

## **Frequently Asked Questions about: Portable XRF Lead-in-Paint Surveys**

**Information Circular #8 July 16, 1998**

### **1. What is the gun-like instrument?**

This is the portable XRF (X-ray Fluorescence) machine. It contains a small radioactive source that, when the trigger is pressed, bombards the paint in front of the gun with radiation. The paint, in response to this radiation, produces x-rays (the "XR" in XRF), which are detected by another part of the gun and then translated into a reading of the lead level of the paint.

### **2. Is the gun dangerous?**

Yes, when used by someone who isn't trained. The gun produces radiation which can cause cell damage. Cell damage is especially bad in reproductive cells. We ask you to stay away from the gun and operator for your own protection.

### **3. Will it leave radioactivity in the house?**

No. The source of continual radiation is sealed in the gun. The x-rays coming from the paint stop as soon as the gun is turned off.

### **4. What is the testing for?**

The machine determines the level of lead in the painted surfaces. The measurement is of the weight (milligrams) of lead per area (square centimeter) of painted surface.

### **5. How long will the testing take?**

A survey may take anywhere from 50 minutes for an 800 sq. ft. newer house to over 3 hours for a large house having lots of wood trim pieces.

### **6. Why is lead in paint hazardous?**

Lead affects the nervous system, and can cause nervousness, lowering of intelligence, and many other symptoms. It affects children, whose nervous systems are still growing, more than adults. Crawling children (ages 7 and under) are even more susceptible because they pick up paint dust or flakes from the floor. Lead was put in paint before 1978, with the heaviest use before 1950. The United States Department of Housing and Urban Development (HUD) has established a level of 1 milligram of lead per square centimeter of paint as hazardous. Paint under this level is generally considered safe to live with, even with children.

### **7. How long does it take to get results from the testing?**

The portable XRF gives the operator a reading in 5-30 seconds. The operator can use this reading to customize the testing. The results of all tests are stored in the machine, and must be retrieved later to be compiled into a written report, which may take 2-3 days.

### **8. Why won't the operator tell me the results?**

Two reasons: 1) each result from the machine is preliminary, and must be interpreted along with all the other results to make any meaningful statements, and 2) unless you have retained us, we are prohibited from disclosing the information to you directly. If a landlord or housing authority is our client, we can only give results to them; you must get information from them.