

# GENOVA Organophosphates

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*The Organophosphates Profile is a urine test that identifies a patient's prolonged exposure to organophosphate pesticides. The Organophosphates Profile uncovers exposure to these pesticides, insecticides and herbicides to determine if avoidance and detoxification are needed for optimal health.*

*Organophosphate pesticides/insecticides are nerve agents that inactivate an important enzyme which is essential to nerve function. This can cause neurodevelopment disorders in small children and fetuses. Though organophosphates degrade rapidly when exposed to sunlight, air, and soil, chronic toxicity can still occur as these chemicals are used on food crops, orchards, and food storage centres.*

## **Why perform organophosphate exposure testing?**

Organophosphates from pesticides can be hazardous to the neurological development of children and babies in the womb, producing lower IQs. Other adverse health effects caused by pesticides include chronic fatigue, asthma, wheeze, immune system disorders, impaired memory, disorientation, depression, irritability, flu-like symptoms, and may increase risk of cancer and Alzheimer's disease. Most exposure to organophosphates occurs from ingestion through the food supply. Direct dermal exposure can also occur for people that work directly with these chemicals.

Organophosphate pesticides are metabolised into the six dialkyl phosphates that show up in urine samples:

- Dimethylthiophosphate (DMTP)
- Dimethyldithiophosphate (DMDTP)
- Diethylthiophosphate (DETP)
- Diethyldithiophosphate (DEDTP)

## SYMPTOMS OF EXPOSURE

Nausea	Headache
Dizziness	Muscle twitching
Poor coordination	Vomiting
Diarrhoea	Asthma
Neurodevelopment disorders	Immune system disorders

## Genova ORGANOPHOSPHATES (urine) [4105]

❖ Atrazine, Atrazine Mercapturate, Diethyldithiophosphate (DEDTP), Diethylthiophosphate (DETP), Dimethyldithiophosphate (DMDTP), Dimethylthiophosphate (DMTP)

## Other environmental toxin tests available

- **Genova Phthalates & Parabens Profile (urine) [4101]:** mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP), mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP), mono-2-ethylhexyl phthalate (MEHP), mono-ethyl phthalate (MEtP); Butylparaben, Ethylparaben, Methylparaben, Propylparaben
- **Genova Chlorinated Pesticides (blood) [4102]:** DDE (p,p1), DDT (p,p1), Dieldrin, Heptachlor Epoxide, Hexachlorobenzene (HCB), Mirex, Oxychlordane, Endosulfan Sulfate, Trans-Nonachlor
- **Genova Polychlorinated Biphenyls (PCBs) (blood) [4103]:** PCB 118, PCB 126, PCB 138, PCB 153, PCB 156, PCB 169, PCB 180, PCB 74, PCB 77
- **Genova Volatile Solvents (blood) [4104]:** Benzene, Ethylbenzene, Styrene, Toluene, Xylene, Hexane, 2-methylpentane, 3-methylpentane
- **Genova Bisphenol A (BPA) (urine) [4106]:** Bisphenol A (BPA), 4-Nonylphenol, Triclosan

## How to order a test kit:

To order a test kit simply request the test name or test code on a NutriPATH request form and have the patient phone **NutriPATH Customer Service** on **1300 688 522**.

