

WHAT IS GUMBORO DISEASE?





Gumboro Disease is a viral disease seen in young chickens worldwide, caused by Infectious Bursal Disease (IBD) Virus. The main target organ of this virus is the Bursa of Fabricius located just inside the cloaca of the chicken. This organ plays a vital role in the development of the chicken's immune system.

Gumboro Disease may cause clinical or subclinical disease. Chickens with clinical disease may show:

- 1  Depression and morbidity
- 2  Watery diarrhoea
- 3  Increased mortality

WHAT CAN WE SEE IN CHICKENS INFECTED WITH INFECTIOUS BURSAL DISEASE?

WHAT CAN BE SEEN IN CHICKENS THAT HAVE DIED FROM INFECTIOUS BURSAL DISEASE?

- 4  Haemorrhages on the thigh muscle
- 5  Haemorrhage and swelling of the Bursa of Fabricius
- 6  Pale kidneys as a result of dehydration
- 7  Atrophic, small bursa compared to a normal bursa



CHICKENS WITH SUBCLINICAL GUMBORO DISEASE INFECTION:

- Do not necessarily show signs of disease at the time of infection
- May have significant damage done to the immune system because of the subclinical infection
- Are sensitive to secondary infection by other bacteria and viruses due to the damage done to the immune system
- May have poor feed conversion efficiency and take longer to reach market weight
- May not respond well to subsequent vaccinations due to the immunosuppression caused by the subclinical infection.



WHAT ACTION IS REQUIRED TO TRY AND PREVENT GUMBORO DISEASE ON YOUR FARM?

Biosecurity



- Thorough clean out and disinfection between flocks using the correct chemicals at the correct concentration for the correct amount of time.



Vaccination

- **Live vaccines** used in broilers and long-live birds
- **Recombinant or vector vaccines** administered in the hatchery for convenience without potential interference from maternal antibodies
- **Inactivated vaccines** for broiler breeders for long term protection and early protection of their chicks.





- **Purchase high quality chicks from a reputable hatchery where day old IBD vaccinations are administered.**

Photo credit:
1, 4, 5 - Professor Niel Duncan
2 - Shutterstock
3, 6 - Dr Claire Botha

SUGGESTED BROILER VACCINATION PROGRAMS

VECTORED VACCINES

- | | |
|---|---|
|  |  |
| Hatchery
Vectored IBD vaccine +/-
Live IBD vaccine
Mild | Live IBD vaccine
10 - 12 days
Intermediate plus
(Only in high challenge areas) |

LIVE VACCINES ONLY HIGH CHALLENGE


- | | |
|---|---|
|  |  |
| Live IBD vaccine
10 days
Intermediate plus | Live IBD vaccine
16 days
Intermediate plus |

LIVE VACCINES ONLY LOW CHALLENGE



- | | |
|---|---|
|  |  |
| Live IBD vaccine
14 days
Intermediate | Live IBD vaccine
18 days
Intermediate |

SUGGESTED LAYER VACCINATION PROGRAMS

LOW CHALLENGE

- | | |
|---|---|
|  |  |
| Hatchery
Vectored IBD vaccine +/-
Live IBD vaccine
Mild | Hatchery
Vectored IBD vaccine +/-
Live IBD vaccine
Mild |

HIGH CHALLENGE

- | | |
|---|--|
|  |  |
| Live IBD vaccine
21 days
Intermediate plus | Live IBD vaccine
28 days
Intermediate plus
(Only if no vector administered in hatchery) |