### How to prevent injury

- Ask for a nail gun with a sequential trigger mechanism.
- NEVER shoot towards yourself or a co-worker.
- Do not press the trigger unless the nose of the gun (contact element) is firmly pressed against the work material.
- NEVER walk around with your finger on the trigger.
- NEVERclean or clear jams or adjust a nail gun when it is connected to the air supply.
- Avoid nailing into knots and metal; nails are more likely to ricochet. Dense materials, like laminated beams, are also difficult to nail.
- NEVER remove or bypass safety devices, triggers, or contact springs.
- NBVER use a defective tool. If a tool is malfunctioning, it needs to be tagged and taken out of service.

To read stories about nail gun injuries and see photos, visit

www.cpwr.com/nailguns

To learn more about CPWR, visit www.cpwr.com

For more safety and health information, visit www.elcosh.org



8484 Georgia Ave. Suite 1000 Silver Spring, MD 20910 301-578-8500

© 2008, CPWR - The Center for Construction Research and Training. All rights reserved. CPWR is the research, training, and service arm of the Building and Construction Trades Dept., AFL-CIO, and works to reduce or eliminate safety and health hazards construction workers face on the job. Production of this card was supported by Grant OH008907 from the National Institute for Occupational Safety and Health (NIOSH). The contents are solely the responsibility of the authors and do not necessarily represent the official views of NIOSH.

# **Nail Guns**



Serious even fatal injuries are happening to workers using these tools.

## What's the problem?

Nail guns are popular for a reason. They get the job done in a blink of an eye.

But that rapid-fire action can work against you. In a split second, a nail can enter your finger, your hand, or worse.

Nail gun injuries are much more common than people think. Most injuries involve puncture wounds to hands or fingers, but serious, even fatal, injuries are also associated with the use of these tools.



- Accidental or unintended firing, often associated with recoil of the tool after firing
- Ricocheting nails
- Nail going through work surface
- Airborne nails
- By-passed safety features
- Unsafe work practices
- Holding finger on contact trigger



Although there are many types of nail guns (framing, finishing, flooring, etc.), there are two common triggers:

Contact trip trigger mechanisms allow the tool to fire anytime the trigger and the nose of the gun (contact element) are both depressed. Trigger can be held down to allow bump or bounce nailing.

Sequential triggers require the nose of gun (contact element) to be depressed before the trigger is pulled. That avoids inadvertent discharge of nails.

#### **WARNING:**

The two triggers look exactly alike. You will not be able to tell the difference!

If you can "bump nail" by holding the trigger down, and bouncing the nose against a nailing surface, that is a contact trigger gun. Use extreme caution.

#### Why it's important:

- The contact trip trigger mechanism carries twice the risk of the sequential trigger, even after considering experience and training.
- Accidental firings are most common following recoil of tools with contact trip triggers.
- If you are not trained in using either of these tools, you are at high risk of injury.

# "Faster" trigger does <u>not</u> increase productivity

A recent study measuring productivity in construction found that the contact trip trigger showed no significant difference (less than 1 percent) in productivity than the sequential trigger. Also, there was no significant difference between the two tools in nail count and placement.

The study, which involved journeymen carpenters with an average of 13 years in the trade, found that the difference in productivity was the worker, not the tool.

.....π

