

The Community Summary Report on trends and sources of zoonoses, zoonotic agents and food- borne outbreaks in the European Union in 2008

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SUMMARY

Zoonoses are infections and diseases that are naturally transmissible directly or indirectly, for example via contaminated foodstuffs, between animals and humans. The severity of these diseases in humans varies from mild symptoms to life-threatening conditions. In order to prevent zoonoses from occurring, it is important to identify which animals and foodstuffs are the main sources of infections. For this purpose information aimed at protecting human health is collected and analysed from all European Union Member States.

In 2008, 27 Member States submitted information on the occurrence of zoonoses, zoonotic agents and food-borne outbreaks to the European Commission and the European Food Safety Authority. Further, information on zoonoses cases in humans was acquired from the European Centre for Disease Prevention and Control. In addition, four countries that were not European Union Member States provided information. Assisted by its Zoonoses Collaboration Centre, the European Food Safety Authority and the European Centre for Disease Prevention and Control jointly analysed all data, the results of which are published in this annual Community Summary Report, which covers 15 diseases.

In 2008, salmonellosis was again the second most often reported zoonotic disease in humans accounting for 131,468 confirmed human cases. The statistically significant decreasing trend in the notification rate of the salmonellosis cases continued in the European Union for the fifth consecutive year. In particular, the human cases caused by *S. Enteritidis* decreased markedly in 2008, while an increase in *S. Typhimurium* cases was observed.

In foodstuffs, *Salmonella* was most often detected in fresh broiler, turkey and pig meat, on average at levels of 5.1%, 5.6% and 0.7%, respectively. *Salmonella* was rarely detected in other foodstuffs, such as dairy products, fruit and vegetables. However, in sprouts, herbs and spices some higher levels of contamination were reported. Products in non-compliance with the Community *Salmonella* criteria were mainly observed in minced meat and meat preparations.

An important decline in the prevalence of *S. Enteritidis* and *S. Typhimurium* in laying hens was observed in 2008 which was the first year when Member States implemented new control programmes in this animal population. The improved situation in laying hen flocks may have been reflected in the decrease of *S. Enteritidis* cases reported in humans, since eggs are an important source for these infections.

Already 20 Member States met their relative *Salmonella* reduction target set for 2008 in laying hens. Further, 19 Member States reported *Salmonella* prevalence lower than the 1% target set for breeding flocks of fowl and to be met by the end of 2009. No major changes in *Salmonella* prevalence in broiler, turkey or pig populations were apparent at Community level.

In 2008, campylobacteriosis continued to be the most commonly reported gastrointestinal bacterial pathogen in humans in the European Union with 190,566 confirmed cases, even though the number of notified cases decreased by 5.0% compared with 2007. In foodstuffs, the highest proportion of *Campylobacter* positive samples was once again reported for fresh poultry meat where on average 30.1% of samples were positive. *Campylobacter* was also commonly detected from live poultry, pigs and cattle.

The number of listeriosis cases in humans decreased by 11.1% compared to 2007, with 1,381 confirmed cases recorded in 2008. A high fatality rate of 20.5% was reported among the cases. *Listeria* bacteria were seldom detected above the legal safety limit from ready-to-eat foods and findings over this limit were most often reported from fishery products, cheeses, meat products and sandwiches at levels of 0.2-0.5% in the European Union.

Q fever cases in humans were analysed for the first time at European Union level and a total of 585 confirmed cases were reported in 2007 with the number of cases increasing to 1,594 in 2008. Q fever was also recorded in cattle, goats and sheep, most frequently in goats.

A total of 3,159 confirmed verotoxigenic *E. coli* (VTEC) infections and 8,346 confirmed yersiniosis cases in humans were recorded in the European Union. Among animals and foodstuffs, human pathogenic VTEC bacteria were most often reported in cattle and bovine meat, and only occasionally from other food and animal species. *Yersinia* bacteria were mostly recorded from pigs and pig meat.

In 2008, 619 confirmed brucellosis cases were reported in the European Union. While the occurrence of tuberculosis and brucellosis in cattle remained largely unchanged compared to 2007, the occurrence of brucellosis in sheep/goats seemed to decrease slightly.

Two parasitic zoonoses, trichinellosis and echinococcosis, caused 670 and 891 confirmed human cases in the European Union, respectively. Uninspected wild boar and pig meat are the most important source of human trichinellosis cases. Both parasite species were mainly detected in wildlife.

A total of 5,332 food-borne outbreaks were reported in the European Union, causing 45,622 human cases, 6,230 hospitalisations and 32 deaths. Most of the reported outbreaks were caused by *Salmonella* (35.4%), viruses (13.1%) and bacterial toxins (9.8%). The most important food sources were eggs and egg products (23.1%), pig meat and products thereof (10.2%) and mixed or buffet meals (9.2%). In addition, 12 waterborne outbreaks were reported in 2008 related to the contamination of private and public water sources.

Four cases of rabies were reported in humans in 2008 with one of them being acquired in mainland Europe and one in a French overseas department. Rabies was still reported from domestic and wildlife animals in the Baltic and some Eastern European MSs, mostly in foxes and raccoon dogs. Four rabies cases in imported dogs were reported as well as one secondary case in dog linked to one imported rabies dog.

Some data were also reported on *Toxoplasma*, *Cysticerci*, *Francisella* and *Leptospira* with findings in domestic and wild animals.