

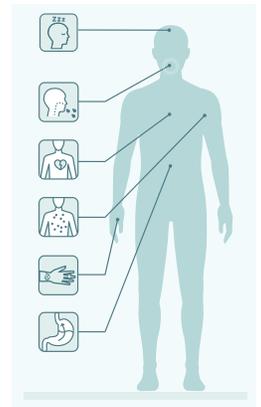
ENVIRONMENTAL TOXINS



Which Patients Need to be Tested for Environmental Toxins?

Individuals who have been affected by an excess of environmental toxins may experience symptoms and conditions, such as:

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| <ul style="list-style-type: none"> ❑ Fatigue and weakness ❑ Chronic burning in the throat and nasal passages ❑ Coughing, wheezing, and shortness of breath ❑ Loss of balance ❑ Depression and/or anxiety ❑ Dizziness ❑ Eye irritation ❑ Headache, light sensitivity ❑ Hearing loss ❑ Heightened sensitivity to chemicals and foods ❑ Irregular heartbeat ❑ Morning stiffness and/or joint pain ❑ Mood swings | <ul style="list-style-type: none"> ❑ Muscle weakness ❑ Skin rashes ❑ Sleep problems ❑ Slower reaction time ❑ Vision changes ❑ Poor memory, difficulty finding words ❑ Difficulty concentrating ❑ Unusual skin sensations, tingling and numbness ❑ Increased urinary frequency or increased thirst ❑ Abdominal pain, diarrhea, and/or bloating ❑ Tearing, disorientation, metallic taste in mouth ❑ Static shocks |
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Facts About Environmental Toxins

- ✓ Environmental toxins, technically called toxicants, are substances produced endogenously from the human body and which, when absorbed, inhaled, or ingested, can cause acute or chronic toxic overload, which may manifest in a variety of biological organ, tissue, and cellular-level systems.
- ✓ Environmental toxins are cancer-causing chemicals and endocrine disruptors, both human-made and naturally occurring.
- ✓ Susceptibility to toxic overload varies person-to-person, and can be affected by a variety of factors including:

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|----------------------------------|---|---------------------------------|
| ■ Genetics | ■ Microbiome composition and diversity | ■ Gender |
| ■ Environment | ■ Age | ■ Lifestyle |
| ■ Diet | ■ Adiposity | ■ Immune system capacity |
| ■ Liver and kidney health | | |
- ✓ Screening patients with multiple chronic inflammatory symptoms, resistance to weight loss, and signs of excessive total toxic load is important to detecting unknown chemical exposure to daily products, foods, and environment



Clinical Connections

-  Vibrant Environmental Toxin Panel uses the most advanced mass spectrometry method to assess 39 different markers to assess environmental toxins in one urine specimen.
-  In order to assess the most comprehensive potential for total toxic load, consider running Environmental Toxins with a Vibrant Heavy Metals, Mycotoxins, or Food Additives panels.
-  Screening for Environmental Toxins can aid practitioners in uncovering true root causes of toxicity from common environmental sources and provide a clear roadmap to detoxification and healing.



What Does the Environmental Toxins Test Include?

| Organochlorine pesticides | Organophosphate pesticides | Other pesticides/herbicides | Plasticizers/Preservatives |
|--|---|---|--|
| 2,4-Dichlorophenoxyacetic Acid (2,4-D) Perchlorate DDA | Metabolites: Diethyldithiophosphate (DEDTP) Dimethyldithiophosphate (DMDTP) Diethylthiophosphate (DETP) Dimethylphosphate (DMP) Diethylphosphate (DEP) Dimethylthiophosphate (DMTP) Atrazine Atrazine mercapturate | Glyphosate Metabolites: 3-Phenoxybenzoic Acid (3PBA) | Phthalate Metabolites: Monoethyl Phthalate (MEP) Mono-2-ethylhexyl phthalate (MEHP) Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP) Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP) Mono-ethyl phthalate (MEtP) Parabens: Methylparaben Propylparaben Butylparaben Ethylparaben Acrylic Metabolites: N-acetyl-S-(2-carbamoylethyl)-cysteine (NAE) N-Acetyl (2-Cyanoethyl) Cysteine (NACE) Other Metabolites: N-Acetyl (2,Hydroxypropyl) Cysteine (NAHP) N-Acetyl (3,4-Dihydroxybutyl) Cysteine (NADB) 2-Hydroxyethyl Mercapturic Acid (HEMA) N-Acetyl Propyl Cysteine (NAPR) Diphenyl Phosphate (DPP) Tiglylglycine (TG) |
| Alkylphenols | Volatile Organic Compounds (VOCs) | | |
| Bisphenol A (BPA) Triclosan 4-Nonylphenol | Metabolites: 2-Methylhippuric Acid (2MHA) 3-Methylhippuric Acid (3MHA) 4-Methylhippuric Acid (4MHA) 2-Hydroxyisobutyric Acid (2HIB) Phenylglyoxylic Acid (PGO) N-acetyl phenyl cysteine (NAP) | | |

Regulatory Statement

The general wellness test intended uses relate to sustaining or offering general improvement to functions associated with a general state of health while making reference to diseases or conditions. This test has been laboratory developed and its performance characteristics determined by Vibrant Genomics LLC, a CLIA-certified laboratory performing the test. The test has not been cleared or approved by the U.S. Food and Drug Administration (FDA). Although FDA does not currently clear or approve laboratory-developed tests in the U.S., certification of the laboratory is required under CLIA to ensure the quality and validity of the tests.