



GLOBAL TASK FORCE ON

CHOLERA CONTROL

EPIDEMIOLOGICAL RESEARCH

PRIORITIES IN THE FRAMEWORK OF THE ROADMAP

Feedback from the Epi WG

A SHORT LIST OF RESEARCH QUESTIONS FROM THE EPI WORKING GROUP DISCUSSIONS

- Key epidemiological features of cholera spread still need to be established
- Spatial-scale of cholera transmission dynamics: household vs neighborhood vs district vs country vs macro-scale dynamics
- Role of the environmental reservoir (both short and long-term established reservoirs)
- Transmission potential of asymptomatic infections
- Infectious doses from fresh stools (hyper-infectious status of *V. cholerae*)
- External factors affecting the reproduction number: rainfall, urban hubs, mass-gathering, market activities?
- Effect of the vaccine on the infectious status (e.g. reduction of transmissibility vs susceptibility) and duration of immunity
- Effectiveness of WASH measures in reducing exposure and infectiousness of infected individuals
- Coverage required for these interventions to achieve control

A SHORT LIST OF RESEARCH QUESTIONS FROM THE EPI WORKING GROUP DISCUSSIONS

- Urgent needs
 - Surveillance (epi and lab) methods to monitor the progress of the roadmap in hotspot areas: impact of the then control/eliminations plans
 - Possible approach: enhanced surveillance with sentinel sites in hotpots
 - Surveillance methods (epi and lab) to speed-up the identification and proper characterization of new outbreaks
- Less urgent but key developments
 - New surveillance methods less sensitive to the weakness of the current surveillance systems (e.g. sero-epidemiology is not affected by under or over reporting)
 - Combined analysis of epidemiological and whole genome sequencing data: molecular typing provides precision to better understand the transmission dynamics and inform epidemiological models
 - Real-time prediction models with the capacity to inform decision making



GLOBAL TASK FORCE ON
CHOLERA CONTROL

THANKS |