

# Weekly Epidemiological Monitor

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## **Current major events**

# Hepatitis E Outbreak in Sudan

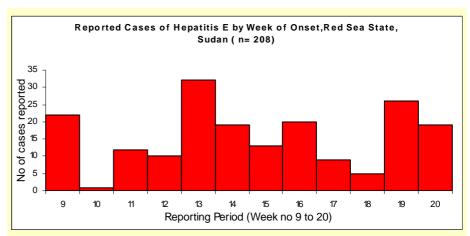
Between epidemiological week no: 9 and 20 of 2008 (week ending 22 May 2008), the Red sea state of Sudan reported 208 cases of Acute Jaundice Syndrome (AJS) including 16 deaths (CFR: 7.6%). Five serum samples, collected from the suspected cases, have tested positive for Hepatitis E at the National Public Health Laboratory (NPHL) in Khartoum. Most of these reported cases are females (72%) and majority of the cases (86%) are in the 15-44 year age group. Amongst the female cases, pregnant women (90%) constituted the majority of cases. The case fatality rate amongst the pregnant women was reported to be 37.5%.

A Task force has been established in the affected state with a senior official incharge from the Federal Ministry of Health of Sudan to coordinate the overall public health response to contain this outbreak. The WHO Country Office in Sudan has been actively supporting this task force in its response operations.

### **Editorial note**

Hepatitis E was not recognized as a distinct human disease until 1980 when specific tests for antibody against hepatitis A were first applied to the study of epidemic waterborne hepatitis in India Subsequently, the first experimental evidence for the existence of hepatitis E virus as a major cause of sporadic hepatitis cases as well as epidemics was known in 1983 only. Since then the virus (HEV) is known to have been responsible for large epidemics of acute hepatitis and a proportion of sporadic hepatitis cases in southeast and central Asia, the Middle East, parts of Africa and Mexico.

In Sudan, repeated outbreaks of Hepatitis E have been reported since 2004, raising the fear that the disease may be endemic in the Country. The first outbreaks were reported from IDP camps in the Darfur Region. However, sporadic



One serum sample has also been tested positive for Dengue Fever. Therefore, it is plausible that a mixed infection of hepatitis E virus as well as dengue viruses are con-commitantly circulating in the Red sea state of Sudan which needs to be investigated further.

### Some Facts on Hepatitis E:

- Hepatitis E is caused by infection with hepatitis E virus (HEV) and the virus is transmitted from person-to-person through faecal-oral route;
- In general, Hep-E is a self-limiting viral infection followed by recovery. Prolonged viraemia is unusual and chronic infection doesn't occur;
- The incubation period following exposure to HEV ranges from 3 to 8 weeks with a mean of 40 days:
- Symptomatic HEV infection is most common in young adults aged 15-40 years;
- Hep E is a mild to moderate disease in severity (mortality rate; 0.4 to 4%) except in pregnancy, where the mortality rate is progressively higher in each successive trimester and may reach 20%;

cases and outbreaks of HEV have been reported from other parts of Sudan. Outbreaks of Hep E are associated with drinking water contaminated by human faeces. Almost all HEV infections are spread through the faecal-oral route, and there is no specific treatment for hepatitis E infection. Good personal hygiene, high quality public water supplies and proper disposal of sanitary waste are the recommended strategies for prevention and control of Hepatitis E outbreaks. Fulminating hepatitis occurs more frequently in pregnancy and results in high mortality (CFR of 20%) among pregnant women especially during the third trimester. Thus a special attention needs to be given to infected pregnant women during an outbreak of hepatitis E.

### Update on outbreaks

in the Eastern Mediterranean Region

**Cholera:** (Sudan) reported from s. Sudan; **HEV:** in Sudan; **VOD:** No new cases reported

# Current public health events of international concern

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

#### Avian influenza

Egypt [50 (22), **44%**]
Indonesia [133 (108), **81.2%**]
Cholera

Kenya [1243 (67), **5.4%**] Sudan (South) [183 (19), **10.4%**]

Wild Polio Virus

One case detected in S. Sudan, living in Ethiopia. [1 (0), 0%]. No new case

### **VOD: (Pyrrolizidine Poisoning)**

Afghanistan [175 (13), **7.4%**]

### **Hand Mouth & Foot Disease**

China [6545(22), **0.3%**]

#### Yellow fever

Chad [12(0), **0%**]\*
C.A.R. [8(0), **0%**]

### Dengue fever

Brazil [145350 (109), **0.1%**]

(\*=Unofficial figures) CFR=Case-Fatality Rate