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ANNUAL REPORT

ON

VACCINATION IN THE MADRAS
PRESIDENCY

FOR THE YEAR

1926-27

MADRAS
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1927

ANNUAL REPORT ON VACCINATION IN THE MADRAS PRESIDENCY FOR THE YEAR 1926-27.

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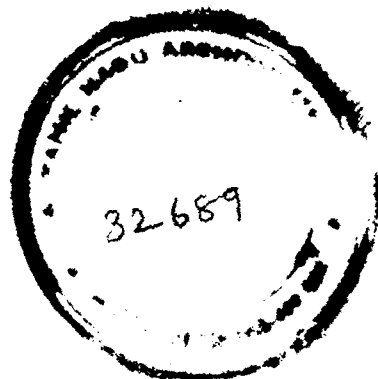
The administration of vaccination in rural areas still remains vested in taluk and union boards, and another year's experience has only emphasized the desirability, expressed in the last four vaccination reports, of transferring this public health function to district boards. In G.O. No. 1415-P.H., dated 13th August 1926, the Government suggested that this proposal should find a place in the draft Public Health Act which was then under contemplation. In a subsequent order, however (G.O. Mis. No. 509-P.H., dated 23rd March 1927) the question of a Public Health Act was rejected in favour of amendment of the existing Local Self-Government Acts, and it is sincerely to be hoped that the draft amendments will include one dealing with the administration of vaccination.

2. Glycerine lymph was used throughout the Presidency during the year under report, and the results obtained have been uniformly satisfactory.

3. In accordance with a promise made by Government in the Legislative Council, revised instructions in the use of vaccine lymph were issued in G.O. No. 241-P.H., dated 4th February 1926, and no pains have been spared to ensure that vaccinators adhere strictly to these rules.

4. Routine vaccination work was as usual suspended during the four hottest months of the year. During this off-season, the vaccinators are expected to check vital statistics and vaccination records and to enrol all unregistered births and unprotected children in the respective registers. The detection work done by the Health Staff continues to give surprising results in every district and reveals the same old defects in the work of village headmen and Presidents of Union Boards, on whom devolves the maintenance of the vaccination and vital statistics records. In North Arcot and Coimbatore, as many as 15,000 unregistered and unprotected children were detected during the last off-season; in South Arcot and Malabar the numbers totalled nearly 12,000, and, in Nellore, 11,000. Further comment as to the hazards run by the child populations of these districts seems superfluous, although it must be added that the increasing interest taken by Collectors and Revenue Officers in the registration of vital statistics has given promise of improvement in the future.

5. In spite of the remarks made by Government in their review of last year's report, many union boards still fail to maintain proper vaccination registers, still refrain from rendering the necessary assistance to the vaccination staffs and still fight shy of sanctioning the prosecution of defaulters. A few specific instances will indicate the difficulties met with. Out of 31 union boards in Tinnevely District, no less than 22 are reported to have maintained their unprotected registers in a most unsatisfactory and perfunctory manner, whilst the union boards of Kulasēkarapatnam and Udangudi have no registers at all. As regards Puliangudi, an important union in Sankaranāyinārkōyil Taluk with a population of 18,437, the Health Inspector has reported that the unprotected register was not maintained either by the village munsif or by the union board president. When the union refused to take over the register, the village munsif asked the President, District Board, to forward it to the union board, but he also was given a flat refusal. Similarly, in Tanjore District, the union boards of Tranquebar and Shiyāli definitely expressed their unwillingness to accept any responsibility for vaccination, and the Unions of Tirutturaippūndi, Muttupet and Vēdāranniyam in the same district gave so little help to the vaccinators during their visits that large quantities of lymph were wasted. The state of vaccination in such areas is in consequence deplorably bad, and unless the presidents of the boards are made to realize the obligations imposed on them by statute, severe smallpox epidemics are inevitable.



6. In municipalities, the off-season work of vaccinators has, generally speaking, been more effectively supervised. During the year, three additional municipal Health Officers were entertained, and District Health Officers were, in G.O. No. 1393-P.H., dated 11th August 1926, made responsible for the supervision of vaccination and registration of vital statistics in municipalities having no Health Officers. The best results will, however, be impossible of attainment until every municipality has its own Health Officer. Under present circumstances, the off-season work is very frequently neglected, and the vaccinators are employed on other duties. It is reported, for instance, that in one municipality the vaccinator was employed during the off-season in the preparation of electoral rolls. However important these may be to would-be municipal councillors, it is more important that the child population should be effectively protected, and the time spent by the vaccinator in tabulating voters would have been not only more usefully, but more legitimately, expended in preparing his unprotected registers.

7. Mention was made in last year's report of the lack of co-operation between the Presidents of Local Boards and District Health Officers in the matter of vaccination, and the Government in their review advised Presidents of Local Boards to give every consideration to the recommendations of these officers in this connexion.

Local boards have, unfortunately, made little effort to follow that advice, and, as a rule, the recommendations made by Health Officers have been ignored. In a number of cases, the question has now become acute, and calls for the immediate delegation of powers of control to Health Officers both in the interest of discipline and of efficient work. For instance, the President of Hospet Taluk Board gave a vaccinator his full travelling allowance after the District Health Officer had recommended reduction because of waste of four successive supplies of lymph. In East Gōdāvari, periods of casual and privilege leave were granted to vaccinators by Taluk Board Presidents, without even consulting the District Health Officer, and regardless of the urgency of the work. More than once, intimation of the grant of leave was sent to the District Health Officer only after the leave had expired, and little thought was given to the appointment of substitutes. In Tanjore District, an unqualified man was rightly replaced by a qualified vaccinator, but the Taluk Board President concerned subsequently thought fit to reappoint the same unqualified individual. Instances of this kind could be multiplied, but these will probably suffice to prove that the administration of vaccination is not nearly as efficient as it might be. Presidents of Local Boards are generally very reluctant to delegate powers in matters regarding leave, transfers, appointments, and punishments of vaccinators to their District Health Officers, but until they do so, the administration will be defective.

8. The office of the Assistant Director of Public Health (Vaccination) was held by Captain N. R. Ubhaya throughout the year, except from 16th May to 15th June when he was on leave, Dr. A. Thirumalayya acting during this period.

The subjoined statement shows the inspections carried out by these officers:—

Captain N. R. Ubhaya, D.P.H.		
Date.		Remarks.
1926.		
9th to 19th April	...	Routine sanitary inspection of Māyavaram Municipality, inspection of Vaccinator's work in Kumbakōnam, Tanjore and Mannārgudi Municipalities and inspection of smallpox measures in Negapatam and Nannilam Taluks.
8th and 9th May	...	Enquiry into the conduct of Rāmnād District Health Officer's office Head Clerk and inspection of the office of the District Health Officer, Rāmnād.
26th to 28th June	...	Inspection of cholera measures in Negapatam Taluk.
14th to 29th July	...	Inspection of vaccination in Gaujām District and in the municipalities of Berhampur, Chicacole and of vital statistics in Chatrapur Union.
1st to 18th September.		Attended Fairs and Festivals Conference in Tirupati, inspected vaccination in parts of Guntūr District, examined cholera measures in Guntūr Town and Vinukonda Taluk, and made a routine sanitary inspection of Guntūr Municipality.

Captain N. R. Ubhaya, D.P.H.—cont.

Date.		Remarks.
1926.		
25th September	...	Inspection of a slaughter-house in Tirukkalikundram, Chingleput District.
26th Oct. to 1st Nov.		Inspection of vaccination and vital statistics in Chingleput town and taluk and routine sanitary inspection of Conjeeveram Municipality.
3rd to 9th Dec.	...	Examination of unqualified vaccinators in Chittoor town, inspection of vaccination in Chittoor and Palmaner taluks, routine sanitary inspection of Anantapur Municipality and examination of an unqualified Sanitary Inspector in Tadpatri Municipality.
1927.		
4th to 9th Feb.	...	Attended maternity and child-welfare conference in Delhi as per G.O. Mis. No. 1446-P.H., dated 17th August 1926.
9th and 10th Mar.	...	Inspection of Health Week arrangements in Nellore.

9. Details of the subordinate vaccination staffs employed in the Presidency during the year under report and the previous year are given in the following table:—

Year.	Health Inspectors (Provincial).	Vaccinators.			
		First class.	Second class.	Probationary.	Total.
1925-26	229	202	397	146	745
1926-27	261	195	432	128	756

The increase in the number of Health Inspectors is due to the entertainment of four additional men in the Agency Tracts and 28 in the other districts in the Presidency, sanctioned in G.Os. Nos. 753-P.H., Mis., dated 1st May 1926, and 624-P.H., dated 10th April 1926, respectively. While the number of second-class vaccinators has increased, a slight reduction in the total of first-class vaccinators falls to be recorded. The number of probationary vaccinators has continued to decrease, and it is to be hoped that this will continue until this class is wholly replaced by properly qualified men.

10. Although many of the difficulties met with in past years have been considerably lessened with the appointment of these additional Health Inspectors, in certain districts a further increase of staff is still necessary, partly on account of the large number of festivals, and partly because of the unwieldy size of the present ranges, and the persistence of epidemic disease. Proposals for an increased number of Health Inspectors have been received from several District Health Officers and if, after examination, these are considered to be reasonable, a separate communication on the subject will be submitted to Government.

11. In some districts the need for additional vaccinators has been urgently felt. Whilst the proposals made by District Health Officers in this connexion have in most cases been rejected by the Presidents of the Local Boards concerned, in Salem District, six additional temporary reserve vaccinators were appointed by the District Board in 1925-26, after the District Health Officer had shown the necessity for additional staff. These extra vaccinators have continued to work during the year under report and have been able to clear off most of the arrears.

In Guntūr District, which has suffered very badly from smallpox during the last two years, the District Health Officer has repeatedly asked for additional vaccinators, so that he might carry out an intensive vaccination campaign, and eradicate the epidemic conditions now existing in his district. The taluk boards have, however, failed to respond to his requests, and their indifference to the health of the people is a further indication of the necessity for centralizing the control of vaccination in district boards.

Although trained men are now easily obtainable, in few districts is the full complement of vaccinators maintained. Especially is this the case as regards the proportion of first-class vaccinators. Every year 50 to 60 men undergo the

training course required for this qualification, so that if reasonably attractive scales of pay were offered, there would be no lack of suitable applicants. Unfortunately many local boards decline to offer suitable salaries, and, as a result, they only obtain men who are otherwise unable to earn a living.

12. The Public Health Department has made every effort during the past three or four years to improve the district and municipal vaccination staffs, and in accordance with G.Os. No. 931-P.H., dated 2nd June 1926, and No. 569, L. & M., dated 1st March 1924, steps have been taken to inspect the work of all unqualified and undesirable vaccinators, so that a final recommendation might be made as to their retention or dismissal by the local boards concerned. Where exemption by the Director of Public Health is finally refused, payment of the salary has been declared illegal and surchargeable, and, in certain cases, it has been necessary to make use of this argument, before undesirables have been finally got rid of.

13. Despite the orders of Government in G.O. No. 1415-P.H., dated 13th August 1926, only one or two District Boards have agreed to make vaccination compulsory. In view of the fact that in some districts smallpox still continues to break out in virulent form, it is to be hoped that the District Boards concerned will shortly see their way to adopt the repeated recommendations of the Public Health Department made in this connexion.

In those areas where vaccination is compulsory, the regulations, of course, must be enforced, or progress will be slow. In Pattukkottai Taluk, for instance, of the 67 defaulters recommended for prosecution by the District Health Officer, Tanjore, not one was sanctioned by the Taluk Board President. Difficulties such as these would disappear if Presidents of Local Boards would delegate the power of sanctioning prosecutions to their District Health Officers. Delegation of powers in this connexion has been granted to the District Health Officers concerned by the President, Taluk Board, Uppinangadi, and the President, Taluk Board, Berhampur, and has been used successfully by these officers. It would be to the benefit of all concerned were the Presidents of other Local Boards to follow these examples.

14. In contrast with the complaints made in previous reports, it is pleasing to be able to state that in certain districts the punishments awarded by the magistrates in respect of vaccination offences were so exemplary that a distinct improvement was secured in those areas. It is to be hoped that this change of attitude will spread rapidly over the whole magistracy in the Province.

15. Extension of Act III of 1899 throughout the Presidency has been constantly urged in previous reports, and the fact that very large numbers of unrecorded births and deaths are detected by the health staffs year after year emphasizes the need for the early introduction of this measure. In their review of last year's Vaccination Report, Government remarked that this subject was separately under consideration. It is requested that early orders on the subject may be issued.

16. The maintenance of village vaccination registers is still unsatisfactory in many instances, but health staffs have made constant efforts to rectify defects by making house-to-house enquiries in the villages they visit.

17. The anti-vaccination campaign in Tanjore District, which was alluded to in last year's report, has developed in intensity, and was one of the main causes for the decreased numbers vaccinated in that district and for the wastage of large quantities of lymph.

18. With regard to the supply of equipment to vaccinators by Taluk Boards, it is to be regretted that in a number of instances the necessary purchases were inordinately delayed. The District Health Officer, Vizagapatam, reports that his indent for the supply of equipment has not yet been sanctioned by the Vizianagaram Taluk Board although the last supply was made as far back as 1924, and similar delays have occurred in other districts.

These difficulties would never arise if supplies were made in the first instance by the district boards and necessary adjustments made later between them and the taluk boards.

In this connexion, it may be noted that, in Ganjam District, two Taluk boards have accepted the proposal to provide a reserve set of vaccinators' equipment for use in case of emergency, this being kept in charge of the District Health Officer. This arrangement is undoubtedly sound and is commended for adoption by other Taluk-Boards in the Presidency.

19. *Vaccination in districts.*—(1) The following statement gives the vaccination figures for 1926-27 as compared with the figures of the three previous years:—

Districts.	Total number of operations performed during the year.				Increase or decrease as compared with 1922-23.
	1923-24.	1924-25.	1925-26.	1926-27.	
Agency districts	66,271	75,680	72,053	82,660	+ 7,340
Añantapur	40,811	39,755	39,695	37,525	+ 1,560
Arcot (North)	81,123	84,569	80,805	76,999	+ 7,682
Arcot (South)	64,189	72,707	71,705	83,211	+ 20,657
Bellary	37,693	37,733	32,836	37,366	+ 5,007
Chingleput	54,198	61,564	58,301	59,546	+ 2,624
Chittoor	48,455	52,876	55,535	43,329	- 4,827
Coimbatore	90,789	94,179	89,785	93,020	+ 3,895
Cuddapah	41,321	37,352	34,366	32,103	+ 2,448
Ganjam	59,543	78,467	72,639	77,739	+ 18,241
Gōdāvari, East	58,032	75,678	80,687	64,043	+ 7,729
Guntūr	78,975	102,296	100,701	92,260	+ 41,728
Kistna	89,722	92,484	95,546	87,397	+ 17,697
Kurnool	43,507	43,226	37,983	41,641	+ 4,706
Madura	76,786	82,056	80,391	81,388	+ 9,432
Malabar	164,251	138,469	130,037	129,287	- 12,508
Nellore	53,188	56,858	57,790	60,202	+ 11,172
Nilgiris	8,821	8,706	14,866	14,091	+ 7,229
Rāmnād	62,194	57,172	74,957	75,808	+ 17,358
Sālem	72,146	85,050	99,906	84,805	+ 23,212
South Kanara	54,516	59,542	56,426	59,270	+ 5,073
Tanjore	88,274	83,583	76,935	72,767	+ 7,617
Tinnevely	80,055	81,993	79,277	72,454	- 1,412
Trichinopoly	79,740	77,902	69,896	65,158	- 1,368
Vizagapatam	100,525	98,211	98,969	94,312	- 6,937
Total	1,693,135	1,773,157	1,782,080	1,718,604	+ 195,289

As compared with 1925-26, the figures for the present year record increases in eleven districts and decreases in the others. Marked increases are reported from South Arcot (+11,539), Agency districts (+10,607), Ganjam (+5,100), Bellary (+4,530), Kurnool (+3,858) and Coimbatore (+3,235). The increase in South Arcot District is ascribed to the better registration of births, the detection of a large number of unregistered unprotected children and the appointment of additional temporary vaccinators. In the Agency Districts, the large increase is due to the appointment of eight additional vaccinators consequent on the formation of four new ranges. In Ganjam, the introduction of compulsory vaccination throughout the district, the increased minima demanded of the vaccinators and the large

number of revaccinations all go to explain the rise in numbers. In Bellary and Kurnool, a change was made in the off-season months, and the vaccinators worked eight months as compared with seven months in the previous year. Moreover, vaccination was made compulsory in three taluks of Kurnool District. In Coimbatore District, one additional vaccinator was employed during the year under review.

(2) The districts which recorded large decreases included Gōdāvari (-16,644), Salem (-15,101), Chittoor (-12,206), Guntūr (-8,444) Kistna and West Gōdāvari (-8,149), Tinnevely (-6,823), Trichinopoly (-4,738), Vizagapatam (-4,657) and Tanjore (-4,178). Decreases varying between 750 and 3,800 were reported from Anantapur, North Arcot, Cuddapah, Malabar and The Nilgiris. The following reasons have been given in explanation of these decreases:—

(a) *Gōdāvari*.—Lack of supervision of the out-door work of vaccinators for nearly two months owing to the absence of the District Health Officer, no vaccination during the off-season, and failure to appoint substitutes in leave vacancies.

(b) *Salem, Anantapur, Tinnevely, Cuddapah, Malabar, The Nilgiris, Kistna and West Gōdāvari*.—Reduction in incidence of small-pox, difficulty in finding unprotected cases consequent on the systematic work done by vaccinators in previous years, and failure to appoint substitutes in certain leave vacancies.

(c) *Chittoor*.—Reduction in the incidence of small-pox, and absence of temporary vaccinators.

(d) *Guntūr*.—Decrease in the number of vaccinators, and emigration of the labouring classes owing to economic stress.

(e) *Trichinopoly*.—Defective registration of births, emigration to Ceylon necessitated by economic conditions and reduction of the minima of vaccinators.

(f) *Vizagapatam*.—Reduction in the incidence of small-pox and of the minima of vaccinators, difficulty in finding unprotected cases for vaccination, and failure to fill vacancies in the staff of vaccinators.

(g) *Tanjore*.—Prevalence of cholera throughout the year, lack of co-operation from the village headmen and presidents of union boards, reduction in the incidence of small-pox and a more vigorous anti-vaccination campaign.

(h) *North Arcot*.—Improper maintenance of vital statistics registers, failure to appoint substitutes for two vaccinators granted leave, non-supply of vaccination equipment to vaccinators and lack of co-operation from the Pernambut Union Board.

(3) The ratio of successful vaccinations per mille of population varied from 27.4 in Tanjore District to 90.1 in The Nilgiris District. Compared with the previous year, increases were recorded in nine districts and decreases in the others. The largest increase (+6.8) was returned by Bellary and the largest decrease (-20.4) by The Nilgiris District.

(4) The number of children under one year of age successfully vaccinated totalled 639,827 as compared with 584,137 in the previous year. The percentage of successful infantile vaccinations to total births varied from 34.1 in Nellore District to 67.6 in The Nilgiris District. Compared with the previous year, 14 districts recorded increases, the largest improvements being recorded in Bellary (+11.7), Anantapur (+9.8), Kurnool (+9.5), Rāmnād (+8.6), Cuddapah (+7.7), Vizagapatam (+6.9), South Kanara (+6.7), Tanjore (+5.8), Malabar (+5.7), and Nellore (+5.3).

The marked decreases which occurred in Kistna (-30.6) and Trichinopoly (-26.1) are attributed to a decreased incidence of small-pox, defective registration of births and reduction in the minima of vaccinators. Details of infantile vaccination rates for individual districts are furnished in Annexure A.

20. *Vaccination in municipalities*.—(1) The total number of vaccination operations performed in the 81 municipalities of the Presidency rose from 183,196 in 1925-26 to 202,617 in the year under report, an increase of 19,411. In 53 municipalities increases were recorded, the most marked being in Madura (+18,590), Trichinopoly (+2,439), Coimbatore (+1,425), Guntūr (+1,344), Chingleput (+626), Kurnool (+590), Ootacamund (+577) and Hindupur (+518).

Twenty-eight municipalities returned decreased figures, the most outstanding being Madras (-3,656), Rajahmundry (-1,939), Vizianagram (-1,854), Palacole (-667), Cannanore (-633), Cochin (-622), Anakāpalle (-560), Conjeeveram (-439), Ellore (-426), Virudhunagar (-354), Cuddapah (-308), Vizagapatam (-260), Chirala (-258) and Berhampur (-211). With the exceptions of Madras, Rajahmundry, Cochin, Vizagapatam, Berhampur and Pollachi, every town employing a health officer showed improved figures for total vaccination operations when compared with the previous year. This is only as it should be, and should serve as a demonstration of improved administration to those towns which still decline to employ health officers.

In a large number of cases it has been reported that the decreased numbers of vaccination operations are due to a fall in the incidence of small-pox and to increased difficulty in finding unprotected cases consequent on the clearing off of accumulated arrears in previous years. The first reason may be accepted, but it is doubtful if the second is correct. Such excuses for the falling off in vaccination figures as "absence of the vaccinator for two months without a substitute" are entirely unacceptable, and, moreover, give a clear indication of indifferent administration.

(2) The maximum and minimum success rates per mille of population were 192.4 in Madura and 13.3 in Tadpatri. The high figure recorded in Madura is due to the large numbers of vaccinations performed during the severe epidemic of small-pox which raged there for over three months. Rates below 35 per mille, which are clear evidence of poor work, were recorded in the following towns:—

Villupuram (34.8), Chirala (33.8), Conjeeveram (33.4), Rajahmundry (33.2), Palni (33.1), Walajapet (32.7), Gudiyāttam (32.0), Chittoor (31.7), Tellicherry (31.6), Māyavaram (31.2), Tenali (30.7), Karur (30.5), Proddatūr (30.1), Vizagapatam (29.5), Nellore (28.2), Virudhunagar (27.1), Erode (26.7), Mannārgudi (25.0), Tiruvālūr (23.9), Cuddapah (20.2), Palacole (18.9), Chidambaram (16.2).

With the exception of Rajahmundry and Vizagapatam, none of the towns in this list have Health Officers, and, as a result, no effective supervision of vaccinators' work can be made. The Municipal Councils concerned should take the lesson to heart.

(3) The recorded percentage of successful infantile vaccinations to total births ranged from 17.4 in Chidambaram to 100.0 in Tirupati. The latter figure is obviously impossible, and the returns submitted must have been wrongly prepared.

The infantile vaccination rates submitted by the municipalities of Chidambaram (17.4), Guntūr (25.6), Cuddapah (27.5), Nellore (33.01) and Karūr (37.1) are very unsatisfactory. The Health Officer of Guntūr states that the low figure is partly due to the high infantile death rate; but, in the other towns, imperfect registration of births and lack of supervision of the work of the vaccinators are responsible. The Municipal Councils concerned should take the necessary steps in the near future to rectify these defects if they wish to avoid small-pox epidemics. The Medical Officers in charge should also be instructed to give more time to this part of their duties.

The rates for individual towns, compared with those of the previous year, are given in Annexure B.

21. The following table gives the total number of vaccination operations performed by all agencies during the year compared with the corresponding figures for 1925-26:—

	1925-26.	1926-27.
Primary and secondary vaccination ...	1,499,278	1,493,021
Re-vaccination ...	465,748	455,011
Total ...	1,965,026	1,948,062

The small decrease of 16,964 is almost equally divided between the two classes of operations.

22. The results of primary and secondary vaccinations and re-vaccinations performed by the different agencies during 1925-26 and 1926-27 are compared in the subjoined statement :—

Establishment.	Number of successful vaccinations.				Total number of successful vaccinations.		
	1925-26.		1926-27.				
	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	1925-26.	1926-27.	
	(1)	(2)	(3)	(4)			(5)
Local Fund vaccinators	...	1,167,748	116,942	1,156,949	91,466	1,284,690	1,248,415
Government vaccinators	...	22,270	1,035	26,610	1,992	23,305	28,902
Municipal vaccinators	...	115,099	31,058	122,008	34,518	146,157	156,556
Cantonment vaccinators	...	5,320	1,698	6,230	1,323	7,018	7,553
Dispensaries	...	...	...	711	133	...	844
Medical subordinates	...	423	4,105	2,239	4,637	4,528	6,876
Total	...	1,310,860	154,838	1,314,747	134,099	1,465,638	1,448,846

Establishment.	Ratio per cent of successful cases.				Ratio per cent of total successful cases.		
	1925-26.		1926-27.				
	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	1925-26.	1926-27.	
	(8)	(9)	(10)	(11)			(12)
Local Fund vaccinators	...	94.3	35.0	94.7	29.4	81.7	81.5
Government vaccinators	...	93.6	40.1	90.9	35.5	89.3	81.9
Municipal vaccinators	...	98.1	58.9	98.1	49.5	83.5	80.6
Cantonment vaccinators	...	99.2	27.0	98.2	22.4	60.2	61.7
Dispensaries	...	...	...	94.9	59.6	...	86.8
Medical subordinates	...	71.2	58.1	84.5	52.4	58.8	59.8
Total	...	94.7	37.9	94.9	33.4	81.8	81.1

The slight increase in the already high percentage of success for primary and secondary vaccinations is pleasing evidence of the continued potency of the glycerine lymph issued by the King Institute, and of the high standard of work done by the vaccination staffs throughout the Presidency. The small decrease in the success rate for revaccinations calls for no remark.

23. The percentages of success for the different administrative areas in the Presidency are given in the following table :—

Number of cases excluding unknown.		Agency.	Percentage of success.	
1925-26.	1926-27.		1925-26.	1926-27.
23,793	29,279	Government vaccinators ...	93.6	90.9
1,237,418	1,221,055	Local Fund do. ...	94.3	94.7
117,319	124,341	Municipal do. ...	98.1	98.1

The rates for the Agency Tracts are always slightly lower than those for other parts of the Presidency. This must be expected, but a figure of over 90 per cent requires no excuses.

24. The expenditure incurred on the vaccination establishments employed by the different agencies and the average cost of successful operations are given in the following statement :—

Establishment.	Total expenditure.		Average cost of each successful case.	
	1925-26.		1925-26.	1926-27.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Government ...	14,715 10 5	18,415 13 11	0 10 1	0 10 4
Local Fund ...	4,55,423 9 1	4,58,780 13 5	0 5 8	0 5 11
Municipal ...	74,061 1 5	74,331 15 9	0 8 1	0 7 7
Cantonment ...	4,898 8 8	4,895 0 0	0 11 2	0 10 4
Total ...	5,49,108 13 5	5,56,423 11 1	0 6 0	0 6 2

The slight increase in the cost per case is due to the additional staff of Health Inspectors and vaccinators entertained, and to the decreased number of successful vaccinations done in some districts.

The average cost per successful case varied from Re. 0-4-6 in Tinnevely District to Re. 0-8-7 in the Nilgiris District.

In municipal areas, the average cost ranged from a minimum of Re. 0-2-3 in Calicut to a maximum of Re. 1-6-11 in Walajapet. This high figure is explained by the fact that the vaccinator was granted leave for three months and no substitute was appointed, so that no vaccinations were done for nearly half of the working year.

The Director, King Institute, reports that he issued lymph for 2,036,865 cases to district boards and municipalities against 1,922,201 operations performed in these areas. The difference of 114,664 represents a wastage of 5.6 per cent, which is only slightly above the percentage allowed, and compares favourably with the corresponding figures for previous years.

25. (a) The number of vaccinated cases inspected by District Health Officers ranged from 998 in Trichinopoly to 5,570 in Coimbatore. Two District Health Officers inspected less than 1,000 cases, 5 less than 2,000 cases, 5 less than 3,000 cases, 7 less than 4,000, 2 less than 5,000 and 2 less than 6,000. The shortage in the districts of Trichinopoly and Tanjore was due to the prevalence of cholera throughout the year.

(b) The inspection of vaccinated cases by Municipal Health Officers (excluding Madras) ranged from 805 in Coonoor to 30,621 in Madura. The work of six Health Officers fell short of the prescribed minimum of 75 per cent and their explanations are being called for.

(c) In municipalities where no Health Officers are employed the percentage of cases inspected by the medical officers in charge of vaccination varied from 59.1 in Gudiyattam to 100.0 in Kodaikanal. Forty-three inspected more than 75 per cent of the cases, 6 between 65 and 75 per cent and 3 between 50 and 65 per cent. These figures are a great improvement over those of last year, and are probably the direct result of a circular issued by the Surgeon-General drawing attention to the necessity for better supervision. The attention of the Surgeon-General will be invited to the nine officers who are still at default.

(d) District Medical Officers and Civil Surgeons inspected 10,802 cases as compared with 7,571 in 1925-26.

(e) Two hundred and twenty-five Health Inspectors inspected more than 85 per cent of the cases and 37 failed to reach this prescribed minimum. Suitable notice will be taken of those whose explanations are considered to be unsatisfactory.

26. The total deaths from small-pox during the last five years are as follows:—

1922-23	...	...	...	...	...	26,526
1923-24	...	...	...	...	...	22,626
1924-25	...	...	...	...	...	20,227
1925-26	...	...	...	...	...	14,498
1926-27	...	...	...	...	...	9,816

The progressive decline in the mortality from this loathsome disease since the introduction of the District Health Service should serve to convince the most sceptical of the value of that organization. In every infected area, prompt action is taken to arrest the spread of infection, not only by means of a vigorous vaccination and re-vaccination campaign, but by systematic propaganda. Enquiries instituted in infected areas go to prove that the majority of cases occur either among unvaccinated persons or among those who have not been re-vaccinated since infancy. The need for further intensive work is thus made plain and the time has not yet come when the vaccination staff can relax their efforts.

Although no district escaped infection during the year under report, in five only did the mortality exceed 500, South Arcot registering the maximum of 936 deaths. Of 1,119 deaths registered in municipalities, no less than 616 occurred in Madura. Trichinopoly recorded 96 deaths and Coimbatore 61, but in no other town did the number exceed 40. Thirty-four municipalities remained free from small-pox throughout the year.

In Ganjam, Madura and Tanjore districts, outbreaks of small-pox went unreported, and were allowed to develop, until they were discovered by the health staffs. Inordinate delays in reporting outbreaks, such as occurred in Anantapur District, are almost as serious, and it is mainly because of these derelictions of duty that constant vigilance is still necessary.

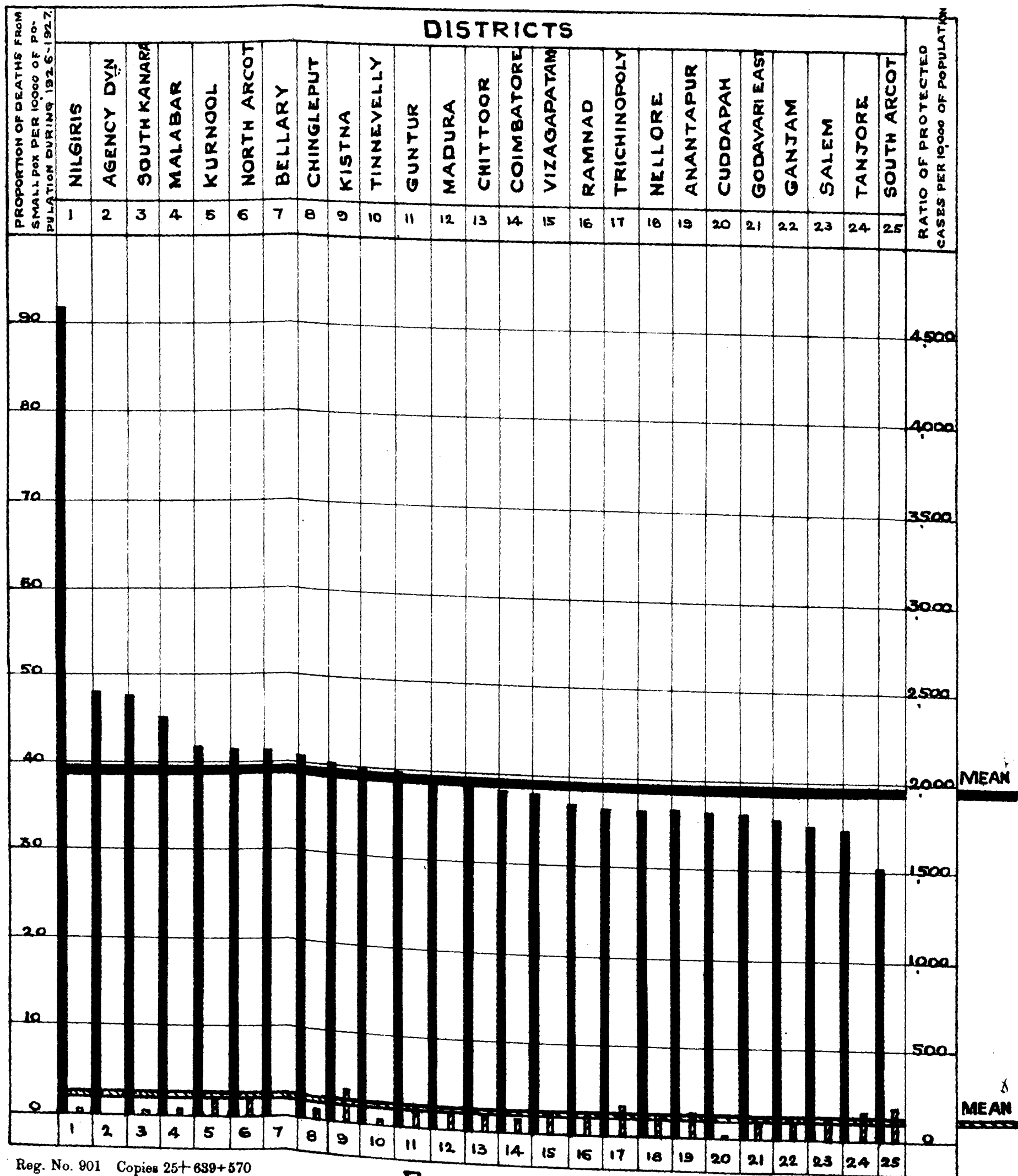
In G.O. No. 1415-P.H., dated 13th August 1926, Government requested all Collectors to issue instructions to their subordinates regarding the importance of prompt intimation of small-pox outbreaks, and the instances quoted above seem to indicate the desirability of issuing a further reminder on the subject.

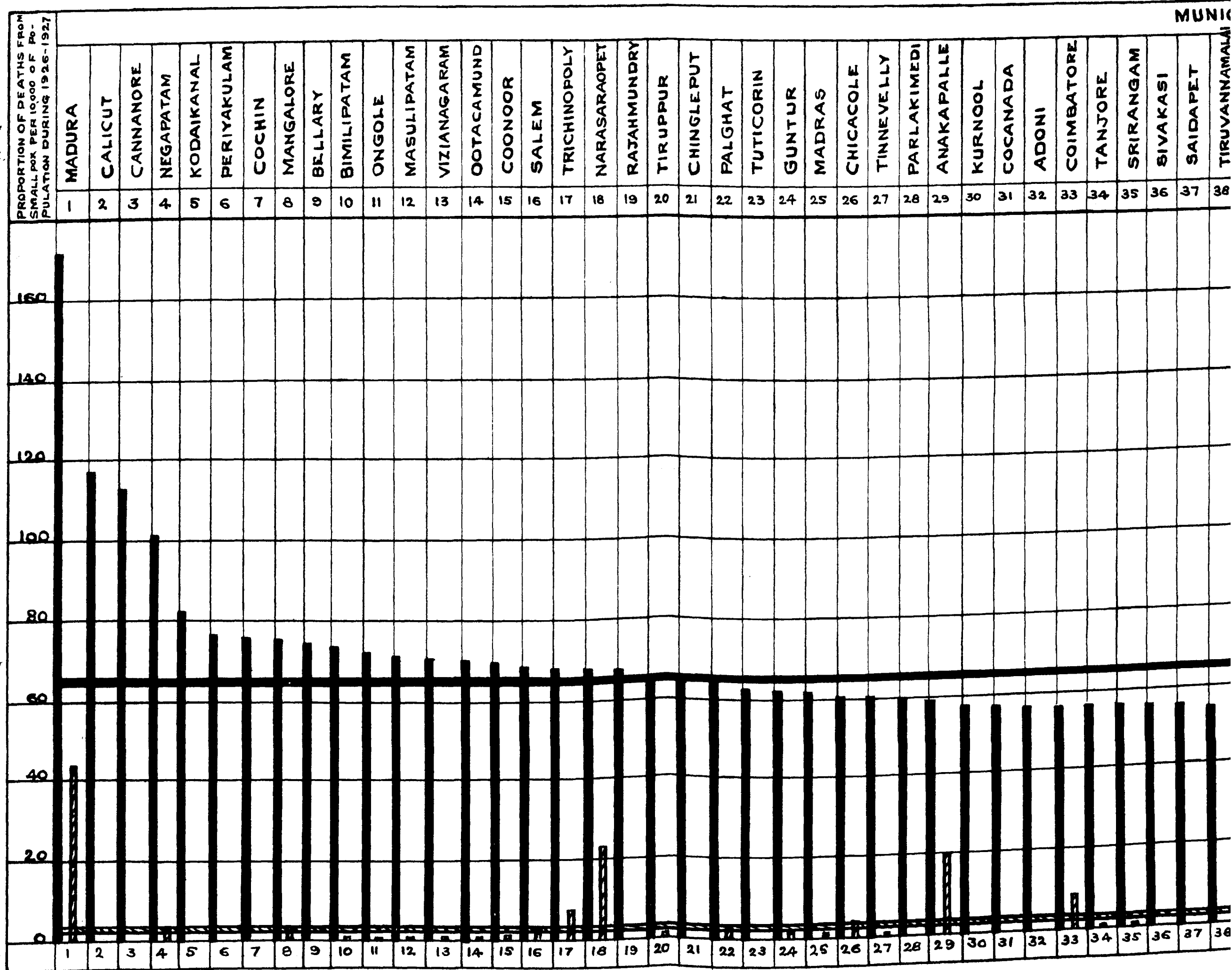
27. Information regarding the number of patients treated in small-pox hospitals and their vaccinal condition, etc., asked for by the Government of India in their letter No. 1250, Health, dated 4th September 1925, has been consolidated from district reports. The number of institutions exclusively reserved for the reception and treatment of small-pox patients has increased by five during the year under report. Sixteen cases were reported to have been treated therein, and 752 additional cases in sheds provided for general infectious diseases. Of the 763 patients, details regarding the vaccinal condition of only 749 cases are available:—

(a) Vaccinated as evidenced by one or more cicatrices	...	...	...	496
(b) Stated to have been successfully vaccinated but no vaccination cicatrices present	...	...	...	21
(c) Stated to be unvaccinated or unsuccessfully vaccinated but no vaccination cicatrices present	...	...	...	162
(d) Previously unvaccinated but vaccinated during the incubation of small-pox	...	...	...	54
(e) Stated to have been successfully re-vaccinated	...	...	...	16
				749

It should be noted that these statistics do not represent the true vaccinal condition of the population as a whole.

OCTACAMUND, A. J. H. RUSSELL, C.B.E., M.A., M.D., D.P.H., LIEUT.-COL., I.M.S.,
20th June 1927. *Director of Public Health, Madras.*

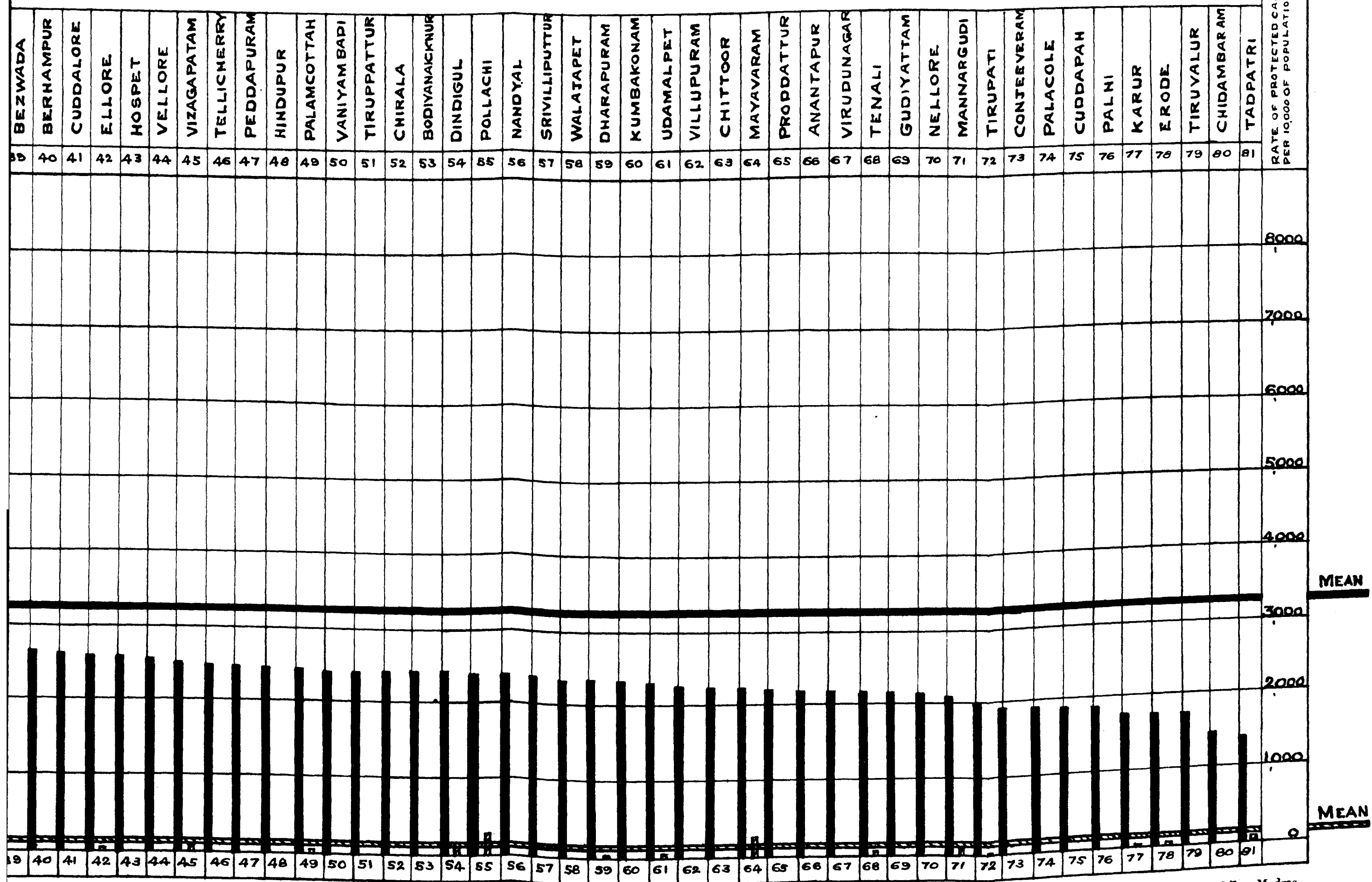




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REPRESENT THE PRO
DO

PALITIES



REFERENCE.

ORTION OF POPULATION PER 10,000 PROTECTED FROM SMALL POX.

DO OF DEATHS FROM SMALL POX PER 10,000 OF POPULATION.

Vandyke., Survey Office, Madras.
1927.

ANNEXURE A.

Comparative Statement showing infantile vaccination in districts
for 1925-26 and 1926-27.

Districts.	Percentage of infantile vaccination to total births registered.		Increase or decrease.	Districts.	Percentage of infantile vaccination to total births registered.		Increase or decrease.
	1925-26.	1926-27.			1925-26.	1926-27.	
1. Anantapur ...	32.7	42.5	+ 9.8	13. Karnool ...	38.5	46.0	+ 7.5
2. Arcot (North) ...	48.9	48.3	- 0.6	14. Madura ...	68.5	68.7	+ 0.2
3. Arcot (South) ...	41.8	45.6	+ 3.8	15. Malabar ...	44.6	50.3	+ 5.7
4. Bellary ...	39.2	50.9	+ 11.7	16. Nellore ...	28.8	34.1	+ 5.3
5. Chingleput ...	48.5	44.6	- 3.9	17. Nilgiris ...	71.7	67.6	- 4.1
6. Chittoor ...	50.6	45.6	- 5.0	18. Ramanud ...	56.6	65.2	+ 8.6
7. Coimbatore ...	49.1	42.7	- 6.4	19. Salem ...	40.4	38.0	- 2.4
8. Cuddapah ...	32.5	40.2	+ 7.7	20. South Kanara ...	39.5	46.2	+ 6.7
9. Ganjam ...	40.7	42.2	+ 1.5	21. Tanjore ...	38.4	44.2	+ 5.8
10. Godavari ...	42.6	40.9	- 1.7	22. Tinnevely ...	48.7	51.2	+ 2.5
11. Gunur ...	45.6	41.6	- 4.0	23. Trichinopoly ...	75.1	49.0	- 26.1
12. Kistna ...	69.6	39.0	- 30.6	24. Vizagapatam ...	35.8	42.7	+ 6.9

ANNEXURE B.

Comparative Statement showing infantile vaccination in municipalities
for 1925-26 and 1926-27.

Municipality.	Percentage of infantile vaccination to total births.		Increase or decrease.	Municipality.	Percentage of infantile vaccination to total births.		Increase or decrease.
	1925-26.	1926-27.			1925-26.	1926-27.	
1. Addni ...	97.16	99.99	+ 2.83	42. Narasaraopet ...	74.00	56.0	-18.0
2. Anakapalle ...	59.65	53.34	- 6.31	43. Negapatam ...	74.45	77.18	+ 2.73
3. Anantapur ...	61.00	86.5	+ 25.5	44. Nellore ...	38.10	33.01	- 5.09
4. Bellary ...	52.3	65.5	+ 13.2	45. Ongole ...	54.00	58.0	+ 4.0
5. Berhampur ...	67.89	66.8	- 1.09	46. Ootacamund ...	67.08	59.2	- 7.88
6. Bezawada ...	49.53	48.11	- 1.42	47. Palakole ...	83.00	52.0	-31.0
7. Bimlipatam ...	60.38	66.4	+ 6.02	48. Palamcottah ...	42.97	62.38	+19.41
8. Bodinayakanur ...	96.70	98.0	+ 1.3	49. Palghat ...	61.70	58.1	- 3.6
9. Calicut ...	77.82	62.67	-15.15	50. Palni ...	86.87	88.81	+ 1.94
10. Cannanore ...	71.95	69.33	- 2.62	51. Parakkimedi ...	65.50	63.2	- 2.3
11. Chikacole ...	73.26	69.96	- 3.30	52. Peddapuram ...	67.08	51.08	-16.00
12. Chidambaram ...	24.79	17.26	- 7.53	53. Periyakulam ...	66.87	75.72	+ 8.85
13. Chingleput ...	50.15	67.33	+ 17.18	54. Pollachi ...	95.61	94.13	- 1.48
14. Chirala ...	50.50	51.1	+ 0.6	55. Proddatur ...	55.73	52.01	- 3.72
15. Chittoor ...	48.75	44.63	- 4.12	56. Rajahmundry ...	51.05	47.11	- 3.94
16. Cocanada ...	39.00	57.0	+18.0	57. Saidapet ...	78.10	77.0	- 1.1
17. Cochin ...	63.74	76.43	+12.69	58. Salem ...	62.03	62.9	+ 0.87
18. Coimbatore ...	69.06	58.25	-10.81	59. Sivakasi ...	72.7	73.74	+ 1.04
19. Conjeevaram ...	36.97	42.8	+ 5.83	60. Srirangam ...	86.67	88.18	+ 1.51
20. Coonoor ...	41.92	56.58	+14.66	61. Srivilliputtur ...	66.56	68.0	+ 1.44
21. Cuddalore ...	63.94	62.51	- 1.43	62. Tadpatri ...	40.65	58.0	+17.35
22. Cuddapah ...	29.00	27.53	- 1.47	63. Tanjore ...	50.8	49.0	- 1.8
23. Dharmapuri ...	43.10	65.52	+22.42	64. Tellicherry ...	63.25	62.4	- 0.85
24. Dindigul ...	65.06	69.68	+ 4.62	65. Tenali ...	48.50	57.1	+ 8.6
25. Ellore ...	97.80	97.3	- 0.5	66. Tinnevely ...	48.47	50.31	+ 1.84
26. Erode ...	79.51	81.73	+ 2.22	67. Trichinopoly ...	43.24	51.8	+ 8.56
27. Gudiyattam ...	53.60	71.7	+18.1	68. Tirupati ...	61.61	100.00	+38.39
28. Gunur ...	48.27	25.6	-22.67	69. Tirupattur ...	52.55	48.44	- 4.11
29. Hindupur ...	75.33	85.11	+ 9.78	70. Tiruppur ...	55.8	49.1	- 6.7
30. Hospet ...	69.22	66.39	- 2.83	71. Tiruvallur ...	98.6	99.48	+ 0.88
31. Karur ...	30.50	37.1	+ 6.6	72. Tiruvannamalai ...	50.7	54.6	+ 3.9
32. Kodakanal ...	71.70	73.9	+ 2.2	73. Tuticorin ...	49.40	59.5	+10.1
33. Kumbakonam ...	55.76	56.4	+ 0.64	74. Udumalpet ...	64.32	59.86	- 4.46
34. Karnool ...	29.82	34.65	+ 4.83	75. Vaniyambadi ...	68.75	68.86	+ 0.11
35. Madras ...	66.80	67.9	+ 1.1	76. Vellore ...	91.40	94.3	+ 2.9
36. Madura ...	85.9	85.3	- 0.6	77. Villupuram ...	68.00	98.0	+ 30.0
37. Mangalore ...	75.70	80.20	+ 4.5	78. Virudhunagar ...	50.10	63.0	+12.9
38. Mannargudi ...	96.49	52.90	-43.59	79. Visagapatam ...	50.84	41.16	- 9.68
39. Masulipatam ...	60.20	61.8	+ 1.6	80. Visianagram ...	50.29	61.26	+10.97
40. Mayavaram ...	55.60	54.4	- 1.2	81. Walajapet ...	62.20	49.1	-13.1
41. Nandyal ...	94.77	98.0	+ 3.23				

A.—VACCINE

Statement No. 1 showing the particulars of Vaccination in the

Number.	Districts.	Ranges.	Population of districts or municipalities according to the census of 1921.	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	
						Males.	Females.	Total.		Total number of operations.	Under 1 year.
1	2	3	4	5	6	7			8	9	10
239	Trichinopoly.	Ariyalur ...	1,741,014	412	2	3,378	2,909	6,587	3,294	5,649	1,643
240		Jayankondan ...			2	3,482	2,979	6,461	3,231	5,891	2,690
241		Karur ...			2	4,684	3,172	7,756	3,878	5,739	2,496
242		Kulittalai ...			2	4,073	3,069	7,142	3,571	5,181	2,219
243		Lalgudi ...			2	4,302	3,346	7,648	3,824	6,706	2,065
244		Mannapparai ...			2	3,406	3,211	6,616	3,308	5,459	2,875
245		Musiri ...			2	2,821	2,229	5,050	2,525	4,486	2,589
246		Perambalur ...			2	3,810	3,201	7,011	3,508	5,733	1,981
247		Trichinopoly ...			1	2,008	1,529	3,537	3,537	3,237	1,414
248		Tiraiyur ...			1	2,698	2,319	5,017	5,017	4,368	2,882
		Total of district ...	1,741,014	412	18	34,861	27,964	62,825	3,490	52,449	22,854
249	Vizagapatam.	Anākāpalle ...	2,120,009	...	1	2,895	3,031	5,926	5,926	4,480	2,007
250		Bimlipatam ...			2	3,399	3,326	6,725	3,363	5,248	1,827
251		Bobbili ...			1	2,470	2,338	4,808	4,808	4,024	1,916
252		Chipurupalli ...			2	3,961	4,090	8,051	4,026	6,239	2,787
253		Chodavaram ...			2	4,747	4,691	9,438	4,719	7,011	3,085
254		Gajapatinagaram ...			2	3,914	3,537	7,451	3,726	5,671	2,597
255		Narasupatam ...			2	3,590	3,101	6,691	3,346	4,981	1,875
256		Palkonda ...			3	3,434	2,794	6,228	2,076	5,552	2,794
257		Parvatipur ...			2	3,035	2,772	5,807	2,904	5,677	1,826
258		Salur ...			1	1,784	1,751	3,535	3,535	3,330	1,487
259		Srungavarapukōta ...			2	2,878	2,669	5,547	2,924	3,365	1,564
260		Vizagapatam ...			1	2,139	2,320	4,459	4,459	3,304	1,739
261		Vizianagaram ...			2	3,513	3,657	7,170	3,585	6,293	2,831
262		Yellamanchili ...			2	3,285	3,550	6,835	3,418	5,573	3,313
		Total of district ...	2,120,009	...	25	45,044	48,927	93,971	3,559	70,748	31,628
		Grand total of districts.	39,296,274	...	572	893,993	738,959	1,632,952	2,855	1,357,497	639,827

DEPARTMENT—cont.

Madras Presidency for the official year 1926-27—cont.

vaccination.			Re-vaccination.			Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Percentage of cases unknown to total cases.		Average annual number of persons successfully vaccinated during previous 5 years.		Average number of deaths from smallpox during previous 5 years.	
Successful.		Unknown.	Total number of operations.	Successful.	Unknown.	Primary vaccination.	Re-vaccination.		Primary vaccination.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
One and under 6 years.	Total of all ages.													
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
2,897	4,861	635	1,325	351	194	96.9	31.0	}	}	11.2	14.6	}	}	}
1,954	5,001	733	904	321	180	96.9	39.4			12.4	18.1			
1,953	4,978	686	2,088	562	211	97.6	29.9			11.1	10.1			
1,715	4,478	426	1,982	520	288	94.2	30.7			8.2	14.5			
3,181	5,564	800	1,174	237	152	94.2	23.2			11.9	12.9			
1,448	4,686	546	1,558	668	156	95.4	47.6			10.0	10.0			
1,302	4,053	313	836	212	79	97.1	28.0			7.0	9.4			
2,980	5,362	340	1,450	732	153	99.4	58.4			5.9	10.5			
1,074	2,689	375	513	68	51	93.3	14.7			11.6	9.9			
672	3,783	478	789	271	138	97.3	41.6			10.9	17.5			
19,126	45,435	5,282	12,709	3,942	1,602	96.3	35.4	28.4	10.0	12.6	49,921	28.7	616	0.4
1,533	3,768	287	2,150	367	118	89.9	18.1	}	}	6.4	5.6	}	}	}
1,717	3,934	421	1,542	122	58	81.5	8.2			8.0	3.8			
1,614	3,682	235	817	151	5	97.2	20.9			5.8	11.6			
2,224	5,180	428	2,168	342	129	89.1	16.8			6.9	5.9			
2,702	5,835	507	3,330	737	421	89.7	25.3			7.2	12.6			
1,493	4,482	483	1,760	263	221	86.4	16.9			8.5	12.4			
2,113	4,408	334	2,454	732	320	94.9	34.3			6.7	13.0			
1,279	4,164	548	986	60	46	83.1	6.4			9.8	4.7			
2,353	4,428	683	461	65	53	88.7	15.9			12.0	11.5			
1,345	2,902	199	431	133	47	92.7	35.6			6.0	11.2			
1,039	2,725	368	2,680	686	135	90.9	26.3			10.9	5.0			
1,129	2,970	260	1,242	365	182	97.6	34.4	7.9	14.7					
1,569	4,737	804	2,109	325	341	86.3	18.4	12.8	16.2					
1,261	4,763	327	1,424	547	181	90.8	42.3	5.9	8.2					
23,371	57,978	5,879	23,564	4,895	2,297	89.4	28.0	29.7	8.8	9.8	61,148	28.8	427	0.2
474,042	1,183,559	107,163	362,097	93,458	45,777	94.7	29.5	32.5	7.9	12.6	1,167,238	29.7	17,322	6.4

A.—VACCINE

Statement No. I showing the particulars of Vaccination in the

Number.	Districts.	Municipalities.	Population of districts or municipalities according to the census of 1921.	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	
						Males.	Females.	Total.		Total number of operations.	Under 1 year.
1	2	3	4	5	6	7			8	9	10
64	Municipalities—cont.	Tellicherry ...	27,576	11,030	2	752	648	1,400	700	678	566
65		Tenali ...	23,230	6,826	1	430	79	809	809	737	502
66		Tinnevely ...	53,783	15,193	2	1,730	974	2,704	1,352	2,283	1,803
67		Trichinopoly ...	120,422	13,369	4	4,470	3,068	8,138	2,035	6,743	2,443
68		Tirupati ...	17,434	11,622	1	347	334	681	681	618	311
69		Tirupattur ...	16,275	4,540	1	322	298	620	620	591	482
70		Tiruppur ...	10,851	2,894	1	384	268	652	652	623	315
71		Tiruvalur ...	24,124	5,079	1	363	227	590	590	488	371
72		Tiruvannamalai ...	21,912	1,992	1	458	413	871	871	844	601
73		Tuticorin ...	44,522	24,734	2	1,255	1,063	2,323	1,162	1,972	1,309
74		Udumalpet ...	10,236	5,000	1	354	198	552	552	440	257
75		Vaniyambadi ...	20,090	5,740	1	445	358	803	803	684	592
76	Military Cantonments.	Vellore ...	50,210	12,553	2	1,524	876	2,400	1,200	1,876	1,620
77		Villupuram ...	17,423	4,311	1	391	335	726	726	608	398
78		Virudhunagar ...	21,821	9,698	1	351	270	621	621	561	440
79		Vizagapatam ...	44,711	8,657	2	965	1,177	2,142	1,071	1,064	720
80		Vizianagram ...	39,299	7,866	2	1,478	919	2,397	1,199	1,541	1,175
81		Walaajpet ...	10,013	10,013	2	288	183	421	211	274	192
		Total of Municipalities.	3,030,739	...	163	118,494	80,874	199,368	610	125,755	81,150
1		Bangalore ...	118,940	8,792	2	370	153	523	262	179	121
2		Secunderabad ...	95,124	5,006	6	4,526	7,186	11,662	1,943	6,188	4,573
		Total of Cantonments	214,064	6,899	8	4,896	7,289	12,185	1,523	6,362	4,694
		Total of Medical Subordinates	...	...	...	11,509	1,113	12,622	...	2,658	1,656
		Grand total	* 42,317,013	...	743	1,028,829	528,235	1,557,127	† 2,483	1,492,272	727,827

* Excluding the population of Bangalore and Secunderabad Cantonments.

† In finding out the average number of persons vaccinated, the total work of Medical Subordinates is excluded.

‡ Excluding the Cantonments of Bangalore and Secunderabad.

NOTE.—(1) Difference between number of operations and number of persons vaccinated equals 89,961 which represents secondary operations.

(2) This statement does not include the statistics of dispensary vaccination which are exhibited separately in Statement No. III.

N.B.—In calculating the percentage of success shown in this statement and Statement No. III unknown cases have not been taken into account.

DEPARTMENT—cont.

Madras Presidency for the official year 1926-27—cont.

vaccination.			Re-vaccination.			Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Percentage of cases unknown to total cases.		Average annual number of persons successfully vaccinated during previous 5 years.		Average number of deaths from smallpox during previous 5 years.		
Successful.			Total number of operations.	Successful.	Unknown.	Primary vaccination.	Re-vaccination.		Primary vaccination.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	
1 and under 6 years.	Total of all ages.	Unknown.													
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
62	643	1	734	228	30	95.0	32.4	31.6	0.1	4.1	1,034	37.5	62	2.2	64
176	687	18	93	27	7	95.5	31.4	30.7	2.4	7.5	701	30.2	5	0.2	65
626	2,260	4	443	883	7	99.2	87.8	49.1	0.2	1.6	2,372	44.1	44	0.8	66
3,507	6,610	67	1,428	1,186	58	99.0	89.6	61.7	1.0	4.1	5,635	46.8	44	0.4	67
294	618	...	63	15	...	100.0	23.8	36.3	...	...	484	27.8	4	0.2	68
109	591	...	29	22	5	100.0	91.7	37.7	...	17.2	575	35.3	7	0.4	69
216	584	5	73	39	10	94.5	61.9	57.4	0.8	13.7	514	47.4	12	1.1	70
111	488	...	102	88	12	100.0	97.8	28.9	...	11.8	513	21.3	4	0.2	71
225	833	...	27	15	...	98.7	56.6	38.7	...	...	854	89.0	8	0.4	72
549	1,936	3	371	94	64	98.3	30.6	45.6	0.1	17.2	2,016	45.3	21	0.5	73
120	419	...	121	80	...	95.2	24.8	43.9	...	...	332	32.4	17	1.7	74
87	683	1	119	45	1	100.0	38.1	38.2	0.1	0.8	675	33.6	11	0.5	75
256	1,876	...	524	...	512	100.0	...	37.4	...	97.7	1,830	36.4	27	0.5	76
179	584	...	127	23	...	96.8	18.1	34.8	...	...	554	31.8	12	0.7	77
108	548	1	60	43	...	98.0	71.7	27.1	0.2	...	716	32.8	37	1.7	78
207	985	...	1,088	332	5	92.6	30.6	29.5	...	0.5	1,857	41.5	46	1.0	79
232	1,499	29	885	285	56	99.1	34.4	45.4	1.9	6.3	2,148	54.7	17	0.4	80
82	274	...	147	53	...	100.0	36.1	32.7	...	...	337	33.7	...	...	81
35,449	1,22,008	1,414	76,852	34,548	7,091	98.1	49.5	51.7	1.1	9.2	143,060	47.2	2,651	0.9	
45	186	...	344	233	...	92.7	67.7	3.4	...	...	783	6.6	32	0.3	1
1,851	6,064	20	5,559	1,090	9	98.4	19.6	75.2	0.3	0.2	6,025	68.3	8	0.1	2
1,896	6,230	20	5,908	1,323	9	98.2	22.4	35.3	0.3	0.2	6,808	81.8	40	0.2	
309	2,239	9	9,964	4,637	1,107	84.5	52.4	...	0.3	11.1	...	...	...	...	
511,196	1,314,036	108,606	454,816	188,966	53,984	95.0	33.4	34.0	7.8	11.8	1,310,298	31.0	18,973	0.5	

SUMMARY OF STATEMENT NO. I.

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which the results were known.		Average number of persons vaccinated by each vaccinator.	Number of children successfully vaccinated.		Ratio of successful vaccination per 1,000 of population.	Total cost of department.	Average cost of each successful case.
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.		Under one year.	One and under six years.			
By Special staff (statement No. I).	1,402,445	454,632	1,492,272	454,816	95.0	33.4	743	2,483	727,327	511,196	84.0	Rs. A. P. 5,56,423 11 1
By Dispensary staff (statement No. III).	749	225	749	225	94.9	59.6	...	974	30	373	...	...
By other agencies, if any	...	...	...	...	...	...	...	...	...	...	...	...
Total	1,403,194	454,907	1,493,021	455,041	95.0	33.4	743	2,483	727,357	511,569	84.0	* 5,56,423 11 1

* Exclusive of the pay and allowances of Assistant Directors of Public Health (Vaccination).

A.—VACCINE

Statement No. II showing the cost of the Department

Number.	District.	Ranges.	Assistant Director of Public Health (Vacation).	Expenditure.									
				Pay.	Health Inspectors.		Vaccinators.			Peons, etc.			
					Number.	Pay.	First class.	Second class.	Probationers.	Pay.	Number.	Pay.	Total pay of establishment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
				RS. A. P.		RS. A. P.				RS. A. P.		RS. A. P.	RS. A. P.
239	Trichinopoly.	Ariyalur ...	...	...	1	309 10 8	1	...	1	1,087 0 0	1	58 12 8	1,430 7 4
240		Jayankondan ...	...	...	1	285 0 0	...	1	1	799 0 0	1	49 13 4	1,188 13 4
241		Karur ...	...	...	1	311 0 0	...	...	1	1,109 15 0	1	51 10 8	1,472 9 8
242		Kulittalai ...	...	...	1	361 5 4	1	...	1	1,099 5 0	1	61 8 0	1,512 2 4
243		Lalgudi ...	...	...	1	240 0 0	...	2	...	1,176 9 0	1	48 0 0	1,464 9 0
244		Manappārai ...	...	...	1	348 0 0	...	1	1	930 8 0	1	48 0 0	1,324 8 0
245		Masiri ...	...	...	1	644 2 4	1	...	1	903 14 0	1	48 0 0	1,596 0 4
246		Perambalur ...	...	...	1	311 0 0	...	2	...	1,272 0 0	1	51 0 0	1,384 0 0
247		Trichinopoly ...	...	...	1	471 0 4	1	...	...	557 11 0	1	52 0 0	1,080 11 4
248	Turaiyur ...	...	...	1	464 14 0	...	...	1	998 6 0	1	61 0 4	1,414 4 4	
		Total of district ...	...	...	10	3,744 0 8	5	7	6	9,814 4 0	10	504 13 0	14,063 1 8
249	Visagapatam.	Anakāpalle ...	...	...	1	372 0 0	...	1	...	830 0 0	1	49 5 4	751 5 4
250		Bitlipatam ...	...	...	1	272 14 6	1	...	1	583 15 0	1	46 14 2	908 11 8
251		Bobbili ...	...	...	1	306 2 0	...	...	1	215 2 0	1	58 4 0	574 8 0
252		Chipurnapalle ...	...	...	1	485 14 0	1	...	1	602 12 10	1	47 14 0	1,186 8 10
253		Chodavaram ...	...	...	1	246 0 0	...	2	...	540 9 0	1	43 14 6	880 7 6
254		Gajapatinagaram ...	...	...	1	524 6 4	1	...	1	686 3 8	1	52 0 0	1,262 9 7
255		Narasapatam ...	...	...	1	372 1 4	...	2	...	642 6 0	1	47 9 4	1,150 1 4
256		Palkonda ...	...	...	1	820 0 0	1	...	1	568 12 0	1	47 14 0	986 10 0
257		Pārvatipuram ...	...	...	1	387 15 0	1	...	2	784 9 0	1	40 1 0	698 8 6
258		Sālar ...	...	...	1	246 0 0	...	...	1	412 7 6	1	24 0 0	455 8 6
259		Srungaverapukota ...	...	...	1	198 0 0	...	...	1	233 8 6	1	52 0 0	1,177 2 10
260		Visianagaram ...	...	...	1	407 0 0	...	2	...	718 2 10	1	149 0 0	990 12 4
261		Visagapatam ...	...	...	1	434 11 4	1	...	...	407 1 0	1	50 7 0	705 6 8
262		Yellamanchilli ...	...	...	1	830 11 8	...	...	2	824 4 0	1	...	...
		Total of district ...	...	...	14	4,853 12 2	6	15	4	7,029 12 11	14	754 3 4	12,697 13 5
		Grand total of districts ...	...	...	262	60,815 2 6	186	325	118	2,25,803 8 5	262	18,614 9 8	3,28,633 4 7

DEPARTMENT—cont.

in the Madras Presidency for the official year 1926-27—cont.

			Paid from							Number of all successful primary vaccination and re-vaccination	Average cost of each successful case.
Travelling allowance.	Contingencies.	Total cost.	Imperial funds.	Provincial funds.	Local funds.	Municipal funds.	Total.				
15	16	17	18	19	20	21	22	23	24		
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.		
454 10 0	104 8 3	1,989 9 7	...	511 1 3	1,478 8 4	...	1,989 9 7	5,212	0 6 1		
371 13 8	96 8 10	1,601 14 10	...	505 5 9	1,096 9 1	...	1,601 14 10	5,322	0 4 10		
463 11 4	168 15 6	2,105 4 6	...	502 4 0	1,603 0 6	...	2,105 4 6	5,540	0 6 1		
487 0 2	122 8 7	2,121 11 7	...	559 10 7	1,562 1 0	...	2,121 11 7	4,998	0 6 10		
482 2 0	152 12 2	2,099 7 2	...	428 9 6	1,675 13 8	...	2,099 7 2	5,801	0 5 9		
476 12 4	105 14 2	1,907 2 6	...	535 6 6	1,371 12 0	...	1,907 2 6	5,354	0 5 8		
388 10 4	102 12 7	2,067 7 3	...	841 9 3	1,225 14 0	...	2,067 7 3	4,265	0 7 9		
459 15 4	131 1 6	2,225 0 10	...	503 7 0	1,721 9 10	...	2,225 0 10	6,094	0 5 10		
280 12 8	36 2 6	1,397 10 6	...	668 3 6	734 7 0	...	1,397 10 6	2,737	0 8 2		
388 8 0	149 4 3	1,952 0 7	...	652 4 0	1,299 12 7	...	1,952 0 7	4,054	0 7 8		
4,234 0 4	1,170 3 4	19,467 5 4	...	5,697 13 4	13,769 8 0	...	19,467 5 4	49,377	0 6 4		
852 6 4	27 0 4	1,180 12 0	...	580 12 0	570 0 0	...	1,130 12 0	4,185	0 4 5		
289 1 8	41 0 0	1,243 13 4	...	275 13 8	967 15 8	...	1,243 13 4	4,056	0 4 11		
284 15 0	72 14 0	932 5 0	...	466 9 0	445 12 0	...	932 5 0	3,833	0 3 11		
329 3 5	44 6 8	1,516 2 11	...	680 5 8	829 13 3	...	1,510 2 11	5,522	0 4 5		
524 3 0	63 9 11	1,418 4 5	...	347 15 7	1,070 4 10	...	1,418 4 5	6,572	0 3 5		
340 1 4	34 9 8	1,439 2 4	...	554 2 4	885 0 0	...	1,439 2 4	4,745	0 4 10		
437 6 9	26 10 3	1,726 10 7	...	669 6 11	1,037 8 8	...	1,726 10 7	5,140	0 5 4		
390 0 8	35 6 3	1,575 8 3	...	502 7 3	1,073 1 0	...	1,575 8 3	4,224	0 6 0		
451 10 2	118 9 4	1,508 13 6	...	488 4 6	1,018 9 0	...	1,506 13 6	4,493	0 5 4		
275 5 8	46 13 10	1,020 11 0	...	414 3 6	606 7 6	...	1,020 11 0	3,065	0 5 4		
220 8 8	21 6 5	697 7 7	...	314 15 1	382 8 6	...	697 7 7	3,411	0 3 3		
328 5 2	68 11 7	1,569 3 7	...	590 11 7	978 8 0	...	1,569 3 7	5,062	0 5 0		
412 2 6	19 6 5	1,422 5 3	...	553 4 0	869 1 3	...	1,422 5 3	3,335	0 6 10		
425 4 8	28 6 8	1,159 2 0	...	518 8 8	640 9 4	...	1,159 2 0	5,310	0 3 6		
5,065 11 0	648 14 4	18,352 5 9	...	6,977 7 9	11,874 14 0	...	18,352 5 9	62,673	0 4 8		
1,20,325 8 1	28,347 14 8	4,77,196 11 4	...	1,56,896 8 11	3,20,330 2 5	...	4,77,196 11 4	1,277,017	0 6 0		

A.—VACCINE

Statement No. II showing the Cost of the Department

Number.	Districts.	Municipalities.	Assistant Director of Public Health (Vaccination).	Expenditure.									
				Pay.	Health Inspectors.		Vaccinators.				Peons, etc.		
					Number.	Pay.	First class.	Second class.	Probationers.	Pay.	Number.	Pay.	Total pay of establishment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
61	Municipalities—cont.	Srivilliputtur ...		RS. A. P.				1		RS. A. P.			
62		Tadpatri ...							◆	5 0 0	1	12 0 0	325 0 0
											(for one month).		17 0 0
63		Tanjore ...							2		524 0 0		524 0 0
64		Tellicherry ...							1	1	484 10 8	1	628 10 8
65		Tenali ...							1		360 0 0		860 0 0
66		Tinnevely ...						1			881 0 6	1	1,025 0 6
67		Trichinopoly ...			1	900 0 0			4		1,291 10 6		2,191 10 6
68		Tirupati ...							1		312 5 0		312 5 0
69		Tirupattūr ...								1	360 0 0		360 0 0
70		Tiruppur ...							1		585 12 0		535 12 0
71		Tiruvālar ...						1			300 0 0		300 0 0
72		Tiruvannāmalai ...						1			468 0 0		468 0 0
73		Tuticorin ...						1			692 3 0	1	854 3 0
74		Udamalpet ...							1		300 0 0		300 0 0
75		Vāniyambādi ...							1		372 0 0		372 0 0
76		Vellore ..							2		637 8 0		637 8 0
77		Villepuram ...							1		415 0 0		455 0 0
78		Virudhunagar ...							1		896 0 0		896 0 0
79		Vizagapatam ...						1	1		847 13 0	1	877 13 0
80	Vizianagaram ...						1	1		727 3 2		727 3 2	
81		Walajapet ...						1		415 2 7		415 2 7	
		Total of Municipalities.			9	10,310 15 4	57	102	9	65,779 0 1	38	7,374 8 0	83,464 7 5
	Military Cantonments—cont.	Bangalore ...					1	1		660 0 0			660 0 0
		Secunderabad ...			1	1,068 3 0	1	4	1	2,009 15 0	5	624 0 0	3,702 2 0
		Total of Cantonments ..			1	1,068 3 0		2	5	1	2,669 15 0	5	624 0 0
		Assistant Directors of Public Health.	1	13,420 12 0									13,420 12 0
		Grand total ...	1	13,420 12 0	272	1,14,324 0 10	195	432	128	2,63,842 7 6	305	21,613 1 8	4,29,779 10 0

- ♦ Vaccination was done by a compounder and then by the warrant officer of the Municipality for want of a qualified vaccinator, during
 • Sanitary Inspector for vaccination inspection.
 † Superintendent of Vaccination.
 ‡ Excludes Rs. 86-0-0, being the vaccination fees collected.
 § Excludes Rs. 19,711-4-4 being the cost of registration in the Madras Corporation and also Rs. 66 being the vaccination fees collected.
 || Excludes the 203 successful cases done in the Penitentiary of Madras.
 ¶ The average cost of each successful case was calculated on the total number of successful vaccinations performed by the Special amount of recoveries made for wastage of lymph.
 N.B.—In Calculating the average cost of each successful case the pay and allowances of the Assistant Director of Public Health have

DEPARTMENT—cont.

in the Madras Presidency for the official year 1926-27—cont.

Travelling allowance.	Contingencies.	Total cost.	Paid from				Total.	Number of all successful primary vaccination and re-vaccination.	Average cost of each successful case.	Number.
			Imperial funds.	Provincial funds.	Local funds.	Municipal funds.				
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.	Rs. A. P.
...	45 5 0	370 5 0	...	...	...	370 5 0	370 5 0	1,303	0 4 7	61
...	10 7 0	27 7 0	...	...	...	27 7 0	27 7 0	150	0 2 11	62
...	66 12 0	590 12 0	...	...	...	590 12 0	590 12 0	2,387	0 4 0	63
...	42 12 7	671 7 8	...	...	...	671 7 8	671 7 8	871	0 12 4	64
...	13 6 0	373 6 0	...	...	...	373 6 0	373 6 0	714	0 8 4	65
60 0 0	156 6 4	1,240 6 10	...	...	...	1,240 6 10	1,240 6 10	2,643	0 7 6	66
...	87 9 0	2,279 8 6	...	...	...	2,279 8 6	2,279 8 6	7,796	0 4 8	67
9 14 6	3 8 0	325 11 6	...	...	...	325 11 6	325 11 6	633	0 8 8	68
...	25 10 0	385 10 0	...	...	...	385 10 0	385 10 0	613	0 10 1	69
...	44 1 5	579 13 5	...	...	...	579 13 5	579 13 5	628	0 14 11	70
60 0 0	119 7 6	479 7 6	...	...	...	479 7 6	479 7 6	576	0 13 4	71
...	0 8 6	468 8 6	...	...	...	468 8 6	468 8 6	848	0 8 10	72
...	52 5 5	906 8 5	...	...	...	906 8 5	906 8 5	2,030	0 7 2	73
...	17 13 0	317 13 0	...	...	...	317 13 0	317 13 0	449	0 11 4	74
...	23 13 3	395 13 3	...	...	...	395 13 3	395 13 3	728	0 8 8	75
...	59 13 9	697 5 9	...	...	...	697 5 9	697 5 9	1,876	0 5 11	76
...	44 5 6	459 5 6	...	...	...	459 5 6	459 5 6	607	0 12 1	77
...	15 0 0	411 0 0	...	...	...	411 0 0	411 0 0	591	0 11 2	78
...	55 14 3	933 11 3	...	...	...	933 11 3	933 11 3	1,317	0 11 4	79
...	29 5 3	766 8 5	...	...	...	766 8 5	766 8 5	1,784	0 6 2	80
...	53 15 6	469 2 1	...	...	...	469 2 1	469 2 1	327	1 6 11	81
909 4 3	9,785 8 5	94,159 4 1	...	...	...	94,109 4 1	94,109 4 1	156,353	0 7 7	
240 0 0	...	900 0 0	900 0 0	...	...	...	900 0 0	399	2 4 1	
180 0 0	112 14 0	3,995 0 0	...	...	...	3,995 0 0	3,995 0 0	7,154	0 8 11	
420 0 0	112 14 0	4,895 0 0	900 0 0	...	...	3,995 0 0	4,895 0 0	7,553	0 10 4	
1,917 5 0	87 9 0	15,384 10 0	...	15,384 10 0	...	...	15,384 10 0	...	...	
1,23,572 1 4	38,233 14 1	5,91,585 9 5	900 0 0	1,72,251 2 11	3,20,330 2 5	98,104 4	15,71,808 5 1	1,440,923	¶ 0 6 2	

the year.

in the Vizianagaram Municipality.

Staff only, viz., Local Fund and Municipal Staff (Vide G.O. No. 1158 L., dated 4th September 1911) and exclusive of Rs. 1,550 being the total been excluded.

B.—DISPENSARY VACCINATION.

*Statement No. III showing Dispensary Vaccination in the Madras Presidency
for the official year 1926-27.*

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.	Total number of operations.	Primary vaccination.				Re-vaccination.			Percentage of successful cases in which the results were known.		Percentage of unknown cases to total operations.	
						Successful.				Total number of operations.	Successful.	Unknown.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.
						Under one year.	Over one and under six years.	Total of all ages.	Unknown.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Agency districts ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anantapur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arcot, North ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arcot, South ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bellary ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chingleput ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chittoor ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coimbatore (The Anamalais Medical Association) ...	...	...	974	*974	749	30	373	711	...	225	133	2	94.9	59.6	...	0.9
Cuddapah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ganjām ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Goāvari ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Guntur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kistna ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madras ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madura ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malabar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nellore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nilgiris, the ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rāmnād ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salem ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Kanara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tanjore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevely ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Visagapatnam ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	...	974	974	749	30	373	711	...	225	133	2	94.9	59.6	...	0.9

* Vaccinations performed by the Medical Officer himself.

Statement No. IV showing the number of persons primarily vaccinated and the number of those persons who were successfully vaccinated in the Madras Presidency in each of the undermentioned years.

Persons primarily vaccinated in the Madras Presidency.																			
1917-1918.		1918-1919.		1919-1920.		1920-1921.		1921-1922.		1922-1923.		1923-1924.		1924-1925.		1925-1926.		1926-1927.	
Total number.	Number success-fully vaccinated.	Total number.	Number success-fully vaccinated.	Total number.	Number success-fully vaccinated.	Total number.	Number success-fully vaccinated.	Total number.	Number success-fully vaccinated.	Total number.	Number success-fully vaccinated.	Total number.	Number success-fully vaccinated.	Total number.	Number success-fully vaccinated.	Total number.	Number success-fully vaccinated.	Total number.	Number success-fully vaccinated.
17,785	15,057	18,640	14,183	16,082	14,675	14,625	10,816	15,749	11,860	11,897	14,981	20,959	16,852	21,275	18,628	24,284	22,270	30,055	26,610
1,194,668	989,157	1,161,772	787,322	1,157,793	833,655	1,107,117	651,154	1,057,517	795,007	1,149,088	8,964,474	1,270,638	1,149,187	1,398,064	1,286,452	1,248,463	1,167,748	1,240,915	1,166,949
3,710	3,497	3,185	2,667	4,757	4,012	4,105	3,021	5,218	4,354	5,438	5,245	5,859	5,850	4,204	4,275	5,264	5,820	6,252	6,280
121,439	113,652	116,193	105,156	103,653	96,188	105,504	88,536	99,450	90,818	105,203	96,948	113,237	108,620	116,000	115,688	115,456	115,089	132,535	122,008
191	189	157	155	131	129	115	113	124	115	152	140	148	143	2	2	...	...	749	711
197	103	550	312	610	845	680	492	1,764	1,402	1,769	1,232	1,188	842	1,842	1,267	576	423	2,668	2,239
1,337,860	1,111,655	1,300,897	908,670	1,283,028	949,004	1,232,146	753,935	1,179,852	904,256	1,273,628	1,015,020	1,413,028	1,282,464	1,440,887	1,367,313	1,394,063	1,310,860	1,478,194	1,314,747
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Statement No. V showing particulars of vaccination verified by Inspecting Officers in the Madras Presidency during 1926-27.

Districts.	Total number of cases vaccinated.			Total number inspected.			Percentage of inspection to total number vaccinated.				Percentage of cases found successful to total number inspected.				Percentage of success as reported by vaccinators.
	By District Medical Officers, and Medical Officers including Civil Surgeons, District Health Officers, Municipal Health Officers, etc.			By Health Inspectors.			By District Medical Officers, including Civil Surgeons, District Health Officers, Municipal Health Officers, etc.		By Health Inspectors.		By District Medical Officers, including Civil Surgeons, District Health Officers, Municipal Health Officers, etc.		By Health Inspectors.		
	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	
Agency districts	66,883	15,777	1,828	599	61,378	13,456	27	38	918	853	541	932	895	957	245
Anantapur	31,968	7,409	2,842	617	29,006	6,459	89	83	907	872	246	960	264	928	297
Arcon (North)	73,418	11,885	7,562	422	61,574	9,000	103	86	939	757	339	967	256	990	400
Arcon (South)	74,568	12,289	7,562	1,200	56,933	8,438	82	98	764	686	618	955	307	967	394
Bellary	34,110	9,287	4,236	1,200	28,581	6,718	124	84	938	723	111	944	231	965	148
Chingleput	48,896	15,952	4,781	1,294	40,225	11,878	97	81	823	745	223	957	378	968	216
Chittoor	37,508	7,125	3,641	1,316	33,805	6,028	97	44	888	845	259	977	325	909	225
Coimbatore	77,106	10,925	3,380	4,208	61,354	19,628	142	148	796	692	271	959	249	960	185
Cuddapah	56,114	4,995	2,616	1,851	48,267	20,454	99	51	881	803	263	981	226	961	325
Gadavari	53,545	19,406	4,646	2,616	43,391	12,606	85	135	910	782	625	958	248	970	354
Godavari East	53,913	42,588	4,698	3,611	50,841	38,293	80	77	863	782	459	984	248	967	354
Guntur	76,572	17,883	7,755	2,698	62,449	12,967	101	145	822	725	797	941	257	989	750
Kistna West Godavari	37,320	7,082	4,224	1,022	33,147	5,889	113	83	888	832	282	937	204	983	439
Kurnool	19,464	12,471	1,927	1,035	15,911	15,162	613	83	...	...	280	...	...	986	330
Madras	78,783	46,739	14,955	24,020	53,911	25,826	190	514	684	324	601	986	242	971	580
Malara	108,536	35,294	10,851	4,436	94,158	25,826	95	126	868	782	524	984	425	975	680
Malabar	52,359	9,164	3,163	630	47,993	7,707	61	69	916	841	379	913	234	996	385
Nellore	6,762	10,967	2,517	2,698	4,064	7,473	372	246	717	681	448	982	507	940	394
Nilgiris, the	75,485	13,744	4,532	798	58,258	10,349	60	58	772	753	346	942	267	959	197
Salon	44,737	17,932	5,168	632	32,953	12,891	116	35	737	719	358	975	387	978	459
South Kanara	65,424	13,367	5,347	1,001	57,061	10,581	82	71	792	792	363	983	249	977	284
Ramanad	73,620	11,065	9,064	1,001	57,061	8,085	123	90	768	731	635	944	317	992	654
Tanjore	70,832	9,459	6,956	1,803	57,767	6,518	198	138	818	689	753	933	341	973	661
Tinnevelly	60,939	16,368	7,385	3,223	47,167	11,107	121	195	774	679	662	933	354	985	821
Trichinopoly	74,906	26,394	5,078	2,073	64,467	21,235	68	79	865	805	358	893	229	957	354
Vizagapatam	1,486,659	449,188	158,533	64,228	1,210,947	307,763	107	143	814	685	514	946	296	974	475
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Statement No. VI showing the number of vaccinations performed in Municipal Towns on children under one year of age (G.O. No. 1534 L., dated 6th December 1909).

Municipalities.	Number of births available for vaccination during the year 1926-27.	Number of deaths amongst children under one year during the year.	Number of successful vaccinations on children under one year during the year ending March 1927.	Date of extension of compulsory vaccination to municipalities.	Municipalities.	Number of births available for vaccination during the year 1926-27.	Number of deaths amongst children under one year during the year.	Number of successful vaccinations on children under one year during the year ending March 1927.	Date of extension of compulsory vaccination to municipalities.
Adoni	1,225	153	667	1st Dec. 1886.	Nagapatam	1,839	362	1,189	1st July 1886.
Anakāpalle	751	162	333	1st Nov. 1891.	Nellore	1,368	178	416	1st Aug. 1886.
Anantapur	439	60	192	1st Jan. 1886.	Ongole	676	122	801	1st Dec. 1885.
Bellary	1,420	140	847	1st Jan. 1891.	Ootacamund	854	106	405	1st July 1887.
Berhampur	1,190	266	610	15th April 1891.	Palacole	883	92	180	1st Sep. 1919.
Bezawada	1,953	500	664	1st May 1892.	Palamcottah	1,557	405	646	1st May 1886.
Bimlipatam	250	48	145	1st Jan. 1894.	Palghat	1,919	381	1,109	1st Jan. 1883.
Bōdinayakkannūr	1,063	210	686	19th Feb. 1916.	Palni	610	135	385	1st Dec. 1891.
Calicut	3,413	233	1,864	1st Oct. 1891.	Parlakimedi	704	119	414	1st Dec. 1890.
Cannanore	1,157	178	784	1st June 1891.	Peddāpur	515	84	263	1st April 1916.
Chioscole	506	100	243	1st Dec. 1890.	Periyakulam	953	179	686	1st Feb. 1891.
Chidambaram	622	102	108	1st July 1887.	Pollachi	543	93	381	23rd Feb. 1921.
Chingleput	640	184	256	1st April 1897.	Proddatur	473	89	174	1st Sep. 1915.
Chirala	567	161	243	9th May 1920.	Rajahmundry	2,434	573	980	1st Jan. 1886.
Chittoor	783	128	297	9th Jan. 1917.	Saidapet	988	149	657	1st April 1921.
Cocanada	2,258	375	1,630	1st June 1890.	Salem	3,203	501	1,504	1st May 1891.
Cochin	887	98	645	1st Jan. 1894.	Sivakāsi	588	100	405	1st Sep. 1920.
Coimbatore	8,059	541	1,557	1st Jan. 1899.	Srirangam	567	124	313	1st July 1888.
Conjeevaram	2,565	694	1,099	1st Jan. 1891.	Srivilliputtar	1,273	243	789	1st Jan. 1896.
Coonor	339	41	172	1st April 1887.	Tadpatri	254	14	145	1st Oct. 1921.
Cuddalore	1,835	344	1,147	1st Aug. 1896.	Tanjore	2,344	491	835	1st July 1893.
Cuddapah	679	134	207	15th July 1888.	Tellicherry	907	154	551	15th June 1892.
Dhārmapattinam	249	34	88	1st Feb. 1916.	Tenali	879	211	304	1st April 1910.
Dindigul	1,241	205	880	16th July 1886.	Tinnevely	2,241	684	954	1st July 1896.
Ellore	1,259	399	411	1st June 1888.	Trichinopoly	4,685	995	2,401	1st Aug. 1890.
Erode	542	83	283	1st April 1891.	Tirupati	531	131	268	1st Mar. 1890.
Gadagur	883	160	431	1st June 1899.	Tirupattur	819	189	306	1st July 1891.
Guntūr	2,324	636	753	1st Jan. 1914.	Tiruppur	393	57	144	1st Apr. 1918.
Hindupur	609	81	326	1st May 1920.	Tiruvallūr	368	94	178	1st Oct. 1913.
Hospet	814	111	493	1st April 1892.	Tiruvannāmalai	1,181	122	601	15th Dec. 1897.
Karūr	622	87	231	1st Sep. 1900.	Tuticorin	1,851	485	961	1st May 1892.
Kodakāñāl	202	63	94	1st April 1889.	Udamalpet	366	77	193	1st Apr. 1918.
Kumbakonam	1,939	406	757	1st Aug. 1889.	Vāniyambādi	662	102	424	1st May 1889.
Kurnool	1,246	218	540	1st July 1891.	Vellore	1,892	307	1,128	1st Jan. 1897.
Madras	22,219	4,411	10,269	1st June 1884.	Villupuram	482	64	229	1st Sep. 1919.
Madura	5,995	1,119	4,175	1st Jan. 1890.	Virudunagar	860	169	440	1st Sep. 1915.
Mangalore	1,996	228	1,541	1st Sep. 1891.	Vizagapatam	1,927	387	588	1st Aug. 1890.
Mannārgudi	724	116	271	1st Dec. 1890.	Vizianagram	1,289	259	621	1st Jan. 1891.
Masulipatam	1,554	335	580	1st May 1888.	Walajapet	391	62	159	20th May 1892.
Māyavaram	1,032	191	511	1st Oct. 1886.					
Nandyāl	409	47	292	1st Jan. 1900.					
Narasaraopet	373	104	157	1st April 1916.					
					Total	119,271	23,048	59,794	

Statement No. VII showing inspection work done by the Health Inspectors during the year 1926-27—cont.

Districts.	Ranges.	Number of Health Inspectors.	Number of villages inspected by Health Inspectors.	Total number of cases vaccinated.	Number of days spent on inspection duty.	Number of cases verified by Health Inspectors.	Total number of successful cases as reported by Health Inspectors.	Percentage of successful cases to the total number inspected as reported by Health Inspectors.	Proportion per cent of inspection by Health Inspectors to total number vaccinated.
1	2	3	4	5	6	7	8	9	10
Vizagapatam.	Anakapalle ...	1	137	6,630	656	6,225	5,135	86.4	93.9
	Binlipatam ...	1	116	6,790	235	6,311	4,056	64.3	92.9
	Bobbili ...	1	133	4,841	242	4,511	3,833	85.0	93.2
	Chipurupalli ...	1	262	8,407	249	7,850	5,522	70.3	93.4
	Chodavaram ...	1	232	10,341	256	9,413	6,572	69.8	91.0
	Gajapatinagarani ...	1	176	7,451	277	6,747	4,745	70.3	90.6
	Narasapatam ...	1	140	7,435	234	6,877	4,767	74.8	85.8
	Palakonda ...	1	278	6,538	217	6,949	4,224	71.0	91.0
	Paravatipuram ...	1	260	6,138	220	5,402	4,493	83.2	88.0
	Salur ...	1	121	3,751	230	3,505	3,085	88.6	98.4
	Srungavarapukota ...	1	127	6,045	259	5,542	3,411	61.5	91.7
	Vizagapatam ...	1	272	4,546	247	4,104	3,335	81.3	90.8
	Vizianagram ...	1	186	8,402	252	7,257	5,062	69.8	86.4
	Yellamanchili ...	1	311	6,997	225	6,539	5,310	81.2	98.5
Grand total ...		262	42,837	1,718,604	63,401	1,518,600	1,231,686	81.1	88.4

Government of Madras

LOCAL SELF-GOVERNMENT (PUBLIC HEALTH) DEPARTMENT

G.O. No. 1432, P.H., 25th July 1927

Vaccination—Annual Report of the Director of Public Health for the year 1926-27—Reviewed.

Order—No. 1432, P.H., dated 25th July 1927.

Recorded.

2. The Government are glad to note that since the introduction of the District Health Scheme there has been a progressive decline in the mortality from smallpox. This amply demonstrates the value of vaccination and of the work performed by the District Health organization. In 1922-23 the total number of deaths from smallpox was 26,526, while in 1926-27 it was only 9,816. The mortality during the year 1926-27 would have been less still, if the health staffs in the districts of Ganjam, Madura, Tanjore and Anantapur had received prompter intimation of outbreaks which occurred in parts of these districts. The attention of the Collectors of the districts concerned is invited to the remarks of the Director of Public Health in this connexion and the Government trust that every effort will be made to impress upon their subordinates the importance of reporting at once the earliest cases of smallpox.

In view of the fact that the majority of deaths from this disease occur among unvaccinated persons or among those who have not been revaccinated since infancy, the Government desire to impress upon all local bodies the importance of carrying on a vigorous and intensive vaccination campaign.

3. The total number of operations performed by all agencies during the year under review was 1,948,062 compared with 1,965,026 during the previous year. In municipalities an increase of 19,411 was recorded in the operations performed. The Government note with satisfaction that the figures representing the total number of vaccination operations performed showed an improvement over those of the previous year in practically every town in which a health officer was employed. The attention of all municipal councils, which have not yet sanctioned the employment of a health officer, is drawn to this fact and to the desirability of employing one as early as possible. The percentage (94.9) of success in primary and secondary vaccinations continued to be high and demonstrates clearly the continued efficacy of the glycerine lymph issued by the King Institute.

4. The number of children successfully vaccinated in districts rose from 584,137 to 639,827. The infantile vaccination rates reported from the municipalities of Chidambaram, Guntur, Cuddapah, Nellore and Karur were however far from satisfactory. This is attributed in the case of Guntur to the high infantile death-rate, and in others to the imperfect registration of births and the

lack of adequate supervision over the work of the vaccination staff. The municipal councils concerned are requested to take early steps to rectify these defects.

5. In G.O. No. 1393, P.H., dated 11th August 1926, the District Health Officers were made responsible for the supervision of vaccination and the registration of vital statistics in municipalities in which there are no health officers. The strength of the inspection staff was also increased during the year under review by the employment of 32 additional health inspectors. The Director of Public Health reports that a further increase in the strength of the Health Inspectors' staff is necessary. As regards vaccinators the number of first-class men employed by local bodies fell from 202 to 195. The number of second-class vaccinators increased from 397 to 432, while that of probationary vaccinators continued to decrease. The Director of Public Health reports that although trained men are now available, the full complement of vaccinators is maintained only in very few districts and that one of the reasons for this is the failure on the part of local boards to offer scales of pay sufficiently attractive to induce suitable applicants to accept Local Fund employment. The Government have recommended suitable scales of pay for adoption by local bodies and as the payment of salary to unqualified men who have not been exempted by the Director of Public Health or whose employment has not been sanctioned by the Government has been declared to be illegal and surchargeable, it is hoped that qualified men will be employed by local bodies in increased numbers on suitable rates of pay.

6. The Government are pleased to learn that the health staffs continued to do good work in detecting cases of unprotected and unregistered children. As many as 15,000 cases of unprotected children were detected in the North Arcot and Coimbatore districts, 12,000 cases in South Arcot and Malabar and 11,000 in Nellore. The maintenance of vaccination registers continued to be unsatisfactory in many unions. The Government note with regret the instances mentioned by the Director of Public Health in paragraph 5 of his report and they trust that presidents of the boards concerned will realize the obligation imposed upon them by the statute and take effective steps for the improvement of vaccination in the areas under their control.

7. In G.O. No. 1415, P.H., dated 13th August 1926, the Government emphasized the need for closer co-operation between Presidents of Local Boards and District Health Officers in the administration of vaccination and disciplinary control over vaccinators. The Director of Public Health points out that local boards have made little or no effort to follow this advice and that on the other hand the recommendations made by the Health Officers have often been ignored. The attention of the local boards concerned is invited to the instances quoted by the Director of Public Health in paragraph 7 of his report and the Government trust that they will in future work in closer touch with the Health Department and will give every consideration to the recommendations made by the District Health Officers in all matters relating to vaccination as directed in G.O. No. 389, P.H., dated 4th March 1926. In the interests of discipline and efficient work Presidents of Local Boards are also requested to consult the District Health Officer in all matters regarding the leave, transfers, appointment and punishment of vaccinators. The example of the Presidents of the Taluk Boards of Puttur and Berhampur in having delegated to their District Health Officers their power to sanction the prosecution of defaulters is commended to the Presidents of all Local Boards for adoption.

8. The Director of Public Health has again emphasized in his present report the desirability of transferring the administration of vaccination in rural areas from the taluk boards to the district boards. This suggestion will be considered when the amendment of the Local Boards Act is undertaken. In regard to the proposal that the Registration of Births and Deaths Act III of 1899 should be extended throughout the Presidency all Collectors have been requested in G.O. No. 2022, P.H., dated 11th November 1926, to submit proposals for the extension of the

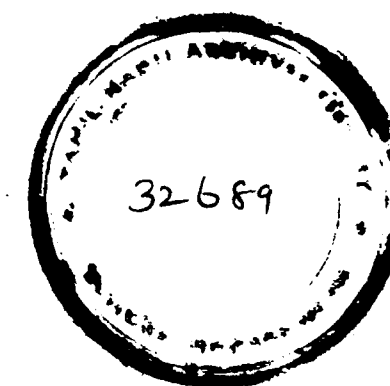
Act to such portions of their districts as they consider desirable and orders have been issued on the proposals so far received.

9. The Director of Public Health points out that only one or two district boards have agreed to make vaccination compulsory within their areas. The Government trust that all other district boards will further consider the question of adopting this course.

(By order of the Government, Ministry of Local Self-Government)

C. B. COTTERELL,
Secretary to Government.

To the Director of Public Health.
" the Surgeon-General.
" the Inspector of Municipal Councils and Local Boards.
" the Law (General) Department.
" the Revenue Department.
" the Board of Revenue (Land Revenue and Settlement).
" the Director of Public Instruction.
" the Accountant General.
" the President, Corporation of Madras.
" all Collectors and District Magistrates.
" all Presidents of District Boards.
" all Chairmen of Municipal Councils.
" the Examiner of Local Fund Accounts.
" the Assistant Quartermaster-General.
" the Consul-General for Netherlands.
" the Consul-General for Siam at Calcutta.
" the Librarian, Legislative Council Library.
" the Chief Editor, "Health and Welfare," Lucknow.
" the Honorary Secretary, L.S.G. Institute, Poona.
Editors' Table.



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