



RECYCLEYOURSELF

An Organ, Eye and Tissue Donation Curriculum

SECTION TWO : FOUNDATIONAL READINGS

Recommended for Health and Driver's Education Classrooms

A DONOR'S STORY

Jerome is a fictional character, but his story illustrates the complexity of organ, eye, and tissue donation.



TRANSPORT

When Jerome arrives at the hospital, ER doctors and nurses have advanced life-support equipment ready. They evaluate injuries and continue lifesaving measures, including a mechanical ventilator, IV fluid, blood replacement, and drugs to help his heart keep beating.

INTENSIVE CARE

After his vital signs stabilize, Jerome is transferred to the Intensive Care Unit, where a doctor performs special tests to see how much damage has been done to his brain and other organs. The medical team continues to provide mechanical support during the tests.

NOTIFICATION

Hospital staff notifies the local organ procurement organization, Pacific Northwest Transplant Bank (PNTB). PNTB's Donation Specialists check the state's donor registry to see if Jerome had registered as an organ, cornea and/or tissue donor. From Portland, they travel to the hospital to determine if Jerome would be medically suitable to donate if he cannot recover from his injuries.

BRAIN DEATH DECLARED

Tests reveal an irreversible loss of blood flow to the brain, causing the brain to die. Doctors inform Jerome's parents that despite their best efforts, he is not going to recover. His brain continues to swell and after a series of tests, he is pronounced brain dead by hospital staff, and his family is notified that he has died. After brain death, Jerome's body is kept functioning by artificial means, while PNTB Donation Specialists talk to his family about donation.

AUTHORIZATION

Jerome's family members discuss their feelings about donation with the PNTB Donation Specialist, and are given time to think and ask questions. His parents remember that when Jerome got his driver's license, he mentioned that he would want to save someone's life, and had registered as a donor.

Knowing that he had wanted to be a donor comforts Jerome's parents as they make their decision during this tragic time. Since he was a minor, his parents must provide authorization for Jerome to become an organ and tissue donor, and work with PNTB staff to provide a medical and social history about Jerome. Because Jerome was a minor, had his parents declined to provide authorization, the process would end here.



ORGAN PLACEMENT

Jerome's blood type, height, weight, hospital ZIP code and other data are entered into the United Network for Organ Sharing's national computer system. A list of patients who are medically compatible is generated, and each healthy organ is offered to the first patient on the match list who is healthy enough to undergo major surgery and willing to be transplanted immediately. Seventy-five percent of organs go to local patients.

Surgical teams from transplant centers are coordinated to arrive at Jerome's hospital. Matching recipients are alerted, and go to their transplant centers to prepare for surgeries.

ORGAN AND TISSUE RECOVERY

Jerome's body is taken to the operating room. The organs which have been determined medically suitable for transplant are recovered in the same sterile and careful way as in any other surgery (in this case, Jerome can donate eight solid organs). All incisions are closed. The organs are cooled and preserved with special solutions while the transplant teams immediately return to their hospitals to perform the transplant surgeries.

Tissues and corneas are recovered by Donation Specialists from Community Tissue Services and Lions VisionGift, and Jerome's body is prepared to be sent to the funeral home.

TRANSPLANT

Meanwhile, transplant teams have arrived at their hospitals with the organs for transplant. Surgeons work around the clock as needed to transplant the new organs into the waiting recipients.

FUNERAL

After donation, Jerome's body is taken to a funeral home. Because Jerome's recovery surgery was done respectfully and carefully, Jerome's family can have an open casket funeral.

FOLLOW-UP

The organ, eye, and tissue recovery organizations provide Jerome's family with general information about the anonymous recipients of his donated organs and tissues. Jerome's donation of eight organs has saved eight lives. His donation of corneas has helped two individuals regain their sight, and by donating tissue he has saved and enhanced over 50 lives.

Adapted from United Network for Organ Sharing, www.unos.org

WAITING FOR A SECOND CHANCE

Key Vocabulary

Chronic kidney disease, congestive heart failure, cystic fibrosis, diabetes, non-alcoholic fatty liver disease, hypertension, organ, tissue, United Network for Organ Sharing, waiting list



Nearly 120,000 Americans are on the national waiting list for organ transplants. Each have been diagnosed with an ultimately fatal condition, meaning that their only chance for survival rests on the donation of a healthy organ to replace their damaged or diseased heart, liver, lungs, kidney, pancreas or intestine. Around eighty percent of all Americans who need an organ transplant require a kidney.

Millions more need tissue donations to restore their sight and mobility, lost or impaired due to disease or damage.

Tragically, there are not enough donors to meet the growing need for transplants in the United States. Every week, 100 people die while waiting for organ transplants (U.S. Department of Health and Human Services, Health Resources and Services, 2012).



WHY DO PEOPLE NEED ORGAN TRANSPLANTS?

Patients on the U.S. waiting list are in end-stage organ failure. This means that their organs were formed abnormally at birth or have been damaged by disease or accidental injury. When vital organs are severely damaged, they may need to be replaced for a person to survive. The chart below details the most common reasons people need organ transplants.

DONATED ORGAN	DISEASE OR DISORDER	DESCRIPTION
HEART	Congestive Heart Failure	The heart no longer pumps enough blood to meet the body's needs.
LUNG	Cystic Fibrosis	A hereditary disease causing thick, sticky mucus to build up in the lungs.
LIVER	Non-alcoholic Fatty Liver Disease	Extra fat builds up in liver cells and destroys the liver's ability to filter. This tends to develop in people who are obese, or have diabetes or high cholesterol.
KIDNEY	High Blood Pressure	Kidneys are damaged, and can no longer filter waste from the body.
PANCREAS	Diabetes	The pancreas can no longer control the level of glucose in the blood.
INTESTINE	Blocked or twisted intestines	Some babies are born with malformations of the gastrointestinal tract, reducing their ability to digest food or absorb fluid.

WHY DO PEOPLE NEED TISSUE TRANSPLANTS?

A single tissue donor can save or enhance more than 50 lives. This is because there are many kinds of tissues which can be donated, for many different reasons:

DONATED TISSUE	TYPICAL APPLICATION	BENEFIT FOR RECIPIENT
CORNEA	Replaces diseased or damaged cornea	Prevents blindness; restores vision.
BONE	Reconstruction related to trauma, tumors, degenerative diseases	Prevents the need for amputation. Accelerates, promotes and allows healing. Restores mobility.
SKIN	Temporary biological bandages for burn victims prevent infection, decrease pain, prevent heat and fluid loss, and reduce scarring	Promotes healing; natural barrier to infection.
VALVES	Repairs congenital abnormalities	Maintains unidirectional flow of blood in the heart.
TENDONS	Reconstruction related to trauma, tears, or overuse	Rebuilds joints; restores mobility.

See Cornea Donation (pp. 38-40) and Tissue Donation (pp. 41-42) sections to learn more.



COMMUNITIES OF COLOR IN CRISIS

- ▶ Latinos, African Americans, and Pacific Islanders are three times more likely than Caucasians to suffer from obesity and diabetes.
- ▶ Native Americans are four times more likely to suffer from diabetes and heart diseases.
- ▶ Asian Americans suffer significantly from liver disease and hepatitis.

The U.S. waiting list is comprised of people of all ages, genders, and ethnic backgrounds. However, certain ethnic groups are more prone to organ failure.

Although there are many reasons for needing an organ transplant, researchers from Oregon Health & Science University believe that a combination of genetic predisposition and inactive lifestyles foster higher rates of obesity among certain groups. Obesity is a major contributing factor to many diseases. And when untreated or uncontrolled, certain diseases often lead to organ failure (Ahmann, 2014).

According to the U.S. Office of Minority Health, many ethnic groups have higher rates of potentially organ-destroying diseases, such as:

- Diabetes
- Hypertension (high blood pressure)
- Liver disease

At the same time, African American and Hispanic American communities have lower rates of consent to organ and tissue donation. Several studies indicate that cultural beliefs, misinformation and/or negative portrayals of donation in TV or the media regarding donation can heavily influence an individual's decision to donate.

Although organs are not matched according to race or ethnicity, all individuals waiting for an organ transplant will have a better chance of receiving one if there are large numbers of donors from their ethnic background. This is because compatible blood types and tissue markers – critical qualities for donor/recipient matching – are more likely to be found among members of the same ethnicity. A greater diversity of donors may potentially increase access to transplantation for everyone (Office of Minority Health, 2014).

- See Appendix for a list of the most common questions about donation (pp. 183-184).
- See Appendix for faith perspectives on donation (pp. 185-186).



*Bella, Kidney Transplant Recipient.
Photo courtesy Donate Life America*

WHO GETS AN ORGAN TRANSPLANT?

Being placed on the waiting list for an organ transplant is not automatic. Because there are so few available organs, patients are carefully evaluated by their doctors, surgeons, and transplant staff prior to being placed on the national waiting list.

The decision is based on the status of the patient's health, their medical and social history, and the expectation of their stability after the transplant takes place – both psychologically and financially. A donation is a rare and special gift, so doctors must be sure that a potential recipient can take care of their new organ with medication, regular office visits, and healthy lifestyle choices. Patients who are unwilling to give up unhealthy drugs, including nicotine and alcohol, may be automatically disqualified.

If a transplant team feels that a patient is a good candidate for transplant, they will contact the [United Network for Organ Sharing](#) in order to put the patient on the national waiting list.

Waiting for an organ transplant is not like taking a number at the deli counter and waiting for your turn! There is no ranking or patient order until there is a deceased donor, because each donor's blood type, size, and genetic characteristics are different. When a donor is entered into the national computer system, only the transplant candidates who match that donor's medical characteristics will appear.

WHAT IS THE WAITING LIST?

When a transplant hospital places a patient on the U.S. waiting list, the patients are registered in a centralized, national computer database that links all donors and transplant candidates. In the United States, this network is managed by the United Network for Organ Sharing 24 hours a day, 365 days a year.

The "list" is a computer network which tracks the following criteria about transplant candidates:

- Blood and tissue type
- Immune status
- Degree of medical urgency
- Time spent waiting

The system uses this information to match the medical characteristics of those waiting against those of a deceased organ donor.

The waiting list does not track a candidate's race, gender, fame, or financial status. This ensures that organs are matched according to strict medical criteria, and that there is no possibility of special treatment.

transplantliving.org



ORGAN	MEDIAN NATIONAL WAITING TIME
HEART	113 DAYS or 3.8 MONTHS
LUNGS	141 DAYS or 4.7 MONTHS
LIVER	361 DAYS or 1 YEAR
KIDNEY	1,219 DAYS or 3 YEARS, 3 MONTHS
PANCREAS	260 DAYS or 8.6 MONTHS
INTESTINE	159 DAYS or 5.3 MONTHS

HOW LONG DO PEOPLE WAIT?

Once someone is added to the list, they must wait for a matching organ to become available. This may take days, weeks, months, or even years. The average wait time per organ, according to the U.S. Department of Health & Human Services, is listed in the chart to the left.

Where a person lives can also impact how long they must wait. For example, waiting times may be longer in large cities with large populations because the need for certain organs will be higher. Waiting times may be shorter in smaller communities. Regardless, when an organ becomes available, it is first offered to local transplant centers. If no match is found, the organ will then be shared on a regional and national level.

TALKING ABOUT DONATION

Language plays an important role in the misconceptions and fears about organ, eye and tissue donation. When talking about donation, it is important to show respect and sensitivity.

PLEASE USE...

RECOVER or PROCURE

INSTEAD OF...

HARVEST

“Harvest” is a word that has long been used by the medical community. However, it can be very unpalatable, especially to donor families when associated with their loved ones. The words “recovery” or “procurement” help people understand that removal of a loved one’s organs and tissues for transplant is a respectful procedure.

DECEASED DONOR

CADAVER

Today, as more people choose to become living donors, there is a need to distinguish between living and deceased donors. The term “cadaveric” depersonalizes the fact that a gift was offered to someone upon an individual’s death. The word cadaver is defined as a “dead body intended for dissection.” This does not display the honor and respect we give to all individuals who have courageously chosen to give the gift of life.

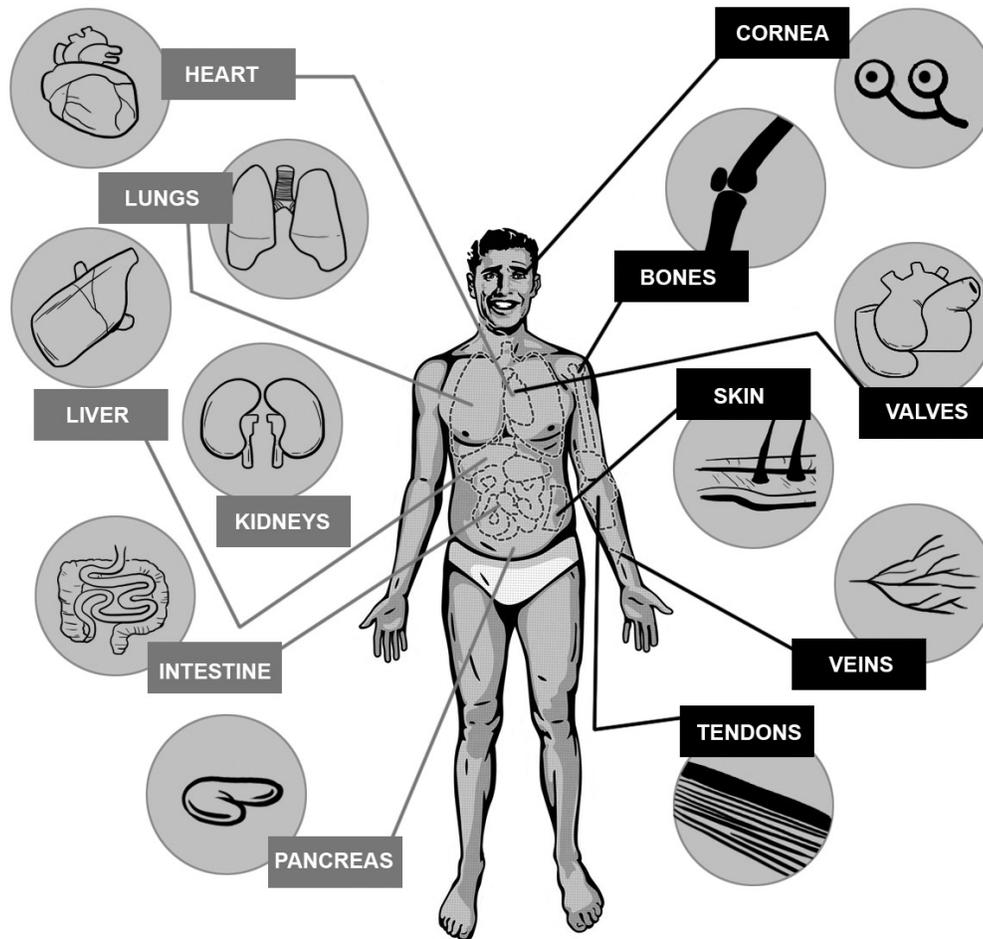
VENTILATED or MECHANICAL SUPPORT

LIFE SUPPORT

There are two ways to determine death: cardiac death (when the heart stops functioning) and brain death (when the brain stops functioning). The term “life support” proves to be a confusing term when used in conjunction with brain death. When death occurs, there is no support that can make the individual live again. The terms “mechanical” or “ventilated support” are appropriate to describe the support given to a deceased person in the event of organ, eye, and tissue donation.



WHAT CAN BE DONATED?



A deceased donor has indicated their decision to donate by registering as a donor on their state's registry, either online, at the DMV, through a paper form, or through their smartphone, or, their family has provided authorization for donation upon his or her death. Ideally, the donor has also talked to their family about the decision to be an organ, eye, and tissue donor.



*Leslie of Portland, Oregon, shares the story of her son Brian, a cornea and tissue donor.
Photo courtesy Donate Life Northwest.*



WAITING FOR A SECOND CHANCE

Questions for Reading Comprehension

CLOSE READING

1. Approximately how many Americans are waiting for an organ transplant? Approximately how many people are waiting for a kidney transplant?
2. Does everyone who needs an organ transplant get one? Why or why not?
3. Which six organs can be donated?
4. Name three kinds of tissue that can be donated.
5. What differences exist between organ and tissue donation?
6. What are some of the problems which put certain ethnic groups at a higher health risk than others?
7. Imagine you are a doctor or nurse talking to a sick patient about the possibility of adding them to the national waiting list. Explain what it is and how it works.
8. What efforts have been made to ensure that the U.S. database matches donated organs with recipients in the fairest way possible?

THINK CRITICALLY

1. How do you feel about organ, eye, and tissue donation?
2. Do you think organ and tissue donation is a good or a bad thing? Explain.
3. Do you feel that you know enough about organ, eye, and tissue donation to make a logical and educated decision about it? What about your family?
4. If you were diagnosed as needing a lifesaving organ transplant, would you accept a donation from someone who has passed away? Why or why not?
5. How would you feel if a loved one were placed on the waiting list for an organ transplant? What could you do to show your support for them?
6. Reflect on a time you've heard about organ donation in television or film. Was the portrayal positive or negative?
7. Assess whether someone with chronic alcoholism is likely to be placed on the waiting list. Defend your opinion.
8. Can you see a possible solution to the rising need for organ, especially kidney, transplants?
9. If applicable, what is your faith's stance on donation?
10. Go online to research two conditions which could cause someone to need an organ transplant.
11. Go online to research how socioeconomic factors can impact health.

CORNEA DONATION

Key Vocabulary

Anatomy: Cornea, iris, lens, micron, pupil, retina, sclera, optic nerve.

Reasons for transplant: abrasion, dysmorphia, dystrophy, trauma, keratoconus, opacity, visual impairment

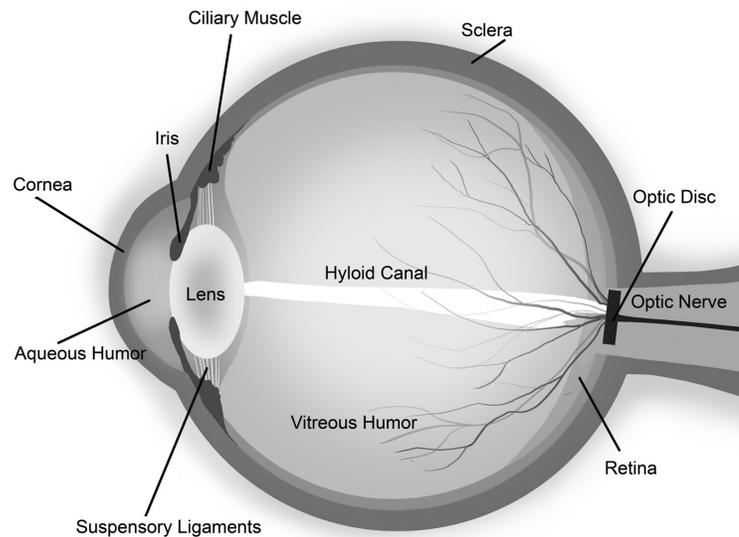
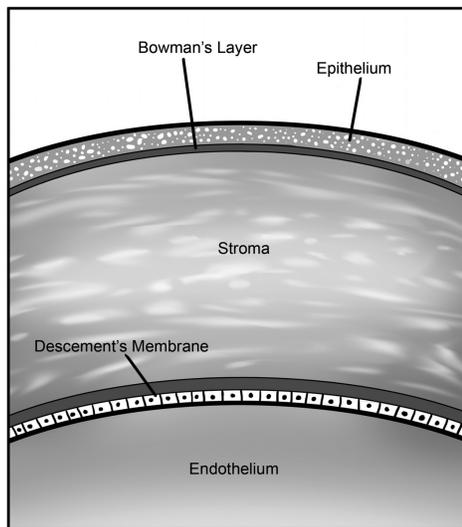
Other terms: astigmatism, cataracts, glaucoma, keratoplasty, macular degeneration

WHAT IS THE CORNEA?

The cornea is, quite literally, just a small part of the eye's anatomy. It is a multilayered membrane consisting of five layers. The entire cornea is only around 500 microns* thick, about the thickness of a dime.

The cornea is not colorful (like the iris or pupil), nor is it the white part of the eye (the sclera; see diagram below). Similar to the windshield of a car, the multilayered membranes of the cornea protect the eye from the outside world.

*A micron is an abbreviation for micrometer, or a millionth of a meter (1/1,000,000 meters). A human hair is about 75 microns thick.





WHO NEEDS A DONATED CORNEA?

Since 1961, nearly one million corneal transplants have been performed, restoring sight to men, women and children ranging in age from 9 days to 103 years old. There are many reasons why the cornea may need to be transplanted:

INJURY TO THE EYE

Corneal abrasions and injury, such as chemical burns, exposure, or penetrating trauma, can seriously harm the cornea.

Not everyone who is blind or who has reduced vision is eligible for a corneal transplant – only those with damage specifically to the cornea. Someone whose blindness stems from damage to their retina or optic nerve may still have a perfectly healthy cornea; this procedure would not benefit them.

HEREDITARY CONDITIONS

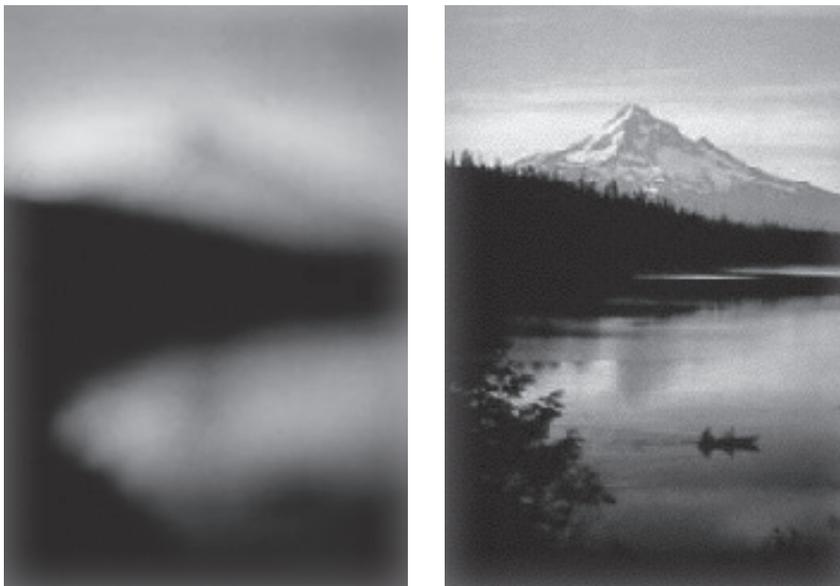
Hereditary conditions can take the form of dystrophies, dysfunctions, or dysmorphia, and can affect specific layers of the cornea.

■ Keratoconus is a disease in which the cornea thins and bulges, taking on an irregular, conical shape. This painful condition is among the most common reasons a corneal transplant is needed.

DISEASE OR INFECTION

Non-hereditary diseases or dysfunctions include certain viral infections, such as herpes, that can leave scars on, or in, the cornea. This reduces or destroys vision by creating foggy areas in the patient's field of vision.

There are also rare cases of bacterial conditions which can damage and scar a person's cornea, often related to untreated water exposure, or improper contact lens care.



Images: Mt. Hood, before and after corneal transplant surgery

WHO CAN BE AN EYE DONOR?

Almost anyone can be an eye donor. The human eyeball is extraordinarily complex with several different parts. Even if another part of the eye is impaired – e.g., due to glaucoma (damage to the optic nerve) or cataracts (damage to the lens) – that person’s cornea could be unaffected and perfectly healthy to donate. Donation specialists at Lions VisionGift carefully screen donated tissue to ensure that recipients receive the healthiest possible graft.

If eye tissue is found to be unsuitable for transplant, it can often be used for research purposes. Eye surgeons can practice surgical techniques on this tissue, or it can be used to study conditions which produce visual impairment, such as cataracts, glaucoma, eye complications from diabetes, or macular degeneration. The gift of a single eye donor can change the lives of many.

CORNEA DONATION

Questions for Reading Comprehension

1. What is the cornea?
2. True or False: A corneal transplant changes the color of your eye.
Reflect on the eye’s anatomy to explain your answer.
3. Describe two conditions which would require someone to have a corneal transplant.
4. Would it be possible for someone with cataracts to donate their corneas?
5. What may happen if donated corneas are not suitable for transplant?



TISSUE DONATION

Key Vocabulary

Bone, cartilage, fascia, graft, heart valve, pericardium, skin, tendon, vein

WHAT IS TISSUE DONATION?

After someone passes away, they can donate tissues such as skin, tendons, bones and heart valves to dramatically improve the quality of life for recipients, and even save lives. A single tissue donor can enhance the lives of more than 50 people.



Professional soccer player Bernardo received a tissue transplant after tearing his ACL.

Photo courtesy Donate Life America.

HOW DOES TISSUE DONATION HELP PEOPLE?

Commonly donated tissues can help people whose tissues have been damaged by disease or accidental injury.

- Skin grafts save the lives of burn victims by acting as a biological bandage to protect them from infection.
- Bone grafts can help people whose bones have degenerated due to infection, tumors, or trauma. Bone can be used for facial reconstruction, limb salvage, birth defect correction, cancer treatment, and spinal and dental surgery.
- Veins are used to re-establish blood circulation and to prevent loss of limbs and leg amputation. For example, a donated saphenous vein can replace the damaged lower leg vein of a diabetic patient.
- Tendons and soft tissue can help people lead more active lives; for example, by replacing an athlete's torn ACL (anterior cruciate ligament).
- Pericardium (the connective soft tissue surrounding the heart) is used in neurosurgery, brain operations, and eyelid repairs.
- Fascia is used in surgical repairs for sports injuries, ligament repairs, dental and other surgeries.
- Cartilage is used for facial and other post-traumatic injury reconstruction.

WHAT IS TISSUE DONATION?

There are many variables that come into play: age, timelines, certain diseases and the extent of certain injuries, but even so – nearly anyone can be a tissue donor. The family or next-of-kin must be contacted for a full medical and social history, which helps recovery professionals determine whether the individual is medically suitable to be a donor.

TISSUE DONATION

Questions for Reading Comprehension

1. What is tissue donation?
2. Which tissues can be donated?
3. How can tissue donation save someone's life? Give one example.
4. How can tissue donation enhance someone's life? Give three examples.
5. What role does someone's family play in tissue donation?



DECEASED ORGAN DONATION

Key Vocabulary

Authorization, brain death, mechanical support, cardiac death, organ procurement organization, organ procurement coordinator, waiting list, United Network of Organ Sharing

THE POWER OF ONE PERCENT

Deceased organ donation is very rare. Of all the deaths which occur every year, both locally and nationally, less than one percent of these deaths will occur in the medical environment which will support organ donation. The donation of vital organs is possible only when someone has died under very specific conditions:

- The patient passes away in a hospital.
- Prior to death, the patient was placed on mechanical support. This maintains the flow of blood and oxygen throughout the vital organs.
- Severe trauma causes the brain to swell, resulting in brain death. Electricity, blood, and oxygen irreversibly cease to flow.

HOW DOES DONATION WORK?

When someone in a hospital has a life-threatening illness or injury, or has died, hospitals are required to contact the regional organ procurement organization (OPO). Donation specialists from the OPO are responsible for coordinating the entire donation process. The OPO serving Oregon, Southwest Washington and Southwestern Idaho is [Pacific Northwest Transplant Bank](#) (PNTB).

After receiving notice of a possible organ donor, donation specialists from PNTB consult the state Donor Registry to see if the patient had registered as a donor. They also determine whether the patient is medically suitable to donate or not.

- When it is time to talk to the family about donation, donation specialists inform the family whether their loved one had registered as a donor, and explain the donation process to them.
 - If the patient is 18 or older and is registered as a donor, the family does not need to provide authorization for donation.
 - If the patient is not registered or is under 18, donation specialists discuss donation opportunities with the patient's family. If the family says no, the process ends.



Most organ donors pass away in tragic and unexpected circumstances. Whether or not someone registered as an organ donor, a donation specialist will talk to the donor's family about the possibility of donation. All too often, families have never discussed donation, and are not sure of what their loved one's wishes would have been. This can be an additional burden during an already difficult time.

Registering as a donor, whether online, at the DMV, via smartphone, or via a paper form gives a clear indication that an individual has decided to give the gift of life, should the worst happen.

HOW ARE DONATED ORGANS MATCHED WITH RECIPIENTS?

Donation specialists collaborate with transplant surgeons to determine which organs or tissues are healthy enough for transplantation. Donors must be carefully screened to ensure that recipients receive the healthiest possible organs. This is done partly with lab tests, and partly by working with the donor's family to obtain a medical and social history.

Next, donation specialists input data about the suitable organs for transplant into the national waiting list database. Donated organs are matched with potential organ recipients according to the following criteria:

- Body size
- Blood and tissue type
- Medical urgency
- Time the recipient has been on the waiting list
- Geographic distance between the donor and the potential recipient

Surgeons recover the organs just as in any other surgery – in a careful and respectful manner, in an operating room. Donation does not interfere with funeral arrangements.

Once the organs are recovered from the donor, time is of the essence. Some organs, like the heart and lungs, cannot travel very far; they must be transplanted into the recipient within four to six hours of being surgically recovered from the donor. Seventy-five percent of organ donors help local recipients. The organs are prepared for transport, and rushed to the hospital where the potential recipient is waiting.

Up to eight organs can be recovered from a single donor, which means up to eight lives can be saved.



DECEASED ORGAN DONATION

Questions for Reading Comprehension

CLOSE READING

1. Create a flowchart showing the steps involved in organ donation.
2. Name three major tasks of an Organ Donation Specialist.
3. How are donated organs matched to potential recipients?
4. How is it that one organ donor save up to eight lives?

THINK CRITICALLY

1. Could someone who passes away at home, of natural causes, be an organ donor? Why or why not?
2. Why, in the United States, do organ procurement organizations make key decisions about organ donation, rather than the hospital doctors or nurses?
3. Do the criteria used to match organs with recipients reveal personal information, such as name, gender, or income? Why might these be left out?
4. Why do you think it would be important to talk with your family about your donation decision?



Century High School students after a successful campus donor drive. Photo courtesy Donate Life Northwest.

LIVING DONATION

Key Vocabulary

Regenerative, leukemia, directed donation, donor chain, hemodialysis access, hemodialysis, living kidney donor, paired donation, peritoneal dialysis, non-directed donation

Some decisions to donate and save lives can be made during one's lifetime. Living donation is a voluntary process and has nothing to do with registering as a deceased organ and tissue donor.

REGENERATIVE DONATION

Most types of living donation consist of regenerative tissue. This type of tissue grows back naturally after some of it is removed.

BLOOD

Blood donations help millions of patients in need! You can learn more about blood donation and find a local blood drive through the [American Red Cross](#).

BONE MARROW

Bone marrow often saves the lives of leukemia patients. The National Bone Marrow Program's website, [Be the Match](#), offers information and resources about registering to be a bone marrow donor.

LIVER

The liver is the body's only regenerative organ. This means that a portion of the liver can be removed from a living donor and transplanted into a recipient, and both the liver segment in the recipient and in the donor will grow to normal size in a few months. The liver is able to do the extra work necessary so that both the donor and the recipient can be healthy.

NON-REGENERATIVE DONATION

These tissues do not grow back. However, living donors offer their loved one, friend, or an anonymous recipient an alternative to waiting on the national waiting list for an organ from a deceased donor.

KIDNEY

People have two kidneys, except in rare cases. If someone chooses to donate one kidney, the remaining kidney can carry out the normal functions of both kidneys.

LUNG

A lower lobe of a lung can be donated, although this kind of procedure is very rare. This surgical procedure is not currently performed in Oregon.

PANCREAS AND INTESTINE

Though extremely rare, it is also possible to be a living pancreas and intestine donor. Neither of these surgical procedures are currently performed in Oregon.



Living Kidney Donation



Jennifer (far left) received a kidney transplant from her mother, Linda (not pictured). Photo courtesy Nick Tracy Photography.

GOT TWO, GIVE ONE

Since 1954, when the first successful living kidney transplant in the United States took place between identical twins, living donors have been giving the gift of life and making a difference. In Oregon, the first living kidney transplant took place at Oregon Health & Science University in 1959, between 12-year-old identical twin sisters.

Why is kidney donation possible? Put simply, because we have two. Several studies have shown that donating one kidney does not change life expectancy or increase a person's risk of developing kidney disease or any other

kidney-based health problems. A person can lead an active, normal life with just one kidney. Like anyone else, they are able to play sports, have children, and exercise.

Living kidney donors effectively save two lives through their single donation: the life of the recipient, and also the life of a stranger on the waiting list, for whom a chance to receive a deceased donor's kidney is now one step closer. Additionally, if ever a living kidney donor finds themselves in need of a kidney transplant later in life, they will be at or near the top of the deceased donor list, shortening their wait time.

FINDING A LIVING KIDNEY DONOR

If you needed a kidney transplant, who would you most likely ask? Most people respond, "My family."

Unfortunately, this is not always possible. It is critical that blood and tissue types between the donor and recipient are well matched so that the chance of rejection is lessened (see Advanced Readings). Nor does everyone have the option of turning to their family. For example, if someone has a family history of genetic diseases, such as polycystic kidney disease, they might not qualify to donate to a relative.

It is no small thing to try to find a living kidney donor! Some people make the decision to donate instantly – only to find that they are incompatible and cannot donate to their loved one. Fears and misconceptions can make living kidney donation a difficult subject. For example, a common misbelief is that a living kidney donor is risking their life or compromising their health. For a person who needs a kidney transplant, this misbelief may be so strong that it may prevent them from even talking to their family and friends about the possibility of living donation.

In any case, transplant centers assist transplant recipients in developing approaches to finding a living kidney donor.

WHO CAN BE A LIVING KIDNEY DONOR?

Potential living kidney donors must be in excellent mental and physical health. The minimum age for volunteering to donate depends on the local transplant center's policy, but in Oregon it is no younger than 18 years old.

Living kidney donors can be parents, siblings, children, spouses, friends, co-workers – or even total strangers. It is a federal crime to buy or sell organs in the United States, so living kidney donation is completely voluntary and donors receive no financial compensation for their gift.

A potential donor will undergo numerous evaluations at a transplant center to determine their mental and physical health, to ensure that the donation is safe, and that their expectations are realistic.

KIDNEY TRANSPLANT CENTERS IN OREGON

LEGACY KIDNEY TRANSPLANT SERVICES

OREGON HEALTH & SCIENCE UNIVERSITY KIDNEY CLINICAL TRANSPLANT SERVICES

PORTLAND VA MEDICAL CENTER

LIVING DONATION

Questions for Reading Comprehension

CLOSE READING

1. Name three tissues which can be donated (partial or whole) while you are alive.
2. How do blood and bone marrow donations save lives?
3. What are two common misconceptions or fears about donating a kidney?
4. Do you have to be a blood relative to donate a kidney? Why or why not?

THINK CRITICALLY

1. Do you plan to donate blood? one marrow? Why or why not? Would your answer change if you knew someone whose health depended on donation? Why or why not?
2. Why do you think the first successful transplants took place between identical twins?
3. Imagine that you need a kidney transplant and have learned about living kidney donation. Come up with three people or groups you would ask. Now imagine that these people have never heard of living kidney donation. Develop a short speech which introduces your need, addresses a common fear or misconception about donation, and encourages them to consider being a donor.



REGISTER TO BE A DONOR

JOIN THE OREGON DONOR REGISTRY

In the future, you may save up to eight lives as an organ donor and restore sight and mobility to 50 or more people as an eye and tissue donor.

Visit GoRecycleYourself.com to learn more!

WAYS TO REGISTER

Parental permission is not required to register.

1. At 13, individuals can join Oregon's Donor Registry online:
 - GoRecycleYourself.com or
 - donatelifeNW.org | donevidaNW.org (en español)
2. At 13, individuals can join the Oregon Donor Registry by filling out a paper form, available by request from Donate Life Northwest.
3. At 18, individuals can sign up with their smartphone.
4. At 15, individuals can say YES to donation when they apply at the DMV for a driver's license/card, permit, or state identification.

If you register at the DMV, you will receive a D code on your license.

If you join the registry online, on your smartphone, or through a paper form, no code will appear on your license.

TALK TO YOUR FAMILY

The news that a loved one was, or was not, a registered donor can be burdensome if it comes as a surprise after a death. It is difficult for families to make major decisions during a time of grief when they may not know, or be able to recall clearly, what their loved one had wanted.

GET INVOLVED

Support donation awareness by volunteering, participating in awareness events, or joining the conversation online.

WHAT IF I WANT TO DONATE MY BODY TO SCIENCE?

Donating your body to science means that after you pass away, you wish to make your entire body available to medical professionals studying anatomy as part of their medical education (physicians, dentists, nurses, physical therapists, biomedical scientists, etc.).

For more information and to enroll as an anatomical donor for medical research through a not-for-profit program in Oregon or Southwest Washington:

Oregon Health Sciences University [Whole Body Donation Program](#)

Western University of Health Sciences [Body Donation Program](#)

CHANGING DONOR REGISTRY STATUS

Individuals can change their status at any time:

1. If you registered at the DMV, you will need to apply for a new license and change your answer to the donor registry question. DMV fees apply.
2. If you registered online or with a paper form, and have provided an email address, you will receive log-in information permitting you to update your status online for free. If you lose your log-in information, contact Donate Life Northwest.
3. If you registered with your smartphone, you can go back into the health app and edit your registration status.

WHAT IF I DO NOT WISH TO BE A DONOR?

If you do not wish to be a donor, do not register. Talk to your family about your decision.



JOIN THE WASHINGTON DONOR REGISTRY

In the future, you may save up to eight lives as an organ donor and restore sight and mobility to 50 or more people as an eye and tissue donor.

WAYS TO REGISTER

1. Individuals can join Washington's Donor Registry online at:

- GoRecycleYourself.com or
- LifeCenter Northwest, www.lcnw.org

2. Individuals can call LifeCenter Northwest toll-free at 1-877-275-5269, and request a brochure to fill out and return.

3. Register at the age of 18 with your smartphone.

4. Say YES to organ, eye, and tissue donation when you apply for or renew your driver's license! Residents who already have a heart on their driver's license are automatically added to the donor registry.

In Washington, the legal age of registration is 15 ½. If you are under 15 ½ the signature of a parent or legal guardian is required. Whether you register yourself or with the signature of a parent or legal guardian, until you turn 18 a parent or legal guardian can revoke authorization at the time of donation.

TALK TO YOUR FAMILY

The news that a loved one was, or was not, a registered donor can be burdensome if it comes as a surprise after a death. It is difficult for families to make major decisions during a time of grief when they may not know, or be able to recall clearly, what their loved one had wanted.

CHANGING DONOR REGISTRY STATUS

Individuals can change their status at any time. Contact LifeCenter Northwest 1-877-275-5269 for more information.

WHAT IF I DO NOT WISH TO BE A DONOR?

If you do not wish to be a donor, do not register. Talk to your family about your decision.

JOIN THE REGISTRY IN YOUR STATE

In the future, you may save up to eight lives as an organ donor and restore sight and mobility to 50 or more people as an eye and tissue donor.

WAYS TO REGISTER

1. Individuals can join the national donor registry by visiting:
 - [RegisterMe.org](https://www.registerme.org)
2. Research and contact your state's donor registry organization.
3. Register at the age of 18 with your smartphone.
4. Say YES to organ, eye, and tissue donation when you apply for or renew your driver's license!

TALK TO YOUR FAMILY

The news that a loved one was, or was not, a registered donor can be burdensome if it comes as a surprise after a death. It is difficult for families to make major decisions during a time of grief when they may not know, or be able to recall clearly, what their loved one had wanted.

CHANGING DONOR REGISTRY STATUS

Changing your donor registry status varies from state to state and registration method. If you register on the national registry via [RegisterMe.org](https://www.registerme.org), you can also edit your registration status through the same web site.

WHAT IF I DO NOT WISH TO BE A DONOR?

If you do not wish to be a donor, do not register. Talk to your family about your decision.