

SUMMARY PROFILE FOR Louping-ill

1 Description [1]

Louping-ill is a virus infection of the central nervous system, spread by the bite of ticks, that affects mainly sheep but can infect many species of domestic animals, wild animals, and some species of wild birds: it is an important disease of grouse. It also occasionally affects people, when it can cause fever or potentially serious infections of the brain (encephalitis) or spinal cord (poliomyelitis). The disease occurs regularly in certain areas throughout the British Isles where pastures are infested with the sheep tick (*Ixodes ricinus*). These are mainly hilly areas of rough upland grazing or moorland. Besides tick bites, the virus can be transmitted by contact with infected animal tissues, particularly if these are handled in a manner which generates aerosols. There is also a possibility of transmission by unpasteurised milk from viraemic animals. Louping-ill is also known as infectious ovine encephalomyelitis, and is one of a group of closely related viruses known as the tick-borne encephalitides, other flaviviruses do not occur in the UK.

2 Rationale for Government Intervention

2.1 Protection of Human Health [2]

The disease can affect people but human cases are very uncommon. Most of the recorded cases have occurred in laboratory or abattoir workers, and one case was fatal.

2.2 Society [3]

Minimal: localised impact on rural economy through occasional marked losses in sheep flocks and grouse. No other effects on society in general

2.3 Trade [4]

No impact on trade.

2.4 Welfare [5]

Clinical louping-ill is very likely to cause significant suffering in clinically affected animals over a period of days to weeks.

3 Legislative Overview [65]

There are no statutory controls for the disease.

4 Geographic Distribution [132]

Occurs annually in UK (42 incidents recorded in sheep in 2004) British Isles, Norway, Spain, Bulgaria, Turkey . Related viruses of the tick-borne encephalitis complex are present throughout Northern temperate latitudes.

5 Risk of introduction / spread [???

(at present, need to enter an assessment which is intended to be part of section 13)

6 Human health implications [61]

Although not usually regarded as a foodborne disease, it has been demonstrated experimentally that acutely infected sheep and goats can shed the virus in their milk. Transmission to humans is mainly vector-borne, but there is evidence of transmission by exposure to infected tissues or aerosols in abattoir and laboratory workers. Through the bite of an infected tick (*Ixodes ricinus*). or by exposure to infected tissues or aerosols. Serological surveys found evidence of exposure to Louping-ill virus in laboratory and abattoir workers. Clinical disease from Louping ill usually resembles the European form of tick-borne encephalitis. There is an initial illness lasting a few days with a moderately raised temperature, headache, muscle pains and "malaise", followed by a remission of about a week. Fever then recurs with signs of meningoencephalitis or paralytic poliomyelitis. Blood white cell counts are depressed in the initial phase and raised in the second. Convalescence in humans may be prolonged. In laboratory and slaughterhouse workers the disease may be limited to the first phase and mistaken for influenza. The disease is uncommon in people, although infection may occur without any illness. The geographic distribution among farm workers would be expected to mirror the locations, seasonality, or abundance of, infected ticks, but this does not hold true for cases among abattoir and laboratory workers.

7 GB Disease control strategy [134]

1. There are no statutory control measures. Disease control is voluntary and is the responsibility of the owner of the animals.
2. Current methods of on-farm control include use of acaricides and use of licensed inactivated vaccine against the virus
3. Depopulation of sheep for at least 2 years to break sheep-tick cycle of infection or use of vaccine for 3 consecutive years on all susceptible sheep rarely implemented

8 Current Surveillance

Investigation of cause of sudden death or neurological signs in sheep or other susceptible species submitted for diagnostic investigation.

9 Costs

No specific information available.

10 Stakeholder Impact [40]

Louping ill causes disease mainly in sheep and grouse in particular upland areas, is uncommon elsewhere or in other species, and very rarely causes human disease.

11 Compensation

None paid.

SUMMARY PROFILE FOR

VETERINARY AND EPIDEMIOLOGICAL INFORMATION

Source Data
(include most important sources of further info from section 22)
Diseases of Sheep (3 rd edition), ID Aitken & WB Martin (eds), Blackwell 2000. ISBN 0-632-05139-6
Her Majesty's Stationery Office: www.legislation.hmso.gov.uk

LEGISLATIVE AND ADMINISTRATIVE INFORMATION

Source Data
Include parent directives inc web address as well as domestic legislation – see section 5)