

Healthy Kids Environmental Phenols Information

Environmental Phenols

Healthy Kids Minnesota measured twelve environmental phenols in your child's urine. These chemicals are commonly used in the products we buy, household materials, and food and beverage packaging. Due to their widespread use, environmental phenols are commonly found in people.

Many environmental phenols are considered "endocrine-disrupting" chemicals. This means that they affect the body's natural hormones. Hormone changes can affect development in infants and children. However, finding environmental phenols in a child's urine is common and does not mean their health will be affected. Scientists are still learning what levels may be unsafe.



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

Phenols Measured in Your Child's Urine

Benzophenone-3 (also called oxybenzone)

What are the main uses?

- Some sunscreens
- Personal care products (such as body washes, moisturizers)
- Plastics
- Varnish and oil-based paints

What are common ways kids are exposed?

Using certain sunscreen and personal care products

Triclosan, Triclocarban

What are the main uses?

Used to slow the growth of bacteria, fungi, and mildew in:

- Toys, sporting goods, clothing
- Some personal care products (like toothpastes, soaps, lotions)
- Housewares/home furnishings

What are common ways kids are exposed?

Using antibacterial and antimicrobial products

Phenols Measured in Your Child's Urine continued

Bisphenol A, Bisphenol F, Bisphenol S

What are the main uses?

Used as a protective coating in:

- Metal food and drink cans
- Some paper receipts

Used in plastics for:

- Housewares (such as plastic dinnerware, storage containers)
- Building materials (like grout, laminate flooring)
- Some dental sealants/fillings

What are common ways kids are exposed?

- Eating canned food or drinking canned beverages
- Consuming food/water stored or microwaved in certain plastic containers

Methyl paraben, Ethyl paraben, Propyl paraben, Butyl paraben

What are the main uses?

Used as preservatives in:

- Personal care products (such as lotions, sunscreens, shampoos, skin cleansers, baby wipes, cosmetics)
- Some household products (like stain removers, pet shampoos)
- Certain foods and food packaging
- Some medications

What are common ways kids are exposed?

- Using personal care products
- Eating food

2,4-dichlorophenol and 2,5-dichlorophenol

What are the main uses?

- 2,4-dichlorophenol is used to make other chemicals. It is also a breakdown product of triclosan (another environmental phenol) and the pesticide 2,4-D.
- 2,5-dichlorophenol is a breakdown product of a chemical used in moth repellents (moth balls, crystals, flakes, and bars). It is also used in room, trashcan, and toilet deodorizers.

- Formed during some types of manufacturing and from burning municipal waste, coal, and wood.

What are common ways kids are exposed?

Using room, trashcan, and toilet deodorizers and moth repellents

How You Can Lower Exposure to Phenols



Food/Beverages in Metal Cans and Plastic Containers

Applies to bisphenol A, F, and S

Ways to Lower Your Child's Exposure

- Choose fresh or frozen food rather than canned food, if possible.
- Choose food or drinks in glass containers rather than metal cans. Do not heat food in metal cans.
- Store leftovers in glass or stainless steel containers instead of plastic.
- Microwave foods in ceramic or glass dishes instead of plastic containers.



Personal Care Products

Applies to benzophenone-3, parabens, triclosan, triclocarban

Ways to Lower Your Child's Exposure

- Read the labels on personal care products. Choose ones that do not include parabens, benzophenone-3 (oxybenzone), triclosan, or triclocarban in the ingredient list.
- Choose sunscreens with zinc oxide and/or titanium dioxide as active ingredients, which physically (rather than chemically) block the sun.



Antibacterial/Antimicrobial Cleaning and Household Products

Applies to triclosan, triclocarban

Ways to Lower Your Child's Exposure

- Read the labels on cleaning products. Choose ones that do not include triclosan or triclocarban in the ingredient list.
- Avoid or limit use of household products or clothing marketed as “antimicrobial” or “antibacterial”, which may contain triclosan or triclocarban.

How You Can Lower Exposure to Phenols continued



Air Fresheners, Deodorizers, Moth Repellents

Applies to 2,5-dichlorophenol

Ways to Lower Your Child's Exposure

- Avoid or limit use of air freshening products, moth repellents, and block deodorants in trashcans and toilets.



House Dust

Applies to all environmental phenols

Ways to Lower Your Child's Exposure

Environmental phenols in consumer products and building materials can end up in house dust:

- Clean floors and surfaces in your home to keep dust from building up.
- Have your child wash their hands before eating.

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