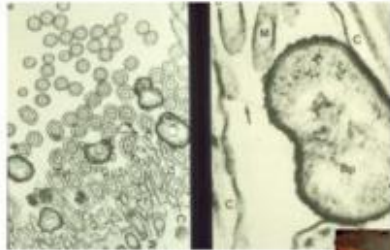
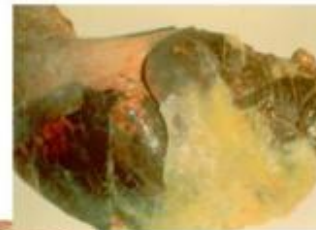


1. “Successful” Respiratory Pathogens

“Successful” Respiratory Pathogens



*Bordatella
bronchiseptica*



*Mannheimia
haemolytica*

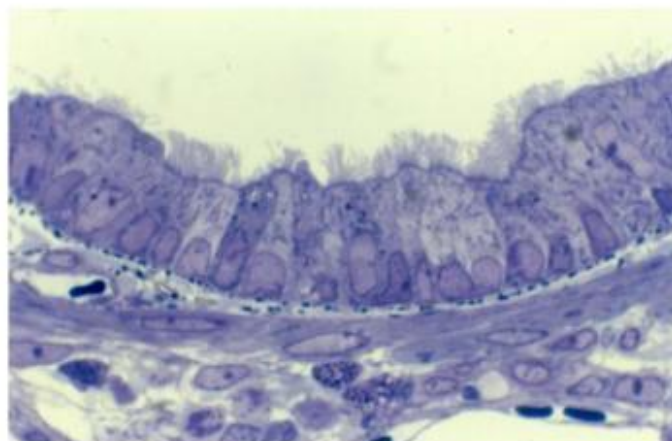


Rhodococcus equi

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2. Protective Respiratory Epithelium

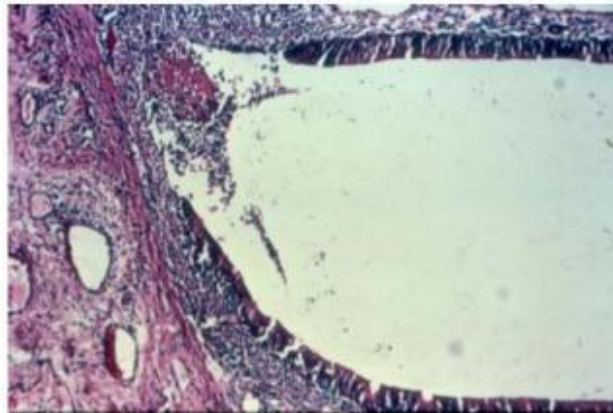
Protective Respiratory Epithelium



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3. Viral-induced Epithelial Injury

Viral-induced Epithelial Injury



Feline Viral Rhinotracheitis

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4. Viral Respiratory Pathogens

Viral Respiratory Pathogens

- Canine: canine parainfluenza virus, canine adenovirus-2, canine distemper virus
- Feline: feline herpesvirus (FVR), calicivirus
- Bovine: parainfluenza-3, IBR, bovine respiratory syncytial virus

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5. Viral Respiratory Pathogens

Viral Respiratory Pathogens

- Equine: equine herpesvirus I (rhinopneumonitis), equine type A influenza virus
- Porcine: porcine circovirus type 2, porcine respiratory corona virus, swine influenza virus

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6. Bacterial Respiratory Pathogens

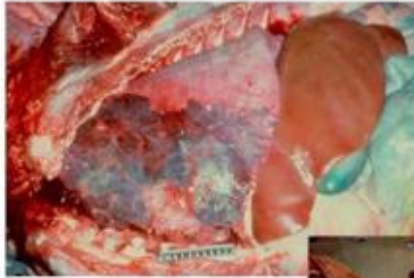
Bacterial Respiratory Pathogens

- Canine/feline: *Pseudomonas* sp., *Klebsiella*
- Equine: *Streptococcus zooepidemicus*, *E. coli*, *Rhodococcus equi*
- Bovine: *Mannheimia haemolytica*, *Pasteurella multocida*
- Small Ruminant: *Pasteurella* sp.
- Porcine: *Haemophilus parasuis*, *Actinobacillus pleuropneumoniae*, *Streptococcus suis*, *Bordetella bronchiseptica*

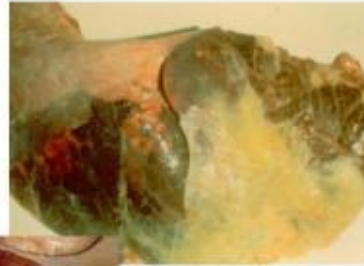
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7. Pneumonia

Pneumonia



Suppurative



Fibrinous

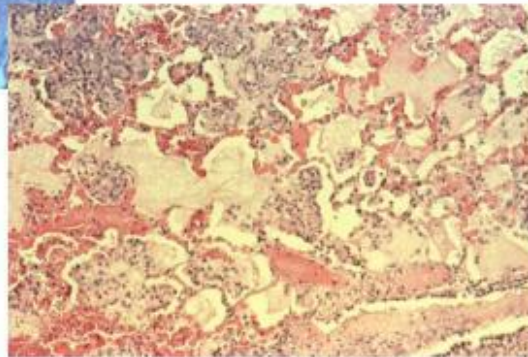
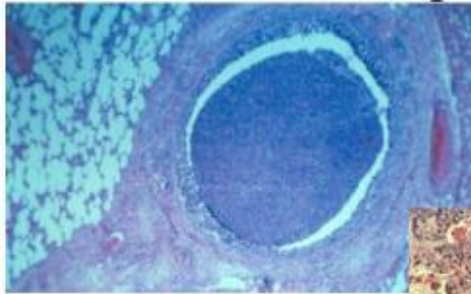


Granulomatous

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8. Bronchopneumonia

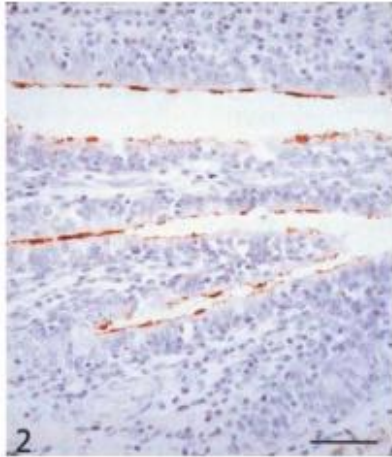
Bronchopneumonia



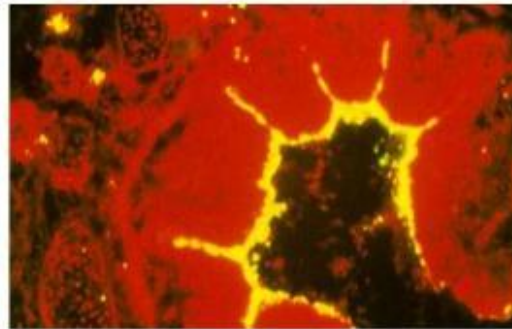
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9. Mycoplasma Ciliary Attachment

Mycoplasma Ciliary Attachment



Immunocytochemistry

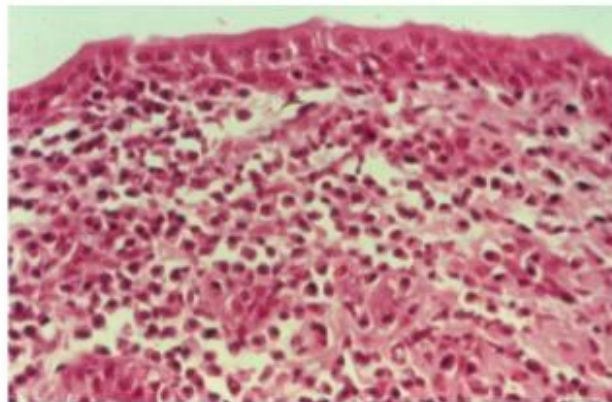


Fluorescent antibody

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10. Poultry: Mycoplasma gallisepticum

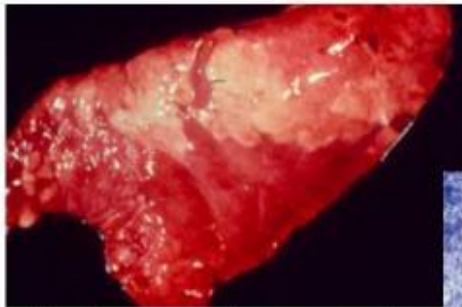
Poultry: *Mycoplasma gallisepticum*



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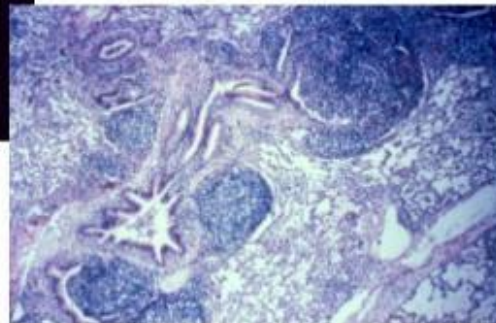
11. Swine: *Mycoplasma hyopneumoniae*

Swine: *Mycoplasma hyopneumoniae*



Porcine enzootic pneumonia

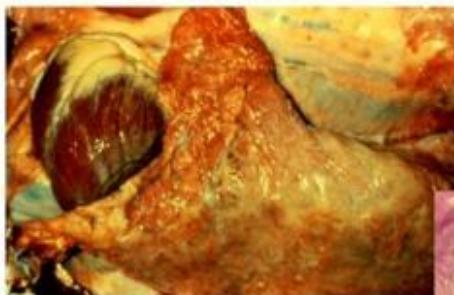
BALT hyperplasia



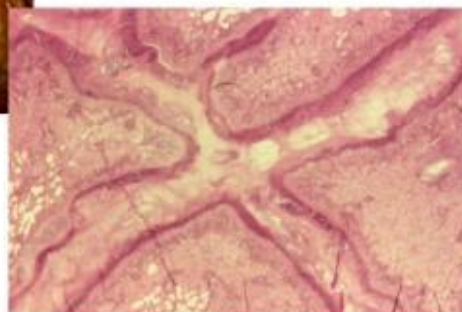
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12. Bovine: *Mycoplasma mycoides/mycoides*

Bovine: *Mycoplasma mycoides/mycoides*



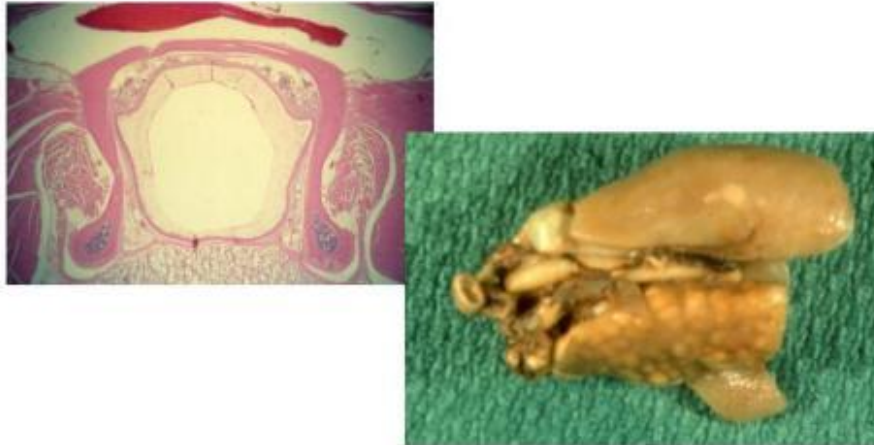
Contagious Bovine
Pleuropneumonia



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13. Rodents: *Mycoplasma pulmonis*

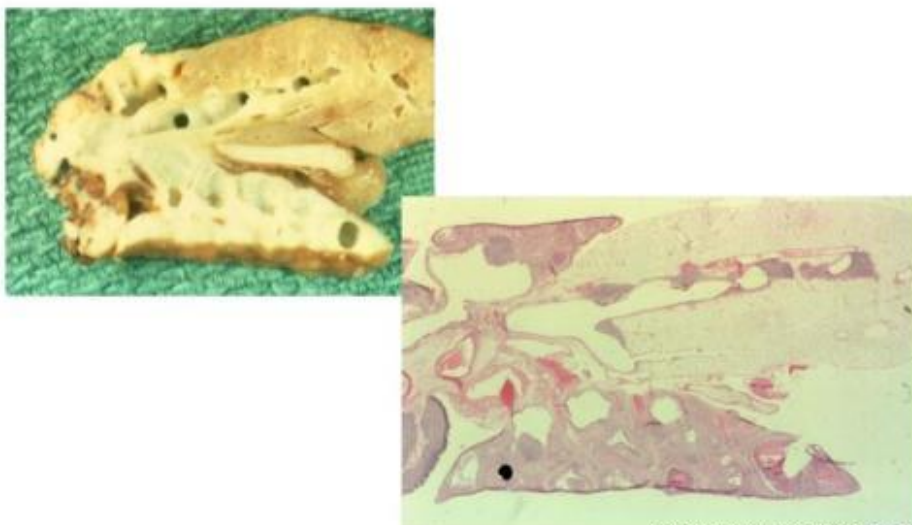
Rodents: *Mycoplasma pulmonis*



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14. Rodents: *Mycoplasma pulmonis*

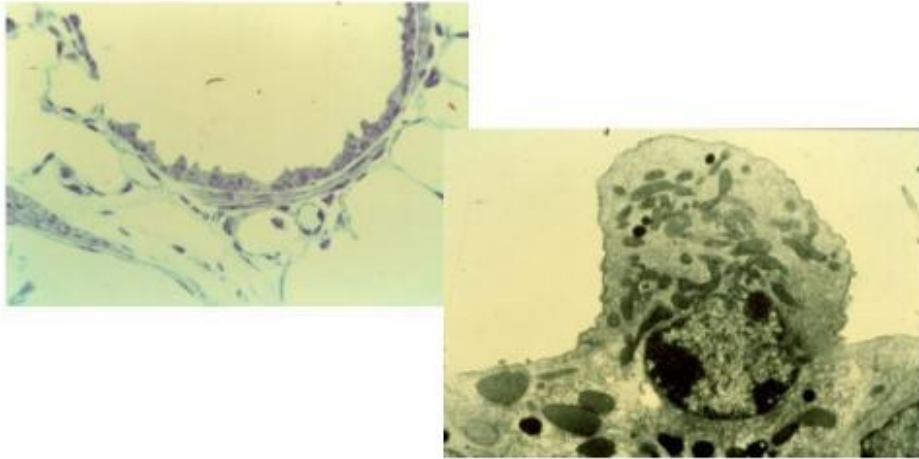
Rodents: *Mycoplasma pulmonis*



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15. Clara Cells

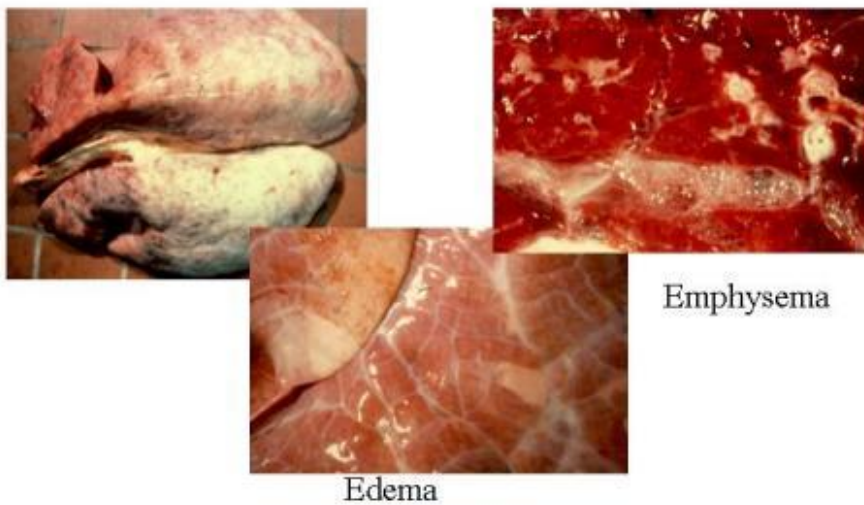
Clara Cells



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16. Bovine 3Methyl Indole Toxicity

Bovine 3Methyl Indole Toxicity

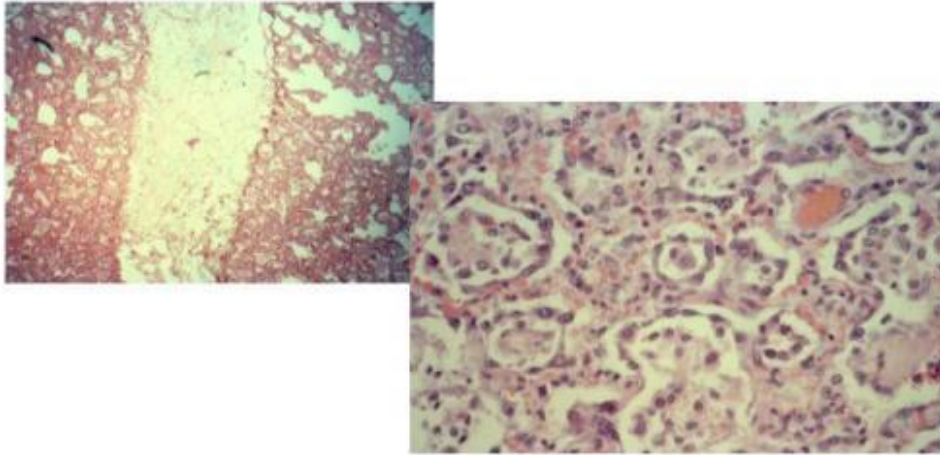


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17.

Bovine 3MI Toxicity

Bovine 3MI Toxicity



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