



Consensus guidance for organ donation and transplantation services during COVID-19 pandemic

The most current version of this document will reside on the [Organ and Tissue Donation and Transplantation professional education website](#).

Background

On March 12, an urgent teleconference meeting of the Organ Donation and Transplantation Expert Advisory Committee (ODTEAC) was held, bringing together donation and transplantation leaders from across the country. The aim of the meeting was to develop a consensus which can be used by provincial organ donation organizations and regional transplant and donation programs to guide the administration of organ and tissue donation and transplantation services in light of the COVID-19 pandemic. It is understood that each organization, program and jurisdiction will develop their own policies.

Because the situation is rapidly evolving, going forward, a teleconference will be held at least once a week to discuss and update the consensus guidance. These discussions and the consensus itself will continue to be informed by recommendations from Canadian Blood Services' advisory committees, Health Canada, Public Health Agency of Canada, WHO, provincial agencies, and international partners (including UK and Spain).

Key Considerations

Guiding principles

- Organ donation and transplantation is an essential life-saving and life-preserving medical intervention.
- Transplant recipients are, or are likely to become, immunocompromised and are at increased risk of more severe outcomes related to COVID-19.
- Recommendations must balance the incidence trends in provinces and territories, the risk posed to potential recipients who will become immunocompromised, and the risks of suspending or delaying transplantation.
- A consistent and principled approach for all jurisdictions is preferred.



Current level of risk

PHAC [has assessed](#) the public health risk associated with COVID-19 as **low** for the general population in Canada but this could change rapidly. At the time of this call, there were no known cases of transmission from donor to recipient in transplant or in transplant recipients.

However, there is an increased risk of more severe outcomes for Canadians:

- aged 65 and over
- with compromised immune systems
- with underlying medical conditions

People who are most likely to transmit COVID-19:

1. Those who live or have visited countries outside of Canada within the previous 14 days and show clinical symptoms compatible with COVID-19.
2. Confirmed donor or potential recipient cases of COVID-19 (for recovered patients, 2 swabs 24 hours apart confirms clearance).
3. Donors and potential recipients who have been exposed to a confirmed case within the previous 14 days and show clinical symptoms compatible with COVID-19. Exposure includes having shared the ICU or any other hospital unit with a confirmed case of COVID-19.

Modes of transmission:

1. Donor to recipient
 - a. droplet/respiratory spread
 - b. +/- viremia
2. Nosocomial
 - a. other patients, visitors, health care staff
 - b. aerosolized and potential surface contamination
 - c. community-acquired

Testing

1. COVID19 nasopharyngeal and oropharyngeal PCR assay is highly sensitive although there is no clear gold standard for comparison of swab efficacy.
 - a. Screening of symptomatic or asymptomatic cases is based on a one-time swab
2. Clearance of confirmed cases = 2 negative NP and oropharyngeal PCR swabs 24 hours apart
3. No practical viremia assay currently available for clinical use but may be available imminently



4. In the event of donors/potential recipients who live or have visited countries outside of Canada within the previous 14 days, but do not show clinical symptoms compatible with COVID-19, screening for SARS-CoV-2 will be performed.
5. In the event of donors who have been exposed to a confirmed case within the previous 14 days but do not show clinical symptoms compatible with COVID-19, screening for SARS-CoV-2 will be performed.

Consensus guidance (as of March 12, 2020, 16:00 EST)

Recommendations for ICU, OR and transplant services

1. Adult and pediatric intensive care units are asked to test all patients that meet the following criteria:
 - a. They are admitted to intensive care;
 - b. The presenting condition is an acute community-acquired respiratory infection of any kind, regardless of known or suspected causative pathogen and clinical features. This includes ECMO active or eligible cases.
2. All health care personnel involved in organ donation and transplantation services should be fit-tested for masks and have personal protective equipment training.
3. N95 masks should be required for all ICU and OR staff managing active donors and recipients.
4. Decisions to proceed with organ donation and transplantation is predicated on hospital capacity and resource considerations, and it is understood that it may be affected by provincial and facility incidence and severity of COVID-19

Recommendation for living donor programs

Based on a March 13 meeting of the chairs and co-chairs of the Kidney Transplant Advisory Committee and the Living Donation Advisory Committee and Canadian Blood Services OTDT leadership, it is recommended that:

All living donor kidney transplant programs in Canada should consider postponing living donor transplants for a minimum of six weeks on a case by case basis and/or until this issue has resolved.



Impacts to Canadian Blood Services Kidney Paired Donation and Highly Sensitized Patient Programs

In light of the current Covid-19 pandemic concerns, Canadian Blood Services leadership and the chairs and co-chairs of the Kidney Transplant Advisory Committee and the Living Donation Advisory Committee have assessed the current evidence and information available in this rapidly changing environment. With the goal of ensuring the safety of both living donors and transplant recipients the following decisions have been made:

1. **Highly Sensitized Patient (HSP) Program:**
The HSP registry will continue to operate and be available to the country. The decision to proceed with accepting a kidney offer will be made by local/provincial programs based on their hospital's current policies and processes for deceased donor organ transplantation during the Covid-19 situation.
2. **Kidney Paired Donation (KPD) Program:**
All donation and transplant surgeries currently scheduled in KPD chains (effective Monday March 16th) will be postponed effective for a minimum of 6 weeks. This action will minimize the possibility of exposing living donors, transplant candidates, and recipients to the Covid-19 virus during travel and in public places such as hospitals. Transplant programs are advised to **release all scheduled KPD surgeries** and inform donors and transplant candidates of the surgery post-ponements. Canadian Blood Services will provide programs with messaging that should be used when sharing this information with transplant candidates. The current situation will be monitored daily and emerging decisions/recommendations will be discussed with program medical advisors on a weekly basis and updated accordingly.

Recommendations for donor criteria

CRITERIA FOR DECEASED DONORS

1. All potential donors must be swab tested for COVID-19.
2. All potential donors who travelled outside Canada must wait 14 days before donation.
3. All symptomatic donors must have a negative swab test result.
4. A deceased donor is eligible to donate only if the swab test for COVID-19 was negative and have not travelled internationally in the previous fourteen days.
5. ICU/OR capacity allowing, a negative COVID 19 result must be available prior to proceeding.
6. All organ offers from programs such as in the United States where testing of donors has not occurred, will not be accepted.



CRITERIA FOR LIVING DONORS (IF TRANSPLANT IS NOT SUSPENDED)

1. All potential living donors must be swab tested twice for COVID-19, and one negative swab test result must occur within 24 hours of actual donation.
2. All potential living donors who travelled outside Canada must wait at least 14 days before donating (as per Health Canada's *Measures to Address the Potential Risk of Transmission of the novel coronavirus responsible for COVID-19 by Human Cells, Tissues and Organ Transplantation*).
3. Potential living donors should undertake 21 days of home quarantine prior to surgery, with quarantine starting after returning from travel and initiating self-isolation.
4. A living donor is eligible to donate only if they have twice tested negative for COVID-19 (at least one negative test must be within 24 hours of actual donation) and who have not travelled outside of Canada in the previous 21 days.
5. Living donor transplants are considered deferrable if it is in the best interest of the donors and patients except in the case of medical urgency for a transplant candidate.

Update on Impact to Blood Supply

Blood components are a vital resource supporting health care in Canada. Canadian Blood Services, in collaboration with our provincial and territorial partners, continues to monitor the impact of COVID-19 on the supply of these resources and will keep you apprised of the blood situation as it evolves.

Attachments

1. Name and affiliation of participants on March 12, 2020 teleconference.