

CHOLERA ALERT for HEALTH CARE WORKERS

3 April 2019

Centre for Enteric Diseases,
National Institute for Communicable Diseases

The World Health Organization has confirmed an outbreak of cholera in Beira, the city hardest hit by Cyclone Idai, in Mozambique. As of 1 April, a total of 1 052 cases of cholera have been reported by the Ministry of Health, and more are expected since >128 000 people are living in temporary shelters with unsafe water supply and poor sanitation and are at high risk of infection. An oral cholera vaccination campaign will start this week.

At this stage, cholera outbreaks have not been reported from other areas in Mozambique that were also affected by the cyclone ([Figure 1](#)).

Areas of Zimbabwe and Malawi were also hit by the cyclone (Figure 1), but no cholera outbreaks have been reported from these countries so far. However, there were cholera and typhoid fever outbreaks in Zimbabwe late last year, and there is concern for potential resurgence and fresh outbreaks in the aftermath of the cyclone.

[Figure attached separately.](#)

Figure 1. Geographical location of the impact of Cyclone Idai in Southern Africa, 30 March 2019.

Source: World Health Organization Regional Office for Africa: weekly bulletin on outbreaks and other emergencies, week 13 (25-31 March 2019)

Healthcare workers are advised to suspect cholera in patients with acute onset of watery diarrhoea, particularly if there is a history of travel to cyclone-affected areas.

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 is recommended for patients with moderate to severe dehydration, as it reduces disease severity and the risk of further transmission. The public are urged to drink water from safe water sources, ensure good hand hygiene before and after using the toilet, and before and after handling food.

There is no information as yet about the antibiotic susceptibility profile of the outbreak strain in Mozambique. Since the cholera strain which caused the recent outbreak in Zimbabwe was multi-drug resistant, in the interim we recommend treatment with azithromycin. This may be revised as more information becomes available.

Management of suspected cholera cases

1. Specimen collection




- Stool is the preferred specimen. A rectal swab can be collected if stool collection is not feasible.
- On the specimen submission form, clearly request 'MCS & cholera' testing. Testing for cholera is not included in routine 'MCS' – it must be specifically requested.
- Transport to the laboratory as soon as possible.



If a delay of >2 hours before processing is likely, place the stool specimen in Cary-Blair transport medium as described in the steps below. If possible, the transport medium should have been chilled for 1 to 2 hours beforehand.



1. Collect a small amount of stool by inserting a sterile cotton-tipped swab into the stool specimen and rotating it
2. If mucous and shreds of intestinal epithelium are present, these should be sampled with the swab.

	<ol style="list-style-type: none"> Immediately insert the swab into the transport medium. The swab should be pushed completely to the bottom of the transport medium bottle.
	<ol style="list-style-type: none"> Break off and discard the top portion of the swab-stick that is protruding above the edge of the bottle, leaving the cotton tip in the transport medium.
	<ol style="list-style-type: none"> Replace the screw cap on the specimen container and transport medium bottle and tighten firmly. Place both into the plastic specimen bag and seal. Complete the specimen request form and place in the sleeve of the plastic specimen bag. Include all the required patient details, clinical presentation and history, and the name and contact details of the attending healthcare practitioner, and type of specimen (i.e. stool or rectal swab). Specifically request MC&S and cholera testing. If there is a delay in transport (or processing in the laboratory) immediately place both containers in a refrigerator (at 4°C) or cooler box (with ice bricks) until collected by the courier. DO NOT FREEZE.

Collection of rectal swabs:

- Moisten the swab in sterile transport medium (Cary-Blair).
- Insert swab gently into the rectal sphincter (2 to 3cm) and rotate. Remove swab and check for visible faecal matter.
- Immediately insert the swab into the transport medium (see steps above), label the specimen, and deliver to laboratory promptly.
- If there is a delay in transport (or processing in the laboratory) immediately place both containers in a refrigerator (at 4°C) or cooler box (with ice bricks) until collected by the courier. DO NOT FREEZE.

2. Treatment

- Aggressive rehydration therapy** is the mainstay of treatment and is the most important lifesaving measure. Further details about clinical management including assessment of dehydration and guide to rehydration treatment are available in the [National Guidelines for Cholera Control](#)
- Antibiotic treatment (azithromycin)** should be given to all patients with moderate to severe dehydration.

	Paediatric dose	Adult dose
Azithromycin	20 mg/kg po as a single dose	1 g po as a single dose

- Zinc** supplementation should be given to all children ≤ 5 years with cholera

Age	Dose of zinc	Duration
0 - 6 months	10 mg po once a day	10 – 14 days
6 months – 5 years	20 mg po once a day	10 – 14 days

3. Notification

Cholera is a notifiable medical condition. Notify as a suspected cholera case immediately - do not wait for laboratory confirmation.

- Complete a cholera case investigation form – [Download Here](#)

- NICD Hotline for healthcare workers

Should you have any questions, you may contact the NICD 24-hour hotline (for use by health professionals only): 082-883-9920.

For laboratory-related queries, please contact Mimmy Ngomane (mimmyn@nicd.ac.za; (011) 386 6235; 072 407 4667) or Juno Thomas (junot@nicd.ac.za; (011) 555 0439; 073 170 8874).