

International Regulations on Food Safety

Gyanendra N. Gongal
Communicable disease
Surveillance and Response (CSR)

Outlines of presentation

- Introduction
- Basis of international regulations on food safety
- Major challenges
- SPS
- Codex activities
- IHR (2005) and INFOSAN
- Conclusion

Introduction

- Food may become a silent vehicle for spreading pathogens and chemicals across borders
- **Same food for all**, i.e. mass production and mass distribution
⇒ Potential risk of mass illnesses, intoxications
- Regulatory mechanism is required to protect consumers ⇒ **Safe food for all**

Basis of international regulations for food safety

- Agreement on Agriculture (AoA)
- Agreement on the Application of Sanitary and Phytosanitary Measures (*SPS Agreement*)
- Agreement on Technical Barriers to Trade (*TBT Agreement*)
- International Health Regulation (2005)

Tools to manage food safety

- Risk assessment (RA)
- Hazard Analysis and Critical Control Points (HACCP)
- Good Manufacturing Practices (GMP)
- Good Agricultural Practices (GAP)

International partners



- Codex Alimentarius Commission (CAC)
- World Health Organization (WHO)
- Food and Agriculture Organization (FAO)
- World Trade Organization (WTO)
- World Organization for Animal Health (OIE)
- International Plant Protection Organization
- Convention on Bio Diversity (CBD)

Major challenges

- Non-mandatory (Codex, SPS)
- Lack of integration of food laws and regulations in the overall legislative system
- Food Safety Regulations are divided among multiple government Agencies
- Regulatory system is weak and enforcement is particularly difficult
- Food safety regulation in developing countries tends to be reactive
- Predominance of industrialized countries in codex standard setting
- Informal food production and distribution sector
- Lack of basic infrastructure, technical capacity and surveillance
- Food-borne outbreaks are difficult to identify and control

SPS Agreement

- Food Safety Issues - CAC
- Animal Health - OIE
- Plant Health - IPPC

TBT Agreement

- Food Quality Issues (composition, nutrient fortification, special diet)
- Food Labelling Issues (country of origin, ingredients, allergens, GMO, additives, irradiation)
- Methods of Analysis and Sampling

Codex standards

- Codex standards and related texts have since 1995 become international benchmarks for harmonization under the SPS and TBT Agreements of WTO
- Reference by policy-maker and regulators

Codex Standards and SPS agreement

For food safety, the SPS Agreement refers to standards developed by Codex in the following areas:

- codes and guidelines of hygienic practice
- contaminants
- food additives
- methods of analysis and sampling
- veterinary drug and pesticide residues

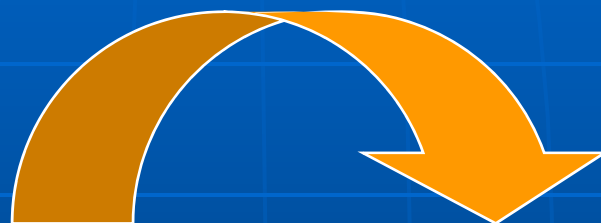
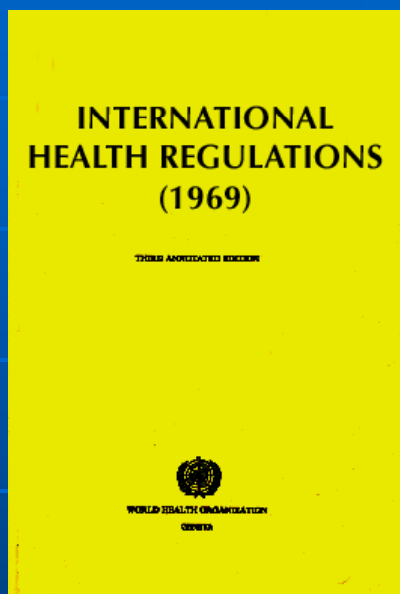
Actions taken by Codex

- Strengthened the role of science in standards development and decision making;
- Developed the principles of risk analysis for application across all relevant Codex Committees and for guidance of member governments
- Reforming structures to make the organization more efficient and responsive to members needs and priorities
- Simplifying standards to focus on provisions essential for health protection and promotion of fair trade;
- Has developed risk analysis principles for guidance of Codex and members;
- Reviewing the criteria for establishing work priorities (General Principles Committee).

Actions required at the national level

- Define national priorities in terms of food control and regulation (National legislation, administrative structures, industry food safety and quality assurance problems and needs);
- Support international standards development through participation in relevant Codex Committees to the maximum extent possible;
- Use standards and related texts established by Codex to the maximum extent possible and support international harmonization;
- Strengthen national structures for Codex (National committees, Contact Point functions, consultative arrangements and policy framework).

International Health Regulations 2005

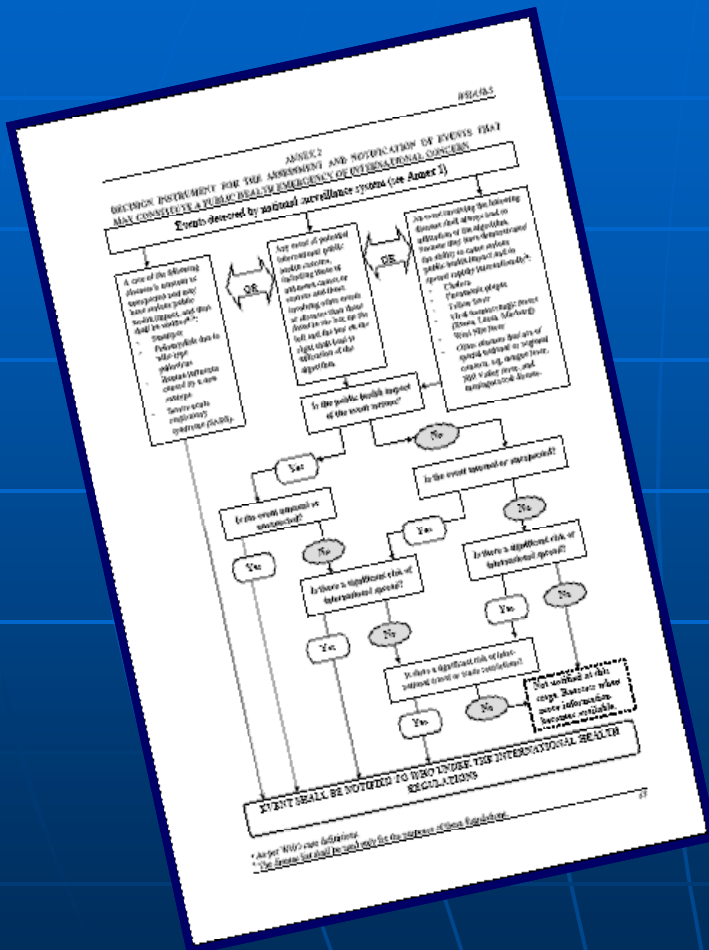


From three diseases to all public health events

From passive to pro-active using real time surveillance/evidence

From control at borders to detection and containment at source

Requirements, International Health Regulations (2005)



- Strengthened national core capacity for surveillance and control including at border posts
- Mandatory reporting of possible public health emergency of international importance, and of four specific diseases: SARS, smallpox, avian influenza and polio
- Collective, pro-active global collaboration for risk assessment and risk management
- Monitoring of implementation by the World Health Assembly

Case study – E.coli 0157:H7

- Few days ago, the country XYZ experienced an E. coli O157:H7 outbreak involving fresh, bagged spinach with reported 205 cases of illness including 104 hospitalizations, 31 cases of kidney failure and 3 deaths.
- Primary distribution of the product to three countries was confirmed and another country received the product through secondary distribution.
- You represent the national food safety authority responsible for risk assessment of all food safety related public health events. As your country is one of the States Parties who is under the International Health Regulations, **you now need to assess 4 criterion:**

- 1 – Seriousness of the public health impact**
- 2 - Unusual or unexpected nature of the event**
- 3 - Significant risk of international spread of disease**
- 4 - Significant risk of international trade or travel restrictions**

Decision making and response: International Health Regulations (2005)

Public health risk reporting from WHO
Alert & Response Network

Public health risk
reporting by countries

Decision-tree analysis to determine if of urgent
international public health importance

NO

National
containment
of public
health risk

National
containment
of public
health risk

YES

Collaborative risk-based
public health measures
identified and managed
pro-actively by WHO

INFOSAN – Proactive?

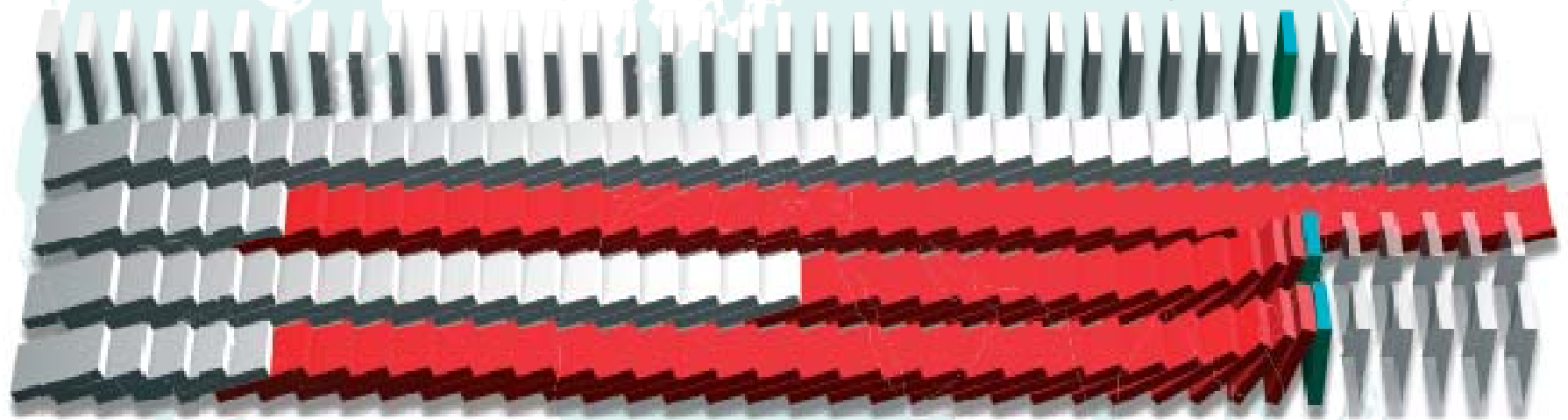
A global network of national food authorities that...



- Promotes the exchange of important food safety information globally
- Responds to international food safety events
- Helps countries strengthen their capacity to manage food safety risks with a goal of preventing foodborne disease

As of today, there are 169 country members of INFOSAN

Production → Processing → Transportation → Storage → Consumption



Food-chain: Food travels from farm to consumers



Contaminated food reaches the consumer

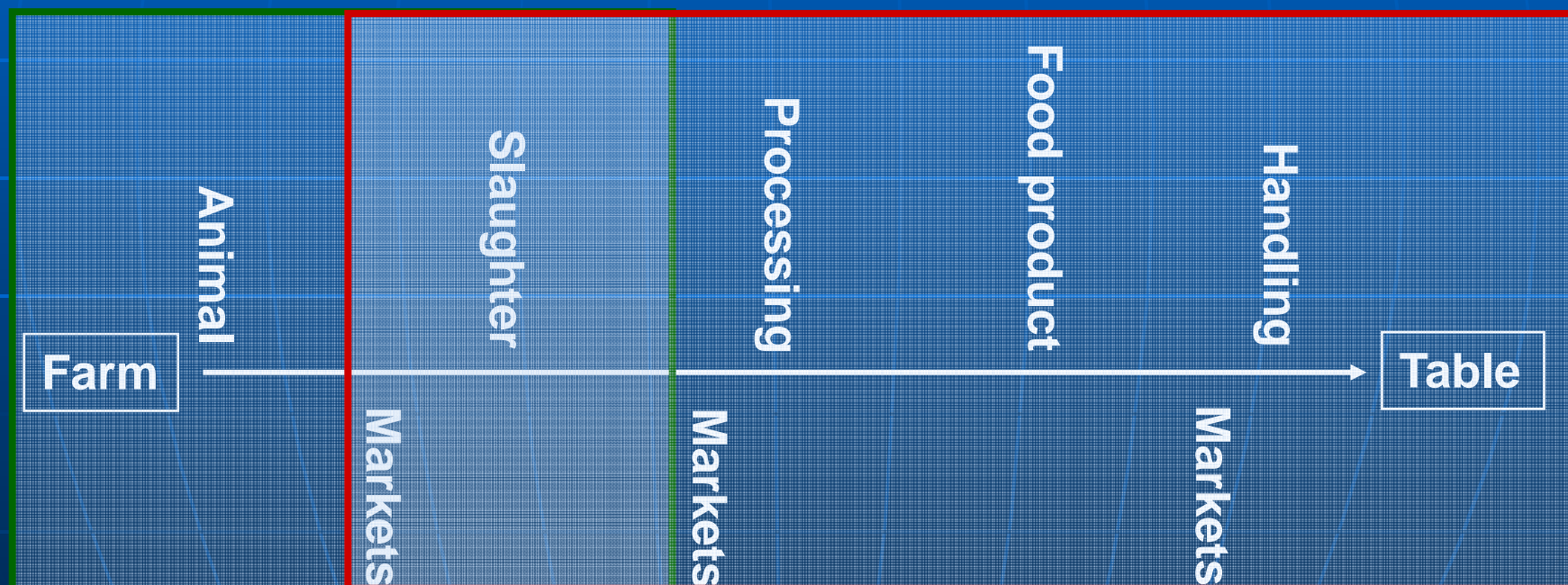


Activation of INFOSAN stops the spread of contaminated food

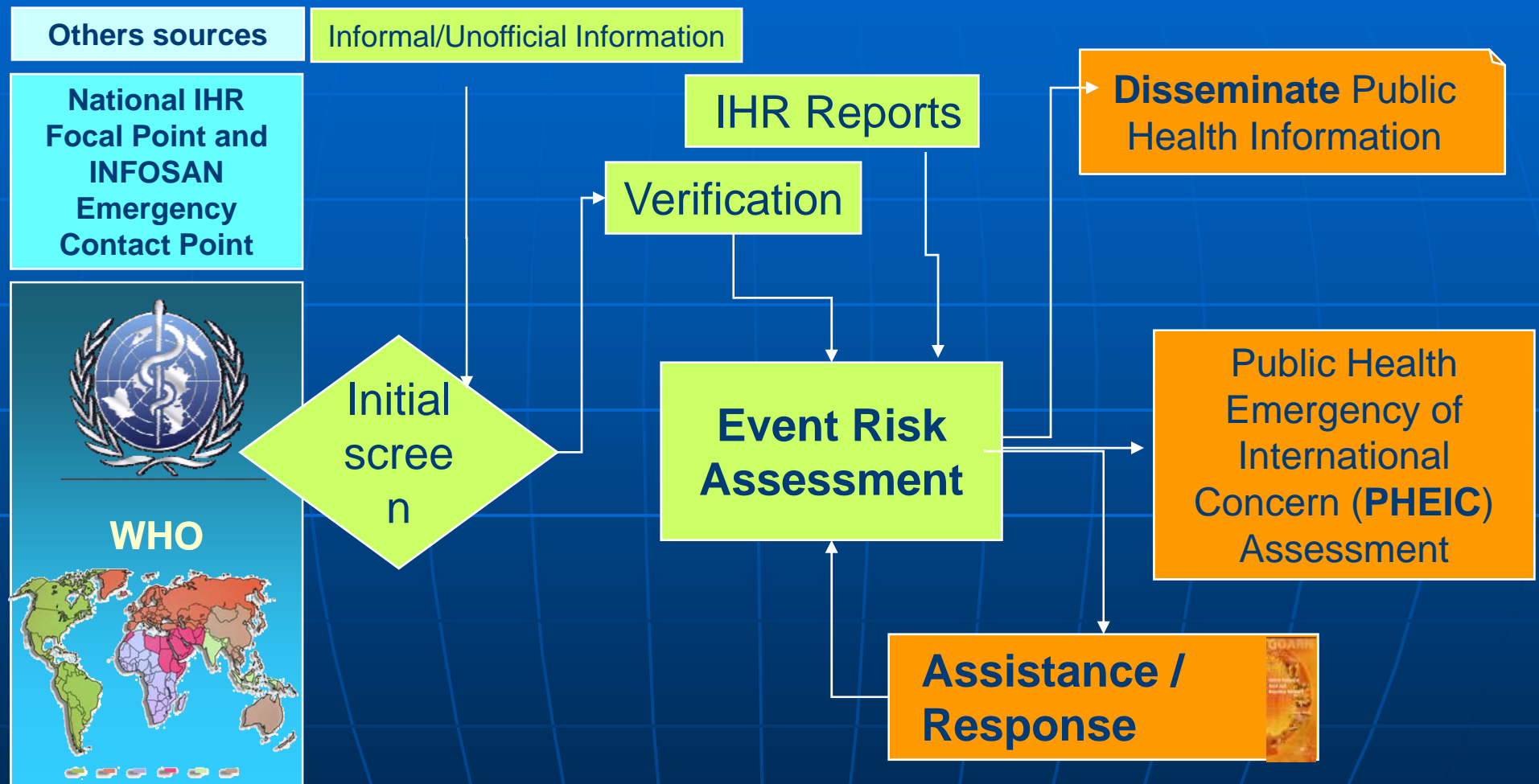
Farm to Table Information Sharing

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

International Food
Safety Authorities
Network (INFOSAN)



The International Health Regulations and INFOSAN



Examples of INFOSAN Emergency ALERTS

2005 *Salmonella* in powdered infant formula from France to 13 countries

- Most countries reported that they received official info from INFOSAN only

2006 *Norovirus* in oysters from Korea to several countries

- The country reported that they received official info from INFOSAN only

2006 *E. coli* 0157 in spinach from USA to all 150 member countries

- USA using INFOSAN to inform other countries receiving secondary distribution

2007 Melamine in “rice protein-enrichment” for pet food – export from China

- INFOSAN warning all countries of potential (wrongful) use in human food

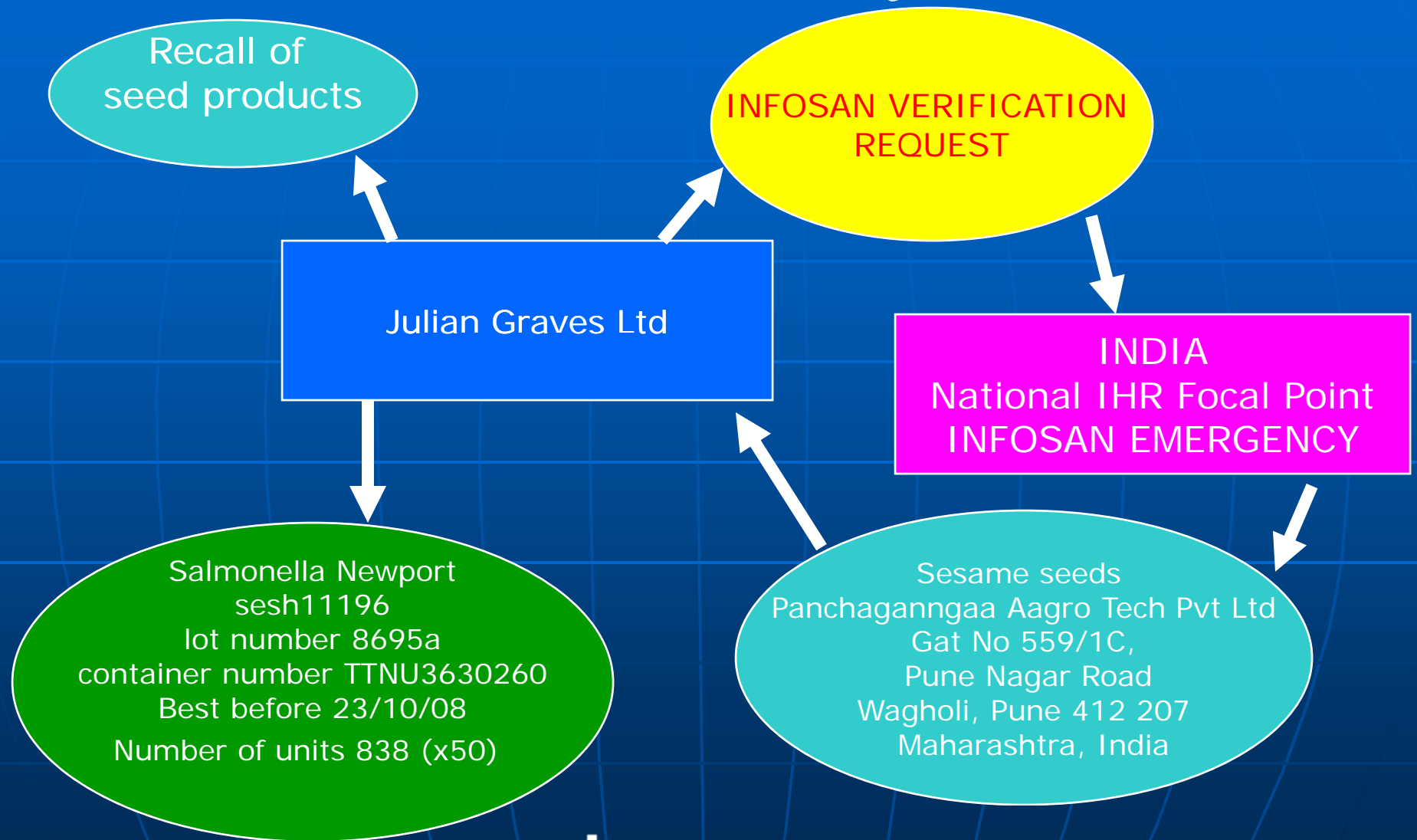
2007 *Salmonella* in snack-food – export from USA

- INFOSAN warning all countries of because of potential internet sales affecting many countries

2007 *Shigella* in baby corn – export from Thailand

- INFOSAN warned all importing countries

Food Alert Cycle



11/5/2008

WHO activities related to international food safety

- International Network of Food Safety Authorities (INFOSAN)
- Global Salmonella Surveillance (GSS)
- Antimicrobial resistance (Human and non-human use)
- Global Environment Monitoring System (GEMS)
- Codex Trust Fund

Conclusion

- Enforcement of Regulatory mechanism for food safety is essential for fair trade and consumer protection
- More equitable and participatory global standard-setting is necessary
- Help developing countries to enhance their level of effective participation in the development of global food safety and quality standards