VACCINATION FOR PIGEON PARAMYXOVIRUS PROTECTION

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VACCINATION IS THE ONLY PROTECTION

- When the disease entered into Australia, it was found that the killed vaccine against Newcastle disease in chickens was effective in producing antibodies
- The recommendation to vaccinate ALL birds was made by the government
- Without vaccination, you risk losing 80-90% of the birds
- There is no treatment against this disease
- Supportive care will help:
 - Electrolytes in the water
 - Resting birds from flight or racing



VACCINATION PROGRAMS

- There are three vaccination programs
- Vaccination in:
 - Outbreak situations on the loft or state level
 - Annual prevention program
 - New bird arrivals to the loft



VACCINATION IN OUTBREAK

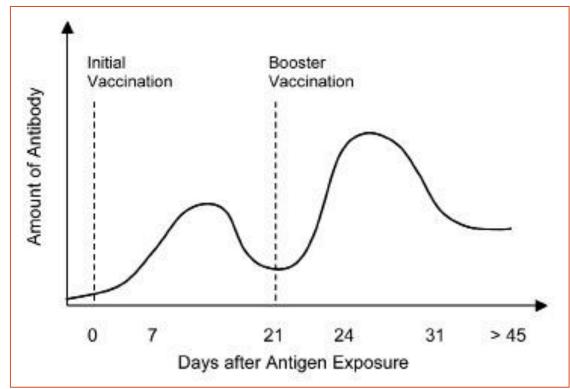
VACCINATION IN THE FACE OF AN OUTBREAK, WHICH IS NOW IN SA

- Vaccinate ALL birds
- = adults
- = youngsters
- = any chick still on the nest
- Vaccination reduces the amount of virus shed by the bird once it gets infected
- This protects the birds around it
- SC injection of killed vaccine is welltolerated by young birds





WHY IS THE BOOSTER 28 DAYS LATER IMPORTANT?



It reminds the body to make more antibodies to the disease





PREVENTION BY VACCINATION

- Vaccinate prior to breeding season, before pairing up
- Boost the immune system to provide immunity going into egg
- Time of close contact = increased risk of transmission
- Breeding is stressful may reduce immune system





VACCINATION FOR PREVENTION

• The goal is to help the young bird to survive infection

- Vaccination of breeding birds BEFORE THE BREEDING SEASON
- I = high immunity when laying eggs
- = immunity given to young through the egg
- This immunity declines over the first two weeks of life.
- Time of susceptibility = 14 21 days
- First vaccine could be given in this time ie as early as 14days but no later than 21days





DEVELOPING IMMUNITY



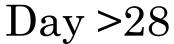
Day 0 - 14

Maternal antibodies present from hen

Interfere with vaccination Day 14 - 28

Maternal antibodies fall

Time of maximum susceptibility



Young bird begins to make own antibodies



CAN WE VACCINATE BIRDS THAT YOUNG?

- Compare the proposed vaccination dates of 14-21 days to the vaccines received by commercial layer chicken. The Newcastle vaccine given is different to that used in pigeons.
- There is no reason to delay vaccination
 - Day 1 Marek's disease, infectious bronchitis, Newcastle disease
 - Day 7 Newcastle disease, reovirus
 - Day 14 Infectious bursal disease
 - Day 21 Newcastle, fowl pox,
 - Day 28 Avian influenza, infectious bursal disease





VACCINATION OF THE NEW BIRD

- Have you seen documentation that the bird is vaccinated?
- IF THERE IS ANY DOUBT...
- 6 week quarantine with vaccination on arrival and 28 days later and so mixing with birds 2 weeks after the second vaccination





FAILURES OF VACCINATION



- Loss of COLD CHAIN CONTROL will inactivate the vaccine
 - Vaccine is left out on a bench for longer than 10 minutes
 - Leave vaccine in fridge and decant into dispenser using a clean needle and syringe
 - Vaccine is not transported from purchase to loft in a chiller at 4°C
 - Vaccine is not stored in a refrigerator at 4^oC
 - Measure with a thermometer
 - Many household fridges are not delivering 4C due to faulty seals or settings

