



Integrated Disease Surveillance Quarterly Bulletin

(2nd quarter data valid to 30 June 2015)

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IDS Editorial

Effective and efficient Integrated Disease Surveillance and Response (IDSR) systems contribute to the reduction of morbidity, disability and mortality from disease outbreaks and health emergencies. In order to ensure prompt an effective response to public health events (PHEs) and health emergencies, the WHO Regional Office for Africa has recently created the Health Security and Emergencies (HSE) cluster. The HSE cluster will take into consideration the experiences and key lessons learnt from the Ebola virus disease (EVD) outbreak in West Africa to strengthen the capacities for health security and emergencies in the WHO African Region. Our vision by 2020 is to have a safer African region where outbreaks and disasters are no longer major causes of morbidity, mortality and socio-economic disruptions. Our strategy will be an **“all hazards – one operational platform – one health”** approach in which we will strive to ensure that the WHO Secretariat, Member States and partners use the **“RAPID Concept”** to achieve our collective goals and strategic objectives. The RAPID Concept includes the following components:

- **R**apid response for rapid impact
- **A**ctions and results oriented
- **P**roactive preparedness, risk mitigation and prevention
- **I**ntelligence, real-time information and communication for decision making
- **D**edicated staff, team building, networking and partnerships.

What is presented in this bulletin?

This second quarter IDS bulletin focuses on selected priority IDSR diseases, events and conditions, including cholera, meningococcal meningitis, and maternal deaths. This edition also presents the status of the epidemiological and virological surveillance of influenza and the Pandemic Influenza Preparedness (PIP) Framework, eSurveillance initiative, and finally, pictorial health warnings on tobacco packages.

Key messages and implications

During the second quarter of 2015, there were 3117 cases and 55 deaths due to cholera reported from eight countries and the median case fatality ratio (CFR) was 0.8% (Interquartile range (IQR): 0 to 5.2%). There were also 8963 cases and 820 deaths due to meningitis reported from 23 countries (Median CFR = 8.3.1%, IQR 4.2 to 14.5). A total of 1260 maternal deaths were reported; however, only 18 of 47 countries submitted figures. WHO recommends that every maternal death be audited and the revised IDSR guidelines recommend that every maternal

death be notified to the WHO. However, it is concerning that the completeness of maternal death notification remains inadequate.

At the time of publication, 17 countries had functional national Influenza-Like Illness (ILI) and Severe Acute Respiratory Infection (SARI) surveillance systems which have integrated virological and epidemiological data. Eleven (11) countries were selected to implement laboratory surveillance in the Pandemic Influenza Preparedness (PIP) project but initial implementation was limited to only Ghana and the United Republic of Tanzania.

eSurveillance is a new initiative that is being implemented in the African Region in the context of IDSR, IHR (2005) and the One Health approach. It is based on the use of electronic systems such as mobile

phone SMS messages and other web applications. eSurveillance was started in 2013 and five countries were selected to pilot its implementation namely Burkina Faso, Cameroon, Kenya, Nigeria and Uganda. Several activities have been conducted including the dissemination of the eSurveillance assessment report as well as the development and implementation of the national action plan and monitoring and evaluation of the implementation of the eSurveillance initiative.

At the time of publication, only four countries have implemented pictorial health warnings on tobacco packages in line with the requirements of Article 11 of the WHO Framework Convention on Tobacco Control (FCTC) and its guidelines. All Member States are urged to accelerate the implementation of the WHO-FCTC.

Conclusions and perspectives for the future

Despite the availability of comprehensive technical guidelines for IDSR and IHR (2005), many challenges remain, including: i) Insufficient delivery of information products for all priority disease programmes; ii) incomplete and non-timely reporting; and iii) inadequate monitoring and evaluation of IDSR implementation. In this issue we focused on selected diseases such as cholera. Cholera is an “indicator disease” and is a sign and symptom of weak health systems, limited access

to safe water and inadequate infection prevention and control in the community and home settings. To avert and mitigate the effects of health security risks and emergencies, all Member States should strengthen IDSR and are encouraged to report timely all IDSR priority diseases, events and conditions, including zero reporting. Moreover, all Member States should strengthen event reporting and verifications systems.

1. Background

Robust surveillance is a key aspect of disease control because it facilitates early detection, timely response and evidence-led decision making for PHEs of national and international concern. Among the key lessons learnt from the Ebola virus disease (EVD) outbreak in West Africa is the importance of having strong surveillance systems in all countries in the Region. Enhanced surveillance of priority disease in the context of IDSR should involve the systematic regular collection, collation, compilation, and analysis of epidemiologic data at all levels of the health system, including the community, using standard case definitions, IDSR reporting forms and electronic tools. The surveillance system should be supported by a laboratory network that facilitates the collection,

transportation, and analysis of laboratory specimens/samples using standardized tools and protocols.

To address the inadequate dissemination of IDSR data, it is important to ensure regular sharing of epidemiological bulletins with Member States and partners. Moreover, periodic performance assessment and integrated supervision should be conducted to ensure good quality data and information at national and sub-national level. The IDSR needs to be fully and effectively implemented everywhere to address health security risks and emergencies in the WHO African Region. The WHO Regional Office for Africa will continue to support all Member States to implement IDSR (health facility and community) and event based reporting.

2. Status of selected priority epidemic prone diseases in the second quarter of 2015 in the WHO African Region

2.1 Cholera

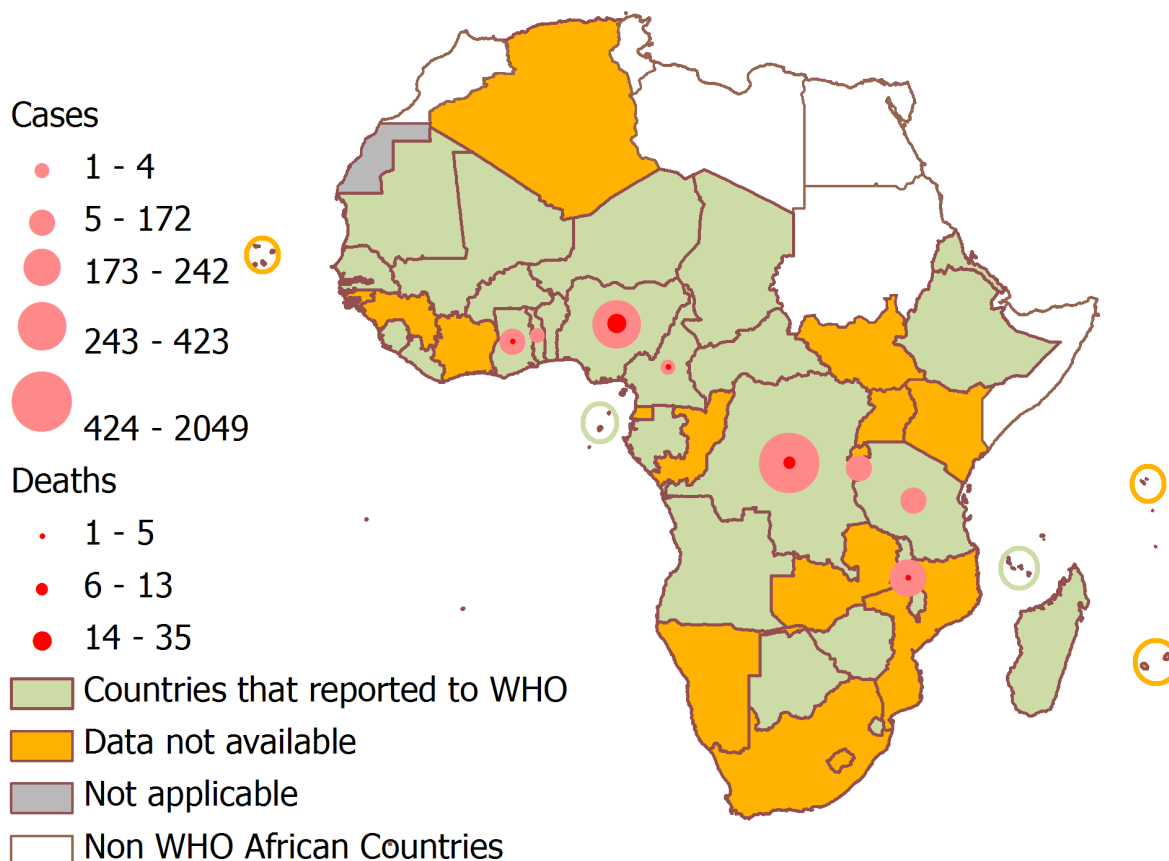
During the second quarter of 2015, a total of 3117 cases and 55 deaths due to cholera were reported from 26 countries in the African Region. The latter is lower than was reported in the first quarter of 2015 (11 121 cases and 203 deaths). However, this decrease may be due to under reporting. There were eight countries that reported at least one cholera case in the second quarter of 2015 (Burundi, Cameroon, Democratic Republic of the Congo, Ghana, Malawi, Nigeria, Togo and the United Republic of Tanzania), and 18 countries that reported zero cases (Angola, Benin, Botswana, Burkina Faso, Chad, Comoros, Eritrea, Ethiopia, Gabon, Liberia, Madagascar, Mali, Mauritania, Niger, Sao Tomé and Príncipe, Sierra Leone, Swaziland and Zimbabwe).

It is concerning that 21 countries did not report during the second quarter of 2015 (Algeria, Cabo Verde, Central Africa Republic, Congo, Côte d'Ivoire, Equatorial Guinea, The Gambia, Guinea, Guinea Bissau, Kenya, Lesotho, Mauritius, Mozambique, Namibia, Rwanda, Senegal, Seychelles, South Africa, South Sudan, Uganda and Zambia) (Figure 1). Moreover, since the beginning of 2015, no data on cholera has been received by WHO from 10 countries (Algeria, Cabo Verde, Congo, Equatorial Guinea, Lesotho, Mauritius, Namibia, Rwanda,

Seychelles and South Africa). The IDSR requires that all Member States report to WHO and reporting a zero case is equally as important as reporting a case because it assists the region to assess the high risk areas for cholera. Consequently, all Member States are urged to promptly report, including zero reporting.

A review of the first quarter data for 2015, suggests that cholera is becoming endemic in many sub-Saharan African countries. Of the eight countries that reported cases in the second quarter of 2015, and excluding one outlier with only 4 cases and 1 death (Cameroon), the case fatality ratio is well above the recommended standard for the WHO African Region (of less than 1%) in Malawi (2.1%) and Nigeria (8.3%). Nigeria's second quarter CFR of 8.3% is double the 4.1% that was observed in the first quarter. The CFR is a function of the timeliness and quality of cholera case management and should remain below the standard of 1%. Commendably, five countries reported a CFR below 1%: Burundi, Democratic Republic of the Congo, Ghana, Togo and the United Republic of Tanzania. The majority of cases (85%) were from two countries: the Democratic Republic of the Congo (50%) and Nigeria (10%) (Figure 1).

Fig. 1. Suspected and confirmed cholera cases and deaths reported in the second quarter of 2015



2.2 Cerebrospinal meningitis

Meningococcal disease is a major public health challenge in countries along the 'meningitis belt' in sub-Saharan Africa. The Meningitis Vaccine Project (MVP), a partnership between WHO and the Program for Appropriate Technology (PATH), is an effort to eliminate meningitis epidemics in sub-Saharan Africa by developing a new low-cost conjugate vaccine to fight group A *Neisseria meningitidis*, the leading cause of the epidemics in the meningitis belt. The project began in 2001 when the Bill & Melinda Gates Foundation (BMGF) awarded WHO and PATH a 10 year grant to establish the MVP. It is expected that by 2016, the countries in the meningitis belt would have introduced the vaccine in mass campaigns, with a total of 300 million vaccinated.

Between 1 April to 30 June 2015, a total of 8963 meningitis cases and 820 deaths have been reported from 32 countries (nine zero reports) compared to 6400 meningitis cases and 508 deaths reported from 28 countries (four zero reports) during the first quarter of 2015.

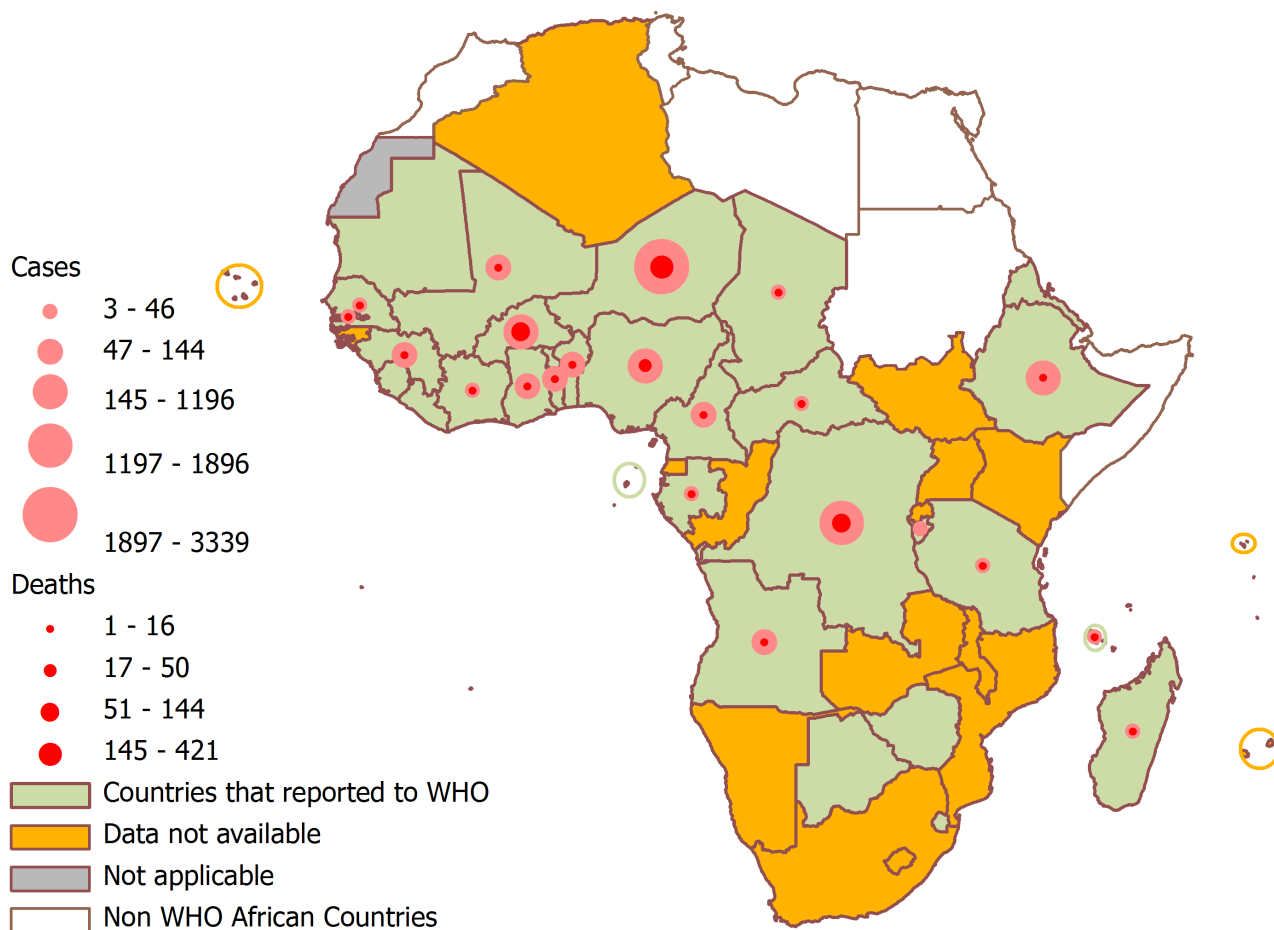
Fourteen countries (Algeria, Cabo Verde, Equatorial Guinea, Guinea Bissau, Kenya, Lesotho, Mauritius, Mozambique, Namibia, Rwanda, Senegal, Seychelles, South Africa and Zambia) have not shared data with WHO since the beginning of 2015 (Figure 2). Twelve countries

(Algeria, Angola, Botswana, Equatorial Guinea, Ethiopia, Mauritius, Mozambique, Rwanda, Seychelles, South Africa, Swaziland and Zambia) that did not report data to WHO since 2013 on critical outbreak prone diseases are however sharing information either on maternal death and/or virological surveillance of influenza as indicated in Figures 4 and 5.

In the second quarter of 2015, the median CFR in the Region was 8.3% (Figure 2). In the first quarter of 2015, the median CFR was 7.4%.

During this period, 1351 of the 5565 samples tested were positive and the overall predominant pathogens were Nmc (78%) followed by *Streptococcus pneumoniae* (30%). Enhanced integrated surveillance systems and functional national public health laboratories are a critical component to ensure timely reporting by all Member States, ensure appropriate investigation and confirmation of the suspected cases, guide on the required antibiotics as recommended by national protocols and guide the targeting of mass vaccination campaign initiatives. Countries are encouraged to adopt and adapt the WHO laboratory based surveillance of antimicrobial resistance and to develop national plans of action.

Fig. 2. Suspected and confirmed meningitis cases and deaths reported in the second quarter of 2015



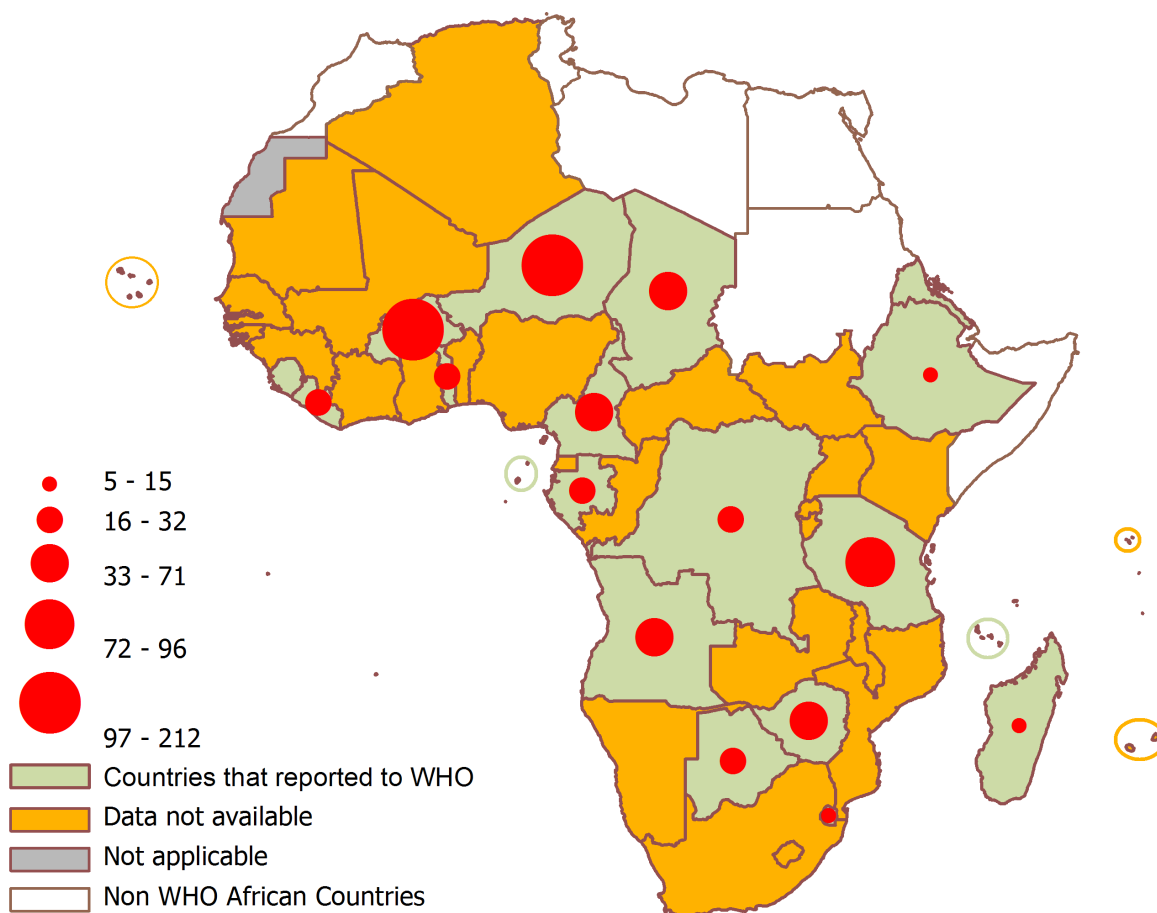
3. Maternal deaths reporting

In the African Region, maternal mortality is one of the priority conditions to be notified weekly through the IDSR. During the second quarter of 2015, 21 countries (three zero reports) reported maternal death data (Angola, Botswana, Burkina Faso, Burundi, Cameroon, Chad, Comoros, Congo, Democratic Republic of the Congo, Eritrea, Ethiopia, Gabon, Liberia, Madagascar, Niger, Sao Tomé and Príncipe, Sierra Leone, Swaziland, Togo, United Republic of Tanzania and Zimbabwe) (Figure 3) compared to 18 countries during the first quarter of 2015 (Benin, Burundi, Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Gabon, Guinea, Guinea Bissau, Madagascar, Malawi, Mauritania, Niger, Sao Tomé and Príncipe, Senegal, Togo, Zambia and Zimbabwe).

More efforts are needed to improve the completeness of the information on maternal deaths. Figure 4 highlights the need to strengthen identification and reporting of maternal deaths through the IDSR system so as to improve completeness of data reported at all levels of health system delivery. Moving forward, all Member States will be required to report the number of maternal deaths as well as the rate of completeness of reporting

from the sub-national units that are expected to report. Although we cannot make comparisons between countries because what is reported is the absolute number of maternal deaths and not the maternal mortality rate, which would require surveys to estimate the number of maternal deaths per 100 000 live births, the information provided some valuable insights about the burden of maternal deaths. For example, there were 1260 maternal deaths reported by 18 countries during the second quarter of 2015 versus 1537 deaths reported by 20 countries in the first quarter 2015. This implies that maternal deaths in the WHO African Region are higher than the combined deaths caused by the infectious diseases reported in this issue (cholera – 84 deaths reported by 27 countries and meningitis – 820 deaths reported by 23 countries). All Member States should ensure that every maternal death is audited and notified to WHO, along with the audit report to ensure the appropriate identification of risk factors and high risk areas inform programme decisions and fully implement existing recommendations aimed at reducing maternal mortality.

Fig. 3. Maternal deaths reported in the first quarter of 2015



4. Status of the epidemiological and virological influenza surveillance

The advent of the Severe Acute Respiratory Syndrome (SARS), Avian Influenza and the 2009 H1N1 pandemic necessitated the revision of the IDSR technical guidelines to include influenza-like illnesses (ILIs) and severe acute respiratory infections (SARIs) as well as the development of the WHO AFRO protocol for influenza surveillance (<http://www.afro.who.int/en/clusters-a-programmes/dpc/integrated-disease-surveillance/ids-publications.html>). The overall objective of influenza surveillance is to provide timely epidemiological and virological data on seasonal and any new strains of influenza virus with pandemic potential. This will better inform national prevention and control activities, including immunization.

The laboratory capacity to diagnose influenza infections by real-time polymerase chain reaction (RT-PCR) in the African Region has grown since the 2009 pandemic. Presently, the regional influenza laboratory network is composed of 30 national influenza reference laboratories in 30 countries (64%) namely: Algeria, Angola, Burkina Faso, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Gabon, Ghana, Kenya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Togo, Uganda, United Republic of Tanzania, Zambia and Zimbabwe. Currently, 14 countries (Algeria, Cameroon, Central African Republic, Côte d'Ivoire, Ghana, Kenya, Madagascar, Mauritius, Nigeria, Senegal, South Africa, Uganda, United Republic of Tanzania and Zambia) are registered as National Influenza Centres and are members of the WHO GISN (Global Influenza Surveillance Network) in the African Region (Figure 4).

The 2009 influenza A (H1N1) pandemic highlighted the need for rapid reporting of cases to assess the severity of the disease and to define risk factors for severe outcomes. The latter pandemic also highlighted that both epidemiological and virological surveillance systems need to be strengthened in the African Region. Sentinel ILI surveillance monitors persons seeking care in ambulatory facilities; sentinel SARI surveillance monitors persons with more severe illness who have been admitted to hospital for treatment. When combined with laboratory confirmatory testing, surveillance of both mild and severe disease contributes to understanding the complete spectrum of influenza illness, including differences in the epidemiology of various influenza virus types and subtypes, factors that place individuals at increased risk for severe disease, and the impact that the disease is having on health care delivery systems. SARI data are particularly useful for monitoring and assessing the severity of seasonal outbreaks, or even future global pandemics, in relation to previous seasons.

Since 2010, data on virological surveillance of influenza virus have been received weekly from 22 countries (Algeria, Burkina Faso, Cameroon, Central African Republic, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Madagascar, Mali, Madagascar, Mauritius, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Togo, Uganda, United Republic of Tanzania and Zambia). The same countries reported to FluNet.

Historically, global influenza surveillance focused primarily on virological surveillance but data collected did not provide the epidemiological information needed to support influenza control strategies, such as the impact of the disease or persons at highest risk in a community. There is a need to better understand the epidemiology, seasonality and economic burden of influenza in order to better target disease interventions in the WHO African Region. In this regard, efforts are ongoing between WHO and selected countries in the Region (Madagascar and Senegal) in the context of Pandemic Influenza Preparedness (PIP) Framework to support the implementation of a study on burden of influenza disease.

Presently, 17 countries have a functional national ILI and SARI surveillance system (Algeria, Burkina Faso, Cameroon, Central African Republic, Côte d'Ivoire, Democratic Republic of Congo, Ghana, Madagascar, Mauritania, Mozambique, Rwanda, Senegal, Sierra Leone, South Africa, United Republic of Tanzania, Zambia and Zimbabwe) (Figure 4). All of them have integrated virological and epidemiological data. Gabon only has a functional national ILI surveillance system. Among the countries that are members of the AFR laboratory network, Congo does not have a functional national (ILI or SARI) surveillance system.

A better integration of epidemiological and clinical surveillance with the virological surveillance would increase the usefulness of each of these systems and ensure an efficient vaccine strain selection process as described in the WHO protocol for national influenza sentinel surveillance.

An example of integration data on epidemiological and virological surveillance of ILI and SARI is presented for two variables: i) Total number of ILI cases tested positive for influenza viruses; and ii) Total number of ILI cases selected for influenza viruses testing; by age group and gender from eight countries (Congo, Democratic Republic of the Congo, Ghana, Mauritania, Mozambique, Nigeria, Rwanda and Zambia) (Table 1). In general, the data demonstrates that children from 0 to 5 years old represent the age group with a high number of positive influenza detected for both ILI and SARI which is consistent with findings from the published literature¹.

¹ <http://www.afro.who.int/en/clusters-a-programmes/dpc/integrated-disease-surveillance/ids-publications.html>

Table 1. Virological and epidemiological data on ILI and SARI surveillance from 8 countries in 2013

Country	Total number of influenza virus tested positive	Type of influenza surveillance	Total number of ILI cases tested positive for influenza viruses/N*		Age Distribution (years)				Gender	
			n	(%)**	0-<5 years	5-<15 years	15-<50 years	>65 years	Male	Female
Rwanda	154	ILI	62/304	20	25	14	22	1	30	32
		SARI	92/966	9	62	10	18	2	41	51
Ghana	239	ILI	216/2153	10	97	50	65	4	105	111
		SARI	23 / 246	9	15	2	5	1	11	12
Nigeria	218	ILI	185/1783	10	131	36	15	1	101	83
		SARI	33/389	8	26	3	3	1	22	11
Mozambique***	58	ILI	44/44	100	14	1	29	0	23°	20°
		SARI	14/14	100	11	3	0	0	5	9
DR Congo	251	ILI	187/1541	12	57	73	54	3	90	94
		SARI	64/938	7	19	22	20	3	36	28
Congo	28	ILI	23/111	21	10	10	2	1	8	13
		SARI	5/122	4	5	0	0	0	1	4
Mauritania	8	ILI	8/122	7	4	0	4	0	6	2
		SARI	--	--	--	--	--	--	--	--
Zambia	96	ILI	64/324	20	47	15	1	0	28	36
		SARI	32/588	5	13	1	16	2	19	13

N*: Total number of ILI cases selected for influenza viruses testing

(%)** : (Total number of ILI cases tested positive for influenza viruses/Total number of ILI cases selected for influenza viruses testing) x 100

***: Only data from the systematic surveillance initiated in July 2013 other data was collected in the same sites but not systematically. The epi data was collected from one sentinel site

-- : Data not available

°: Missing data

4.1 The Pandemic Influenza Preparedness Framework

The Pandemic Influenza Preparedness (PIP) Framework for the sharing of influenza viruses and access to vaccines and other benefits is an international arrangement adopted by the World Health Assembly in May 2011 to improve global pandemic influenza preparedness and response.

Five different work areas will be developed and regularly updated, including: (i) **Laboratory and Surveillance** – the capacity to detect and monitor influenza epidemics is strengthened; (ii) **Burden of Disease** – national policy makers will have influenza disease burden data needed for informed decision making and prioritization of health resources; (iii) **Regulatory Capacity Building** – countries with weak or no regulatory capacity will be able to regulate influenza products including vaccines, antivirals and diagnostics, and to accelerate national approval of these commodities during an influenza pandemic; (iv) **Risk Communication** – global risk communication capacities are strengthened with a special focus on pandemic influenza communications; and (v) **Planning for Deployment** – plans for deployment of pandemic supplies including vaccines, antivirals and diagnostics.

Presently 21 Member States in the African Region are recommended to benefit from PIP Partnership

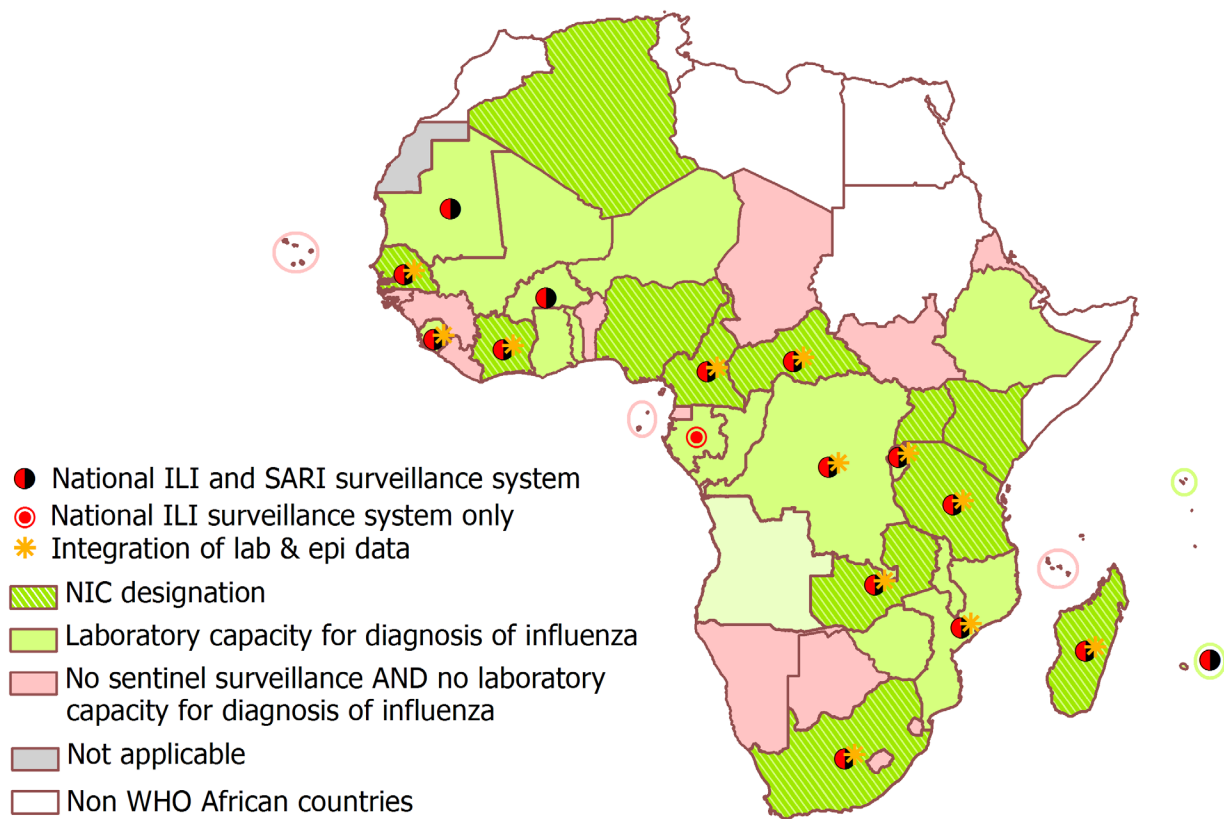
Contribution (PC) funds to implement activities in one or two work areas listed above and under different output categories that lead to the stated outcomes. Eleven countries were selected to implement activities in the Laboratory and Surveillance work area of the PIP project but initial implementation was limited to Ghana and Tanzania.

The Collaborating Centre (WHO CC) in London is in advanced stages for influenza virus characterization including biosafety and biosecurity. The NIC in turn has enhanced sub-regional laboratory capacity by offering training to neighboring countries in virus isolation.

In Tanzania, the project has supported the training of personnel in sample collection, storage and shipment; including infection prevention and control. Essential Information Technology (IT) equipment including epidemiological and laboratory surveillance software were provided. This has enhanced the national capacity to monitor and assess influenza events of international concern and data is promptly processed and shared electronically with stakeholders.

It is expected that the project will be expanded in the new biennium 2016-2017 to cover all the selected 21 countries in various work streams mentioned above.

Fig. 4. Status of the implementation of the influenza surveillance in the Region as of the second quarter of 2015



5. Implementation of eSurveillance

With the lessons learnt from the frequent public health events (PHEs) occurring in the Region including epidemics of zoonotic diseases and the Ebola virus disease (EVD) epidemic in West Africa, a rapid collection, analysis, reporting and use of both human and animal health data is required for appropriate public health action. To implement the reporting function of IDSR, many countries report priority diseases and conditions from health facilities to the districts and in some cases to the regional and national levels using paper, radiophone and short message service (SMS) format. However, over time, some countries have initiated electronic surveillance and reporting projects that are supported by local and international stakeholders. These multiple electronic surveillance and reporting projects are neither standardized nor properly linked to the national epidemiologic surveillance strategy.

eSurveillance is a new initiative that is being implemented in the African Region in the context of IDSR, IHR (2005) and the One Health approach through the use of electronic systems such as mobile phone SMS messages and other web applications. eSurveillance will maximize the use of existing health surveillance structures and human resources within national governments. eSurveillance was developed to facilitate and improve the monitoring of health situations and assessment of health trends through the use of electronic systems and the four strategic objectives are to:

- Strengthen public health and veterinary health surveillance data and information flow across the health system including multiple data sources and platforms;
- Improve the Information and Communications Technology (ICT) infrastructure that supports public health and veterinary health surveillance priorities;
- Reinforce the workforce capacity related to health information systems and health ICT staff; and
- Enhance involvement of public health information systems stakeholders and existing resources in supporting eSurveillance implementation.

In this regard, WHO in close collaboration with partners such as the US Centers for Disease Control and Prevention (US-CDC), the US Defense Threat Reduction Agency (DTRA), the US Agency for International Development (USAID), the Public Health Practice - LLC, the African Field Epidemiology Network (AFENET), amongst others will play a critical role in implementing and sustaining the eSurveillance initiative through the following priority actions:

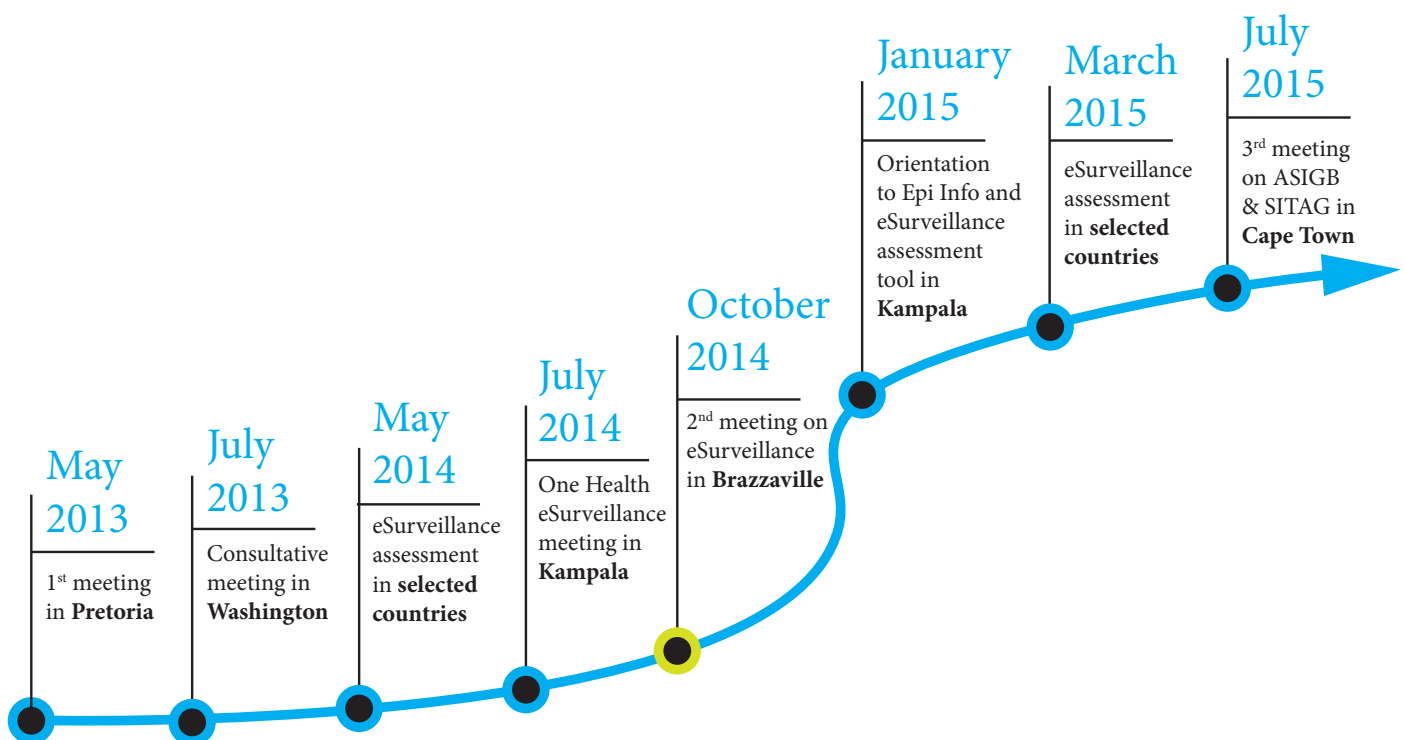
- Promoting the creation of a platform for the better sharing of national and regional data and experiences among different health programmes and other sectors;
- Providing a more secure data storage platform and increasing access to data;
- Improving the quality of public health surveillance using interoperable health ICTs (for instance, electronic health/medical records, laboratory information management systems, electronic disease surveillance tools) at all levels of the health system for better public health decision-making;
- Increasing surveillance capacity using standard protocols and tools for electronic data analysis and interpretation, and electronic dashboard for visualization of information on priority diseases, conditions and events;
- Enabling near real-time transmission and availability of data anchored on existing frameworks including IDSR, IHR (2005), One Health approach, and existing vertical health programmes, among others, for timely public health interventions; and
- Facilitating the monitoring and evaluation of IDSR core functions, IHR core capacities and other related initiatives such as the One Health approach.

eSurveillance implementation in the context of IDSR and IHR (2005) started in 2013. Five countries have been selected to pilot implementation namely Burkina Faso, Cameroon, Kenya, Nigeria and Uganda. WHO in close collaboration with the above partners conducted several activities that are summarized in [Figure 5](#).

To ensure the implementation of the eSurveillance initiative, the selected countries should ensure the following next steps:

- Disseminate the final eSurveillance Assessment Report to relevant stakeholders with technical support from WHO and relevant partners;
- Develop and implement the national action plan for eSurveillance; and
- Monitor and evaluate the implementation of eSurveillance in close collaboration with WHO and relevant partners.

Fig. 5. Milestones in the implementation of eSurveillance in the WHO African Region as of July 2015



6. Status of implementation of pictorial health warnings on tobacco packages

Studies have shown evidence of the link between active and passive tobacco smoking and a range of tuberculosis outcomes including infection, response to treatment, relapse rates and mortality (<http://www.who.int/tb/challenges/tobacco/en/>). In addition, the health consequences of hypertension can be compounded by other factors that increase the odds of heart attack, stroke and kidney failure. Tobacco use is among these factors (<http://www.who.int/features/qa/82/en/>).

The collaboration between IDSR and Tobacco control programmes as well as departments responsible for priority communicable and noncommunicable diseases and conditions is crucial to plan and implement joint prevention and control activities within their existing frameworks. This section therefore provides an overview on the implementation of pictorial health warnings on tobacco packages in the African Region.

The WHO Framework Convention on Tobacco Control (WHO FCTC) is the first public health treaty negotiated under the auspices of WHO. It was adopted unanimously by the World Health Assembly on 21 May 2003 and entered into force on 27 February 2005. The main goal of the WHO FCTC is reducing the prevalence of tobacco use and exposure to tobacco smoke. This goal cannot be attained without effective enforcement of the measures in the WHO FCTC.

In order to achieve the objectives of the WHO Framework Convention on Tobacco Control (WHO FCTC) and to ensure successful implementation of its provisions, every person should be informed of the health consequences, addictive nature and mortal threat posed by tobacco consumption and exposure to tobacco smoke. Many people are not fully aware of, misunderstand or underestimate the risks of morbidity and premature mortality due to tobacco use and exposure to tobacco smoke. People believe they can reduce or stop tobacco use before health problems occur. The reality is that most tobacco users will not be able to quit, and up to half will die from tobacco-related illnesses.

Article 11 of the WHO FCTC requires countries to adopt and implement effective measures to ensure that tobacco product packaging and labelling do not promote a tobacco product. It also requires that each unit packet and package of tobacco products and any outside packaging and labelling of such products also carry health warnings describing the harmful effects of tobacco use. Each country should adopt and implement effective packaging and labelling measures, within a period of three years after entry into force of the WHO FCTC for that country.

In the African Region, four countries namely Madagascar (2012), Mauritius (2009), Namibia (2015) and Seychelles (2015) have so far implemented pictorial health warnings on tobacco packages in line with the requirements of Article 11 of the WHO FCTC and its guidelines. Smokers in these four countries are systematically exposed to anti-tobacco messages through the pictorial health warnings; and the tobacco pack is no longer a vehicle for free and continuous publicity for the tobacco industry but a means of positive health communication for the authorities.

From their experiences, the conception and development of the pictorial warnings are time consuming. In addition, the lobbying power and tactics of the tobacco industry and its partners were significant barriers in the adoption process. Strong advocacy, partnership, political will and a dedicated team of tobacco control advocates were the key elements that drove the pictorial warning agenda in these countries despite the intensified marketing by the tobacco industry and interference with policy making. Several other countries in the African Region have mandated text health warnings on tobacco packages.

The evaluation of the impact of the pictorial health warnings in Mauritius reported an improvement in knowledge and an increase in intention to quit. It also demonstrated that these warnings have led to significant increases in awareness, knowledge and emotional responses about the health risks of smoking and the findings from the survey have provided powerful scientific data documenting the effectiveness of the warnings. The implementation of the pictorial health warnings resulted in significant increases in smokers' awareness of health warnings only 10 months after their implementation. The pictorial warnings also radically increased thinking about the health risks, thinking about quitting, and knowledge of the various health effects addressed by the labels.

Pictorial health warnings on the packaging of all tobacco products are guaranteed to reach all users and reduce the marketing effect employed by the tobacco industry. Use of pictures with graphic depictions of disease and other negative images has greater impact than words alone, and is critical in reaching the large number of people worldwide who cannot read. Pictures are also effective in conveying messages to children – especially those of tobacco users, who are the most likely to start using tobacco themselves. Tobacco manufacturers have always used packaging as a platform to reinforce brand loyalty and users' perceived self-image, particularly among young people. The tobacco industry also uses

packaging to deceive smokers by employing false terms such as “light”, “ultra-light”, “low tar” or “mild” – none of which actually signify any reduction in health risk.

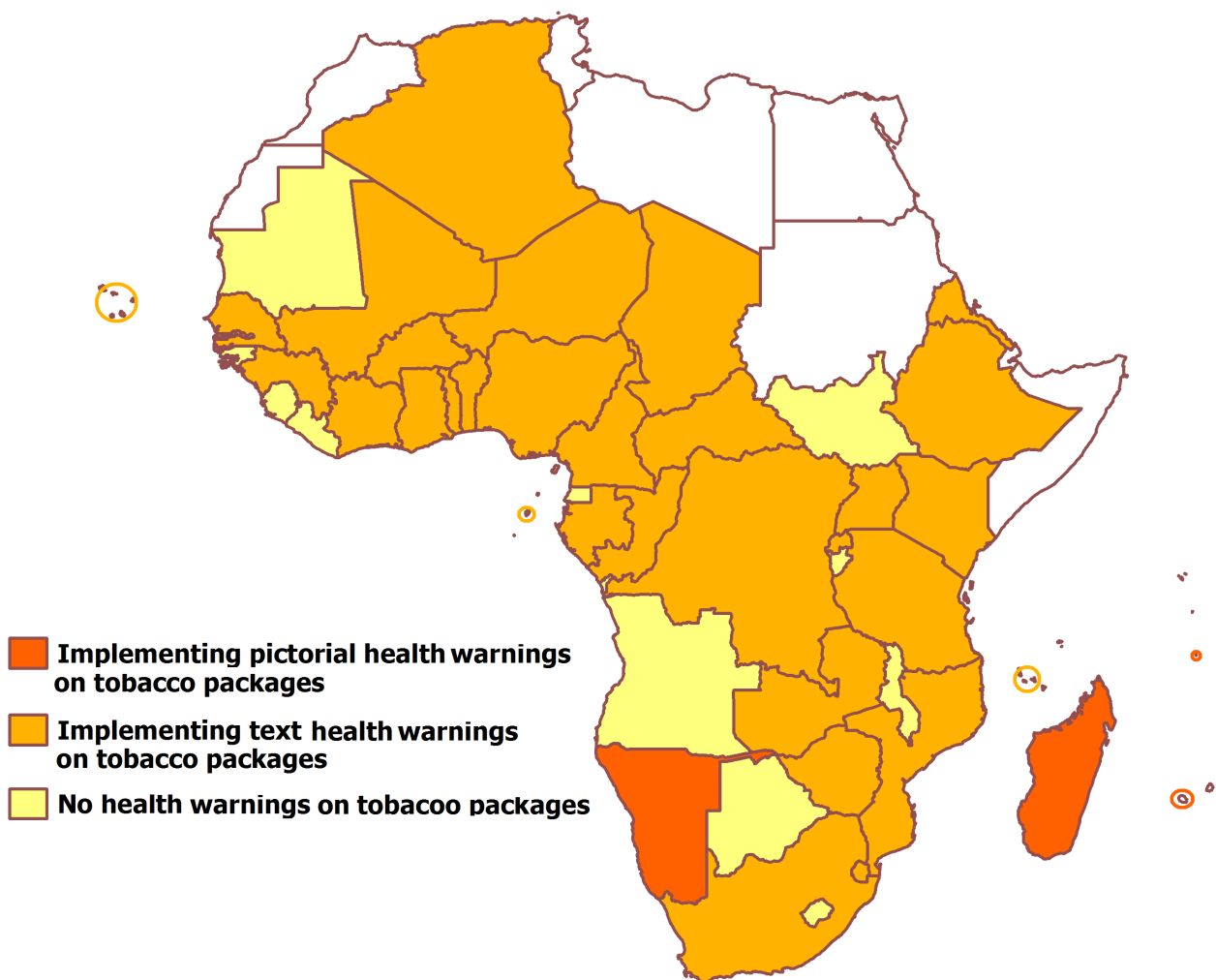
To be effective, health warnings should be large, clear, visible and legible, in the form of or include pictures and approved by the competent national authority. They should cover 50% or more, but no less than 30%, of the principal display areas. Warnings should appear on individual packs, on all outside packaging and on retail displays, and should be periodically rotated to remain effective.

Policies mandating health warnings on tobacco packages are very cost-effective to implement and therefore feasible for all countries. Pictorial warnings are overwhelmingly supported by the public and generally encounter little resistance except from the tobacco industry itself. Expanded warnings encourage tobacco users to quit and young people not to start, and help gain public acceptance of other tobacco control measures such as establishing smoke-free environments.

The experiences from Madagascar, Mauritius, Namibia and Seychelles have demonstrated the effectiveness of pictorial health warnings on packaging and labelling of tobacco products and have shown that these warnings are feasible within a reasonable timeline with appropriate legal and binding measures. The tobacco industry cannot claim countries cannot implement these measures.

The evaluation of the impact of pictorial health warnings have shown these measures to be well received by the public and have demonstrated how well-designed health warnings on tobacco product packages are a cost-effective means to increase public awareness about the adverse health effects of tobacco use. All countries are encouraged to comply with the WHO FCTC and require pictorial health warnings on tobacco packages to reduce tobacco consumption.

Fig. 6. Status of implementation of health warnings on tobacco packages as of the second quarter of 2015



7. Discussion and perspectives for the future

Many communicable diseases such as those reported in this issue, other PHEs, health emergencies and the associated risk factors in Africa can be prevented or their effects mitigated through proven public health interventions. However, the health systems in most countries in the WHO African Region remain inadequate. The IHR (2005) that entered into force on 15 June 2007, required all States Parties to have established the minimum public health core capacities by June 2012, but for those unable to meet that deadline, to request for an extension to 2014 and an exceptional circumstances request could be made to June 2016. The IDSR and IHR (2005) offer the framework for the prevention and control of epidemic and pandemic threats to enable States Parties to defend themselves against health security risks and emergencies.

The unprecedented Ebola virus disease outbreak in West Africa has highlighted the need for all countries to urgently strengthen preparedness, promptly detect and respond to public health events and health emergencies. To mitigate future risks, all countries will be required to accelerate implementation of the IHR (2005) minimum core capacities and put in place robust IDSR systems. This will allow implementation of event intelligence systems, as well as, timely response capacity and national and sub-national level which are critical for improving health security and emergencies. Moreover, there will be a need to actively integrate health security functions into national health systems.

List of abbreviations

AFR	African Region	MDSR	Maternal Deaths Surveillance and Response
BMGF	Bill & Melinda Gates Foundation	NA	Not Available
CFR	Case Fatality Rate	PHEs	Public Health Events
EBS	Event Based Surveillance	PHL	Public Health Laboratories
EMS	Event Management System	PIP	Pandemic Influenza Preparedness
GISN	Global Influenza Surveillance Network	RT-PCR	Real-time Polymerase Chain Reaction
IDSR	Integrated Disease Surveillance and Response	SARI	Severe Acute Respiratory Infection
IHR	International Health Regulations	SARS	Severe Acute Respiratory Syndrome
ILI	Influenza-Like Illness	SMS	Short Message Service
ICT	Information and Communications Technology	WHO	World Health Organization
		WHO FCTC	WHO Framework Convention on Tobacco Control