

Although the word pollution conjures up images of oil spills and smokestacks spewing toxic chemicals into the air, the fact is we are exposed to more subtle sources of pollution every day. Our day-to-day pollutants don't get the same sort of news coverage as oil and toxic chemical spills, but they can produce long-term health problems.

Symptoms related to environmental pollutants

A single large exposure to a known environmental toxin can have immediate health effects, and might even be considered a medical emergency. However, long-term exposure to low levels of environmental pollutants produces more vague symptoms, making the cause more difficult to determine. Symptoms associated with environmental pollution include:

- irritation of eyes, nose and throat; skin rashes and other skin irritations
- effects on the central nervous system including impaired thinking and movement
- disrupted hormone function
- headaches, nausea, anxiety or depression
- fatigue and drowsiness

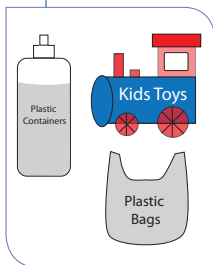
Why Test for Pollutants?

- Environmental pollutants are found everywhere.
- The toxic effects of environmental pollutants are associated with many common health concerns.
- An environmental pollutants panel helps determine the pollutants you have the most exposure to - information you can use to minimize future exposure.

Where are environmental pollutants found?

Parabens are found in skin products and foods

Shampoos, conditioners, soaps, hand sanitizers, lip balms, facial masks and foundations frequently contain parabens as do pharmaceutical products like antacids, suppositories, injectable drugs, and mentholated rubs. Parabens are also used as preservatives in some foods like: fish and poultry, mayonnaise, oils, ketchup, pickles, dairy products and most processed foods.



Phthalates are found in plastics

Vinyl flooring and tile, wall coverings, pool liners, wires & cables, garden hoses, weather stripping, flexible plastic medical tubing and bags, some food containers, bottled water containers, children's toys, shower curtains, and faux leather all contain phthalates.

Volatile organic compounds are found in many household products

- **Xylene** is found in varnish, paint, paint thinner, paint remover, shellac, polish, rust inhibitors, lacquers, inks, dyes, adhesives, cleaning fluids and products, degreasing agents, tobacco smoke, and in fuel additives.
- **Toluene** is found in aerosols, spray paint cans, glues, varnishes, shellac, tobacco smoke, fuel additive, solvent-based sanitizers, and may be added to some cosmetics.
- **Benzene** is found in adhesives, paint removers/strippers, carburetor cleaner, rubber cement, some arts & crafts supplies, and tobacco smoke.
- **Trimethylbenzene** is found in coatings, paint thinners, wood preservatives, cleaners, aerosols, dry-cleaning degreasers, fuel additives, pesticides, and printer inks.
- **Styrene** is found in packing materials (polystyrene), thermal & electrical insulation, fiberglass, foam cups and food containers, and automotive emissions.

Parabens

Parabens are chemical preservatives that prevent growth of bacteria and mold, and increase the shelf life of many perishable products. It is estimated that 75 to 90% of skin products contain parabens.

Phthalates

Phthalates are used in the manufacture of plastics. Soft plastics, in particular, release phthalates into the contents of the container.

Volatile Organic Compounds (VOCs)

Also known as volatile solvents, VOCs are air borne particles that contribute to poor air quality and smog.

Information is for educational purposes only. It is not meant as medical advice and any treatment decisions should be made with the knowledge or consent of your healthcare professional.

Restoring Health

As the authors of "Slow Death by Rubber Duck" revealed in their groundbreaking and entertaining book on environmental toxins, you can dramatically decrease levels of toxins and toxic metabolites by seeking out and using chemical-free products. In other words, always read labels and don't be afraid to ask manufacturers for more information.

Parabens, phthalates and volatile organic compounds are eliminated from the body relatively quickly - generally within a couple of days. Thus, when exposure has been reduced or eliminated, levels of environmental pollutant byproducts should decline in a short period of time. If exposure is ongoing, accumulation of environmental toxins can occur. Once toxins accumulate, it takes longer to eliminate them once exposure is reduced.

A few simple tips to help reduce exposure to parabens, phthalates and VOC's:

1. Steer clear of ingested, topical, and airborne phthalate and paraben sources such as plastics, paints, cosmetics and processed foods. Be a label reader and make conscious choices about what you choose to put in and on your body and bring into your home. The book *Ecoholic* by Adria Vasil is also a great resource.
2. Avoid plug-in or spray air fresheners, and harsh chemical or heavily scented cleaning products. Instead use essential oils to scent a room, open a window for some fresh air and choose environmentally friendly cleaning products.
3. Make daily beneficial lifestyle choices that promote gentle detoxification in the body, such as drinking lots of water, exercising on a daily basis and eating a whole foods diet.
4. Your healthcare professional can recommend supplements and lifestyle changes to help your body eliminate parabens, phthalates and VOCs more efficiently.

Prepare for Your Test

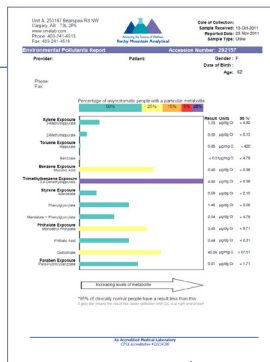
In preparation for the Environmental Pollutants Profile, avoid foods preserved with benzoic or sorbic acid for a minimum of 48 hours prior to collection. The metabolites of these preservatives are the same as those of some environmental pollutants, which could artificially raise your levels. The best way to avoid benzoic and sorbic acid (or benzoate or sorbate containing foods) is to **eat only fresh, unprocessed foods for 48 hours prior to urine collection.**

Benzoic acid containing foods include beer, chewing gums, sweets, ice cream, jams, jellies, maraschino cherries, fruit juices, soft drinks, pickles, barbecue sauces, salad dressings and margarine. Benzoic acid is also found in processed foods like cheeses and lunch meats.

Sorbic acid and potassium sorbate are added to a wide variety of products, including bread and other bakery foods, cheese, yogurt, dried fruits, gelatin, syrup, sauces and soft drinks. Sorbic acid and potassium sorbate also are used as wine preservatives.

Test Results

The test report for environmental pollutants shows the breakdown products of volatile organic compounds, phthalates and parabens in urine in bar graph form. The longer the bar, the more of a particular breakdown product (metabolite) is present in the urine. A very high number for one or more metabolites does not necessarily mean the environmental pollutant is responsible for symptoms, it just means you have more of that metabolite than most other clinically normal people. Your healthcare professional will consider your symptoms along with your test results and help you determine the best course of action.



Why Test?

Good health has a lot to do with maintaining balance: the right balance of work and play, the right balance of nutrients in the diet, and the right kinds of foods.

Environmental pollutants may be a contributing factor to a variety of chronic illnesses. Environmental pollutant testing is useful for monitoring exposure to pollutants.

Rocky Mountain Analytical is committed to offering tests that identify imbalances and other conditions - so they can be corrected before disease develops!

About Us

Rocky Mountain Analytical was founded in 2002 with a mission to offer tests that focus on early identification and prevention of disease.

Rocky Mountain Analytical is an accredited medical laboratory located in Calgary, Alberta. Accreditation means tests performed by Rocky Mountain Analytical are regularly reviewed for quality, accuracy and reproducibility by the College of Physicians & Surgeons of Alberta.

Ask your healthcare professional whether a test is right for you.

