The global burden of cholera

OBJECTIVE: To estimate the global burden of cholera using population-based incidence data and reports.

METHODS: Countries with a recent history of cholera were classified as endemic or non-endemic, depending on whether they had reported cholera cases in at least three of the five most recent years. The percentages of the population in each country that lacked access to improved sanitation were used to compute the populations at risk for cholera, and incidence rates from published studies were applied to groups of countries to estimate the annual number of cholera cases in endemic countries. The estimates of cholera cases in non-endemic countries were based on the average numbers of cases reported from 2000 to 2008. Literature-based estimates of cholera case-fatality rates (CFRs) were used to compute the variance-weighted average cholera CFRs for estimating the number of cholera deaths.

FINDINGS: About 1.4 billion people are at risk for cholera in endemic countries. An estimated 2.8 million cholera cases occur annually in such countries (uncertainty range: 1.4-4.3) and an estimated 87,000 cholera cases occur in non-endemic countries. The incidence is estimated to be greatest in children less than 5 years of age. Every year about 91,000 people (uncertainty range: 28,000 to 142,000) die of cholera in endemic countries and 2500 people die of the disease in non-endemic countries.

CONCLUSION: The global burden of cholera, as determined through a systematic review with clearly stated assumptions, is high. The findings of this study provide a contemporary basis for planning public health interventions to control cholera.

Topic(s): Essential cholera epidemiology

Outside Link: http://www.ncbi.nlm.nih.gov/pubmed/22461716

Links
[8] https://www.stopcholera.org/resource-type/journal-articles