End of Rift Valley Fever outbreak in Sudan

The Federal Ministry of Health, Republic of Sudan has declared an end to the Rift Valley Fever (RVF) outbreak in Sudan on April 12, 2020 as the country reported its last case on 25 January 2020. The outbreak started on September 24, 2019 in Red Sea State and extended to involve six other states.

Rift Valley Fever is a viral zoonosis that usually presents as a mild illness but may cause severe disease in both animals and humans leading to high morbidity and mortality. The disease is more common in domestic animals in sub-Saharan Africa. The disease was first identified in Kenya’s Rift Valley in 1930. The virus primarily affects animals through bites of infected mosquitoes of diverse species, but can also infect humans, usually after handling, slaughtering, butchering or assisting an infected animal that is giving birth. Mosquito can also transmit the virus to humans. Spread from person to person has not been documented. People are usually asymptomatic or feel mild symptoms, but a small percentage of affected people develop more severe hemorrhagic fever that can be lethal. RVF causes high death rate among young animals, and high abortion rates among pregnant female animals, resulting in huge economic losses.

This is not the first time that Sudan has experienced RVF outbreak. During the last two decades the country has faced a number of viral hemorrhagic fever outbreaks with high number of cases as well as high case fatality rates. Sudan reported a major outbreak in 2007 with 723 cases and 230 deaths (CFR 31.8%).

The recent outbreak started late September 2019 in Algonib and Awleib locality of Red Sea. In the beginning of October, the National Focal Point of IHR notified WHO regarding confirmed cases of Rift Valley Fever, following that a total of 576 cases were reported with 11 associated deaths till the end of the outbreak. Out of which most of the cases were reported from two states “Red Sea and River Nile”. In addition to that 5 more states “Khartoum, White Nile, Gezira, Kassala and Gedaref states” reported sporadic cases (See table). Most of the cases were reported during week 42, 51 and 52 of 2019 (See graph). 56% of the cases were males and most affected age group was 15 to 29 years which was 30% of the total cases, the disease affected less commonly among children less than 5 years.

The government swiftly responded to the outbreak and activated the National RVF Task Force committee along with the deployment of surveillance teams to the affected states. Furthermore, five RVF treatment centers were established with the support of WHO and other health partners. Household inspections and fogging were conducted in Port Sudan of Red Sea State. The Ministry of Animal Resources and Fisheries was part of the response to contain the outbreak, and conducted vector control in four animal enclosures areas. In addition to this, a joint technical mission of FMoH, MoAR and WHO conducted a rapid assessment regarding confirmed cases of Rift Valley Fever in Sudan on December 22, 2019, and also supported response activities.

The last cases was reported from Red Sea State on January 25, 2020 in Algonib and Awleib. After more than 2 months without reporting a case, the FMoH has now officially declared the end of Rift Valley outbreak in Sudan. WHO will closely monitor the situation and work with FMoH and other partners to establish active surveillance to detect any future warning signals of this disease.