Health Alert
Lead Poisoning in New Jersey Firing Range Workers

From January to October 2017, the New Jersey Department of Health confirmed 34 indoor firing range workers with blood lead levels considered unsafe for adults. The average blood lead level in the U.S. is about 1.2 micrograms per deciliter (μg/dL) for all adults. The average blood lead level of the 34 workers was 33.7 μg/dL. Lead is a health hazard to both the workers and their families, especially to young children, when lead is brought home on their skin and clothing.

34 workers

27 Males
7 Females

Types of jobs
The 34 range workers held various types of jobs including: maintenance, range safety officers, owners/operators, instructors, range masters, and sales representatives.

Blood lead levels
Blood lead levels ranged from 5-67 μg/dL. The Centers for Disease Control (CDC) defines an elevated blood lead level for adults as equal to or higher than 5 μg/dL.

Type of lead levels

40 to 67 μg/dL
25 to 39 μg/dL
11 to 24 μg/dL
5 to 10 μg/dL
Number of employees

A blood test measures lead in the blood stream and is the most reliable way to know that a worker has been exposed to lead.

14 of the 34 workers reported symptoms*

BRAIN
- Headaches 8
- Difficulty concentrating 7
- Irritability 4
- Trouble sleeping 1

GENERAL
- Extreme tiredness 9
- Muscle/joint pain 8
- Weak ankles/wrists/fingers 3
- Metallic taste in mouth 1

DIGESTIVE SYSTEM
- Nausea 1
- Weight loss 1

*Some individuals reported multiple symptoms

NOTE: A worker can have symptoms (see back page for other types of lead poisoning symptoms) at lower blood lead levels or have no symptoms even at higher levels. Some lead poisoning symptoms may be confused with common aches and pains. Getting a blood lead test can rule out lead poisoning.
Symptoms of Lead poisoning†

Vision
- Partial blindness
- Hallucinations

Central nervous system
- Insomnia
- Loss of appetite
- Depression
- Irritability
- Cognitive deficits
- Memory loss
- Headache
- Personality changes
- Delirium
- Coma

Hearing loss

Mouth
- Unusual taste
- Slurred speech
- Blue line along the gum

Kidney failure

Blood
Anemia

Neuromuscular
- Tremor
- Pain
- Delayed reaction times
- Loss of coordination
- Convulsions
- Weakness
- Seizures

Abdomen
- Pain
- Nausea
- Diarrhea or constipation

Extremities
- Wrist and foot drop
- Pain
- Tingling

General
- Malaise
- Fatigue
- Weight loss

Reproductive
- Sperm dysfunction (males)
- Pregnancy complications (females)
- Decreased libido

Skin
- Unnatural lack of color
- Unhealthy pale appearance

Public Health Service Agency for Toxic Substances and Disease Registry