

Current major event

Update on hepatitis E virus in Sudan

The Federal Ministry of Health in Sudan continues to report cases of acute jaundice syndrome caused by hepatitis E virus (HEV) infection mainly from camp settings. As of Friday 12 November 2021 (week 45), 1831 HEV infections, including three associated deaths were reported with an attack rate (AR) of 0.6/1000 and a case-fatality ratio (CFR) of 0.16 %.

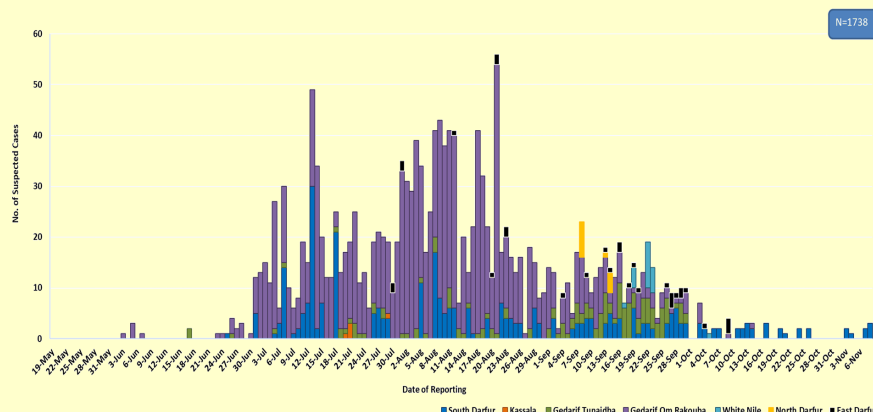
Editorial note

HEV is endemic in many African countries and has caused multiple outbreaks. In Sudan, several HEV outbreaks were recorded in the past particularly in internally displaced persons (IDP) camps in the Darfur region. As of week 45 2021, 1831 HEV infection cases including three associated deaths were reported in Sudan (AR 0.6/1000; CFR 0.16 %). Gedarif State reported 78.6% of the total cases, followed by South Darfur at 17.4%. During week 45 2021, eight new suspected HEV cases were reported with no deaths from East Jabal Marra locality, South Darfur (see table). Moreover, UNHCR has reported 87 suspected HEV cases from "Village 8" refugee camp and Om Rakouba camp in Gedarif, along with 13 more cases from Hamdayet refugee camp in Kassala. Five suspected HEV cases were also reported from Tawela, North Darfur. Furthermore, an outbreak of HEV is currently being reported in an IDP camp in Bentiu, South Sudan which is near the borders with Sudan where there are migratory routes.

Hepatitis E is an acute viral hepatitis caused by infection with HEV with an incubation period of two to 10 weeks after exposure. The illness usually begins as an acute viral syndrome with mild fever, marked loss of appetite, aversion to food, upper abdominal discomfort, nausea and/or vomiting. Jaundice can appear within a few days of the symptoms and usually persists for one to six weeks, and then gradually resolves. Most HEV infections occur without any symptoms or only as a mild illness without jaundice, and most affected persons will recover completely.

A small proportion of infected persons (0.5–4.0%) progress to develop acute liver failure (ALF), normally within a week of the onset of symptoms, with this being more common among pregnant women. ALF is characterised by altered mental status (encephalopathy) and bleeding (coagulopathy) due to a decrease in coagulation factors. HEV mortality rates are higher among pregnant women (19.3–63.6%). ALF leads to a high mortality rate in

Distribution of HEV suspected cases by date of reporting, Sudan 2021



Geographical distribution of suspected HEV cases and deaths 2021

State	locality	Suspected cases	Death
South Darfur	East Jabal Marra	313	0
	North Nyala Otash Camp	5	0
Gedarif	Algalabat East Om Rakouba camp	1161	1
	Algalabat East host community	43	1
	Al Mafaza Tunaibda camp	128	0
	Al Mafaza host community	21	0
	Alfashaga village 8 camp	87	0
Kassala	Wad Al Helaioh Hamdayet camp	5	0
White Nile	Al Jabalaen refugee camp	7	1
	Al Jabalaen host community	13	0
North Darfur	Dar Elsalam Nifasha camp	8	0
	Alfashir	4	0
	Tawela	5	0
East Darfur	Bahr Al Arab	28	0
	Abo Jabra	2	0
	Aldeain	1	0

all affected persons (up to 50%). HEV is shed in the stools of infected persons, is transmitted via the faecal-oral route, and enters the human body through the intestine. Transmission is mainly through contaminated drinking water.

Response activities of the HEV outbreak in Sudan have centered on the application of Water, Sanitation and Hygiene (WaSH) strategies. Water quality monitoring is ongoing in the affected areas. Water chlorination protocols have been strengthened in all refugee and IDP sites, while hygiene promotion messaging on safe water chain, proper food handling, hand washing, drinking chlorinated water and using latrines is ongoing. Solid waste routine cleanup has been conducted and hygiene supplies including soap were distributed in the camps. Surveillance and lab capacities have been strengthened in all affected areas.

WHO continues to collaborate with the Ministry and partners to support the implementation of prevention and control strategies to contain the outbreak in Sudan.

Update on outbreaks

in the Eastern Mediterranean Region

COVID-19 in 22 EMR countries

Current public health events of concern

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

Coronavirus disease 2019 (COVID-19): 2019–2021

Afghanistan	[157 218 (7308), 4.6%]
Bahrain	[277 552 (1394), 0.5%]
Djibouti	[13 504 (186), 1.4%]
Egypt	[355 767 (20 305), 5.7%]
Iran (Islamic Republic of)	[6 105 101 (129 549), 2.1%]
Iraq	[2 079 084 (23 772), 1.1%]
Jordan	[939 293 (11 515), 1.2%]
Kuwait	[413 266 (2465), 0.6%]
Lebanon	[666 768 (8701), 1.3%]
Libya	[371 571 (5438), 1.5%]
Morocco	[949 648 (14 774), 1.6%]
occupied Palestinian territory (oPt)	[459 689 (4792), 1%]
Oman	[304 532 (4113), 1.4%]
Pakistan	[1 284 189 (28 709), 2.2%]
Qatar	[242 979 (611), 0.3%]
Saudi Arabia	[549 671 (8832), 1.6%]
Somalia	[23 016 (1327), 5.8%]
Sudan	[42 826 (3141), 7.3%]
Syrian Arab Republic	[47 863 (2733), 5.7%]
Tunisia	[717 258 (25 363), 3.5%]
United Arab Emirates	[741 858 (2145), 0.3%]
Yemen	[9981 (1945), 19.5%]