

Hyperbaric Oxygen Therapy: Carbon monoxide poisoning

What is carbon monoxide poisoning?

Carbon monoxide is a gas that you cannot see or smell. It comes from burning carbon-based fuels such as natural gas, gasoline, diesel, wood, propane, and charcoal. Common sources of carbon monoxide include:

- Cars, trucks and motor bikes
- Gas-powered boats
- Gas-powered tools
- Gas and charcoal grills
- Wood stoves
- Fireplaces
- Furnaces
- Water heaters
- Generators
- Gas stoves and ovens
- Gas heaters in tents and campers

If you are in an area that is not well ventilated (open to the outside) and carbon monoxide builds up in the area, you can be poisoned by breathing too much of it. You can also be poisoned when being pulled behind or sitting at the back of a boat by the motor.

When you breathe in carbon monoxide, it binds tightly to your red blood cells. This prevents your blood from carrying oxygen to your organs. If carbon monoxide levels are high enough, your brain, heart, and other organs can be damaged and you can die.

Carbon Monoxide remains in your body for hours after the exposure has stopped, continuing to poison you and prevents oxygen from getting to your vital organs.



Hyperbaric oxygen is delivered in hyperbaric chambers like the ones pictured above and on page 2.

What are the signs and symptoms?

Carbon monoxide poisoning affects people differently, but some common early symptoms are headache, nausea, dizziness, weakness, and changes in the way you see.

Other signs and symptoms can include:

- Chest pain
- A fast heartbeat
- Unsteady walking or balance problems
- Confusion

As your carbon monoxide level rises, you can lose consciousness (pass out), have convulsions, or stop breathing.

If you are exposed to lower levels of carbon monoxide over days, weeks, or months, you might have these symptoms as well as anxiety, depression, sleep problems, irritability, mood disturbances, and hair loss.

Children and unborn babies are much more sensitive to carbon monoxide than adults. Children may show signs of poisoning sooner than adults do.

How is it treated?

Many people with carbon monoxide poisoning need treatment with hyperbaric oxygen.

Hyperbaric [hi-per-BARE-ik] **oxygen therapy** is breathing 100% oxygen at pressures 2 to 3 times greater than normal.

Hyperbaric oxygen is delivered in a special cylinder or room, called a chamber. This can be a clear single-person cylinder filled with 100% oxygen. Or, it can be a room-size chamber for several people who breathe 100% oxygen through hoods or masks. Both treatments are equally effective. Some patients need more than one hyperbaric oxygen treatment. Your doctor can answer any questions you might have.



Monoplace hyperbaric chamber

What are the benefits of hyperbaric oxygen therapy?

Almost half of people with carbon monoxide poisoning develop problems such as trouble thinking, poor coordination, memory loss, persistent headaches, depression, and anxiety. Some of these problems can show up days or weeks after poisoning.

Hyperbaric oxygen therapy lowers your risk of long-term problems after carbon monoxide poisoning.

Hyperbaric oxygen helps you in several ways:

- It increases the amount of oxygen in your body.
- It helps your body get rid of carbon monoxide in your blood.
- It prevents harmful inflammation in your brain and other organs caused by carbon monoxide.

What should I do to get the most benefit from hyperbaric oxygen therapy?

You can improve your response to hyperbaric oxygen by doing the following:

- Quit smoking. Every cigarette makes your blood vessels smaller for 8 hours and increases the amount of carbon monoxide in your blood.
- Do not smoke for at least 8 hours after your hyperbaric treatment.
- Do not drink alcohol for at least 8 hours after a treatment.
- Do not take any medications except those prescribed or approved by your doctor.
- Go to all of the hyperbaric therapies your doctor prescribes, even if you feel better right away.
- Tell your healthcare team if any symptoms continue after your treatments are completed, or if new symptoms or problems develop.
- Do not go back to the place where you were exposed to carbon monoxide until the source has been fixed and the fire department or gas company tells you it is OK.

Some people might not respond as well as others to hyperbaric oxygen therapy. This includes people who are older or who already have coordination problems.

How much does it cost?

Insurance coverage varies, depending on your provider. We recommend you contact your insurance carrier and Intermountain financial services for more information.

To learn more, call us at: _____

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