

Pesticides

Background

Pesticides are a category of products used for their inherently toxic properties to control pests

The term "pesticide" broadly refers to a chemical used to kill, inhibit or repel bacteria, fungi, plants, insects or vermin

Pesticides are commonly used in agriculture, gardening, treatment of pets and lawns, and indoor use

Exposure can occur through direct contact with pesticides during or after application or through ingestion of residues in food products

Health Risk

Children are at special risk for pesticide exposure and health effects compared to adults

Increased risks of exposure and harm include: hand-to-mouth behavior, higher ingestion and breathing rates, restrictive eating habits and interruption of development

Depending on the chemical, acute exposure can produce headaches, lethargy, dizziness, paresthesia, weakness, nausea, vomiting et al.; these require emergent care

Lower level chronic exposures to certain chemicals are linked to certain cancers and developmental and learning disorders

Response

Limiting use and potential exposure to pesticides can minimize risk of harm

Integrated Pest Management (IPM) can successfully control household pests with minimal or no pesticide use

Store household products capped, out of reach of children, in the labelled container they came in; always follow label directions.

Eating fruits and vegetables is encouraged, along with washing produce and hands before eating; organic and "clean 15" produce may have fewer pesticides

Instructions for User

A message map delivers three key messages on a particular topic (top row, in yellow), each with three supporting statements (column below each key message, in blue). The key messages provide succinct Background, Health Risk and Response to the topic.

A message map is intended to guide a discussion of health risks and responsive actions pertaining to the topic. It does not represent an exhaustive resource for information on the topic. The presenter is expected to tailor the depth and pacing of information delivery to the needs of the recipient. At the recipient's request, the presenter is expected to bring his/her expertise to the topic and link the discussion to other resources available to the recipient. Some suggested sources of further information are listed below.

For more information on pesticides:

New York City Department of Health and Mental Hygiene:
Pests and Pesticides
<http://www.nyc.gov/html/doh/html/environmental/pesticides.shtml>

Integrated Pest Management (IPM)
<http://www.nysipm.cornell.edu/publications/homesbro/files/homes.pdf>

New York State Department of Health
<http://www.health.ny.gov/environmental/pests/reduce.htm>

Environmental Working Group (EWG) Produce Guide
<http://www.ewg.org/foodnews/summary.php>

Risk communication is a science-based approach for communicating effectively and accurately to diverse audiences in situations that are high-concern, high-stress, emotionally charged, and/or highly controversial. Its purpose is to enhance knowledge and understanding, build trust and credibility, encourage constructive dialogue, produce appropriate levels of concern, and provide guidance on appropriate protective behavior and actions following a crisis incident. Although much about risk communication involves elements of common sense, its principles are supported by a considerable body of scientific research.

Covello V (Center for Risk Communication), Minamyer S, Clayton K (U.S. EPA National Homeland Security Research Center). Effective Risk and Crisis Communication During Water Security Emergencies. Reston, VA: U.S. EPA: March 2007. 72 p. Work Assignment: 4-94. Contract No.: 68-C-02-067.

Environmental Protection Agency (EPA)
<http://www.epa.gov/pesticides/>

Environmental Protection Agency (EPA) for consumers
<http://www2.epa.gov/safepestcontrol/reduce-your-childs-chances-pesticide-poisoning>

Environmental Protection Agency (EPA) for educators
<http://www.epa.gov/pesticides/kids/index.htm>