

## **Cholera in Travellers: Improving Vaccination Guidance in Europe**

Rogelio Lopez-Velez<sup>1</sup>, Danilo Presotto<sup>2</sup>

<sup>1</sup> Ramon y Cajal University Hospital

<sup>2</sup> Former Emergent BioSolutions, Inc.

**Background:** Cholera is endemic in ~50 countries worldwide and remains a disease associated with poverty, causing illness and death in the poorest and most vulnerable people. In travellers, cholera is considered a low-incidence disease, but its true impact is difficult to assess. Cholera vaccination may improve safety for certain European travellers at risk. Effective vaccines are available; however, vaccination recommendations in Europe vary considerably between countries.

**Methods:** A review and comparison of cholera vaccination recommendations from 29 advice reference bodies across key European countries (United Kingdom, Germany, Spain, Italy, Portugal, Switzerland, Sweden, Finland, Norway, France and Denmark) was conducted. The differences in perceived cholera risk were highlighted. A comparison with the United States Centers for Disease Control and Prevention (CDC) recommendations was also conducted.

**Results:** The recommendations from European organizations were found to be ambiguous. They also differed widely across these organizations. This contrasts with recommendations in the United States, where the CDC publishes a consistent set of guidelines.

**Conclusion:** Given the ease of intra-European travel, it would be beneficial to harmonize the recommendations for cholera vaccination and risk perception across Europe, providing pre-travel health advisers with a trusted source of information that allows them to provide consistent recommendations.