

HPAI (H5N5 & H5N8) in Sweden 2021



Swedish Board of Agriculture 11-12 February 2021



HPAI outbreaks 2021

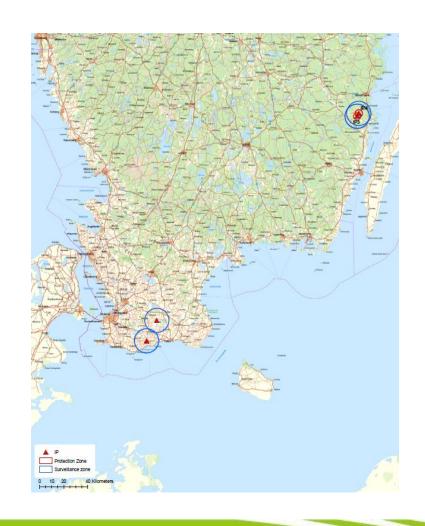
2021/1: H5N8 commercial farm with 85 000 parent poultry for the production of day old broiler chickens. In the municipality of Sjöbo in the south of Sweden

2021/2: H5N8. A commercial farm with 2200 turkeys. In the municipality of Skurup in the south of Sweden.

2021/3: H5N5. A commercial poultry farm with about 2 million laying hens and pullet chickens. In the municipality of Mönsterås in the south-east of Sweden.



HPAI outbreaks 2021







Outbreak 2021/1, H5N8

A farm with 85 000 parent poultry for the production of day old broiler chickens. In the municipality of Sjöbo in the south of Sweden

Swedish Board of Agriculture

| 2/1 3/1 | suspicion, sampling confirmation of Al |
|------------|---|
| 3/1 | restriction zones and all restrictions and necessary measures according to Council Directive 2005/94/EC |
| 6/1 | killing of all birds by gas in unit (house 7 and 8) |
| 9/1 | preliminary cleaning and disinfection |
| 10/1 | increased mortality in house11 |
| 11/1 | killing of all birds by gas in unit (house 11 and 12) |
| 14/1 | preliminary cleaning and disinfection |
| 15/1 | increased mortality in house 2 |
| 16-18/1 | killing of all remaning birds |
| 19/1 | preliminary cleaning and disinfection |
| 9/2 | protection zone lifted |

Probable source of infection: under investigation



of Agriculture

Outbreak 2021/2, H5N8 (1)

A farm with 2200 turkeys. In the municipality of Skurup in the south of Sweden.

| 13/1 | Suspicion, sampling |
|------|---|
| 14/1 | Confirmation |
| 14/1 | Restriction zones and all restrictions and necessary measures according to Council Directive 2005/94/EC |
| 14/1 | Culling of all birds |
| 17/1 | Preliminary cleaning and disinfection |
| 7/2 | Protection zone lifted |





Outbreak 2021/2 (2)

- No movements or exports of live poultry, hatching eggs and non-heated poultry products from the restriction zones
- All commercial farms within the protection zone visited by official veterinarian
- All commercial farms and all hobby herds in the surveillance zone are contacted
- Reported in ADNS and WAHIS
- Written information to:

 European Commission
 CVO in the Nordic countries

 Third countries



Surveillance zones 2021/1 and 2021/2



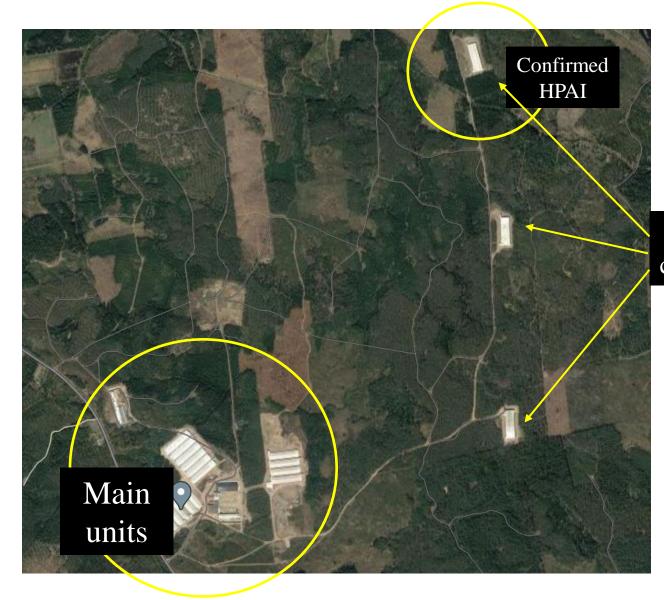


Outbreak 2021/3, H5N5 (1)

A farm with 2 million laying hens and pullet chickens. In the municipality of Mönsterås in the south east of Sweden.

- The establishment constitutes of 16 houses separated into three epidemiological units. 1,3 million laying hens.
- In addition there are three epidemiological units/houses for pullet chickens located approximately 1-1,5 km away. 700000 pullet chickens.
- Strict biosecurity with separate staff, equipment etc. between the epidemiological units





Pullet chickens



Outbreak 2021/3 (2)

- 17 January: Clinical signs of high mortality in one house, with approximately 85 000 poultry. This epidemiological unit was immediately put under restrictions and samples were taken and sent for analysis to the National Veterinary Institute.
- The birds in all the other epidemiological units are closely monitored and put under official surveillance.
- 18 January: Protection zone (3 km) and surveillance zone (10 km) and the culling of the poultry in the first epidemiological unit started.
- 18 January: HPAI H5 confirmed.



Outbreak 2021/3 (3)

- <u>20</u> January: Increased mortality in one house in the second epidemiological unit and decision to cull all the birds in this unit already on suspicion of HPAI.
- <u>21 January:</u> The third epidemiological unit was put under restrictions as a preventive measure.
- 24 January: HPAI was confirmed in the third unit.
- 26 January: The third unit was culled. In total approximately 1,3 million poultry (unit 1-3)





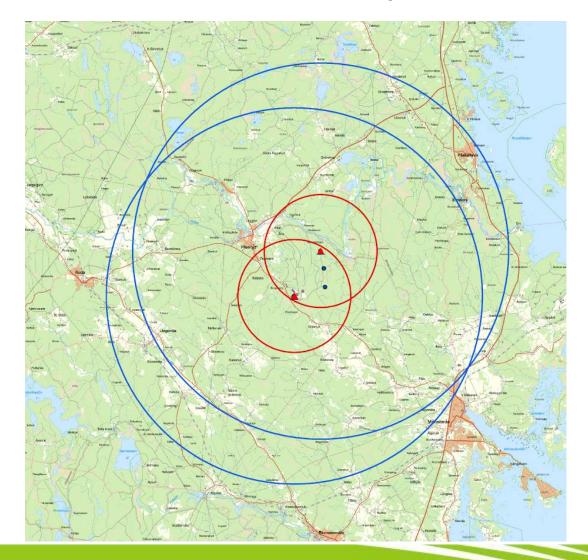
Outbreak 2021/3 (4)

- <u>30 January:</u> For animal welfare reasons, one unit with 245000 pullet chickens 1 km away from the main units, was culled.
- <u>1 February:</u> Suspicion due to increased mortality in another unit with pullet chickens. Extended restriction zones were established
- <u>2 February:</u> Culling of the second unit was finished. Approx. 700000 pullet chickens.
- 4 February: HPAI H5 was confirmed.
- 8 February: The last (third) unit with pullet chickens was culled (without suspicion or clinical signs)
- In total approximately 2 million poultry (laying hens and pullet chickens)

Probable source of infection: under investigation



Protection and surveillance zone 2021/3





Outbreak 2021/3 (5)

- No export of live poultry, hatching eggs and non-heated poultry products from the restriction zones
- No other farms within the protection zone
- All farms and hobby herds in the surveillance zone are contacted
- Reported in ADNS and WAHIS
- Written information to:

European Commission CVO in the Nordic countries Third countries



Analysis

- Organ samples were analysed by PCR
 - Real-time PCR (matrix)
 - Real-time PCR (H5)
- Virus sequencing
- Virus isolation and whole-genome sequencing.



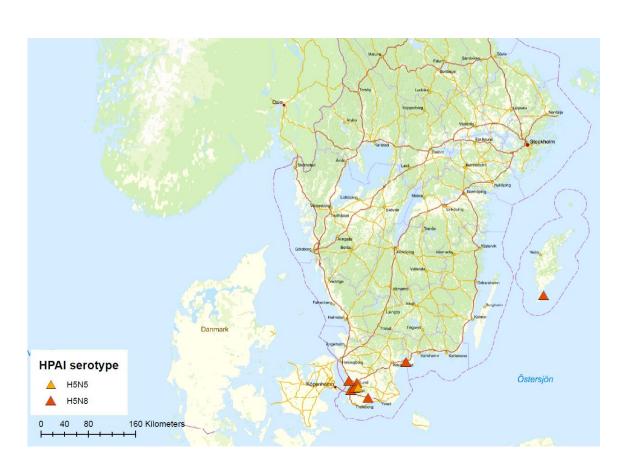


Index cases of HPAI in wild birds

Birds found sick or dead between 1 November and 20 January

8 cases of H5N8 and 1 case of H5N5

- 6 Barnacle geese
- 2 Peregrine falcons
- 1 Eurasian eagle owl





Thank you for your attention!

