SAFETY UNLIMITED, INC.

Weekly Safety Meeting

Nailing Down the Need for Nail Gun Safety

Nail guns are powerful, easy to operate, and boost productivity for nailing tasks. They are also responsible for an estimated 37,000 emergency room visits each year – 68% of these involve workers and 32% involve consumers.

Severe nail gun injuries have led to construction worker deaths. Fortunately, these injuries can be prevented, and more and more contractors are making changes to improve nail gun safety.

Research shows that risk of injury is twice as high using “contact” trigger nail guns compared to “sequential” trigger nail guns.

Nail gun injuries:

There are seven major risk factors that can lead to nail gun injury. Understanding them will help you to prevent injuries on your job sites.

- Unintended nail discharge from double fire;
- Unintended nail discharge from knocking the safety contact with the trigger squeezed;
- Nail penetration through lumber work piece;
- Nail ricochet after striking a hard surface or metal feature;
- Missing the work piece;
- Awkward position nailing; and
- Bypassing safety mechanisms.

Prevent nail gun injuries:

By taking these steps, employers can prevent nail gun injuries from occurring:

- Use full sequential trigger nail guns;
- Provide training;
- Establish nail gun work procedures;
- Provide personal protective equipment (PPE);
- Encourage reporting and discussion of injuries and close calls; and
- Provide first aid and medical treatment.

Choosing the right trigger:

The full sequential trigger is the safest trigger mechanism for all jobs, because it will only fire a nail when the controls are activated in a certain order.

The order calls for employees to first push the safety contact tip into the working surface and then pull the trigger to discharge a nail. To fire a second nail the user needs to repeat the process, thus preventing bump firing, single shot trigger, restrictive trigger, or trigger fire mode.

Due to this firing mechanism there is a fear amongst contractors the full sequential trigger slows workers down. The one available study on the topic, which had 10 experienced framers stick-build two identical small (8 ft x 10 ft) wood structures—one using a sequential trigger nail gun and one using a contact trigger nail gun, found average nailing time using the contact trigger was 10% faster, which accounted for less than 1% of the total building time.

If your workplace uses both types of triggers, at a minimum use the full sequential triggers when lumber must be held by hand. Examples include building walls and nailing blocking, fastening studs to plates and blocks to studs, and installing trusses.

Also restrict inexperienced employees to full sequential trigger nail guns because of their inexperience. If you use more than one type of trigger on the job think about some color-coding or identification system to differentiate between trigger types.

DO

1. Manuals for the nail guns used on the job are easily accessible.
2. Manufacturers' tool labels and instructions are understood and followed.
3. Tools and power sources are checked before usage to ensure they are in proper working order.
    - If not, they are immediately removed from service. Broken or malfunctioning nail guns are immediately removed from service.
4. All lumber is checked for knots, nails, straps, hangers, etc. that could cause recoil or ricochet before nailing.
5. For placement work, employees keep hands at least 12 inches away from the nailing.
6. When possible, use clamps to brace instead of your hands.
7. Always shoot nail guns away from your body and away from co-workers.
8. Always disconnect the compressed air when:
    - Leaving a nail gun unattended;
    - Travelling up and down a ladder or stairs;
    - Passing the nail gun to a co-worker; or
    - Clearing jammed nails.

DON'T

1. Bypass or disable nail gun safety features:
    - Tampering includes removing the spring from the safety-contact tip or securing the trigger, so it does not need to be pressed.
    - Tampering increases the chance a nail gun will fire unintentionally. Not only does the manufacture strongly recommend against tampering, but OSHA requires tools be maintained in a safe condition;
    - Carry a nail gun with your finger on the trigger;
    - Lower, raise or carry a nail gun by the hose--if the gun gets caught on something, don't pull it; or
    - Use the non-dominant hand to operate the nail gun.

Remember:

Nail gun injuries are painful. Some cause severe injuries or death. Nail gun injuries have been on the rise along with the increased popularity of these powerful tools.

These injuries can be prevented, and more and more contractors are making changes to improve nail gun safety.

Take a look at your practices and use this guide to improve safety on your job sites.

Working together with tool gun manufacturers, safety and health professionals, and other organizations, we can reduce nail gun injuries

IGNORING A WARNING…CAN CAUSE MUCH MOURNING!

Safety Meeting Sign-In Sheet

Supervisor:	*Subject:*
Location:	*Date:*
Conducted By:	*Trainer Signature:*

Name (print clearly)	Signature	Comments / Safety Concerns / Training Requests