



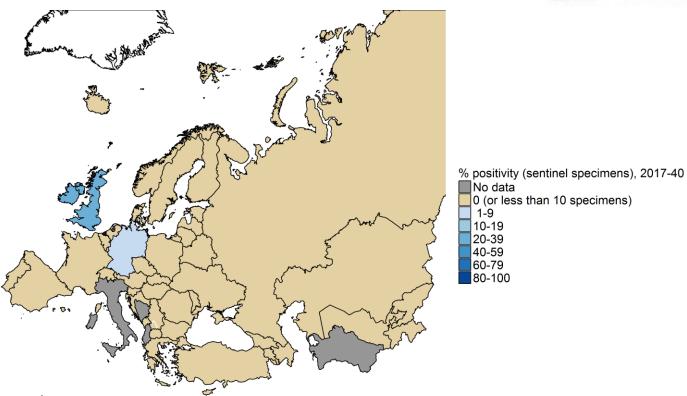
Overview of the 2017–2018 influenza season

Influenza surveillance teams of WHO Regional Office for Europe and ECDC

Percentage of sentinel specimens positive for influenza viruses, by week, 2017–2018 season







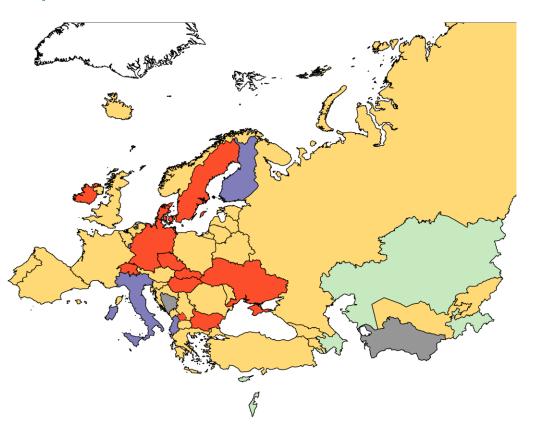
West to East spread

• linear regression; P<0.001

Maximum reported intensity across the Region, 2017–2018 season*





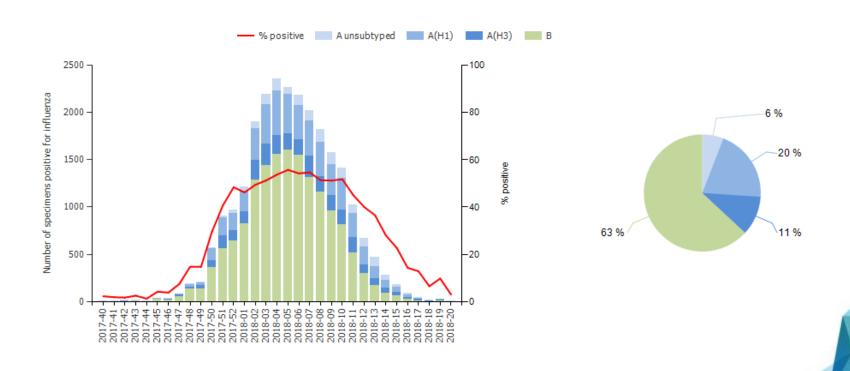




Weekly influenza virus detections by (sub)type and positivity, weeks 40/2017–20/2018



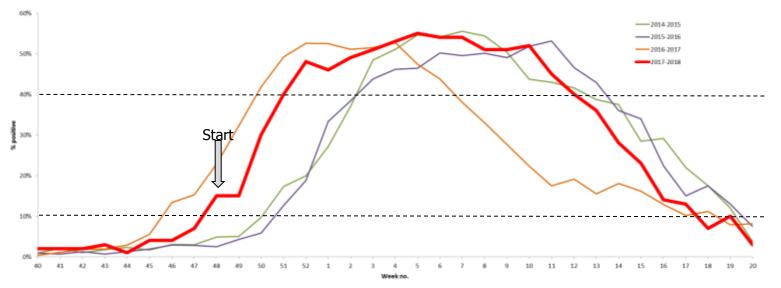




Comparison with recent seasons based on % of sentinel specimens positive for influenza virus





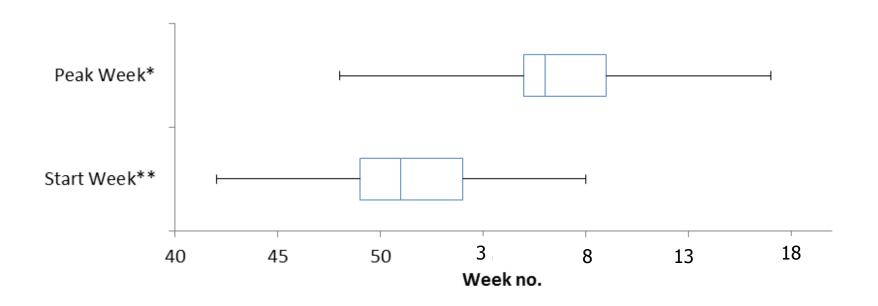


	2017/18	2016/17	2015/16	2014/15
Start of season	Week 48	Week 46	Week 51	Week 51
Duration of virus circulation >40%	14 Weeks	9 weeks	11 weeks	11 weeks

Distribution of start and peak weeks based on sentinel specimens positive for influenza viruses, 2017-2018 season







^{*}highest % positivity after a start week & minimum of 10 specimens

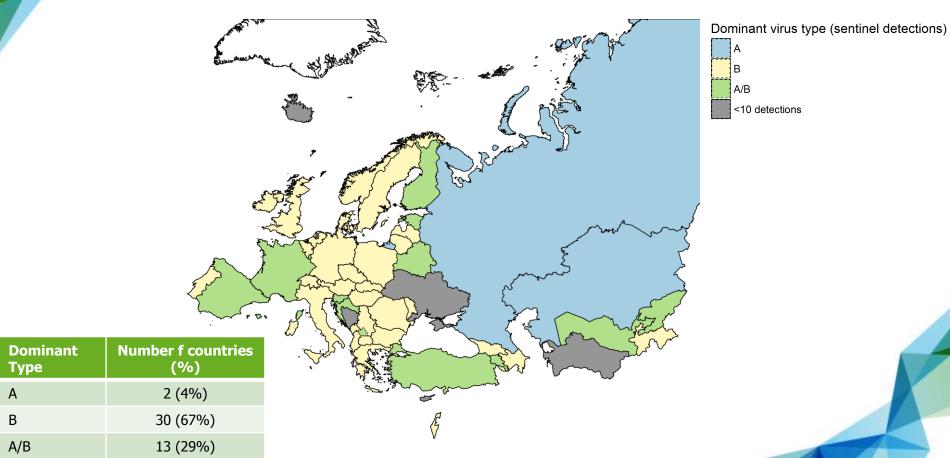
^{**} first of two successive weeks with at least 10% positivity and 10 specimens

Dominant influenza virus type from sentinel specimens, 2017-2018 season



<10 detections

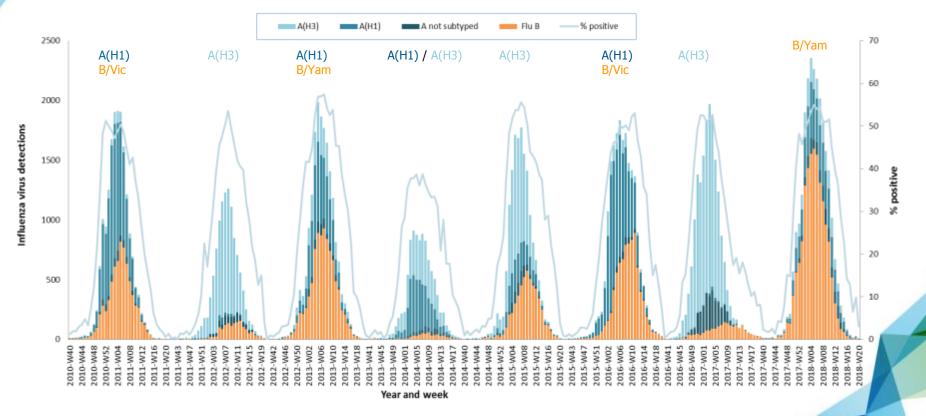




Weekly influenza virus detections from sentinel specimens by (sub)type and season, 2010/11–2017/18*



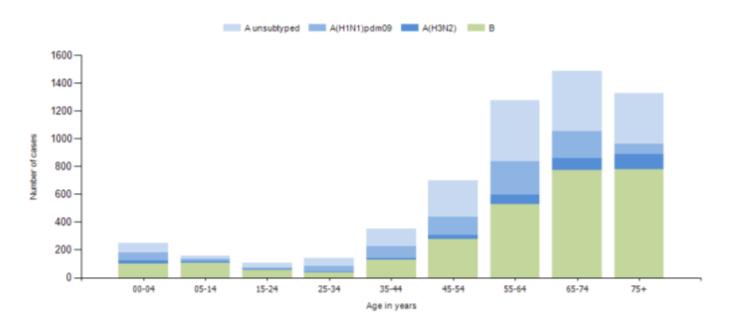




Distribution of virus (sub)type by age group in laboratory-confirmed cases in ICU, 2017–2018*





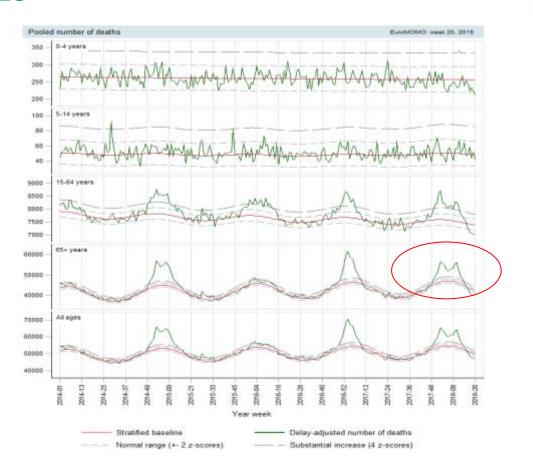


Influenza type B accounted for approximately half of the severe cases

All-cause excess mortality by age group, EuroMoMO, 2014–2018





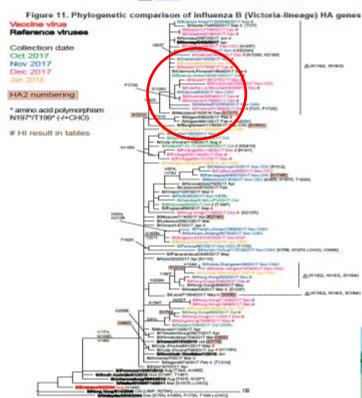


Genetic characterisation of circulating influenza viruses in the WHO European Region, 2017–2018





- 3 363 virus characterisations reported
- Emergence of variant influenza B/Victoria lineage (45%) of those characterised) with two amino acids deletion in the HA protein (162 and 163) -> Antigenically and genetically distinct from the vaccine strain
- 2 192 viruses assessed for neuraminidase inhibitor susceptibility: <1% showed evidence of reduced or highly reduced inhibition by oseltamivir and zanamivir



Vaccine Effectiveness (VE)





- Interim all-age VE estimates results from 5 European studies*:
 - 25 to 52% against any influenza
 - 55 to 68% against influenza A(H1N1)pdm09
 - -47 to 7% against influenza A(H3N2)
 - 36 to 54% against influenza B



*Rondy, Kissling et al. EuroSurv 2018

Summary





- Relatively early start and extended period of activity
- Dominance of influenza B viruses at regional level (different patterns at MS level; A/B or H1 or H3 dominant)
- Older adult hospitalisations (Type B viruses caused severe disease)
- Excess mortality from all causes especially in older people
- Emergence of variant influenza B/Victoria lineage
- Season vaccine effectiveness estimates: 25 to 52%
- <1% antiviral drug resistance (similar to 2016/17)

Acknowledgements









- The network of experts involved in national surveillance
- ECDC Influenza and other Respiratory Viruses team
- WHO European Region Office High Threat Pathogens team
- Consultant and temporary advisor

Thank you for your attention!





