

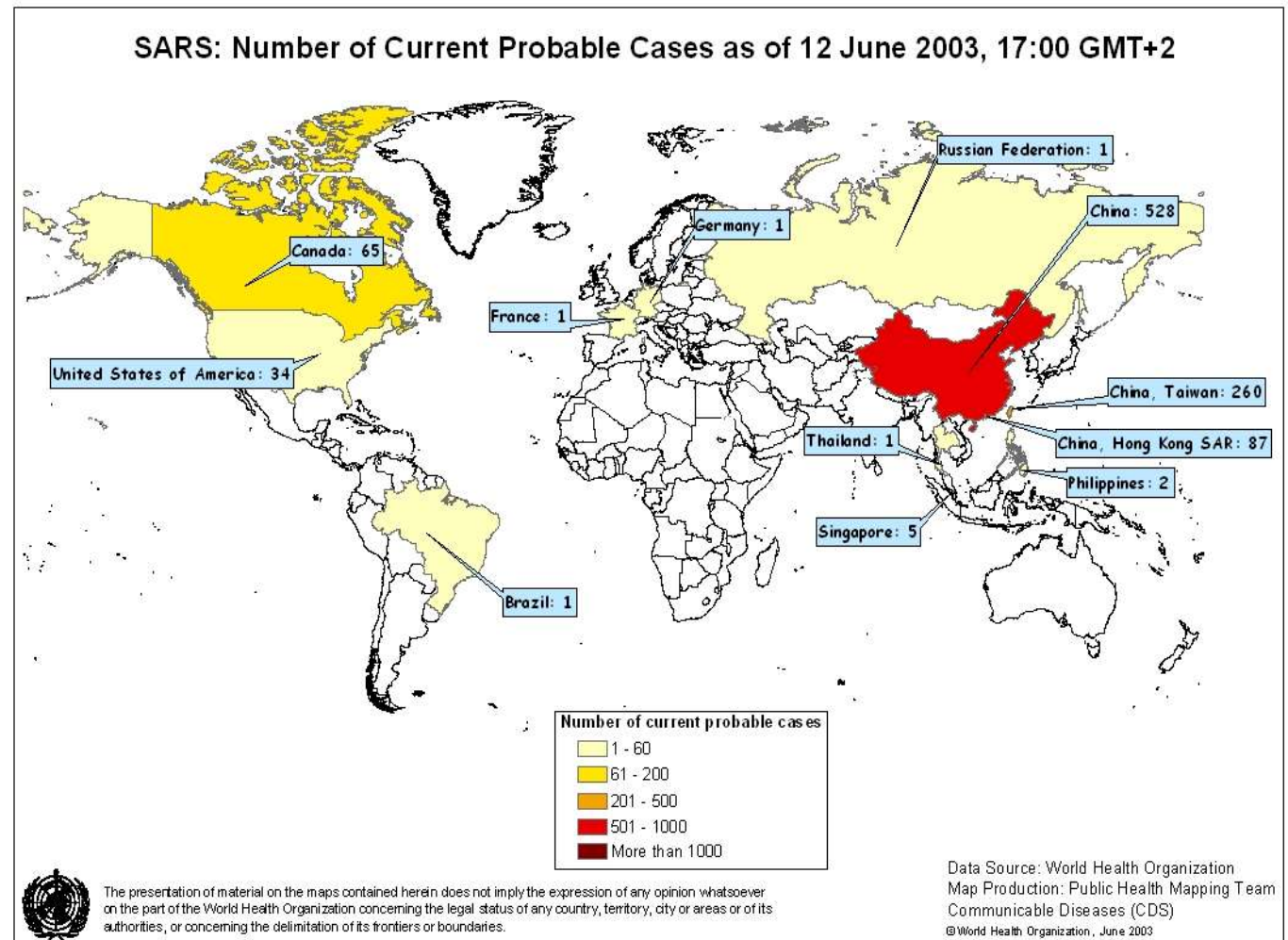
ECDC activities connected to emerging, food- and vector-borne pathogens in Europe: Surveillance, response and prevention

Tamás Bakonyi

Emerging and Vector-borne Diseases Group, Epidemic-prone Diseases Section,
European Centre for Disease Prevention and Control

ERINHA workshop on High Consequence Infectious Diseases in Central Eastern Europe: Gaps & Cooperation Opportunities
25. 11. 2021

2003 - SARS Coronavirus



2005 - Birth of ECDC



ECDC mission and mandate

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

Disease Surveillance & Epidemic intelligence

Response support & Risk assessments
Preparedness & capacity strengthening

Scientific advice & guidance

EU and external stakeholders & Country support

Public health training

Communication

- Antimicrobial resistance and healthcare-associated infections
- Epidemic-prone diseases
 - Emerging and Vector-borne Diseases
 - Food- and Waterborne Diseases
 - Coronavirus and Influenza
- Sexually transmitted infections, Blood-Borne viruses and Tuberculosis
- Vaccine-preventable diseases and Immunisation

Towards Health Security

INTERNATIONAL HEALTH REGULATIONS (IHR)

– from policy to people's health security

What are the IHR?

The IHR are legally binding and help countries work together to protect lives threatened by the spread of diseases and other health risks, including radiation and chemical hazards



5 reasons why the IHR matter



HEALTH THREATS HAVE NO BORDERS

The IHR strengthen countries' abilities to control diseases that cross borders at ports, airports and ground crossings



TRAVEL AND TRADE ARE MADE SAFER

The IHR promote trade and tourism in countries and prevent economic damage



GLOBAL HEALTH SECURITY IS ENHANCED

The IHR establish an early warning system not only for diseases but for anything that threatens human health and livelihoods



DAILY THREATS ARE KEPT UNDER CONTROL

The IHR guide countries to detect, assess and respond to threats and inform other countries quickly



ALL SECTORS BENEFIT

The IHR prepare all sectors for potential emergencies through coordination and information sharing

Until all sectors are on board with the IHR, no country is ready

www.euro.who.int/ihr

Main areas of Decision No 1082/2013/EU on serious cross-border threats to health

Decision No 1082/2013/EU Serious cross-border threats to health

Origins of threats



Biological¹



Chemical



Environmental



Unknown

EU level

Main areas

National level



Commission
DG Sante
"Coordinate + Support"
Art.168 TFEU



ECDC/2004
"Communicable diseases"

Other EU
agencies/bodies

Preparedness

Joint procurement

Surveillance/monitoring

EWRS

Risk assessment

Coordination of response

Emergency declaration

Health Security Committee

National bodies

Member States

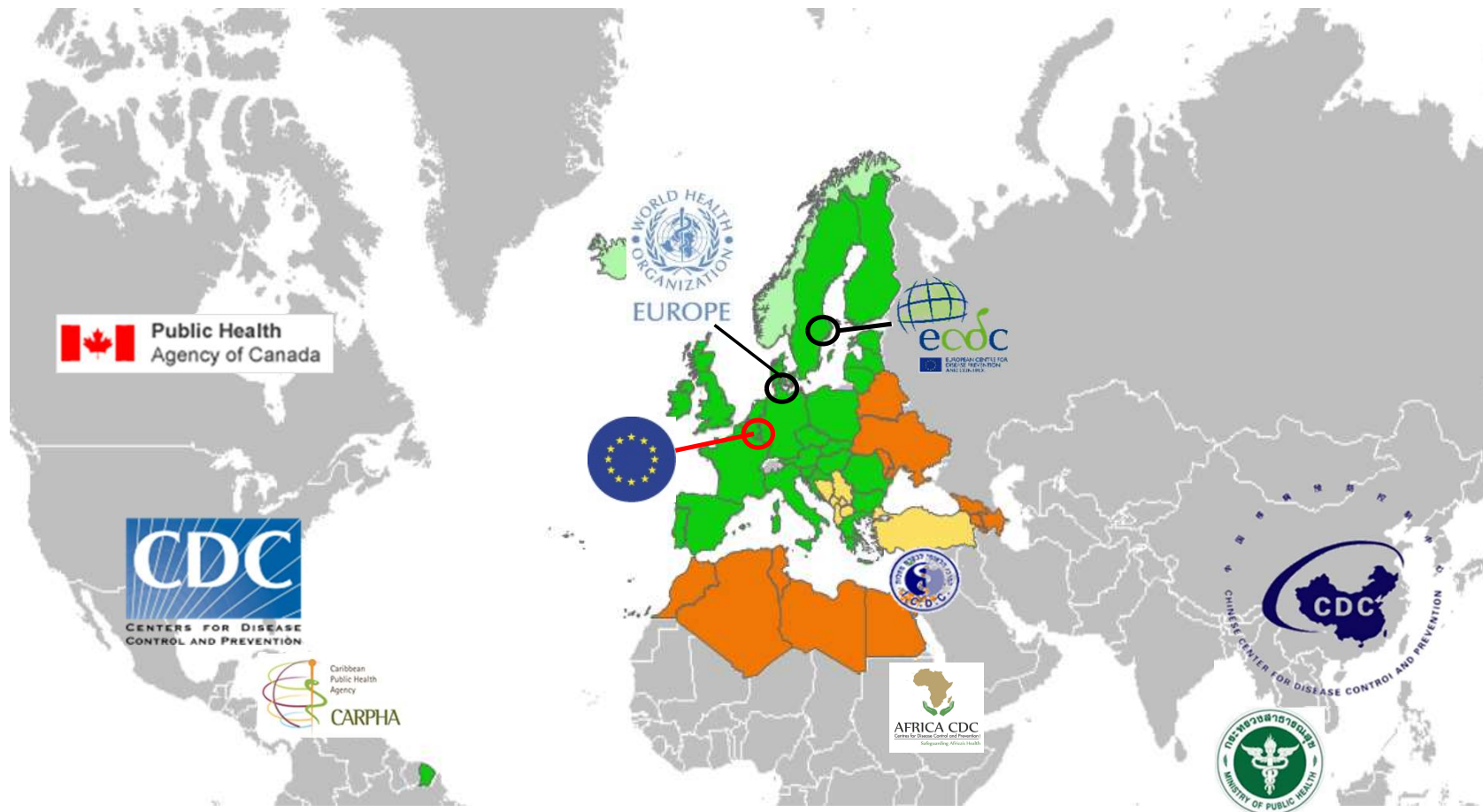
General competence
for public health

HSC members
Competent body for surveillance
EWRS contact point

¹ Biological threats can be communicable diseases, antimicrobial resistance and special health issues, and biotoxins

Source: European Court of Auditors.

Working with European and international stakeholders on Public Health



Partners



One Health



approach / initiative / movement / model / network

One Health recognizes that the health of humans, animals and ecosystems are interconnected. It involves applying a coordinated, collaborative, multidisciplinary and cross-sectoral approach to address potential or existing risks that originate at the animal-human-ecosystems interface.

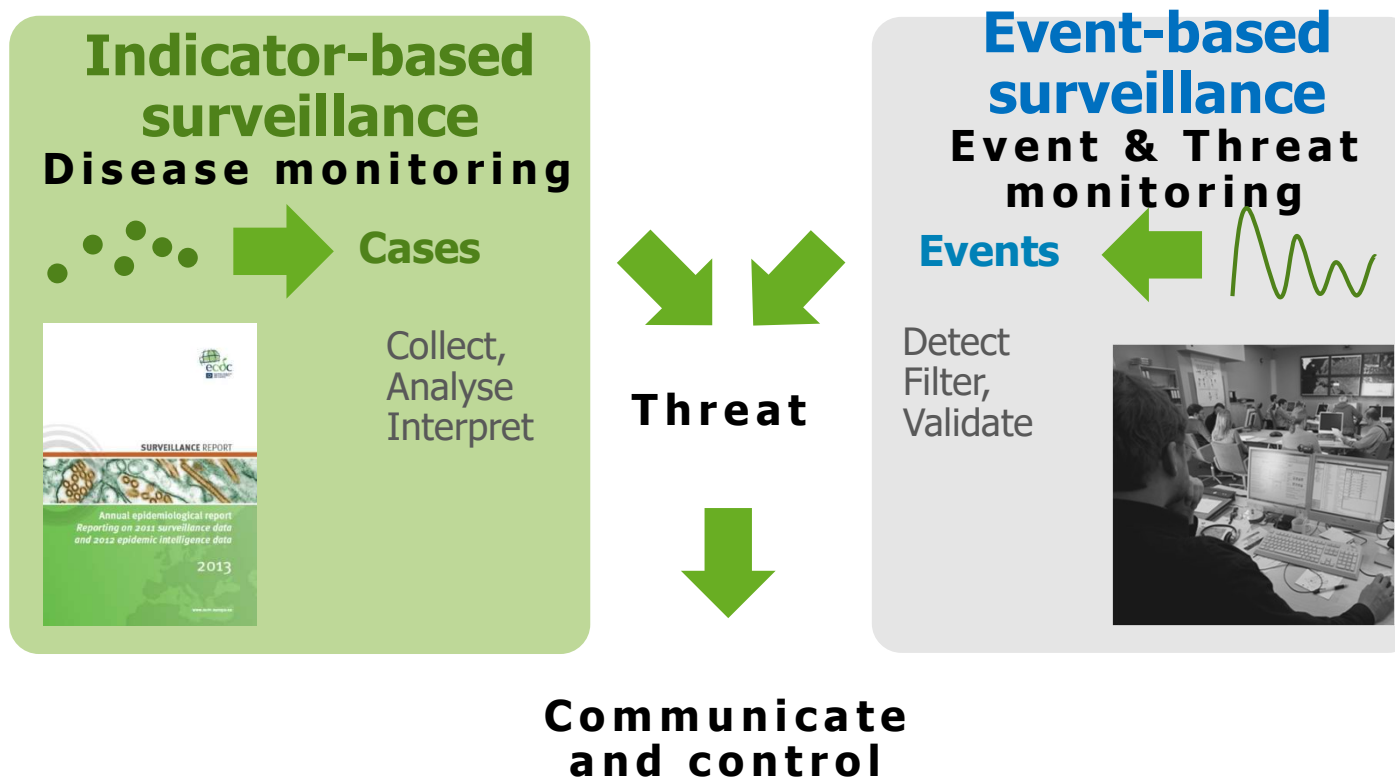
Cooperation of stakeholders in public health, veterinary and environmental sectors on different levels (local, national, international; i.e. WHO–FAO–OIE; ECDC–EFSA–EÉA)

Main topics:

- Zoonotic and vector-borne diseases
- Food- and water-borne diseases
- Antimicrobial resistance



Disease surveillance and event monitoring: Our Health Radar



Daily 24/7 Threat Monitoring



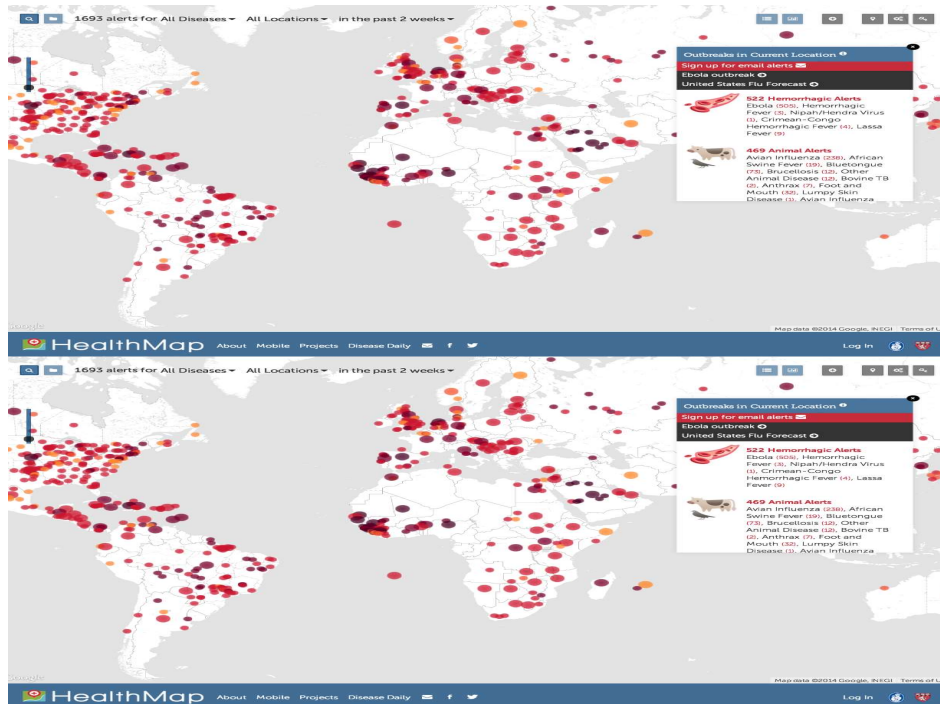
Epidemic intelligence

- **Monitoring** in **over 50 languages** & Screening around **1000 webpages/day**
- **Every day at 11:30**: Round table discussions with ECDC experts assessing threats
- **Daily** round table reports and **weekly** communicable disease threat reports.

Response

- Coordinate and support the **timely assessment of risks** and **response options in EU and globally**
- Produce **risk assessments** (30-50/year) with recommendations on **public health measures**
- Support to **national and international field response** through missions.

Epidemic intelligence screening activities



ProMED
INTERNATIONAL SOCIETY
FOR INFECTIOUS DISEASES

Most Recent Alert

View printable version | Share this post | Facebook | Twitter | LinkedIn | Email

Published Date: 2019-03-20 21:35:27
Subject: PORCINE EPIDEMIC DIARRHEA - NORTH AMERICA (03): USA (OK) pigs
Archive Number: 20190320.838883

PORCINE EPIDEMIC DIARRHEA - NORTH AMERICA (03): USA (OKLAHOMA) PIGS

A ProMED-mail post:
<http://www.promedmail.org>
ProMED-mail is a program of the International Society for Infectious Diseases
<http://www.isid.org>

Date: 21 Mar 2019
Source: Pork Business [edited]
<https://www.porkbusiness.com/article/pedy-diagnosed-oklahoma-youth-expo>

Pigs were diagnosed with porcine epidemic diarrhea virus (PEDV) at the Oklahoma Youth Expo in Oklahoma City, OK on Wed 20 Mar 2019. Several pigs have become ill, and show veterinarians assume that most pigs that were at the show or are there now have been exposed, according to a statement released by the Oklahoma Youth Expo (OYE).

ProMED-mail is a program of the International Society for Infectious Diseases
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"PEDV is not a human health risk, and pork is safe to eat. However, the disease causes a transient illness in feeder pigs and mature swine. In baby pigs, it can cause up to 100 percent mortality," the statement said.

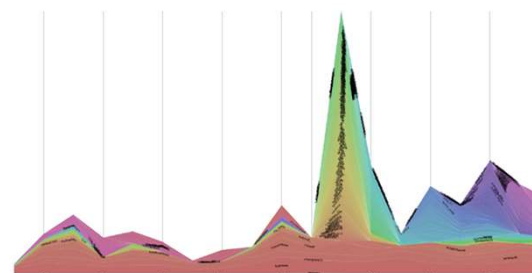
This virus is very contagious and can be transmitted easily on fomites such as clothing, equipment and shoes. Because of this, all attendees of the Oklahoma Youth Expo should use the strictest biosecurity measures possible when returning home, urged the Oklahoma Youth Expo.

Here are some tips for OYE exhibitors and attendees upon returning to their farms:

1. If you are taking animals from OYE home to your farm, isolate those animals until you can confirm they have not been exposed or are contagious. This is a highly infectious disease where a very small amount of virus can cause an infection in pigs.
2. Do not wear the same clothes, shoes, caps, jackets, etc. that you wore at OYE once you arrive home. Clean and disinfect your shoes, clothes and outerwear as soon as possible.
3. Clean and disinfect your trailer and any tack or equipment you had at OYE. It is best if you clean and disinfect at a location not on your farm.

AVIAN FLU TOP USERS PER DAY

Tension between global local: there is a network of users who monitor diseases internationally (red) and then there are location specific users who respond to particular outbreaks (other colours).



- Number of emails/day : ~ 100
- Number of webpages opened/day: ~ 1 000
- Number of articles screened/day: ~ 3 000
- Requests or comments from MS/day: 1-2
- Social media monitoring and trend analysis

Yin Yang shared a link.
September 15 at 12:15pm

<https://ecdc.europa.eu/.../typhoid-fever-outbreak-linked-rain...>

ecdc.europa.eu
ECDC.EUROPA.EU

Like Share

4

Massimiliano Marelli Thank you! You get it! Now that institution are aware... everybody is sure more relaxed...
Like - September 15 at 12:23pm

How does ECDC detect and assess threats? Sources of information



- **ECDC Networks:**

- Surveillance and Epidemiology: National Focal Points in public health institutes, focus on EVD, FWD, FLU, EI...
- Microbiology: Focal Points in laboratories e.g. EVD-LabNet
- Entomology: Veterinary and medical entomologists i.e. VectorNet

- **EC network:**

- Early Warning and Response System (EWRS) contact points
- Animal Disease Information System (ADIS)
- Rapid Alert System for Food and Feed (RASFF)

- **Partner agencies and organisations** e.g. World Health Organisation, US CDC, (EFSA, OIE)

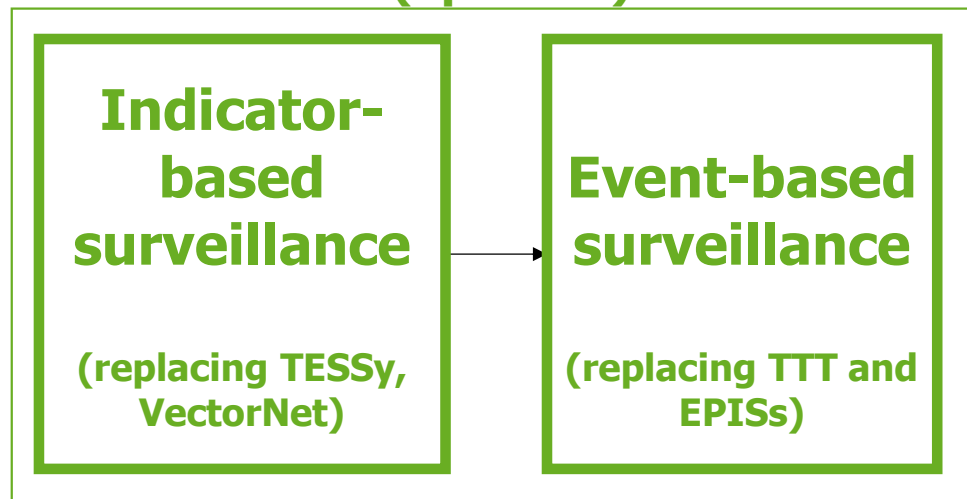
- **Media** and web-aggregators e.g. MedISys

- **Moderated platforms** e.g. ProMed, GPHIN



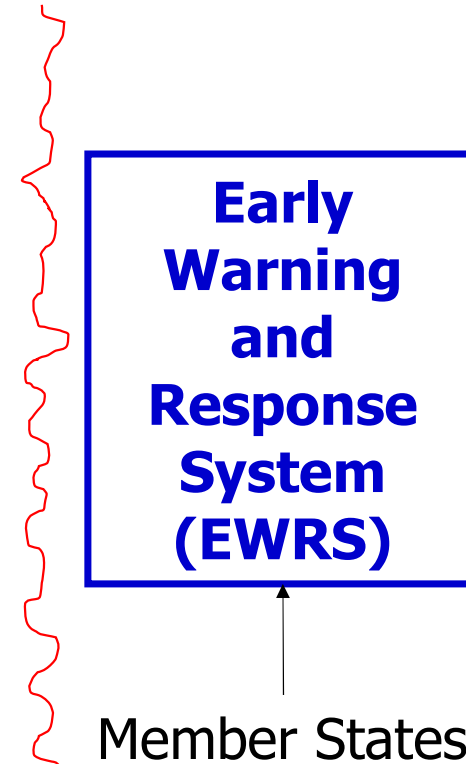
Main communication channels

European surveillance portal
for infectious diseases
(EpiPulse)



Member States

RISK ASSESSMENT



RISK MANAGEMENT

How does ECDC detect and assess threats?

Tools: EpiPulse event and document, EVD domain



ID	Participating domain	Type	Title	Created by	Pathogens	Diseases	Modified time
2021-EIP-00018	EVD, EI, PREP	Long-Term Monitoring	West Nile virus - Multi-country (World) - Monitoring season 2021	ECDC/Public Health	West Nile virus, not specified	West Nile virus infection	2021-10-29 07:20
2021-EVD-00009 (new)	EVD, EI	Event	2021, a record year for Pogosta (Sindbis virus) disease in Finland	Finland/Public Health	Sindbis virus	Sindbis fever	2021-10-28 18:10
2021-EIP-00058	EI, PREP, EVD	Event	Ebola – Democratic Republic of Congo – 2021	ECDC/Public Health	Ebola virus, not specified	Ebola virus disease	2021-10-19 12:04
2021-EIP-00041	EVD, EI, PREP	Event	Nipah virus – India – 2021	ECDC/Public Health	Nipah virus	Nipah virus infection	2021-10-18 19:01
2021-EVD-00008	EI, EVD	News	WHO recommended widespread use of malaria vaccine in children	ECDC/Public Health	Plasmodium falciparum	Malaria	2021-10-12 18:24
2021-EIP-00055	EI, PREP, EVD	Signal	Yellow Fever - Venezuela - 2021	ECDC/Public Health	Yellow fever virus	Yellow fever	2021-10-12 18:18
2021-EVD-00006	EVD	Event	Recording of an introduced P.vivax malaria case, Greece, September 2021	Greece/Public Health	Plasmodium vivax	Malaria	2021-10-11 15:19

Summary (Modified time: 2021-10-18 19:01)



Overview

Update: Media quoting the Health Minister of Karala state report that the Kozhikode district is now considered to be Nipah virus free as 42 days have passed since the Nipah virus case was reported on 4 September 2021.

Summary: A case of Nipah virus (NiV) infection was reported in a 12-year-old boy on 4 September 2021, in a rural area in Kozhikode district, Kerala state, India. The case was hospitalised on 29 August 2021 and has since died.

As of 15 September 2021, media reports quoting health authorities confirmed that the index case, including the boy's parents and health contacts, were confirmed to be negative. Samples from other close contacts for laboratory test performed has not been communicated. Laboratory tests at the National Institute of Virology, Pune (WHO Collaborating Centre) and the Kozhikode District Hospital have been identified and the high risk contacts are in isolation.

In addition, a One Health approach is being applied by the local health authorities, including testing from the two goats owned by the family of the case and the residence. An animal husbandry team has identified a fruit bat from the National Institute of Virology in Pune has been taken for testing. Bats and other animals in accordance with the local Nipah outbreak response plan.

Assessment

To date, one case has been confirmed and none of the tested contacts were positive. The case lived in the district where the 2018 NiV infection outbreak occurred, which suggests that NiV is likely to be circulating in the wildlife reservoir.

The likelihood of exposure and infection by NiV for EU/EEA citizens travelling or residing in Kozhikode district is currently very low. The single case is deceased and no other close contacts have been found to be positive, despite extensive testing; symptomatic individuals are in isolation. Exposure to the primary source and/or vehicle of infection of the case cannot be excluded, but the most likely place of infection of the index case has been sealed. As a general precaution, EU/EEA travellers and residents in India should not handle domestic or wild animals and avoid contact with their excreta. The virus may be present on food items contaminated by bats; washing, peeling, and cooking fruit and vegetables before consumption is generally recommended. Raw date palm sap should not be consumed.

Considering the severity of the symptoms and the high fatality rate of the disease, and that the number of cases among EU/EEA citizens travelling or residing in Kozhikode district is expected to be limited, the local impact of infection is considered to be low. As a result, the risk of infection by NiV for EU/EEA citizens travelling or residing in Kozhikode district is currently low.

The most likely route of introduction of the virus into the EU/EEA is via infected travellers. While importation of the virus cannot be excluded, it is currently very unlikely to occur considering that so far there is only one confirmed case in Kerala and that identified high risk contacts are in isolation. The current number of travellers arriving from India is expected to be relatively low due to the COVID-19 restrictions. Should a case be imported, nonetheless, the likelihood of spread of the virus within the EU/EEA is considered to be very low. It should be highlighted that the natural reservoir host of NiV is not native to Europe. As stated above, the impact of infection is considered to be low and consequently the risk of spread of the virus within the EU/EEA is considered to be low.

Main actors from the public health sector

National coordinators ^A

ECDC EVD team ^A

EVD network ^A

- National Focal Points
- Operational Contact Points

**DG SANTE C,
WHO EURO, and
EWRS contact points** ^C

Laboratory ^B

- EVD-LabNet contractor
- EVD-LabNet network members

Entomological ^B

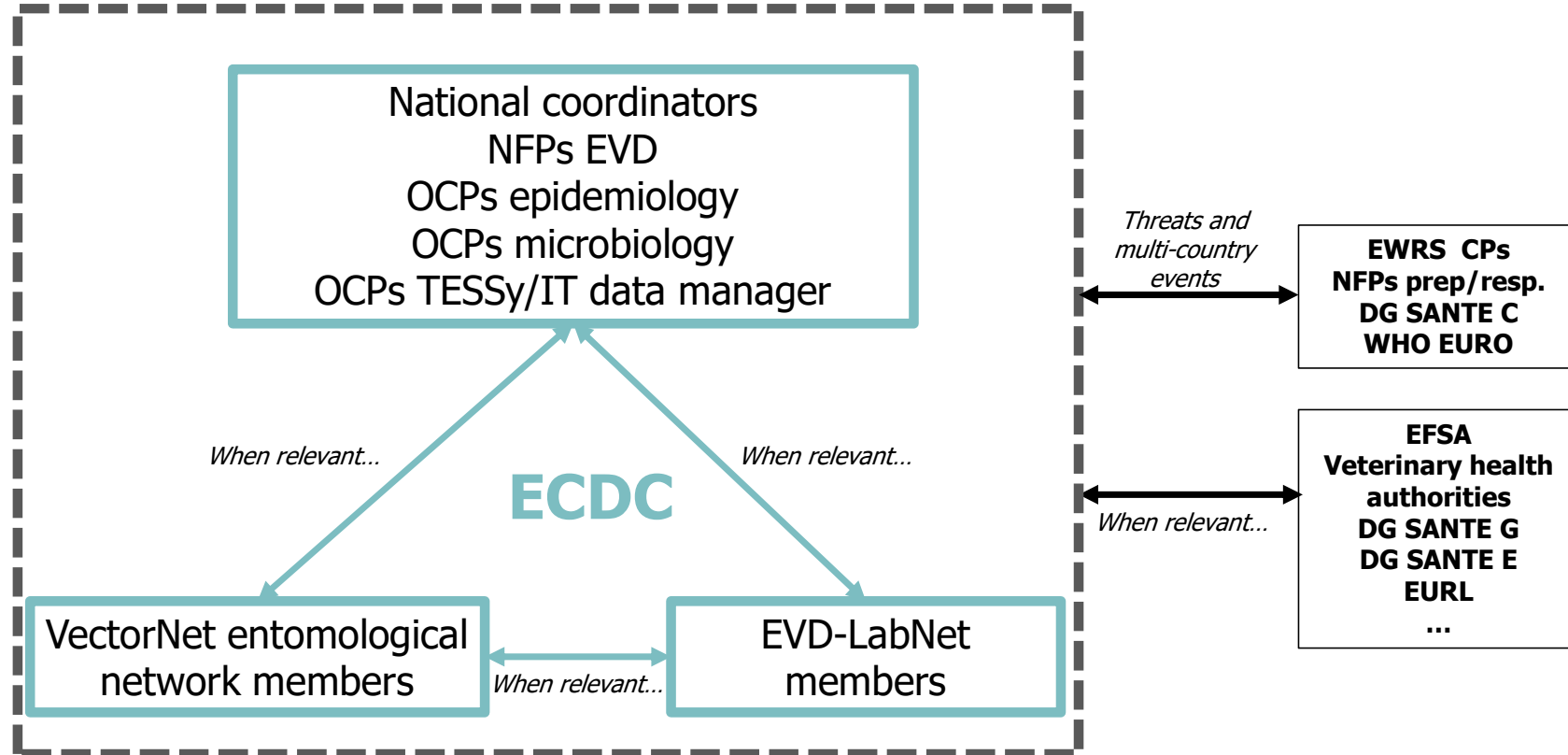
- VectorNet contractor
- VectorNet network members

Animal health ^B

- EFSA
- EU Reference Laboratory
- DG SANTE G ^C

All actors (One Health approach)

EpiPulse - Access rights to the EVD domain

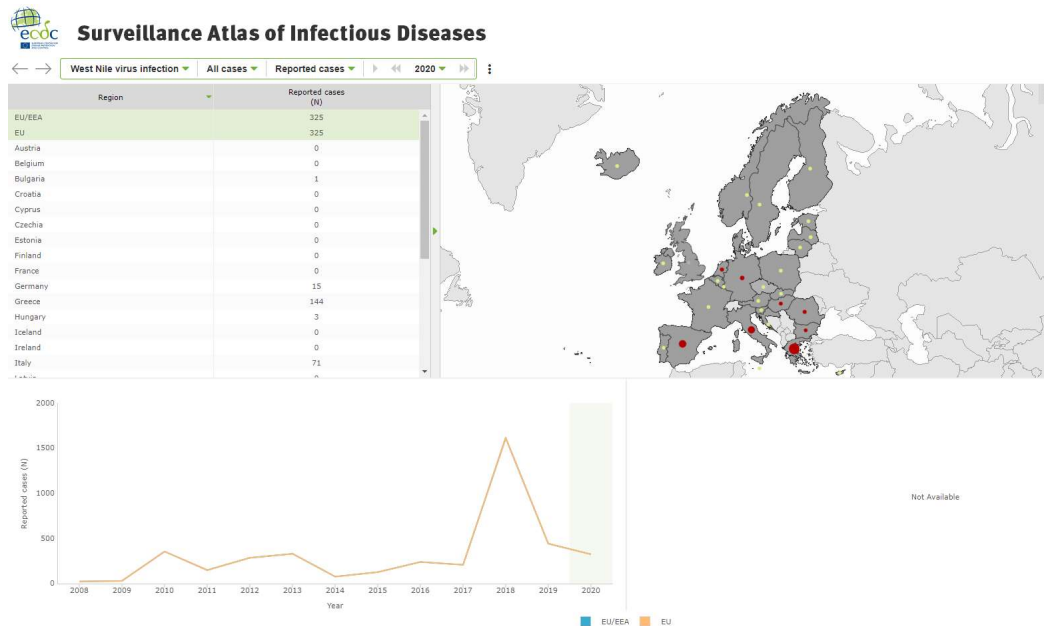


By default, only representatives from the EU/EEA and the Enlargement countries have access.

EpiPulse cases formerly The European Surveillance System (TESSy)

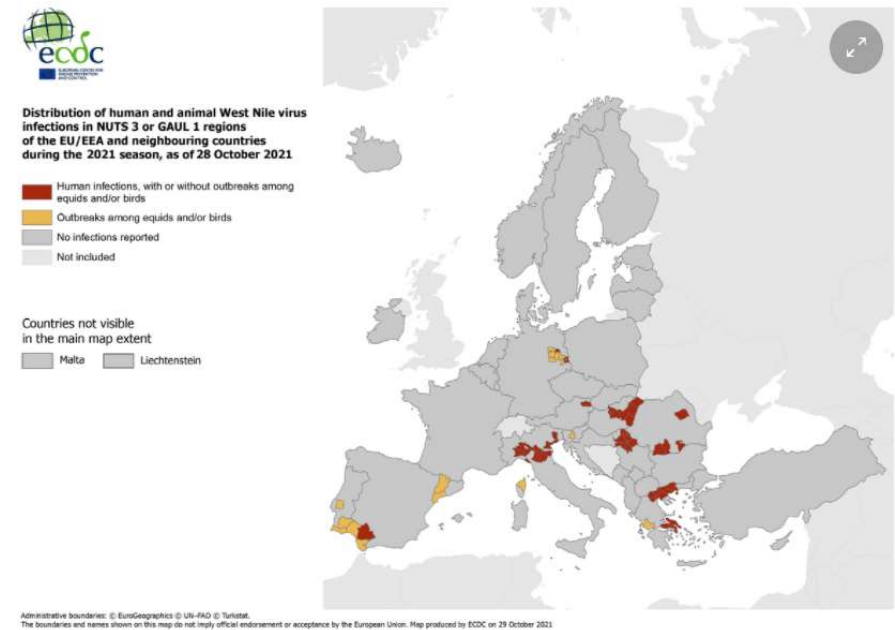
Mandatory notifiable diseases and conditions among which viral haemorrhagic fevers (e.g. CCHF, Ebola and Marburg virus disease, RVF, Lassa fever), influenza, Q fever, salmonellosis, tick-borne encephalitis, tularaemia and West Nile virus infections are listed.

Yearly data



<http://atlas.ecdc.europa.eu/public/index.aspx>

Weekly West Nile virus infection updates



<https://www.ecdc.europa.eu/en/publications-data/west-nile-virus-europe-2021-infections-among-humans-and-outbreaks-among-equids-20>

Emerging Viral Diseases-Expert Laboratory Network (EVD-LabNet)



European Network of Expert Laboratories on **emerging viral diseases** supporting ECDC for early detection and surveillance of (re)emerging viral diseases in the EU/EEA, and for providing scientific advice.

Support to EU Member States, EEA countries and EU Candidate Countries in the following areas:

- **Identifying** (early detection and surveillance) and **assessing** current and emerging **threats** to human health from communicable diseases, in particular (re-emerging) vector-borne and other viral infectious diseases (**coordinated investigations** and **scientific expert interpretation**).
- Conducting **External Quality Assessment** (EQA) on viral pathogens covered by the ECDC EVD DP.
- Providing short **training** courses and workshops to improve the diagnostic capability of EU expert laboratories.

EVD-LabNet

Virus family ▼

Virus genus ▼

Virus species ▼

Clear all

EIA

EM

HIA

HYB

IB

IFA

IHC

PCR

SQ

VI

VNT

Capacity

Contacts

Country ▼

Institute ▼

Network Institutes



The dark blue colour indicates the countries that have laboratory network members. The orange dots indicate the location of the laboratory network members.

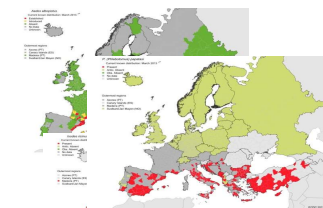
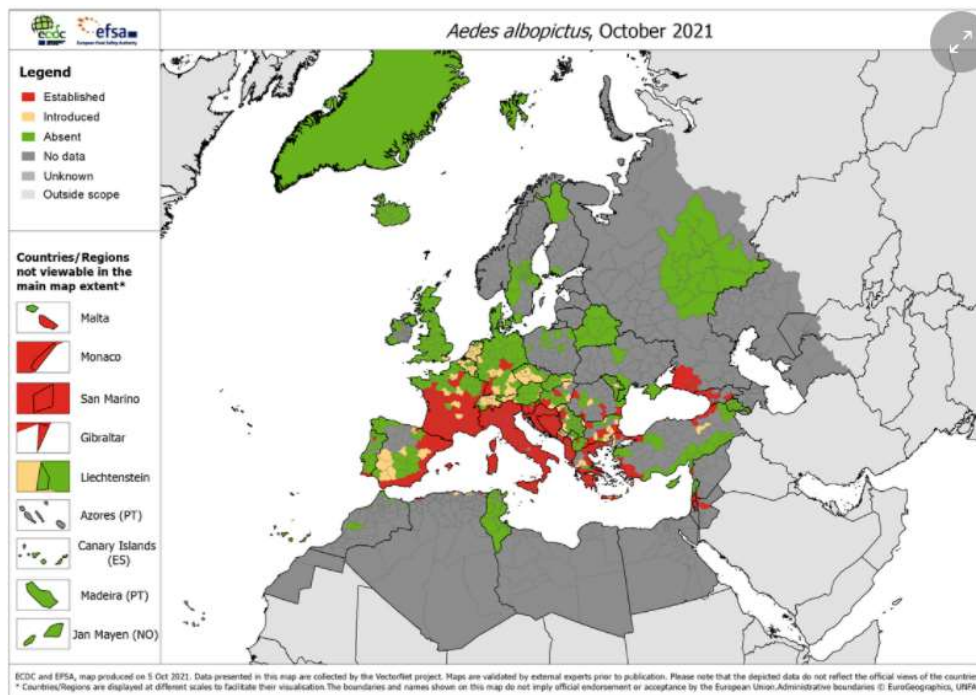
	EIA	EM	HIA	HYB	IB	IFA	IHC	PCR	SQ	VI	VNT
Alphavirus, generic		●		●				●	●	●	
Alphavirus, other		●		●							
Andes virus		●		●	●			●			
Argentinian virus (Junin ...		●		●				●			
Barmah forest virus		●		●							
Batai virus		●		●				●			
Bundibugyo virus		●		●				●			
Bunyamwera virus		●		●				●			
California encephalitis vi...		●		●		●		●		●	●
Camelpox virus		●		●		●		●	●	●	

Incomplete data

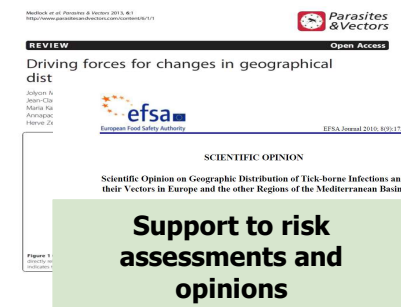
Networks - VectorNet

A European network for sharing data on the geographic distribution of arthropod vectors, transmitting human and animal disease agents.

- **Network of medical and veterinary entomologists, public health professionals and veterinarians.**
- Geographical distribution of priority vectors: mosquitoes, ticks, sandflies and midges/gnats.
- *Ad-hoc* scientific advice and targeted entomological surveillance.



**Common vector
distribution database**



Vector maps



European Centre for Disease Prevention and Control

An agency of the European Union



All topics: A to Z

News & events

Publications & data

About us



Home > All topics: A to Z > Disease vectors > Surveillance and disease data

< Disease vectors

Surveillance and disease data

Mosquito maps

Tick maps

Phlebotomine maps

VectorNet tool

Guidelines for mosquito surveillance

Prevention and control

Facts

Surveillance and disease data for disease vectors



Mosquito maps ▶

The maps shows the current known distribution of invasive mosquito species in Europe at 'regional' administrative level (NUTS3).



Tick maps ▶

The map shows the current known distribution of the tick species in Europe at 'regional' administrative level (NUTS3).



Phlebotomine maps ▶

The map shows the current known distribution of Phlebotomus sandfly species in Europe at 'regional' administrative level (NUTS3).

Response mechanisms

- Daily assessments of the situation: in EpiPulse, round table reports
- Rapid Risk Assessments, sometimes joint with other EU agencies like EFSA
- Rapid Outbreak Assessments joint with EFSA for foodborne outbreaks
- Deployments on the field



SCIENTIFIC REPORT OF ECDC-EFSA

Risk related to household pets in contact with Ebola cases in humans¹

European Centre for Disease Prevention and Control²

European Food Safety Authority^{2,3}

European Food Safety Authority (EFSA), Parma, Italy



APPROVED: 29 September 2021

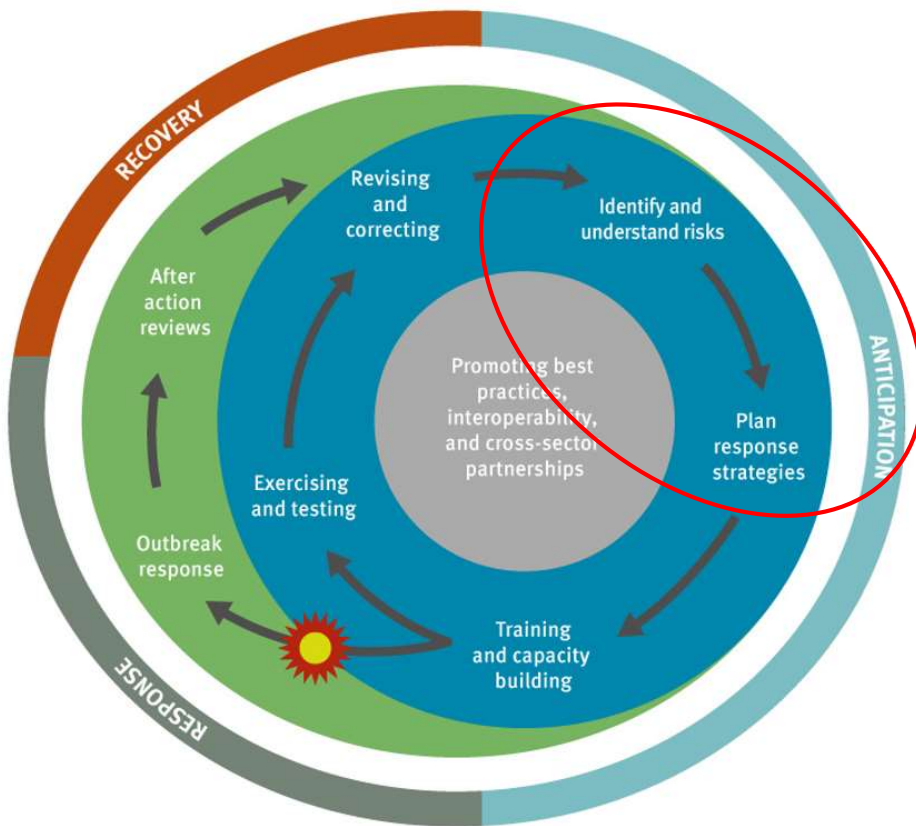
Avian influenza overview May – September 2021

European Food Safety Authority,
European Centre for Disease Prevention and Control and
European Union Reference Laboratory for Avian Influenza

Cornelia Adlhoch, Alice Fusaro, José L. Gonzales, Thijs Kuiken, Stefano Marangon, Éric Niqueux, Christoph Staubach, Calogero Terregino, Inma Aznar, Irene Muñoz Guajardo and Francesca Baldinelli



Emergency preparedness and Response



https://www.ecdc.europa.eu/en/rift-valley-fever/facts

An official website of the European Union How do you know? ▼

Other sites: ECDC European Antibiotic Awareness Day ESCAIDE - Scientific conference Eurosurveillance journal EVIP - Vaccination portal

European Centre for Disease Prevention and Control
An agency of the European Union

All sections ▼ Enter your keyword(s) 🔍

Home > All topics: A to Z > Rift Valley fever > Facts

Facts about Rift Valley fever

Factsheet

Rift Valley fever (RVF) is an acute viral disease that affects domestic animals (such as cattle, buffalo, sheep, goats, and camels). The disease is caused by the RVF virus, generally found in regions of eastern and southern Africa, but also in most countries of sub-Saharan Africa, Madagascar, Saudi Arabia and Yemen.

Humans may become infected through direct or indirect contact with the blood or organs of infected animals. [Manage cookies](#)

Research Article

Enhancing Preparedness for Arbovirus Infections with a One Health Approach: The Development and Implementation of Multisectoral Risk Assessment Exercises

Maria Grazia Dente^{1,2}, Flavio Riccardo³, Wim Van Bortel^{4,5}, Laurence Marrama^{6,7,8}, Thomas Mollet⁹, Tariq Derrough¹⁰, Bertrand Sodre¹¹, Paolo Calistri¹², Gloria Nacca¹³, Alessia Rughinacci¹⁴, Camille Escadafal¹⁵, Lohas Gueyeh¹⁶, Ariane Guillot¹⁷, Miguel Angel Jimenez-Carmona^{18,19}, Juan-Claude Mangenot²⁰, Guilaine Mikaty²¹, Marie Picard²², Javier Fernandez-Piñero²³, Elia Perez-Ramirez²⁴, Vincent Robert²⁵, Kathleen Victor²⁶ and Silvia DeLich²⁷

¹Italian Superior Health Institute, Rome, Italy
²European Centre for Disease Prevention and Control (ECDC), Stockholm, Sweden
³Institute of Tropical Medicine, Antwerp, Belgium
⁴Research Institute for Agricultural Fisheries Aquaculture and Aquatic Environment (IRIA), Ghent, Belgium
⁵European Reference Laboratory for Arboviral Infections (ERL-ARI), Ghent, Belgium
⁶INRAE, UR1213, Montpellier, France
⁷INRAE, UR1213, Montpellier, France
⁸INRAE, UR1213, Montpellier, France
⁹INRAE, UR1213, Montpellier, France
¹⁰INRAE, UR1213, Montpellier, France
¹¹INRAE, UR1213, Montpellier, France
¹²INRAE, UR1213, Montpellier, France
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Received 24 April 2018; Accepted 10 January 2019; Published 21 April 2019

Abstract **Background:** One Health is a concept that promotes the integration of human, animal, and environmental health. This approach is essential for addressing complex health challenges, such as zoonotic diseases. The purpose of this study was to develop and implement multisectoral risk assessment exercises (MRAEs) to enhance preparedness for arbovirus infections. **Methods:** A One Health approach was used to develop and implement MRAEs. The exercises were designed to be multisectoral, involving human, animal, and environmental health sectors. The exercises were conducted in a participatory manner, involving stakeholders from all sectors. The exercises were designed to be practical and actionable, providing a clear understanding of the risks and the measures needed to reduce them. **Results:** The exercises were conducted in 10 countries across Europe. The exercises were designed to be practical and actionable, providing a clear understanding of the risks and the measures needed to reduce them. **Conclusions:** The exercises were successful in enhancing preparedness for arbovirus infections. The exercises provided a clear understanding of the risks and the measures needed to reduce them. The exercises were successful in enhancing preparedness for arbovirus infections.

ECDC
EUROPEAN CENTRE FOR DISEASE PREVENTION AND CONTROL

SURVEILLANCE REPORT

Rift Valley fever
Annual Epidemiological Report for 2019

Key facts

- For 2019, ECDC countries did not report any cases of Rift Valley fever.

Rift Valley fever (RVF) is an acute viral disease that affects domestic animals (such as cattle, buffalo, sheep, goats, and camels). The disease is caused by the RVF virus, generally found in regions of eastern and southern Africa, but also in most countries of sub-Saharan Africa, Madagascar, Saudi Arabia and Yemen.

Humans may become infected through direct or indirect contact with the blood or organs of infected animals. The disease is caused by the RVF virus, generally found in regions of eastern and southern Africa, but also in most countries of sub-Saharan Africa, Madagascar, Saudi Arabia and Yemen.

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Methods

This report is based on data for 2019 retrieved from The European Surveillance System (TESSy) on 9 October 2020. TESSy is a system for the collection, analysis and dissemination of data on communicable diseases.

For a detailed description of methods used to produce this report, refer to the Methods chapter [2].

An overview of the national surveillance systems is available online [2].

A subset of the data used for this report is available through ECDC's online Surveillance atlas of infectious diseases [2].

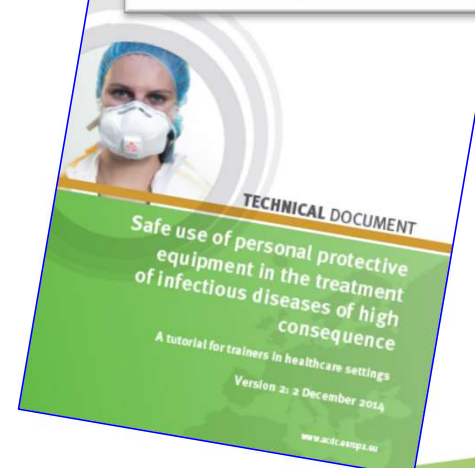
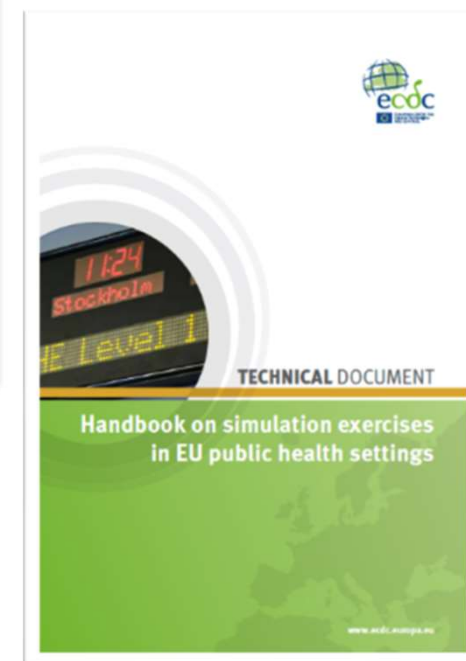
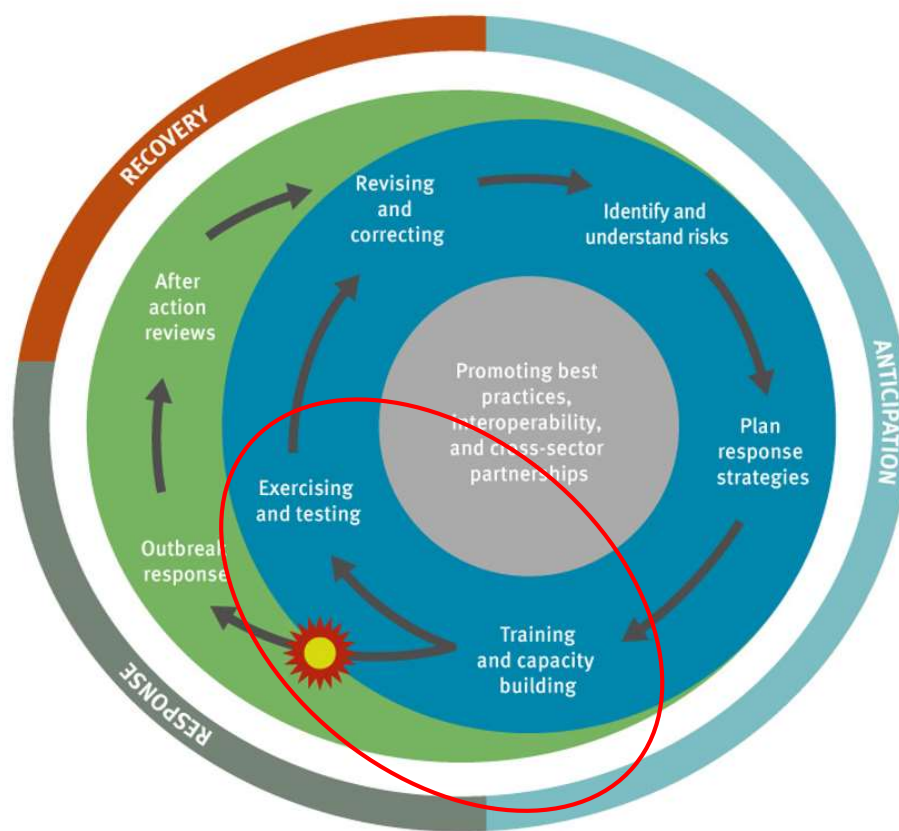
For 2019, 22 ECDC countries reported case-based data (Austria, Bulgaria, Cyprus, Denmark, Poland, Sweden, Luxembourg, the Netherlands and Portugal did not report). Thirteen countries used the EC case definition, four (Czechia, Germany, Italy and the United Kingdom) used an alternative case definition, and five (Belgium, France, Ireland, Poland and Romania) did not specify the case definition used.

Reporting was complete for 18 countries, not specified in Ireland and Poland and voluntary in the United Kingdom. Surveillance was mostly comprehensive (not specified in Ireland and Poland) and passive.

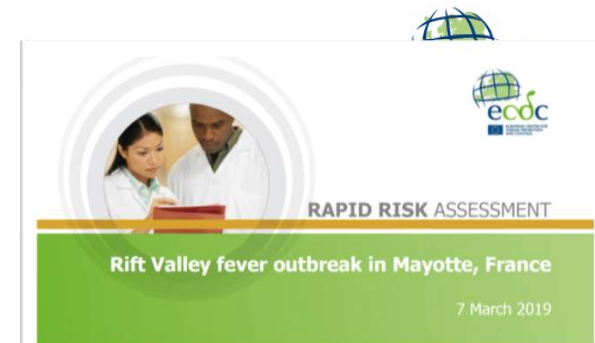
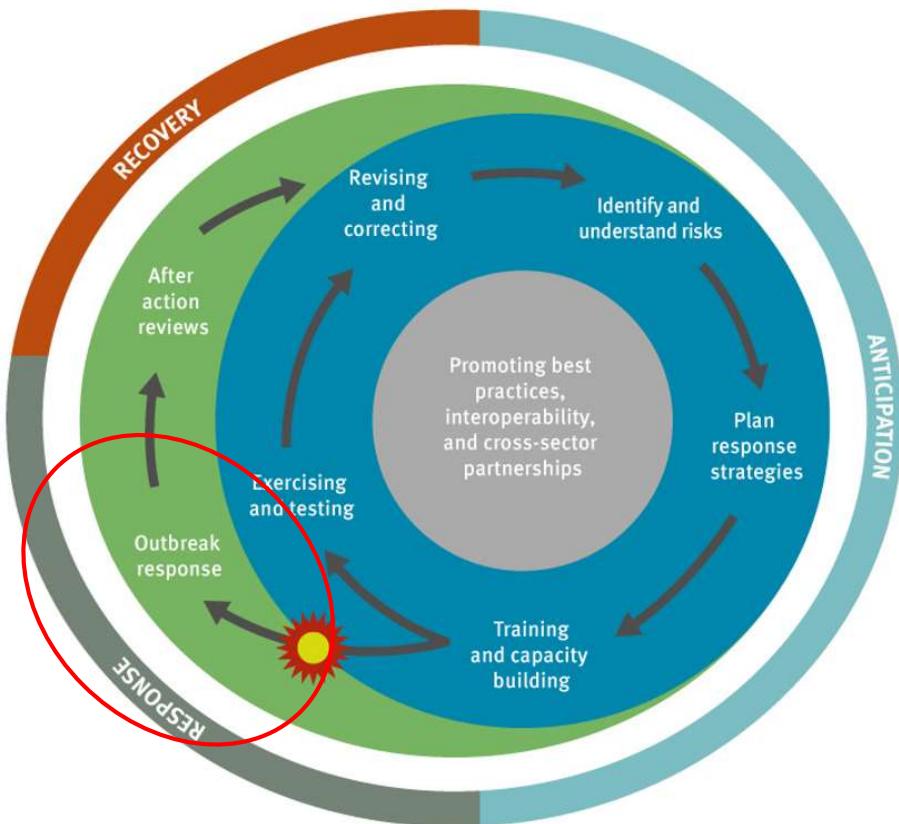
Suggested citation: European Centre for Disease Prevention and Control. Rift Valley fever. In: ECDC. Annual epidemiological report for 2019. Stockholm: ECDC; 2021.

Source: European Centre for Disease Prevention and Control. 2021. Reproduction is authorized, provided the source is acknowledged.

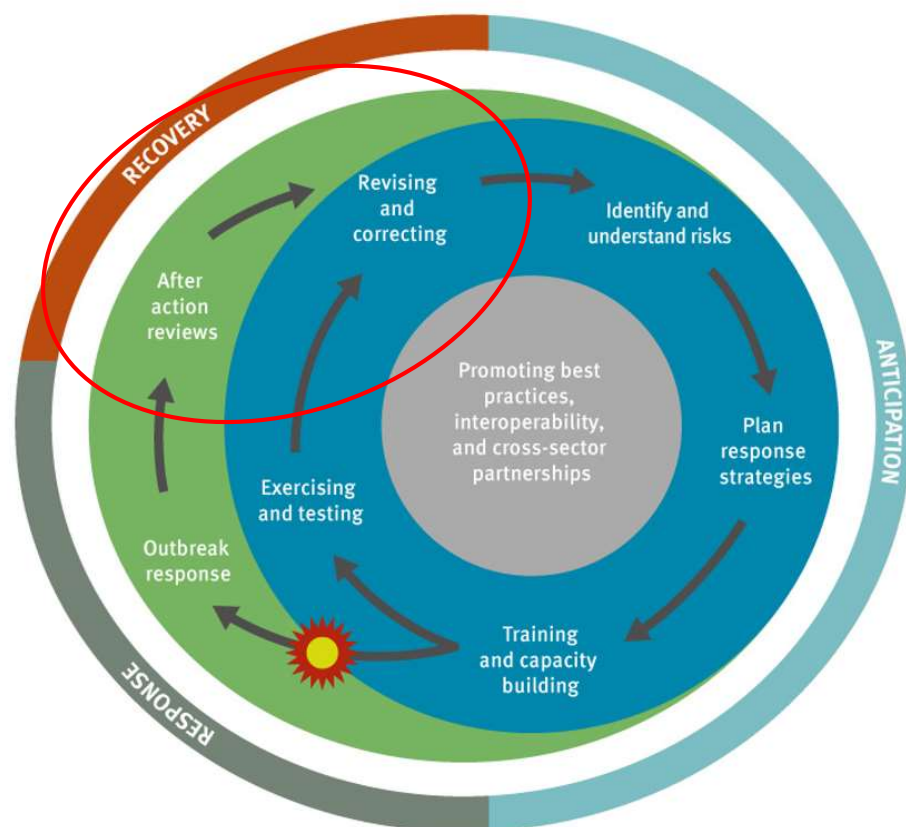
Emergency preparedness and Response



Emergency preparedness and Response



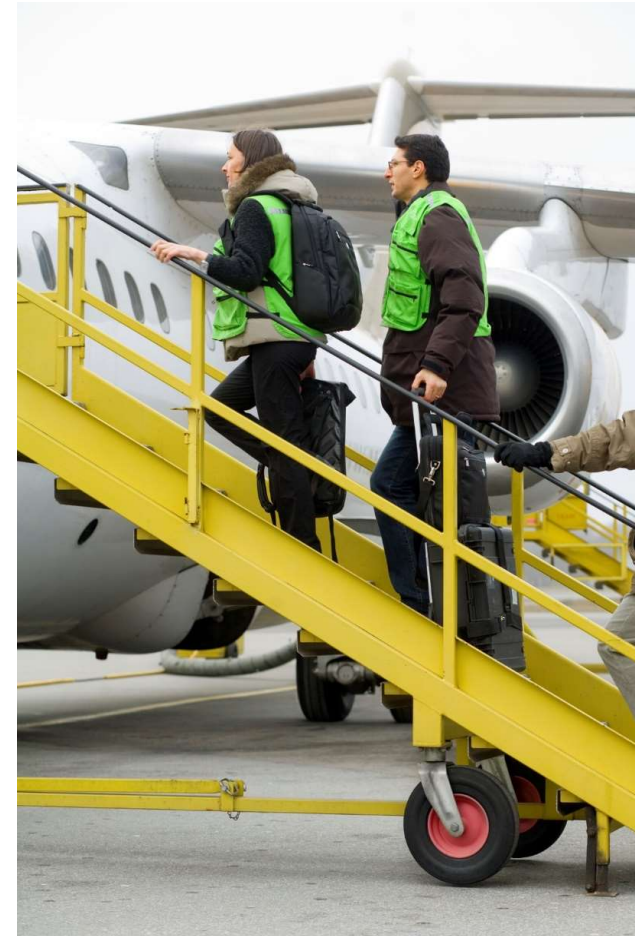
Emergency preparedness and Response



Emergency Operations Centre

In the event of a **public health emergency**, ECDC activates its 24/7 **emergency operations centre** (EOC).

EOC assesses **threat levels** and advises on **counter measures** and deploys experts to the field.



ECDC Emergency Response activities

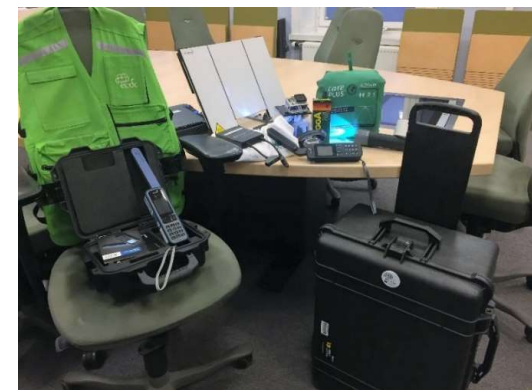


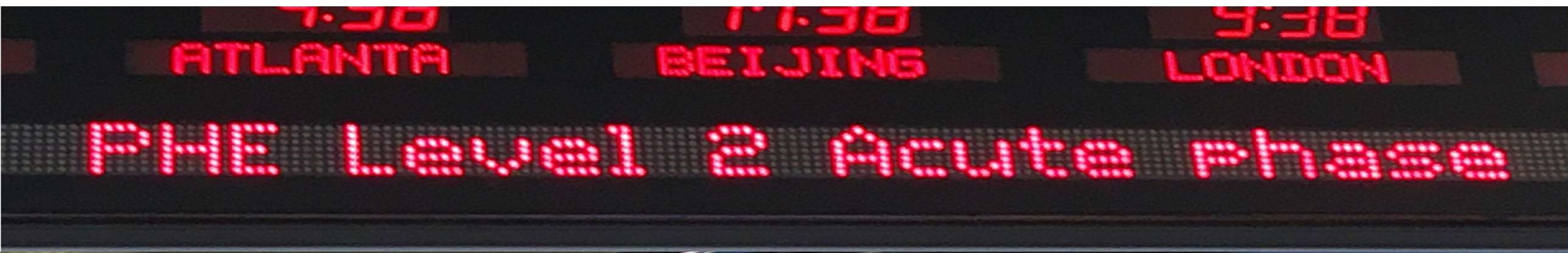
Public Health Events (PHE) internal response

- 2020, COVID-19 – PHE level 1&2
- 2018, Ebola – PHE level 1
- 2017, Plague – PHE level 1
- 2016, Zika – PHE level 1
- 2014, Ebola – PHE level 1&2
- 2013, H7N9 Flu – PHE level 1
- 2011, E-coli – PHE level 1
- 2009, H1N1 Flu – PHE level 1&2
- 2007, Tuberculosis – PHE level 1

Field missions

- 2020, EU MSs – COVID-19
- 2020, DRC – Ebola
- 2019, DRC – Ebola
- 2019, Mozambique – Cholera
- 2018, DRC – Ebola
- 2017, Madagascar – Plague
- 2016, Angola – Yellow fever
- 2015, Guinea – Ebola
- 2013, Madeira – Dengue
- 2010, Haiti – Cholera





Public Health Emergency level 2 as of 31 January 2020

ECDC works 24/7 during PHE 2

Support to the EU Commission and EU Member States



- **Daily updates, maps and tables**
- **Risk assessments with options for response**
- **Briefings for stakeholders**
- **Guidance and materials for EU Member States**
- **Support in preparedness actions**
 - **Laboratory capacity**
 - **Hospital preparedness**
- **Template leaflets, infographics, videos for national authorities to translate and customise**



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ECDC is monitoring the COVID-19 pandemic and assessing the risk to the EU, follow our latest updates

All info about the COVID-19 pandemic

COVID-19 pandemic

European Antibiotic Awareness Day (EAAD)

Latest data: Antibiotic consumption & antimicrobial resistance

ECDC Podcast

COVID-19 quick links



COVID-19 Vaccine Tracker

Monitor the rollout of COVID-19 vaccines across EU/EEA countries.

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Situation updates

Latest available data on the COVID-19 pandemic

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Weekly maps in support of the Council Recommendation

Weekly maps showing 14-day notification rate, testing rate and test positivity

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RAPID RISK ASSESSMENT

Assessing the current SARS-CoV-2 epidemiological situation, projections for the end-of-year festive season and strategies for response in the EU/EEA, 17th update

24 November 2021

Summary

After a period of decline in August and September 2021, increases in case notifications, hospitalisations and ICU admissions have been observed in October and early November in the majority of the EU/EEA countries, driven by circulation of Delta (B.1.617.2) in the context of insufficient vaccine uptake and widespread relaxation of non-pharmaceutical interventions (NPIs). Whilst COVID-19 burden is particularly high in a number of countries experiencing low vaccine uptake, there is evidence of rising burden even among countries with higher uptake. The current epidemiological situation is to a large part driven by the high transmissibility of Delta that counteracts the reduction in transmission achieved by the current vaccination rollout in the EU/EEA.

To date, 65.4% of the total population and 76.5% of the adult population in the EU/EEA have been fully vaccinated against COVID-19. The overall pace of weekly increase in vaccine uptake in the EU/EEA is slowing down and is mostly driven by the rollout in younger age groups. Four countries are still reporting less than 50% of full vaccine uptake in the total population. Vaccination continues to successfully avert deaths, reduce hospitalisations and transmission in the EU/EEA, despite the emergence and continued dominance of Delta, which is up to 60% more transmissible than the previously dominant variant, Alpha (B.1.1.7).

Available evidence emerging from Israel and the UK shows a significant increase in protection against infection and severe disease following a booster dose in all age groups in the short term. All EU/EEA countries have begun administration of 'additional dose' and 'booster' vaccinations to better protect individuals who mount inadequate immune responses to the primary schedule and to improve protection in individuals for whom immunity may wane over time since completing the primary schedule.

The end-of-year festive season is traditionally associated with activities such as social gatherings, shopping and travelling, which pose significant additional risks for intensified transmission of Delta.

Modelling scenarios that consider vaccine uptake (including 'additional dose' and 'booster' vaccinations), vaccine effectiveness, waning vaccine-induced immunity, vaccination of children, natural immunity and population contact rates indicate that the potential burden of disease risk in the EU/EEA from the Delta variant is expected to be very high in December and January, unless NPIs are applied now in combination with continued efforts to increase vaccine uptake in the total population.

Model forecasts highlight the need for NPIs as an immediate measure to control transmission, in combination with rollout of vaccine booster doses for adults, which should be prioritised for those aged 40 years and over.

Suggested citation: European Centre for Disease Prevention and Control, Assessing the current SARS-CoV-2 epidemiological situation, projections for the end-of-year festive season and strategies for response in the EU/EEA, 17th update – 24 November 2021. ECDC: Stockholm: 2021.

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TECHNICAL REPORT

Overview of the implementation of COVID-19 vaccination strategies and deployment plans in the EU/EEA

11 November 2021

Key messages

This report provides an updated overview of the progress of national COVID-19 vaccination strategies and deployment in European Union/European Economic Area (EU/EEA) countries, including updates on:

- overall vaccine uptake and uptake by target group;
- vaccination strategies and policies;
- challenges and good practice with the rollout, including vaccine acceptance and uptake.

Vaccine COVID-19 rollout overview

- As of 7 November 2021, over 599 million vaccine doses have been administered in the EU/EEA, 293 million people have received a complete primary vaccination course (30 countries reporting) and over seven million individuals in the EU/EEA have already received an additional dose following the primary vaccination course (22 countries reporting).
- Since the start of COVID-19 vaccine deployment in the EU/EEA in December 2020, the cumulative uptake of a full vaccination course has reached 64.8% (range: 22.5–81.2%) in the total population and 76% (range: 27–92.4%) in the adult population aged 18 years and above (pooled data from 30 reporting countries). However, the pace of weekly increase in vaccine uptake in the EU/EEA as a whole is slowing down and the progress is unequal across countries, with four reporting less than 50% of full vaccination uptake in the total population (Bulgaria, Croatia, Romania and Slovakia).
- As vaccine campaigns expanded to include younger age groups, the median uptake of full vaccination among the elderly aged 60 years and above in the EU/EEA, as of 7 November 2021, reached a plateau well above 80%, while still increasing among younger adults (65.9% in 18–24; 71.6% in 25–49; 79.6% in 50–59), as well as in adolescents and children, with a median uptake of full vaccination of 14.3% among individuals below 18 years (52.9% in 15–17; 19.5% in 10–14).

Vaccination strategies and policies during rollout

- From the start, vaccinations have been rolled out in phases through various priority groups. Countries initially prioritised elderly people, residents and personnel of LTCFs, healthcare workers, social care personnel, and people with certain comorbidities. All EU/EEA countries then opened vaccination to the general population, with all offering vaccination to those aged 12 years and over.
- Twenty-eight countries (out of the 28 countries who responded to this question) recommend the vaccination of pregnant women, most of them with mRNA vaccines following the first trimester.

Suggested citation: European Centre for Disease Prevention and Control, Overview of the implementation of COVID-19 vaccination strategies and deployment plans in the EU/EEA, 11 November 2021. Stockholm: ECDC: 2021.

Stockholm, November 2021

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Support mechanisms for **laboratories**

- ECDC works with networks of laboratories
- Laboratories that **offer support** to other laboratories
- National laboratory networks
- WHO referral laboratories, 6 in the EU/EEA+UK
- Established the **European COVID-19 reference laboratory network (ECOVID-LabNet)** as a subnetwork of the European COVID-19 surveillance network

Direct support to Member States for surging molecular surveillance capacities – facilities and training

- **RT-PCR support (65 M EUR)**
- **Sequencing support (105 M EUR)**



ECDC prevention work



Level of Prevention	Target area	Possible examples with infectious diseases
Primordial	Upstream measures designed to prevent the development of, or mitigate against risk factors	Hygiene legislation for food production; closure of 'wet' or live animal markets
Primary	Interventions aimed at having a direct and immediate preventive effect	Vaccination, post-exposure prophylaxis, provision of health information
Secondary	Diagnostics and screening programmes for (early) detection of diseases	HIV testing for pregnant women (also = primary prevention for the baby); HPV screening programmes
Tertiary	Interventions aimed at improving quality of life for patients with established disease	(Future) treatments for 'Long COVID'; Antiretroviral treatment for HIV
Quaternary	Avoiding overmedicalization, protecting patients from unnecessary interventions	Policies to minimise (i.e. optimise) use of antibiotics

ECDC prevention work, since 2008

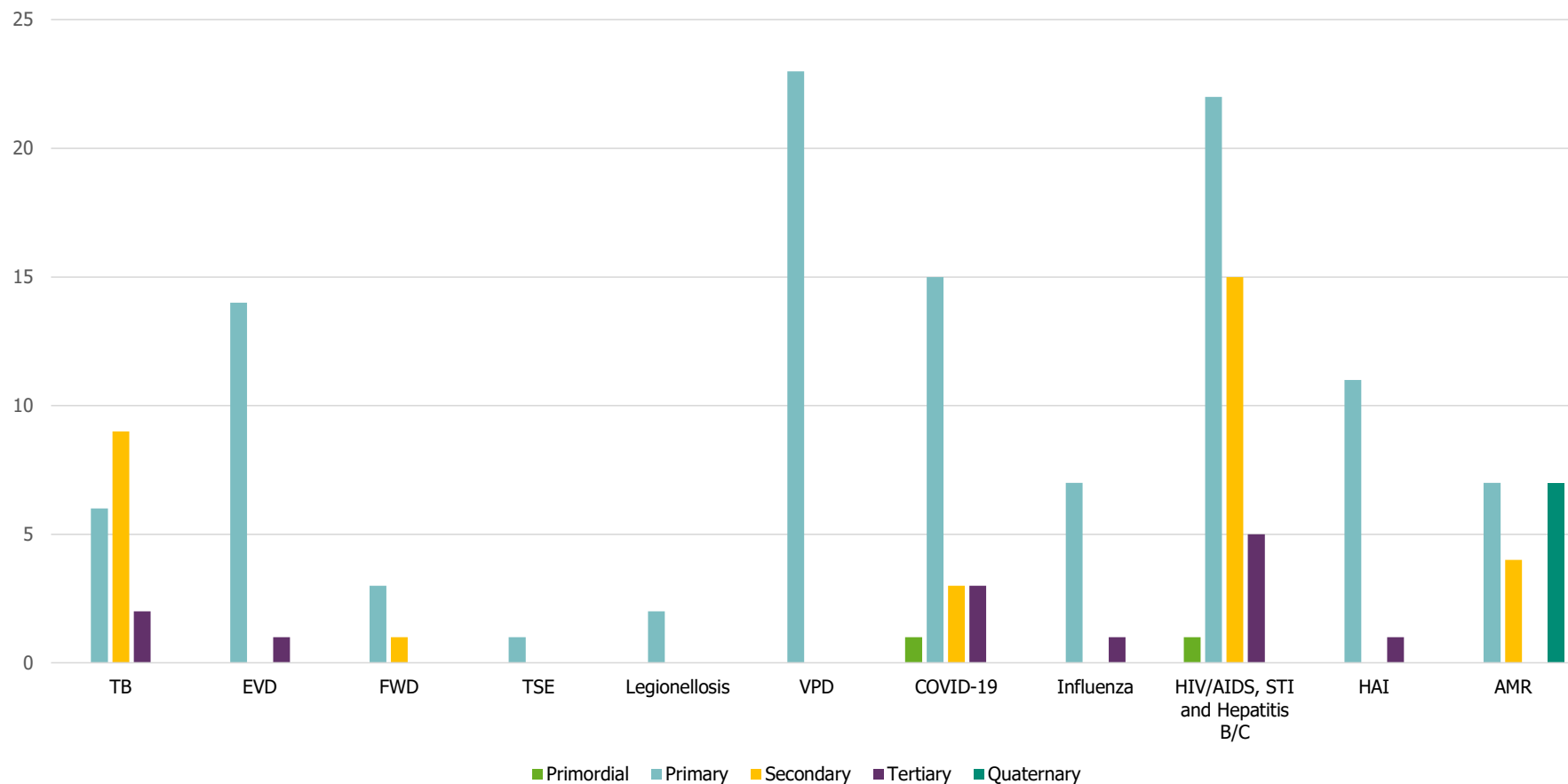


Level of prevention	Total number of scientific advice documents on prevention published by ECDC*
Primordial	2
Primary	111
Secondary	32
Tertiary	13
Quaternary	7
TOTAL	165

*Based on website review and interviewing ECDC experts. May not be complete.

ECDC prevention work

Scientific advice on prevention by disease groups





Thank you for your attention