Preventing COVID-19 and Lead Exposure: Guidance for Shooting Ranges

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Shooting ranges are an occupational necessity for those who have careers in security, law enforcement, and the military. They also provide a growing recreational activity for the public. COVID-19 and lead exposure are two hazards faced by shooting range employees and visitors. The procedures used to prevent COVID-19 exposure closely relate to safety practices used to prevent lead exposure. Given the community spread of COVID-19 throughout Georgia and the well-established risk of lead exposure in shooting ranges, it is important for shooting range employers to have comprehensive COVID-19 and lead exposure control plans, which includes symptom checking, social distancing, hygiene and decontamination procedures, and training. This document provides recommendations for shooting range employers to implement as part of their COVID-19 and lead exposure control plans.

COVID-19 and Lead Exposure

Exposure to the COVID-19 virus occurs mainly between people who are in close contact with one another (within about 6 feet) through respiratory droplets produced when an infected person coughs, sneezes, or talks. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. COVID-19 may also be spread by infected persons who are not showing any symptoms. Lead exposure can occur at shooting ranges from the airborne lead dust that comes from using ammunition containing lead and from the smoke released in the air when a gun is fired. Lead dust settles everywhere, including on retail counters, merchandise, and floors. Lead can enter a person’s body by breathing lead dust into the lungs or by swallowing lead dust that settled on hands or surfaces that were not adequately cleaned. If a person breathes in or accidently consumes lead particles, they are at risk for blood lead poisoning.

COVID-19 symptoms

COVID-19 symptoms occur 2-14 days after exposure to the virus and can include fever or chills, cough, shortness of breath, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, or diarrhea. Encourage workers to stay at home or leave the job when feeling sick or when they have been in close contact with a confirmed positive COVID-19 case. If a worker has confirmed COVID-19, the areas where that person worked should be immediately disinfected. Workers with confirmed or suspected COVID-19 should follow DPH Isolation Guidance (https://dph.georgia.gov/isolation-contact) and can return to work once they have completed the requirements in the DPH return-to-work
Lead poisoning symptoms

Lead poisoning symptoms can occur even with low levels of lead in adults over years or decades. Lead can damage almost every organ system, causing serious and permanent health problems including high blood pressure, fatigue, joint and muscle pain, numbness of extremities, memory loss, decreased kidney function, decreased sperm count, miscarriage, or pre-mature birth. A simple blood test will show how much lead is in your body. Employees should receive regular blood lead testing based on OSHA’s medical surveillance guidelines [https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1025AppC](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1025AppC) or speak with their doctor about getting a blood lead test.

Preventing COVID-19 Exposure

Measures to prevent spread of COVID-19 in shooting ranges include:
- Checking and verifying the effectiveness of the air filtration system
- Installing six-foot spacing markers in buildings and range areas
- Limiting the number of people within buildings
- Closing adjacent lanes to improve social distancing (odd days/odd lanes open, even days/even lanes open)
- Providing hand-washing stations and sanitizers throughout the facility
- Increasing signage which promotes hand washing
- Regularly disinfecting rental equipment or eliminating the use of rental equipment, including golf carts, eye protection, and ear protection
- Disinfecting rental and showroom firearms after each use
- Repeated sanitizing of frequently touched surfaces, such as technology device screens
- Reducing daily operational hours to allow time to thoroughly clean and disinfect the facility
- Implementing sneeze guard shields at checkouts, customer service and firearms counters
- Communicating daily with staff to discuss health hygiene practices
- Asking employees to monitor themselves for COVID-19 symptoms each day. If thermometers are used on the job, they should be ‘no touch’ or ‘no contact.’
- Providing facemasks, gloves, and sanitizers for employees

Preventing Lead Exposure

Work tasks such as emptying or cleaning bullet traps, cleaning the range, cleaning or handling guns or ammunition, and spending time on the firing line are high risk for exposure to lead. Routinely cleaning the entire shooting range will help to reduce the amount of lead on surfaces. Clean all surfaces with a damp cloth, including retail counters and break areas. Wet sweep or mop, instead of dry sweeping to avoid putting lead dust into the air. When vacuuming, use
vacuums containing high-efficiency particulate air (HEPA) filters. To prevent accidental ingestion of lead, employees and visitors should not eat, drink, smoke, or vape in the shooting range. Employees and visitors should be reminded to wash their hands, face, and forearms with soap before eating, drinking, smoking, or vaping and to do so only in designated areas. Lead dust sticks to skin, hair, clothes, and shoes. It is important for employees and visitors to avoid bringing lead into their car or home where others can be exposed. Practices to prevent taking lead home include:

- Changing into clean clothes and shoes after leaving the range
- Keeping dirty work clothes separate from clean street clothes in a locker or bag
- Washing hands, forearms, and face with soap
- Taking a shower and washing hair as soon as you get home, before touching others
- Washing work clothes separately from other household clothes

**Personal Protective Equipment (PPE) Use**

**For COVID-19**

It is recommended for everyone to wear a facemask or a cloth face covering when around coworkers or in public places to help prevent spread of COVID-19. **Facemasks and cloth face coverings, however, are NOT respirators and are not appropriate substitutes for them when performing tasks at high risk for lead exposure.**

**For Lead**

When performing work tasks at high risk for lead exposure, employees should wear PPE such as:

- NIOSH approved respirator masks (require fit testing and training)
  - Respirators should be worn during all cleaning tasks. At a minimum, provide a P-100, N-100, or R-100 filtering facepiece respirator (a.k.a. “dust mask”) or half-face respirator. A full-face respirator with P-100 filters should be worn while cleaning the bullet traps.
- Disposable suits (i.e., Tyvek®) or uniforms that stay at the shooting range for cleaning
- Shoe covers
- Gloves
- Hearing protection (for noise)

**Additional Resources**

For more information about COVID-19 and testing visit the [Georgia Department of Public Health](https://dph.georgia.gov/novelcoronavirus) or call 1-866-PUB-HLTH (1-866-782-4584).

Georgia Occupational Health Surveillance Program. This program collects data on work-related injuries, illnesses, and hazards in Georgia and conducts follow-back and intervention activities for adults with elevated blood lead. Call 404-657-2588 to contact this program. For more information about occupational lead exposure visit: [https://dph.georgia.gov/epidemiology/georgia-occupational-health-and-safety-surveillance-program](https://dph.georgia.gov/epidemiology/georgia-occupational-health-and-safety-surveillance-program).

Georgia Tech Consultation Program. This program provides free, confidential, on-site consultation for small companies (fewer than 250 employees and not more than 500 employees corporate wide) that need assistance in occupational safety and health. Call 404-894-4121 to contact this program. Web: [https://oshainfo.gatech.edu/about/](https://oshainfo.gatech.edu/about/).