

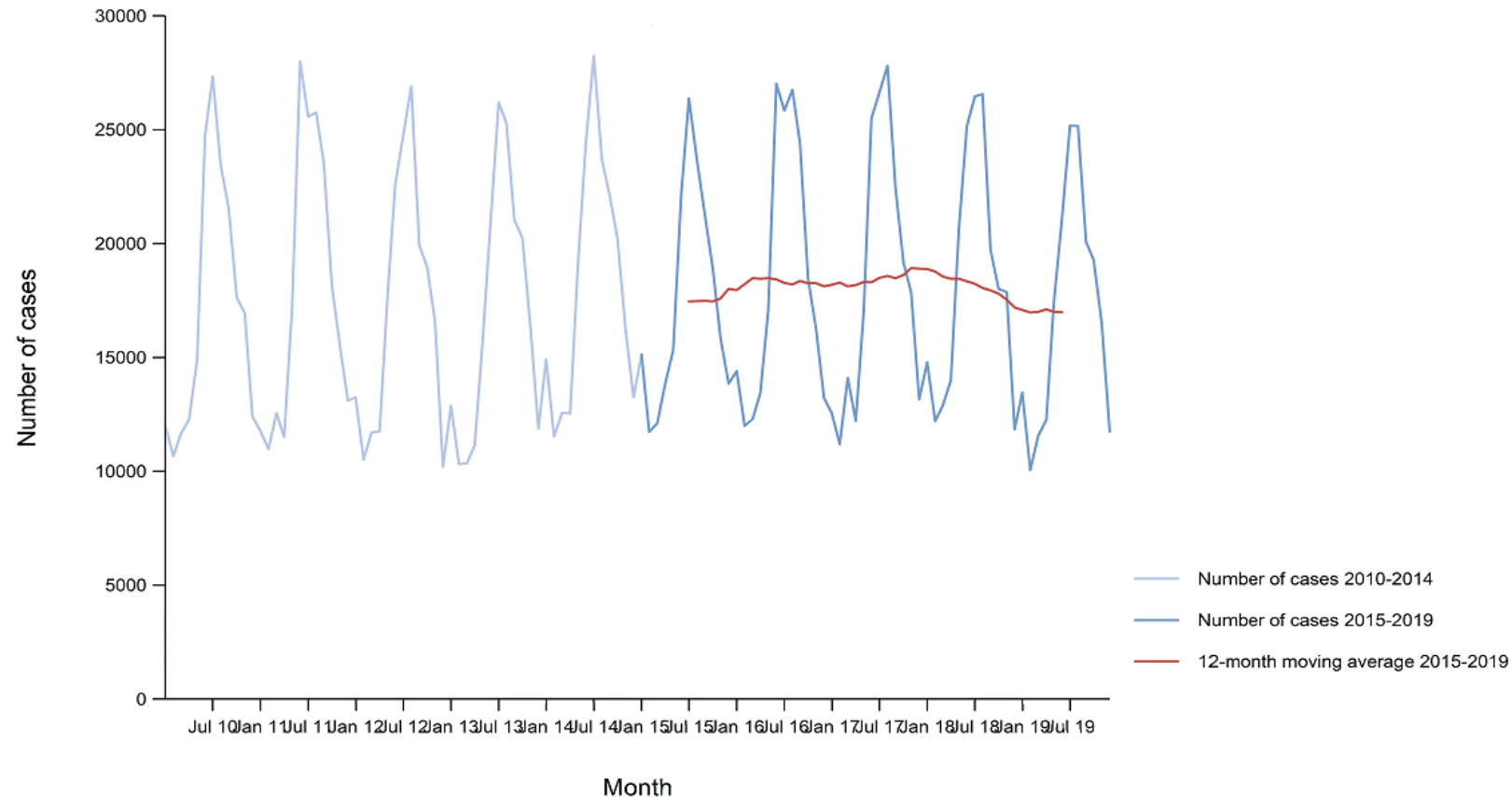
# Human *Campylobacter* infections in EU/EEA and One Health approach

Johanna Takkinen

EURL *Campylobacter* workshop, 30 September 2020

# EU/EEA epidemiology of campylobacteriosis, 2019

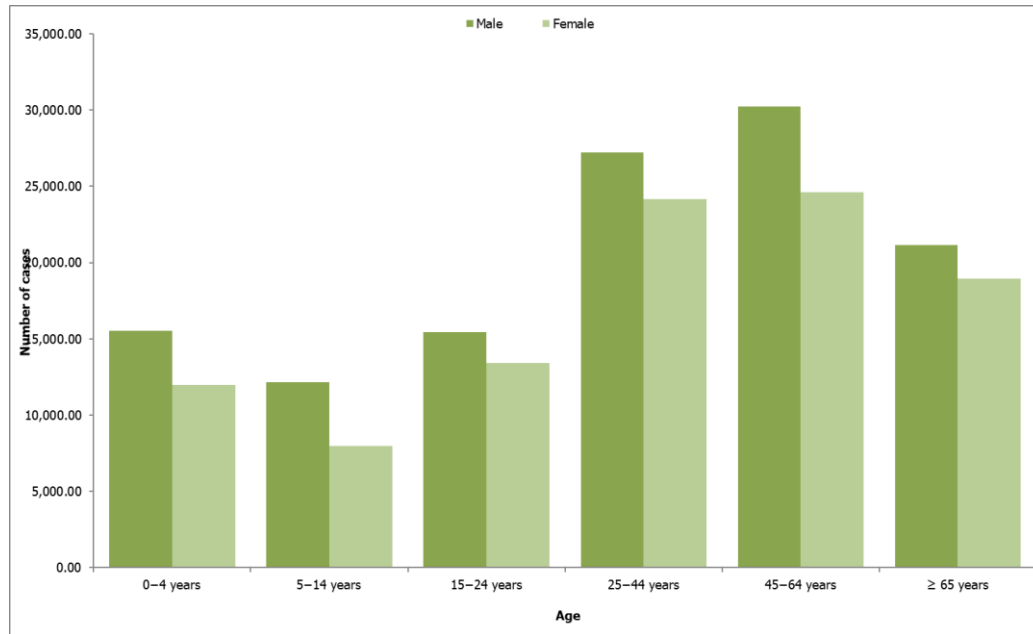
# Campylobacteriosis trend and seasonality in EU/EEA, 2019



- 224 972 confirmed cases reported by 30 EU/EEA countries in 2019 (-10% since 2018)
- Overall rate 59.96 / 100 000 (64.1 in 2018)

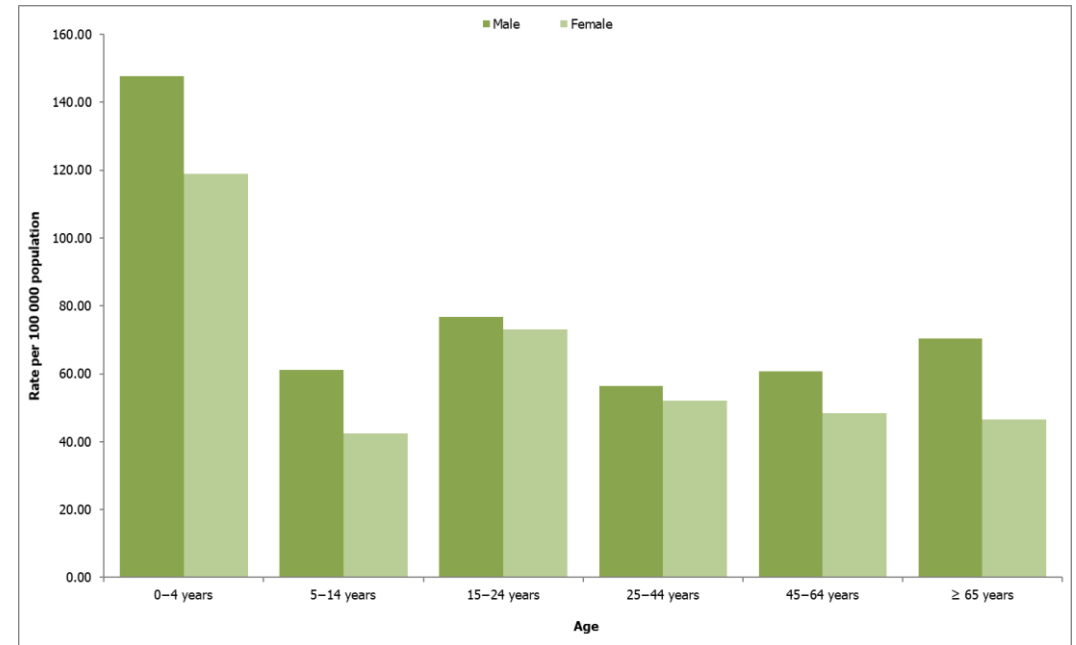
# Campylobacteriosis by gender and age groups in EU/EEA, 2019

Number of cases



- Male-to-female ratio 1.2:1
- Higher case counts in males than females in 23/30 countries

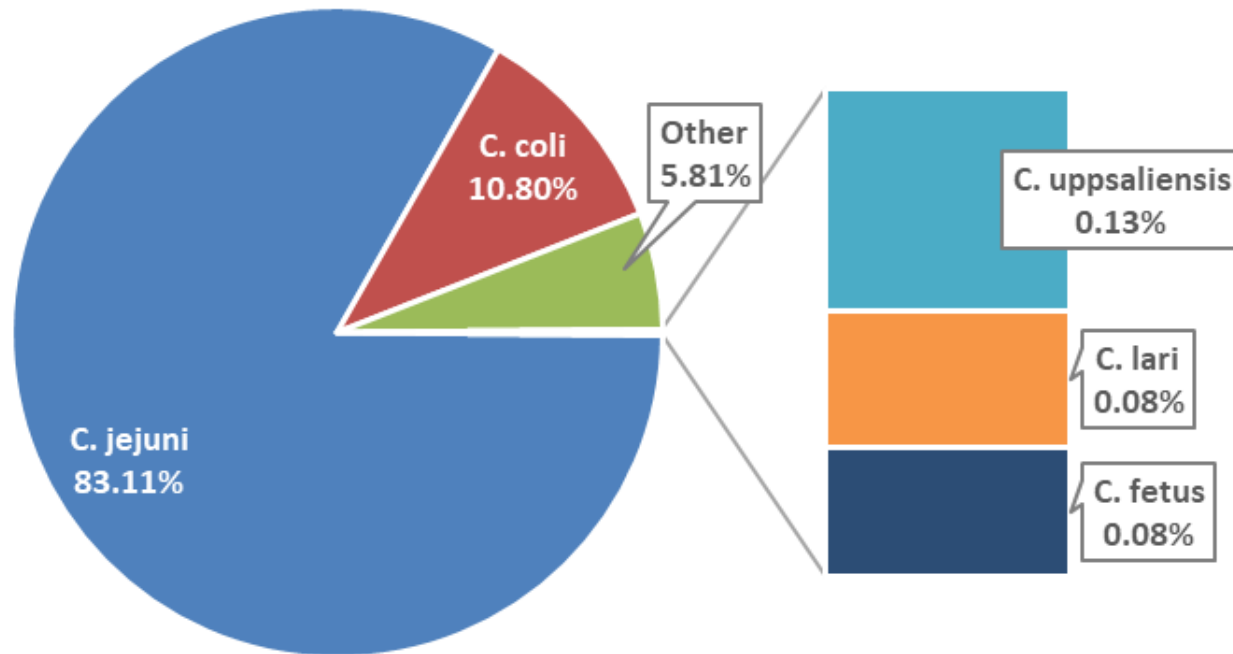
Number of cases / 100 000



- Rate in males 67.9 / 100 000
- Rate in females 54.5 / 100 000

# Campylobacteriosis severity and reported species in EU/EEA, 2019

- Hospitalised 31.8% (n=20 342, data reported for 29.1% of cases)
- Case fatality 0.03%; 47 deaths reported (data reported for 78.0% of cases)
- Speciation reported for 55.2% (n=121 829)



# Outcome of FWD-Net *Campylobacter* workshop, 5-6 March 2020 – preliminary results

# FWD-Net *Campylobacter* workshop objectives

1. To explore and document the existing capacity, capability and arrangements of national organisations and ECDC to use WGS for the **detection of cross-border threats of campylobacteriosis** in EU/EEA
2. To raise awareness among epidemiologists and microbiologists and **share good practice** from relevant national and international studies utilising WGS for surveillance of campylobacteriosis, including outbreak investigations.
3. To develop **an action plan** to enhance the existing arrangements for the collaborative preparedness and response to cross-border threats to health caused by *Campylobacter* and other foodborne pathogens.

# Pre-workshop survey 24-27 February 2020

## Topics addressed

- Referral of *Campylobacter* isolates to national level
- Representative sampling and testing
- Characterisation of isolates
- Detection of cross-border outbreaks

## Response

- 22 replies analysed (22 countries represented in workshop)



# Workshop preliminary conclusions, 2020

- Important to implement **sampling and referral** of *Campylobacter* isolates in the national surveillance system
- It would be beneficial to validate analytical WGS-based typing methods and make sure that they give **concordant results across laboratories**
- WGS-enhanced surveillance system for *Campylobacter* infections should be implemented at the EU level, enabling **centralised data analysis** and offering options for **sequence data sharing** and **analyses** for the Member States
- **Cross-border spread** of *Campylobacter* strains from common source yet to be shown

# Acknowledgements



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## Open questions:

**1. How monitoring results of process hygiene criterion for *Campylobacter* could best be integrated to WGS-enhanced surveillance in humans?**

**2. Could ST148 outbreak in Sweden used as a test case for exploring possible cross-border spread?**