HCT/DONOR MEETING
14 DECEMBER 2011

An Update on Communicable Disease Outbreaks

WHO/UNICEF
Water, Sanitation, Hygiene Related Outbreaks 2011 to Date

Diarrhoeal Diseases
- Cholera
  - Chimanimani, Chiredzi and Chipinge
- Rotavirus
  - Kadoma City (Urban and Rural)
- Acute watery diarrhoea (AWD)
  - Kwekwe City (Urban and Rural)

Other Diseases
- Typhoid fever
  - Harare City
### Diarrheal Disease Outbreaks
#### Cholera

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Districts Affected</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Period of outbreak</td>
<td>Week 5–52</td>
<td>Week 1–25</td>
</tr>
<tr>
<td>Cumulative Cases</td>
<td>1,022</td>
<td>1,140</td>
</tr>
<tr>
<td>Confirmed Cases</td>
<td>123</td>
<td>320</td>
</tr>
<tr>
<td>Deaths</td>
<td>22</td>
<td>45</td>
</tr>
<tr>
<td>Case Fatality Rate</td>
<td>2.1</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Cumulative cases of cholera are similar to last year, while case fatality rates are higher than last year.

Cholera is Endemic in Zimbabwe – there is nothing unusual about outbreaks this year to date.
## Diarrheal Disease Outbreaks

### Acute Watery Diarrhea

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Kwekwe</th>
<th>Kadoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period of Outbreak</td>
<td>Week 39-44</td>
<td>Week 36-41</td>
</tr>
<tr>
<td>Cumulative Cases</td>
<td>403</td>
<td>860</td>
</tr>
<tr>
<td>Deaths</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>CFR</td>
<td>4.7</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Recent outbreaks are concentrated in urban areas. The case fatality rate in Kwekwe is extremely high.

### Undeclared Events *

- **Makonde** (ongoing)
  - AWD (443)
  - Dysentery (110)
- **Chinoyi** (ongoing)
  - Dysentery (110)
- **Gokwe North** (contained)
  - AWD (236)

*As reported by Implementing Partners*
In week 49, Harare City Health Officials reported 1812 cases of AWD and 50 cases of dysentery. The same time last year, they reported just 559 cases of AWD and 39 cases of dysentery - a nearly three-fold increase in cases over last year.
**Typhoid Fever**

**2011 Outbreak - Harare**

**Symptoms**
- High fever lasting 3 days or more
- Cough
- Diarrhoea or constipation
- Abdominal discomfort/pain

**Incubation**
- 8-14 days (up to 2 months)

**Carriers**
- 2-5% become carriers

**Indicators**

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<tbody>
<tr>
<td>Period of outbreak</td>
<td>Week 41 to Date</td>
</tr>
<tr>
<td>Cumulative Cases</td>
<td>768</td>
</tr>
<tr>
<td>Confirmed Cases</td>
<td>22</td>
</tr>
<tr>
<td>Deaths</td>
<td>2</td>
</tr>
<tr>
<td>Case Fatality Rate</td>
<td>.26%</td>
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</table>
Typhoid Fever
2011 Outbreak - Harare

Other Affected Areas

- Shamva, Lilifordia
- Estate, Whitecliff,
- Seke
- Zvimba
- Norton
- Epworth
- Manyame Park

39 suburbs affected
Water, Sanitation and Hygiene Related Disease
2011 Outlook

*Holiday Travel/Rains = Further Transmission?*
Water, Sanitation and Hygiene Related Disease
2011 Outlook

Cholera cases 2008 to 2011

Will Trends Continue?
Water, Sanitation, Hygiene Related Outbreaks Response to Date

• Coordination
  – Typhoid Outbreak Response meetings 3 x Week (City Health)
  – C4 meeting 1 x week
  – Environmental Health Alliance convening regularly (former WERU/HERU)
  – WASH/Health Clusters have re-introduced joint meetings 2 x week
  – Clusters continue to meet as scheduled

• Clinical Case Management
  – Dissemination of Typhoid Management Guidelines
  – Training of health workers (HW) in diarrhea case management, including typhoid
  – Training of HW in Integrated Disease Surveillance and Response
  – Provision of medial supplies
Water, Sanitation, Hygiene Related Outbreaks
Response to Date

• Water, Sanitation and Hygiene
  – Emergency Rehabilitation and Risk Reduction (ER/RR)
    • Continued provision of water treatment chemicals for municipal suppliers (30 municipalities across country) – near term
    • Ongoing rehabilitation of urban water supply infrastructure
  – Water trucking where municipal supplies are interrupted (Kadoma, Harare)
  – Borehole Drilling (Harare, Kadoma)
  – Distribution of soap, aquatabs, and in some cases ORS
  – Social mobilization

• Study on determinants/Risk Factors associated with Harare Typhoid outbreak (CDC)
Moving Forward - Proactive Response
Behind the Curve

Lesson 1
Cholera 2008-2009

Source: CDC, 2009
Proactive Response
Behind the Curve

Lesson 1
Cholera 2008-2009

Source: EHA, 2011
Proactive Response
Behind the Curve

Source: EHA, 2011
## Proactive Response

### Getting Ahead of the Curve

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<tr>
<td>2008</td>
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### Getting Ahead of the Curve

#### Targeted Assistance

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Targeted Assistance **BEFORE** people die
Getting Ahead of the Curve
Targeted Assistance

From: B Nhika [mailto:des@kadomacity.org.zw]
To: Lang, Helmut GIZ ZW
Cc: Ladewig, Thomas GIZ ZW
Subject: Emergency works at our works

Further to the discussion between myself and Mr Ladewig of GIZ, Council do hereby confirms our request for assistance at our Waterworks.

- Assistance to repair the leak at Shore Pump station
- Assistance to procure a suitable transformer for pump no.2 at Claw intake tower, we would require a transformer which steps from 33KV to 400V, the required of transformer size is 500KVA instead of the existing 1MVA transformer steps from 33KV to 3.3 KV which does not match the new motor supplied by French Redcross

Zesa have indicated to us in a meeting held with them yesterday that dedicated line to Pasi and Blue Ranges waterworks will be connected and commissioned with in the next 7 days from the 8th of December 2011

We have also been informed that the Contract for installation of Claw Dam Dedicated power line has been approved by ZESA head office and the contractor will start works as soon as possible. ZESA will inform us of the program by Wednesday 14th of December 2011 and this will be communicated to yourselves

NHIKA B (MR)

DIRECTOR OF ENGINEERING SERVICES
Getting Ahead of the Curve
Targeted Assistance

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NHIKA B (MR)
DIRECTOR OF ENGINEERING SERVICES

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From: Lang, Helmut GIZ ZW [mailto:helmut.lang@giz.de]
Sent: Monday, December 12, 2011 3:28 PM
To: 'Murtaza Malik'; a.paul@welthungerhilfe.co.zw
Cc: Ladewig, Thomas GIZ ZW; Ulmer, Axel GIZ ZW
Subject: Alert on precarious water supply situation in Kadoma
Importance: High

Dear Colleagues,

The purpose of this e-mail is to inform and alert you in-officially that on Fr. 9 Dec. 2011 we have received an SOS signal from the Dir. Eng. Services of the City of Kadoma (see e-mail at the bottom).

In our assessment the water supply situation in Kadoma will be insufficient for some days to come. Negative consequences to the health situation of the residents of the City of Kadoma cannot be excluded.

DIRECTOR OF ENGINEERING SERVICES
Getting Ahead of the Curve
Mass Social Mobilization

PREVENT DIARRHEA
(including Cholera, Typhoid)

TYPHOID ALERT!
HOW TYPHOID IS SPREAD

- By washing your hands thoroughly with soap or ash after taking care of a person suffering from typhoid, after using the toilet and before handling, preparing and eating food.
- By only drinking water from safe sources i.e. tap, borehole or protected well or spring.
- By disinfecting all water through either boiling or use of water purifying tablets or solutions.
- By cooking food thoroughly and eating it whilst still hot.
- By storing all food with appropriate covers.
- By washing fruits and vegetables properly under safe running water before eating them.
- By disposing of waste properly and avoiding shacks in gatherings, partly or fully during a typhoid outbreak.

If you suspect TYPHOID in your area, please advise health workers at your nearest health facility.

LET'S WORK TOGETHER IN PREVENTING

Ministry of Health and Child Welfare (Health Promotion Unit) in collaboration with UNICEF, World Health Organization (WHO) and PSI
Getting Ahead of the Curve
Reduce Structural Barriers

Aquatabs and Soap

200,000 Households
Getting Ahead of the Curve
Reduce Structural Barriers

Aquatabs and Soap
200,000 Households

Cholera—Modern Pandemic Disease of Ancient Lineage
J. Glenn Morris, Jr.

Potential strategies for their utilization (40). Although the environment remains a critical component of transmission, interventions focused increasingly on the household and on blocking transmission immediately after passage of feces are acutely needed. Ultimately, good sanitation (as part of a

Cholera has been an unwanted companion among human civilizations for at least a millennium, with suggestions that it has existed in India "since immemorial times" (2). Its impact in Bengal society was sufficient to have resulted in recognition of a goddess of cholera, Oliver (or Olia Bashee), who required prayers to protect villages from the disease (3). Global pandemic spread of cholera from its ancestral home in Bengal was first documented in 1817 (4), the beginning of what has been designated as the first pandemic. In the intervening 2 centuries, cholera has continued to ebb and flow from southern Asia to other parts of the known world, with 6 additional pandemics identified. During the third pandemic, which ravaged London in 1854, John Snow conducted his pioneering epidemiologic study (4) and gained fame for removal of a pump handle.

Author affiliation: University of Florida, Gainesville, Florida, USA.

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2000
Getting Ahead of the Curve
Ensure Safe Water in High Risk Areas

Address Municipal Supply Constraints

Pre-positioning of NFI and other Materials
Getting Ahead of the Curve
Rapid Response and Case Management

Strengthen Laboratory Capacity (District Level)

- Additional training of health workers (HW) in diarrhea case management, including typhoid
- Capacitate the MoHCW RRTs
  - Additional training including IDSR
  - Transport support (vehicles, fuel)
  - OJT support and supervision
- Preposition clinical supplies
Proactive Response

Next Steps

Recent outbreak events in several urban areas and generally high rates of diarrheal disease across the country suggest this high transmission season may be more robust than the past two. To prevent further transmission, we propose a proactive response.

• Mass Social Mobilization around two key messages
  – Wash hands all the time
  – Treat water at home
• Distribution of Aquatabs and soap to high risk households
• Continued support for water treatment at municipal level
• Continued work to rehabilitate municipal supply systems and provide alternatives where those systems fail (including advocacy for longer term solutions)
• Continued capacity building for health workers at field level
  – Training of health workers
  – Support for RRTs
  – Support to district level laboratories
• Rapid multi-sector response to outbreak events
Anthrax Outbreak in Mash Central Province

Mbire district
• In the Kanyemba area
• The index case reported for treatment on the 17th of Nov 2011
• By 12 Dec 2011, a total of 43 human cases
• Cases reported to have eaten dead Hippo and Elephant meat
• Several deaths of these wildlife in water were reported in the area

Mt Darwin district
• In the Dotito area
• Outbreak reported on Thursday 08th Dec 2011
• 30 cows died from anthrax
• 43 human cases
• Cases reported to have eaten dead cow meat
Anthrax Response Activities

• CPU activated at district and provincial levels

• The PMD teams visited affected areas

• Provincial RRT
  – PEDCO, VET, Wildlife, Police and
  – the President office visited the affected areas

• On-going contact tracing
PREVENT DIARRHEAL DISEASE
(including Cholera, Typhoid, and Dysentery)

Let’s work together to prevent diarrhoea