## Rabies in Virginia – Penelope Smelsor

- a. Overview
  - i. Bullet shaped
  - ii. RNA
  - iii. Variants in US
    - 1. Bat
    - 2. Raccoon
    - 3. Fox
    - 4. Skunk
  - iv. Spreads from the bite of an infected animal
    - 1. Saliva
    - 2. Brain or nervous tissue
- b. Mode of action
  - i. Cycle
    - 1. Travels along nerves
    - 2. Enters brain
    - 3. Enters salivary glands
  - ii. Time between bite and symptoms depend on where on body bite occurred
  - iii. Symptoms
    - 1. Flu-like
    - 2. Hallucinations
    - 3. Insomnia
    - 4. Disorientation
    - 5. Hypersalivation
    - 6. Difficulty swallowing
- c. Human cases
  - i. About 3 cases per year in US
  - ii. Bat variant accounts for ~70% of cases
  - iii. Almost always fatal
- d. Virginia
  - i. 1998
    - 1. Bat variant
    - 2. Inmate
  - ii. 2003
    - 1. Northern VA
    - 2. Raccoon variant
  - iii. 2009
    - 1. Imported
    - 2. Dog variant
- e. Prevention
  - i. Animals must be vaccinated
  - ii. Bites get reported to health department

- 1. Human
  - a. Locate animal
  - b. Place on 10 day quarantine
- 2. Animal exposure
  - a. 45 day quarantine vaccinated
  - b. 6 month quarantine unvaccinated
- 3. Testing only done with possible exposure
  - a. Report about 500 animals per year in Norfolk
  - b. Average 1-3 positives per year in Norfolk
- iii. Oral Rabies Vaccination (ORV) Project
  - 1. Control rabies in raccoon population
  - 2. Prevent raccoon rabies from spreading west