# Live Kidney Donation: Medical Toolkit

**CHAPTER •** 9

## Living kidney donation and the chance of kidney failure

### If I donate a kidney, will I have a higher chance of developing kidney failure?

If you donate a kidney, you will have about a 1% chance of developing kidney failure (end stage renal disease). This is a higher rate than if you had not donated.

However, a donor's chance of kidney failure is still low. This is due to the careful screening process for donors that excludes persons with risk factors for kidney disease. A recent study of nearly 100,000 living donors found these lifetime chances of getting kidney failure, from highest to lowest chance<sup>1</sup>:

- General population = 3.2% chance
- · Kidney donors = .9% chance
- · Healthy non-donors = .14% chance

# What happens if a donor develops kidney failure?

If a donor develops kidney failure, they will need to get care from a nephrologist who will discuss treatment options including dialysis and transplant. If a donor is placed on the transplant waiting list, they receive priority points.

### A tool to help estimate your chances

There is a tool called a 'risk calculator' that may help people with 2 kidneys understand their chances of getting kidney failure<sup>2</sup>. You can find it at: <u>http://www.</u> <u>transplantmodels.com/esrdrisk/</u>

But risk calculators are not perfect and may underestimate the chance of kidney failure in some groups, such as children and adolescents, and people with a family history of kidney disease.



Kidney failure means your kidneys have stopped working and can't do these important jobs to keep you alive and healthy:

- · Filter your blood
- · Keep your fluids in balance
- Make hormones that help your body control your blood pressure, have healthy bones, and make red blood cells

Kidney failure is also called end stage renal disease (ESRD).

### **HEALTH TIPS**

If you're a donor or thinking about donating, eating well and being active are very important! As is regular doctor follow-up visits.

This will help you find and treat any health conditions, such as high blood pressure or diabetes, as early as possible.



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Because kidney donors have 1 kidney, the chance for donors is likely higher than these estimates.

#### How can I learn more?

Talk to your donor team to learn more about your chances of kidney failure and other specifics of your situation.

#### References

- Mjoen G, Hallan S, Hartmann A, Foss A, Midtvedt K, Oyen O, et al. Long-term risks for kidney donors. Kidney international. 2014 Jul;86(1):162-7.
- Muzaale AD, Massie AB, Wang MC, Montgomery RA, McBride MA, Wainright JL, et al. Risk of end-stage renal disease following live kidney donation. JAMA: the journal of the American Medical Association. 2014 Feb 12;311(6):579-86.
- Lam NN, Lentine KL, Garg AX. End-stage renal disease risk in live kidney donors: what have we learned from two recent studies? Current opinion in nephrology and hypertension. 2014 Nov;23(6):592-6. Pub
- Kasiske BL. Outcomes after living kidney donation: what we still need to know and why. American journal of kidney diseases: the official journal of the National Kidney Foundation. 2014 Sep;64(3):335-7.
- Gill JS, Tonelli M. Understanding rare adverse outcomes following living kidney donation. JAMA : the journal of the American Medical Association. 2014 Feb 12;311(6):577-9.
- Matas AJ, Wadstrom J, Ibrahim HN. Kidney donation and risk of ESRD. JAMA: the journal of the American Medical Association. 2014 Jul 2;312(1):92-3.
- 7. http://www.transplantmodels.com/esrdrisk/

Note: This information is the opinion of the Living Donor Community of Practice (LDCOP) of the American Society of Transplantation. The LDCOP is a group of health care professionals and researchers who specialize in living kidney donation. The LDCOP's recommendations are meant to offer you helpful information, but you may find opinions from other groups or organizations that are helpful to you, too.