b Middle East respiratory syndrome coronavirus (MERS-CoV) update

Situation update
As at 16 January 2015, the World Health Organization (WHO) has been notified of a total of 950 laboratory-confirmed cases of infection with Middle East respiratory syndrome coronavirus (MERS-CoV), including at least 350 deaths. To date, all reported cases have been linked to countries in or near the Arabian Peninsula, with the majority of

cases reported from the Kingdom of Saudi Arabia. Other countries in or near the Arabian Peninsula with laboratory-confirmed cases include Jordan, Yemen, United Arab Emirates (UAE), Qatar, Oman, Kuwait, Lebanon and Iran. Countries with travel-associated cases include United Kingdom (UK), France, Netherlands, Turkey, Tunisia, Egypt, Greece, Germany, Italy, Malaysia, Philippines, United States of America (USA) and Algeria.

There have been no laboratory-confirmed cases of MERS-CoV in South Africa to date. In addition to the Hajj surveillance conducted in 2013 where samples from 237 returning pilgrims were tested (and all found negative for MERS-CoV), to date the NICD has tested a total of 23 patients for MERS-CoV (four in 2013, 16 in 2014 and two in 2015). Of the 23 patients tested, 15 had reported a history of travel or contact with a person who had travelled outside South Africa, eight of whom had travelled to countries in or near the Arabian Peninsula.

Clinical features
Individuals with MERS-CoV infection have presented with a wide clinical spectrum, ranging from asymptomatic infection to mild illness (acute upper respiratory illness) to severe illness (rapidly progressing lower respiratory illness, respiratory failure, septic shock and multi-organ failure). Atypical presentations, including mild respiratory illness without fever, and diarrhoea preceding the development of pneumonia, have been reported, especially in immunocompromised persons. Secondary cases appear to experience milder disease than that of primary cases.

Modes of transmission and infection control
To date, person-to-person transmission has occurred through close contact, both among family contacts and in healthcare settings. However, there is no evidence of sustained person-to-person transmission in community settings. As with other respiratory infections, early symptoms of MERS-CoV are non-specific and it is not always possible to identify patients with MERS-CoV early in the course of illness. In the case of a suspected MERS-CoV case, healthcare workers are encouraged to practice infection prevention and control precautions as per the World Health Organization recommendations; this includes standard precautions, droplet precautions, and additional airborne precautions when performing aerosol-generating procedures.

Travel advice
WHO does not advise screening for MERS-CoV at points of entry, nor does it currently recommend the application of any travel or trade restrictions.

Indications for testing
Healthcare workers should be aware of the possibility of MERS-CoV infection in patients with travel history from countries in or near the Arabian Peninsula who present with acute respiratory illness. Details of case definitions, indications for testing and appropriate specimens for MERS-CoV testing can be accessed at the NICD webpage: http://www.nicd.ac.za/page=alerts&id=5&rid=340.

Additional information on MERS-CoV can be accessed at the following websites:

- WHO website: http://www.who.int/csr/disease coronavirus_infections/en/ and http://www.who.int/csr/bioriskreduction/infection_control/publication/en/
- NICD website: http://www.nicd.ac.za
- US CDC website: http://www.cdc.gov/coronavirus/index.html.

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS