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NEWS

Dengue cases in India doubled in 2014-15

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While the number of malaria cases in India fell from 1 102 205 in 2014 to 792 234 in 2015 (to September), the number of dengue cases doubled from 40 571 to 84 391 over much the same period (to 15 November).[1]

A large increase in dengue cases in the past year was seen in several states and territories including Delhi (up from 995 to 15 531), Punjab (472 to 12 628), Haryana (214 to 8021), and West Bengal (3934 to 5703). In other states the number of cases fell, including in Odisha (6433 to 2167) and Maharashtra (8573 to 3461).

Cases of malaria dropped notably from 2014 to 2015 in the states of Madhya Pradesh (96 879 to 48 329), Odisha (395 035 to 330 336), Chhattisgarh (128 993 to 85 145), and Jharkhand (103 735 to 63 670), among others.

Both dengue and malaria are mosquito-borne diseases: dengue is a viral disease caused by one of the four serotypes of the virus (DEN-1, DEN-2, DEN-3, and DEN-4) and is often transmitted by the female *Aedes aegypti* mosquito, which feeds during the day and tends to breed in urban areas and in man made containers. Malaria is caused by *Plasmodium* transmitted by the female *Anopheles* mosquito, which usually feeds between dusk and dawn.

Satish Pawar, director of health services in the Maharashtra government, told *The BMJ* that two programmes introduced in rural areas had helped to reduce the number of dengue cases in the state. In one programme health workers have been trained to examine households for water collection areas that could serve as breeding spots for dengue mosquitoes. The health workers usually visit households every 15 days for disease surveillance.

In addition, villages have a designated "dry day" once a week when all water pots are emptied, cleaned, and refilled with fresh water. The gram panchayat (local governing body) releases additional water on that day to facilitate the activity, said Pawar.

Gagandeep Grover, state programme officer at the National Vector Borne Disease Control Programme in Punjab, told *The BMJ* that dengue tends to show an alternate year cycle in the state with cases rising every alternate year, in line with rainfall. Better public awareness was vital in controlling cases, he said, and, although the government had been working on this, more needed to be done.

To improve the control of dengue the Punjab government has asked private clinics and small laboratories to report suspected and confirmed cases of dengue, which has resulted in better notification and the apparent rise in cases, said Grover. The government has tested more than 24 000 samples suspected for dengue, free of charge, and has also made provision for 900 extra hospital beds for dengue cases. Antibiotics and intravenous treatment have been offered at no cost to patients in government hospitals in Punjab, he added.

To help reduce malaria cases Punjab has treated 83 villages at a high risk of malaria with insecticide and supplied three villages at particularly high risk with longlasting insecticide nets, added Grover.

1 Press Information Bureau, Government of India. Special measures to control dengue and malaria. 2 Dec 2015. http://pib.nic.in/newsite/erelcontent.aspx?relid=132220.

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