

### 3 ENTERIC DISEASES

#### a Two confirmed cholera cases in Gauteng Province, South Africa

There is an ongoing cholera outbreak in Zimbabwe, with 9 116 cases and 54 deaths reported as of 12 October 2018. While the outbreak is concentrated in the densely populated suburbs of Harare, cases have also been reported from eight other provinces. A mass oral cholera vaccination campaign was launched in Harare on 3 October 2018 targeting >420 000 people. Subsequent phases of the vaccination campaign targeting an additional 370 000 people are imminent.

A case of cholera in South Africa was confirmed in a 50-year-old female with a travel history to Zimbabwe. The patient travelled from Harare (Zimbabwe) to Pretoria by bus on 28-29 September, and developed abdominal cramps and diarrhoea whilst travelling. She was admitted to a Tshwane hospital on 1 October presenting with profuse watery diarrhoea complicated by dehydration. She reported contact with ill people during her stay in Harare. The patient's husband, a 49-year-old male, was admitted on 4 October with acute watery diarrhoea also confirmed as cholera. Both patients responded to intravenous rehydration and antibiotic therapy and recovered uneventfully.

*Vibrio cholerae* was isolated from stool samples at the testing NHLS laboratory in both cases, and confirmed to be toxin-producing *V. cholerae* O1 serotype Ogawa at the National Institute for Communicable Diseases (NICD). The isolates are resistant to most first-line antibiotics (including tetracycline, cotrimoxazole, doxycycline, ceftriaxone and ciprofloxacin) but are susceptible to azithromycin.

Cholera is usually transmitted through contaminated drinking water or food. However, cholera can also be transmitted following direct contact with infective material (e.g. stool or vomitus), so trans-

mission within households is not uncommon. Mild-to-moderate cases may be treated with oral rehydration fluid. Severe cases require admission and intravenous fluid administration. Antibiotic treatment is recommended for patients with moderate to severe dehydration, as it reduces disease severity and the risk of further transmission. Azithromycin is recommended for cases linked to the current Zimbabwean outbreak, since this cholera strain is resistant to ciprofloxacin.

In South Africa, heightened awareness for possible cholera cases must be maintained whilst the outbreak continues in Zimbabwe. Any patient who develops acute watery diarrhoea with or without vomiting should be investigated.

Any suspected case should be notified immediately to the facility's infection prevention and control practitioner, district Communicable Disease Control Coordinators (CDCCs) and to the national notifiable medical condition (NMC) system. Healthcare workers should ensure that stools or rectal swab specimens are collected, and specimens should be sent to the testing laboratory with a specific request for cholera testing. If a delay in testing or transport of specimens is anticipated, specimens should be submitted in Cary-Blair transport media. Additional information on cholera, including guidance on specimen collection and case management, can be accessed on the NICD website: <http://www.nicd.ac.za> under the diseases A-Z Tab.

**Source:** Centre for Enteric Diseases, Division of Public Health Surveillance and Response and Provincial Epidemiology Team, NICD-NHLS; Gauteng Provincial and City of Tshwane CDCCs; (junot@nicd.ac.za; outbreak@nicd.ac.za)

### 4 INTERNATIONAL OUTBREAKS OF IMPORTANCE

#### a Ebola virus disease outbreak, Democratic Republic of Congo (DRC)

The Ebola virus disease (EVD) outbreak in North Kivu, Democratic Republic of Congo (DRC) is ongoing. As of 21 October 2018, a total of 238 confirmed and probable EVD cases, including 155 deaths (case fatality ratio 68.31%) has been reported. Of the 238 cases, 203 are confirmed and 35 are probable. Of the 155 deaths, 120 occurred in confirmed cases. As of 10 October 2018, 20 healthcare workers have been affected in this outbreak, of which 19 are laboratory confirmed and three have died. Beni, Butembo, Masereka and Mabalako continue to report an increasing number of new cases, indicating the persistence of Ebola virus transmission in these areas.

Recent cases in Beni include a disproportional number of cases in children aged ≤16 years; 47%

(n=20) of 43 total cases reported since 1 October 2018, including nine cases in infants and young children aged <5 years. Investigation teams are intensively reviewing potential sources of the recent increase in cases among children. As of 15 October 2018, 57 cases have recovered, been discharged from Ebola treatment centres (ETCs), and re-integrated into their communities. The treatment centres in Beni and Butembo recorded an occupancy rate of 76% (31/41) and 42% (10/24) respectively.

Unstable political situation has hampered follow-up of contacts.

#### **Vaccines and new drugs being used**

A ring vaccination program was implemented in the