



Office of Hon Jo Goodhew

MP for Rangitata

Minister for the Community and Voluntary Sector

Minister for Food Safety

Associate Minister for Primary Industries

Associate Minister for Social
Development

MinOIA14-014

06 NOV 2014

Alex Harris

fyi-request-2105-074c4937@requests.fyi.org.nz

Dear Alex Harris

RELEASE OF OFFICIAL INFORMATION

I refer to your official information request of 15 October 2014 relating to all briefings and communications I have received relating to the *Yersinia pseudotuberculosis* outbreak.

The following information is released to you under the Official Information Act 1982 (the OIA):

- AM14-149 Background on *Yersinia pseudotuberculosis*
- AM14-154 Background on *Yersinia pseudotuberculosis*
- AM14-158 Background on *Yersinia pseudotuberculosis*
- Text from weekly report for the week ending 10 October 2014

Please note some information has been withheld pursuant to section 9(2)(a) of the OIA in order to protect the privacy of natural persons and section 9(2)(g)(i) of the OIA to maintain the effective conduct of public affairs through the free and frank expression of opinions by employees of a department in the course of their duty.

For your further information, the case control studies developed by the Institute of Environmental Science and Research, referred to in AM14-158, have been made publicly available by the Ministry of Primary Industries on their website:
<http://www.mpi.govt.nz/food/food-safety/yersinia-pseudotuberculosis>

You have the right under section 28(3) of the OIA to seek an investigation and review by the Ombudsman of my decision to withhold some information. A request must be made in writing to:

The Ombudsman
Office of the Ombudsman
PO Box 10 152
WELLINGTON

Yours sincerely



Hon Jo Goodhew
Minister for Food Safety

AM14-149

Ministry for Primary Industries
Manatū Ahu Matua



Aide-memoire:

From: Matthew Stone
Acting Deputy Director-General, Regulation and Assurance
for Director-General

Contact S9(z)(a)

To: Hon Nathan Guy
Minister for Primary Industries
Hon Jo Goodhew
Minister for Food Safety
Associate Minister for Primary Industries

Date: 9 October 2014

Background on *Yersinia pseudotuberculosis* (Minister's request)

1. On 29 September 2014, the Ministry for Primary Industries (MPI) accepted lead agency responsibility for investigation into an outbreak of *Yersinia pseudotuberculosis* that had been identified by Environmental and Scientific Research (ESR) and notified initially to the Ministry of Health (MoH). Transfer of lead agency responsibility was requested by MoH based on preliminary case survey information that indicated the outbreak pattern was consistent with a foodborne outbreak.
2. While MPI is lead agency in this investigation, the MoH continues to have considerable involvement and ESR is providing on-going case data analysis.
3. As at 1200 hours 8 October 2014, 124 confirmed and 18 presumptive cases of *Yersinia pseudotuberculosis* had been notified since 1 September 2014.
4. Laboratory methods for detection of *Yersinia pseudotuberculosis* mean that, in this outbreak, there is a delay of 10-15 days between onset of illness and confirmation of diagnosis. Most cases have mapped to an outbreak curve with most people becoming ill between September 5 and September 22 (peaking around 15 September).

Security Level – In Confidence

5. Illness has occurred in 9 district health board territories, with almost half the cases occurring in Canterbury. Significant numbers of cases have also occurred in Auckland, Wellington, the Bay of Plenty and Southland/Otago. 1-2 cases have been identified in each of the Waikato, Hawkes Bay, Taranaki and Nelson/Marlborough areas. This is an unusual pattern of distribution. It does not appear to be consistent with either localised food supply or with nationwide food distribution networks.

The organism

6. Yersiniosis is a notifiable disease under the Health Act 1956. There are three species of *Yersinia* that can cause human illness. *Yersinia enterocolitica* is the most commonly notified, and presents with 'typical' stomach illness. *Yersinia pseudotuberculosis* is rarely notified, and presents with symptoms that can mimic appendicitis. The third type that can cause illness is *Yersinia pestis* which causes plague and hasn't been reported in New Zealand since 1911.
7. The infectious dose of *Yersinia pseudotuberculosis* is high, which means that high numbers (millions to hundreds of millions) of the organism are required to cause illness. In order to reach numbers of this magnitude on a food, two factors are generally required;
 - a) A specific contamination event that introduces high numbers of the organism into a food production or processing environment,
 - b) A food environment that allows growth of the organism. *Yersinia* is sensitive to heat, so cooked or heat-treated foods are not often sources (unless, on very rare occasions, contamination has occurred after cooking or heat treatment).
8. Outbreaks of *Yersinia pseudotuberculosis* overseas have been linked with animal contact, contaminated water and a range of foods, including pasteurised milk, chocolate milk, tofu, beans, pork and fresh produce (such as lettuce and carrots).

Outbreak Investigation

9. When a notification is made, Public Health Units (PHUs) frequently contact the affected person and ask that they complete a questionnaire designed to identify possible sources of infection (possible human contacts, details of ingestion of untreated water, contact with animals, travel and food history).

Security Level – In Confidence

10. Notifications and questionnaire information is entered into the EpiSurv database, which ESR regularly analyses to identify trends and outbreaks of notifiable diseases. When an outbreak is identified the preliminary case questionnaire data can indicate whether one or more sources are more likely to be contributing to illness. This may result in subsequent, more targeted questionnaires to further investigate possible sources of infection.
11. In this investigation, PHU /district health board representatives have obtained information from affected people via two food-based survey questionnaires. They have also assisted with conducting case control studies (which provide information about foods consumed by the general, unaffected, population as a point of comparison against patterns of food consumption for those people that became ill).
12. Once food was identified as a possible source of infection a second more detailed food questionnaire was completed with affected people in order to further identify a food (or foods) that may be implicated as a source of infection.
13. Food history information on its own is a good source of data but is generally not sufficient to positively identify a source of foodborne illness. Other avenues of investigation can include matching food supply chain information with patterns of infection, identifying possible or probable contamination events (in production or processing), and, if possible, isolating the organism of concern from samples of implicated foods.
14. MPI has been working with industry contacts to document production and processing practices and supply chains for several foods that were identified, after analysis of food questionnaires, as being consumed more frequently by affected people than unaffected case control people.
15. Further investigations are on-going in order to identify possible contamination sources, or alternative foods that could be a source but were not specifically asked about in food questionnaires. It is possible further food questionnaires will be developed to test whether additional foods could be a source.
16. The outbreak curve (see point 4) may suggest that any source of contamination has now resolved itself. This may make it difficult to confirm what actually caused the outbreak. However MPI is committed to completing the investigation in order to;
 - a. Have certainty that the outbreak is contained,
 - b. Identify any particular risk factors that require risk management intervention to reduce an opportunity for future, similar outbreak events,
 - c. Maintain public confidence in New Zealand's food safety system.

Security Level – In Confidence

Communication

17.

18.

S9(2)(g)(i)

19. MPI food safety messages to the public includes the advice to wash fruit and vegetables before eating – still probably the best preventative information available.
20. MPI has also sent our key messages regarding this outbreak to overseas markets that may receive New Zealand lettuces and carrots noting that these products have not, to date, been confirmed as a source of the outbreak.

Minister / Minister's Office

Seen / Referred

/ /2014

RELEASED UNDER THE OFFICIAL INFORMATION ACT

AM14-154

Ministry for Primary Industries
Manatū Ahu Matua



Aide-memoire:

From: Matthew Stone
Acting Deputy Director-General, Regulation and Assurance
for Director-General

Contact S 9/26

To: Hon Jo Goodhew
Minister for Food Safety
Associate Minister for Primary Industries

Hon Nathan Guy
Minister for Primary Industries

Date: 10 October 2014

Background on *Yersinia pseudotuberculosis* (Minister's request)

1. This paper updates you with progress since AM14-149 (9 October 2014). It discusses progress towards identifying the possible source(s) of contamination that has caused people to become ill with *Yersinia pseudotuberculosis*.
2. It is worth noting that over the past week the number of new cases has fallen, bearing in mind that the incubation period for this illness can be up to 21 days.

Possible source of contamination

3. On Thursday 9 October, Environmental and Scientific Research (ESR) provided MPI with its latest update of its studies into the possible source of contamination.
4. ESR reports have identified a range of potential foods that have been linked to the outbreak. They do not, however, definitively identify a specific food as the source.
5. Some foods have been consumed by a significant proportion of those who have become ill. There is no single food that has been consumed by 100% of the cases reporting illness.

Security Level – In Confidence

6. The latest ESR report identifies that a significant proportion of people confirmed with *Yesinia pseudotuberculosis* have consumed lettuce – this is the highest proportion of a food type that has been identified as consumed by those people. A smaller proportion of people reporting illness also consumed carrots.
7. It is also worth noting that a large proportion of the public have also consumed both products and have not reported illness.
8. The ESR report states that “this information is not definitive” but is sufficient to focus the investigation of possible contamination of both lettuce and carrots at some point between growth and consumption. MPI continues to investigate this and other possible links. Other possible links include companion foods such as some dressings that were not included in the ESR analysis.
9. Both lettuce and carrots come from multiple sources and are produced and marketed under multiple brands. This makes tracing and identifying the contamination source problematic. The incidence of illness would suggest that the infected product is no longer on the market and MPI’s investigation is now retrospective.

Plan for weekend & next week

10. Based on the latest assessments from ESR and MoH, requests for specific information are being formulated and will be sent out today. This information is to support the deeper analysis of the supply chains (from grower/producer to consumer) of potential risk products.
11. MPI will continue to make progress on this issue over the weekend, including meeting with the key industry providers (supermarkets and produce peak bodies).
12. It is expected that we will have sufficient information by late Monday/early Tuesday to begin to understand the supply chains. From this, potential vulnerabilities may be identified that could have led to this outbreak.
13. MPI’s focus for next week will be to continue our investigation and tracing work to identify the source. We are following up on the distribution chains for these products in an effort to determine whether the distribution pattern matches the pattern of illness.
14. If the source of contamination is formally identified, MPI will take appropriate and necessary actions.

Security Level – In Confidence

15. We will provide you with a further aide-memoire by late next week, unless new and significant information arises before then.

Media update

16. MPI will continue to update the public with information as it comes to hand.
17. MPI reiterates the food safety messages to the public – the best approach is to wash fruit and vegetables before eating them raw. This remains the best preventative information available.

Minister / Minister's Office

Seen / Referred

/ /2014

Back pocket media messages for the Minister

- Over the past week the number of new cases of *Yesinia pseudotuberculosis* has fallen. It is likely that the outbreak of illness is coming to an end. The incidence of illness would suggest that the infected product is no longer on the market and MPI's investigation is now retrospective.
- A range of potential foods have been identified that have been linked to the outbreak. No specific food has been identified as the source.
- Some foods have been consumed by a significant proportion of those who have become ill. There is no single food that has been consumed by 100% of the cases.
- A large proportion of the public has consumed product that has been identified as potentially linked, but have not reported illness.
- MPI is continuing to investigate this issue and work is taking place across the weekend and into next week.
- MPI will continue to update the public with information as it comes to hand.
- MPI reiterates the food safety messages to the public – the best approach is to wash fruit and vegetables before eating them raw. This remains the best preventative information available.

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AM14-158

Ministry for Primary Industries
Manatū Ahu Matua



Aide-memoire:

From: Scott Gallacher
Deputy Director-General, Regulation and Assurance
for Director-General

Contact Scott Gallacher [] s9(2)(a)

To: Hon Nathan Guy
Minister for Primary Industries

Hon Jo Goodhew
Minister for Food Safety
Associate Minister for Primary Industries

Date: 14 October 2014

Update on *Yersinia pseudotuberculosis*

1. This paper updates you with progress since AM14-154 (10 October 2014). (Copies of the Environmental and Scientific Research (ESR) working documents are attached for your reference).
2. As at 13 October, there are 132 confirmed and 20 presumptive cases (suspected, yet to be confirmed). A total of 53 people have been hospitalised.
3. The peak of illness was in mid-September indicating that consumption of affected product was in early September. Based on an ESR situation update from 13 October, the last confirmed cases (2 cases) were on 30 September. There are currently four unconfirmed cases still under investigation, but these pre-date 8 October (with three of them pre-dating 4 October).

Possible source of contamination

4. On Thursday 9 October, ESR provided MPI with its latest update (8 October) of its studies into the possible source of contamination.
5. Because the ESR working documents are not definitive in respect to lettuce and carrots, MPI is currently not excluding other foods that may be consumed in a common pattern with lettuce and carrots, for example, dressings, herbs, or other leafy greens.

Security Level – In Confidence

6. MPI is conducting geo-spatial mapping of the incidence of illness with purchase data (supermarkets) to identify potential suppliers of contaminated product.
7. In parallel, MPI is investigating incidence of *Y. pseudotuberculosis* in animals and whether this information can help pinpoint a potential contamination point for human food.

Possible links to shops and supermarkets

8. The ESR working documents identified that people who sourced lettuce and/or carrots from independent supermarkets were more likely to become ill than people who purchased from supermarkets operated by Foodstuffs, who were in turn, more likely than customers of Progressive supermarkets. However, none of the supermarkets can be ruled out as a potential source.
9. MPI is working with supply chain participants (growers, packers, distributors, brokers, supermarkets and other potential end users) to identify common linkages and patterns that match the incidence of the outbreak.

Possible links to brands

10. The ESR working documents notes Pam's branded lettuce as a food identified by patients as being consumed around the time of onset of illness. The survey reported by ESR asked about people's recollection of purchasing certain brands, but did not ask about all brands.
11. Almost everyone in the survey recalled purchasing lettuce during the period preceding the outbreak.
12. While 87 (of 96) people affected by the illness purchased lettuce, only 17 identified any of the brands asked about in the survey. 79 of the 96 affected people did not identify any particular brand.
13. "Pam's Fresh Express Mesclun Salad Lettuce Ready to Serve" was recalled by 8 from the 96 people surveyed. 23 people also recalled Pam's Fresh Express lettuce products as being purchased.
14. In other cases, people recalled a brand that included several individual products.
15. Based on the information available, we are not sufficiently confident to rule particular brands, supermarket chains or other outlets, in or out.

Findings

16. Different companies (growers and packers) supply into the same brand.

Security Level – In Confidence

17. The main branded products are usually sourced from preferred suppliers, but additional produce may be sourced from other suppliers to fill gaps in supply.
18. Based on the distribution of incidence of illness, MPI has requested from supermarket companies, distributors and brokers the names of suppliers of lettuce, carrots and other leafy greens sold during August and September. MPI will attempt to identify common batches of product linked to the illness, and from there to the possible source of contamination.
19. The complexity of the supply chain makes this investigation difficult and the timeframe uncertain. Because of this complexity, and the retrospective nature of this investigation, it is uncertain that a definitive source will be found, but we are focused on getting as much clarity as possible.

Microbiological testing

20. Microbiological testing is unlikely to assist in the identification of a source food product for a number of reasons, including:
 - analysis for *Y. pseudotuberculosis* is not carried out routinely in NZ or overseas;
 - the infectious dose required to cause illness in the population as observed is in the order of 100,000,000 organisms. Therefore, methods would be required that can quantify the degree of contamination on product; not just detect contamination;
 - there are no validated methods, nor accredited laboratories, in New Zealand for enumeration of *Y. pseudotuberculosis* on foods; and
 - there are not baseline data against which any result could be interpreted with respect to foodborne risk.
21. In any event, there has not been any product to test because of the length of time of incubation of the illness, and patients have not kept any product.

Media update

22. MPI will continue to update the public with information as it comes to hand. Attached is the latest media release. In addition, Foodstuffs have also released the attached statement.

Security Level – In Confidence

23. MPI reiterates the following food safety message to the public that has been issued alongside media updates and is also highlighted on the MPI website – the best approach is to wash fruit and vegetables before eating them raw. This remains the best preventative information available.

Minister / Minister's Office

Seen / Referred

/ /2014

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Text from Minister Weekly Report

Week ending 10 October:

Subject: Yersinia Outbreak

MPI Contact: Scott Gallacher

MPI is leading the investigation of an outbreak of Yersiniosis, working with the Ministry of Health, District Health Boards and Environmental Science and Research. A food source is suspected based on the distribution of cases, but it is not yet confirmed. Further detail is provided in an Aide Memoire. Further media statements have been made today, and MPI has responded to criticism made online through a medical website.

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