Current major event

High number of CCHF cases in Afghanistan: An assessment conducted

Afghanistan has experienced an unusual increase in cases and deaths from Crimean - Congo Hemorrhagic Fever (CCHF) during 2017 with Herat province being the most affected. Up to date, a total of 242 cases including 42 deaths (CFR: 17.35%) have been reported in 27 out of 34 provinces. WHO organized a technical mission in February 2018 to support activities for improving prevention and control efforts.

Editorial note

The recent surge in the number of CCHF cases necessitated identification of reasons for this surge including preventive and mitigating efforts that can limit the spread. On the request of the Ministry of Public Health in Afghanistan, a technical mission was conducted which primarily focused on the following critical areas- triage, and isolation, case management, laboratory diagnosis, infection prevention and control measures, disease surveillance, entomological surveillance, inter-departmental coordination and control measures implemented at the country level (*see table*). The mission members comprised of experts from the Pasteur Institute of Islamic Republic of Iran having ample experience in the relevant areas of the CCHF prevention and control.

A promising observation of the mission was the existence of a disease early warning and response system (DEWS) and its operation in approximately all the provinces of the country. Almost 95% of accessible districts in the country are covered by DEWS. The surveillance data of DEWS is shared with the national authority on a weekly basis. In the event of any alert or outbreak, rapid response teams mount timely for effective response; this is another integral part of the DEWS program.

The assessment also covered visits to the hospitals to look at the triaging procedures of suspected cases, use of case definitions to identify and recognize cases early, case management and infection control practices as well as laboratory tests performed to confirm diagnosis. It was revealed that the health workforce had knowledge of triage, isolation, case management, use of PPE and IPC measures to be practiced during handling the cases. The laboratory diagnosis was limited to the ELISA tests only. PCR machines were available in the designated laboratories but were not being used due to unavailability of the reagents.

Several action points have been recommended (*see box*) to improve preventive and control efforts. Surveillance was identified by the mission as one of the areas requiring strengthening. There is a need to use a more sensitive case definition aiming for early detection and treatment of CCHF cases.

CCHF is a zoonotic disease. It is important that the disease transmission and other risk factors for the spread of CCHF is mapped through identification of hot spots or epidemiological niche in the country. These areas need to be targeted for enhancing surveillance and regular sharing of data and information for evidence-based decision making to control.

System for detection and response to CCHF cases in Afghanistan

Components	Strengths
Triage	The health facility staff were aware of the concepts of triaging of the patients and few dedicated areas are earmarked for triaging.
Case management	Better knowledge of isolation of the patients and use of anti-viral drugs. Designated areas are available as isolation wards.
Laboratory confirmation	Staff is trained to use PCR and also performing ELISA tests. PCR machines are available in both the animal and human health sectors.
Data collection and sharing	DEWS is functional in 600 sentinel sites. In addition an automated system will soon be rolled out in the country for the electronic data collection and reporting.
Personnel Protective Equipment (PPE)	Good level of awareness among health workforce regarding use of appropriate PPE
Infection Prevention and Control (IPC)	IPC procedures are practiced according to available logistics and knowledge
Community awareness	Information sharing and messages dissemination products have been developed and shared through print and electronic media.
Coordination	Zoonosis committee is formed and conducting regular monthly meetings. Limited data sharing between animal and human health sector.

Recommended Action Points

Case Management:
- Isolate suspected cases in triage an admit to separate room
- Train staff on PPE use and triage
- Calculate annual demand for CCHF treatment courses and share it with competent authorities to avoid shortage

Laboratory Diagnosis:
- Provide PCR training course and kits
- Create an estimating system of laboratory requirements to prevent deficiency
- Establish subnational laboratory in high-risk provinces

Surveillance System:
- Conduct training on case definition, outbreak investigation response and reporting
- Develop a national strategy for tick control with comprehensive plan of action
- Free or subsidizes disinfestation campaign before the peak of transmission season

Community Engagement:
- Disseminate prevention and control message and run periodic extensive sessions in community
- Prepare educational programs for religious leaders

High Risk Groups::
- Conduct training for animal handlers, butchers, veterinarians and health care service staff on preventive measures

Update on outbreaks in the Eastern Mediterranean Region

MERS in Saudi Arabia; **cholera** in Somalia; **cholera** in Yemen; **dengue** in Sudan.

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)	[4 (0)]

Avian influenza A (H7N9): 2013-2017

China	[1,565 (612), 39.1%]

Chikungunya: 2016-2018

Pakistan	[8,482 (0)]

Cholera: 2017-2018

Somalia (2018)	[850 (3), 0.35%]
Yemen	[1,062,423 (2258), 0.21%]

Diphtheria: 2018

Yemen	[1149 (68), 5.9%]
Bangladesh	[5,764 (38), 0.65%]

Dengue fever: 2017-2018

Sudan	[197 (3), 1.5%]

MERS: 2012-2018

Saudi Arabia	[1,788 (701), 39.2%]

Wild poliovirus: 2018

Afghanistan	[3 (0)]

Yellow Fever: 2017-2018

Brazil	[464 (154)] 33.1%