The hazards related to compressed gas cylinders include the possibility of explosion resulting from damage to the cylinder or its valve, the risk of injury from lifting the heavy cylinders, illness from leaking gas, and fire.

**Hazard: Explosion**

**Details**
Damage to a cylinder valve can cause the cylinder to explode. A cylinder can take off like a rocket.

**Threat**
- Serious injury or death

**Safe Work Guidelines**
- Do not drop cylinders or let them bump into each other
- When you finish using the cylinders, close the valves and replace the protective caps
- When you are using, moving, or storing cylinders, use rope, chain, wire, or bungee cord to keep them upright
- Do not use cylinders as door stops – a heavy door may close and cause the cylinder to tip over
- Chalk ‘EMPTY’ or ‘MT’ on cylinders that are to be returned to the supplier
- Return unused or empty cylinders to the supplier

**Hazard: Lifting**

**Details**
Cylinders are very heavy and awkward to handle.

**Threat**
- Stress on your body causing muscle and joint injuries

**Safe Work Guidelines**
- Move cylinders on a hand truck or dolly
- To lift and lower cylinders from level to level, use a hoisting cradle – do not roll cylinders or lift them by their collars
- Do not use a magnet or sling to lift cylinders
- Before moving a cylinder, remove gauges and other attachments

**Hazard: Leaking Gas**

**Details**
Gas leaking can replace the breathable air or damage your lungs.
Servicing and Storing Compressed Gas Cylinders

Threat
- Dizziness
- Unconsciousness
- Possibly death

Safe Work Guidelines
- When you are not using cylinders, keep the valve tightly closed and the valve cover in place
- Store gas cylinders in a well-ventilated and secure location, preferably outdoors
- Do not move cylinders in the trunk of a car or in an enclosed van – escaping gas can collect in a confined space and create the risk of explosion or asphyxiating.

Hazard: Fire
Details
Compressed gases found in gas cylinders may leak, causing a fire.

Threat
- Burns
- Cuts
- Broken bones
- Possibly death

Safe Work Guidelines
- Store cylinders:
  - Upright
  - Separately from each other
  - Outside where there is no contact with the ground, water, ice, snow, salt or other corrosives to avoid corrosion of the metal
  - Out of direct sunlight and/or temperature extremes
  - Store oxygen cylinders away from flammable gas cylinders
  - Supported tightly by wall chains
  - Away from heat or ignition sources and flammable materials, and
  - Away from areas such as elevators and traffic routes where they can be knocked over or damaged
- Keep full and empty cylinders separate
- Close cylinder valves tightly after use
- Do no drop cylinders – move them on a hand truck
- Make sure that tanks are not top heavy