

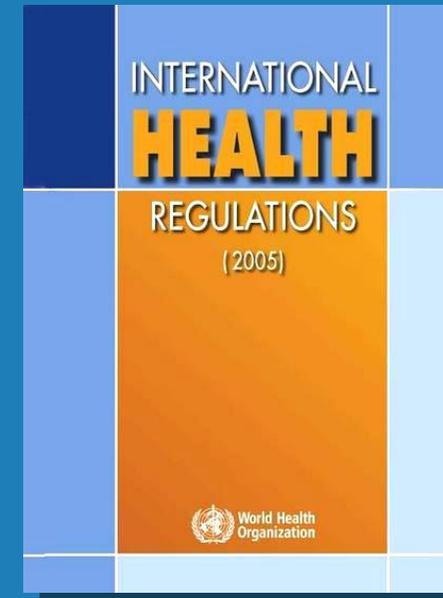
Situation update pandemic (H1N1) 2009

February 2010
USPACOM/COE
Pandemic Influenza
Workshop



World Health
Organization

Health Security and Environment



Overview

- Overview of Events
- Pandemic (H1N1) 2009
- Issues/Concerns



Overview of events

- April 12: an outbreak of influenza-like illness in Veracruz, Mexico reported to WHO
- April 15–17: notification of clusters of rapidly progressive severe pneumonia in Distrito Federal and San Luis Potosi
- April 15-17: two cases of the new A(H1N1) virus infection identified in two southern California counties in U.S.A.
- April 23: novel influenza A (H1N1) virus infection confirmed in several patients in Mexico.

Time line current situation (1)

- Friday 24 April
 - Reports of previously undetected Influenza A (H1N1) virus in USA and Mexico
 - **HQ SHOC activated**
- Sunday 26 April
 - IHR Emergency Committee convened
 - WHO Director-General declares a Public Health Emergency of International Concern

Time line current situation (2)

- Monday 27 April
 - WHO increases pandemic alert phase from 3 to 4
 - Geographic Containment not feasible
- Wednesday 29 April
 - WHO raises pandemic alert phase from 4 to 5
- Tuesday 5 May
 - WHO starts sending antiviral stocks to 72 countries and Regional Offices

Phase 6

- June 11: WHO declared phase 6 - pandemic

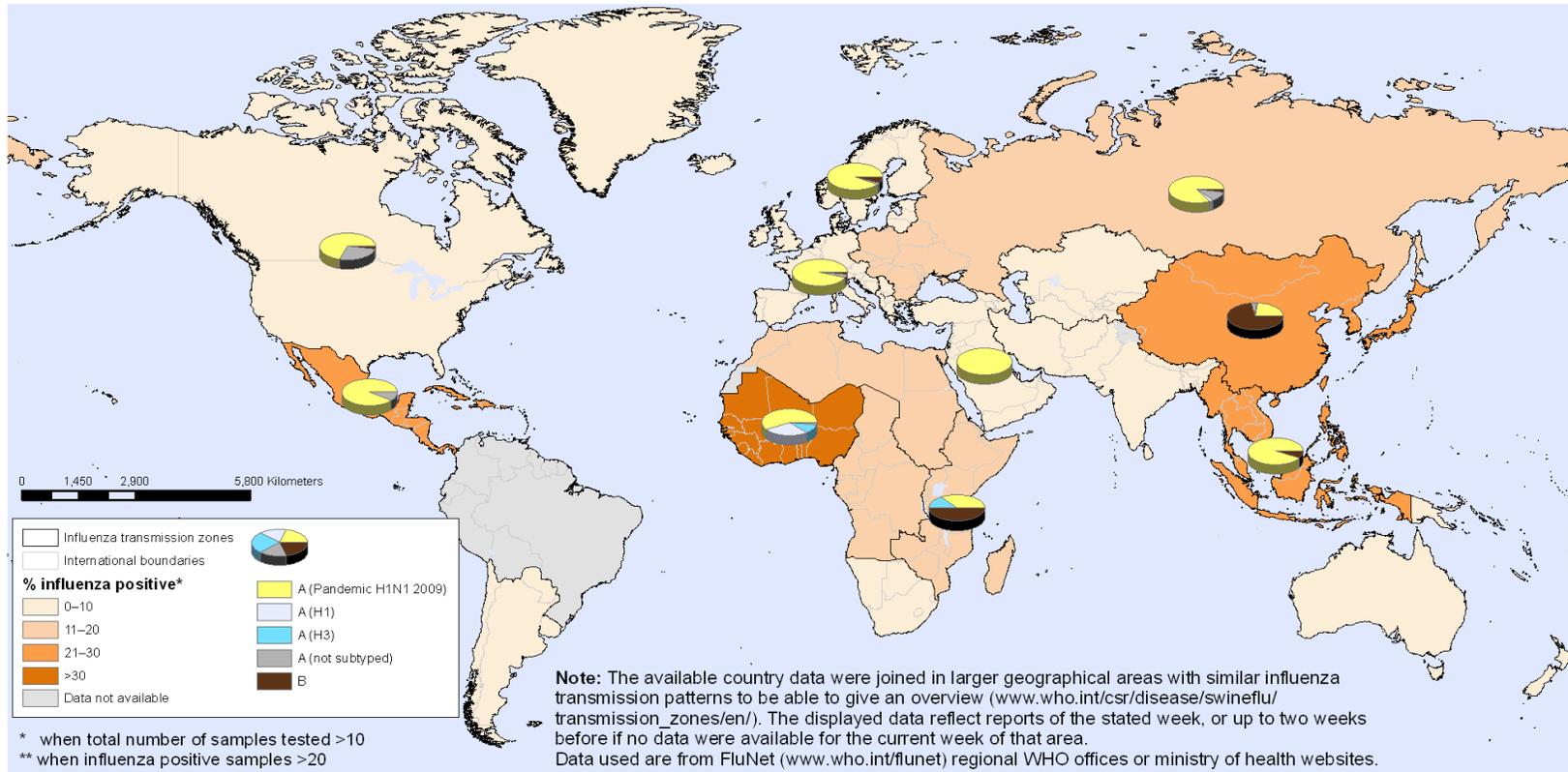
Phase 6 is characterized by community level outbreaks of the same virus in at least 1 other country in a different WHO region.

- Designation of this phase indicates that a global pandemic is under way.
- Severity of National and Local situation must dictate the measures taken.

Influenza Reported

Percentage of respiratory specimens that tested positive for influenza

Status as of week 05
31 January–06 February 2010



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Epidemiology of pandemic (H1N1) 2009 (1)

- Efficient, rapid person-person transmission
- International travel has facilitated geographical spread
- Cases have been reported in all regions.
- More cases in urban centers before wider geographical spread within the countries.

Epidemiology of pandemic (H1N1) 2009 (2)

- 5-45 yrs of age most commonly affected
- Hospitalization and case/fatality in young adults higher than seasonal influenza
- Epidemiologic and serologic evidence for low susceptibility in older adults



Epidemiology of pandemic (H1N1) 2009 (3)

Current situation

- The most active areas of pandemic influenza transmission currently are in parts of eastern Europe, North Africa, and South Asia.
- In North Africa, transmission remains active but overall activity has been declining
- In South and Southeast Asia, transmission remains active but geographically localized to regional
- In East Asia, influenza transmission remains widespread and active but is declining in most places
- In Europe, pandemic influenza transmission remains active in limited number of countries, however, overall activity continued to decline
- In the Americas, both in the tropical and northern temperate zones, overall pandemic influenza activity continued to decline or remain low
- All countries should stay vigilant and situation in developing countries should be closely watched

Weekly update 12 February 2010



Pandemic (H1N1) 2009 infection – findings (1)

- Most cases in **children and young adults**
- Spectrum of disease range from **non-febrile, mild upper respiratory tract illness** to **severe or fatal pneumonia**. Occasional gastrointestinal symptoms (diarrhoea, vomiting)
- **Most frequent symptoms:** cough, fever, sore throat, malaise and headache



Photos: WHO/ Isadore Brown

WHO – Revised guidance – Nov 2009

Pandemic (H1N1) 2009 infection – findings (2)

- Vast majority of cases have **clinically mild disease** and a small proportion have experienced complications requiring hospitalization
- Lower respiratory tract disease due to primary viral pneumonia in hospitalized patients
- **Other complications:** secondary bacterial infections, septic shock, renal failure, multiple organ dysfunction, myocarditis, encephalitis, and worsening of underlying chronic disease conditions such as asthma, chronic obstructive pulmonary disease (COPD), or congestive cardiac failure.

WHO – Revised guidance – Nov 2009



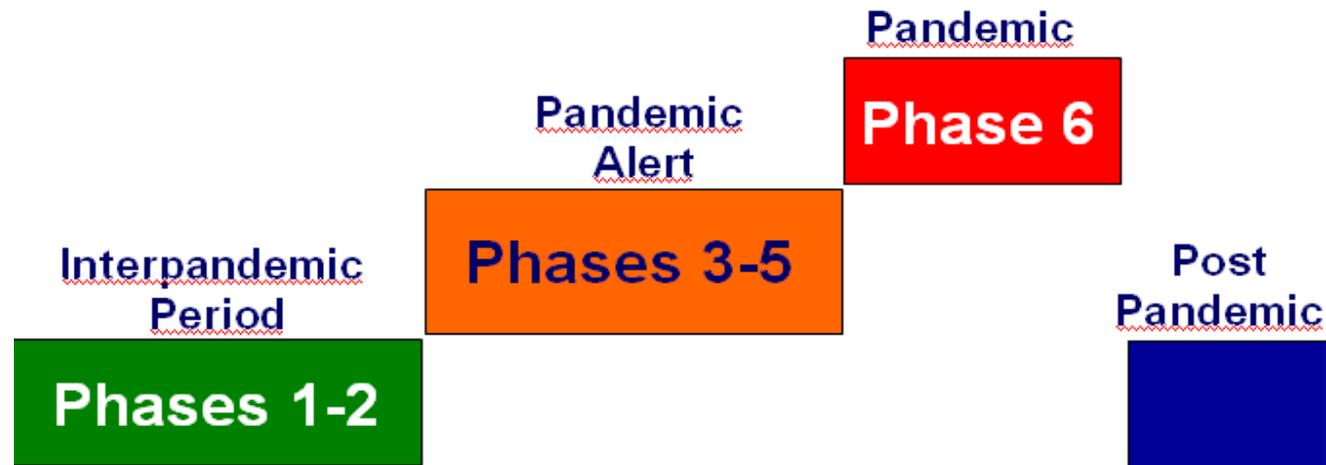
Groups at higher risk for severe disease

- Infants and young children, in particular < 2 years
- Women who are pregnant
- Persons of any age with chronic diseases (pulmonary disease, cardiac disease, metabolic disorders)
- Persons with chronic renal disease, chronic hepatic disease, certain neurological conditions
- Persons with hemoglobinopathies, or immunosuppression
- Children receiving chronic aspirin therapy
- Persons aged 65 years and older

Sources and references

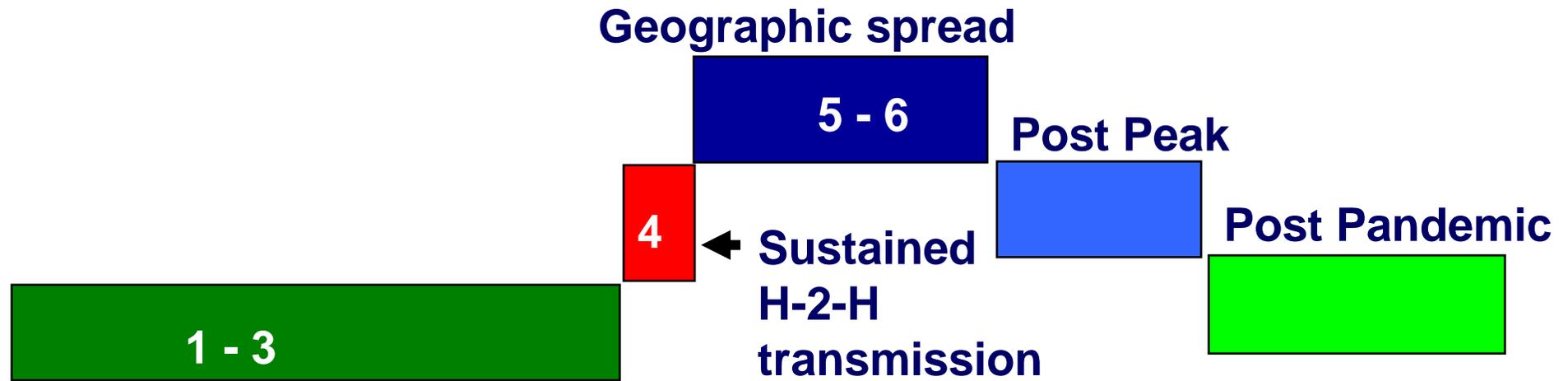
- Clinical management of human infection with pandemic influenza (H1N1) 2009: Revised guidance - November 2009
http://www.who.int/csr/resources/publications/swineflu/clinical_management/en/index.html
- Infection control
http://www.who.int/csr/resources/publications/infection_control/en/index.html
- Laboratory testing
<http://www.who.int/csr/disease/swineflu/guidance/laboratory/en/index.html>

2005 Phases



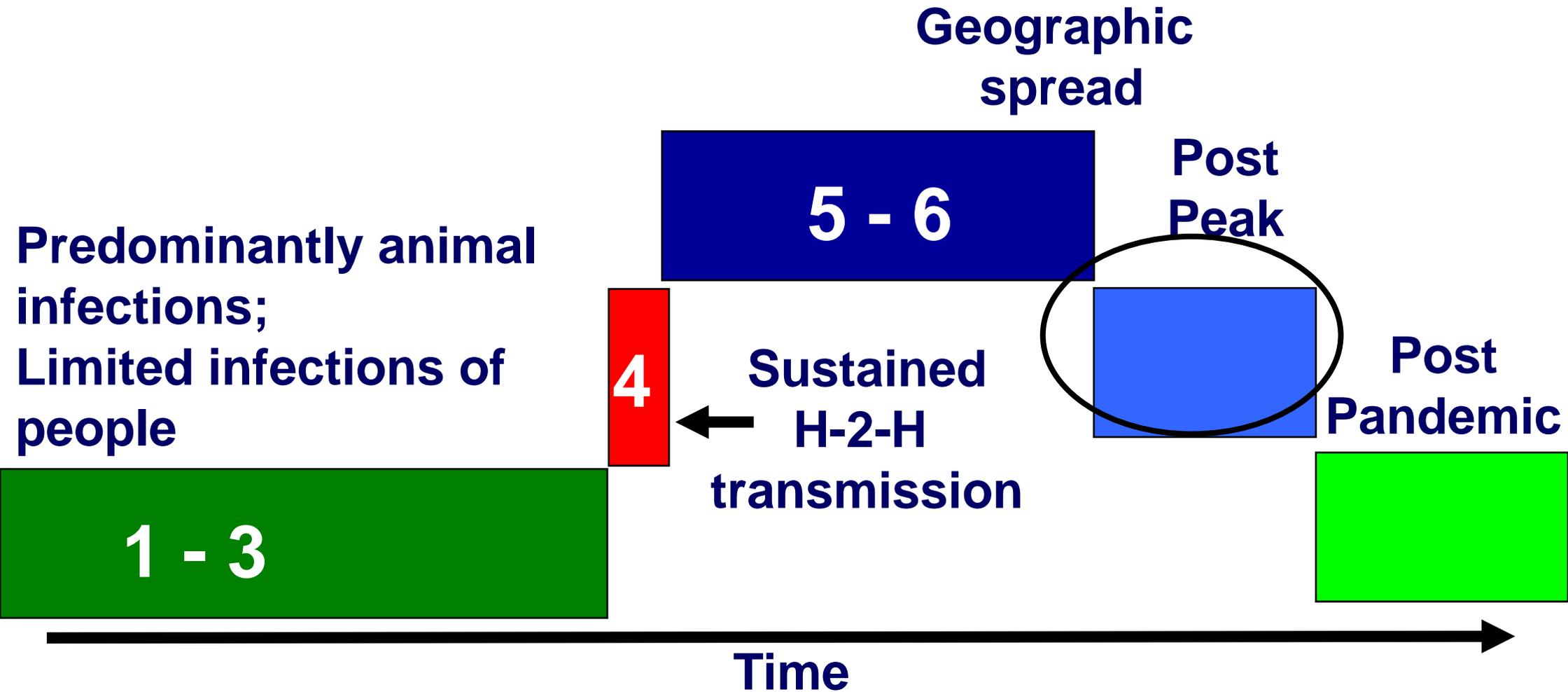
- "Pandemic alert" language contributed to over anxiety and fatigue
- Progression does not convey epidemiological risk very well
- No recovery period
- Difficulties with interpretation

Advantages of 2009 Phases

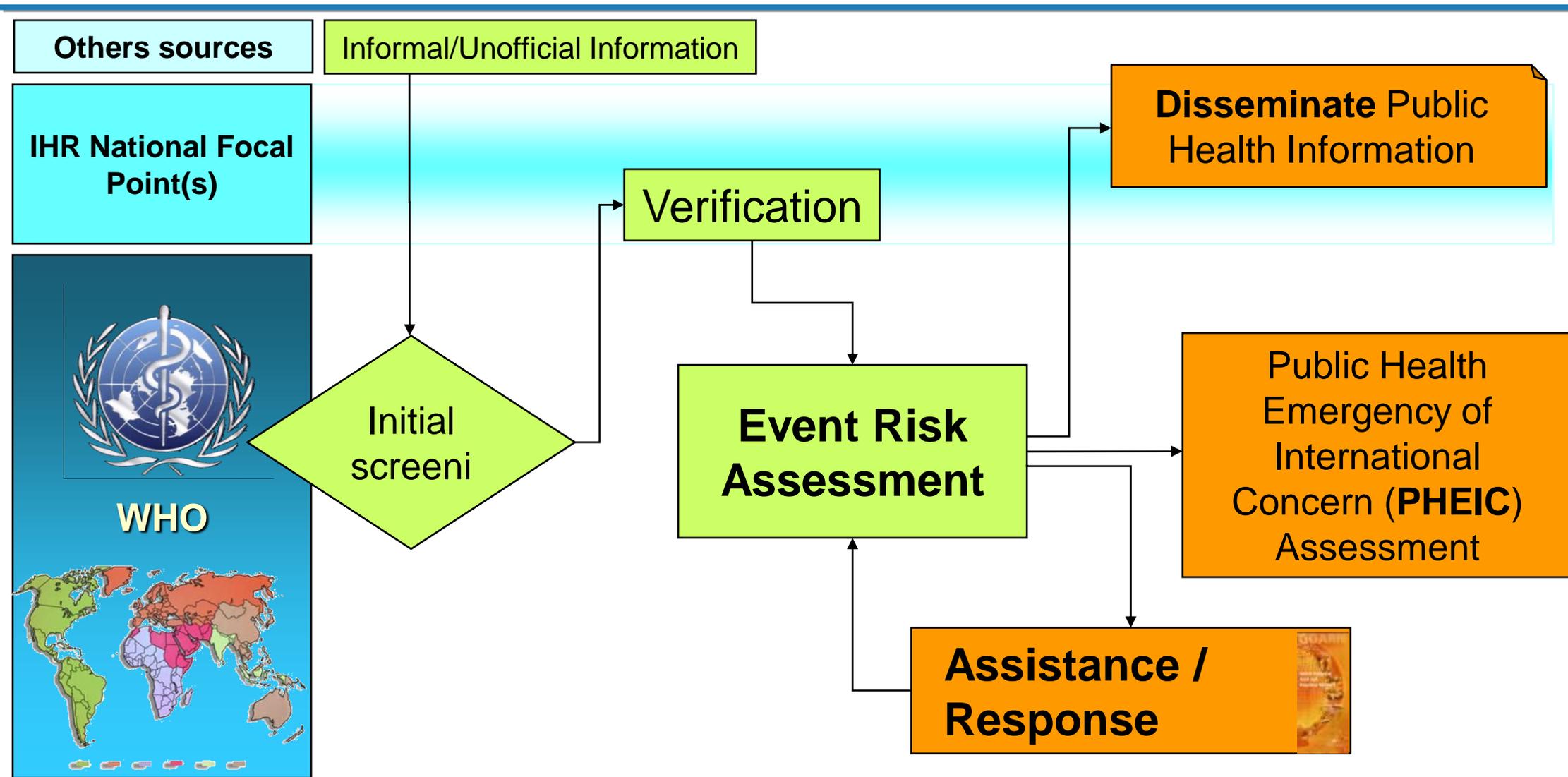


- Better representation of epidemiological "risk"
- Identifies sustained H-2-H transmission as most pivotal event
- Better distinguishes between time for preparedness and for response
- Defines a post pandemic peak to facilitate recovery activities

Pandemic Phases



Scope of IHR Operations (Unofficial)



Scope of IHR Operations (Official)

Others sources

IHR National Focal Point(s)



WHO



IHR Reports

Disseminate Public Health Information

Event Risk Assessment

Public Health Emergency of International Concern (PHEIC) Assessment

Assistance / Response

Event management

- Headquarters and Regional Operations centres at highest activation level as of 24 April.
- 61 Guidance and technical documents published in the fields of surveillance, lab and diagnostic, infection control, health care management, pandemic response planning, and vaccines.
- Clearinghouse of influenza related training material collected in database and published to the web (<http://www.influenzatraining.org/>)

Expert Assistance

- Global Alert and Response Network (GOARN)
- Experts in logistics, epidemiology, medical anthropology, risk communications, infection control, clinical management, surveillance, laboratory capacity and other areas identified and deployed to countries.
- To date teams deployed throughout Central and South America, the Caribbean and Mexico.
- Experts from GOARN institutions contributing to WHO response at Headquarters and Regional Offices.

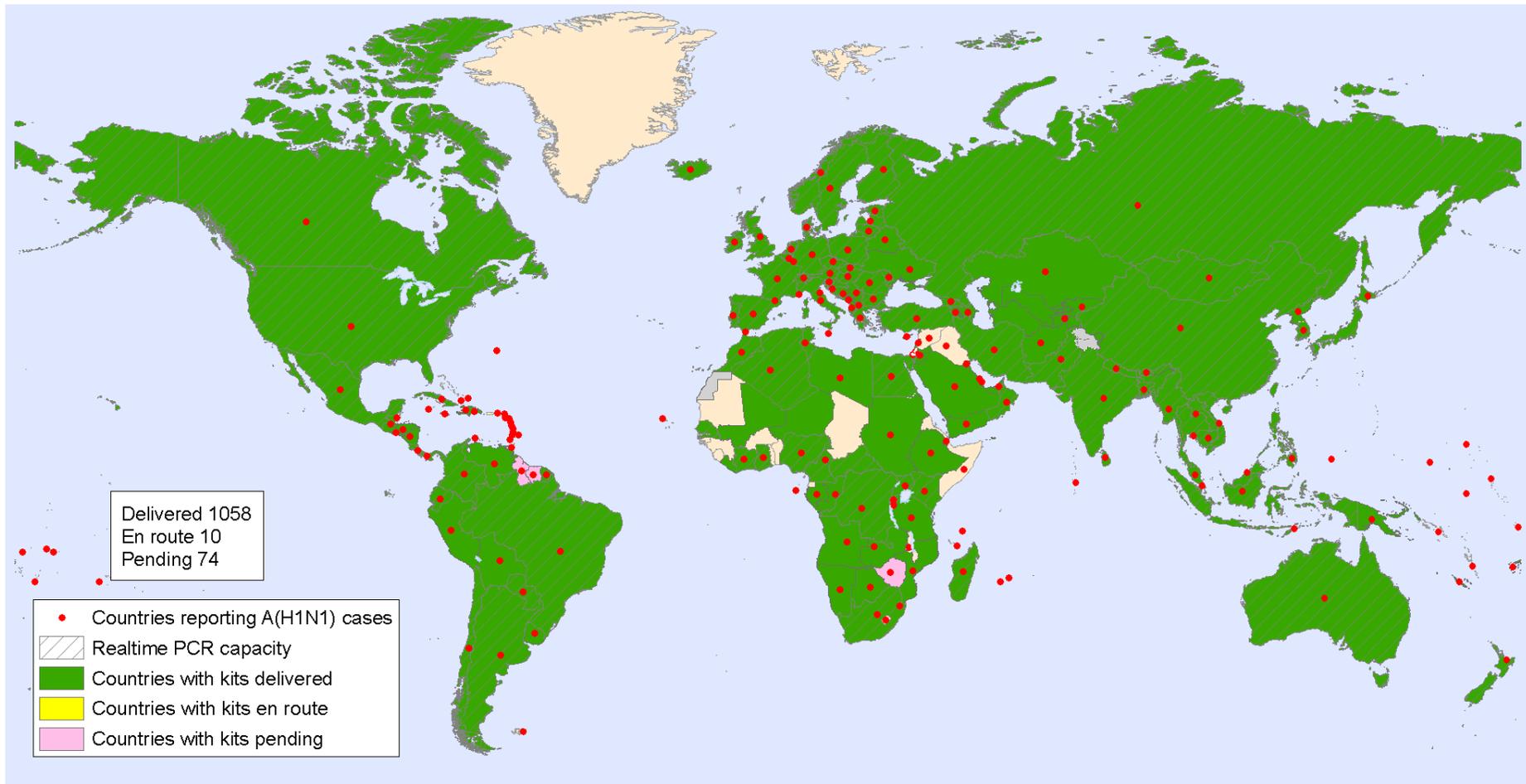


Shipments of diagnostic kits

- Diagnostic kits for real-time RT-PCR are sent from the WHO-Collaborating Center in CDC US, ATCC is distributing kits on behalf of CDC.
- WHO-Global Influenza Program with WHO-CC in CDC – are monitoring the kits distributions to *Global Influenza Surveillance Network* (GISN).
- CDC will continue supporting requests from *National Influenza Centers* (NICs) and national influenza reference laboratories for the RT-PCR primers, probes and positive control for the currently circulating pandemic influenza A(H1N1) 2009 virus, free of charge.

Shipments of diagnostic kits

153 countries, 1142 kits (map produced: 20 January 2010)



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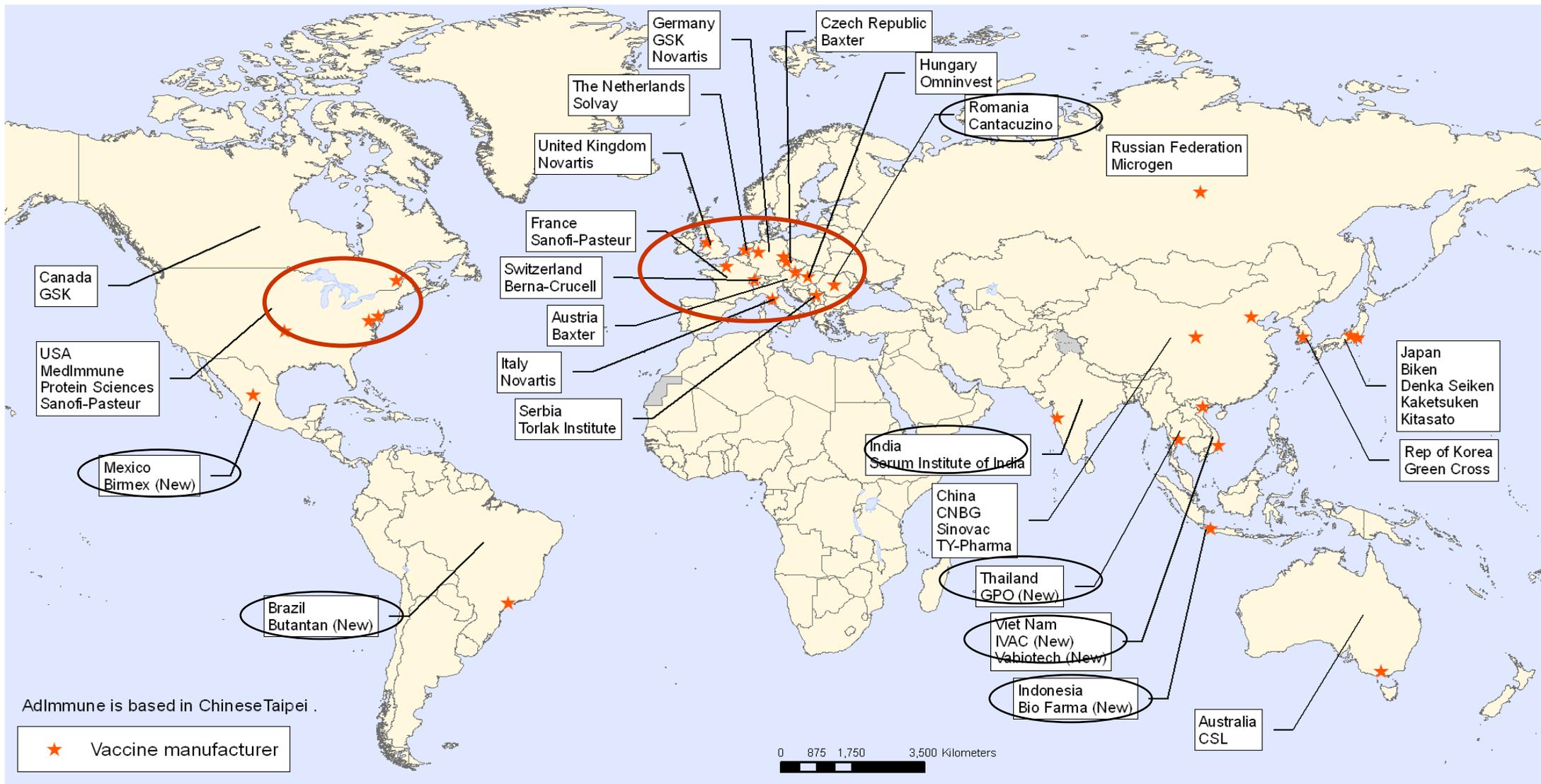
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Potential pandemic (H1N1) 2009 Vaccine Manufacturers



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A/H1N1 Pandemic Vaccine

- 200 million doses have been pledged
- Total 92 Countries requested
- 49 signed agreement
- 3 countries have received
- 18 orders have been placed (Feb-March delivery)



Vaccine Deployment Challenges

- Conclusion of agreements (Donor -WHO) taken 3 to 5 months – Key issue is liability
- Beneficiary countries – 3 to 67 days
- National Deployment Plan (WHO did workshops)
- Approval has taken not less than 5 months. 24 of 92 have finalized
- Regulatory Approval can take up to 8 weeks

Applying the Lessons

- More Exercises (Discussion and TTX)
- WHO Review
- Other Disease Containment Operations planning and response continues
- Flexible and expandable plans



Way Forward

- Member States to continue to develop Disease response “Operational” Plans
- Integrate Disease Containment and response Plans with Pandemic Plans and broader Emergency Management Systems
- Train/orientation, Test, Revise.. and again
- Apply the Lessons Learned (Things Change)
- And...Train/orientation, Test, Revise...

Thank you



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