The mainstay of cholera treatment is fluid replacement. Mild-to-moderate cases may be treated with oral rehydration fluid. Severe cases require admission and intravenous administration of fluid. Antibiotic treatment (ciprofloxacin) is recommended for patients with moderate to severe dehydration, as it reduces disease severity and the risk of further transmission. The public is urged to drink water from safe water sources or treat water to render it safe before use, and to ensure good hand hygiene before and after using the toilet, and before and after handling food.

Additional information on cholera can be accessed on the NICD website: http://www.nicd.ac.za under the Diseases A-Z Tab.

Article source: KwaZulu-Natal provincial Department of Health; Centre for Enteric Diseases and Provincial Epidemiology Team, NICD-NHLS; junot@nicd.ac.za

INTERNATIONAL OUTBREAKS OF IMPORTANCE

Novel coronavirus outbreak

On 31 December 2019, the World Health Organization (WHO) China country office reported a cluster of pneumonia cases in Wuhan City, Hubei Province of China (Figure 1). On 7 January 2020, the causative pathogen was identified as a novel coronavirus (2019-nCoV). There is currently limited epidemiologic data available on affected cases. There has been no sustained spread of the virus in the community. However, there have been indications of limited person-to-person transmission as a growing number of patients reportedly have not been exposed to animal markets. The transmissibility of the virus remains unclear. Cases outside of China have been linked to travellers from Wuhan City.

Coronaviruses are a large family of viruses, causing respiratory illness in humans and animals. In rare circumstances, animal coronavirus has the potential to evolve, infect humans and spread to others through human-to-human transmission. Novel coronaviruses emerge periodically in different parts of the world such as the severe acute respiratory syndrome (SARS) epidemic which arose in China in 2002, and the Middle East respiratory syndrome (MERS) epidemic which arose in Saudi Arabia in 2012. Currently, human-to-human SARS transmission has not been reported since the 2002-2003 outbreak. There are ongoing cases of MERS globally; however, 80% of human cases are reported in Saudi Arabia.

On 11 and 12 January 2020, the 2019-nCoV outbreak was epidemiologically linked to a seafood, poultry and live wildlife market (Huanan Seafood Wholesale Market) in Jianghan District of Hubei Province. The majority of the case-patients were dealers and vendors at the seafood market, which suggests that the novel coronavirus has a possible zoonotic origin. The market was shut down on 1 January 2020 for environmental sanitation and disinfection.

As of 30 January 2020, there have been 7 818 confirmed cases of 2019-nCoV associated pneumonia, affecting 19 countries globally. Among the 7 818 confirmed cases, 7 736 (99.0%, 7 736/7 818) originated from China and 82 (1%, 82/7 818) were imported cases reported in parts of Western Pacific, South East Asia, North America, Eastern Mediterranean and the European region. Of the 7 736 confirmed cases in China with available data, 1 370 patients are hospitalised and severely ill (17.7%; 1 370/7 736) and 170 deaths have occurred (2.2%; 170/7 736). Of the 82 cases reported outside China, 7 were detected while asymptomatic. All reported cases had either a travel history to Wuhan City or had a contact history with a confirmed case. The main clinical signs and symptoms are fever and cough, with a few patients presenting with difficulty in breathing and bilateral lung infiltrates on chest radiograph.

Full genetic sequencing data for 2019-nCoV were released on 12 January 2020. Development of specific diagnostic tests is underway. There is still limited information regarding transmission route, illness severity and patient profile, but environme ntal assessments, contact tracing and further epidemiological investigations are currently underway. Travel health notices and screening at points of entry have been issued in China and neighbouring countries. Travellers returning from Wuhan or living in Wuhan were advised to seek medical attention and share travel history with their healthcare provider if they display symptoms suggestive of respiratory illness. On 30 January 2020, the Emergency Committee convened by the WHO Director-General has declared the 2019-nCoV outbreak a Public Health Emergency of International Concern (PHEIC). This is in acknowledgment of the risk the virus poses to countries beyond its origin in China and of the need for a more coordinated international response to the outbreak. More details can be found on: https://www.

who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov). Based on current information, WHO does not recommend the application of any travel or trade restrictions on China. Recommendations on public health measures and surveillance of influenza and severe acute respiratory infections still apply.

Respiratory illness caused by a novel respiratory pathogen is a category 1 notifiable medical condition (NMC) in South Africa; therefore, notification should be made immediately on identification of a case meeting the definition of suspected infection with 2019-nCoV, or 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 on the diagnosis of the novel respiratory pathogen can be found on: http://www.nicd.ac.za/wp-content/uploads/2019/05/NMC-case-definitions-FLIPCHART_v4_May-2019.pdf. South Africa has released case definitions and precautionary measures for 2019-nCoV which can be found on: http://www.nicd.ac.za/novel-coronavirus-outbreak-in-wuhan-city-hubei-province-of-china/

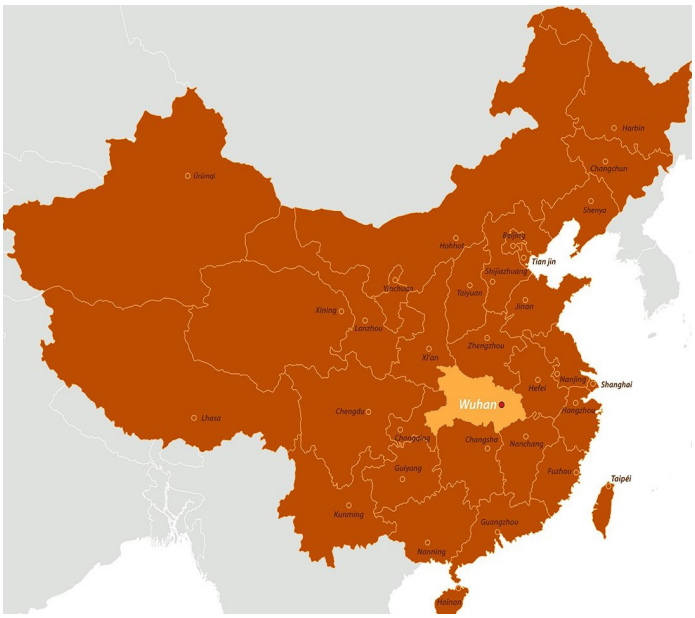

Figure 1. Location of the cluster of pneumonia cases in Wuhan City, Hubei Province of Republic of China

Source: https://www.cdc.gov/coronavirus/novel-coronavirus-2019.html

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

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) has become the country's largest-ever Ebola outbreak. It was declared a public health emergency of International concern on 1 August 2018. There have been positive signs that the number of cases is slowly reducing, although the figures have been fluctuating from the end of 2019 into early 2020. The affected provinces are North Kivu, South Kivu and Ituri.

As of 19 January 2020, a total of 3 414 EVD cases has been reported including 3 295 confirmed and 119 probable cases, of which 2 237 cases have died (overall case fatality rate 66%). Of the total confirmed and probable cases, 56% (1 911) were female, 28% (963) were children aged less than 18 years, and 5% (171) were healthcare workers.

In the past 21 days from 30 December 2019 to 19 January 2020, 37 new confirmed cases were reported from 12 of the 87 health areas in six active health zones in North Kivu and Ituri provinces: Mabalako (32%, n=12), Beni (32%, n=12), Butembo (19%, n=7), Katwa (3%, n=1), Musienene (3%, n=1), and Mambasa (11%, n=4). As of 19 January, more than 21 days have passed without reports of new confirmed cases in Kalunguta Health Zone.

More than 246 000 contacts have been registered to date, and 2 771 were under surveillance as of 19 January 2020. On average, 92% of contacts were followed daily in the last seven days in health zones with continued operations. An average of 5 092 alerts were reported per day over the last seven days, of which 4 972 (98%) were investigated within 24 hours of reporting. There are currently 11 operational Ebola treatment centres (ETC) and 25 Ebola transit centres