



Lake District Campylobacter outbreak linked to raw milk vending machine

An outbreak originally reported in mid-December with six confirmed Campylobacter cases has now thought to have affected at least 65 people. The South Lakeland District Council is investigating the outbreak and has linked the illnesses to raw milk sales from a vending machine situated in a farm shop near Kendal.

Controls for Raw Drinking Milk (RDM) are provided in EU and domestic legislation. The current controls on the sale of raw cows' drinking milk in hygiene regulations which apply to England, Wales and Northern Ireland are as follows:

a) The milk may only be sold direct to consumers by registered milk production holdings (at the farm gate or in a farmhouse catering operation), at farmers' markets (by the farmer) or by a distributor from a vehicle used as a shop premises (i.e. milk rounds). Sales through other outlets have been banned since 1985. These restrictions only applied to Cow's milk and do not apply to the sale of raw sheep, goat or buffalo milk.

b) The supplying animals must be from animals that are healthy, and a herd that is brucellosis and tuberculosis free.

c) The production holding, milking premises and dairy, must comply with hygiene rules.

d) The milk must bear the appropriate health warning.

e) Compliance with the food safety and hygiene requirements is monitored through twice-yearly inspections.

f) The milk is sampled and tested quarterly by Dairy Hygiene Inspectors to monitor compliance with microbiological standards.

Sales of Raw Drinking Milk (all species) are prohibited in Scotland.

I was watching one of the many television programs which abound this time of year (to coincide with our New Year resolutions) on diets and healthy eating and was astounded to see one of the presenters visiting a farm shop and extolling the virtues of drinking raw cows milk.

In July 2016 the FSA issued the following guidance "Unpasteurised or 'raw' milk and 'raw' cream may contain harmful bacteria that cause food poisoning. If you have a weakened immune system, you are particularly vulnerable to food poisoning and should not consume unpasteurised milk and cream. Vulnerable groups include pregnant women, infants and children".

Another US Salmonella outbreak linked to cucumbers

Following two outbreaks reported in 2015 (one caused by Salmonella poona affecting 838 people and resulting in 4 fatalities, and a second caused by Salmonella newport affecting 275 individuals), a new report has linked a food poisoning outbreak last year in the US to the consumption of imported cucumbers.

Although no contaminated produce was detected, all the available epidemiological information indicated that the cucumbers were the most likely source of the outbreak, which was caused by the rare serotype Salmonella oslo.

The report highlighted the difficulty of investigating outbreaks where short shelf life fresh produce are the likely source, as by the time symptoms have appeared and the causative organism has been recognised, the implicated

batches of product are often no longer available for examination.

Incidence of Salmonella in Australia

Two new reports have been published on the incidence of Salmonella in Australia.

The first study published in PoultryMed showed a higher risk of illness from contaminated eggs than from contaminated chicken meat, suggesting that consumption and handling practices potentially play a bigger role in illness due to eggs, considering the comparatively low prevalence of Salmonella on eggs compared to raw poultry.

http://www.poultrymed.com/poultry/templates/showpage.asp?DBID=1&LNGID=1&TMID=178&FID=1908&IID=47241&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+Poultrymed+%28Poultrymed+RSS%29

In the second study, research conducted by the University of Adelaide showed that despite a higher number of cases of Salmonella poisoning from eggs and egg products during the hot summer months, there is no greater risk of Salmonella contamination in the production of free range eggs in Australia due to hot weather, compared with other seasons. The authors claimed that the findings provided evidence that the hygiene around egg handling in the supply chain and in household and restaurant kitchens is critical to reducing food poisoning from eggs. They stated that the research helps to reinforce a simple health safety message: that it's important for people to wash their hands before and after handling eggs, whether at home, in a restaurant, or while working in the supply chain."

https://www.sciencedaily.com/releases/2017/01/170105101314.htm?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+sciencedaily%2Fplants_animals%2Fagriculture_and_food+%28Agriculture+and+Food+News+++ScienceDaily%29

Nanoparticles and food packaging

We have considered the use of antimicrobial use of nanoparticles in previous bulletins and now a consortium led by the Israel Institute of Technology, has received funding from the European Union (EU) to develop a new nanotechnology-based antimicrobial packaging solution that is claimed to extend the shelf life of foodstuffs.

The €7.7m EU fund will be used to demonstrate, validate and test food-packaging products with antimicrobial surfaces based on natural materials for a three-year period.

The nanoparticles act as carriers to facilitate the slow release of essential oils into the packaging.

The researchers claim that the oils have both antimicrobial and anti-fungal properties and can be tailored to inhibit the growth of most food-borne microbes, therefore prolonging shelf life.

Biofilm production by Staph aureus – study into Buffalo milk

We are hopefully all familiar with the issues caused by biofilm production (particularly with Pseudomonas and Listeria), but new research serves as a reminder that many organisms can evade both the hosts immune system and sanitisers by the formation of biofilms. In this paper, the authors comment on the ability of Staph aureus to produce biofilms in Buffalo herds which are used for milking in Brazil, and how the biofilm producing strains found in the environment are the same as those which cause mastitis in the milking herds.

<http://www.academicjournals.org/journal/AJMR/article-abstract/6D164BF62498>

Outbreak of Botulism caused by consumption of illicit prison hooch

Despite the obvious question of how inmates were able to distil and make illicit alcohol in prison, the largest outbreak of botulism in the US since 1987 has been linked to the consumption of the alcohol.

It was reported that reported that honey, potatoes, apples, and tomato paste from a bulging can were combined, hidden, and fermented in a sealed plastic bag at room temperature for 3–5 days.

Symptoms ranging from total paralysis requiring intensive care and mechanical ventilation, to cranial nerve complaints not requiring hospitalization affected a total of 31 inmates.

Listeria data published by PHE

Public Health England have released data on Listeria from 2006-2015. Unsurprisingly the reporting of listeriosis is

dominated by people over the age of 60 and women of child-bearing age (ages 20 – 29), the latter being cases associated with pregnancy.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/584055/Listeria_2016_Data_gtw.pdf