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Global risk mapping for major diseases transmitted by *Aedes aegypti* and *Aedes albopictus*

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Highlights

- Despite the fact that many arboviral diseases share the same vectors and often coexist, previous studies have focused on mapping the distribution of one or two diseases separately.
- In the present study, we have compiled and spatially mapped a large amount of data from publicly available sources on the occurrence of major arboviral diseases (Zika, dengue fever, chikungunya, yellow fever and Rift Valley Fever).
- The risk mapping showed multiple occurrences of arboviral diseases in which 49.2% (123/250) of the countries/territories reported two or more diseases in common.
- Our risk maps include data on vector suitability and diseases occurrence and we believe that decision makers will be better able to consider coordinated programmes informed by a more complete picture of these diseases.
- Recognizing that arboviral diseases have common vectors and transmission features, the risk maps in our study can be used to set up combined interventions against the diseases in more cost-effective ways.