

Breathing is something we do all the time, mostly even without thinking about it. We take a breath in, we blow it out. We must breathe to live.

When difficulty with breathing occurs, treatment and care are expected. Sometimes a ventilator is needed. To refuse and to deny assistance for something as essential as breathing would not be in accord with right reason. Good ought to be done; evil must be avoided.

Sometimes breathing needs assistance, e.g., an inhaler or a ventilator. Experience shows that an inhaler can be helpful for asthma. A ventilator can be helpful to treat other diseases and injuries. While we are grateful for the ability to breathe without the need of an inhaler or ventilator, if ever these are needed to assist breathing, we should request them and treatment with them ought to be expected.

The term “respirator” is often used to refer to a ventilator. The ventilator is an aid in breathing; aid in respiration is desired and promoted by the use of the ventilator. Ventilation is the movement of air into and out of the body. Respiration in the lungs takes oxygen out of the air to be used by the body in exchange for carbon dioxide exhaled out of the body into the air.

In everyday life, for breathing to occur, an impulse originates in the brain and is conducted along nerves to muscles used in breathing. These muscles are those of the chest wall and the diaphragm (a muscle that separates the chest from the abdomen). The muscles contract, causing the chest to expand, resulting in lungs filled with oxygen-rich air. Nerve impulses stop and the muscles relax. The chest elastically recoils, exhaling carbon dioxide into the air. Other organs used in breathing include the trachea (the windpipe), smaller air passages known as bronchi and bronchioles and the lungs.

The actual exchange of oxygen and carbon dioxide takes place in the lungs, as well as in living tissues throughout the body via circulation. The heart pumps, circulating blood to and through the lungs and then throughout the body. In the lungs, the blood takes in oxygen and gives up carbon dioxide. Then the blood circulates throughout the rest of the body where an opposite exchange occurs: the blood gives up oxygen and takes in carbon dioxide. This exchange in the lungs and in the tissues is respiration.

The ventilator aids breathing

When the parts of the brain that control breathing or the organs and tissues for breathing are diseased or injured, a ventilator helps until normal functioning is restored. For example, people with head injuries and respiratory diseases typically receive relief and help from the use of a ventilator.

This machine is properly called a “ventilator” since it supports the ventilation part of breathing. In other words, a ventilator moves air; it does not and cannot cause the other part of breathing—respiration. That is, it does not and cannot exchange oxygen and carbon dioxide as occurs

in lungs and body tissues. Respiration can occur only when the body’s respiratory and circulatory systems are otherwise intact and functioning properly.¹ Respiration is a human function, not a machine’s. The more accurate term “ventilator” should always be used.

The ventilator moves air into air spaces to help the patient to breathe more effectively.² The ventilator does not move the air out. Elastic recoil of lungs and chest move the air out of the patient. A ventilator can be effective as support of respiration only in a living patient, never in a corpse.



When the living body of a person with interdependence of organs and systems receives an adequate supply of needed oxygen, and carbon dioxide is exhaled adequately, healing can occur. If respiration is not supported adequately by the ventilator, although all other treatments remain in place, death nevertheless can occur.

An effective treatment

By now it should be clear that in terms of function, a ventilator, like an inhaler, is a means of treatment for a patient who needs help breathing. While an inhaler is typically pulled out of a pocket and used almost anywhere without

much technical skill or training, a ventilator is used primarily in a hospital, often in an intensive care unit. Some types of ventilators, however, are portable and may be used outside the hospital.

The important thing to know is that both the ventilator and the inhaler are forms of treatment. Therefore, the decision to use a ventilator should be made in the same way decisions about other forms of treatment and care are made—by determining whether it will protect and preserve life.

The value of a ventilator

More specifically, we ought to choose medical treatments, including a ventilator, that will support breathing and ultimately restore normal breathing. A ventilator ought to be used to assist breathing of patients with conditions for which ventilatory support is known to be effective, such as pneumonia, asthma, head injuries and drug overdose. During and after certain anesthetics, or simply needing breathing support and comfort after major surgery, often the use of a ventilator is included. In the typical case, the ventilator benefits the patient by helping him or her to breathe more effectively.

The use of a ventilator is effective as an aid in the treatment and care of a living patient. Even when the ventilator is used to help the patient to be more comfortable, its use continues to be effective in breathing and respiration.³

To those who say, “I never want to be put on a ventilator,” we can see that the assumption that probably underlies this sentiment is apt to be false. Ventilators are used commonly and effectively to protect and preserve life. With the assistance of a ventilator, a person can continue to live and serve God.

NOTES

1 A variety of medical means are used to support or treat impairment of respiration. For example, oxygen—supplied by a ventilator or by a nose tube connected to an oxygen tank—helps the patient whose body is having difficulty taking oxygen out of the air.

A ventilator works by supplying air and/or oxygen under pressure: pressure increases, causing air flow into the patient’s lungs; pressure then decreases, and the lungs elastically recoil, expelling carbon dioxide.

2 A patient on a ventilator in an intensive care unit usually has other kinds of equipment in use, mostly for making observations about the patient’s condition. For example, such equipment may electronically monitor heart rate, breathing rate, blood pressure, the amount of oxygen in the tissues of the body and other functions. In other words, many “machines” in intensive care units are used not so much to treat the patient as to make accurate observations that can be used to treat the patient more effectively.

3 The Science of Medicine has improved its practice to protect and preserve the life of the patient who is a person, not a thing. “This has led to a gradual modification of the very concept of medicine, extending its role beyond the ancient function of fighting disease to that of promoting the overall health of human beings. A consequence of this new outlook is that the relation between physician and patient has gradually taken on increasingly organized and complex forms that are meant to safeguard the citizen’s health from birth to old age.” (Pope John Paul II. *A Patient Is a Person*. Oct. 27, 1980, Address to Two Congresses of Physicians and Surgeons.)

Some medical conditions necessitate ventilator support for a short time; others for extended, perhaps indefinite, periods. It is important to understand that use of the ventilator itself is an aid to the patient. Life is protected and preserved with the aid of the ventilator. The ventilator can support the vital activity of breathing only in a living patient. While the patient may need help adjusting his or her lifestyle to such necessary medical treatment, it would not be morally permissible to foreclose or discontinue ventilator support because the patient’s life is considered no longer worth living.



P.O. Box 1350, Stafford, VA 22555

phone: 540-659-4171 fax: 540-659-2586

e-mail: jbrown@all.org web: www.all.org

© 2013 American Life League, Inc.

TO BREATHE IS TO LIVE

The ventilator assists breathing

