

# Toolbox Talk

## Nail Gun Safety

Nail guns make for a fast and productive jobsite, but with all that power comes great risk. A study from NIOSH (National Institute for Occupational Safety and Health) reported that every year hospitals see roughly 37,000 nail gun related injuries. A big factor in reducing injuries comes from proper training and equipment awareness. This is a deep subject, so here are the top 6 tips to use for your next tool box talk.

**1. Establish company nail gun procedures** that are specific to the jobs and tasks that you perform. The rules for a roofing company will be different from those of a framing contractor. Some examples might look like:

All carpenters working for us will:

- Have manuals for the exact nailers used on the job are always available on the jobsite. (hardcopy or QR code to website)
- Check tools before operating to make sure that they are in proper working order. Take broken or malfunctioning nail guns, hoses, and compressors out of service immediately.
- Complete hands-on training prior to use nail guns.
- Be required to attend retraining if they are found misusing or tampering with safety features of our nail guns and equipment. There is NO legitimate reason to modify or disable a nail gun safety device.
- Keep their fingers off the trigger when holding or carrying a nail gun.
- Never lower the nail gun by the hose or pull on the hose when it is stuck. Climb down and walk to the location and release the hose accordingly.
- Never use the nailer as a hammer.

### 2. Provide Personal Protective Equipment (PPE)

Safety shoes: As required by OSHA on residential construction sites, a shoe/boot with a thick rubber sole and a sturdy leather upper to protect from nail punctures.

- Hard hats: Required by OSHA when there is an overhead danger present, very typical when nail guns are being used.
- High Impact eye protection – safety glasses or goggles marked ANSI Z87.1
- Hearing protection – either earplugs or earmuffs

**3. The full sequential trigger** is the safest style of nail gun trigger. It reduces the risk of unintentional nail discharge and double fires.

- Provide full sequential trigger nailers for carpentry work where the material is being held in place by hand or foot. Examples include stick framing walls, fastening studs to plates, installing blocking, and installing trusses or rafters. Unintended nailing is more likely to happen when the focus is on holding the material in the correct spot as opposed to larger pieces that lay in place like roof and wall sheathing, and subflooring.
- Inexperienced workers should only use full sequential trigger nail guns until they are comfortable with the equipment. In a large carpentry crew, it is a good idea to clearly mark which nail guns are for trainees vs experienced.

**4. Everyone can benefit from safety training**, provide training for new and experienced workers. New users need to understand the causes of nail gun injuries and specific steps to reduce them, and experienced workers to understand new equipment and a reminder of company policies. Here is a list of topics for training:

- How nail guns work: show a manufacture diagram of the gun and its parts.
- Main causes of injuries: misuse, inexperience, misfire/double fire, different triggers.
- Hands-on training with the actual nailers that are being used:
  - How to load the nail gun
  - How to operate the air compressor and set pressure
  - How to fire the nail gun
  - What materials can you nail into, and what you definitely should not nail
  - How position yourself when nailing awkward spaces (e.g., toe-nailing and work on ladders)
  - If you can create a double fire or misfire, have the trainee experience that and explain why it is happening and how to correct it.
- PPE: safety glasses, gloves, boots, hardhats, etc.
- Internal company procedures: who can/cannot use nail guns, personal protective equipment, injury reporting, and first aid and medical treatment.

**5. Provide first aid** and the nearest location for medical treatment. OSHA requires at least 1 person on site have first aid training. When working on large sites, the morning start up should mention the closest first-aid kit.

Nail gun injuries should seek immediate medical attention, even minor puncture injuries. Studies suggest that 1 out of 4 nail gun injuries involve some type of structural damage such as bone fracture. Strip nails are held together with glue or plastic that can get embedded in the injury and lead to infection. Barbs (like on coiled roofing nails) can cause additional injury if the nail is removed incorrectly. It is highly encouraged to leave the nail in place (if possible) to be treated at an ER.

6. Encourage reporting and discussion of injuries and close calls.

Many worksite injuries go unreported out of fear of retaliation, embarrassment, or fear of the paperwork. Employers should encourage that reporting any and all injuries is ok and a good learning experience for everyone.

Reporting helps:

- Ensure that employees get medical attention.
- Identify unrecognized job site risks that could lead to additional injuries if not addressed.
- Both injuries and close calls provide teachable moments that bring reality to the training.

If you have a safety incentive program, be sure that it does not discourage workers from reporting injuries. “Days since last injury” signs might seem like moral boosters, but they often cause people hide injuries.