EFSA and ECDC release new European Union summary report on trends and sources of zoonoses

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The European Food Safety Authority (EFSA) in collaboration with the European Centre for Disease Control (ECDC) recently released its latest report on trends and sources of zoonoses in the European Union. This Science Brief focuses on the findings for two disease-causing bacteria, Campylobacter and Salmonella.

Zoonoses are diseases and/or infections which can be transmitted between animals and humans. They can be transmitted directly (e.g. by direct contact with infected animals or animal excreta) or indirectly (e.g. via the consumption of contaminated food or water). All sectors of the population are susceptible; however, the very young, the elderly, the immune-compromised and pregnant women are most vulnerable.

European Union Member States (MSs) are legally obliged to monitor and collate data on zoonoses, the agents responsible for zoonoses (e.g. bacteria, viruses, fungi) and food-borne outbreaks. These data are evaluated at Community level and every year a European Summary Report is produced by EFSA in collaboration with ECDC.

The 2010 Summary report which was published on the 8th March 2012 shows that campylobacteriosis (the illness caused by Campylobacter bacteria) was the most frequently reported zoonosis in humans in the EU in 2010. The incubation period (i.e. the time between exposure to the infectious agent and appearance of the disease) for campylobacteriosis is 2 to 5 days and the illness lasts for a similar period. The symptoms are usually self-limiting and primarily include diarrhoea (often bloody), abdominal pain and fever. Complications are rare and usually only occur in a small minority of patients. A total of 212,064 confirmed cases of campylobacteriosis were reported in 2010, representing an increase of 6.7% on the number of confirmed cases reported in 2009 (198,682 confirmed cases). The number of confirmed cases has been increasing since 2006. The mortality rate is low (in 2010, 266 of the 115,747 cases for which this information was reported died, i.e. 0.22%).

Salmonellosis (the illness caused by Salmonella bacteria) was the second most frequently reported zoonosis in humans in the EU in 2010. However, the good news is that salmonellosis, which has been declining in incidence since 2006 continued to decline in 2010. There was an 8.8% reduction in the number of confirmed cases between 2009 (108,618 confirmed cases) and 2010 (99,020 confirmed cases). This decline has been attributed to the successful implementation of Salmonella control programmes in poultry populations. The incubation period for salmonellosis is 12-36 hours. The symptoms usually last a few days and include headache, abdominal pain, diarrhoea, nausea, vomiting and fever. In some patients, the infection may be more serious and may have long term effects. The mortality rate is low (in 2010, 62 of the 46,639 cases for which this information was reported died, i.e. 0.13%).

Campylobacter and Salmonella were also implicated in food-borne outbreaks in the EU in 2010. A total of 5,262 food-borne outbreaks, resulting in 43,473 human cases, 4,695 hospitalisations and 25 deaths were
reported in 2010. Of these 30.5% (1,604 outbreaks) were attributed to Salmonella and 8.9% (470 outbreaks) to Campylobacter. The majority of Salmonella outbreaks (79.8%, i.e. 1280 outbreaks) were reported by France, Germany, Hungary, Italy, Poland, Slovakia and Spain. The major food vehicles implicated in these outbreaks included eggs and egg products, bakery products, mixed or buffet meals, broiler (poultry) meat and products thereof. The majority of Campylobacter outbreaks (52.6%, i.e. 247 outbreaks) were reported in Germany and Slovakia and broiler meat was the most commonly implicated food vehicle. Causative agents for other outbreaks included viruses (15.0%, i.e. 790 outbreaks) and bacterial toxins (8.8%, i.e. 461 outbreaks).

For more information, see: