

Cholera surveillance and laboratory capacity assessment

Joint Meeting of the Working Groups on Surveillance Annecy, France. 16 April 2016

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Surveillance of cholera

- An effective surveillance system aims to provide reliable and timely information before, during and after the outbreak
- Objectives
 - early detection of outbreaks in both endemic and non-endemic areas
 - identify hotspots in areas where cholera disease is endemic
 - monitor morbidity and mortality trends
 - monitor and evaluation of the interventions

Laboratory surveillance

- Well-performed laboratories contribute to surveillance through timely and accurate testing of samples to
 - confirm or discard cholera
 - monitor the outbreak, declare the end of the outbreak
 - characterise and determine resistance profile of the circulating strains
 - declare or certify cholera elimination

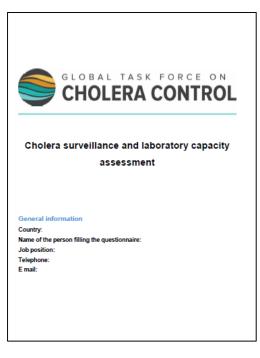
Surveillance capacity assessment

To determine the current country-specific capacities for cholera surveillance and identify main constraints and gaps

in order to prioritise actions to strengthen the surveillance and laboratory capacities

Questionnaire

- standardised questionnaire to collect the information on current capacity
- The questionnaire was completed by national public health professionals from seven countries
- 25 questions in three sections
 - 1. Cholera surveillance system
 - 2. Early detection of cholera cases
 - 3. Laboratory capacity



Main results

Surveillance of cholera

- National standard case definitions are available and reporting systems in place
- Sources of information are mainly based on health care facilities and laboratories
- Community based surveillance not integrated in the surveillance system, mainly contributing when outbreak is declared
- Registers / line listings available at the health care facilities, although they are not specific for cholera
- Cases and deaths are not systematically reported / delayed to the surveillance unit
 - Lack of technical means and guidance for reporting
- Analysis of data, bulletins and sitreps are regularly produced
- Reporting to WHO varies between countries

Early detection and use of RDT

- Suspected cholera outbreaks detected at health care facilities are reported immediately
- but do not always trigger a field investigation with stool sampling to confirm the outbreak
 - Lack of funding for deployment of the teams
 - Remoteness and accessibility
- RDT are not systematically used at peripheral level for early outbreak detection
 - Inadequate stock and supply delivery to periphery funding
 - Lack of trained staff at health care centres
- Test results are easy to interpret and are reliable

Laboratory capacity

- Stool culture capacity for confirmation of *Vibrio cholera* O1 or O139 and antibiotic resistance testing available
 - mainly at NRL, and some regional hospitals and in some districts
 - not performed challenges with regular maintenance and restocking of supplies
- PCR is not available / not used because lack of supplies and trained staff
- Limited capacity for collection, packaging and transport of stool samples from health care facilities to reference labs for confirmation
 - Lack of transport media and supplies, trained staff and SOPs
- Most of countries don't have formal links/agreements with international laboratories



Merci

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