

July 2022

### OVERVIEW OF FACT SHEET



This fact sheet provides general awareness as to what lead (Pb) is, how it is used, how it affects the body, and how exposure may be avoided. Please remember it is your responsibility as an employee to follow safe working practices and report any unsafe conditions to your immediate supervisor.



Environmental Health and Safety (EHS) can assist the campus community by completing lead exposure sampling, recommending engineering controls, PPE, and providing lead product disposals.

If you have any questions regarding lead or other safety topics, please contact the [Environmental Health and Safety Office](#) at 704-687-1111. Please visit our website ([safety.uncc.edu](http://safety.uncc.edu)) to review material on additional safety and regulatory topics.

# Lead Safety

### What is Lead?

Lead (Pb) is a naturally occurring metal in the ground, and is a basic chemical element. It can combine with various other substances to form numerous lead compounds. Lead was used in a wide variety of products, including paint. However, the use of lead in paints in the U.S. was banned in 1978.

### Exposure to lead can be hazardous to your health.

Inorganic lead can be absorbed into your body by **inhalation** (breathing lead dust or fumes) and **ingestion**. Lead (except for some organic lead compounds) is not absorbed through the skin. When lead is scattered in the air as a dust or fume, it can be inhaled and absorbed through your respiratory tract. Ingestion of lead occurs when particles are introduced into the body through normal hand-to-mouth activity. Ingestion is the most common route of exposure, but more lead is absorbed into the body when inhaled. Once absorbed into the body, lead is distributed to organs such as the brain, kidneys, liver, teeth and bones.

### Potential lead exposure activities:

- Use of some pottery/ceramic glazes
- Lead soldering
- Automotive batteries
- Campus building and/or resident hall paint removal
- Demolition and renovation of buildings
- Maintenance or repair of painted steel structures (handrails, poles, etc.)
- Welding, torch cutting, scraping, grinding, or sandblasting painted metal objects
- Removing or pulverizing lead paint or other products
- When paint is deteriorating, peeling, or chipping

### How to protect yourself and others from lead exposure:

Lead or lead containing products can be removed or encapsulated to be managed in place. The management technique depends on the type of product, where it is and the condition of the product. An example of an encapsulated lead product is paint that has been sealed with a non-lead-based paint. This method is effective as long as both coats remain intact.

- You should always know what you are working with. Check the Safety Data Sheet (SDS) to determine if the material you will be working with contains lead.
- If you are unsure if lead exposure is possible, contact EHS for assistance.
- When working with products that contain lead, you may be required to wear a respirator. Appropriate PPE will greatly reduce the chance of exposure to lead. Contact EHS for assistance with respirator requirements.

### GROUP DISCUSSION TOPICS

- Are there any work tasks that you do in which you could potentially be exposed to lead?
- Do any of the chemicals or products you use contain lead or lead compounds?
- How are lead or lead containing products to be disposed – in regular garbage or as hazardous waste?
- Paint manufactured before what year may contain lead?