

**WANTED: SPARE KIDNEY**

A while back, a Vancouver peewee hockey team learned that its coach, Stephen Gillis, needed a life-saving kidney transplant.

Unfortunately, the number of patients needing kidneys is far greater than the number of organs available through donation. Mr. Gillis was on a five-year waiting list. But he learned he could get a transplant faster if he could find his own kidney donor. So his players created a video and posted it on social media.

“Our coach needs our help,” they said. “Help us find a donor.”

LIVING DONORS

In Canada, most organs come from deceased donors. But ‘living donors’ can also donate kidneys. Most people only need one kidney, so they can donate the other one.

Many people stepped forward to offer Mr. Gillis a kidney. However, the coach has a rare blood type. None of the potential donors was a match – until Michael Teigen came along.

DID YOU KNOW?

Living donors can provide liver as well as kidney transplants. Our bodies only have one liver, but up to 50 percent of it can be transplanted. The donor’s remaining liver and the recipient’s transplanted liver portion grow until normal liver function is restored.

Mr. Teigen used to work with Mr. Gillis. The moment when he told his friend that he would give him a life-saving kidney was recorded on video. Mr. Gillis sobbed and embraced his donor. He chose to make that video public, and it went viral.

“I’m hoping now we can use this story to sign up people to become organ [donors] and save the lives of others,” he said.

THE NEED FOR MORE DONORS

The shortage of donated organs is a worldwide problem. Globally, there are over 135,000 solid organ transplants performed annually. Yet that represents less than ten percent of the need. In Canada, 2979 life-changing transplants took place in 2016. However, there were 4333 patients on the waiting list.

“About 250 people die waiting for an organ transplant every year in Canada,” says Amber Appleby, Director of Organ and Tissue Donation and Transplantation for Canadian Blood Services.

About 90 percent of Canadians support organ donation. Online registering is easy and quick. Yet less than 20 percent of



Canadians register to become organ donors.

“I get why it’s not anyone’s favourite choice of conversation,” says Brent Dueck, a young father. He had a transplant 17 years ago and is now on the waiting list for another. Still, talking about donating organs and registering beforehand is better than raising the subject after someone dies and the family is in shock, he says.

GREEN SHIRT DAY

Logan Boulet’s parents knew what he wanted. The Humboldt Broncos hockey player died in a tragic April 2018 bus crash in Saskatchewan. Shortly before his death, Mr. Boulet had signed up to be an organ donor. After his death, six people received his organs.

That had a powerful effect. Two months after Mr. Boulet died, more than 150,000 people registered to become donors.

Mr. Boulet’s parents honour his memory by promoting organ donation. They started Green Shirt Day, a yearly tradition. (Green was the Broncos’ colour.) On April 7th, the date of their son’s death, they invite their Lethbridge, Alberta community to a public skate.

“We want people to be inspired to register and to have a conversation with their family about being an organ donor,” said Logan’s mother.

HOW A TRANSPLANT WORKS

Less than two percent of people die in a way that their organs can be transplanted. Generally, donors experience brain death – they have lost all brain function. Yet the heart keeps beating and blood still flows to other organs. If these organs are healthy, they can then be used in transplants.

The heart, liver, kidneys, lungs, pancreas, small intestine, eyes, bone, skin, and heart valves can all be donated. One donor can save up to eight lives, and benefit more than 75 people.

Organs are matched to recipients by blood type, height, and weight. How sick the recipients are, and how long they have been waiting for a transplant, are also considered. Once chosen, the recipient immediately meets the transplant team at the transplant centre. Meanwhile, surgeons remove, package, and send donor organs to the centre.

Recipients stay on anti-rejection drugs for life. Rejection is the body’s normal reaction to a foreign object – including a new

organ. But anti-rejection drugs trick the immune system into accepting the transplant.

The change in a patient’s health can be amazing. Someone can be “on a computer, complete life support, **ventilated**, [with] wires hanging inside and out of them” before a transplant, says James Breckenridge of the Canadian Transplant Association.

“When you see a person go from that to, within a week, walking and standing up and being bright pink colour and healthy, it’s an amazing miracle.”

PRESUMED CONSENT

Nova Scotia will soon address organ shortages by becoming the first province to adopt a policy of ‘presumed consent’. That means instead of registering to consent to organ donation, you are assumed to have given consent – unless you or your next-of-kin opt out.

Cindy Ryan knows how life-changing an organ transplant is. She received a liver in 2013 and again in 2015.

“So many things to be grateful for every day, and all because someone I’ll never have the honour to meet gave me the most generous gift of all – the gift of organ donation, the gift of life,” she says. ★

DEFINITIONS

VENTILATE: to provide air for breathing using machines



ON THE LINES

Answer the following in complete sentences:

1. Which two organs can be transplanted from a live person?

2. List at least four other organs that can be transplanted.

3. How many organ transplants are performed annually around the world?

4. How many transplants were performed in Canada in 2016?

5. How are donor organs matched with recipients? Explain.

6. Describe the organ transplant process.

7. How long does a transplant recipient need to take anti-rejection drugs for? Why is this necessary?

8. How does Nova Scotia plan to solve the donor shortage problem?



BETWEEN THE LINES

What if... there were no organ donors?

JUST TALK ABOUT IT

1. What reasons can you suggest to explain why there is a worldwide shortage of donated organs? Explain.
2. Would you consider registering to be an organ donor? Give reasons to support your position.
3. What is your understanding of Nova Scotia's planned 'presumed consent' to organ donation? For what reasons do you agree with this approach? For what reasons do you disagree? Explain.

ONLINE

Note: The links below are listed at www.lesplan.com/en/links for easy access.

1. Visit <https://organtissuedonation.ca/en> to find out more about how to register to be an organ donor.
2. Read the BBC article 'Life-saving kidney delivered by drone' at <https://www.bbc.com/news/technology-48132595>.
3. Find out more about how organ donation works in Canada at <https://globalnews.ca/news/5134948/organ-donation-process-canada/>
4. Watch the Mayo Clinic video 'What You Might Not Know About Organ Donation' at <https://www.youtube.com/watch?v=psOigFbiKPc> [1:23] ★

