What is *Listeria* and how do rockmelons become contaminated?

While rockmelons are grown off the ground on top of plastic sheeting, the fruit is grown in the open farm environment and subject to rain, wind and other natural contamination pathways. *Listeria* species, including *Listeria monocytogenes*, are soil bacteria that are naturally found in the environment, including farm paddocks. It is not unusual to find *Listeria* on the surfaces of any raw fruit and vegetable. Rockmelon skin is rough and irregular which allows more soil and bacteria like *Listeria* to be trapped.

How did this outbreak happen?

To reduce the risk of contamination farms usually wash and sanitise rockmelons. The investigation found that the contamination is likely to have occurred due to adverse weather (localised storm over the farm and subsequent dust storms during the season) increasing the levels of *Listeria* on the fruit prior to harvest. On this occasion and despite following industry best practice, the washing and sanitising at Rombola Family Farms was not able to remove all the trapped bacteria from the rockmelon surfaces, resulting in a low level of *Listeria* being present.

Inspections by the NSW Food Authority found there was also an opportunity for the introduction of *Listeria* after washing through contact with surfaces or equipment that may have had traces of *Listeria monocytogenes*. This includes dust blown from fans used to dry the fruit after washing, and from porous material on packing tables that was not able to be effectively cleaned at the time.

While *Listeria monocytogenes* is not an issue for healthy consumers, it poses a serious health risk for those vulnerable to infection, such as individuals who are immunocompromised or pregnant.

What are the results of the investigation?

The NSW Food Authority has completed extensive microbiological swabbing of the packing shed environment and equipment for *Listeria*. *Listeria species* and *Listeria monocytogenes* was found on the
packing shed floor during the investigation, which is not surprising as *Listeria* are often found in soil. Melons from boxed product at Flemington Markets tested positive for *Listeria monocytogenes* and a trade level recall was initiated on 28 February. That same day the NSW Food Authority issued a media release advising consumers to discard any rockmelon they may have purchased.

Melons obtained at retail, wholesale, and a swab of melons at the packing shed tested positive for *Listeria monocytogenes*. The genetic sequence of these *Listeria* isolates was an exact match with clinical cases. No rockmelons or swabs from other farms tested positive for *Listeria monocytogenes*.

During the investigation there was an allegation of raw organic fertiliser use on the rockmelon crop which was found to be incorrect. There is no reason to believe this played a role in the outbreak.

**Why is the NSW Food Authority allowing the farm to pack rockmelons?**

The production of rockmelons on the farm and packing shed environment has been investigated. During March 2018, further rockmelon packing trials and swabbing verified effective washing and sanitising is in place. The company has fully cooperated with the NSW Food Authority and has made significant line modifications to improve cleaning. They have also increased cleaning and sanitising of the packing line environment and increased the sanitiser concentration during the washing of melons. The company and the NSW Food Authority will continue to monitor the situation through inspections and product sampling. The NSW Food Authority is currently satisfied that the company has adequate steps in place to minimise the risk of foodborne illness, noting that immunocompromised people should avoid rockmelons.

No melons from the farm will be released for sale prior to testing for *Listeria*.

**Will it happen again?**

While rockmelons from Rombola are washed, sanitised and packed under hygienic conditions there is no absolute guarantee that any fresh produce item will be free from *Listeria*. The NSW Food Authority recommends that any farm produce eaten raw should be thoroughly washed before consumption. Consumers who are immunocompromised or pregnant are also advised to avoid high risk foods, including rockmelons.

**What happens next?**

The NSW Food Authority will continue to work with the industry and food regulatory agencies to share lessons learnt from this outbreak. This includes interstate businesses and food safety agencies so the industry as a whole can move forward with confidence in the future.

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About the NSW Food Authority: The NSW Food Authority is the government organisation that helps ensure NSW food is safe and correctly labelled. It works with consumers, industry and other government organisations to minimise food poisoning by providing information about and regulating the safe production, storage, transport, promotion and preparation of food.

Note: This information is a general summary and cannot cover all situations. Food businesses are required to comply with all of the provisions of the Food Standards Code and the *Food Act 2003* (NSW).