

Reducing the risk of listeriosis in NSW

Retail delicatessen investigations 2017-2018

Purpose

Retail delicatessen investigations were conducted during 2017-2018 to monitor food safety practices and reduce the risk of listeria contamination in these businesses in the Sydney metropolitan area.

Issue

Listeriosis is a preventable foodborne illness, commonly linked to delicatessen (deli) meats and soft cheeses. Cross-contamination is a major contributing factor to *Listeria monocytogenes* contamination of ready-to-eat (RTE) foods. Control of *L. monocytogenes* cross contamination and adequate sanitation is essential to reduce the risk of listeriosis from the deli environment.

A cluster of eight listeriosis cases was detected in NSW and was investigated in 2016. The cases were attributed to foods (RTE deli meats) sold through retail delis.

What we did

Stage 1 survey

As a follow up to the outbreak investigation in 2016, a [joint project](#) with Canada Bay and the Northern Beaches Councils was conducted between November 2016 and March 2017. The aim was to gather information on the prevalence of *L. monocytogenes* in the deli

environment to determine which areas were most susceptible for *Listeria* spp. In total, 31 delis were surveyed whereby food samples and environmental swabs were tested. Results were then compared with compliance inspection findings from each deli.

L. monocytogenes was not detected in any of the foods sampled or any food contact surfaces swabbed. However, there were several detections of non-pathogenic *Listeria* spp in food and food contact surfaces which can suggest the possibility of potential future presence of *L. monocytogenes*.

Stage 2 survey

A further follow up project was conducted between November 2017 and May 2018, with joint inspections of 17 delicatessen businesses in the Campbelltown, Cumberland and Mosman City Council areas.

Food and environmental samples were submitted, and results compared with compliance inspection findings.

There was extra focus placed on sanitation compliance during Stage 2 of the project. Sanitisers at each business were tested with field test indicators (QUAT (Quaternary Ammonium Compounds) or chlorine) during the inspection.

Nine of the businesses did not comply with sanitation requirements as their sanitisers were not at the correct strength required. A company that was in partnership with many of these businesses that were non-compliant with sanitation was contacted and the issue was rectified.

49 foods were sampled at the 17 businesses. *L. monocytogenes* (at > 1500 cfu/g) was detected in food from one of the businesses. Non-pathogenic *Listeria* species was found in food at another business. *L. monocytogenes* was found in environmental swabs of both these two businesses.

205 environmental swabs were obtained at the 17 businesses. 18 of those environmental swabs had *L. monocytogenes* or non-pathogenic *Listeria* spp detected in 6 of the businesses. Again, detections of non-pathogenic *Listeria* spp in food and food contact surfaces can suggest the possibility of potential future presence of *L. monocytogenes*.

There was a correlation with *Listeria* found in the environment (particularly with food contact surfaces) and *Listeria* found in the food. This correlation was also associated with sanitation non-compliance.

The food sample that had > 1500 cfu of *L. monocytogenes* was also associated with temperature control issues found in storage of food at the business.

Four businesses received Improvement Notices and two Penalty Notices were issued for non-compliance as a result of the Stage 2 survey. A Prohibition Order was issued against one business that was found to have significant temperature control and sanitising issues.

What we found

It was found during the Stage 2 survey that sanitising of key areas of the

delicatessen environment, particularly food contact surfaces was important in the control of *Listeria* within the business. Proper sanitation is considered a key way to prevent the movement of *Listeria* from one surface to another. Other hygiene factors such as personal hygiene, cross contamination and temperature control were still important factors.

Next steps

- Share the information from the survey with the businesses involved and local government Environmental Health Officers (EHO's).
- Develop a factsheet for businesses and training for EHO's to encourage the monitoring of sanitisers in businesses by the use of sanitiser field test indicators.
- Revisit lower performing businesses to monitor compliance.

More information

For further information visit:

<https://www.foodauthority.nsw.gov.au>

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