

# Risk Management Approaches to Food Incidents

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# Food Demand in Hong Kong

- Needs of the inhabitants (approx. 7 million)
- International finance and commerce centre
- International conferences and events
- Tourists (36 million in 2010)
- Consumers demand variety of food from all parts of the world
  - From **high-risk** seafood and ready-to-eat meat products to **low-risk** rice and pasta

# Food Supply in Hong Kong

- **Over 95% of the food is imported**
  - e.g. 242,000 tonnes chilled and frozen pork from > 8 countries in 2010
- **Food is imported from many countries by air, sea and land**
- **Majority is imported from the Mainland, particularly, fresh vegetables and fruits, meat, fish and live food animals for slaughter**

# Food Safety Risk Management

- When most food is imported and demand for variety is high at affordable prices food safety risk management is quite challenging

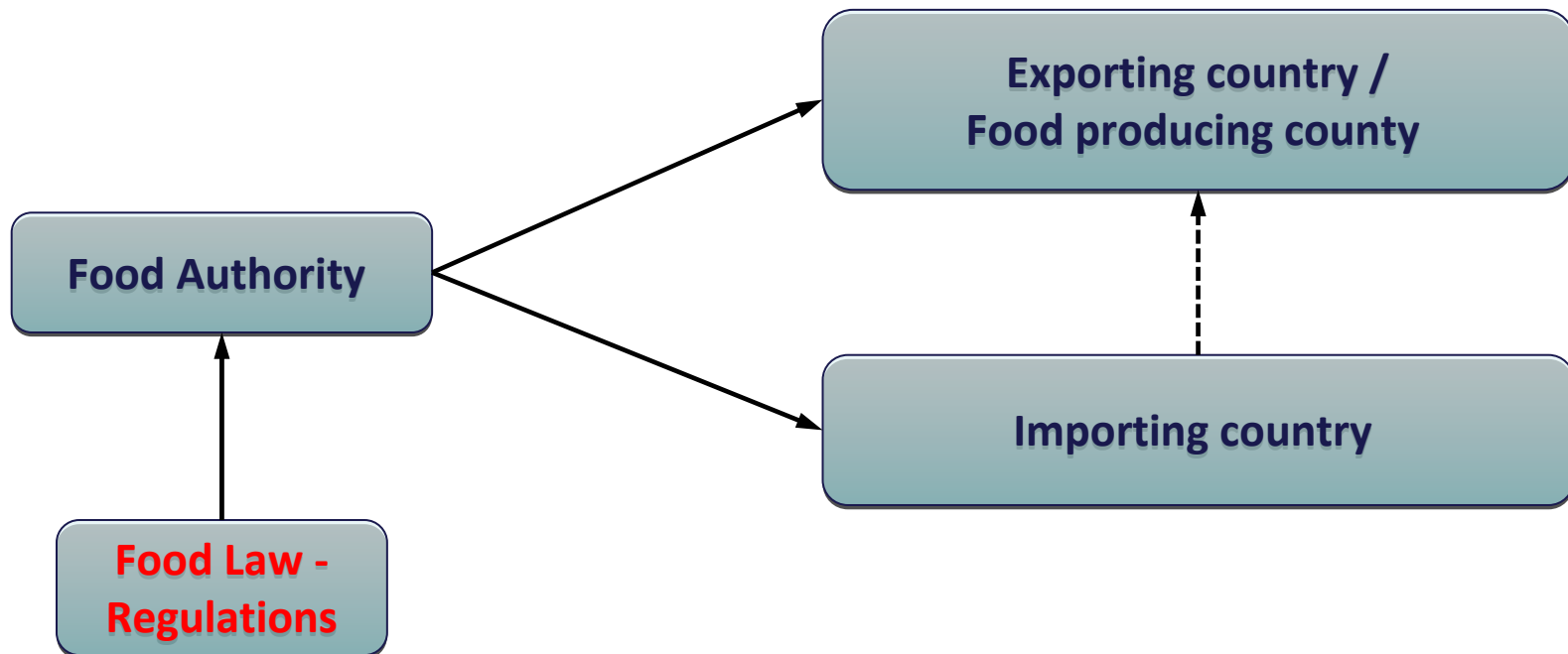
## Risk Management – general considerations

- Challenge to the industry is to provide consumers:



- To combine all consumer needs it is necessary to use modern farming and processing methods, imports, etc.

## Food Safety Risk Management – Role of the Government



## Role of the Government – exporting country

- Producers and processors have systems in place to produce safe food
- By controlling the hazards to mitigate the risks
- Food authorities check application of such systems by producers and processors and complying with regulations using audits / inspections etc.

## Role of the Government – importing country

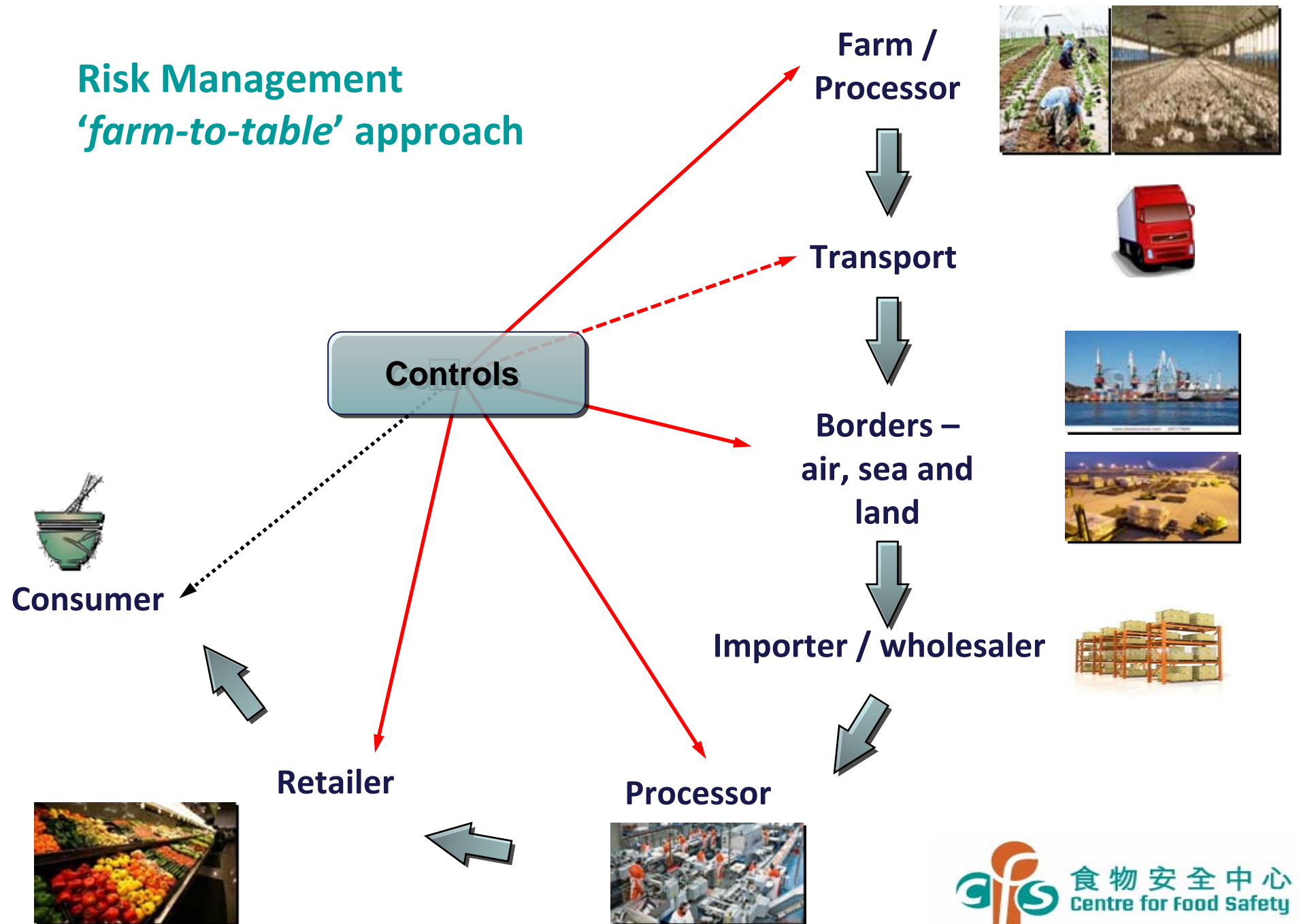
- Check whether producers and processors have food safety management systems
- Verify implementation of such systems using
  - Audits
  - Inspections
  - Certification
  - Administrative arrangements
  - Equivalence agreement
  - Voluntary agreements etc.



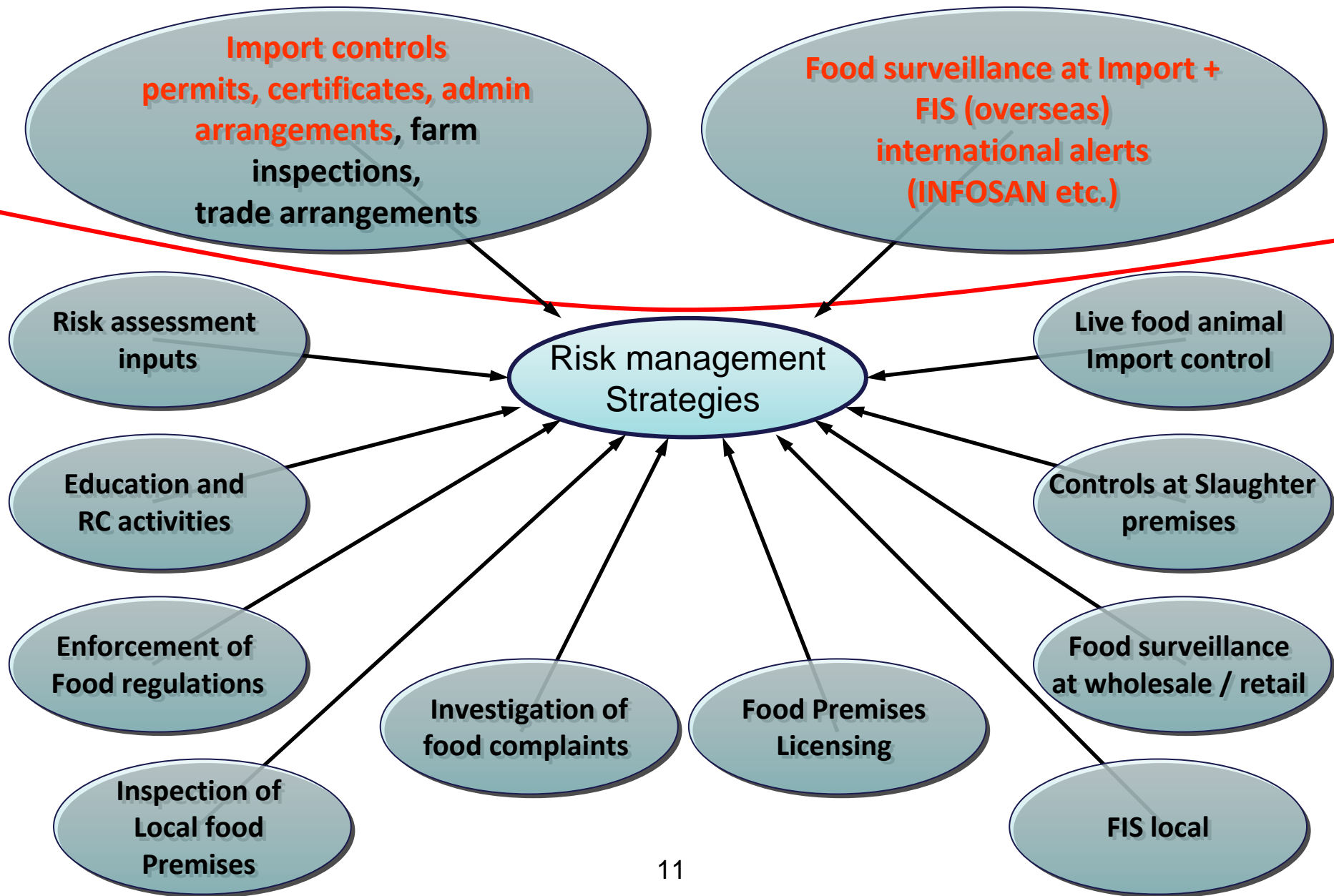
## What is Hong Kong's approach?

- Systems are in place to manage food safety risks associated with food incidents
- Using different mechanisms – before, at / during and after importation

# Risk Management 'farm-to-table' approach



# Risk management strategies in Hong Kong



# Risk Management – Some examples

- 1. Import control**  
Meat, milk and frozen confection
- 2. Administrative arrangements**  
Vegetables and freshwater fish
- 3. Food Surveillance at import**  
Sampling food for testing hazards
- 4. Food Incident Surveillance System**  
Check local and overseas incidents
- 5. International alerts**  
INFOSAN, RASFF etc.

## Risk Management – Some examples

6. **Live food animal import controls**  
AI vaccination in poultry
7. **Controls at slaughter**  
E.coli O157 in cattle
8. **Food Surveillance at retail**  
Sampling for testing hazards
9. **Investigation of food complaints**  
Local and international
10. **Food premises licensing**  
Legal requirements

## Risk Management – Some examples

### 11. Inspection of food premises

For compliance with regulatory requirements

### 12. Enforcement of food safety regulations

Issue of premise closure orders

### 13. Education and Risk communication activities

### 14. Inputs from Risk Assessment

# Food Surveillance programme

- Key features:

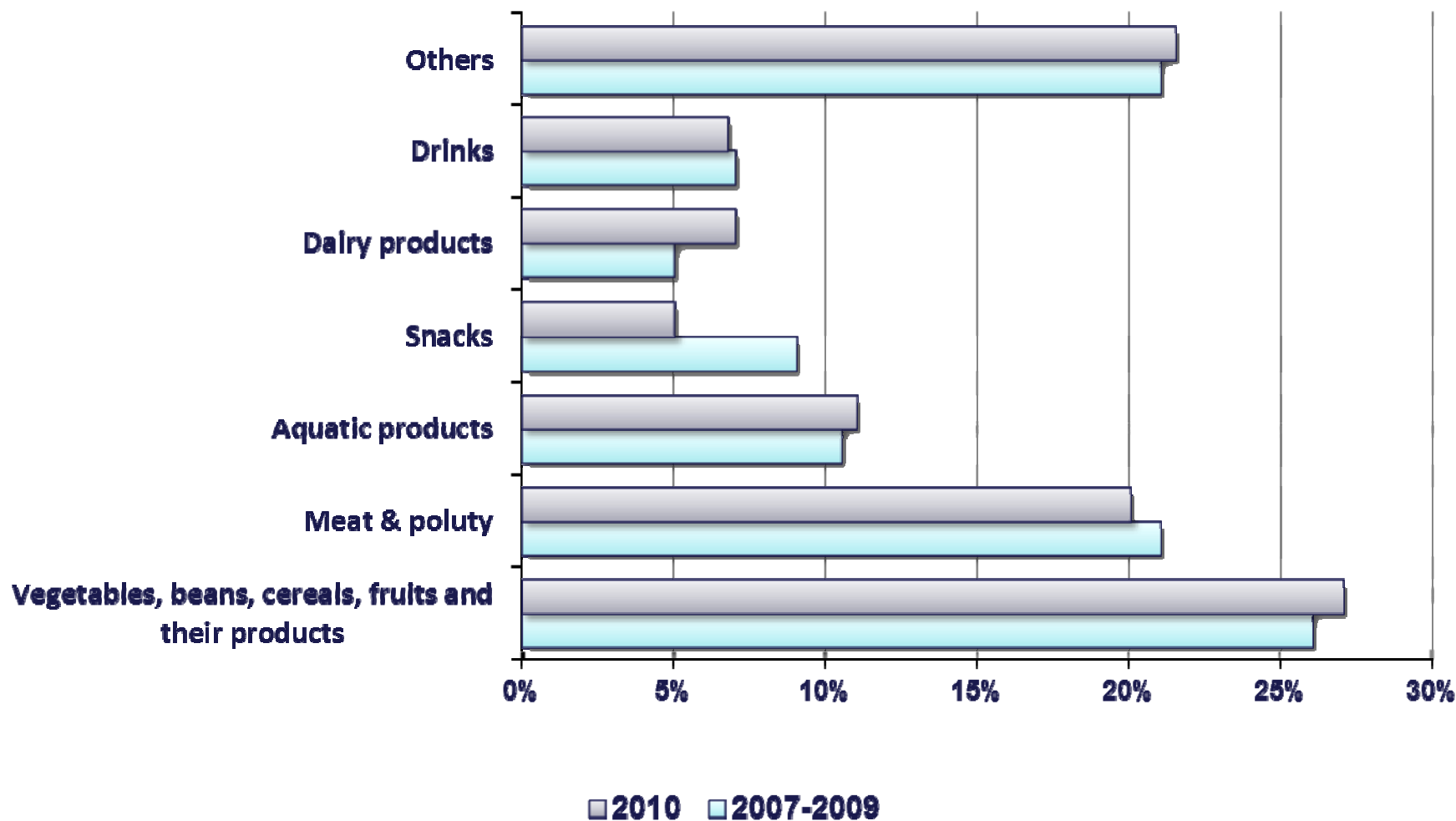
- Risk-based
- At import, wholesale and retail
- A downstream control programme – important in imports
- Microbiological, chemical and radiological testing
- About 65,000/year *[about 9 samples per 1000 population]*
- Routine, targeted and seasonal food surveillance and popular local food items

## What is a food incident?

**Any event which has potential food safety implications and is actively evaluated by the Centre for Food Safety (CFS)**



## Proportion of food incidents by food commodity (2007-2010)



## Classification of incidents according to the nature of hazard in 2010

Hazard	Number of incidents	%
Chemical	271	37%
Microbiological	282	39%
Physical	51	7%
Others	119	16%
<b>Total</b>	<b>723</b>	<b>100%</b>

## Classification of incidents according to the types of microorganisms in 2010

Microorganism	Number of incidents	%
<i>Listeria</i>	79	28%
<i>Salmonella</i>	78	28%
<i>E. coli</i> O157:H7	28	10%
<i>Norovirus</i>	10	4%
<i>Staphylococcus aureus</i>	6	2%

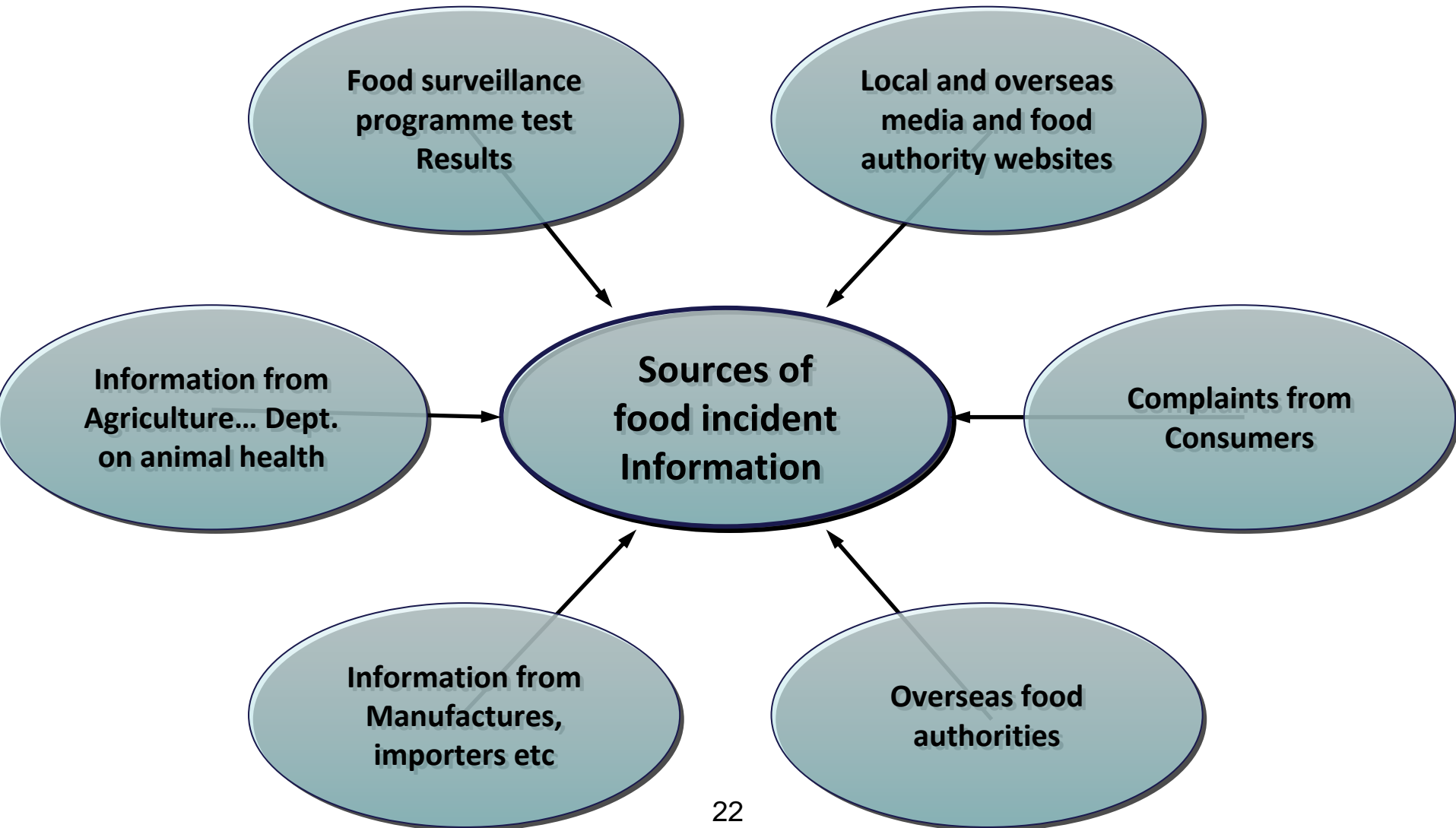
## *Listeria monocytogenes* - related incidents

Commodity / name	Number of incidents involving LM	Percentage of total LM	Remarks
Cheese products	21	27%	–
Processed meat (beef, poultry & pork)	14	18%	Include smoked meat, sliced meat, deli meat,
Sausage, ham & bacon	10	13%	–
Processed aquatic products	9	11%	Mainly smoked salmon
Salad	7	9%	–
Sandwiches & similar products	4	5%	–

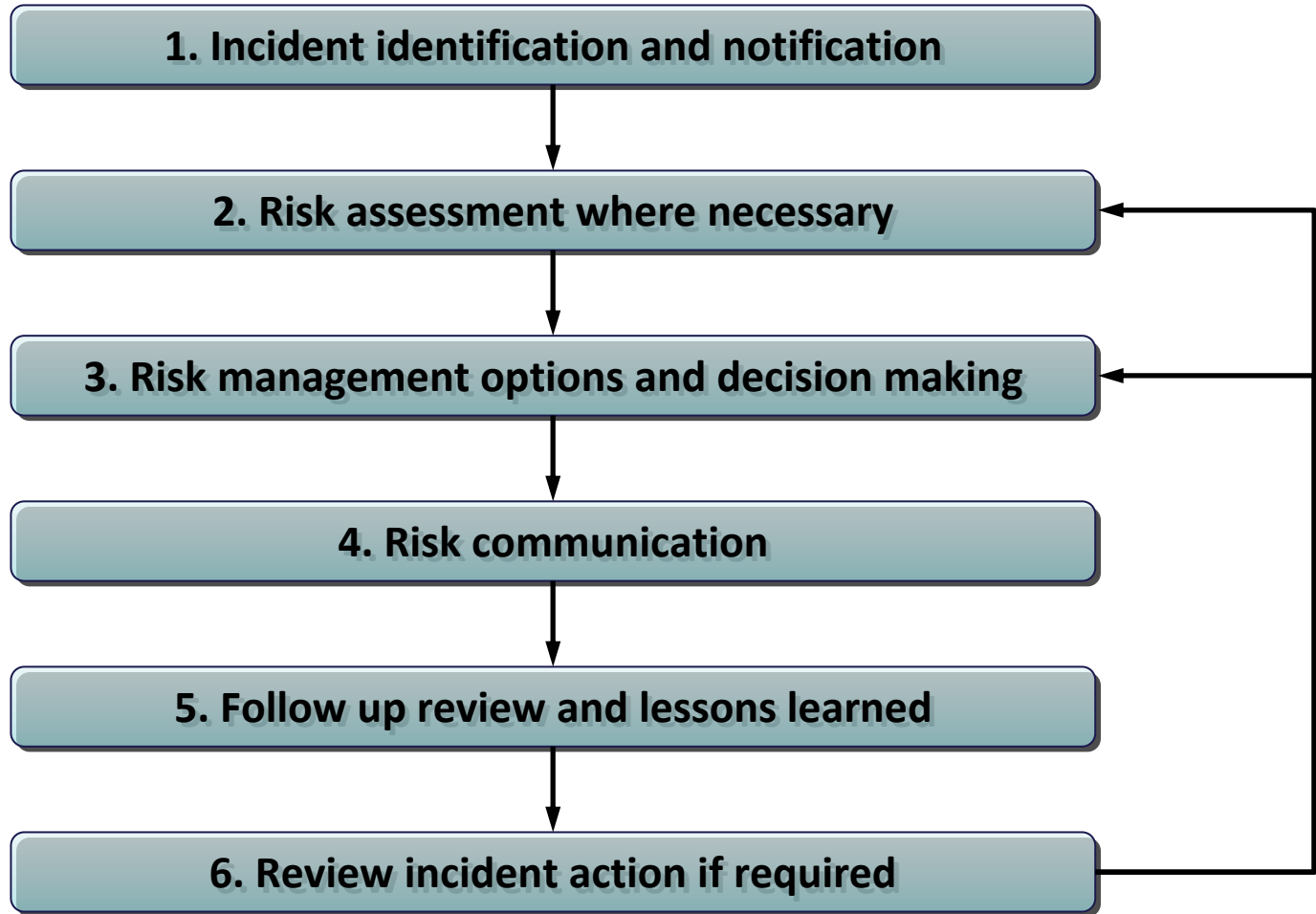
## Salmonella-related incidents

Commodity / name	Number of incidents involving <i>Salmonella</i>	Percentage of total <i>Salmonella</i>	Remarks
Vegetables	15	19%	include salad, coriander, parsley, red pepper, cilantro, sprout
Meat products	12	15%	Include ground meat, sausages,
Seeds	11	14%	Include sesame paste and cardamom seed
Nuts & nut products	8	10%	—
Herbs & spices	4	5%	—
Melon	3	4%	—

# Sources of food incident information



## The key steps of incident risk management



# Some factors to be considered when choosing risk management options

- **Source of information**  
Official/media/surveillance results
- **Local availability and distribution**
- **Hazard nature**  
Toxicity, acute and chronic effect, levels etc.
- **Potential exposure**  
Food type, high risk consumers, e.g. infants, consumption pattern



## Action taken following food incidents

- Check product availability for sale
- Alert and request the trade to stop selling & recall the affected product
- Collect samples for testing
- Strengthen surveillance at import
- Issue public announcement if necessary
- Contact relevant food authority for more information

# Action taken following food incidents with products locally available in 2010 – 2011

- **Announced by the Overseas Food Authority**
  - Salmonella contaminated sausages, granola bars, and potato chips and onion rings. Announced by USA (FDA) and Canada (CFIA)
- **Incident found from food surveillance at retail**
  - Smoke salmon contaminated with *Listeria monocytogenes*

## Action taken:

***Salmonella* contaminated sausages, granola bars, and potato chips and onion rings**

- Immediate action to request the concerned importers and retailers to stop sale of the affected product.
- Issue trade alerts.
- Issue press release to advise people not to consume the product.
- Also informed the concerned food authority.

# Action taken:

## Smoked salmon contaminated with *Listeria monocytogenes*

- Identified the source.
- Issue trade alerts.
- Further tests done at import level showed positive results.
- Immediate action was taken to request the concerned importers and retailers to stop sale of the affected product.

## Action taken:

# Smoked salmon contaminated with *Listeria monocytogenes*

- Voluntary surrender of remaining stock.
- Increased surveillance for the same brand of product at import.
- Issue press release to advise people not to consume the product.
- Also informed the concerned food authority.

# Food incident Risk Management Summary

- Incidents reported from a number of sources
- Risk management depends on the nature of the incident
- Different risk management strategies are used depending on the incident

# Thank you

