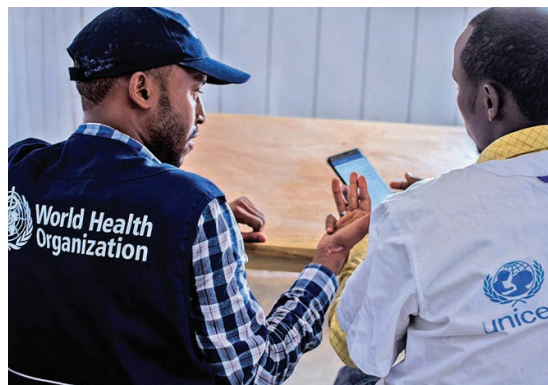*COVID-19 information note 2*

As disease surveillance in Somalia needs to be scaled up during COVID-19, EWARN rolls out

During this difficult time of responding to COVID-19, being ahead of the curve is the only way to stop transmission and limit the spread of the virus in the community. Enhancing active surveillance and expanding its geographic coverage and including both the private and public health sectors using a syndromic-based approach is the best way to find cases early, especially in an outbreak situation.

History of EWARN: foundation for disease detection

During this COVID-19 crisis, in the absence of any routine disease surveillance system in Somalia, the Early Warning, Alert and Response Network (EWARN) is doing what it was intended to do and what it has done best in other outbreak situations. EWARN is a disease surveillance system for epidemic-prone diseases which was first launched in Somalia in 2008. However, it collapsed thereafter because of operational difficulties. The system was reactivated by WHO together with federal and state health authorities in 2017 as a real-time, password-protected, web-based electronic surveillance system. This reactivation came after one of the worst cholera outbreaks in Somalia in the past decade when there was no reliable disease surveillance system in the country to monitor, detect and respond to cholera cases and other epidemic-prone diseases and health

EWARN is a real-time web-based electronic surveillance system available at

http://ewarn.emro.who.int/som/index.php/login.html

The EWARN mobile app is available at Google play:

https://play.google.com/store/apps/details?id=com.emro.ewarn&hl=en

threats. The implementation of the EWARN system has greatly improved the detection, verification, investigation and reporting of diseases of public health importance in the country in real time. It has also allowed the sharing of relevant health information with health partners and stakeholders to guide response activities and monitor the trends in these diseases across the country.
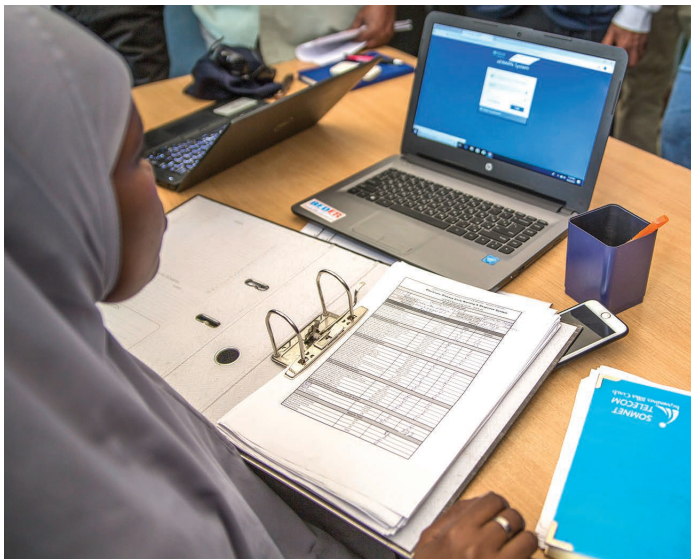
EWARN: growing and transforming

By 2019, an estimated 6.5 million people, including 2 million internally displaced people, were covered by the EWARN system. Currently, 535 of 1075 health facilities across the country are included in EWARN; 64% of these facilities submit their EWARN reports on time and 74% of the reports are complete. In 2019 alone, 74 new heath facilities were added to the EWARN system. A record 4 789 832 consultations were reported in 2019 through the EWARN system. Knowledge of patient consultations and population coverage helps WHO and other health partners to measure the consultation rate and identify gaps in health care access in vulnerable populations. In 2019, the system triggered over 18 000 outbreak alerts, of which 883 were verified through field investigation by WHO and the health authorities.

In a country such as Somalia, which has a fragile health system, the EWARN system has been able to detect and prevent epidemics in real

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Somalia

time in drought-affected districts, camps for internally displaced people in different states, including their host communities, and in districts inaccessible to humanitarian agencies or the government. As the system relies on electronic data collection using a mobile phone-based application, data on epidemic-prone diseases can be regularly collected and collated, even from insecure and inaccessible areas of the country. This would not have been possible if EWARN relied on a paper-based system for data collection.

EWARN: Outpacing COVID-19

As the country grapples with increased transmission of COVID-19, the EWARN system has been rolled out to another 260 health facilities, including all privately owned medical facilities that are admitting and treating patients with acute respiratory diseases of unknown origin. Using online training platforms adapted to the country's needs and context, the WHO country office through its public health emergency officers is providing training at each of these newly enrolled facilities on the use of a syndromic case definition of COVID-19 and early recognition and reporting of suspected cases. These facilities include private sector hospitals. The training also covers data entry and reporting using both the web-based application and mobile platform of the EWARN system. In addition to the 14 epidemic-prone diseases already included in the system (e.g. waterborne, vaccine-preventable, vector-borne and mixed-transmission diseases), the case definition for COVID-19 has been added and rolled out as a newly reportable health condition in EWARN.

The EWARN surveillance system continues to transform the way Somalia detects an epidemic disease including the COVID-19 in the absence of a routine disease surveillance system in a very complex setting. Responding to COVID-19 requires extraordinary response, requires innovation. Using the infrastructure for EWARN to detect COVID-19 suspected case exemplifies this.

Another important innovation of the EWARN system during this period of COVID-19 has been the addition of event-based surveillance, which is intended to capture non-specific and other respiratory diseases of unknown origin in the system so as to trigger an alert and appropriate investigation.

Understanding the evolution and transmission dynamics of any epidemic is a challenge even in countries with good health systems and functioning surveillance systems. In Somalia, a country with fragile health systems and no routine disease surveillance system, the challenges are immense. The other main advantage of the roll out of EWARN for COVID-19 is the use of its GPS coordinates which will allow alerts of the location of a suspected case or cluster of cases. This information will be precisely pinpointed and automatically displayed on the electronic dashboard, which will facilitate efficient contact tracing and identification of more suspected cases in the vicinity of the alert or a suspected case.

As the roll out begins, the system will automatically generate a weekly bulletin, which will show all alerts and also COVID-19 alerts by health facility and geographic location.

Our operational response to COVID-19 is supported by: