

d A suspected case of MERS-CoV

Background

The Middle East respiratory coronavirus (MERS-CoV) syndrome is a viral respiratory illness with a high mortality that was first reported in Saudi Arabia in 2012. MERS-CoV infections are characterized by inter-personal spread through droplet and airborne routes and frequent nosocomial transmission.

On the 5 October 2016, the NICD received three specimens (induced sputum, a naso-pharyngeal swab and blood) from a 63-year-old female admitted to ICU at a private hospital in KwaZulu-Natal Province. She had presented with a two-week history of cough, shortness of breath, and fever. Her symptoms had started a week after she had returned from Saudi Arabia where she had worked as a nurse managing an isolation unit in a tertiary-care facility. The facility had managed over a hundred cases of MERS-CoV since 2012. On admission, her white cell count was $10.5 \times 10^6/\text{ml}$, C-reactive protein was 10 mg/l, and a throat swab was negative for influenza, RSV and other respiratory viruses.

After being alerted to the possibility of MERS-CoV, the hospital placed the patient in a negative-pressure isolation room, implemented airborne infection prevention measures, and made a line-list of health care workers exposed to the patient. The patient was treated with broad-spectrum antibiotics, and later with a macrolide antibiotic. Following testing at the NICD, sputum, blood and nasopharyngeal swabs were negative on polymerase chain reaction for MERS-CoV and other respiratory viruses. However specimens were positive for *Chlamydia pneumoniae*. The patient made an uneventful re-

covery.

This case underscores the need for a high index of suspicion for MERS-CoV infection amongst persons developing lower respiratory tract infections within 14 days of return from the Middle East, and the importance of implementing appropriate infection control measures until MERS-CoV infection is ruled out.

In South Africa, 19 samples have been tested for MERS-CoV in 2016 and none of these have been positive. Globally, the World Health Organization (WHO) has been notified of a total of 1806 laboratory-confirmed cases of infection with MERS-CoV from 27 countries, including 643 deaths, as at 21 September 2016. To date all cases reported have been linked to countries in the Arabian Peninsula, with majority of cases reported from Saudi Arabia.

Indications for testing

Guidelines for the diagnosis (including case-definitions), case management and infection control and prevention of MERS-CoV in health care facilities can be accessed at the NICD webpage: <http://www.nicd.ac.za/?page=guidelines&id=73>

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS; (cherylc@nicd.ac.za)