# Tools for Life – Weekly Health & Safety Meeting

— MECHANICAL CONTRACTORS —
Building People Who Build Great Things

## Home Healthy - Home Safe

**Date: June 2023**

# System Pressure Testing Safety- AISH 41

Most of the hazards associated with pressure testing come from the sudden, unintended release of stored energy. The risk of injury from a failing joint, connection, gauge, valve, fitting, or another component increases during the testing process, especially during pneumatic testing. Safe work practices are needed for all types of pressure testing to protect the workers performing the tests, and others in the test area. It is important that we have the entirety of the system identified and test boundaries set before beginning any testing. Use barricades and signs to keep the area safe and clear.

**Pressure Testing Hazards Include:**

- Flying objects such as valves, flanges, gauges, and fittings.
- Flying shrapnel such as small pieces of pipe, pipe fittings, or other system components that shatter into parts from the pressure.
- Oxygen displacement from an inert gas used for testing.
- Flooding in areas where energized electrical sources are present.

**Most, but not all injuries from improper pressure testing are inflicted by flying objects. Some of the more obvious pressure testing injuries include:**

- Puncture wounds
- Eye damage
- Lacerations
- Broken bones
- Contusions
- Concussions
- Internal injuries

Pressure testing is a necessary part of business for Apollo's day to day work. Utilizing AISH 41 and the Pressure Testing Certificate to set parameters and controls it is a task that can be accomplished safely every time. Planning the work and working the plan is the number one key to a successful safe pressure test. Additional information on safe pressure testing can be found through the MCAA (Mechanical Contractors Association of America) website. https://www.mcaa.org/pca/wp-content/uploads/sites/3/2016/03/SE86PDF.pdf

**HEALTHY OR SAFETY REMINDER:** Copper pipes control bacteria in water and have been proven to reduce viruses such as Polio, Legionnaire and E-Coli. Even water that only was exposed to copper overnight was found to have positive effects on controlling bacteria.

**Discussion Points/Quiz Questions:**

1. **When is a situation where a pneumatic test must be used?**
2. **Why is a hydro test safer than a pneumatic test?**