



EFSA ECDC EURL scientific reports on the latest epidemic of avian influenza

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SCIENTIFIC REPORT



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Avian influenza overview

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

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Avian influenza overview – EU/EEA

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, Krzysztof Smetanka, Calogero Terregino, Yves Van der Stede, Inma Aznar, and Francesca Baldinelli

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Avian influenza overview February – May 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, Eliana Lima and Francesca Baldinelli

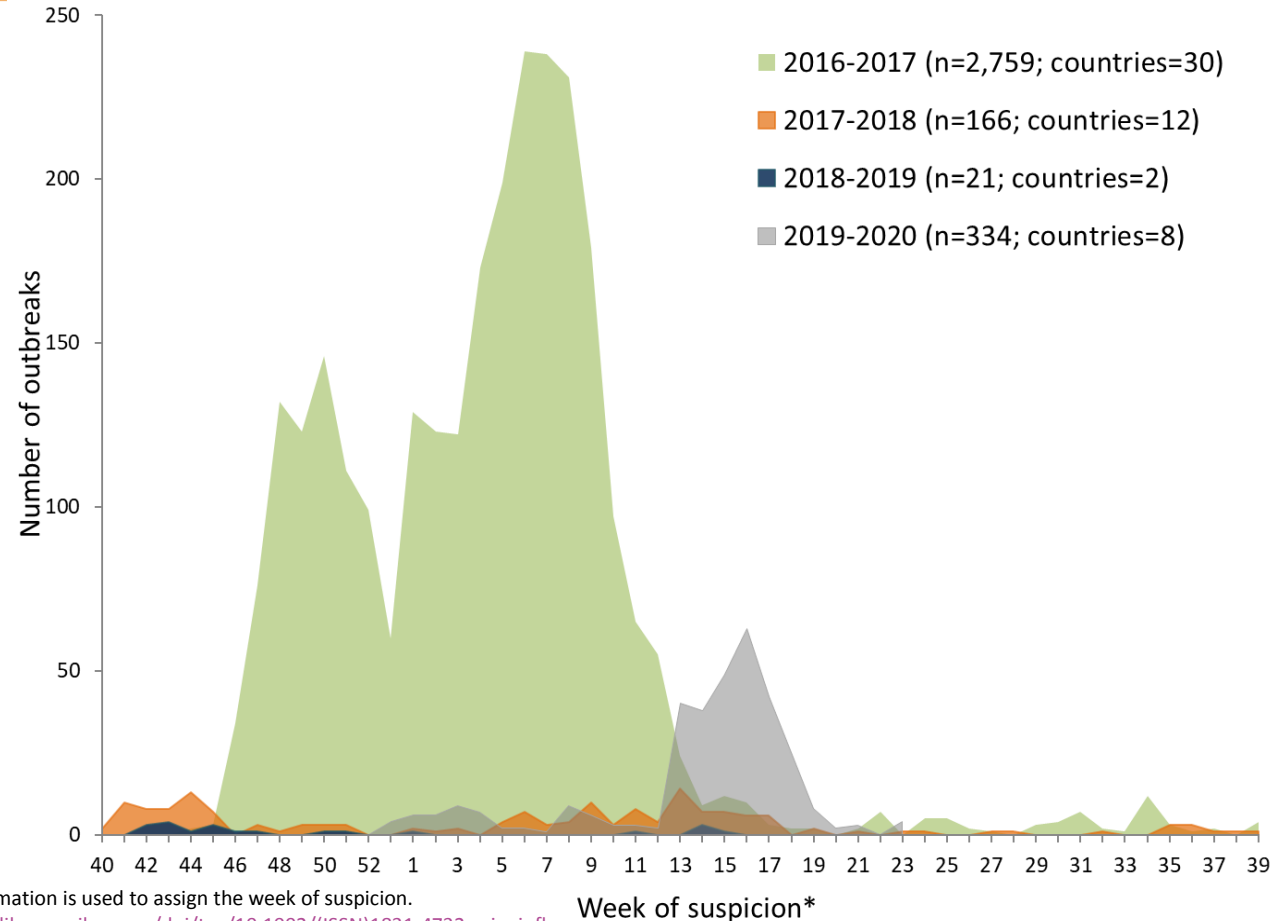
Avian influenza overview December 2020 – February 2021

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, Irene Muñoz Guajardo, Eliana Lima and Francesca Baldinelli

Number of HPAI outbreaks by week of suspicion and season, EU/EEA and the UK

- Distribution of total number of HPAI virus detections reported in Europe by epidemic seasons and by week of suspicion
- 28 September 2016 – 15 September 2020 (3,280)

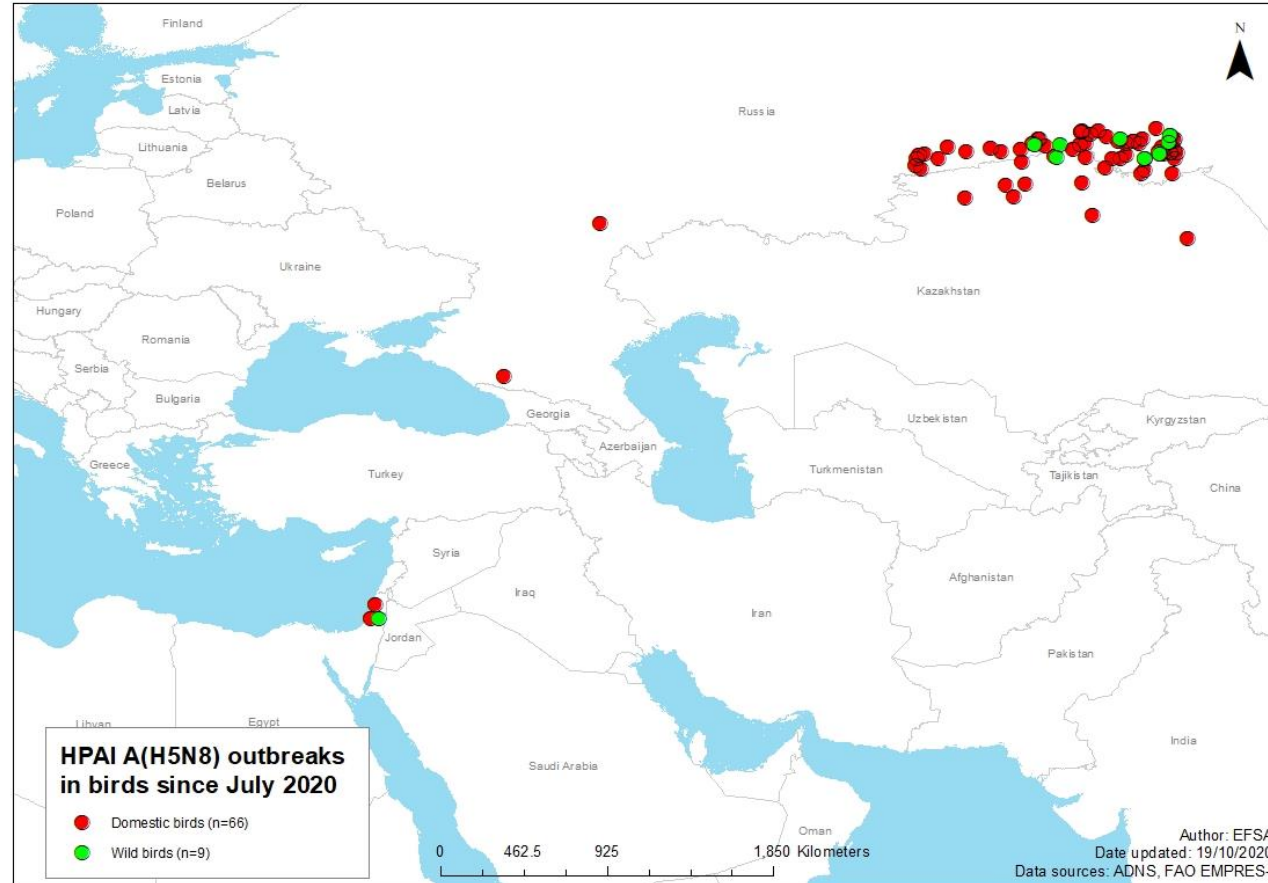


*When the date of suspicion is not available then the date of confirmation is used to assign the week of suspicion.

Source: EFSA/ECDC/EURL avian influenza reports [https://efsa.onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1831-4732.avianinfluenza](https://efsa.onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1831-4732.avianinfluenza)

HPAI outside Europe in summer 2020

Between July and October 2020, 75 HPAI A(H5N8) outbreaks have been detected in Russia (61), Kazakhstan (11) and Israel (3)

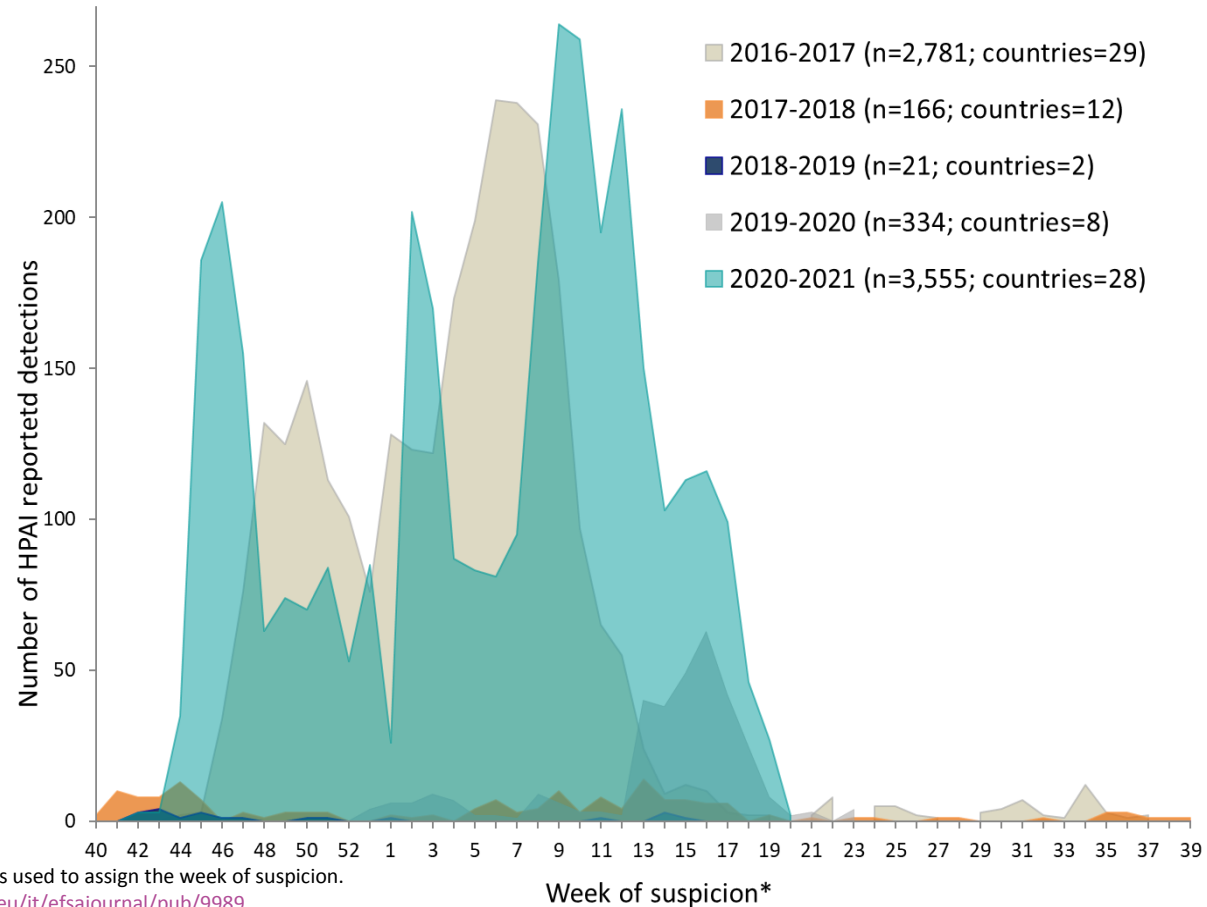


ESFA launched an alert and recommended to stay vigilant:

- The presence of HPAI virus in western Russia and north Kazakhstan spatially associated with autumn migration routes of wild waterbirds are of **concern for the possible spread of the virus** via wild birds migrating to the EU
- Member States should take appropriate measures to **promptly detect suspected cases** of HPAI virus and to **increase biosecurity measures**

Number of HPAI outbreaks by week of suspicion and season, 2016/17-2020/21, EU/EEA and the UK

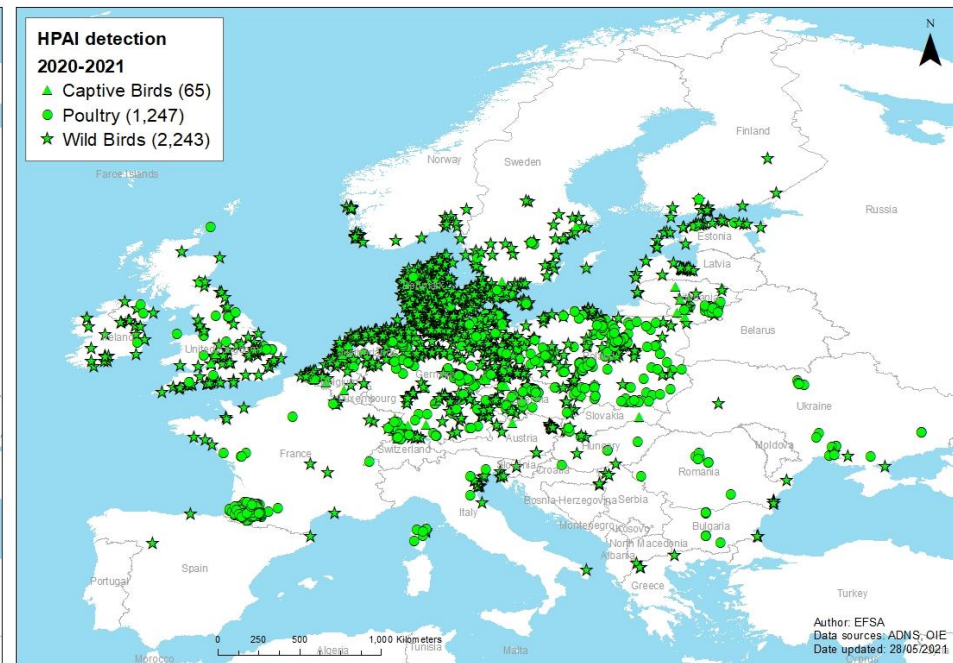
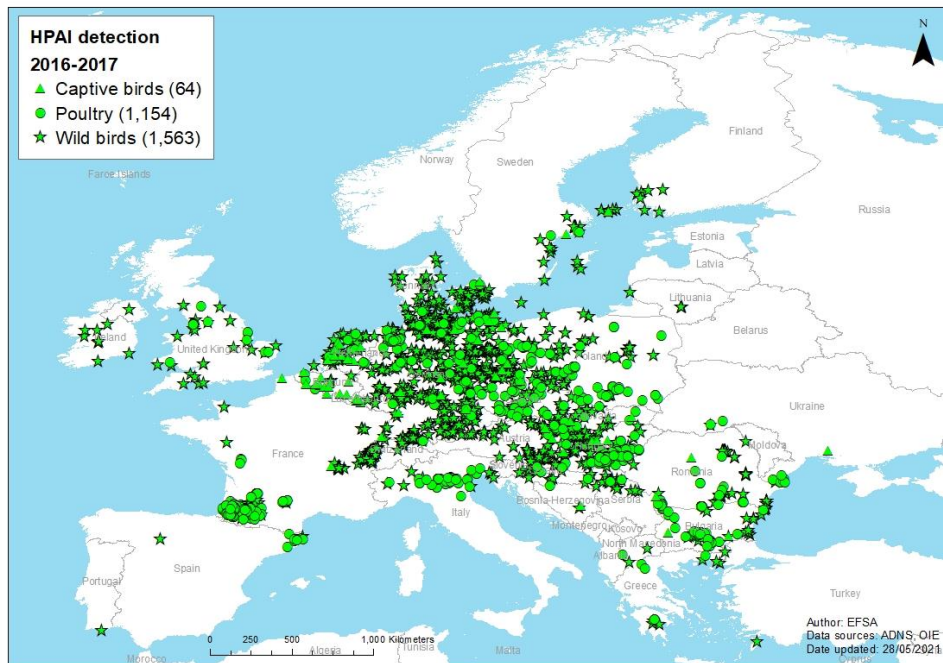
- Distribution of total number of HPAI virus detections reported in Europe by epidemic season and by week of suspicion
- 28 September 2016 – 14 May 2021 (6,857)



*When the date of suspicion is not available then the date of confirmation is used to assign the week of suspicion.

Source: EFSA/ECDC/EURL avian influenza reports <https://www.efsa.europa.eu/it/efsajournal/pub/9989>

HPAI detections, 2016-2017 and 2020-2021



* This designation is without prejudice to positions on status and is in line with United Nations Security Council Resolution 1244 and the International Court of Justice Opinion on the Kosovo Declaration of Independence.

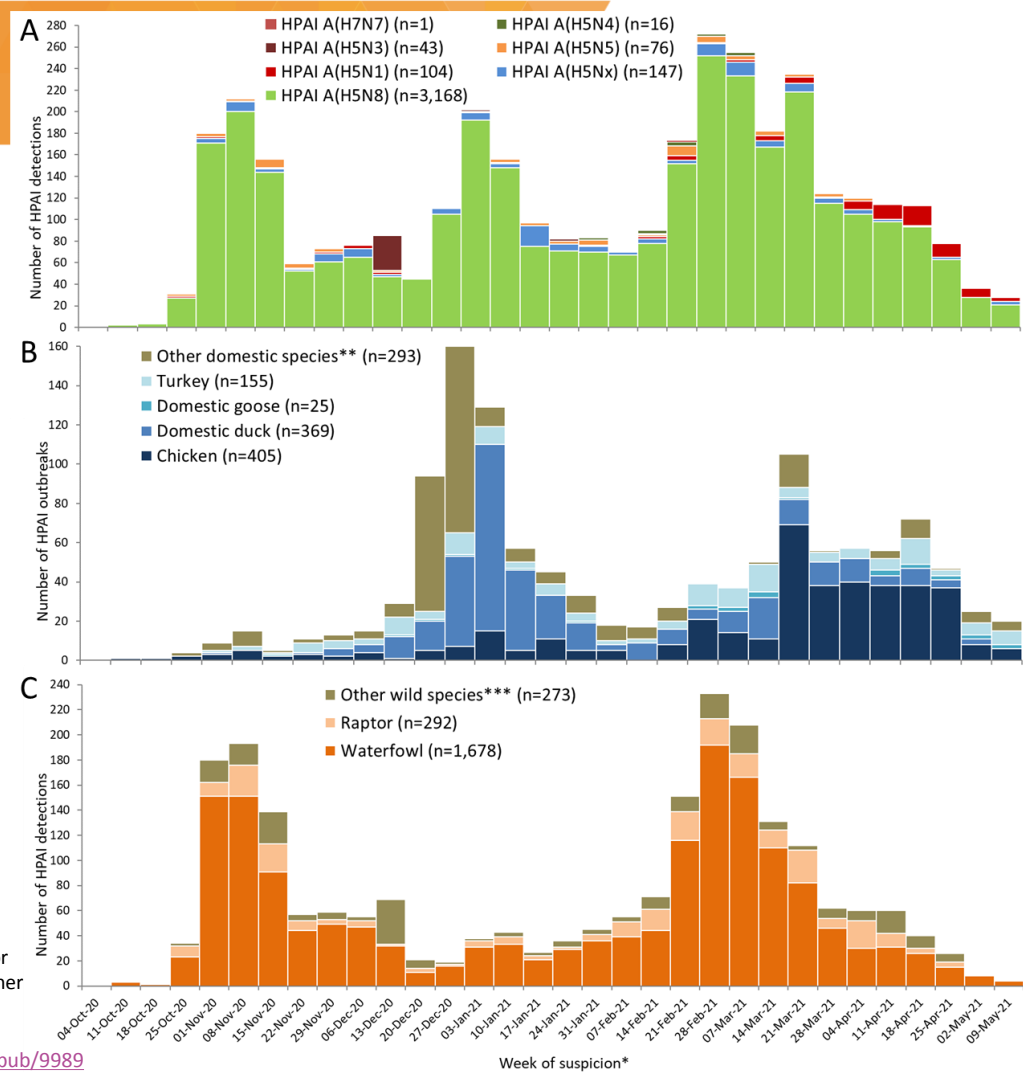
Source: EFSA/ECDC/EURL avian influenza reports <https://www.efsa.europa.eu/it/efsajournal/pub/9989>

HPAI detections 2020-2021

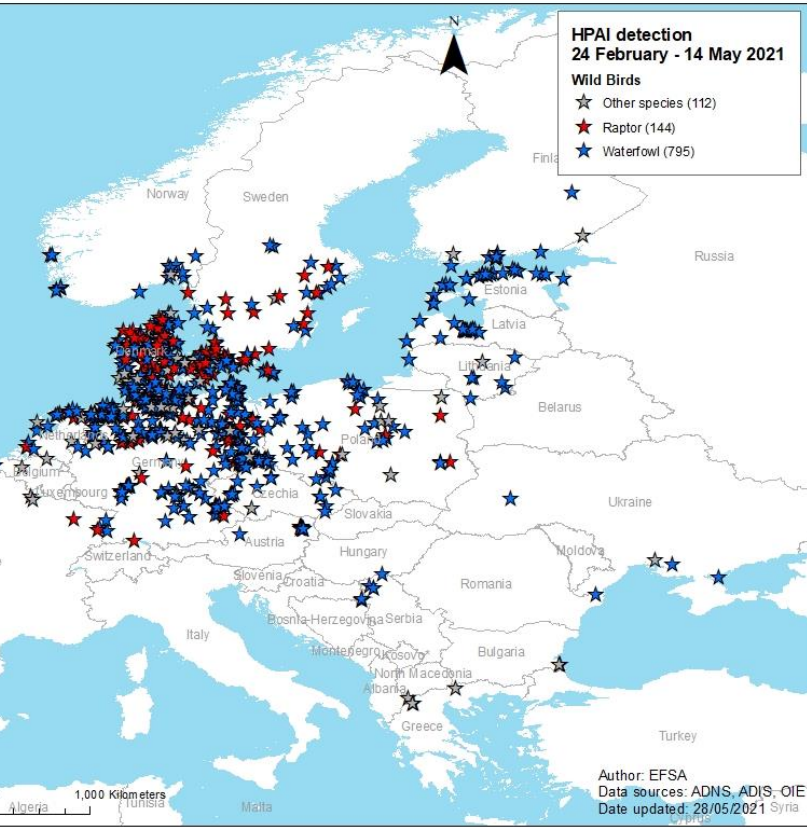
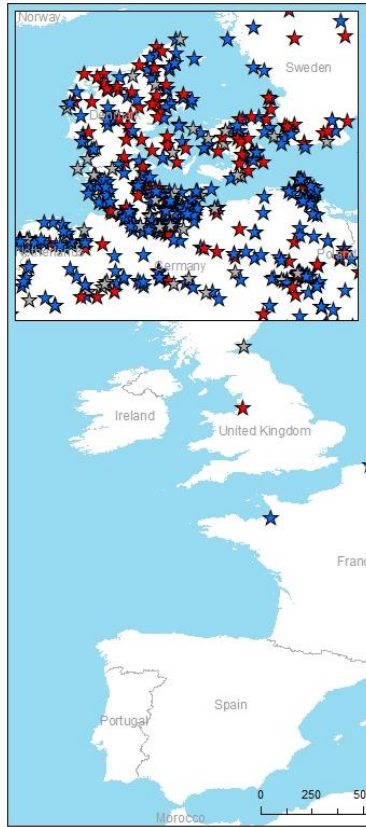
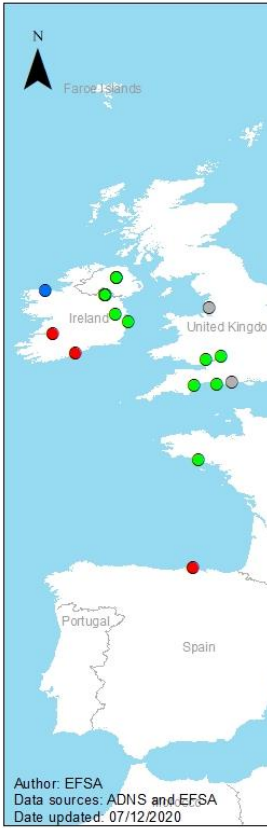
Distribution of total number of HPAI virus detections reported in Europe by week of suspicion (dates indicate the first day of the week) and

- A. virus subtype (3,555)
- B. affected poultry categories (1,247)
- C. affected wild bird categories (2,243)

5 October 2020 – 14 May 2021



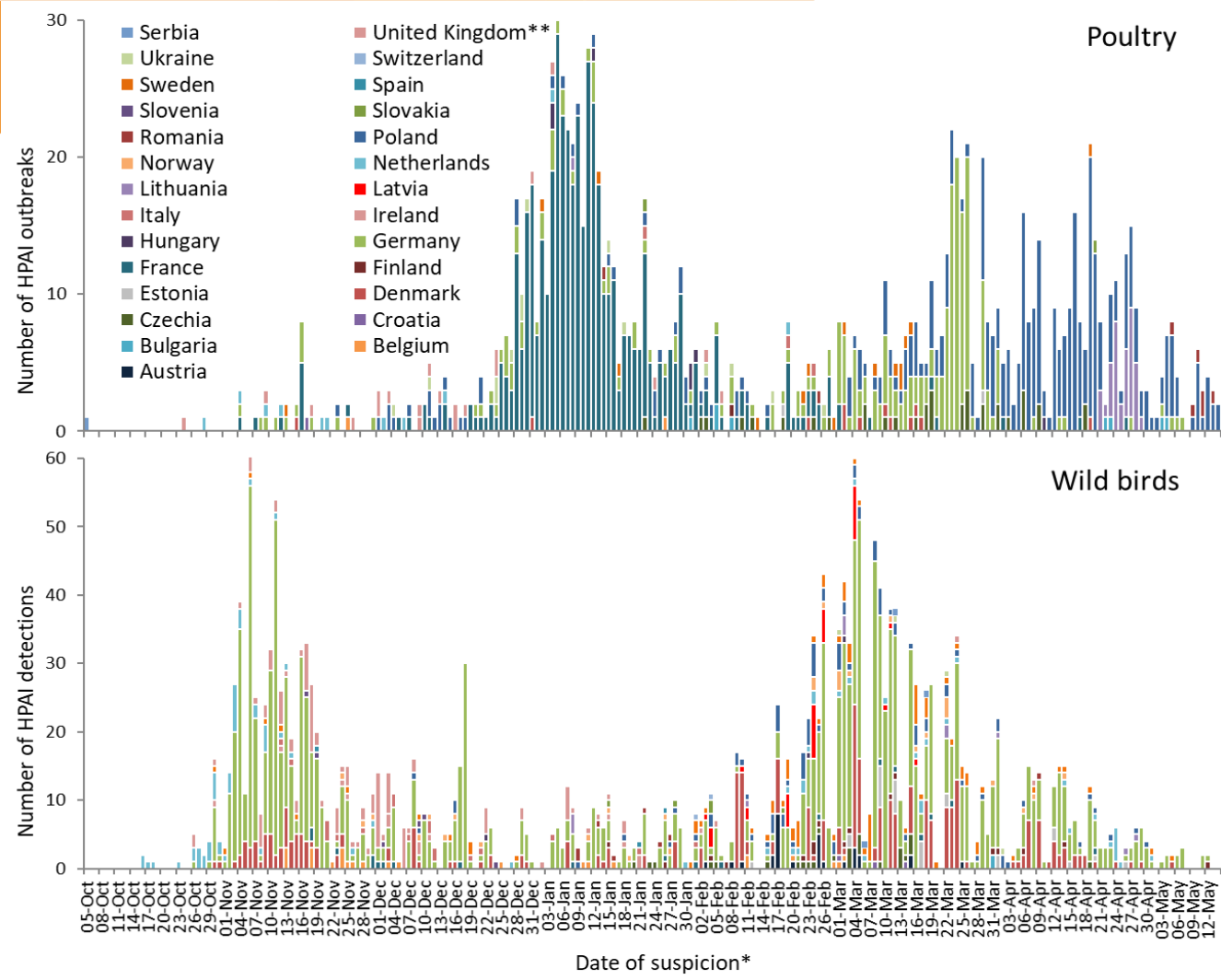
HPAI detections in wild birds



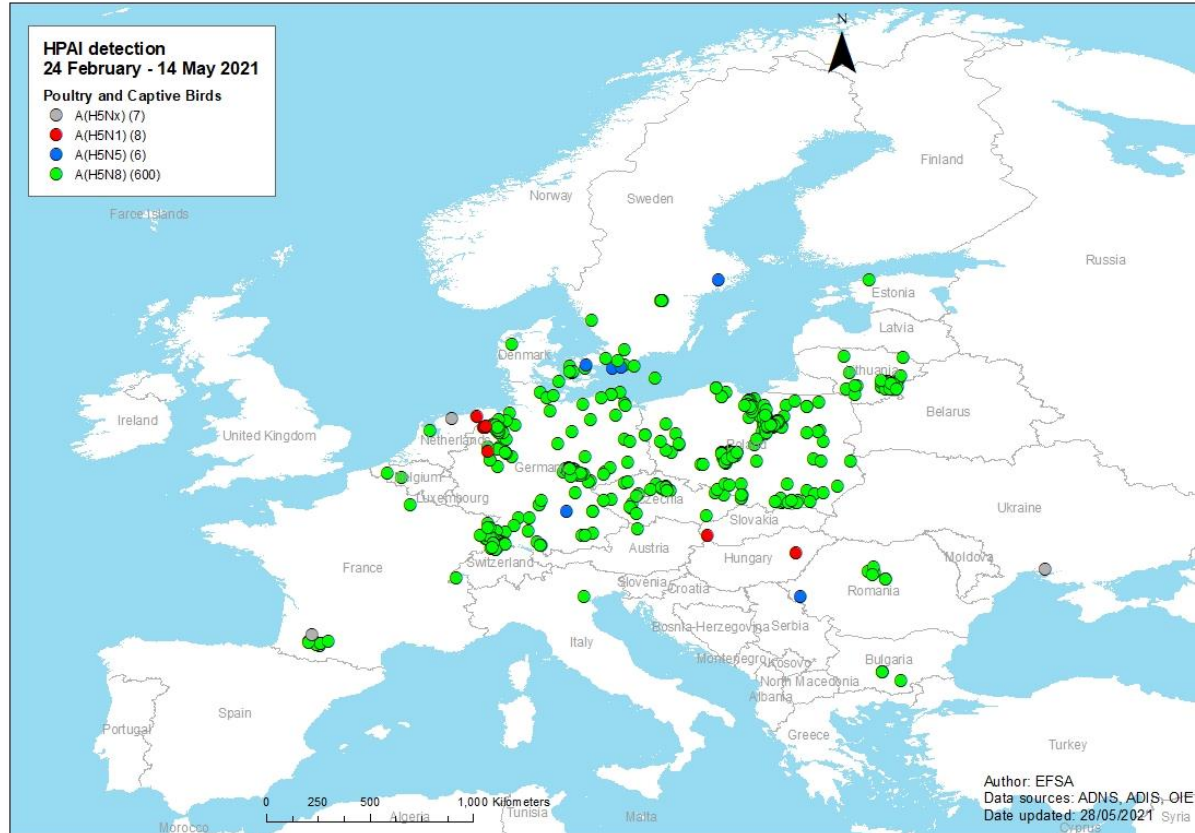
Distribution of HPAI detections

Daily distribution of total number of HPAI virus detections reported in Europe by affected country

5 October 2020 – 14 May 2021 (3,490)



HPAI outbreaks in poultry

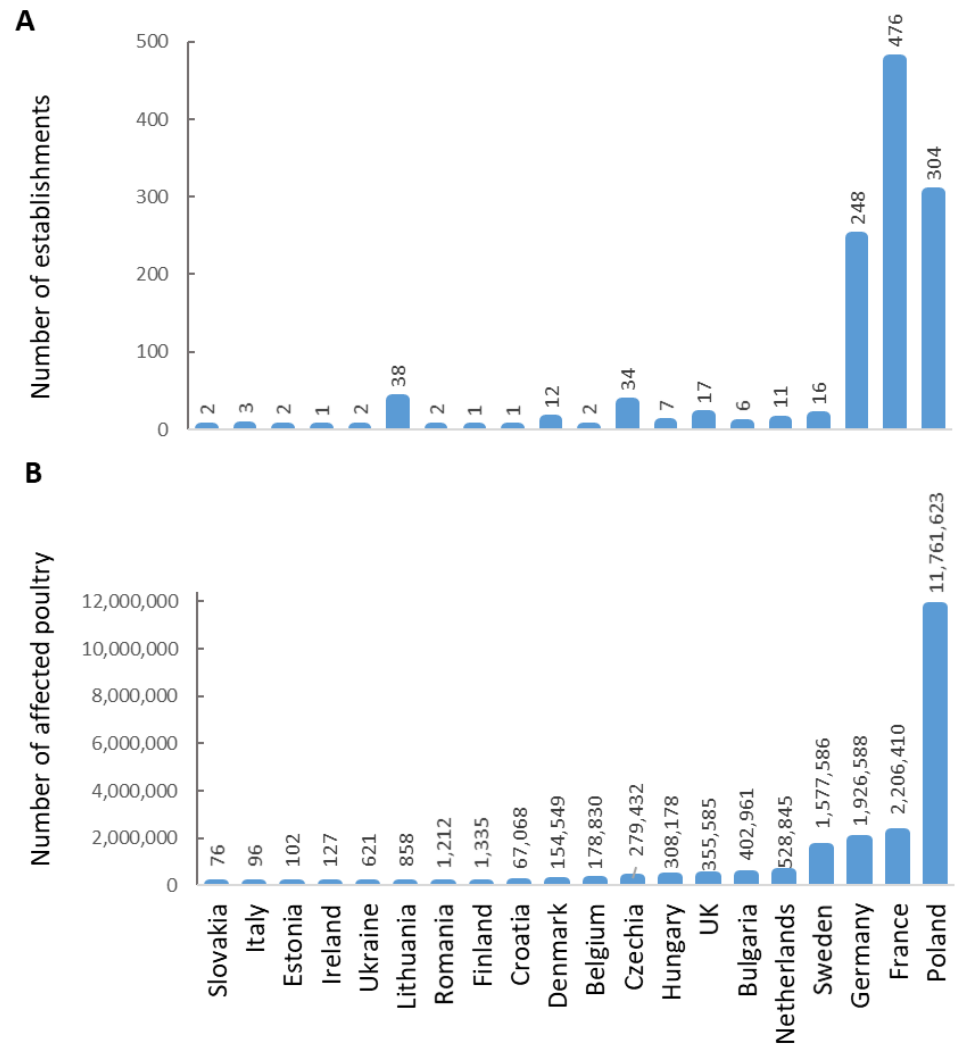


HPAI outbreaks in poultry

Number of establishments (A) and domestic birds (poultry) (B) affected by HPAI in the EU

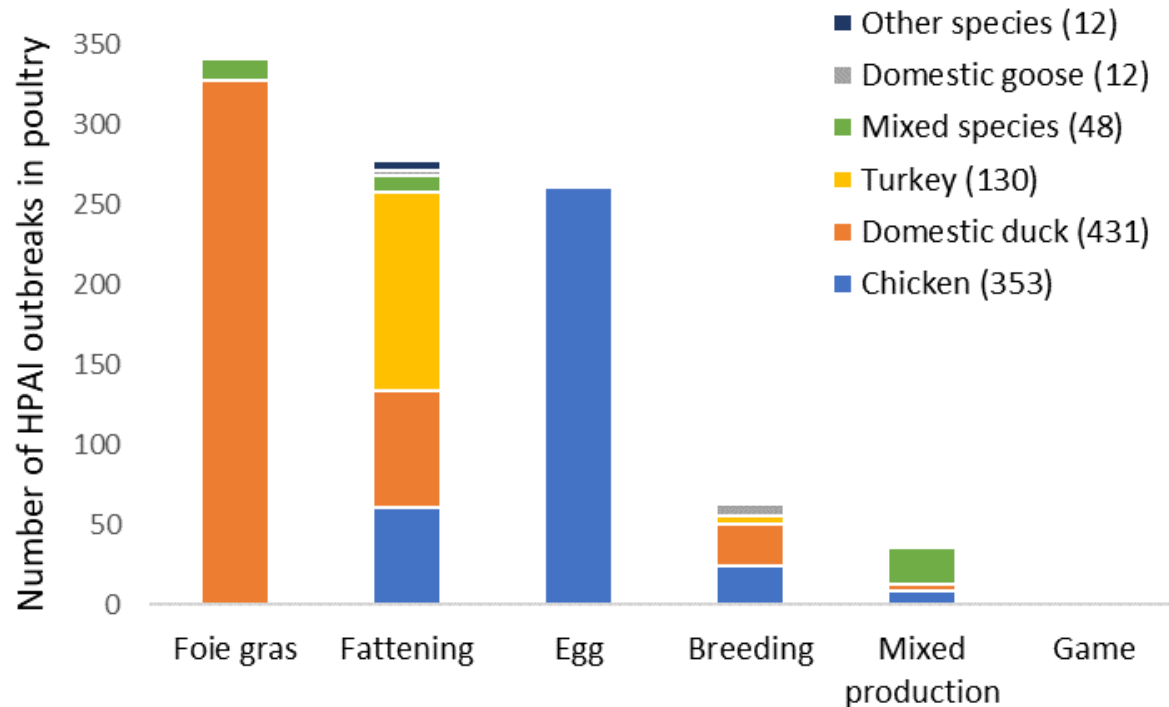
October 2020 – 14 May 2021

- 1,115 HPAI outbreaks
- ≈ 20 million birds affected



Production type of affected establishments in the EU (986)

October 2020 – 14 May 2021



According to data reported to EFSA between 1 January 2019 and 14 May 2021:

- Since 2019, 13 countries reported more than 2,800 exposures of people during culling and related activities
- No transmission to humans has been reported
- No human-to-human transmission has been described

- In 2020-2021 Europe experienced the **largest HPAI epidemic season**
- EFSA launched an **alert** on possible HPAI virus introduction in the EU **in September**
- A better understanding of the factors regulating **wild bird** migration is of the utmost importance to improve our ability **to detect the virus early** and monitor its spread

- The observed **longer persistence of HPAI in wild birds**, compared to previous years, may indicate a **continuation of the risk for the juveniles** of several species of wild birds and mammals, as well as for virus entry into **poultry farms**
- The **long duration of the avian influenza risk period** could represent a **challenge** for the sustainability of the reinforced biosecurity measures implemented along the poultry chain in high-risk areas or production sectors
- The **risk of infection for the general population** in the EU/EEA is assessed as **very low**, and for occupationally exposed people low

- To **improve early detection** of infections in poultry, enhanced **awareness among farmers** to monitor and report increases in daily mortality and drops in production parameters are recommended
- In case of a HPAI outbreak
 - in highly densely populated areas, maintaining high levels of **biosecurity**, improving **early detection**, and strengthening **emergency response**, are the most important actions to be rapidly implemented
 - **immediate restrictions to the movement of live poultry** and at-risk poultry commodities should be enforced
- In geographical areas at risk of HPAI infection, **controls on live poultry** movements should be **strengthened**

- Continued **surveillance** of avian influenza virus in wild birds and poultry in Europe, combined with **timely generation and sharing of complete viral genome sequences**, are crucial
- Continued monitoring together with **in-depth analyses on virus evolution and genetic mutations**, resulting in changes in viral properties that are **relevant for animal and public health**, are of utmost importance
- More **efforts** should be made by reporting countries **to genetically characterize** a higher number of samples

- The evolution and increasing occurrence of **reassortment events** need to be closely monitored for the potential risk that avian influenza viruses transmit from birds to human, and subsequently between humans, and/or to other wild or domestic mammals
- The initiation of **sero-epidemiological studies in exposed people** following HPAI outbreaks is strongly encouraged to identify transmission events and support risk assessments

Member State representatives for avian influenza

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