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# Spike in Dengue Infections Across Maharashtra During 2024

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## To The Editor

The year 2024 has witnessed a concerning rise in the number of dengue cases throughout the state of Maharashtra, posing a significant threat to the public health. The total cases had sharply risen and reached alarming levels in the large cities with Pune and Mumbai being two of the most affected areas. As a result, there was an immediate call for enhanced vector control measures and public health initiatives to stop the transmission of the disease.

As per the records of the State Health Department, more than 2500 patients were noted to be suffering from dengue by the month of September 2024. In Pune alone, there was a significant surge in suspected cases during the month of August, with approximately 1150 being reported. As compared to previous months, there was a marked increase in dengue cases, with an average of 38 new cases being identified each day.<sup>1,2</sup>

The Mumbai Metropolitan Region has seen a significant increase in cases, prompting local health authorities to step up vector control measures and issue health alerts. The increase has been linked to heavy rains during the monsoon season<sup>3</sup>, which create ideal conditions for the proliferation of *Aedes aegypti* mosquitoes, the main vector of the dengue virus.<sup>4</sup>

As recorded, it can be noted that the trend of this disease is increasing and a greater number of patients being admitted to hospital with symptoms such as fever, severe headache, joint pain, and skin rash, putting a strain on health facilities. Officials say hospitals are struggling to treat the growing number of dengue cases and other seasonal illnesses. This has put a strain on the state's health infrastructure, especially in densely populated urban areas. Government-run medical facilities in Pune and Mumbai have noted a rise in emer-

gency and outpatient visits, with some institutions reaching maximum capacity.<sup>2</sup>

Delays in implementing mosquito elimination efforts in Maharashtra have been a major hurdle in the fight against dengue. Authorities started fogging and using larvicides only after the rainy season ended, but experts say they should have started earlier. Health experts from various community groups have urged residents to take precautions such as using mosquito nets and repellents, keeping water tanks covered and removing standing water from containers.<sup>1,2</sup>

Effective response methods are also hampered by concerns over under- or delayed reporting of cases. Official state health records list approximately 2,500 cases, but experts warn that this figure may be an underestimate due to insufficient testing and recording in some remote areas. Public health experts have called for improved data collection to allow for a more thorough response and prevent further escalation.<sup>1,2</sup>

As dengue approaches crisis levels, public awareness and preventive measures are essential to contain the epidemic. Local health officials and city governments must work with local residents to maintain sanitation and eliminate all mosquito breeding sites. Preventive measures, timely medical care and community engagement are essential to mitigate the impact of dengue in Maharashtra this year and in future.

## REFERENCES

1. Steffy Thevar - Chikungunya Cases Surge in Pune, Prompting Health Authorities to Investigate. Available from <https://www.emedinexus.com/post/43671/Chikungunya-Cases-Surge-in-Pune-Prompting-Health-Authorities-to-Investigate>. Last accessed on 01.10.2024 at 11:45 am

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2. Dileep Khurhade - State Health Dept Minimizes Chikungunya Outbreak, Confirms 150 Cases in 3 Months. Available from <https://punemirror.com/pune/cover-story/state-health-dept-minimizes-chikungunya-outbreak-confirms-150-cases-in-3-months/cid1726462008.htm> . Last accessed on 11.10.2024 at 11:45 am
3. Faridah L, Fauziah N, Agustian D, Mindra Jaya IGN, Eka Putra R, Ekawardhani S, Hidayath N, Damar Djati I, Carvajal TM, Mayasari W, Ruluwedrata Rinawan F, Watanabe K. Temporal Correlation Between Urban Microclimate, Vector Mosquito Abundance, and Dengue Cases. *J Med Entomol.* 2022 May 11;59(3):1008-1018. doi: 10.1093/jme/tjac005. PMID: 35305089; PMCID: PMC9113159. Last accessed on 11.10.2024 at 11:55 am
4. Dengue and Chikungunya Cases Sound Alarm. Available from <https://www.punekarnews.in/dengue-and-chikungunya-cases-surge-in-pune-health-officials-sound-alarm/> . Last accessed on 01.10.2024 at 11:45 am