

Projectiles from Shearing or Cutting: Flying Object Struck-by Hazards

Shearing, cutting, or prying materials apart during demolition, material processing, or other work can cause pieces to break off and become projectiles, striking personnel or damaging equipment and property.

Protect workers by:

- Scheduling work in stages so that demolition is not happening right next to new work.
- Separate and barricade off work that could create projectile hazards.
- Securing materials to avoid them flying away.
- Requiring use of personal protective equipment, such as hard hats, safety glasses, and steel-toe footwear.

Planning Resources

- [Job Hazard Analysis](#)
- [Building Information Modeling \(BIM\) for Safety Planning](#)
- [CPWR's Head Protection Webpage](#)
- [OSHA Competent Person Resources](#)

Training Resources

- Toolbox Talks:
 - Eye Protection ([English](#), [Spanish](#))
 - Head Protection ([English](#), [Spanish](#))
- Hazard Alert Cards:
 - Eye Injuries ([English](#), [Spanish](#))
 - Preventing Head Injuries ([English](#), [Spanish](#))
- Posters/Infographics:
 - Eye Protection (English [PDF](#); Spanish [PDF](#))
 - Head Protection (English [PDF](#) & [JPEG](#))

Relevant Standards

- OSHA Standard 29 CFR - <https://www.osha.gov/laws-regs/regulations/standardnumber/1926>
 - [1926 Subpart C - General Safety and Health Provisions](#)
 - [1926.20 - General safety and health provisions.](#)
 - [1926.21 - Safety training and education.](#)
 - [1926.22 - Recording and reporting of injuries.](#)
 - [1926.23 - First aid and medical attention.](#)
 - [1926.25 - Housekeeping.](#)
 - [1926.28 - Personal protective equipment.](#)
 - [1926.29 - Acceptable certifications.](#)
 - [1926 Subpart E - Personal Protective and Life Saving Equipment](#)
 - [1926.95 - Criteria for personal protective equipment.](#)
 - [1926.96 - Occupational foot protection.](#)
 - [1926.100 - Head protection.](#)
 - [1926.101 - Hearing protection.](#)
 - [1926.102 - Eye and face protection.](#)
 - [1926.107 - Definitions applicable to this subpart.](#)
 - [1926 Subpart G - Signs, Signals, and Barricades](#)
 - [1926.200 - Accident prevention signs and tags.](#)
 - [1926 Subpart T - Demolition](#)

- [1926.850 - Preparatory operations.](#)
- [1926.852 - Chutes.](#)
- [1926.853 - Removal of materials through floor openings.](#)
- [1926.858 - Removal of steel construction.](#)
- American National Standards Institute (ANSI):
 - [ANSI/International Safety Equipment Association \(ISEA\) Z89.1-2014 \(R2019\) – Head Protection](#)
 - [ANSI/International Safety Equipment Association \(ISEA\) Z89.1-2020 – Eye and Face Protection](#)

Nudges to Improve Planning

- Job Site Posters: *see Training Resources above*
- Text Messages

Target Audience	Texts
Supervisors and Workers	If you're performing any demolition work, barricade the area to prevent others nearby from being injured by flying materials when shearing or cutting.

- Email Messages
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Example:

Dear [],

As a supervisor, keeping your workers safe is a top priority. Shearing, cutting, or prying materials apart during demolition, material processing, or other work can cause pieces to break off and become projectiles, striking personnel or damaging equipment and property. Create a plan before work begins using CPWR's Struck-by Planning Program and communicate it with your workers to prevent injuries caused by flying objects. As part of your plan, you should:

- Schedule work in stages so that demolition is not happening right next to new work.
- Separate and barricade off work that could create projectile hazards.
- Secure materials to avoid them flying away.
- Require use of personal protective equipment, such as hard hats, safety glasses, and steel-toe footwear.

Thanks for helping to instill a safety and health culture here at [company name]. Stay safe!

[Name]

- Stickers



CPWR has a simple "Sphere of Safety" hardhat sticker design that can be downloaded and printed. We also have limited supplies available for free, which can be ordered by contacting Grace Barlet at gbarlet@cpwr.com.

[Download Sphere of Safety sticker artwork](#)



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