

Pressure Testing: Keep People Outside the Release Path

Todd Jerome Jenkins | v1.0 | October 12, 2026 | Discussion + field verification

Why this matters

A pressure test deliberately stores energy in a system. A fitting that fits, or a gauge that reads normally, does not establish that people are protected if something fails.

Objective: Confirm the test boundary, protected positions and safe release method before pressurization.

Key hazards or failure points

Ejected fittings; hose whip; unexpected release; trapped pressure; improvised leak inspection.

Practical controls

- Use the approved test plan for this assembly, medium and pressure. Authorized specialists select equipment, limits and safeguards; the crew does not improvise them.
- Establish the specified enclosure or exclusion arrangements before testing. Keep controls and observers in the protected positions identified by the assessment.
- Use the planned remote monitoring and depressurization method. Do not tighten connections under pressure or use hands to find leaks.

Verify It in the Field

With the system in its prescribed safe state, match assembly, fittings and instrument identifiers to the approved plan and inspection records.

Walk the access boundary before pressurization. Confirm adjacent workers understand the restriction and the test lead controls entry.

Ask the test lead to explain how all trapped sections are verified safe before approach. A single zero gauge is insufficient evidence.

Stop and reassess

Hold for unidentified components, missing protection, unexpected readings, leaks or boundary intrusion. Follow the planned safe shutdown; keep clear until authorized verification and release.

Ask the crew

1. What can be ejected here?
2. Who controls access during the test?
3. What proves approach is permitted?

Use this HOP tool — Procedure use: Before setup, choose one critical test-plan instruction. State its prerequisite, the evidence needed and who verifies it. If today's hardware or layout prevents compliance, name the safe holding point and the person authorized to resolve the mismatch before pressure is applied.

Sources: HSE GS4 — Safety requirements for pressure testing; HSE INDG261 — Pressure systems. HOP concepts adapted from DOE-HDBK-1028-2009, Vol. 2 (June 2009). No claim to original U.S. Government work; no government endorsement implied.

Free next step: JHA/JSA planning and field-verification worksheet

Expanded guidance and separate forms: toddjeromejenkins.com/toolbox-talks/pressure-testing-release-path