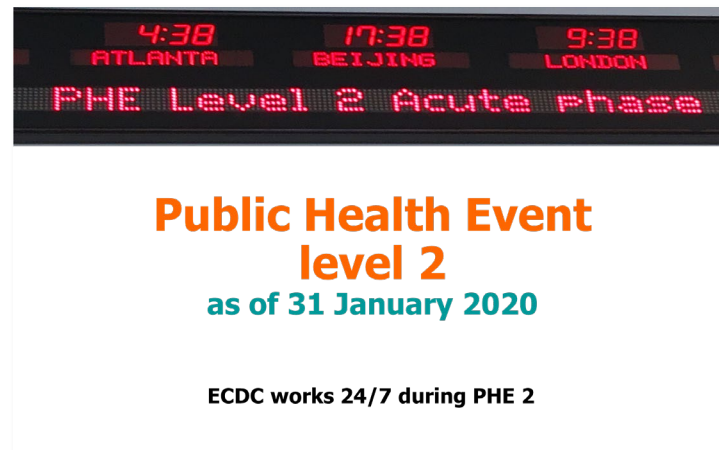


COVID-19 surveillance and vaccination coverage in the EU

Piotr Kramarz
Deputy Head of Unit and Deputy Chief Scientist, ECDC

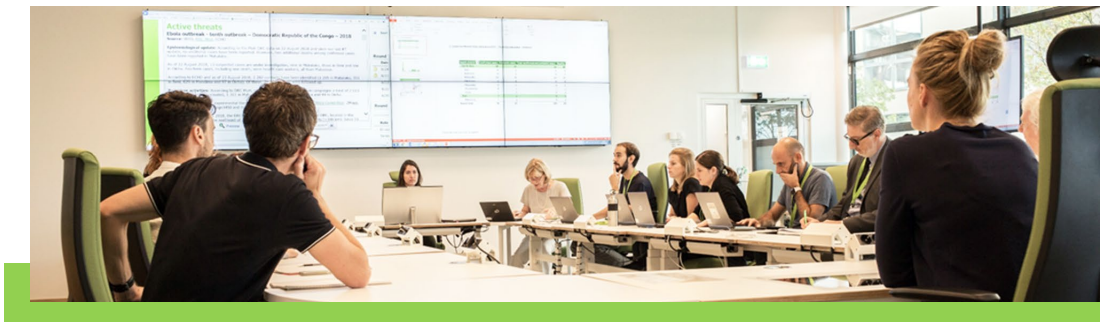
Outline

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



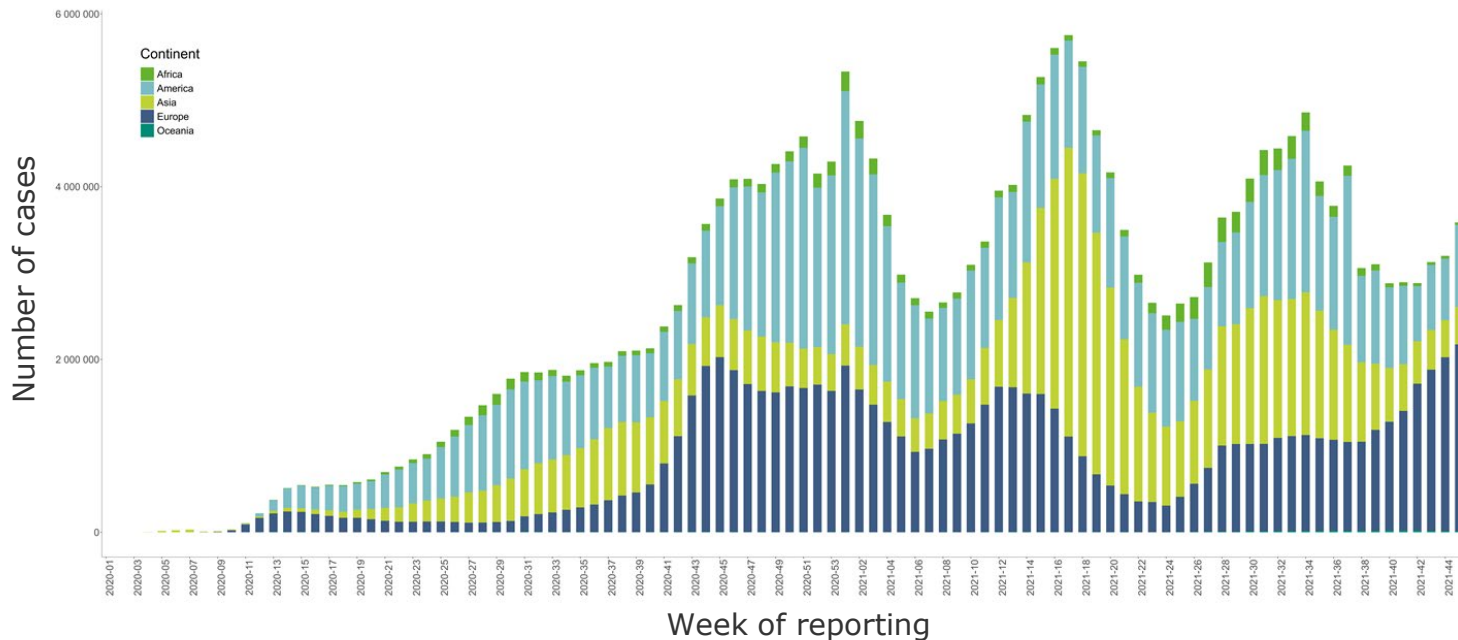
ECDC role

- 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

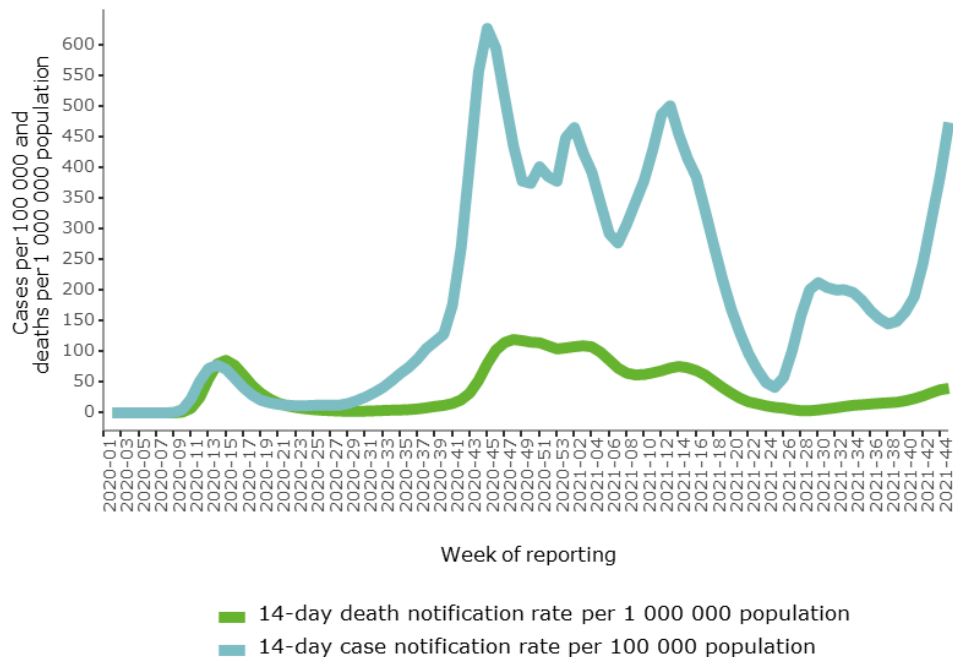


Global distribution of COVID-19 cases

AS OF WEEK 45, 2021



14-day case and death notification rate, EU/EEA



EU/EEA totals as of week 45, 2021:

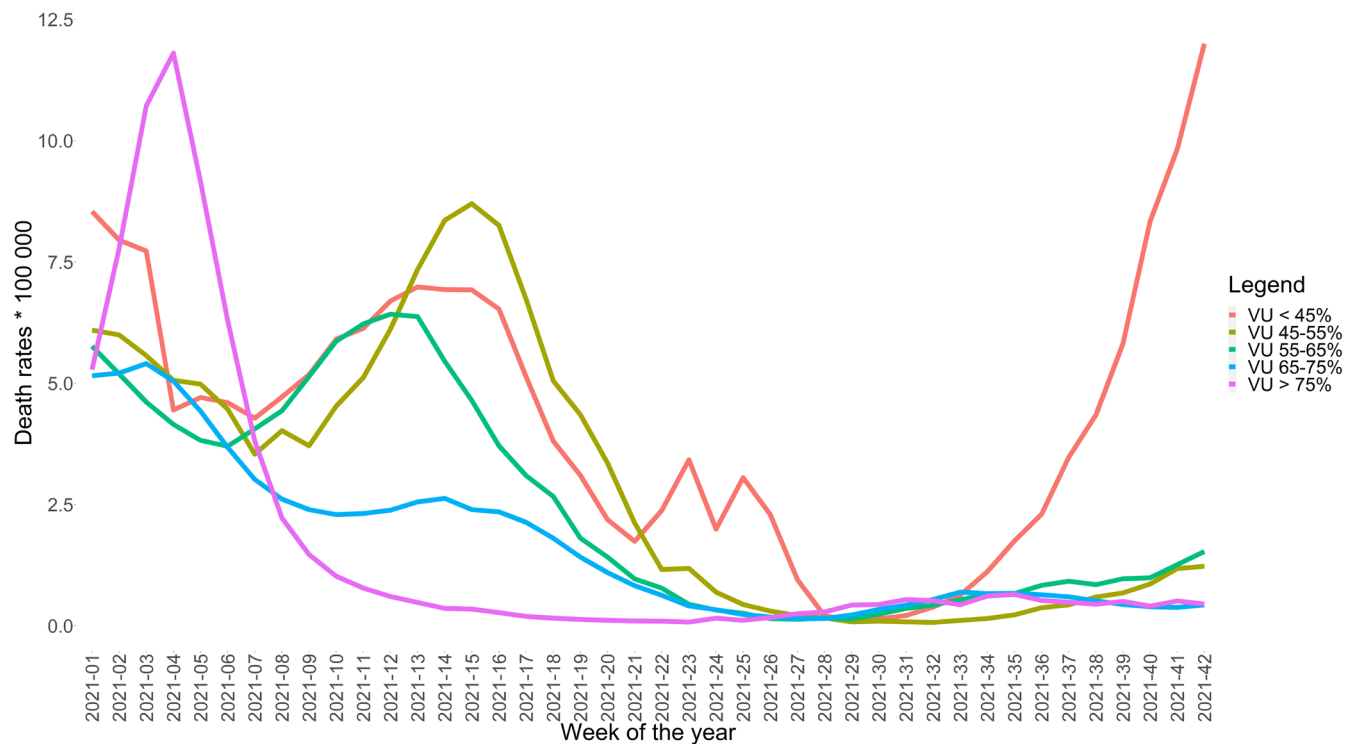
52,594,673 cases

968,492 deaths

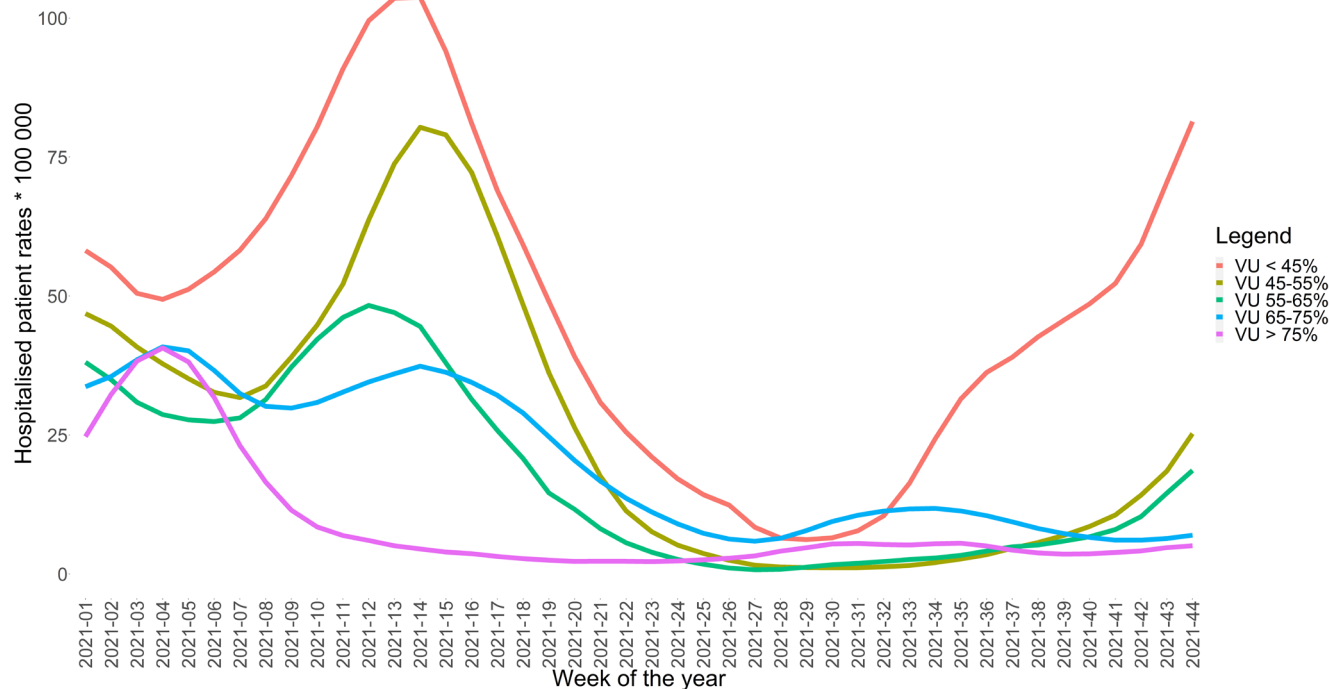
Factors influencing epidemiological situation

- **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

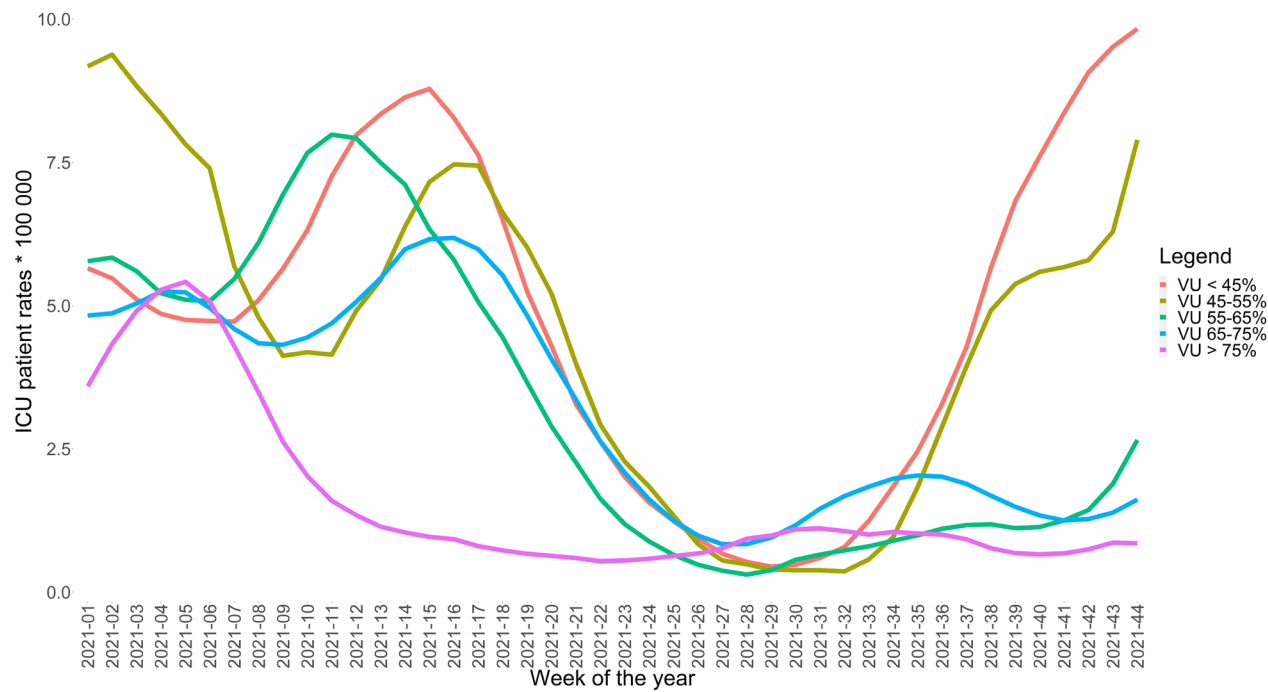
Death rates over time by vaccine uptake, EU/EEA



Hospital occupancy over time by vaccine uptake, EU/EEA

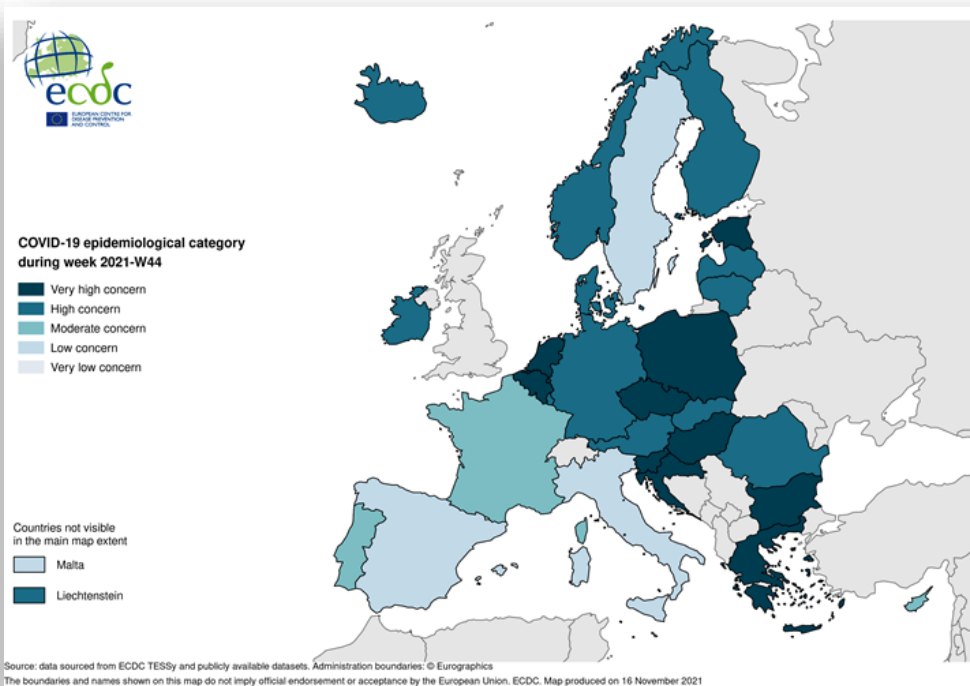
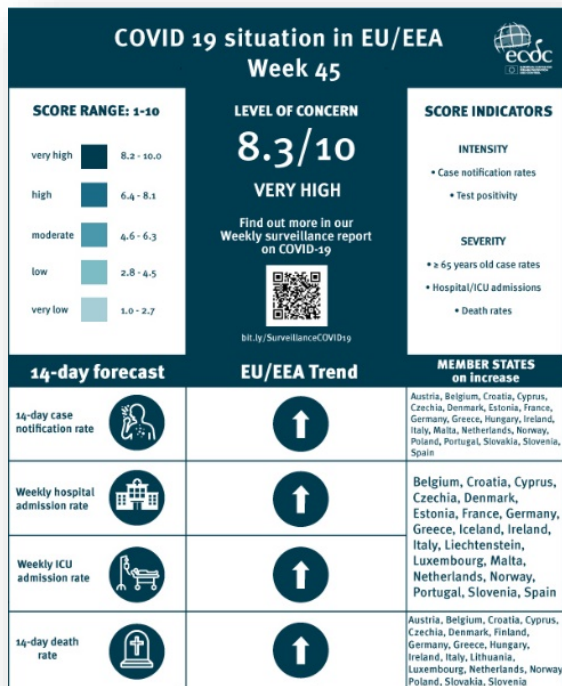


ICU occupancy over time by vaccine uptake, EU/EEA

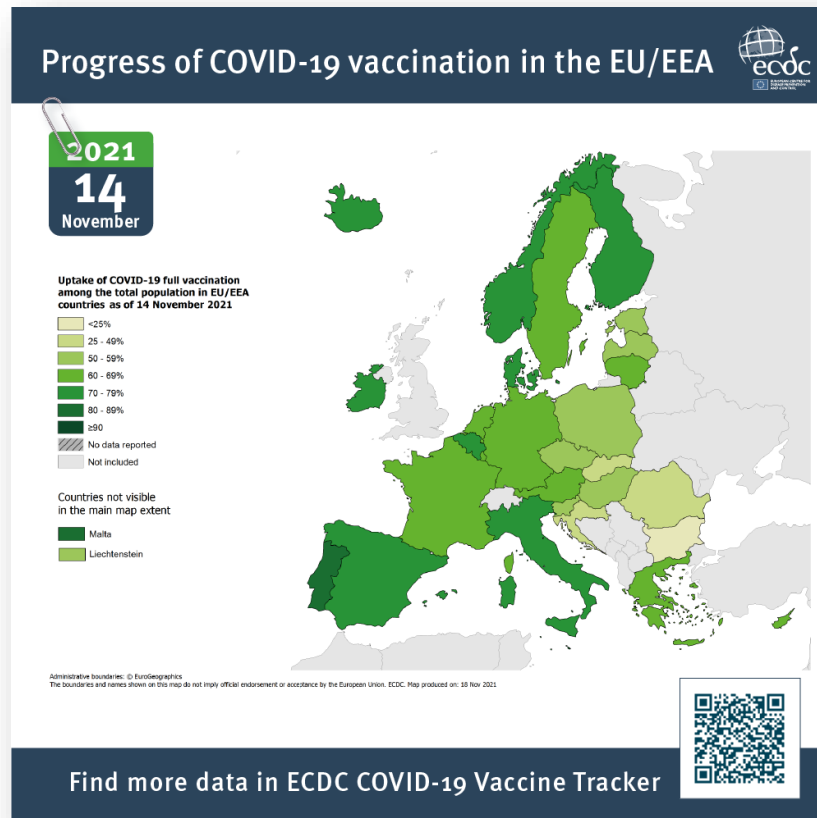


COVID-19 epidemiological categorisation by level of concern

EU/EEA, AS OF WEEK 44, 2021

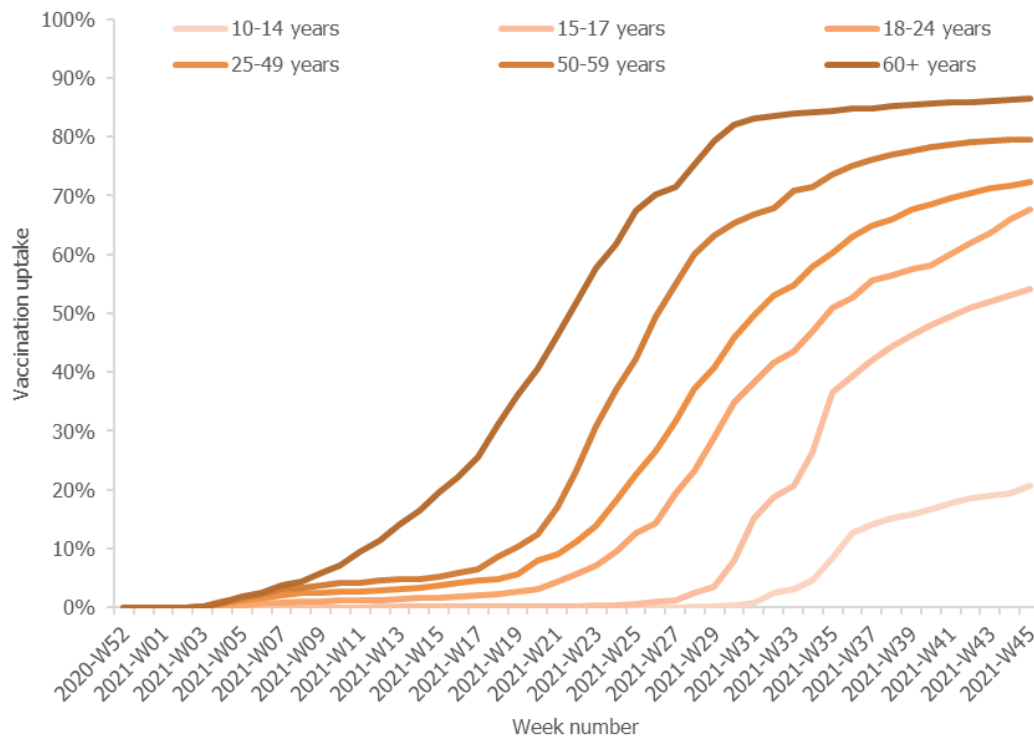


Vaccine uptake, EU/EEA



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:

<https://www.ecdc.europa.eu/en/publications-data/rapid-risk-assessment-sars-cov-2-november-2021>

Country overview report:

<http://covid19-country-overviews.ecdc.europa.eu/>

SARS-CoV-2 variant dashboard:

<https://www.ecdc.europa.eu/en/covid-19/situation-updates/variants-dashboard>

COVID-19 dashboard:

<https://qap.ecdc.europa.eu/public/extensions/covid-19/covid-19.html>

Vaccine tracker:

<https://vaccinetracker.ecdc.europa.eu/public/extensions/COVID-19/vaccine-tracker.html#uptake-tab>

Thank you for your attention

Acknowledgements:

Member State experts

ECDC colleagues