

Route of Entry

Video Dialogue - Part One

Exposure and Symptoms

1. There are four primary ways you can be exposed to pesticides, skin (dermal), eyes (ocular), lungs (inhalation), and mouth (oral).
2. 97% of all exposure is through the skin. Parts of the body differ in their ability to absorb formulations, water soluble liquids or powders, wettable powders, dusts and granular pesticides do not easily penetrate, unlike oil based liquid formulations such as emulsifiable concentrates.
3. Application techniques affect exposure levels. High exposures often happen during overhead applications, using a blower for mists and dusts or dipping livestock and pets. Gloves and hands can transfer pesticides to other body parts. Exposure can also depend on PPE, age and health.
4. Under certain conditions absorption through the eyes can be particularly hazardous.
5. Eye exposure may result from airborne dusts, particles, splashes, spills, broken hoses, spray mists or rubbing eyes with contaminated hands or clothing.
6. Lung exposure can occur when mixing, loading, or applying pesticides.
7. Inhalation can cause damage to nose, throat, lung tissue, and enter the bloodstream, potentially damaging other organs.
8. Oral exposures can occur during mixing, loading, and applying or while cleaning equipment. Never use your mouth to clear a nozzle. Never eat, drink or smoke without washing your hands.
9. Never transfer chemicals to unmarked containers or store in common areas.
10. All pesticide measuring cups and containers should be properly marked and stored separately from food or beverages.

11. Acute Toxicity is caused by a single, one-time exposure event, showing up within seconds or minutes of exposure.

12. Chronic Toxicity is long term exposure, taking place over weeks, months or years. Minimize chronic toxicity by limiting exposure and following all label directions when handling and applying.

13. Poisoning symptoms can be visible such as nausea, dizziness, pinpoint pupils, giddiness, sweating, vomiting and diarrhea. Long term effects can be genetic changes, noncancerous or cancerous tumors, reproductive effects, blood disorders, nerve disorder, to name a few.

14. The liver and the kidneys are the primary organs that filter and breakdown chemicals in the body.

15. Non-soluble chemicals cannot break down and are eventually stored in fatty deposits in the body and in breast milk.

16. Bodies produce enzymes that help detoxify chemicals. However continual or frequent exposures may overwhelm the body's capacity to breakdown and eliminate these chemicals.

17. Because symptoms vary widely, medical professionals need training to recognize and treat properly. The EPA has a manual entitled Recognition and Management of Pesticide Poisonings and can be purchased through the EPA website.

18. If symptoms develop within 24 hours of exposure, seek medical help immediately. Take the Pesticide Label with you. It will help determine the proper course of treatment. Common illness such as the flu, pneumonia, or even a hangover can have symptoms similar to pesticide exposure. However, take every precaution and to seek medical help to ensure it is not pesticide related.