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Current major events

Disease surveillance efforts geared up in Pakistan

Heavy monsoon rains in last couple of days have caused one of the worst floods in recent memory in Pakistan resulting in large number of deaths and widespread population displacement. The floods affecting mainly the north-western part of the country have caused severe damage to the health infrastructure as well. The hardest hit province is Khyber Pakhtunkhwa (KPK) with reports of severe loss of lives and livelihoods in Balochistan, Azad Jammu and Kshmir province as well.

In anticipation of any immediate impact of this widespread flood on the emergence and transmission of infectious diseases, the disease early warning system in Pakistan has been geared up in the flood affected areas.

Editorial note

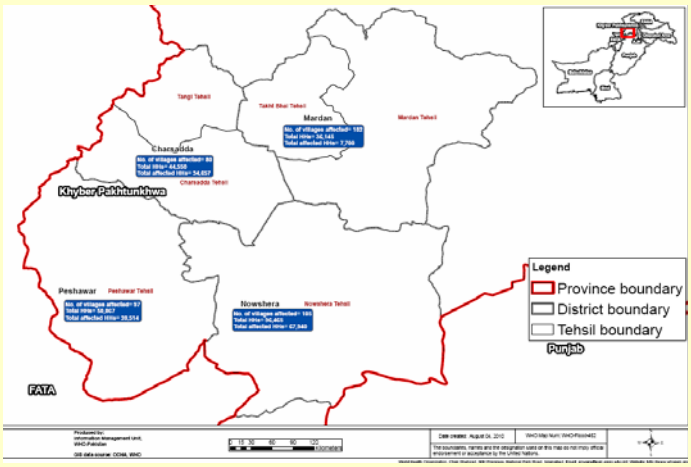
Natural disasters such as the recent flood in Pakistan can have a rapid onset and broad impact on the health of the displaced population. Due to multiple risk factors that inevitably follow every natural disaster of this scale and magnitude that of this recent Pakistan flood, the threat of infectious disease outbreaks remain considerably high.

When floods or similar natural disasters cause large scale population displacement and the affected people are forced to seek temporary shelter in crowded conditions with inadequate sanitation, compromised safe water supply, potential food shortage, malnutrition and low level of immunity, such conditions may enhance emergence and transmission of infectious diseases with potentials for a disease outbreak.

The goal of emergency health interventions, immediately in the aftermath of the flood, should therefore be to improve health conditions of the affected people through restoring the routine health services in the affected areas as quickly as possible. The highest priority needs to be directed towards diseases the country is endemic to and particularly those which can potentially cause excess mortality and morbidity within a short span of time. A crucial initial step for a public health emergency response is to establish adequate disease surveillance systems that take into account the inherent disruption of the public health infrastructure of the affected country. Outbreaks are usually prevented when the disease surveillance system of the affected country can detect a disease threat early enough that triggers prompt and appropriate response.

In Pakistan, the disease early warning system (DEWS), set up after the massive earthquake in 2005, is functioning well and public health capacities have been built on risk analysis, threat detection and response to any public health emergency using surveillance data from the DEWS. While the public health response efforts are geared up, it would be critical to learn lessons how the enhanced surveillance system for early detection of outbreaks in Pakistan can help the country in mitigating adverse health impacts of this devastating flood.

Flood affected areas of Pakistan



Common threats of communicable disease following flood

- Water-borne disease: Cholera, diarrhoeal disease, typhoid fever, Hepatitis A and E, Leptospirosis and parasitic disease;
- Vector-borne diseases: Dengue, Malaria, Chikungunya;
- Air-borne diseases: Acute respiratory infection

Update on outbreaks

in the Eastern Mediterranean Region

Avian Influenza A (H5N1) in Egypt
Dengue in Yemen.

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

Avian influenza	
Egypt	[110 (35), **31.8%**]
Indonesia	[167 (138), **82.6 %**]
China	[39 (26), **66.6%**]
Global total	[502(298), **59.3%**]
Dengue fever	
Yemen	[9053(11), **0.1%**]
AWD (Cholera)	
Yemen	[300 (4), **1.3 %**]
Benin	[278(2),**0.72%**]
Pandemic (H1N1) 2009	
AFRO	No of deaths: 168
AMRO	No of deaths: At least 8532
EMRO	No of deaths: 1020
EURO	No of deaths: At least 4879
SEARO	No of deaths: 1945
WPRO	No of deaths: 1855
GLOBAL Total	No of deaths: 18,399

CFR=Case-Fatality Rate