# **High Pressure Danger With Compressed Air**

#### **WHAT'S AT STAKE?**

Compressed air can make short work of everything from changing tires to nailing and stapling, but its power demands respect.

#### WHAT'S THE DANGER?

Thousands of debilitating and fatal injuries have occurred as a result of air hoses accidentally whipping out of control and striking workers, people unintentionally lodging nails or staples into their heads or bodies while using air tools, or having compressed air enter their bodies.

## **Example**

Forty pounds of air pressure released from the nozzle of an air gun passing four inches from the ear can cause rupture of the ear drum or cerebral hemorrhage resulting in death. The same pressure passing this distance from the eyes or mouth can cause blindness or rupture of the lungs, stomach or intestines.

Not only the body openings are vulnerable. If workers use compressed air for cleaning dust off their clothing, the slightest scratch or puncture in the skin will permit air to enter. The affected part immediately swells to huge proportions and becomes extremely painful.

Compressed air can cause injuries in other ways too. If it is used to blow shavings, dust, filings or chips from machines it can blow them into the eyes of workmen nearby or even back into the operator's eyes.

## **HOW TO PROTECT YOURSELF**

- Never point an air-powered tool at another person. This type of horseplay can have fatal results.
- Use only air from a compressor. Never use carbon dioxide, oxygen or combustible gases to power a tool.
- Always check tools and compressed air lines daily before using them and blowing out air

lines, pointing the hose away from you and anyone else in the vicinity. Make sure tools and their operating parts are securely attached.

- If the air pressure can be adjusted, keep it as low as possible to allow you to do the job, while at the same time reducing the possibility of injury.
- Using appropriate personal protective equipment (PPE) is a must. PPE requirements will vary with the task being performed, but safety glasses, hearing protection, impactresistant face protection, hardhats, safety shoes and vibration-reducing gloves are commonly used.
- Never use compressed air to blow work surfaces or clothing clean. You can easily end up fi ring an object into your eye or body or that of a co-worker.

### **FINAL WORD**

Compressed air is useful in the workplace. It is also extremely dangerous. Be aware of the dangers. Know that compressed air can kill you or others if not handled properly.

# QUIZ

- 1. At low pressure, compressed air is harmless.
  - o True
  - False
- 2. Your eyes are vulnerable to injury from compressed air.
  - o True
  - o False
- 3. Compressed air can cause internal injuries that result in death.
  - o True
  - False
- 4. Horseplay involving compressed air is always harmless fun.
  - o True
  - False
- 5. Using compressed air to clean clothing and surfaces can cause serious injuries.
  - o True
  - o False

BEFORE THE TALK - TIPS		AFTER THE TALK- CHECKLIST
1.	In some workplaces, the misuse of compressed air to clean clothing and work surfaces is a continuing problem. Be prepared to focus on any such unsafe practices in your work area.	PROVIDED FOLLOW-UP TO WORKERS THAT DID  POORLY ON THE QUIZ  NAME:
2.	Find out who is responsible for maintaining the compressed air systems in your work area. To whom should problems be reported?	DATE:
3.	Check your company's safety records for any incidents involving compressed air.	OBSERVED WORKERS TASK(S):
4.	Even if compressed air is not used in your work area, it is important all personnel understand the	DATE:
	hazards. Everyone has occasion to spend time once in awhile at locations where compressed air is used - such as automotive garages.	REFRESHER TRAINING TOPIC(S):
5.	Review safety precautions for the air tools used by your workers. Common pneumatic staplers and	DATE:
6.	nail guns cause many injuries.  Make sure compressed air lines are correctly labeled so they cannot be mistaken for breathing air or inert gases such as nitrogen. Compressed air intended to power tools and equipment should never be used for breathing air because it may be contaminated with fuel vapors or other impurities.	OTHER (DESCRIBE): MEETING DATE: LOCATION:
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# **ANSWERS:**

1. False 2. True 3. True 4. False 5. True



ATTENDANCE				
INSTRUCTOR:	DATE:			
SAFETY TALK:				