

Marine (1898) Department.

G.O., No. 375 In

DATED 13 May

[Despatch Abstract.]

Infection of plague by means of rats. G. O. L. & In
Dept. communicating certain orders regarding — with
the request that the Port Authorities may be
instructed to see that no rats are landed with
goods imported by sea and that rats found on
ships are destroyed forthwith.

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

2

No. 274 M., 23RD FEBRUARY 1897.

GOVERNMENT OF MADRAS. LOCAL AND MUNICIPAL DEPARTMENT.

ORDER—No. 274 M., dated 23rd February 1897.

There is a general belief, supported by medical opinion, that rats are peculiarly susceptible to the infection of the bubonic plague and are active agents in its dissemination. Granaries are the favourite haunts of rats, and grain bags arriving from any place suspected to be affected by the plague should be very carefully examined and any rats found with them at once destroyed and their bodies consumed by fire. Infection once brought into a granary spreads rapidly among the healthy rats and thence in time to human beings living in the neighbourhood.

2. The attention of all Collectors, Presidents of District Boards and Chairmen of Municipal Councils, and the President, Municipal Commission, Madras, is therefore drawn to the necessity of taking special precautions to prevent the danger of infection from this source. Arrangements should be made for the constant inspection of granaries and grain bazaars and care taken to keep them clean and disinfected and to have the rats destroyed.

3. In inspecting these granaries particular inquiries should be made whether any dead or sick rats have been observed. Rats sick with the plague seem careless in the presence of men and run about in a dazed way with a peculiar limping gait in the hind legs owing to painful glands in the groin.

4. The bodies of dead rats when found should invariably be burnt.

(True Extract.)

G. S. FORBES,
Secretary to Government.

To all Collectors.
„ all Presidents of District Boards.
„ all Chairmen of Municipal Councils.
„ the President, Municipal Commission, Madras.
„ the Sanitary Commissioner.
„ the Surgeon-General.
„ the Revenue Department.

Government {1897} of Madras.
LOCAL AND MUNICIPAL.

Recd. } 1897. Enclosures
Regd. } Spare copies

G.O., No. 274 M., 23rd February 1897.

FEBRUARY.

Mar Sum
6/2/97

Bubonic Plague.

Drawing, with remarks, the attention of all Collectors, Presidents of District Boards and Chairmen of Municipal Councils, and the President, Municipal Commission, Madras, to the necessity of taking special precaution to prevent the danger of infection of — by means of rats found in grain bags arriving from infected places.

Government {1898} of Madras.
LOCAL AND MUNICIPAL.

Recd. } 1898. Enclosures
Regd. } Spare copies

G.O., No. 184-P., 11th March 1898.

MARCH.

Mar Sum
6/2/98

Bubonic Plague.

Passing orders on the revised proposals submitted by the Collector of Karnool for the formation of Inspection Stations and Observation Circles.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

From MUHAMMAD RAZA KHAN, Esq., Acting Collector of Kurnool, to the Secretary to Government, Local and Municipal Department, dated 6th March 1898, C. No. 623-Genl.

Adverting to G.O., No. 93-P., dated 26th February 1898, and in modification of my C. No. 593, dated 2nd March 1898, I have the honour to report as follows.

2. No railway inspection stations are necessary in this district, there being no railway stations situated at or near the Hyderabad frontier.

3. I consider it advisable to establish Road Frontier Inspection Stations, not only at the eight abkari chowki stations named in my C. No. 593, dated 2nd March 1898, but also at Bijinevemula, in the Nandikotkur taluk, in view of the long distance of 11 miles between Allur and Morawakonda. I recommend that at each of the inspection stations, the establishment and accommodation proposed in my previous reference may be maintained, viz. :—

		Staff.	
		One Hospital Assistant, 2nd or 3rd grade.	One totti (Rs. 9 or 10).
		One gumastah (Rs. 15).	Two police peons (Rs. 7 each).
		One conservancy maistry (about Rs. 12).	

Accommodation.

Sheds sufficient to contain twelve cases under observation and three plague cases. I request to be favoured with a list of disinfectants and stores to be maintained at each station.

4. With reference to paragraph 4 of the Government Order, the district may be divided into fourteen circles as particularized below :—

Serial number of circle.	Head-quarters.	Number of villages comprised in the circle and appertaining to				Total number of villages in each circle.	Remarks.
		Pattikonda taluk.	Ramallakot taluk.	Nandikotkur taluk.	Nandyal taluk.		
1	Gandrevula ..	7	10	..	..	17	The head-quarters are located in many instances on or near the northern boundary which is more exposed to infection than others. Circles which are hilly have fewer villages than those where the country is plain.
2	Edurur ..	..	20	..	..	20	
3	Kurnool ..	..	18	4	..	22	
4	Satanikota ..	..	..	15	..	15	
5	Nagatur ..	..	..	17	..	17	
6	Musalimadugu ..	..	..	15	..	15	
7	Atmakuru ..	..	..	16	..	16	
8	Tarigopula ..	..	..	14	..	14	
9	Sunkasala ..	..	..	10	..	10	
10	Tippayapalli ..	..	..	2	3	13	
11	Uyyalavada ..	..	13	..	12	14	
12	Luddagiri ..	..	21	..	..	13	
13	Machapuram ..	13	1	..	..	21	
14	Tornikal ..	12	..	..	..	14	

It was first proposed to exclude the villages comprising the 14th circle, as they are west of the trijunction between the Hyderabad territory and the districts of Bellary and Kurnool, but as the tract is within the limit of 20 miles from the border, I have, on reconsideration, thought it advisable to constitute these villages also into an observation circle.

For the fourteen circles above mentioned as many Sanitary Inspectors are needed ; but there being two inspectors already in employ on observation duty in the Ramallakot and Nandikotkur taluks, only twelve men will be indented for from Madras.

The observation circles will be apportioned as follows among three Supervisors, whose charges will be denominated divisions :—

Division.	Head-quarters.	Circles numbers.
No. 1 ..	Kodumur *	I, II, XII, XIII and XIV.
" 2 ..	Kurnool *	III, IV, IX, X and XI.
" 3 ..	Jutur ..	V, VI, VII and VIII.

A map showing the proposed circles, the head-quarters of Inspectors and Supervisors, Inspection Stations, &c., is herewith submitted as required by Government.

5. The Board of Revenue (Separate Revenue) has consented to spare for duty as Supervisors Messrs. Bradbury and Berlie, Assistant Inspectors, who are acquainted with the frontier villages and also know the vernacular. I have addressed the Inspector-General of Police for the services, on similar duty, of Mr. Anderson, who was for some years the Inspector of Police at Cumbum and who is fairly acclimatized to this district.

6. With regard to my previous recommendation for the appointment of a Sanitary Inspector for Nandyal, an Assistant Plague Inspector may be posted to the place instead as contemplated in Regulation 6.

7. The Surgeon-General states that no lady Apothecary or Hospital Assistant is available for employment in the Kurnool Municipality and recommends that a nurse may be appointed instead. This course may be approved of.

8. As regards the Ambulance Staff referred to in Regulation 9, I beg to reiterate my suggestion that it should be put in hand at once.

The Surgeon-General informs me that Eurasian nurses will have to be paid Rs. 100 per mensem and, if possible, provided with quarters.

9. The Sanitary Commissioner in his letter, No. 484-S., dated 2nd March 1898 (copy enclosed), suggests that a reward of 2 pies may be offered for the tail of every rat certified by the Reddi of any village to have been killed within 20 miles of the borders of this district which I may regard as specially exposed to infection.

The whole area now constituted into observation circles is no doubt specially exposed to infection, and precautions in the way of the destruction of the rat population are desirable in it ; but under paragraph 10 of the Government Order under reply, rewards are to be offered for dead rats only in an area declared "infected." I presume the "infected" area herein referred to is one notified as such by the Collector under Regulation 21, Part II, on receiving information of a case (suspected or actual) of plague. I solicit instructions as to whether the course suggested by Dr. King may be adopted at present, or whether action in this direction should be postponed till after the actual occurrence of plague.

10. I further request that 100 men of the Madras Infantry may be placed at my disposal with tent equipage. I shall wire for 25 men as soon as the Ambulance Staff is got ready so that the sepoys may join them for duty and training at the locality chosen. The remaining 75 men may remain at their head-quarters warned for duty.

11. The favour of very early orders is requested.

ENCLOSURE.

From Surgeon-Lieutenant-Colonel W. G. KING, M.B., C.M., D.P.H., Sanitary Commissioner for Madras, to the Collector of Kurnool, dated Fort St. George, 2nd March 1898, No. 484-S.

I have the honour, with reference to the severe incidence of plague in the dominions of His Highness the Nizam, to advise that some early and active action be taken by you in regard to the killing of rats. That rats are important factors in spread of the disease, once a locality has been attacked, all authorities admit ; that rats are frequently first attacked and that they therefore may form the medium of infection of a district in the first place is an open question, but has much to support it. It is at least quite certain that whilst the disease may be limited by restraining human intercourse, any effort in this direction would be useless, if rats, over whom there is no human control and who will not obey plague regulations, are allowed to be the carriers of the disease from house to house and perhaps from village to village.

2. There are certain sanitary efforts that if they demand much expenditure and much effort for their accomplishment are likely to be regarded as the true route for success, whilst more humble yet possibly equally efficacious methods are liable to be forgotten. Of the latter class, I regard the killing of rats as a precautionary measure. It is true that it is not possible to secure the destruction of the whole rat population of an area, but, if rats are capable of conveying the plague microbe, as they undoubtedly are, it would be no small satisfaction to find that the population of rats in any place threatened had been appreciably thinned and that, consequently, the chances of conveyance of infection had at least been diminished. I therefore ask you not to despise the measure I ask you to undertake, but to attempt your best to put it in force, notwithstanding obvious difficulties. In short, I advise you to do your utmost to free the villages of your border of rats of a species that live in and near human habitations. Wholesale poisoning could be conducted by men specially employed for the purpose, but as some danger would result from this method—should the poisoned materials be left about in the neighbourhood of houses—I suggest that the mode of compassing the death of rats be left to villagers, and that you offer two pies for the tail of every rat certified by the Reddi of any village to have been killed within 20 miles of the borders of your district you regard as specially exposed to infection. If it were possible to secure a band of country along your borders in which the rat population was diminished, I believe the chances of infection would also be immensely diminished and that there would result much good in rendering the efforts made after invasion by plague more likely to be effective.

ORDER—No. 184-P., dated 11th March 1898.

The proposals submitted by the Collector in his letter, No. 593, dated 2nd March 1898, have been disposed of in G.O., No. 173-P., dated 9th March 1898.

2. The Government does not think that it is necessary at present to have an additional Road Frontier Inspection Station at Bijinevemula. The Collector may apply for one later on if its necessity is clearly established. A list of stores and disinfectants to be maintained at each Road Inspection Station will be supplied to him.

3. The constitution of an additional Observation Circle, with head-quarters at Tornikal, is sanctioned. The numbering of the circles in the second row should begin from the left and not from the right. A revised map on the scale of 1 inch = 4 miles should be submitted. The Collector will consider whether fourteen circles are not too many for three Supervisors. If there is any difficulty in obtaining the full number of Sanitary Inspectors required, the circles in the first row should be first organized, and then those in the second line as men become available. The same course should be adopted in Bellary also.

4. Under Additional Regulation 10, it is within the Collector's discretion to concentrate the Ambulance Staff when he sees fit. From the reports received in the Government Office, it does not appear that any case of plague has yet occurred to the south of the railway line from Wadi to Hyderabad or to the west of Hominabad in Bidar district, or west of Kaladgi in Bijapur district.

5. The Collector is right in thinking that the infected area referred to in paragraph 10 of G.O., No. 93-P., dated 26th February 1898, is that notified as such under Additional Regulation 21. There is, however, no objection to taking steps at once to destroy rats as an experimental measure in one or two villages. The result should be reported after ten days.

(True Extract.)

H. TREMENHEERE,
Ag. Secretary to Government.

To the Collector of Kurnool.

" " of Bellary.
" Sanitary Commissioner.
" Surgeon-General.
" Inspector-General of Police.
" Financial Department.
" Public Department.
" President, District Board, Kurnool.
" " Bellary.
" Chairman, Municipal Council, Adoni.
" " Bellary.
" " Kurnool.

Ed. W. D. Moss.

Local and Municipal Dept.

Proceedings of the Madras Government.

Order No. 459 P. Mis. dated 10th May 1898.

Government order No. 274 M., dated 23rd February 1897 and the Sanitary Commissioner's letter No. 484 S dated 2nd March 1898 (printed in G.O., No. 184 P dated 11th March 1898) will be communicated to the Marine and Revenue departments with the request that the Port and Sea Customs authorities may be instructed to see that no rats are landed with goods imported by sea into this Presidency and that rats found in ships are destroyed forthwith.

(True Extract)

To
The Marine Dept.
" Revenue Dept.

H. Tremenhure
Secretary to Government