## Salmonella Braenderup

**Background:** Salmonella enterica subsp. enterica serovar Braenderup (antigenic formula 6,7,14:e,h:e,n,z15) is a serovar of the O:7 (C<sub>1</sub>) serogroup. S. Braenderup is the 10<sup>th</sup> most common serovar among human cases in the U.S. However, Salmonella Braenderup is found in low percentage (>1%) in animals in the U.S. One report identified that serovar Braenderup can penetrate the eggs of turtles. To subtype S. Braenderup, a phage typing scheme was created in the U.K.

Animal reservoir: Potential reservoirs for serovar Braenderup are cattle, chicken and turtles. However, isolation from these sources are sporadic.

<u>Geographical distribution:</u> S. Braenderup is widely distributed, countries with reports of this serovar included countries in North America (U.S. and Canada), Latin America (Colombia, Cuba, Venezuela), Europe (Greece, Austria, U.K), and Asia (China, South Korea, Japan, Taiwan).

Outbreaks: Multiple outbreaks linked to S. Braenderup have been reported; in most of these outbreaks, the associated food was produce.

Year	Location	Associated source	Number of cases
2018	US-multistate	Shell Eggs	45
2012	US-multistate	Mangoes	127
2011	England	Iceberg lettuce	29
2008	Japan	Lunch boxes	176
2005	US-multistate	Tomatoes	82
2004	US-multistate	Tomatoes	125
2001	US-Wisconsin	Chicken	21
1993	Switzerland	Meat pie	215

<sup>\*</sup>multiple serovars were included in this outbreak

## Relevant links and references:

- 1. http://www.cdc.gov/salmonella/braenderup-08-12/index.html
- 2. http://europepmc.org/abstract/MED/21916661
- 3. http://europepmc.org/articles/PMC547744/
- 4. http://www.ncbi.nlm.nih.gov/pubmed/21519363
- 5. https://www.cdc.gov/salmonella/braenderup-04-18/index.html