

BE.104

April 7, 2005 Problem set: due April 14, 2005

Environmental chemicals and Health Risk Assessment: 1 and 2.

Laura Green

1. For which leading causes of death in the U.S. today might environmental chemicals play a significant role? In about 3 or 4 sentences, please provide some specific hypotheses and bases for these hypotheses. Please mention how your answer changes when asked to consider the same issue for leading causes of death in the U.S. 100 years ago.
2. What is IARC, and by what method(s) does it characterize chemicals with respect to carcinogenicity? What is IARC's role in quantification of cancer risks?
3. In about 6 sentences, explain how scientific judgment, lawsuits, and quantitative health risk assessment have shaped how U.S. OSHA regulates exposures to workplace carcinogens.
4. Please list each of the "criteria air pollutants" (*per* U.S. EPA), list their primary NAAQS (with units and averaging times), and briefly describe the health-basis upon which each pollutant is regulated.