

# AGENDA

TIME	SETTING THE CONTEXT	CHAIRMAN: SILVIO BORRELLO
10,30	Introduction	Silvio Borrello DGAH, MoH, IT
10,35	Welcome address (videomessage)	Beatrice Lorenzin Minister of Health, IT
10,45	Opening remarks	Stef Bronzwaer EFSA
10,50	Conference scope and concept	Silvio Borrello DGAH, MoH, IT
11,00	EU strategies on poultry: animal health and meat safety	Klaus Kostenzer EC
11,15	Campylobacteriosis in humans in the EU/EEA: health aspects and estimated burden	Alessandro Cassini ECDC
11,30	<i>Campylobacter</i> contamination levels in poultry meat in the EU and recommended reduction measures	Winy Messens EFSA
11,45	<i>Campylobacter</i> control strategies in poultry farms, biosecurity and innovative rapid diagnostic tests	Eva Olsson Engvall EURL for <i>Campylobacter</i> , SE
12,00	Fact and figures of poultry industry in EU	Paul Lopez AVEC
12,15	The UK experience in controlling <i>Campylobacter</i> along the poultry chain and communication campaign	Francisco Javier Dominguez Orive FSA, UK
12,30	Need for reliable disease burden estimates to support food safety decision making: the example of human campylobacteriosis in the EU	Ákos Józwiak NÉBIH, HU
12,45	Discussion	All Speakers involved
13,00	Lunch at the terrace of the EU Pavilion Visit to the EU Pavilion	
TIME	CAMPYLOBACTER PREVENTION, SURVEILLANCE AND CONTROL POLICIES	CHAIRMAN: GIUSEPPE RUOCCO
14,30	Introduction	Giuseppe Ruocco DGFS, MoH, IT
14,35	Zoonotic <i>Campylobacter</i> : main microbiological and pathogenic features of a very successful bug	Antonia Ricci NRL for Salmonellosis, IT
14,50	Feed interventions – blocking the colonisation of birds	Gilles Salvat NRL for <i>Campylobacter</i> , FR
15,05	<i>Campylobacter</i> contamination in poultry meat production chain in Italy and the National monitoring system	Paolo Calistri NRL for <i>Campylobacter</i> , IT
15,20	Risk-based control strategies for <i>Campylobacter</i> in poultry meat	Louise Boysen DTU, DK
15,35	Discussion	All Speakers involved
15,50	Conclusions	Giuseppe Ruocco DGFS, MoH, IT
16,05	Visit to EXPO	

## International Conference on PREVENTION AND CONTROL OF **CAMPYLOBACTER** IN THE POULTRY PRODUCTION SYSTEM



**MILAN** CIVIL SOCIETY PAVILION  
CASCINA TRIULZA  
AUGUST, 31, 2015



# WHAT WE ARE DISCUSSING TODAY



**Silvio Borrello**  
Conference chair

Human campylobacteriosis is the most frequent food-borne zoonosis notified by the EU Member States and the consumption of poultry meat is one of the main sources of human infection.

The EU Member States are strongly committed to adopt appropriate methods to control the *Campylobacter* contamination along the whole poultry meat production chain, with the aim of reducing the exposure of European consumers to the infection and the consequences related to the gastro-intestinal illnesses and the serious sequelae due to this bacterium.

The conference debates the risk factors and the effective control measures, including communication to consumers, sharing the point of view of the European Institutions, the National Competent Authorities, the European and National Reference Laboratories, the Stakeholders. Our common goal is to contribute to the current debate on the effective methods available for improving the quality and safety of poultry meats in the EU, providing the most recent valuable scientific experiences and technical solutions.

I hope you will appreciate this initiative of the Italian Ministry of Health and enjoy the Universal Exposition of Milano.

## OUR “TAKE-HOME MESSAGES”



**Klaus Kostenzer**  
European Commission,  
DG SANTE

A baseline survey on the prevalence of *Campylobacter* in broiler flocks and on broiler carcasses in EU shows a rather high prevalence on the EU average although the situation varies considerably between the different Member States and even slaughterhouses.

EFSA has published a scientific opinion assessing the public health impact of control measures in broiler meat and the European Commission is currently evaluating the

economic and social impact of the suggested control measures in view of reducing human cases. A cost-benefit analysis on the most prominent control measures was also performed. The on-going revision of meat inspection in poultry includes suggested changes to improve hygiene in slaughterhouses and sets a focus on *Campylobacter* as being one of the main identified hazards. The Commission intends to continue its “farm to fork” approach, hence i.e. biosecurity measures on farm, good hygiene practices at the slaughter of broilers are important aspects.



**Alessandro Cassini**  
European Centre for  
Disease Prevention and  
Control

In the European Union and European Economic Area Member States, annual notification rate of campylobacteriosis is 65.9 per 100 000 (2009–2013), although a recent sero-epidemiology study estimated the rate of exposure to *Campylobacter* spp. (infections to which the majority remain asymptomatic) to be around 0.83 per person-year, more than 420 million yearly infections. By anchoring the infections to community studies, it is possible to estimate the incidence of campylobacteriosis in

EU: 475 per 100 000 or 2.4 million cases per year amongst European citizens. Underestimation of the disease, therefore, is considered to be about 11 times the notification rate. Moreover, in a recent burden of disease study, ECDC estimated that about 600 deaths are related to campylobacteriosis every year, largely among elderly people. Campylobacteriosis also resulted in the highest number of DALYs (disability adjusted life years) among the assessed food and water-borne disease. For the purpose of monitoring campylobacteriosis we recommend to continue efforts in repeating EU-wide sero-epidemiological studies e.g. in five year intervals. This should be combined with community studies in order to assess the socio-economic impact of disease burden.



**Winy Messens**  
EFSA

The European Food Safety Authority will summarise the contamination levels of *Campylobacter* in poultry meat in the European Union based on the EU-wide baseline survey carried out in 2008 and the monitoring data of 2013. The extent to which broiler meat contributes to human campylobacteriosis at EU level will be discussed and control options within the broiler meat production chain described. The estimated impact of targets in primary production and microbiological criteria will be presented.



**Eva Olsson Engvall**  
EURL for *Campylobacter*,  
National Veterinary  
Institute, Sweden

Control of *Campylobacter* in live poultry is an important strategy to reduce contamination of poultry meat and number of human campylobacteriosis cases. Different approaches are applied to prevent flock colonisation. Biosecurity measures including strict hygiene barriers are effective but other types of interventions are required and development of e.g. vaccines, probiotics, bacteriophages, etc. is in progress. New tests for rapid detection and identification of *Campylobacter* include culture independent diagnostic tests i.e. immunoassays, PCR-based assays, and use of mass spectrometry.



**Paul Lopez**  
Association of  
Poultry Processors  
and Poultry Trade  
in the EU

The EU poultry production amounts to about 14 million tons mainly chicken. The EU imports more than 0.8 million tons of boneless meat with a value of almost 2.2 billion Euros and has an export volume of more than 1.5 million tons with a value of almost 2.1 billion Euros. More than 300,000 EU citizens are involved in the poultry meat chain with a value of about 32 billion Euros.

Poultry safety is a prerequisite for food business operators (FBO) pressed by both EU regulations and consumers, who penalise businesses by rejecting their products. It is essential that FBO demonstrate to be trustworthy by being accountable and transparent about using sustainable processes and techniques. Today poultry meat production costs in the EU are among the highest in the world, due to the high production standards and feed costs. Fair trade would need that similar requirements are imposed on imported poultry meat productions. The poultry sector has been successfully fighting against *Salmonella* for many years and is committed to achieve similar success with *Campylobacter*, hopefully implementing progressive step by step interventions supported by research.



**Francisco Javier Dominguez Orive**  
Food Standard  
Agency, UK

Javier Dominguez will provide an overview of the UK Food Standards Agency's (FSA) programme of work to reduce *Campylobacter* levels in poultry meat. Javier will present a summary of the main interventions trialled along the poultry chain, from farm to fork, including novel interventions developed by the UK poultry industry to effectively reduce *Campylobacter* levels on poultry carcasses. Data will be provided on the effect of the whole programme and the different interventions.

Javier will also present FSA's communication initiatives to inform UK consumers about the risk of *Campylobacter* and how those have been received by consumers, farmers, poultry processors and retailers. Javier's presentation will show that the control of one of the main foodborne hazards across Europe is taking a lot of time and effort by both the regulator and the UK poultry industry but that there is hope that *Campylobacter* could be controlled if all players along the poultry chain play their part.



**Ákos Józwiak**  
National Food Chain  
Safety Office, Hungary

**with the contribution of János G. Pitter, Zoltán Vokó, Ádám Halmos**  
The aim of our work was *Campylobacter* control measures in the EU-27: to gather country-specific cost of illness estimates, to generate a conservative estimate of *Campylobacter* related disease burden per case expressed in QALYs, and to assess the country-specific cost-effectiveness of control measures using the adapted model assumptions.

The adjusted country-specific cost of illness estimates ranged from 38 to 311 EUR/case (versus the assumed 267 EUR/case). The overall, discounted health burden per case was calculated as 0.0152 QALY loss (versus the assumed 0.0389 DALYs). The combined application of currently available control measures of low/medium consumer impact was found to generate both cost saving in the EU-27 and health benefits, even when using the adjusted, conservative model input parameters. QALY was found to be a suitable methodology for disease burden estimation, with significant advantages.



**Antonia Ricci**  
OIE/NRL for  
*Salmonellosis*,  
IZS Venezie, Italy

While global efforts to control the transmission of enteric pathogens have been effective at reducing the incidence of a number of major foodborne pathogens, the prevalence of *Campylobacter* infection has nevertheless continued to increase across most developed nations in the last decades. Factors underlying this rise, such as the interaction between *Campylobacter* and the host immune system or gut microbiota, or its capacity to acquire antimicrobial resistance will be discussed.



**Gilles Salvat**  
NRL for *Campylobacter*,  
Anses, France

**with the contribution of Marianne Chemaly, Muriel Guyard-Nicodème, Pedro Medel**

As *Campylobacter* should be considered as a “quite normal” host of poultry gut flora, eradication of the bug from poultry production is a myth. Despite that, reducing *Campylobacter* shedding in live birds at the day of slaughter from 1 to 3 log, may prevent the risk of campylobacteriosis for the consumer. The use of feed or drinking water additives such as organic acids, probiotics, prebiotics or plant extracts alone or in combination, with or without vaccination, may be a future solution to control the amount of *Campylobacter* carried by live birds before slaughtering, to reduce the risk of carcasse contamination. Different solutions evaluated by Anses laboratory will be presented.



**Paolo Calistri**  
NRL for *Campylobacter*,  
NRC for Veterinary  
Epidemiology and  
Risk Assessment,  
IZSAM, Italy

**with the contribution of Elisabetta di Giannatale**

In the last years the Italian veterinary authority and the Italian poultry meat producers worked together to characterise the risk deriving from *Campylobacter* contamination in the Italian production chain. The NRL for *Campylobacter* and the NRC for Veterinary Epidemiology carried out several epidemiological studies, which highlighted the complexity of the contamination patterns and factors influencing the final risk for consumers. Due to this complexity, a national monitoring plan was launched in 2015 with the aim of defining some of the driving epidemiological factors affecting the contamination level and its variability in chicken carcasses, to support the choice of possible interventions along the production chain on a risk-based approach.



**Louise Boysen**  
National Food Institute,  
Technical University of  
Denmark

Biosecurity is important when trying to control *Campylobacter* in the broiler production chain and crucial for preventing *Campylobacter* infection of broiler flocks. Combinations of interventions are most efficient in reducing the prevalence in *Campylobacter* flocks. Overall, the effect of control measures largely depends on their strict implementation. Furthermore, the implementation of a control measure like fly screens, can only be expected to be efficient if the biosecurity is in place.