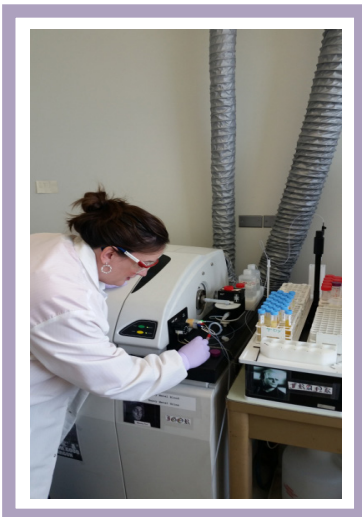


## What chemicals are being tested?

The 4CSBC study aims to better understand five particular environmental health concerns.

These include:

- Heavy metals such as arsenic, cadmium, manganese, mercury, selenium, or uranium
- Phthalates, which are a group of related chemicals involved in making plastics and other industrial uses
- 2,4-D, a domestic use herbicide
- Para-dichlorobenzene (p-DCB) has many uses and is present in disinfectants, deodorants and mothballs
- Pyrethroid-containing pesticides, which are often used around homes, recreational areas, and mosquito breeding areas to control insects and insect-borne diseases



## Four Corners States Biomonitoring Consortium

In 2014, the state public health agencies of Arizona, Colorado, New Mexico, and Utah formed a regional biomonitoring consortium. In addition to sharing the only location in the nation where four states share a boundary point, these states have much in common in their geology, environment, economy and demographic makeup. The four states also have many common environmental health concerns. By forming a consortium, each state's public health agency is able to take advantage of the laboratory capacity to better understand five particular environmental health concerns.

Visit our website at [www.4csbc.org/](http://www.4csbc.org/) for more information.

# Biomonitoring

Biomonitoring measures chemicals in our bodies.



## What is Biomonitoring?

We are exposed to chemicals everyday through a number of sources. These sources include common products such as cosmetics (e.g. lotions and soaps), plastics (e.g. containers for food), and children's toys. Chemicals are also used in industry and agriculture.

Chemicals used in these products can contaminate our air, water, soil and food. Because of this, we all have chemicals in our bodies. Some of us have more or less depending on our exposure.

Some chemicals have been studied and scientists have determined they can harm our health. Some health concerns include birth defects, learning problems, weight gain, cancer, asthma and other illnesses. Some chemicals still need to be studied to determine if they affect our health.

Biomonitoring is a way to measure the chemicals we have in our bodies. Biomonitoring is the collection of biological samples (such as skin cells, blood, hair, saliva, urine, etc.) and testing those samples for the presence of hazardous chemicals or the metabolites the body makes from those chemicals.

Biomonitoring can help determine how much exposure someone had to an environmental hazard.

## Why is Biomonitoring Important?

Biomonitoring helps us understand what chemicals can get into our bodies.



This information is important because:

- We can learn how chemicals impact our health
- We can keep dangerous chemicals out of the environment and out of products we consume

## Can I Participate in the Biomonitoring and Well Water Project?

Yes! The Four Corner States Biomonitoring Consortium is testing people and well water in communities across Arizona, Colorado, New Mexico and Utah. Participants in the study will be asked to provide a urine sample. A water sample will also be collected if participants drink water from a private well. Benefits of participation include:

- Confidential report of metal contaminants in your well water
- Confidential report of urine results
- Knowledge of what chemicals are in your body
- Knowledge of ways to keep chemicals out of your body
- Contribute to scientists' understanding of environmental chemicals and human exposure

