

## **Unidentified risk areas of chikungunya: mapping the origin of chikungunya cases in travelers**

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**Background:** Chikungunya is becoming an increasing global health issue as it spreads across the world. Better understanding on the origin of chikungunya cases in travelers can inform us of the presence of this infectious disease globally and support traveler's decision-making.

**Methods:** We performed a scoping review of the literature and local French databases reporting on chikungunya in returning travelers. This was compared with locations of confirmed chikungunya cases reported by the CDC and ECDC.

**Results:** The origin of chikungunya cases in travelers does not always overlap with reported locations of chikungunya transmission. This is potentially the result of the absence of proper local surveillance, as well as the unpredictability of the disease. On a local level, we assessed the origin of chikungunya cases in returning travelers from France. Out of 10 countries of case origin from May to November 2023, only four were reported by the ECDC in November 2023.

**Conclusion:** Despite significant ongoing efforts by the CDC and ECDC to monitor chikungunya virus transmission, inadequate surveillance hinders the accurate identification of potential risks for travelers. Additionally, the explosive and unpredictable nature of the chikungunya virus makes it hard to predict the location of future outbreaks. This is especially relevant for travelers, enabling them to make informed decisions about their travel destinations and get appropriate protection against local diseases, as well as for healthcare professionals discussing these potential risks. Including the origin of traveler cases in chikungunya risk maps could improve informed decision-making of travelers.