

PERC-med: The Pesticide Educational Resources Collaborative for Medical Professionals

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U.S. EPA Office Of Pesticide Programs
Cooperative Agreement #X8-83935901
University of California Davis Extension
Oregon State University

OPHA October 14, 2019

Learning Objectives

1. Define pesticides.
2. Identify medical care provider reporting requirements in Oregon for pesticide-related illness.

OPHA October 14, 2019

Learning Objectives (Continued)

3. Explain what resources are available to medical care providers for pesticide-related poisonings and illnesses.

What are Pesticides?

Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

The Challenge We Face

The magnitude of pesticide use, and the settings of pesticide application, are under-recognized by many medical care providers and public health professionals.

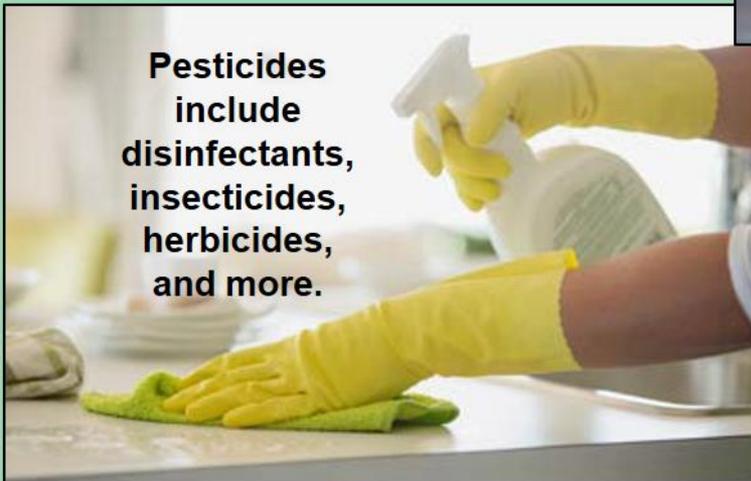
Have you ever used?



- Bug repellents
- Weed killers
- Pet flea collars
- Antimicrobial wipes
- Bathroom mold removers



- **Educational resources**
- **Training**
- **Technical assistance**



Pesticides include disinfectants, insecticides, herbicides, and more.

pesticideresources.org/med
Contact: Diana Simmes, MPH
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PERC-med

Pesticide Educational Resources
Collaborative - Medical

Helping the
medical
community
prevent,
recognize,
and treat
pesticide-
related
illnesses
and injuries.



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The Pesticide Educational Resources Collaborative - Medical is a cooperative agreement (agreement #X-83935901) between the U.S. EPA's Office of Pesticide Programs and University of California Davis Extension, in collaboration with Oregon State University.

Clinical Context: Depends On:

- Active Ingredient
- Duration
- Quantity
- Exposure Route
- Health Status



Clinical Context (Continued)

Pesticide poisoning symptoms may be confused with:

- Flu
- Food poisoning
- Heat Illness
- Hangover

Pesticide Reporting In Oregon: Mandatory

- Healthcare Providers
- Labs
- Suspected OR confirmed pesticide illnesses within 24 hours

Pesticide Reporting In Oregon: Mandatory (Continued)

Pesticide Exposure Safety & Tracking System (PEST)

- Fax: (971) 673-0979
- Phone: (971) 673-0400
- Call local health department

Pesticide Reporting In Oregon: Mandatory (Continued)

Pesticide Analytical Response Center (PARC)

- 8 member agencies, unique

National Pesticide Information Center

- 800-858-7378
- General Public
- Healthcare providers

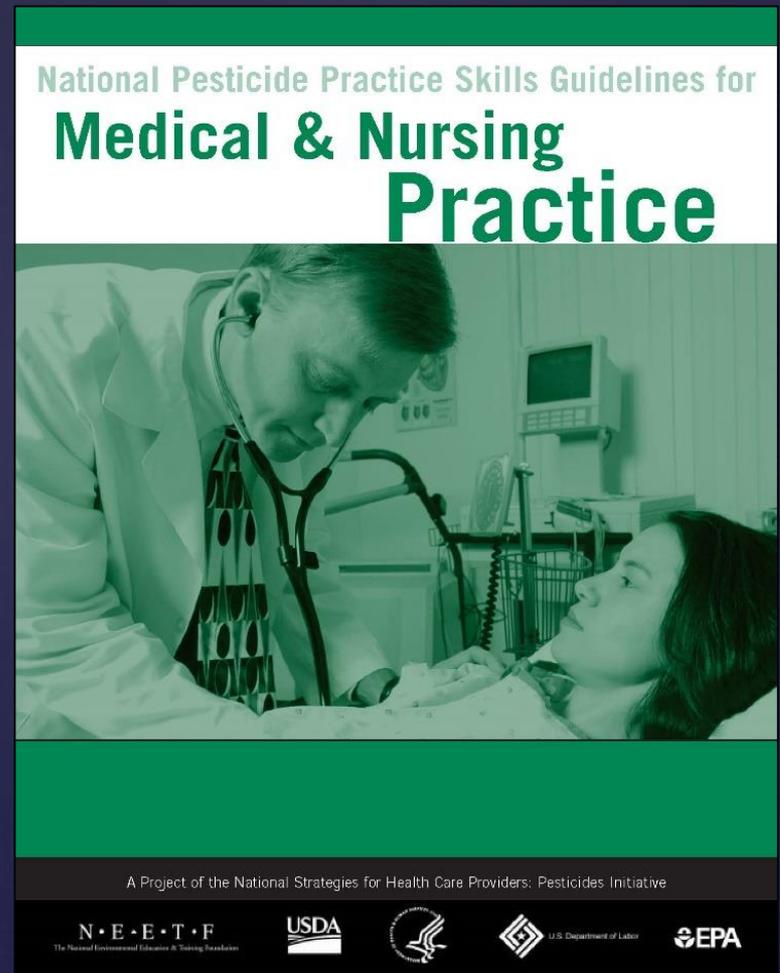
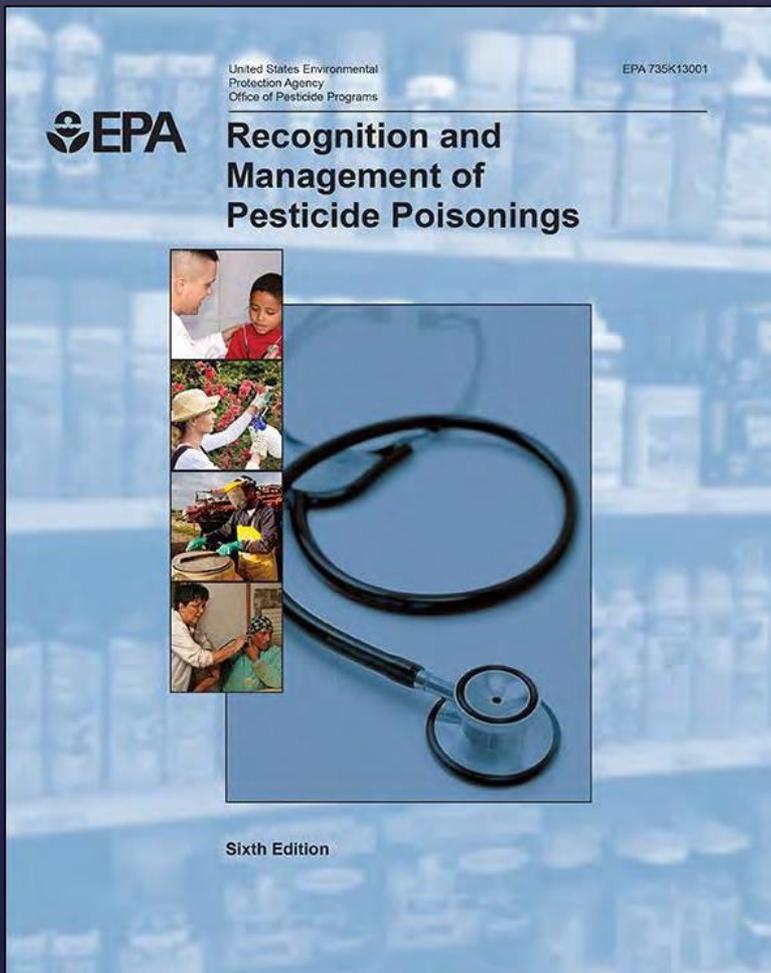
Pesticide Education: Not Routinely Included in Medical Training

- PERC-med website
pesticideresources.org/med
- Online CME (continuing medical education)
- Oregon Poison Center 1-800-222-1222

Pesticide Education: Not Routinely Included in Medical Training

- Recognition and Management of Pesticide Poisonings
- Medical & Nursing Practice Skills
- National Pesticide Information Center

Key Resources





Paraquat Poisoning: One Sip Can Kill

WHAT IS PARAQUAT?

Paraquat is used for weed control and defoliation in both agricultural and non-agricultural settings. It is one of the most widely used herbicides in the world. Paraquat is classified by the U.S. Environmental Protection Agency as a Restricted Use Pesticide due to its high toxicity. There are no homeowner uses and not allowed in residential areas.

There is no antidote for paraquat ingestion. Paraquat should **NEVER** be put into unmarked containers or used at home.

HOW PARAQUAT WORKS

The extent of poisoning depends on the amount, route, and duration of exposure as well as the person's health status. It damages the lining of the mouth, stomach, and intestines on contact. After paraquat enters the body, it is distributed to all areas of the body. It causes toxic chemical reactions throughout many parts of the body, primarily the lungs, liver, and kidneys.

DANGER - ONE SIP CAN KILL



**PELIGRO -
UN SORBO PUEDE MATAR**

SYMPTOMS

IMMEDIATE symptoms after ingestion of **LARGE** amounts:

- Pain and swelling of the mouth and throat likely
- Followed by gastrointestinal symptoms (e.g. nausea, vomiting, abdominal pain, diarrhea)
- Severe GI symptoms may result in dehydration, electrolyte abnormalities, and low blood pressure

In general, within a **FEW** hours to a **FEW** days:

- Acute kidney failure
- Confusion
- Coma
- Fast heart rate
- Injury to the heart
- Liver failure
- Lung scarring

One Sip Can Kill

- Poster collaboration between PERC-med and University of Iowa
- Paraquat Use Profile
- How Paraquat Works
- True Stories, Symptoms
- Regulation, References

For More PERC-med Information

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For General Pesticide Information

National Pesticide Information Center

Oregon State University

(800) 858-7378

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