

# What is Biomonitoring?

Measuring chemicals in our bodies



**BIOMONITORING**  
**CALIFORNIA**



## Biomonitoring California

*Biomonitoring California* was created to help protect the people of California from harmful chemicals.

***Biomonitoring California** measures levels of certain chemicals in Californians and how the levels change over time.*

***Biomonitoring California** helps evaluate how well government programs protect the public from harmful chemicals.*

To find out more about *Biomonitoring California*, or for more information about biomonitoring,

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visit: [www.biomonitoring.ca.gov](http://www.biomonitoring.ca.gov)

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*A joint program of the California Department of Public Health, Office of Environmental Health Hazard Assessment, and Department of Toxic Substances Control.*

## Which Chemicals are Measured?

Scientists can measure many chemicals in the body. Usually, they measure chemicals that can be harmful, are widely used, and stay in the body or the environment for a long time. For example,

**Pesticides** are used to kill insects in homes, yards, farms, parks, and on pets.

**Flame retardants** are in the foam in furniture and in cars, electronics, and many other products. They get into the air, dust, and food.

**Mercury** comes from coal-fired power plants and mines. It pollutes our air and water. It gets into fish that we eat. It is also in some skin lightening creams.

**Phthalates** (THAL-ates) are in many plastic products. They are also in nail polish and products with added “fragrance,” such as shampoos, air fresheners, and candles.



# Chemicals in Everyday Life



We come into contact with many chemicals each day. They are used in industry and agriculture. They are in common products, such as cosmetics, toys, and plastics.

Some of these chemicals get into our air, water, soil, dust, and food. As a result, all of us have chemicals in our bodies. We may have more or fewer chemicals—depending on the products we use, the jobs we do, and the places we live.

## Chemicals and Our Health

Some chemicals can harm our health. They can cause birth defects, learning problems, weight gain, cancer, asthma, and other illnesses. However, many chemicals have not been well studied, so we do not know if they affect our health.

## What is Biomonitoring?

Biomonitoring (bi-o-MON-i-tor-ing) is a way to measure the chemicals in a person's body. It can tell us which chemicals are there and how much.

Scientists usually test for chemicals in samples of blood and urine. There are only a few labs that can do this testing.

*Like other parents, Tony wants to protect his son's health. "We need to learn which chemicals our kids are exposed to."*



## Why is Biomonitoring Important?

Biomonitoring helps us learn which chemicals get into our bodies.

This information can be used to:

- Learn more about how chemicals affect our health.
- Help keep harmful chemicals out of our environment and the products we buy.

## Taking Part in a Biomonitoring Project

*Biomonitoring California* is a state government program. You may be asked to take part in one of the *Biomonitoring California* projects. If you agree to participate:

- You will be asked to provide blood, urine, or other samples for testing.
- You can see your results.
- Your results will be confidential.
- You will learn if you have chemicals in your body that might be harmful. However, safe amounts for most chemicals are not known.
- You will learn ways to help keep some chemicals out of your body.



*Anna was asked to be part of a biomonitoring project with other pregnant women.*