Did You Know Disinfectants & Sanitizers Are Pesticides?

Texas Department of State Health Services
Environmental Epidemiology and Disease Registries Section
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http://www.dshs.state.tx.us/epitox/pest.shtm

PEST Program
Pesticide Exposure Surveillance in Texas
What are disinfectants, sanitizers and sterilizers?

- **Disinfectants**: chemicals that are applied to non-living objects to destroy microorganisms (fungi, viruses, bacteria). Disinfectants used in hospitals may be used to disinfect items such as medical instruments, floors, walls, bed linens, and toilet seats. Disinfectants used in the home may be used to disinfect general household items as well as swimming pools and drinking water.

- **Sanitizers**: reduce the number of microorganisms from non-living surfaces within a specified amount of time to levels considered safe as determined by public health codes or regulations. Sanitizers may be used on both food and non-food contact products.

- **Sterilizers**: chemicals or processes (such as steam, heat, or pressure) that completely eliminate microorganisms (such as fungi, viruses, bacteria, spores) from a surface, equipment, or food.
Can disinfectants, sanitizers and sterilizers be harmful?

While these pesticides provide benefits, they also can be harmful if used improperly. Exposure to these chemicals generally occurs either by accident or by a failure to follow the directions on the label.

Here are some examples of the types of exposures that have been reported to the Pesticide Exposure Surveillance in Texas Program:

- Accidental ingestion of pine-oil after the bottle fell and splashed on the face
- Mixed chlorine and ammonia in a small space causing toxic fumes
- Accidentally sprayed co-worker in the eye with a hospital disinfectant
How can someone be exposed to disinfectants, sanitizers and sterilizers?

Even if you never use pesticides yourself, you still can be exposed to them – at home, school, work, or play – just by being in an area that has been treated.

What types of health effects are associated with these chemicals?

Short term exposure to disinfectants, sanitizers and sterilizers can result in the following health effects:

- Chest pain
- Shortness of breath
- Headache
- Vomiting
- Nausea
- Watery eyes
- Flu-like symptoms
What steps can be taken to reduce risk?

To reduce your risk of exposure to these chemicals you can:

- Choose the right product
- Read the product label
- Determine the correct amount to purchase; use only what is needed
- Use the product safely and correctly
- Only use the product for its intended use
- Store and dispose of the product properly
- If an accident occurs, such as a splash in the eyes, mouth, or skin, call Poison Control Network at: 1 (800) 222-1222
- When possible, stay away from application areas
- Don't mix household products together; this can cause fumes that irritate or even damage the lungs
- Don't prepare products in enclosed areas where there is no ventilation
- Don't apply too much of the product
- Don't apply near foods
- Don’t use product without wearing proper personal protective equipment
Disinfectants, sanitizers, and sterilizers are classified as pesticides, and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requires that they be registered with the Environmental Protection Agency (EPA).

Currently, there are more than 5,000 disinfectant, sanitizer, and sterilizer products registered with the EPA in formulations consisting of sprays, liquids, concentrated powders, and gases; each may contain one or more of 275 active ingredients.

What are occupations that might be at greater risk?

- Pool cleaners
- Maintenance workers
- Janitors
- Restaurant workers
- Individuals working near application areas
- Healthcare workers
The Texas Occupational Condition Reporting Act, Health and Safety Code, Chapter 84, requires that the following individuals report cases of occupational pesticide poisonings:

- Physicians
- Health Professionals
- Laboratory Directors
- Any persons in charge of a clinical or hospital laboratory, blood bank, mobile unit or other facility in which a laboratory examination reveals evidence of the reportable disease.
What Information should be reported to DSHS?

- The exposed individual’s name, address, phone number, birth date, race or ethnicity, and diagnosis
- Laboratory test results
- Occupation and employer information, if exposure is work-related

How is this information used?

- The information is used to identify incidents and provide assistance.
- Ongoing surveillance of occupational pesticide exposures enables us to identify potential public health hazards.
- The information is used to make recommendations, develop targeted prevention efforts, and implement strategies to reduce the risk of occupational exposure to pesticides.

– Reported Information is Confidential –
Who should report occupational pesticide exposures?

- Texas Poison Control Network (TPCN)
- Other state agencies
- Regional health departments
- Health care providers, labs
- Individuals

How can I report?

- Cases can be reported directly to the Environmental and Injury Epidemiology and Toxicology Unit, DSHS, by calling our toll-free number: 1 (800) 588-1248.
- Case reports can be faxed to: (512) 776-7222.
- Case reports can be mailed to:
  
  **PEST Program Environmental and Injury Epidemiology and Toxicology Unit**
  
  PO Box 149347  MC1964
  
  Austin, TX 78714-9347

- Cases also may be reported to local or regional health department staff who can transmit the information directly to the DSHS central office.


Additional Sources of Information

- Texas Department of State Health Services  http://www.dshs.state.tx.us/epitox/pest.shtm
- National Pesticide Information Center  http://npic.orst.edu/
- Environmental Protection Agency  http://www.epa.gov/pesticides/health/index.htm

The majority of the source material for this fact sheet was adapted from the Environmental Protection Agency (EPA).

http://www.epa.gov/oppad001/ad_info.htm  and  http://www.epa.gov/oppad001/

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