

MADRAS RECORD OFFICE.

Government of Madras.

Public DEPARTMENT.

G.O. No.	995	Press ~~Mis.~~
Dated	14-4-	1869.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Department,
16th July 1869.*

No. 133. Read the following letter from the Sanitary Commissioner for Madras, to the Chief Secretary to Government, Fort Saint George ; dated Madras, 8th July 1869, No. 2575.

I have the honour to forward, herewith, for submission to Government, the accompanying reports on the mortality in the districts of the Madras Presidency, during the fourth quarter of 1868, contrasted with that of 1867, and on the vital statistics in the city of Madras during the first quarter of 1869.

No. 134. ORDER THEREON, 17th July 1869, No. 995.

The Government notice with pleasure the generally satisfactory character of the foregoing report upon the mortality in the several districts of the presidency during the fourth quarter of 1868. The great decrease in the number of deaths from cholera is especially a subject for congratulation, as it appears to be due to the recently introduced measures for sanitation at fairs and festivals.

2. The Board of Revenue will be requested to arrange for the preparation, as suggested by the Sanitary Commissioner, of annual tables showing the exact dates on which these fairs and festivals are held in each Collectorate. Those for the year 1869 should be furnished as early as possible.

(True Extract).

Actg. Secy. to Govt.

To the Sanitary Commissioner.

- „ Board of Revenue.
- „ Inspector General of the Indian Medical Department.
- „ President of the Municipal Commission for the Town of Madras.

Exd. J. Wright.

REPORT

ON THE

MORTALITY IN THE DISTRICTS OF THE MADRAS PRESIDENCY,

DURING THE FOURTH QUARTER OF 1868, CONTRASTED

WITH THAT OF 1867.

It is unnecessary to notice in detail the discrepancies between the rates of population observable in the fourth quarters of the years 1867 and 1868. I purpose, therefore, to follow the system adopted in reporting upon the mortality during the second and third quarters of the latter year, during which the numbers shown under the head of population simply indicate the total number of persons residing in districts from which Returns of Births and Deaths are regularly received.

From calculations based upon the accompanying table it will be seen that assuming the population of the whole Presidency to be (as by revised statement for 4th quarter, 22,924,301 the general mortality rate throughout it was as follows:—

1st. quarter, *84,618, at the rate of 3·6 per mille or 14·4 per annum.
2nd do. *86,632 do. 3·7 do. 14·8 do.
3rd do. *106,792 do. 4·6 do. 18·4 do.
and 4th do. 100,715 do. 4·3 do. 17·2 do.

or taking the whole year, 3,78,757 deaths, at an actual annual rate of 16·5 per mille, is found to have occurred in a population of 22,924,301.

Districts.	QUARTERLY RATE.								ANNUAL RATE.	
	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.		1867.	1868.
	1867.	1868.	1867.	1868.	1867.	1868.	1867.	1868.		
Ganjam ...	5·1	2·2	2·2	2·7	2·2	3·5	2·7	3·3	12·4	11·8
Vizagapatam ...	3·4	2·6	2·02	3·0	2·1	3·5	3·2	3·04	10·9	12·3
Godavery ...	3·6	3·4	2·4	3·1	3·07	3·9	3·4	3·7	17·8	14·4
Kistna ...	6·6	3·2	3·2	4·2	6·8	5·5	3·2	6·07	30·3	17·4
Nellore ...	4·8	3·4	3·4	3·9	2·8	4·5	4·1	4·2	15·2	16·08
Cuddapah ...	3·5	2·6	3·09	3·3	2·4	4·6	3·2	6·3	12·4	16·6
Bellary ...	3·5	3·5	3·2	4·7	2·9	6·6	3·6	6·9	13·4	20·8
Kurnool ...	5·4	3·5	3·9	4·6	3·1	5·5	4·3	5·6	16·9	19·2
Madras ...	3·6	4·3	3·4	5·6	4·2	7·6	5·7	9·3	22·09	23·7
North Arcot ...	7·5	4·2	3·6	3·7	3·3	5·06	4·6	4·8	19·03	17·9
South Arcot ...	5·0	2·3	2·8	2·2	4·4	5·2	4·05	7·7	16·5	14·6
Tanjore ...	5·9	4·8	4·3	3·7	5·8	5·3	4·9	5·5	21·2	19·4
Trichinopoly ...	5·1	4·8	3·2	3·6	3·8	4·06	3·8	3·6	16·2	16·09
Madura ...	9·2	2·3	4·4	2·1	3·9	2·5	4·2	2·8	22·9	9·8
Tinnevely ...	5·3	2·5	2·2	2·8	2·4	3·2	3·4	3·9	13·5	12·6
Coimbatore ...	3·4	2·1	1·9	2·6	2·04	2·3	2·1	2·9	9·6	11·1
Salem ...	3·2	2·7	1·9	2·2	2·4	3·8	2·9	4·2	10·5	21·1
South Canara ...	5·8	5·2	6·6	4·3	10·04	6·02	5·3	4·8	28·6	12·09
Malabar ...	5·0	4·4	4·09	4·2	4·9	4·1	3·7	3·2	17·5	16·08
Total.....	5·0	3·3	3·3	3·4	3·7	4·4	4·2	4·3	16·4	15·4

* These figures do not agree with those already published in the Quarterly Reports to which they refer, as supplementary Returns were subsequently received which are here added.

Dist. of 1868

PUBLIC.

THE SANITARY COMMISSIONER.

Dated July, 17th.

Recd.

G. O. 17th July 1868, No. 993.

JULY.

NO. 133-134.

Reviewing the report on the mortality in the districts of this presidency during the fourth quarter of 1868.

Return showing the deaths among the Civil Population of the Madras Presidency, during the 4th Quarter of 1867.

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Districts.	Population at last Census.	From Disease.				From Violence.										Ratio of deaths per 1,000 from				Remarks.	
						Accidents.			Suicides.							Cholera.	Small-pox.	Fevers.			
		Cholera.	Small-pox.	Fevers.	Age.	Other Diseases.	Drowning.	Snake-bite.	Wild Beasts.	Other Accidents.	Hangings.	Poison.	Other suicides.	Murders.	All Causes.						
Ganjam	1,234,742	1,820	1,554	178	57	1,725	107	1,238	27	10	9	16	2	1	...	4	2.7	0.1	0.04	1.3	Excluded of certain villages from which no returns have been received.
Vizagapatam.....	1,424,652	2,453	2,157	10	80	2,166	578	1,630	73	16	11	29	3	5	2	5	3.2	0.007	0.05	1.5	Do.
Godavery	1,420,229	6,090	5,363	41	276	9,656	278	1,742	42	11	...	4	...	...	1	...	8.4	0.02	0.1	6.7	Do.
Kistna	892,484	3,903	3,449	131	231	1,934	1,495	3,464	47	22	...	11	13	...	1	...	3.8	0.1	0.2	2.1	Do.
Nellore	1,145,091	2,522	2,198	1	250	611	684	3,065	60	21	3	24	...	...	...	1	1.4	0.0008	0.2	0.5	Do.
Cuddapah ..	1,144,759	3,723	1,666	6	87	1,738	347	1,470	43	10	1	15	...	...	...	1	1.3	0.005	0.07	1.5	Do.
Bellary	1,304,998	4,778	2,037	...	159	2,254	472	1,780	58	20	...	18	3	8	...	2	4.3	...	0.1	1.7	Do.
Kurnool	771,062	3,354	1,751	...	38	2,141	210	880	26	9	8	21	19	...	1	2.4	...	0.04	2.7	Do.	
Madras	664,836	3,792	1,832	14	637	616	393	2,072	28	9	...	21	...	...	1	1.5	0.02	0.9	0.9	Do.	
North Arcot.....	1,187,134	5,559	2,659	85	977	1,623	458	2,285	85	16	9	11	21	1	4	2.4	0.07	0.8	1.3	Do.	
South Arcot.....	1,261,846	5,119	2,692	339	503	982	574	2,575	58	50	10	23	3	1	...	1	4.05	0.2	0.3	0.7	Do.
Tanjore	1,572,703	7,849	3,863	864	742	1,367	1,168	3,575	55	62	1	11	1	1	...	1	2.4	0.5	0.4	0.8	Do.
Trichinopoly.....	1,004,719	3,891	1,857	323	218	668	539	2,068	18	22	3	29	1	...	1	1	3.8	0.3	0.2	0.6	Do.
Madura	911,894	3,901	1,810	41	534	916	251	2,065	49	35	3	4	2	...	1	...	4.2	0.4	0.5	1.004	Do.
Tinnevelly	1,363,951	2,459	1,214	19	525	510	372	3,164	46	10	5	15	...	...	...	1	1.3	0.01	0.3	0.3	Do.
Tinnevelly	1,416,132	3,089	1,730	11	131	581	710	1,553	65	16	...	...	...	...	...	2.1	0.007	0.09	0.4	Do.	
Coimbatore	1,463,221	4,362	2,036	15	446	1,545	302	1,932	81	26	2	9	...	...	...	1	3.2	0.01	0.2	1.03	Do.
Salem	836,919	4,447	2,060	58	32	1,744	500	1,961	41	26	15	58	2	1	...	1	5.3	0.06	0.03	0.08	Do.
South Canara.....	1,761,501	3,687	2,876	13	574	1,987	826	2,946	57	87	6	45	14	1	...	4	3	0.007	0.3	1.1	Do.
Malabar	22,811,073	97,209	51,989	45,220	2,149	6,497	34,758	10,264	41,465	964	478	86	386	38	55	72	38	0.09	0.2	1.5	
Total.....																					

Districts.	Population at last Census.	From Disease.				From Violence.						Ratio of deaths per 1,000 from.				Remarks.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Ganjam	1,210,517	20	41	2,288	186	1,429	18	9	11	12	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3</

Cholera.—The first disease of importance which claims special attention is Cholera, and as regards this disease, it may without doubt be asserted that the quarter under review is one of the healthiest of which we have any record of a reliable character. The table in the margin shows at a glance the actual and relative

Cholera.	1867.	1868.	Difference.
First Quarter.....	18,645	6,449	12,196
Second "	5,575	972	4,603
Third "	6,222	400	5,822
Fourth "	2,149	217	1,932
Total...	32,591	8,038	24,553

mortality in each quarter of the two years under notice; and the very small number of casualties from this disease, recorded in the concluding quarter of last year, is worthy of notice. Although, in 1867, a very decided improvement in the public health as regards

this disease was observed at the conclusion of the year, it is to be remarked as satisfactory that the fatality of the disease during the same period of last year amounted as nearly as possible to only one-tenth of that previously observed. Although it is undoubted that the year 1868 showed a very wide spread immunity from epidemic cholera which must, to a very great extent, be esteemed as accounting for the low rate of mortality from disease, yet there is another cause conducive to the same result, which is even more satisfactory, because it is clearly referable to human interference by the enforcement of sanitary laws during the occurrence of Fairs and Festivals. There can, I think, be very little doubt now entertained that epidemic cholera is chiefly due to the immediate or ultimate results of these agglomerations of people. The measures, which under the orders of this Government have been adopted in the hope eventually of "stamping out" this disease entirely, are no doubt calculated to effect the end in view to a very material extent. But I would respectfully submit that it would be highly desirable that the Board of Revenue should direct the preparation of an annual chronological table showing the exact dates at which in each Collectorate or District Fairs or Festivals are to be held. This would enable the Sanitary Department to trace out mortality from Cholera or other epidemics to the primary source of their origination; and should there eventually be an organized system of general sanitary supervision throughout this Presidency, attention would be directed to the exact period of the year at which precautionary measures should be adopted to protect the public health of those localities where agglomerations of people are likely to occur at stated times of the year.

The information at present in possession of this Department, (and which is comprised chiefly in the list of Fairs and Festivals occurring within the limits of the Madras Presidency, upon which the orders of Government were passed in November of last year,) is not sufficiently accurate to enable me to estimate how far previous casualties from cholera were actually the result of, or coincident with, large collections of people, nor can I fully trace out cases arising from this cause in the period under review at present.

Throughout the Madras Presidency the Collectorates or Districts, which appeared to have suffered to any extent from cholera during the period under review are noted in the margin. It is to be observed, however, that in some (marked*) of these Districts large concourses of people assemble together to celebrate the annual festivals that take place during this season of the year. If we can point to these assemblages as one of the causes for the origination of this disease, we cannot be at a loss to account for its prevalence in these particu-

Ganjam	20
* Tanjore	50
* Trichinopoly	31
Madura	24
Tinnevely	18
* Salem	16
* South Canara	22

lar districts. Although it may be said that cholera prevailed to a certain extent in the districts, abovenamed, yet considering the immunity which the other districts have enjoyed from the disease, and on a comparison with the experience of the previous quarters of the year 1868, it is gratifying to note that a remarkable reduction has taken place in the rate of mortality from cholera, in many of these districts, during the fourth quarter of the year. This can only be accounted for by the knowledge of the more strict observance, of late, in the enforcement of Sanitary Laws generally, and particularly during Fairs and Festivals.

Small-pox.—In my last report I had to comment on the considerable increase

Small-pox.	1867.	1868.	Difference.
First quarter ...	8,549	10,366	+ 1,817
Second „ ...	6,532	9,845	+ 3,313
Third „ ...	5,706	7,708	+ 2,002
Fourth „ ...	6,497	5,093	— 1,404
Total...	27,284	33,012	+ 5,728

that had occurred as regards the fatality of small-pox, which was much more prevalent during the first three quarters of 1868 than in the same period in the preceding year. It is satisfactory, however, to be able to add that in the fourth quarter of the year, 1404 cases less occurred than in the same period of the

preceding year. I before remarked that if the increase, at the rate of the first three quarters, had been persistent throughout the year, the annual increase would have been at the rate of nearly 10,000 deaths. The actual increase in the first three quarters amounted to 7,132 deaths; but this being counter-balanced by a considerable diminution in mortality (1,404) in the fourth quarter the actual net increase in mortality for the whole year amounted to only 5,728.

The very marked decrease in mortality from small-pox during the quarter under review was coincident with an equally singular immunity from epidemic cholera, while, as will appear below, fevers were much less prevalent than in the corresponding portion of the preceding year.

As regards the course of Small-pox during the entire year under review, it is to be observed that there was a steady decline in the rate of mortality during each consecutive quarter, while the number in the concluding quarter of the year was less than one-half of that observed during the first three months of it.

Fevers.—Fevers as shewn in the accompanying table, continued to cause a

Fevers.	1867.	1868.	Difference.
First quarter ...	30,483	24,017	— 6,466
Second „ ...	21,463	21,533	+ 70
Third „ ...	23,351	27,612	+ 4,261
Fourth „ ...	34,758	29,629	— 5,129
Total...	110,055	102,791	— 7,264

very large amount of mortality. This, however, is less to be wondered at when we bear in mind that the fourth quarter of the year is, in this Presidency, that which is characterised by the greatest prevalence and fatality of the disease. When further improvement is effected,

and when the system of registration is more perfect than it has hitherto been, it will be possible by a careful analysis of a series of minor district returns to arrive at some possible conclusion as to the actual and definite localities in which fever is, either from peculiarities of soil or cultivation, or from the natural habits of the people, persistently endemic. It is impossible, however, for any Central Sanitary Department to carry out to a satisfactory conclusion any enquiry of this comprehensive character. A thorough acquaintance with the topography of the districts, their geology, natural and artificial drainage, nature of the soil and sub-soil, uncultivated jungle, extent and nature of cultivation, &c., is essential to the

of such an enquiry, which could alone be carried out efficiently tent local Sanitary Inspectors. I believe, however, that the more system of returns now authorized by the Board of Revenue will form a nent of that general knowledge which must be preliminary to so com- e and important an enquiry.

HOWARD B. MONTGOMERY, M.D.,

Secretary Sanitary Commissioner for Madras

REPORT
ON THE
MORTALITY IN THE
DISTRICTS
OF THE
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DURING THE FOURTH QUARTER OF
AND THAT OF 1868.

Printed by H. MORGAN, at the Government

Public Department.
PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following letter

*from the
Sanitary Commissioner
for Madras.
Here entered July 1869 No. 2075*

Order thereon No 9952 17 July 69

*The Government
with pleasure the
generally satisfactory
character of the foregoing
report upon the mortality
in the several Districts
of the Presidency during
the fourth quarter of
1868. The great decrease
in the number of deaths
from Cholera is especially
a subject for congratulation*

as

as it appears to be due
to the recently introduced
measures for sanitation
at fairs and festivals.
~~The~~ Board of Revenue
will be requested to ar-
range for the prepara-
tion, as suggested by
the Sanitary Commis-
sioners, of annual ta-
bles showing the ex-
act dates on which
these fairs and festivals
are held in each Col-
lectorate. Those for
the year 1869 should
be furnished as early
as possible.

1869

To The Sanitary Commⁿ Sep 22/7

Board of Revenue

Sup^t J. McDougall

President M.C. for the town of ...

Sept 24/7

Cont. of 1869 MSS.

Table

To
the Secretary General

Recd
Date July 17 } 1869

NO 133. 1869

Receiving the Report of
the Morbidity in the
District of this Prov.
during the fourth
quarter of 1868.

Further Pro 25 March/70 No 98
1869
#No 961 of 1870
1871
1099
1871