MERS cluster in Riyadh region, Saudi Arabia

Between 1 and 31 May 2020, Saudi Arabia reported a cluster of six laboratory-confirmed cases of MERS and four associated deaths in a hospital in Riyadh region. This is the second hospital outbreak that has occurred in the country this year, since the hospital outbreak in Aseer Region in January.

Editorial note

Middle East respiratory syndrome (MERS) is a viral respiratory disease caused by a novel coronavirus. Coronaviruses are a large family of viruses that can cause diseases ranging from the common cold to severe acute respiratory syndrome (SARS) and coronavirus disease 2019 (COVID-19). MERS outbreaks still represent a respiratory disease threat and mainly occur within health care settings.

Between January and the end of May 2020, Saudi Arabia reported a total of 56 cases, five of which were associated with nosocomial outbreaks.

From 21 to 31 May, a nosocomial outbreak involving six laboratory-confirmed cases of MERS-CoV infection, including four deaths, was reported from Riyadh region in Saudi Arabia. The first case reported was a 58-year-old male patient, with symptom onset on 10 May and testing positive on 19 May. He was in critical condition and on mechanical ventilation in ICU. He passed away on 21 May. Through contact tracing, five additional cases were identified. One of the cases was an asymptomatic 31-year-old health care worker (radiologist) with no co-morbidities. The other four cases were males above 75 years of age and were confined to bed in the hospital with comorbidities. Three of those cases have passed away.

Investigation and follow up of more than 45 contacts (at households and in health care facilities) were completed and no further secondary cases were identified. The outbreak seems to have halted, and Saudi Arabia continues to remain vigilant for the detection of any other cases. The country’s experience in controlling hospital outbreaks of MERS helped to limit the spread of the disease through the timely implementation of control measures.

Such events and outbreaks are highlighting the fact that the COVID-19 pandemic does not exclude the possibility for other epidemic and pandemic threats. Ensuring the continuity of detection and response activities is essential to prevent and control possible outbreaks.

Infection prevention and control measures are critical against the possible spread of MERS-CoV in health care facilities. As is the case with COVID-19, the early symptoms of a MERS-CoV infection are non-specific, making early detection of either respiratory disease not always possible among patients. Therefore, health care workers should consistently apply standard precautions with all patients, regardless of their diagnosis or illness. This includes droplet precautions when providing care to patients with symptoms of acute respiratory infection; contact precautions and eye protections when caring for probable or confirmed cases of MERS-CoV infection; and airborne precautions when performing aerosol-generating procedures.

Early identification, case management and isolation, together with appropriate infection prevention and control measures, can prevent human-to-human transmission of MERS-CoV.