

Home Ventilation ...

improves quality
of life for
ventilator-assisted
individuals

but requires
significant commitment
from caregivers
to ensure safety



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Healthcare Technology Foundation

5200 Butler Pike
Plymouth Meeting, PA 19462
Phone: 610 825-6067
Web site: www.thehtf.org

ECRI Institute

5200 Butler Pike
Plymouth Meeting, PA 19462
Phone: 610 825-6000
Web site: www.ecri.org

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Additional Resources:

Fire Safety and Oxygen: A Patient Guide
www.thehtf.org/documents/HomeDevice_Oxygen.pdf

How to Prepare for and Handle Power Outages for Medical Devices that Require Electricity

<http://www.fda.gov/downloads/MedicalDevices/ProductsandMedicalProcedures/HomeHealthandConsumer/UCM252812.pdf>

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Home Medical Devices

Home Ventilation:

A Safety Guide for Caregivers



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What You Need To Know About Home Ventilation

Home ventilation can allow the ventilator-assisted individual who would otherwise need to be in a special facility to live a more normal life. But this often requires that person's loved ones or other caregivers to take on many of the responsibilities of trained medical professionals. It also requires these caregivers to become familiar with the ventilators, and understand what can go wrong in order to minimize the risks.



What's Involved in Home Ventilation?

Home ventilators are life-support devices that provide full or partial ventilatory support for patients with certain breathing conditions. They are most often used on a continuous basis and may be used with supplemental oxygen. They typically connect

to a patient's tracheostomy tube using corrugated tubing and connectors that comprise a breathing circuit. The breathing circuit is usually also connected to a moisture-generating device to deliver humidified gas to the patient. Home ventilators are operated using normal electrical power and typically have a short period of battery backup. They have audible and visual alarms that are designed to alert caregivers to certain problems with the device or patient.

What Are The Risks?

The most serious risk with home ventilation is the loss of ventilatory support, which can happen if the breathing circuit is accidentally disconnected or if a power outage occurs. Patients can also be harmed if they receive too much or too little air or oxygen, which can be due to the use of inappropriate settings on the ventilator. When supplemental oxygen is used, the risk of fire is increased. Ventilator patients are very susceptible to infection, which can result from contamination on the breathing circuit, humidification system, or the ventilator itself.

How Can I Keep the Patient Safe?

Here are some steps that you can take to help ensure the safety of your loved one.

- Keep technical and clinical support contact information readily available in case you have questions or there is an emergency.
- Be sure you know how to connect the breathing circuit and other accessories to the ventilator and the patient.
- Make sure someone is available and able to help the patient at all times. The patient should have a way to call for help as well.
- Promptly respond to all ventilator-related alarms by trying to verify that the patient is being adequately ventilated and that the ventilator is operating properly.
- Do not change the alarm limits and settings on your device without first checking with your prescribing clinician.
- Make sure that alarms are loud enough so that you can hear them in another room and over common household noises.
- Keep the area around the tubing clear of clutter, clothing, bedding, pets, and other things that could cause an accidental disconnection or blockage.
- Follow recommended cleaning instructions for the ventilator, breathing circuit, and other accessories to help minimize the risk of infection. Always wash your hands before touching the ventilator or the patient.
- Have a power plan in place for what to do in the event of an extended power outage, both while traveling and at home. Consider arranging for backup electrical power, a backup ventilator, and a manual resuscitator.
- Make sure you have read and understand the manufacturer's written instructions. Meet with a respiratory therapist who is familiar with the specific device you will be using to discuss how it works and any special precautions you should consider.