

PARAQUAT USE PROFILE

Paraquat is used for weed control and defoliation and is one of the most widely used herbicides in the world. Paraquat is classified by the U.S. Environmental Protection Agency (EPA) as a Restricted Use Pesticide due to its high toxicity. There are no homeowner uses and no products registered for application in residential areas.

HOW PARAQUAT WORKS

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

There is no antidote for paraquat ingestion. 1 to 2 teaspoons can be lethal! Paraquat should NEVER be put in unmarked containers or used at home.



Product labeling may not be accessible to health care providers and the initial clinical presentation depends on the route of exposure which may not be immediately known. Certified pesticide applicators who may use paraquat include crop-dusters, farm laborers, public land managers, and foresters. Health care providers may consider advising such patients to never transfer pesticides into food/beverage containers. Remember that pesticide exposure is a reportable condition in many states.

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
- Muscle weakness
- · Pulmonary edema
- Respiratory failure possibly leading to death
- Seizures

Symptoms after ingestion of SMALL - MEDIUM amounts within SEVERAL days to SEVERAL weeks:

- Heart failure
- Kidney failure
- · Liver failure
- Lung scarring



The Pesticide Educational Resources Collaborative-Medical (PERC-med) helps medical professionals prevent, recognize, and treat pesticide-related illness by providing continuing education, training, and technical assistance. It is a cooperative agreement (agreement #X-83935901) between the U.S. EPA's Office of Pesticide Programs and University of California, Davis in collaboration with Oregon State University.