



# VULNERABLE PERSONS INDUSTRY FORUM

16 November 2017



Department of  
Primary Industries  
Food Authority



# WELCOME & INTRODUCTION

Dr Lisa Szabo – Chair  
CEO Food Authority

Vulnerable Persons Industry Forum – 16 November 2017



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# TRENDS IN AUDITING VULNERABLE PERSONS FACILITIES

Vulnerable Persons Industry Forum – 16 November 2017



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Darren Waterson

Team Leader, Audit Systems and Verification

# RESULTS OVER THE LAST 12 MONTHS – SOME STATISTICS



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**NUMBER OF NSW  
LICENSED VP  
FACILITIES**

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**1230**

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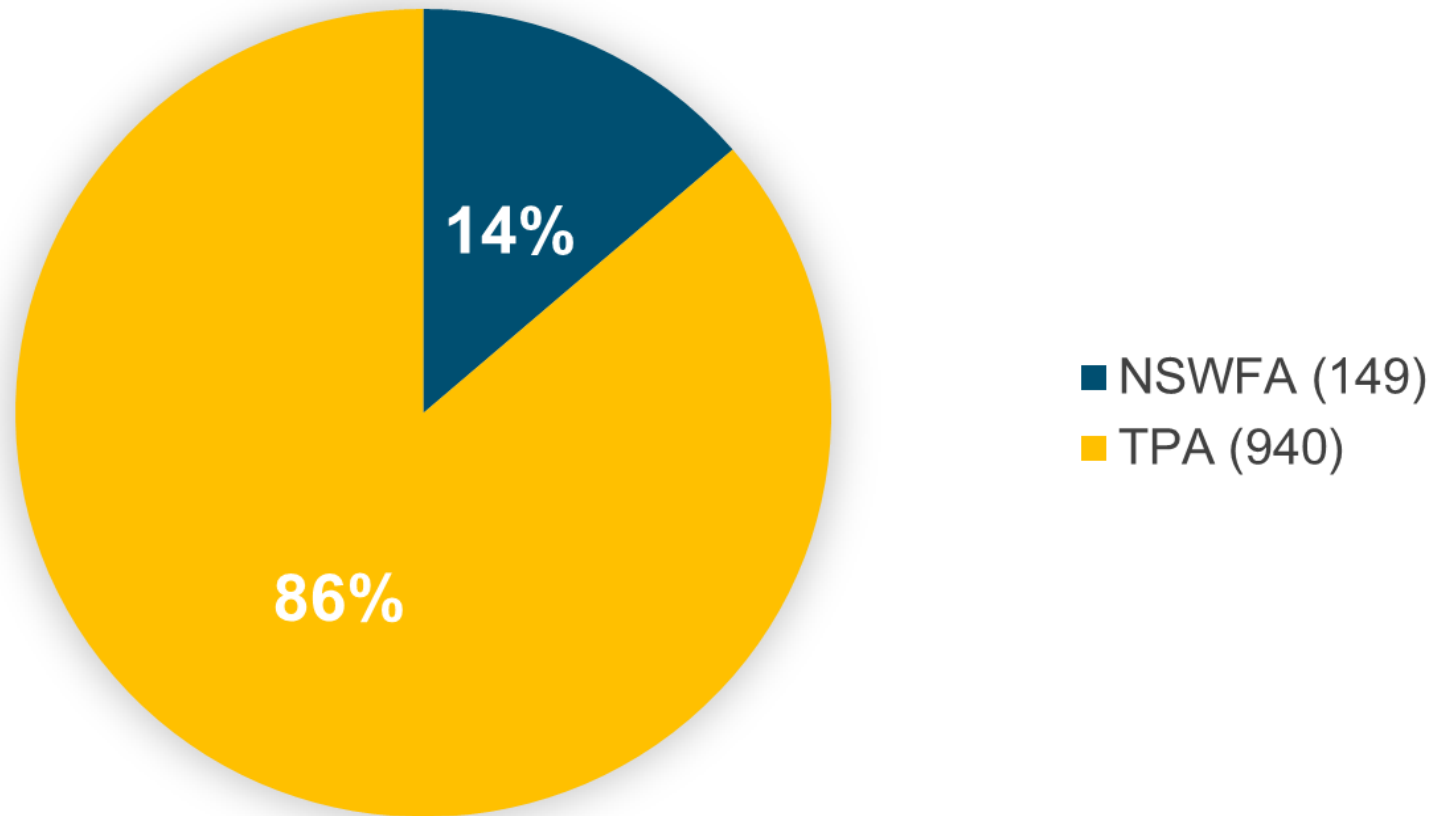
**PERCENTAGE USING  
THIRD PARTY  
AUDITORS  
(823 FACILITIES)**

**68.1%**

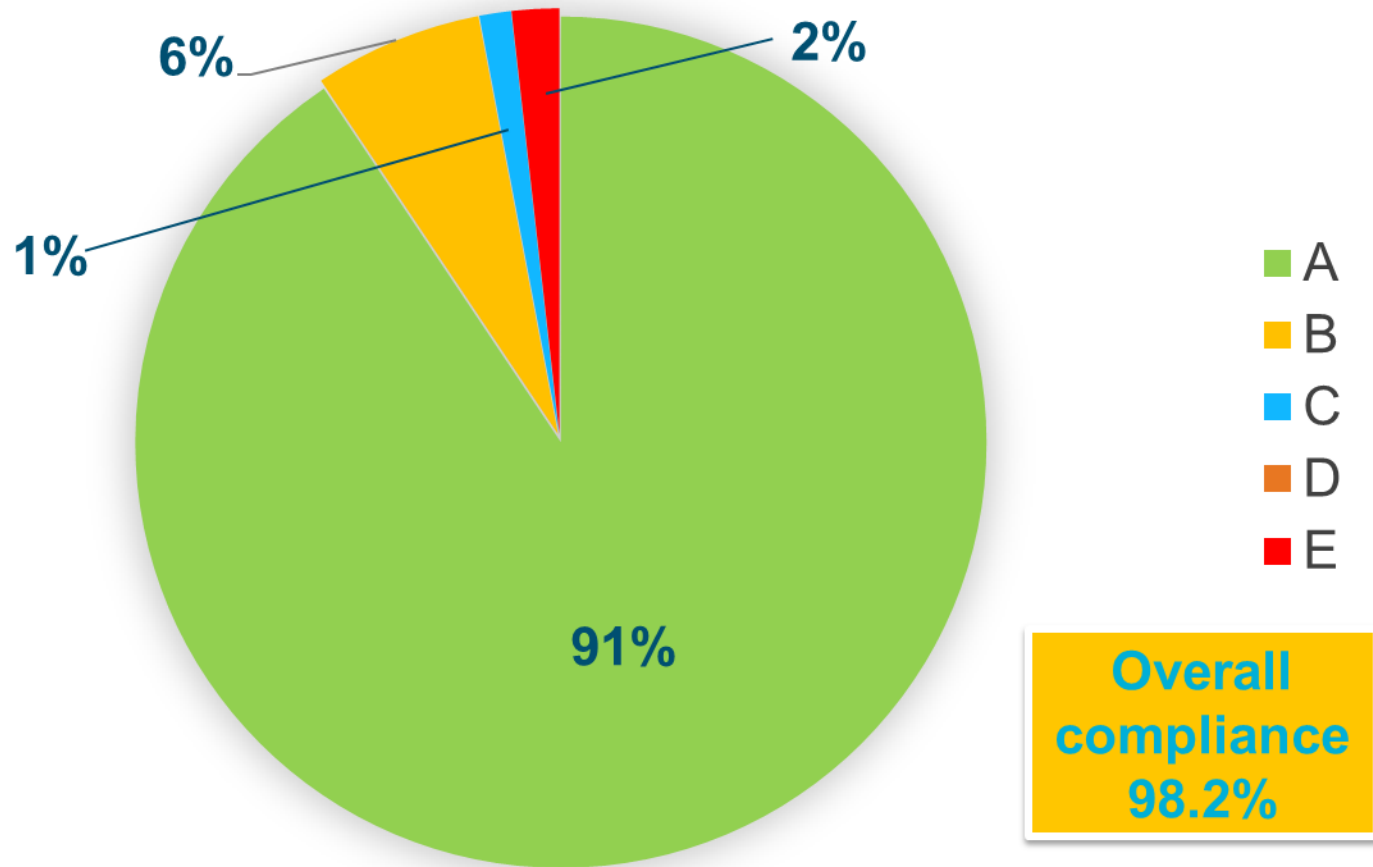


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# NUMBER OF AUDITS - VP



# COMPLIANCE RATES - VP



# ENFORCEMENT ACTION - VP

Improvement notices issued 37

Penalty notices issued 0

Prosecutions 0





# TOP REASONS FOR FAILURE - VP

## Process Control

- 21 Critical CARs issued
- 29% of businesses did not complete monitoring records at the frequency required in the Food Safety Program – typically cooling records
- 17% of the businesses had monitoring records that did not reflect the actual conditions or processes at the facility
- 9% of the businesses had not cooled short shelf life cook chill food as per the Foods Standards Code requirements

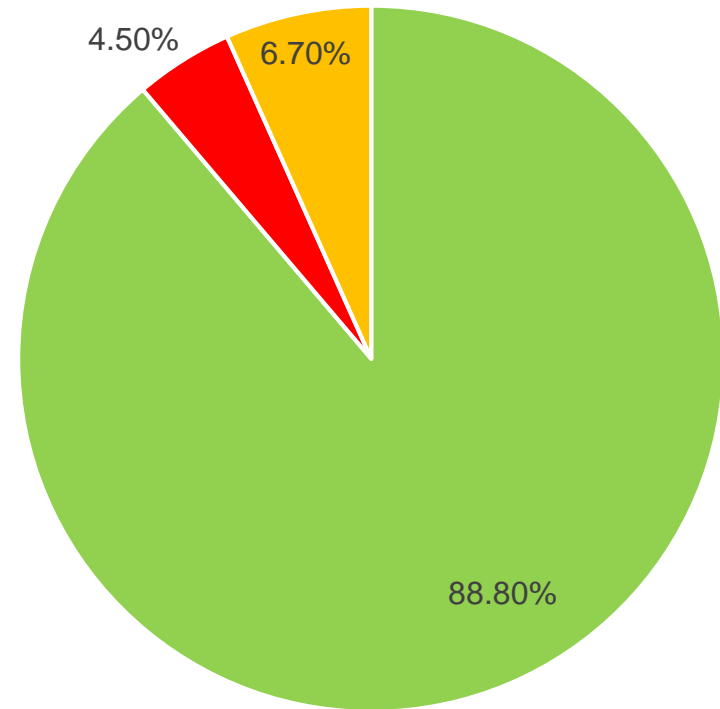
## Food safety program

- 1 Critical CAR issued
- Food safety program does not document appropriate corrective actions to be taken when identified hazards are found not to be under control



# VERIFICATION - VP

- 134 inspections
- Increase of approx 10% for acceptable inspections
- Top results for failure:
  - No verification for high risk foods
  - Incomplete cooling records
  - Falsified records
  - Allergens



■ Acceptable ■ Marginal ■ Unacceptable



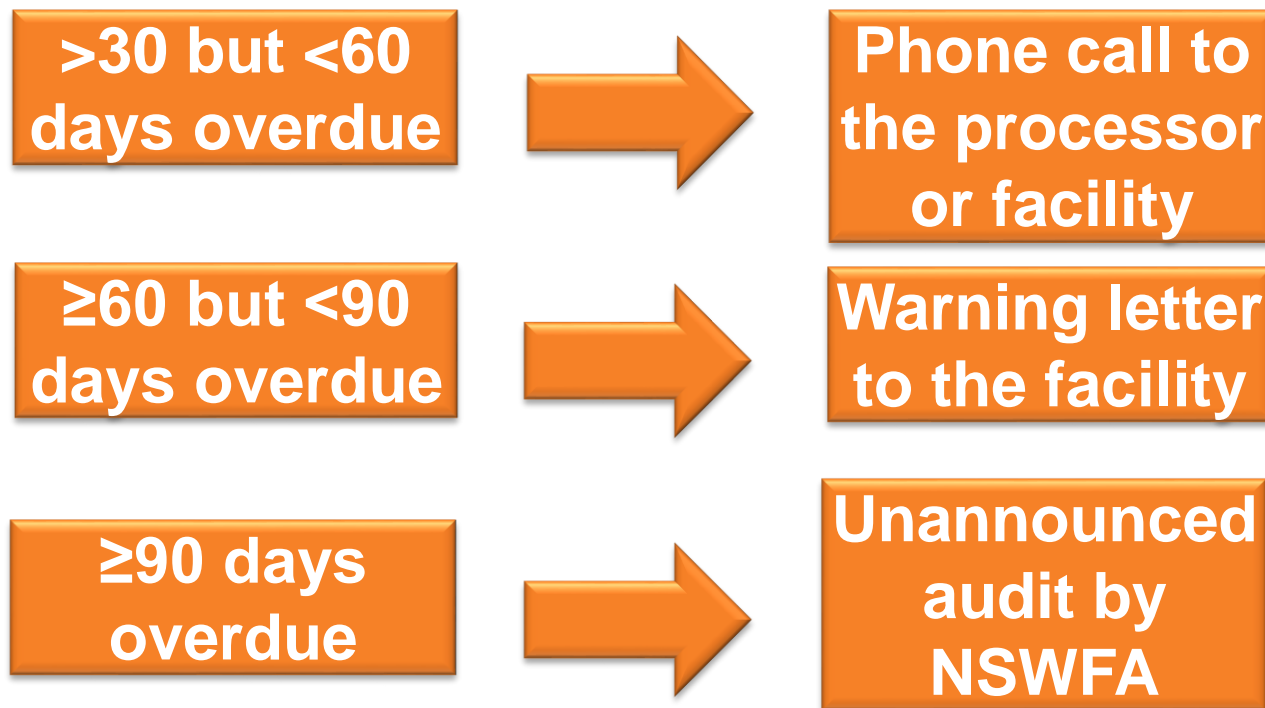
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# OVERDUE TPA AUDITS

% of TPA audits conducted after audit control date	
Audits conducted on time or early	69% (941)
Audits conducted < 30 days	19% (266)
Audits conducted 31 - 60 days	7% (90)
Audits conducted 61-90 days	2% (32)
Audits conducted > 90 days	3% (39)



# WHAT HAPPENS WHEN AUDITS ARE OVERDUE?





# THANK YOU

Darren Waterson, Team Leader – Audit Systems and Verification

[foodauthority.nsw.gov.au](http://foodauthority.nsw.gov.au)



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# HIGHER RISK FOODS

## HOW VALIDATION WORKS

Vulnerable Persons Industry Forum – 16 November 2017

Anne McIntosh

Team Leader, Audit Systems and Verification



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*"There is no sincerer love  
than the love of food"*  
*- George Bernard Shaw*



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# GUIDELINES FOR FOOD SERVICE TO VULNERABLE PERSONS

HOW TO COMPLY WITH THE  
VULNERABLE PERSONS FOOD  
SAFETY SCHEME OF FOOD  
REGULATION 2015 AND STANDARD  
3.3.1 OF THE FOOD STANDARDS  
CODE



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AUGUST 15



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# VP GUIDELINES

## Status of the VP Guidelines:

- Designed to help industry prepare a food safety program that will comply with the NSW Food Regulation 2015 via recommended and validated control measures
- Compliance with the suggested control measures is **NOT** mandatory
- A business may choose to use an alternative method of compliance instead of the recommended control measures in the guidelines, but must be able to demonstrate an **appropriately validated** equivalent food safety outcome which is documented in their food safety program and complied with.



# WHAT IS VALIDATION?

- Validation is the action taken by the business to confirm that the control measures are effective in controlling the hazards (that is, they prevent, eliminate or reduce a food safety hazard to an acceptable level). \*
- The validation of a food safety program needs to occur before it is implemented as it confirms whether the proposed controls will be effective in preventing, eliminating or reducing a food safety hazard to an acceptable level

*\* Food Safety Programs” a guide to Standards 3.2.1 Food Safety Programs  
– FSANZ Pg 25*



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# HIGHER RISK FOODS

## Guidelines for Food Service to Vulnerable Persons – Part 3 Menu Design

- Certain foods present a higher risk to vulnerable people due to increased potential for these foods to cause food poisoning. These foods require specific control measures to be implemented to minimise the potential risks.



# HIGH RISK FOOD

## Guidelines for Food Service to Vulnerable Persons – Part 3 Menu Design

- The menu should be designed to ensure that safe food is served to all residents/patients.
- The business should consider food safety risks in the development of the menu, and implement control measures to address the risks.
- All higher risk foods and ingredients should be received through approved suppliers
- Validated options to aid in controlling the safety of higher risk food have been included in the manual

Table 1: Recommended control measures for higher risk foods

Food type	Control measures – options for controlling hazards
Meat and poultry	<ol style="list-style-type: none"><li>1. All meat and poultry are cooked in accordance with minimum recommended cooking temperatures (see Appendices 2 &amp; 3)</li><li>2. Purchase packaged, whole portions of unsliced ready-to-eat meats and poultry and slice in central processing unit, kitchen or service departments and limit shelf life to 7 days after slicing and re-packaging</li></ol>



# HIGHER RISK FOODS

## The Problem

- Perception by the VP industry that you cannot serve higher risk foods
- Lack of understanding / education regarding foodborne pathogens
- Lack of understanding / education regarding validation
- The thought that is it all too difficult



# HIGHER RISK FOODS

## The Result

- Facilities remove foods from the menu or
- Facilities serving higher risk foods with no or insufficient controls in place

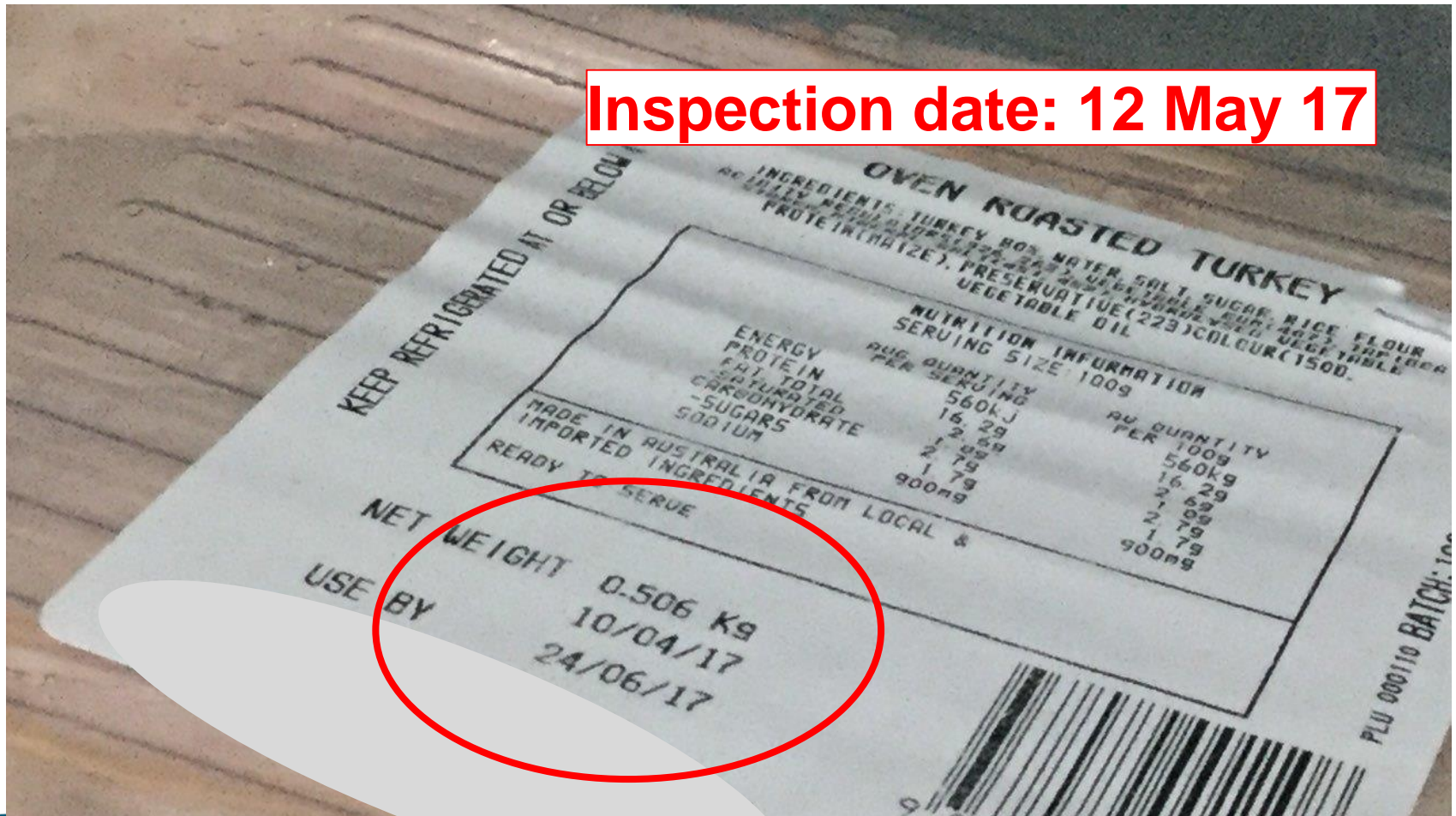


- Increased risk of decreased nutritional intake for long term patients and aged care residents
- Increased risk of foodborne illness



# RECENT EXAMPLES

Inspection date: 12 May 17



Facility was using package use-by date with no validation

Date	Time	Supplier	Product	Chilled Product Temp	Frozen Product Temp	Hot Product Temp	Transport Condition ✓ x	Product and Packaging Integrity ✓ x	Goods returned
1-6-17	10:40	<b>Deli</b>	Silverside	1.9°	←	—	✓	✓	
1-6-17	" "	" "	Fruit	—	—	—	✓	✓	
1-6-17	9:00	Baker	Bread	—	—	—	✓	✓	
1-6-17	14:33	<b>Deli</b>	Ham	1.7°	←	—	✓	✓	
2-6-17	6:50	Milko	Milk	2.2°	—	—	✓	✓	
2-6-17	9:50	<b>Deli</b>	Ham, Silverside	1.7°	←	—	✓	✓	
2-6-17	" "	" "	Fruit	—	—	—	✓	✓	
2-6-17	10:30	PFD	Chicken Snitz	—	H/F	—	✓	✓	
2-6-17	" "	" "	Bacon, turkey	2.2°	—	—	✓	✓	
2-6-17	" "	" "	Veg	2.3°	—	—	✓	✓	
2-6-17	11:20	Butcher	Lamb, Pork, Beef	2.5°	—	—	✓	✓	
4-6-17	10:30	<b>Deli</b>	Ham, butter	1.9° 2.2°	←	—	✓	✓	

Care manager thought the supermarket deli “looked OK”  
Deli not licensed, no listeria management program



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**Inspection date: 21 June 17**



**14 Day shelf life with  
no validation**



# MICROORGANISMS OF PUBLIC HEALTH SIGNIFICANCE

- *Listeria monocytogenes*
- *Salmonella*
- *E.coli*



# LISTERIA MONOCYTOGENES

- Short regular rods
- Can develop flagella for motility when grown at 20-25°C
- Facultative anaerobe – can grow under aerobic, microaerobic and anaerobic conditions and in the presence of CO<sub>2</sub>
- Psychotrophic - Can grow at temperatures of 4°C and lower
- Not very thermotolerant – temp of 72°C for 2 min (or equivalent) will kill *Listeria*
- Growth typically does not occur in a pH of 4.5 or lower



Photo courtesy of Food Safety Information Council - <http://foodsafety.asn.au/listeria-monocytogenes/>



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# LISTERIA MONOCYTOGENES

- More tolerant of alkali with a pH of 9.7 required to inhibit growth
- Salt tolerant for growth up to a NaCl concentration of 10%
- Can survive for up to 12 months in 16% NaCl
- Low water activity of 0.90-0.93 to prevent growth and can survive in dry products environments such as straw, soil etc
- Biofilm producer



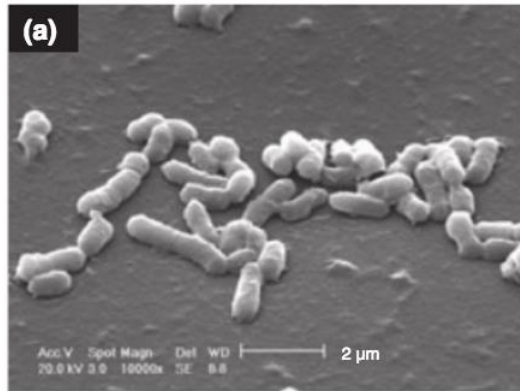
Photo courtesy of Food Safety Information Council - <http://foodsafety.asn.au/listeria-monocytogenes/>



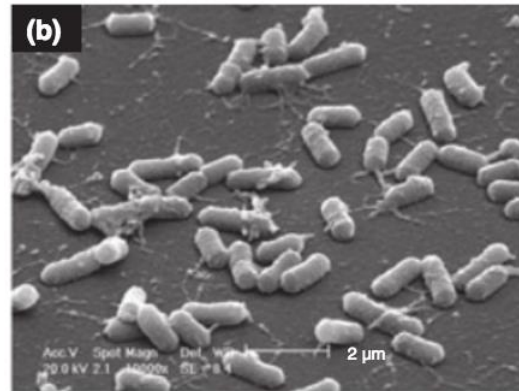
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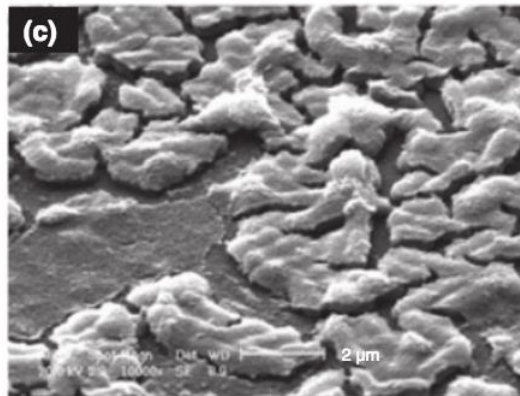
a) 4°C



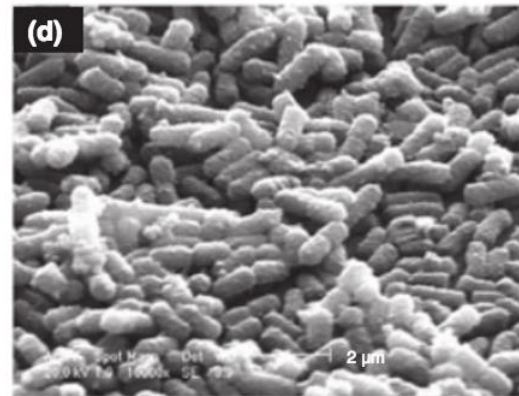
b) 12°C



c) 22°C



d) 37°C



Ref: Bonaventura, Giovanni & Piccolomini, R & Paludi, Domenico & D'Orio, V & Vergara, Alberto & Conter, M & Ianieri, Adriana. (2008). Influence of temperature on biofilm formation by *Listeria monocytogenes* on various food-contact surfaces. *Journal of Applied Microbiology*.

# LISTERIA MONOCYTOGENES

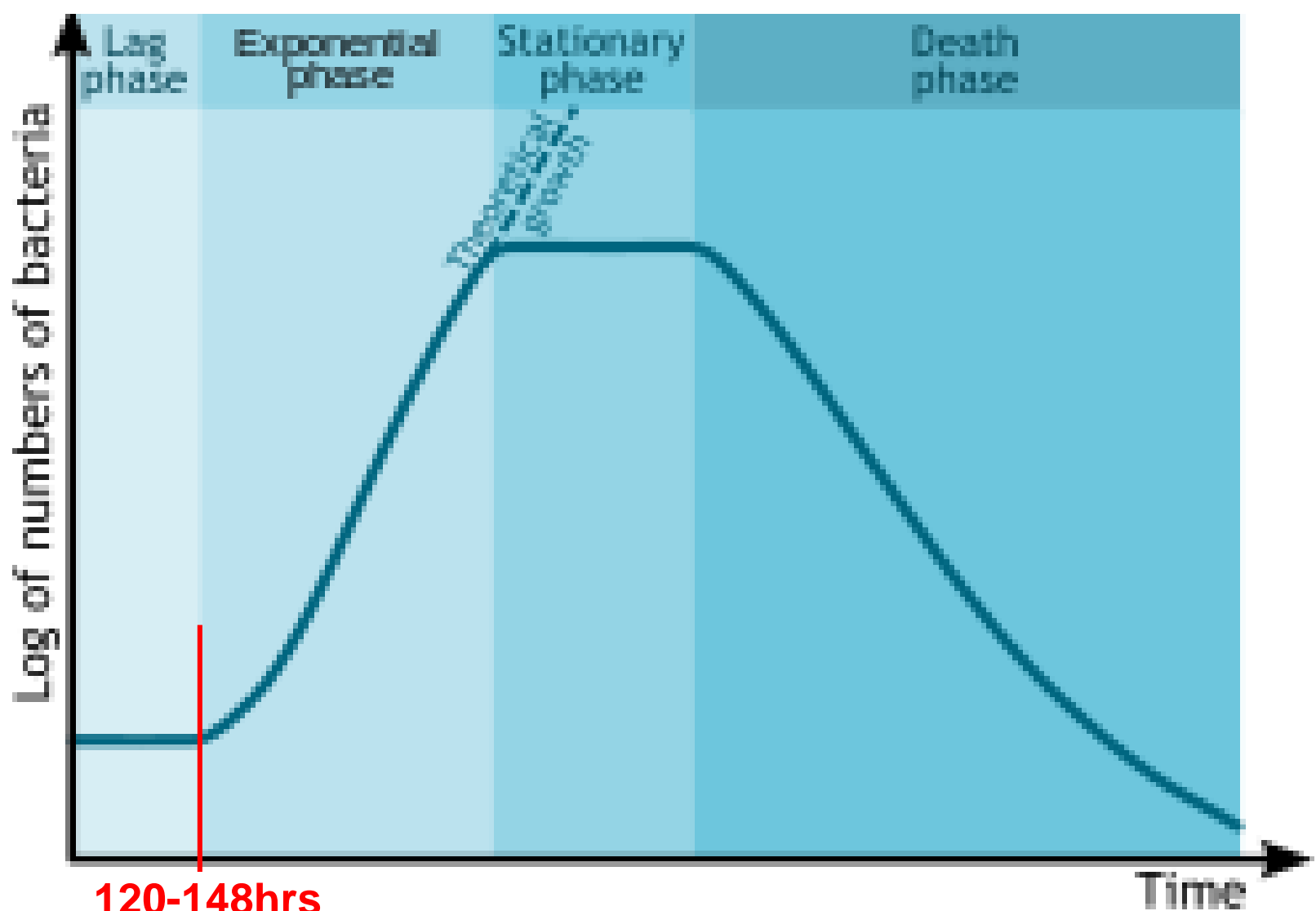
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- Can survive for up to 12 months in 16% NaCl
- Low water activity of 0.90-0.93 to prevent growth and can survive in dry products environments such as straw, soil etc
- Biofilm producer
- Lag phase 120-148 hours



Photo courtesy of Food Safety Information Council - <http://foodsafety.asn.au/listeria-monocytogenes/>



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**120-148hrs**  
**Lag time**

Institute of Food Technologists [www.ift.org](http://www.ift.org)



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# LISTERIA MONOCYTOGENES

## Infective dose

The infective dose of *L. monocytogenes* is undetermined, but is believed to vary with the strain and susceptibility of the host, and the food matrix involved also may affect the dose-response relationship. In cases associated with raw or inadequately pasteurized milk, for example, it is likely that fewer than 1,000 cells may cause disease in susceptible individuals.

<https://www.fda.gov/downloads/Food/FoodborneIllnessContaminants/UCM297627.pdf> (The Bad Bug Book)

## Onset time

3 days to 3 months



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# LISTERIA MONOCYTOGENES

## Mortality:

- Although not a leading cause of foodborne illness, L. monocytogenes is among the leading causes of death from foodborne illness.
- Estimated 255 deaths in the U.S. annually. (1591 cases)
- The severe form of the infection has a case-fatality rate of 15% to 30%
- Listerial meningitis 70%
- Septicemia 50%
- perinatal/neonatal infections >80%.

<https://www.fda.gov/downloads/Food/FoodborneIllnessContaminants/UCM297627.pdf> (The Bad Bug Book - 2012)



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# LISTERIA OUTBREAKS

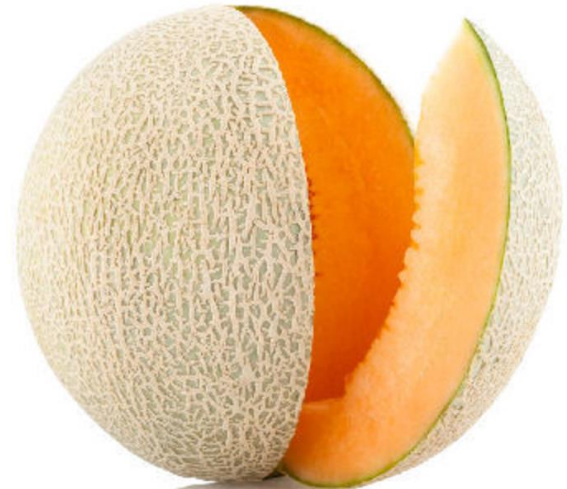
## USA – 2010

- 10 cases with a 50% mortality rate
- pre cut celery
- All 10 cases had 1 or more immunocompromising conditions or were receiving acid reducing medications that could increase susceptibility



## USA – 2011

- 147 cases, 33 deaths (22%), 1 miscarriage
- Rockmelon
- 99% of patients were hospitalized
- Most had purchased whole rockmelons



# LISTERIA OUTBREAKS

## EU – 2013

- 1763 cases
- multiple food sources inc crustaceans, meat, mixed salads

## Australia – 2013

- 3 deaths
- soft cheese



## USA - 2014

- 4 cases, 2 deaths
- Mung Bean Sprouts with L.Mono detected in sprouts and irrigation water. 12 months later the Listeria was still present in the environment.

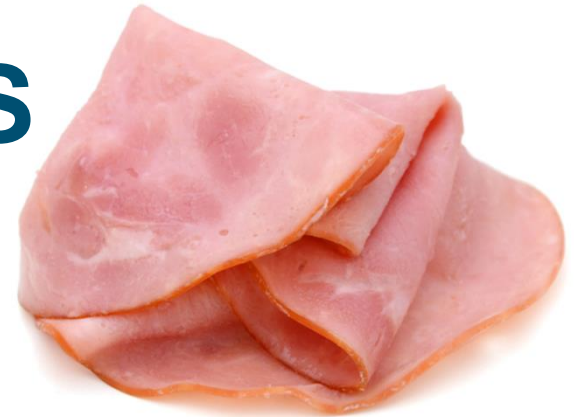
# LISTERIA OUTBREAKS

## USA - 2014-15

- 35 cases, 1 fetal death
- 3 cases meningitis in healthy children aged 5-15
- caramel apples
- Listeria found at both the apple packing facility and the caramel apple.
- Insertion of stick into the apple could have created a microenvironment at the apple caramel interface.



# LISTERIA OUTBREAKS



## Australia (NSW) – 2016

- Cluster of 8 cases (3 in NSW)
- Attributed to small goods sold thru supermarket delicatessens across 3 jurisdictions – linked via Whole Genome Sequencing
- A survey of delis (n=31) conducted in NSW which arose from the outbreak found *Listeria* species at surveyed delis found on food slicers, slicer bench, wrap machine, scales, cutting boards, utensils, knives, cooler door, hand wash basin, wash up sink and under display bench at 1 or more of the delis
- The same survey found *L.monocytogenes* on the display floor, display door, display bench, wash up sink, under the display bench at 1 or more delis

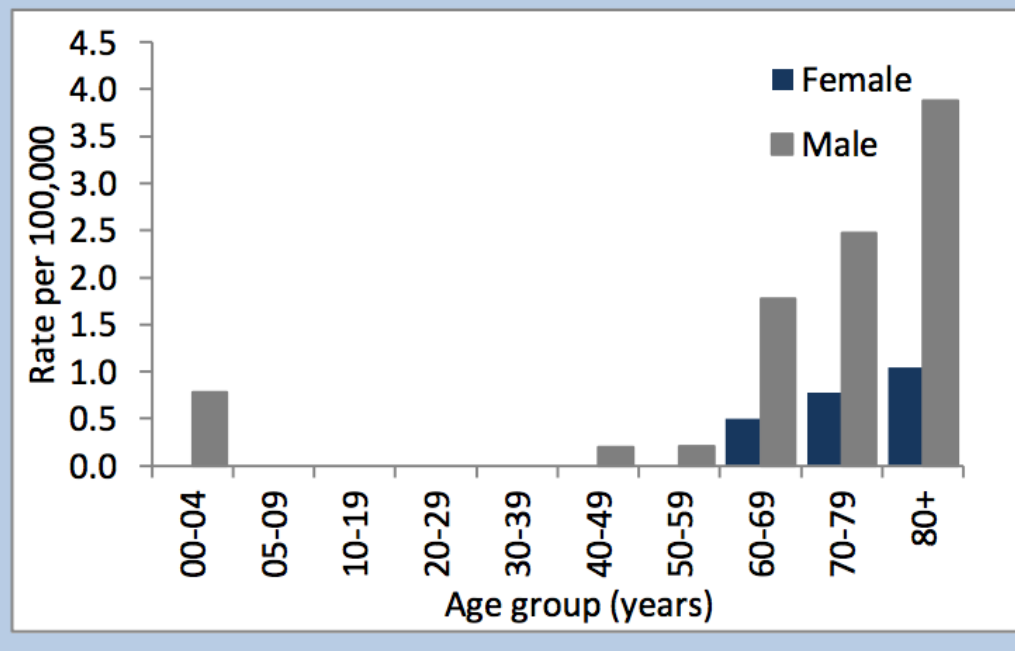
# LISTERIA OUTBREAKS

## Australia 2016

- 84 cases nationally\*
- 34 cases in NSW (40%)\*

\* *National Notifiable Diseases Surveillance System Quarterly Report Oct-Dec 2016*

Notification rate per 100,000 population by age category and sex, 2015, NSW



Source: OzFoodNet NSW Annual Report 2015






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# GUIDELINES FOR FOOD SERVICE TO VULNERABLE PERSONS

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HOW TO COMPLY WITH THE  
VULNERABLE PERSONS FOOD  
SAFETY SCHEME OF FOOD  
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AUGUST 15

17

Table 1: Recommended control measures for higher risk foods

Food type	Control measures – options for controlling hazards
Meat and poultry	<ol style="list-style-type: none"><li>1. All meat and poultry are cooked in accordance with minimum recommended cooking temperatures (see Appendices 2 &amp; 3)</li><li>2. Purchase packaged, whole portions of unsliced ready-to-eat meats and poultry and slice in central processing unit, kitchen or service departments and limit shelf life to 7 days after slicing and re-packaging</li><li>3. Purchase meats pre-sliced from a licensed manufacturer with a Listeria management program. Apply a limited shelf life of no more than 7 days from date of packaging<sup>2</sup>. It is not recommended to purchase sliced meats from delicatessens or retail shops etc.</li><li>4. Use canned or shelf stable meats</li><li>5. Purchase frozen cooked meats</li></ol>
Dairy	<ol style="list-style-type: none"><li>1. Serve dairy products made from pasteurised milk</li><li>2. May serve soft cheeses with a shelf life limited to no more than 7 days from date of packaging<sup>2</sup></li></ol>
Seafood	<ol style="list-style-type: none"><li>1. All seafood is cooked</li><li>2. May serve cold-smoked seafood, with limited shelf life of 7 days from date of packaging<sup>2</sup></li><li>3. Use canned seafood or shelf stable seafood</li><li>4. Purchase frozen seafood</li></ol>
Eggs	<ol style="list-style-type: none"><li>1. Do not use any cracked or dirty eggs</li><li>2. Serve eggs that are cooked until the white is firm and yolk begins to thicken</li><li>3. Use pasteurised egg in dishes which will not be cooked</li></ol>
Fruits, vegetables and salads	<ol style="list-style-type: none"><li>1. Inspect all fresh produce prior to use and remove dirty, cut, mouldy and bruised stock. Wash all fruit and vegetables under running potable water<sup>3</sup></li><li>2. May serve packaged pre-cut vegetables, fruit and salads with a shelf life limited to no more than 7 days from date of packaging<sup>2</sup></li><li>3. Wash and sanitise melons (e.g. rockmelons/cantaloupe, honeydew) in sanitisers appropriate for fresh produce</li><li>4. Serve seed sprouts only if they are cooked</li></ol>

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# RTE MEATS

2003 - a risk assessment by the US Food and Drug Administration and USDA Food Safety and Inspection Service identified deli meats as the leading food category for causing listeriosis



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# RTE MEATS

2010 – In a follow-up risk assessment, data shows that while there was a reduction in listeria contamination at manufacturing sites (due to measures implemented by the manufacturers); deli meats sliced and packaged in a deli were contaminated **five** to **seven** times more frequently than deli meats sliced and packaged by a processor



# DELI SLICERS – HOW THEY SHOULD LOOK



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# DELI SLICERS – HOW WE FIND THEM





# VALIDATION – RTE MEATS

# HOW NSWFA DID THEIR VALIDATION

Recommendation	Validation
1. All meat and poultry are cooked in accordance with minimum recommended cooking temperatures (see Appendices 2 & 3 of the Guidelines)	<ul style="list-style-type: none"><li>• VP Guidelines Appendix 2 - Cooking temperatures for cook serve foods such as eggs, whole bird or muscle meats, sauces, leftovers and reheated cook chill foods</li><li>• VP Guidelines Appendix 3 - Cooking times and temperatures for cook chill foods to give a 6-log reduction in <i>L.monocytogenes</i> and <i>Cl. non-proteolytic Clostridium botulinum</i> type B</li></ul>



# HOW NSWFA DID THEIR VALIDATION

Recommendation	
<p>2. Purchase packaged, whole portions of unsliced ready-to-eat meats and poultry and slice in central processing unit, kitchen or service departments and limit shelf life to 7 days after slicing and re-packaging</p>	<ul style="list-style-type: none"><li>• Whole unsliced packaged portions should be free from pathogenic bacteria inside the meat when cooked in accordance with AS 4696</li><li>• Limit the shelf life to 7 days post slicing as this is in the lag phase of growth should contamination occur during slicing</li></ul>





# HOW NSWFA DID THEIR VALIDATION

Recommendation	Validation
<p>3. - Purchase meats pre-sliced from a licensed manufacturer with a Listeria management program.</p> <p>- Apply a limited shelf life of no more than 7 days from date of packaging.</p> <p>- It is not recommended to purchase sliced meats from delicatessens or retail shops etc.</p>	<ul style="list-style-type: none"><li>• Purchasing from a license manufacturer gives some assurance that the manufacturer is processing and handling their product, their staff are trained and product is regularly tested and environmental swabs undertaken</li><li>• Limit shelf life to 7 days post slicing as this is in the lag phase of growth should contamination occur during slicing</li><li>• Purchasing from delis increases the risk of a post cooking contamination. Deli staff will be minimally trained in food handling and cleaning. Not licensed and no testing of product or environment</li></ul>





# HOW NSWFA DID THEIR VALIDATION

Recommendation	Validation
4. Use canned or shelf stable meats	Commercially sterile products
5. Purchase frozen cooked meats	Listeria will not grow at temperatures (<-1.5°C) freezer



# ALTERNATIVE VALIDATION

Procedure	Validation
<ul style="list-style-type: none"> <li>• Purchase cook in the bag RTE meats from an approved supplier, licensed with NSWFA and maintains a Listeria management program.</li> <li>• Obtain copy of NSWFA license every year</li> <li>• Obtain declaration from manufacturer that they operate a Listeria management program</li> </ul>	<ul style="list-style-type: none"> <li>• Licensed premises required to cook RTE meat products to minimum legal standard (ie. AS 4696:2007 – min 65°C for 10 min</li> <li>• Products cooked in the bag reduces contamination during the cooling, storage and delivery steps.</li> </ul>
<ul style="list-style-type: none"> <li>• Receival – ensure no damage to bags and RTE meat is at a temperature &lt;5°C</li> </ul>	FSC 3.2.2 – Clause 5 (1) and (3) – Food receipt
<ul style="list-style-type: none"> <li>• Store at &lt;5°C</li> <li>• Store on a shelf above raw products</li> </ul>	FSC 3.2.2 – Clause 6 (1) and (2) – Food Storage



# ALTERNATIVE VALIDATION

Procedure	Validation
<ul style="list-style-type: none"><li>• Opening the bag<ul style="list-style-type: none"><li>• Wash and sanitise hands immediately before handing product.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• FSC 3.2.2 15 (3) (a) – hygiene of food handlers</li><li>• Fact sheet from cleaning supplier re use and efficacy against pathogens</li></ul>
<ul style="list-style-type: none"><li>• Sanitise work area and all product contact surfaces (bench, cutting board, plastic containers, knives, deli slicer etc.) immediately before use.</li><li>• Follow chemical use instructions</li></ul>	<ul style="list-style-type: none"><li>• FSC 3.2.2 20 (1) (b) – Cleaning and sanitizing of specific equipment</li><li>• Fact sheet from cleaning supplier re use and efficacy against pathogens</li></ul>

# ALTERNATIVE VALIDATION

Procedure	Validation
<ul style="list-style-type: none"><li>• Clean &amp; sanitize the outside of the bag to remove any surface bacteria</li></ul>	<ul style="list-style-type: none"><li>• FSC 3.2.2 20 (1) (b) – Cleaning and sanitizing of specific equipment</li><li>• Fact sheet from cleaning supplier re use and efficacy against pathogens</li></ul>
<ul style="list-style-type: none"><li>• Put on single use gloves before opening product</li></ul>	<ul style="list-style-type: none"><li>• FSC 3.2.2 15 (3) (a) – hygiene of food handlers</li></ul>



# ALTERNATIVE VALIDATION

Procedure	Validation
<ul style="list-style-type: none"><li>• Open product with sanitised knife</li></ul>	<ul style="list-style-type: none"><li>• FSC 3.2.2 20 (1) (b) – Cleaning and sanitizing of specific equipment</li><li>• Fact sheet from cleaning supplier re use and efficacy against pathogens</li></ul>
<ul style="list-style-type: none"><li>• Restrict time out of refrigeration to maximum 30 minutes</li></ul>	<ul style="list-style-type: none"><li>• SafeFood Australia – A Guide to the Food Safety Standards – Appendix 2 – the use of time as a control for potentially hazardous food. Max allowed 2 hours however this facility choosing to limit this to 30 min as an extra safety precaution</li></ul>



# ALTERNATIVE VALIDATION

Procedure	Validation
<ul style="list-style-type: none"><li>• Slice the product wearing single use gloves</li></ul>	<ul style="list-style-type: none"><li>• FSC 3.2.2 15 (3) (a) – hygiene of food handlers</li></ul>
<ul style="list-style-type: none"><li>• Vacuum package product in max 300g quantities for freezing. Label with date of slicing and frozen shelf life of 30 days</li></ul>	<ul style="list-style-type: none"><li>• US Food Safety Agency recommends sliced luncheon meats frozen for no more than 1-2 months</li><li>• Ref: Storage Times for the Refrigerator and Freezer <a href="https://www.foodsafety.gov/keep/charts/storagetimes.html">https://www.foodsafety.gov/keep/charts/storagetimes.html</a></li></ul>



# ALTERNATIVE VALIDATION

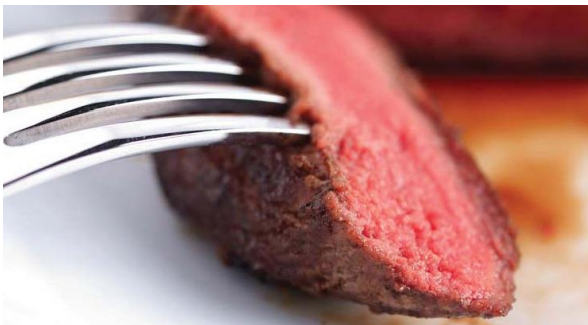
Procedure	Validation
<ul style="list-style-type: none"><li>• Store hard frozen in freezer</li></ul>	<ul style="list-style-type: none"><li>• FSC Std 3.2.2 Clause 6 (2) (b)</li><li>• USFFA – listeria will not grow below -1.5°C</li></ul>
<ul style="list-style-type: none"><li>• Thaw under temperature control and use within 48 hours</li></ul>	<ul style="list-style-type: none"><li>• FSC Std 3.2.2 Clause 6 (1)</li><li>• US Food Safety Agency recommends sliced luncheon meats stored in refrigeration for max 3 days</li><li>• Ref: US FDA FoodSafety - Storage Times for the Refrigerator &amp; Freezer <a href="https://www.foodsafety.gov/keep/charts/storagetimes.html">https://www.foodsafety.gov/keep/charts/storagetimes.html</a></li></ul>





# THE FOOD AUTHORITY IS HERE TO HELP

- Approved 14 days shelf with RTE meats manufacturer
- Assisted an Italian facility with validating salami
- Assisted a Greek facility with validating feta
- Assisted a Jewish facility with validating cottage cheese without a 7 day shelf life
- Approved a generic FSP with provisions for rare steak and sushi



# THE FOOD AUTHORITY IS HERE TO HELP

- We don't do it all for you – the facility needs to provide information on what they want to do and evidence that it is ok
- Extending shelf life of RTE meats to 14 days requires intimate knowledge of the processing of the meat, use of preservatives, gas flushing etc to validate the process
  - Not information a VP facility will have access to!





# THANK YOU

Anne McIntosh, Team Leader – Audit Systems and Verification

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# **VP FOOD SAFETY SCHEME - REVIEW OF THE RISK ASSESSMENT**

**PUBLISHED MARCH 2017**

Vulnerable Persons Industry Forum – 16 November 2017



Department of  
Primary Industries  
Food Authority

Alison Imlay

Manager Food Science



# THE FOOD ACT REQUIRES US TO CONDUCT RISK ASSESSMENTS

## + REGULAR REVIEWS

All of the Schemes' risk assessments were reviewed in 2008 - 2009 to underpin the development of Food Regulation 2010

& subsequently:

Egg Food Safety Scheme: Periodic review of the risk assessment – June 2013 (2017 revision at final review stage)

Seafood Safety Scheme: Periodic review of the risk assessment - April 2017

[Vulnerable Persons Food Safety Scheme risk assessment - March 2017](#)

Dairy Food Safety Scheme: Periodic review of the risk assessment – November 2014

Meat Food Safety Scheme: Periodic review of the risk assessment – June 2014

Plant Products Food Safety Scheme risk assessment – April 2014 (next review started)



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# **SCOPE — REVIEW COMMENCED IN 2016 AND HAS BEEN PUBLISHED ON THE FA WEB PAGE SINCE MARCH 2017**

## **GROWING SEGMENT**

2016 – 1471 licensed facilities, including 11 Central Processing Units

Carrying out:

- Preparation of raw or ready-to-eat foods
- Preparation and service of freshly cooked foods (cook-fresh or cook-serve)
- Preparation and service of previously cooked foods without further heating (leftovers)
- Service of foods previously cooked using cook-chill (with or without reheating)



# THINGS TO NOTE

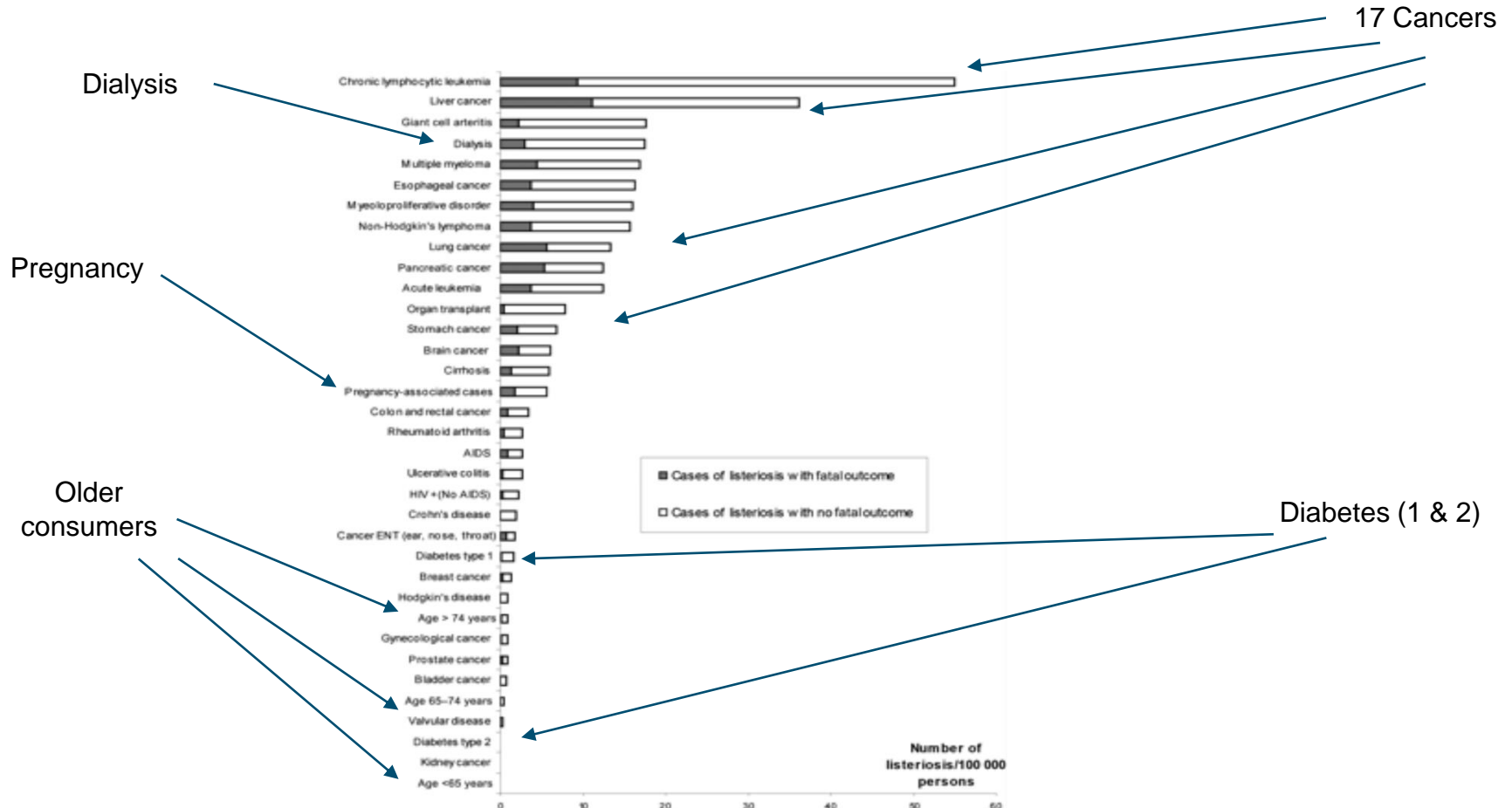
A UNIQUE ATTRIBUTE OF THIS RISK ASSESSMENT IS THE ADDITIONAL CONSIDERATION OF FOOD AS A CONTRIBUTOR TO QUALITY OF LIFE

## THIS DOCUMENT:

- INCLUDES AS APPENDIX 1, AN UPDATE OF THE “RECOMMENDED CONTROL MEASURES” FROM SECTION 5 OF THE 2010 TECHNICAL REVIEW
- REINFORCES THE IMPORTANCE AND EFFICACY OF HACCP
- IDENTIFIES HIGHER RISK FOODS AND SETS OUT RECOMMENDED COOKING TEMPERATURES
- ADDRESSES PREPARATION OF PUREED MEALS
- DEALS WITH INFANT FORMULA PREPARATION
- UPDATES REFERENCES



# NOTE THE RELATIVE RISKS OF LISTERIOSIS FOR DIFFERENT VP CONSUMER GROUPS



# SUMMARY:

- Risk assessments are regularly reviewed and updated
- Based upon literature locally and internationally
- Based upon:
  - local knowledge and conditions
  - improvements, developments and innovations in food safety management
  - developments in food production, processing, manufacturing and packaging
- Based upon balancing food safety requirements, well being, nutrition and enjoyment





# THANK YOU

Alison Imlay, Manager Food Science

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# THIRD PARTY AUDITORS WORKSHOP

## 2017

Vulnerable Persons Industry Forum – 16 November 2017

Anne McIntosh

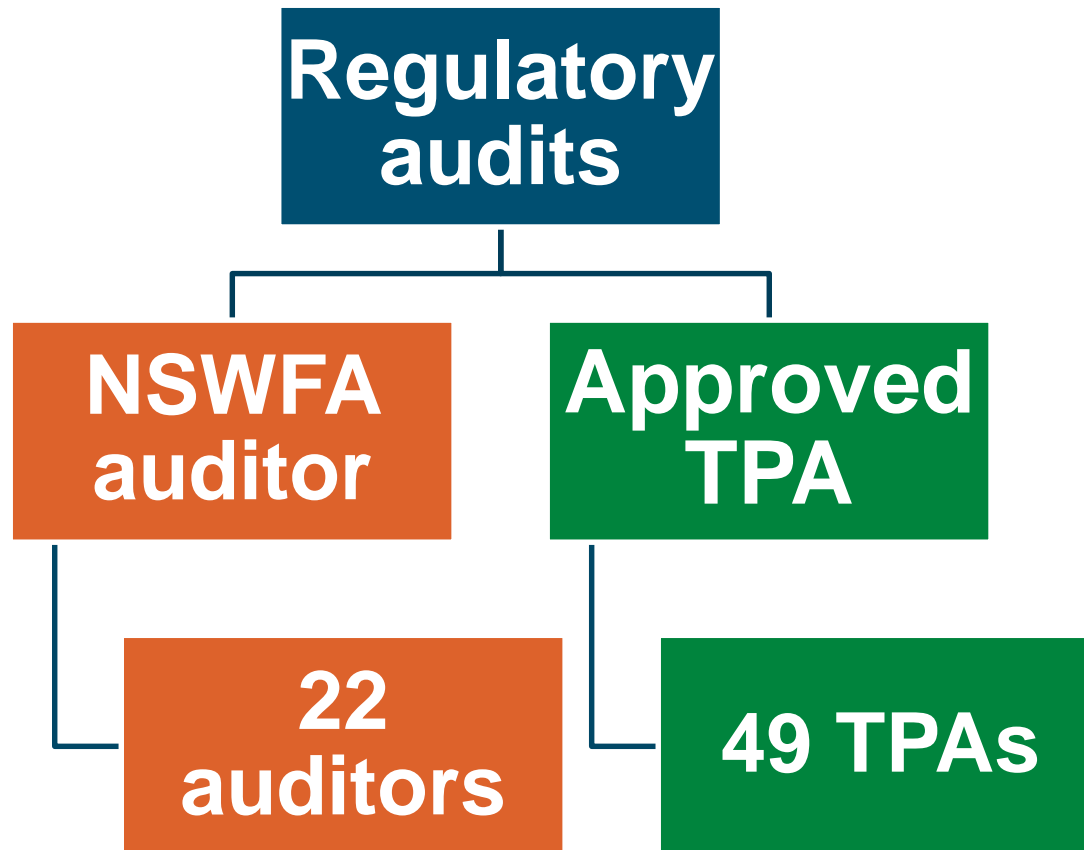
Team Leader, Audit Systems and Verification



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# AUDITS IN NSW



# AUDITOR QUALIFICATIONS

- National Regulatory Food Safety Auditor Policy
- Tertiary Qualifications – minimum Cert IV Food Science and Technology
- Minimum standardised qualifications in auditing food safety programs
- Extra auditing qualifications for high risk scopes
  - Cook Chill
  - Heat Treatment
  - Manufacture of RTE meats
  - Bi-valve molluscs



# 2017 TPA WORKSHOP

- Annual event – August
- 2 days
- Continuing education for TPA auditors on trends and latest technology in the food industry
- Attendance is not mandatory
- Approx 60% of TPA auditors attend



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# 2017 TPA WORKSHOP

## Day 1

- Identified trends during audit
- Auditor standardisation quiz
- VP Food Safety Schemes review
- Dairy Food Safety Schemes review
- Low microbial diets for the extremely vulnerable person
- What if?? Commonly asked questions from the last 12 months



# 2017 TPA WORKSHOP

## Day 2

- High Risk Foods – how validation works
- Paddock to plate - Rockmelons and food safety at farm
- Recall and withdrawal – who, when, how, why
- Food Safety Schemes Manual – review and update
- Raw milk cheese – demonstration of the on-line tool
- Q & A




# APPROVAL TO USE A TPA AUDITOR

www.foodauthority.nsw.gov.au/ip/audits-and-compliance/3rd-party-audits

Home > Audits and compliance > Third party audits (TPA, RFSA) > Third party audits

## Audits & compliance

- Audits in the food industry
- Third party audits (TPA, RFSA)
- Compliance
- Powers of authorised officers



### Third party audits

Share this page

The NSW Food Authority has developed a Regulatory Food Safety Auditor System to approve persons other than Authority employees to conduct regulatory food safety audits of licensed food businesses in NSW.

Regulatory food safety auditors (RFSA) may also be known as third party or commercially employed auditors.

**Key features include:**

- Auditor register
- Facility application**

Licensees who meet all of the [facility requirements](#) can apply online using form [TPA006](#) (pdf 42KB)

The Food Authority will assess applications and contact the applicant in writing with the decision.

#### Related topics

- Food Safety Auditor Code of Conduct
- Audits & compliance: overview

#### Forms & templates

- Application for approval as regulatory food safety auditor (TPA001)
- Application (facilities) to implement a regulatory food safety auditor system (TPA006)



# APPROVAL TO USE A TPA AUDITOR

- To be considered a facility must:
  - have a suitable audit and compliance history
  - have received an A or B rating at their most recent audits
  - have no outstanding enforcement action
- Using a TPA auditor is not mandatory





# HOW TO FIND A TPA AUDITOR

**Auditor register:**

[foodauthority.nsw.gov.au/\\_Documents/industry/tpa\\_auditor\\_register.pdf](http://foodauthority.nsw.gov.au/_Documents/industry/tpa_auditor_register.pdf)



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# THANK YOU

Anne McIntosh, Team Leader – Audit Systems and Verification  
[audit.admin@foodauthority.nsw.gov.au](mailto:audit.admin@foodauthority.nsw.gov.au)

[foodauthority.nsw.gov.au](http://foodauthority.nsw.gov.au)



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# AVOIDING THE OUTBREAK

## WHY WE DO WHAT WE DO

Vulnerable Persons Industry Forum – 16 November 2017



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Alan Edwards  
Snr Food Incident Response & Complaints Co-ordinator

# OVERVIEW

- A risk – *Salmonella* (*Listeria* was covered in a previous presentation)
- Overview of four Aged Care Facilities (ACF) outbreaks
  - Raw egg
  - Unclean equipment
  - Cross contamination
  - Pests
- Some 'near misses' we have come across
- Avoiding or responding to an incident
- Do these strategies make a difference?

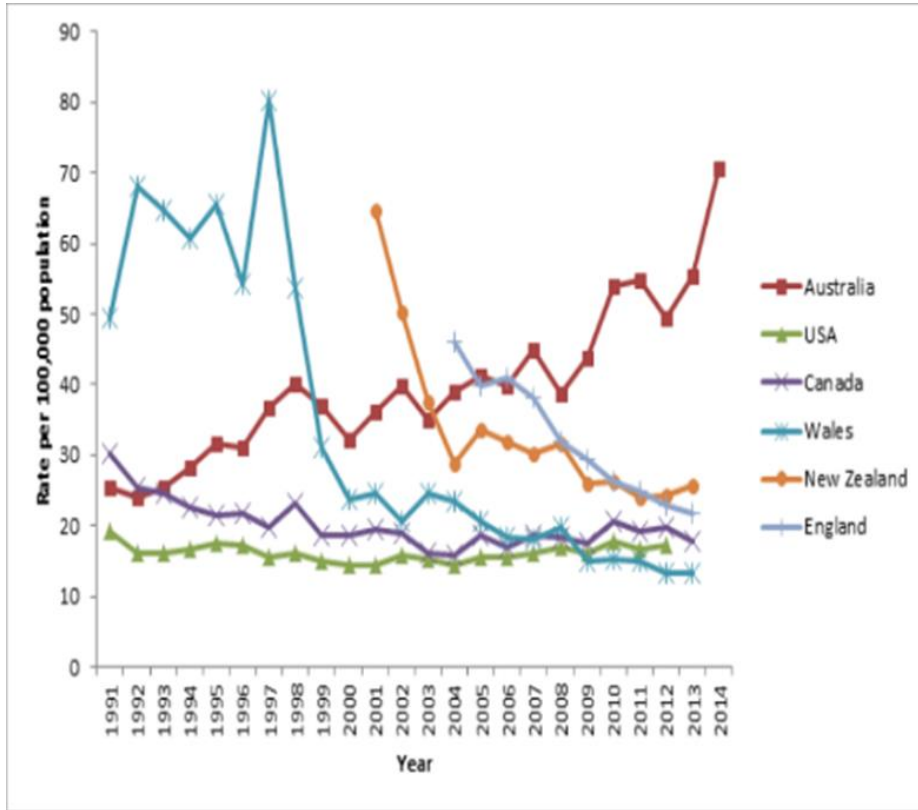


# SALMONELLA



- Main bacterial agent in food poisoning outbreaks
- Highly virulent - Small number of cells ingested may cause illness
- May take 6-72 hours for symptoms to develop after consumption
- Severe illness
  - 25-30% all people ill will be hospitalised
  - Can have long term consequences

# SALMONELLA



- Responsible for majority of foodborne outbreaks in Australia
- *Salmonella* Typhimurium most common serovar
- 20-30% of all cases hospitalised
- > 18,000 human cases in 2016
- >4,400 in NSW
- NSW Food Safety Strategy, 2015-2021
- 30% reduction in foodborne salmonellosis cases



# OUTBREAK 1: RAW EGGS

- Health identified a number of cases of *Salmonella* amongst residents at a Nursing Home. One of the cases died during the investigation
- A chocolate mousse was served to residents
- The mousse was made using raw eggs





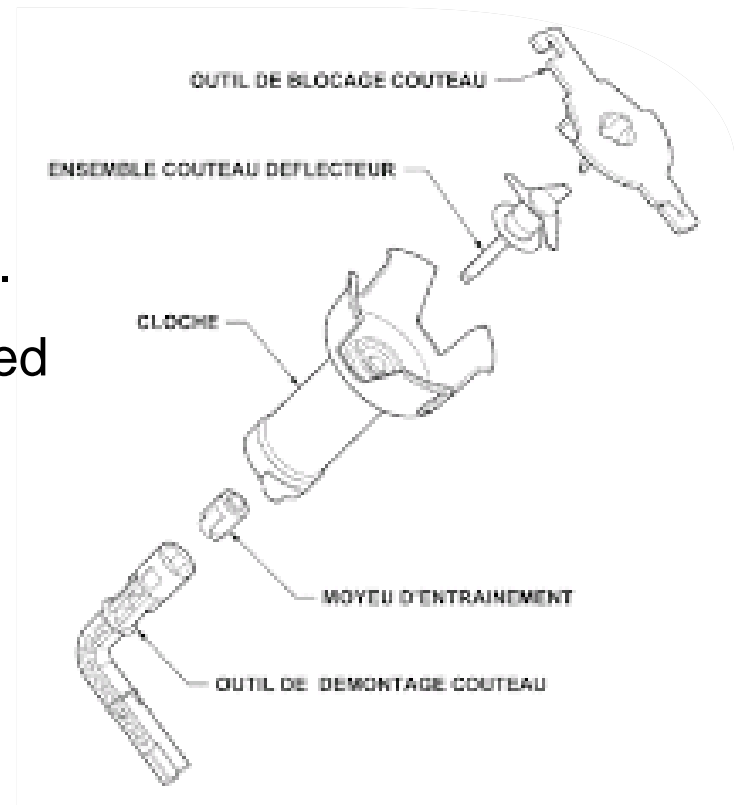
- Officers took food and environmental swabs, including egg rinse
- some of the eggs were cracked and dirty
- The *Salmonella* found on egg rinse was the same as the *Salmonella* isolated from the cases



# OUTBREAK 2: UNCLEAN EQUIPMENT

## AND AN UNCLEAN STICK/STAB BLENDER

- *Salmonella* STm9
  - 19 confirmed cases March 2015
  - Stab mixer used to make raw scrambled egg mix and RTE Pesto.
  - Contaminated RTE Pesto implicated
- *Salmonella* STm9
  - 16 cases over several weeks
  - raw egg implicated
  - Stab blender identified as source



# SA OUTBREAK PHOTOS

## STICK BLENDER INSIDE HOUSING – SHAFT REMOVED



# SA OUTBREAK PHOTOS

## BUILD UP ON STICK BLENDER SHAFT



# SA OUTBREAK PHOTOS

UNDER STICK BLENDER BLADE ONCE  
SHAFT REMOVED



# OUTBREAK 3: THICKENED FLUID

## SIMPLE CROSS CONTAMINATION

- Twenty-two confirmed and three probable cases of *Salmonella* among 70 residents;
- High-level care areas were affected;
- Of the 25 cases, most (76%) were on a soft / puree diet. (92%) received thickened fluids - either prescribed or with medications.
- This was a good facility by all measures. A single kitchen prepared and plated all meals. The facility met regulatory requirements.



# OUTBREAK 3: THICKENED FLUID

## SIMPLE CROSS CONTAMINATION

- A scoop and knife used to dispense the thickened fluid powder (powder) were stored in a container with the powder.
- Batches of thickened fluid were made up daily
- Staff reported no direct hand contact with the powder.
- The handles of the plastic scoop and knife were in contact with the powder when stored.



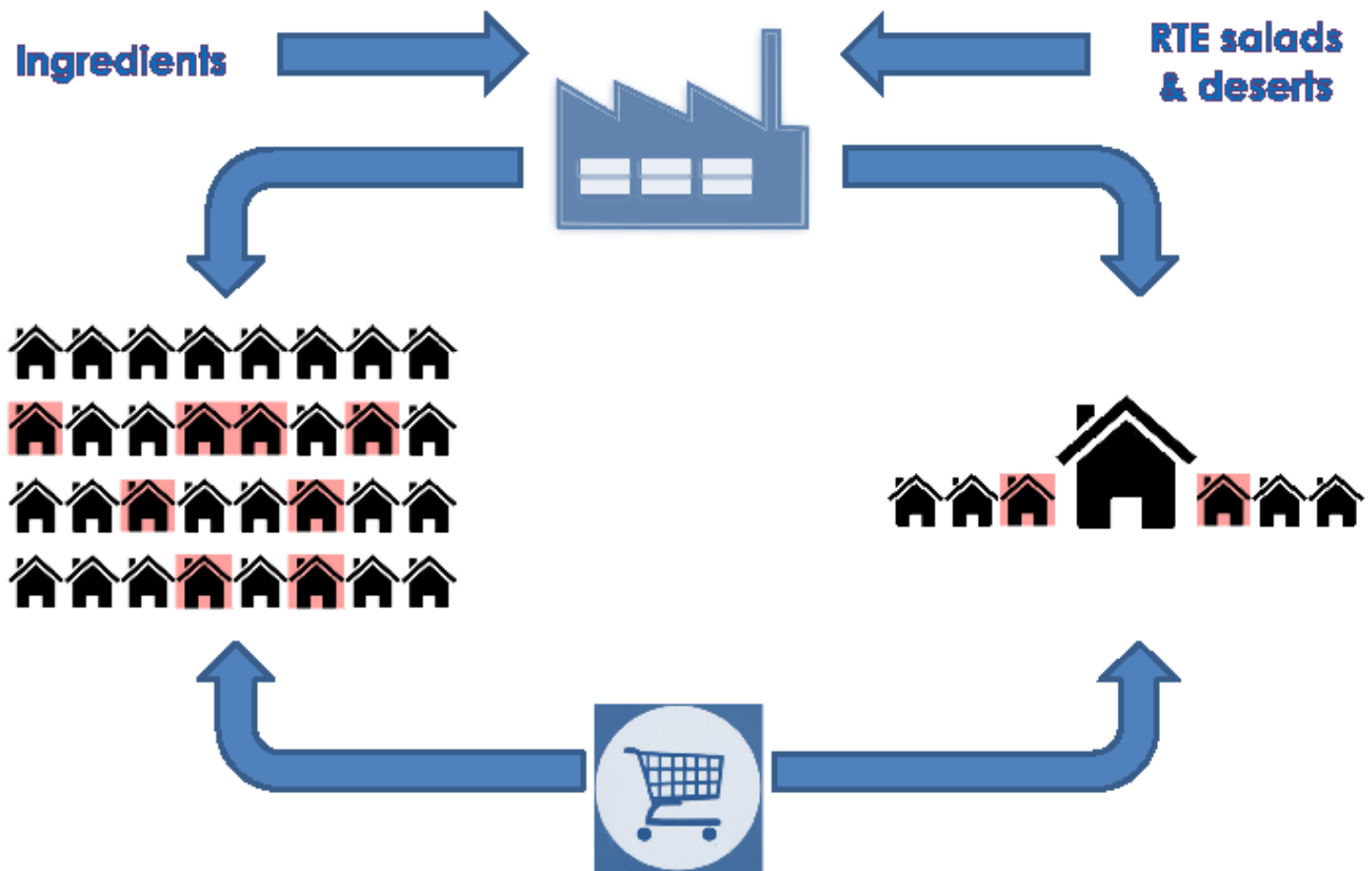


# OUTBREAK 4: BAKED GOODS

## THE THIRD PARTY SUPPLIER

- 33 residents across 10 ACFs in NSW (8) and ACT (2) tested positive for *Salmonella* bovismorbificans
- Onset between 21 January and 23 February 2015
- One secondary case with an onset date of 24 March
- 30 of the 33 cases have been confirmed as the same type of organism with 2 deaths linked to the outbreak
- *Salmonella* bovismorbificans infection is relatively rare in NSW with an average of three cases notified across the state each month





# OVERVIEW

## SIGNIFICANT IMPACT

- 2 deaths linked to the outbreak
- 12 (36%) cases admitted to hospital
- ACF's withdrew service of RTE products including luncheon meats and salads for over 4 weeks
- Incident response units were established within the ACF; within the Food Authority and within the Health Protection Unit of NSW Health
- Significant community and press interest



**FOOD SAMPLES AND  
ENVIRONMENTAL  
SWABS COLLECTED  
DURING THE  
INVESTIGATION**

---

**504**

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# POSITIVE SWABS



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# POSITIVE SWABS



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# NEAR MISS 1 - RTE MEATS

- Out of date RTE meats
- Control measures re freezing not listed in food safety program – e.g. what is the UBD when RTE meat is delivered frozen
- Most risky food that is served on a day-to-day basis





# NEAR MISS 2 – COOKING AND COOLING RECORDS

- Cooking temperatures not recorded;
- Not cooled to 21°C within two hours and then to 5°C within 4 hours;
- Incomplete cooling records.



# NEAR MISS 3 – DIRTY BLENDER



# COMMENTS BY STAFF ON BLENDER CLEANING

- Does that open up?
- How did you do that?
- We just put it through the dishwasher.
  - **Did you open it up?**
  - We took the lid off and the blade out. (about blender/blixer)
- It doesn't come apart
  - (until shown it does)
- But we reheat everything before we serve....
- I just work here..
- I don't do that, it's not my job.



# AVOIDING AN INCIDENT

Manage the risk in the first place by making sure the food safety program you have in place works and is implemented

That's why we do what we do



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# RESPONDING TO AN INCIDENT

- Ability to make decisions and provide information
- One individual – not a group – who has crisis management skills -
  - Can communicate effectively
  - Can build a team if need be

**Providing answers to two key initial questions at any time -**

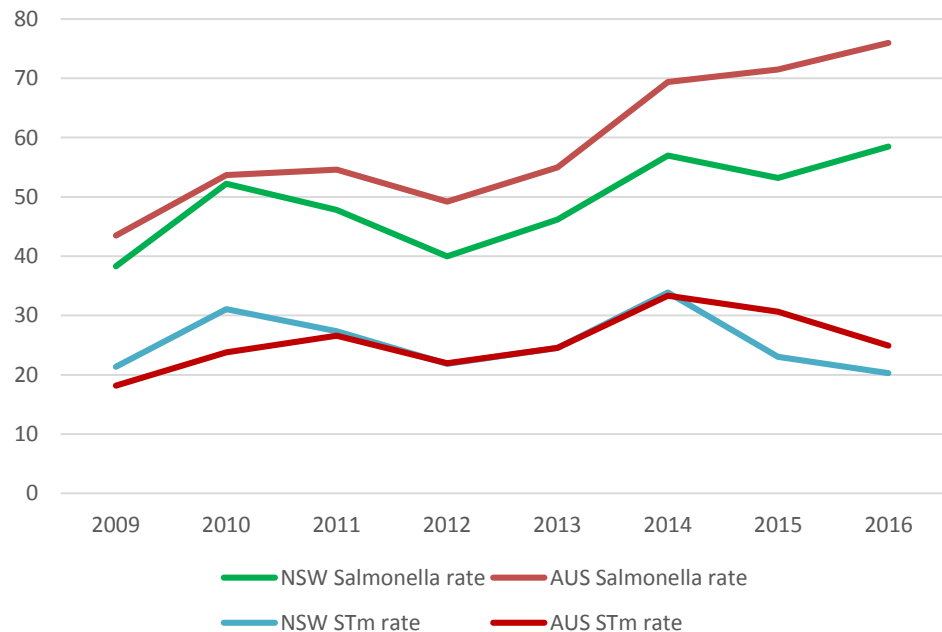
- **What is the risk to human safety?**
- **How many people are potentially exposed to the risk?**



# EFFECT OF INTERVENTIONS – S. TYPHIMURIUM

NSW and national *Salmonella* rates (per 100K population)

*S. Typhimurium* v total *Salmonella*



**Up to 2014:** *S. Typhimurium* rates in NSW continued to increase and accounted for over 50% of all human *Salmonella* cases

**After 2014:** *S. Typhimurium* rates diverging from *Salmonella* trend. Now less than half of all *Salmonella* cases

**So far in 2017:** *S. Typhimurium* ~ 20% lower than corresponding period in 2016

- 1545 cases in 2016
- Down from peak of 2456 total cases in 2014
- 2 outbreak in 2017 YTD
  - 13 outbreaks in 2014



# ACKNOWLEDGEMENTS

## **Audit Systems & Verification unit staff**

Anne McIntosh, Darlene Pennell, Kathy Day and Sally Timmins

## **Food Incident Response & Complaints unit staff**

Craig Shadbolt

## **Public Affairs**

Rebecca Bowman



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# THANKYOU

Alan Edwards, Snr Food Incident Response & Complaints Co-ordinator

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