**Insecticide poisoning**

Insecticide is a chemical that kills bugs. Insecticide poisoning occurs when someone swallows or breathes in this substance.

This is for information only and not for use in the treatment or management of an actual poison exposure. If you have an exposure, you should call your local emergency number (such as 911) or the National Poison Control Center at 1-800-222-1222.

See also:

* [Bug spray poisoning](http://www.nlm.nih.gov/medlineplus/ency/article/002763.htm)
* [Paradichlorobenzene poisoning](http://www.nlm.nih.gov/medlineplus/ency/article/002902.htm)

**Poisonous Ingredient**

Most household bug sprays contain chemicals called pyrethrins. These chemicals are generally not harmful, but can cause life-threatening breathing problems if breathed in.

Industrial insecticides, often found in household garages and greenhouses, contain many dangerous substances, including:

* Carbamates
* Organophosphates
* Paradichlorobenzenes (mothballs)

**Where Found**

Various insecticides (bug killers)

**Symptoms**

Symptoms of pyrethrin poisoning:

* Lungs and airways
  + Breathing difficulty
* Nervous system
  + [Coma](http://www.nlm.nih.gov/medlineplus/ency/article/003202.htm)
  + [Convulsions](http://www.nlm.nih.gov/medlineplus/ency/article/003200.htm)
* Skin
  + Irritation
  + Redness or swelling

Symptoms of organophosphate or carbamate poisoning:

* Bladder and kidneys
  + Increased urination
* Eyes, ears, nose, and throat
  + [Increased salivation (drooling)](http://www.nlm.nih.gov/medlineplus/ency/article/003048.htm)
  + [Increased tearing](http://www.nlm.nih.gov/medlineplus/ency/article/003036.htm)
  + Small pupils
* Gastrointestinal
  + Abdominal cramps
  + Diarrhea
  + Loss of appetite
  + Nausea
  + Vomiting
* Heart and blood
  + Slow heart rate
* Lungs and airways
  + Breathing difficulty
* Nervous system
  + [Anxiety](http://www.nlm.nih.gov/medlineplus/ency/article/003211.htm)
  + Coma
  + Convulsions
  + [Dizziness](http://www.nlm.nih.gov/medlineplus/ency/article/003093.htm)
  + Headache
  + [Weakness](http://www.nlm.nih.gov/medlineplus/ency/article/003174.htm)
* Skin
  + [Blue lips and fingernails](http://www.nlm.nih.gov/medlineplus/ency/article/003215.htm)

Note: Serious poisoning can occur from just touching the organophosphate without gloves or without washing hands soon after exposure. Large amounts of the chemical soak through the skin unless you are protected. Life-threatening paralysis and death can occur very quickly.

Symptoms of paradichlorobenzene poisoning:

* Gastrointestinal
  + Abdominal pain
  + Diarrhea
  + Nausea
  + Vomiting
* Muscles
  + [Muscle spasms](http://www.nlm.nih.gov/medlineplus/ency/article/003193.htm)

Note: Paradichlorobenzene mothballs are not very toxic. They have replaced the more toxic camphor and naphthalene types.

**Home Care**

Seek immediate medical help. Do NOT make a person throw up unless told to do so by poison control or a health care professional.

If the chemical is on the skin or in the eyes, flush with lots of water for at least 15 minutes.

If the person breathed in the poison, immediately move him or her to fresh air.

**Before Calling Emergency**

Determine the following information:

* Patient's age, weight, and condition
* Name of the product (ingredients and strengths, if known)
* Time it was swallowed
* Amount swallowed

**Poison Control**

The National Poison Control Center (1-800-222-1222) can be called from anywhere in the United States. This national hotline number will let you talk to experts in poisoning. They will give you further instructions.

This is a free and confidential service. All local poison control centers in the United States use this national number. You should call if you have any questions about poisoning or poison prevention. It does NOT need to be an emergency. You can call for any reason, 24 hours a day, 7 days a week.

**What to Expect at the Emergency Room**

The health care provider will measure and monitor your vital signs, including temperature, pulse, breathing rate, and blood pressure. Symptoms will be treated as appropriate. You may receive:

* Activated charcoal
* Breathing tube
* Bronchoscopy -- camera down the throat to see burns in the airways and lungs
* Endoscopy -- camera down the throat to see burns in the esophagus and the stomach
* Fluids by IV
* Medicine (antidote) to reverse the effect of the poison
* Oxygen
* Tube through the mouth into the stomach to empty the stomach ([gastric lavage](http://www.nlm.nih.gov/medlineplus/ency/article/003882.htm))
* Surgical removal of burned skin (skin debridement)
* Washing of the skin (irrigation) -- perhaps every few hours for several days

**Outlook (Prognosis)**

How well you do depends on the amount of poison swallowed and how quickly treatment is received. The faster you get medical help, the better the chance for recovery.

Swallowing such poisons can have severe effects on many parts of the body.

It is a good sign that recovery will occur if patients continue to improve over the first 4 - 6 hours after medical treatment.

Although the symptoms are the same for carbamate and organophosphate, recovery is more difficult for organophosphate.

**Alternative Names**

Organophosphate poisoning; Carbamate poisoning