

Healthy Kids Pesticides Information

Pesticides

Pesticides control a variety of pests such as insects, weeds, and bacteria. They are used in farming, in and around the home, and many other places. Children can be exposed to pesticides where they live, learn, and play.

The health effects of pesticides depend on the specific pesticide. For example, some may harm the nervous system, irritate skin or eyes, or increase cancer risk. Infants and children are often more sensitive than adults. However, finding pesticides in a child's urine is common and does not mean your child's health will be affected. Scientists are still learning what levels may be unsafe.

Pesticides can change into related chemicals once they enter the body. We call these "breakdown products." Healthy Kids Minnesota measured eight chemicals in your child's urine—one pesticide and seven pesticide breakdown products.



For more information and resources, please visit our webpage: [Healthy Kids Minnesota: Chemical Information and Resources](#)

Pesticides Measured in Your Child's Urine

2,4-D

What are the main uses?

- Controls weeds in home lawns
- Widely used in farming to control weeds

What are common ways kids are exposed?

- Eating food
- Playing on treated lawns
- Nearby farming use

IMPY

Breakdown product of diazinon

What are the main uses?

Controls insects in farming (crops, livestock)

What are common ways kids are exposed?

- Eating food
- Nearby farming use

Pesticides Measured in Your Child's Urine continued

PNP

Breakdown product of methyl- and ethyl-parathion

What are the main uses?

- Previously used to control insects in farming but use is no longer allowed in the U.S.
- PNP is also a breakdown product of an industrial chemical called nitrobenzene

What are common ways kids are exposed?

Living close to industries that use or release nitrobenzene

TCPY

Breakdown product of chlorpyrifos and chlorpyrifos-methyl

What are the main uses?

- In the home, chlorpyrifos can be used in ant and roach bait stations only – no other home uses are allowed
- Outside the home, chlorpyrifos can only be used to control insects in places where young children do not spend time, like golf courses
- Chlorpyrifos-methyl is used on stored grain

What are common ways kids are exposed?

Eating food*

**Chlorpyrifos use on food crops no longer allowed after February 2022*

3-PBA, 4-F-3-PBA, trans-DCCA, cis-DCCA

Breakdown products from a group of insecticides called pyrethroids

What are the main uses?

- Control insects in the home and yard/garden
- Used in some flea and tick products for pets
- Control insects in farming

What are common ways kids are exposed?

- Eating food
- Contact with treated areas in home and yard
- Contact with pets
- Nearby farming use

How You Can Lower Exposure to Pesticides



Pesticides Used in the Home

Applies to TCPY, 3-PBA, 4-F-3-PBA, trans-DCCA, cis-DCCA

Ways to Lower Your Child's Exposure

Making your home less welcoming to pests is the best way to avoid using pesticides—like cleaning up food spills quickly, sealing holes and cracks, and fixing plumbing leaks.

If you need to use a pest control product:

- Make sure to identify the pest correctly and that the pest is listed on the label.
- Follow instructions on the product label.

- Choose baits and gels. They are more contained than sprays. Place baits and gels where your child or pet cannot touch them.
- If using a spray, limit use to targeted locations or cracks and crevices. Ventilate your home by opening windows.
- Keep your child, pet, toys, clothes, etc. away from treated area.
- Avoid foggers or bug bombs.
- If the pest problem is severe, consider hiring a certified applicator.
- Always store pesticides in their original containers out of your child's reach.



Pesticides Used on Lawns

Applies to 2,4-D

Ways to Lower Your Child's Exposure

Keeping your lawn strong and healthy is the best way to avoid using pesticides like weedkillers.

Consider tolerating some pest activity, like weeds, in your lawn. If you need to use a pest control product:

- Make sure to identify the pest correctly and that the pest is listed on the label.
- Follow instructions on the product label.

- Make sure children and pets are not nearby while applying and keep them away from the treated area for the time listed on the label.
- For liquid products, choose calm weather so it doesn't drift to other places.
- Take shoes off before entering the house and change clothes after applying.
- Always store pesticides in their original containers out of your child's reach.



Pesticide Residues on Food

Applies to all chemicals except PNP

Ways to Lower Your Child's Exposure

- Wash fruits and vegetables before eating.
- See our website for lists of fruits and vegetables with the most and least pesticide residues.



Pesticides Used on Pets

Applies to 3-PBA, 4,F,3-FPBA, trans-DCCA, cis-DCCA

Ways to Lower Your Child's Exposure

- Ask your veterinarian to help you select the most appropriate products.
- Follow the label directions and never over-treat your pet.

How You Can Lower Exposure to Pesticides continued



Pesticides in the Air from Farms and Neighboring Properties

Applies to all chemicals except PNP

Ways to Lower Your Child's Exposure

Keep your child and pet indoors with windows closed if you know pesticides are being sprayed nearby.

If you think your child came in contact with pesticide drift, follow these steps:

- Handle medical emergencies first and call 911, if needed.

- Call the Minnesota Poison Control System 24/7 at (800)222-1222 or a doctor to determine if they need medical attention.

- Report the incident to Minnesota Department of Agriculture: 651-201-6333. Pesticide drift is against Minnesota law.



Pesticides in Drinking Water

Applies to all chemicals except PNP

Ways to Lower Your Child's Exposure

Water from public water systems is already tested for many pesticides.

If you are concerned about pesticides in your private well, consider your well's risk factors:

- Pesticides are more likely to occur in wells in farming areas with vulnerable groundwater. There is a water vulnerability map on our website.

- Testing for nitrate can indicate if there are pesticides in your water. At three milligrams per liter of nitrate or above, the likelihood increases.
- If you are concerned about pesticides in your water, reverse osmosis (RO) devices remove nearly all pesticides when properly maintained.



Pesticide Residues Brought Home from Work

Applies to all chemicals

Ways to Lower Your Child's Exposure

- Follow safe work practices and the product label instructions.
- Do not bring pesticide containers or pesticides home from work.

- After work, change your clothes and shoes before entering your home and car. Shower before touching your child.
- Wash work clothes separately from other clothes.

Minnesota Department of Health

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