

Notes and statistics on vaccination in Burma.

Contributors

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NOTES AND STATISTICS
ON
VACCINATION IN BURMA

FOR THE YEAR 1908-09



RANGOON
OFFICE OF THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA
1909

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NOTES AND STATISTICS

ON

VACCINATION IN BURMA

FOR THE YEAR 1908-09.

1. *Establishment*.—Forty-eight Native Superintendents and 259 Vaccinators were employed during the year under review. There was an increase of six Vaccinators, distributed as follows:—

Pakōkku District three, Katha District two, and Meiktila District one.

2. *Training School*.—Fourteen Native Superintendents and ten Vaccinators underwent training at the Meiktila Vaccine Depot during the year. Difficulty is still found in enlisting men with sufficiently thorough elementary education to understand and profit by the education they receive at the depot. Only a proportion of those examined at the end of the course of six months training attain the minimum 50 per cent. of possible marks necessary to qualify.

3. *Work performed during the year*.—Excluding dispensary operations, the total work performed in the Province in 1908-09 was 382,326 operations, which is less by 5,076 than in the previous year. The following 12 districts show an increase of works, namely, Kyaukpyu (3,461), Shwebo (2,000), Sagaing (1,769), Tharrawaddy (1,620), Bassein (1,155), Minbu (1,108), Tavoy (746), Chin Hills (422), Ma-ubin (960), Hanthawaddy (718), Prome (418), and Southern Shan States (8,353). Twenty-six districts show a falling off, the largest decreases being—Akyab (3,933), Upper Chindwin (3,101), Myingyan (2,198), Meiktila (2,571), Pegu (1,491), Yamethin (1,466), Rangoon (1,515), Thatōn (1,645), Sandoway (1,118), Henzada (532), Mergui (660), Toungoo (700), Lower Chindwin (929), Kyaukse (1,283), Thayetmyo (1,071), and Amherst (1,049). Statement II.

If, for the sake of further analysis, we exclude the Municipality of Rangoon and Native States and Hill Tracts, we find that the total decrease in the work done in the more settled districts is 11,776 operations less than in the preceding year. The Arakan Division shows a decrease of 1,590, confined to Akyab and Sandoway Districts, Kyaukpyu showing an increase of 3,461. The Pegu Division shows a total increase of 1,265, shared in by all districts except Pegu, which has a deficit of 1,491. The Irrawaddy Division shows a total increase of 854, confined to Ma-ubin and Bassein, the combined decrease of the other districts Henzada, Myaungmya, and Pyapōn being 1,261. The Tenasserim Division (excluding Salween Hill Tracts) shows a total decrease of 3,308. Of the five districts, Tavoy alone returns an increase of 746. The Mandalay Division shows a total decrease of 919, the Ruby Mines District alone returning an increase of 38. Sagaing Division shows a decrease of 261. The considerable increase of 3,769 in the Shwebo and Sagaing Districts was discounted by the decrease in Upper and Lower Chindwin Districts, respectively, of 929 and 3,101 totalling 4,030 operations. Magwe Division shows a decrease of 299, in three out of the four districts, Minbu alone showing an increase of 1,108. Meiktila Division shows a total decrease in all four districts of 7,518, all the districts showing a decrease of over 1,000 operations.

The Civil Surgeons of districts submit various explanations for the decrease, among which are the following—Meiktila Division and Toungoo and Bhamo Districts and Taungdwingyi Town, unsettled condition of the people due to widespread epidemics of plague and cholera. Pyapōn and Mergui District and Pakōkku town, absence of epidemic small-pox. Myingyan, emigration of the poor classes on account of scarcity. Lower Chindwin, difficulty in getting children owing to lack of co-operation of the *Ywathugyis*. In Upper Chindwin, Sandoway, Katha, Myitkyina, and Henzada the falling off is explained as due to inefficiency, or numerical inadequacy of the staff, several vaccinators being dismissed, under suspension, or on leave. In Henzada and Akyab, passive opposition by the people and their preference for inoculation is preferred as the cause of the decrease. Many of

the explanations offered are reasonable and must be accepted as accounting for the decrease in the outturn of work. In several instances the obstacles to vaccination were the subject of correspondence during the year. In the Henzada District, for instance, there has long been a difficulty in getting men of reliability and energy to work as vaccinators in the district. The service is unpopular in this district and good men will not stay. The altogether unreliable statistics of work done, furnished by the older vaccinators, resulted in the dismissal of the worst offenders by the Civil Surgeon in the previous year, and in spite of much effort on his part, this officer has not been able to make any great headway against the prevailing apathy of the people and their distaste for the operation. Until all grades of Civil Officers in this district unite to persuade the people to accept the operation, and a better class of vaccinators can be induced to remain in the district, no marked progress is to be expected. There is no doubt that the severe plague and cholera epidemics, which have visited the Meiktila Division during the year, have produced an effect detrimental to the performance of vaccination in many parts of the districts. A similar factor was at work in the Toungoo District, and in some instances the Civil Surgeon and Vaccinators were refused admission to the villages. No doubt other districts were affected to some extent in the same way. It has, however, to be remarked that the severe plague and cholera outbreaks in the Tharrawaddy District did not prevent the increase of vaccination work in that district. The same remark applies to the Prome and Bassein Districts. The effect produced by a small-pox epidemic in increasing the outturn of vaccination work is well recognised, but the plea put forward by the Civil Surgeon of Pyapôn that the falling off in the year under review is to be explained by the absence of small-pox does not carry weight, since there was no more small-pox in that district in the preceding year than in 1908-09. In the Pakòkku District, where there was a severe small-pox epidemic in 1907, the outturn of work rose by 796 primary operations in consequence of the vaccination staff being augmented in the year under review; there was, as might have been expected, a decrease in revaccinations consequent on the cessation of the epidemic.

The large increase in the outturn of work in the Southern Shan States, nearly all in primary operations, was due to improved organisation of the vaccination staff, and to the special efforts made by the Civil Surgeons of Taunggyi and Loimwe, and is much to their credit.

Statement I. 4. *Primary Vaccination.*—In 40 districts there was a total decrease of 5,117 primary operations.

Appendix B. 5. *Infantile Vaccination in towns.*—A total of 19,981 primary vaccinations on infants under 12 months of age were successful, in 45 towns, as compared with 19,530 in 44 towns in 1907-08 an increase of 451 over the work of the previous year. Twenty-two towns show a definite increase in the number of successful operations on infants. In Rangoon the excess was 309, and in Paungdè 179. Gyobingauk, Letpadan, and Thônzè between them show an increase of 182, Toungoo of 216, and Allanmyo of 178. Pyapôn, Wakèma, and Bassein all show a creditable increase. Several towns show a considerable falling off in this branch of the work. This is observed in all the towns of the Arakan Division. In Myanaung the number of successful operations on infants fell from 464 to 226, and in Ngathainggyaung from 96 to 20. In Tavoy the decrease was 284, in Zalun 185, and in Pakòkku 143.

Statement I. 6. *Percentage of success obtained.*—The average successful results in primary vaccination for the whole province was 93·58 per cent. of operations. This is higher than in any previous year, and compares favourably with the 91·78 of 1907-08. In different districts the percentage of success varied from 98·82 in Rangoon, to 82·44 in the Ruby Mines District. The highest percentage of successes in districts was achieved in Lower Chindwin (98·57), Meiktila (98·51), and Mandalay (97·24). The districts showing the lowest percentages of success were Ruby Mines (82·44), Salween (82·81), and Northern Shan States (86·56). The Superintendent, Meiktila Depôt, writes, "the quality has been exceedingly good throughout the year. The returns received for 257,284 cases give a percentage success of 92·98, or practically 93, compared with 91·2 of 1907-08, and 90·65 of 1906-07."

7. *Dispensary Vaccination.*—Fourteen thousand and eighty-seven persons were vaccinated at dispensaries in 1908-09, against 19,131 in the previous year. There was a falling off in this branch of the work of 5,044 operations. The percentage of successes in primary operations fell from 95·32 in 1907-08 to 94·24 in the year under review; in revaccinations, there was an increase in percentage of success from 60·18 to 64·25. The decrease was in both primary and revaccinations. Of the total successfully vaccinated, only 774 were children under 12 months of age. The remainder were about equally distributed between the ages above and below six years. It is observed that this falling off in dispensary vaccination occurred in nearly all districts, the exceptions being Bassein, Amherst, Mergui, Toungoo, Thatôn, Salween, Mandalay, Katha, Ruby Mines, and Magwe. No satisfactory explanation is afforded of this decrease of activity. Doubtless the causes which have already been adverted to as explaining the falling off in district vaccination apply in some degree also to the vaccination work at the dispensaries. This fall in Dispensary vaccination is sudden, since the number of operations at dispensaries had risen steadily up to the year under review. The numerical loss in operations performed amounts to 5,044, almost equal to the decrease in the district work of the province.

Statement III.

8. *Verification.*—During the year under review 33,589 primary operations and 11,311 revaccinations were verified by Civil Surgeons, against 47,420 primary and 12,828 revaccinations in the previous year. Native Superintendents of Vaccination verified 140,072 primary and 21,242 revaccinations against 140,550 primary and 24,917 revaccinations in 1907-08. The percentage of operations verified by Deputy Sanitary Commissioner and Civil Surgeons in the two years 1908-09, and 1907-08, respectively, was in primary cases 9·79 and 13·51 and in revaccinations 21·17 and 23·09. Native Superintendents verified 40·84 per cent. of primary operations and 39·75 of revaccinations against 40·05 and 44·85 in the previous year. The decrease in verification work performed was thus considerable, and is in most cases unexplained. The decrease in the Meiktila District was, however, due to the Native Superintendent of Vaccination being detained at headquarters until near the end of the year to assist in training vaccinators. With the exception of Meiktila, there was no falling off generally in the work of the Native Superintendents. It is satisfactory to be able to record that the total number of operations on infants found successful and also the total number of persons successfully vaccinated over six years of age was larger than in the previous year.

Statement V.

Statement I.

9. *Lymph Supply: the Vaccine Depôt, Meiktila.*—The vaccine lymph used throughout the whole province, with the exception of the Rangoon Municipality, was supplied from the Meiktila Vaccine Depôt. Lymph sufficient for 529,189 operations was issued from the depôt during the year. The issue was larger than in the previous year by 2,074 cases, but less than in 1906-07. The cost of manufacture of the vaccine paste was the same as last year, namely, 2·8 pies per case. The greater part of the lymph issued was glycerinated, only sufficient lanoline vaccine for 61,200 operations, and quinated vaccine for 8,295 operations being despatched. Two hundred and seventy one calves were vaccinated against 263 in the previous year. The total weight of vaccine pulp obtained from the calves was greater than in previous years, being 179·2 ounces. The average yield in grains per calf was 289·40 against 308 grains in 1906-07. The largest yield from any one calf was 600 grains, the average quantity required for a single operation was 0·14 grain. The Superintendent complains that at several stations there was a great and unnecessary wastage of vaccine. Thus, at the three stations of Bogale, Kyaiklat, and Danubyu 4,410 grains were received and only 963 operations performed. At Bhamo 8,340 grains produced only 3,893 operations. In some cases the difficulty experienced in obtaining subjects promptly for operation is a reasonable excuse for this waste, as at Loilem and Lashio. This excuse ought not to be put forward in settled districts such as Pyapôn and Ma-ubin, however, and the backward condition of vaccination in those districts is the true explanation of the wasteful use of the vaccine. Glycerinated lymph was found to give better results than the other preparations. The post of Superintendent of the Meiktila Vaccine Depôt was filled by Major J. Entrican,

M.D., I.M.S., until December 1908, and subsequently by Captain J. Good, I.M.S., to the end of the year. The perfection to which the manufacture of the vaccine has been brought during his incumbency of the post is the best testimony to the devotion, skill, and inventive genius displayed during several years by the late Superintendent, Major Entrican, and it is with much regret that I have to record the loss by this Department of his services owing to his being compelled by ill health to take leave. The present incumbent, Captain Good, has carried on the work with the greatest zeal since he assumed office, and merits my thanks for his services.

10. *The Rangoon Municipal Vaccine Depot.*—Work was as in former years carried out at the vaccination station at the Municipal Office. In spite of unfavourable surroundings, which have been considered responsible for unsatisfactory results obtained from the vaccine prepared at this depot in previous years, the lymph has throughout the year been of excellent quality, and a percentage of 98·95 successes was obtained in primary operations. The new vaccine depot in Kandawgalay is said to be ready now for occupation and work will be commenced there shortly. This depot was sanctioned by the Municipal Committee in March 1907, and there has been much delay in carrying out the scheme.

Statement II.

11. *Cost of the Department.*—The total expenditure on establishment, travelling allowance, and contingencies during the year 1908-09 was Rs. 1,49,847-3-4 against 1,38,604-7-4 in 1907-08. The increase in cost was due to (a) Establishment, increase Rs. 9,395-4-1. (b) Travelling allowance, increase 4,785-5-9. The total increase was, therefore, Rs. 11,242-12-0. The average cost of each successful operation was Re. 0-7-5 against Re. 0-6-11 in the previous year. The cost varied greatly in different districts, being only Re. 0-2-3 in Sagaing, Re. 0-3-1 in Lower Chindwin, and Re. 0-3-9 in Katha. On the other hand, it was as high as Rs. 2-12-4 in the Northern Shan States, Rs. 2-1-1 in Pyapôn, and Re. 0-14-6 in Hanthawaddy. The high cost of vaccination in the Hanthawaddy and Pyapôn Districts was due to the very poor work performed in those districts, in proportion to the large staffs employed. The increase on establishment is explained by the appointment of additional Native Superintendents for nine districts and of additional permanent Vaccinators. These men were sanctioned from 1st of March 1908, but were entertained during the year under review, and were employed during the entire year. Six temporary vaccinators were employed for six months in Pakôkku District.

12. *Inoculation and attitude of the people.*—Inoculation is still practised in certain districts, especially in the Arakan Division, and in the Irrawaddy and Pegu Divisions. It is precisely in those Districts where vaccination is backward that the people are most addicted to the practice of inoculation, and *per contra*, hostile to vaccination. The districts of Akyab, Henzada, Pyapôn, and Ma-ubin are among those in which least advance has been made of late years in popularising vaccination. Hanthawaddy District is another stronghold of inoculation where the progress of vaccination has halted for years past.

13. *Legislation.*—An act for the prevention of inoculation and the licensing of Vaccinators became law during the year. Inoculation will hereafter be a criminal offence in those districts to which the Act may be from time to time applied. It has been arranged to apply the Act first to the Hanthawaddy and Pegu Districts. An act for the improvement of vaccination in Rangoon Town and port has recently received the approval of the Governor-General and came into force on the 24th of May 1909. It provides for the compulsory vaccination of all persons coming to Burma to work as labourers, who are unprotected from small-pox, and gives additional powers to the Municipal Committee for vaccinating the occupants of factories and lodging houses.

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

RANGOON, 25th May 1909.

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A.—VACCINATION

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

No.	Circles and Districts.	Population of district according to census of 1901.	Average population per square mile.	Average number of vaccinators employed throughout the year.	Total number of persons vaccinated.		Average number of persons vaccinated by each vaccinator.	PRIMARY VACCINATION.					
								Total.	Successful.			Un-known.	
									Under one year.	One and under six years.	Total of all ages.		
1	2	3	4	5	6		7	8	9	10	11	12	
ARAKAN DIVISION.													
1	Akyab	481,666	94	10	7,721	6,855	14,576	1,458	13,935	1,966	5,583	12,521	371
2	Hill Tracts, Northern Arakan	20,682	4	2	805	484	1,289	645	1,154	9	188	1,067	31
3	Kyaukpada	108,927	38	6	5,700	5,509	11,209	1,864	10,246	1,235	3,976	9,256	559
4	Sandoway	90,927	24	3	1,127	960	2,087	696	1,391	211	922	1,779	...
	Total	762,102	41	21	15,353	13,808	29,161	1,389	27,902	3,441	10,669	24,623	1,061
PAU DIVISION.													
5	Rangoon	252,155	8,906	* 3	25,402	3,784	29,246	9,749	6,543	3,539	1,221	5,381	1,098
6	Hautawaddy	407,637	105	6	2,006	2,723	5,324	887	4,493	548	2,741	3,566	183
7	Pegu	339,572	79	8	3,725	3,116	7,441	930	6,505	1,297	4,301	6,482	199
8	Tharrawaddy	395,570	139	8	5,007	5,149	10,155	1,270	10,143	3,020	5,332	9,215	194
9	Prome	305,804	125	12	7,033	6,025	13,059	1,085	12,449	4,267	6,079	11,438	372
	Total	1,330,635	139	37	43,223	31,493	65,216	1,763	40,893	12,661	19,674	36,377	2,046
IRRAWADDY DIVISION.													
10	Maubin	288,347	178	4	1,610	1,573	3,183	796	2,878	791	1,533	2,801	...
11	Pyawon	221,929	106	6	1,465	959	2,044	334	1,633	654	761	1,338	...
12	Bassein	331,427	95	10	7,925	6,500	14,425	1,450	13,245	3,313	6,345	12,182	6,165
13	Heinada	404,553	109	15	7,463	6,938	14,391	959	14,001	4,229	6,318	12,091	1,035
14	Myawngmya	279,338	105	7	4,575	4,477	9,052	1,263	8,902	2,605	4,381	8,112	390
	Total	1,693,600	124	42	22,631	20,447	43,128	1,027	40,659	11,002	19,338	36,724	2,052
TENASSERIM DIVISION.													
15	Amherst	300,173	43	9	13,261	7,839	21,100	2,341	20,431	3,351	7,515	18,708	627
16	Tavoy	100,979	21	5	5,071	6,150	11,221	2,244	7,247	1,245	2,745	5,626	1,060
17	Mergui	88,744	9	4	3,439	3,099	6,538	1,635	6,474	714	2,269	5,697	142
18	Toungoo	279,315	45	7	4,355	3,034	7,389	1,066	6,323	1,979	2,213	5,897	506
19	Thabon	343,310	65	6	4,190	4,692	8,882	1,480	7,780	2,486	4,633	7,917	...
20	Salween	37,837	14	1	793	631	1,324	1,324	739	17	159	612	...
	Total	1,160,568	32	32	31,109	25,315	56,424	1,764	49,756	9,093	19,604	43,827	2,335
MANDALAY DIVISION.													
21	Mandalay	306,507	173	10	7,112	6,516	13,628	1,363	11,976	6,193	4,739	11,032	8
22	Bhamo	79,515	19	4	2,074	1,819	3,893	973	3,412	1,193	1,170	2,896	282
23	Katha	176,223	25	4	2,091	1,792	3,883	972	3,886	591	1,826	3,618	91
24	Ruby Mines	87,694	16	4	1,708	1,309	3,017	809	3,337	701	1,045	2,179	594
25	Myittha	67,399	6	2	720	563	1,283	642	1,274	124	633	1,114	15
	Total	777,538	26	24	13,708	12,219	25,927	1,080	23,779	9,007	9,413	21,439	990
SAGAING DIVISION.													
26	Shwebo	266,801	51	8	5,081	6,063	12,244	1,531	11,991	3,109	7,399	11,042	374
27	Sagaing	282,633	152	6	9,873	10,943	20,816	3,469	15,382	7,276	7,829	14,565	356
28	Lower Chindwin	276,333	79	6	7,511	7,340	14,851	2,480	12,984	5,438	6,492	12,796	2
29	Upper Chindwin	141,551	8	6	8,670	3,682	12,352	1,315	7,352	617	3,516	6,217	453
	Total	1,000,488	33	26	27,035	28,228	55,263	2,127	47,709	16,440	24,666	44,021	1,215
MAGWE DIVISION.													
30	Thayetmyo	239,706	50	8	6,941	7,090	13,971	1,742	13,734	2,704	5,037	11,394	847
31	Pakboku	256,439	57	9	7,937	7,416	15,353	1,708	14,975	3,211	5,483	13,886	478
32	Minbu	233,377	71	7	4,150	4,183	8,333	1,186	8,257	2,119	4,308	7,772	118
33	Magwe	245,708	55	8	5,748	6,800	12,548	1,575	12,347	3,990	7,666	11,539	265
	Total	1,076,230	63	32	24,745	25,479	50,225	1,570	49,214	11,934	20,439	44,591	1,708
MEIKTILA DIVISION.													
34	Meiktila	252,305	116	6	3,558	3,138	6,195	1,033	6,184	861	4,804	6,009	34
35	Yamethia	213,197	57	7	4,305	4,808	9,743	1,393	9,590	3,322	5,008	8,417	503
36	Kyaukse	141,253	111	3	2,145	2,215	4,363	1,454	4,227	2,497	1,882	3,779	71
37	Myingyan	355,092	114	7	6,076	6,896	13,062	1,907	13,078	3,426	6,292	11,723	339
	Total	962,847	91	23	16,817	17,047	33,864	1,472	33,079	10,006	17,576	29,998	1,047
SHAN STATES.													
38	Northern Shan States	321,490	22	8	1,092	940	2,032	254	2,001	19	655	1,417	384
39	Southern Shan States	316,354	19	11	9,589	9,004	18,594	1,699	15,434	2,379	7,570	16,035	627
	Total	1,137,444	20	19	10,672	9,944	20,616	1,085	20,425	2,398	8,225	17,062	891
CHIN HILLS.													
40	Chin Hills	87,189	11	3	1,677	755	2,432	811	2,387	1	472	1,687	493
	GRAND TOTAL	10,477,508	45	209	297,631	174,675	382,326	1,476	335,415	87,543	152,626	300,928	13,538

Foot-note.—The figures given under "Primary Vaccination" and "Re-vaccination" respectively do not include second operations; these operations in the figures shown in this

* This number excludes 16 Registrars

† Statistics of Pwau have

NOTE.—Area and population of the

DEPARTMENT.

Province of Burma during the year 1908-09 (Paragraphs 3, 4, 6 and 8).

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
641	418	30	90-97	68-41	26-86	1-23	4-68	11,274	22-41	154	3-22	1
131	108	...	94-68	82-44	56-81	2-68	...	939	45-39	...	...	2
363	188	106	92-68	73-15	55-94	7-92	29-20	5,631	23-35	54	3-32	3
124	83	...	90-63	28-61	19-23	...	...	2,043	12-53	6	1-07	4
1,359	747	136	91-74	66-52	33-29	3-80	10-80	19,892	26-10	214	2-28	
22,703	9,516	6,767	98-92	59-71	59-08	16-78	29-61	12,221	50-35	377	1-52	5
831	323	26	89-70	40-12	8-56	4-67	3-13	3,616	7-68	556	1-18	6
476	404	18	91-80	88-21	22-25	2-56	3-78	5,991	22-13	108	1-61	7
13	7	...	91-62	53-85	23-31	1-91	...	12,351	20-27	282	2-29	8
810	337	209	96-26	56-07	32-18	3-04	25-80	14,498	39-63	191	1-12	9
24,533	10,587	7,020	94-86	52-43	25-80	5-07	28-27	52,776	28-29	1,683	1-92	
305	139	...	97-32	45-57	10-38	...	...	6,258	12-43	416	1-83	10
871	249	2	94-30	67-48	7-94	1-12	5-54	...	...	...	...	11
1,233	512	162	96-38	46-93	32-43	4-57	12-33	15,807	40-38	238	1-60	12
390	165	31	93-40	45-96	25-29	7-54	7-95	31,696	65-41	300	1-62	13
150	68	10	95-30	48-57	22-25	4-38	6-67	8,569	30-15	271	1-95	14
2,469	1,133	205	95-12	50-54	22-76	5-05	8-30	62,399	37-47	1,222	1-73	
669	333	56	91-47	54-32	63-43	3-07	8-37	18,347	61-12	113	1-38	15
3,974	1,580	324	90-34	34-52	62-51	14-63	8-15	9,015	82-24	4	0-1	16
64	32	5	89-97	54-24	64-26	2-19	7-81	5,309	19-83	7	0-1	17
1,904	512	207	94-41	46-87	30-09	8-32	15-67	7,493	20-66	127	1-49	18
162	17	...	90-17	18-67	21-10	...	...	5,540	17-00	133	1-39	19
555	241	2	82-81	41-85	22-62	...	...	745	19-68	...	...	20
6,698	2,398	591	92-42	32-29	32-56	4-09	8-87	46,784	40-35	385	1-35	
1,658	1,098	11	97-24	66-67	34-73	1-07	6-66	11,592	31-60	118	1-84	21
451	187	91	92-52	47-95	38-77	8-26	13-92	3,253	40-08	...	...	22
...	...	...	90-34	...	20-53	2-34	...	2,807	16-10	...	...	23
...	...	...	82-44	...	24-85	18-25	...	2,620	28-73	...	...	24
9	2	...	88-48	22-22	16-26	1-18	...	1,044	15-49	...	...	25
2,148	1,287	102	91-05	62-90	22-24	4-16	4-75	21,241	27-33	...	...
933	158	38	95-05	73-49	39-04	3-12	15-02	11,042	38-49	31	1-11	26
6,454	3,991	230	96-93	78-19	65-65	2-31	6-07	13,444	47-98	88	1-31	27
1,897	1,214	13	91-57	69-75	51-05	1-02	6-60	12,500	45-33	16	1-06	28
...	...	...	90-51	...	40-23	6-37	...	9,069	55-68	...	...	29
7,684	5,463	381	95-97	76-84	50-06	2-55	5-02	46,485	46-46	135	1-16	
237	151	28	88-41	72-35	43-16	6-17	11-61	12,947	53-60	23	1-10	30
375	83	37	93-77	24-26	39-18	3-19	9-87	8,150	22-86	178	1-58	31
46	25	3	95-49	53-14	33-41	1-43	6-62	6,093	20-11	2	0-1	32
251	165	45	93-51	47-44	30-10	2-15	17-33	11,172	45-28	33	1-13	33
909	424	113	93-62	53-27	41-32	3-46	12-43	38,203	35-55	230	1-24	
12	11	...	98-51	91-67	23-58	1-36	...	8,954	25-49	40	1-16	34
153	114	27	91-40	33-37	33-37	5-25	17-65	10,003	41-13	52	1-39	35
136	121	5	90-93	22-37	27-61	1-68	5-68	4,620	22-77	1	0-0	36
484	223	47	92-33	51-03	23-55	2-97	9-71	11,115	31-22	142	1-40	37
780	471	79	93-65	66-71	30-69	3-17	10-06	34,701	34-26	275	1-28	
31	19	6	88-56	76-00	4-47	18-19	12-35	4,693	14-62	...	...	38
150	130	13	87-26	94-89	12-30	2-68	8-67	5,154	9-99	...	...	39
181	149	19	87-21	91-28	15-11	4-36	10-50	12,848	11-30	...	...
45	16	27	89-07	88-89	19-53	20-65	60-00	1,347	16-45	...	...	40
45,911	22,675	8,676	93-58	59-30	30-89	4-13	18-49	336,666	32-13	...	...

performed in consequence of the failure of a first Vaccination or re-vaccination, but the orders of the Government of India to include statement will be observed in future statements.
 Vaccinators whose work has been included,
 been included in Maubin.
 Pakokku Chin Hills have been excluded.

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 super- vising officers.	Pay.	Vaccinators.	Pay.	Clerks.	Pay.	Feeds, etc.	Pay.		
1	2	3	4	5	6	7	8	9	10	11	12	13	
ARAKAN DIVISION.													
			Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.	Rs. A. P.	
1	Akyab ...	...	...	2	825 0 0	10	2,603 11 10	...	...	...	...	3,428 11 10
2	Hill Tracts, Northern Arakan...	...	...	...	...	...	672 6 8	...	...	...	...	672 6 8
3	Kyaukpadaung ...	...	...	...	...	...	1,838 9 6	...	...	...	...	1,838 9 6
4	Sandaway ...	...	...	1	100 0 0	3	562 9 10	...	...	...	...	562 9 10
	Total	...	...	4	925 0 0	21	5,777 5 10	...	...	...	...	6,702 5 10
PAGO DIVISION.													
5	Rangoon...	...	...	...	...	3	2,905 12 0	...	...	4	573 3 0	3,478 15 0
6	Hanthawaddy ...	...	...	3	600 0 0	6	1,641 0 6	...	...	...	...	2,241 0 6
7	Paga ...	...	...	3	390 0 0	8	2,354 7 6	...	...	...	...	2,744 7 6
8	Tharrawaddy ...	...	...	1	610 0 0	8	2,373 5 11	...	...	...	...	2,983 5 11
9	Prone ...	...	...	1	600 0 0	12	3,425 8 0	...	...	...	...	4,025 8 0
	Total	...	...	8	2,100 0 0	37	12,792 1 11	...	...	4	573 3 0	13,365 4 11
IBRAWADDY DIVISION.													
10	Ma-abin ...	...	...	1	600 0 0	4	1,012 14 5	...	...	...	...	1,612 14 5
11	Pyawon ...	...	...	1	600 0 0	6	1,839 15 11	...	...	...	...	2,439 15 11
12	Bassein ...	...	...	2	810 0 0	10	2,573 5 7	...	...	...	...	3,413 5 7
13	Henzada ...	...	...	1	600 0 0	15	4,102 8 8	...	...	...	...	4,702 8 8
14	Myaungmya ...	...	...	1	600 0 0	7	1,794 11 2	...	...	...	...	2,394 11 2
	Total	...	...	6	3,210 0 0	42	11,220 7 9	...	...	...	...	14,440 7 9
TENASSERIM DIVISION.													
15	Amherst ...	...	...	2	1,200 0 0	9	2,441 4 0	1	120 0 0	...	...	3,761 4 0
16	Tatoy ...	...	...	1	600 0 0	5	1,185 9 0	...	...	...	...	1,785 9 0
17	Mergui ...	...	...	1	600 0 0	4	976 8 0	...	...	...	...	1,576 8 0
18	Tongoo ...	...	...	1	600 0 0	7	1,457 0 0	...	...	...	...	2,057 0 0
19	Thaon ...	...	...	1	591 9 10	6	1,862 0 6	...	...	...	...	2,453 10 4
20	Salween ...	...	...	...	...	1	36 0 0	...	...	...	...	36 0 0
	Total	...	...	6	3,591 9 10	32	8,823 5 6	1	120 0 0	...	...	12,034 15 4
MANDALAY DIVISION.													
21	Mandalay ...	...	...	1	599 0 0	10	3,841 14 0	...	...	...	...	4,440 14 0
22	Bhamo ...	...	...	...	...	4	1,351 2 5	...	...	...	...	1,351 2 5
23	Katha ...	...	...	...	...	4	8 10 8	...	...	...	...	8 10 8
24	Ruby Mines ...	...	...	1	56 6 10	4	1,510 2 0	...	...	...	...	1,566 8 10
25	Myittha ...	...	...	...	...	2	711 6 1	...	...	...	...	711 6 1
	Total	...	...	2	655 6 10	24	7,553 3 2	...	...	...	...	8,210 10 0
SAGAING DIVISION.													
26	Shwebo ...	...	...	1	591 10 8	8	2,041 1 5	...	...	...	...	2,632 12 1
27	Sagaing ...	...	...	...	...	6	1,700 9 1	...	...	...	...	1,700 9 1
28	Lower Chindwin ...	...	...	1	550 0 0	6	1,680 8 11	...	...	...	...	2,230 8 11
29	Upper Chindwin ...	...	...	...	...	6	1,867 7 10	...	...	...	...	1,867 7 10
	Total	...	...	4	1,141 10 8	25	7,289 11 5	...	...	...	...	8,431 5 11
MAGWE DIVISION.													
30	Thayetmye ...	...	...	1	600 0 0	8	2,259 7 2	...	...	...	...	2,859 7 2
31	Pakko ...	...	...	1	600 0 0	9	2,314 7 8	...	...	...	...	2,914 7 8
32	Minbu ...	...	...	...	...	...	1,916 3 1	...	...	...	...	1,916 3 1
33	Magwe ...	...	...	2	840 0 0	8	1,993 4 2	...	...	...	...	2,833 4 2
	Total	...	...	5	1,840 0 0	32	8,183 6 1	...	...	...	...	10,028 6 1
MEIKTILA DIVISION.													
34	Meiktila Vaccine Depot	1	600 0 0	1	1,200 0 0	2	1,050 0 0	8	1,292 13 3	5,034 5 3
35	Meiktila ...	...	...	...	...	...	1,514 5 2	...	...	...	...	6,632 15 7
36	Yamethin ...	...	...	...	...	...	1,892 5 3	...	...	...	...	2,547 5 3
37	Kyaukse ...	...	...	...	...	...	935 15 0	...	...	...	...	935 15 0
38	Myingyan ...	...	...	1	600 0 0	7	1,532 6 2	...	...	...	...	2,132 6 2
	Total	...	...	1	600 0 0	6	7,593 10 5	23	6,613 7 9	2	1,050 0 0	17,289 15 5
SHAN STATES.													
39	Northern Shan States ...	...	...	2	750 0 0	8	1,393 5 6	...	...	...	...	2,143 5 6
40	Southern Shan States ...	...	...	5	475 0 0	11	3,109 7 7	...	...	8	1,768 4 11	5,332 12 6
	Total	...	...	7	1,225 0 0	19	4,502 13 1	...	...	8	1,768 4 11	7,476 2 0
41	Chin Hills ...	...	...	...	...	3	757 9 11	...	...	...	...	757 9 11
	GRAND TOTAL	...	1	600 0 0	48	22,412 5 9	259	73,420 8 3	3	1,780 0 0	20	3,634 5 2	1,01,447 3 2

* Under training

† Apprentice

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

DEPARTMENT.

Province of Burma during the year 1908-09 (Paragraphs 1 and 11).

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.	
1,129 8 2	.....	4,558 4 0	.....	.....	4,206 4 0	352 0 0	.....	4,558 4 0	12,939	0 5 8	1
166 1 0	.....	828 7 8	.....	828 7 8	.....	.....	.....	828 7 8	1,175	0 11 8	2
1,285 8 6	.....	2,924 2 0	.....	.....	2,813 2 7	110 15 5	.....	2,924 2 0	9,444	0 4 11	3
600 10 0	.....	1,563 3 10	.....	.....	1,443 3 10	120 0 0	.....	1,563 3 10	1,512	0 13 10	4
3,171 11 8	.....	9,874 1 6	.....	828 7 8	8,462 10 8	581 15 5	.....	9,874 1 6	25,370	0 6 3	
478 2 9	4,434 2 8	8,441 4 5	.....	521 14 0	.....	7,919 6 5	.....	8,441 4 5	14,897	0 9 1	5
1,564 10 3	.....	3,876 10 9	.....	.....	3,405 10 9	.....	.....	3,405 10 9	4,189	0 14 6	6
1,102 6 2	.....	3,846 13 8	.....	.....	3,166 13 8	740 0 0	.....	3,846 13 8	6,888	0 8 11	7
1,519 1 9	.....	4,534 7 8	.....	.....	4,534 7 8	.....	.....	4,534 7 8	9,222	0 7 10	8
1,899 1 6	.....	5,464 9 6	.....	.....	4,519 9 6	915 0 0	.....	5,464 9 6	11,770	0 7 5	9
6,093 6 5	4,434 2 8	26,092 14 0	.....	521 14 0	15,936 9 7	9,574 6 5	.....	26,092 14 0	46,964	0 8 11	
550 1 0	.....	1,962 15 5	.....	.....	1,962 15 5	.....	.....	1,962 15 5	2,940	0 10 8	10
1,856 11 0	.....	3,696 10 11	.....	.....	3,128 13 2	567 13 9	.....	3,696 10 11	1,787	2 1 1	11
1,493 10 9	.....	1,907 0 4	.....	.....	4,172 0 4	735 0 0	.....	4,970 0 4	12,694	0 6 2	12
1,791 2 6	.....	6,433 11 2	.....	.....	5,038 11 2	1,455 0 0	.....	6,493 11 2	12,153	0 8 6	13
1,219 14 0	.....	3,811 9 2	.....	.....	3,357 1 2	254 8 0	.....	3,611 9 2	5,180	0 7 1	14
6,111 7 8	.....	20,671 15 0	.....	.....	17,669 9 3	3,002 5 9	.....	20,671 15 0	37,887	0 8 9	
1,290 15 6	27 15 6	5,180 3 0	.....	.....	4,119 3 0	1,061 0 0	.....	5,180 3 0	12,041	0 4 4	15
619 8 0	.....	2,406 1 0	.....	.....	2,163 0 0	243 1 0	.....	2,406 1 0	6,896	0 5 7	16
238 12 9	.....	2,510 4 9	.....	.....	2,270 4 9	240 0 0	.....	2,510 4 9	5,723	0 7 0	17
1,238 2 0	.....	3,395 2 0	.....	.....	2,915 2 0	480 0 0	.....	3,395 2 0	5,779	0 9 5	18
1,228 7 6	.....	3,892 1 0	.....	.....	3,377 1 0	505 0 0	.....	3,892 1 0	7,931	0 7 5	19
135 8 0	.....	435 8 0	.....	.....	435 8 0	.....	.....	435 8 0	866	0 8 2	20
5,545 5 9	27 15 6	17,609 4 7	.....	.....	15,283 3 7	2,324 1 0	.....	17,609 4 7	46,225	0 6 1	
944 3 0	17 7 10	5,402 8 10	.....	3,211 12 7	.....	2,190 12 3	.....	5,402 8 10	12,730	0 6 9	21
632 6 0	.....	1,996 8 6	.....	1,586 6 5	.....	407 2 0	.....	1,996 8 6	3,093	0 9 10	22
322 8 6	.....	1,561 3 2	.....	851 3 2	.....	.....	.....	1,561 3 2	3,093	0 8 9	23
351 15 6	.....	1,948 8 4	.....	1,122 7 11	.....	.....	796 0 5	1,948 8 4	2,173	0 14 4	24
296 12 11	1 14 0	1,010 1 0	.....	1,010 1 0	.....	.....	.....	1,010 1 0	1,116	0 14 6	25
2,577 13 11	19 5 10	11,107 13 9	.....	7,813 15 1	.....	2,497 14 3	796 0 5	11,107 13 9	22,728	0 7 10	
1,250 10 6	8 8 0	3,886 14 7	.....	3,846 14 7	.....	240 0 0	.....	3,886 14 7	11,300	0 5 7	26
928 12 0	.....	2,629 5 1	.....	2,629 5 1	.....	.....	.....	2,629 5 1	1,856	0 2 3	27
441 5 9	6 12 0	2,718 10 8	.....	2,384 10 8	.....	334 0 0	.....	2,718 10 8	14,110	0 8 1	28
1,113 15 4	.....	2,981 7 2	.....	2,981 7 2	.....	.....	.....	2,981 7 2	6,217	0 7 8	29
3,774 11 7	10 4 0	12,215 5 6	.....	11,642 5 6	.....	574 0 0	.....	12,215 5 6	50,083	0 8 11	
976 4 0	.....	3,835 11 2	.....	.....	3,225 11 2	610 0 0	.....	3,835 11 2	1,1545	0 5 4	30
1,551 5 6	.....	4,465 13 9	.....	4,300 13 2	.....	165 0 0	.....	4,465 13 2	13,919	0 5 1	31
686 1 0	.....	2,442 4 1	.....	1,942 4 1	.....	500 0 0	.....	2,442 4 1	7,797	0 5 0	32
1,013 7 0	.....	3,561 11 2	.....	3,061 11 2	.....	500 0 0	.....	3,561 11 2	11,704	0 4 7	33
4,067 1 6	.....	14,095 7 7	.....	9,064 12 5	3,225 11 2	1,775 0 0	.....	14,095 7 7	45,015	0 5 0	
616 12 0	4,132 11 7	9,783 13 6	.....	9,783 13 6	.....	.....	.....	9,783 13 6	.....	.....
787 4 3	.....	7,440 3 10	.....	7,195 3 10	.....	245 0 0	.....	7,440 3 10	6,020	1 3 9	34
961 0 3	.....	3,508 5 6	.....	2,872 5 6	.....	636 0 0	.....	3,508 5 6	2,603	0 6 6	35
456 2 0	.....	1,412 1 0	.....	1,412 1 0	.....	.....	.....	1,412 1 0	3,900	0 5 10	36
975 1 0	.....	3,144 7 2	.....	2,865 15 2	.....	287 8 0	.....	3,144 7 2	11,946	0 4 3	37
3,706 4 0	4,132 11 7	25,288 15 0	.....	24,120 7 0	.....	1,168 8 0	.....	25,288 15 0	30,419	0 13 3	
1,832 8 6	.....	3,975 12 0	.....	648 12 10	.....	.....	3,331 15 2	3,975 12 0	1,436	2 12 4	38
2,271 0 0	70 12 0	7,694 8 6	.....	7,694 8 6	.....	.....	.....	7,694 8 6	1,5735	0 7 10	39
4,103 6 6	70 12 0	11,670 4 6	.....	8,338 5 4	.....	.....	3,331 15 2	11,670 4 6	17,191	0 10 10	
462 8 0	.....	1,220 1 11	.....	1,220 1 11	.....	.....	.....	1,220 1 11	1,703	0 11 6	41
39,704 12 7	8,635 8 7	1,49,947 3 4	.....	61,580 4 11	60,639 12 0	21,499 2 10	4,127 15 7	1,49,947 3 4	3,23,603	0 7 5	

at Meiktila.

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
ARAKAN DIVISION.						
1	Akyab	...	...	...	...	...
2	Hill Tracts, Northern Arakan	...	...	...	...	...
3	Kyaukpada	...	...	...	...	...
4	Sandaway	...	...	...	...	...
	Total	...	...	1,681	...	1,493
PAU DIVISION.						
5	Rangoon	...	...	...	...	...
6	Hasthawaddy	...	...	...	...	...
7	Paga	...	...	...	...	...
8	Tharawaddy	...	...	...	...	...
9	Prome	...	...	...	...	...
	Total	...	...	2,306	...	899
ISRAWADDY DIVISION.						
10	Maubin	...	...	...	...	...
11	Pyawb	...	...	...	...	...
12	Basscin	...	...	...	...	...
13	Henzada	...	...	...	...	...
14	Myaungmya	...	...	...	...	...
	Total	...	...	3,520	...	741
TENASSERIM DIVISION.						
15	Amherst	...	...	...	...	...
16	Tavoy	...	...	...	...	...
17	Mergui	...	...	...	...	...
18	Toungoo	...	...	...	...	...
19	Thatun	...	...	...	...	...
20	Salween	...	...	...	...	...
	Total	...	...	345	...	321
MANDALAY DIVISION.						
21	Mandalay	...	...	...	...	...
22	Bhamo	...	...	...	...	...
23	Katha	...	...	...	...	...
24	Ruby Mines	...	...	...	...	...
25	Myittha	...	...	...	...	...
	Total	...	...	1,342	...	706
SAGAING DIVISION.						
26	Shwebo	...	...	...	...	...
27	Sagaing	...	...	...	...	...
28	Lower Chindwin	...	...	...	...	...
29	Upper Chindwin	...	...	...	...	...
	Total	...	...	345	...	325
MAGWE DIVISION.						
30	Thayetmyo	...	...	...	...	...
31	Pakokko	...	...	...	...	...
32	Minbu	...	...	...	...	...
33	Magwe	...	...	...	...	...
	Total	...	...	1,631	...	1,096
MEIKTILA DIVISION.						
34	Meiktila	...	...	...	...	...
35	Yamethin	...	...	...	...	...
36	Kyaukse	...	...	...	...	...
37	Myingyan	...	...	...	...	...
	Total	...	...	543	...	275
SHAN STATES.						
38	Northern Shan States	...	...	...	...	...
39	Southern Shan States	...	...	...	...	...
	Total	...	...	330	...	183
40	Chin Hills	...	...	...	...	...
	GRAND TOTAL	...	...	14,087	...	7,562

VACCINATION.

Province of Burma for the year 1908-09 (Paragraph 7).

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	12	13	14	15	16	17	18	19
...	...	...	...	...	...	...	...	...	...	...	1
98	562	1,031	120	20	13	...	100-00	65-10	...	...	2
1	5	257	8	125	95	12	94-07	84-07	9-87	9-60	3
				43	29	...	94-49	67-44	1-09	...	4
99	567	1,290	123	158	137	12	94-16	77-84	8-24	6-38	
...	...	...	...	...	...	...	...	...	...	...	5
46	218	326	8	1,907	1,556	4	97-31	81-77	...	...	6
20	29	54	...	...	...	...	100-00	...	...	...	7
1	3	7	...	...	...	...	100-00	...	...	...	8
...	...	...	...	...	...	...	...	...	...	...	9
67	250	357	8	1,907	1,556	4	97-73	81-77	...	...
...	...	...	...	...	...	...	...	...	...	...	10
8	27	82	2	724	493	45	100-00	72-61	2-83	6-22	11
...	...	...	...	...	...	...	...	...	...	...	12
34	72	131	7	...	...	35	97-76	53-53	4-96	17-07	13
43	156	229	20	1,045	315	1	97-37	29-16	6-99	...	14
...	...	187	22	763	331	141	82-90	53-04	9-57	18-43	
84	263	609	51	2,779	1,230	222	95-51	48-10	6-88	7-99	
...	...	...	...	...	...	...	...	...	...	...	15
5	24	46	2	5	8	...	92-00	60-00	3-85	...	16
...	...	...	...	...	...	...	...	...	...	...	17
9	38	91	...	...	...	...	98-91	...	...	...	18
13	17	23	...	9	1	...	93-42	11-11	...	...	19
20	19	59	...	3	1	...	93-65	33-33	...	...	20
2	20	31	...	7	...	...	85-84	...	...	...
59	113	300	2	24	5	...	94-01	20-83	...	...
...	...	...	...	...	...	...	...	...	...	...	21
53	65	169	5	243	188	58	96-57	64-83	2-78	16-67	22
...	...	...	...	...	...	...	...	...	...	...	23
...	...	417	49	288	203	34	93-29	79-92	9-88	11-81	24
...	...	12	...	...	...	...	100-10	...	...	...	25
1	5	18	...	...	...	...	100-00	...	...	...
54	76	616	54	656	391	92	91-43	71-83	7-03	14-47	
...	...	...	...	...	...	...	...	...	...	...	26
6	31	42	...	10	10	...	100-00	100-00	...	...	27
9	3	12	...	...	...	...	100-00	...	...	...	28
3	8	11	...	1	...	...	100-10	...	...	...	29
43	83	231	7	9	2	2	91-30	28-57	2-62	22-22	
61	127	296	7	20	12	2	93-08	66-67	2-13	10-00	
...	...	...	...	...	...	...	...	...	...	...	30
190	216	640	17	535	376	2	90-27	70-54	2-34	...	31
8	53	131	60	...	...	...	95-45	...	13-25	...	32
...	...	...	...	...	...	...	...	...	...	...	33
27	83	110	...	...	...	...	93-21	...	...	...
205	352	941	77	535	376	2	92-35	70-54	7-03	...	
...	...	...	...	...	...	...	...	...	...	...	34
59	81	192	21	268	161	43	95-92	71-56	9-45	16-04	35
39	8	47	3	...	...	...	94-00	...	5-66	...	36
...	...	...	...	...	...	...	...	...	...	...	37
...	
98	89	239	24	268	161	43	95-22	71-56	8-73	16-04	
...	...	...	...	...	...	...	...	...	...	...	38
...	11	87	70	58	26	...	89-69	62-07	41-92	...	39
2	10	15	1	18	13	...	100-00	100-00	6-25	...	40
...	
2	21	102	71	78	54	...	91-07	71-05	38-90	...	
25	197	457	1,540	92	12	25	91-63	17-91	7-6-12	27-17	49
774	2,062	5,287	1,952	5,525	3,934	402	91-24	61-25	22-81	6-16	

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.
	1899-1900.		1900-1901.		1901-02.		1902-03.		1903-04.	
	1	2	3	4	5	6	7	8	9	10
Government	122,193	112,483	106,629	95,802	91,530	83,082	120,284	101,106	135,294	109,016
Municipal	71,287	60,705	62,838	58,008	52,227	46,605	55,362	47,049	53,775	44,879
Local Funds	200,518	248,803	215,111	198,789	181,107	168,238	168,218	149,585	179,917	160,016
Native States	1,764	1,631	1,574	1,420	1,322	1,353	7,003	5,451	6,712	5,614
Dispensary	6,033	5,421	6,053	4,229	3,971	3,033	6,022	5,038	8,924	6,915
ARMY.										
Europeans	28	19	23	10	20	9	25	11	...	...
Natives	782	344	391	207	114	67	359	233	330	222
Total	463,605	438,406	392,710	358,055	333,791	300,722	355,013	308,563	385,102	327,178

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

No.	Districts.	TOTAL NUMBER OF PERSONS VACCINATED.		TOTAL NUMBER INSPECTED			
				By Deputy Sanitary Commissioner or Civil Surgeons.		By Native Superintendents or other Inspecting Officers.	
		Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.
1	2	3	4	5	6	7	8
1	Akrab	13,085	641	447	359	4,079	73
2	Hill Tracts, Northern Arakan	11,100	151	...	...	121	22
3	Kyaukpada	12,062	488	1,129	52	2,171	118
4	Sandoway	2,238	167	425	28	275	53
5	Rangoon	65,43	22,703	460	2,152	4,497	10,735
6	Hanthawaddy	4,531	2,733	326	1,903	4,247	812
7	Pegu	7,019	476	221	...	8,612	217
8	Tharrawaddy	10,159	13	338	...	6,306	...
9	Prome	12,249	810	1,221	47	5,714	550
10	Ma-ohin	2,902	1,029	235	631	2,766	1,020
11	Pyapon	1,633	871	...	...	1,461	236
12	Bassein	13,386	1,453	254	87	4,793	929
13	Heuza	14,237	1,475	709	992	4,285	828
14	Myaungmya	9,122	915	1,625	764	6,528	96
15	Amherst	20,483	674	625	5	15,414	643
16	Tavoy	7,247	3,074	13,37	937	4,198	2,111
17	Mergui	6,566	64	605	35	3,482	64
18	Toungoo	6,161	1,313	169	359	3,778	553
19	Thatun	8,843	152	2,097	...	4,477	...
20	Salween	777	69	43	3	61	4
21	Mandalay	12,160	2,056	1,495	272	8,310	501
22	Bhamo	3,412	481	576	47	93	...
23	Katha	4,812	256	605	260	431	232
24	Ruby Mines	3,249	...	101	...	133	...
25	Myittha	1,992	9	161	4	186	...
26	Shwabo	12,083	263	308	...	3,912	40
27	Sagaing	15,394	5,434	1,787	172	...	...
28	Lower Chindwin	12,995	18,93	2,475	345	8,128	793
29	Upper Chindwin	7,612	9	319	...	253	7
30	Thayetmyo	14,460	772	2,310	401	9,036	675
31	Pakokko	15,238	575	2,651	213	7,316	138
32	Mimbu	8,267	46	2,124	...	839	18
33	Magwe	12,439	251	324	12	1,607	122
34	Meiktila	6,406	230	690	211	705	19
35	Yamethin	9,643	133	1,575	102	6,130	1
36	Kyaukse	4,327	126	380	...	124	...
37	Myingyan	13,078	424	1,544	86	11,343	386
38	Northern Shan States	2,163	89	137	56	1,374	23
39	Southern Shan States	15,450	168	575	...	740	67
40	Chan Hills	4,410	137	30	...	427	...
GRAND TOTAL		32,977	53,436	33,559	11,311	140,07	21,242

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.
1904-05.		1905-06.		1906-07.		1907-08.		1908-09.		
7	8	9	10	11	12	13	14	15	16	
133,435	109,201	162,044	144,074	126,106	111,283	148,497	133,229	147,188	134,451	Government.
59,410	46,168	64,883	52,398	59,352	48,431	48,080	41,811	43,072	38,908	Municipal.
160,339	141,636	181,909	160,428	167,418	148,271	138,772	119,609	138,167	122,307	Local Funds.
6,986	4,939	8,197	6,083	6,833	5,739	5,203	4,330	6,991	5,362	Native States.
9,516	7,122	9,812	7,272	10,600	7,180	10,443	7,457	7,502	5,287	Dispensary.
										ARMY.
25	14	66	33	24	14	59	36	37	33	Europeans.
879	215	304	123	281	143	408	279	455	395	Natives.
381,090	300,365	427,303	371,376	370,704	321,081	351,442	306,761	343,459	306,646	Total.

by Inspecting Officers during the year 1908-09 (Paragraph 8).

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 Surgeons.		By Native Superin- tendents or other Inspecting Officers.		By Deputy Sanitary Commissioner or Civil Surgeons.		By Native Superin- tendents or other Inspecting Officers.				
Primary.	Re-vaccina- tion.	Primary.	Re-vaccina- tion.	Primary.	Re-vaccina- tion.	Primary.	Re-vaccina- tion.	Primary.	Re-vaccina- tion.	
9	10	11	12	13	14	15	16	17	18	19
82.1	56.01	29.27	11.39	91.23	72.70	94.07	34.25	90.97	63.41	1
...	...	10.43	14.57	...	...	100.00	100.00	91.68	82.44	2
9.36	10.66	15.00	23.16	93.89	53.88	80.61	81.96	92.68	73.15	3
18.99	16.77	12.29	81.14	93.88	...	95.27	69.28	90.63	26.61	4
7.03	9.48	68.73	47.80	98.26	53.35	90.27	61.22	93.82	69.71	5
8.20	69.50	87.91	29.66	93.94	81.77	89.59	34.36	89.70	40.12	6
8.15	...	81.00	45.39	99.55	...	96.09	72.81	95.20	83.21	7
8.63	...	64.15	...	93.64	...	84.52	...	92.62	59.85	8
12.42	5.80	46.63	67.90	96.91	82.23	88.40	49.09	96.26	60.07	9
7.60	61.32	30.38	99.13	98.67	69.60	97.22	61.27	97.32	45.57	10
14.33	23.45	89.47	63.61	98.29	90.80	92.74	63.47	94.30	67.49	11
5.90	40.95	35.51	67.83	99.19	71.86	95.85	59.35	96.38	46.38	12
6.94	73.66	23.75	22.24	94.66	20.03	82.14	80.31	95.40	45.26	13
17.79	83.50	60.35	10.49	93.48	50.63	94.05	44.80	95.80	43.57	14
9.95	74	66.46	95.70	95.52	...	93.63	63.64	94.47	34.32	15
13.45	23.88	57.93	63.12	95.81	38.53	92.14	34.34	90.93	34.52	16
7.69	64.69	62.73	100.00	90.69	40.00	92.65	66.25	89.97	64.24	17
2.74	27.84	61.24	26.88	92.31	69.08	87.99	57.51	94.41	46.67	18
23.71	...	50.63	...	95.97	...	92.28	...	90.17	16.67	19
8.63	5.1	7.85	...	79.97	...	98.36	100.00	82.21	41.25	20
12.81	13.96	65.40	15.00	98.00	56.99	94.04	71.76	97.24	60.67	21
16.83	9.77	2.87	...	68.06	57.45	100.00	...	92.32	47.95	22
11.62	90.28	10.54	97.92	75.45	70.77	80.26	71.99	95.34	...	23
9.11	...	5.63	...	100.00	...	87.43	...	88.44	...	24
12.69	44.44	14.03	...	65.85	...	79.37	...	88.48	22.22	25
1.73	13.99	83.09	15.21	90.87	86.11	97.36	80.00	95.05	73.49	26
11.61	3.17	...	...	89.87	79.07	...	...	96.93	78.19	27
18.97	18.18	64.09	41.78	96.84	49.66	97.54	29.40	95.37	69.73	28
4.92	...	3.32	77.78	94.73	...	86.55	28.57	90.51	...	29
15.91	51.94	62.42	74.48	85.43	75.53	86.95	72.17	89.41	72.25	30
13.71	56.80	45.21	36.80	91.45	40.25	93.59	7.25	95.77	21.56	31
22.12	...	10.16	39.13	92.84	...	99.28	88.89	95.69	59.14	32
2.66	4.78	12.90	48.61	80.85	75.00	92.03	77.87	95.51	80.10	33
9.21	75.96	11.61	6.79	99.15	70.62	89.65	89.47	96.51	91.67	34
15.78	94.35	63.57	63	82.60	76.32	89.61	...	93.40	92.06	35
8.99	...	2.91	...	88.16	...	99.19	...	90.93	93.39	36
11.61	17.77	86.73	79.75	95.21	15.28	79.27	31.09	92.39	51.03	37
6.62	62.92	63.38	25.84	83.21	64.29	90.25	73.91	86.56	76.00	38
3.12	4.01	39.88	81.57	...	...	82.57	89.15	87.26	94.29	39
68	...	9.68	...	100.00	...	100.00	...	89.07	83.29	40
9.79	21.17	40.84	39.75	92.23	59.56	91.14	56.58	93.58	59.30	

APPENDIX A.

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

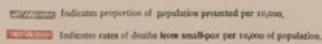
Official year.	Ratio per 10,000 successfully vaccinated.	Quinquennial mean.	Calendar year.	Ratio per 10,000 of mortality from small-pox.	Quinquennial mean.
1	2	3	4	5	6
1893-94	810.45	449.45	1893	6.53	4.62
1894-95	843.63		1894	3.85	
1895-96	445.91		1895	3.41	
1896-97	551.43		1896	3.70	
1897-98	586.66		1897	4.32	
1898-99	652.47	495.16	1898	10.70	7.24
1899-1900	673.31		1899	13.21	
1900-01	530.41		1900	6.76	
1901-02	352.69		1901	4.45	
1902-03	323.04		1902	2.82	
1903-04	353.65	344.74	1903	2.30	6.96
1904-05	324.89		1904	2.38	
1905-06	335.48		1905	10.10	
1906-07	369.61		1906	14.19	
1907-08	300.06		1907	2.75	
1908-09	297.50		1908	1.34	

APPENDIX B.

Statistics relating to the number of children under one year of age in towns available for vaccination and the number of successful operations performed on them (Paragraph 5).

Towns.	Number of births during the year 1908-09.	Number of deaths among children under one year during the year 1908-09.	Number available for vaccination after deducting the numbers who have died as shown in column 3.	Number of successful vaccinations on children under one year during the year ending 31st March 1909.	Date of extension of Vaccination Act into towns.
1	2	3	4	5	6
Akyab	673	157	516	315	August 1883.
Kyaukpada	69	17	52	10	April 1894.
Sandoway	93	15	78	38	September 1890.
Rangoon	5,131	1,460	3,671	4,164	April 1884.
Pegu	518	146	372	285	March 1893.
Prome	834	335	499	608	June 1890.
Paungda	445	69	376	329	August 1890.
Gyobingauk	521	83	438	461	February 1897.
Letpadan	332	72	260	136	January 1897.
Thonze	236	54	182	107	October 1897.
Ma-abin	149	41	108	144	October 1901.
Yandoon	349	75	274	194	January 1892.
Pyapon	275	67	208	240	November 1904.
Kyaukse	227	70	157	279	15th December 1904.
Kyaukse	939	221	718	651	September 1888.
Ngathalingyauk	181	39	142	20	February 1890.
Myingmya	114	16	98	120	June 1894.
Wakima	155	52	103	140	27th April 1907.
Henzada	753	172	581	394	January 1889.
Zalun	500	39	461	157	August 1891.
Myingmya	364	49	315	326	July 1889.
Kyaukse	322	46	276	389	August 1894.
Moulmein	1,363	211	1,152	1,311	August 1885.
Thaon	490	114	376	410	October 1891.
Kyaukse	205	28	177	123	March 1897.
Tavoy	742	128	614	553	December 1889.
Mergui	139	105	34	403	October 1891.
Teungoo	452	142	310	393	May 1889.
Shwegyia	218	40	178	224	January 1890.
Mandalay	5,510	2,173	3,337	4,121	August 1891.
Sagun	347	90	257	210	April 1894.
Monywa	236	40	196	299	March 1893.
Thayetmye	401	50	351	360	May 1889.
Althemye	420	65	355	435	May 1901.
Yaukse	210	80	130	210	February 1892.
Prithama	394	33	361	321	November 1891.
Myingmya	527	106	421	453	September 1891.
Shwebo	283	99	184	161	June 1894.
Pakokko	683	208	475	563	April 1892.
Kyaukse	246	75	171	188	May 1894.
Minbu	238	40	198	176	March 1896.
Sala	271	68	203	138	March 1896.
Tsangdingyi	202	101	101	51	February 1893.
Meikila	228	76	152	52	June 1906.
Bhamo	155	24	131	90	26th October 1894.
TOTAL	20,860	7,470	13,390	19,981	

Diagram showing the proportion of Population projected during the seven official years from 1902-03 to 1908-09 and the death-rate from Small-pox during the calendar year 1908 in districts where Registration is in force.

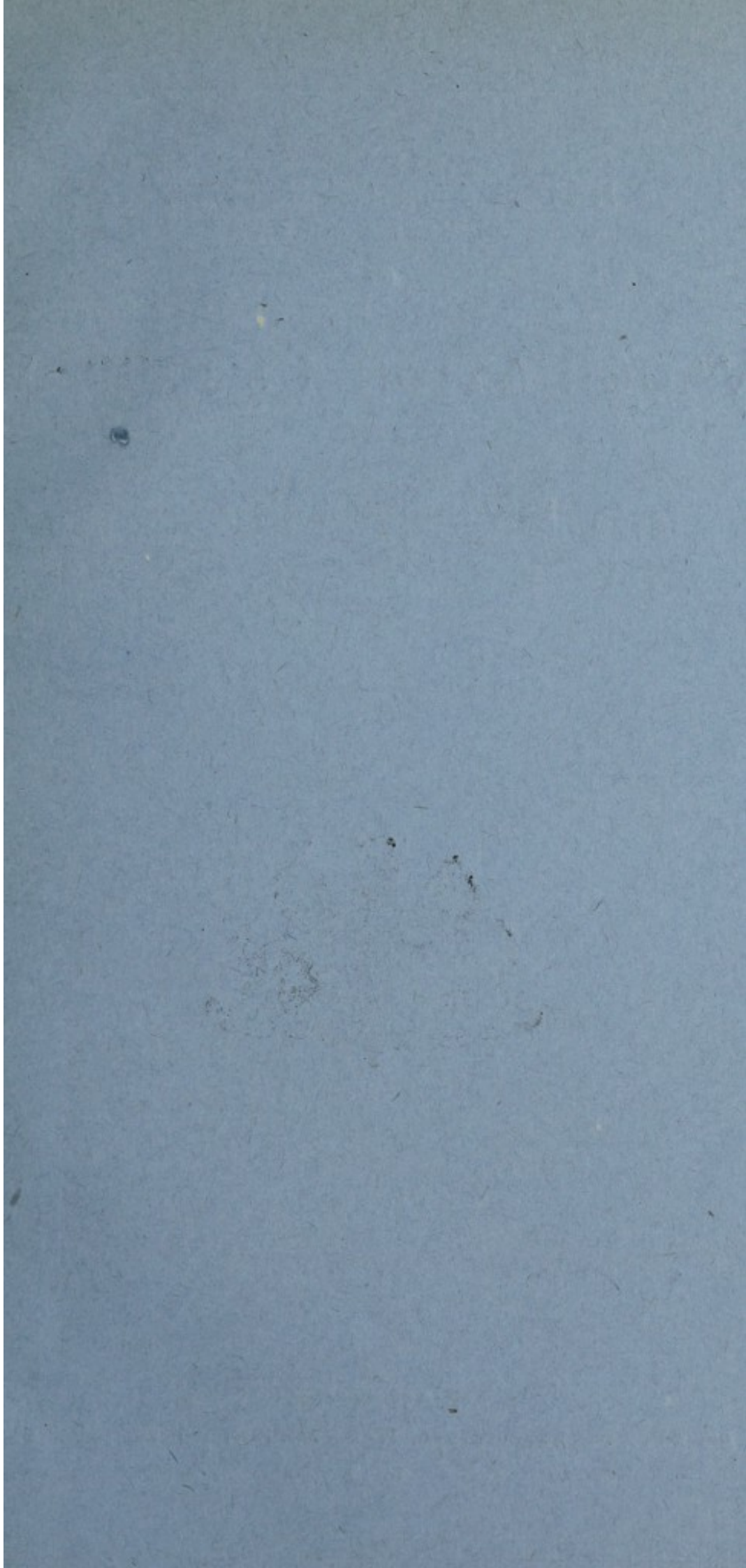


* Registration of vital statistics is not carried out in these districts.
† Statistics of Pysphn have been included in Maubin.

APPENDIX C

Table showing the composition of the

No.	Name of substance	Percentage of composition				
		Carbon	Hydrogen	Oxygen	Nitrogen	Sulfur
1	Acetylene	92.3	7.7			
2	Acetylene	92.3	7.7			
3	Acetylene	92.3	7.7			
4	Acetylene	92.3	7.7			
5	Acetylene	92.3	7.7			
6	Acetylene	92.3	7.7			
7	Acetylene	92.3	7.7			
8	Acetylene	92.3	7.7			
9	Acetylene	92.3	7.7			
10	Acetylene	92.3	7.7			
11	Acetylene	92.3	7.7			
12	Acetylene	92.3	7.7			
13	Acetylene	92.3	7.7			
14	Acetylene	92.3	7.7			
15	Acetylene	92.3	7.7			
16	Acetylene	92.3	7.7			
17	Acetylene	92.3	7.7			
18	Acetylene	92.3	7.7			
19	Acetylene	92.3	7.7			
20	Acetylene	92.3	7.7			
21	Acetylene	92.3	7.7			
22	Acetylene	92.3	7.7			
23	Acetylene	92.3	7.7			
24	Acetylene	92.3	7.7			
25	Acetylene	92.3	7.7			
26	Acetylene	92.3	7.7			
27	Acetylene	92.3	7.7			
28	Acetylene	92.3	7.7			
29	Acetylene	92.3	7.7			
30	Acetylene	92.3	7.7			
31	Acetylene	92.3	7.7			
32	Acetylene	92.3	7.7			
33	Acetylene	92.3	7.7			
34	Acetylene	92.3	7.7			
35	Acetylene	92.3	7.7			
36	Acetylene	92.3	7.7			
37	Acetylene	92.3	7.7			
38	Acetylene	92.3	7.7			
39	Acetylene	92.3	7.7			
40	Acetylene	92.3	7.7			
41	Acetylene	92.3	7.7			
42	Acetylene	92.3	7.7			
43	Acetylene	92.3	7.7			
44	Acetylene	92.3	7.7			
45	Acetylene	92.3	7.7			
46	Acetylene	92.3	7.7			
47	Acetylene	92.3	7.7			
48	Acetylene	92.3	7.7			
49	Acetylene	92.3	7.7			
50	Acetylene	92.3	7.7			



NOTES AND STATISTICS
ON
VACCINATION IN BURMA

FOR THE YEAR 1908-09



RANGOON
OFFICE OF THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA
1909