

Nuvo Lite Oxygen Concentrator



What Does an Oxygen Concentrator Do?

Oxygen makes up about one in five parts (21 percent) of the air we normally breathe. An oxygen concentrator filters out gases from room air that are not oxygen. It then delivers concentrated oxygen to your child. Using an oxygen concentrator increases the amount of oxygen your child breathes.



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Using an
Oxygen Concentrator



SEE USER MANUAL
FOR MORE DETAILED
INSTRUCTIONS:

**Nuvo Lite Oxygen
Concentrator**

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Read all manufacturer's warnings and cautions before operating equipment for the first time.

Equipment

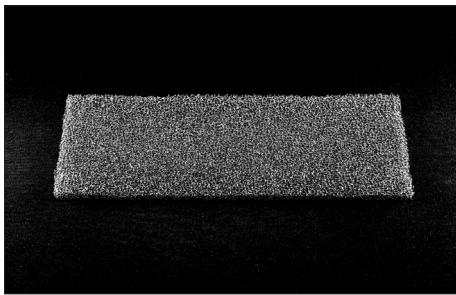


Oxygen Concentrator

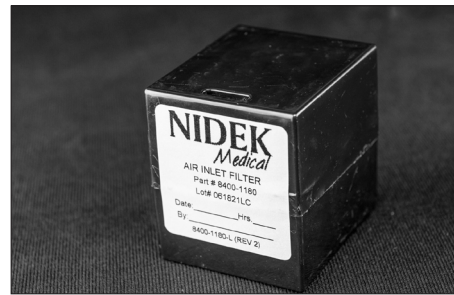


Oxygen Tanks and Regulator
Patient specific

Supplies



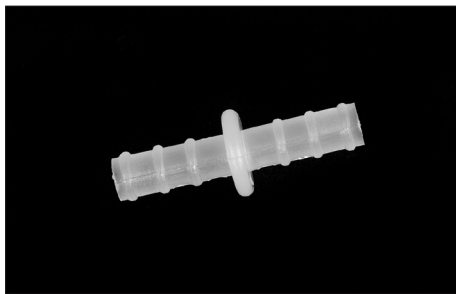
Removable Cabinet Air Filter



Air Inlet Filter



Oxygen Tubing
Different lengths available



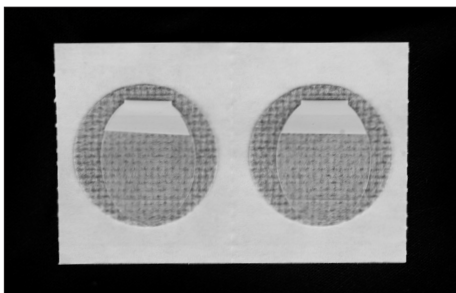
Oxygen Tubing Adapter
May vary by location



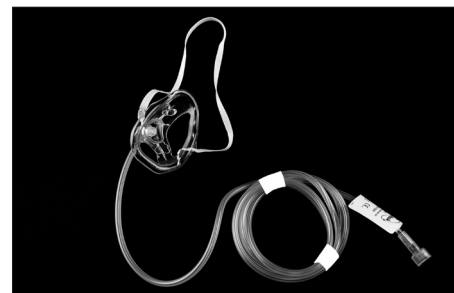
Oxygen Mask
Different sizes and styles available



Nasal Cannula
Different sizes available



Tender Grips



OxyMask
Different sizes available

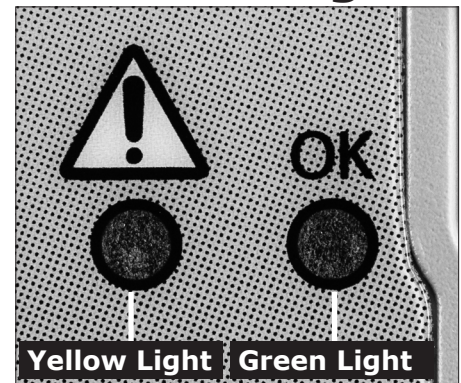
NOTE: For OxyMask, check instructions or ask PHS clinician for correct flow rates to use with mask.

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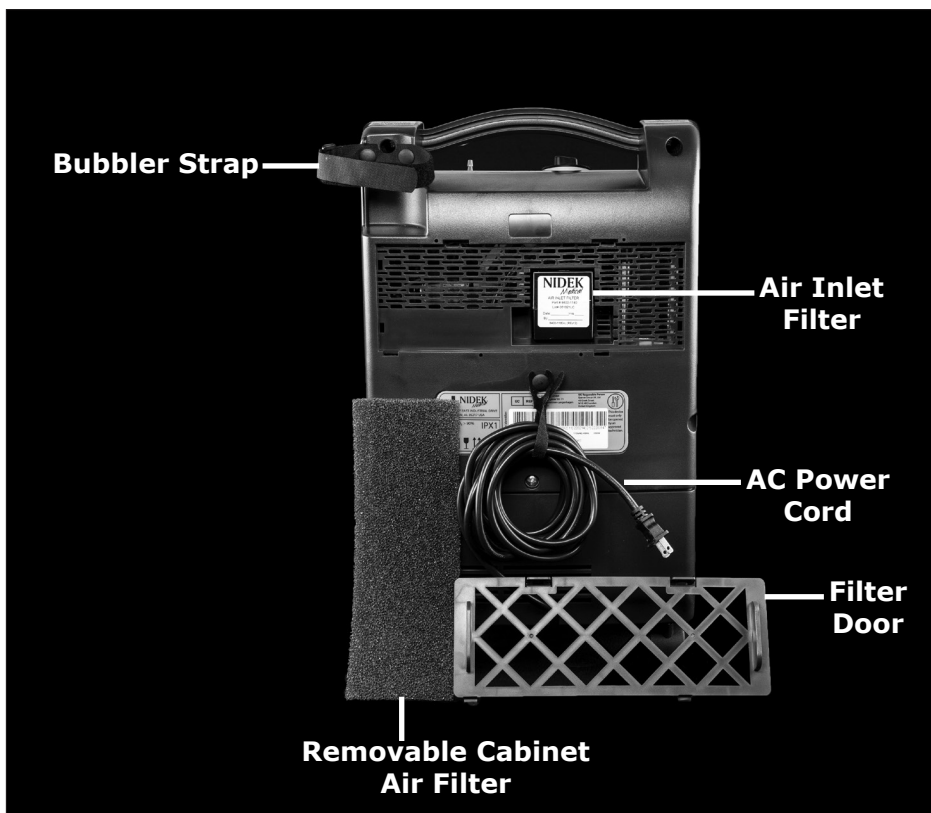
Parts of the Oxygen Concentrator—Front



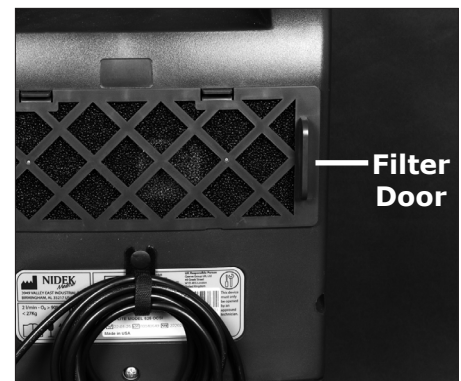
Indicator Lights



Parts of the Oxygen Concentrator—Back



NOTE: Remove filter door for access to air inlet filter.



Using the Oxygen Concentrator Safely

In case of loss of electricity in your home:

- Work with your PHS clinician beforehand to make sure you have a safe number of oxygen tanks to meet your child's needs, considering how many hours a day your child uses oxygen, the liter flow ordered by your child's doctor, and how long it might take PHS to deliver more oxygen.
- Order more tanks before you are below your safe number.

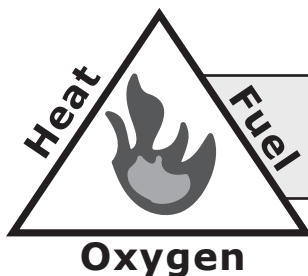
Always monitor your child while using an oxygen concentrator.

Post *Oxygen in Use* signs at all entrances of your home. The signs tell visitors and firefighters that someone is using oxygen in your home.

Fire

Fire needs oxygen to start and continue burning. Concentrated oxygen from an oxygen concentrator makes things burn more easily, quickly and at a hotter temperature than they would normally.

NOTE: Concentrated oxygen from an oxygen concentrator penetrates cloth, including clothes, bed sheets, and coverings on chairs. After you turn the oxygen concentrator off, concentrated oxygen remains in cloth for a period of time. A flame or source of high heat can cause the cloth to burn quickly and easily.



YOU NEED OXYGEN AND HEAT AND FUEL TO MAKE FIRE

When using an oxygen concentrator, avoid:

- Sparks, flames, or other sources of high heat
 - NEVER light or smoke a cigarette, cigar or pipe in a home where an oxygen concentrator is present.
 - Do NOT use electrical devices that may cause a spark near an oxygen concentrator. Examples include electric blankets, space heaters, and hair dryers.
 - Do NOT allow your child to play with toys that have motors or can give off sparks.
 - Do NOT place liquids on or near an oxygen concentrator. If liquid spills inside the device, unplug it before attempting to clean up the spill.
- Types of fuel that catch fire easily:
 - Do NOT use hair spray or other canned sprays near an oxygen concentrator.
 - Do NOT use products on your child's skin or lips that have petroleum, petrolatum, mineral oil or vegetable oil in them. These products can cause burns to skin and lips when oxygen is in use. Examples include lip balm, hand lotion, Vaseline, A+D ointment, and AquaPhor ointment.
 - Do NOT use rubbing alcohol, or products with alcohol or isopropyl alcohol, near an oxygen concentrator.
 - Do NOT lubricate fittings, connections, tubing, or other accessories.



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SCAN & WATCH A VIDEO ON:
Oxygen Safety

Setting Up the Oxygen Concentrator

IMPORTANT! NEVER use more than 50 feet of oxygen tubing between oxygen concentrator and nasal cannula, oxygen mask, or other oxygen delivery device.



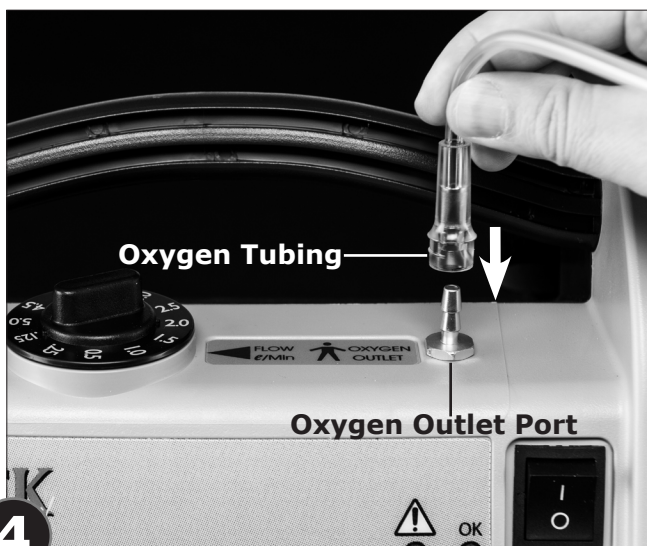
- 1** Clean your hands with soap and water or alcohol-based hand gel.



- 2** Place oxygen concentrator in open area away from wall with at least 6–12 inches of free space on all sides.
- This area should be free of pollutants and fumes.



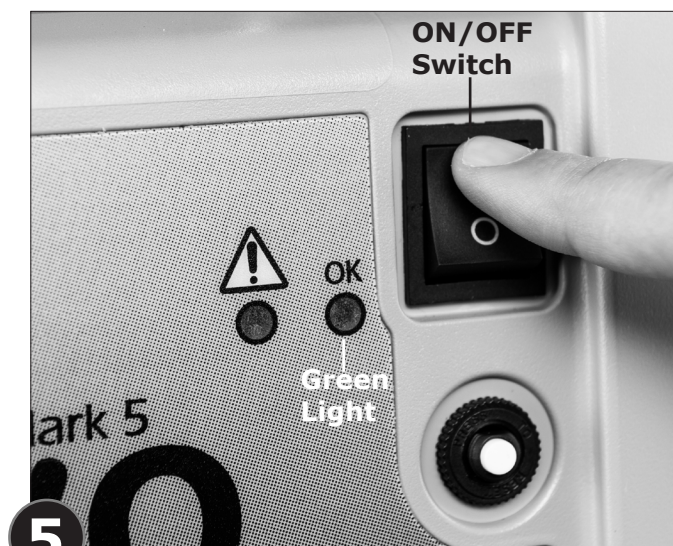
- 3** Plug AC power cord into AC outlet. Do NOT use extension cord between power cord and outlet.
- NOTE:** Cords and tubing can be a tripping or strangulation hazard. Keep cords and tubing out of the way as much as possible.



- 4** Attach one end of oxygen tubing to oxygen outlet port on oxygen concentrator.
- NOTE:** You can attach end of tubing from nasal cannula or oxygen mask directly to oxygen outlet port on oxygen concentrator.

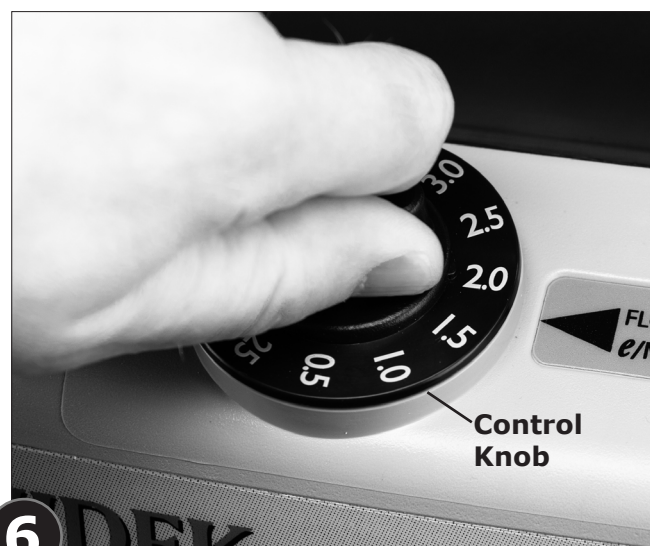
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Setting Up the Oxygen Concentrator [continued]



Press ON/OFF switch to turn oxygen concentrator on.

When you turn oxygen concentrator on, green OK light will blink for about a minute, then stop blinking and remain on.



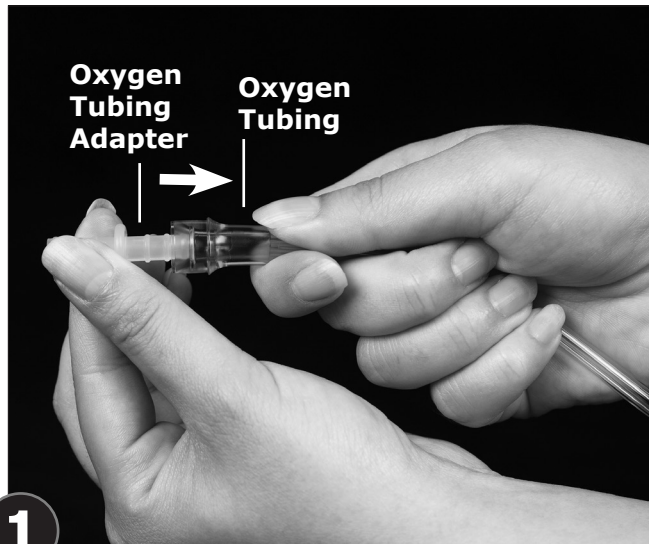
Turn control knob to match directions from doctor about oxygen liters per minute (LPM) or oxygen saturation level.

NOTE: Make sure control knob clicks into place.



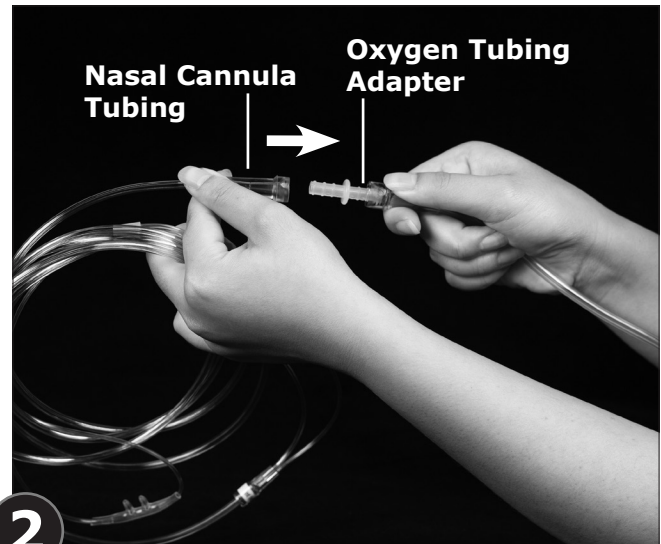
Wait until green OK light stops blinking BEFORE you connect your child to oxygen concentrator.

Using the Oxygen Concentrator with a Nasal Cannula

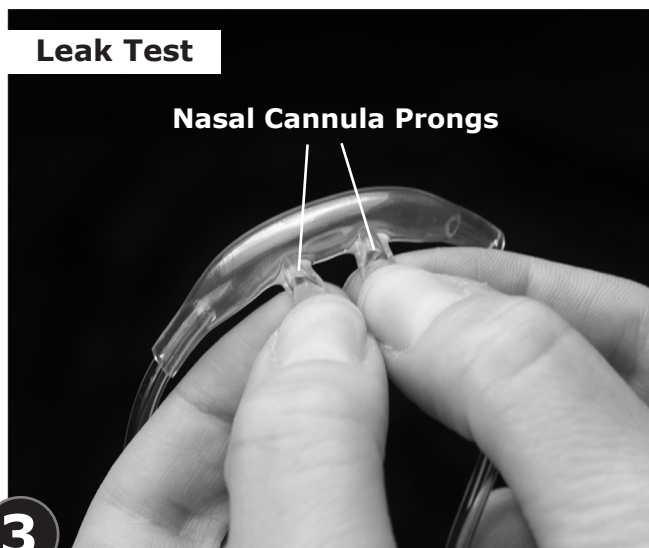


Attach oxygen tubing adapter to open end of oxygen tubing.

NOTE: You can attach end of tubing from nasal cannula or oxygen mask directly to oxygen outlet port on oxygen concentrator.



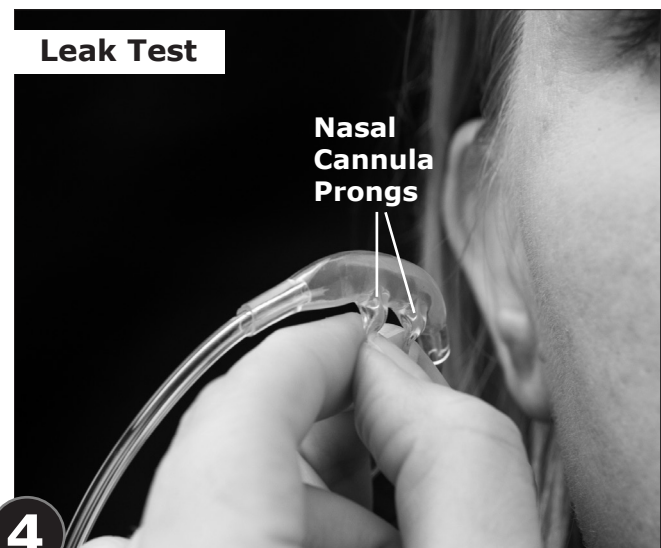
Attach other end of oxygen tubing adapter to tubing from nasal cannula.



Perform leak test by pinching prongs of nasal cannula so that oxygen cannot flow out of them.

NOTE: Be sure

- Oxygen concentrator is turned on.
- Oxygen liter flow is set at 0.5 LPM or higher.



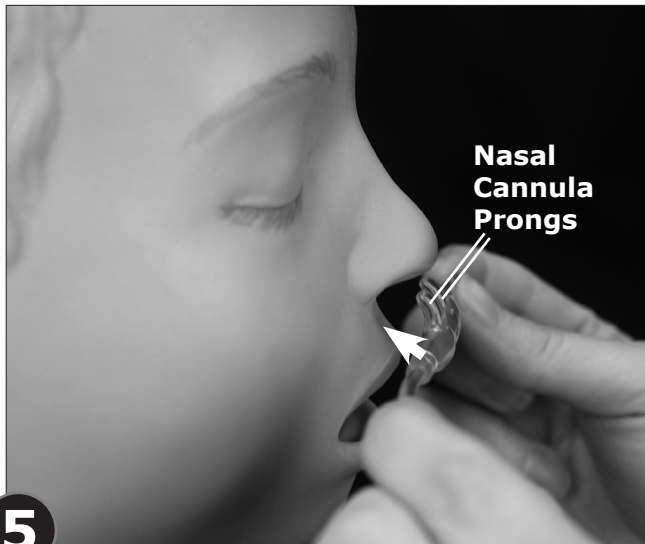
Hold pinched prongs of nasal cannula near your cheek. Release prongs and feel and listen for rush of oxygen from nasal cannula.

- If you feel and hear rush of oxygen from nasal cannula, go to step 5.*
- If you do NOT feel and hear rush of oxygen from nasal cannula, go to section on "Troubleshooting."*

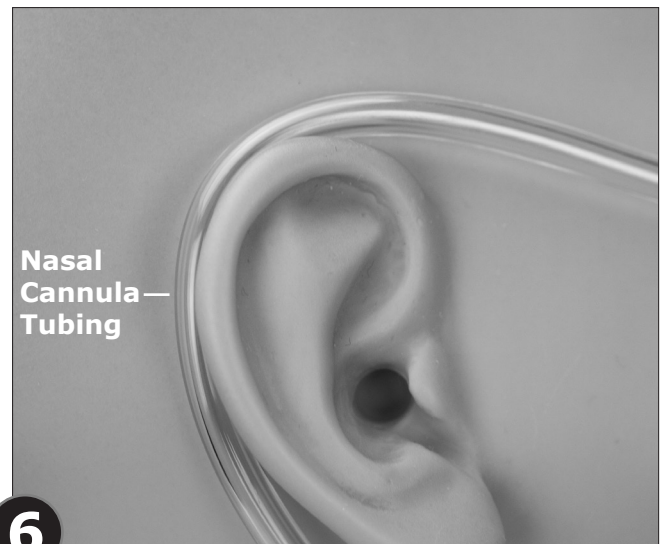
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Using the Oxygen Concentrator with a Nasal Cannula

[continued]



Insert prongs of nasal cannula into child's nose with prongs curving down into nostrils.



Place tubing of nasal cannula over child's ears to hold nasal cannula in place.

NOTE: *If using tender grips with nasal cannula, make sure you do not damage your child's skin. See section on "Using Tender Grips to Hold a Nasal Cannula in Place."*

Using Tender Grips to Hold a Nasal Cannula in Place

IMPORTANT! To avoid damage to child's skin,

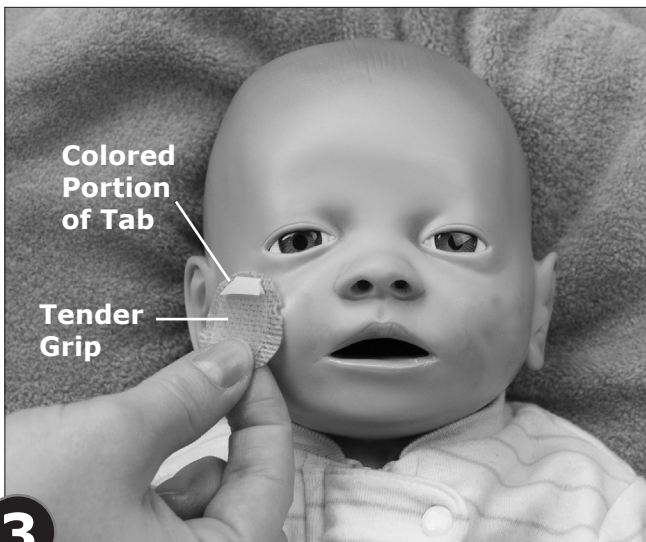
- Wash cheeks with mild soap and water and let dry *BEFORE* placing tender grips on child.
- Change tender grips as often as ordered by your child's doctor (usually every two to three days).
- Vary the placement of tender grips on child's cheeks.



Clean your hands with soap and water or alcohol-based hand gel.

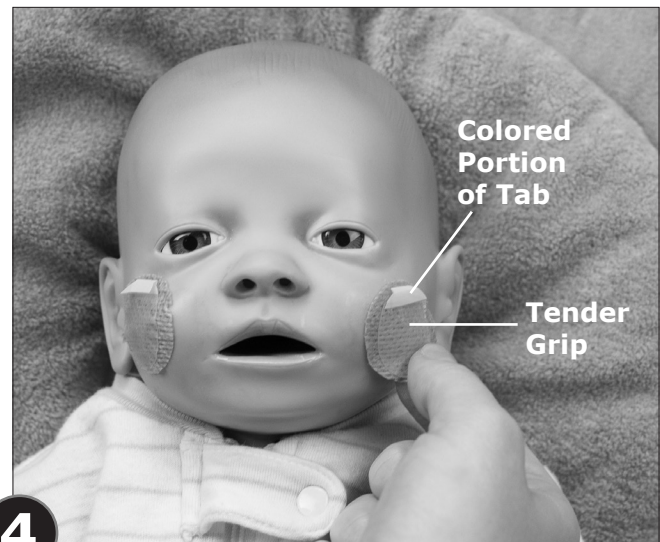


Clean your child's cheeks with mild soap and water. Allow skin to dry completely.



Remove one tender grip from paper backing.

Attach tender grip to child's cheek with colored portion of tab pointed toward top of head.



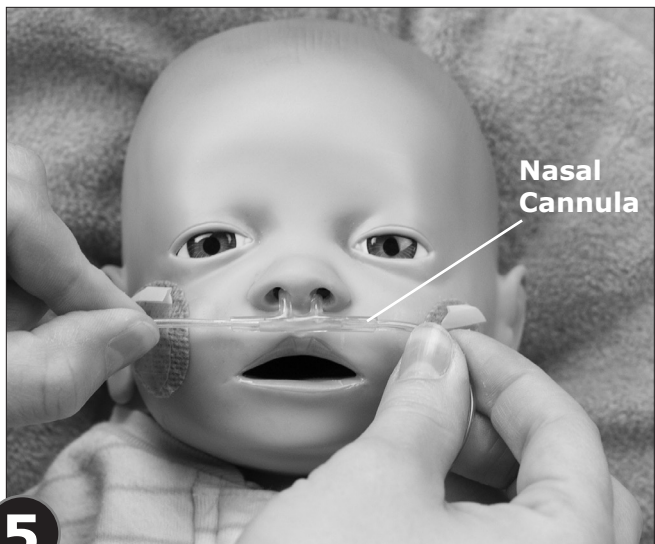
Remove second tender grip from paper backing.

Attach tender grip to child's other cheek with colored portion of tab pointed toward top of head.

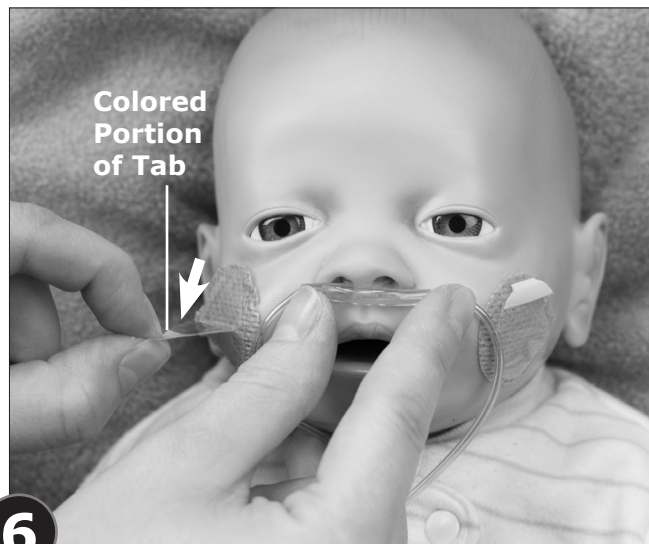
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Using Tender Grips to Hold a Nasal Cannula in Place

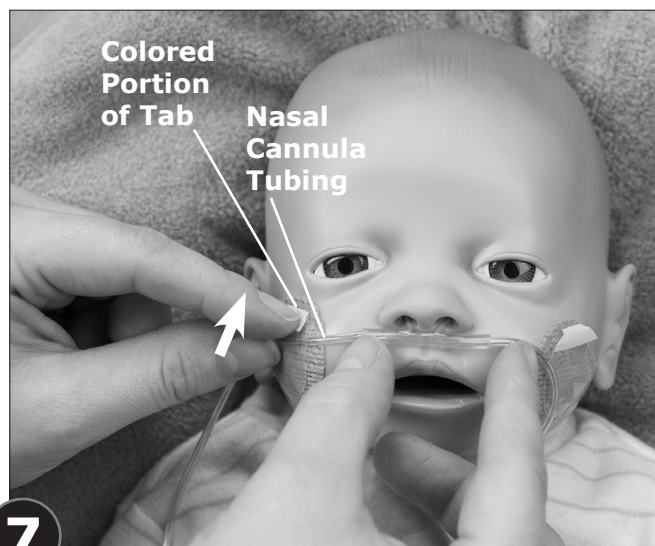
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Insert prongs of nasal cannula into child's nose with prongs curving down into nostrils.

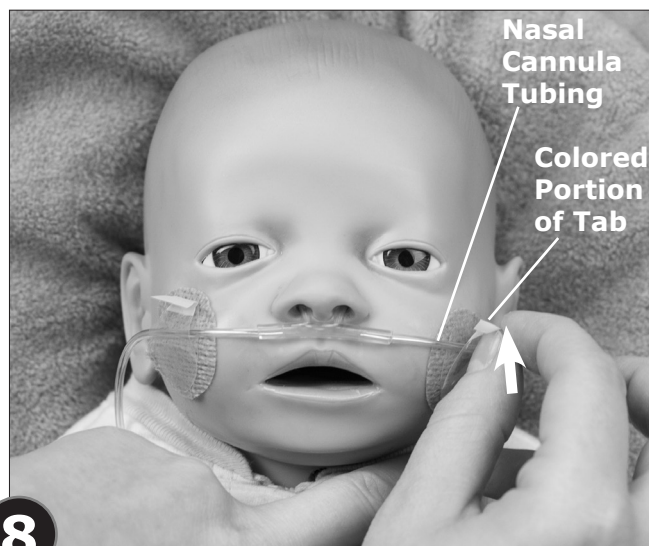


Hold prongs in place with one hand. With other hand, lift colored portion of tab and peel tab back halfway to expose sticky surface.



Place tubing of nasal cannula on sticky surface of tender grip. Line up tubing alongside lifted portion of tab.

Pull colored portion of tab back over tubing of nasal cannula.

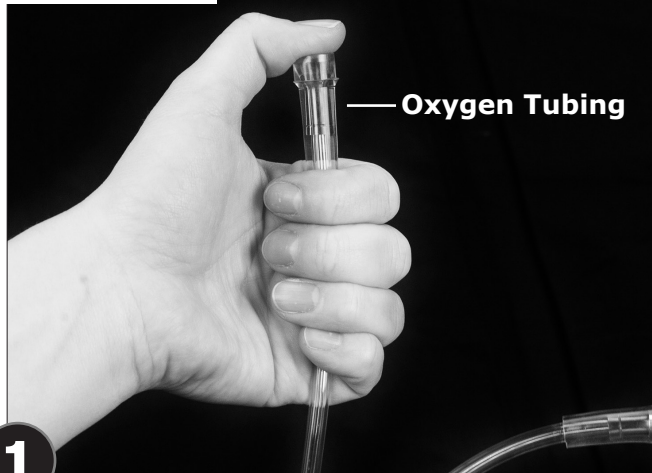


Repeat steps 6 and 7 on child's other cheek.

Using the Oxygen Concentrator with Oxygen Mask or Other Oxygen Delivery Device

NOTE: If using other oxygen delivery device, complete steps 1 and 2 in this section. Then follow instructions from your PHS clinician on how to connect and use oxygen delivery device.

Leak Test



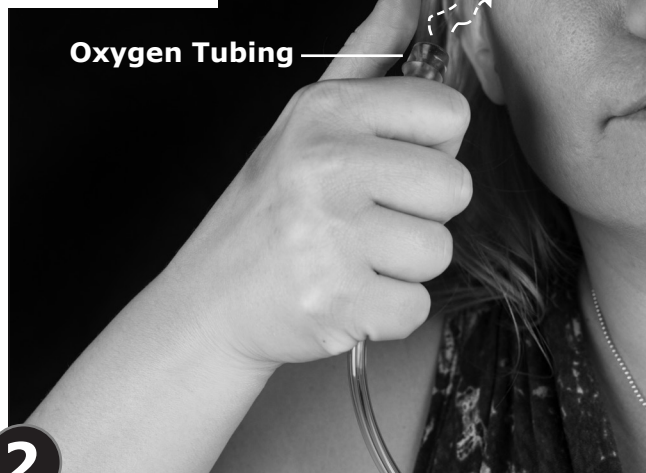
1

Perform leak test by using thumb to completely block open end of oxygen tubing. Do not allow oxygen to escape from under your thumb.

NOTE: Be sure

- Oxygen concentrator is turned on.
- Oxygen liter flow is set at 0.5 LPM or higher.

Leak Test



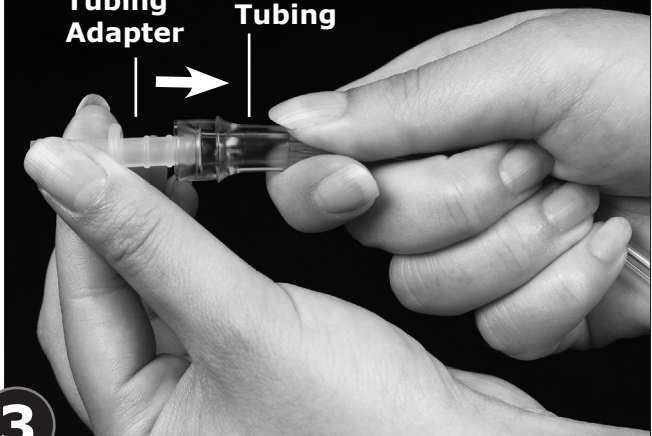
2

Hold blocked end of oxygen tubing near your cheek. Remove thumb from end of tubing and feel and listen for rush of oxygen from oxygen tubing.

- a. If you feel and hear rush of oxygen from end of oxygen tubing, go to step 3.
- b. If you do NOT feel and hear rush of oxygen from end of oxygen tubing, go to section on "Troubleshooting."

Oxygen Tubing Adapter

Oxygen Tubing

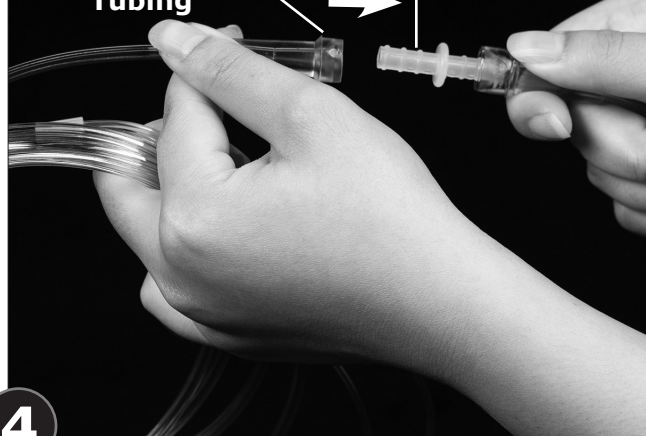


3

Attach oxygen tubing adapter to open end of oxygen tubing.

Oxygen Mask Adapter

Oxygen Mask Tubing



4

Attach other end of oxygen tubing adapter to tubing from oxygen mask.

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Using the Oxygen Concentrator with Oxygen Mask or Other Oxygen Delivery Device [continued]



Place oxygen mask on your child.

IMPORTANT! You **MUST** set flow meter to 5 LPM when using an oxygen mask.

If using OxyMask, follow instructions from your PHS clinician about oxygen liter flow setting.

Ending Use of the Oxygen Concentrator



Press ON/OFF switch to turn oxygen concentrator off.

IMPORTANT! If your child needs *continuous oxygen*, connect your child to an oxygen tank BEFORE you turn oxygen concentrator off.

IMPORTANT! If moving or storing oxygen concentrator, keep it vertical (upright).

NOTE: If not using oxygen concentrator regularly, run it for at least 30 minutes once a month for best performance.

Power Sources

Oxygen concentrator only works if plugged into AC outlet.

Electrical Requirements: 230 Volts (V), 10 Amps (A), 330 Watts (W)


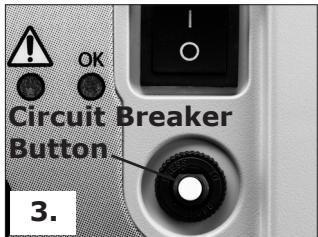
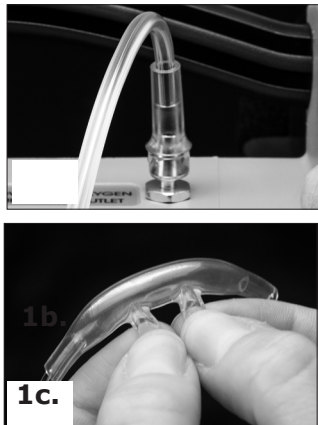
Alarms

IMPORTANT! Immediately connect child to oxygen tank if your child requires continuous oxygen and you cannot quickly determine the cause of an alarm on the oxygen concentrator, or you need to turn oxygen concentrator off. If your child is having a medical emergency, call 911.

Alarm Sound and Indicator Lights	What It Means	Solutions
Short beeps with pauses in between. Green light is off.	Loss of power to oxygen concentrator.	<ol style="list-style-type: none">1. Make sure AC power cord is firmly plugged into AC outlet.2. <i>If step 1 does not solve problem,</i><ol style="list-style-type: none">a. Press ON/OFF switch on oxygen concentrator to off position.b. Plug AC power cord into different AC outlet.c. Press ON/OFF switch to turn oxygen concentrator on. <p>Call PHS if problem continues.</p>
Continuous alarm. Yellow light comes on.	Oxygen concentration level is below the level ordered by your child's doctor.	<ol style="list-style-type: none">1. Check that oxygen tubing is not kinked.2. Check that control knob is set properly. <p>Call PHS if problem continues.</p>
Continuous alarm. Yellow light comes on. Green light stays on.	Oxygen tubing is blocked.	<ol style="list-style-type: none">1. Make sure: Oxygen tubing is not blocked or kinked. Nasal cannula is not pinched or bent.2. <i>If step 1 does not solve problem,</i><ol style="list-style-type: none">a. Change cannula and tubing.b. If using a bubbler, change bubbler.3. <i>If steps 1 and 2 do not solve problem,</i><ol style="list-style-type: none">a. Turn oxygen concentrator off.b. Call PHS.
Continuous alarm. Yellow light flashes.	Low pressure due to mechanical failure.	<ol style="list-style-type: none">1. Turn oxygen concentrator off.2. Call PHS.

Troubleshooting



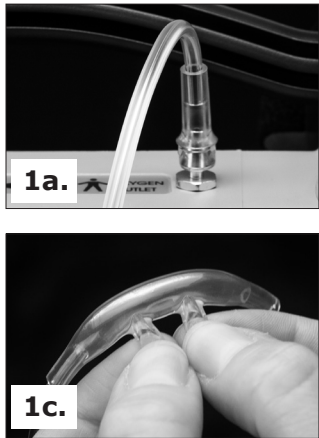
IMPORTANT! Immediately connect child to oxygen tank if your child requires continuous oxygen and you cannot quickly determine the cause of an alarm on the oxygen concentrator, or you need to turn oxygen concentrator off. If your child is having a medical emergency, call 911.

Problem	Action to Take	
The ON/OFF switch is in the ON position, but oxygen concentrator does NOT turn on.	<ol style="list-style-type: none"> 1. Make sure AC power cord is firmly plugged into AC outlet. 2. <i>If step 1 does not solve problem</i>, plug AC power cord into different AC outlet. 3. <i>If steps 1 and 2 do not solve problem</i>, check fuse or circuit breaker in your home. <p>Call PHS if problem continues.</p>	 <p>AC Outlet</p>
Oxygen concentrator <ul style="list-style-type: none"> • Stops working. • Sounds an alarm. • Circuit breaker button pops out. 	<ol style="list-style-type: none"> 1. Press ON/OFF switch on oxygen concentrator to off position. 2. Allow oxygen concentrator to cool down. 3. Push in circuit breaker button on oxygen concentrator. Call PHS if you cannot push in circuit breaker button. 4. Make sure oxygen concentrator is plugged in. Press ON/OFF switch to turn oxygen concentrator on. 5. Leave on for 10 minutes and retest. <p>Call PHS if problem continues.</p>	 <p>Circuit Breaker Button</p> <p>3.</p>
Oxygen tubing or nasal cannula do NOT pass leak test.	<ol style="list-style-type: none"> 1. Make sure: <ol style="list-style-type: none"> a. Oxygen concentrator is turned on. b. Oxygen tubing is firmly connected to oxygen outlet port on oxygen concentrator. c. Oxygen tubing or nasal cannula is not pinched or bent. 2. <i>If step 1 does not solve problem</i>, use new oxygen tubing or nasal cannula. <p>Call PHS if problem continues.</p>	 <p>1b.</p> <p>1c.</p>

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Troubleshooting [continued]

IMPORTANT! Immediately connect child to oxygen tank if your child requires continuous oxygen and you cannot quickly determine the cause of an alarm on the oxygen concentrator, or you need to turn oxygen concentrator off. If your child is having a medical emergency, call 911.

Problem	Action to Take	
<p>The ON/OFF switch is in the ON position, BUT</p> <ul style="list-style-type: none"> There is oxygen flow AND the compressor is operating BUT the green light is off, OR There is no flow AND the alarm sounds continuously, OR There is oxygen flow AND the compressor is operating BUT the alarm sounds continuously. 	<ol style="list-style-type: none"> Press ON/OFF switch on oxygen concentrator to off position. Call PHS. 	
<p>The compressor stops in mid-cycle, then starts again after a few minutes.</p>	<ol style="list-style-type: none"> Press ON/OFF switch on oxygen concentrator to off position. Allow oxygen concentrator to cool down. Clean or replace cabinet air filter. Press ON/OFF switch to turn oxygen concentrator on. <p>Call PHS if problem continues.</p>	
<p>Air flow stops at nasal cannula outlet, OR flow at nasal cannula is irregular.</p>	<ol style="list-style-type: none"> Make sure: <ol style="list-style-type: none"> Tubing connections are tight. Bubbler is sealed, if using. (See the document <i>Bubbler for Nuvo Lite Oxygen Concentrator</i> for more information on this.) Oxygen tubing or nasal cannula is not pinched, kinked, or bent. <p>Call PHS if problem continues.</p>	

Cleaning

Oxygen Concentrator—Clean and Disinfect Every Week

Turn oxygen concentrator off and unplug oxygen concentrator from AC outlet. Wipe machine with clean cloth dampened with disinfecting mixture. Do NOT put oxygen concentrator into water. Let oxygen concentrator air dry completely before plugging back in.

NOTE: Read *Common Methods for Disinfecting Reusable Supplies* card for disinfection options and mixtures.

Removable Cabinet Air Filter—Clean Every Week

1. Remove panel on back of oxygen concentrator.
2. Pull dirty air filter from back of oxygen concentrator. Replace with clean air filter, then replace panel on back of oxygen concentrator.
3. Wash dirty air filter in mixture of warm water and standard dish soap.
4. Rinse completely with hot water.
5. Press air filter with clean towel to remove extra water.
6. Allow to air dry completely on clean surface. NEVER use damp air filter in oxygen concentrator.
7. Store in clean, dry container.

Air Inlet Filter—Check Every Month and Replace Annually or When Dirty

Your PHS clinician will inspect air inlet filter during follow up visit. Filter may need to be replaced between visits. Monthly checking instructions are below.

1. Remove panel and removable cabinet air filter from back of oxygen concentrator. Pull air inlet filter out.
2. Look through window on top of filter. Replace with new filter if filter inside window is gray or brown in color.
3. Replace panel on back of oxygen concentrator.

NOTE: When you get oxygen concentrator, pull air inlet filter out and write date and your initials on it. Replace air inlet filter within one year.



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Cleaning [continued]

Oxygen Tubing—Clean Every Week and Replace Every Month

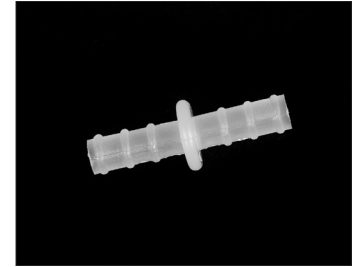
1. Wipe outside of oxygen tubing with clean cloth dampened with warm soapy water.
2. Use new oxygen tubing every month.

NOTE: Use new oxygen tubing sooner than one month if dirty or wet on inside.



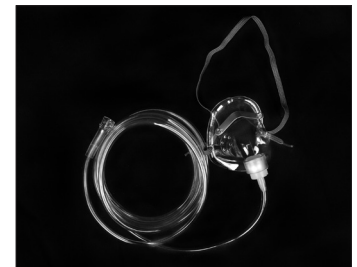
Oxygen Tubing Adapter—Clean Every Month

1. Remove dirty oxygen tubing adapter from oxygen tubing.
2. Replace with clean oxygen tubing adapter.
3. Wash dirty oxygen tubing adapter in mixture of warm water and standard dish soap.
4. Rinse completely with hot water.
5. Allow to air dry completely on clean surface.
6. Store in clean, dry container.



Oxygen Mask—Clean Every Day and Replace as Needed

1. Remove dirty oxygen mask from oxygen tubing.
2. Replace with clean oxygen mask.
3. Wash dirty oxygen mask in mixture of warm water and standard dish soap.
4. Rinse completely with hot water.
5. Allow to air dry completely on clean surface.
6. Store in clean, dry container.



NOTE: Use new oxygen mask if mask is cracked or does not come clean after washing.

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Cleaning [continued]

Nasal Cannula—Clean Every Day and Replace as Instructed

1. Wipe outside of nasal cannula and attached tubing with clean cloth dampened with warm soapy water.

NOTE: Use a new nasal cannula if cannula does not come clean after wiping with cloth.

2. Perform leak test after cleaning to make sure oxygen flows through nasal cannula. See section on “Using the Oxygen Concentrator with a Nasal Cannula” for instructions.
3. Use a new nasal cannula every two weeks, or as instructed by your PHS clinician.

