



World Health  
Organization

REGIONAL OFFICE FOR  
Africa

## COMMUNICABLE DISEASES EPIDEMIOLOGICAL REPORT

DATA VALID EFFECTIVE  
7 DECEMBER 2009

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## CDER EDITORIAL

### INFORMATION FOR ACTION: RELAUNCHING THE COMMUNICABLE DISEASES EPIDEMIOLOGICAL REPORT

**S**urveillance information is essential for appropriate responses and actions by public health authorities in charge of disease prevention and control. In September 1998, during the 48<sup>th</sup> WHO Regional Committee for Africa<sup>1</sup>, Member States unanimously adopted integrated disease surveillance (IDS) as their strategy for strengthening national surveillance systems. Since then, 43 countries in the WHO African Region have been implementing IDS, thus contributing to significant improvements in surveillance and control efforts.

In May 2005, the 58<sup>th</sup> World Health Assembly adopted the revised International Health Regulations (IHR (2005)), which entered into force on 15 June 2007. The IHR (2005) are legally binding and lay out specific requirements for strengthening national public health systems for international health security. The IHR (2005) require that core capacities for surveillance and response be strengthened in countries, including at selected points of entry. Therefore the functions of the Integrated Disease Surveillance and Response (IDSR) framework and IHR are mutually supportive. That is why Member States of the African Region decided that IHR will be implemented using the IDSR framework.

In this context, WHO and the US Centers for Disease Control and

Prevention, Atlanta, met at the WHO African Regional Office (AFRO) in Brazzaville, Congo, from 2-4 December 2009, to revise the IDSR *Technical Guidelines* in order to take into account the IHR (2005). To further support surveillance and response activities, AFRO's Division of Prevention and Control of Communicable Diseases (DDC) is proud to relaunch the *Communicable Diseases Epidemiological Report* (CDER) in partnership with the *African Health Monitor*. Each quarterly issue of the CDER will provide a focus on a particular disease or public health event and epidemiological updates on selected priority diseases in the Region to provide information for action by technical partners and public health authorities.

Coordination, collaboration and commitment: these are the keys to achieving our goal of reducing the burden of diseases in the African Region. A coordination mechanism for IDS is being set up at country, intercountry and WHO Regional office levels to support the collection and analysis of surveillance data for generating information. This is our pledge to countries and to our partners.

*With anticipated thanks for your support,*

DR. PAUL-SAMSON LUSAMBA-DIKASSA  
DIRECTOR OF PROGRAMME MANAGEMENT

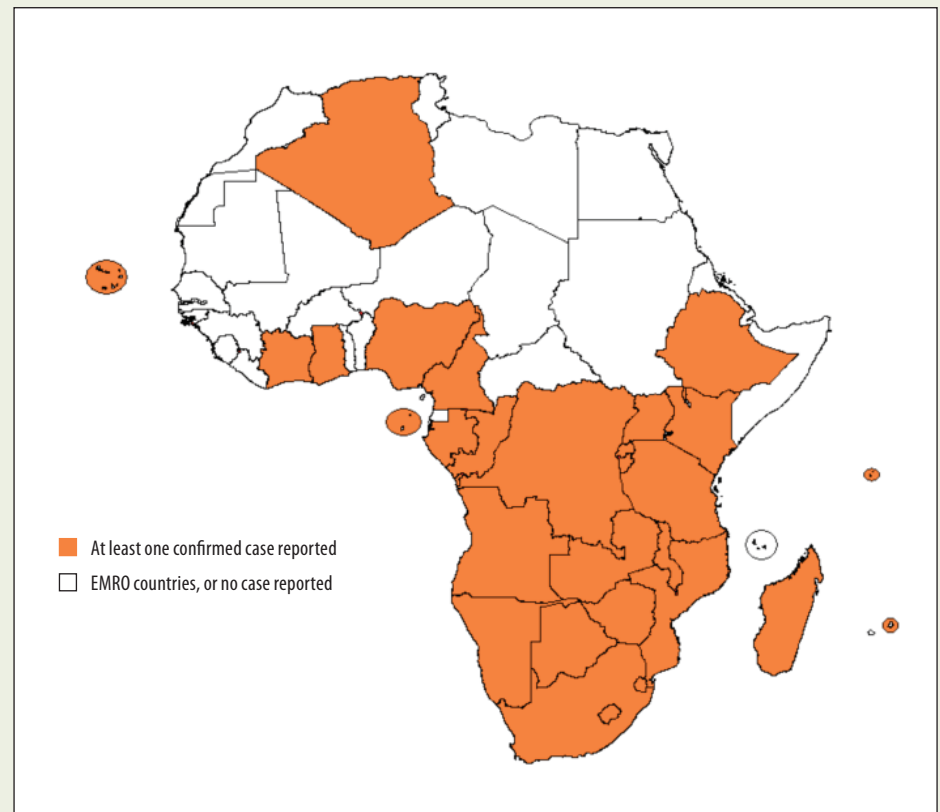
## **FOCUS: PANDEMIC (H1N1) 2009 IN THE WHO AFRICAN REGION**

South Africa detected and confirmed the first case of pandemic (H1N1) 2009 in the WHO African Region on 18 June 2009. The case was not indigenous. By 26 November 2009, 29 countries had reported to WHO 15 690 laboratory-confirmed cases and 107 deaths (Figure 1). Most of the deaths were associated with other underlying health conditions.

Good preparedness, laboratory networking and partnership have contributed to the timely detection of subsequent cases, as well as the response efforts of the WHO African Region to the pandemic. This includes dissemination of WHO guidelines to public health staff in all Member States, strengthened partnership through laboratory networking, training field staff on the shipment of dangerous pathogens fulfilling requirements of the International Air Transport Association and supplying specimen collection material and reagents to countries who have expressed the need for them. Moreover, reporting mechanisms and tools were disseminated, communication and team work enhanced with daily crisis management meetings.

The Region is also benefitting from the contribution of a network of influenza laboratories. These laboratories are also part of the Global FluNet programme. The findings of this network for 2009 to date are summarized in Table 1.

**Figure 1: Laboratory-confirmed cases of pandemic (H1N1) 2009 in the WHO African Region**



Source: Member States, updated 26/11/2009.

**Table 1: Geography of influenza pathogens in the WHO African Region, 2009**

Country	Laboratory name	Specimens processed	A (H1)	A pandemic (H1N1) 2009	A (H3)	A (H5)	A not subtyped	B	Total Influenza positive	Percent A pandemic (H1N1) 2009 of all positive
Algeria	NIC Alger	520	32	49	52	0	9	21	163	30
Cameroon	CP Yaounde	432	5	56	71	0	0	2	134	42
Central African Republic	IP Bangui	293	38	0	22	0	0	0	60	0
Côte d'Ivoire	IP Abidjan	865	33	2	117	0	51	17	220	1
Democratic Republic of the Congo	INRB Kinshasa	829	12	13	31	0	11	18	85	15
Ethiopia	EHNRI Addis	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ghana	NMIMR Noguchi	631	14	5	112	0	4	26	161	3
Kenya	KEMRI/CDC Nairobi	4145	148	22	45	0	8	0	223	10
	KEMRI/CVR Nairobi	1680	51	22	85	0	111	20	289	8
Madagascar	IP Antananarivo	970	1	164	53	0	0	91	409	40
Rwanda	NRL Rwanda	445	16	0	15	0	0	29	60	0
Senegal	IP Dakar	557	0	42	168	0	0	4	214	20
South Africa	NICD Sandringham	7949	6	1071	1075	0	58	134	2344	46
Tanzania	NIC Dar Es Salaam	344	9	10	1	0	0	17	37	27
Uganda	UVRI Entebbe	387	3	11	2	0	0	10	20	55
Zambia	UTH	595	24	81	0	0	7	0	112	72
<b>All networking influenza laboratories</b>		<b>20 649</b>	<b>392</b>	<b>1548</b>	<b>1849</b>	<b>0</b>	<b>259</b>	<b>489</b>	<b>4531</b>	<b>34</b>

Source: Networking influenza laboratories, updated 26/11/2009.

**COMMUNICABLE  
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**COMMENT:**

Between April and 27 November 2009, processing of 20 649 laboratory specimens by the networking influenza laboratories found 4531 positive for influenza viruses in the Region. Of these, 41% were A (H3), 34 % were A pandemic (H1N1) 2009, 11% influenza B, 9 % seasonal A (H1), and 6 % were A not subtyped (Table 2).

**Table 2: Trends of influenza pathogens in the WHO African Region, 2009**

Week No	Specimens processed	A (H1)	A pandemic (H1N1) 2009	A (H3)	A (H5)	A Not subtyped	B	Total Influenza positive	% A pandemic (H1N1) 2009
1	110	3	0	3	0	1	5	12	0
2	226	8	0	11	0	3	4	26	0
3	353	6	0	23	0	7	3	39	0
4	289	8	0	20	0	1	7	36	0
5	324	9	0	15	0	6	9	39	0
6	307	13	0	9	0	5	5	32	0
7	364	9	0	19	0	2	5	35	0
8	395	1	0	1	0	7	4	13	0
9	468	3	0	4	0	2	4	13	0
10	431	6	0	14	0	5	4	29	0
11	450	3	0	18	0	4	0	25	0
12	516	1	0	4	0	1	5	11	0
13	432	16	0	2	0	5	6	29	0
14	499	9	0	5	0	0	1	15	0
15	421	11	0	23	0	2	2	38	0
16	473	12	0	8	0	3	3	26	0
17	444	5	0	12	0	3	2	22	0
18	489	9	0	13	0	4	3	29	0
19	523	24	12	68	0	12	8	124	10
20	559	27	0	53	0	7	10	97	0
21	554	23	0	63	0	12	7	105	0
22	559	14	0	103	0	7	3	127	0
23	655	26	0	178	0	8	11	223	0
24	812	17	0	254	0	17	16	304	0
25	648	12	7	165	0	8	29	221	3
26	746	18	9	157	0	16	25	225	4
27	832	32	61	157	0	0	41	291	21
28	1239	22	84	148	0	3	60	311	27
29	981	27	56	90	0	39	49	261	21
30	631	10	79	61	0	28	33	211	37
31	569	1	149	47	0	10	32	239	62
32	676	1	209	31	0	4	28	273	77
33	548	0	145	43	0	3	19	210	69
34	554	1	157	7	0	10	12	187	84
35	493	0	127	2	0	9	7	145	88
36	434	1	89	5	0	2	5	102	87
37	364	1	75	0	0	1	11	88	85
38	271	0	34	12	0	0	6	52	65
39	205	1	15	0	0	1	2	19	79
40	266	1	17	1	0	0	3	22	77
41	83	1	13	0	0	1	0	15	87
42	25	0	0	0	0	0	0	0	0

Source: Networking influenza laboratories, updated 26/11/2009.

Tables 3a and 3b show that the distribution is concentrated on young age groups. The median age is less than 35 years. 83% of the reported cases are less than 25 years old. The sex ratio is 100 female to 99 male.

**Table 3a: Gender specific distribution of laboratory-confirmed influenza cases in the WHO African Region in 2009**

Sex	Cases	Mean	Minimum	25%	Median	75%	Maximum	Mode
<b>F</b>	540	18.9	0.3	13.0	17.0	21.5	80.0	14.0
<b>M</b>	537	17.6	0.4	12.0	16.0	20.0	71.0	18.0
<b>Total</b>	<b>1077</b>	<b>18.3</b>	<b>0.3</b>	<b>12.0</b>	<b>16.0</b>	<b>21.0</b>	<b>80.0</b>	<b>14.0</b>

Source: Networking influenza laboratories, updated 26/11/2009.

**Table 3b: Age and gender specific distribution of laboratory-confirmed influenza cases in the WHO African Region in 2009**

Sex	0–04 years	05–14 years	15–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years +	TOTAL
<b>F</b>	16	179	248	48	21	25	1	2	540
<b>M</b>	26	189	241	41	20	15	3	2	537
<b>Total</b>	42	368	489	89	41	40	4	4	1077
% of total	4%	34%	<b>45%</b>	8%	4%	4%	0.4%	0.4%	
Cumulative cases	42	410	899	988	1029	1069	1073	1077	
Cumulative %	4%	38%	83%	<b>92%</b>	<b>96%</b>	99%	99.6%	100.0%	

Source: Networking influenza laboratories, updated 26/11/2009.

# SELECTED PRIORITY DISEASES UNDER WEEKLY SURVEILLANCE: CASES AND DEATHS IN 2009

Cholera, cerebrospinal meningitis, influenza, dysentery and measles dominated the epidemiological situation in the Region from January to September 2009 (Table 4).

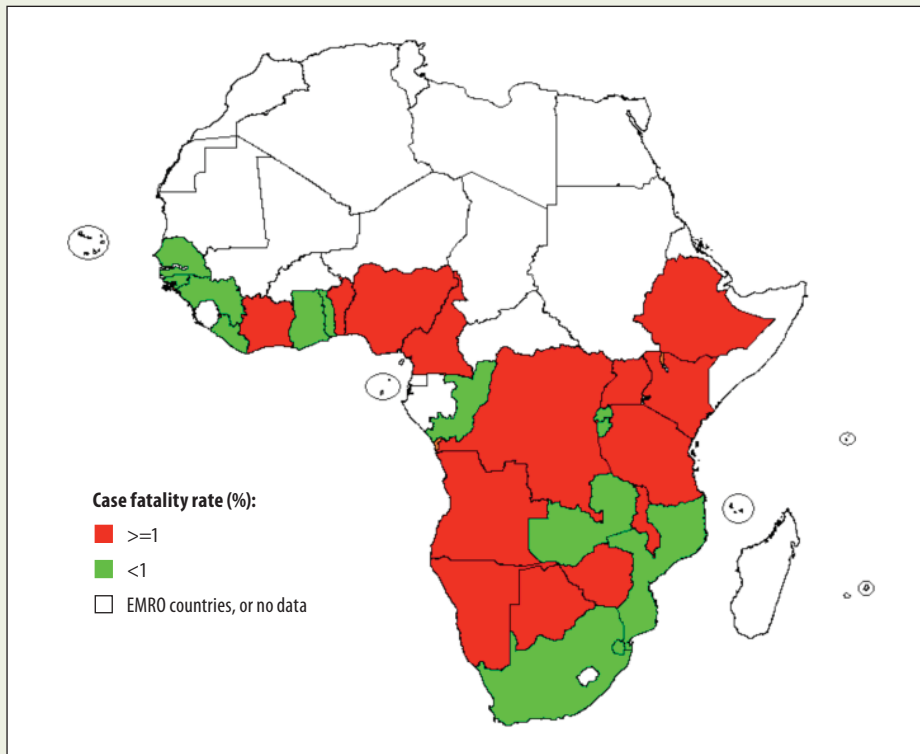
**Table 4: Reported cases and deaths of selected priority diseases under weekly surveillance in the WHO African Region, 2009**

Reported health condition	Suspected cases	Deaths	Case fatality rate
Anthrax	15	5	33.33%
Cholera	195 795	5926	3.03%
Cerebrospinal Meningitis	86 870	5463	6.29%
Dysentery	282 461	161	0.06%
Influenza (any)	61 025	23	0.04%
Hepatitis	5	0	0%
Measles	38 698	307	0.79%
MonkeyPox	1379	21	1.52%
Plague	388	25	6.44%
Rabies	221	83	37.56%
Viral Hemorrhagic Fever	17 230	79	0.46%
Ebola	0	0	0
Lassa	225	56	24.89%
Dengue	16 648	9	0.05%
Rift Valley	127	3	2.36%
Crimea-Congo	2	0	0.00%
Yellow Fever	1165	44	3.78%

Source: Member States Reports, updated 26/11/2009 by DDC/AFRO.

## CHOLERA

Cholera has become one of the major endemic diseases in the WHO African Region. From January through October, 5926 deaths were reported out of 195 795 suspected cases (Table 4) with a case fatality rate of over 1% (threshold) in the majority of countries with reported cases (Figure 2). The main risk factors are lack of potable water and poor sanitation. Prevention strategies include improving water and sanitation and health education.

**Figure 2: Case fatality ratio of cholera by country in the WHO African Region, 2009**

Source: Member States, updated 26/11/2009.

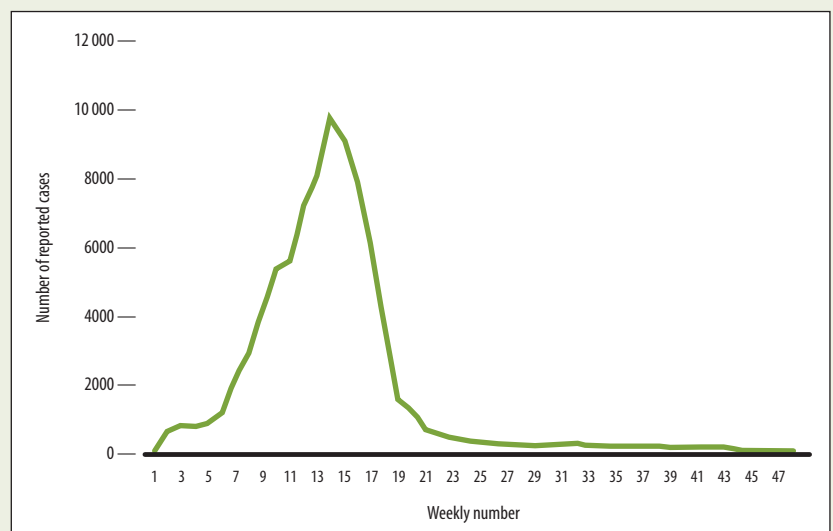
## CEREBROSPINAL MENINGITIS

From January through September 2009, 76 612 cases and 4 361 deaths of cerebrospinal meningitis were reported to the Regional Office. The weekly trend of cases is illustrated in Figure 3.

Most of the cases reportedly occurred during the first half of the year. This fact tallies with the epidemic season of the disease in countries of the cerebrospinal meningitis belt. At the peak of the 15<sup>th</sup> week more than nine thousand cases were reported.

Table 4 shows that meningitis took away 5463 lives during the period covered by this report in 2009, with a case fatality rate of 6.3% (threshold of acceptable = 10%).

Detailed information on cerebrospinal meningitis including age, gender and causal pathogen distribution and anti microbial susceptibility will be shared in the next issue of the CDER.

**Figure 3: Weekly trend of cerebrospinal meningitis cases in the WHO African Region, 2009**

Source: Member States, updated 26/11/2009.

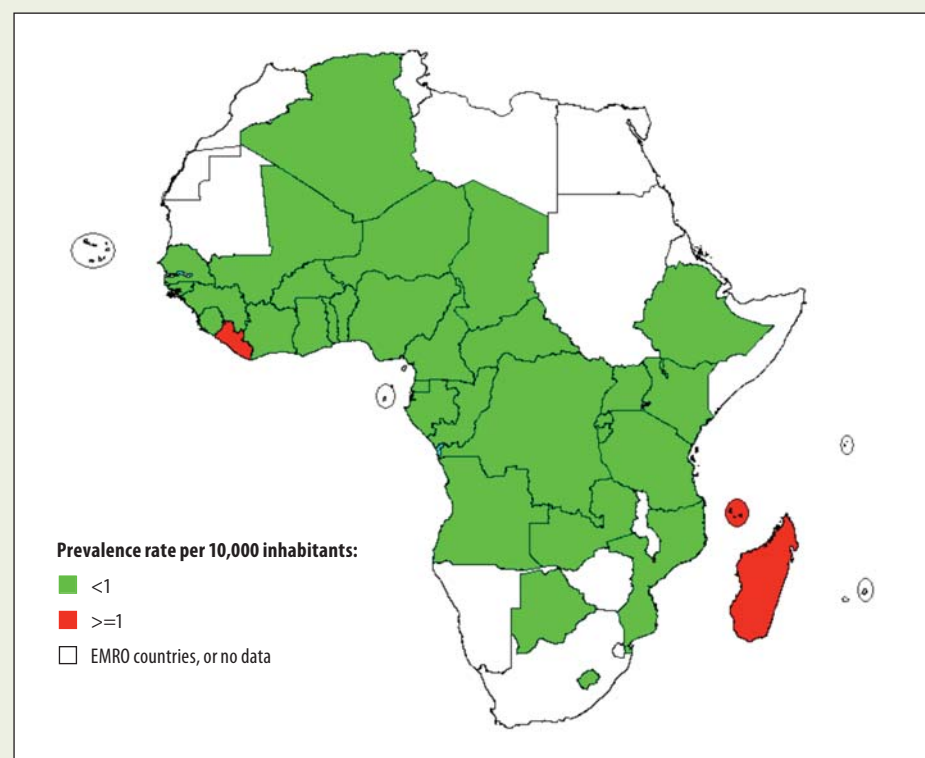
# LEPROSY: SUMMARY OF EPIDEMIOLOGICAL SITUATION IN THE WHO AFRICAN REGION

In 36 countries that reported data for 2008, 31 056 new cases of leprosy were detected: 75% are multibacillary, 10% children, 11% with deformity grade 2 and 36% in women.

The magnitude of leprosy is decreasing in the Region. The prevalence rate was 0.43 cases per 10 000 inhabitants in 2008, down from 0.93 during the year 2000, 0.92 in 2001, 0.86 in 2002, 0.79 in 2003, 0.71 in 2004, 0.63 in 2005, 0.50 in 2006 and 0.46 in 2007. Support is needed to sustain the elimination levels achieved by Liberia, Madagascar and the Comoros (Figure 4).

All countries have expressed the need of a new strategy to maintain leprosy quality care services in order to further dramatically reduce the cost and burden of the disease. The proposed new leprosy elimination threshold is set at 1 case per 100 000 inhabitants at district level.

**Figure 4: Prevalence rate of leprosy, by country, end-2008**



Source: Member States, updated 24/9/2009.