Transition from EWARN to routine surveillance

A three days workshop was conducted in Damascus, Syria from 8-10 August 2018 to disseminate findings of Early Warning Alert and Response Network (EWARN) evaluation in Syria. Participants included Ministry of Health (MOH) staff and technical EWARN officers. During this workshop the question of how and when to transition from EWARN to routine surveillance was examined.

Editorial note

The WHO Eastern Mediterranean Region (EMRO) currently has the highest proportion of countries that are experiencing humanitarian complex emergency. As part of the Regions public health response to these emergencies, WHO/EMRO is currently supporting operational EWARN systems in 7 countries (see table-2).

The question of appropriate timing and the most effective strategy for transitioning from EWARN to routine surveillance was addressed in the context of Syria during the workshop in Damascus, it is also a pertinent issue for the emergency countries with active EWARN systems. This is especially so because due to protracted humanitarian crisis, in 5 out of the 7 EWARN implementing countries in the EMR, EWARN has progressively expanded nationwide to fill the gap left by collapsing health systems, including routine surveillance. These countries include Somalia, Yemen, Syria, Iraq, Sudan and Libya.

EWARN has played a critical role in the emergency countries by ensuring early detection of outbreaks of epidemic prone diseases, and effective monitoring of outbreak response measures. Despite its value, the guiding principles of introduction of EWARN in emergency settings should always be upheld. These include ensuring that, irrespective of scope of expansion, implementation of EWARN should always remain a temporary emergency intervention intended to address surveillance gaps when routine surveillance systems are disrupted by a man-made or natural disaster. Once emergency is over, it should not be retained longer, and the timing of exit should be linked to the return to reasonably degree of normalcy and recovery of routine public health structures and operations to acceptable levels based on careful assessment.

EWARN as designed and implemented in emergencies is also resource intensive; it has high implementation and operating costs. This is often necessary because of the urgency, the difficult operating context, and vulnerability of target population to epidemics. For these reasons EWARN is neither appropriate nor sustainable for use as a routine surveillance system once emergency is over. Furthermore an effective exit strategy should (see table-1) ensure a gradual integration of the EWARN to the routine surveillance system after the end of an emergency, through retention and adoption of best practices of EWARN.

Table 2. Scope of EWARN implementation in EMR

<table>
<thead>
<tr>
<th>Country</th>
<th>Scope of EWARN</th>
<th>EWARN coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>National</td>
<td>19 million</td>
</tr>
<tr>
<td>Somalia</td>
<td>National</td>
<td>15 million</td>
</tr>
<tr>
<td>Libya</td>
<td>National</td>
<td>4 million</td>
</tr>
<tr>
<td>Yemen</td>
<td>National</td>
<td>28 million</td>
</tr>
<tr>
<td>Afghan-</td>
<td>National</td>
<td>31 million</td>
</tr>
<tr>
<td>Iraq</td>
<td>Refugee &amp; IDP</td>
<td>6 million</td>
</tr>
<tr>
<td>Sudan</td>
<td>3 emergency affected states</td>
<td>1.4 million</td>
</tr>
</tbody>
</table>

Table 1. Best EWARN practices for consideration for adoption when transitioning to routine surveillance

- Syndromic and event based surveillance approaches for early detection of suspected disease outbreaks
- An electronic platform for real-time early warning component of the surveillance system
- Mobile devices for timely and effective communication of surveillance data
- Regular refresher trainings for sustained technical capacity of surveillance staff
- Strong linkage with laboratory support for sample testing
- Involvement of target communities in reporting of suspected disease outbreaks
- Structured supervision mechanism with supporting checklists
- A strong linkage between outbreak detection, field investigation and outbreak response

Weekly Epidemiological Monitoring

World Health Organization
Regional Office for Eastern Mediterranean
Cairo, Egypt

Update on outbreaks in the Eastern Mediterranean Region

- **MERS** in Saudi Arabia; cholera in Somalia; cholera in Yemen; Diphtheria in Yemen.

Current public health events of international concern

- **Avian influenza**: 2006-2017
  - Egypt (A/H5N1) [359 (122), 34%]
  - Egypt (A/H9N2) [4 (0)]
- **Ebola virus disease (EVD)**: 2018
- **Democratic Republic of Congo (DRC)** [412 (236), 57.28%]
- **Rift Valley fever**: 2018
- **Uganda** [23 (8), 34.78%]
- **Cholera**: 2017-2018
  - Somalia [6 605 (45), 0.68%]
  - Yemen [1 302 634 (2 610), 0.20%]
  - Tanzania [4 389 (83), 1.89%]
- **Diphtheria**: 2018
  - Yemen [2 690 (154), 5.72%]
  - Bangladesh [8 302 (44), 0.52%]
- **MERS**: 2012-2018
  - Saudi Arabia [1 896 (732), 38.60%]
- **West Nile fever**: 2018
  - Tunisia [329 (2), 0.60%]