Equine Infectious Anaemia in Ireland

**Note:** Defra’s International Animal Health Division (IAHD) monitors outbreaks of specified disease around the world. Equine Infectious Anaemia (EIA) is among those diseases of concern.

**Disease Report**

The Republic of Ireland (RoI) reported two cases of equine infectious anaemia (EIA) on two stud farms in north-eastern part of the country on 16 June 2006. The authorities suspect that the introduction of new animals or animal products may have been implicated in these cases (OIE, 2006). The Republic of Ireland has never reported a case of equine infectious anaemia before this incident.

On 21 July 2006, RoI further informed Defra that subsequent investigations have revealed that more cases have been confirmed in already identified high-risk contact horses (Sheridan, 2006).

**Situation Assessment**

The last case of EIA in the UK was reported in 1976. EIA is a contagious viral disease that affects horses only. The disease may be manifested in an inapparent, acute or chronic form. While most of infected horses will die following the onset of an acute form within the few weeks following infection, those that survive will become lifelong carriers of the virus. Currently, there is no known effective treatment for EIA (MacAllister and Floyd, 2006). In most cases, the disease occurs sporadically (Cvetnic, 1983). In natural conditions, the disease is most likely transmitted by blood-sucking insects (e.g. stable flies, mosquitoes). Horses with acute clinical signs of the disease seem to play the most important epidemiological role as a source of the virus. The other most likely potential pathways for the transmission of the disease are contaminated needles, syringes, dental and tattooing equipment (MacAllister and Floyd, 2006) including contaminated biological preparations (Cvetnic, 1983).

At this stage, it would appear that the most likely pathway for the introduction of the disease from RoI to the UK is the movement of live horses that may have been in contact with the infected horses. On the basis of a limited information, it appears that the disease has been confined to a few risk compartments in the RoI where infected horses have been detected so far. As of 27 July 2006, RoI authorities have informed Defra that a total of 19 horses that may have been in contact with horses at the high risk compartments have arrived to the UK.
It remains uncertain to what extent the in-contact horses that have arrived in the UK may have been exposed to infection. At this stage it appears unlikely that the transmission of the disease by human action could have occurred given that horses identified as being at high risk are under control of the veterinary authorities of the RoI.

According to Issel and others (1990), the transmission by blood sucking insects during the exposure period would depend on the distance between the horses, the presence and abundance of biting insects and interruption to their blood meal while feeding on a donor horse during acute stage of the disease when the quantity of the virus in blood is considered to be sufficiently high to ensure that the disease is effectively transmitted to another horse.

**Conclusion**

Based on the disease report and recently received additional information, there is an increased likelihood of the introduction of EIA to the UK after the reported cases in the Republic of Ireland. However, this likelihood is difficult to quantify at this stage given that many uncertainties still remain. We continue to monitor developments and will re-assess the situation as new information becomes available.

**References**