



UK hospital Listeria outbreak – update

Public Health England (PHE), the Food Standards Agency (FSA) and the NHS confirmed that, following a retrospective analysis of Listeria cases, an additional 3 cases including 2 deaths have now been linked to this outbreak.

The individuals who died were diagnosed and treated at Manchester University NHS Foundation Trust: (2 cases), Aintree University Hospital NHS Foundation Trust, University Hospitals of Derby and Burton NHS Foundation Trust and The University Hospitals of Leicester NHS Trust.

The revised total means that there are 9 people thought to have been affected in this outbreak with 5 fatalities. Diagnosed cases of Listeria linked to this outbreak have now been identified at hospitals in Western Sussex (2 cases), Frimley and East Kent.

All confirmed cases to date had been linked to sandwiches produced by The Good Food Chain. The company voluntarily ceased production on 5 June and withdrew all products which remained in date.

However, the outbreak strain of listeria was identified in meat produced by North Country Cooked Meats which supplied The Good Food Chain, so following extensive testing and verification by Stafford Borough Council, The Good Food Chain was considered to be no longer part of the ongoing investigation into the source of the outbreak. With the investigation now focusing on suppliers further up the food supply chain, The Good Food Chain was permitted to restart production.

It was however reported on the 1st July that The Good Food Chain had ceased trading and had entered into administration, with the company owner and founder citing that “whilst the confirmation that The Good Food Chain was not the source of the outbreak was welcomed, it ultimately came too late in the day to get the business back on a sustainable footing”.

The investigation is now focusing on the supply chain of North Country Cooked Meats, including further testing of products and environments for listeria to identify whether a match to the outbreak strain can be found.

Cruise ships and Salmonella

In the past there have been numerous outbreaks of Norovirus associated with Cruise ships, due in part to the amount of people gathered together in a relatively confined space promoting the chance of person to person spread of the virus.

It has now been reported that in May of this year, 24 cases of Salmonella enteritidis have been linked to travel on cruise ships whilst visiting destinations in the Eastern Mediterranean and Middle East. The outbreak was detected through whole genome sequencing (WGS) analysis.

Investigations to date indicate there is more than one cruise holiday associated with the outbreak. Patients for whom information is available said they ate all meals on the cruise ship with many spending the entire incubation period of the illness on board.

Hepatitis A outbreak linked to school canteen

Another place where you get a lot of people gathered together in close proximity is in schools, and Public Health England (PHE) is investigating an outbreak of Hepatitis A linked to food eaten at a school canteen.

A total of 17 people with Hepatitis A have been confirmed connected to Outwood Academy in Ripon, North Yorkshire. Three other people have Hepatitis A in the Ripon area, but the source of illness for these patients remains under investigation.

At least two staff members at the school were confirmed with Hepatitis A infections. PHE is reviewing the data about food eaten in the school canteen to find the source of the outbreak.

Like Norovirus, Hepatitis A can have a food or waterborne origin, but infected individuals can then infect others via close personal contact. Infected individuals can also re-contaminate food.

Many outbreaks of Hepatitis A on products such as frozen berries have been traced back to contamination via workers hands at the harvesting and picking stage.

Warning on Hepatitis A in dietary supplements

Belgian officials have issued a warning because of incidents of hepatitis infections being linked to dietary supplements containing curcumin.

The Federal Agency for the Safety of the Food Chain (FASFC) cited a notification in the Rapid Alert System for Food and Feed (RASFF) detailing cases of acute hepatitis following consumption of various dietary supplements containing curcumin.

The potential source of this outbreak is interesting because curcumin (found in turmeric) has well known antibacterial properties and has been incorporated into products such as food packaging because of this property. It would appear that the compounds antiviral properties are not as well defined.

Hepatitis A outbreak in Germany linked to Moroccan dates, figs and nuts

Foodborne Hepatitis A is certainly in the news this month. It has been recently reported that an outbreak last year in Germany and other European countries was due to the consumption of dates, figs and nuts from Morocco. Thirty nine patients in Germany fell ill between April and August 2018. Thirty were imported cases and nine people were not abroad during the incubation period. A further eighteen people from the UK, Netherlands and Sweden were also affected.

Results of a case-control study and findings from surveys of affected people indicated the outbreak was caused by contaminated dried dates which had been purchased loosely at markets in Morocco.

Chilli powder involved in product recall due to presence of Salmonella

The Food Standards Agency has recently publicised a product recall made by P&B Foods for various packs of Heera Extra Hot Chilli Powder due to the presence of Salmonella.

Once again, it's another example of how Salmonella can survive and remain viable in a dry (low water activity) product. As relatively low numbers can cause illness, the organism doesn't have to grow in the product, but merely survive to constitute a food safety risk.

Latest FSA Campylobacter survey figures published

The top nine retailers published their latest testing results in June on Campylobacter contamination in UK-produced fresh whole chickens (covering samples tested from January to March 2019).

The latest figures show that on average, across the major retailers, 3.5% of chickens tested positive for the highest level of contamination. These are the chickens carrying more than 1,000 colony forming units per gram (cfu/g) of Campylobacter.

The figures have remained fairly constant over the last year, with levels of 3.1, 3.5 and 3.7% recorded over the previous 3 quarterly testing periods.

Psychrotrophic bacteria in raw milk

A review article has been published in this month's Journal of Food Protection on the role played by Psychrotrophic bacteria in the spoilage of milk.

Psychrotrophic bacteria in raw milk, generally comprising bacterial species of the genera Pseudomonas, Acinetobacter, Aeromonas, Serratia, Bacillus, Lactococcus, Microbacterium, and Staphylococcus, are of special concern to the dairy industry because they can produce heat-stable enzymes. These enzymes may withstand various heat treatments during dairy processing, causing quality defects over the product storage period. The levels and diversity of psychrotrophic bacteria in raw milk are tightly linked to natural habitats, milking practices, and hygiene practices of farms in different countries. Most psychrotrophic bacteria can form biofilms on various milk storage and processing equipment, which serve as persistent sources of microbial contamination due to their biotransfer potential.

The article concluded that preventative measures to restrict the potential growth of the psychrotrophic bacteria could include novel strategies such as the use of lytic bacteriophages, microfiltration and high pressure homogenization.