Successful Eradication of Equine Infectious Anemia From Ireland During 2006

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Equine infectious anemia (EIA) has been successfully eradicated from Ireland. In the Meath cluster, infection was mainly transmitted iatrogenically. In the Kildare cluster (a veterinary hospital), transmission to 13 horses was linked with a narrow infection window but cannot be explained by commonly described methods of transmission. Authors’ addresses: Centre for Veterinary Epidemiology and Risk Analysis, University College Dublin, Belfield, Dublin 4, Ireland (More, Aznar, Clegg); Department of Agriculture, Fisheries and Food in Maynooth, Co. Kildare (Brangan, Flaherty), Dublin 2, Co. Dublin (Bailey), Navan, Co. Meath (Larkin), Naas, Co. Kildare (Myers), and Central Veterinary Research Laboratory, Backweston Campus, Celbridge, Co. Kildare (Lenihan), Ireland; and Irish Equine Centre, Naas, Co. Kildare, Ireland (Leadon); e-mail: simon.more@ucd.ie. © 2008 AAEP.

1. Introduction
Equine infectious anemia (EIA) was confirmed in Ireland on 15 June 2006. This was the first outbreak of this disease in Ireland with evidence of transmission of infection. We present the results of a detailed epidemiological study to determine the source of infection and modes of transmission.

2. Materials and Methods
Data were collected on the timing and location of all events that might be relevant to the introduction and transmission of infection. We developed detailed timelines, maps, and cluster diagrams to evaluate temporal and spatial relationships. These were constructed for each of the 38 cases for each of the two clusters (Meath and Kildare) and for the overall outbreak.

3. Results
The probable source of introduction was hyperimmune plasma, imported without license. Within the Meath cluster (21 cases), infection was spread iatrogenically (14 cases), by close contact (4 cases), and by insects (3 cases). In the Kildare cluster (17 cases, linked to a veterinary hospital), transmission to 13 secondary cases was linked to a narrow infection window in association with a hospitalized primary case. In some horses, the periods from infection to both AGID and ELISA seroconversion were much longer than previously reported.
4. Discussion
EIA has been successfully eradicated from Ireland. Veterinarians contributed to the spread of infection within the Meath cluster. In the Kildare cluster, at this stage we can only speculate as to the mechanism of transfer of infection from the primary case to 13 secondary cases.