

Pesticide Drift Exposure and Your Health

INFORMATION FOR PATIENTS

Pesticides are chemicals used to prevent, kill, repel or control insects, plants, microorganisms or animals that are harmful or a nuisance. Insecticides, herbicides, fungicides, and rodenticides are types of pesticides. Pesticides may be used on farms, homes, businesses, and public places.

People can be exposed to pesticides through direct use of products or through contaminated air, water, soil and treated materials. This fact sheet is about one type of accidental exposure to pesticides known as **pesticide drift**.

What is pesticide drift?

Pesticide drift is the movement of pesticide dust or droplets through air at the time it is applied or soon after that spreads the pesticide beyond the intended area of application. For instance, a field or ditch may be sprayed on a windy day and the pesticide blows onto adjacent properties or roads. There may or may not be an odor when drift occurs. Pesticide drift is a violation of Minnesota law.

Pesticide drift and health

When pesticides drift, they could be inhaled or land on skin or in eyes. Symptoms include eye irritation, nose irritation or runny nose, coughing or wheezing, or rash. Different pesticides affect different body systems and can cause different symptoms.

The likelihood that the pesticide drift will result in more serious harm to one's health depends on the how much of the pesticide enters into the body and the type of pesticide:

- Some pesticides are not very toxic and cause little or no harm.
- Others are very toxic and not much exposure is needed to cause serious effects. These more dangerous pesticides are more tightly controlled.
- Different pesticides can affect different organ systems in the body.
- The range of symptoms can be very broad.
- Symptoms can occur immediately, or may develop over time.
- Some pesticides, at sufficiently high exposures, can cause long-term health

effects, including neurodevelopmental disorders in children, infertility and reproductive disorders, cancer, pulmonary disease, and others.

Before the U.S. Environmental Protection Agency (EPA) approves the use of a pesticide, they require testing on what happens to the pesticide in the environment (e.g. how long it takes to break down) and how toxic it is in laboratory animals. This information is used to determine when, where, and how a pesticide can be safely used. Applicators must follow the label instructions. Label instructions are intended to lower the risk of exposure when applying pesticides.

If you think you were exposed to pesticides:

- Stop the contact with the pesticide.
- If you are sick, see a doctor right away.
- Remove your clothes, hats and shoes as soon as possible. Do not wash your clothes immediately. Place them in an air tight container.
- Wash any part of the body that was exposed with soap and water.
- If you experience eye irritation, immediately flush eyes with clean, cool water. Remove contact lenses and continue flushing for 10-15 minutes.
- Contact a doctor or the Minnesota Poison Control System to determine if you need medical attention. Advice from Poison Center staff is free and

they can help you decide if you need to see a doctor.

The Minnesota Poison Control System can be reached 24/7 at 1-800-222-1222.

- Write down where and when the exposure occurred, what you were doing, and what you experienced. Note if you saw pesticides sprayed from a plane or tractor, if you smelled or tasted anything unusual, if you felt moisture or powder on your skin, and if you had any symptoms. If possible, write down the “N” number found on the plane’s tail.
- Contact the Minnesota Department of Agriculture (MDA) to report the suspected exposure. MDA staff will discuss preserving clothing or other evidence that may establish that a violation of pesticide law occurred.
- If clothing is not needed for reporting, thoroughly clean any clothing, shoes or other objects that may have been exposed to pesticide drift before wearing or using them.

To protect yourself from drift:

- Stay indoors with the windows closed when pesticide is sprayed nearby.
- Do not go into the area that is being sprayed, even to get the applicator’s attention.
- Report suspected incidents of drift to MDA, even if you aren’t sick.

Reporting suspected pesticide drift

Reporting exposure to pesticide drift helps us learn when, where, and why exposures occur. Although reporting will not stop an exposure if it has already occurred, it may help reduce future exposures.

MDA takes complaints related to violations of pesticide laws, such as injury to a human or

animal; damage or contamination of food or feed; damage to the environment; damage to a crop, landscape or garden; pesticide-related bee kill; and application made without proper license or certification. They will also register complaints for other reasons.

MDA cannot investigate complaints without sufficient information to indicate that a pesticide may have been used in violation of law. All complaints are required by law to be submitted in writing and may be provided anonymously. Once violations are proven, MDA may take action against the applicator. These actions can range from written warnings to financial penalties. In rare cases, the MDA may initiate proceedings to revoke or suspend applicator licenses. MDA investigates complaints for law enforcement purposes and cannot assist you with claims for damages related to pesticide use.

You can find help

Contact the MN Poison Control System anytime by calling 1(800)222-1222 or online at <http://www.mnpoison.org/>.

Contact the [Minnesota Department of Agriculture \(MDA\) Filing a Written Pesticide/Fertilizer Misuse Complaint form](https://www.mda.state.mn.us/pesticide-fertilizer/pesticide-and-fertilizer-misuse-complaint-form) (<https://www.mda.state.mn.us/pesticide-fertilizer/pesticide-and-fertilizer-misuse-complaint-form>) to report pesticide drift.

Reports can be made by telephone at **651-201-6333** (8AM-4PM).

After hours, contact the Minnesota Duty Officer at 1-800-422-0798.

More information can be found at the [National Pesticide Information Center](http://www.npic.orst.edu/) (<http://www.npic.orst.edu/>).