

**GOVERNMENT OF INDIA
HEALTH AND FAMILY WELFARE
LOK SABHA**

STARRED QUESTION NO:231

ANSWERED ON:29.08.2007

SPREAD OF VECTOR/ WATER BORNE DISEASES

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Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

- (a) whether there has been recurring outbreak of vector/water borne diseases such as Chikungunya, Dengue, Malaria, Cholera etc. in several parts of the country;
- (b) if so, the details thereof alongwith the reasons therefor;
- (c) the number of cases of Chikungunya, Dengue, Malaria and Cholera reported and number of persons died during the last three years and the current year, till date, State-wise, year-wise;
- (d) whether a central team consisting of Scientists and Experts has visited the affected States;
- (e) if so, the outcome of the said visit; and
- (f) the measures taken/proposed to be taken to control these diseases?

Answer

THE MINISTER OF HEALTH AND FAMILY WELFARE (DR. ANBUMANI RAMADOSS)

(a)to(f): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO. 231 FOR 29TH AUGUST, 2007

Chikungunya fever outbreak was reported in the country during 2006 (1.39 million cases) after a gap of almost 3 decades. During 2007 till 21st of August, only 31,396 cases have been reported. (Annexure-I).

Dengue fever is also an outbreak prone disease and has been endemic in many states of the country. During 2005, 11985 cases were reported in the country while during 2006, 12317 cases were reported. However, in 2007 till 21st of August, only 1120 cases have been reported. (Annexure-II).

Both Chikungunya and Dengue are viral diseases and transmitted by Aedes mosquitoes. These mosquitoes usually breed in clean water collections in containers, tanks, disposables, junk materials in domestic and peri-domestic situations, and in tree holes, latex collecting cups in rubber plantations etc. The various factors responsible for the occurrence of Dengue/ Chikungunya diseases are:

- (i) unprecedented population growth;
- (ii) unplanned and uncontrolled urbanization;
- (iii) unplanned developmental activities
- (iv) increased population movement
- (v) water supply mismanagement like water scarcity/interrupted supply alongwith increased density of vector mosquitoes and spread of vectors to newer areas due to man-made ecological and lifestyle changes.

Malaria: In malaria no recurring outbreak is reported during last three years. However, there was increase in cases and deaths due to malaria in four North Eastern States i.e. Arunachal Pradesh, Assam, and Mizoram in 2006 and Meghalaya in 2006 and 2007.(Annexure-III).

Malaria high risk areas are located in the forest, forest fringed, international borders, with large population movement across the borders, which are operationally difficult areas. These areas have poor infrastructure and large numbers of vacancies. There are nine malaria vectors and the prevalent malaria vectors in these areas are very efficient in transmission of disease. The predominant malaria parasite is mainly P. falciparum which leads to drug resistance and is known to cause complication and death.

Japanese Encephalitis is another outbreak prone viral disease. During 2005, an outbreak was reported from the eastern part of Uttar

Pradesh and a total of 6727 cases were reported from 14 states. However, during 2006 only 2842 cases were reported. During 2007 till 21st August, 870 cases have been reported in the country.

Japanese Encephalitis (JE) is another outbreak prone viral infection having cyclic trend with seasonal phenomenon and is transmitted by the mosquito which breeds mainly in rice fields. The mosquitoes are outdoor resters and, therefore, vector control measures such as indoor residual spray are not very effective. Children below 15 years are mostly affected.

Cholera: Reported 4728 cases in 2004, 3155 cases in 2005, 1939 cases in 2006 and 252 cases in 2007 till 25th June, 2007. The threat of water borne diseases like Cholera, typhoid etc. increases with the onset of Monsoon. (Annexure-IV).

Cholera outbreaks occur due to poor water supply and poor water sanitation. Lack of safe drinking water for consumption and improper disposal of human excreta which contaminates the surface and ground water are some of the factors that play a major role against the low socio-economic group living in congested slums.

The Central teams have visited the affected States to review the situation and provide technical assistance as and when reports of an outbreak received. On receipt of report of Chikungunya fever outbreak, the teams visited Kerala during 28th May – 1st June, 10-13 June, and 14-18 July, 2007. Similarly, for malaria, the teams visited Chhattisgarh during November, 2006 and Karnataka during April, 2007. For J.E., the team visited Gorakhpur division of Uttar Pradesh during July-August, 2007. The teams assessed the situation and suggested appropriate containment measures and also gave technical guidance.

There is no vaccine or specific medicine available against Chikungunya and Dengue infection. Vector control is thus very important in controlling or preventing transmission of Chikungunya. Government of India has prepared a Long Term Action Plan for prevention and control of Chikungunya and Dengue.

For effective control of malaria, a three-pronged strategy i.e.

(i) Disease Management

(ii) Integrated Vector Management for reducing mosquitoes density

(iii) Supporting Interventions have been adopted. High endemic districts have been identified for intensive monitoring of malaria situation as well as implementation status of the programme. Newer and effective tools like Rapid diagnostic Test Kits for laboratory deficient areas, Artesunate-SP combination anti-malarial for Chloroquine resistant areas and Arteether Injection for severe and complicated malaria cases have been introduced. The States in eastern parts in the country have also been provided enhanced support through Global Funds to Fight AIDS, Tuberculosis and Malaria (GFATM) and World Bank.

There is no specific treatment for J.E., therefore early symptomatic management is very important. Trained Rapid Response Teams have been constituted in JE endemic districts. Advisories along with Standard Guidelines on JE case Management conveyed to all endemic States. A Sub Office of Regional Office of Health & Family Welfare, Lucknow, has been established at Gorakhpur, UP, for intensive monitoring of situation & for providing technical assistance to State Government UP on prevention and control of JE. A Vector Borne Disease Control Surveillance Unit has also been established at BRD Medical College, Gorakhpur, UP for strengthening epidemiological and entomological surveillance in eastern UP. JE vaccination programme had been launched for children between 1 and 15 years of age as an integral component of Universal Immunization Programme (UIP) in 11 districts in 4 states in 2006. The programme has been extended to cover other 29 endemic districts in 9 States. Left out children and children between 1-2 years age are being covered under routine immunization programme.

With reference to cholera prevention and control, National Institute of Communicable Diseases (NICD), Government of India, provides outbreak diagnosis, technical support, laboratory support, research and training in controlling communicable diseases. Multidisciplinary teams under the Directorate General of Health Services investigate various outbreaks and suggest relevant control measures.