

Oxygen Concentrator: Training and Safety Guidelines



How oxygen concentrators work

Oxygen concentrators are electric machines that filter room air to make pure oxygen. They do not store oxygen — they produce and distribute it.

People who have trouble getting enough oxygen from breathing normal room air breathe better and feel better by getting purified oxygen from a concentrator. Concentrators are not life-supporting or life-sustaining devices.

For Your Safety

Following these guidelines will help reduce risks. See the manufacturer website if you would like more information about your equipment.

- Do not attach more than 50 feet of extension tubing to your cannula.**
- Post the Oxygen in Use sign where visitors can see it. The sign comes with your oxygen kit.
- Do not use the oxygen concentrator in the same room as an open flame, sparks, or smoke. Keep the concentrator:
 - In a well-ventilated area.
 - At least 6 inches from the wall, furniture, or draperies.
 - Away from bedding or clothing fabrics that make static electricity, such as wool or nylon.
 - Away from swamp coolers, heat registers, space heaters, or other source of heat.
- Do not use an extension cord or a wall outlet that powers other electrical equipment.
- Closely supervise children and pets around the concentrator.
- If you use a concentrator 24 hours a day, make sure a backup system is available.



How to use a concentrator

- 1 Plug the power cord directly into an electrical outlet. Do not use extension cords.
- 2 Connect the humidifier (if used).
- 3 Connect the oxygen tubing to the oxygen outlet (or humidifier bottle outlet if used), and fit the nasal cannula or mask to your face. **Do not attach more than 50 feet of extension tubing to your cannula.**
- 4 Press the power switch to “on,” and ensure the green indicator light comes on.
- 5 Turn the flowmeter knob to the setting prescribed by your doctor. Do not change the level of oxygen without your doctor’s consent.

The oxygen purity indicator lights

- A **green light** means proper oxygen flow.
- A **yellow light** means below-normal oxygen purity. Keep using the concentrator, but be sure that backup oxygen is nearby. Call Intermountain Homecare & Hospice right away.
- A **red light** means the unit has shut down. Switch to backup oxygen. Call Intermountain Homecare & Hospice right away.

Maintaining and Cleaning

- Remove and clean each filter at least once a week. In areas with high dust, smoking, or other air pollutants, clean them more often.
- Vacuum external filters or wash them in warm soapy water, rinse thoroughly, and dry fully.
- Wipe the concentrator cabinet with a damp cloth.

- Change your cannula every 2 to 4 weeks. Also change it after you've been sick.
- Change your oxygen tubing every 3 to 6 months. If it's damaged, change it right away.

Call your doctor if you think the amount of oxygen you are receiving should be changed.

Call Intermountain Homecare & Hospice if you have any problems with the equipment.

Troubleshooting

Problem	Probable Cause	Solution
<ul style="list-style-type: none"> • Unit not operating (power failure alarm) 	<ul style="list-style-type: none"> • Plug not firmly in wall • Concentrator circuit breaker tripped • No power at wall outlet • Electrical power outage 	<ul style="list-style-type: none"> • Check plug at outlet. • Press reset button on concentrator. • Check outlet fuse or circuit breaker. • Verify the wall switch that controls outlet is on. • Try another outlet. • Use your backup oxygen until power is restored.
<ul style="list-style-type: none"> • Oxygen not flowing from cannula • Place your oxygen cannula in a small glass of water and look for a steady flow of bubbles. If you see bubbles, the system is working. 	<ul style="list-style-type: none"> • Oxygen tubing or nipple adaptor not connected tightly • Obstruction in tubing • Obstruction in cannula • Humidifier lid not secure • More than 50 feet of tubing attached to the cannula 	<ul style="list-style-type: none"> • Check that oxygen tubing is connected tightly to system. • Make sure nipple adaptor is attached tightly. • If flow is restored when tubing is disconnected, replace tubing. • If flow is restored when cannula is disconnected from tubing, replace with new cannula. • Attach the humidifier lid securely to the jar; make sure it is not cross-threaded. • Do not attach more than 50 feet of extension tubing to your cannula
<ul style="list-style-type: none"> • Unable to dial prescribed flow rate 	<ul style="list-style-type: none"> • Obstruction in tubing • Obstruction in cannula • Obstruction in humidifier bottle • More than 50 feet of tubing attached to the cannula 	<ul style="list-style-type: none"> • If flow is restored when tubing is disconnected, replace tubing. • If flow is restored when cannula is disconnected from tubing, replace with new cannula. • If flow is restored when humidifier bottle is disconnected, clean or replace the humidifier bottle. • Do not attach more than 50 feet of extension tubing to your cannula
<ul style="list-style-type: none"> • Temperature light / alarm is on 	<ul style="list-style-type: none"> • Unit overheated 	<ul style="list-style-type: none"> • Make sure unit is not blocked by something like drapes. • Make sure filters are clean. • Turn off concentrator for 30 minutes to allow cooling and then restart. Use your backup system while the concentrator is cooling.
<ul style="list-style-type: none"> • Oxygen tubing contains water (if using a humidifier) 	<ul style="list-style-type: none"> • Overfilled humidifier bottle • Tubing lying on a cold floor 	<ul style="list-style-type: none"> • To dry the tubing, attach it directly to the concentrator (without the humidifier bottle). • Use your backup oxygen system while drying the tubing.

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