

A photograph showing a close-up of two hands. One hand, with light-colored nail polish, is gently holding the other hand. The background is blurred, suggesting a clinical or healthcare setting. The image is partially covered by a green and teal geometric overlay.

European Centre for Disease Prevention and Control

Piotr Kramarz, Disease Programmes Unit

Digital Technologies...

...for public health key functions

Mission

Identify, assess and communicate current and emerging threats to human health posed by infectious diseases.

Surveillance

STI, Blood-Borne Viruses and TB

Microbiology

Preparedness

VPD and Immunisation

Country support

Coronavirus and Influenza

Scientific advice

Emerging, Food- and Vector-Borne Diseases

Public health training

Health communication

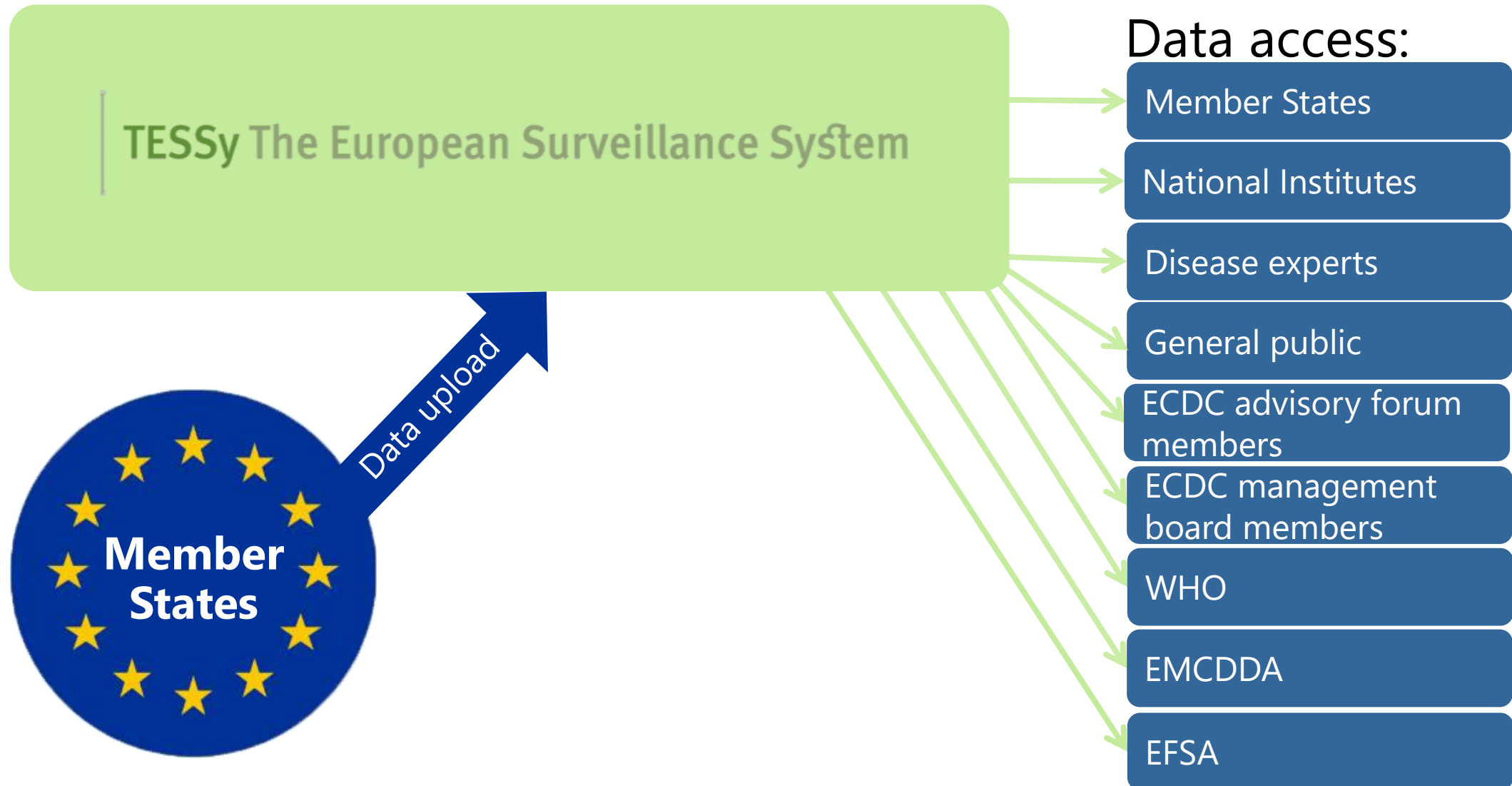
AMR and Healthcare-Associated Infections

Epidemic intelligence and outbreak response

Partners



Surveillance: TESSy



Epidemic intelligence: Daily threat monitoring



Epidemic intelligence

- Detecting, monitoring and assessing threats
- Collection, collation, validation and analysis of information.
- **Risk assessments** with recommendations on public health measures.

Response

- Coordinate and support the timely assessment of risks and response options.
- Support to national and international field response through missions.

Microbiology: Whole genome sequencing (WGS) connecting the dots - foodborne outbreaks

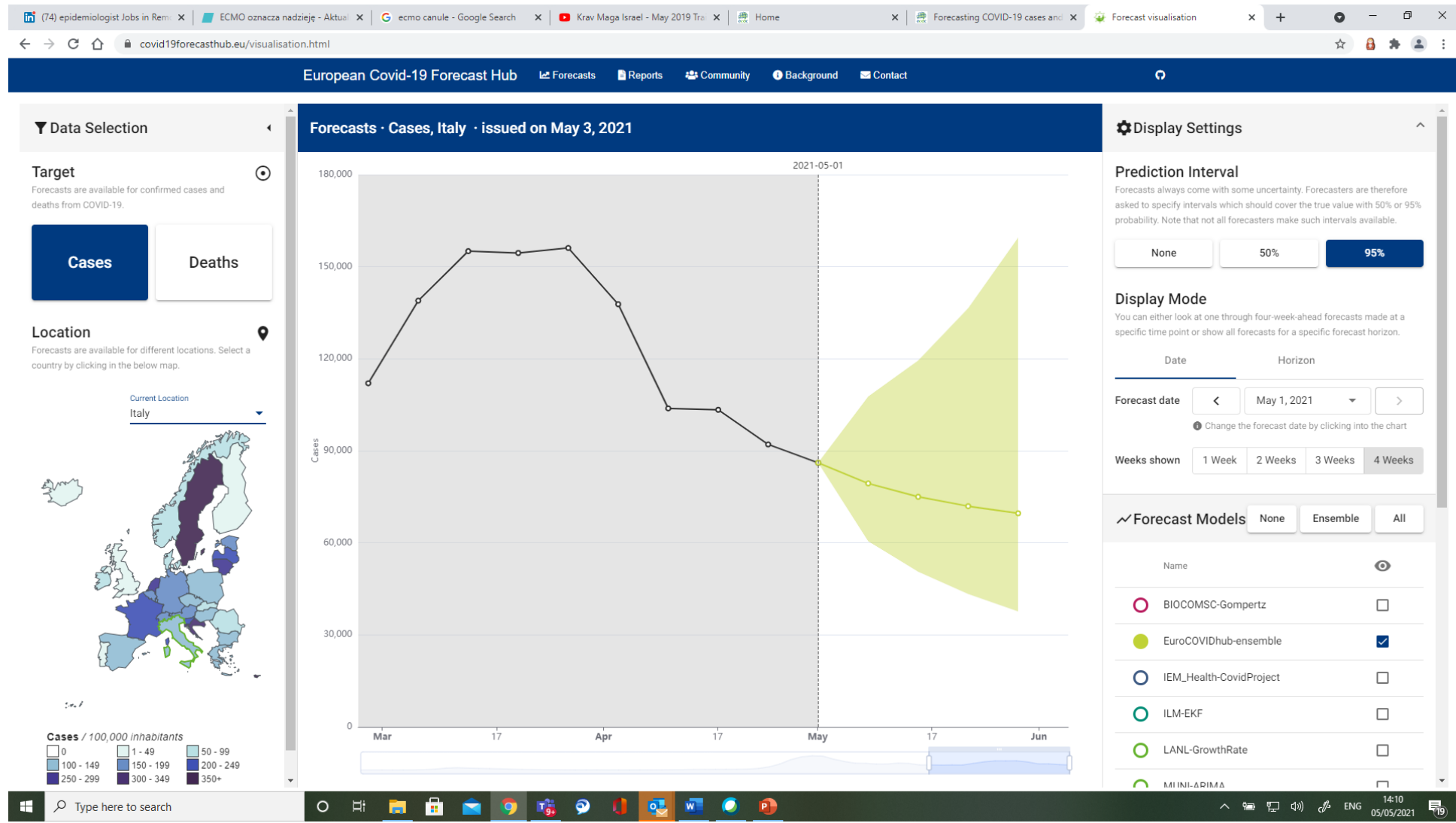
ECDC and the European Food Safety Authority (EFSA) investigated a **multi-country outbreak** of *Listeria monocytogenes* in 2018.

The source of this outbreak was thought to be limited to frozen corn, but the use of **WGS** detected matching strains of *L.monocytogenes* in other frozen vegetables produced by the same company.



This enabled authorities to find the exact points of contamination and take further action to ensure food safety.

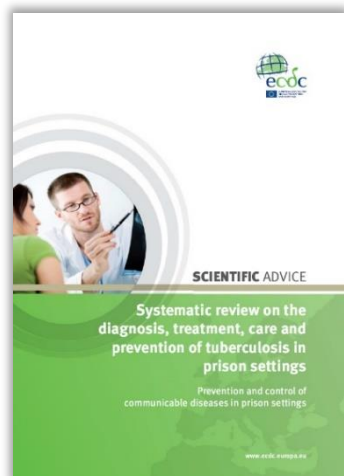
Mathematical modelling



Scientific advice

ECDC guidance

Supports informed decision-making with respect to a specific public health issue of concern by providing options for prevention and control and their evidence-base.



Systematic review

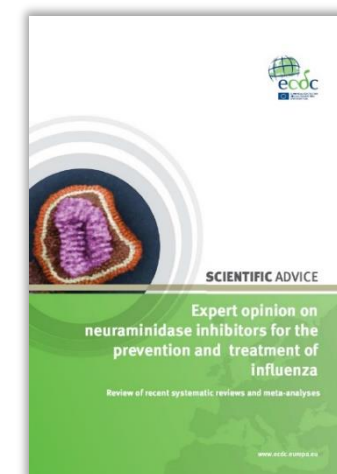
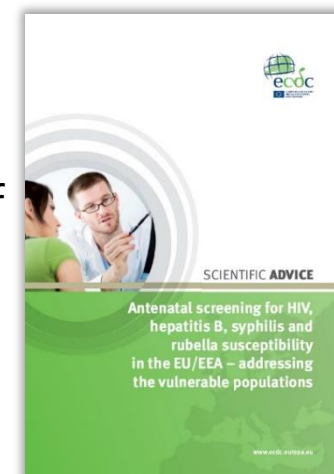
Evidence synthesis applying a thorough, transparent and reproducible methodology in order to minimise bias when identifying, appraising, analysing and synthesising the evidence with regards to a specific question or a set of questions.

Expert opinion

Scientific view or comment of designated experts.

Peer-reviewed publications

ECDC publishes a multitude of peer-reviewed publications by designated experts on various topics.





ECDC staff, 2016