

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
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.
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
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
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.
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.



Content created and approved by Intermountain Homecare & Hospice

Intermountain Healthcare complies with applicable federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. Se proveen servicios de interpretación gratis. Hable con un empleado para solicitarlo. 我們將根據您的需求提供免費的口譯服務。請找尋工作人員協助。

© 2014-2020 Intermountain Healthcare. All rights reserved. The content presented here is for your information only. It is not a substitute for professional medical advice, and it should not be used to diagnose or treat a health problem or disease. Please consult your healthcare provider if you have any questions or concerns. More health information is available at intermountainhealthcare.org. Patient and Provider Publications FSHC036 - 03/20 Also available in Spanish