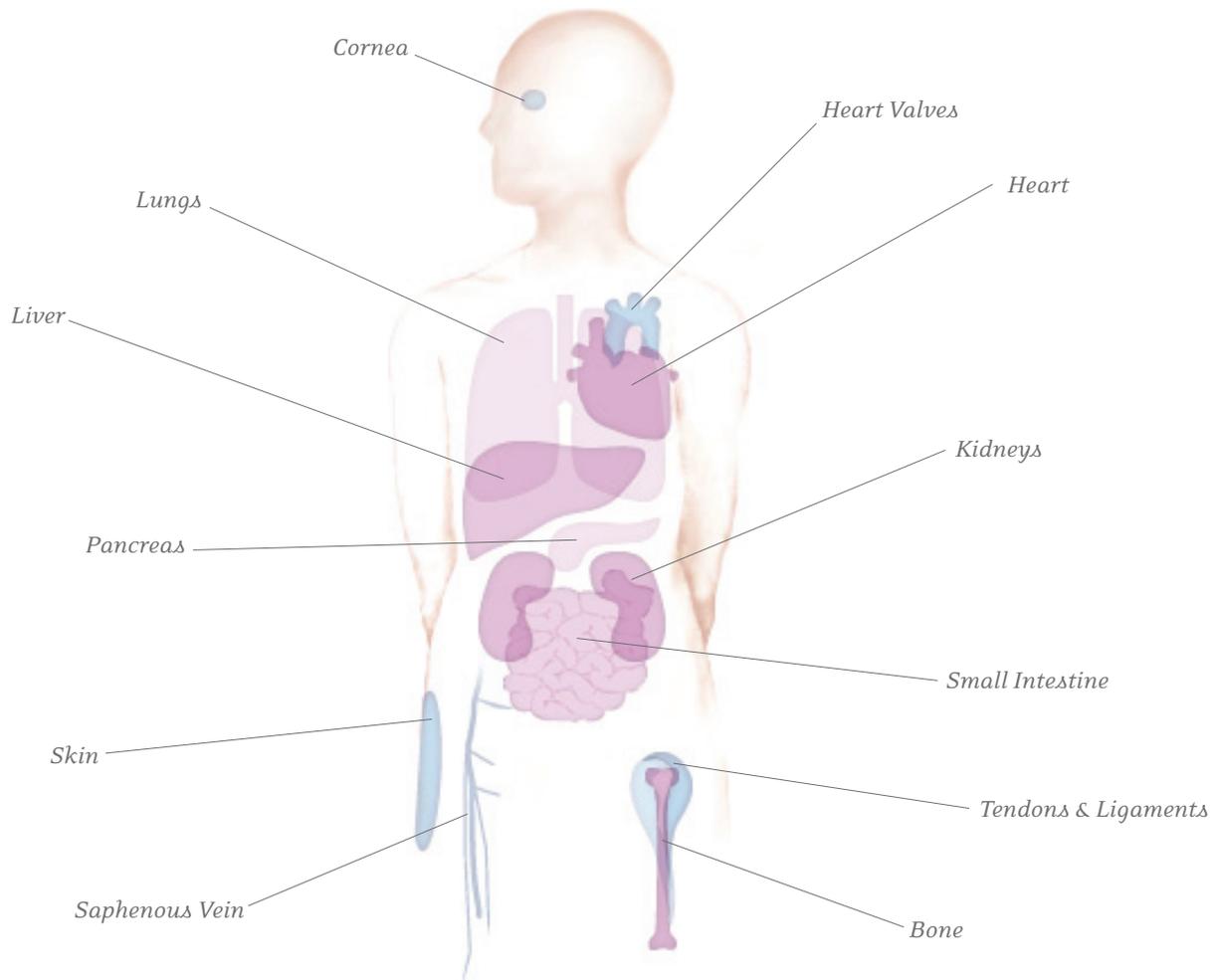


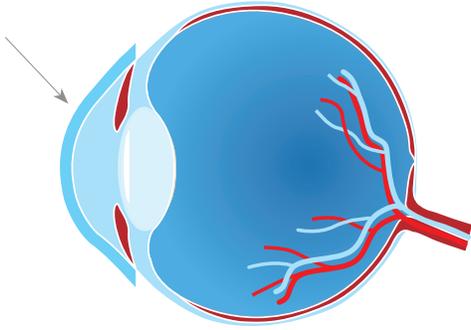
# What Can Be Donated?

## EXPLORE THE BODY



**ORGANS:** heart, intestine, kidney, liver, lung, pancreas    **TISSUES:** bone, tendons & ligaments, cornea, heart valves, skin, veins

**Each Organ and Tissue** in our body performs certain functions. Many people are born with health problems causing a particular organ or tissue to not function properly, thus creating the need for a transplant. Others may require a transplant due to wear and tear or exposure to other diseases. There are many reasons why any one of us may require a transplant at some point in our lives. The following information highlights the organs and tissues that can be donated to help those in need.



## Cornea

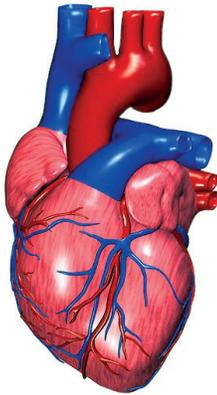
The cornea is the transparent covering of the eye. It is similar to the crystal on the face of a watch.

### *Why Transplant?*

The cornea can become cloudy, damaged, or distorted from diseases, burns, or perforating injuries to the eye.

### *Transplant Facts*

The cornea can be transplanted and clear vision can be restored. Cornea blindness is the only type of blindness that is curable today. Due to the limited blood supply to the cornea, matching is generally not a problem. The first cornea transplant occurred in 1960. More than 40,000 cornea transplants occur each year in the United States.



## Heart

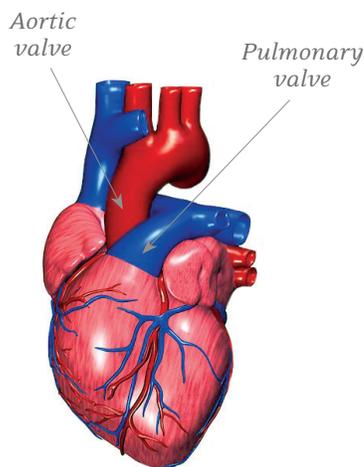
The heart is a hollow, muscular organ that pumps oxygen-rich blood to all parts of the body. The heart is essential to life because all cells need oxygen to function.

### *Why Transplant?*

Several diseases, such as cardiomyopathy, can weaken the heart muscle and prevent it from pumping effectively.

### *Transplant Facts*

A match of blood type, size, and weight between the donor and recipient must occur for a successful transplant. Recipients can generally resume a normal lifestyle. The first heart transplant occurred in 1967.



## Heart Valves

Heart valves are flaps of fibrous tissues that separate the chambers in the heart. The valves of the heart prevent blood from flowing back into the previous chamber as the heart pumps. When retrieving heart valves for transplant, the entire heart is recovered.

### *Why Transplant?*

Most heart valves are transplanted into children who have been born with defective heart valves. Using donated heart valves enables recipients to enjoy a normal childhood.

### *Transplant Facts*

The size of the heart valve is very important in ensuring a successful transplant into the recipient's heart. More than 5,000 heart valves are transplanted each year in the United States, 75% of which are used in children.



## Kidney

The kidneys are a pair of organs located just above the waist. They filter the blood and eliminate waste material in the form of urine.

### *Why Transplant?*

Kidney stones, hypertension, and infections are several diseases, which can cause the kidneys to fail.

### *Transplant Facts*

Only a portion of one kidney needs to function to live normally, therefore, only one kidney is transplanted into a recipient. Dialysis, the process of cleansing the blood by an external machine, is possible while patients wait for a transplant. The first kidney transplant occurred in 1954.



## Liver

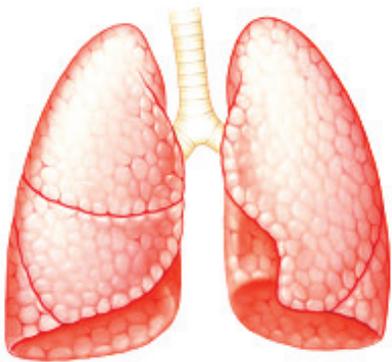
The liver is the large organ that is responsible for the filtration of blood. It also secretes a liquid called bile, which helps in the digestion of fatty foods.

### *Why Transplant?*

The most common diseases, which destroy the liver, are hepatitis and cirrhosis. Hepatitis occurs when chemicals or parasites inflame the liver. Cirrhosis occurs when normal liver cells are replaced by scar tissue.

### *Transplant Facts*

A compatible match must be made between the donor and recipient so that rejection does not occur. The first liver transplant occurred in 1963.



## Lung

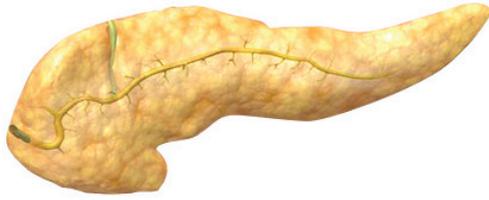
The lungs are paired, cone-shaped organs in the chest. The lungs expand and contract as air is taken into the body and carbon monoxide is exhaled. The lungs also process oxygen and carry it to the bloodstream.

### *Why Transplant?*

Many diseases such as emphysema and cystic fibrosis can damage the lungs. Emphysema causes the lungs to lose their ability to contract and they remain filled with air. Cystic fibrosis prevents lungs from cleaning fluid making breathing difficult.

### *Transplant Facts*

The size of the lungs is a critical factor for lung transplantation. A person can live with a single lung. Often the lungs from a single donor can benefit two recipients. The first lung transplant occurred in 1963.



## Pancreas

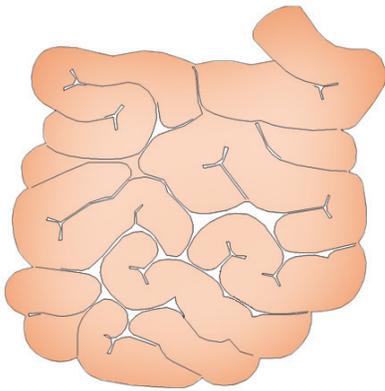
The pancreas secretes insulin, a protein used by the body to control the amount of sugar in the blood, and it secretes enzymes that aid in the digestion of food in the small intestine.

### *Why Transplant?*

The pancreas can simply wear out or not function at all. A person can replace their insulin by giving themselves shots on a daily basis.

### *Transplant Facts*

A pancreas transplant can replace the entire system, which will allow the return of insulin control and enzyme production. Cells from the pancreas can be transplanted to restore normal insulin production. The first pancreas transplant occurred in 1966.



## Small Intestine

The small intestine is part of the digestive system where most of the digestion and absorption of food takes place.

### *Why Transplant?*

Problems can occur in babies who are born with an incomplete small intestine. They cannot properly digest food and must be fed intravenously. This problem is rare in adults.

### *Transplant Facts*

A small intestine can be transplanted into infants allowing them to digest solid food and giving them the chance to have a normal diet and lifestyle.



## Tendons and Ligaments

The tendons and ligaments are fibrous connective tissues that attach muscles to bones.

### *Why Transplant?*

Injuries to tendons and ligaments usually occur due to physical activity such as skiing or other sports-related injuries.

### *Transplant Facts*

Tendons and ligaments are most commonly used to replace and repair damaged tissues in the knee joint. It is estimated that there are more than 1,000 tendon and ligament transplants each year.



## Saphenous Vein

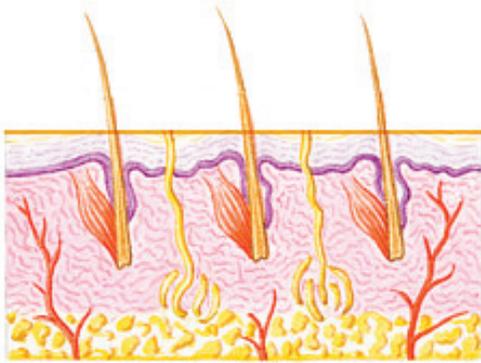
The greater saphenous vein is the largest vein in the body. It begins in the foot and ends in the groin. It is responsible for returning blood from the leg back to the heart.

### *Why Transplant?*

Blockage of the veins can occur due to disease or collapse and causes restricted blood flow to certain areas of the body. This is common in the lower extremities of the legs.

### *Transplant Facts*

Donated veins can be used to replace damaged veins, restoring normal blood flow. It can also be used in coronary artery bypass surgery when the patient has no usable vein available.



## Skin

The skin is the tissue that covers the body and is the largest organ in the body. It is essential to survival because it protects the body from bacteria, dehydration, and harmful light rays.

### *Why Transplant?*

Loss of skin from trauma or burns may result in a potentially life-threatening situation. Skin is used as a temporary burn dressing and in reconstructive and aesthetic surgeries. It can be donated from areas of the body including the back and legs.

### *Transplant Facts*

Skin grafts can be used to provide a temporary covering to prevent dehydration and bacterial infection until the patient's skin has time to heal.



## Bone

Bone is the hard connective substance that forms the skeleton of the body. Some examples of bone that can be donated include long bones of the upper and lower extremities.

### *Why Transplant?*

Bone can be damaged by infection, disease, or trauma such as an automobile accident. It has many different uses including spinal fusion, hip and knee repair, and facial/jaw reconstruction following trauma or tumor removal.

### *Transplant Facts*

Donor bone can be transplanted to a recipient and, over time, it will fuse and replace a damaged bone segment. Donor bone also adds structure support for weakened recipient bone.