

## Chapter 10 Objectives: "Risk, Toxicology, and Human Health"

1. Define *risk* and *risk assessment* and list the four general types of common hazards with examples.
2. Define and describe relationships among *dose*, *response*, *toxicity*, and *poison* and distinguish between acute and chronic exposures and acute and chronic effects.
3. Distinguish between a *linear dose-response model* and a *threshold dose-response model*. Which model applies best when low doses are involved?
4. Evaluate the effectiveness of *risk assessments* and *pollution prevention* in dealing with hazards and list the five principle types of chemical hazards and give an example of each.
5. Define *ionizing radiation*. Give two examples and include any physical damage they may cause.
6. Distinguish between *genetic* and *somatic* damage.
7. Distinguish between *transmissible* and *nontransmissible* diseases.
8. Summarize the state of the battle against bacterial infections.
9. Describe how transmission of viral diseases can result in *pandemics*.
10. Define *epidemiological transition*.
11. Summarize how developing countries and developed countries can best improve their health.
12. Define *risk analysis*.
13. Define *risk-benefit analysis* and *desirability quotient* (not in text).