

What is dicamba?

Dicamba is a selective herbicide in the chlorophenoxy family of chemicals. It comes in several salt formulations and an acid formulation. These forms of dicamba have different properties in the environment. Products with dicamba frequently contain other herbicides as well.



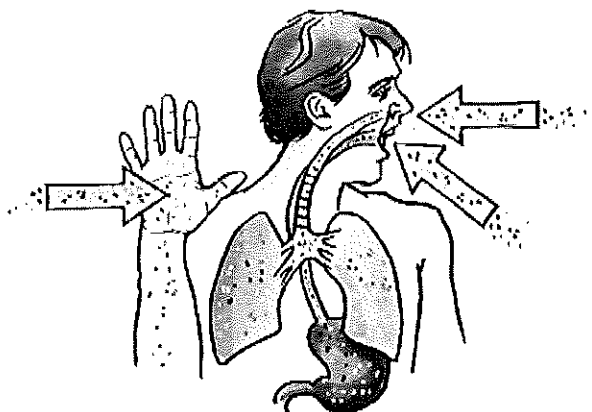
What are some products that contain dicamba?

Products containing dicamba may be liquids, dusts or granules. Products may be concentrated or ready-to-use. Currently, dicamba can be found in over 1100 products that are sold in the United States. It is used in agriculture, residential areas, and other sites.

Always follow label instructions and take steps to avoid exposure. If any exposures occur, be sure to follow the First Aid instructions on the product label carefully. For additional treatment advice, contact the Poison Control Center at 1-800-222-1222. If you wish to discuss a pesticide problem, please call 1-800-858-7378.

How does dicamba work?

Dicamba is similar to the herbicide 2,4-D. Both act like natural plant hormones known as auxins. These hormones help to control plant growth. When plants are treated with dicamba, they grow in abnormal and uncontrollable ways, and often, the plants die. Dicamba is used on many broadleaf weeds and woody plants.



How might I be exposed to dicamba?

Products with dicamba may be used in many places including on home lawns, farms, golf courses and rights-of-way along utility lines, roadsides and railways. You may be exposed if you are applying dicamba and you get it on your skin, inhale it, or eat or smoke afterwards without washing your hands first. You also may be exposed if you touch plants that are still wet with spray. You can limit exposure by following the label carefully if you are using products that contain dicamba. You can also stay away from grass or plants that have been treated until the leaves are dry.

In some cases, dicamba can be found in well water but typically at low levels. These levels are usually so low that no effect on human health is expected. Dicamba has also been found in house dust in farmer's homes at very low levels.

NPIC General Fact Sheets are designed to provide scientific information to the general public. This document is intended to promote informed decision-making. Please refer to the Technical Fact Sheet for more information.

What are some signs and symptoms from a brief exposure to dicamba?

Pure dicamba is low in toxicity if breathed. If inhaled, people may experience dizziness, and irritation of the nose, resulting in coughing. If you get pure dicamba on your skin, it is low in toxicity, however skin irritation may develop. If you get dicamba in your eyes, it is moderately toxic. If dicamba is swallowed, people have reported symptoms such as vomiting, loss of appetite and muscle spasms. If a large amount is swallowed, diarrhea and abdominal pain have been reported.

Pets may be exposed to dicamba if they come into contact with plants that have been treated with dicamba, either by eating the plants or walking through an area where dicamba was applied. Signs that a dog or a cat may have been exposed to dicamba include shortness of breath, muscle spasms and the animal may produce a lot of saliva. Birds may also be exposed to dicamba by eating dicamba granules and signs include wing drop, a loss of controlled movements, and weakness.



What happens to dicamba when it enters the body?

In humans, dicamba is not absorbed through the skin very well. If swallowed, dicamba is taken in quickly. Following dicamba's uptake, the chemical is rapidly eliminated in the urine, mostly unchanged. When laboratory rats were fed dicamba, most of the dose was found in urine within two days.

Is dicamba likely to contribute to the development of cancer?

Scientists have not found a clear link between dicamba and cancer in people. One study on pesticide applicators found weak links between lung and colon cancer and dicamba exposure, but other studies have not found any evidence of this. The EPA had concluded that dicamba is not likely to cause cancer in people.

Has anyone studied non-cancer effects from long-term exposure to dicamba?

Scientists have studied the effects from long-term exposure to dicamba to different animals. When rats were fed dicamba for 90 days, some of the rats didn't gain as much weight when compared to rats that were not fed dicamba. When rabbits had dicamba on their skin for 21 days, there were no effects on any internal organs, but dicamba irritated the rabbits' skin.

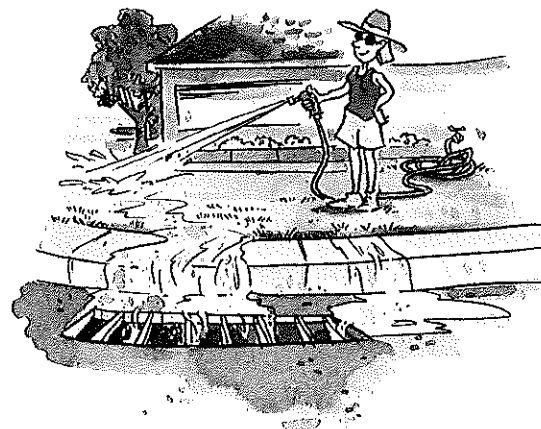
Are children more sensitive to dicamba than adults?

While children may be especially sensitive to pesticides compared to adults, there are currently no data showing that children have an increased sensitivity specifically to dicamba.

What happens to dicamba in the environment?

When dicamba is applied to plants, it can be absorbed by the leaves and roots. It can travel throughout the plant, but the amount and speed of movement depends on the plant. In water, microbes and ultraviolet (UV) light can break down dicamba.

Dicamba breaks down in soil so that half of the original amount is gone in 30-60 days. Water and microbes in soil can speed up the breakdown of dicamba. Sometimes following an application, dicamba can become airborne and cause damage to nearby plants.



Can dicamba affect birds, fish, or other wildlife?

The salt forms of dicamba are not likely to hurt birds if eaten. The acid form is slightly or moderately toxic to birds. Dicamba is not likely to harm fish because of its low toxicity. Among several studies in fish exposed to dicamba, results showed that dicamba was relatively non-toxic to fish.

Where can I get more information?

For more detailed information call the National Pesticide Information Center, between 8:00 AM and 12:00 PM Pacific Time (11:00 AM to 3:00 PM Eastern Time), Monday - Friday, at 1-800-858-7378 or visit us on the web at <http://npic.orst.edu>. NPIC provides objective, science-based answers to questions about pesticides.

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