

# Lead Exposure: What You Need to Know

## What is Lead and Why Is It Harmful?

Lead is a toxic heavy metal with no safe level of exposure. It can harm nearly every organ system—especially the brain, kidneys, heart, and reproductive system. Lead is stored primarily in bones and can re-enter the bloodstream years after initial exposure.

## Common Sources of Lead

- Drinking water from old pipes or plumbing fixtures
- Soil, dust, or peeling paint in homes built before 1978
- Certain foods: wine, rice, spices, balsamic vinegar
- Imported products: cosmetics, jewelry, traditional medicines, vitamins
- Hobbies or work involving ceramics, welding, shooting ranges, or construction
- Cigarette smoke and residues from old gasoline

## Why Lead Is Especially Harmful to Children and Pregnant Women

Even very low levels of lead can cause:

- Lower IQ and learning difficulties
- Behavioral problems, depression, and anxiety
- Hearing loss

During pregnancy, lead crosses the placenta and may lead to:

- Impaired brain development
- Miscarriage
- Low birth weight and developmental delays
- Higher risk of thyroid and cardiovascular issues later in life

## Signs and Health Effects of Lead Exposure

- Fatigue, memory loss, brain fog
- High blood pressure, kidney dysfunction
- Hormone imbalance, infertility
- Mood changes, depression, anxiety
- Osteoporosis and fractures
- Stroke and cardiovascular disease, even at low levels

## Testing and Meaningful Levels

- **Blood lead levels (BLL)** measure recent exposure
- Levels as low as 2 µg/dL are linked to:

- Cognitive loss
- Cardiovascular disease
- Kidney damage

There is no safe threshold for lead exposure, particularly in children or during pregnancy.

### **How to Reduce Lead Exposure**

- Filter drinking water, especially in homes with old pipes
- Avoid imported spices, pottery, cosmetics, and canned goods from unregulated sources
- Wash hands often, particularly before meals
- Clean surfaces with HEPA-filter vacuums and damp mops to control dust
- Ask your doctor about lead testing if you:
  - Are pregnant or planning to conceive
  - Live in or near an older home or industrial site
  - Experience unexplained fatigue, mood issues, or high blood pressure