MISSOURI DEPARTMENT OF HEALTH & SENIOR SERVICES

Public Health Guidance

Ammunition Detonation in Iowa

Situation Overview

The U.S. Army is planning two controlled detonations of degraded lead azide at the Iowa Army Ammunition Plant in Middletown, Iowa, at 9 a.m. on November 25.

- *November 24 Army Press Conference (video link)*

The Missouri Department of Health and Senior Services (DHSS) has worked closely with partners at every level to assess any potential impacts this detonation event may have on human health. The anticipated risk in Missouri is low.

While the detonation is expected to produce a dust plume containing lead particles that may travel and settle on surrounding surfaces, the levels of lead that reach Missouri is expected to be low and is dependent on the wind direction and speeds.

We expect this to be an isolated, short-term event. Negative impacts of lead exposure are typically due to long-term, chronic exposures.

Our lead poisoning prevention program is always monitoring lead impacts as Missouri is a lead-producing state. Our team works day in and day out on providing this education and will continue to work with healthcare partners to do so.

The plume area will be more defined as we get closer to the event. For those in the potential affected area, DHSS advises staying indoors, keeping windows closed, and closing fresh air intakes for 24-48 hours after detonation. Specific precautions are below and are intended for communities in the downwind direction. The U.S. Army is responsible for providing updated models to show the affected areas.

Potential Public Health Concerns

The primary potential exposure pathways include:

- **Airborne exposure:** Breathing in lead-containing particles during and immediately following the detonation.
- **Surface exposure:** Contact with or ingestion of lead dust deposited on soil, playgrounds, vehicles, buildings, and other surfaces.

Lead is a toxic metal that can cause serious health effects. No safe level of lead in the human body has been identified. Young children and pregnant women are at particular risk.

Precautions – Before Detonation (and continued for the first 24-48 hours)

Homes, schools, childcare facilities, etc.

- Close windows, doors and fresh air intakes
- Bring inside, if possible:
  - Bikes, children's toys, strollers, portable playground equipment
  - Pets, pet food, water bowls, toys
  - Outdoor cushions, furniture other movable items that could collect lead dust
  - Park cars/vehicles in closed garage, if available.
- Cover, if possible:
  - Any of items listed above if they can't be brought inside.
  - Outside sandboxes, playground equipment.
  - Gardens growing edible plants, exposed produce, rainwater collection containers.
  - Seal outdoor doormats in a sealed bag (or store in a garage or shed)

  *Afterward, dispose of coverings cautiously in thick sealed trash bags, being careful not to aerosolize the dust.
- HVAC systems
  - If HVAC needs to stay on, use HEPA filters. Use indoor air recirculation. Residential furnaces may continue operating. Facilities with outside air intakes, including schools and commercial buildings, should consider temporarily switching to recirculation.

Precautions – After Detonation

- Wet-clean frequently touched surfaces, including playground equipment, outdoor toys, tables, chairs, handrails and exterior windowsills. Use soap or detergent in the wet cleaning.
- Avoid dry sweeping, using leaf blowers or other activities that may redistribute dust.
- Wash children's hands with soap and water after potential contact with outdoor dust and before eating or drinking.
- Wash pets' paws after going outside.
- Keep children away from suspected contaminated surfaces and outdoor play areas until appropriate cleaning or assessment has occurred.
- Well-constructed private water wells are not expected to be impacted. However, private wells with imperfections or surface connections always have the potential to be impacted by surface contaminants. DHSS encourages testing of private wells periodically and especially after known changes to the land around the well or observable water quality. Test kits are available from DHSS and local public health departments.

Blood Lead Testing and Health Concerns

Lead exposure may not cause immediate symptoms. Blood lead testing is the only recommended method for evaluating potential exposure.

If there is concern of exposure to lead dust, individuals are advised to contact their local public health agency or healthcare provider to discuss whether a blood lead test is appropriate.

Detonation event aside, lead poisoning remains a serious concern in Missouri.

- Missouri is the nation's top producer of lead and lead products and has a high percentage of aging homes with lead-based paint.
- DHSS provides resources on lead poisoning prevention, health effects and safety tips to protect children and adults from exposure all year round.
- Be sure to bring your children to their healthcare provider or local public health agency for routine lead risk factor screening, with possible blood testing.

For more information to prevent and manage lead exposures: Health.mo.gov/lead