

Influenza Pandemic Preparedness: AFRICA

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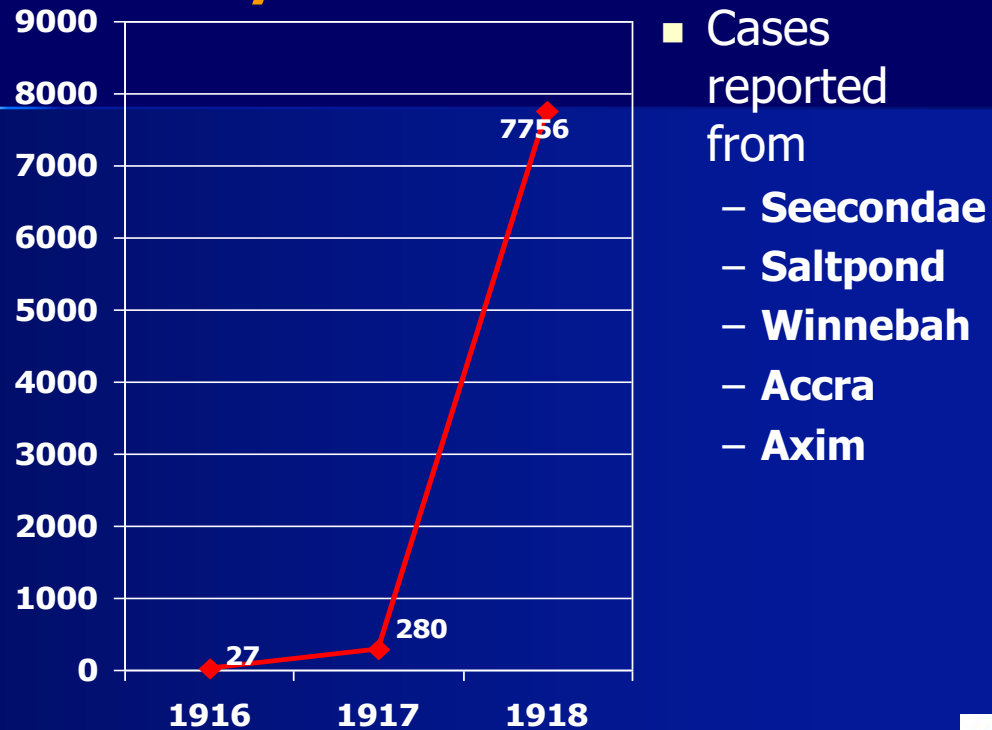


“ from the Coast the disease travelled rapidly along the lines of communication and reached Ashanti late in September”.

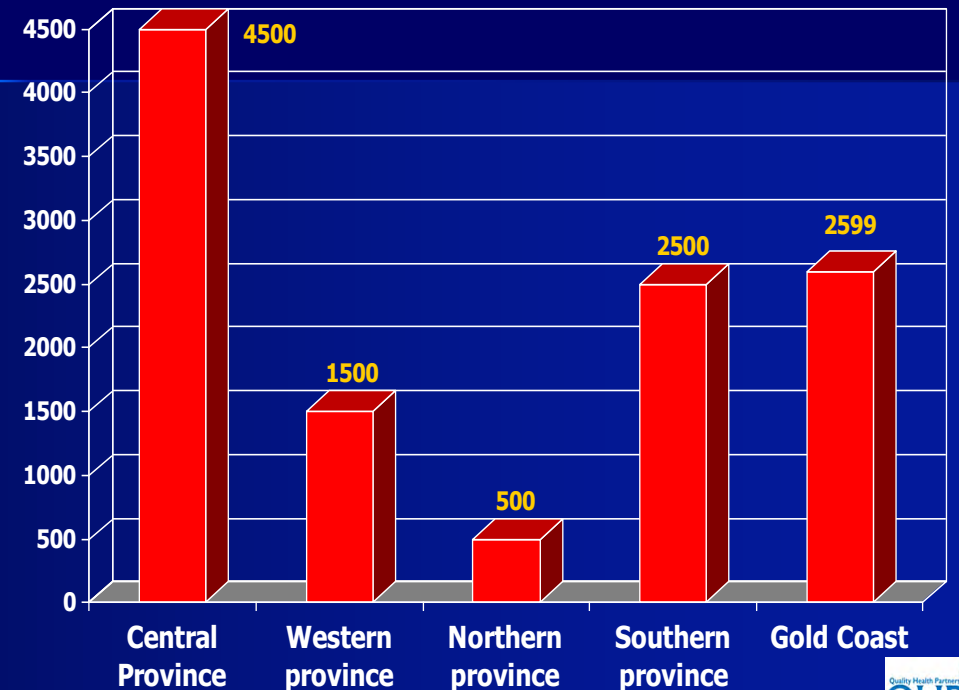
“The hinterland of the northern territories, to which access is less easy, was invaded last, cases were not being reported until the beginning of October ...”



1918 "Spanish flu" A(H1N1): Morbidity Gold Coast 1916-1918



Influenza Mortality, Old Ghana 1918



Dependency on external supply of vaccines renders African countries:

- **Unprepared to address disease outbreaks and public health emergencies.**
 - **2014 Ebola outbreak in West Africa**
- **Vulnerable to epidemics and pandemics.**
 - **the 2009 H1N1 Influenza pandemic**
- **Poor vaccine sustainability due to lack of supply assurance**

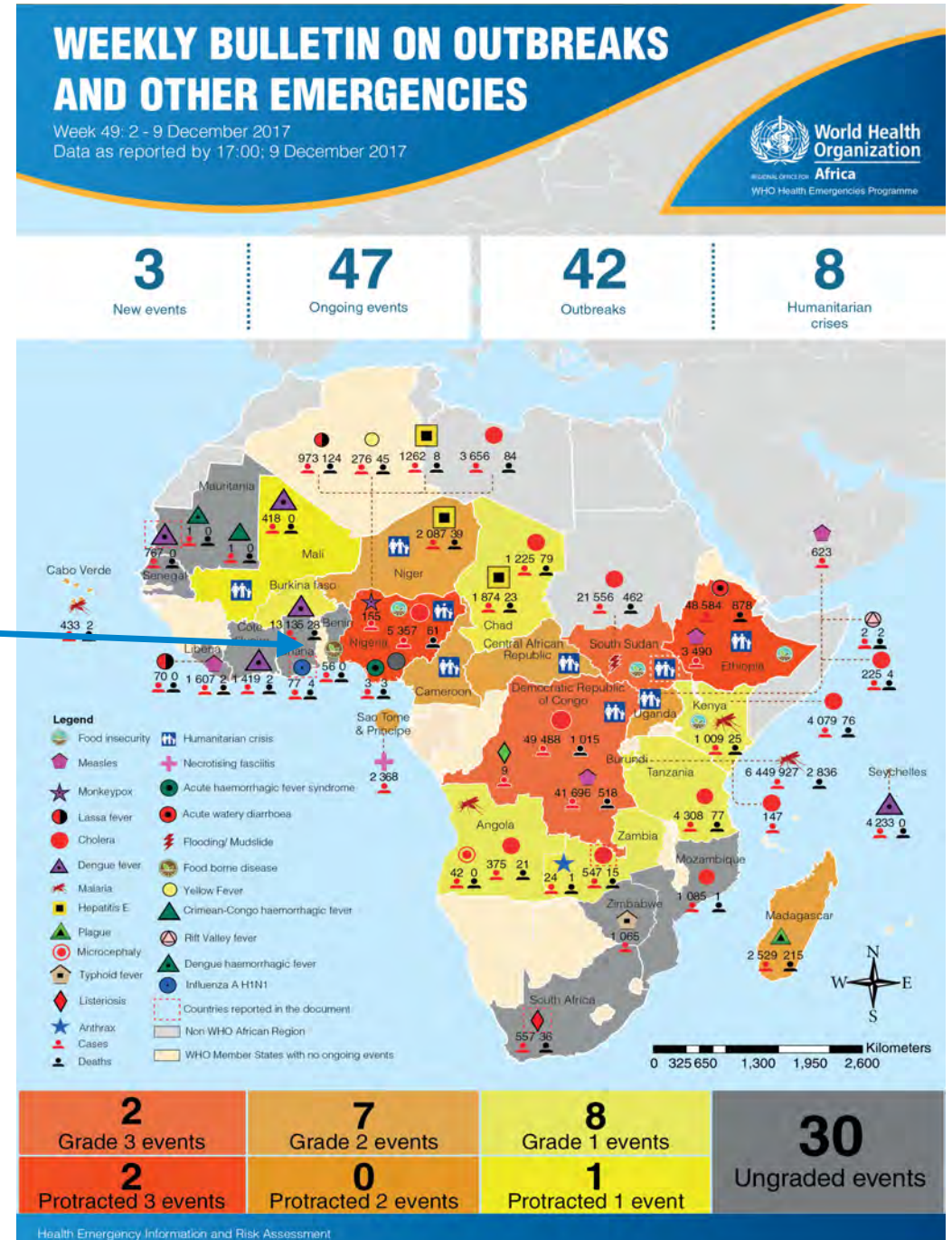
African Vaccine Manufacturers



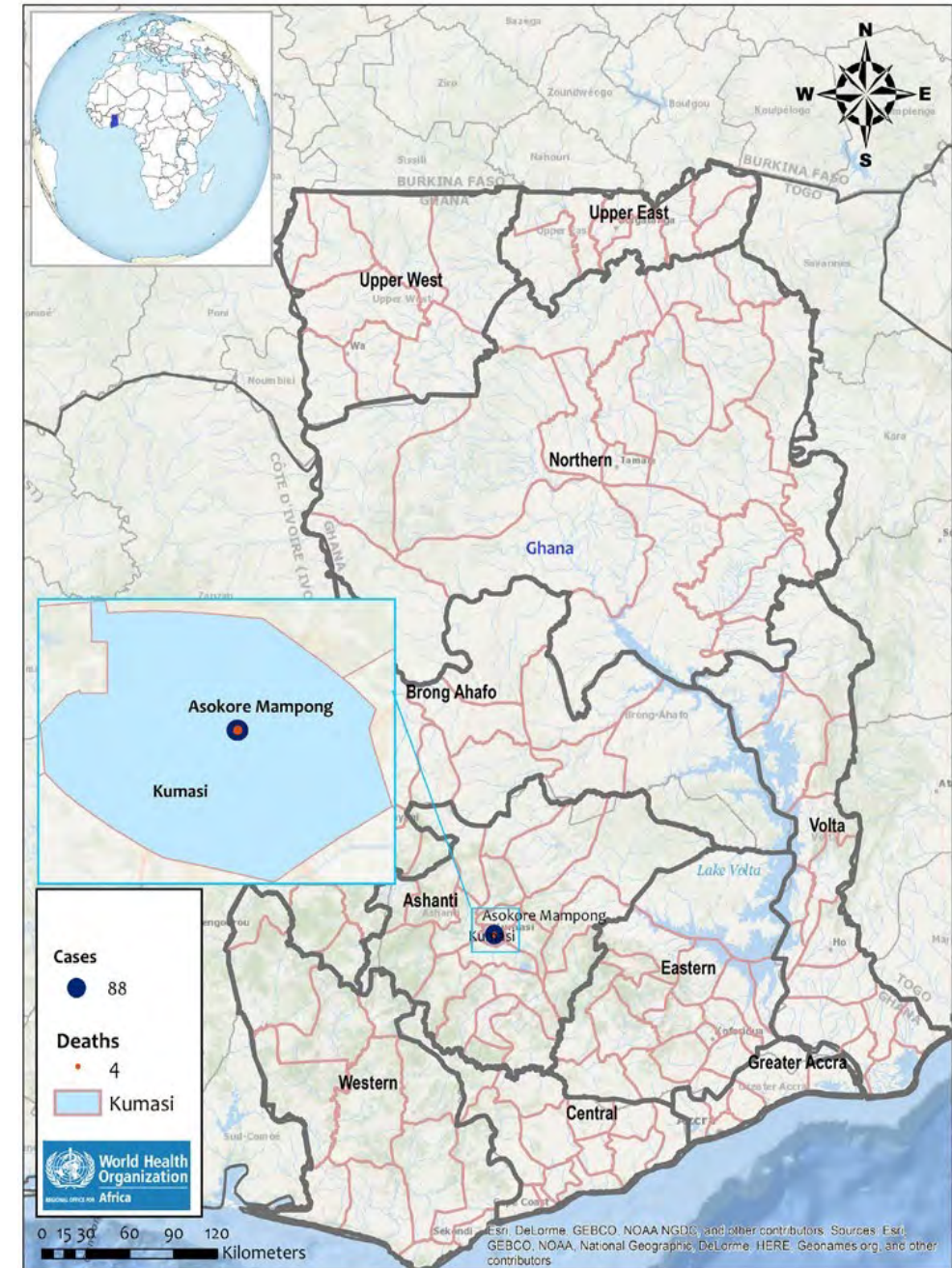
The WHO Health Emergencies Program monitors events in African region.

Week 49. 2nd to 9th December 2017

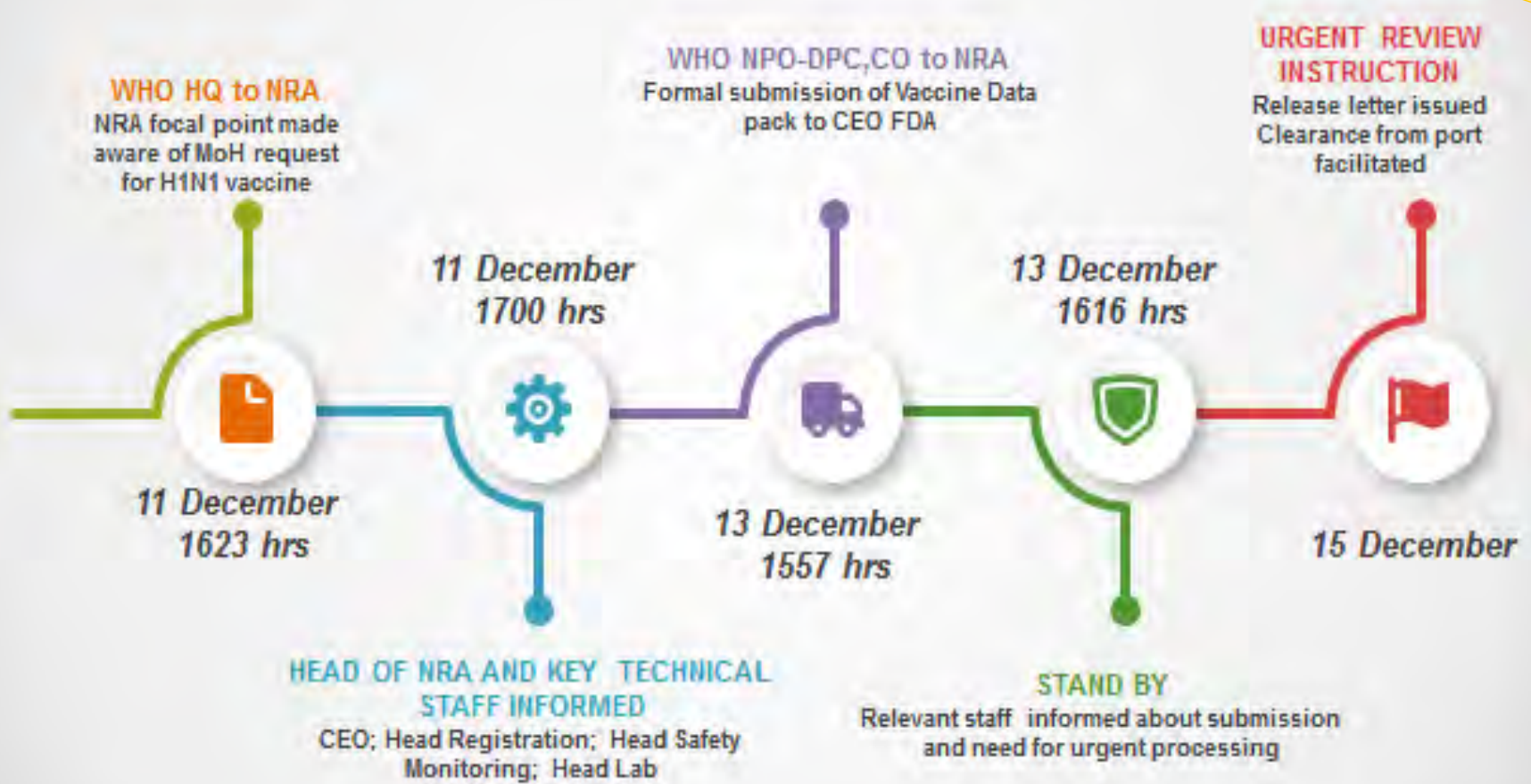
- Declaration of end of Marburg virus disease outbreak in Uganda
- **Influenza A H1N1 in Ghana**
- Listeriosis in South Africa
- Cholera in Zambia
- Dengue fever in Senegal
- Humanitarian crisis in South Sudan



- **Influenza H1N1 outbreak
Kumasi Academy**
- **29th November 2017 to 31st
December 2017**
- **95 cases (suspected/ probable
with 12 confirmed) including
four (4) deaths**
- **response included:**
 - **improved case management
with Relenza and Tamiflu)**
 - **enhanced surveillance /
public education**
 - **vaccination against H1N1
pdm09; 90 % coverage of
students and staff**



NRA role in Ghana School Outbreak: H1N1 (pdm09) Dec. 2017



- RESPONSE**
- Confirmation
 - Containment
 - **Vaccination**
 - Monitoring
- Total cases - 94
 Casualties - 4



Ghana perspective on pandemic preparedness: enhancement of influenza surveillance

Ghana recently received WHO PIP support to establish and operate 2 new sentinel sites for influenza surveillance

Also revised and shared nationwide, the national Influenza Surveillance Protocol.

National health information management system has been modified to capture epidemiological characteristics of Acute Respiratory cases

Collation of influenza cases is now a regular feature of the Ghana Weekly Epidemiological Report

Collaboration with Military Health Facilities on Influenza Surveillance in Ghana continues for a comprehensive profiling of influenza disease in Ghana

WHO/U.S. NAMRU3 /US CDC as partners, adopting advanced molecular diagnostics tools (NGS) to improve our bioinformatics capacity to characterize influenza viruses in Ghana – recent Flu A H9 isolates in poultry

Ghana perspective on pandemic preparedness: collaboration with Animal Health

workshop on strengthening surveillance for seasonal and rapid response for pandemic influenza in the African Region was hosted by Ghana, WHO/ US CDC in April 2017.

Epi-, Lab- and Vet- staff from 20 African countries refreshed skills influenza surveillance protocols and rapid response /control measures for avian influenza.

WHO risk assessment process for pandemic influenza was presented for improved networking on influenza surveillance in the African region and the use of the IHR decision instrument for assessing zoonotic events was reviewed.

Following the last HPAI H5N1 outbreak in poultry in January 2017, LPAI H9N2 has recently emerged in May 2018 domestic poultry Ghana.

Investigations at the animal human interface underway and human cases of ILI and SARI with animal contact are given priority attention.

Ghana perspective on pandemic preparedness: Influenza Disease Burden

Like many African countries, Ghana lacks policy for routine influenza vaccination but respiratory infections are among the top five diseases reported.

A 4-yr population based study of influenza disease was conducted with the US CDC in 17 health facilities from 2013 to 2017.

Incidence of influenza-associated hospitalizations and outpatient visits highest in children 0 to 4 yrs confirming significant burden of influenza-associated respiratory disease in children <5 years

Persons over 65 years showed significant SARI but we may have underestimated the true incidence of influenza-associated illness due to non-medically attended illnesses

Influenza virus circulated year-round with 2 distinct epidemic periods .

We have generated important data on influenza disease burden in Ghana and West Africa needed for public health policies and action to lessen the impact of influenza on populations.

Pandemic influenza preparedness in Africa is a profound challenge for an already distressed region - analysis of national preparedness plans. (2008)

Ortu et al. Health Policy and Planning, 2008

Reviewed 35 plans from 53 African countries

Strengths

- Risk communication,
- Components of detection/ containment

Weaknesses

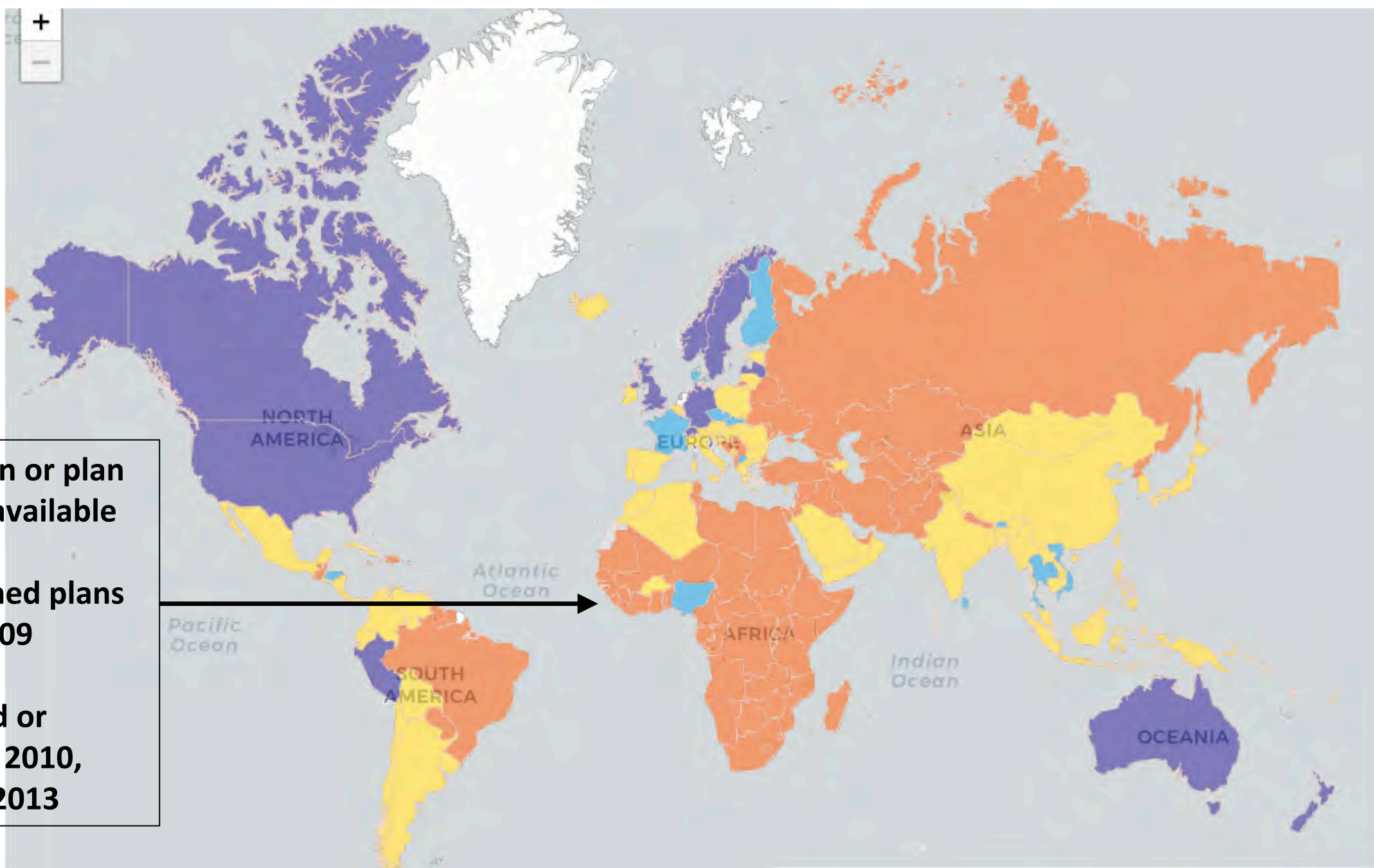
- Lack operational clarity
- Operational planning not linked to strategic plans
- No SOPS for Business continuity
- No SOPS for Case management, triage,
- Lack of adequately equipped health care facilities
- Lack of Detailed strategic planning for human pandemic influenza.
- Focus on avian influenza rather than pandemic human influenza.
- Poor Provision/ Distribution/ Administration of Pharmaceuticals

AFRICA IPPP

Orange: no plan or plan not publically available

Yellow: Published plans in or before 2009

Blue: published or revised plan in 2010, 2011, 2012 or 2013



1

- Develop template/tool (in English) for countries to develop or update a PPP.
- Current tools, checklists etc. will be utilized to build this AFRO tool/template.

2

- Regional meeting with participants from Ministries of Health, Agriculture/Animal services, Environment, Health Security etc. to implement tool. Mentored Workshop
- **OUTCOME:** each country team have an advanced draft of a PPP.

3

- Seed funding provided to countries to finalize plans.

4

- **Simulation exercise to test plan**

5

- Tool translated into French and Portuguese and process repeated as the tool is rolled out in the Region

Planning For Pandemic Influenza Preparedness, WHO / CDC – IPPP workshop Tunis, Aug 2018

Aim: WHO regional office and WHO PIP FW cascade to strengthen national preparedness plans for pandemic influenza in the African Region

Specific objectives:

- **To understand the status of countries' current IPPP and identify areas of strength and gaps in their IPPP.**
- **To update country IPPP using available expertise and background information and develop a clearly defined plan of action for the finalization of country IPPP including areas that require additional input.**
- **To understand the importance and process of ongoing planning that would be undertaken by countries to update and test the IPPP going forward.**

Participants – EMRO, WHO AFRO

5 countries with IPPPs that need revision

- **AFRO: Tanzania and Ghana**
- **EMRO: Morocco, Oman, Tunisia**
- All completed JEE with NICs and had 6-8 representatives from
 - MoH Senior Management
 - Expanded Program on Immunizations
 - Regulatory Drugs Administration
 - Hospital/Clinical Management
 - Public Health Surveillance – Epidemiology
 - Public Health Surveillance – Laboratory NIC
 - Therapeutics Interventions/Vaccine Deployment
 - Community Engagement & Risk Communication



Methodology – presentations, discussions, group work and plenary sessions.

- Workshop was organized in modules with each module covering specific topics of the WHO-checklist for pandemic influenza risk and impact management.
- Countries made presentations on the status of their IPPP with group work on the modules.

- ❖ Introduction
- ❖ Preparing for emergency
- ❖ Surveillance, Investigation and Assessment
- ❖ Health Services and Clinical Management
- ❖ Preventing Illness in the Community
- ❖ Maintaining Essential Services and Recovery
- ❖ Research and Development
- ❖ Evaluation, Testing and Revising Plans



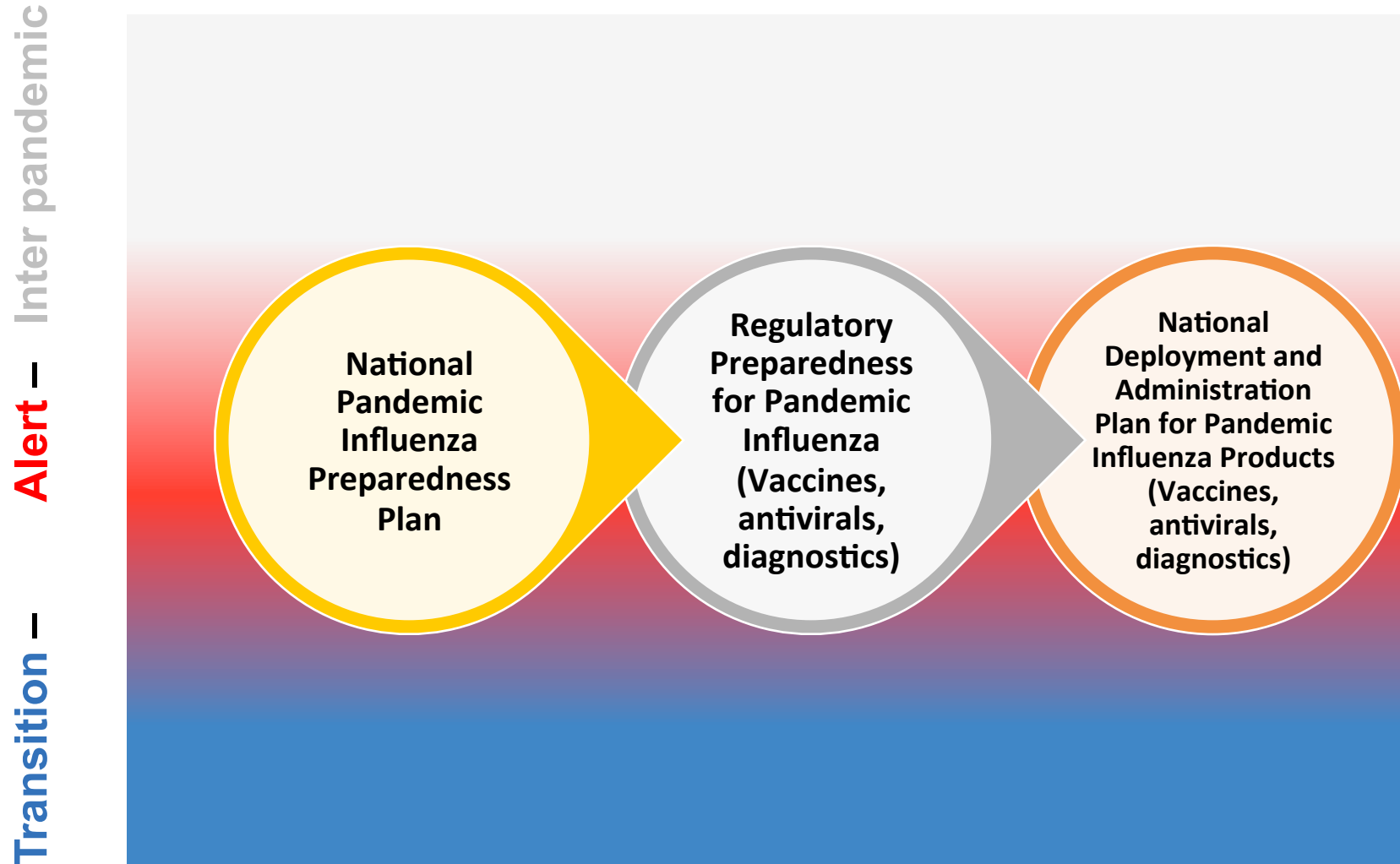
- There was Cross-country collaboration and sharing of best practices and lessons learned.

Ghana Team – IPPP recommendations deadline Sept 2018

- Adopt updated Ghana IPPP (*Nov 2009 to Aug 2018*)
- Brief Director Public Health Ghana Health Service
- Update current IPPP with checklist completed in Tunis
- Convene meeting of National Technical Coordinating Committee to consolidate updated IPPP



Preparedness for Pandemic Influenza Products in the Continuum of Pandemic Phases



Observations

- **Efforts to update country IPPPs in Africa are underway – more support would fast track and enhance this process**
- **Lack of seasonal influenza immunization policies in several African countries - barriers for effective IPPP**
- **Lack of vaccine production capacity so dependence on WHO or national contracts for flu vaccine supply**
- **Need to Test regulatory preparedness during the inter-pandemic phase for seasonal influenza and challenge with pandemic simulation**

ACKNOWLEDGEMENTS

- **GHANA HEALTH SERVICE NATIONAL INFLUENZA SENTINEL SITES**
 - **GHANA ARMED FORCES INFLUENZA SENTINEL SITES**
 - **VETERINARY SERVICES DIRECTORATE**
 - **US NAVAL MEDICAL RESEARCH UNIT 3**
 - **US CENTRES FOR DISEASE CONTROL AND PREVENTION**
 - **WORLD HEALTH ORGANIZATION**
- **NIC, NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH, UNIV. OF GHANA**