

BIOSECURITY MANAGEMENT FOR EXPORT OF FROZEN SEAFOOD





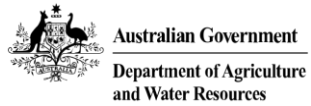
ROBIN LIEW

B. Sc Microbiology, UM (1989)

M. Biotechnology, UM (1995)

**Almost 30 years work experience
in aspects of biosecurity in food
safety, disease screening and
quality management system (ISO
17025)**

- **Malaysia**
- **Indonesia**
- **Brunei**
- **Bangladesh**
- **Myanmar**



BIOSECURITY : Definition

Biosecurity is a strategic and integrated approach that encompasses the policy and regulatory frameworks (including instruments and activities) for analysing and managing relevant risks to human, animal and plant life and health, and associated risks to the environment.

- **Food Safety**
- **Zoonoses**
- **Animal Health**
- **Plant Health**
- **LMO (Living Modified Organism)**
- **Invasive Alien Species**
- **Environment protection**

BIOSECURITY IN SEAFOOD



Food Safety :

A biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect

Codex Alimentarius Commission (CAC)

RISK ASSESSMENT
RISK MANAGEMENT
RISK COMMUNICATION

BIOSECURITY IN SEAFOOD



FROZEN PRAWNS (Risk Assessment) :

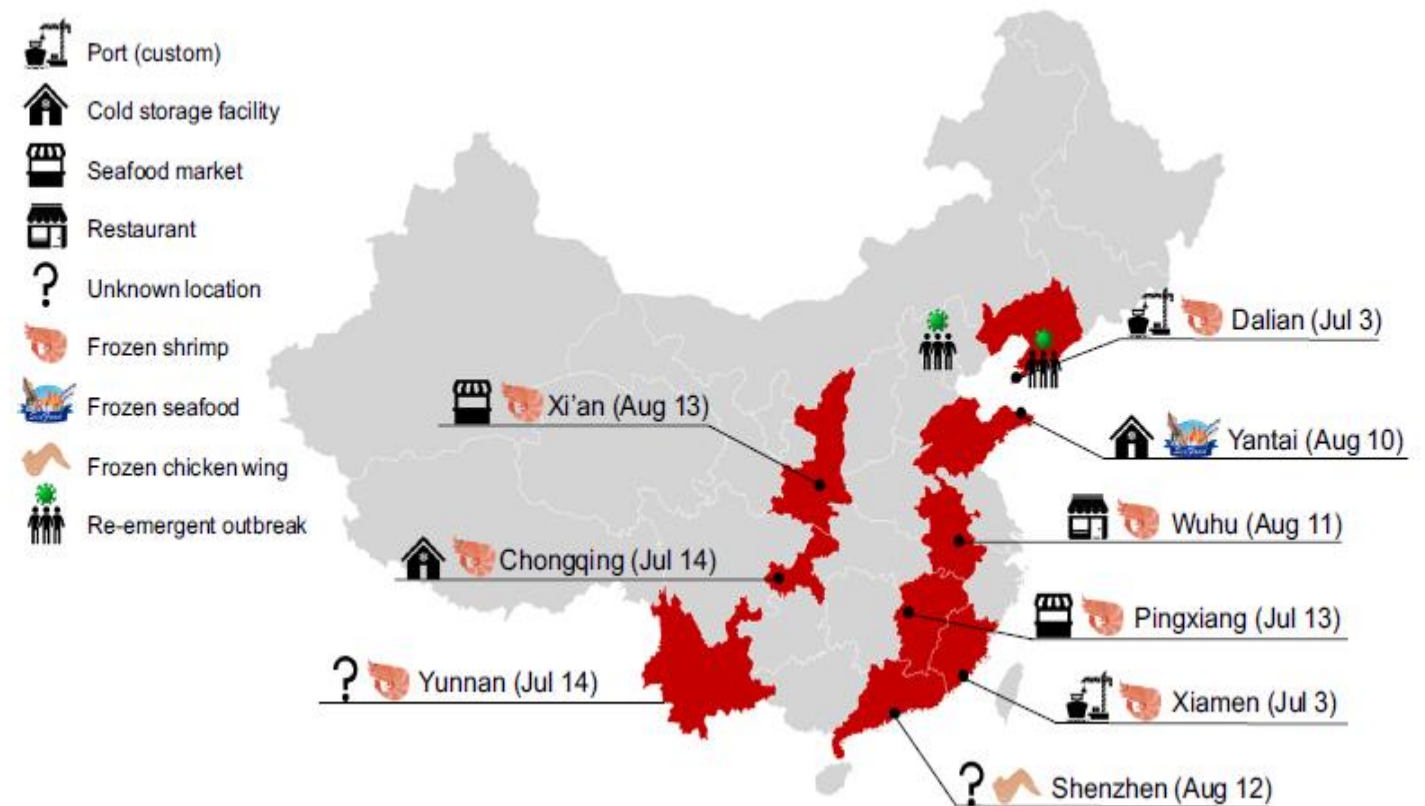
In addition to biological, chemical and physical, Australian biosecurity requires products to be :

1. WSSV Free
2. YHV Free
3. De-vein prawn GI (potential EHP risk)

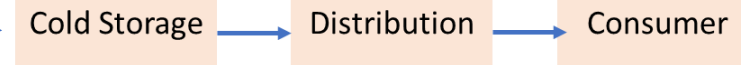
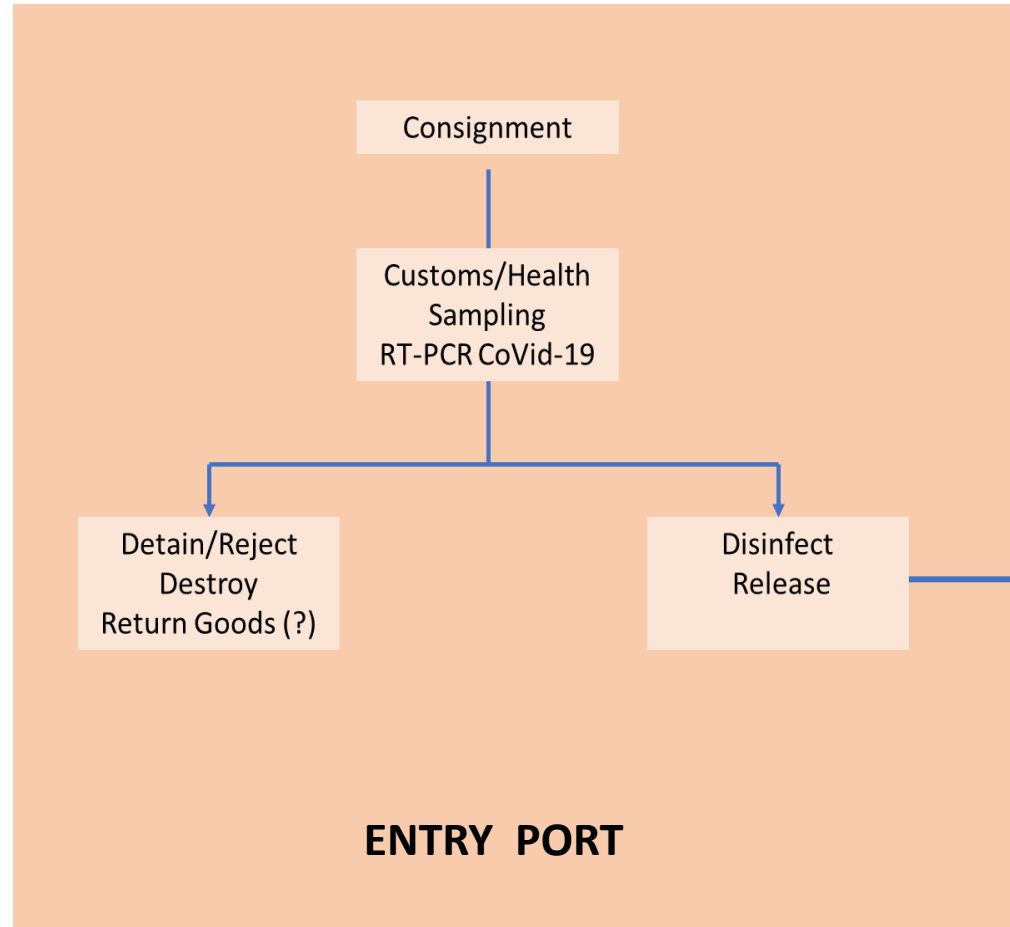


BIOSECURITY FOR SEAFOOD

- June 2020 Beijing Xinfadi Agriculture Produce Whole-Sale Market, Beijing (CoVid-19 detected on cutting board imported salmon section)
- July 2020 CoVid-19 detected in frozen food packaging materials and interior of shipping container (9 reported cases)
- August 2020 Shenzhen , CoVid-19 detected on surface of frozen chicken from Brazil
- October 2020 Qingdao, live CoVid-19 was recovered from frozen cod
- November 2020 Tianjin , Cold storage worker infected with CoVid-19
- Chinese Government issue new directive Nov 09 Work Plan For Preventive and Comprehensive Of Imported Cold Chain Food

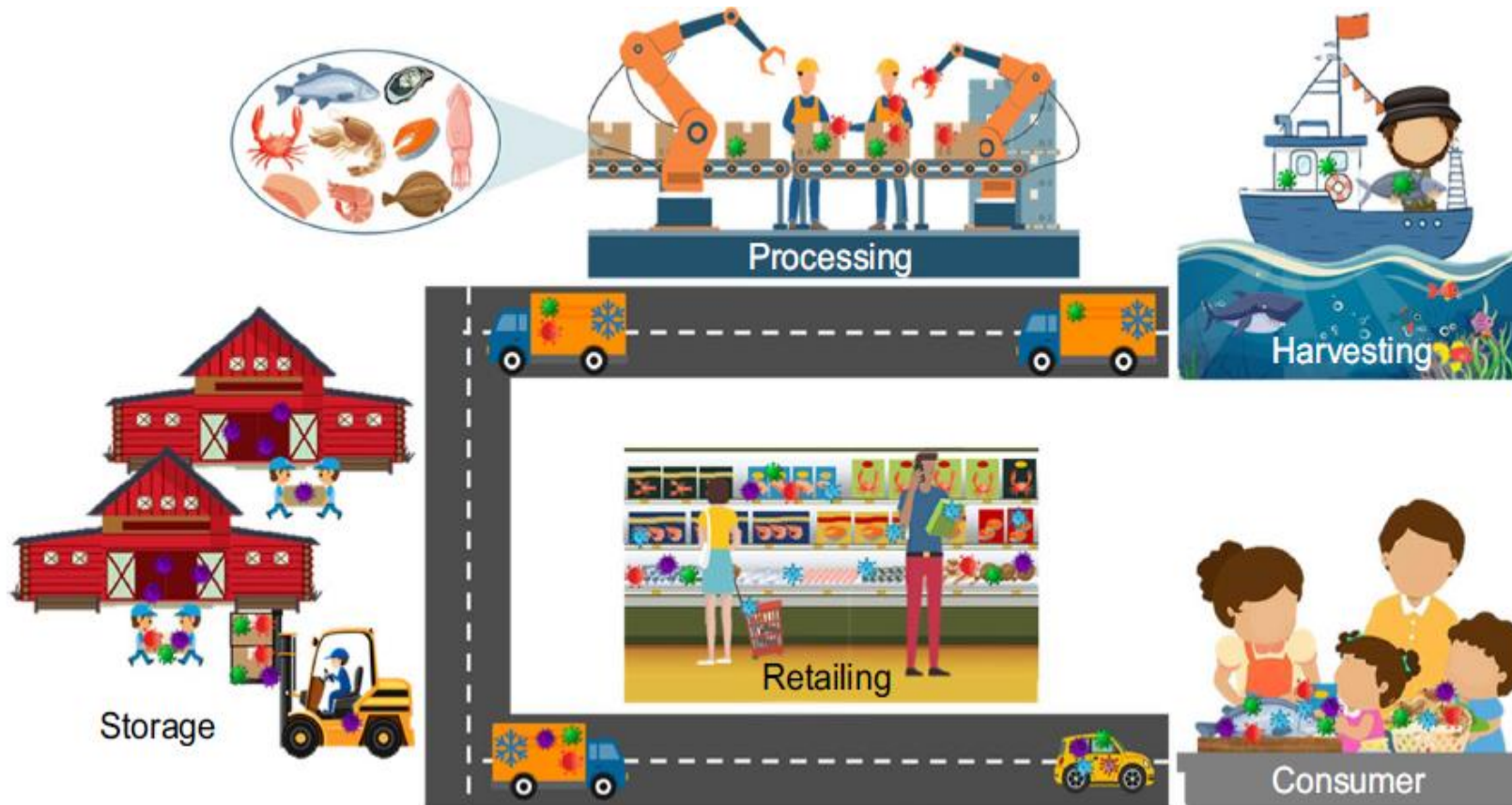


CHINA FROZEN SEAFOOD IMPORTS










Work Plan for Preventive and Comprehensive Disinfection of Imported Cold Chain Food -

BIOSECURITY CONSIDERATIONS




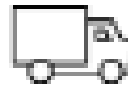
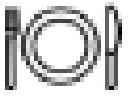


- Complex Supply Chain from Farm to Fork
- Biosecurity Management of the whole chain
- Traceability

BIOSECURITY CONSIDERATIONS

Safety Measures during the COVID-19 Pandemic						
Be Healthy	Wash Hands	Disinfect Surfaces	Working Environment	Preparation	Delivery	Social Distance
 <ul style="list-style-type: none"> • Stay home if sick • Check for symptoms like fever, cough, difficulty breathing • Cover your mouth with a tissue or sleeve when coughing or sneezing <p>(FDA, 2020a)</p>	 <ul style="list-style-type: none"> • Wash hands often with soap and water for at least 20s • Avoid touching your eyes, nose and mouth with unwashed hands • Use a 60% alcohol-based sanitizer <p>(FDA, 2020a)</p>	 <ul style="list-style-type: none"> • Disinfect high touch surfaces with proper products (e.g. 62-71% ethanol) • Use sanitizers according to label instructions • Follow protective measures <p>(FDA, 2020a)</p>	 <ul style="list-style-type: none"> • Apply proper disinfection of toilet areas • Develop open plan work spaces • Use window ventilation <p>(Dietz, 2020; Liu, 2020)</p>	 <ul style="list-style-type: none"> • Separate raw from cooked products • Wash fruits and vegetables thoroughly before eating • Cook food in appropriate temperatures (>70°C) <p>(Chin et al. 2020; FDA, 2020a)</p>	 <ul style="list-style-type: none"> • Try to use "no touch" deliveries • Maintain time and temperature controls • Ensure that transport containers are cleaned and sanitized <p>(FDA, 2020a)</p>	 <ul style="list-style-type: none"> • Stay at least 2 m from other people • Do not gather in groups • Stay out of crowded places and avoid mass gatherings <p>(Kissler, 2020)</p>

BIOSECURITY CONSIDERATIONS

		Agricultural Production	
		Post-Harvest Handling	
		Processing	
		Distribution/Retail	
		Consumption	



BIOSECURITY CHALLENGES

NEW NORMAL :

- RE-EVALUATE / RE-ASSESSMENT
- MANAGEMENT - PREVENTION AND RESPONSE
- CHANGE IS KEY TO SURVIVAL
- RE-TRAINING
- TRACEABILITY

THANK YOU
DANK JE
TERIMA KASIH