**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