Highlights

Floods due to heavy rains hit twelve States in Sudan affecting 232 135 population or 46 427 families. So far, more than 23 100 houses were damaged and 45 lives lost.

High density of house flies and mosquitoes has been observed over the last two weeks in Khartoum, Red Sea and North Darfur States.

There are 71 temporary health facilities functioning in different flood-affected localities. More temporary and mobile health facilities are needed.

Health situation / health needs

Floods due to heavy rains from the beginning of August 2013 have resulted in damages to lives and properties of marginalized communities in various parts of Sudan. According to the information received from the Federal Ministry of Health (FMoH), majority of people affected by the floods are in twelve States, namely Khartoum, Northern State, River Nile, Gezira, Red Sea, Sennar, North Kordofan, Gedaref, North Darfur, Blue Nile, White Nile and South Darfur.

Assessment of the affected population is still ongoing, but as of 13 August 2013, some 232 135 population or around 46 427 households have been affected, as reported by FMoH. A total of 23 120 families reported complete damage to their houses. So far, there are 45 deaths and 70 injured reported.

As heavy rains in many parts of the country is indicated by the weather forecast, the situation continues to be on alert status. Flood and its consequences are anticipated to worsen. This may aggravate outbreaks of communicable diseases especially acute watery diarrhea, malaria, dengue, and Rift Valley fever. In addition to inconsistent chlorination, population movement as well as flooded and destroyed toilets and poor community hygiene practices are considered as risk factors for the potential outbreak and spread of acute watery diarrhoea. On 12 August, there were rumours of suspected cases of diarrhoea in Ombadah locality, Khartoum State. An investigation team was immediately deployed by FMoH and found that there was no single case of diarrhoea in the area.

High density of house flies and mosquitoes have been observed during the last two weeks in Khartoum, Red Sea and North Darfur States. Currently, volunteers are searching for breeding sites in the identified States and will be immediately followed by spraying and house-to-house health education campaigns, as well as distribution of long-lasting insecticide-treated nets (LLINs).

According to FMoH, more than 30 700 latrines were destroyed by the floods. As heavy rains are still anticipated over the next weeks, the number of collapsed latrines is expected to increase.
Almost all localities in Khartoum State have been affected by floods with most destruction reported in the localities of Sharq El-neel, Ombadah and Karari locality. The Khartoum State Ministry of Health has identified the following urgent activities which need support from the health sector: chlorination of drinking water in 220 wells and 10 000 household water containers, monitoring of drinking water sources, disinfection and closing of collapsed latrines, vector control activities such as spraying, health education campaigns, and distribution of LLINs.

**Health response**

To date, there are 71 temporary health facilities functioning in different flood-affected localities with adequate number of health workers including medical doctors, medical assistants, laboratory technicians and nurses. However, FMoH highlights the urgent need for more temporary health facilities as well as mobile health clinics to provide health services to affected communities.

FMoH has sent four Rapid Response Teams to Red Sea, Gezira, Northern State, and River Nile. Financial support for immediate health needs were provided to the affected States.

Since early June 2013, FMoH has conducted weekly flood coordination meetings. Buffer stocks at national and State levels that are at risk of flooding were prepositioned.

The World Health Organization (WHO) provided FMoH with five mobile hospitals, seven rapid response kits, five diarrhoeal disease kits, and two Italian emergency health kits.

In additional to these supplies, UNICEF and UNFPA also provided FMoH with emergency health supplies including reproductive health kits (102), primary healthcare kits (652), Hudson spray pumps (1035), fog machines (70), long-lasting insecticide-treated nets (50 000), as well as numerous environmental health essentials such as water quality testers and pesticides. On top of this, FMoH has prepositioned 200 disaster boxes or emergency health kits for hospitals. In addition, a series of training sessions were conducted to train Rapid Response teams at state and localities level.

One of the immediate responses during flood emergency is disinfection of latrines. In Khartoum State, around 15 089 latrines need urgent disinfection and so far, only 1 300 latrines were disinfected. From ten assessed States across Sudan, more than 24 520 latrines need to be immediately disinfected, and to date, only 7 435 have been disinfected.

World Vision Sudan through the Khartoum State Commission of Voluntary Humanitarian Workers has initially supported Khartoum State with 500 tarpaulins, 500 blankets, as well as 1000 mosquito nets to support homeless families living in open dry areas who are vulnerable to diseases.

During the last week of July 2013, WHO supported SMoH to train 25 public health officers on rainy season preparedness and response from different facilities in North Darfur. In addition, another batch of 25 health cadres from SMoH and WES were trained on bacterial and chemical test for drinking water.

**Coordination**

With the FMoH (at the national level) and SMoH (at the State level), WHO coordinates activities of health partners on the ground to avoid overlapping of activities, and to collate data for the response. In addition, FMoH is conducting regular meetings with the National Council for Civil Defense to further assess the flood situation. In North Darfur, the rainy season preparedness task force is conducting regular meetings to assess health problems and monitor responses. Regular reports on the pattern of water borne diseases and findings of water quality monitoring are presented during the meetings.
Several community-specific health assessments were also conducted to gather vital health information and to identify the gaps in health services provision and coverage, as well as assess the priority public health threats to the populations affected by floods.

For more information contact:

Dr Anshu Banerjee
WHO Representative in Sudan
banerjea@sud.emro.who.int

Dr Hala Ismail
EHA Technical Officer
assadh@sud.emro.who.int

Mrs Christina Banluta
Communications Officer
banlutac@sud.emro.who.int