NAIL GUNS

IDENTIFY

Nail guns are very powerful and very dangerous if not used properly. They have the capacity to fire several nails per second.

Two types of nail guns commonly used on construction sites are:

1. Pneumatic (compressed air)
2. Powder-actuated (explosive cartridge)

Puncture wounds are the most common type of injury, often caused because the bump or trigger safety was disabled. Severe nail gun injuries have resulted in blindness, brain damage, bone fractures, and even death.

While puncture wounds to the extremities such as hands and feet are the most common, puncture wounds to places like the head or neck can cause more severe injuries and may result in death.

COMMUNICATE AND CONTROL

Nail gun safety can be increased if you know the difference between trigger types:

- **Contact triggers** allow the gun to fire any time the trigger is held down and the nose is depressed against a surface.
- **Sequential triggers** only fire when the nose is depressed against a surface before squeezing the trigger. To fire a second nail, you must release and press the trigger and/or release and depress the nose.

Sequential-trip triggers are much safer than contact-trip triggers, which can fire accidentally if the nail gun recoils or the operator bumps against a surface or co-worker.

Studies show that using sequential-trip triggers can cut injury rates in half without affecting productivity.

Nail guns may speed up the work, but one careless motion is all it takes to lose an eye or put a nail through your hand.

The following safe work practices can help prevent nail gun injuries:

- Always wear the proper PPE (including eye protection) when you are using the nail gun.
- Always keep your hands and fingers off the trigger when you are not using the gun. Never carry the gun with your finger on the trigger.
- Before doing any sort of maintenance on your nail gun, whether reloading it or clearing a jam, disconnect it from its air source or remove the cartridge.
- Never modify the safety features of a tool or compressor.
- Keep your hand and fingers well away from the nail's path. Use clamps if necessary.
- Never point the gun at another person or yourself.
- Don't use a nail gun if you are working in an awkward position. This makes the gun harder to control and increases the chance of injury.
- When you are not using the gun, engage the trigger safety device or disconnect the gun from its power source.
- Only let people who have received training operate a nail gun.
- Adjust the air pressure to the psi recommended by the manufacturer for the task you are doing and the tool you are using. Never exceed the maximum recommended air pressure.
- Always use the proper type of nails in the gun.
- Never overextend your reach when you are using the gun. Hold it firmly in your hand.
- If you have to work at heights, stand on a scaffold or other secure work platform rather than on a ladder.
- Always check the manufacturer's instructions.

FACTS AND TIPS

- With a nail gun currently being used on site, demonstrate the trigger type.
- Show your crew how to inspect the nail gun to ensure that it is in proper working condition and that all the safety features are intact and working.
- A copy of the manufacturer's instructions should be available on site for reference. Show your crew where it is located.
- Refer to the Workplace Safety and Health (WSH) Regulation Part 16.23 and 16.24(1) for the guidelines on proper use and storage of nail guns.

THE QUIZ

1. Nail guns have the capacity to fire several nails per second:
   TRUE_____ FALSE_____

2. The two types of nail guns commonly used on construction sites are:
   a) _____
   b) _____

3. Puncture wounds are the most common type of injury, often caused because the bump or trigger safety was disabled:
   TRUE_____ FALSE_____

4. Puncture wounds to places like the head or neck can cause more severe injuries and result in death:
   TRUE_____ FALSE_____

5. Nail gun safety can be increased if you know the difference between trigger types. Name the two:
   a) _____
   b) _____

6. Contact-trip triggers are much safer than sequential-trip triggers, which can fire accidentally if the nail gun recoils or the operator bumps against a surface or co-worker:
   TRUE_____ FALSE_____

7. Studies show that using sequential-trip triggers can cut injury rates in half without affecting productivity:
   TRUE_____ FALSE_____

8. Nail guns may speed up the work, but one careless motion is all it takes to lose an eye or put a nail through your hand:
   TRUE_____ FALSE_____

9. Wearing gloves is the only appropriate PPE required while using nail guns:
   TRUE_____ FALSE_____

10. Always carry the gun with your finger on the trigger:
    TRUE_____ FALSE_____

ANSWERS:

1. TRUE; **2.** Pneumatic (compressed air), powder-actuated (explosize cartridge); **3.** TRUE; **4.** TRUE; **5.** Contact triggers, sequential triggers; **6.** FALSE; **7.** TRUE; **8.** TRUE; **9.** FALSE; **10.** FALSE