

# Organ transplants drop dramatically during pandemic

■ Cite as: *CMAJ* 2020 June 22;192:E692-3. doi: 10.1503/cmaj.1095877

Posted on cmajnews.com on June 5, 2020

**H**ospitals are slowly resuming non-emergency procedures as outbreaks of coronavirus disease 2019 (COVID-19) wane across Canada. But for thousands of Canadians waiting for replacement organs, the pandemic continues to disrupt transplant operations and the supply of organs.

The slowdown of procedures to free up resources for patients with COVID-19 “delayed a number of living and deceased donations,” says Dr. Atul Humar, director of the transplant centre at Toronto’s University Health Network. “We’re turning down organs.”

Across Canada, most living donor kidney transplants have been postponed, except in exceptional circumstances, to ease pressure on hospitals and protect organ donors and recipients from COVID-19. But deceased donor transplants have also decreased sharply.

In Ontario, just 12 deceased donor transplants were performed in April this year, compared to between 32 and 47 in each of the previous five Aprils, according to the Trillium Gift of Life Network, which manages donations in the province. The network cautions that numbers of deceased donor transplants often fluctuate, so the drop may not be entirely due to the pandemic. However, other countries have seen similar declines, with deceased donor transplants falling by 90% in France and 50% in the United States during the pandemic.

Even as other procedures resume, hospitals are still postponing some transplants because of concerns that the immunosuppressed recipients could be at higher risk of complications or death if they contract COVID-19.

Meanwhile, the number of useable organs has fallen. Because of the potential



Canada’s organ supply wasn’t meeting demand before COVID-19. Now, it’s worse, say experts.

for disease transmission from donor to recipient, organs from people who died from COVID-19 aren’t useable, and all other donors must be carefully screened and tested. “Cases, where there was any concern, were deferred that in the past might have gone ahead,” says Dr. Sean Keenan, medical director for donation services at BC Transplant.

With more people staying home due to pandemic lockdowns, there have been fewer deaths due to car accidents and other trauma — although only a small proportion of donor organs come from people who die in accidents, says Dr. Prosanto Chaudhury, medical director of Transplant Quebec.

Humar says there are also signs that people suffering a stroke or heart attack

are avoiding going to the hospital because of COVID-19 fears. If they die at home, their organs are less likely to be useable for transplant, he explains.

Postponed operations and reduced supply of organs will mean longer waits for transplants, and Humar expects some patients may die while waiting. “It’s not a stretch to say any delay will lead to bad outcomes,” he says. Even before the pandemic, Canada’s organ supply wasn’t meeting demand. In 2018, 223 people died while on a waitlist for an organ transplant.

Now past the worst of the first wave of COVID-19 cases, hospitals are scheduling more transplants again. Dr. Darin Treleaven, chief medical officer for transplant at Trillium, says Ontario has a phased, colour-coded plan for resuming operations. The province has moved from the “red” stage of performing only the highest-priority transplants to “orange,” which allows transplants from younger deceased donors to recipients at lower risk of complications.

“Right now, we’re limiting our activity to the organs and recipients who have the best chance,” Treleaven explains. In the

next phase, the province will resume transplants for patients who may require longer hospital stays, living donor transplants, and transplants from older deceased donors.

Transplant Quebec is also “gradually seeing the numbers [of operations] rebound,” says Chaudhury. But until there are reliable treatments and vaccines for COVID-19, the pandemic will “continue to confer added risk to transplant recipients for some time to come,” he says.

**Brian Owens**, St. Stephen, N.B.