

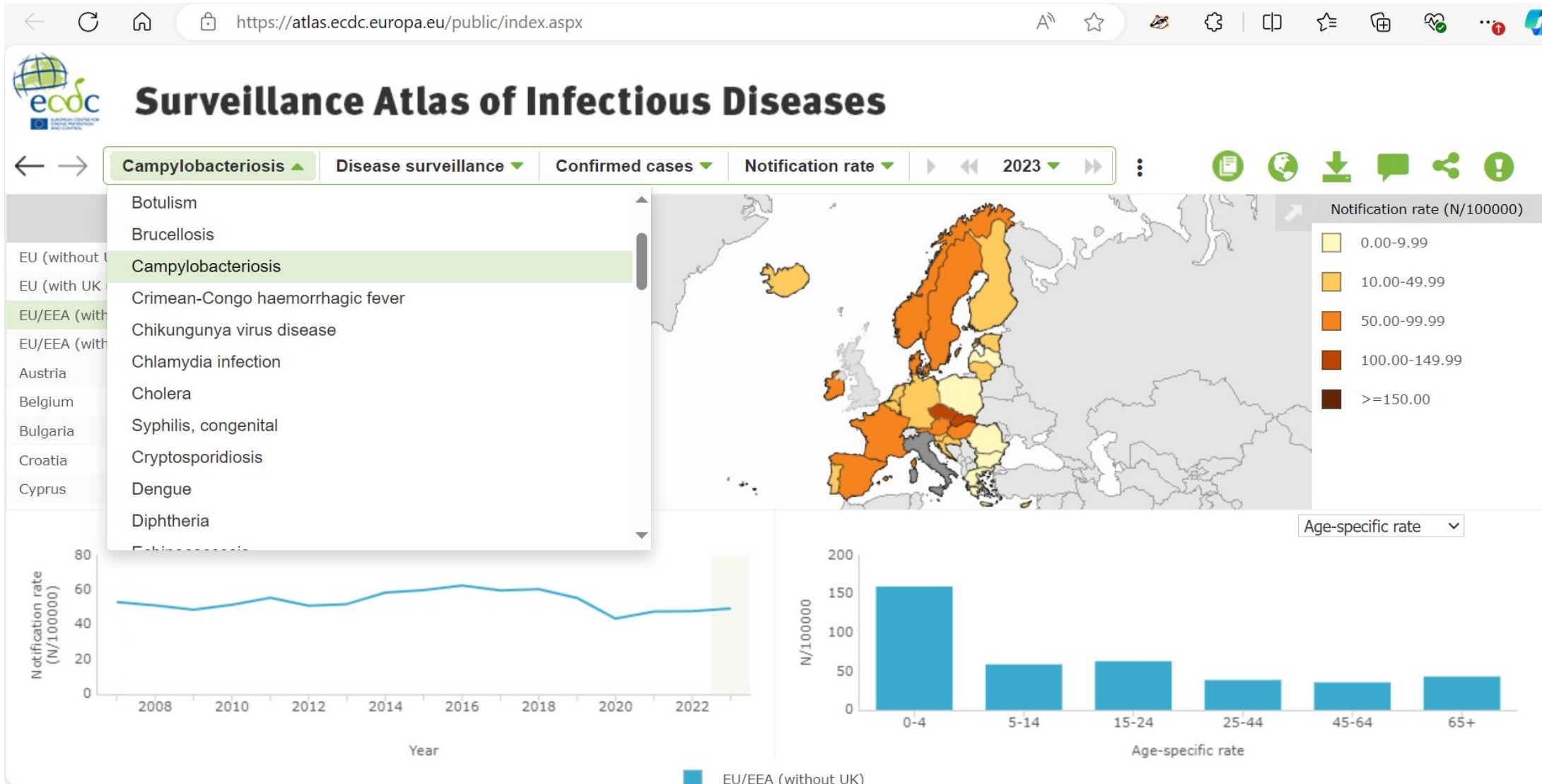
Update on *Campylobacter* in the EU/EEA

EURL *Campylobacter* workshop, Uppsala 22 October 2024
Cecilia Jernberg, Expert microbiology and molecular surveillance

Topics

- Update on campylobacteriosis surveillance 2023
- EpiPulse Molecular Typing Tool, including visualisations
- EURL for public health in the field of food and –waterborne bacteria (indicative start date end of 2025)

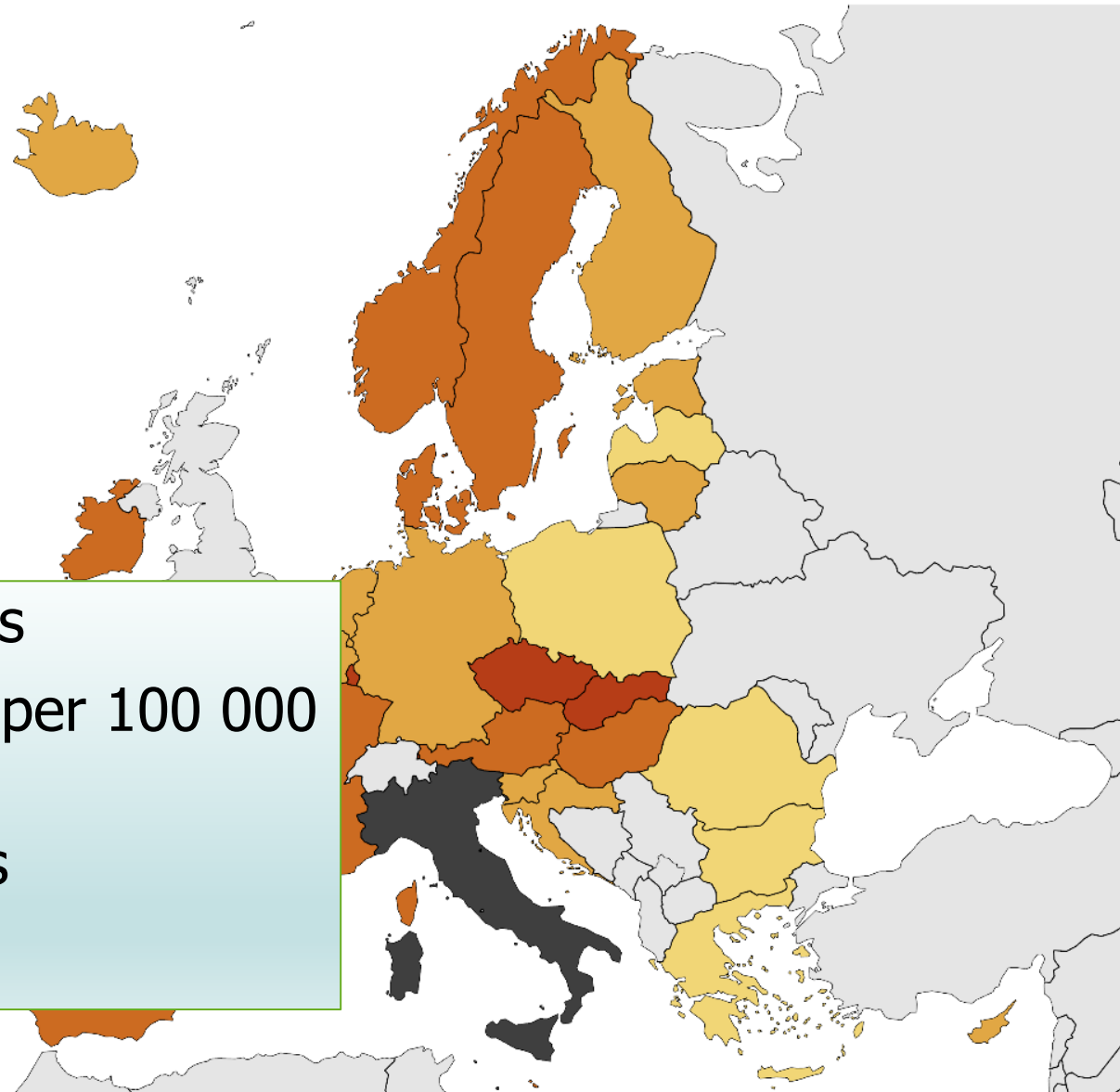
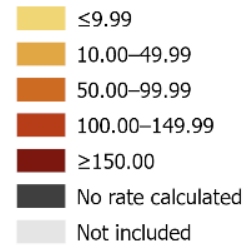
ECDC Surveillance Atlas of Infectious Diseases



Campylobacteriosis cases in the EU/EEA 2023



**Notification rate
(per 100 000 population)**



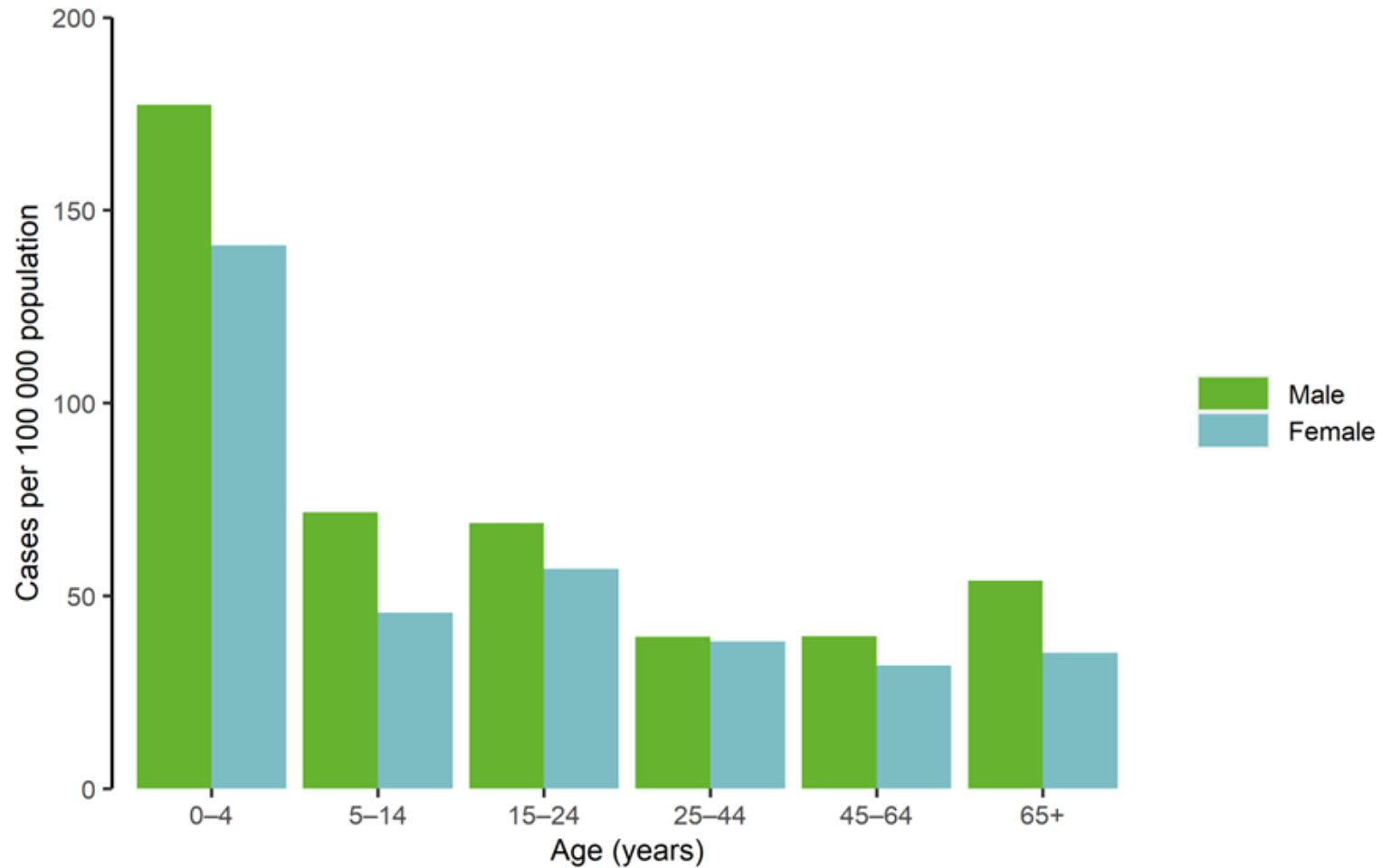
- 150 823 reported cases
- Notification rate 49.4 (per 100 000 population)
- 13 101 hospitalisations
- 47 deaths



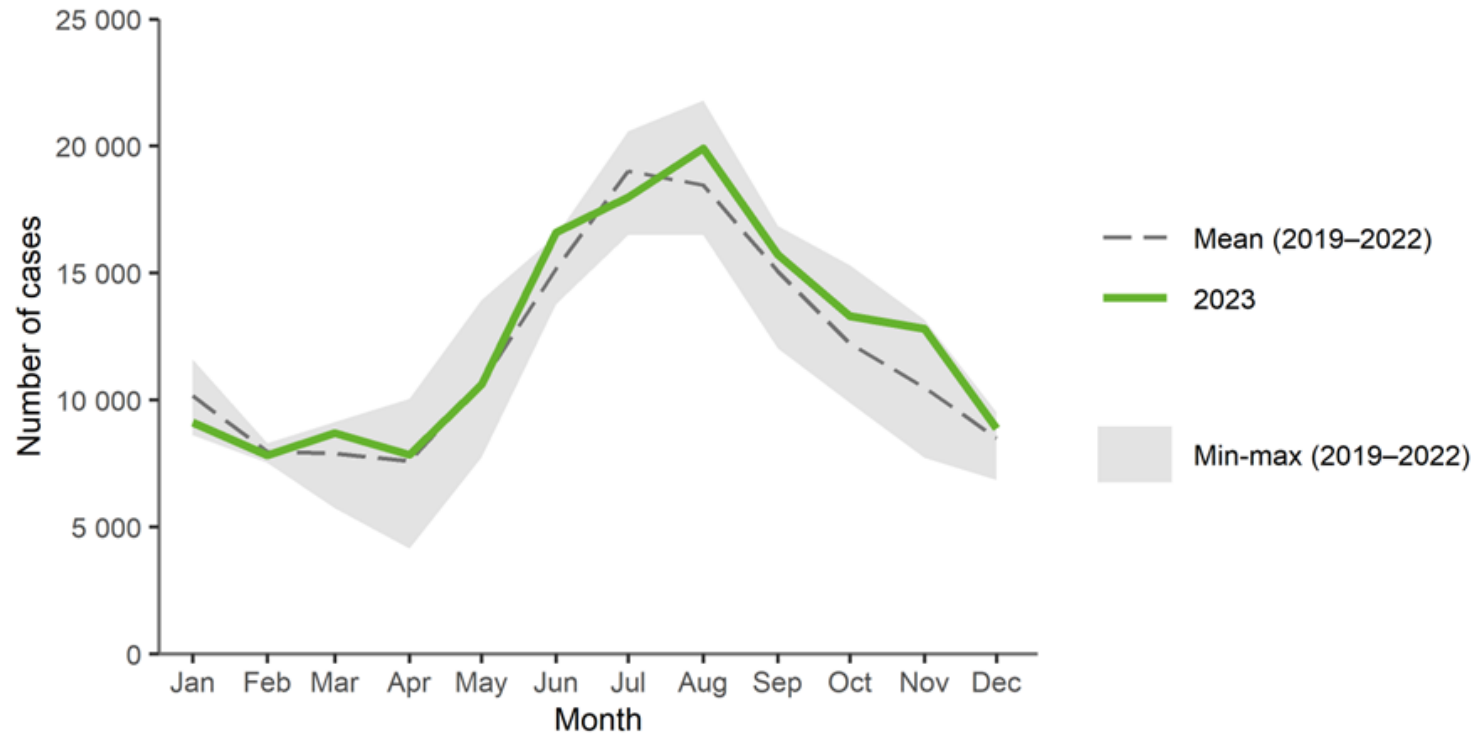
Malta

Administrative boundaries: © EuroGeographics. The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. Map produced by ECDC on 6 September 2024

Cases per 100 000 population by age and gender, EU/EEA



Cases per month, EU/EEA, 2023 and 2019-2022



Campylobacteriosis cases in the EU/EEA 2023

Highest notification rates in countries:

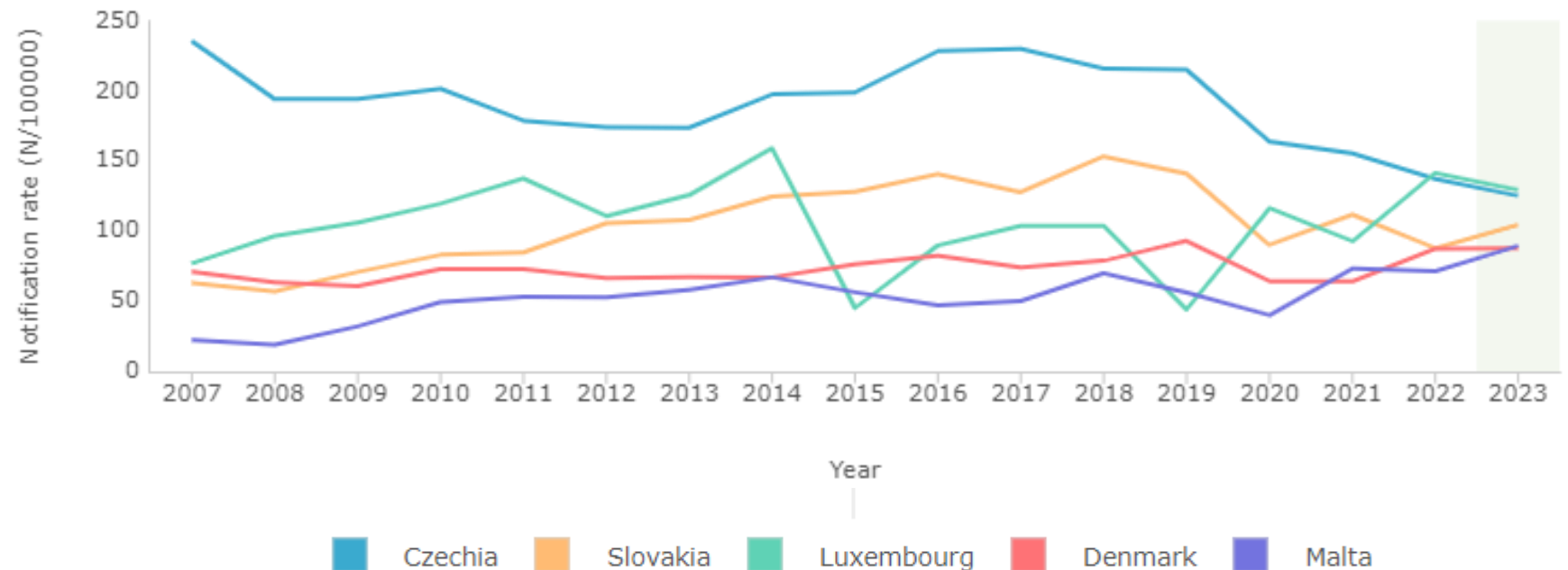
Luxembourg: 129.39

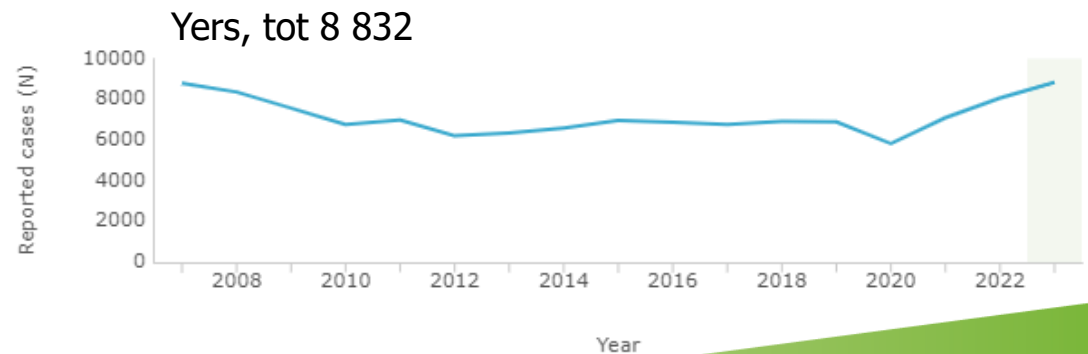
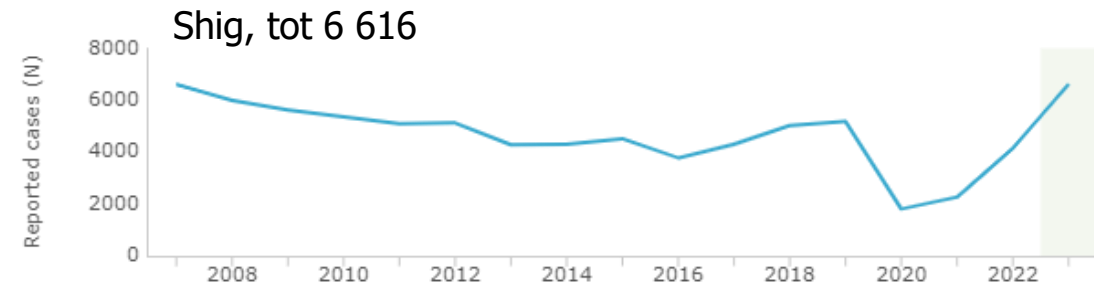
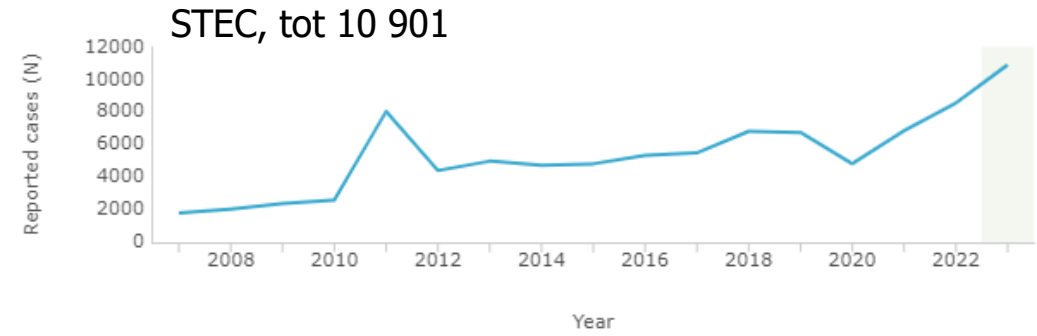
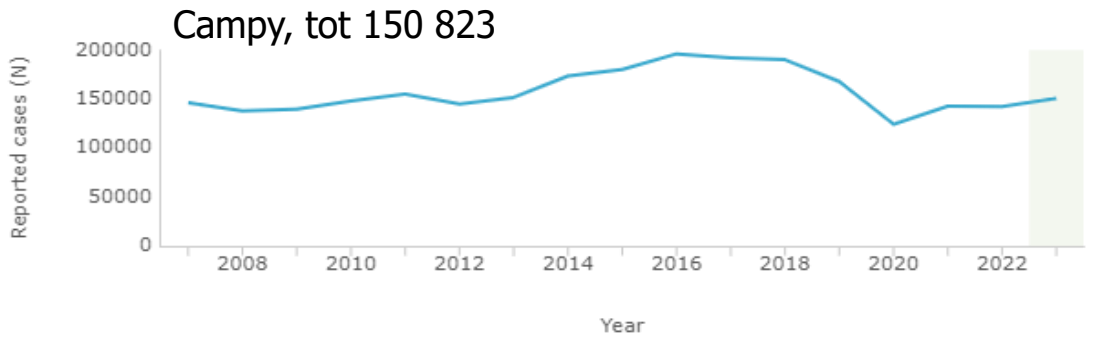
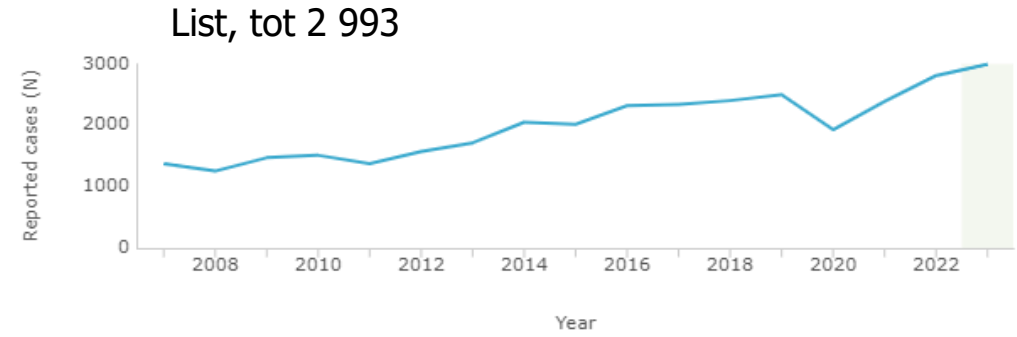
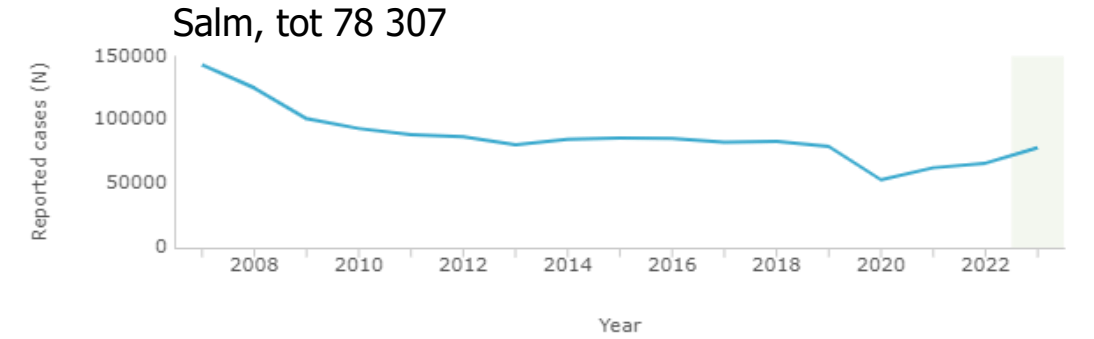
Czechia: 125.22

Slovakia: 104.35

Malta: 89.47

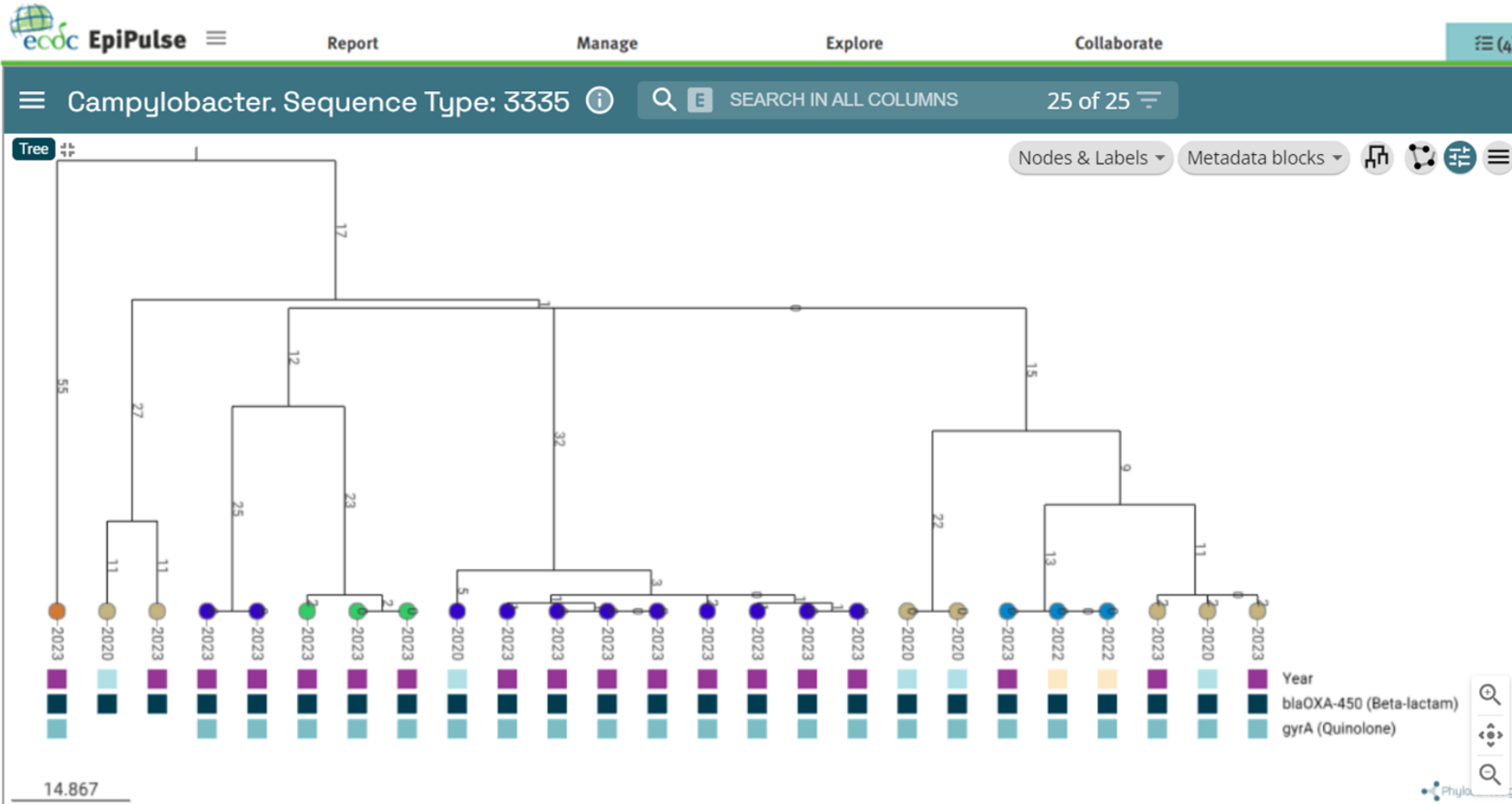
Denmark: 87.60





Genomic surveillance of *Campylobacter*

Genomic surveillance of *Campylobacter* at ECDC



Objectives for genomic surveillance of *Campylobacter*

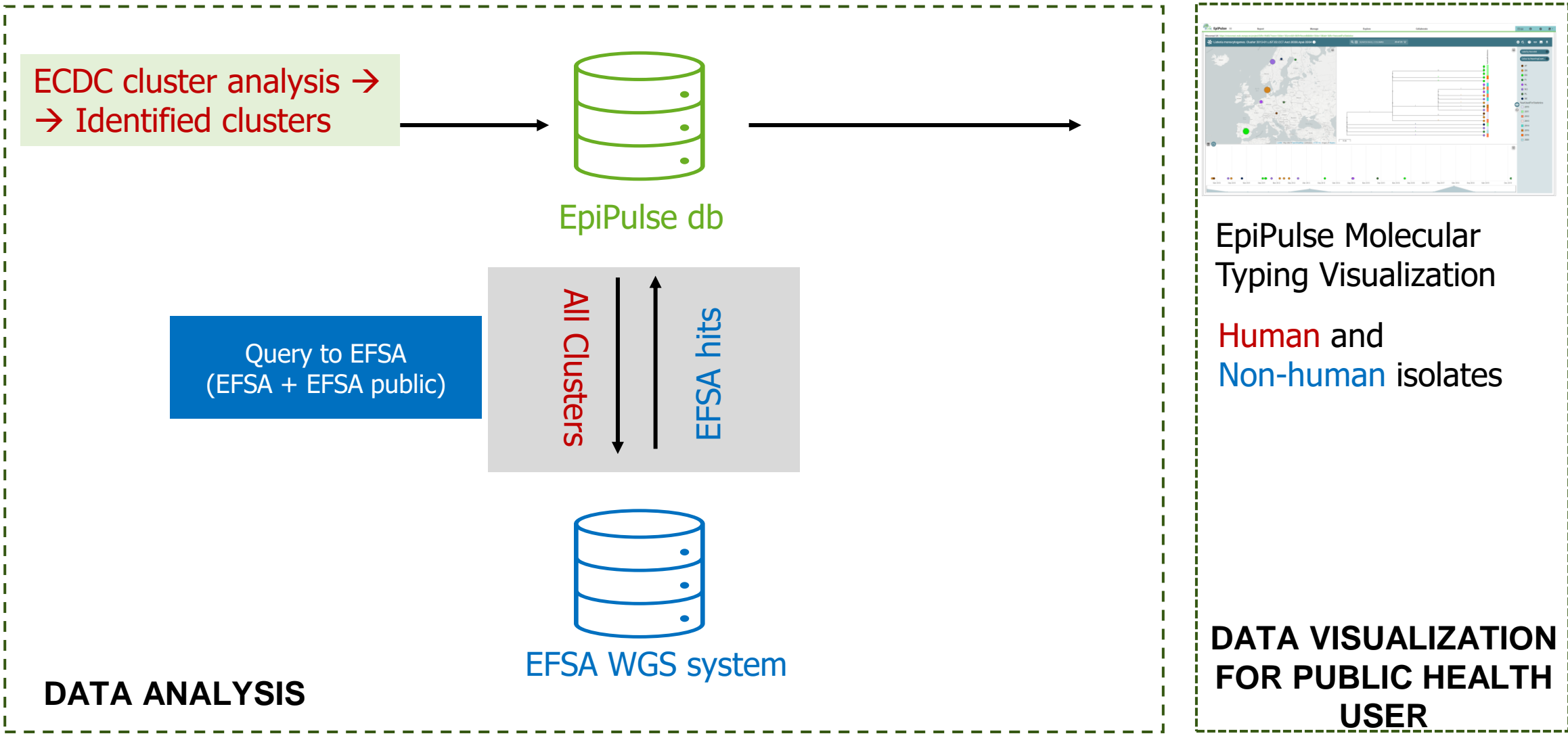


1. Verification of multi-country outbreaks
2. Investigation of sources/vehicles in a cross-border foodborne outbreak jointly with EFSA and member states (when *Campylobacter* implemented in the EFSA WGS system)
3. Identification of persistent strains

Sequences shared

- For events and outbreak investigations
- For the annual AMR reporting

ECDC EFSA One health system - overview



EpiPulse Molecular Typing Tool – visualisation and cluster detection of reported WGS data



EpiPulse ☰

Report	Manage	Explore	Collaborate
TESSy Cases	TESSy - review uploads	Public Atlas	CCB contacts
Events, Forum & News	Atlas ▶	Surveillance Dashboards/Reports ▶	Domain Contacts ▶
Surveillance system descriptors	TALD cases	Events, Forum & News	Extranets
EpiPulse Cases	TALD sites	Download data	Duty Schedule
		Signal detection tool	TESSy Help & Docs
		Molecular typing tool	Request EU Health Task
		Outputs Overview	Force support
		EQA Lab Reports	

Home > Explore > Molecular typing tool

Please treat the data in the platform as sensitive non-classified unless specifically indicated as public.

Please, select a Pathogen to review and analyse its data.

Campylobacter

Search & Refine Selection

Sequence Type

Please, select one Sequence Type

ST572

Countries

Countries

If empty, all the countries will be selected.

Match Distance

Match Distance

Cluster

Cluster Code

If empty, all the clusters will be selected.

Date used for statistics

dd/mm/yyyy

Cluster Method

Default

Events

Events

Submission Date

dd/mm/yyyy

Epidemiological Data

Please, select one or more epidemiological data

Isolates

Isolates

Distance metric to match

Default

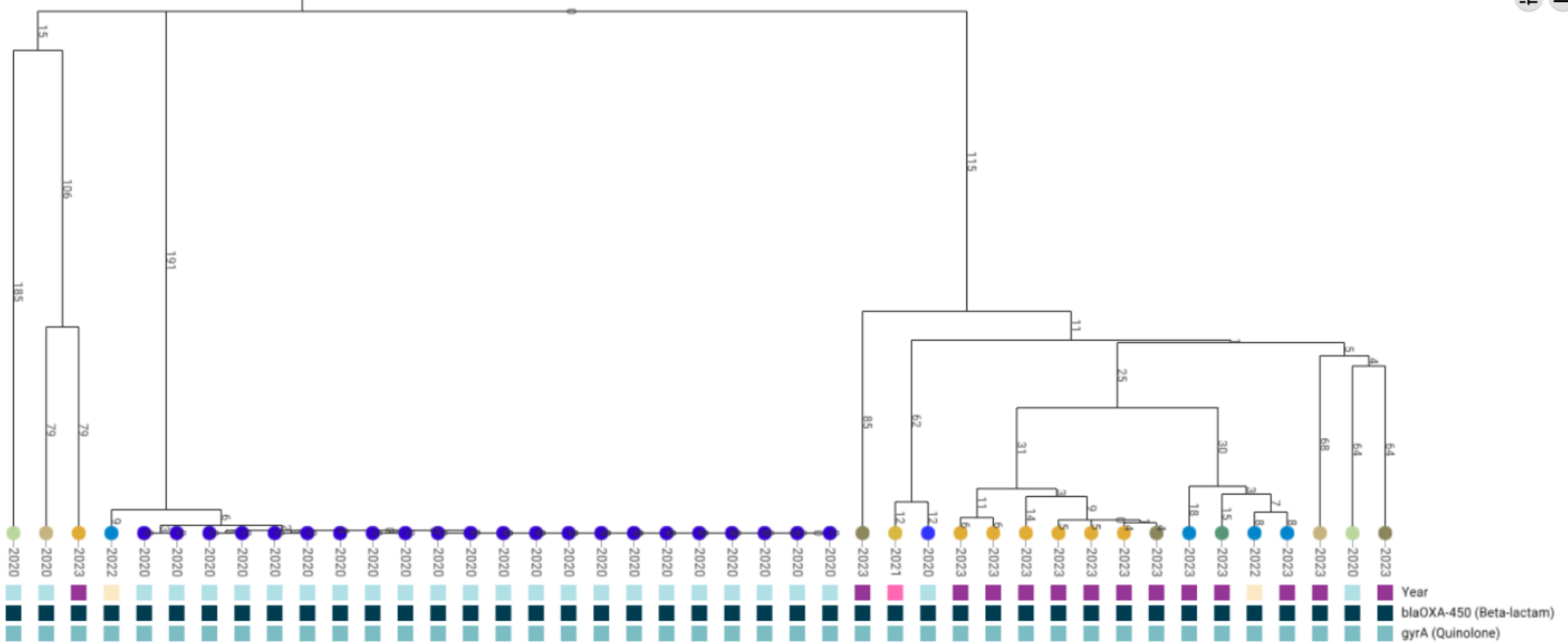
ST 572 isolates (cgMLST, Single Linkage tree)

☰ Campylobacter. Sequence Type: 572 ⓘ

🔍 SEARCH IN ALL COLUMNS

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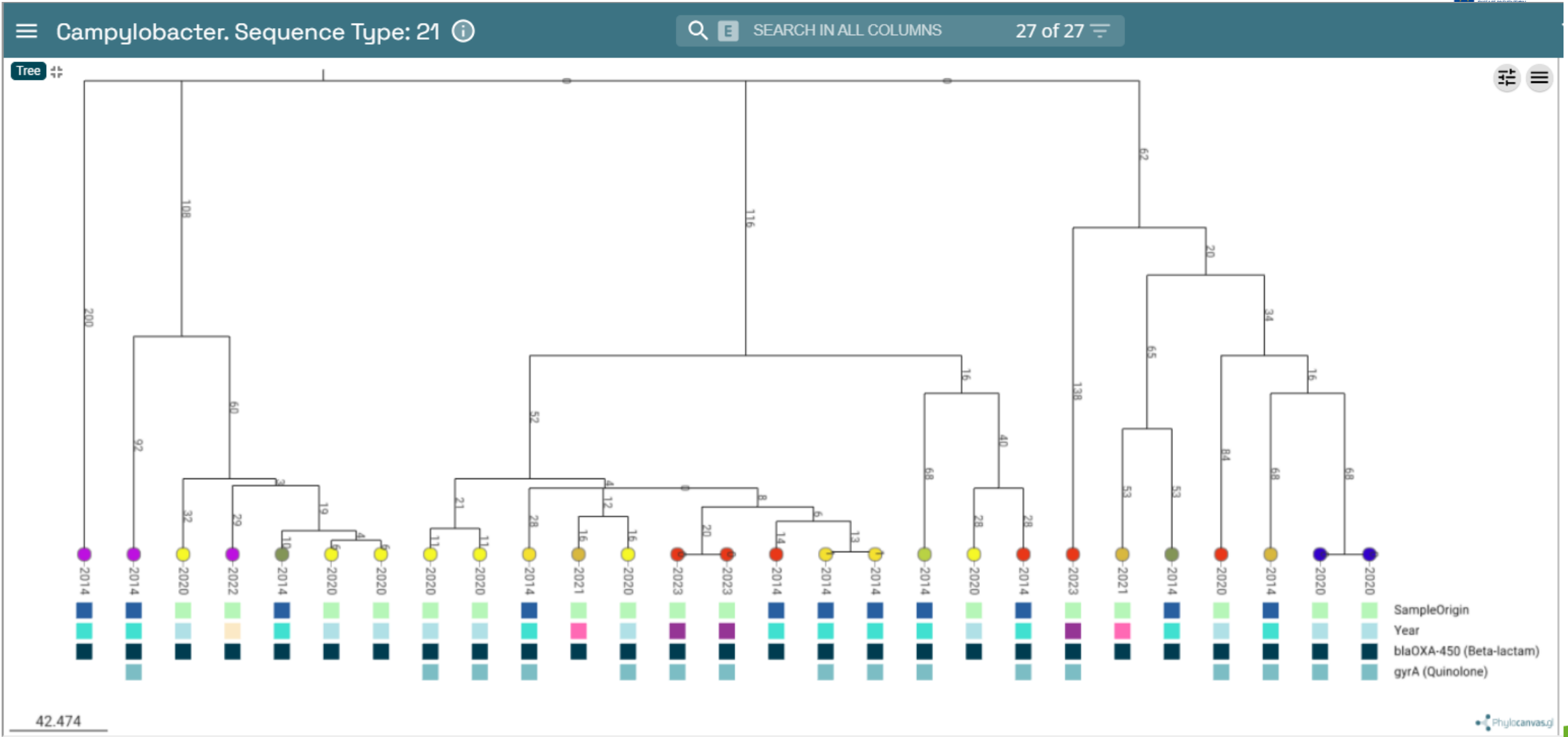
Tree



40.565

PhyloCanvas.js

Example of human and non human isolates (ST21)



ECDC data visibility criteria for PH users regarding non-human isolates



- For EFSA data, country of origin can only be seen by ECDC and the same country, and further restrictions on data visibility can be applied by the EFSA providers
- For EFSA Public data, no visibility restrictions on country of origin

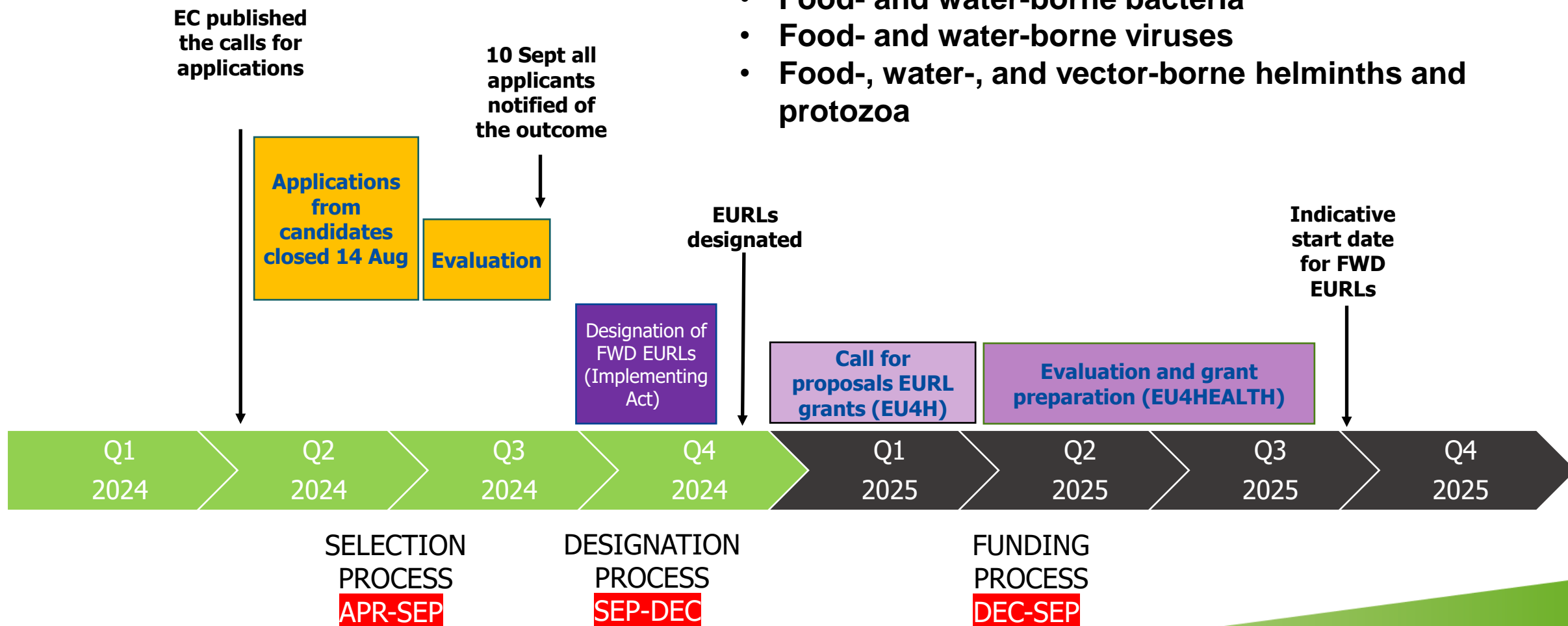
Public Health EURL

FWD EURLs implemented in 2024/2025

Indicative timeline



- Food- and water-borne bacteria
- Food- and water-borne viruses
- Food-, water-, and vector-borne helminths and protozoa



EURL for food- and waterborne bacteria

The EURL will provide support for activities for *Salmonella* spp., STEC, *Listeria monocytogenes*, ***Campylobacter* spp.** and *Shigella* spp.. The scope of the EURL also includes *Vibrio* spp. and *Yersinia* spp. (excluding *Y. pestis*).

Coordination with other EURLs or relevant initiatives



In consultation with ECDC, the EURL should exchange information and when relevant, coordinate activities with EURLs for food, feed and animal health addressing the same pathogens.

Questions

Public health EURLs. Article 15



1. The Commission may, by means of **implementing acts**, designate EURLs in the area of public health or for specific public health areas relevant for the implementation of the SCBTH Regulation. **The aim** is to provide support to national reference laboratories to promote good practice and alignment by Member States on a voluntary basis on diagnostics, testing methods, use of certain tests for the uniform surveillance, notification and reporting of diseases by MS.
2. The EU reference laboratories shall be **responsible for** coordinating the network of national reference laboratories, in particular, in the following areas:
 1. reference diagnostics, including test protocols;
 2. reference material resources;
 3. external quality assessments;
 4. scientific advice and technical assistance;
 5. collaboration and research;
 6. monitoring, alert notifications and support in outbreak response, including to emerging communicable diseases and pathogenic bacteria and viruses; and
 7. training.