

SUMMARY PROFILE FOR NEWCASTLE DISEASE

1 Description

Newcastle disease (ND) is one of the most important infections of poultry world wide. It is a notifiable disease caused by a virus which can infect a wide variety of birds, and may result in severe losses. There are several strains of the virus, and the severity of disease depends both upon the virus strain and the species of birds which are infected, as well as factors like the general state of health of the birds. Affected birds may show signs of respiratory disease, diarrhoea, nervous signs such as twisted neck or incoordination, swollen face and neck, or sudden death. Hens may stop laying, or the eggs may be mis-shapen. In severe outbreaks a high proportion of infected birds may die. Chickens are very susceptible; ducks and geese are less so, and birds of the parrot family may carry mild strains for many months without showing any signs of illness. Statutory action to control ND is taken only for strains which are classified as "virulent". It last occurred in England in pheasant in July 2005; the most recent previous outbreak was in chickens and turkeys in the UK in 1997. However, disease in pigeons occurs quite frequently caused by a particular strain of the virus known as paramyxovirus of pigeons. This strain does not usually spread to poultry, although outbreaks have occurred linked to feed contaminated by the faeces of infected pigeons. Most strains of ND virus can infect people, but do not cause serious disease and do not spread between them. The term "fowl pest" was previously used in legislation to refer to ND, although the distinction from Avian Influenza was not always clear.

2 Rationale for Government Intervention

2.1 Protection of Human Health

The virus does not pose a significant threat to human health, but may occasionally cause mild disease in people usually in the form of conjunctivitis.

2.2 Society

The disease can cause severe losses to the poultry and allied industries, but little effect on the wider society.

2.3 Trade

An outbreak of Newcastle Disease would lead to a ban on exports of live birds, eggs and poultry products. The length of the ban and the effect on the poultry and allied industries would depend on the extent of spread of the disease and the time taken to eradicate it.

2.4 Welfare

The disease can cause significant suffering in large numbers of birds.

3 Legislative Overview

ND is an OIE listed disease and is subject to statutory control in both EU and domestic legislation. Domestic legislation includes regulations to reduce the chance of importing disease, and provides powers to control and eradicate outbreaks of ND. It also prohibits the feeding of waste food to poultry.

4 Geographic Distribution

ND is normally absent in poultry in the UK, but 20 or more cases of "pigeon paramyxovirus" have been reported every year since 1983. Virulent Newcastle disease is enzootic, causing frequent epizootics, throughout Africa, Asia, Central America, parts of South America and Australia.

5 Risk of introduction / spread

Import controls on live birds and poultry products reduce risk of introduction to a low level. Residual risk from migrating wild birds or illegal imports. Moderate to high risk of further spread if disease is introduced.

6 Human health implications

The virus can cause mild human disease and may be a hazard to employees, but is unlikely to affect the general public.

7 GB Disease control strategy

a) Prevent the introduction of disease by statutory import controls on live birds, eggs and poultry products, and by prohibiting the feeding of waste food to poultry. b) Statutory notification of suspect disease followed by investigation by SVS. c) Statutory powers to control outbreaks by stamping out. If disease is confirmed, all susceptible birds on affected premises are culled, together with dangerous contacts on other premises. Movement restrictions in the surrounding area and action to re-establish disease free status are specified by EU legislation. d) Notified outbreaks of PMV-1 in pigeons are dealt with by movement controls, together with monitoring of any poultry on the premises. Infection of poultry with virulent pigeon PMV-1 is classed as Newcastle Disease. e) Statutory controls on laboratories working with the virus. f) Voluntary vaccination. Licensed vaccines are freely available for use in poultry and pigeons.

8 Current surveillance

a) Statutory notification of suspected disease. b) Ante-mortem and post-mortem inspection procedures at poultry abattoirs. c) Inspection / testing of imported birds when these are required to undergo quarantine

9 Costs

Compensation for birds slaughtered in the GB outbreak in 1997 amounted to around £4 million.

10 Stakeholder Impact

Severe impact on the poultry industry both from direct losses and effects on trade. Significant impact on government in implementing control measures and managing communication. Significant impact on pigeon fanciers.

11 Compensation

Compensation is payable at market value for healthy birds compulsorily slaughtered.

SUMMARY PROFILE FOR NEWCASTLE DISEASE VETERINARY AND EPIDEMIOLOGICAL INFORMATION

Source Data
ALEXANDER, D.J. (2003) Newcastle disease, Other Avian Paramyxoviruses and Pneumovirus infections: Newcastle disease. In Diseases of Poultry. Y.M. Saif [ed in chief] Iowa State University Press USA pp 64-87.
Anon (1998) Animal Health 1997: the report of the chief veterinary officer. HMSO, ISBN 0 11 243040 6

LEGISLATIVE AND ADMINISTRATIVE INFORMATION

Source Data
Council directive 92/66/EEC of 14 July 1992 introducing Community measures for the control of Newcastle disease. <i>Official Journal of the European Communities</i> , L260 : 1-20.
Diseases of Poultry (England) Order 2003, and similar Scotland, Wales and Northern Ireland Orders. The Avian Influenza and Newcastle Disease (England and Wales) Order 2003.
The Animal By-Products Regulations 2003 (and corresponding Scotland, Wales and Northern Ireland Regulations)
The Animals and Animal Products (Import and Export) (No 2) Regulations 2004