EFSA and ECDC release the 2011 European Union summary report on zoonoses and foodborne outbreaks

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The 2011 European Union summary report on trends and sources of zoonoses and foodborne outbreaks has recently been published by the European Food Safety Authority (EFSA) and the European Centre for Disease Control (ECDC). The good news is that the numbers of human cases caused by Salmonella are continuing to decrease; however, the numbers of human cases caused by other bacteria, e.g. Campylobacter and pathogenic Escherichia coli are increasing. All three groups of bacteria were amongst those implicated in foodborne outbreaks. The foodborne outbreak associated with the most human cases occurred in Germany during the summer of 2011. It was caused by a rare type of pathogenic Escherichia coli and was linked to sprouted seeds.

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. To prevent diseases from occurring it is important that the animals and foodstuffs which are the main sources of infection are identified. For this purpose, data are collected annually from all European Union Member States and are analysed by EFSA and ECDC. The 2011 Summary report which was published on the 9th April 2013 presents data relating to 10 zoonoses and foodborne outbreaks.

These data show that campylobacteriosis (the illness caused by Campylobacter bacteria) continues to be the most commonly reported zoonosis. A total of 220,209 confirmed cases of campylobacteriosis were reported in 2011, representing an increase of 2.2% on the number of confirmed cases reported in 2010 (215,397 confirmed cases). In fact, there has been a statistically significant increase in the number of cases in the past four years. The mortality rate is low (in 2011, 43 of the 114,793 cases for which this information was reported died, i.e. 0.04%). In foodstuffs, Campylobacter was most commonly detected in foods of animal origin, particularly poultry meat.

Salmonellosis (the illness caused by Salmonella bacteria) was the second most frequently reported zoonosis in humans in the EU in 2011. However, the good news is that salmonellosis, which has been declining in incidence since 2006 continued to decline in 2011. There was a 5.4% reduction in the number of confirmed cases between 2010 (101,037 confirmed cases) and 2011 (95,548 confirmed cases). The mortality rate is low (in 2011, 56 of the 46,757 cases for which this information was reported died, i.e. 0.12%). In foodstuffs, Salmonella was most commonly detected in raw poultry meat.

A total of 9,485 confirmed cases of infection from pathogenic Escherichia coli (i.e. VTEC/STEC) were reported in 2011. The number of cases in the EU has been increasing since 2008 and there was a 2.6-fold increase in the number of confirmed cases between 2010 (3,656 cases) and 2011. Symptoms range from mild to severe gastroenteritis. Kidney disease or failure (haemolytic uraemic syndrome) can develop in
severe cases. In 2011, a total of 1,006 cases developed haemolytic uraemic syndrome, this was a 4.5-fold increase on the numbers reported in 2010. This increase was attributed to the German outbreak. In foodstuffs, pathogenic Escherichia coli were most commonly detected in meat products from cattle but they were also detected in other foodstuffs.

These three groups of bacteria were amongst those implicated in food-borne outbreaks in the EU in 2011. A total of 5,648 food-borne outbreaks, resulting in 69,553 human cases, 7,125 hospitalisations and 93 deaths were reported in 2011. Most of the reported outbreaks were caused by Salmonella (26.6%), bacterial toxins (12.9%), Campylobacter (10.6%) and viruses (9.3%). However, the outbreak which caused most human cases (3,793 cases) occurred in Germany from May to July 2011. It was caused by a rare strain of pathogenic Escherichia coli (E. coli O104:H4) and was associated with sprouted seeds.

For further details, see:


EUFIC material on safe food handling.

EUFIC material on food contaminants.