Implementation of Electronic EWARN Platform in EMRO

In collaboration with ITT unit of the Regional Office, the IHM unit of the Department of WHO Health Emergencies Programme in EMRO is developing a regional electronic platform for EWARN (Early warning Alert and Response Network) for humanitarian crisis affected settings.

Editorial note

Vulnerable populations who have survived the initial disaster should never have to face the prospect of dying from subsequent preventable disease outbreaks. EWARN is an early warning syndromic and event based surveillance system for humanitarian crisis settings to ensure timely detection and response to disease outbreaks. Populations affected by humanitarian crisis, whether internally displaced, refugees, or local host populations, often find themselves at increased risk of infectious hazards and disease outbreaks. This is often due to undue exposure to disease transmitting vectors; compromised water quality and sanitary conditions that increase the risk of water borne diseases; and poor overcrowded shelters that increase the risk of respiratory spread of pathogens.

EWARN has been implemented by WHO in collaboration with the Ministries of Health and a network of NGOs providing health care services to affected populations through fixed and temporary health facilities. However recent experiences in different contexts in several countries in humanitarian crisis in the region have shown that unless these systems are implemented in a timely manner, and optimized through appropriate real time innovative electronic solutions, their true value may not be realized in certain contexts. Unique challenges include insecurity barriers that render manual data transmission EWARN systems ineffective, as well as delays and incomplete reporting often associated with manual reporting.

Use of innovative real time electronic EWARN solutions in recent and ongoing humanitarian crisis in countries in the region such as Yemen, Iraq and Libya has demonstrated the value of these solutions in surmounting insecurity barriers to enable monitoring of disease occurrence among vulnerable displaced and host populations in hard to reach areas, cut off from direct access by insecurity and battle front lines. These tools have also bridged epidemiological analysis and reports preparation skills gaps that are often encountered in such setting by enabling automated data summarization and generation of epidemiological reports for stakeholders.

Despite its value, deployment of technology in EWARN systems has proved tenuous at best. In the recent past challenges encountered have included difficulties in finding expert developers in a timely manner, delays in contractual arrangements with the experts because of pending donor appeals, and extended periods of time we can ill afford spent on addressing server and hosting issues.

The proposed regional electronic EWARN platform addresses these challenges by ensuring: i) a simple and user friendly electronic EWARN solution that can be easily customized and deployed in a new country setting; ii) back up hosting at Regional office for rapid and timely deployment while local hosting in the country is being addressed; iii) maintenance and customization of the electronic applications by readily accessible WHO staff for timely implementation and reliability of the electronic EWARN systems.

Update on outbreaks in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia; Cholera in Somalia; Cholera in Yemen; Chikungunya in Pakistan.

Current public health events of international concern [cumulative N° of cases (deaths), CFR %]

Avian Influenza: 2006-2017
- Egypt (A/H5N1) [359 (122), 34%]
- Egypt (A/H9N2) [3 (0)]

Chikungunya: 2016-2017
- Somalia [40,402 (693), 1.7%]
- Yemen [13,943 (1,112), 8%]
- Nigeria [5,502 (0)]

MERS-CoV: 2012-2017
- Saudi Arabia [1,604 (644), 40.1%]

Cholera: 2016-2017
- Somalia [40,402 (693), 1.7%]
- Yemen [49,096 (361), 0.74%]
- Nigeria [13,943 (1,112), 8%]

Avian Influenza A (H7N9): 2013-2017
- China [1,320 (492), 37.3%]

Yellow fever
- Brazil [1,561 (264), 16.9%]

Wild poliovirus: 2014-2017
- Pakistan [382 (0)]
- Afghanistan [64 (0)]

Zika Virus Infection: 2015-2017
- 84 countries and territories have reported transmission so far.