

12.03 ½ hrs.

Title: Regarding outbreak of Pneumonic Plague in Himachal Pradesh - Laid.

...(Interruptions)

MR. DEPUTY-SPEAKER: Now, Dr. C.P. Thakur will lay the statement.

THE MINISTER OF HEALTH AND FAMILY WELFARE (DR. C.P. THAKUR): Sir, I beg to lay on the Table a statement regarding 'outbreak of pneumonic plague in Himachal Pradesh.'

* I would like to brief the House on the outbreak of Pneumonic Plague in Village Hat Koti, District Shimla, Himachal Pradesh and subsequent incidence of plague like disease in Chandigarh and the steps taken by the Government to check this.

A local outbreak of a virulent, highly contagious febrile illness, with pre-dominant chest symptoms, occurred in village Hat Koti, District Shimla, Himachal Pradesh, in the first week of February, 2002. These cases presented with fever of rapid onset, chills, chest pain, breathlessness, headache, prostration and haemoptysis. The local clinicians and the State nodal officer for National Surveillance Programme for Communicable Diseases (NSPCD), informed the Director, National Institute of Communicable Diseases (NICD), Delhi on 13.02.2002 about the seriousness of this suspected outbreak. A total of 16 cases of such illness have been reported in Himachal Pradesh since the first case on 04.02.2002. Four of the infected persons from Himachal Pradesh have died.

Immediately on receipt of information of this outbreak from the State Health Authorities, a team consisting of an Epidemiologist, a Microbiologist and an Entomologist from the NICD proceeded to the affected area on the morning of 14.02.2002. Simultaneously, the emergency medical requirements of State were promptly met. This team visited the affected areas of Shimla district between 14th

and 17th February, 2002, examined the patients in the hospitals where they were being treated, and held consultations with the doctors attending upon these patients. In the course of their visit, the team observed that all the cases of illness could be linked to residents of a hamlet of village Hat Koti, consisting of three houses. All the persons who were taken ill were relatives of the first case detected, and had come into contact with the first reported patient. It was also observed by the NICD team that the first case reported had been on an extended hunting trip to the forests from 21st January and had taken ill immediately after his return to his village on 2nd February, 2002. The patient samples obtained from PGI, Chandigarh were brought back to Delhi on 15.02.2002 and were examined by the Investigators of NICD.

Culture isolates from two suspected cases, sputum specimens from two cases, lung autopsy from one case and one lung lavage material, were examined in the laboratories of NICD. The stage-wise investigations reveal as under :-

- Smear examination showed bipolar, short thin bacilli morphologically resembling *Yersinia pestis*;
- Fluorescent antibody test was found positive for *Yersinia pestis*;
- Molecular tests confirmed the presence of *Yersinia pestis* specific PlA and F1 genes;
- The DNA fingerprint had tallied with a known sequence of plague bacilli; and
- Bacteriophage lysis test for *Yersinia pestis* was positive.

The sequence of tests collectively confirmed that the cases related to infection with *Yersinia pestis*, commonly known as Pneumonic Plague. This conclusion is also supported by other clinical and epidemiological evidence. The procedure for identification and confirmation of the pathogen was in full conformity with the guidelines set out by the World Health Organisation for this exercise.

One more patient from Chandigarh was admitted in PGI Chandigarh on 19.02.2002 with respiratory symptoms and he expired on 19th/20th night. On enquiry it was found that he had visited the hospital to look after his brother, who was already admitted in PGI Chandigarh with some other ailment. It is not known for certain whether he came in to contact with patients suffering from suspected plague from Himachal Pradesh, who were being treated at PGI, Chandigarh. On 22.02.2002, one more patient and on 23.02.2002 two more patients with symptoms similar to that of plague were admitted to PGI, Chandigarh. Two of them were the wife and daughter of the patient with respiratory symptoms who expired on 19th/20th night; while the third was a nurse working in a nursing home where the deceased had been admitted before being brought to PGI, Chandigarh. The clinical samples from these three patients did not show suspicious bacterial growth. However, as a measure of abundant caution, the various contacts of these three patients at different hospitals and their family settings were administered prophylactic treatment and were isolated from general population. Public health advisories were issued to Punjab, Haryana and the Union Territory of Chandigarh regarding undiagnosed fever and respiratory ailment.

On receiving report of the new cases with plague like symptoms from Chandigarh, Ministry of Health and Family Welfare deputed a team of experts consisting of an epidemiologist and a microbiologist from National Institute of communicable Diseases on 22nd February for conducting investigations. The NICD further strengthened its team at Chandigarh by sending 4 more experts to monitor the infection control measures in the areas of high risk. The situation is being closely watched by the Central and State Governments.

The NICD team, which had gone to Himachal Pradesh to investigate the suspected outbreak, issued detailed guidelines to the local health administration for containing the spread of infection. The significant components of these guidelines were :-

- Quarantine of the affected village and close contacts of the patients.
- Chemoprophylaxis (using Doxycycline/ Tetracycline/ Broad Spectrum antibiotics) administered to the close contacts of the patients, residents of the affected and neighbouring villages, doctors/ paramedics and health workers (numbering about 28,000-30,000 in Himachal Pradesh, Punjab, Haryana, Uttaranchal and U.T. of Chandigarh).
- Fumigation using Formalin (10%) in the affected villages (patient's residences), as well as of the transport vehicles.
- IEC campaign for reassuring the general public not to panic, and also to advise them to immediately report to health facilities in case there was fever, cough, etc.,
- Door to door interaction with the population in the affected and adjoining village for dispensing antibiotics, obtaining information about the new cases and educating the people.
- To treat the patients locally.

Guidelines, as above, have also been issued to the Government of Uttaranchal, as one of the patients, who is a resident of that State, had acquired the infection on a visit to Hat Koti.

Up to 11 March, 2002, out of the sixteen cases of plague detected in Himachal Pradesh and the four suspected cases with plague like symptoms from Chandigarh and its adjoining areas, five have died, 13 have been discharged after recovery and two are under treatment at PGIMER, Chandigarh and are progressing well.

I along with the Chief Minister and the Health Minister of Himachal Pradesh accompanied by senior officials of the Union and State Health Ministries visited PGI Chandigarh and the affected areas of Himachal Pradesh on 21st February, 2002 and reviewed the situation.

@ (Placed in Library. See No. LT 5145/2002)

* Laid on the Table.
