What is dengue?

Dengue is a viral infection transmitted through the bite of the female Aedes aegypti mosquito. Symptoms—commonly called dengue fever—look a lot like flu and can include fever, headaches, nausea, joint pain, rashes and vomiting. In some cases, dengue fever can lead to complications like plasma leakage, fluid accumulation and respiratory distress. This is called severe dengue and is extremely dangerous. Every year, thousands of people around the world die from severe dengue. But given that hundreds of millions become infected annually, mortality is very rare.

Dengue in Cox’s Bazar

Displaced Rohingya communities in Cox’s Bazar have experienced upsurges in dengue fever since August 2019. Rain and hot weather during the monsoon seasons increase the levels of stagnant standing water around the camps. It’s here that the Aedes Mosquitoes breed, increasing vector opportunities for the spread of dengue. Research shows that dengue incidence increases three to four weeks after heavy rainfall. The 2021 upsurge began after the monsoon season, with October to December accounting for 99% of the total 1530 dengue cases that year. That year, three deaths from dengue were recorded.

Surveillance in 2022

WHO first noted an upward trend in cases during the second week of May in 2022 (epi week 19). Using alerts from the field surveillance team, WHO undertook a Mult-Agency Rapid Risk Assessment alongside IOM in camp three—the most affected location accounting for 50% of cases. Case numbers prompted further action, resulting in a cross-sectoral review alongside health, WASH and camp management partners. Total cases in 2022 currently stand at 1,821 with zero case fatalities.

Interventions and measures

There are no treatments to cure dengue or severe dengue. The disease is therefore difficult to contain. However, early treatment can reduce the risk of severe health consequences. That’s why surveillance and response are crucial interventions for Cox’s Bazar. WHO has donated around 500 standardised dengue Rapid Diagnostic Tests (RDT) to IOM to ensure early identification of the virus. We’re currently prioritizing the procurement process for additional kits.

Stronger referrals

We have also finalized a rapid referral pathway for confirmed cases. Suspected cases will be
referred from health posts to the central IOM Public Health Centre—currently the focal point for dengue treatment. Cases of severe dengue will then be advanced to Cox's District Hospital or MSF Hospital. This ensures that people get the treatment they need as soon as possible. WHO has contacted other NGO-managed hospitals to prepare capacities for additional cases. Case management training will continue to ensure optimal care for dengue patients.

**Weekly medical supplies**

Symptoms of dengue can be successfully managed with antipyretics and fluids. In cases of severe dengue, these treatments can save lives. IOM is mobilizing weekly commodities shipments to ensure that health facilities are prepared in the face of higher case numbers.

**Environmental control**

Data shows that environmental factors in Cox's Bazar are affecting transmission rates. Currently, 59% of dengue patients are male—most likely because Rohingya men are more likely to be exposed outside the home. Community awareness and engagement is therefore a critical part of the health-sector response. WHO is working closely with Community Health Working Groups to encourage the use of personal and household protections against mosquito bites. Collaboration with the WASH sector will also help to reduce the quantity of standing water in and around dwellings. Covering, emptying and cleaning domestic water storage containers will help to reduce dengue cases. The IOM Public Health Centre has added ten new isolation beds and six observation beds for better case management.

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