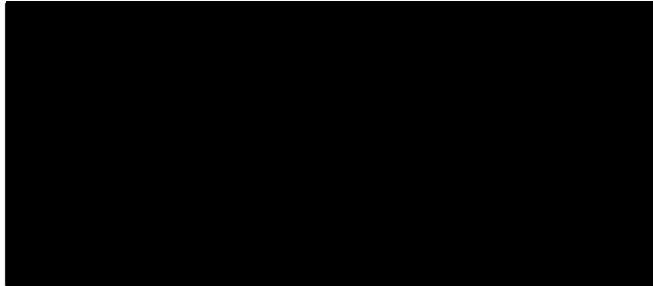


4 May 2020



Re Official Information Request – Cluster of Infectious diseases

I refer to your official information request dated 13 March 2020 requesting the following information.

In a recent OIA (OIA19-0814) sent to Food Science and Risk Assessment, New Zealand Food Safety, the following paragraph was provided, regarding information from the EpiServ data base, and its source data.

“In New Zealand the identification and investigation of diseases are the responsibility of the Ministry of Health and its agents. Information on cases of illness where raw drinking milk is identified as a risk factor is notified to MPI by District Health Boards (DHBs). MPI does not assess the medical evidence to establish that consuming raw milk was a risk factor in notified cases of illness but is advised by DHBs.”

Information provided to the MPI, by your DHB, suggests that “raw milk” was the cause of an outbreak of “STEC (E.coli O157:H7)”. The outbreak was identified with a “report date” of 2 Feb 2016, causing illness in 11 people between the ages of 2 and 13. The comment provided regarding the source of the outbreak was “Cases consumed raw milk from the same raw milk producer”.

Please keep in mind the main focus of this OIA is clarification of “the medical evidence used” in establishing that consumption of raw milk was either the cause of the illness, or the most likely cause of the illness.

I am responding from Auckland District Health Board (ADHB) as the DHB responsible for Auckland Regional Public Health Service (ARPHS).

ARPHS provides public health services to all three metro Auckland District Health Boards – Waitematā District Health Board, Counties Manukau Health and Auckland District Health Board, and the populations they serve. ARPHS's core role is to protect and promote public health.

Response to OIA 19-0814 and clarification of the medical evidence used in establishing that the consumption of raw milk was either the cause of the illness, or the most likely cause. This refers to the information provided by Auckland Regional Public Health (ARPHS) that suggest "raw milk" was the cause of an outbreak of STEC (E.Coli O157:H7)

Seven specific questions were asked.

Notwithstanding competing pressures on ARPHS with respect to COVID 19 the answers to these questions are as follows

1. What information was sought from the "cases" themselves

Answer:

The Health Protection Officers contacted all cases by phone or visited the cases in hospital, if hospitalized, to interview each case.

These questions included:

- Onset, type and duration of symptoms
- Presence of severe complications of STEC (Haemorrhagic colitis, Haemolytic Uraemic Syndrome)
- Overseas travel, visitors, consumption of food brought into NZ
- NZ travel
- Contact with other confirmed cases or persons with a similar illness
- Foods consumed during the incubation period, where/how purchased, brands
- Water consumed e.g reticulated, tank, bore, stream
- Environmental risk factors
- Contact with faecal matter (nappy changing, manure from gardening, raw veges, herbs from home gardening.
- Contact with pets, pet farms, zoos
- Contact with farm animals
- Recreational water exposure (e.g. swimming in rivers, streams, pools, spa pools).

2. What information was sought from other sources, and what were these other sources.

Answer:

Information from other sources included:

- Checking MPI Recall Products and food safety information on raw milk products
- ARPHS notified ESR to establish whether there were other STEC notifications from other regions that might be associated with the consumption of raw milk
- ARPHS requested early STEC four/five toxin profile testing to determine whether this was possibly a common outbreak strain
- ARPHS requested expedited pulsed field gel electrophoresis (PFGE) studies to provide better resolution of whether this was a common outbreak strain.

3. What tests were used to establish that raw milk was the cause, or probable cause, of the illness?

Answer:

- The original stool samples underwent PCR testing for STEC toxin
- The positive stool results were subsequently tested to establish whether the STEC was O157:H7 or another strain
- The positive stool results underwent toxin profiling
- The positive O157:H7 results underwent PFGE
- Food (milk) samples were collected where possible
- Opened and unopened containers of the named milk were obtained
- The milk containers were tested by Christchurch Science Centre for Food laboratory
- Positive samples were tested for the four/five toxin profile
- Positive samples were tested and compared against clinical samples from patients to determine similarities.

4. What evidence did you rely on to ascertain that raw milk was the cause, or probable cause, of the illness?

Answer:

The evidence relied on was:

- Identification of the most common high risk food exposure amongst cases for that period
- Cases were able to name the single product brand of raw milk involved.
- E Coli was identified in one of the named samples uplifted and E.Coli O157:H7 was identified in another unopened sample
- The E Coli O157:H7 isolates from the cases were indistinguishable or very similar to the uplifted milk samples by PFGE.

5. What other foods did the “cases” consume that may have caused the illness?

Answer:

A full food history was taken from cases including whether cases had consumed high risk foods such as seafood, sushi, hummus etc. and commonly consumed food. Chicken was commonly consumed but the chicken consumed was not common in the form it was consumed (e.g. nuggets, precooked, fresh), where it was consumed (e.g. home or outside the home), or where it was purchased from.

6. What nonfood sources were investigated as possible causes of the illness?

Answer:

All cases were interviewed as to the possibility of other environmental and non-food sources. No commonality was found from the interviews.

7. What other possible sources of the illness were investigated to ascertain that they were not the cause, or probable cause, of the illness?

Answer:

Following the initial interview every case is discussed at a review meeting where possible sources are considered and included or excluded based on the evidence available. A line listing is utilized to identify commonalities amongst the cases. Frequently ARPHS has to rely on individual or multiple risk factors to establish the probable cause. In this particular case the medical evidence was as compelling that the causative agent was the named product.

I trust this information answers your questions.

You are entitled to seek a review of the response by the Ombudsman under section 28(3) of the Official Information Act. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Please note that this response, or an edited version of this response, may be published on the Auckland DHB website.

Yours faithfully



Ailsa Claire, OBE
Chief Executive