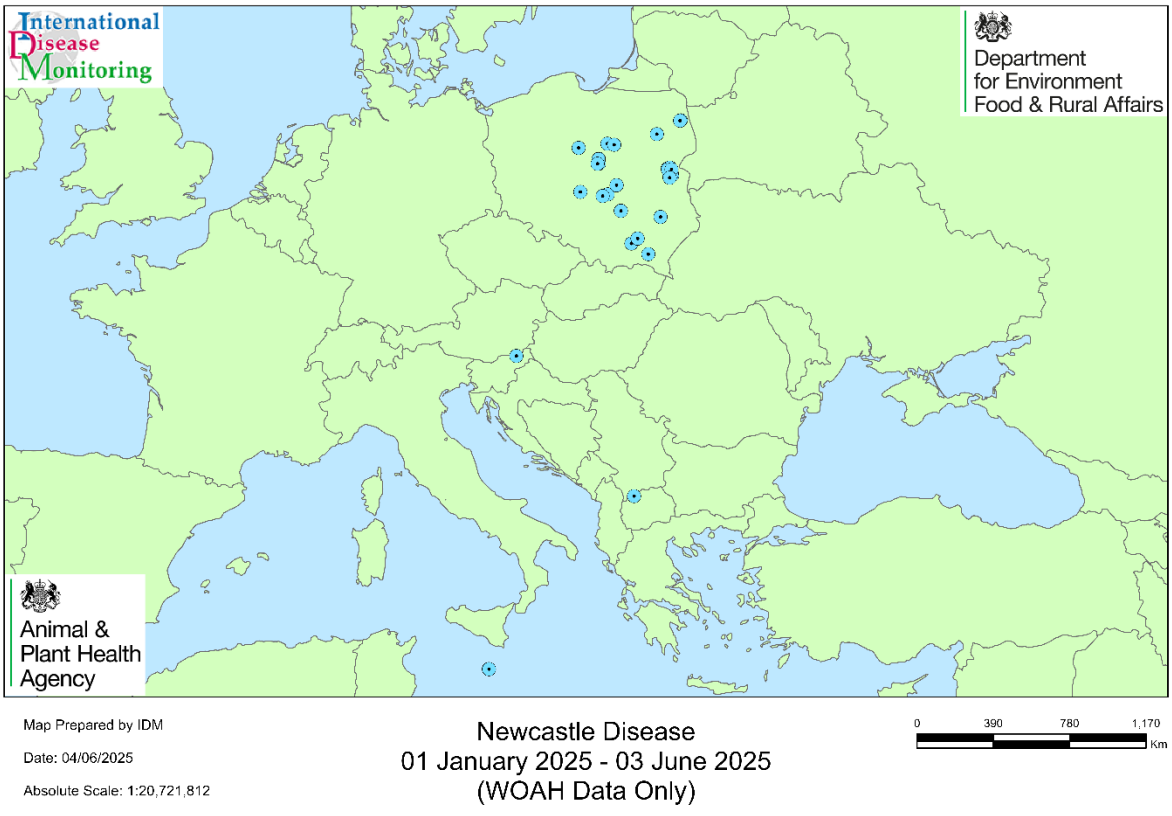
Preliminary Outbreak Assessment #1

Newcastle disease (ND) in Poland and Europe

6 June 2025

Disease report

To the 6 June 2025, Poland has reported 31 outbreaks of Newcastle disease (ND) in poultry since 1 January 2025 according to the World Organisation for Animal Health (WOAH). ND is the result of infection in poultry with avian paramyxovirus serotype 1 (APMV-1). ND has also been detected in Malta for the first time since 1993 with 2 outbreaks in poultry in May. Both Slovenia and North Macedonia have reported single outbreaks in poultry earlier this year. In addition, the Netherlands Ministry of Agriculture have reported ND in captive pigeons in Oldenzaal in May, most likely caused by pigeon paramyxovirus serotype 1 (PPMV-1), which is a virulent variant of APMV-1.



Map: Map of Europe showing Newcastle disease events in domestic poultry reported to WOAH from 1 January 2025 to 3 June 2025. The map shows single points on Malta and in Slovenia and North Macedonia but 31 points in central and eastern Poland.

Situation assessment

To 3 June 2025, Poland has reported 31 outbreaks of ND in poultry since 1 January 2025 according to WOAH (see Map) with 30 poultry outbreaks reported to ADIS to 4 June 2025. Three of the most recent outbreaks were in vaccinated flocks (see Plants, Animal, Food and Feed (PAFF) committee Presentation: Newcastle Disease - Poland), where birds displayed neurological signs, diarrhoea and mortality. Of these, one report was the first outbreak in commercial poultry in the Swietokrzyskie region where the affected flock of 27,000 hens was vaccinated against ND with live attenuated vaccine, both as day old chicks and at 35 days old. A second outbreak was on a farm in Mazowieckie region that housed 57,000 vaccinated turkeys as well as 7,000 unvaccinated geese. The third outbreak was in Lodzkie and involved 16,500 broiler chickens vaccinated twice against ND with live attenuated vaccine.

As of 25 April 2025, it has been mandatory to vaccinate flocks on commercial farms against ND in the entire territory of Poland. Following vaccination, monitoring should be conducted to evaluate the vaccination plan's effectiveness. This is done by laboratory tests to assess the level of antibodies in flocks. Mandatory measures such as foot mats, carrying out daily inspections of poultry, keeping poultry in isolation from wild birds and water bodies to which wild animals have access, and keeping feed and water sources for poultry away from contact with wild birds have been implemented (akty prawne do ISAP-u-x kad). Emergency vaccination has conditions whereby phytosanitary standards must be strictly applied and vaccination crews should thoroughly dispose of materials, clothing and undergo disinfection to mitigate the risks of virus spread via these crews. Contaminated feed is unlikely to be the source.

From the most recent PAFF committee presentation on 21 May 2025 and according to ADIS reports (to 4 June 2025), Poland has also reported an additional 27 outbreaks in non-commercial farms (captive birds) so far in 2025. The total number of outbreaks in Poland is therefore 58 since 1 January 2025. Of the 31 commercial outbreaks in poultry in Poland on WOAH, 30 were on farms and 1 was on a backyard premises with 252 birds.

Elsewhere in Europe, two outbreaks of ND in poultry have been reported in Malta in May marking the first outbreaks since 1993. Both outbreaks were reported on farms in Zebbug, western Malta, and housed 5,040 and 7,200 chickens respectively (Times Malta 2025). It is unlikely birds were vaccinated. There are 74 licensed layer and broiler farms across Malta and Gozo (Times Malta 2025). Vaccination is available and is now required for all farms on Malta according to The Times Malta (2025).

A case of Newcastle disease (almost certainly PPMV-1) has been confirmed in privately kept pigeons in Oldenzaal in May according to the Dutch Ministry of Agriculture (NL Times 2025). PPMV detection in pigeons is detection of a virus that would be ND if causing infection in chickens and turkeys, and could be related to the other cases in Europe. This was reported on ADIS on 23 May 2025 (ADIS 2025) but

not on WOAH as of 6 June 2025. The infected birds are being culled, and containment measures have been enacted to prevent the spread of the virus. A 10-kilometre restriction zone has been imposed around the outbreak location. The four commercial poultry farms located within this zone are banned from transporting birds or eggs. A nationwide housing order is already in place in the Netherlands due to high pathogenicity avian influenza.

Implications for Great Britain

The ongoing outbreaks in Poland present a concern not only because of the increase in infected poultry and hence risk of entry to GB through trade but also because most of the flocks were vaccinated. However, this is not unprecedented, and it is well documented that outbreaks of ND can still occur in the face of vaccination despite commercial vaccines against ND being available for decades (Mahmood et al 2025). Current ND vaccines continue to be effective against circulating APMV-1. It has been shown that existing vaccine formulations confer similar levels of clinical protection to contemporary strains of ND virus and that the antigenic heterogeneity of circulating strains does not impact upon shedding profiles in immunised birds (Mahmood et al 2025). Rather than the vaccines being ineffective, it is considered more likely that the emergence of ND in vaccinated flocks is due to vaccine protocols or a build-up in infection pressure as a result of low vaccination rates in non-commercial flocks.

Epidemiological investigations in Poland presented in January 2025 (that is before vaccination was mandatory) identified non-compliances with biosecurity measures (Presentation - Newcastle Disease in Poland). These include farms linked by feed supplies, the risk of ineffective disinfection of vehicles at farms, table eggs bought in non-commercial farms and brought to commercial farms by a farm worker, keeping of captive birds by farm workers, and shortcomings in infrastructure and biosecurity procedures. However, biosecurity should be high in poultry in Poland with the ongoing avian influenza regulations. The cause of this increase in ND in Poland is unclear, but unvaccinated non-commercial flocks are likely to contribute to building infection levels, despite vaccination levels in commercial poultry.

While ND has mainly been localised to eastern Europe so far 2025, the recent detection in captive pigeons in the Netherlands poses a higher risk to Great Britain this autumn when many passerines and other wild bird species migrate south-west through western Europe. It is important that the strain of PPMV in captive pigeons in the Netherlands is typed at the molecular level as if it is not PPMV-1 then it is more of a concern. While birds entering Great Britain mainly come from Scandinavia and Denmark, small numbers may come through the Netherlands particularly into eastern England. PPMV-1 is endemic in pigeons in Great Britain. While the risk to poultry in Great Britain is currently low, it is important to monitor the spread of ND within the Netherlands in June and July.

Conclusion

The WOAH has reported now reported 31 outbreaks of ND on commercial and backyard poultry premises in Poland this year with 6 in the month of May. In addition, there have been 27 outbreaks in captive birds in Poland taking the total for 2025 (to 5 June 2025) to 58. This is despite the mandatory vaccination for ND in Poland since 25 April 2025.

There has also been an outbreak of APMV, most likely PPMV-1, reported in the Netherlands in captive pigeons. As the variety of species of wild bird that may be susceptible and may act as a reservoir for ND is wide, we generally consider there is a constant low risk of introduction of avian paramyxovirus serotype 1 (APMV-1) into the domestic poultry sector.

It is recommended that poultry keepers consider vaccinating their flocks and practice good biosecurity. Vaccines for ND with marketing authorisations are commercially available in the UK and vaccination is common in most, if not all, commercial layers, layer breeders and broiler breeders. It is also common in most turkey breeders and some commercial turkeys and broilers (Newcastle disease in Europe (2023)).

The risk of introduction of ND into UK poultry is considered to be unchanged, at Low. Disease may be introduced via trade, wild birds or fomites and these events highlight the background risk to commercial poultry from feral pigeons as potential carriers of ND. PPMV-1 is endemic in pigeons in Great Britain and Europe.

We will continue to monitor the situation closely, particularly in the Netherlands, as this is an important exotic disease which will be a concern for Europe in terms of its ability to spread and the impact on poultry.

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References

ADIS (2025) Total outbreaks by disease/disease type and country.

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NL Times (2025) Newcastle disease found in privately kept pigeons in Oldenzaal; Infected birds culled | NL Times.

This publication is available at https://www.gov.uk/government/collections/animal-diseases-international-monitoring

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