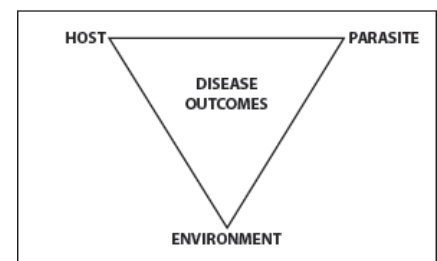


Washington Disease Research Assignment

You and your team of three will research one disease in a Washington wildlife species. You will put together a 10-minute presentation of the species and will share your findings with the class.

1. What is the name of the disease you are choosing to study? What type of pathogen is it? Scientific name (if biotic pathogen).
2. What species does the disease impact?
3. How is the disease transmitted between individuals? Populations?
4. Is it found in different species (for example, white-nose syndrome is found in many species of bats, but not all.)?
5. Describe how the disease impacts the animal. What are its impacts to reproduction? Mortality rate?
6. Describe the lifecycle of the disease.
7. What is the treatment for the disease? If there is none, how is the disease being managed?
8. The severity of disease outbreaks is often influenced by the environment (“the disease triangle”). In nature, the environment is constantly changing, and humans sometimes play a role in these changes. Pick one environmental factor you have an interest in (such as temperature, habitat destruction, season, pollution, rain levels, etc.) and use it to address the following: a. Before doing any research, write a specific hypothesis and prediction about how you think this environmental factor will influence disease levels. A hypothesis is the biological explanation for your prediction, and a prediction explains what you think will happen based on your hypothesis. For example: I predict that influenza will be more severe in winter because the flu virus is more stable in cold air. For your hypothesis and prediction, you may use the same framework as the example: “I predict ABC will increase/decrease disease, because XYZ.” *

FIGURE 1: Disease triangle model



9. Based on your research, make a conclusion about your hypothesis and prediction. Did your research support or contradict what you presented? Why? *

10. How might/does this disease impact ecosystem services for people living in Washington?

**Questions adapted from Perdue University Disease Ecology Lesson 1*