

## Safe Handling and Transportation of Compressed Gas Cylinders

Compressed gas cylinders must only be handled by those familiar with the hazards they pose and who are trained in proper handling techniques. Whenever possible, handle compressed gas cylinders in **teams of two** rather than alone: cylinders are heavy and can be difficult to move. Improper handling may result in physical injuries such as sprains, strains, bruises, or broken bones. Fire, explosion, chemical burns, cold burns, or poisoning could occur if the cylinder is damaged due to mishandling.

### Indoor Transportation

#### Before transporting a compressed gas cylinder:

1. Don the required personal protective equipment (PPE): safety glasses, thick work gloves, lab coat, and hard-toe shoes (safety shoes).
2. Check the cylinder:
  - Look at the label and confirm that it is the correct cylinder to be moved.
  - Verify that the cylinder valve is closed and that regulators and any other connections to experimental setups are removed.
  - Ensure that the cylinder cap is firmly in place. **Never move a cylinder that lacks a protective cap.**
3. Check the cylinder cart or hand truck:
  - When available, carts with four wheels must be used. Carts with only two wheels may tip over during transport.
  - Ensure that the cart is in good condition and that there are no signs of damage to the frame or wheels.
  - Verify that the chain and/or belt for securing the cylinder to the cart is in good condition, with no visible damage or weak points.

**Always** use a cart or hand truck designed for the transportation of compressed gas cylinders to move cylinders. **Never** drag, carry, or roll cylinders along the ground. (*Exception: lecture bottles may be carried.*)

#### Examples of appropriate and inappropriate cylinder transportation carts



**Figure 1:** Example of a cart **not intended** for cylinder transport

- Does not provide sufficient support for a cylinder
- No means of securing the cylinder to the cart



**Figure 2:** Example of a **suitable** cart for cylinder transport

- Has a chain for securing the cylinder(s)
- Second set of wheels to ensure stability during transport

### Outdoor Transportation

**Do not transport compressed gas cylinders along public sidewalks, roadways, or through public tunnels.** Contact Environmental Health and Safety for guidance on the safe transport of cylinders between Concordia buildings.

**Environmental Health and Safety (EHS)**  
514-848-2424 ext. 4877  
[ehs@concordia.ca](mailto:ehs@concordia.ca)

For more information on compressed gas cylinder safety, consult Concordia's Compressed Gas Safety Manual available online at: [https://www.concordia.ca/content/dam/concordia/services/safety/docs/EHS-DOC-126\\_CompressedGasesSafetyManual.pdf](https://www.concordia.ca/content/dam/concordia/services/safety/docs/EHS-DOC-126_CompressedGasesSafetyManual.pdf)