

- Pigeon paramyxovirus type 1 (PPMV-1)



Swedish Board of Agriculture 20200310

# Summary of outbreak

- Holding with 79 Pakistan pigeons
- Kept by a private owner.
- Not used for competitions nor exhibitions.
- The pigeons were not vaccinated against ND.

28 February 2020, suspicion raised

- Clinical signs: high mortality rates
- Restrictions put in place on the holding and samples taken.

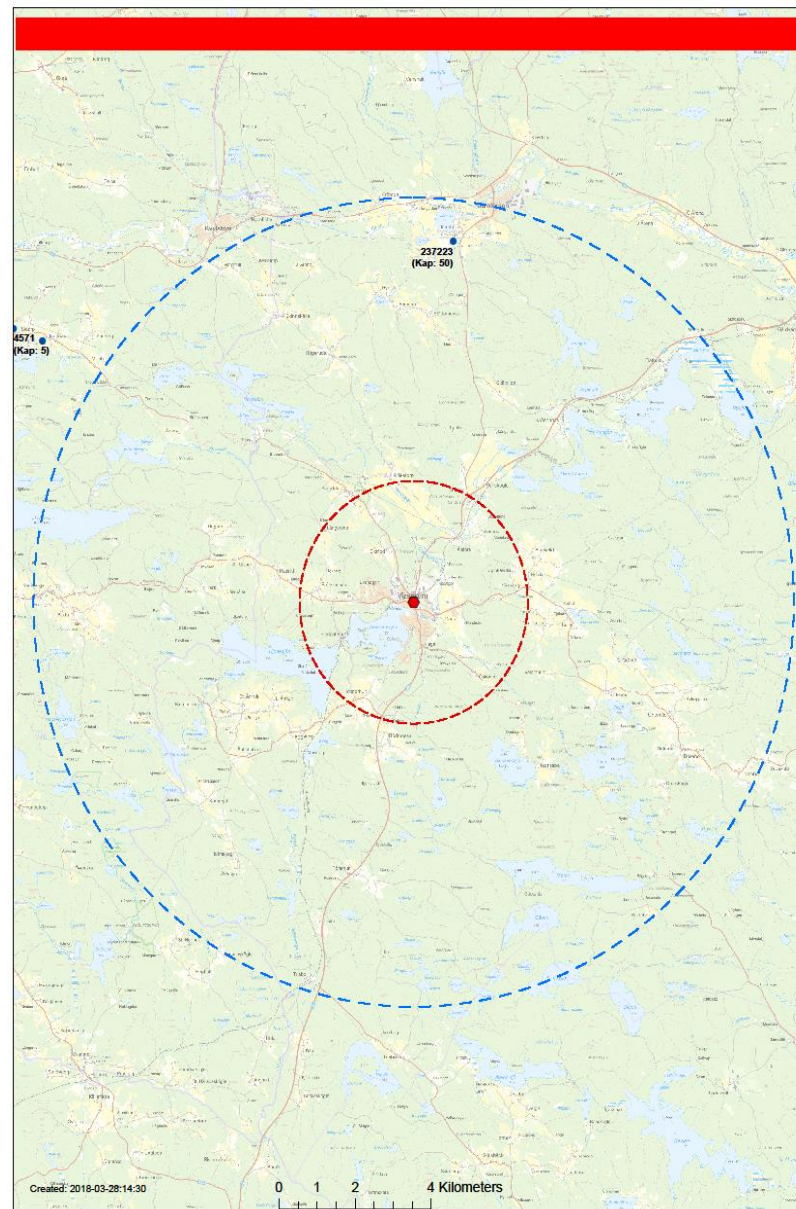
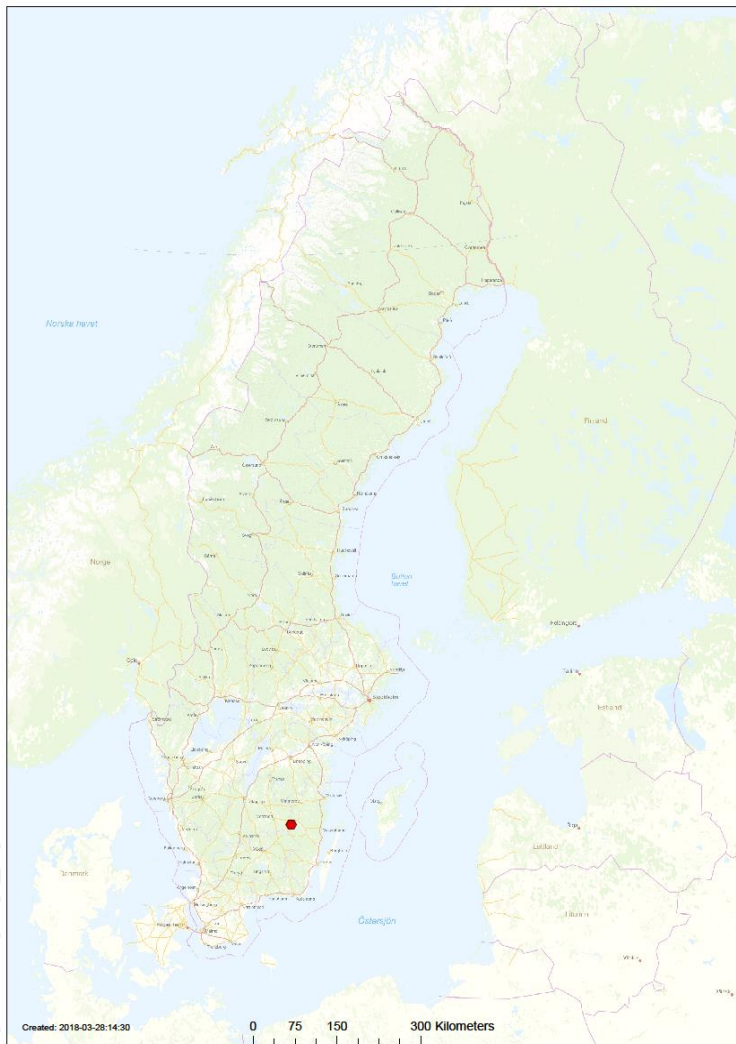
Organ samples (from 5 dead pigeons) analysed

- 4 March 2020 **Pigeon Paramyxovirus type 1** confirmed
- 5 March 2020 all remaining pigeons (37) killed and preliminary cleaning and disinfection

# Measures applied

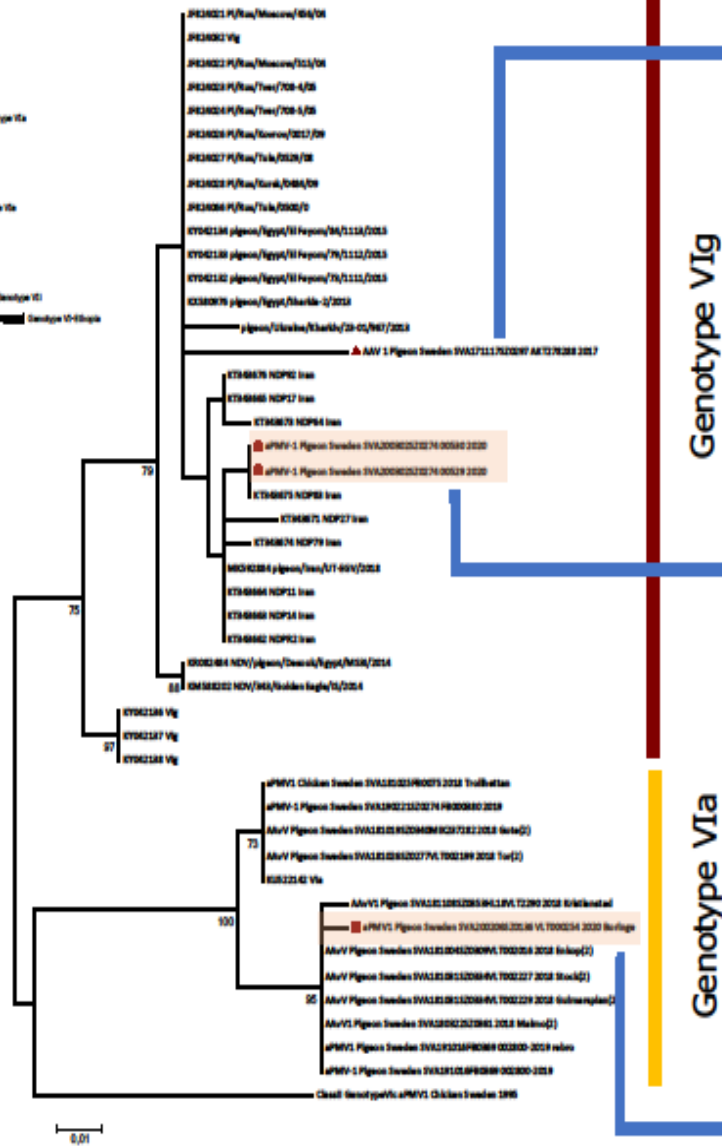
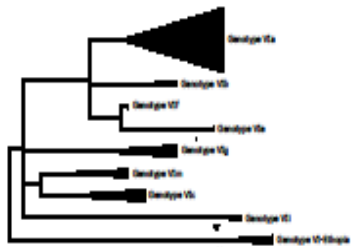
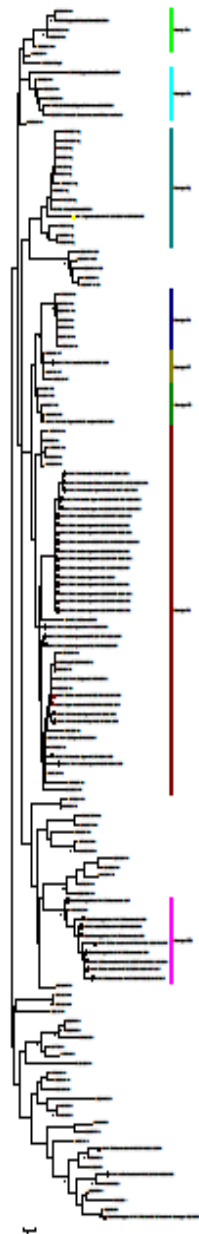
- All restrictions and necessary measures according to Directive 92/66/EEC were applied on the holding
- Killing and preliminary cleaning and disinfection
- The final cleaning and disinfection was completed on 22 April 2020.
- No restriction zones were established.
- There are no commercial poultry holdings within a radius of 10 km
- 1 backyard holding within radius of 10 km





# Analysis

- **Pigeon Paramyxovirus type 1 (PPMV-1)** is an antigenic variant of Avian Paramyxovirus type 1 (APMV-1).
- Phylogenetic analysis based on the partial sequences of the F gene indicates that the detected virus belongs to subgenotype VIg. The detected virus was closely related to the previously reported pigeon paramyxoviruses isolates from the Middle East (Iran) in 2018.
- The detected virus is not epidemiologically related to the PPMV-1 virus recently circulating and identified in wild pigeons in other parts (Dalarna) of the country.



GG112-KRQKRF-117IGA

Genotype V1g-2017  
Gotland

GG112-KRQKRF-117IGA

Genotype V1g-202003  
Kalmar

GG112-RRQKRF-117IGA

Genotype V1a-202002  
Borlänge

# Conclusion

The investigation was difficult as the owner hid information or did not provide correct information. The source of the infection could not be identified.

The possible origin of Newcastle disease at the holding: the owner has bought 12 pigeons on the internet. The origin of these pigeons could not be determined.

The detected virus was closely related to the previously reported pigeon paramyxoviruses isolates from Gotland 2017 and is more like viruses that have circulated in the pigeon population in the Middle East in recent years.



[cvo@jordbruksverket.se](mailto:cvo@jordbruksverket.se)