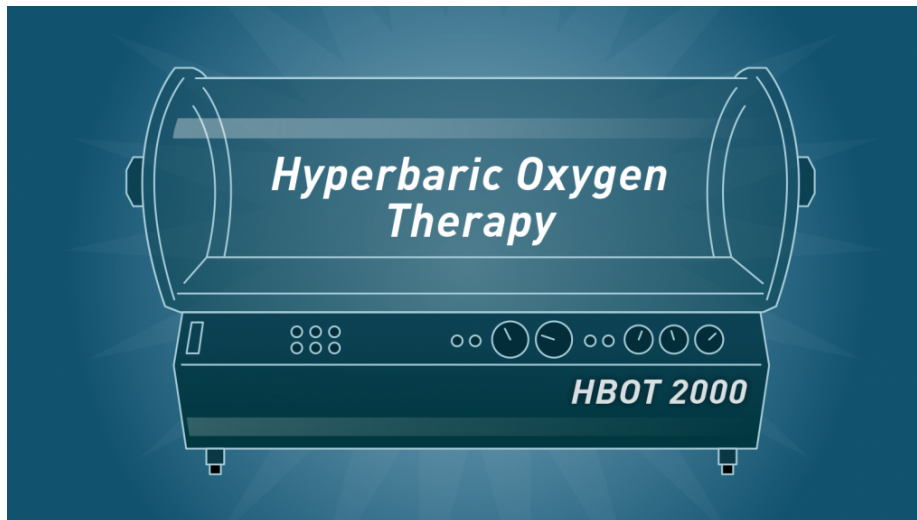


Hyperbaric Oxygen Therapy: Get the Facts



Español (</consumers/articulos-en-espanol/oxigenoterapia-hiperbarica-conozca-los-hechos>)

Hyperbaric oxygen therapy (HBOT) is well known for treating scuba and deep-sea divers affected by the rapid change in pressure around them. But did you know that HBOT is also used to treat a variety of other health problems, including carbon monoxide poisoning and diabetic foot ulcers?

If you are considering the use of a HBOT device for yourself or a loved one, be aware that some claims of what it can do are unproven. For example, HBOT devices are not proven to cure cancer, Lyme disease, autism or Alzheimer's disease. The U.S. Food and Drug Administration recommends you check with your health care provider before using a HBOT device to make sure you are pursuing the most appropriate care. If your health care provider recommends HBOT, the FDA advises that you go to a hospital or facility that has been inspected and is properly accredited by the Undersea and Hyperbaric Medical Society (<https://www.uhms.org/>) [↗](https://www.fda.gov/about-fda/website-policies/website-disclaimer) (<http://www.fda.gov/about-fda/website-policies/website-disclaimer>).

Hyperbaric oxygen therapy and the FDA's role

Our body's tissues need oxygen to function. The air we breathe is 21% oxygen.

HBOT involves breathing 100% (pure) oxygen while in a special space called a hyperbaric chamber. The air pressure inside is raised to a level that is higher than normal air pressure.

The increased air pressure in the chamber helps the lungs collect more oxygen. Getting more oxygen to the tissues that need it can help the body heal and fight certain infections. However, too much oxygen can cause damage to the body.

The FDA regulates both the oxygen used in HBOT and the hyperbaric chambers, which are generally a tube large enough to hold one person or a room that can accommodate more than one person.

Conditions for which hyperbaric chambers are cleared for marketing by the FDA

FDA clearance of a medical device includes a determination that the device has the same intended use as, and is as safe and effective as, another legally U.S.-marketed device of that type. As of July 2021, the FDA has cleared hyperbaric chambers for the following disorders:

- Air and gas bubbles in blood vessels
- Anemia (severe anemia when blood transfusions cannot be used)
- Burns (severe and large burns treated at a specialized burn center)
- Carbon monoxide poisoning
- Crush injury

- Decompression sickness (diving risk)
- Gas gangrene
- Hearing loss (complete hearing loss that occurs suddenly and without any known cause)
- Infection of the skin and bone (severe)
- Radiation injury
- Skin graft flap at risk of tissue death
- Vision loss (when sudden and painless in one eye due to blockage of blood flow)
- Wounds (non-healing, diabetic foot ulcers)

HBOT is being studied for other conditions, including COVID-19. However, at this time, the FDA has not cleared or authorized the use of any HBOT device to treat COVID-19 or any conditions beyond those listed above. The website, [clinicaltrials.gov \(https://clinicaltrials.gov/ct2/results?cond=hyperbaric+oxygen&term=&cntry=&state=&city=&dist=\)](https://clinicaltrials.gov/ct2/results?cond=hyperbaric+oxygen&term=&cntry=&state=&city=&dist=), has more information on HBOT clinical trials for COVID-19 and other conditions.

Risks of hyperbaric oxygen therapy

When HBOT chambers are used for indications cleared by the FDA, HBOT is generally safe, and serious complications are rare.

Because of the increased pressure and increased concentration of the oxygen during HBOT, potential risks include:

- Ear and sinus pain
- Middle ear injuries, including tympanic membrane rupture
- Temporary vision changes
- Lung collapse (rare)

High concentrations of oxygen also pose the risk of fire, which is one reason why the FDA recommends treatment at an accredited facility. Explosions and fires have occurred in HBOT chambers that have not been reviewed by the FDA and are located at unaccredited facilities.

Other hyperbaric devices

The FDA has also cleared a large, zippered bag that is intended to treat altitude sickness only.

These zippered chambers for treating altitude sickness provide pressure but do not attach to oxygen tanks. The FDA has not cleared these bags for use with oxygen tanks or oxygen concentrators. However, the FDA is aware of instances in which people used these bags to create homemade HBOT devices, which can pose the risk of fire and suffocation.

Additional Information

If you have experienced serious health or safety problems related to HBOT, you can voluntarily report them to [MedWatch \(/safety/medwatch-fda-safety-information-and-adverse-event-reporting-program\)](https://www.fda.gov/safety/medwatch-fda-safety-information-and-adverse-event-reporting-program), the FDA safety information and adverse event reporting program.



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