

Welders Killed in Explosions

In 2000-2001, three welders in Massachusetts were fatally injured while cutting metal containers with torches.

Fatality #1: A 61-year-old mechanic supervisor was cutting a 55-gallon metal drum. The drum, which had previously contained diesel fuel conditioner, exploded while he was cutting off the lid to recycle the container. The lid struck the victim in the head and chest. He died in hospital seven days later.

Fatality #2: A 48-year-old welder was using a torch to install a bung in a new oil delivery truck tank. The 5,000-gallon truck tank had contained approximately 2,800 gallons of fuel oil at the time of the incident. The explosion caused severe burns to the victim. He was transported to a local hospital where he died eight hours later.

Fatality #3: A 28-year-old service manager was cutting a 55-gallon metal drum. The drum, which had previously contained windshield washer fluid, exploded, causing the lid to strike and kill the victim.

Recommendations to prevent similar incidents:

- Treat every container to be cut as if it contains a flammable substance.
- Never weld, cut or perform hot work on a container unless the container has been cleaned and vented thoroughly.
- Test the internal atmosphere of the container before performing hot work. Use a calibrated direct-reading instrument for flammable gases and vapors.
- Use a manual lid remover when removing a lid from a barrel or drum (instead of a torch or pneumatic tool, which produces sparks).
- Never use a container as a hot work bench.
- Employers should provide annual training for welders that reinforces proper torch cutting procedures.