

# International Health Regulations (IHR): Speaking the Same Language

## Signals & Trends: What Will Public Health Look Like in 10 Years?

Roberta Andraghetti, Regional Advisor - International Health Regulations  
Pan American Health Organization (PAHO) / World Health Organization (WHO)

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Laboratory Conference  
Raleigh, NC, 2 June 2013



*The Association of Public Health Laboratories adheres to established standards regarding industry support of continuing education for healthcare professionals. The following disclosures of personal financial relationships with commercial interests within the last 12 months as relative to this presentation have been made by the speaker Roberta Andraghetti - “Nothing to disclose”*

# 1980 - 2005 Milestones



HIV/AIDS



Chernobyl



Plague



Ebola /  
Marburg



vCJD



Nipah



Anthrax



SARS



Meningitis



Cholera



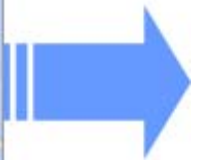
Chemical  
spill



Polonium-  
210



Avian  
Influenza



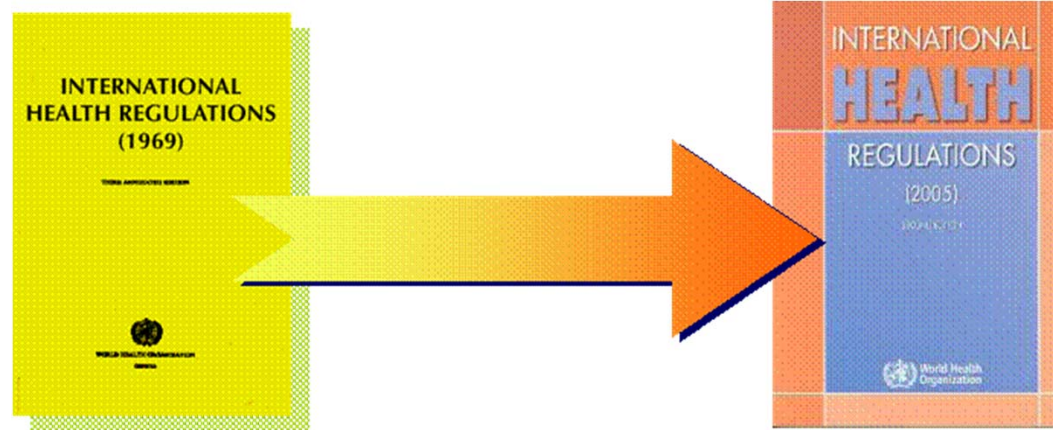


# International Health Regulations

- WHO Member States recognized need to collectively respond to public health emergencies of international concern
- An Intergovernmental Working Group tasked with the revision of the IHR(1969) established in 2004
- WHO Member States adopted the current IHR during the 58th World Health Assembly in 2005
- Current IHR entered into force in June 2007
- A legal tool requested, developed and negotiated by WHO Member States – based on dialogue, transparency and trust – that describes procedures, rights and legal obligations for States Parties and WHO
- Not a new technical discipline (...*existing*...) – tool that serves public health according to good, evidence-based, practice and adapted to the context
- State's commitment – beyond the health sector

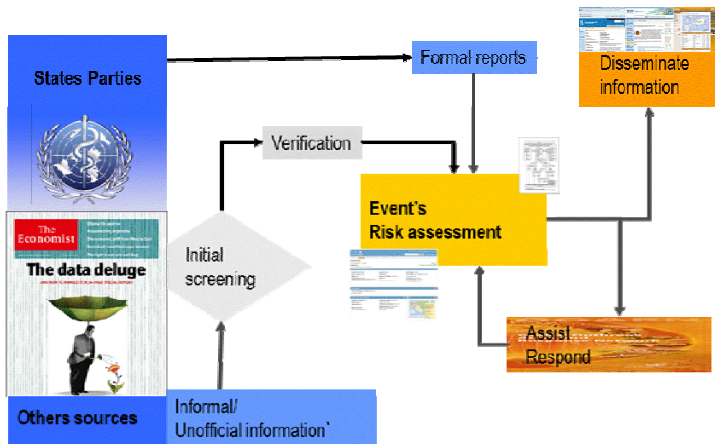
# Purpose and scope of the IHR

“to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade“ (Article 2)

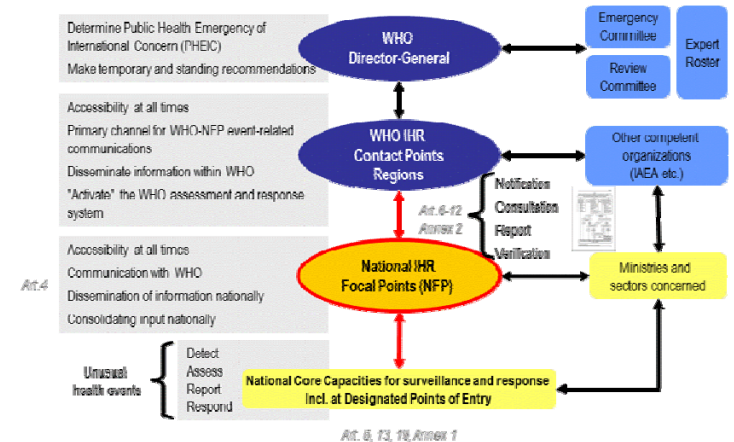


- From three diseases to all public health hazards, irrespective of origin or source
- From preset measures to adapted response
- From control of borders to, also, containment at source

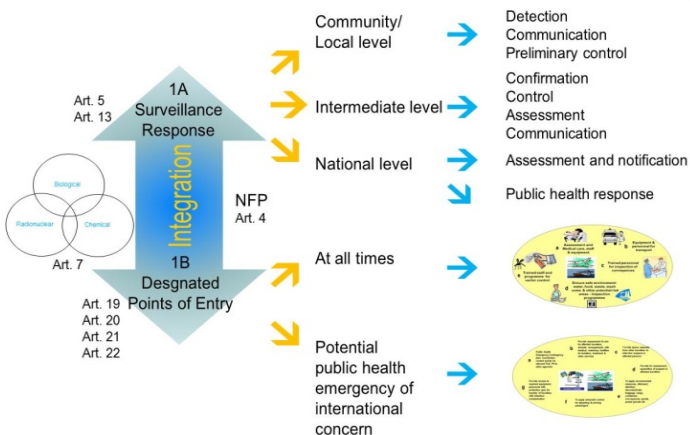
# WHO Global Alert and Response System



## IHR Operational Framework



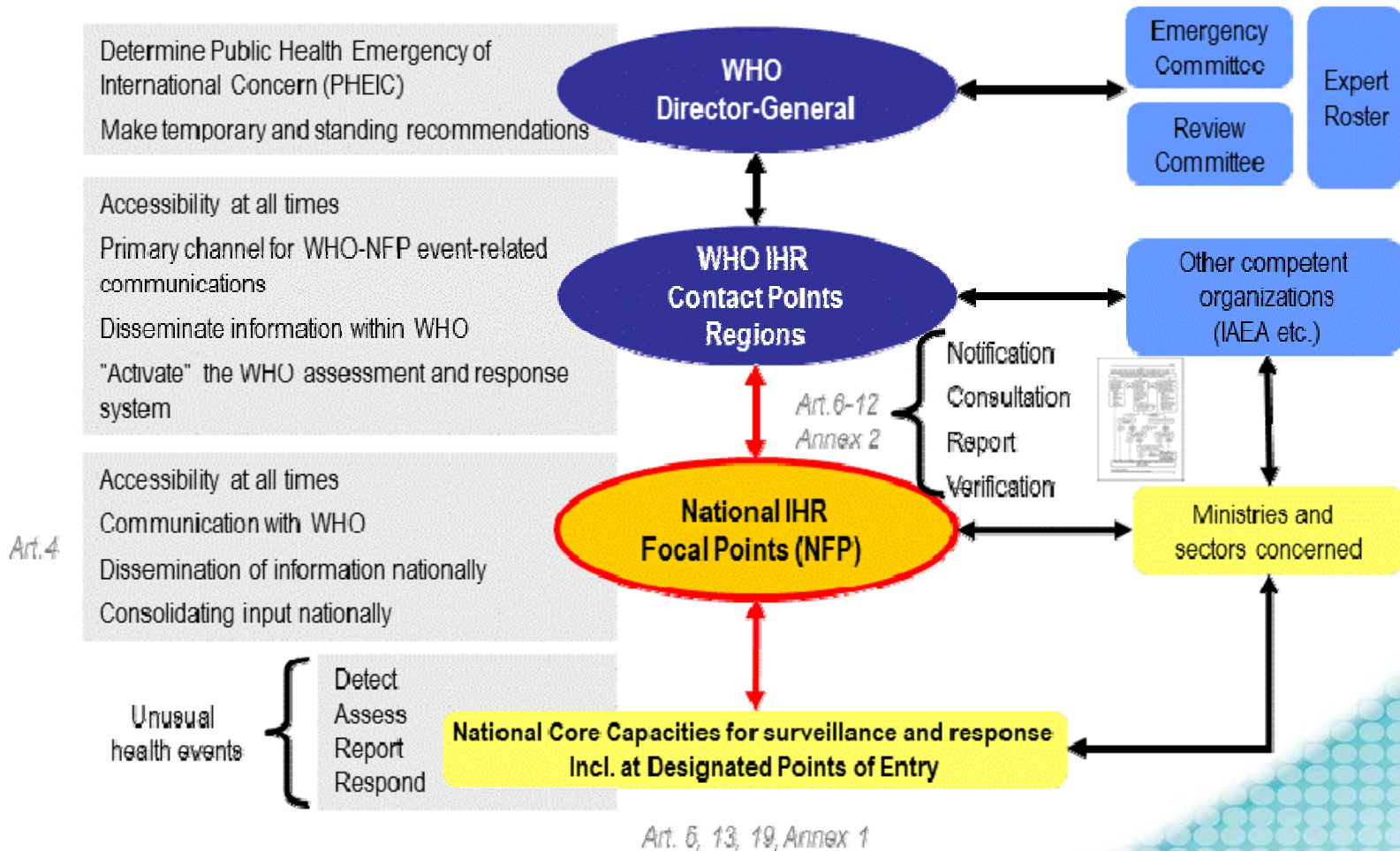
## Core Capacities



The interdependency of States Parties makes the Global Alert and Response System as strong as its weakest link

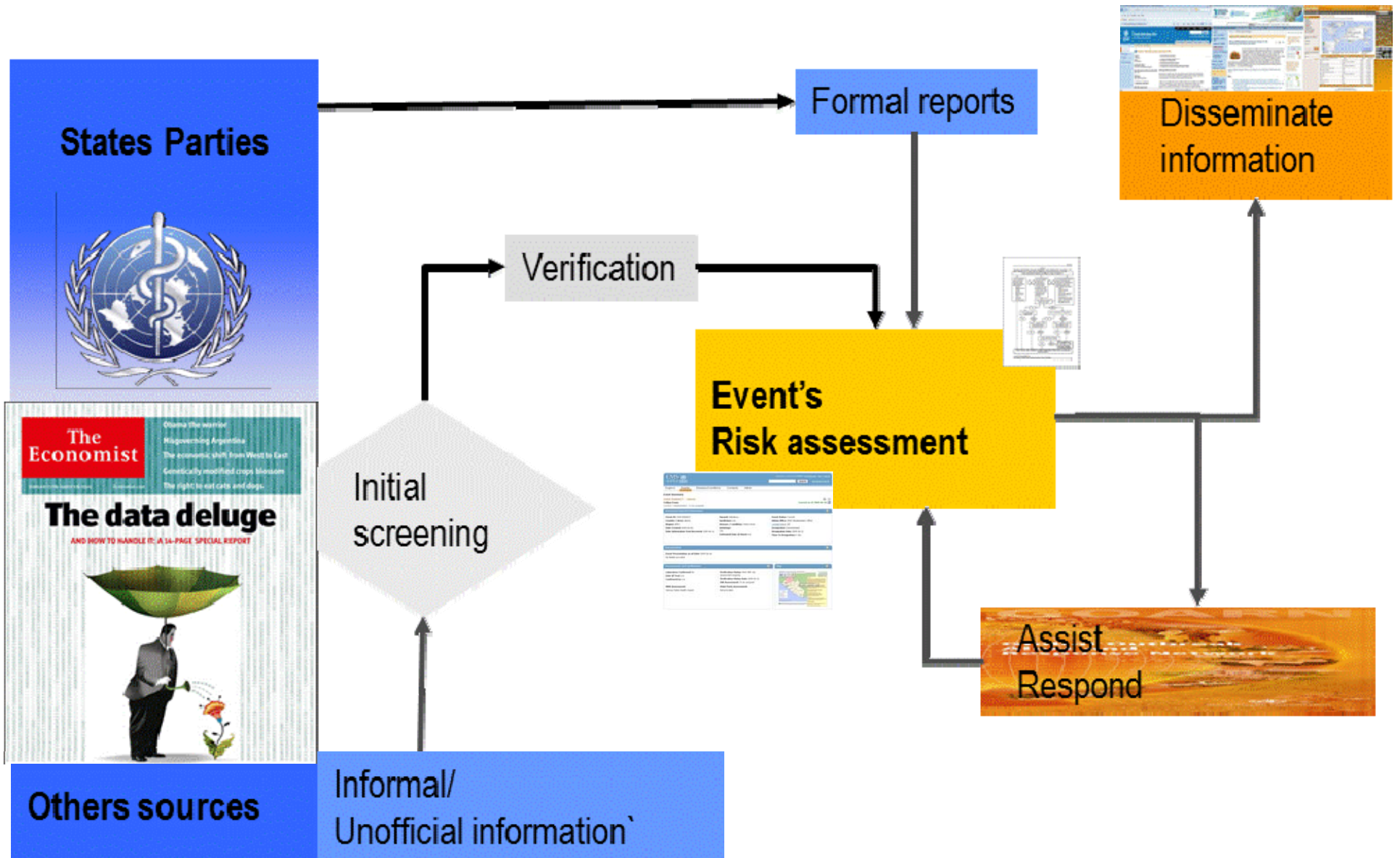


# IHR Operational Framework



**National IHR Focal Point - United States**  
 Department of Health and Human Services (HHS)  
 Assistant Secretary for Preparedness and  
 Response (ASPR)

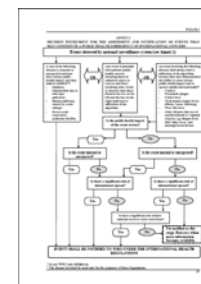
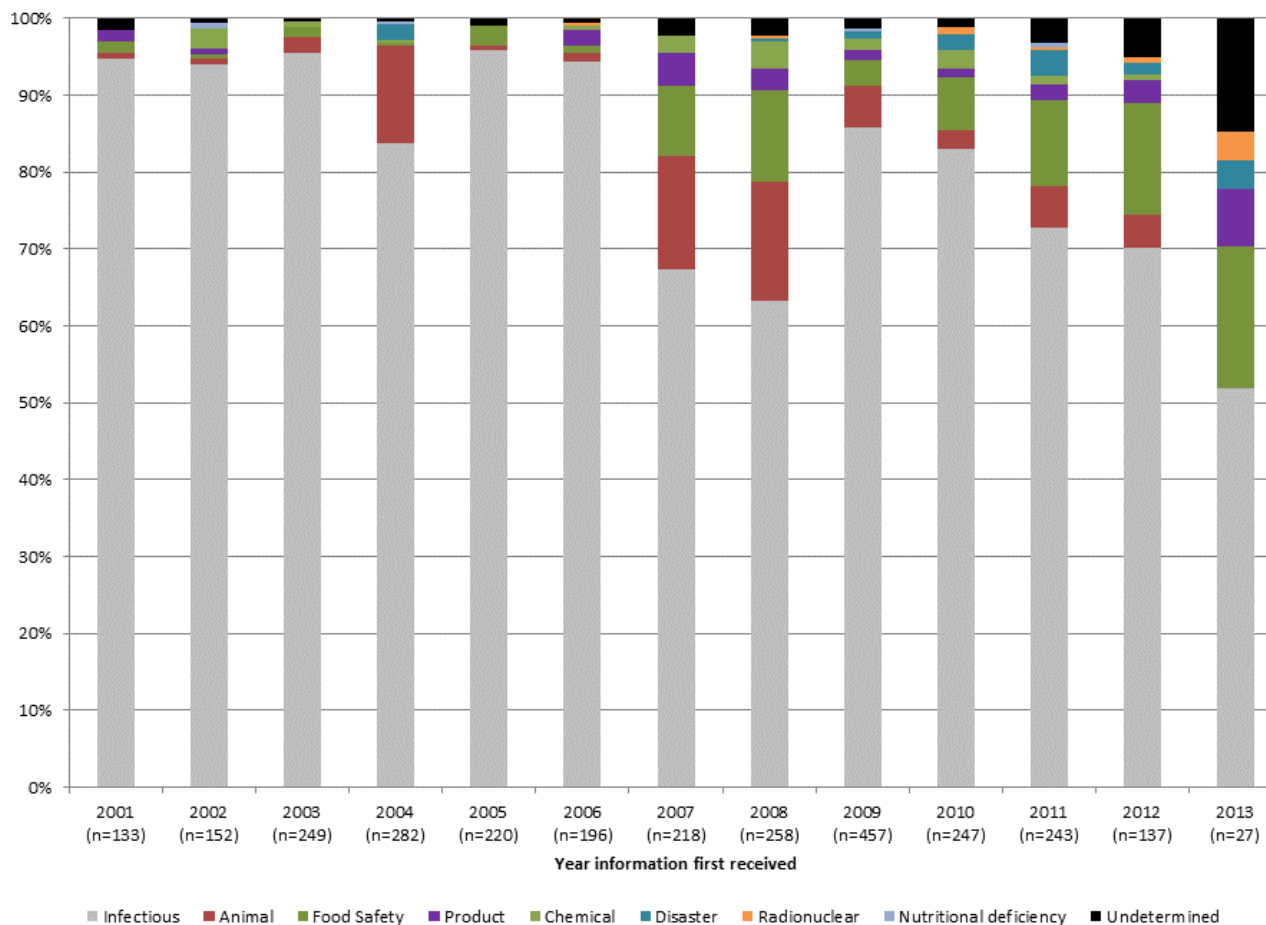
# WHO Global Alert and Response System





# Substantiated Public Health Events of Potential International Concern by Hazard

1 January 2001 - 1 June 2013  
(n=2,819; 592 (21%) in the Americas)

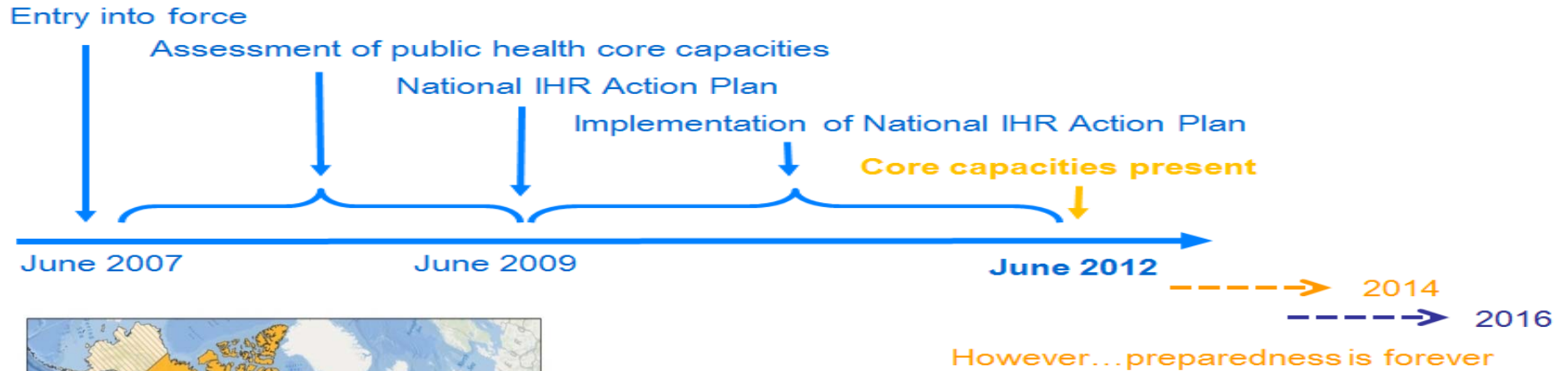


Annex 2

## Criteria for substantiated

- Serious Public Health Impact
- Unusual or Unexpected
- International disease spread
- Interference with international travel or trade

# Core Capacities



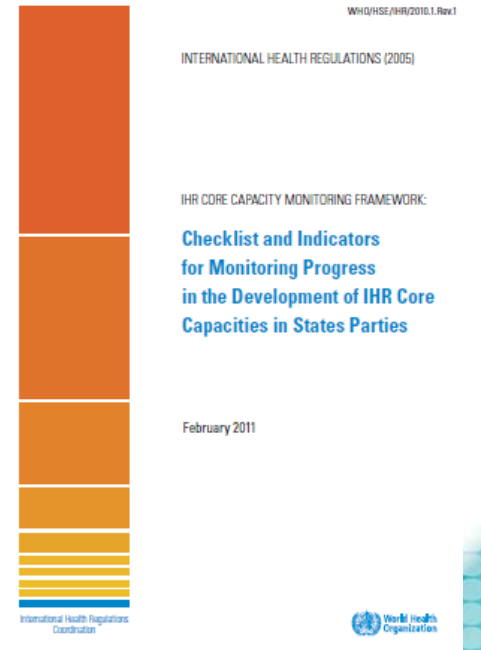
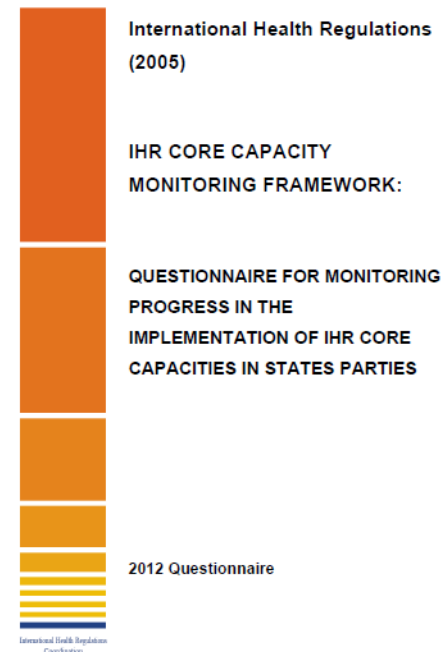
As of March 2013:

- Globally, 57% (110/194) States Parties granted two year extension, including 83% (29/35) States Parties in Americas

# Core Capacities

## WHO 2010 (rev. 2011, 2012)

1. National legislation, policy and financing
2. Coordination and NFP communications
3. Surveillance
4. Response
5. Preparedness
6. Risk communication
7. Human resource capacity
8. Laboratory
9. Points of Entry
10. Zoonotic events
11. Food safety
12. Chemical event
13. Radiation emergencies

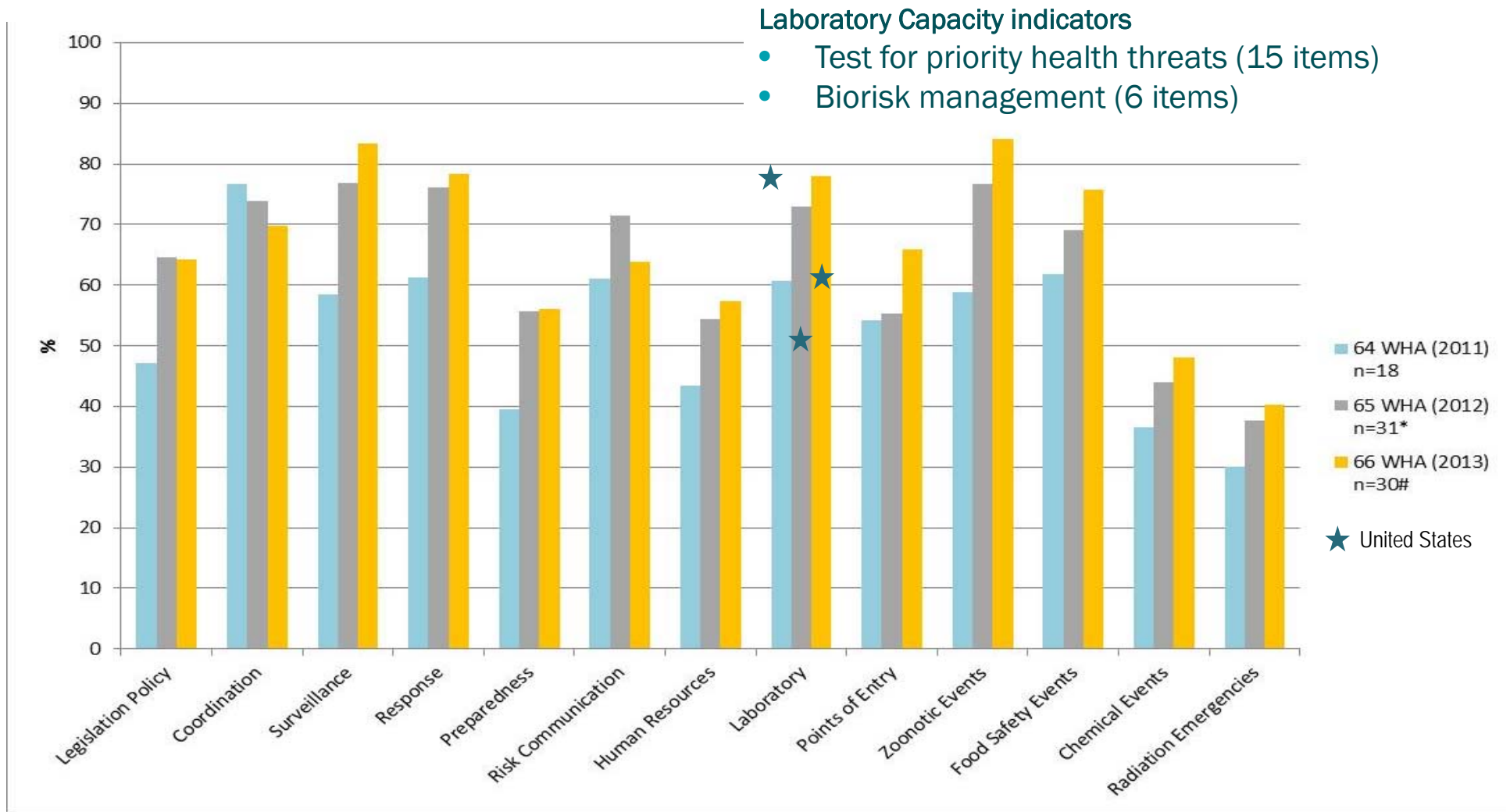




# Status (%) of Core Capacities in the Americas

## States Parties Annual Reports

### 64<sup>th</sup>, 65<sup>th</sup>, 66<sup>th</sup> World Health Assemblies



\* Information related to points of entry submitted by Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay, and Venezuela was in a format not allowing its conversion into the WHO format  
 # Information related to points of entry submitted by Argentina was in a format not allowing its conversion into the WHO format

# IHR and Laboratory - Challenges

- IHR text: “laboratory” , “specimens” , “ samples” mentioned 7 times
- No clear indications on laboratory requirements in terms of organization or regulations
- Not clear the extent to which laboratory capacity should be established domestically or outsourced
- Laboratory capacity spans across disciplines and sectors



# PAHO / WHO Approach to Laboratory Core Capacity Strengthening

1. Laboratory capacity for priority diseases

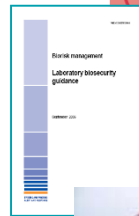
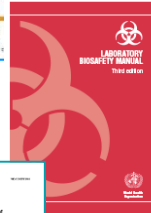
2. Quality Management

3. Bio-risk Management

4. Specimen collection and transport

5. Laboratory based surveillance

6. Networking



- Policy
- Regulations
- Human resources
- Infrastructure, equipment and supplies
- Access to resources
- Any event under the radar is as an opportunity (and a challenge)



# Learning the Same Language

## Networking and Public Health Events

- WHO Collaborating Centres – virtually cover all IHR Core Capacities
- Global Outbreak Alert and Response Network (GOARN)
- Disease and hazard specific global, regional, and sub-regional networks
  - SIREVA II - Sistema de Redes de Vigilancia de los Agentes Responsables de Neumonias y Meningitis Bacterianas
  - RELDA - Red de laboratorios de dengue de las Américas

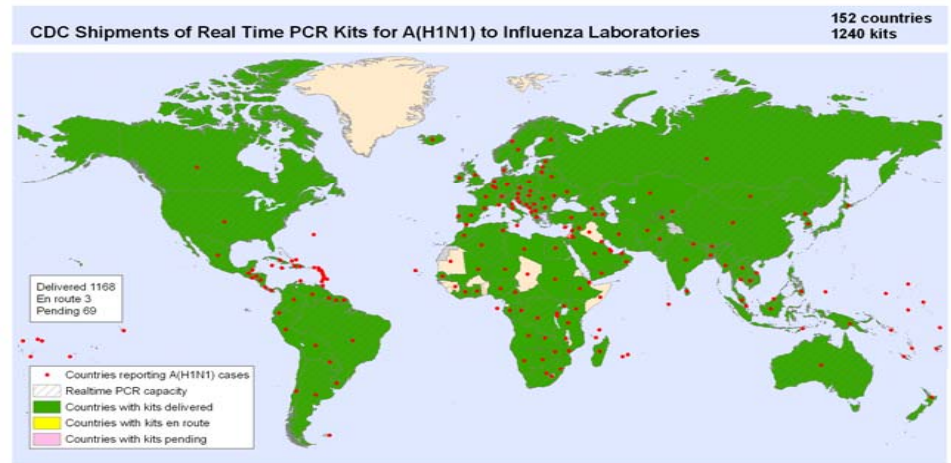
The screenshot shows the WHO Collaborating Centres Global database interface. The header includes the WHO logo and the text 'WHO Collaborating Centres Global database'. Below the header are navigation tabs for 'Home', 'Search', 'Reports', and 'Portal'. The main content area displays details for a specific center: 'Ref.No. [Initiator] USA-359 [AMRO]', 'Title of the centre: WHO Collaborating Center for Implementation of IHR National Surveillance and Response Capacity', 'Director / Head: Dr. Scott Dowell' with an email address 'sfd2@CDC.GOV', 'Institution: Division of Global Disease Detection and Emergency Response, Coordinating Office for Global Health Centers for Disease Control and Prevention (CDC)', and 'Address: 1600 Clifton Road, NE 30232 Georgia'. There are also fields for 'Town:' and 'Country:', and a 'Region:' dropdown menu. The footer shows 'Done' and 'Internet | Protected Mode: On'.

The screenshot shows the GOARN website. The header features the GOARN logo and the text 'Global Outbreak Alert and Response Network' along with the WHO logo. Below the header are navigation tabs for 'Home', 'About GOARN', 'Workspaces', 'Resources', and 'Contact us'. The main content area includes a navigation menu on the left with links for 'Events', 'Operations', 'Updates', and 'Calendar'. The central text describes GOARN as a voluntary association of about over 150 laboratories, national surveillance centres, and public health institutions in both developed and developing nations that have agreed to work together to coordinate the international response to infectious disease outbreaks. It also mentions that GOARN is coordinated by the WHO and provides a communications platform for members. The footer includes a disclaimer about protecting confidential information and a link for 'Additional Information'.

# Global Influenza Surveillance and Response System (GISRS)

## 2009 H1N1 Pandemic

- 17 lab experts deployed in countries in the Americas
- Most of countries were using IFI and viral culture, classical PCR
- Diagnostic kits for real-time RT-PCR sent by the WHO Collaborating Center at CDC
- CDC supported requests from NICs RT-PCR primers, probes and positive control

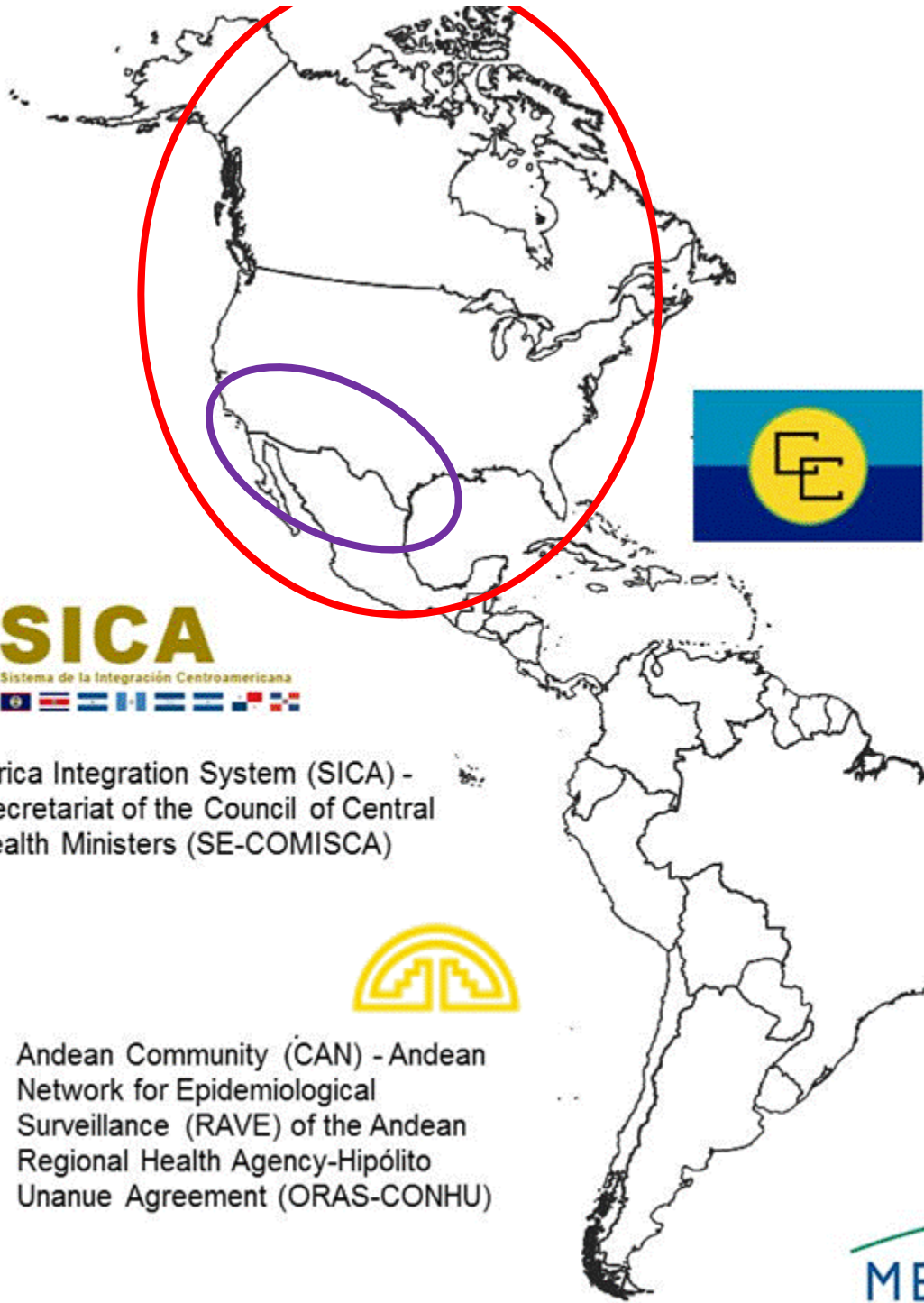


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Map produced: 12 May 2010

Data Source: World Health Organization  
Map Production: Public Health Information  
and Geographic Information Systems (GIS)  
World Health Organization

World Health Organization  
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Caribbean Community (CARICOM) -  
Caribbean Epidemiology Centre (CAREC)  
→ Caribbean Public Health Agency (CARPHA).



**SICA**  
Sistema de la Integración Centroamericana

Central America Integration System (SICA) -  
Executive Secretariat of the Council of Central  
American Health Ministers (SE-COMISCA)



Andean Community (CAN) - Andean  
Network for Epidemiological  
Surveillance (RAVE) of the Andean  
Regional Health Agency-Hipólito  
Unanue Agreement (ORAS-CONHU)



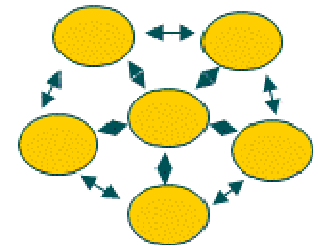
**UNASUR**

Union of South  
American Countries  
(UNASUR) -  
Technical Working  
Group for  
Surveillance and  
Response (GTVR)



Southern Common Market  
(MERCOSUR) - Inter-  
governmental  
Commission for the  
International Health  
Regulations (CIRSI) of the  
Working Group on Health  
(SGT-11)

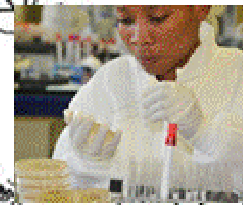




CARPHA - Caribbean Public Health Laboratory Network, 2010



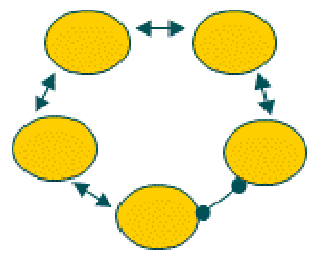
**SICA**  
Sistema de la Integración Centroamericana



REDLAB - Red Regional de Laboratorios Nacionales de Referencia, 2012



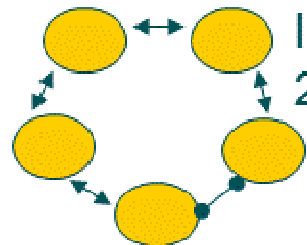
**UNASUR**



RINS - Red de Institutos Nacionales de Salud (RINS), 2009

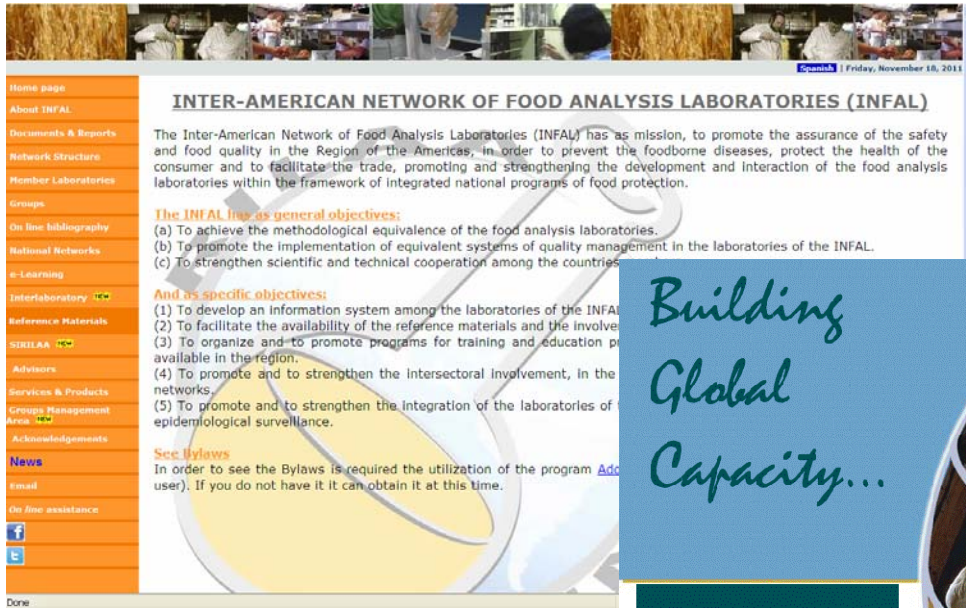


RAIS - Red Andina de Institutos de Salud, 2007





# Food Safety Related Laboratory Networks



**INTER-AMERICAN NETWORK OF FOOD ANALYSIS LABORATORIES (INFAL)**

The Inter-American Network of Food Analysis Laboratories (INFAL) has as mission, to promote the assurance of the safety and food quality in the Region of the Americas, in order to prevent the foodborne diseases, protect the health of the consumer and to facilitate the trade, promoting and strengthening the development and interaction of the food analysis laboratories within the framework of integrated national programs of food protection.

**The INFAL has as general objectives:**

- (a) To achieve the methodological equivalence of the food analysis laboratories.
- (b) To promote the implementation of equivalent systems of quality management in the laboratories of the INFAL.
- (c) To strengthen scientific and technical cooperation among the countries.

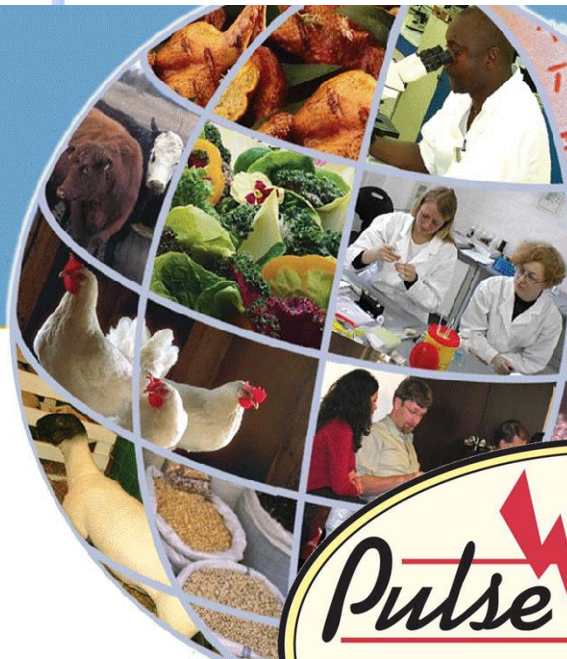
**And as specific objectives:**

- (1) To develop an information system among the laboratories of the INFAL.
- (2) To facilitate the availability of the reference materials and the involvement of the laboratories.
- (3) To organize and to promote programs for training and education programs available in the region.
- (4) To promote and to strengthen the intersectoral involvement, in the networks.
- (5) To promote and to strengthen the integration of the laboratories of epidemiological surveillance.

**See Bylaws**  
In order to see the Bylaws is required the utilization of the program [Add user](#). If you do not have it it can obtain it at this time.

INFAL - Inter-American Network of Food Analysis Laboratories

*Building  
Global  
Capacity...*



GFN - Global Foodborne Infections Network





## Zoonotic hazard

## PAHO/WHO Pan American Foot and Mouth Disease Center (PANAFTOSA)

The image shows two screenshots of the PANAFTOSA website. The top screenshot displays the 'LABORATORIO DE REFERENCIA DE OIE Y FAO PARA FIEBRE AFTOSA Y ESTOMATITIS VESICULAR' section, detailing the laboratory's mandate. The bottom screenshot shows the 'Acciones del arco' section, listing key activities such as research, capacity building, and coordination of interventions.



## Chemical hazard

## WHO Poison Centres Network

## Radiation hazard

## Latin American Biological Dosimetry Network

Argentina	ARN – Nuclear Regulatory Authority Buenos Aires, Argentina
Brazil	Instituto de Radioproteção e Dosimetria National Nuclear Energy Commission (CNEN) Rio de Janeiro, Brazil
Chile	Biodosimetry Laboratory. COHEN. Comisión Chilena de Energía Nuclear Santiago - Chile
Cuba	Biological Dosimetry Lab, Centro de Protección e Higiene de las Radiaciones Havana, Cuba
Peru	Biological Dosimetry Laboratory Instituto Peruano de Energía Nuclear (IPEN) Lima, Peru
Mexico	Instituto Nacional de Investigaciones Nucleares Toluca, Estado de México. Mexico
Uruguay	Instituto de Investigaciones Biológicas "Clemente Estable", Ministerio de Educación y Cultura Montevideo, Uruguay

# We Will Be Speaking the Same Language in 10 Years?



SIXTY-FOURTH WORLD HEALTH ASSEMBLY  
Provisional agenda item 13.2

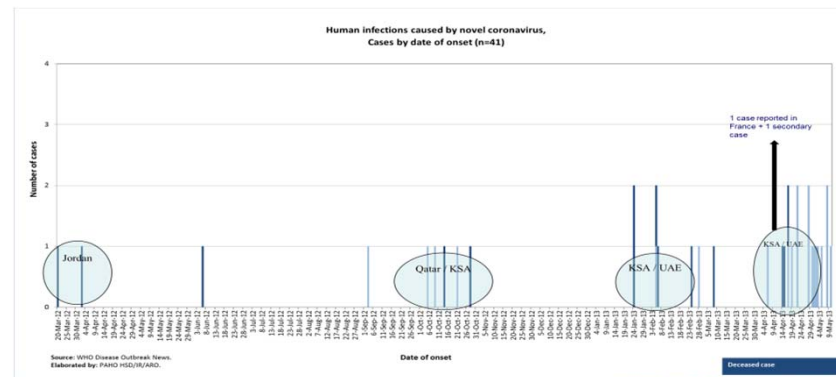
A64/10  
5 May 2011

- Metrics of the IHR
- Adequacy of the IHR and pace of evolving technologies
- Déjà-vu?
- Cultural shift

## Implementation of the International Health Regulations (2005)

Report of the Review Committee on the Functioning  
of the International Health Regulations (2005)  
in relation to Pandemic (H1N1) 2009

Report by the Director-General



Thank you

Roberta Andraghetti

Tel: +1 202 974 3129

E-mail: [andragro@paho.org](mailto:andragro@paho.org)

