



## Highlights

- Typhoid cases reported per week doubles in Harare
- Kwekwe Diarrhoea outbreak now in control
- Muzarabani and Patchway Cholera Alerts investigated

## Contents

- A. General context
- B. Epidemic prone diseases
- C. Events of public health importance in the region
- D. Preparedness
- E. Timeliness and completeness of data
- F. Recommendations for action/follow up
- G. Annexes:
  - 1: Standard case definitions and alert/action epidemic thresholds
  - 2: National summary of cases/deaths by condition by week

### A. General context

The last cholera cases were reported in week 25 of 2011, having spilled over from 2010.

This year, 1104 suspected cases of measles have been reported. Of the 628 samples collected and sent for Measles confirmation, no positive Measles cases were found while 303 positive cases of Rubella were found. There are no malaria outbreaks being reported in the country. Typhoid outbreak persists in Harare, with Dzivaresekwa 3, reporting highest numbers.

In the Southern Africa region Rift Valley Fever has been reported in Namibia and South Africa; Viral Haemorrhagic Fever and measles in DRC and Tanzania; cholera in Congo, DRC, Malawi, Mozambique and Zambia; suspected H1N1 cases in Namibia and Anthrax in Zambia

### B. Epidemic prone diseases

#### Typhoid

A total of 153 Typhoid cases have been reported this year in four outbreaks. All of the cases were from Harare city. The recent typhoid outbreak started on the 10<sup>th</sup> of October contributed 144

Figure 1: National cumulative Typhoid cases Jan-6 November, 2011

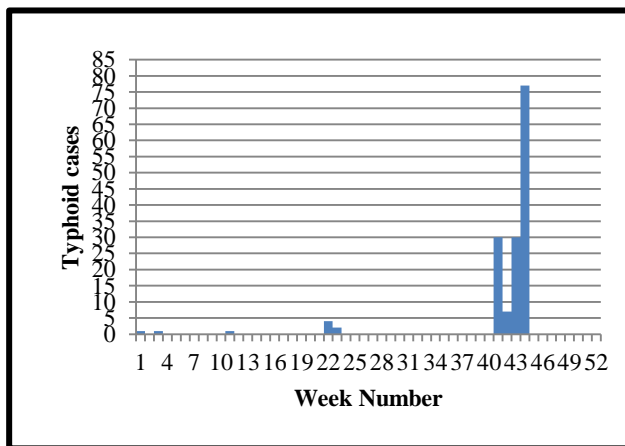
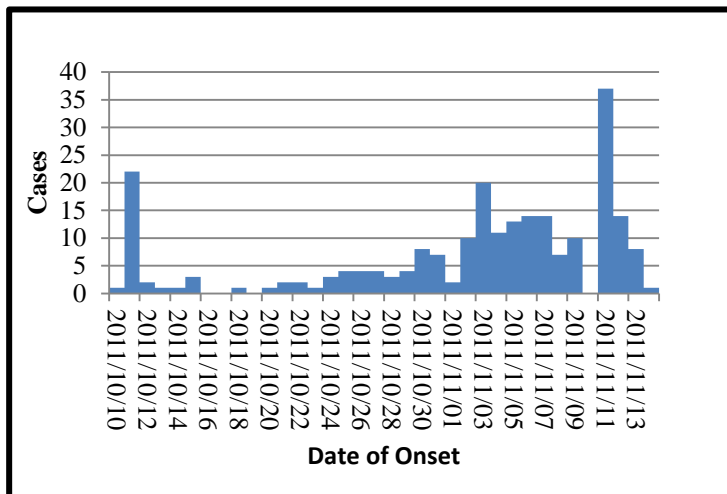


Figure 2: Typhoid Epidemic curve, Harare, 10 October – 6 November 2011



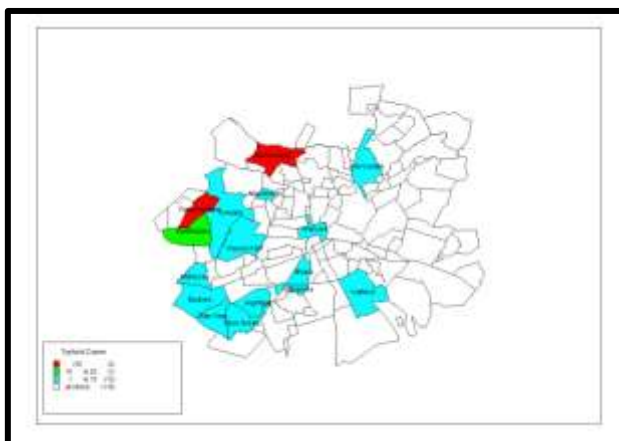
cases as of week 44. Sixteen suburbs of Harare have been affected, with Dzivaresekwa 3 the worst affected. The cumulative distribution of the cases is as shown in the map on the next page.

#### Week 44 (31 October -6 November 2011)

77 cases were reported this week: Avenues 1, Budiro 2, Dzivaresekwa 43, Glen View 2, Kuwadzana 4, Marlberaign 1, Marlborough 18 ( Including Good Hope and Westgate) Mufakose 1, Tynwald 4 and Warren Park 1 from Dzivaresekwa.

# Zimbabwe Weekly Epidemiological Bulletin

Figure 3 Distribution of Typhoid Cases by Surburbs, Harare 10 Oct-6 Nov,2011



## Response:

The following activities have been implemented to control the outbreak:

- Case management
- Contact tracing
- Social mobilisation
- NFIs distribution

## Diarrhoea

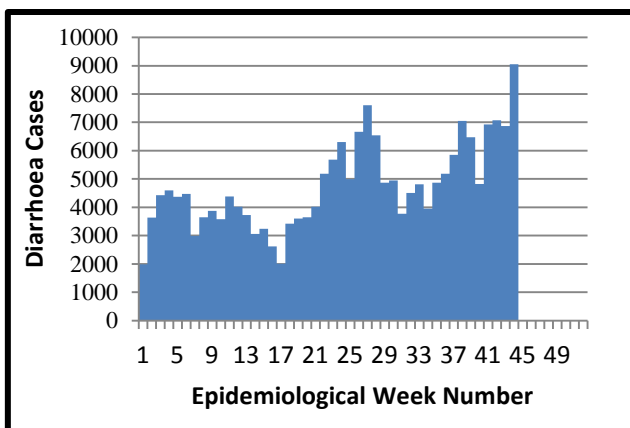
### Nationwide

The number of diarrhoea cases reported nationwide increased from 7069 to 9046.

### Kwekwe Outbreak

Kwekwe outbreak is now in control.

Figure 4: Diarrhoea Epidemic curve, Zimbabwe, Week 1-44, 2011



## Cholera

From January to June 2011, ten out of the Zimbabwe's 62 districts, namely: Bikita, Buhera, Chimanimani, Chegutu, Chipinge, Chiredzi, Kadoma, Murewa, Mutare and Mutasa, reported cholera cases. By the 26<sup>th</sup> June 2011, a total of 1140 cases and 45 deaths were reported, giving a crude case fatality rate of 4.0%. Of the total reported cases, 320 were confirmed positive by laboratory tests. Majority 870 (76%) of cases was reported from Manicaland province among which 697 (80%) cases were reported from Chipinge.

The last cholera cases were reported from Chiredzi district in week 25. Surveillance continues in all districts.

### Week 44 (31 October – 6 November 2011)

No new cases of cholera were reported countrywide. Alerts of cholera in Muzarabani and Patchway were investigated and found to be false.

### C. Timeliness and completeness of data

National data completeness timeliness reported for week number 44 increased from 57% to 66% and timeliness decreased from %43% to 54% respectively

### D. Events of public health importance within SADC

#### Democratic Republic of Congo (DRC) Cholera

As of 26 October, 2011, a total of 7 379 cases and 398 deaths (CFR 5.0%) were reported from the following four provinces of DR Congo: Equateur (2 954 cases and 155 deaths, CFR 5.0%), Bandundu (2 216 cases and 132 deaths, CFR 6.0%), Kinshasa (583 cases and 28 deaths, CFR 5.0%) and Province Orientale (1 626 cases and 84 deaths, CFR 5.0%). Generally, a decrease in reported number of cases and deaths has been observed since the epidemiological week 37.

# Zimbabwe Weekly Epidemiological Bulletin

## Namibia:

### H1N1

The WHO Country Office was informed of an outbreak of H1N1 occurring in 9 districts of the Republic of Namibia. As of October 28, 2011, a total of 3 063 cases and 0 death were reported from these nine districts. 77.3% (2 368/3 063) of the cases came from Eenhana and 21.5% (658/3 063) from Enegla districts of Ohangwena region bordering Ompalapa province of Angola. Most of the cases occurred between age groups 1 and 19.

### South Africa – Meningococcal disease

This is an update to the meningitis outbreak that is occurring in day care centres in Tshwane district, South Africa.

As of 21 October 2011, daily field visits have been conducted at the affected day care centres since additional 2 cases were detected. Environmental health department has been working with the management of the affected day care centres to improve the conditions.

In the interim, as these measures are being put in place, the affected centres will be monitored daily. Active surveillance activities will continue to be strengthened as well as collaboration with all stakeholders including the community to improve the condition at the day care centre.

### E. Acknowledgements

We are very grateful to health workers from facility to district, provincial level and national level for sharing surveillance data. In particular, we recognise those who share complete data on time.

We also acknowledge members of the Health and WASH clusters who share their data with our team. MoHCW recognizes the efforts made by NGOs and other partners that are providing support to them. Information on **events of public health importance occurring within SADC** is consolidated from the WHO daily summary of health events.

# Zimbabwe Weekly Epidemiological Bulletin

## Annex 1

**Table 1: Comparison of cholera cases and deaths of 2010 with those of 2011, Zimbabwe, as of week 36**

District	2010		2011		Total Cases	Total Deaths
	Cases	Deaths	Cases	Deaths		
Beitbridge	17	0	0	0	17	0
Bikita	9	1	43	1	52	2
Bindura	2	0	0	0	2	0
Buhera	130	0	64	0	194	0
Chegutu	32	2	1	0	33	2
Chimanimani	66	0	28	13	94	13
Chipinge	39	2	697	20	736	22
Chiredzi	54	2	219	9	267	11
Chivi	13	0	0	0	13	0
Harare	4	0	0	0	4	0
Hurungwe	171	5	0	0	171	5
Kadoma	160	5	2	0	162	5
Makonde	3	0	0	0	3	0
Mangwe	1	0	0	0	1	0
Masvingo	10	1	0	0	10	1
Mt Darwin	11	1	0	0	11	1
Murewa	0	0	5	2	5	2
Mutare	206	2	80	0	286	2
Mutasa	0	0	1	0	1	0
Mwenezi	5	0	0	0	5	0
UMP	4	1	0	0	4	1
<b>Total</b>	<b>937</b>	<b>22</b>	<b>1140</b>	<b>45</b>	<b>2071</b>	<b>67</b>

# Zimbabwe Weekly Epidemiological Bulletin

## Annex 2: Standard case definitions and alert/action epidemic thresholds

### 1. Cholera Standard Case Definition

#### *Suspected case:*

In an area where there is no cholera, any person aged five years or more, presenting severe dehydration or death from acute watery diarrhoea

In an area where there is a cholera epidemic, any person aged two years or more presenting with acute watery diarrhoea, with or without vomiting.

#### *Confirmed case:*

A suspected case in which *Vibrio cholerae* sero-groups O1 or O139 has been isolated in the stool.

*NB: All suspected cases under the age of two years must be confirmed.*

The inclusion of all ages in the case definition somewhat reduces specificity, that is, inclusion of more non-cholera childhood diarrhoea cases (mainly those below 5 years). It does not impede meaningful interpretation of trends. Teams should monitor any shift in the age distribution of cases, which might indicate a changing proportion of non-cholera cases among patients seen.

### 2. Malaria Standard Case Definition

#### *Suspected uncomplicated malaria*

Any person living in a malaria area or history of travelling in a malaria area within the last 6 weeks, presenting with fever, malaise, chills, and rigors, without signs of severe disease such as vital organ dysfunction

#### *Confirmed uncomplicated malaria*

A suspected uncomplicated malaria with laboratory diagnosis by malaria blood slide or RDT for malaria parasites

#### *Confirmed severe malaria*

A patient hospitalized with *P. falciparum* asexual parasitaemia as confirmed by laboratory tests with accompanying symptoms of severe disease (vital organ dysfunction)

### 3. Typhoid Case Definition

*Suspected case:* Any person with gradual onset of steadily increasing and then persistently high fever, chills, malaise, headache, sore throat, cough, and, sometimes, abdominal pain and constipation or diarrhoea.

# Zimbabwe Weekly Epidemiological Bulletin

**Confirmed case:** Suspected case confirmed by isolation of *Salmonella typhi* from blood, bone marrow, bowel fluid or stool.

## 4. Diarrhoea Case Definition

**Suspected case:**

Passage of 3 or more loose or watery stools in the past 24 hours with or without dehydration and:

*Some dehydration* -- two or more of the following signs: restlessness, irritability; sunken eyes; thirsty; skin pinch goes back slowly, or

*Severe dehydration* -- two or more of the following signs: lethargy or unconsciousness; sunken eyes; not able to drink or drinking poorly; skin pinch goes back very slowly.

**Confirmed case:**

Suspected case confirmed with stool culture for a known enteric pathogen. *Note:* Laboratory confirmation of specific agent causing outbreak is not routinely recommended for surveillance purposes.

### Action and alert thresholds for selected epidemic prone and other diseases of public health importance in Zimbabwe

Disease or condition	Alert threshold	Action threshold
Measles	1 suspected case	<b>District level:</b> 25 or more cases per 100,000 population  <b>Health facility:</b> 3 or more cases in the same ward in 1 week  <b>In closed settings like Refugee camps, schools, in-patient ward within a health facility:</b> 1 confirmed case
Meningococcal meningitis	1 suspected case	1 confirmed case
Plague	1 suspected case	1 confirmed case
Rabies (suspected rabid bites)	1 case of a bite from suspected rabid animal	1 case of a bite from suspected rabid animal
Trypanosomiasis	1 suspected case	1 case in an area that is not endemic or For endemic areas 3 cases per 100,000

# Zimbabwe Weekly Epidemiological Bulletin

Typhoid fever	1 case	5 suspected cases per 50,000 population or 20 suspected cases per District's catchment area or any 1 confirmed case by blood culture
Viral Haemorrhagic Fever	1 suspected case	1 confirmed case
Outbreak of unknown cause	3-5 cases or deaths with similar symptoms that don't fit most case definitions	Any cluster of cases or deaths who had similar symptoms over a short period of time and fail to respond to treatment for the usual causes of the symptoms.
Acute Flaccid paralysis (AFP) / Polio	1 AFP case	1 confirmed case of polio (virus isolated).
Dysentery	Five cases or more per reporting site per week	A 2-fold increase in the number of cases compared to an expected number usually seen in previous season – specific time period  Any increase in number of deaths due to bloody diarrhoea
Cholera	1 suspected case	1 confirmed case (where it has not been reported before)
Diarrhoea under five	Increasing number of cases in a short time	Doubling of no of cases as compared to the same time period of a previous year.
Malaria	Increasing cases above the median	Number of cases that exceed those in the 3rd quartile (the upper Limit of the expected number of cases or  Number of cases that exceed the mean plus 1.5 x Standard Deviations (Mean + 1.5 SD).
Neonatal tetanus (NNT)	1 suspected case	1 confirmed case
Human influenza caused by a new Subtype	1 suspected case	1 confirmed case
Severe Acute Respiratory Syndrome (SARS)	1 suspected case	1 confirmed case

# Zimbabwe Weekly Epidemiological Bulletin

Adverse Events Following Immunisation (AEFI)	1 suspected case	1 confirmed case
Acute Viral Hepatitis	1 suspected case	1 confirmed case
Anthrax	1 suspected case	1 confirmed case

## Notes:

An *alert threshold* suggests to health workers that further investigation is needed. Health workers respond to an alert threshold by:

- Reporting the suspected problem to the next level
- Reviewing data from the past
- Requesting laboratory confirmation to see if the problem is one that fits a case definition
- Being more alert to new data and the resulting trends in the disease or condition
- Investigating the case or condition
- Alerting the appropriate disease-specific programme manager and district epidemic response team to a potential problem.

An *epidemic/action threshold* triggers a definite response. Possible actions include communicating laboratory confirmation to affected health centres, implementing an emergency response, community awareness campaign, or improved infection control practices in the health care setting.

## Reporting:

- T1 for notification of an infectious notifiable disease (used for up to five cases after which line lists must be filled)
- Weekly Rapid Disease Notification Form
- Reporting is to the next level (health facility to district to province to national level)

## C. Events of Public Health concern

There are three main categories of events, which if detected by the national surveillance system, should trigger the use of Annex 2 of the IHR (2005). Annex 2 is the Decision Instrument for the Assessment and Notification of Events that may constitute a Public Health Emergency of International Concern. These are:

- A case of the following diseases, which are unusual or unexpected and may have serious public health impact and should be notified: smallpox, poliomyelitis due to wild-type poliovirus, human influenza caused by a new subtype and SARS.
- Any event of potential international public health concern including those of unknown causes or sources, and those involving other events or diseases (than those listed in i) above and iii) below). Such events may include:
  - environmental health emergencies (natural events, technological incidents, complex emergencies and deliberate events);
  - chemical risk in food (environmental or intentional pollution) and



# Zimbabwe Weekly Epidemiological Bulletin

- Zoonotic diseases or other infectious diseases.
  
- iii. An event involving the following diseases shall always lead to utilisation of the algorithm (i.e. Annex 2) because they have demonstrated the ability to cause serious public health impact and to spread rapidly internationally: Cholera, pneumonic plague, yellow fever, viral haemorrhagic fevers, West Nile Fever, other diseases that are of special national or regional concern e.g. dengue, RVF and meningococcal disease.