

### **Who Conducts The Exposure Investigations?**

An Exposure Investigation Coordinator in the Bureau of Community Environmental Health conducts them. This coordinator's training includes biology, chemistry, biochemistry, human health, toxicology and statistics. The county health departments collect the samples from the community. The labs analyze the samples for chemicals. The Exposure Investigation Coordinator evaluates the results and writes a report. The report is shared with the community.

### **What Is Learned From An Exposure Investigation?**

All people are exposed to various chemicals every day. Some people may get sick from exposure, while others may not. After we analyze the lab results, we see if current or future illness (es) are related to that level of a chemical. If a person was exposed to a chemical months or years ago, biological sampling may not provide useful results. It is important to keep in mind that most biological tests do not predict whether a person may suffer any illness. After an Exposure Investigation, we explain the results to the community. Knowing the results, the community will better understand the possible health effects of their chemical exposure. They will also know what steps to take to stay healthy. These steps may include seeing their doctor regularly or being screened for certain illnesses.

### **What Is The Community's Involvement During The Exposure Investigation?**

The community is a very important part of the Exposure Investigation. We can not do an Exposure Investigation without community involvement. We need community input and interest. We need community members to volunteer to give us samples. We need their consent for testing. We may need their permission to look at medical records. Also, the community needs to understand what the Exposure Investigation results may or may not tell them, before it begins. All of these above items are crucial for a successful investigation.

### **For More Information**

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# *Exposure Investigations*

## **Evaluating Environmental Exposures for People Living Near Hazardous Waste**



**Bureau of Community Environmental Health**

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### **What is an Exposure Investigation?**

An Exposure Investigation shows if people have had recent contact with certain hazardous chemicals. The Florida Department of Health (DOH) directs the collection of biological samples from people. These samples include blood, hair and urine. Laboratory staff analyze these samples to see if people have these chemicals in their bodies. We do such investigations in communities near hazardous waste sites.

### **What Are The Determining Factors For An Exposure Investigation?**

We consider the following when deciding whether to do an Exposure Investigation:

- If it is likely that people were exposed to a chemical
- If more information on the exposure is needed
- If an Exposure Investigation will give the information needed
- If the Exposure Investigation will affect public health decisions

### **How is An Exposure Investigation Done?**

If people were recently exposed to a hazardous chemical, we can sample their body fluids, hair or nails. The samples are analyzed at a certified laboratory. The lab data tells us how much of that chemical is in their body. Next, we compare the amount of the chemical found in their body to a known average amount. We may compare this amount for a certain age group or the general population. After analyzing the results, we write an Exposure Investigation report and share it with the community.

### **What Types of Chemicals Are Sampled For During An Exposure Investigation?**

Different chemicals stay in the body for varying lengths of time. We only sample those chemicals that are likely to be found in the body. Also, we only sample for those chemicals that are a serious health threat. In the past, Exposure Investigations have included testing for the following chemicals in blood, hair or urine:

Arsenic, bromine, dioxins, lead, mercury, organochlorine pesticides, polychlorinated biphenyls (PCBs), uranium and volatile organic compounds (VOCs).

We can also test for other chemicals. We will add more chemicals as the Center for Disease Control (CDC) completes its research.

### **Who Funds An Exposure Investigation?**

The Federal Agency for Toxic Substances and Disease Registry (ATSDR) funds the Florida DOH's Health Assessment Team Section to do Exposure Investigations. We work in cooperation with ATSDR. We apply for funding from ATSDR for the Exposure Investigations. The entire process takes a few weeks or months.

### **Are Exposure Investigations Done For All Who Ask?**

Unfortunately, the answer is no. Each exposure situation is different. The Florida DOH and ATSDR decide if an Exposure Investigation is needed. For many chemicals, low levels are usually found in everyone's bodies. So, it is hard to tell if an exposure is the cause of a person's illness. An Exposure Investigation may only tell the community if they have higher than average levels of a certain chemical. An Exposure Investigation should only be done if the results will help make better public health decisions. Also, if people were exposed to a chemical many years ago, the chemical may not be found in their body now. In this case, an Exposure Investigation should not be done.