

CHAPTER 17 VOCABULARY – Environmental Hazards and Human Health

MILLER LITE, 17th EDITION

cancer	Group of more than 120 different diseases, one for each type of cell in the human body. Each type of cancer produces a tumor in which cells multiply uncontrollably and invade surrounding tissue.
carcinogen	Chemicals, ionizing radiation, and viruses that cause or promote the development of cancer. See <i>cancer</i> . Compare <i>mutagen</i> , <i>teratogen</i> .
dose	Amount of a potentially harmful substance an individual ingests, inhales, or absorbs through the skin. Compare <i>response</i> . See <i>dose-response curve</i> , <i>median lethal dose</i> .
dose-response curve	Plot of data showing the effects of various doses of a toxic agent on a group of test organisms. See <i>dose</i> , <i>median lethal dose</i> , <i>response</i> .
epidemiology	Study of the patterns of disease or other harmful effects from exposure to toxins and diseases caused by pathogens within defined groups of people to find out why some people get sick and some do not.
hazard	Something that can cause injury, disease, economic loss, or environmental damage. See also <i>risk</i> .
hazardous chemical	Chemical that can cause harm because it is flammable or explosive, can irritate or damage the skin or lungs (such as strong acidic or alkaline substances), or can cause allergic reactions of the immune system (allergens). See also <i>toxic chemical</i> .
infectious disease	Disease caused when a pathogen such as a bacterium, virus, or parasite invades the body and multiplies in its cells and tissues. Examples are flu, HIV, malaria, tuberculosis, and measles. See <i>transmissible disease</i> . Compare <i>nontransmissible disease</i> .
LD50	See <i>median lethal dose</i> .
median lethal dose (LD50)	Amount of a toxic material per unit of body weight of test animals that kills half the test population in a certain time.
metastasis	Spread of malignant (cancerous) cells from a tumor to other parts of the body.
mutagen	Chemical or form of radiation that causes inheritable changes (mutations) in the DNA molecules in genes. See <i>carcinogen</i> , <i>mutation</i> , <i>teratogen</i> .
neurotoxins	Chemicals that can harm the human <i>nervous system</i> (brain, spinal cord, peripheral nerves).
nontransmissible disease	Disease that is not caused by living organisms and does not spread from one person to another. Examples include most cancers, diabetes, cardiovascular disease, and malnutrition. Compare <i>transmissible disease</i> .
pathogen	Living organism that can cause disease in another organism. Examples include bacteria, viruses, and parasites.
poison	Chemical that adversely affects the health of a living human or animal by causing injury, illness, or death.
response	Amount of health damage caused by exposure to a certain dose of a harmful substance or form of radiation. See <i>dose</i> , <i>dose-response curve</i> , <i>median lethal dose</i> .
risk	Probability that something undesirable will result from deliberate or accidental exposure to a hazard. See <i>risk analysis</i> , <i>risk assessment</i> , <i>risk management</i> .

risk analysis	Identifying hazards, evaluating the nature and severity of risks associated with the hazards (<i>risk assessment</i>), ranking risks (<i>comparative risk analysis</i>), using this and other information to determine options and make decisions about reducing or eliminating risks (<i>risk management</i>), and communicating information about risks to decision makers and the public (<i>risk communication</i>).
risk assessment	Process of gathering data and making assumptions to estimate short- and long-term harmful effects on human health or the environment from exposure to hazards associated with the use of a particular product or technology.
risk communication	Communicating information about risks to decision makers and the public. See <i>risk, risk analysis</i> .
risk management	Use of risk assessment and other information to determine options and make decisions about reducing or eliminating risks. See <i>risk, risk analysis, risk communication</i> .
teratogen	Chemical, ionizing agent, or virus that causes birth defects. Compare <i>carcinogen, mutagen</i> .
toxic chemical	See <i>poison, carcinogen, hazardous chemical, mutagen, teratogen</i> .
toxicity	Measure of the harmfulness of a substance.
toxicology	Study of the adverse effects of chemicals on health.
toxin	See <i>poison</i> .
transmissible disease	Disease that is caused by living organisms (such as bacteria, viruses, and parasitic worms) and can spread from one person to another by air, water, food, or body fluids (or in some cases by insects or other organisms). Compare <i>nontransmissible disease</i> .