

20 DECEMBER 2007

## EQUINE INFLUENZA

### CHIEF VETERINARY OFFICER COMMUNICATION # 19

## FOR ALL VETERINARIANS

### Update on NSW Equine Influenza Control and Eradication Program

I want to take this opportunity to thank you for your involvement in the Equine Influenza (EI) control and eradication campaign and to update you on what we have achieved and where we are heading in the coming months. Potential cases of EI were first reported on 24 August 2007 at the Centennial Park Equestrian Centre. The resulting control and eradication campaign has been an enormous challenge.

The control and eradication program has limited disease spread by the dual strategy of limiting movements of horses and horse products, and creating an immune population of horses through the strategic use of vaccine. Vaccination has been undertaken to establish buffers at: Mittagong, Gloucester, Wellington, Dubbo, Armidale, Forbes/Parkes, Mudgee, Temora, Woodenbong, Gunnedah, Narrabri, Scone, Grenfell/Young, Tenterfield and the Blue Mountains. In these vaccination buffers a total of 50,065 doses of vaccine have now been administered, with second round vaccinations completed on 20,927 horses. Within the high prevalence purple zone our aim is to have at least 80-85% of horses immune (either through natural infection or vaccination). 11,806 horses have received first vaccinations and more than 4,655 have received their second round vaccination. Surveillance testing (PCR and ELISA) is being undertaken in all zones on suspect clinical cases, dangerous contact premises, for clearance of IPs, in vaccination buffers and for zone progression. To date over 39,640 ELISA, 1,073 HI and 33,386 individual PCR tests have been performed.

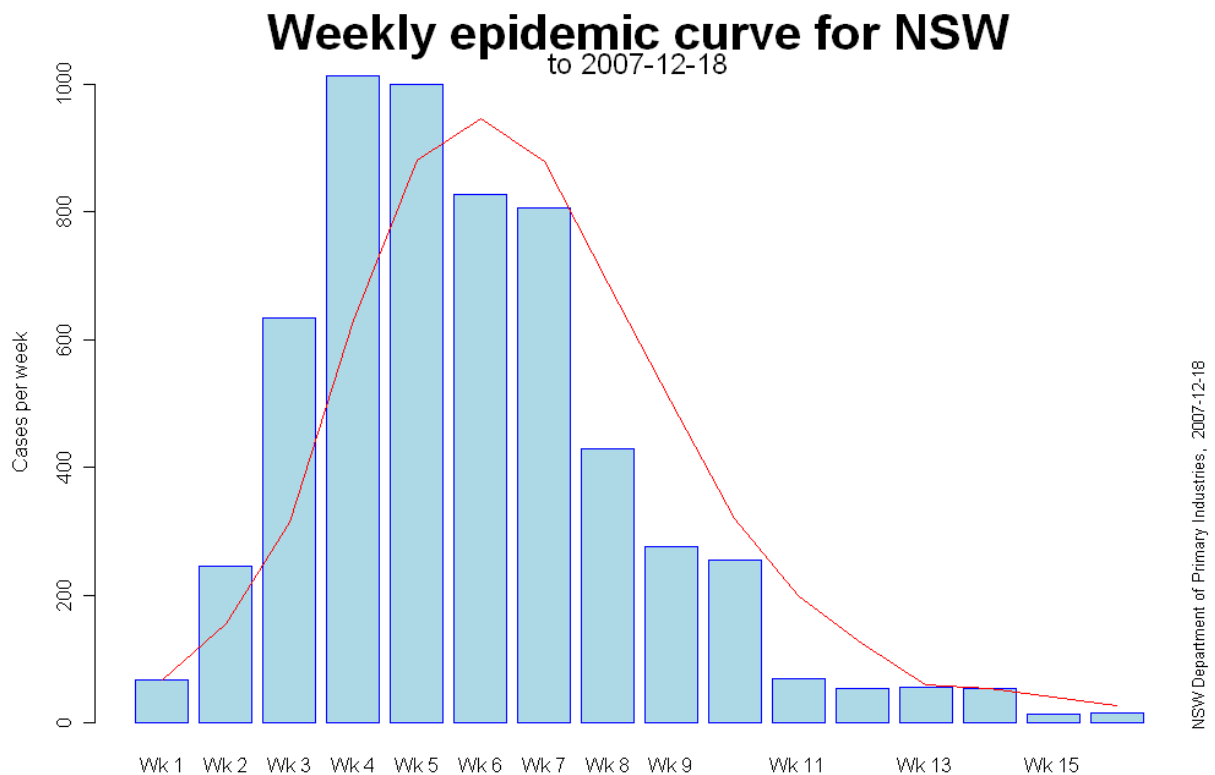
### Epidemiological update

In the weeks following the initial diagnosis EI spread to infect more than 44,000 horses on about 5,800 premises. More than 75% of previously infected premises (IP's) have now been resolved with many more premises being reviewed and considered for resolution. The total number of IPs as at 19 December was 1,413.

The number of IP's initially rose sharply, peaking at 250 per day and stabilising at around 100 per day in early October, and then declined to about 50 per day from mid October. A further sharp decline to less than 20 new cases per day occurred in early November. This decline appears to be due to the warmer weather during this period and decreasing numbers of susceptible horses (from the combined effects of natural infection and vaccination). There may also be some under-reporting, particularly in the high-prevalence Purple Zone. This downward trend has accelerated in December with only 4 new cases detected in the last week (see Figure 1).

New cases are continuing to occur sporadically in the Purple zone and in outlying clusters of the remaining Red Zones. Most of the remaining IP's are more than 3 weeks old and are unlikely to be actively spreading infection. Vaccination buffer zones are being implemented immediately around new clusters, with vaccination teams working from the outside in, usually starting about 15-20 km from the nearest IP. Vaccination and zone boundaries are being based on parishes within LGAs.

**Figure 1: Epidemic curve for EI infection in NSW, by date declared IP, up to 18 December 2007**  
(red line = 7-day rolling average)

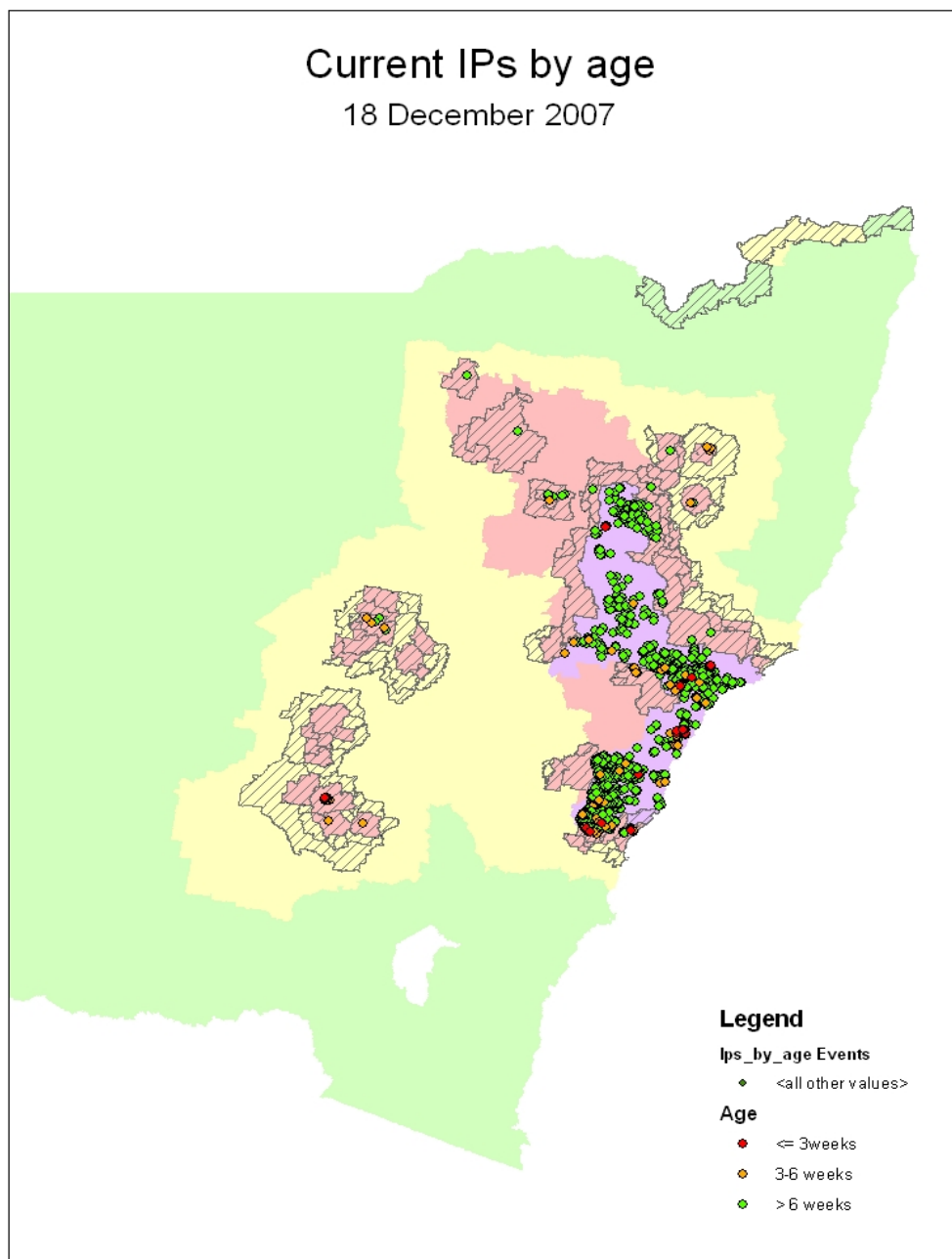


## Zoning and movements

The introduction of Zoning for EI on 21 September 2007 allowed a significant return to horse movements and the resumption of events in large areas of the state, including: holding registered events and movements in the Green Zone using Travelling Horse Statements, freedom to move and hold events within the Purple Zone and a resumption of CVO approved events including race meetings in the Amber Zone. Progressive changes in zone status have seen much of the state reclassified to green. The intention is to progressively confine the disease to smaller parts of the Red and Purple Zone. As the disease is eliminated it is planned that the Purple Zone will be rezoned to Amber and then to Green. We are currently on target to eliminate the disease thanks to everyone's efforts.

However, as the risk associated with horse or fomite movement decrease, the potential impact of a new disease outbreak also rises. New nationally agreed protocols aim to facilitate further movements while continuing to provide protection from the spread of infection.

**Figure 2: Map showing the current EI protection plan zone boundaries and the location of infected and resolved premises within NSW as at 18 December.**



## Conclusion

In conclusion I want to take this opportunity to thank each and every one of you for your ongoing involvement and commitment to this program. Your continual effort in order to eradicate Equine Influenza is greatly appreciated. Finally, I wish you and your families an enjoyable, safe and relaxing Christmas and a happy New Year.

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (20 December 2007). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.