

## Attributing foodborne salmonellosis in humans to animal reservoirs in the European Union using a multi-country stochastic model - DTU Orbit (09/11/2017)

### Attributing foodborne salmonellosis in humans to animal reservoirs in the European Union using a multi-country stochastic model

A Bayesian modelling approach comparing the occurrence of *Salmonella* serovars in animals and humans was used to attribute salmonellosis cases to broilers, turkeys, pigs, laying hens, travel and outbreaks in 24 European Union countries. *Salmonella* data for animals and humans, covering the period from 2007 to 2009, were mainly obtained from studies and reports published by the European Food Safety Authority. Availability of food sources for consumption was derived from trade and production data from the European Statistical Office. Results showed layers as the most important reservoir of human salmonellosis in Europe, with 42.4% (7 903 000 cases, 95% credibility interval 4 181 000-14 510 000) of cases, 95-9% of which was caused by *S. Enteritidis*. In Finland and Sweden, most cases were travel-related, while in most other countries the main sources were related to the laying hen or pig reservoir, highlighting differences in the epidemiology of *Salmonella*, surveillance focus and eating habits across the European Union.

#### General information

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