COVID-19 surveillance and vaccination coverage in the EU

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Outline

1. ECDC role
2. Global epidemiological situation
3. Situation in the EU
4. Vaccine uptake
5. Genomic variants
6. Non-pharmaceutical interventions
ECDC role

- Epidemiological surveillance (monitoring of case, death and testing rates, test positivity, etc.)
- Public health microbiology support (including genetic sequencing)
- Scientific advice
- Direct support to Member States
- Preparedness support
- Capacity building, training
- Health communication
Global distribution of COVID-19 cases

AS OF WEEK 45, 2021
14-day case and death notification rate, EU/EEA

EU/EEA totals as of week 45, 2021:
52,594,673 cases
968,492 deaths
Factors influencing epidemiological situation

• **Vaccination uptake**: around 66% of total population and 77% for over 18s with full vaccination

• Properties of dominant **genomic variants**: Delta variant up to 60% more transmissible than Alpha

• **Non-pharmaceutical interventions** (physical distancing measures, face masks, hygiene): widespread relaxation of measures
Death rates over time by vaccine uptake, EU/EEA
Hospital occupancy over time by vaccine uptake, EU/EEA
ICU occupancy over time by vaccine uptake, EU/EEA
COVID-19 epidemiological categorisation by level of concern
EU/EEA, AS OF WEEK 44, 2021

COVID-19 situation in EU/EEA
Week 45

SCORE RANGE: 1-10

LEVEL OF CONCERN

8.3/10

VERY HIGH

Find out more in our Weekly surveillance report on COVID-19

SCORE INDICATORS

INTENSITY

- Case notification rates
- Test positivity

SUREFIRE

- 45% all case rates
- Hospitals/ICU admissions
- Deaths rates

14-day forecast

EU/EEA Trend

14-day case notification rate

Weekly hospital admission rate

Weekly ICU admission rate

14-day death rate

MEMBER STATES on Increase

Australia, Belgium, Croatia, Cyprus, Czechia, Denmark, Croatia, France, Germany, Greece, Hungary, Iceland, Italy, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain

COVID-19 epidemiological category
during week 2021-W44

Very high concern
High concern
Moderate concern
Low concern
Very low concern

Countries not visible in the main map excerpt

Austria, Belgium, Croatia, Cyprus, Czechia, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Lithuania, Luxembourg, Netherlands, Norway, Poland, Slovakia, Slovenia

Source data sourced from ECDC: TESSy and publically available datasets. Administration boundaries: © Eurographics. The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. ECDC: Map produced on 16 November 2021.
Vaccine uptake, EU/EEA
Full COVID-19 vaccination by age group in the EU/EEA
MEDIAN CUMULATIVE UPTAKE, AS OF WEEK 45, 2021
Genomic variants of concern

- **Monitoring** of genomic variants **extremely important** to detect: changed transmissibility, severity of disease, effectiveness of vaccines, medicines, tests (e.g. detection of “immune escape” variants), etc.

- **Capacity** for genomic sequencing **varies greatly** across the EU/EEA but is increasing

- **Delta variant** is completely **dominating** in Europe at this time

- **Sublineages** like AY.4.2 have been **detected and are monitored**

- Important to **keep viral transmission low** to prevent emergence of new variant
Non-pharmaceutical interventions

- **NPIs** (physical distancing, mask-wearing, hygiene, etc.) have proven effective in decreasing SARS-CoV-2 spread and reducing COVID-19 deaths.
- NPI effectiveness is amplified by swift and decisive implementation, appropriate risk communication and community engagement.
- The ECDC-Joint Research Centre Response Measures Database collates and maps NPIs implemented by EU/EEA countries.
- On 8 November 2021, fewer measures were in place overall compared with the same day in 2020 and six months earlier on 8 May 2021.
Key messages

• The **highest priority** is the continued efforts **to increase vaccination coverage rates across the EU/EEA** to control the spread of COVID-19

• EU/EEA countries should consider a **booster dose** for those 40 years and over, targeting the most vulnerable and the elderly

• Even in countries with high vaccine uptake, **maintaining or reintroducing NPIs** remains vital to reduce transmission
Useful links

New ECDC Rapid Risk assessment:  

Country overview report:  
http://covid19-country-overviews.ecdc.europa.eu/

SARS-CoV-2 variant dashboard:  

COVID-19 dashboard:  

Vaccine tracker:  
Thank you for your attention

Acknowledgements:

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