Compressed Gas Cylinder *Mon Health Medical Center*



Compressed Medical Gases

 Medical gas refers to oxygen, nitrous oxide, medical air, carbon dioxide, helium, nitrogen, instrument air, and mixtures of these gases.



COMPRESSED GASES POSE SEVERAL SPECIAL HAZARDS:

 Projectile: If a compressed gas cylinder ruptures or if the cap is knocked loose, the cylinder turns into a very dangerous projectile that can cause serious injury and damage. For this reason alone, it is very important to always keep cylinders secured. <u>Empty</u> <u>cylinders can have residual pressure and still be</u> <u>dangerous.</u>



COMPRESSED GASES POSE SEVERAL SPECIAL HAZARDS:

- Fire: Some gases are flammable, and some gases are oxidizers, which promote fire through the release of oxygen. If an acetylene gas cylinder ruptures, it is both a hazardous projectile and a fire hazard.
- Oxygen Displacement: When large containers are ruptured, the contents are released with such force that breathable oxygen is actually forced out of a room. This is especially hazardous in small rooms or areas where very large volumes of compressed liquids are used, such as in an MRI facility.

MRI Room Dangers



- All equipment used in the MRI suite is specially made out of non-ferrous (non-magnetic) material, such as aluminum.
- Special cylinders are used in the MRI scan room that are non-magnetic so the magnet does not pull the tank into the chamber like in the picture below:



Storage

- Full tanks: Store in the designated Clean Supply Room racks.
- Partial tanks(>500 psi): Store in cylinder holders on beds, pull carts, wheelchairs, or in designated racks in equipment or clean rooms.
- Empty tanks: Store in designated Soiled Utility Room racks.
 - Compressed gas cylinders must be secured at all times! Utilize carts or holders for transport. Unsecured tanks are potential missiles and have the potential to cause immense damage and harm.

Oxygen Cylinders

YES!

 Oxygen cylinders should **ALWAYS** be stored in either a pull cart, cylinder rack or other designated rack for cylinders. They should **NEVER** be left free-standing or lying on the ground.

NO!