

# **CPWR TECHNICAL REPORT**

## **Knowledge and Recommendations of Sales Personnel Regarding Pneumatic Nail Gun Safety**

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### **List of Terms and Abbreviations**

Contact trigger – mechanism on nail gun that allows firing anytime trigger and nose are both depressed; order does not matter. Used to rapid fire “bump nail”.

Sequential trigger – trigger mechanism on nail gun that allows discharge of nails only when the nose is depressed before the trigger; sequencing prevents inadvertent discharge of nails.

Actuation – refers to system through which nail guns are fired or discharge nails.

NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
CPSC	Consumer Products Safety Commission

## **Background and Specific Aims**

In this small project we collected data from points of sale or rental of framing nail guns to document knowledge of staff regarding the safety mechanisms on the tools they sell or rent and their recommendations for use. Because contractors typically buy power tools such as these for the workers they employ, and because of growing consumer access, the knowledge of the sales personnel is potentially very important. Specific aims included the following:

- To assess the knowledge level regarding safety mechanisms and injury risks among personnel selling pneumatic nailers, as well as their recommendations for use made to contractors, workers, and consumers.
- To contrast findings among sales personnel at primary construction tool/material vendors (lumber yards, tool or building supply sources) versus general supply sources (large home improvement or hardware stores).
- To make recommendations to vendors and manufacturers as well as the Consumer Products Safety Commission and the Occupational Safety and Health Administration regarding training needs of sales personnel so that purchasers are appropriately informed regarding available risk control strategies.

## **Highlights/Significant Findings**

We visited 217 sales/rental outlets of framing pneumatic nail guns in 4 geographic regions including 6 different states. Approximately 25% of the outlets were primary construction supply outlets including building supply, tool supply, lumber yards etc. This activity resulted in a number of key findings related to knowledge of sales personnel.

- Less than 25% (24.4%) of sales/rental personnel mentioned any differences in triggers on the tools and of those who did, 60% of that group described the differences correctly. Overall, 29% correctly described the trigger differences including personnel who had to be directly asked.
- Although we did receive some excellent safety suggestions that covered major areas of concern, less than half (40.6%) of the personnel we talked with provided us with any safety information about the tools. Only 6% suggested any training.
- Outlets selling primarily to builders were more likely to offer safety information and understand trigger differences; still only half of these vendors offered safety information and less than half had appropriate knowledge of trigger differences, which we found surprising.
- Seven years after the 2003 voluntary industry-sponsored ANSI standard called for shipment of framing nail guns with the safer sequential trigger, the majority of people selling the tools have no knowledge of the risk associated with the type of triggering mechanism on the tool or even the differences in the actuation mechanisms.
- Sales personnel were also sources of significant misinformation and it was not unusual for personnel to pontificate at great length erroneously.
- Spanish speaking personnel were available in about one third of establishments; the proportion of stores with Spanish speakers varied considerably by state (3% in WV vs 92% in Texas). No differences in Spanish speakers were seen by whether the outlet was a consumer or construction outlet.

**Dissemination plans**

At this point we cannot report any adoption or use of findings nor can we claim any outcomes or impact. However, a number of dissemination activities are planned in coming months. Timing of these dissemination efforts will be coordinated with release of the planned academic publication and press release. Ultimately we hope these findings can be used to effectively approach vendors and distributors about appropriate training for sales personnel. For example, Lowe's, the large home improvement chain headquartered in North Carolina, is associated with the non-profit Home Safety Council; we believe the information gained in this small project combined with our existing injury data on nail gun injuries could make a compelling case for this group to sponsor a safety campaign that might reach consumers and contractors.

We also believe it is important to be able to continue providing data that maintains attention to this safety issue including drawing similarities to injury risk among consumers and workers that has been effective in the past.

**Publication:**

Manuscript:

Buyer beware: personnel selling nail guns know little about dangerous tools  
(draft manuscript attached – not for circulation at this time)

We plan to accompany the manuscript publication with a Duke Press Release to draw media attention and we hope to get the results into a trade journal/communication.

**Presentation:**

APHA Meeting November 2010, Denver, Colorado

**Communication:**

Direct communications are planned to the following groups.

- Federal OSHA Office of the Directorate of Construction
- Federal OSHA ACCOSH Committee, Nail Gun work group
- CPSC
- NIOSH NORA Construction Council
- Lowe's and Home Depot Stores