EFSA explains **zoonotic diseases Campylobacter**



What is **Campylobacter**?

- *Campylobacter* is a bacterium that can cause an illness called campylobacteriosis in humans. With over 190,000 human cases annually, this disease is the most frequently reported food-borne illness in the European Union (EU). However, the actual number of cases is believed to be around nine million each year. The cost of campylobacteriosis to public health systems and to lost productivity in the EU is estimated by EFSA to be around EUR 2.4 billion a year.
- Raw poultry meat is often contaminated with *Campylobacter* since the bacterium can live in the intestines of healthy birds. It is also found in pigs and cattle. Eating undercooked chicken, or ready-to-eat foods that have been in contact with raw chicken, is the most common source of infection.
- Usual symptoms are fever, diarrhoea and abdominal cramps. Safe handling of raw meat and other raw food ingredients, thorough cooking and good kitchen hygiene can prevent or reduce the risk posed by contaminated food.

How **EFSA** supports EU efforts to **combat** *Campylobacter*

The European Food Safety Authority provides independent scientific support and advice through the collection and analysis of data on the prevalence of *Campylobacter* as well as by assessing the risks posed by the bacterium and advising on possible control and mitigation options.

EFSA's findings are used by risk managers in the EU and the Member States to help inform policy, and to support the setting of possible control options and reduction targets for *Campylobacter* in the food chain.

EU-wide surveys on the prevalence of Campylobacter

To ascertain the original situation, EFSA produces baseline survey reports on the prevalence of *Campylobacter* in food-producing animals such as chickens and on the risk factors that contribute to the prevalence of *Campylobacter* in animal populations and in food. The findings are used by risk assessors such as EFSA's Panel on Biological Hazards to provide risk estimates, and also by risk managers to define possible control options and/or reduction targets.

Risk assessments and recommendations

EFSA's Panel on Biological Hazards evaluates the food safety risks of *Campylobacter* and provides scientific advice on control options at the request of risk managers or on its own initiative. In its assessments, EFSA has among others found that achieving set reduction targets for *Campylobacter* in chicken flocks in the EU would significantly reduce the risk of human contamination.

Annual monitoring of Campylobacter in animals and food to measure progress

EU-wide data on the presence of *Campylobacter* in the food chain as well as the prevalence of animal and human infection are collected and analysed in annual EU Summary Reports prepared by EFSA and the European Centre for Disease Prevention and Control (ECDC). The monitoring data are used with other information to evaluate the progress made in EU Member States in reducing the prevalence of the bacteria.



Campylobacter jejuni bacterium - © Sciencephotolibrary

- Campylobacter infection is the most frequently reported food-borne illness in the European Union with over 190,000 human cases each year.
- > EFSA plays an important role in protecting consumers from this public health threat by providing independent scientific support and advice on the human health and food safetyrelated aspects of Campylobacter and by monitoring progress.
- > EFSA analyses EU-wide surveys and annual monitoring data on the prevalence of Campylobacter in animals and foods in Europe and assesses the risks of Campylobacter in the food chain.
- > EFSA's advice on reducing Campylobacter in chicken meat is supporting European and national risk managers in the fight against campylobacteriosis in humans.

WHAT ARE ZOONOSES?

Zoonoses are infections or diseases that can be transmitted directly or indirectly between animals and humans, for instance by consuming contaminated foodstuffs or through contact with infected animals.

Food-borne zoonoses are a significant and widespread public health threat. Research indicates that between one third and one half of all human infectious diseases have a zoonotic origin, that is, are transmitted from animals, directly or indirectly. EFSA is assisted in its work by the Scientific Panel on Biological Hazards composed of 21 independent experts on biological hazards in the food chain and by the Task Force on Zoonoses Data Collection: a pan-European network of national representatives of EU Member States, other reporting countries, as well as the World Health Organisation (WHO) and World Organisation for Animal Health (OIE).



EU **cooperation** for protecting **public health**

To protect consumers from this public health threat, the EU has adopted an integrated approach to food safety from the farm to the fork. The approach consists of both risk assessment and risk management measures involving all key actors: EU Member States, European Commission, European Parliament, EFSA and ECDC. The approach is supported by timely and effective risk communication activities.

EFSA plays an important role in protecting consumers from this public health threat by providing independent scientific support and advice on the human health and food safety-related aspects of *Campylobacter* and by monitoring progress.

EFSA is **working together** with key EU actors to **reduce campylobacteriosis** in humans

In April **2005**, EFSA published an opinion on *Campylobacter* in animals and foodstuffs, which identified poultry meat as a major source of campylobacteriosis.

In **2007**, at the request of the European Commission, EFSA's Task Force on Zoonoses Data Collection proposed a coordinated monitoring programme for *Campylobacter* in chicken meat in the EU.



Using the technical specifications submitted by EFSA's Task Force, a European Unionwide baseline survey on *Campylobacter* in chickens at slaughter was carried out in **2008**.

EFSA analysed and published the results of the survey in **2010**: the bacterium was found in over 75% of chickens.

EFSA experts concluded that the handling, preparation and consumption of chicken meat may directly account for 20% to 30% of human cases of campylobacteriosis.

In **2011**, EFSA's Panel on Biological Hazards issued advice on reducing *Campylobacter* in chicken meat. Recommendations include pre-slaughter measures that could reduce public health risk by 50%, meat production measures that could reduce public health risk by 90% or more, and an evaluation of the effectiveness of achieving set reduction targets.

EFSA will continue to assist European and national risk managers in monitoring and evaluating the prevalence of *Campylobacter* and, upon request, provide scientific advice on food safety risks and future risk mitigation activities.



European Food Safety Authority

Committed to ensuring that Europe's food is safe

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