# Recycle Yourself

Save lives through organ, eye, and tissue donation!



This presentation contains sensitive content regarding the discussion of death, grief, illness, and the showing of medical images.

Be mindful and respectful of everyone's experiences, feelings, and attitudes regarding the topic of organ, eye, and tissue donation.

Please care for yourself and reach out for support if needed.



Registers donors & educates the public about donation. We work with...

Organ, eye, and tissue recovery professionals







#### **Transplant Centers**













#### Do you have a "D" or a **v** on your license?

After I die, I wish to donate

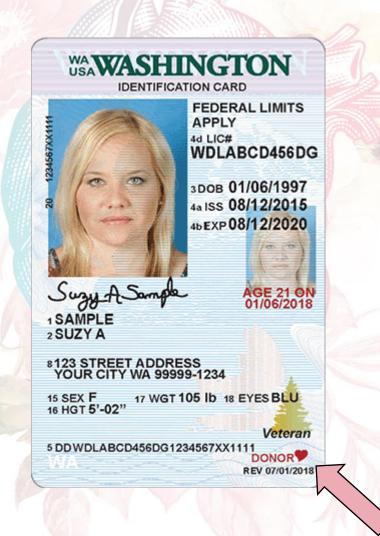
organs, eyes, and/or tissues

to save someone's life,

restore someone's vision,

and/or restore someone's

mobility.

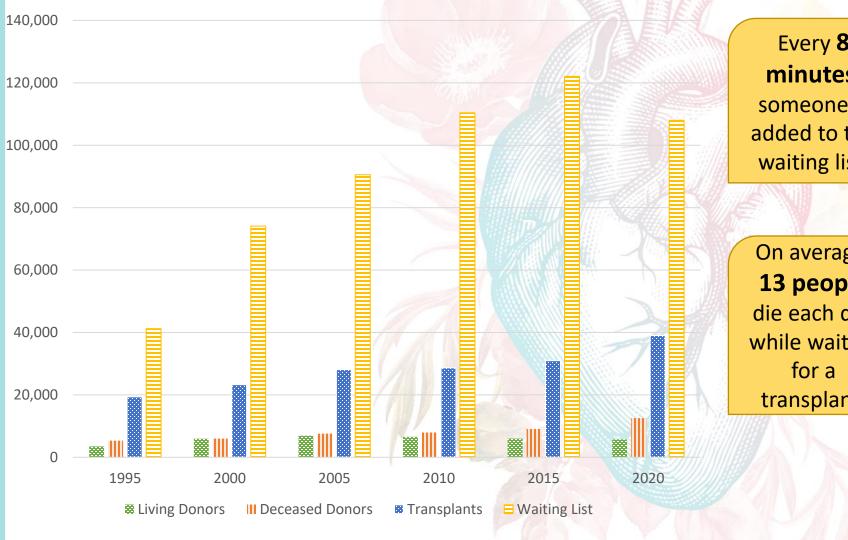


### Why **Don't** People Register?

Fears, Myths, and Misinformation

- TV and movies
- Concern over medical care
- Religious beliefs about donation
- Don't think they are eligible
- Don't want to think about death
- Don't know how to sign up

### The Need for Organ Donors



Every 8 minutes, someone is added to the waiting list.

On average, 13 people die each day while waiting transplant.

## 86% of everyone waiting needs





People in the US are increasingly at risk for preventable conditions which eventually lead to kidney failure:

- Type II Diabetes\*
- High Blood Pressure\*

Due to systemic racism and health inequities, Hispanic, African, Asian, and Native Americans are up to 3x more likely to suffer from these conditions.

<sup>\*</sup> Can be prevented or delayed by staying at a healthy weight, eating well, and getting exercise.

### What is it like waiting?

- Doctors refer sick patient to a transplant center.
- 2. A committee of doctors, surgeons, and hospital staff decide whether a patient is a candidate for transplant.
- 3. A transplant candidate is added to the national waiting list.
- 4. People stay on the national waiting list for days, months, or even years.



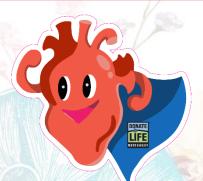
**The Waiting List** 



Alysia's Story



#### **Local Heroes**



≈ 6.2 million Washingtonians are registered donors

≈ 66,000 Washingtonians died in 2024

6,438 cornea donors = 4,322 corneal transplants

421 tissue donors = 52,625 tissue transplants

325 organ donors = 843 organ transplants

#### **True or False:**

Organ donation is very common.

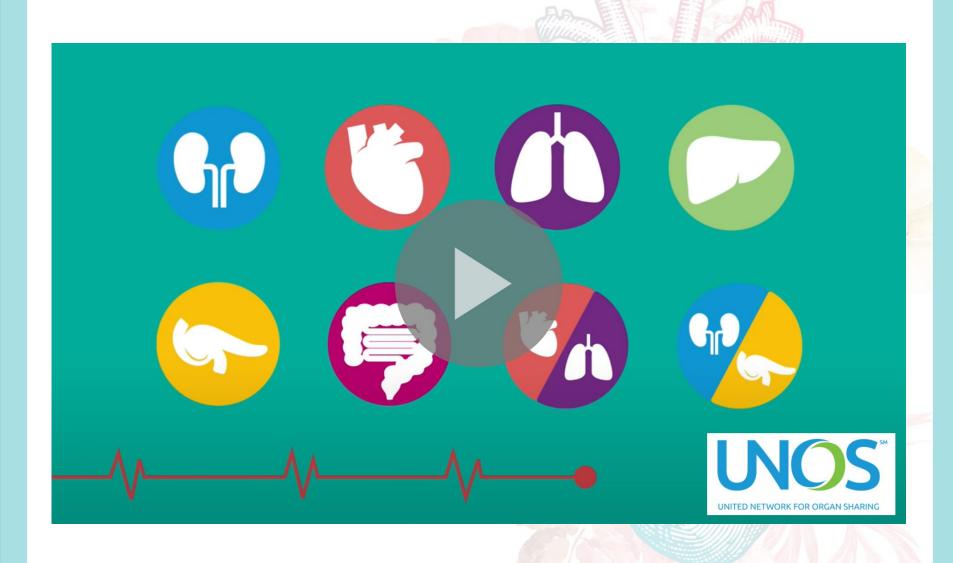
**False**. Not everyone who dies can donate organs, because they must die under very specific circumstances.

### **Criteria for Organ Donation**

- Donor died in a hospital.
- Donor placed on mechanical ventilator prior to death.
  - Blood and oxygen continue to flow through the vital organs.
- Donor had a severe, irreversible brain injury, and one of two pathways occurs:
  - Donation after Brain Death (most common)
  - Donation after Circulatory Death (family approval required)

#### **Criteria for Tissue Donation**

- Donor died at home, in a care facility, or in a hospital.
- Donor does not need to be placed on a mechanical ventilator prior to death.
- Donor died due to a variety of causes.



#### **Next Steps**

#### If someone CAN be a donor...

- A separate team comes in
- The registry is checked
- The family is approached
  - If under 18, the family will be asked to authorize donation
- TALK TO YOUR FAMILY TODAY!



### Matching

- 1) Check medical history
- 2) Determine which organs or tissues are viable
- 3) Search waiting list for the best match for each organ based on:
  - Blood type
  - Body size
  - Severity of patient's medical condition
  - How long the patient has waited
  - Geographic distance



4) Tissues are stored and distributed upon request.

### Logistics



#### **Number of Hours for Viability**

Heart 4 - 6 hours

Lungs 4-6 hours

Liver 8 - 12 hours

Intestines 8 - 16 hours

Pancreas 12 - 18 hours

Kidney 24 - 36 hours

Cornea up to 18 hours
Tissue up to 24 hours

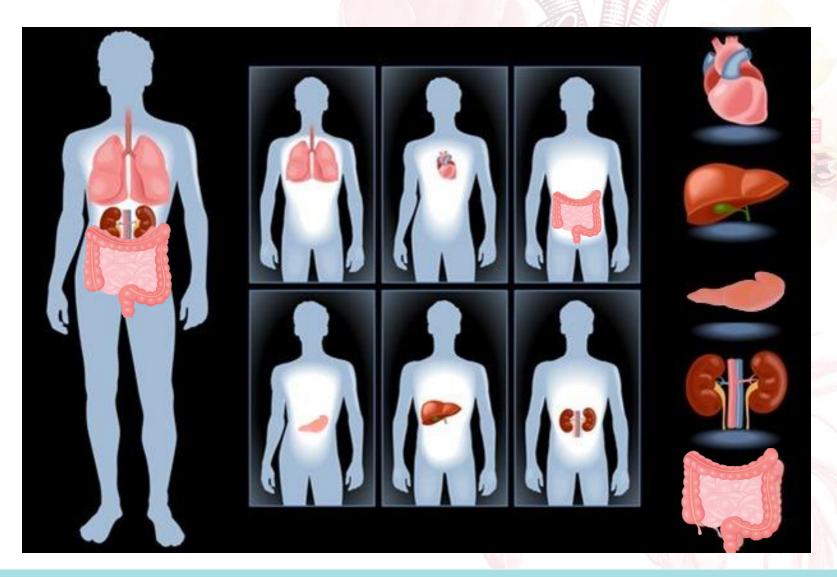
### **Organ & Tissue Recovery**

The recovery surgery takes place in an operating room, in the same sterile and careful way as in any surgery.

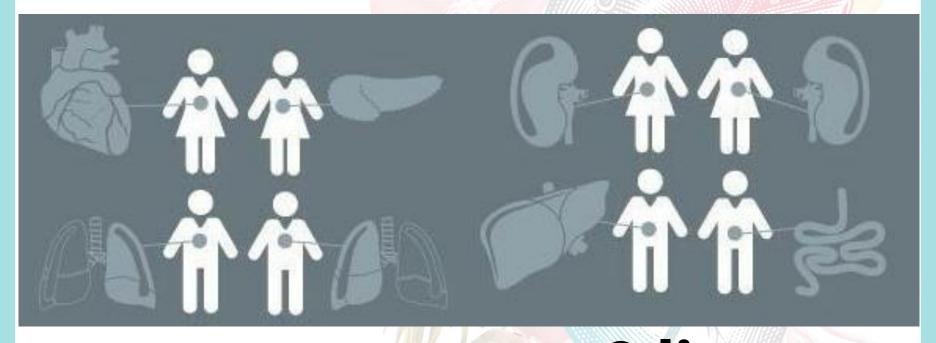


- There are no costs to the family for the donation process.
- Being an organ or tissue donor does not interfere with funeral arrangements.

## Which Organs Can be Donated?



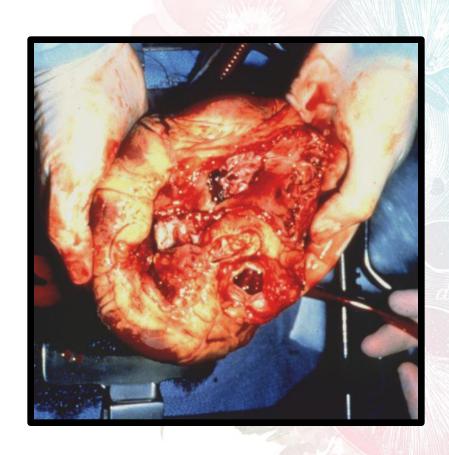
## One organ donor

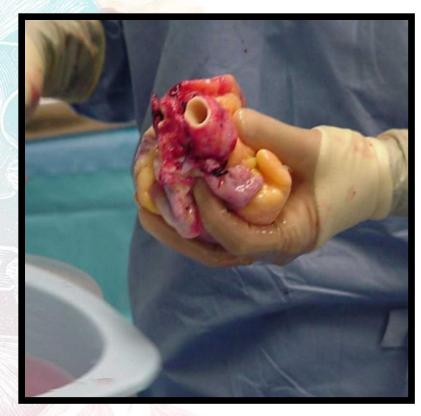


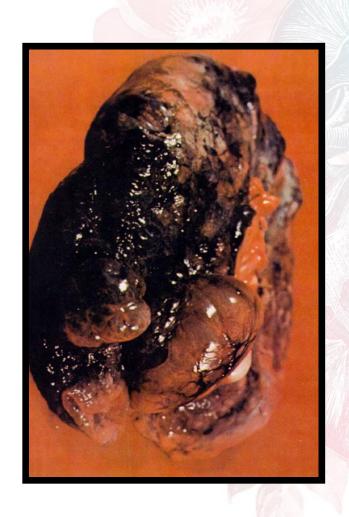
can save up to 8 lives

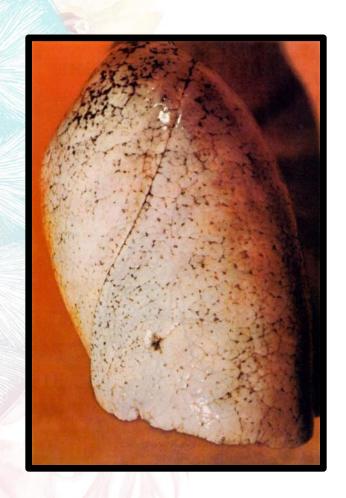
# Name that Organ!

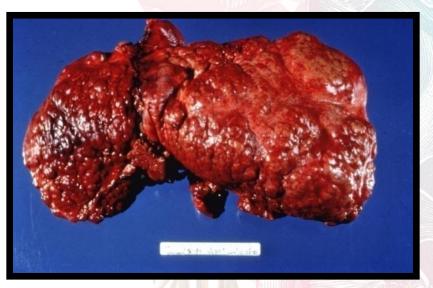
The following slides contain graphic medical images about organs, eyes, and tissue – you've been warned!









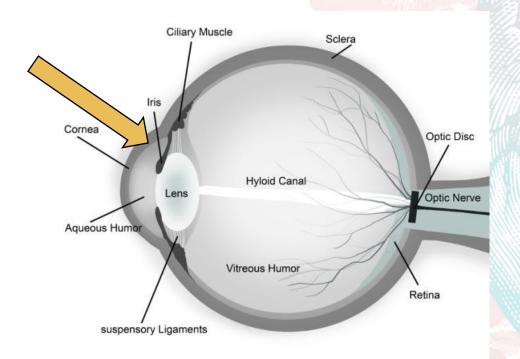








#### What is a Cornea?





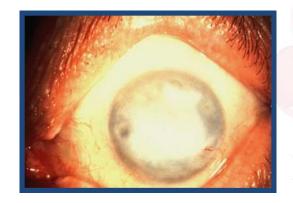
**John's Story** 

#### **True or False:**

Donated corneas can restore sight to the blind.

**True**. When the cornea is damaged due to injury, disease, infection or a hereditary condition, corneal transplant surgery may be an option.

When the cornea is damaged due to injury, disease, infection or a hereditary condition, corneal transplant surgery may be an option.



chemical burn

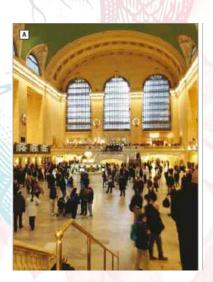


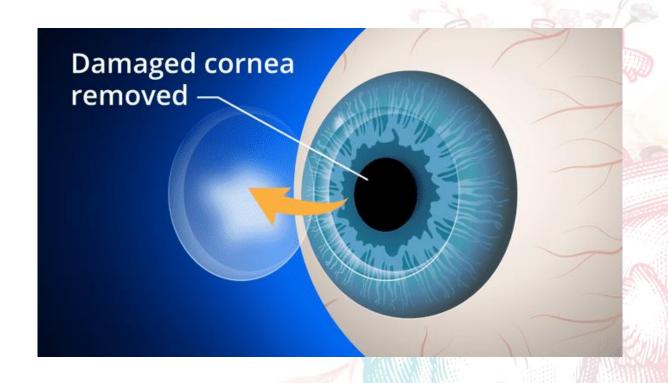
Keratoconus

Vision with Fuchs Dystrophy, untreated and post-transplant Vision in the same patient.

JAMA Ophthalmol. 2015;133(4):e145353.





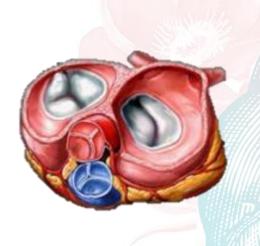


Research on glaucoma, retinal disease and eye complications of diabetes relies on human eye donations—leading to advanced treatments and cures.

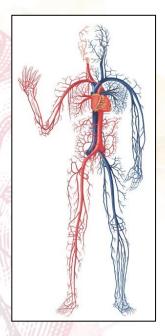


### Which tissues can be donated?















**Jan's Story** 

#### **Extended list of recoverable tissue**

#### **Bone**

Proximal/ Distal Femur
Whole Femur
Proximal/ Distal Tibia
Whole Tibia
Proximal/ Distal Fibula
Hemi-Pelvis
Humerus
Radius
Ulna
Costal Cartilage w/ Sternum

#### **Cardiovascular Heart**

Valves (tricuspid, bicuspid)
Aorta
Pulmonary Valves
Descending Thoracic Aorta
Saphenous Vein
Femoral Vein/ Artery
Aortoiliac Artery

#### **Tendons**

Achilles
Semitendinosus
Anterior Tibialis
Posterior Tibialis
Peroneus Longus
Plantaris
Achilles
Semitendinosus
Gracilis

#### **Connective Tissue**

Fascia Pericardium

#### Ligaments

Patellar Tendon w/ Ligament

#### Skin

Full-thickness Split-thickness

#### **Nerves**

Deep Peroneal Nerve
Tibial Nerve
Sciatic Nerve
Musculocutaneous Nerve
Median Nerve
AlN (Anterior Interosseous)
PIN (Posterior Interosseous)
Ulnar Nerve
Radial Nerve
Femoral Nerve bundle & branches
Superficial Peroneal Nerve
Common Peroneal Nerve
Sural Nerve
Lateral Sural Nerve
Plantar Nerve

#### **Fresh Allografts**

Knee Block
Ankle Block
Arm Block
Shoulder Block
Elbow Block
Bilateral Cartilage

### Life-saving skin

Skin regulates our heat and fluid, and is the body's first defense against germs.



18/100<sup>th</sup> of an inch removed from donor using an amalgatome



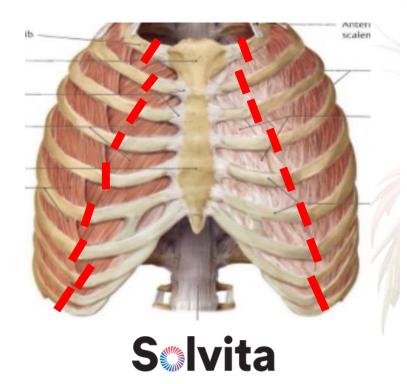
Graft is meshed so that it can stretch to cover a larger area



Graft acts as a biological bandage on a burn victim

### Life-enhancing tissue

Costal Cartilage taken from the sternum/rib area can be transformed and used to reconstruct cartilage forming the ear.







Above the assembled, carved rib cartilage construct is shown before and after placement of a skin flap. In this technique the construct initially lies flat against the side of the head. A second procedure is required to elevated the ear and place a skin graft. Often times a third touch up procedure is required.

One tissue and eye donor



can save or enhance over 125 lives

#### **True or False:**



Grandparents can be donors

**True.** No one should rule themselves out due to age, health, medical conditions, gender, or sexual orientation! Additionally, the criteria required for *organ* donation do not apply to tissue and eye donation.

### Life After Transplant

- Managing rejection
- Healthy lifestyle

More LIFE



Sarah Hyland



Megan Rapinoe



**Tracy Hoyle** 



**Selena Gomez** 



**Laurie Hernandez** 



**Mandy Patinkin** 



**George Lopez** 



**Steve Jobs** 

#### **Donor Families**

The gift of more life is invaluable to those who receive a donated organ or tissue, and donor families, like <u>Hayden's</u>, are also impacted by the gift their loved one has given to others.



### What can you donate while living?

A kidney

You can donate a kidney to save the life of anyone who matches your blood and tissue type – recipients don't have to be a blood relative!

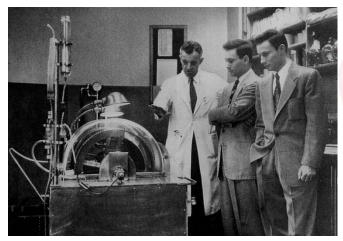
- Paired and chain donation
- How safe is it for the donor?
- A portion of your liver
- Very small portion of lung called a lobe
- Blood and bone marrow



Living donation has nothing to do with registering as a deceased donor.

In the US, you must be at least 18 to consider living kidney donation.

# A Very Brief History of Transplantation in the US



Dr. John P. Merrill (left) explains the workings of a thennew machine called an artificial kidney



Dr. Norman Shumway successfully transplants a heart into 54-year-old steelworker Mike Kasperak, who survives for 14 days.

**1878**: First bone transplant

**1906**: First cornea transplant

1908: First skin allograft

**1954**: First kidney transplant (between identical twins)

1968: First heart transplant

**1968**: Uniform Anatomical Gift Act allows gift of organs to others, USA

**1981**: First heart-lung transplant

**1985**: Oregon's first heart transplant

2014: VCA authorization is allowed

in the US

#### Common Research, or Sci-Fi

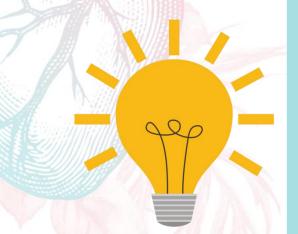
- New research is always happening!
- Vascular Composite Allografts (VCAs) started in 2014 in the US
- VCAs involve multiple structures
  - Skin, bone, muscles, blood vessels, nerves, connective tissues
  - Face and hand transplants
- VCAs require additional authorization

#### **Careers in Donation & Transplant**



## Pop Quiz

- 1) How many people's lives can be saved or enhanced by tissue and/or cornea donation?
- 2) Do you know if your family members are registered donors?
- 3) What is one new thing you learned today?



What Can You Do Today?

- Eat right and exercise!
  - Especially if your background puts you at high risk for Type II Diabetes or High Blood Pressure!
- Register!
  - Online
  - Paper form
  - Say "YES" to donation at DMV
  - On iPhone Medical ID (at age 18)
- Talk to your family!
- Host a donor drive!
- Start a SODA Chapter

Organ Don Visit www.sodanational.org.

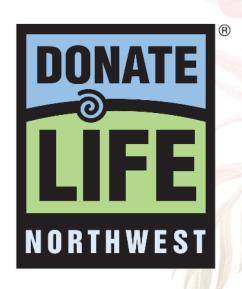




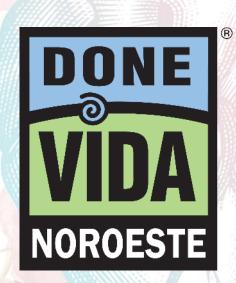
IF NOBODY GIVES, NOBODY GETS.

### Learn more and register...

#### GORECYCLEYOURSELF.COM



www.DonateLifeNW.org



www.DoneVidaNW.org (en español)





@GORECYCLEYOURSELF



**GO**RECYCLE**YOURSELF**.COM

