

WHAT DO YOU KNOW ABOUT TISSUE AND ORGAN DONATION?

Post-Test

1. List three organs that can be transplanted.

2. **True** or **False** Cardiac death donors may donate bone, ligaments, skin and heart.
3. **True** or **False** There are more than 80,000 people on the national organ waiting list.
4. If I choose to be a potential tissue and organ donor, I should:
 - a. Share my decision with family members
 - b. Fill out and sign a donor card and have two people witness my signature.
 - c. Learn the facts about tissue and organ donation and transplantation.
 - d. All of the above
5. **True** or **False** It is impossible for a person to recover from brain death.
6. List three tissues that can be transplanted.

7. **True** or **False** Close to 500,000 tissue transplants are performed each year.
8. **True** or **False** One tissue donor can save and/or enhance the lives of up to 75 people.
9. **True** or **False** Bone, skin, tendons, ligaments, veins and heart valves may be donated.
10. **True** or **False** Bone is used for reconstructive surgery related to trauma, cancerous tumors, degenerative diseases and fractures.

You have the power to donate life!

YOU DON'T HAVE TO BE A SUPERHERO TO SAVE LIVES



Student Guide to Tissue & Organ Donation



Community Tissue Services
A DEPARTMENT OF COMMUNITY BLOOD CENTER

FACTS ABOUT DONATION

Human tissue transplantation has become a modern miracle to thousands of Americans. One donor can save and/or improve the quality of life of up to 75 people.

It is important to understand there are numerous tissues that can be transplanted to save lives and/or enhance lives. The donation of skin helps mend a burn victim; bone grafts can renew lost bone from cancerous defects; heart valves can be used to replace a failing heart valve; and ligaments and tendons are used to repair injured knees and ankles.

- It is estimated that close to 1 million tissue transplants are performed in the United States each year.
- There are more than 80,000 people on the national organ waiting list. Seventeen men, women and children die each day waiting for an organ transplant.
- More than 45,000 people each year are admitted as patients to a burn unit/hospital suffering severe burn injuries that may require skin grafts.
- Everyone is a potential tissue, organ and eye donor. Your medical condition at the time of death will determine what tissues and organs can be donated. It is important that you discuss your decision to become a donor with family members.
- Anyone can be a donor. However, tissues and organs that cannot be used for transplants due to advanced age or disease can often be used for research, which aids physicians and scientists in looking for cures to many diseases.
- Being a tissue, organ and eye donor will not interfere with funeral arrangements. Families may plan a traditional funeral with an open casket viewing.
- There is no charge to the family or the estate of the donor's family to donate tissues and organs.
- Most major religions approve of tissue and organ donation and consider it to be an act of charity and also the miracle of life.

THREE TYPES OF DONORS

Brain Death

Because organs deteriorate quickly without oxygen, those who donate major organs must be maintained on a ventilator and have a beating heart. These circumstances occur when a person is brain dead. The ventilator permits the donated organs to stay oxygenated until a recipient is found and prepped for transplant surgery. Brain dead donors can donate both organs and tissue including: heart, liver, lungs, kidneys, pancreas, corneas, heart valves, skin, bone, and veins. Organs are removed in an operating room while heart function is maintained with artificial support.

Cardiac Death

Donors who have no cardiac or respiratory function may not be organ donors. Donors in this situation are eligible to donate tissue. Acceptable donations include corneas, heart valves, pericardium, skin, bone, tendons, fascia and veins. Tissue is removed in an aseptic manner. Tissue can be donated up to 24 hours after death.

Living

Because we have two kidneys and can function with one, a person may donate one of their kidneys while they are still alive. Potential living donors undergo screening and compatibility testing. A living kidney donor usually returns to their regular lifestyle one week after surgery. Other transplants from living donors include: partial liver or lung, bone marrow, and blood.

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FUN - N - GAMES

T N A L P S N A R T A L
 I I D H O B C S H E I W
 S E V T R L Y M E G J F
 S P S O A E R C A P U T
 U D N F N U T M R D T N
 E O T D V I E S T R N F
 D C I I S N N K V S E S
 O K N K T T D A A C I N
 N I K S E N O N L E P I
 A D E N N R N W V H I E
 T N D Y G J S P E S C V
 I E T A G S L A S D E I
 O T N P D R I C W I R C
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 L T E V A T E S E V C O
 I L I V I N G D O N O R
 G L R S H B L A L P R R
 A S S E O U M C A O N E
 M U A N N S G N U L E S
 E R E G R O N O P W A S
 T D E C I S I O N N S U

Find and circle these words having to do with donation:

Heart Valves
 Ligaments
 Tissue
 Organs
 Recipient
 Kidneys
 Decision

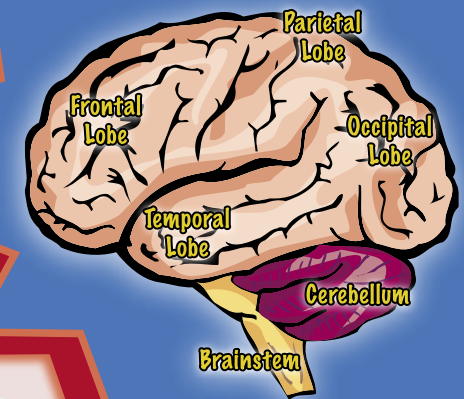
Tendons
 Living Donor
 Corneas
 Heart
 Liver
 Tissue Donation
 Transplant

Skin
 Veins
 Lungs
 Life
 Donor
 Bone

BRAIN DEATH

What is brain death?

- The total, irreversible destruction of the brain and brain stem.
- An established medical and legal diagnosis of death.



What causes brain death?

- **Trauma to the brain**
Examples are severe head injury caused by a motor vehicle accident, a fall, a blow to the head or a penetrating wound to the head.
- **Cerebrovascular injury** (*bleeding in the brain*)
Examples are massive stroke or a ruptured aneurysm.
- **Anoxia** (*loss of oxygen to the brain*)
Examples are drowning, heart attack or suffocation from smoke inhalation or drug overdose (when emergency procedures result in the restoration of heartbeat and respiration, but not before lack of blood flow/oxygen to the brain has caused brain death).
- **Brain tumor**
Example is the uncontrollable growth of a brain tumor, which can cause the permanent loss of blood flow/oxygen to the brain.

Brain death is **NOT** coma or persistent vegetative state (PVS).

BRAIN DEATH VS. PVS

Brain Death	Coma or PVS
All brain tissue is dead	A portion of the brain is injured
No blood flow to the brain	Brain still receiving blood flow
No electrical activity present in the brain	Electrical activity present in the brain

WHAT CAN BE DONATED?

Organ - A somewhat independent part of the body composed of various tissues that perform a specific function or functions.

Heart transplants help patients suffering from heart failure. Some common causes of heart failure are congenital defects and cardiomyopathy.

Intestine transplants help children who were born with an incomplete intestinal system.

Kidney transplants help patients suffering from severe kidney failure. Kidney failure is often caused by complications of diabetes or hypertension.

Liver transplants help patients suffering from severe liver failure. Some common causes of liver failure are Hepatitis C, biliary atresia, and cirrhosis.

Lung transplants help patients suffering from emphysema, cystic fibrosis or other lung diseases.

Pancreas transplants help insulin-dependent diabetic patients by eliminating the need for insulin injections and reducing the risk of losing sight or limbs.

Tissue - A group of specialized cells that perform a special function.

Bone is used for reconstruction related to trauma, cancerous tumors, degenerative diseases and fractures.

Cornea transplants restore sight to those with corneal damage or disease.

Heart valve transplants help patients requiring replacement of malfunctioning heart valves.

Saphenous vein transplants help patients requiring coronary by-pass surgery in which veins are used to replace diseased or blocked arteries. Also used to restore bloodflow to limbs after traumatic injury or chronic blockage.

Ligament and tendon transplants help patients suffering from joint injuries, frequently due to sports injuries.

Skin is used as a temporary covering to reduce pain and lower the chance of infection to patients with severe burns.

Living Tissue

Blood transfusions help people who have lost blood due to an accident or injury, as well as cancer and surgical patients who require replacement of blood components.

Bone marrow helps patients suffering from leukemia and other immunodeficiency disorders.

Visit our website for more information:
www.communitytissue.org



FREQUENTLY ASKED QUESTIONS

Who can be a tissue or organ donor?

People of all ages and medical histories should consider themselves potential donors. The age and sex of a person will determine what tissues are eligible to be donated.

What is the difference between tissue and organ donation?

Your medical condition at the time of death will determine if you can be a tissue and/or organ donor. A person is declared dead when one of two things occur:

- 1) Cardiac/Respiratory Arrest:** If a person dies due to a cardiac/respiratory arrest, where the heart has stopped pumping blood to the organs in the body, then this person can be a potential tissue and eye donor. For example, if a person dies at the scene of a car accident, then this person can be a potential tissue and eye donor but not an organ donor because the heart has already stopped. Although an autopsy is performed, tissue and eye donation may still occur. Tissue and eye donation can be recovered up to 24 hours after the time of death.
- 2) Brain Death:** After all tests are conducted and there is no brain activity, a person is declared brain dead. After a doctor has pronounced someone brain dead they are eligible to be a tissue and organ donor. Organ donation must occur prior to cardiac death (heart stops beating).

Why is it important to make sure your family is aware of your decision to donate?

Sharing your decision to become a donor is just as important as making the decision. It's also important to tell family members about your decision because a medical and social history is needed at the time of death and the next-of-kin is approached for that information. Deciding to donate life can also provide your family with great comfort in their time of grief.

Will I be disfigured and unable to have a funeral?

No, there will not be any visible disfigurement. Every effort is made to avoid interfering with the funeral arrangements planned by your family.

If I sign a donor card, will that affect the quality of my medical care?

No. Only after all efforts have been exhausted in saving your life, death has been declared by the doctor, and consent has been given by the next-of-kin, will tissue and organ recovery take place. The doctors working to save your life are separate from the medical team involved in recovering your tissues and organs. The donation process is a surgical procedure that takes place in an operating room environment.

How much will it cost my family to donate my tissue and organs?

There is no cost to the family or estate.

Will my family know who gets my tissues and organs?

No. Confidentiality is provided both for the donor families and the recipients. The recovery agency may act as a liaison if the recipient wishes to correspond with the donor family. It is only if both parties are in agreement to meet that the names are released.