

Figure 2: Hypothetical Immune Response to PZP Vaccine in Five PMWHR Yearling Mares



- All yearling mares were born on the Pryors in 2000.
- PZP booster shots were last given in Sept 2002 for all mares.
- Captive mare research shows that infertility is conferred as long as antibody titer response stays at or above 60% (Lui et al, 1989).
- Antibody titer levels and decay rate are likely slower, than expected, in healthy young mares who initially respond well to the PZP vaccine (Kirkpatrick and Turner (2002).
- Reversibility studies with booster doses show an average of 3.2 years between the last booster shot and first foal production (Turner and Kirkpatrick, 2002).
- It was not expected that any of these five mares would foal prior to 2005.
- Antibody titer levels should be low enough in 2005 to allow conception with first foal production in 2006.
- No additional young mares are selected for treatment with PZP on the Pryors at this time.

Figure 3: Patterns of Foal Loss PMWHR 1999-2005

As of 7/27/05

