## Salmonella Brandenburg

**Background:** Salmonella enterica subsp. enterica serovar Brandenburg (antigenic formula 4,[5],12:I,v:e,n,z<sub>15</sub>) is a serovar of the O:4 (B) serogroup. In New Zealand, in 1996 *S.* Brandenburg emerged in the sheep population and caused a number of outbreaks. During these outbreaks in sheep, *S.* Brandenburg has caused abortion in pregnant ewes and has killed approx. the half of infected ewes. In addition, outbreaks in cattle have also been reported in New Zealand. It is considered an occupational hazard, because farmers can acquire the disease by contact with infected animals.

Animal reservoir: Serovar Brandenburg is found in different animal species (turkey, cattle, and sheep). However, in New Zealand, it is predominantly found in ruminants (sheep mostly).

<u>Geographical distribution:</u> Serovar Brandenburg is reported among the 15<sup>th</sup> most common serovars in Europe, and it is endemic in ruminants (sheep and cattle) in New Zealand.

Outbreaks: Outbreaks have occurred in different countries since 1963. Outbreaks in sheep in New Zealand are common since 1996; these outbreaks are characterized by abortion in ewes.

Year	Location	Associated source	Number of cases
2008	Italy	Restaurant associated	Approx. 200
2001	Japan	Hospital associated	-
1992	Switzerland	Not clear, multiple foods and animals were found positive	Several outbreaks
1963	England	Pork products	-

## Relevant links and references:

- 1. http://www.business.otago.ac.nz/sirc/conferences/2001/17\_higgan.pdf
- 2. http://www.stuff.co.nz/business/farming/sheep/9090477/Bacterial-outbreak-killing-South-Island-sheep
- 3. http://www.jpmh.org/issues/201152102.pdf
- 4. http://www.ncbi.nlm.nih.gov/pubmed/11754160
- 5. http://www.odt.co.nz/news/farming/175358/salmonella-devastating-flocks-south