

Country-level medical risk ratings: A structured, data driven methodology

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Background:

We have developed a transparent, standardised methodology for generating country level medical risk ratings to support consistent, actionable travel health decision making.

Materials and methods:

Country-level medical risk ratings were generated using a structured, two-tiered assessment combining internal operational data with selected external public health indicators. Internal data included: (1) a medical care score derived from a 19-item assessment completed by International SOS Regional Medical Directors (covering healthcare standards, emergency capability, pharmaceutical availability, water and blood safety, and service accessibility); (2) an evacuation score based on the 10-year average proportion of hospitalised cases requiring medical evacuation; and (3) a security score produced by the International SOS security team. External indicators were sourced from World Bank health datasets. All inputs were standardised and aggregated to create a comparative country score. Final scores were grouped into four risk levels: Low, Medium, High and Extreme.

Results:

A total of 228 countries and territories were assessed. Most fell within the Medium (n=80) or High (n=76) risk categories. 49 countries were classified as Low risk, indicating strong healthcare systems and reliable medical access. 23 countries were rated Extreme, reflecting severely limited or non-functional healthcare capacity. Geographic patterns were evident, with the highest proportions of High and Extreme risk ratings occurring in the African and Eastern Mediterranean regions, while the European and Western Pacific regions had the greatest share of Low-risk countries.

Conclusion:

These ratings provide a consistent framework to compare medical risk across countries, that strengthens travel health planning and organisational decision making.