

## **Epidemiological Bulletin Number 41**

### **Week 1 (week ending 10 January 2010)**

#### **Foreword**

This bulletin provides a weekly overview of the outbreaks occurring in Zimbabwe. It includes disaggregated data to inform and improve the continuing public health response by the various partners. It also provides guidance to agencies on issues relating to data collection, analysis and interpretation, and suggests operational strategies on the basis of epidemiological patterns so far. The bulletin is published weekly. Note that the epidemiological week runs from Monday to Sunday. This edition covers week 1 (week ending 10 January 2010).

The C4 team welcomes feedback. Data provided by individual agencies is welcome but will be verified with MOHCW structures before publication.

Please send any comments and feedback to the Cholera Control and Command Centre

Email: [Cholera\\_Taskforce@zw.afro.who.int](mailto:Cholera_Taskforce@zw.afro.who.int).

**Toll free number for alert** by district and province is **08089001** or **08089002** or **08 089000**

Mobile number for alerts is **0912 104 257**

#### **Acknowledgements**

We are very grateful to MoHCW District Medical Officers, District and Provincial Surveillance Officers, Provincial Medical Directors, Environmental Health Officers, and MoHCW's National Health Information Unit, who have helped to gather and share the bulk of the information presented here.

Likewise, we acknowledge agencies, including members of the Health and WASH clusters, who have kindly shared their data with our team.

MoHCW recognizes and thanks the efforts made by NGOs and other partners assisting in the response and providing support to MoHCW.

#### **Highlights:**

- **Rumour of Cholera cases in Kadoma Rural**
- **No new reported cases of Pandemic H1N1(2009) Influenza Cases**
- **New Measles cases reported**

## Figures

See also summary tables (annex 1), maps (annex 2) and graphs (annex 3). The case definitions can be found in appendix 1 and detailed data by district are shown in appendix 2

### Since September 2009

10 out of the 62 districts in the country have been affected by the ongoing cholera outbreak compared to 51 districts last year. **149** cumulative cholera cases and **5** deaths were reported by 10 January 2010 to the World Health Organization (WHO) through the Ministry of Health and Child Welfare's (MoHCW) National Health Information Unit. The crude case fatality rate since the outbreak started stands at **3.4%**. By week 1 last year, **37 806** cumulative cases and **1 912** deaths had been reported, with a crude case fatality rate of **5.1%**.

For the same reporting period, the cases reported this year are **0.4 %** of last year's cases, whilst the deaths are **0.3%** of last year's deaths. This year's case fatality rate is **lower** than last year's by **1.6%**.

### Week 1 (4– 10 January 2010)

No confirmed case of cholera was reported in the week. Rumour of 3 suspected cases of cholera cases and 1 clinical death were received from Vere Clinic, Kadoma Rural. See assessment and response for details of investigation done in Kadoma Rural.

### Geographical distribution of cases

The cases reported so far came from the following districts: Bindura, Chegutu, Chipinge, Gokwe North, Gokwe South, Harare, Kadoma, Makonde, Rushinga and Seke. The affected districts are in the following six provinces namely: Harare, Manicaland, Midlands, Mashonaland Central, Mashonaland East and Mashonaland West. 58 (38.9%) of the cumulative cases were reported by Manicaland, followed by Midlands with 57 cases (38.3%) and Mashonaland West which had 22 cases (14.8%). Mashonaland West province has the highest number of districts affected by cholera namely 3.

### Urban/Rural distribution of cases

**82 %** of the cumulative cases were from rural areas and the remainder **18%** from urban areas compared to last year's scenario of **66 %** cases from urban areas and **34 %** from rural areas in the corresponding week.

## Assessments & response

Assessments were done by the Gokwe North District Health Executive in conjunction with Concern and Merlin to verify the rumours of cholera in Gokwe North. No evidence was found to link the community death and cases that were reported last week to cholera.

In addition rumours of cholera cases around Vere Clinic in Kadoma were also investigated by Kadoma District Health Executive, GAA, Merlin and WHO, the cases were not laboratory confirmed.

## Pandemic Influenza A H1N1 (2009)

By week ending 3 January, 253 cumulative probable<sup>1</sup> cases of Pandemic H1N1 (2009) had been reported in Zimbabwe, 41 of which were confirmed by PCR (Polymerase chain reaction) to be Pandemic H1N1 (2009).

### Week 1 (4– 10 January 2010)

Zero cases of probable Pandemic Influenza A H1N1 (2009) were reported.

### Geographical distribution of cases

The following provinces have reported cases: Manicaland, Harare, Mashonaland East and Midlands. The affected 8 districts are: Harare Urban, Chivhu, Marondera, Goromonzi, Seke, Mutasa, Nyanga and Chirumhanzu.

## Assessments & response

No samples were sent to the National Virology Laboratory.

## Measles

### 2010

128 cumulative blood specimens were received since the beginning of the year by the national polio laboratory compared to 382 for the whole of 2009. The specimens received this year are slightly above a third of the specimens received last year. The cumulative number of measles IgM positive cases year to date is now 50. Hence the positivity rate is 39%.

38 cases this year (76%) of the positive cases occurred in the 9 months to 14 Years age group, 2 cases (4%) were in the 0 to 9 months age group, 10 cases (20%) were in the above 14 years of age group. Routine immunisation caters for the 9 months to 12 months age group, and NIDs for the 9 months to 5 years age group. Children in the 9 months to 14 Years are immunised in response to an outbreak.

### Since Start of outbreak

1 052 cases of suspected measles have been reported of which 161 were confirmed cases of IgM Measles. The distribution of the confirmed cases by age group were as follows: 131 cases (81%) were in the 9 months to 14 Years age group, 17 cases (11%) were in the above 14 Years age group and 13 cases (8%) in the below 9 months age group. See table 6 for distribution of suspected cases, confirmed cases and deaths by district.

### Week 1 (4– 10 January 2010)

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<sup>1</sup> See definition of probable case in Appendix 1

110 specimens of suspected measles were received in this epidemiological week . 38 specimens were positive namely from Bindura 2, Bulawayo, 2, Harare 22, Makoni 10 and Mount Darwin 2. 72 (65% ) were from the 9 months – 14 Years Agegroup, 14 (13%) below 9 months and 24 (22%) above 14 years.

### **Geographical distribution of cases**

To date 22 districts out of 62, have reported measles outbreaks namely: Bindura, Bubi, Buhera, Bulawayo, Centenary, Chegutu, Chirumhanzu, Chipinge, Gokwe South, Gutu, Harare (including Chitungwiza) Hwedza, Insiza , Kwekwe, Makoni, Makonde, Marondera, Mt. Darwin, Mutare, Nyanga , Umzingwane and Zvishavane.

### **Assessments & response**

Case based surveillance for measles continues in all districts and provinces. The EPI unit of the Ministry of Health and Child Welfare is doing a review meeting of Child Health Days. A meeting with various stakeholders is planned for next week to discuss the best strategies to grapple the current measles outbreak.

The Buhera District Health Executive with its partners such as MSF, the local government authorities, Apostolic Sects leaders have made plans for immunising children from the Apostolic Sects.

## Annex 1: Summary Tables

**Table 1: Cumulative Cholera cases and deaths reported by district for the period week 37,2009 to week 1,2010**

District	Cases Reported This Week	Cumulative Cases	Community deaths	Institutional deaths	Attack rate per 1 000 000	Percent
Harare	0	6	0	0	4	4.0
Bindura	0	1	0	0	7	0.7
Rushinga	0	1	0	0	14	0.7
Seke	3	3	0	0	15	2.0
Chegutu	0	2	0	0	8	1.3
Kadoma	0	3	0	0	12	2.0
Makonde	0	17	0	1	92	11.4
Chipinge	0	58	0	0	193	38.9
Gokwe North	0	57	2	0	250	38.3
Gokwe South	0	1	2	0	3	0.7
<b>Total</b>	<b>3</b>	<b>149</b>	<b>4</b>	<b>1</b>	<b>44</b>	<b>100.0</b>

**Table 2: Age and Sex breakdown of cumulative cholera linelisted cases for the period week 37,2009 to week 1,2010**

District	Under 5 Years		5-14 Years		15-29 Years		30 Years and over	
	Male	Female	Male	Female	Male	Female	Male	Female
Gokwe North	3	0	5	4	8	14	7	16
Chipinge	0	0	5	5	4	4	4	4
Harare	1	0	0	0	0	2	1	1
Kadoma	0	0	0	0	1	1	0	1
Rushinga	0	0	0	0	0	0	0	1
Bindura	0	0	0	1	0	0	0	0
Seke	0	0	0	0	0	0	2	1
<b>Total</b>	<b>4</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>13</b>	<b>20</b>	<b>14</b>	<b>24</b>

**Table 3: Age and Sex Distribution of Cumulative Confirmed H1N1 Cases from July to 27 December 2009**

District	Under 5 Years		5-14 Years		15-29 Years		30 Years and over	
	Male	Female	Male	Female	Male	Female	Male	Female
Chikomba	0	0	3	0	4	3	0	0
Harare	0	1	2	0	0	0	0	0
Mutasa	0	0	3	2	0	0	0	0
Seke	0	1	8	4	1	1	0	0
Unspecified District	0	0	5	2	1	0	0	0
<b>Total</b>	<b>0</b>	<b>2</b>	<b>21</b>	<b>8</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>0</b>

**Table 4: Age Distribution of Measles Igm Positive Cases from 4 January, 2010 to 10 January 2010 by age**

District	below 9 months	> 14 yrs	9months - 14 Yrs	> 14 yrs	TOTAL
<b>BINDURA</b>	0	0	2	0	2
<b>BULAWAYO</b>	0	2	0	2	2
<b>HARARE</b>	2	8	12	8	22
<b>MAKONI</b>	0	0	10	0	10
<b>MT DARWIN</b>	0	0	2	0	2
<b>TOTAL</b>	<b>2</b>	<b>10</b>	<b>26</b>	<b>10</b>	<b>38</b>

**Table 5: Distribution of, Confirmed cases by agegroup by district since start of outbreak**

District	below 9 months	9 months -14	above 14 Yrs	TOTAL
<b>BINDURA</b>	0	3	0	3
<b>BUBI</b>	0	6	3	9
<b>BUHERA</b>	0	4	0	4
<b>BULAWAYO</b>	1	3	2	6
<b>CENTENARY</b>	0	2	0	2
<b>CHEGUTU</b>	0	5	0	5
<b>CHIPINGE</b>	0	5	1	6
<b>CHIRUMANZU</b>	0	1	0	1
<b>CHITUNGWIZA</b>	0	2	0	2
<b>GOKWE</b>	0	9	1	10
<b>GUTU</b>	0	3	0	3
<b>HARARE</b>	<b>10</b>	<b>34</b>	<b>8</b>	<b>52</b>

District	below 9 months	9 months -14	above 14 Yrs	TOTAL
HWEDZA	0	1	0	1
INSIZA	0	2	0	2
KWEKWE	0	3	0	3
MAKONDE	0	1	0	1
MAKONI	0	14	1	15
MARONDERA	0	4	0	4
MT DARWIN	0	10	0	10
MUTARE	1	4	0	5
NYANGA	1	0	0	1
UMZINGWANE	0	1	0	1
ZVISHAVANE	0	14	1	15
<b>TOTAL</b>	13	131	17	161

**Table 6: Distribution of Suspected Measles, Igm Positive Cases and Deaths since start of outbreak by district**

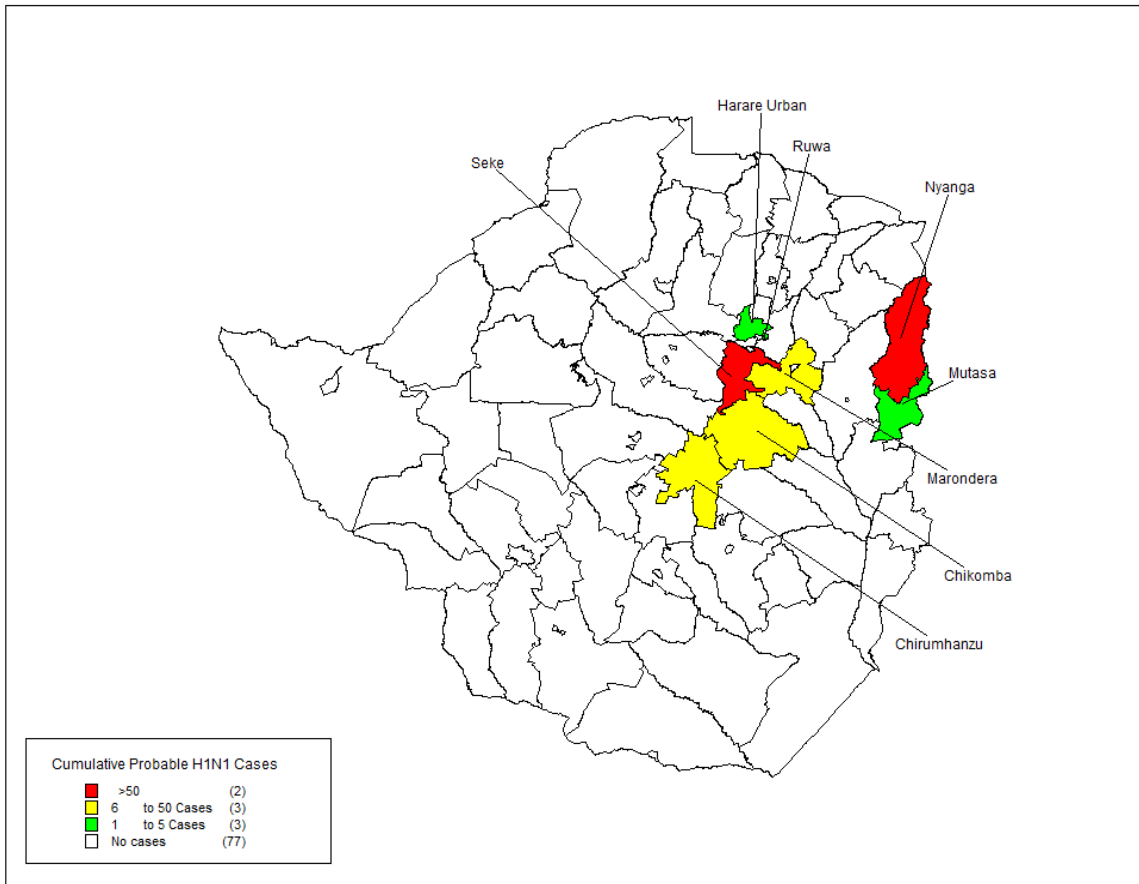
District	Suspected Cases	Confirmed Cases	Deaths
Beitbridge	10	0	0
Bikita	2	0	0
Bindura	5	3	0
Binga	5	0	0
Bubi	10	9	0
Buhera	23	4	2
Bulawayo	16	6	0
Bulilimangwe	1	0	0
Centenary	5	2	0
Chegutu	17	5	0
Chikomba	4	0	0
Chipinge	12	6	0
Chirumanzu	1	1	0
Chitungwiza	8	2	0
Chivi	5	0	0
Gokwe	16	10	0
Goromonzi	6	0	0
Guruve	1	0	0
Gutu	4	3	0
Gwanda	8	0	0
Gweru	3	0	0
Harare	158	52	0
Hurungwe	1	0	0
Hwange	2	0	0
Hwedza	1	1	0
Insiza	6	2	0
Kadoma	3	0	0
Kariba	5	0	0

Source: Ministry of Health and Child Welfare Rapid Disease Notification System

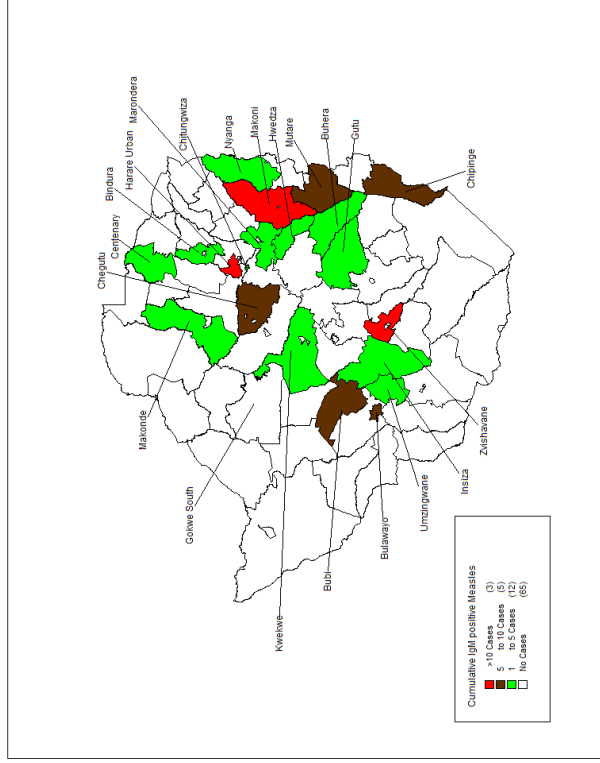
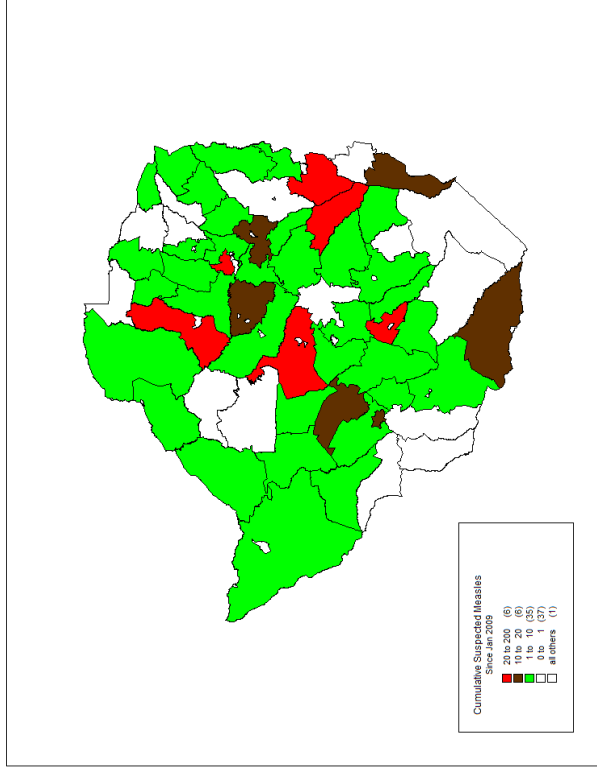
District	Suspected Cases	Confirmed Cases	Deaths
Kwekwe	21	3	0
Lupane	1	0	0
Makonde	29	1	0
Makoni	489	15	24
Marondera	16	4	0
Masvingo	2	0	0
Mazowe	8	0	0
Mberengwa	2	0	0
Mt Darwin	22	10	0
Mudzi	4	0	0
Murehwa	3	0	0
Mutare	56	5	15
Mutasa	1	0	0
Mutoko	1	0	0
Nkayi	2	0	0
Nyanga	6	1	0
Rushinga	2	0	0
Seke	2	0	0
Shurugwi	4	0	0
Tsholotsho	4	0	0
Umguza	2	0	0
Ump	1	0	0
Zvimba	3	0	0
Umzingwane	1	1	0
Zvishavane	32	15	0
<b>Total</b>	<b>1052</b>	<b>161</b>	<b>41</b>



**Map 2: Cumulative probable Influenza A H1N1(2009) cases by district, July, 2009-10 January 2010**



**Map 3: Comparison of Cumulative Measles Igm positive cases and Suspected Measles case by district, as at 10 January 2010**  
**Since January 2009**

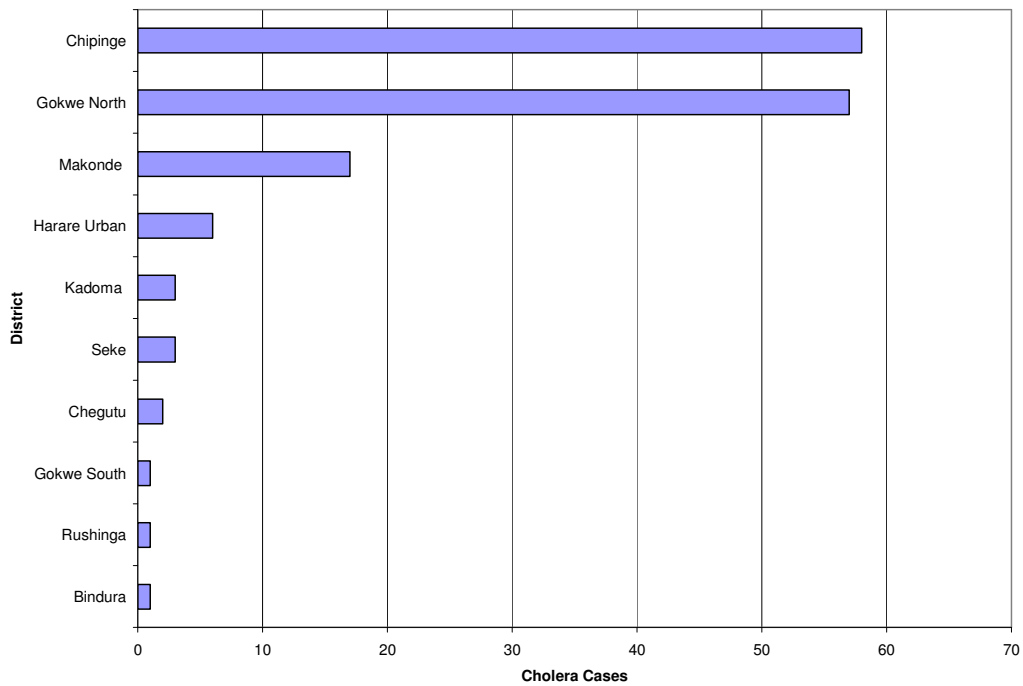


**Confirmed Measles Cases**

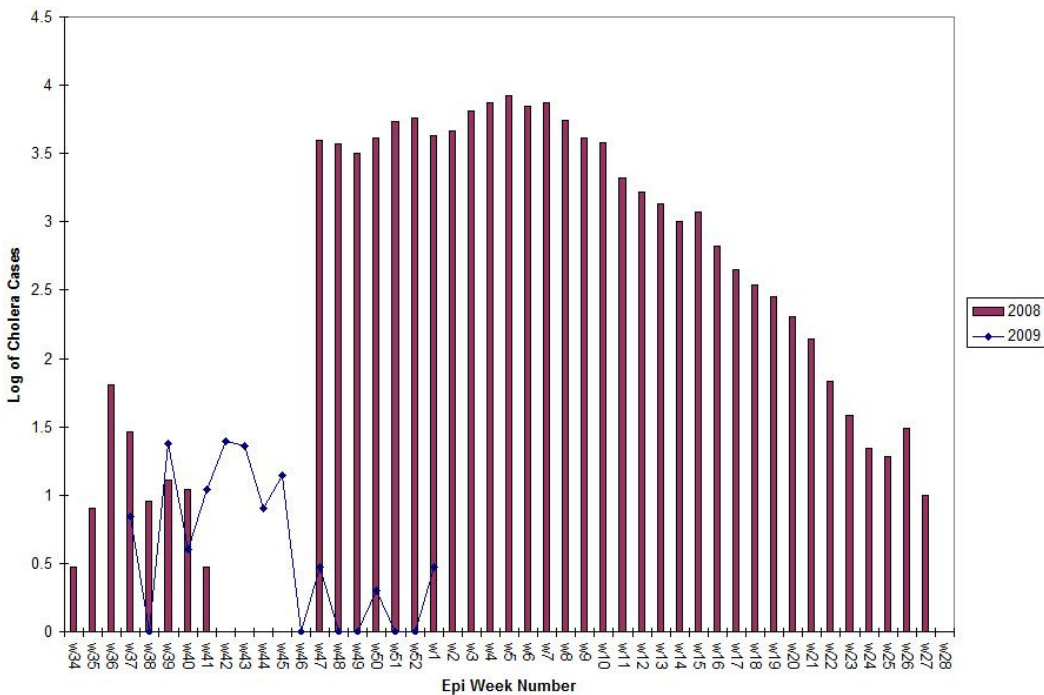
**Suspected Measles Cases**

## Annex 3: Graphs

**Graph 1: Ranking of District Cumulative Cholera Cases Reported by week37,2009 to week 1,2010**

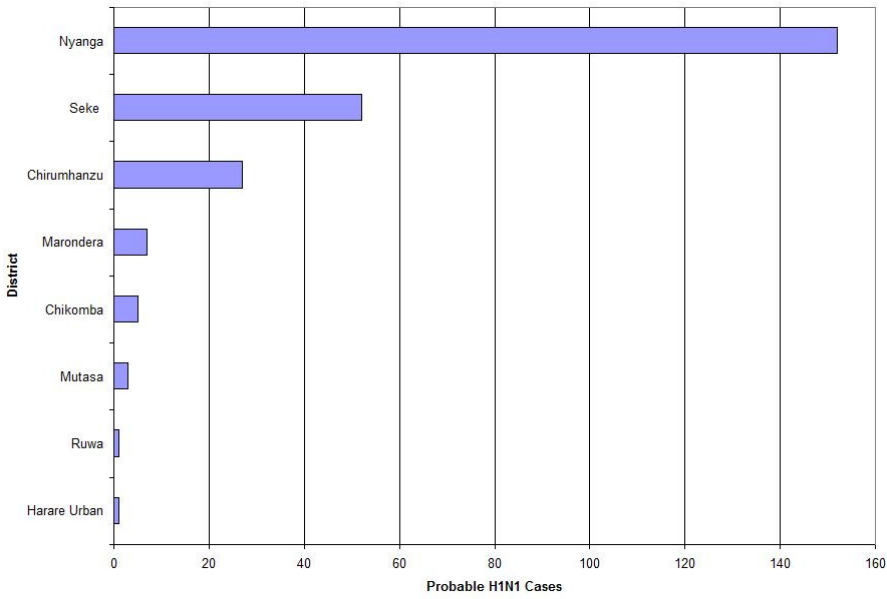


**Graph 2: Logarithms of Cumulative Cholera Cases by week for the years 2008/09 and 2009/10**

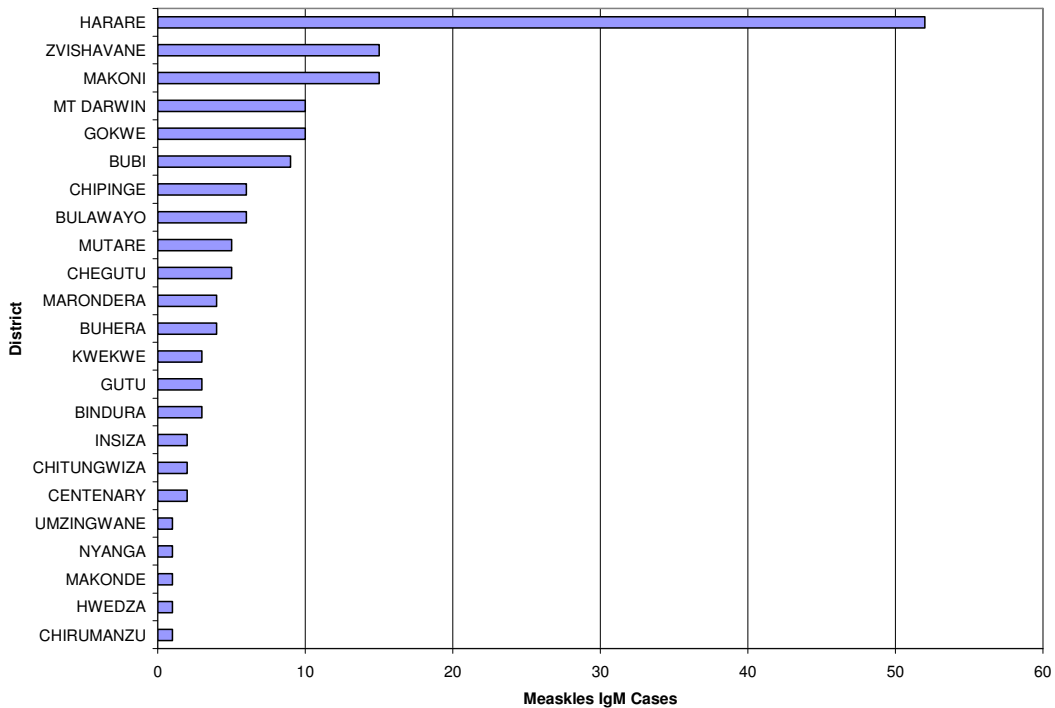


Source: Ministry of Health and Child Welfare Rapid Disease Notification System

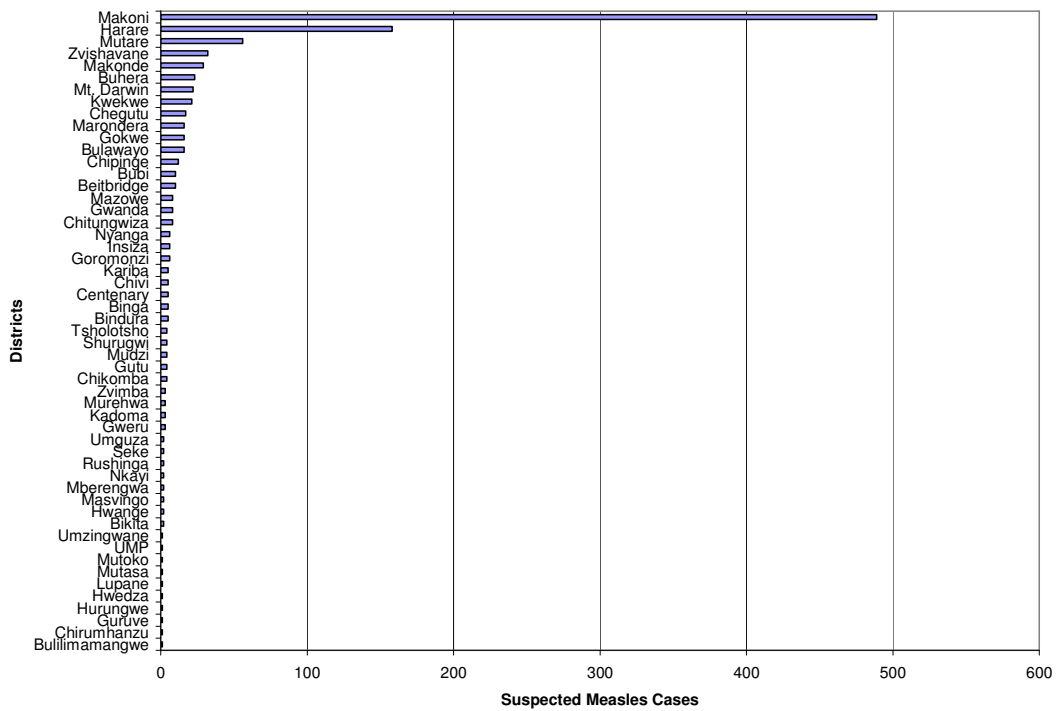
**Graph 3: Ranking of District Probable H1N1 Cases Reported by July to 31 December 2009**



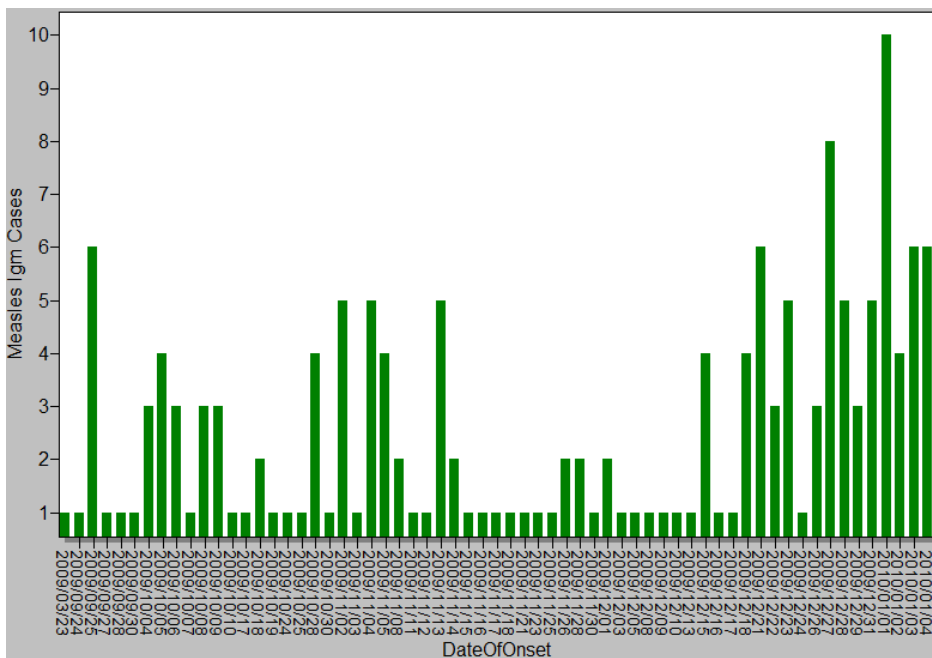
**Graph 3: Ranking of Confirmed Measles IgM Cases by District Reported from 1 January, 2009 to 10 January 2010**



**Graph 4: Ranking of Suspected Measles Cases by District Reported from 1 January, 2009 to 10 January 2010**



**Graph 5: Epidemic Curve of IgM positive Measles Cases, 23 March to 3 January 2010**



## Appendix 1: Case Definitions

### Cholera

The Zimbabwe cholera state definition states that

"In an area where there is a cholera epidemic, a patient aged 2 years or more develops acute watery diarrhoea, with or without vomiting".

"A confirmed cholera case is when *Vibrio cholerae* is isolated from any patient with diarrhoea".

This is adapted from the WHO case definition for cholera.

The inclusion of all ages in the case definition somewhat reduces specificity, that is, inclusion of more non-cholera childhood diarrhoea cases. It, however, 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.

### Influenza A H1N1

Influenza A and B are two of the three types of influenza viruses associated with annual outbreaks and epidemics of influenza. Only influenza A virus can cause pandemics.

The Zimbabwe IDSR technical guidelines define influenza case by a new sub type (including Avian flu Influenza A H5N1 and Swine flu Influenza A H1N1) as;

"Any person presenting with unexplained acute lower respiratory illness with fever (>38 °C ) and cough, shortness of breath or difficulty breathing AND notion of exposures in the 7 days prior to symptom onset."

#### Probable case definition:

Any person meeting the criteria for a suspected case **AND** positive laboratory confirmation of an influenza A infection but insufficient laboratory evidence for H1N1 infection.

**Confirmed H1N1 case:** A person meeting the criteria for a suspected or probable case **AND** a positive result conducted in a national, regional or international influenza laboratory whose H1N1 test results are accepted by WHO as confirmatory.

There may be difficulty in telling apart mild cases of pandemic influenza from the seasonal influenza.

#### Suspected measles:

Any person with fever and maculopapular rash and cough OR Coryza (running nose) Or conjunctivitis (Red eyes) OR clinician suspects measles.

#### Measles Outbreak Definition:

A cluster of 5 or more suspected cases OR at least 3 measles IgM positive cases in a district /health facility in a month.

**Lab confirmed:** Suspected case of measles with positive serum IgM antibody, with no history of measles vaccination in the past 4 weeks.

**Confirmed by epidemiologic linkage:** Suspected case of measles not investigated serologically but has possibility of contact with a laboratory-confirmed case whose rash onset was within the preceding 30 days (same / adjacent districts with plausible transmission)