

## Safety Facts:

# Hot Work – Combustible and Flammable Materials\*

Hot work involves burning, welding, riveting, grinding, using fire or spark-producing tools, or other work that creates a source of ignition. We do not want our hot work to ignite combustible and flammable materials.

Combustible refers to materials that can ignite and burn, such as paper or cloth. Flammable means easily ignited and capable of burning rapidly (e.g., gasoline).

### Why is it important?

Every year workers are injured or killed from incidents involving hot work. In one instance, a worker was using a propane torch to dry plywood on a balcony which ignited vapours from cement adhesive in an adjacent unventilated. A worker suffered burns.

Hot work has also caused structural fires in residences and businesses. A National Fire Prevention Association (NFPA) research paper noted 4,580 structure fires involving hot work from 2014 to 2018 in the United States.

Awareness and knowledge of hot work and developing a hot work program can help us avoid incidents like those noted above.



### Preventive next steps

Ensure that you are doing welding, cutting, and similar processes according to health and safety standards for hot work.

Controlling combustible and flammable material will help prevent fires and protect workers. Consider the following:

- Remove all combustibles from areas before performing hot work
- Ensure 15m (50ft) minimum clearance between combustible material and hot work
- Use proper containers to store combustibles such as oily rags go into approved waste cans
- Store flammable material in approved storage containers as per the National Fire Code of Canada
- Store compressed gas cylinders as per the National Fire Code and NFPA standards 51 and 55.
- Review the requirements to establish a welding health and safety program, including a hot work program
- Designate areas where hot work is permissible and non-permissible
- Develop a hot work permits system and implement a fire watch.



### For additional resources visit:

NFPA 51: *Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes*

NFPA 55: *Compressed Gases and Cryogenic Fluids Code*

*National Fire Code of Canada 2015*

*CSA Standard W117.2:19*

# Toolbox Talk

Name of Facilitator: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Employee feedback/questions/recommendations**

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**Workers who attended**

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**Key Talking Points (Facilitator Notes)**

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