

Current major event

Acute hepatitis E in Sudan

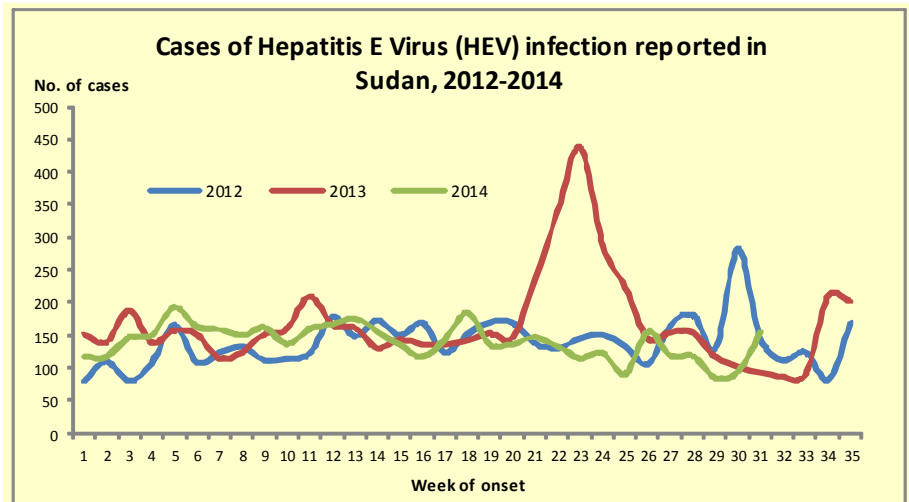
The Federal Ministry of Health (FMOH) in Sudan, recently, reported to WHO a high number of acute jaundice syndrome caused by Hepatitis E Virus (HEV) infection. Between week 1-32 of 2014, a total of 500 cases of HEV infection including 2 related deaths (CFR 0.8%) were reported. About 60% of cases were reported from South Darfur State, mostly from Nyala and Bilail locality. Sixty-five out of eighty samples collected tested positive for HEV by serology.

Editorial note

Since May 2004, Sudan has been reporting cases of HEV infection on an annual basis. The first outbreak of HEV infection was reported from Darfur region, an area severely affected by the ongoing civil conflict in the country. The conflict internally displaced nearly 1.8 million people who lived and continue to live in camps with severely compromised water, sanitation and hygiene situation. The camps of internally displaced people in Darfur have seen repeated outbreaks of HEV infection since then with high case fatality observed amongst the pregnant women.

Acute Jaundice Syndrome caused by HEV is typically caused by ingestion of contaminated food and water. The virus principally affects the liver, with incubation period ranging between 3 to 8 weeks. HEV was not recognised as a distinct aetiological agent until the 1980s; until then, epidemics of hepatitis in the developing world had been linked to hepatitis A virus (HAV) infections. The subsequent development of serological assays showed HEV to be endemic throughout tropical and subtropical countries, with periodic epidemics reported from the Indian subcontinent, southeast Asia and Africa. Although foodborne epidemics have been reported in China, most HEV-associated epidemics have been caused by contaminated water.

It is estimated that close to 20 million human infections from HEV occur on an annual basis globally with around



Cumulative number of HEV infection reported from Sudan, 2012– 2014

Year	Cumulative cases
2012	8079
2013	8280
2014 (upto week no 31)	4352

70,000 related deaths. However, due to incomplete, non-representative and inconsistent data, the burden of HEV infection in the countries of WHO Eastern Mediterranean Region is unknown. Apart from Sudan, explosive outbreaks from HEV infection have been reported from Afghanistan, Iraq, Pakistan and Syria. Infection in pregnancy is usually associated with a high risk of complications including deaths. The virus has 4 genotypes that have been detected from human so far. The Genotype-1 is the most commonly found genotype of HEV found in the countries of WHO Eastern Mediterranean Region.

The peak incidence in sporadic cases of hepatitis E in endemic regions occurs in 15–35-year-old age group. The same age group has also been seen to be affected during this high number of cases in Sudan. Hepatitis E infection in most individuals manifests as a self-limiting, acute, icteric hepatitis. However, during an outbreak or seasonal surge, efforts need to be accelerated to improve water, sanitation and hygiene situation as this remains the proven intervention to stop transmission.

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia

Current public health events of international concern

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

Avian Influenza A (H5N1): 2006-2014

Egypt [176 (64), 36.4%]

MERS-CoV: 2012-2014

Saudi Arabia [732 (269), 36.7%]

Jordan [11 (6), 54.5%]

Oman [2 (2), 100%]

UAE [68 (8), 11.8%]

Kuwait [3 (1), 33.3%]

Tunisia [3 (1), 33.3%]

Qatar [7 (4), 57.1%]

Yemen [1 (1), 100%]

Egypt [1 (0), 0%]

Lebanon [1 (0), 0%]

Iran [5 (1), 20%]

Ebola Hemorrhagic Fever: 2014

Guinea [1074 (648), 60.3%]

Liberia [3458 (1830), 52.9%]

Sierra Leone [2021 (605), 29.9%]

Nigeria [20 (8), 40%]

Senegal [1 (0), 0%]

DRC [70 (42), 60%]

Wild poliovirus: 2014

Pakistan [166 (0), 0%]

Afghanistan [10 (0), 0%]

Somalia [5 (0), 0%]

Severe Respiratory Illness (Enterovirus D68):

USA [130 (0), 0%]