

Current major event

Monsoon floods and threats of disease outbreaks in Pakistan

Heavy monsoon rains have killed more than 154 people across Pakistan and displaced thousands and caused huge damage to properties and infrastructure since the beginning of August 2013. More monsoon rains are forecast later in the month. WHO Pakistan is responding to the health situations in flood affected areas. An Emergency Flood Operation Centre has been established. Six medical camps are working round the clock in rain affected areas in Karachi and Thatta. Alerts of acute watery diarrhea, measles, neonatal tetanus and Diphtheria have been reported and responded to in these areas.

Editorial note

The monsoon season and the accompanying flash floods has started and is already causing devastations in parts of Pakistan and Afghanistan. News sources have reported over 85 people killed in flash flooding in Afghanistan, and in Pakistan 154 deaths were reported. Many people are injured and homes, farmlands and infrastructure are destroyed. The affected populations are left without adequate shelter. This is just the beginning of the monsoon in both countries and more heavy rains is forecasted.

In the last three years, the two Eastern Mediterranean countries have suffered some of the worst flooding in modern history, with Pakistan being the most affected. Pakistan witnesses frequent flooding but in the last three years the flooding has become more frequent, extensive and severe. In the aftermath of these flooding caused by severe weather, Pakistan suffered some serious outbreaks of water and vector borne diseases (*see table right*). A big outbreak of acute watery diarrhea with confirmed cholera cases were reported from affected provinces of Pakistan during the 2011 floods. Another disease outbreak that has followed flooding in Pakistan is dengue fever. A large outbreak of dengue was reported from Karachi following the 2010 flooding and from Punjab

Map of Pakistan: Flood Affected Districts - August 2013



List of floods in Pakistan 2003 - 2013

Year	Affected Provinces	Reported Deaths	Major Outbreaks
2003	Sindh	484	
2007	KP, Sindh & Baluchistan	967	
2010	All Pakistan	2000	AWD, Dengue
2011	All Pakistan	361	AWD, Dengue, CCHF
2012	KP, Punjab & Sindh, Balochistan	455	AWD, CCHF, Measles, Pertussis, Malaria
2013	Karachi, Punjab, KP, Balochistan	154	Measles, CCHF, AWD, Dengue

following the 2011 flooding. Over 21580 confirmed cases including 317 deaths were reported from nationwide. Congo-Crimean hemorrhagic fever (CCHF) also spread with displaced livestock and caused outbreaks in new areas in 2010 and 2011 floods.

There is enough reason to worry about the prospects of disease outbreaks as the current flooding season continues. WHO/Pakistan has always taken a leading role in monitoring and responding to these outbreaks. The Disease Early Warning and Response System (DEWS) is the driving force behind the WHO/CO effort. It has provided effective technical support in the Country (especially after the devolution of the Ministry of Health). The three levels of WHO should be prepared to complement the efforts of DEWS if needed.

Update on outbreaks

in the Eastern Mediterranean Region

Novel Coronavirus in Saudi Arabia, UAE & Tunisia; **Hepatitis E** in South Sudan; **Meningococcal meningitis** in South Sudan; **Wild poliovirus** in Somalia.

Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

Avian influenza

Egypt	[173 (63), 36.4%]
Indonesia	[192 (160), 83.3 %]
Viet Nam	[125 (62), 49.6%]
Cambodia	[31 (27), 87.1%]
Global total	[629 (375), 59.6%]

Hepatitis E

South Sudan	[11,779 (219), 1.8%]
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Novel Coronavirus (MERS-CoV)

Saudi Arabia	[75 (40), 53.3%]
Italy	[3 (0)]
Jordan	[2 (2), 100%]
France	[2 (1), 50%]
UAE	[7 (3), 42.8%]
Tunisia	[2 (0)]

Influenza A (H7N9) virus

China	[135 (44), 32.6%]
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Meningococcal meningitis

South Sudan	[196 (13), 6.6%]
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Wild poliovirus

Somalia	[95 (0)]
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CFR=Case-Fatality Rate; # Suspected cases