

Lab: The Epidemiologic Tradition

INSTRUCTIONS

Read the article by Terris (1979) and then answer the questions below. These are essay questions. There is more than one right “answer.”

REFERENCE

Terris, M. (1979). The epidemiologic tradition. The Wade Hampton Frost Lecture. *Public Health Reports*, 94(3), 203-209.

QUESTION 1: Milton Terris argues against the idea that infectious diseases have single causes whereas non-infectious diseases arise from “multiple causation.” Can an event or condition ever be said to have a single cause?

QUESTION 2. Terris emphasizes the advantage for epidemiology of having a basic knowledge of biology and causal mechanisms. (a) Describe a relationship that you were able to see with the help of your knowledge of biology that someone without that knowledge would not have been able to see? (b) Does the fact that a hypothesis is biologically plausible establish that a causal relationship exists?

QUESTION 3: Everyday behaviors and experiences often provide useful examples for the kind of thinking used in epidemiology. Think of an instance when you tried to figure out why something in your everyday life was not working the way it was supposed to. How did you proceed? What steps did you follow to solve the problem? (For example, you may discuss a problem you solved with your personal computer or with your automobile. You may also choose as an example a health problem you helped solve for one of your patients or clients. How did you proceed to solve the problem? What observations did you make? What steps did you follow? Did you try altering settings to observe associated changes? How successful were you in solving the problem?)

For inspiration, see

- <http://www.amazon.com/Pleasure-Finding-Things-Out-Richard/dp/0738203491>
- <http://www.cosmolearning.com/documentaries/richard-feynman-the-pleasure-of-finding-things-out/>

QUESTION 4: Describe *three* attributes of public health problems that make them particularly difficult [to study *in terms of determining cause and effect*. Note: This is not a question about the efficacy of interventions. It is a question about determining cause so that interventions can then proceed in an effective and rational way.