

**INTERNATIONAL OUTBREAKS OF IMPORTANCE**

## **An update on the novel coronavirus disease 2019 (COVID-19) outbreak**

The NICD has been closely monitoring the outbreak of respiratory illness that was first detected in Wuhan City, Hubei Province of China on 31 December 2019. On 7 January 2020, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was confirmed as the causative agent of coronavirus disease 2019 (COVID-19). The SARS-CoV-2 virus is a betacoronavirus, like Middle East respiratory syndrome coronavirus (MERS-CoV) and severe acute respiratory syndrome coronavirus (SARS-CoV), both of which have their origins in bats. On 30 January 2020, the Emergency Committee convened by the WHO Director-General declared the COVID-19 outbreak a PHEIC.

To date, there has been ongoing sustained transmission of COVID-19 in Mainland China (all provinces), Hong Kong, Japan, Republic of Korea, Singapore, Vietnam, Taiwan, Italy and Islamic Republic of Iran. As of 26 February 2020, there were 81 108 laboratory-confirmed cases of COVID-19 globally. An estimated 80% of cases were mild whilst 14% were severe (including pneumonia and shortness of breath) and 6% were in critical condition characterised by septic shock, respiratory failure and multi-organ failure. As of 26 February 2020, a total of 2 761 deaths have been reported, the majority of which (2718/2761, 98.4%) occurred in China. A total 15 COVID-related deaths occurred in the Islamic Republic of Iran followed by 12 deaths in Republic of Korea, 11 deaths in Italy and 1 death each in the Philippines, Japan and France. There have been 2 917 cases reported outside of China affecting 36 countries. Of the 2 917 cases reported outside of China, 86 were detected while apparently asymptomatic. On 25 February 2020, the Ministry of Health, Population and Hospital Reform of Algeria has reported the country's first case of COVID-19, which is also the first reported case in the African continent. On 14 February 2020, the Minister of Health and Population of Egypt reported a person with confirmed COVID-19 infection. However, the case has since tested negative for COVID-19 by PCR, but is still undergoing a 14-day observation period that is scheduled to end on 27 February 2020.

Since SARS-CoV-2 has only been recently identified, there is limited information regarding the mode/s of transmission, clinical features, and severity of disease at

this stage. The main clinical signs and symptoms are fever and cough with a few patients presenting with difficulty in breathing and bilateral infiltrates on chest X-rays. Treatment is supportive, as no specific therapy has been shown to be effective. Due to the transmissibility of SARS-CoV-2 (mainly through respiratory droplets, contact and fomites), infection prevention and control practices are vital in order to contain the spread of COVID-19. For droplet precautions, personal protective equipment (PPE) such as masks (surgical/medical), goggles, face shield, clean non-sterile long-sleeved gowns and gloves are recommended. For aerosol generating procedures, N95 masks and eye protection must be used. The public has been urged to continue practising hand hygiene, cough etiquette, avoid close contact with people suffering from acute respiratory infections and avoid visiting live animal markets.

The NICD, South Africa and the Institut Pasteur Dakar, Senegal, have been identified as the two referral laboratories to provide reference testing support for COVID-19 for the African Region. There have been ongoing surveillance activities in South Africa including the screening of travellers at ports of entry for early detection of COVID-19. As of 26 February 2020, 121 people from within South Africa have been tested for SARS-CoV-2, of which 77 were persons under investigation (PUI), all results were negative. There have been continuing efforts to strengthen capacity within South Africa to detect and respond to any imported cases of COVID-19. Guideline for case finding, diagnosis, management and public health response to COVID-19 has been published by the NICD on <http://www.nicd.ac.za/diseases-a-z-index/covid-19/>. It has been recommended that persons returning to South Africa from an area with community transmission of SARS-CoV-2 self-isolate at the first onset of symptoms and seek medical attention immediately from healthcare providers and share their travel history with the health provider. To date, no vaccine is available for COVID-19.

COVID-19 is classified as a Category 1 notifiable medical condition under 'Respiratory disease caused by a novel respiratory pathogen', therefore, notification should be made immediately on identification of a case meeting case definition of suspected infection with SARS-CoV-2,

i.e. person under investigation, a cluster of cases with severe respiratory illness with evidence of common exposure or epidemiologic link, or on receipt of a laboratory diagnosis of the novel respiratory pathogen. More details can be found on <http://www.nicd.ac.za/nmc-overview/>. Additionally, provincial communicable disease co-ordinators (CDCCs) are to contact the NICD.

In the event of a confirmed case, contact tracing will be conducted.

**Source:** <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>

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## An update on Ebola virus disease outbreak in Democratic Republic of Congo

The Ebola virus disease (EVD) outbreak in northeast Democratic Republic of the Congo (DRC) still remains a serious public health concern internationally since the outbreak was declared on 1 August 2018. There have been positive signs that the number of cases are slowly reducing, but it is unclear when it may end. Although the proportion of cases have been fluctuating from the end of 2019 into 2020, the rates are still high in North Kivu, South Kivu and Ituri provinces.

As of 16 February 2020, 3 432 EVD cases have been reported including 3 309 confirmed and 123 probable cases, of which 2 253 cases have died (overall case fatality rate 66%). Of the total confirmed and probable cases, 56% (1 923) were female, 28% (968) were children aged less than 18 years, and 5% (172) were healthcare workers.

In the past 21 days from 27 January to 16 February 2020, 10 new confirmed cases were reported from 4 of the 30 health areas in two active health zones in North Kivu Province: Mabalako (10%, n=1), Beni (90%, n=9). There have been more than 42 days since new cases have been confirmed from Butembo Health Zone. In Mabalako, there are no more contacts in their high risk period of day 7-13 since last exposure. Although there is a reduced trend and spread of the outbreak, the security situation is volatile and risk of spread within DRC and neighbouring countries remain high. The WHO risk assessment for the outbreak moved from very high to high at the national and regional levels, while low at the global level. However, delays in isolation of cases and

continued reports on nosocomial transmission might raise the number of cases in near weeks. It is therefore critical to rapidly detect, investigate and follow-up all cases and their contacts.

More than 249 000 contacts have been registered to date, and 1 662 were under surveillance as of 16 February 2020. On average, 91% of contacts were followed daily in the last seven days in health zones with continued operations. An average of 5 186 alerts were reported per day over the last seven days, of which 5 142 (99%) were investigated within 24 hours of reporting. There are currently eight operational Ebola treatment centres (ETC) and 13 Ebola transit centres located in North Kivu, South Kivu and Ituri provinces. Ebola vaccinations continue with 295 673 people vaccinated with the rVSV-ZEBOV-GP Ebola vaccine as of 16 February 2020, and 12 233 vaccinated with the Ad26.ZEBOV/MVA- BN-Filo vaccine in two health areas near Goma, since its introduction on 14 November 2019. On 10 February 2020, WHO published new guidelines regarding the management of pregnant and breastfeeding women to prevent and control EVD. Infection prevention and control (IPC) detection, evaluation, monitoring and supervision is important to reduce exposure of possible nosocomial infection and EVD cases.

The government and the Ministry of Health (MOH), and other national authorities in the DRC, World Health Organization (WHO) and partners are implementing outbreak control interventions together with teams in the surrounding provinces, who are taking measures to ensure that they are response-ready. WHO still advises against any restriction of travel to, and trade with the DRC, although port screening is