

# Healthy Kids Pesticides Information

**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 potential 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 more sensitive than adults.

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.

**For more information and resources, please visit our webpage:**



**Healthy Kids MN**













[health.mn.gov/  
HealthyKidsChemicals](https://health.mn.gov/HealthyKidsChemicals)

## Where Can Pesticides Be Found?



# Pesticides Tested in Your Child's Urine

Pesticides can change into related chemicals once they enter the body. We call these “breakdown products.” Healthy Kids Minnesota tested for eight chemicals in your child’s urine—one pesticide and seven pesticide breakdown products.

Name	Main Uses	Common Ways Kids Are Exposed
<b>2,4-D</b> 2,4-Dichlorophenoxyacetic acid This is a breakdown product of diazinon.	<ul style="list-style-type: none"> <li>Controls weeds in home lawns</li> <li>Widely used in farming to control weeds</li> </ul>	 Eating food  Playing on treated lawns  Nearby farming use
<b>IMPY</b> 2-Isopropyl-4-methyl-6-hydroxypyrimidine This is a breakdown product of diazinon.	<ul style="list-style-type: none"> <li>Controls insects in farming (crops, livestock)</li> </ul>	 Eating food  Nearby farming use
<b>PNP</b> P-nitrophenol This is a breakdown product of methyl- and ethyl-parathion.	<ul style="list-style-type: none"> <li>Previously used to control insects in farming but use is no longer allowed in the U.S.</li> <li>PNP is also a breakdown product of an industrial chemical called nitrobenzene</li> </ul>	 Scientists are still learning how kids are exposed to this chemical
<b>TCPY</b> TCPy [3,5,6-Trichloro-2-pyridinol] This is a breakdown product of chlorpyrifos and chlorpyrifos-methyl.	<ul style="list-style-type: none"> <li>In the home, chlorpyrifos can be used in ant and roach bait stations only – no other home uses are allowed</li> <li>Outside the home, chlorpyrifos can be used to control insects on farms and non-farm settings such as golf courses</li> <li>Chlorpyrifos-methyl is used on stored grain</li> </ul>	 Eating food  Air exposure, nearby farming use
<b>3-PBA, 4-F-3-PBA, trans-DCCA, cis-DCCA</b> 3-Phenoxybenzoic acid, 4-Fluoro-3-phenoxybenzoic acid, Trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid, Cis-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid These are breakdown products from a group of insecticides called pyrethroids.	<ul style="list-style-type: none"> <li>Controls insects in the home and yard/garden</li> <li>Used in some flea and tick products for pets</li> <li>Controls insects in farming</li> </ul>	 Eating food  Contact with treated areas in home and yard  Nearby farming use  Contact with pets

# How You Can Lower Exposure to Pesticides



## Pesticides Used in the Home

**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.

**Applies to:**

**TCYP**

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



## Pesticides Used on Lawns

**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.

**Applies to:**

**2,4-D**

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



## Pesticide Residues on Food

- Wash fruits and vegetables before eating.
- See our website for guidance on how to minimize your exposure to pesticide residues in food.

**Applies to:**

**2,4-D**

**IMPY**

**TCPY**

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

# How You Can Lower Exposure to Pesticides (cont.)



## Pesticides Used on Pets

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

### Applies to:

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



## Pesticides in the Air from Farms and Neighboring Properties

**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.

### Applies to:

2,4-D

IMPY TCPY

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



## Pesticides in Drinking Water

**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.

### Applies to:

2,4-D

IMPY TCPY

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



## Pesticide Residues Brought Home from Work

- 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.

### Applies to:

2,4-D IMPY

PNP TCPY

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

[www.health.mn.gov](http://www.health.mn.gov)

To obtain this information in  
a different format, email:

[health.biomonitring@state.mn.us](mailto:health.biomonitring@state.mn.us)

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For more information and  
resources, please visit our webpage:  
[health.mn.gov/healthykidsmn](http://health.mn.gov/healthykidsmn)