

High Pressure Danger With Compressed Air



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Handout

Safety Talk

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, impact-resistant 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 firing 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.