



## Naturopathic Medicine: Frequently Asked Questions

*A service for consumers from the [American Association of Naturopathic Physicians \(AANP\)](#) and the [Institute for Natural Medicine \(INM\)](#). The INM and AANP would like to acknowledge [Tess Marshall, ND](#), for her contributions to the content of this FAQ.*

### What do naturopathic doctors do to treat toxin exposure?

#### What is Environmental Medicine?

Environmental medicine (EM) is a relatively new branch of medicine that explores how the environment interacts with the human body – especially the physical, mental, and emotional responses to environmental factors. Environmental medicine dovetails with other branches of medicine including toxicology, industrial medicine, and public health. EM uses a holistic, systems-wide based model to evaluate how various toxins, pollutants, chemicals, and microbes may be compromising the body.

Those working in environmental medicine leverage the concept of [cumulative toxic load](#) – low-level exposure and interaction with various substances in food, water, air, homes, and communities – over time that may compromise fundamental systems which maintain overall wellness and support healthy aging. This field explores the link between the environment and the documented rise in chronic illnesses like cancer, metabolic, neurological, and endocrine disorders.

#### Where do toxins come from?

In the age of industrialization and modern society, pollutants, chemicals, and toxins are commonly encountered in daily life and range from pollutants that come through the atmosphere to packaging and consumed food. Several [examples of chemicals and pollutants are listed below](#).

Food	Persistent organic pollutants (POPs) Organophosphates (OCPs) Pesticides: various herbicides, glyphosate Xenobiotics: Plastics, bisphenol A (BPA) Metals: Aluminum, arsenic, cadmium, mercury Alcohol
Water	Microorganisms Disinfectants: Chlorine Metals: Lead Organic Chemicals
Air	Mold Mycotoxins Polycyclic aromatic hydrocarbons (PAHs) Perfluorocarbons (PFCs) Volatile organic compounds (VOCs) Particulate matter Ozone Carbon monoxide Sulfur and nitrogen oxides
Products	Parabens Phthalates Metals: aluminum

Naturopathic doctors understand that no two people are alike due to genetic biochemical individuality. Based on this principle and utilizing a patient-centered approach, naturopathic doctors evaluate how each person's environmental exposure may be influencing their foundations of health. In addition to toxic load, an ND evaluates genetic variations, nutrient deficiencies, stressors, dietary choices, microbiome status, vitality, and associated conditions that may influence how a patient responds to toxins.

Given that chronic illness is typically caused by many factors, it is important to identify which toxins or elements in the environment are interacting within the body. Many of the above-named chemicals have a direct effect on a variety of tissues, leading to a potential cycle of oxidative stress inflammation. A number of environmental toxins have also been associated with [endocrine disruption](#). [Research to date](#) alludes to the inflammation as the key driver of metabolic, neurologic, endocrine, and cellular malfunction leading to a rise in obesity, neurodegenerative disease, autoimmune conditions, reproductive disorders, and cancer.

## How naturopathic doctors evaluate a patient who has many symptoms of toxic exposure?

While assessing if the environment is contributing or causing a specific illness, a naturopathic doctor (ND) begins with a thorough case history, sometimes using a comprehensive environment – a targeted questionnaire that helps identify signs of toxic overload. Several questions are asked to help identify what chemicals are involved in the timing of exposure is consistent with symptom development, and what systems in the body are compromised by the possible exposure. For example, if a patient began complaining of an increase in allergies, brain fog, headaches, and skin rashes upon moving into an old modular home located in a humid area, a naturopathic doctor may be suspecting mold contamination and compromised lung, immune, and neurological function.

In addition, there are various [specialty laboratory tests available](#) to practitioners. To identify toxic load, advanced laboratory testing may be necessary, including serum or urine testing, which assesses for metals, mold derivatives, solvent metabolites, and [organophosphate metabolism](#). To work up specific systems implicated by environmental exposure, a doctor may explore microbiome testing, hormone testing, organic acid testing, micronutrient panels, genetic panels, and oxidative stress markers before implementing a targeted treatment plan.

## What treatments are available in environmental medicine?

Naturopathic doctors [work through the therapeutic order while treating patients](#). Given environmental medicine can be so complex and multi-modal, the primary factor in treatment is to identify the source and remove it. **Avoidance alone can make a notable difference in a patient's symptoms.** Next, targeted therapeutics depends on the individual's genetic make-up, biochemical, and metabolic needs. Treatment may include:

Supporting functional genetics with added vitamins, nutraceuticals, and lifestyle changes.

- Certain genetic variations in our detoxification pathways have been shown to require added support in their function with specific minerals or stimulation through botanicals that influence antioxidants.
- [Single Nucleotide Polymorphisms](#) (SNPs) are also continuously being transcribed through our DNA, and new research has found that [moderate exercise is capable of controlling](#) the genetic expression of unfavorable genes.

[Supporting liver detoxification](#) with [botanicals, protein, and vitamins](#).

- [Phase 1 and phase 2 detoxification](#) require a broad series of B vitamins, bioflavonoids, sulfur metabolites, protein, and fat-soluble vitamins.
- Botanicals such as milk thistle have been shown in various clinical studies to increase cellular glutathione, the body's primary antioxidant, in addition to strengthening antioxidant defense systems.
- Dietary modification including the increase of cruciferous vegetables such as Brussels sprouts, broccoli, and kale.
- Increasing system-wide antioxidants with green tea, N-acetyl cysteine, anthocyanins, polyphenols, and citrus bioflavonoids.

Supporting [elimination pathways](#) through the gut and skin.

- Stimulating the liver in detoxification can become troublesome without focusing on elimination pathways, so optimizing bowel and kidney function is key to a successful detoxification program.
- Focus on adequate water intake for proper kidney elimination may be recommended along with therapeutics that address overall gut health such as colonics, [castor oil packs](#), and/ or high fiber diets.
- Sauna/infrared saunas are found to stimulate detoxification and clearance of toxic metals through the skin.

Facilitating environmental change in the home.

- Water filtration systems for drinking and shower water.
- Air purification filters (such as HVAC or house plants), especially for those in urban areas.
- Reduction in carpet surface area. Carpets are known to store various pollutants from the air in homes.
- Clean paint to prevent lead [off-gases](#) from being absorbed through the respiratory tract.

Preventing other toxins from impacting the body in the future.

- [Strengthening the microbiome](#) with broad-spectrum probiotics, fermented foods, and stress modification.
- Improving the gut epithelial lining with proteins and minerals such as glutamine or zinc carnosine, which are shown to maintain a healthy inflammatory response, support the gut immune system, and prevent "[leaky gut](#)."
- Exchanging personal and household care products to be paraben and phthalate free.
- Opting for organic, cleanly washed produce and either wild caught or grass fed, hormone free meat/fish.

With modern advancements in biotechnology and advanced therapeutics, many naturopathic doctors are trained and specialize in and promote detoxification in a controlled setting. Such treatments are done under medical supervision.

As society continues to evolve, the care for nature and our environment is becoming more popular. There are now many ways patients can be proactive about their environment using resources from the [Environmental Working Group](#) and understanding the [Dirty Dozen](#), downloading apps like [Think Dirty](#), and following health blogs that educate about DIY tactics for creating a healthy home environment.

While our environment is ever changing and nearly impossible to avoid complete exposure to pollutants, chemicals, and toxins, seeking out the advice of a licensed naturopathic doctor can help you understand the way your body is responding to your environment and lifestyle, and help support your system in order to maintain optimal function and prevent chronic disease.

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