#### **International Health Regulations (2005)**

**Update on implementation** 

**Monitoring & Evaluation System** 

WHO/EPR



# IHR is not a surrogate for national surveillance and response systems

- IHR is about <u>preventing the international spread</u> of diseases
- IHR is not about a global surveillance system
- But IHR seeks that all Member States be able to timely detect, assess, notify and report events and respond to public health risks and <u>public health emergency of</u> international concern (<u>PHEIC</u>)

# IHR (2005) core capacities requirements for surveillance and response

#### Community level and/or primary public health response level

 To detect events involving disease or death above expected levels, report to the local health personnel and implement preliminary control measures

#### Intermediate public health response levels

To confirm the status of reported events and implement control measures

#### National level (on a 24-hour basis)

- To assess all reports of urgent events within 48 hours and notify the WHO immediately through the national IHR focal point when required.
- To rapidly determine the control measures required to prevent domestic and international spread
- To provide direct operational links with senior decision makers and provide liaison with other sectors
- To establish, operate and maintain a national public health emergency response plan



#### **IHR Timeframe**

May 2005: World Health Assembly approves the

revised IHR

2007: Entry into force of the revised IHR

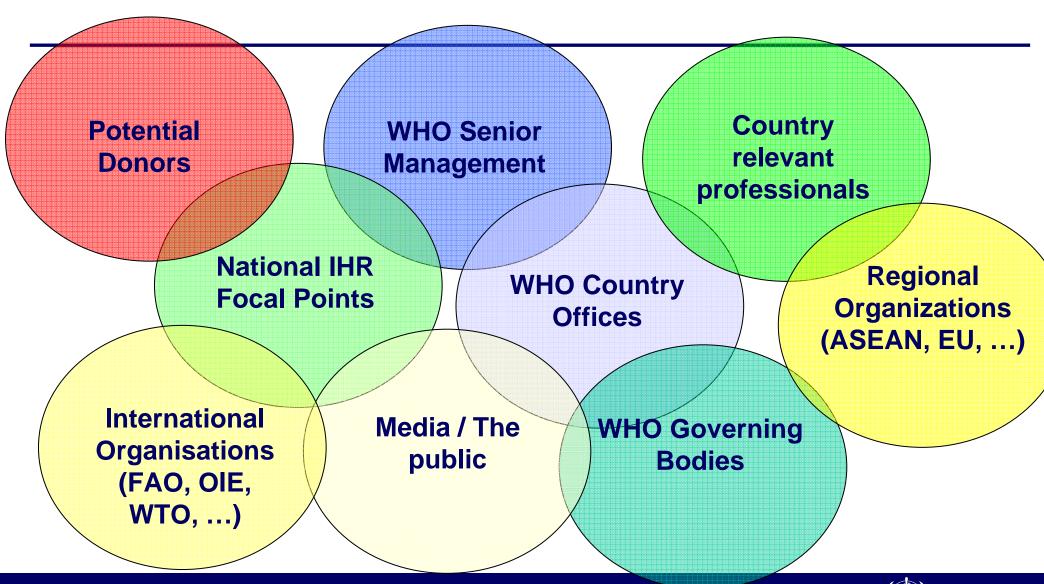
2009: All countries have assessed their level of core capacities

2012: All countries have reached a minimum required level of core capacities

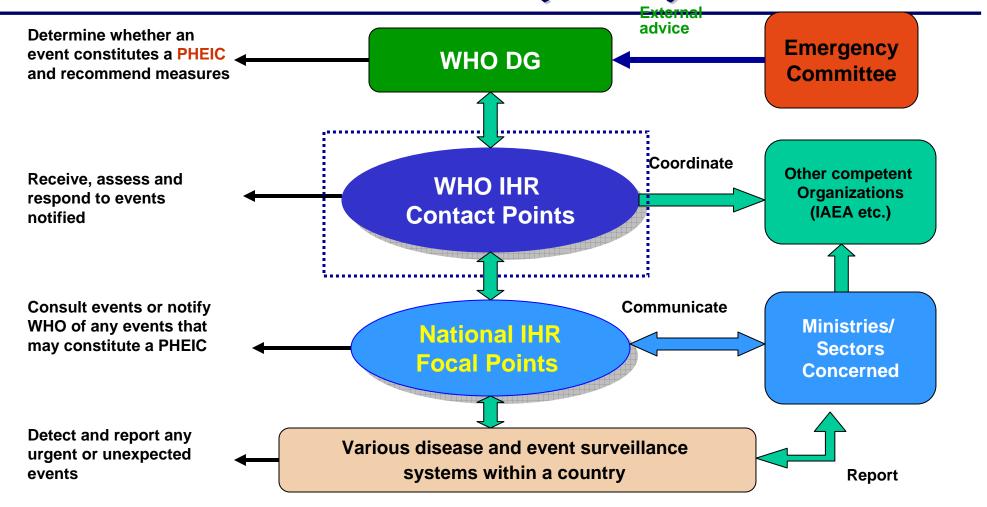
#### Elements for a WHO strategy

- 3 domains: Project management, WHO ARO, National Core capacity
- Build on existing
  - WHO alert & response operations
  - WHO (relevant) control programmes
     (e.g. GIP, ADE, ERI, IVB, POL, FOS, PHE ...)
  - Regional strategies for surveillance & response
     (e.g. joint WPRO/SEARO, PAHO, IDSR in AFRO & EMRO)

## Coordination: Many players to bring on board



# Event notification and determination under IHR (2005)



# M&E of IHR Implementation at country level

- M&E timeframe : 2007 2012
- M&E worldwide : 192 countries
- Multiple areas for M&E : events irrespective
- Routine Monitoring : e-routine monitoring, experience-based monitoring
- Performance Evaluation : Internal reviews, external reviews, exter



## IHR M & E: 5 Pillars System

#### Pillar 1

Policy Planning Financing

- 1 Legal framework for IHR
- 2 National Plan for PHEIC
- 3 Budget allocation for IHR

#### Pillar 2

IHR Infrastructures & Institutions

- 4 National IHR Focal Point
- 5 Focal Point for communication with Media
- 6 Points of Entry
- National Emergency Committee

#### Pillar 3

IHR Human Resources knowledge & skills

- IHR training and continuous education
- 9 Roster of professionals with IHR "qualification"
- 10 Active Participation in International IHR related Networks

#### Pillar 4

IHR Technical Resources

- 1 IHR Resources Mapping
- 12 Telecommunication Resources
- 13 Infection Control SOPs
- 14 Clinical Management guidelines for PHEIC

#### Pillar 5

IHR Systems and Services

- 15 Early Warning System
- 16 Verification and risk assessment system
- 7 Rapid Investigation & Response Team
- 18 Equipments and Stockpiles
- 19 Functioning laboratory system for PHFIC

WHO Resources

IDSR-APSED-EID-HMN

GOARN - EMS - E-Health- Global Atlas - Health Mapper - CSUN- GLADNet...



#### IHR Monitoring: a score-based system

Pillar 1. Policy - Planning - Financing

- 1.Legal Framework for IHR
- 2.National Plan for PHEIC
- 3. Budget Allocation for IHR

0: Not adequate

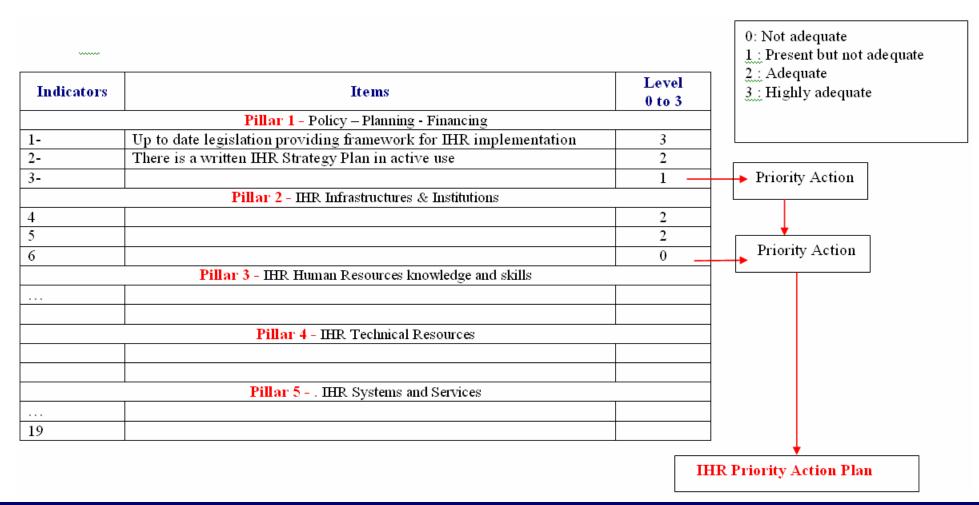
1: Present but not adequate

2: Adequate

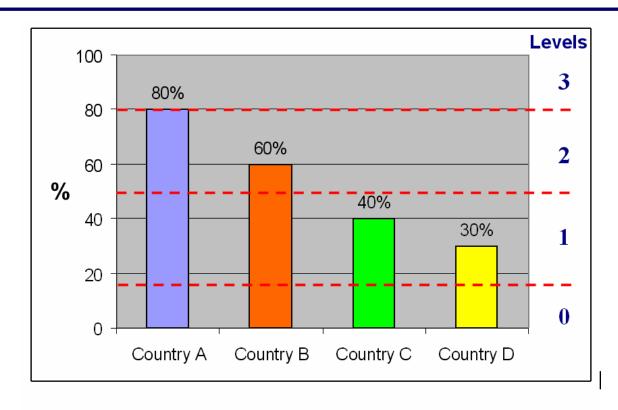
3: Highly adequate

					Routine Monitoring (2x/year) (using diverse ICT services when available)			
WHO	Core	Available	Items	Score	3	2	1	0
Resources	Capacities	Data Bases		0 to 3*1				
	1.Legal							
	Framework							
	for IHR							
	2. National							
	Plan for							
	PHEIC							
	3. Budget							
	Allocation							
	for IHR							

## IHR M&E System: IHR Priority Action Plan IHR PAP



#### IHR M&E System: IHR State Party Compliance

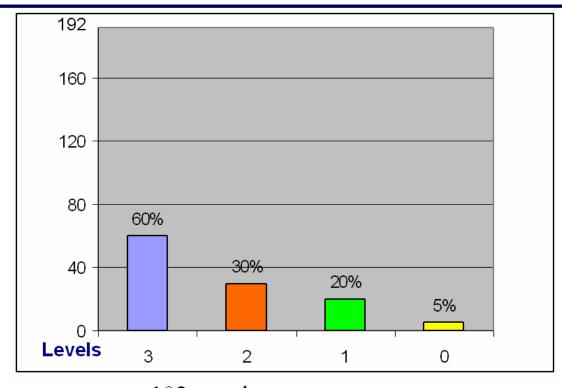


IHR compliance: 80%

Country A: IHR fully compliant: Level 3 Country B: IHR almost compliant: level 2 Country C: IHR needs improvement: level 1



## IHR M&E System: General overview of IHR implementation



192 member states

60% fully compliant

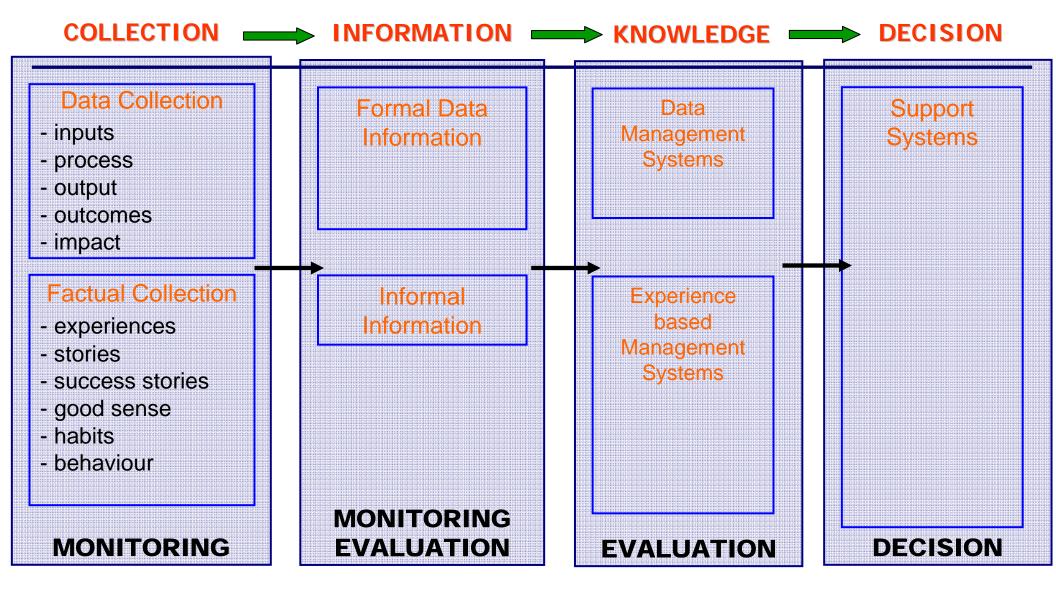
30% almost compliant

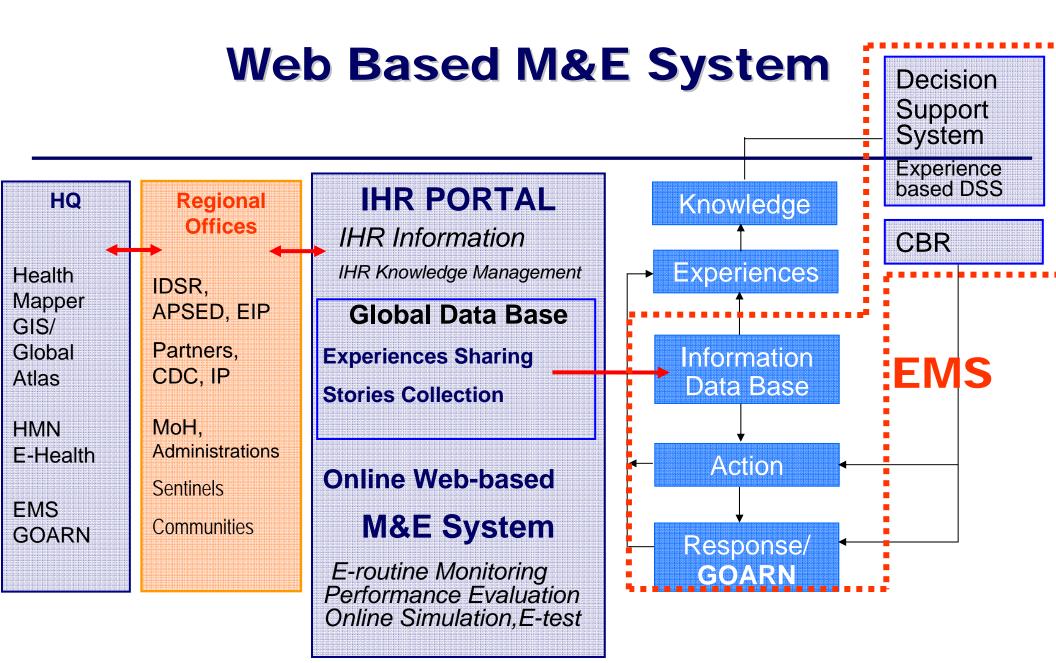
20% needs improvement

5% needs major improvements



#### **Data & Experience Based M&E System**





#### **IHR M&E Mapping**

Mapping epidemiological trends, resources and risks to support IHR

#### **IHR M&E Mapping**

#### List of IHR Requirements to be mapped

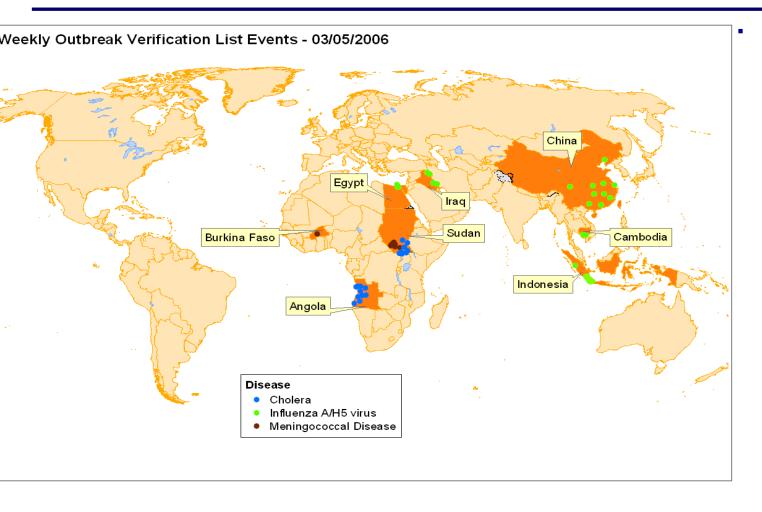
```
* NFP
```

- \* Points of Entry (airports, ports....)
- \* Hospitals, Labs
- \* Infrastructures (roads, bridges...)
- \* Stockpiles

\*



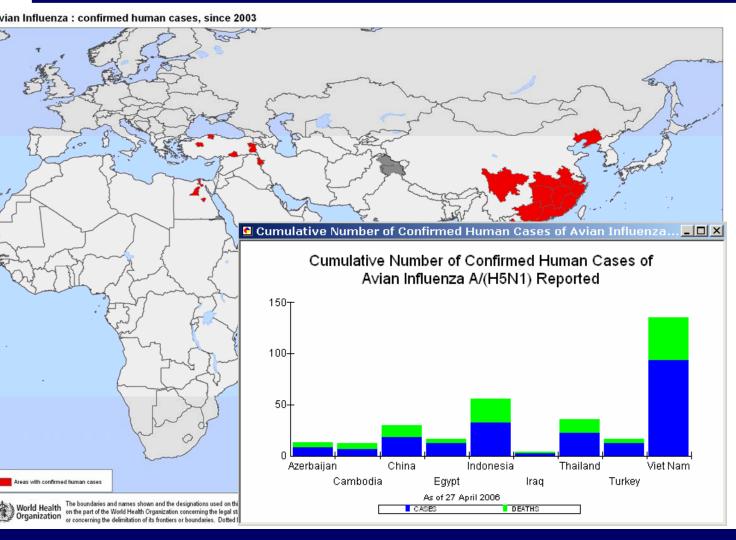
# Tracking and monitoring outbreak alerts globally



Weekly outbreak events

# Geographic spread of avian influenza

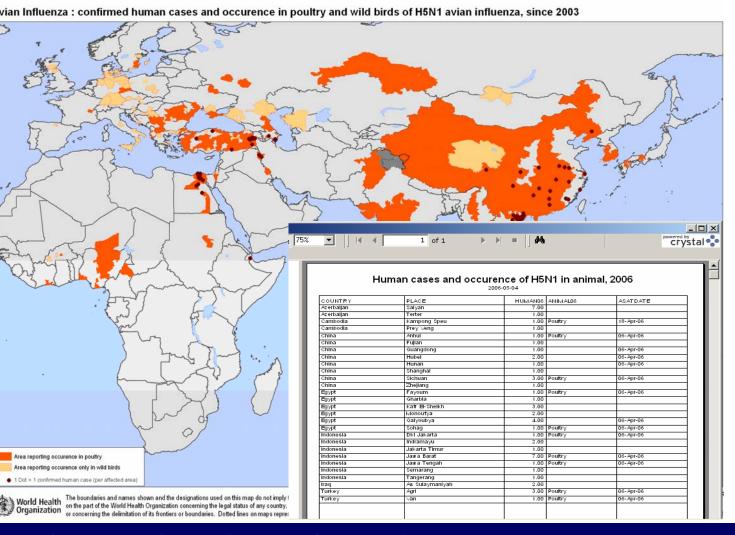




Avian influenza in human (yearly and cumulative geographical spread)

# Geographic spread of avian influenza

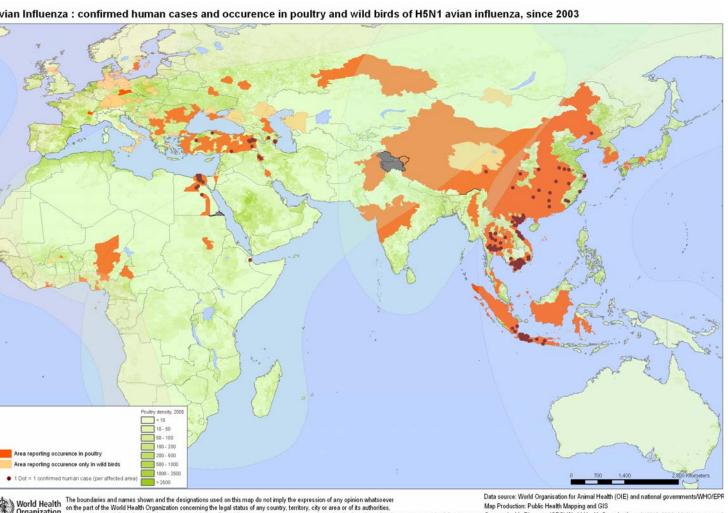




 Overlap of avian influenza in human and animal

## Mapping risk factors





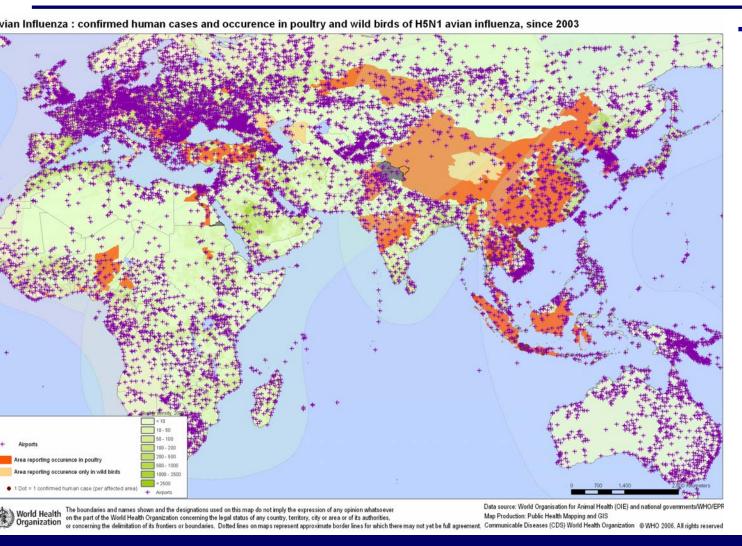
Mapping risk factors:

- poultry densities
- flight routes of migratory birds
- Lakes, etc.



### Mapping infrastructures



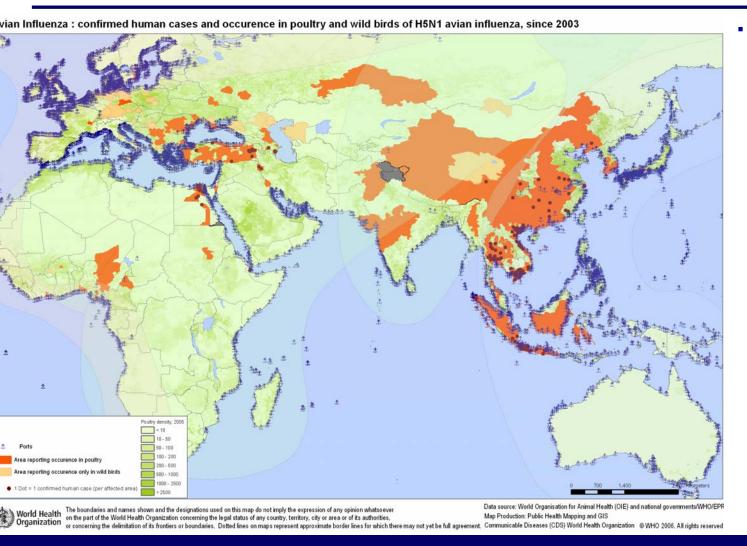


Global location of airports



### Mapping infrastructures

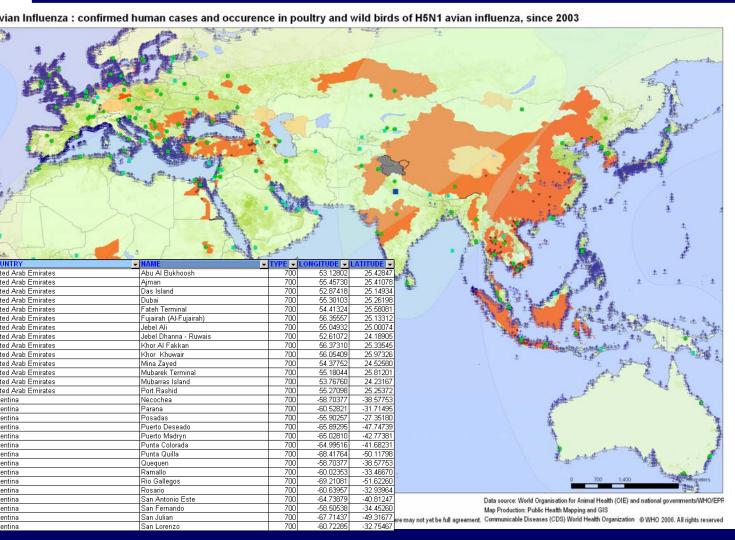




Global location of ports

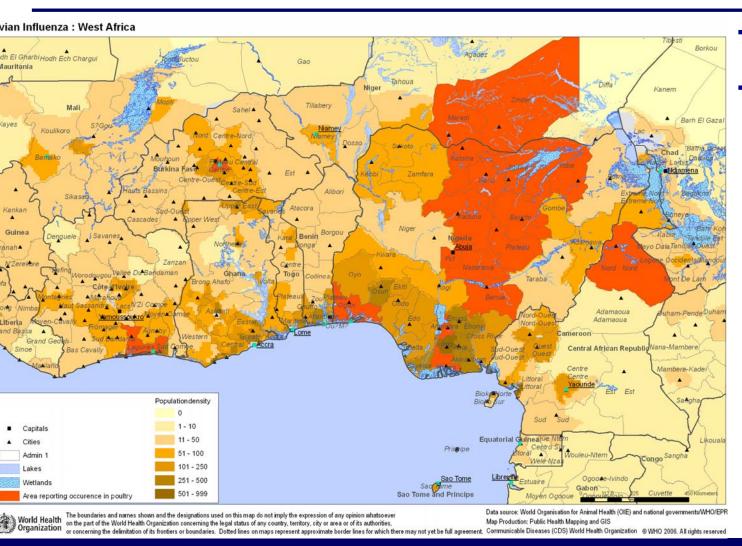
## Mapping resources for response





- Mapping regional and country offices
- Mapping laboratory network (national reference labs, diagnostic capacities)

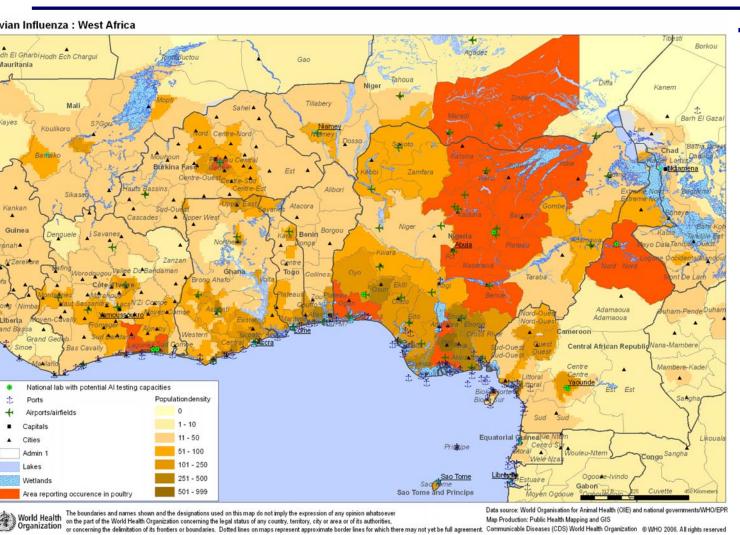
### Identifying areas at risk



- Identifying countries at risk of importation of the virus
- Pinpointing areas where surveillance should be intensified and identifying populations at great risk of exposure



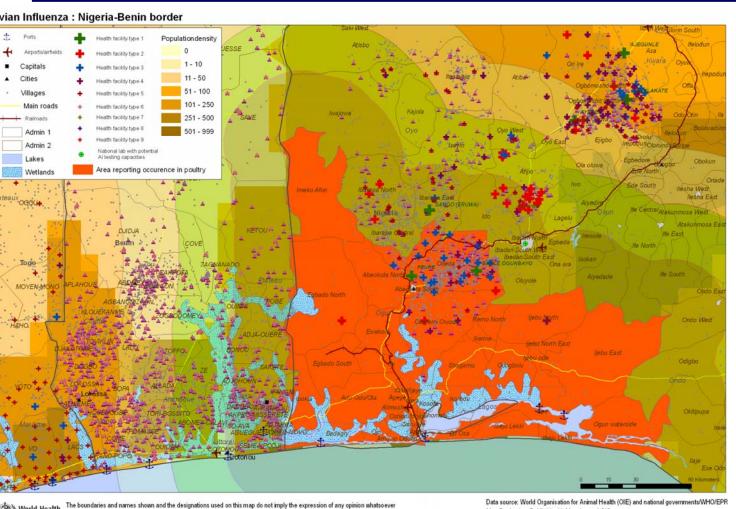
#### Identifying areas at risk and resources



Mapping airports, ports, national lab, etc.



## Local infrastructures for response



Identifying health services, schools, locating roads, railroads, workplaces, etc... to support targeting of drugs, equipment, surge capacity



Organization 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. Communicable Diseases (CDS) World Health Organization @ WHO 2006. All rights reserved

Map Production: Public Health Mapping and GIS

