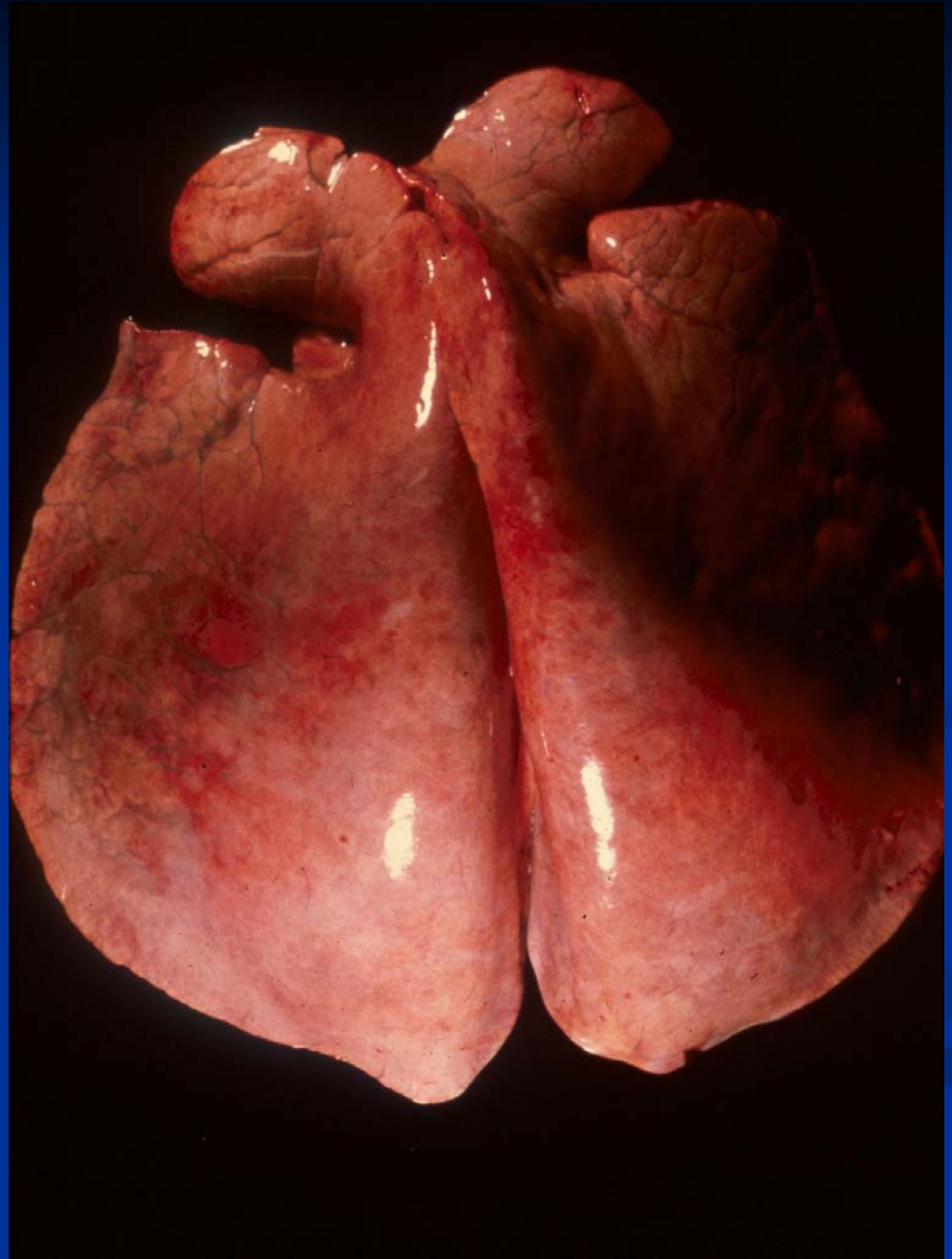


# Adenovirus

- Generally immunosuppressed/deficient foals e.g. Arabs with CID
- Low morbidity, low mortality
- Pathology
  - Bronchointerstitial pneumonia
  - Intranuclear inclusion bodies
  - Often secondary infection – bacterial, *P. carinii*

Adenovirus  
and *P. carinii* -  
Arabian Foal -  
Interstitial  
pneumonia



# Hendra Virus

- Family Paramyxoviridae, subfamily Pneumovirinae, a henipavirus as is Nipah virus
- Transmission by fruit bats/flying foxes
- Zoonotic
- Australia
- Pathology
  - Severe pulmonary edema
  - Fibrinoid necrotizing vasculitis – lung and kidney
  - Multinucleated syncytial cells – endothelial cells
- Diagnosis - IHC

# African Horse Sickness

- Orbivirus, vector borne (Culicoides)
- Africa, Middle East, India, Pakistan
- High mortality (up to 95%)
- Forms
  - Pulmonary, cardiac, mixed and mild
- Virus infects endothelial cells

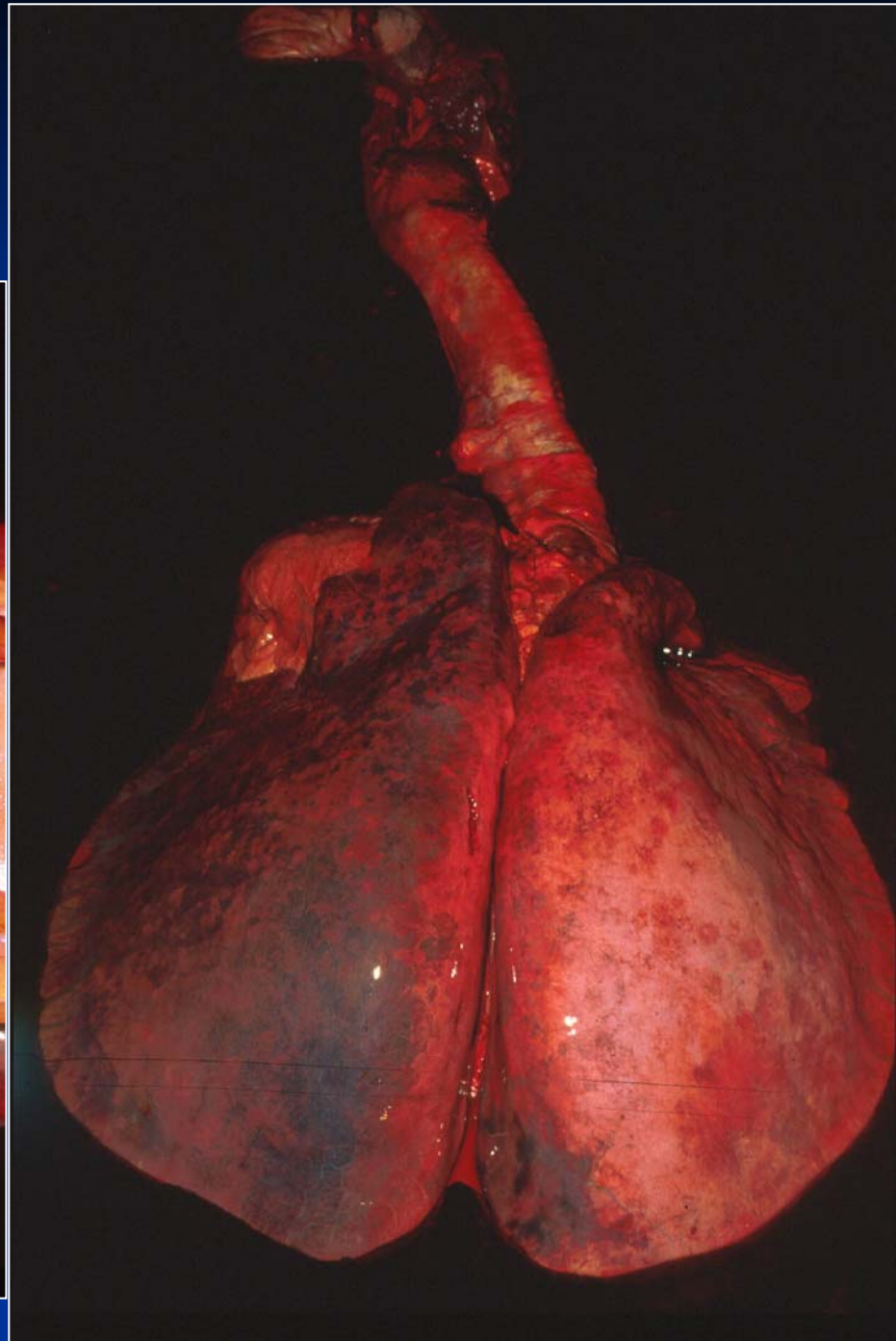
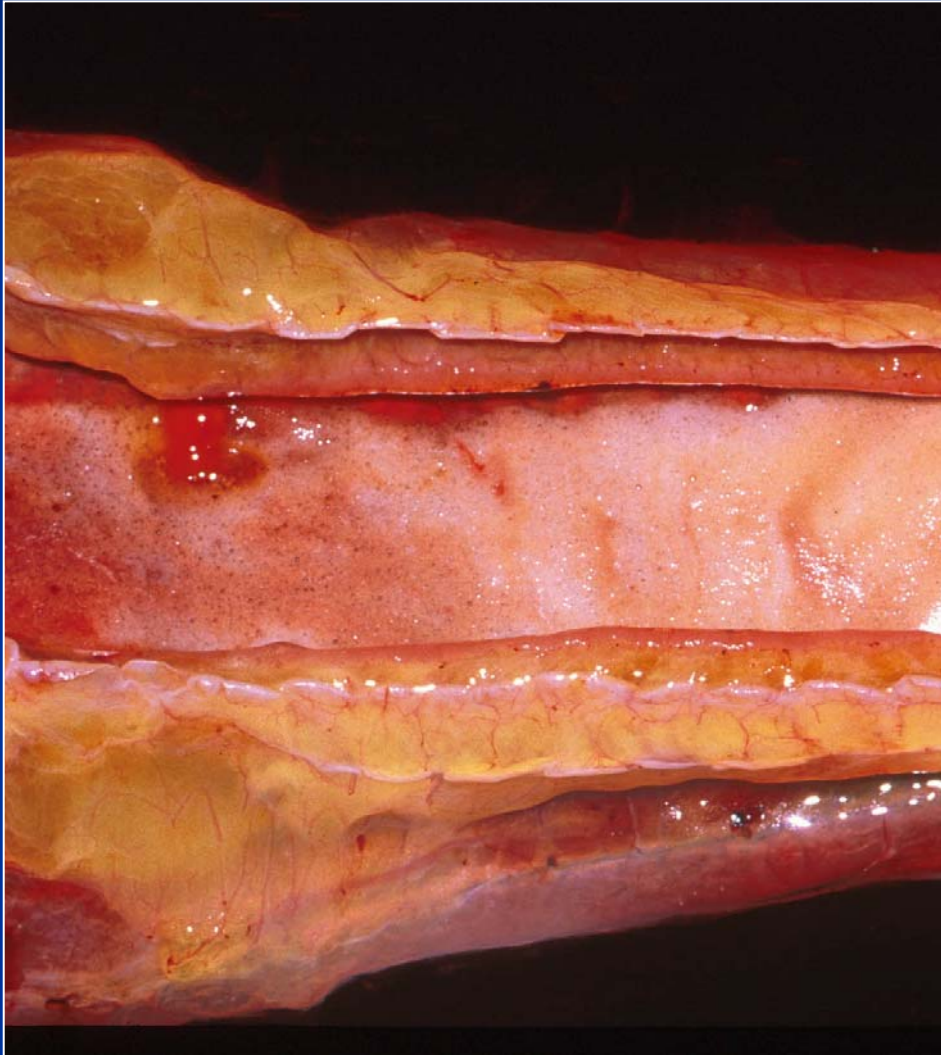
# African Horse Sickness

- Pulmonary form
  - Severe respiratory distress and rapid death
  - Massive pulmonary edema
- Cardiac form
  - Cardiac failure with head edema
- Diagnosis – IHC

# African Horse Sickness



# African Horse Fever



# Bacterial Bronchopneumonia

- Generally young, stressed animals
- Predisposition
  - Stress e.g. shipping
  - Viral infection
  - Immune deficiency/suppression



# Bronchopneumonia

- Etiology
  - *Rhodococcus equi* (*Corynebacterium equi*)
  - Other
    - Chlamydophila
    - Mycobacterium spp
- Opportunistic infections
  - *Streptococcus spp*
  - *Strep zooepidemicus* – shipping fever
  - *E. coli*
  - *Klebsiella pneumoniae*

# Bronchopneumonia

- Common sequelae
  - Pleuritis
  - Abscesses
  - Sequestra