Ruby Mines	2,941	211	8	...	3,124	109
25	Myittha	1,253	2	180	...	391	2
26	Swebo	11,168	417	26	106	5,738	15
27	Sagaing	15,744	3,038	1,588	101	10,396	1,718
28	Lower Chindwin	11,289	1,192	1,721	433	6,334	341
29	Upper Chindwin	6,440	21	599	...	193	31
30	Thayemyo	11,704	2,029	1,854	367	7,555	715
31	Pakókka	20,748	22	1,555	13	6,602	13
32	Mintu	8,578	347	213	...	793	55
33	Mogwe	14,431	66	721	41	3,584	16
34	Meiktila	6,703	51	2,288	137	6,432	14
35	Yamethin	9,242	171	719	...	283	...
36	Kvaungse	4,020	110	784	8	9,071	114
37	Myingyan	14,250	143	102	147	3,182	247
38	Northern Shan States	4,140	204	1,473	...	10,916	48
39	Southern Shan States	15,533	15	219	...	...	...
40	Chin Hills	4,228	15	...	...	...	...
<b>GRAND TOTAL</b>		<b>351,498</b>	<b>53,238</b>	<b>36,616</b>	<b>9,254</b>	<b>179,114</b>	<b>26,196</b>

and the number of those persons who were successfully vaccinated in the Province of mentioned official years.

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.	Establishments.
1905-06.		1906-07.		1907-08.		1908-09.		1909-10.		
7	8	9	10	11						
162,014	144,074	126,106	111,283	148,497	138,220	147,180	184,151	178,234	177,619	Government.
64,881	52,398	60,392	48,411	48,069	41,811	43,072	38,308	43,578	44,057	Municipal.
181,999	160,428	167,418	148,271	184,772	179,030	183,167	222,857	222,195	207,744	Local Funds.
8,137	6,953	6,633	5,730	5,303	4,330	6,091	5,202	10,081	6,581	Native States.
9,812	7,572	10,090	7,180	10,443	7,457	7,562	5,287	5,475	4,304	Dispensary.
										ARMY.
66	33	24	14	59	36	37	35	68	56	Europeans.
304	183	281	143	408	279	435	396	306	269	Natives.
427,836	371,376	370,794	321,051	391,442	366,751	343,419	396,646	361,572	328,610	Total.

by Inspecting Officers during the year 1909-10 (Paragraph 5).

PERCENTAGE OF INSPECTIONS TO TOTAL NUMBER VACCINATED.				PERCENTAGE OF CASES FOUND SUCCESSFUL OF TOTAL NUMBER INSPECTED.				PERCENTAGE OF SUCCESS REPORTED BY VACCINATORS.		No.
By Deputy Sanitary Commissioner or Civil Surgeon.		By Native Superintendents or other Inspecting Officers.		By Deputy Sanitary Commissioner or Civil Surgeon.		By Native Superintendents or other Inspecting Officers.		Primary.	Re-vaccination.	
9	10	11	12	13	14	15	16			17
8.32	78.05	40.23	6.74	66.91	72.53	95.16	48.88	91.40	74.67	1
12.26	69.75	51.78	3.21	96.89	78.10	100.00	100.00	95.76	80.00	2
6.41	...	11.89	33.79	92.76	...	70.38	57.76	94.05	95.00	3
3.01	8.42	74.00	57.70	93.47	48.25	99.77	55.75	98.74	87.00	4
2.888	9.10	88.88	37.61	90.65	55.41	91.05	73.68	99.15	96.02	5
18.88	25.78	79.23	33.91	92.55	82.55	94.18	81.08	97.66	87.93	6
87	...	37.90	100.00	97.21	...	92.60	66.67	94.31	...	7
9.70	17.56	53.24	61.09	96.28	89.45	99.65	59.68	97.18	43.28	8
15.34	66.81	100.00	93.15	93.67	83.79	98.19	68.77	95.19	36.79	9
53.38	10.19	88.24	74.76	97.89	47.62	93.57	60.83	98.89	69.85	10
4.16	84.39	30.11	81.01	97.45	56.16	96.60	62.84	96.04	64.45	11
10.64	6.56	31.31	22.21	81.11	18.01	92.94	42.38	91.31	32.86	12
1.81	87.17	50.20	13.94	94.64	47.00	90.50	65.71	95.87	...	13
9.24	4.34	79.14	77.78	96.93	57.02	94.60	57.99	96.06	59.30	14
10.19	47.07	82.36	100.00	95.94	35.25	90.12	43.36	83.37	41.95	15
5.98	19.44	35.37	62.50	95.09	57.14	94.40	45.71	91.63	57.14	16
7.46	21.16	85.99	19.69	96.60	38.35	85.63	39.70	91.73	52.99	17
31.9	...	48.60	...	92.23	...	97.15	...	90.82	33.39	18
14.04	4.97	2.10	4.79	91.84	83.33	100.00	84.62	94.50	43.88	19
22.08	14.60	65.04	21.85	92.97	55.32	83.00	66.37	96.85	51.25	20
21.40	21.98	8.01	1.65	95.64	77.60	74.26	100.00	95.16	70.81	21
13.28	95.97	2.51	84.74	87.51	78.66	96.41	80.81	95.57	...	22
20	...	79.23	67.33	87.50	...	95.78	19.82	96.25	75.00	23
11.69	...	19.67	100.00	99.61	...	92.04	50.00	99.26	...	24
2.02	25.42	51.88	3.60	98.99	8.93	97.37	100.00	94.65	28.04	25
10.66	5.35	67.39	54.18	93.03	65.64	94.73	74.51	97.37	86.20	26
19.24	35.49	59.06	24.61	87.10	79.15	98.91	81.31	99.21	77.01	27
9.24	...	9.91	91.39	91.85	...	93.96	71.42	94.87	...	28
13.76	28.91	66.48	35.38	98.47	75.46	87	67.10	98.34	34.80	29
9.42	30.25	81.82	45.24	98.77	48.15	96.15	94.78	97.20	41.62	30
13.77	...	8.16	32.16	94.83	...	99.71	98.00	95.62	87.00	31
1.48	6.63	9.73	24.39	95.99	78.19	95.00	80.00	95.84	68.61	32
10.92	62.12	53.57	24.24	99.31	97.66	93.64	87.69	95.80	81.89	33
25.78	90.73	63.81	9.27	86.31	81.76	92.70	...	90.01	88.55	34
15.35	...	5.15	...	95.67	...	61.37	...	97.95	84.34	35
5.28	5.10	63.52	79.72	94.43	75.00	91.32	87.02	94.06	56.00	36
2.46	40.72	75.63	68.42	69.61	30.61	93.40	21.40	95.92	67.24	37
9.47	...	70.19	23.53	96.27	...	92.66	91.69	92.26	75.32	38
5.15	...	...	...	27.85	...	...	...	95.83	100.00	39
10.42	17.38	50.96	49.21	39.61	62.90	94.05	60.98	95.40	61.58	40

## APPENDIX A.

Statement showing the ratio per 10,000 successfully vaccinated and the mortality from small-pox by quinquennial periods for Lower Burma only.

Official year.	Ratio per 10,000 successfully vaccinated.	Quinquennial mean.	Calendar year.	Ratio per 10,000 of mortality from small-pox.	Quinquennial mean.
1	2	3	4	5	6
1894-95	853.83	519.56	1894	3.85	5.19
1895-96	443.91		1895	3.41	
1896-97	554.43		1896	3.70	
1897-98	586.66		1897	4.32	
1898-99	652.47		1898	10.70	
1899-1900	678.31	476.91	1899	13.21	5.57
1900-01	530.41		1900	6.70	
1901-02	352.69		1901	4.45	
1902-03	323.04		1902	2.82	
1903-04	353.66		1903	2.30	
1904-05	324.59	333.91	1904	2.38	6.16
1905-06	385.48		1905	10.10	
1906-07	359.61		1906	14.19	
1907-08	300.95		1907	2.75	
1908-09	297.50		1908	1.34	
1909-10	347.77	...	1909	1.30	

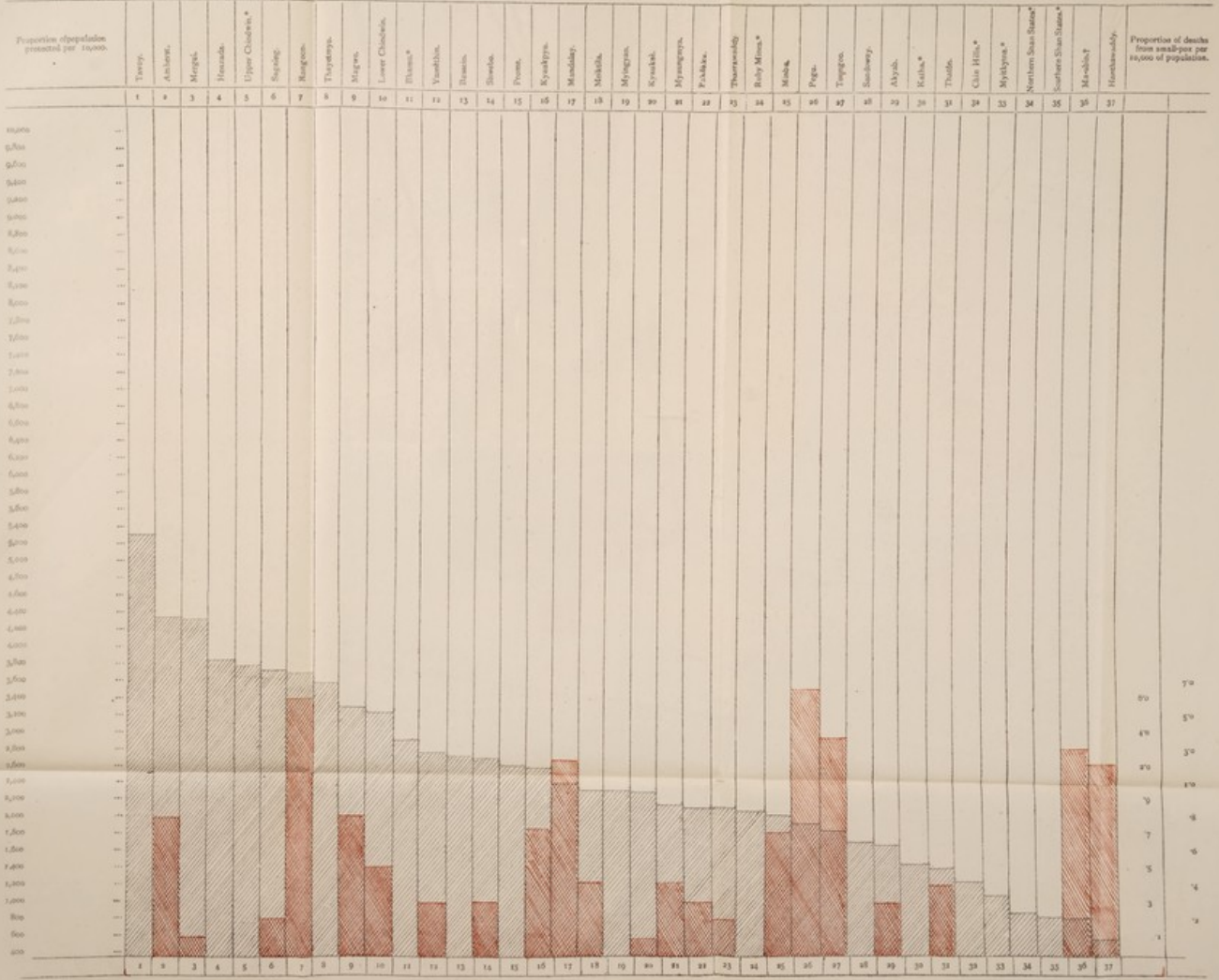
## APPENDIX B.

Statement showing the number of vaccinations performed in municipal towns on children under one year of age (Paragraph 6).

Towns.	Number of births during the year 1909-10.	Number of deaths among children under one year during the year 1909-10.	Number of successful vaccinations on children under one year during the year ending 31st March 1910.	Date of extension of Vaccination Act into towns.
1	2	3	4	5
Akyab	591	2.7	311	August 1883.
Kyaokpya	49	16	24	April 1891.
Sandoway	69	18	68	September 1890.
Rangoon	5,056	1,598	3,597	April 1884.
Begu	445	18.1	321	March 1893.
Nyaung-U	143	1.5	85	29th March 1910.
Nyaung-U	789	30.1	327	June 1890.
Pyaw	306	11.7	542	February 1893.
Paung-oh	210	7.9	165	February 1897.
Gyebogank	248	9.1	161	January 1897.
Letpadon	216	7.4	75	October 1897.
Téonze	177	4.1	137	October 1891.
Ma-ubin	381	8.6	234	January 1892.
Yandoo	216	4.8	181	9th July 1899.
Danubyu	2.3	4.5	153	November 1901.
Pyawon	240	39.2	174	15th December 1904.
Kyalkut	163	7.1	627	September 1888.
Bassein	142	3.9	142	February 1890.
Ngaunggyaung	103	3.6	76	June 1894.
Myaungmya	212	1.6	176	27th April 1907.
Wakama	690	6.7	430	January 1889.
Hennada	218	5.2	161	August 1891.
Zain	2,219	5.2	210	July 1889.
My-naung	244	96.1	1,132	August 1894.
Kyaukse	719	9.3	936	August 1885.
Mealancia	406	8.7	139	October 1891.
Thafon	20.1	14.1	167	March 1897.
Kyalkto	90.0	1.61	797	December 1889.
Taroy	416	12	464	October 1891.
Mergol	5,444	2,797	278	May 1889.
Teungoo	241	59	3,173	January 1890.
Showgyin	646	61	519	August 1891.
Mandalay	319	166	246	April 1891.
Sagaing	233	60	235	March 1893.
Maeywa	672	15	222	May 1889.
Thayemyo	434	36	333	May 1901.
Alatmyo	160	1.9	166	February 1892.
Yamthia	675	140	322	November 1891.
Pyinmana	495	280	440	September 1891.
Ayinyan	277	32	129	June 1891.
Shweto	703	49	511	April 1892.
Pakka	252	70	164	May 1891.
Kyaukse	251	50	161	March 1896.
Mindu	211	170	221	March 1896.
Saha	259	16	123	February 1893.
Taungdwieryi	206	75	130	June 1906.
Mektila	118	54	89	26th October 1894.
Bhamo	...	...	...	...
Total	34,548	9,810	19,721	

APPENDIX C.

Diagram showing the proportion of Population protected during the seven official years from 1903-04 to 1909-10 and the death-rate from Small-pox during the calendar year 1909 in districts where Registration is in force.



Indicates proportion of population protected per 10,000.

Indicates rates of deaths from small-pox per 10,000 of population.

\* Registration of vital statistics is not carried out in these districts.

† Statistics of Pyaw have been included in Mawbho.

APPENDIX C.

Table of the results of the experiments on the effect of the various factors on the growth of the plants.

No.	Species	Height	Weight	Number of leaves	Number of flowers	Number of fruits	Number of seeds	Weight of seeds
1	Phaseolus	1.2	15	10	5	10	100	10
2	Phaseolus	1.5	20	12	6	12	120	12
3	Phaseolus	1.8	25	15	8	15	150	15
4	Phaseolus	2.1	30	18	10	18	180	18
5	Phaseolus	2.4	35	20	12	20	200	20
6	Phaseolus	2.7	40	22	14	22	220	22
7	Phaseolus	3.0	45	25	16	25	250	25
8	Phaseolus	3.3	50	28	18	28	280	28
9	Phaseolus	3.6	55	30	20	30	300	30
10	Phaseolus	3.9	60	32	22	32	320	32
11	Phaseolus	4.2	65	35	24	35	350	35
12	Phaseolus	4.5	70	38	26	38	380	38
13	Phaseolus	4.8	75	40	28	40	400	40
14	Phaseolus	5.1	80	42	30	42	420	42
15	Phaseolus	5.4	85	45	32	45	450	45
16	Phaseolus	5.7	90	48	34	48	480	48
17	Phaseolus	6.0	95	50	36	50	500	50
18	Phaseolus	6.3	100	52	38	52	520	52
19	Phaseolus	6.6	105	55	40	55	550	55
20	Phaseolus	6.9	110	58	42	58	580	58
21	Phaseolus	7.2	115	60	44	60	600	60
22	Phaseolus	7.5	120	62	46	62	620	62
23	Phaseolus	7.8	125	65	48	65	650	65
24	Phaseolus	8.1	130	68	50	68	680	68
25	Phaseolus	8.4	135	70	52	70	700	70
26	Phaseolus	8.7	140	72	54	72	720	72
27	Phaseolus	9.0	145	75	56	75	750	75
28	Phaseolus	9.3	150	78	58	78	780	78
29	Phaseolus	9.6	155	80	60	80	800	80
30	Phaseolus	9.9	160	82	62	82	820	82
31	Phaseolus	10.2	165	85	64	85	850	85
32	Phaseolus	10.5	170	88	66	88	880	88
33	Phaseolus	10.8	175	90	68	90	900	90
34	Phaseolus	11.1	180	92	70	92	920	92
35	Phaseolus	11.4	185	95	72	95	950	95
36	Phaseolus	11.7	190	98	74	98	980	98
37	Phaseolus	12.0	195	100	76	100	1000	100
38	Phaseolus	12.3	200	102	78	102	1020	102
39	Phaseolus	12.6	205	105	80	105	1050	105
40	Phaseolus	12.9	210	108	82	108	1080	108
41	Phaseolus	13.2	215	110	84	110	1100	110
42	Phaseolus	13.5	220	112	86	112	1120	112
43	Phaseolus	13.8	225	115	88	115	1150	115
44	Phaseolus	14.1	230	118	90	118	1180	118
45	Phaseolus	14.4	235	120	92	120	1200	120
46	Phaseolus	14.7	240	122	94	122	1220	122
47	Phaseolus	15.0	245	125	96	125	1250	125
48	Phaseolus	15.3	250	128	98	128	1280	128
49	Phaseolus	15.6	255	130	100	130	1300	130
50	Phaseolus	15.9	260	132	102	132	1320	132
51	Phaseolus	16.2	265	135	104	135	1350	135
52	Phaseolus	16.5	270	138	106	138	1380	138
53	Phaseolus	16.8	275	140	108	140	1400	140
54	Phaseolus	17.1	280	142	110	142	1420	142
55	Phaseolus	17.4	285	145	112	145	1450	145
56	Phaseolus	17.7	290	148	114	148	1480	148
57	Phaseolus	18.0	295	150	116	150	1500	150
58	Phaseolus	18.3	300	152	118	152	1520	152
59	Phaseolus	18.6	305	155	120	155	1550	155
60	Phaseolus	18.9	310	158	122	158	1580	158
61	Phaseolus	19.2	315	160	124	160	1600	160
62	Phaseolus	19.5	320	162	126	162	1620	162
63	Phaseolus	19.8	325	165	128	165	1650	165
64	Phaseolus	20.1	330	168	130	168	1680	168
65	Phaseolus	20.4	335	170	132	170	1700	170
66	Phaseolus	20.7	340	172	134	172	1720	172
67	Phaseolus	21.0	345	175	136	175	1750	175
68	Phaseolus	21.3	350	178	138	178	1780	178
69	Phaseolus	21.6	355	180	140	180	1800	180
70	Phaseolus	21.9	360	182	142	182	1820	182
71	Phaseolus	22.2	365	185	144	185	1850	185
72	Phaseolus	22.5	370	188	146	188	1880	188
73	Phaseolus	22.8	375	190	148	190	1900	190
74	Phaseolus	23.1	380	192	150	192	1920	192
75	Phaseolus	23.4	385	195	152	195	1950	195
76	Phaseolus	23.7	390	198	154	198	1980	198
77	Phaseolus	24.0	395	200	156	200	2000	200
78	Phaseolus	24.3	400	202	158	202	2020	202
79	Phaseolus	24.6	405	205	160	205	2050	205
80	Phaseolus	24.9	410	208	162	208	2080	208
81	Phaseolus	25.2	415	210	164	210	2100	210
82	Phaseolus	25.5	420	212	166	212	2120	212
83	Phaseolus	25.8	425	215	168	215	2150	215
84	Phaseolus	26.1	430	218	170	218	2180	218
85	Phaseolus	26.4	435	220	172	220	2200	220
86	Phaseolus	26.7	440	222	174	222	2220	222
87	Phaseolus	27.0	445	225	176	225	2250	225
88	Phaseolus	27.3	450	228	178	228	2280	228
89	Phaseolus	27.6	455	230	180	230	2300	230
90	Phaseolus	27.9	460	232	182	232	2320	232
91	Phaseolus	28.2	465	235	184	235	2350	235
92	Phaseolus	28.5	470	238	186	238	2380	238
93	Phaseolus	28.8	475	240	188	240	2400	240
94	Phaseolus	29.1	480	242	190	242	2420	242
95	Phaseolus	29.4	485	245	192	245	2450	245
96	Phaseolus	29.7	490	248	194	248	2480	248
97	Phaseolus	30.0	495	250	196	250	2500	250
98	Phaseolus	30.3	500	252	198	252	2520	252
99	Phaseolus	30.6	505	255	200	255	2550	255
100	Phaseolus	30.9	510	258	202	258	2580	258

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THE UNIVERSITY OF CHICAGO

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NOTES AND STATISTICS  
ON  
VACCINATION IN BURMA

FOR THE YEAR 1909-10



RANGOON  
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1910