# The WHO Strategy for managing zoonotic public health risks at the human-animal interface

Jørgen Schlundt
Department of Food Safety and Zoonoses, WHO
Paris 13.10.2009

# Outline

| | |
|---|---|
| Strategy | - preventing disease |
| Data | - action based on coordinated disease data |
| Systems | - global intersectoral action |
| Goals | - decreasing disease burden |

# Managing Risks at the H/A interface
# What does it mean?

- A strategy for managing public health risks at the human-animal interface *taking into account* the wider determinants of human disease resulting directly or indirectly from animals (domestic and wild) and their ecosystems
- A strategy including preventative, containment and control/elimination activities at all levels that will vary depending on disease and related risk
- A strategy requiring Working in partnership and collaboration to strengthen capacity at all levels of WHO and all levels of the chain of transmission of the diseases to reduce the risk of transmission of diseases from animals to humans taking into account the wider determinants

# Overall Objective - Capacity Building

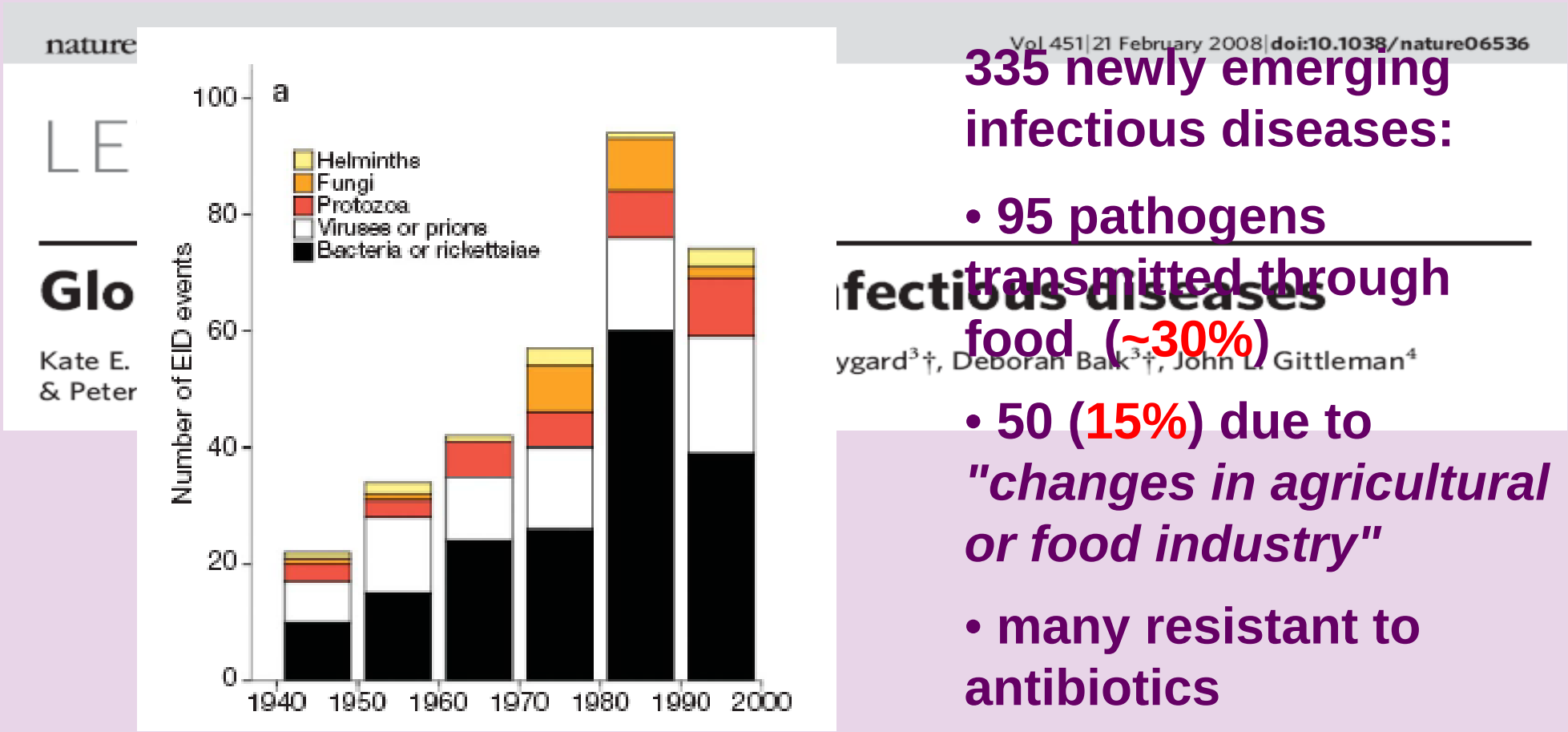
- Establishing risk-based strategic disease surveillance in humans and animals in accordance with internationally agreed standards to identify diseases at source.
- Strengthening international capacity to improve 'horizon scanning' of disease intelligence to support countries to respond early and control/eliminate zoonotic disease related events.
- Improving national disease control capacity at all levels (including the public and animal health, wildlife and food safety services) based on good governance compliant with IHR (2005) and OIE

# Specific Objectives and Outputs

- Develop national regional and global capacity in surveillance including the development of standards tolls and monitoring processes
- Strengthen national regional and international capacity in public and animal health to prevent detect and respond to disease outbreaks, including communication strategies
- Promote inter-agency and cross-sectoral collaboration and partnerships
- Strengthen emergency response capability, including a global rapid response support capacity
- Control exiting and potentially re-emerging infectious diseases
- Conduct strategic research

# Myth No 4:

## 'Foodborne diseases are getting less & less frequent'




335 newly emerging infectious diseases:

- 95 pathogens transmitted through food (~30%)
- 50 (15%) due to *"changes in agricultural or food industry"*
- many resistant to antibiotics

**Compounded by effects of climate change**

# Attributable Fractions
# Salmonella Source Account

Registered human cases

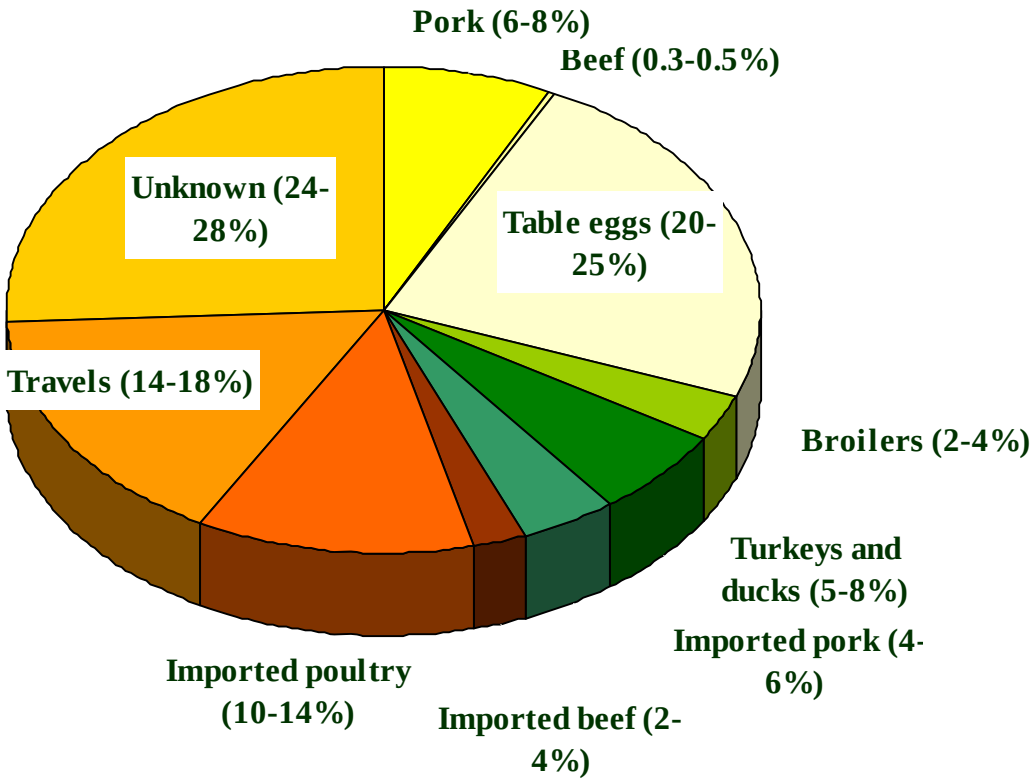
- Sero-, phage- & DNA types

Prevalence in food animal reservoirs

- Sero-, phage- & DNA types

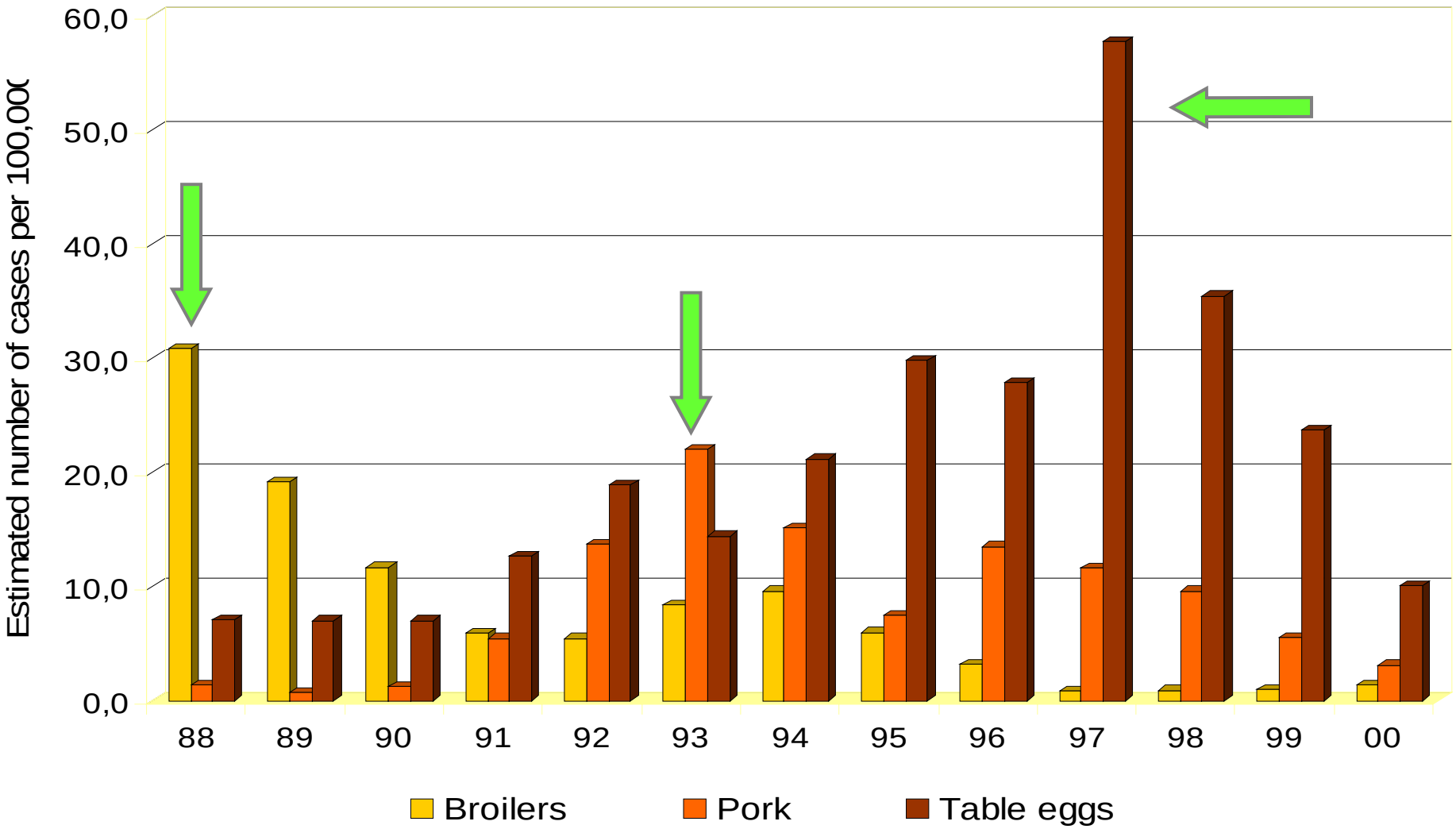
Comparison of types

- Certain types almost exclusively isolated from single sources
- Other types ascribed to source proportionally to indicative types



# Attributable Fractions in interventions

## Estimated primary sources of human salmonellosis - DK



# *Salmonella elimination*

is a realistic possibility

through science-based action plans

**<u>Elimination does not mean eradication</u>**

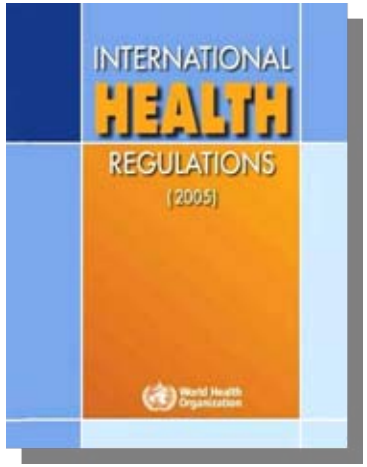
**But moving from 40% of chicken to less than 1 % of chicken infected eliminates a significant number of human cases**

# WHO action to prevent global outbreaks NEW (and better) International Health Regulations (IHR)

- Old IHR only covered Yellow Fever, Cholera and Plague
- New IHR extends the WHO coordinated public health emergency system to include *all public health emergencies of international concern* - including foodborne emergencies
- New IHR entered into force June 2007
- All WHO Member States are now obliged to declare public health emergencies of international concern to WHO

# International Regulations governing zoonotic diseases

WHO: International Health Regulations
http://www.who.int/csr/ihr/en/



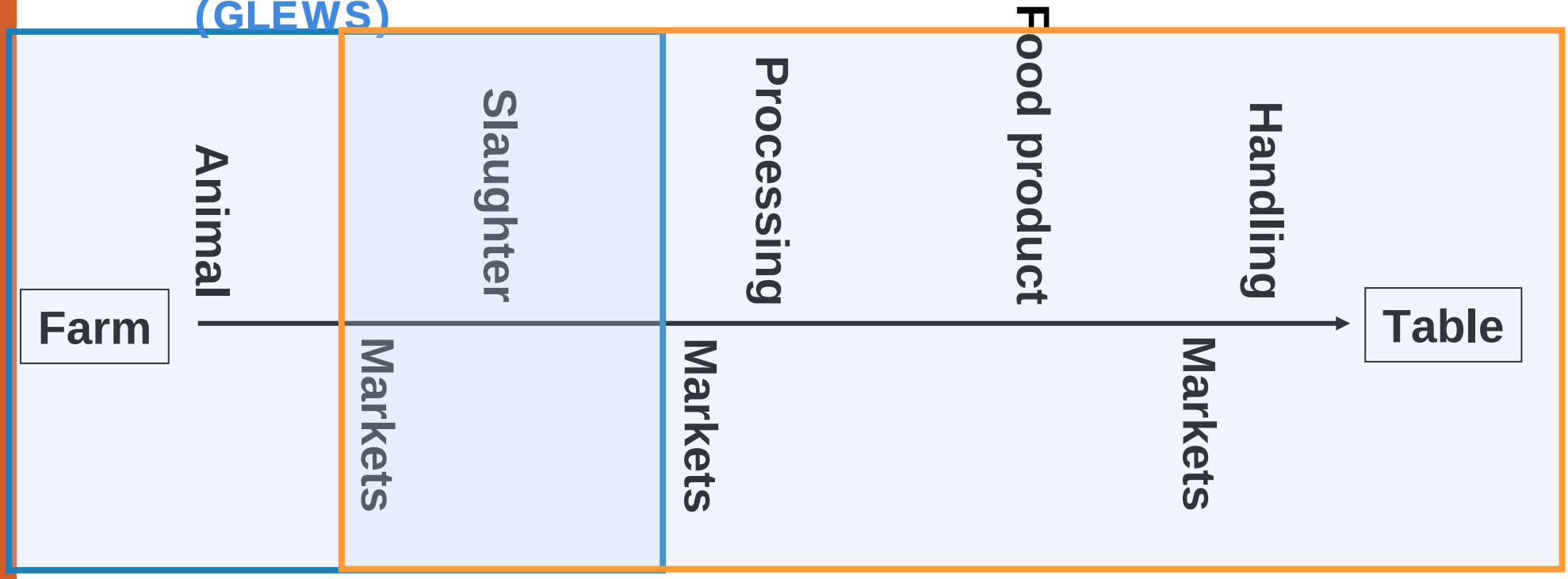

OIE: Terrestrial Animal Health Code
http://www.oie.int/eng/normes/Mcode/en_sommaire.htm

# Farm to Table – the Human Animal Interface

## Existing international mechanisms for information sharing

**Global Early Warning System for Major Animal Diseases, including Zoonoses (GLEWS)**

**International Food Safety Authorities Network (INFOSAN)**



# Global Early Warning System for Major Animal Diseases, including Zoonoses (GLEWS)

GLEWS: formalized FAO/ OIE/ WHO initiative coordinating the alert mechanisms of FAO, OIE and WHO enabling sharing of information and assessments.

An early warning system that links human and animal health systems

Desired outcome:

Avoided or decreased zoonotic disease burden

Triggers action – using animal disease information for human health

Timely, information driven decision making

Coherent messages from participating organizations

# Flow of information in GLEWS

**Global transboundary perspective**


**Regional**

Regional Offices | Regional Representations | Regional Offices

**National**

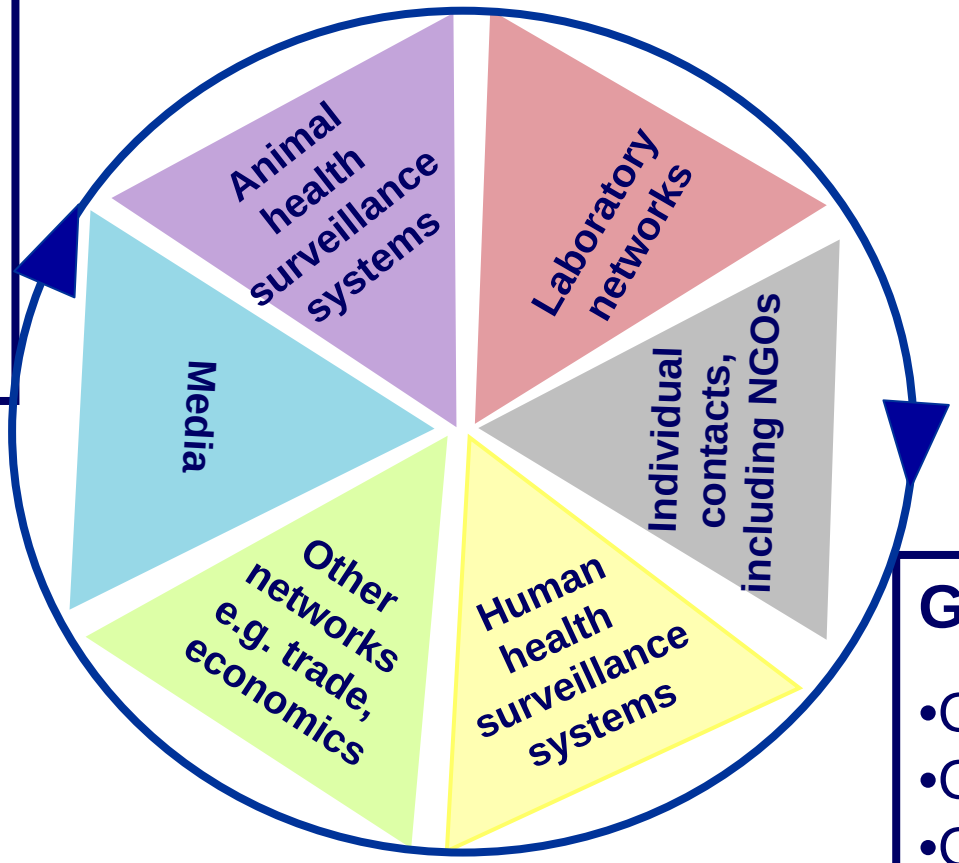
WHO Country Offices | OIE Delegates, CVO | FAO Country Offices

National Authorities

# What feeds GLEWS?

**Types of alert data**

- Rumour
- Suspected
- Confirmed




**GLEWS**

- Outbreak alert
- Outbreak verification
- Outbreak assessment

**diagram not all inclusive*

# Vision and Goal

- Vision: a world capable of preventing, detecting, responding to and controlling /eliminating public health risks attributable to zoonotic diseases

- Goal: to minimize the impact on health and economy of diseases originating at the human-animal interface by preventing, eliminating or eradicating zoonotic disease originating from direct or indirect contact with domestic and wild animals, their products and environment

# Where do we want to go?

- Significant public health risks are attributable to zoonotic diseases
- Zoonotic diseases are cross-sectoral in nature
- Collaboration between veterinary and human health sectors has been poor
- We know that many problems could have been avoided
- We know that humans do not need to be sentinels for animal disease
- We know that most of these disease can be signifcantly reduced in all countries
- So – lets start doing it!