

South African children have a lower risk of COVID-19 illness and disease, and current studies show that when infected, they are less likely to develop severe illness. It is still of utmost importance that physical distancing, wearing of masks and strict hand hygiene be maintained in all schools to minimise the risk of transmission within the school and between students and their households and communities.

Oxygen therapy remains a key component of therapy in the hypoxic patient. It has been found to be especially effective if administered early to patients in the pneumonic phase. Typically, patients with progressive COVID-19 illness will decompensate around day 5-7 after onset of infection and it is therefore critical to encourage patients to seek medical care urgently for oxygen therapy at this stage if experiencing worsening of symptoms.

With regards to treatment advances, data from the UK RECOVERY trial showed that dexamethasone reduced all-cause deaths at day 28 by one-third in ventilated patients

(29.0% vs. 40.7%) and by one-fifth in other patients receiving only oxygen (21.5% vs. 25.0%). No benefit was seen among those patients who did not require respiratory support at randomisation though, and there was paradoxically a signal of possible increased mortality when dexamethasone was used for this subset of patients. As a result, it is now recommended that dexamethasone should be a standard of care for patients requiring supplemental oxygen therapy or ventilation, but avoided in patients who do not require oxygenation support.

Laboratory Testing

PCR remains the preferred test for diagnosis of patients with acute infection. Shortages of testing reagents and kits has necessitated prioritisation of testing for hospitalised patients, especially patients under investigation for COVID-19, and symptomatic healthcare workers. This will allow appropriate management, allocation of resources and infection prevention and control measures. Repeat testing for patients with COVID-19 is not required for de-isolation.

Article source: National Institute for Communicable Diseases COVID-19 response team; NICD-NHLS; lucilleb@nicd.ac.za

An update on Ebola virus disease outbreak, Democratic Republic of Congo

Nearly two years after the Democratic Republic of the Congo's (DRC) longest and biggest outbreak began, the country's health officials on 25 June 2020 declared that the Ebola virus disease (EVD) outbreak in the eastern part of the country is over.

Having passed two incubation periods since the last patient was confirmed to be free of the virus, the Ebola virus disease (EVD) outbreak centered in North Kivu and Ituri provinces resulted in 3 470 cases, including 3 317 confirmed and 153 probable cases. Of the total confirmed and probable cases, 2 287 cases died (overall case fatality ratio 66%) and 1 171 survived.

The outbreak, which was the DRC's 10th, began on 1 August 2018, and was the world's second largest EVD outbreak. It began just a week after a small 11-week outbreak in the country's northwestern Equateur province was declared over. It was particularly

challenging as it took place in an active conflict zone.

This long, complex and difficult outbreak has been overcome due to the leadership and commitment of the Government of the DRC, supported by the World Health Organization (WHO), a multitude of partners, donors, and above all, the efforts of the communities affected by the virus.

WHO has congratulated the DRC and all those involved in the arduous and often dangerous work required to end the outbreak, but stresses the need for vigilance. Continuing to support survivors and maintaining strong surveillance and response systems in order to contain potential flare-ups is critical in the months to come.

Led by the DRC government and the Ministry of Health and supported by WHO and partners, the more than 22-month-long response involved training thousands of health workers, registering 250 000 contacts, testing 220 000 samples, providing patients with equitable access to advanced

therapeutics, vaccinating over 303 000 people with the highly effective rVSV-ZEBOV-GP vaccine, and offering care for all survivors after their recovery.

The response was bolstered by the engagement and leadership of the affected communities. Thanks to their efforts, this outbreak did not spread globally. More than 16 000 local frontline responders worked alongside the more than 1 500 people deployed by the WHO. Support from donors was essential, as was the work of United Nations (UN) partner agencies, national and international non-governmental organisations (NGOs), research networks, and partners deployed through the Global Outbreak Alert and Response Network. Hard work to build up preparedness capacities in neighbouring countries also limited the risk of the outbreak expanding.

Work will continue to build on the gains made in this response to address other health challenges, including measles and COVID-19.

As countries around the world face the COVID-19 pandemic, the DRC Ebola response provides valuable lessons. Many of the public health measures that have been successful in stopping Ebola are the same measures that are now essential for stopping COVID-19: finding, isolating, testing, and caring for every case and relentless contact tracing. In DRC, community workers were provided with training and a smartphone data collection app that enabled them

to track contacts and report in real time rather than fill in laborious paper reports. Even when violence locked down cities, the community workers, many of them local women, continued to track and trace contacts using the application, something that was crucial for ending this outbreak.

While this 10th outbreak in DRC has ended, the fight against Ebola continues. On 1 June 2020, seven cases of Ebola were reported in Mbandaka city and neighbouring Bikoro Health Zone in Equateur Province, and an 11th outbreak was declared. This current outbreak is more than 1 000 km west of the previous outbreak in Ituri, North Kivu and South Kivu provinces. These two outbreaks appear to be unlinked; however, a source of infection has yet to be determined for either. WHO is supporting the government-led response with more than 50 staff already deployed and more than 5 000 vaccinations already administered. WHO considers the public health risk to be moderate at the national and regional levels and low at the global level.

WHO salutes the thousands of heroic responders who fought one of the world's most dangerous viruses in one of the world's most unstable regions.

Article source: WHO: www.who.int; WHO-AFRO, Division of Public Health Surveillance and Response, NICD-NHLS; outbreak@nicd.ac.za

SEASONAL DISEASES

Influenza

To date, the influenza season, which occurs mainly during the winter months of May to August, has not started. However, the ongoing COVID-19 pandemic likely influenced health-seeking behaviour as well as staffing/routines in sentinel surveillance sites. In addition, the various hygiene and physical distancing measures being implemented to reduce SARS-CoV2 virus transmission may also have played a role in interrupting influenza virus transmission. Globally, influenza activity has been at lower

levels than expected and to date, none of the Southern Hemisphere countries have reported any influenza activity. Since the localised outbreak of influenza A(H1N1)pdm09 and influenza B Victoria in the Western Cape Province in the beginning of the year, there has been one detection of influenza A(H1N1)pdm09 in Gauteng Province from a Viral Watch surveillance site in the week ending 14 June. Over the past 36 years, the mean peak of the season has been the last week of June.

Article source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS; cherylc@nicd.ac.za