

Chronic Kidney Disease (CKD)

Midwest Kidney Network

November 20, 2019

Overview

1. Who is the Midwest Kidney Network?
2. Why are we talking about kidney disease?
3. What is chronic kidney disease?
4. Who is at risk?
5. What is it like to have kidney failure?
6. Why and how to screen patients?
7. What are the benefits of organ donation and kidney transplantation?
8. What partnerships are needed?

Midwest Kidney Network's Mission

To assess and improve the quality of care provided to individuals with end stage kidney disease.

Midwest Kidney Network Serves



- **5** states: Michigan, Minnesota, North Dakota, South Dakota, and Wisconsin
- **512** dialysis providers
- **21** kidney transplant centers
- **47,489** people with kidney failure (as of 12/31/2018)

As we discuss, please consider the following questions

- What education is needed, and how can it be made more easily accessible?
- With whom can you share the information you learned today?

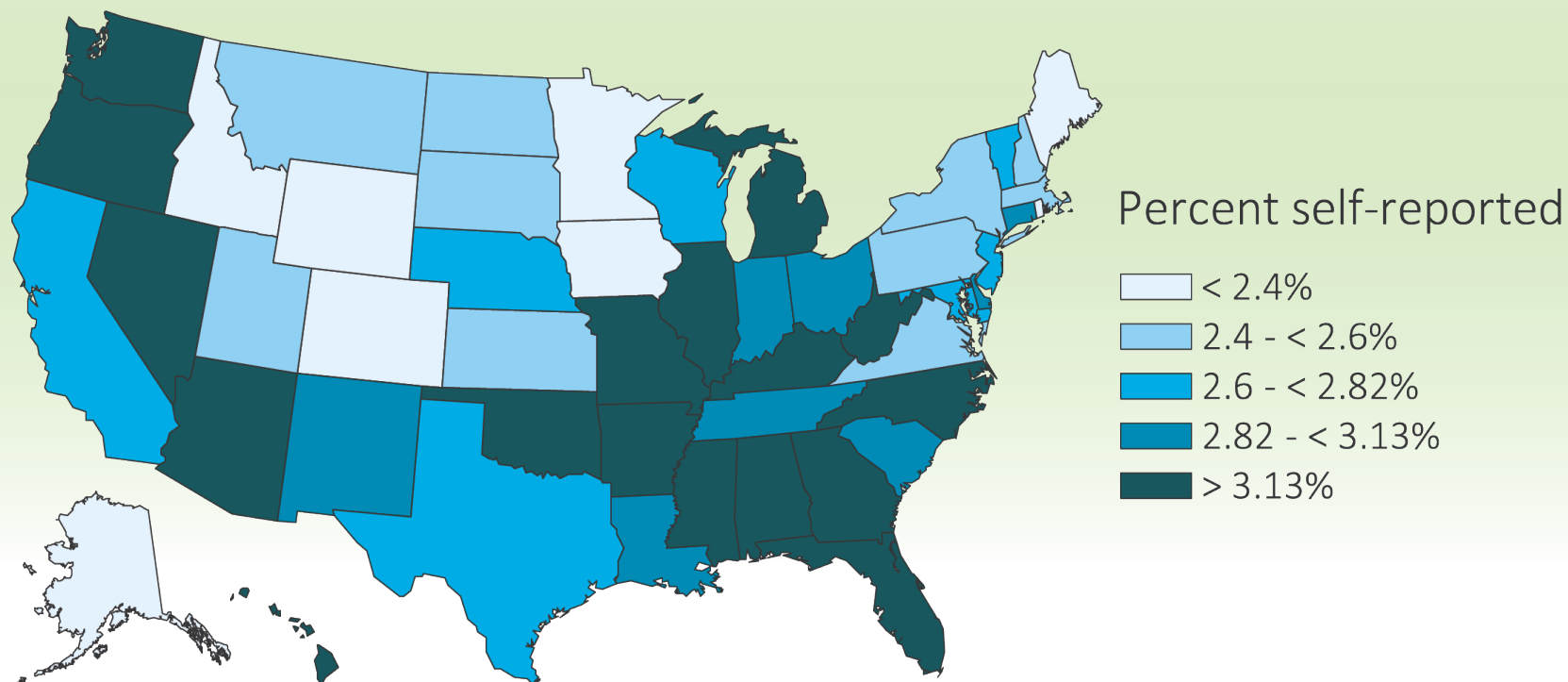
Why are we discussing chronic kidney disease (CKD)?

Chronic kidney disease crisis in the United States

- 15% of adults in the USA have CKD
 - 37 million people
- Only 10% of those are aware of it
- Medicare spends **\$114 billion** on people with CKD or End Stage Renal Disease (ESRD)
- ESRD population is less than 1% of the total Medicare population, but accounts for about 7% of Medicare spending

Source: United States Renal Data System (USRDS) 2018 Annual Data Report

Estimated prevalence of self-reported kidney disease by state, BRFSS participants ages 18 and older 2016



Data source: Behavioral Risk Factors Surveillance System (BRFSS), participants aged 18 & older. 2013 (N=491,777), 2014 (N=464,617), 2015 (N=441,460), and 2016 (N=486,303).

QIN contract aims

1. Improve behavioral health outcomes, focusing on opioid misuse
2. Increase patient safety
3. Increase chronic disease self-management
4. Increase quality of care transitions
5. Improve nursing home quality

Advancing American Kidney Health Initiative Goals

1. Decrease the number of patients advancing to kidney failure by 25%
2. Achieve 80% of newly diagnosed patients starting home dialysis or receiving a pre-emptive kidney transplant
3. Standardize organ procurement procedures to double the number of kidney transplants available
4. Reduce the discarded kidney rate from 19% to 15%

CMS Kidney Transplant Initiative

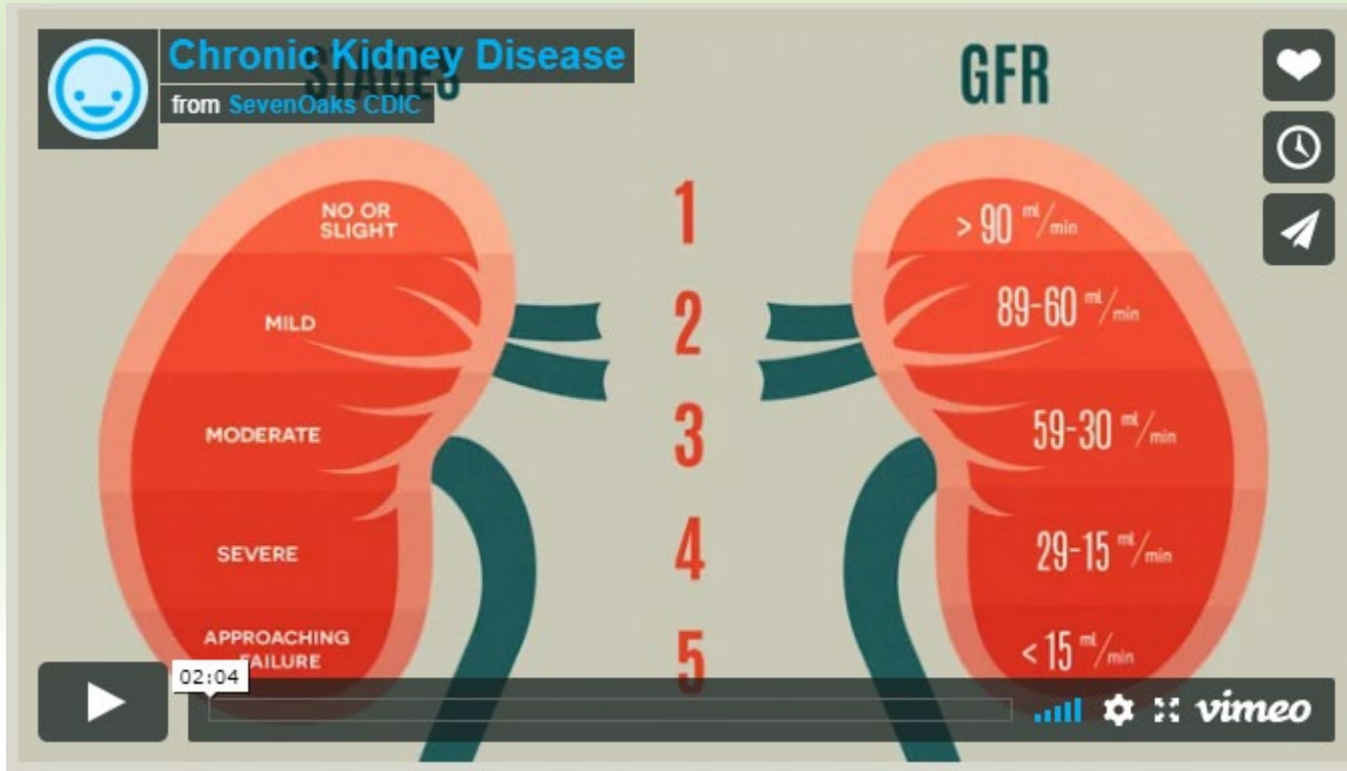
Focus Areas

1. Increasing the number of beneficiaries who receive kidney transplants from deceased organ donors
2. Identifying and spreading *known* clinical, behavioral, and cultural best practices

What is Chronic Kidney Disease (CKD)?

- Kidneys have been damaged slowly over a long time period
- The damage indicates your kidneys are not working well
- CKD is permanent, but the damage can be slowed down if detected early

What is CKD?



- <https://kidneyfailurerisk.com/>

Stages of kidney disease

Stage	Level of Disease	GFR	Symptoms
1	No or slight	> 90	Most people feel normal
2	Mild	60-89	My have slight or mild symptoms
3	Moderate	30-59	<ul style="list-style-type: none">• May begin to feel unwell;• May notice urine output changes;• Blood pressure may rise
4	Severe	15-29	
5	End stage renal disease (ESRD)	< 15	Kidney failure and need dialysis or kidney transplant for survival

CKD risk factors

- **37 million Americans have CKD**
- Diabetes (#1 in the United States)
- Hypertension (#2 in the United States)
- Obstruction due to kidney stones, tumors, prostate enlargement
- Inherited kidney diseases
- Systemic diseases
- Other contributing factors:
 - High body mass index (BMI)
 - Older age

Source: United States Renal Data System (USRDS) 2018 Annual Data Report

Prevalence (%) of CKD in NHANES population within age, sex, race/ethnicity, & risk factor categories, 2013-2016

Age	
20-39	6.3
40-59	10.4
60+	32.2
Sex	
Male	12.9
Female	16.7
Race/Ethnicity	
Non-Hispanic White	15.6
Non-Hispanic Black/African American	15.9
Mexican American	12.6
Other Hispanic	11.4
Other Non-Hispanic	12.6
Risk Factor	
Diabetes	36.0
Hypertension	31.2
Self-reported cardiovascular disease	40.3
Obesity (BMI \geq 30)	16.8
All	14.8

Data source: National Health and Nutrition Examination Survey (NHANES), 2001-2004, 2005-2008, 2009-2012 & 2013-2016 participants age 20 & older. Single-sample estimates of eGFR & ACR; eGFR calculated using the CKD-EPI equation. Diabetes defined as HbA1c >7%, self-reported (SR), or currently taking glucose-lowering medications. Hypertension defined as BP \geq 130/ \geq 80 for those with diabetes or CKD, otherwise BP \geq 140/ \geq 90, or taking medication for hypertension. Values in Figure 1.12 cannot be directly compared to those in Table 1.3 due to different survey cohorts. The table represents NHANES participants who are classified as hypertensive (measured/treated) but some of those are at target blood pressure. Abbreviations: ACR, urine albumin/creatinine ratio; BMI, body mass index; BP, blood pressure, CKD, chronic kidney disease; eGFR, estimated glomerular filtration rate.

Welcome Monica Rudiger



Recipient of Living Donor Kidney

Why is screening important?

- Slow progression to end stage renal disease
- Protecting kidney function
- Planning for treatment
 - Early modality education – including transplant
- Improving other health outcomes such as
Cardiovascular disease

Cardiovascular disease (CVD)

In 2003 the American Heart Association noted kidney disease as a risk factor for the development of CVD and recommended that patients with CKD be considered members of the “highest risk group.”

- CVD is the leading cause of morbidity and mortality in patients with CKD
- CVD outcomes are poorer in patients with CKD
- CVD is the number one cause of kidney transplant graft loss
- Hennepin Health



How can we slow progression?

Early detection can slow the progression of CKD and keep it from worsening with interventions such as:

- **Nutritional interventions**

- Follow a low salt diet & take in adequate calories
- Adequate, not excessive, protein intake (may help limit albuminuria)
- Choose heart healthy foods, possibly limit excess phosphorus
- Avoid starting any new supplements unless MD approved

- **Lifestyle interventions**

- Exercise (improves glucose control & helps prevent heart disease)
- Do not smoke or use tobacco (associated with abnormal urine albumin & CKD progression)
- Self-management care focusing on individualized plans such as tracking your blood sugars, blood pressure and taking medication as prescribed.
- Limit alcohol



How can we slow progression?

- **Medical Management**
 - Regular follow-up with your MD
 - Control and monitor blood pressure
 - Control and monitor blood glucose

National Kidney Foundation (NKF) Kidney Early Evaluation Program (KEEP)

National Kidney Foundation community hosts screenings for individuals 18 years and older to raise awareness about kidney disease, providing free education and screenings

- Risk surveys
- Free educational materials and opportunity to speak with health care professionals

Why aren't people getting screened?

- Many people have no symptoms until their kidneys are about to fail. Kidney disease is sometimes called a silent killer.
- Inadequate insurance or no insurance
- Poor health literacy
- Lack of integrated health systems

Challenges ahead

- Educate the 4 Ps
 - Patient
 - Providers
 - Payers
 - Public
- Identify
- Diagnosis
- Refer
- Treat

Benefits of early detection

- Kidney transplantation is well recognized as a preferred treatment for kidney failure
- Organ donor shortages are a major limitation
- Patients can be on transplant wait lists for several years
- Early CKD detection can help patients and families to plan ahead

Welcome Ann Lovdahl



LifeSource
Organ Procurement Organization



LifeSource

ORGAN, EYE AND TISSUE DONATION

Partnering to save lives through donation

Ann Lovdahl, MA

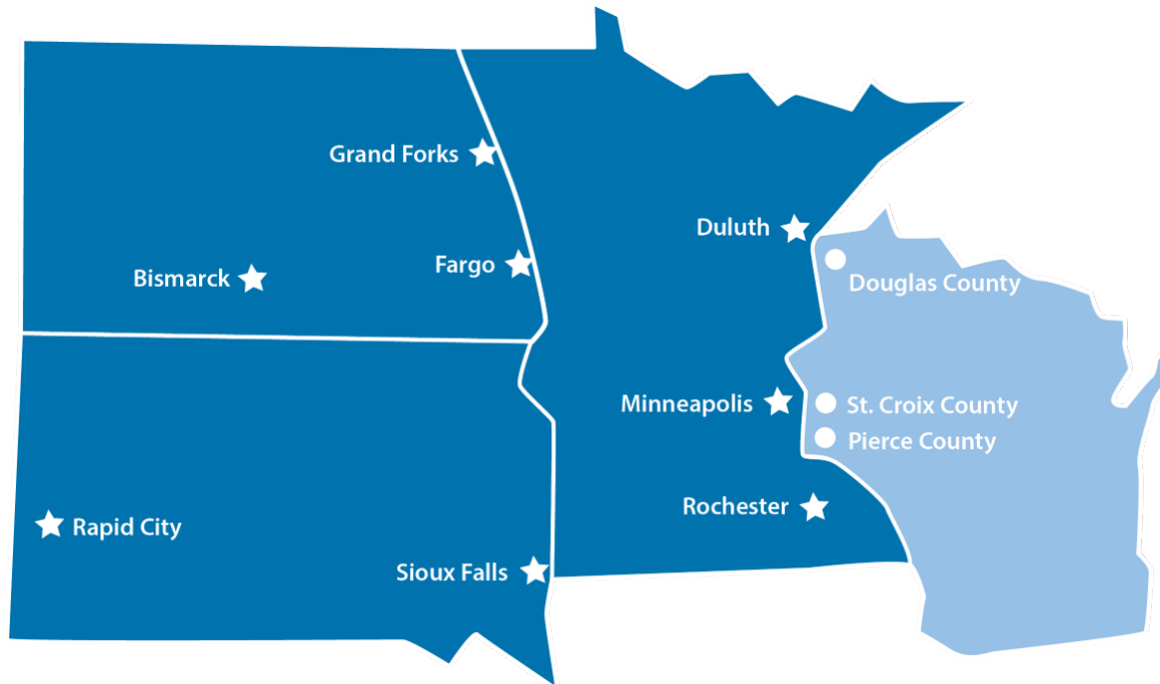
Hospital Liaison

About LifeSource



- Headquarters and home for donation is located in [Minneapolis](#)
- Employs [145](#) team members
- Transplanted [14,328](#) organs transplanted since 1989
- Over [250,000](#) tissues available for transplant
- Partner with [9](#) transplant centers in our region

LifeSource Service Area



THE NUMBERS

>7.0 million people

>3,300 on waiting
list

9 transplant centers

279+ hospitals





The Need



113,746

More than **113,746** men, women and children in the U.S. are waiting for life-saving organ transplants and more than **3,369** live in the Upper Midwest.



3,369

70%

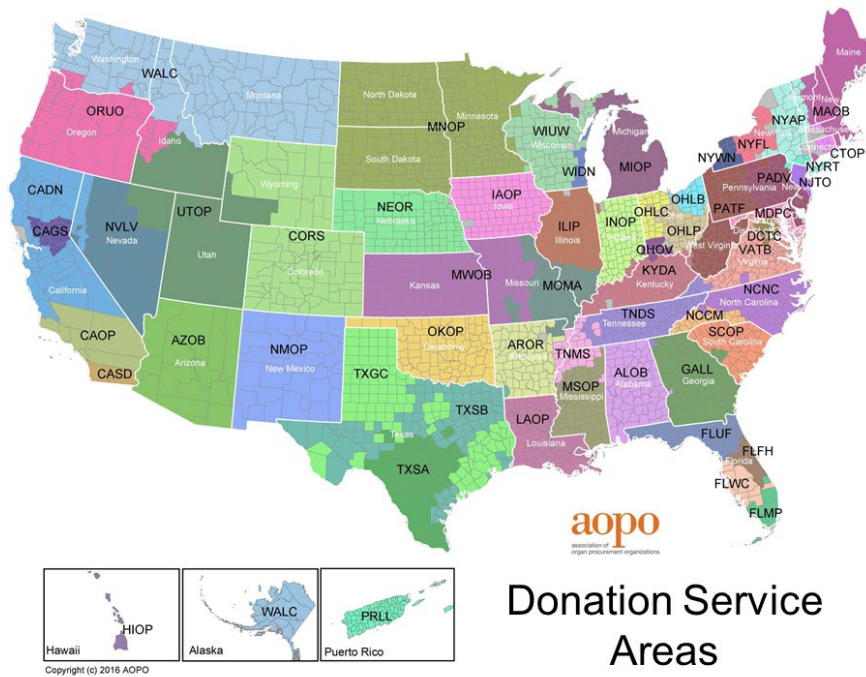
of all adults in MN, ND and SD are registered donors. Register to be a donor at www.life-source.org.



When you designate your decision to be a donor, you are authorizing donation to occur after your death.



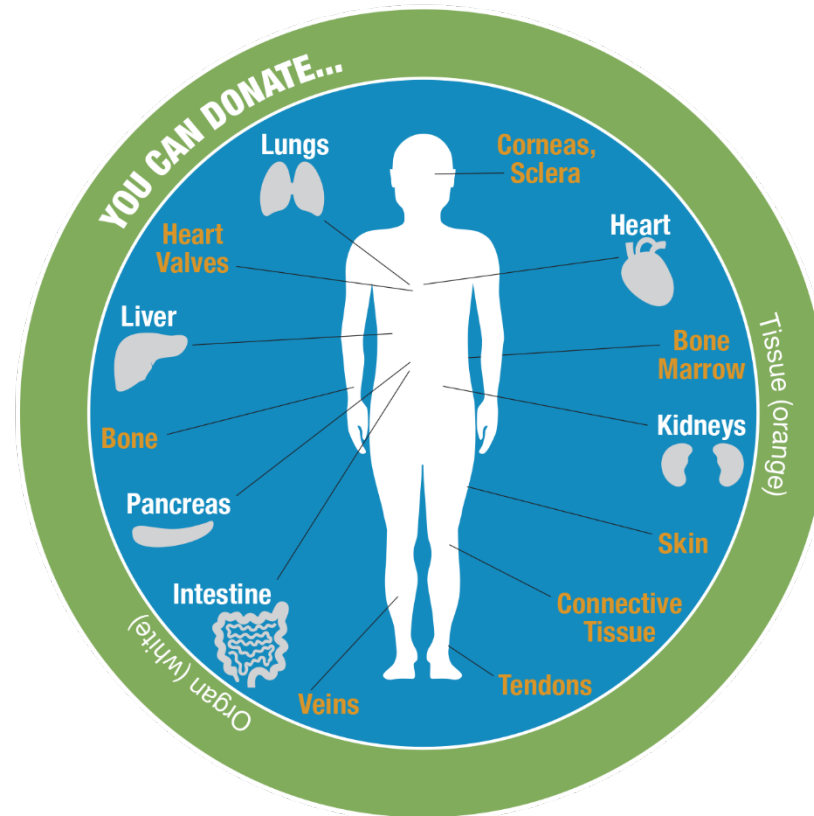
Organ Procurement Organizations (OPOs)



- There are 58 Organ Procurement Organizations (OPOs) in the United States.
- They are federally designated, based on population.
- LifeSource is number 34, and is the second largest OPO geographically in the United States.



What Can Be Donated



Donor Designation

Donor designation is the practice of honoring the donor's lifetime, documented, decision to be an organ, eye and tissue donor.



Increasing Donation

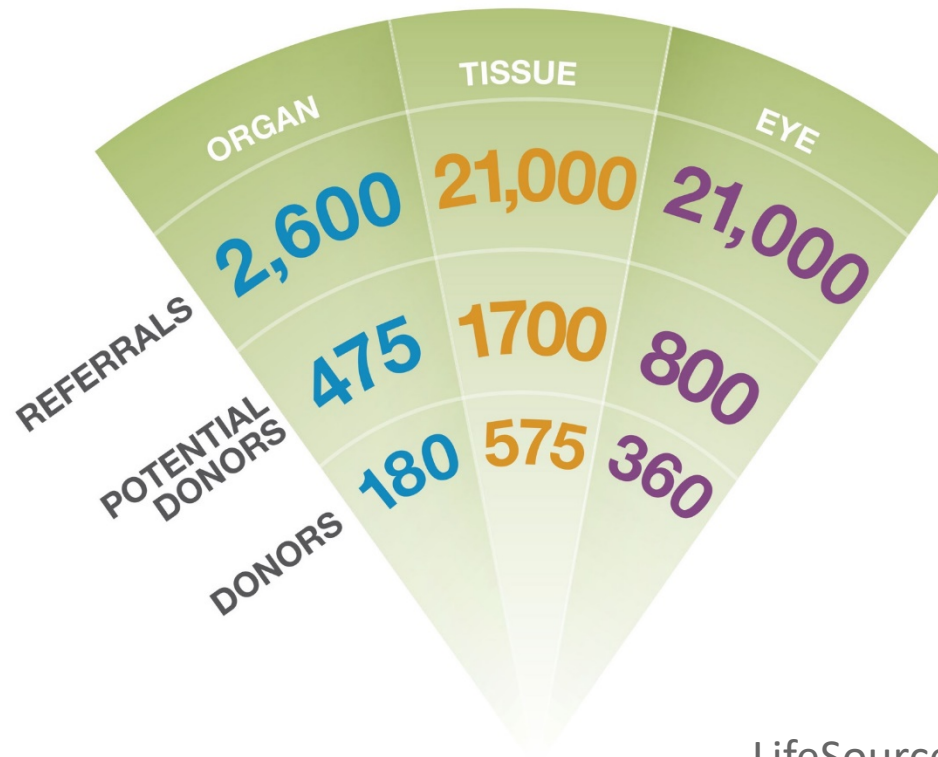
- Implementation of HIV Organ Policy Equity (HOPE) ACT in 2013 established a framework for research into the viability and efficacy of transplanting HIV+ donor organs into HIV+ recipients.





Donation is a Rare Event

LifeSource Experience



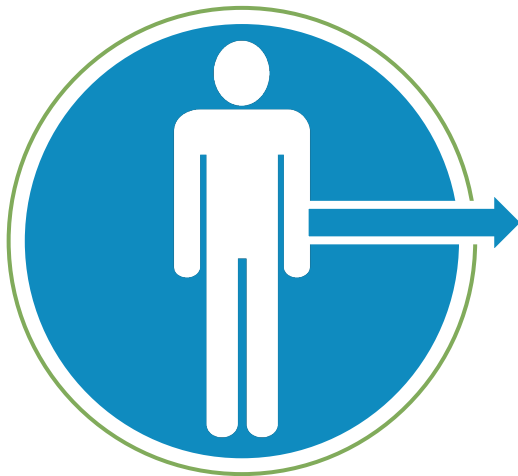
LifeSource Region, Annualized





Finding the match

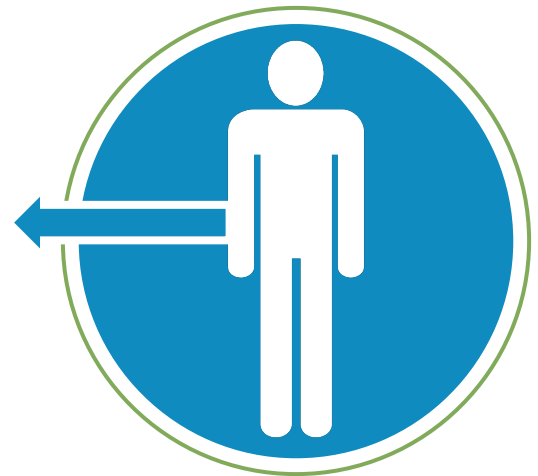
Donor
Information



United Network
for Organ
Sharing



Recipient
Information





Facts About Who Can Donate

- No age limit
- Medical history doesn't prevent donation
- There is no cost to the family for donation
- All major religions support donation



Aftercare and Family Follow-up from LifeSource



- Letter to family
- Bereavement and aftercare program
- Donor Family Gatherings
- Recipient information
- Donor family and recipient correspondence
- Family box

Resources




Life-Source.org is a comprehensive online resource for the community.

DonateLife.net is a nonprofit organization leading national partners and Donate Life State Teams to increase the number of donated organs, eyes and tissues.



You can save lives too!



My son gave life to others. Check the box.

LifeSource
ORGAN, EYE AND TISSUE DONATION

DONATE LIFE **ANYONE CAN REGISTER TO BE A DONOR.**
DonateLifeMN.org

- Register today
- Share your decision

Welcome Randy Nelson



Kidney Donor

Let's go back to the two questions!

- What education is needed, and how can it be made more easily accessible?
- With whom can you share the information you learned today?

Thank you!

Diane Carlson

Diane.Carlson@midwestkidneynetwork.org

Candace Kohls

Candace.Kohls@midwestkidneynetwork.org

Renaë Nelson

Renaë.Nelson@midwestkidneynetwork.org

Kristen Ward

Kristen.Ward@midwestkidneynetwork.org