**In which countries is dengue currently spreading, and what precautions should people take when travelling to those countries?**

In 2023, there were over 6 million cases and 6000 deaths globally due to dengue virus (DENV) infection, marking historic milestones for the virus. In the first 11 weeks of 2024, dengue cases surged to nearly 3 million with more than 780 deaths within the World Health Organization's (WHO) American region, encompassing over 40 countries, territories, or islands. Countries in the northern hemisphere are bracing themselves for another potentially record-breaking year as the onset of summer and the rainy season draws near, eliciting a sense of anticipation and surprise among observers.

Dengue fever, a mosquito-borne illness, is caused by four distinct serotypes of the dengue virus within the Flaviviridae family. Transmission to humans occurs through the bites of *Aedes aegypti (L.)* and *Aedes albopictus* (Skuse) mosquitoes. Currently, Dengue Virus (DENV) is endemic in over 125 countries, with reported cases to the World Health Organization (WHO) escalating annually. While the majority of infections (>80%) exhibit no or mild symptoms, leading to lifelong immunity against the specific serotype, reinfection with different serotypes, termed secondary or tertiary dengue infection, poses a significant risk of severe dengue, potentially culminating in fatal outcomes.

**Geographical hotspots:**

In 2023, two distinct hotspots of dengue virus circulation emerged: the South American region and the South and Southeast Asian region (see Table 1). Among the top five countries with DENV infections in 2023 were Brazil (2,569,746 cases), Bangladesh (321,179 cases), Peru (264,764 cases), Mexico (216,277 cases), and Burkina Faso (237,291 cases). Additionally, three European countries reported indigenous dengue cases in 2023: Italy (82 cases), France (43 cases), and Spain (3 cases), while the United States documented a record 156 locally transmitted cases of DENV.

Table 1: Top 20 countries with dengue virus infection in 2023 and 2024 (up until 20 March 2024)

Source:

1. PAHO: <https://www3.paho.org/data/index.php/en/mnu-topics/indicadores-dengue-en/dengue-nacional-en/252-dengue-pais-ano-en.html>
2. ECDC: <https://www.ecdc.europa.eu/en/publications-data/dengue-cases-january-december-2023#:~:text=In%202023%2C%20over%20six%20million,reported%20from%2092%20countries%2Fterritories>.
3. <https://www.ecdc.europa.eu/en/dengue-monthly>

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| --- | --- | --- | --- |
| 2023 | | |  |
|  | Countries | Cases | Deaths |
| 1 | Brazil |  |  |
| 2 | Bangladesh |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 20 |  |  |  |

**Map:** Global map showing the number of dengue cases in 2023