

## 20th EURL – Campylobacter workshop

30 September – 1st October 2025

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### **Topics**



- Annual data reporting for campylobacteriosis for 2024 in EU/EEA
- Genomic surveillance of Campylobacter in EpiPulse (ECDC's surveillance platform)

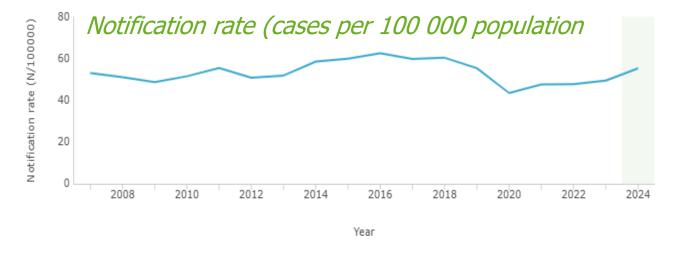
### **Campylobacteriosis 2024**

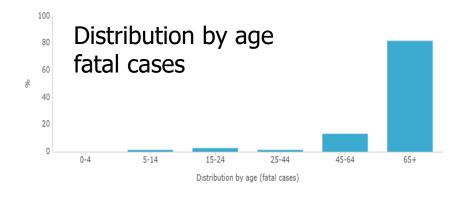






- Notification rate: **55.29** (2023: 49.36)
- Reported hospitalised cases: 16 154 (2023: 13 101)
- Number of reported deaths: **76** (2023: 47)
- Comparison salmonellosis: 116 fatal cases in 2024







### Surveillance Atlas of Infectious Diseases





Campylobacteriosis >

Confirmed cases ▼

Notification rate (N/100000)

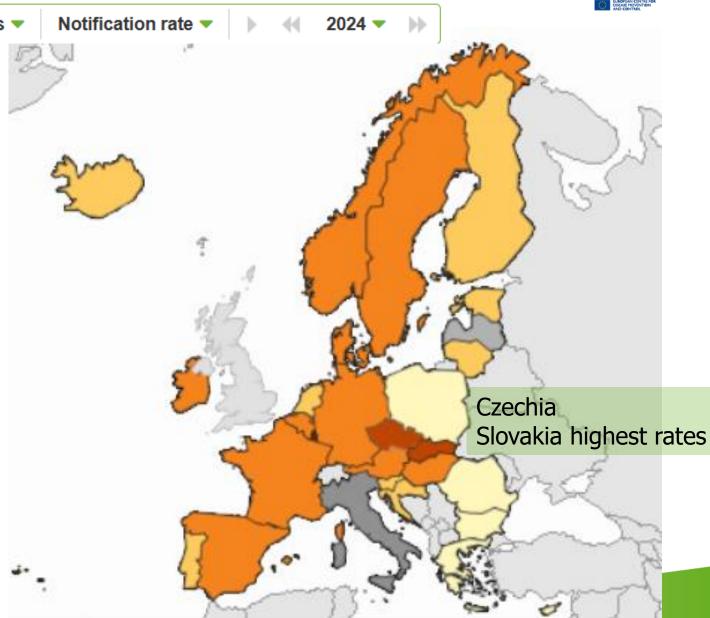
0.00-9.99

10.00-49.99

50.00-99.99

100.00-149.99

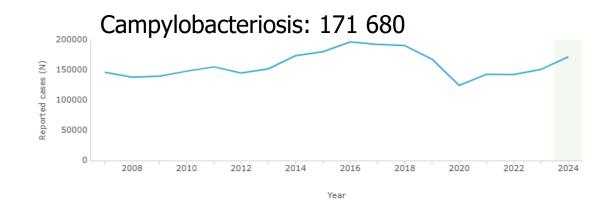
>=150.00

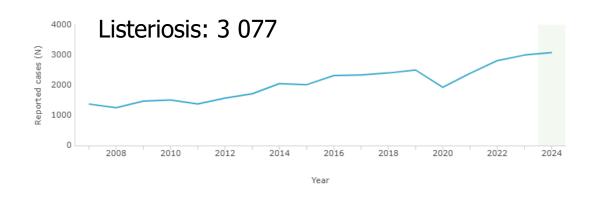


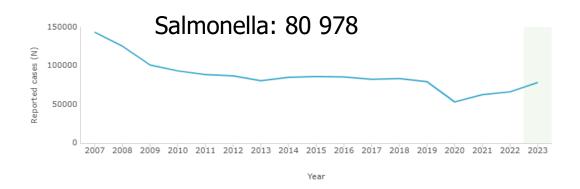
Data not yet published, amendments still possible

### **Comparison number of reported cases**



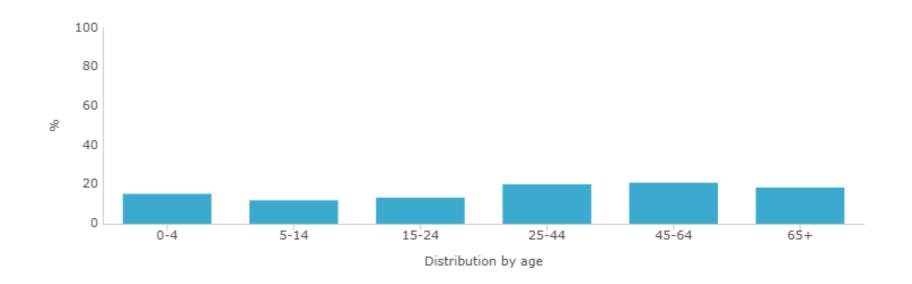


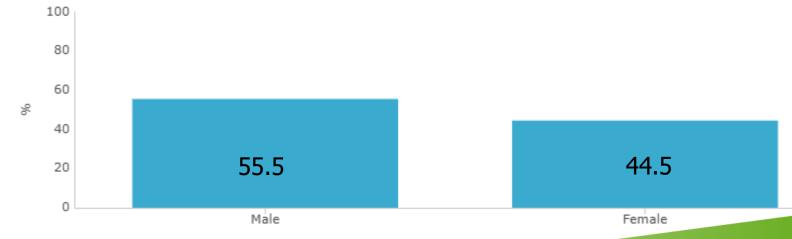




### Distribution by age and gender









## ECDC genomic surveillance in EpiPulse

- what sequence data is reported and show case of the Molecular Typing Tool in EpiPulse

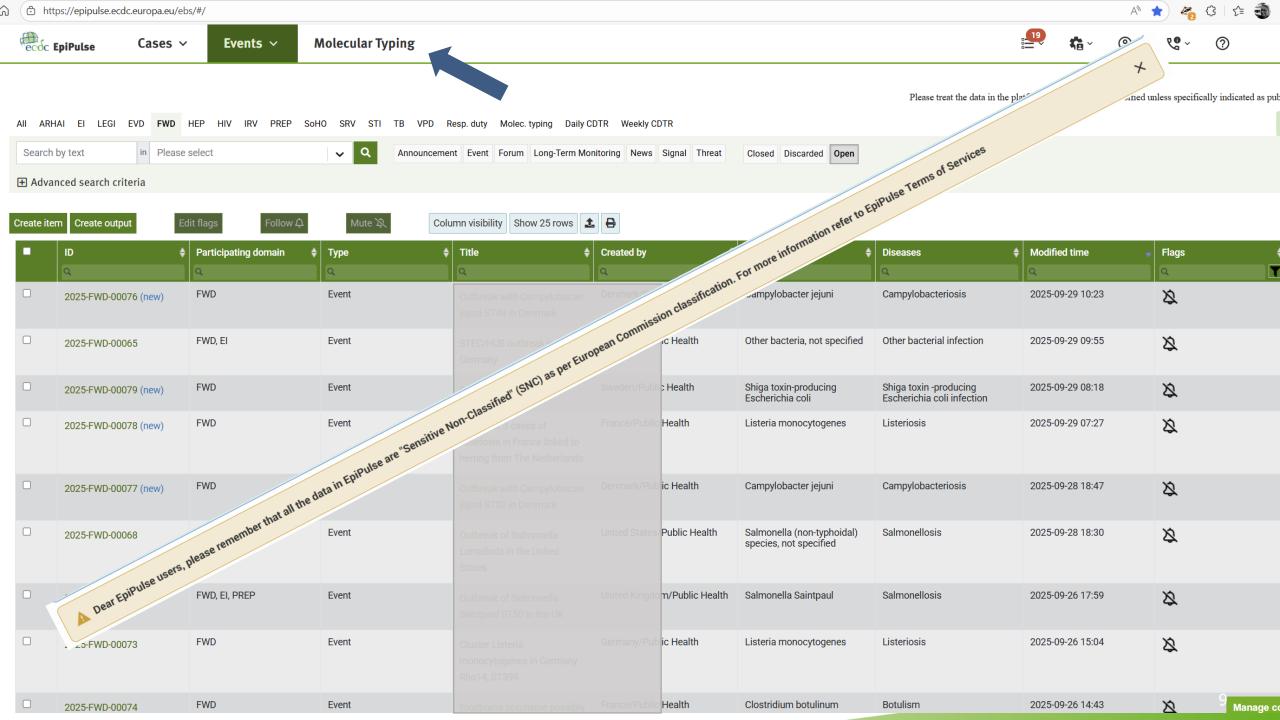
### What isolates are submitted to ECDC?



Basis are the pathogens with mandatory reporting requirements. For future, isolate and event based reporting requirements will define data to be reported.

The databases includes sequences from:

- Outbreaks
- Projects
- Data for AMR reporting for *Campylobacter* (and *Salmonella*) and Publicly available sequences from repositories

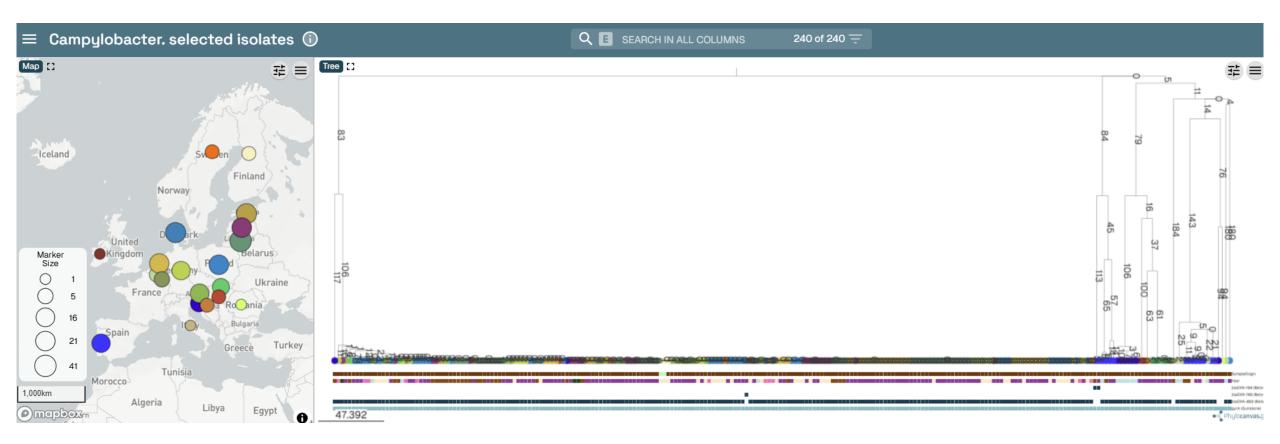


# Example ST464, common ST on human and animal side (poultry)

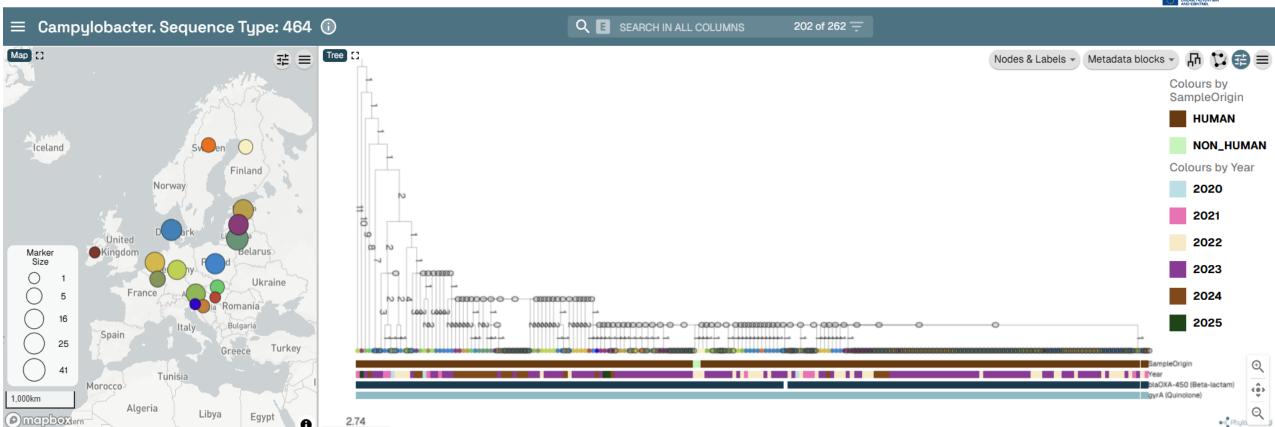


| https://epipulse.ecdc.europa.eu/typing/explore/   |  |   | A <sup>N</sup> \$\frac{1}{6}\$ \$\frac{1}{6}\$ \$\frac{1}{6}\$  |
|---|--|---|---|
| ecoc EpiPulse Cases > Events >  | Molecular Typing   |   |   |
|   |  | Please treat the data in the platform a | as sensitive non-classified unless specifically indicated as pr |
| Please, select a Pathogen to review and analyse its data.  Campylobacter  Search & Refine Selection |  | ·                                       |   |
| Sequence Type  ×464 (N=262)  ×  | Cluster Cluster Code   | Events Events                           | Isolates  |
|   | If empty, all the clusters will be selected.  Date used for statistics | Submission Date                         | Distance metric to match  |
| Countries   | dd/mm/yyyy 🗊 dd/mm/yyyy 🗑  | dd/mm/yyyy                              | Default   |
| Countries  If empty, all the countries will be selected.  | Cluster Method   | Epidemiological Data                    | Antibiotic Resistance Markers                                   |
| Match Distance  | Default  | <pre></pre>                             | Antibiotic Resistance Markers                                   |
| Match Distance  ECDC cluster address  |  |   |   |
| ECDC cluster address  ECDC cluster address  |  |   |   |
|   |  |   | Reset form Sear   |









Isolates are from 2020 to 2025, reported from 16 countries



# "Burning" topic on the public health side – culture independent diagnostics tests. Benefits anc challenges

### **Benefits and challenges of PCR-panels**



#### **Benefits**

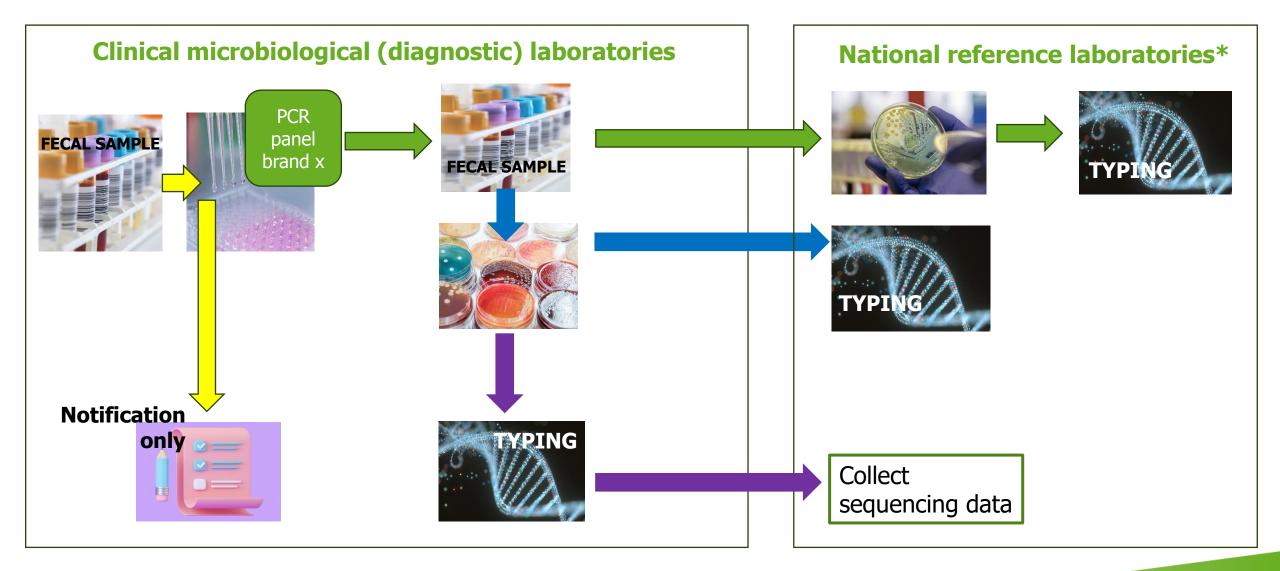
- The ability to detect multiple pathogens in one test
- Higher sensitivity for difficult-to-culture bacteria
- Faster results enabling timely treatment and control measures
- Benefit for the patient!

### Challenges

- Multiple-pathogen positives, making causation unclear.
- Variations in manufacturer target genes, affecting detection consistency
- Lack of cultured isolates, which are critical for outbreak detection, antimicrobial resistance testing, and molecular surveillance.

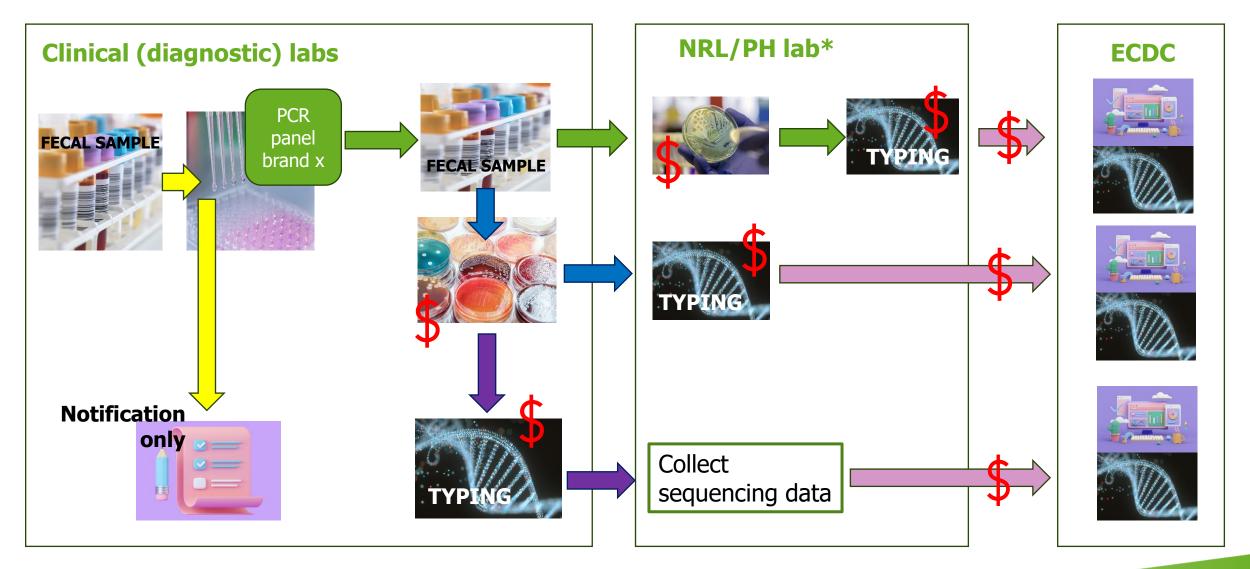
## Different possibilities and strategies in different countries





## Reporting of WGS data comes with a cost, including in human resources and lab material.







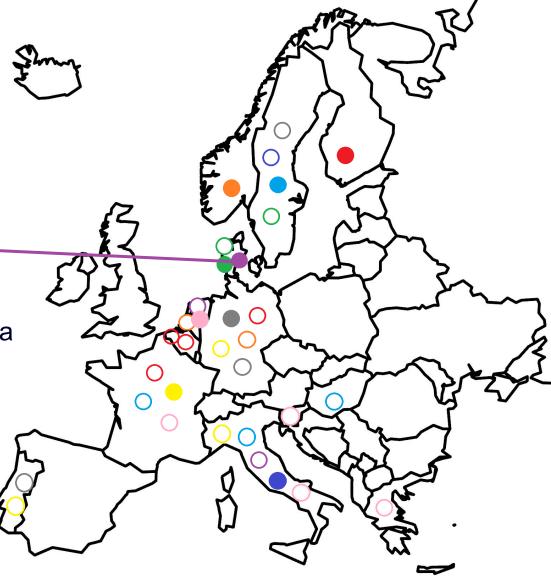
### **EURLs for Public Health**

# 9 EURLs have been designated to date:





- Antimicrobial resistance (AMR) in bacteria
- Diphtheria and pertussis
- Emerging, rodent-borne and zoonotic viral pathogens
- Food- and water-borne bacteria
- Food- and water-borne viruses
- Food-, water- and vector-borne helminths and protozoa
- High-risk, emerging and zoonotic bacteria
- Legionella
- Vector-borne viral pathogens



<sup>\*</sup>Filled circles indicate the EURL consortium lead sites





- A consortium of SSI (lead), RIVM and ISS
- Cover the pathogens: Campylobacter, Salmonella, Shigella, STEC, Listeria, in addition to Vibrio non cholerae and Yersinia non pestis (less support).
- Probable start date 1 January 2026