

Viral Respiratory Diseases

- Rare, expect as part of systemic disease
- **Rabbit Calicivirus** - hemorrhages in lung from coagulopathy (tracheal hyperemia).
- **Myxomatosis** – poxvirus – can affect lung
- **Rabbit pox** - orthopoxvirus
- Papular lesions in oropharynx and respiratory tract, focal necrosis with leukocyte infiltration.
- **Herpesvirus sylvilagus**
- Interstitial pneumonia with prominent lymphoid hyperplasia in the lung.

Bacterial Respiratory Diseases

- *Pasteurella multocida*
- *Bordetella bronchiseptica*
- *Staphylococcus aureus*
- *Klebsiella pneumoniae*
- All cause similar lesions
- CAR associated bacillus – different antigenically from that in mice and rats

Pasteurella multocida

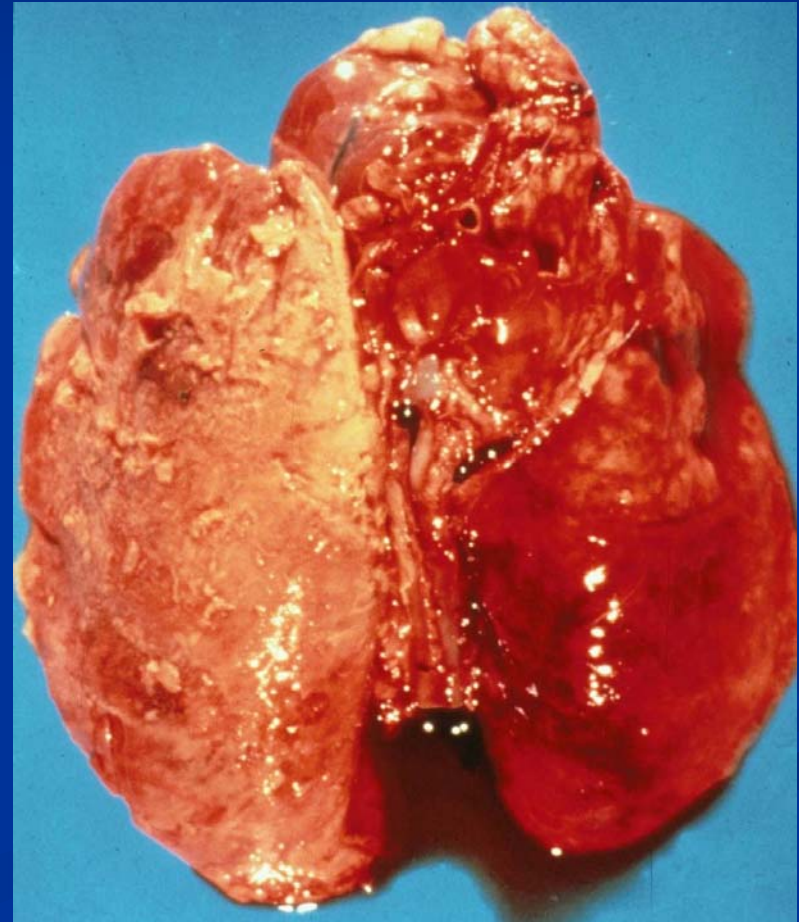
- Major disease in rabbits - incidence up to 50% with up to 70% harboring organism in URT and tympanic bullae.
- Lesions: chronic rhinitis (snuffles) and bronchopneumonia.
- Transmitted by direct contact with nasal or vaginal secretions. Fomites may be involved
- Predisposing factors: ammonia, pregnancy, concomitant disease
- Spread: middle ear via the eustachian tube; hematogenously; local extension; and to the genital tract by venereal spread

Pasteurella multocida—Rabbit
Suppurative Rhinitis - Snuffles



Pasteurella multocida—Rabbit

- Fibrinous pleuritis
- Bronchopneumonia



Staphylococcus aureus

- Septicemia and purulent bronchopneumonia.
Most strains hemolytic, coagulase - +ve, type C
- Transmitted by direct contact via aerosol.
Umbilical vessels and skin abrasions possible entry sites.
- Spreads hematogenously or via local extension.
- Pneumonia often very suppurative with focal necrotizing lesions with colonies of cocci.

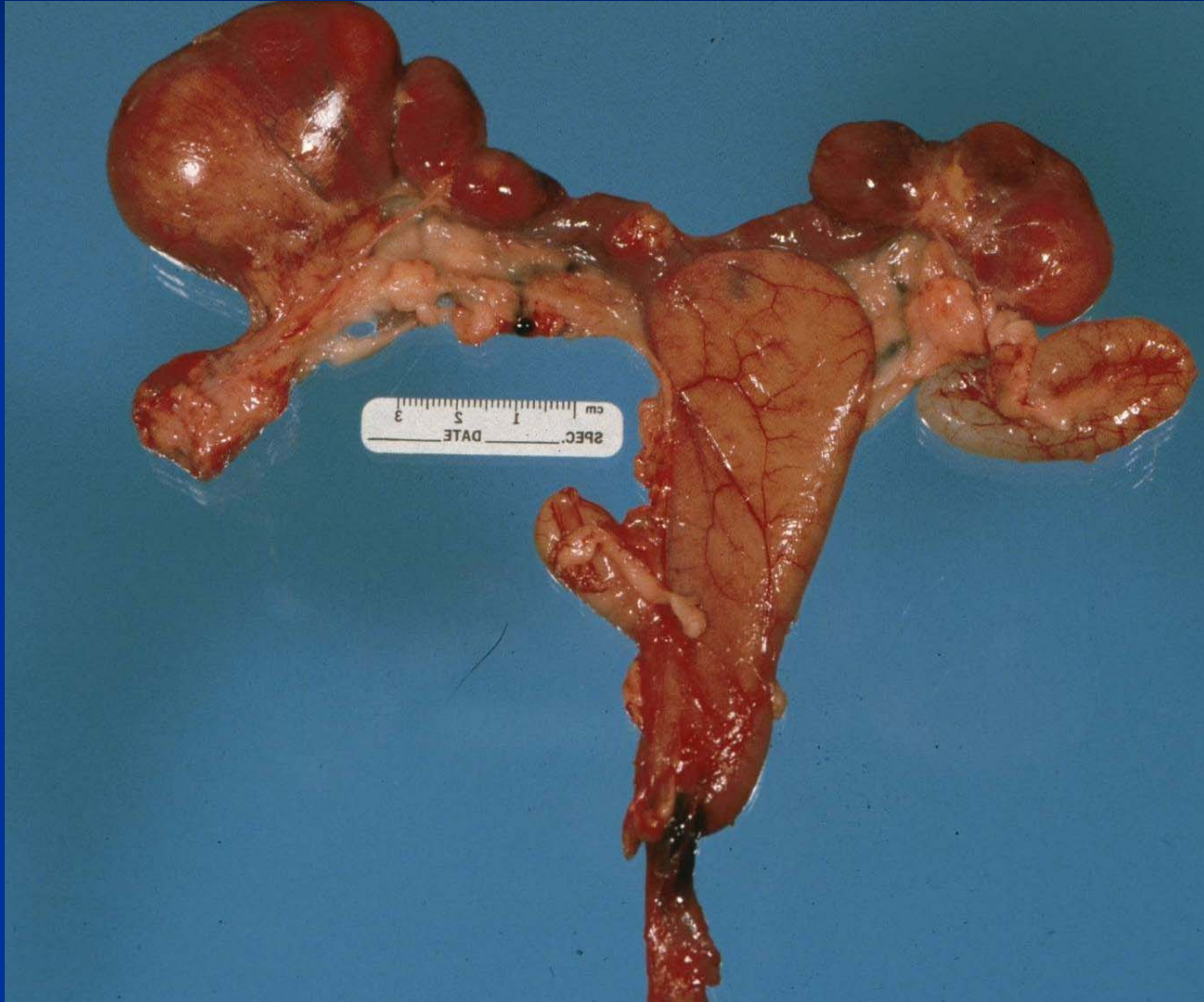
Bordetella bronchiseptica

- Often with *Pasteurella multocida* - role in disease not established.
- Can be recovered from the upper and lower respiratory tract of healthy rabbits.
- Chronic bronchointerstitial pneumonia with perivascular and peribronchial accumulations of lymphocytes, plasma cells, and macrophages.

Pulmonary Neoplasia

- Rabbits extremely susceptible to uterine carcinoma which can metastasize to the lungs
- Up to 80% by 5 years of age

Uterine Adenocarcinoma--Rabbit



Pulmonary Metastasis from Uterine Adenocarcinoma

