

Coronavirus (SARS-CoV-2) causing COVID-19: Information for donation and transplant professionals - Version 5 dated 26-Mar-2021

Knowledge about COVID-19 is rapidly evolving with advice and publications regarding the disease continually being updated. The guidance in this document will evolve due to changing circumstances e.g. community prevalence of viral infection, viral test accessibility, and intensive care unit and hospital capacity.

Clinicians within the organ donation and transplantation sector should ensure that information utilised is in its most up to date form. This information should be read in conjunction with the [Coronavirus Disease 2019 \(COVID-19\) Communicable Disease Network of Australia \(CDNA\) National guidelines for public health units](#) . Further links to national guidance are provided at the end of this document.

The donor risk assessment interview includes questions about travel and occupation (healthcare workers with direct patient contact) that is relevant to assessing epidemiological risk for COVID-19. In addition, it should be ascertained whether the donor has ever been tested or diagnosed with COVID-19, or has been in close contact with a person known to have confirmed or suspected COVID-19.

Routine testing of deceased donors

Routine COVID-19 (SARS-CoV-2) virus screening should be undertaken in all deceased donors, generally within 72 hours of donation (although a negative test undertaken earlier in the same hospital admission may suffice in the absence of subsequent development of clinical features suggestive of COVID-19).

Testing should be conducted as follows:

- Combined nose and throat swab (PCR test), and
- Endotracheal aspirate* (PCR test)

*COVID-19 tests may be negative in the incubation period of up to 14 days. Diagnostic sensitivity is improved by testing lower respiratory tract samples in addition to upper respiratory tract samples. Broncho-alveolar lavage is not currently recommended owing to the higher risk of aerosol generation.

Where possible obtain the COVID-19 (SARS-CoV-2) PCR results prior to proceeding with donation.

In donors where COVID-19 is NOT suspected, probable or confirmed, donation can proceed without prospective PCR results being available, noting that access to timely PCR testing is currently variable.

In a suspected or probable case of COVID-19, only proceed to organ retrieval and transplantation once negative PCR results are received (donation work up can continue). Obtain advice from an infectious disease physician if PCR results are negative but there is a strong clinical suspicion of COVID-19 infection and no other cause can be identified.

If prior infection (e.g. >28 days since COVID-19 diagnosed, clinical features fully resolved, and two negative respiratory tract SARS-COV-2 PCR results taken >24 hours apart), it may be safe to proceed to donation although information is limited at present. Consider only after discussion with an infectious disease physician and when the need for transplantation is urgent.

NOTE: Testing of donors is solely for the purpose of improving safety in transplantation and does not infer any suspicion of COVID-19 infection in these patients. Unless COVID-19 is suspected on epidemiological or clinical grounds, additional precautions to those usually employed for acquiring respiratory samples in standard, non-COVID-19 intensive care patients are NOT required. Specifically, there is no need for patient isolation or the use of non-standard ICU PPE in ongoing care of these patients. Handling of clinical specimens is as for all PC2 level organisms, as determined by WHO recommendations current at September 2020

<https://www.who.int/publications/i/item/diagnostic-testing-for-sars-cov-2>

Exclude as deceased donors:

- Use of organs from a donor with current PCR positive test is contraindicated*
- If the donor has prior COVID-19 infection, consult an infectious disease physician before proceeding[#]

* defined by the CDNA national guidelines as “positive to a validated specific SARS-CoV-2 nucleic acid test or has the virus identified by electron microscopy or viral culture”.

[#] Clearance of infection is defined currently on the basis of European Centre for Disease Prevention and Control (ECDC) Technical Report (2020) Novel coronavirus (SARS-CoV-2) accessed 23 November 2020: www.ecdc.europa.eu/sites/default/files/documents/COVID-19-Discharge-criteria.pdf. The definition for a cleared case of COVID-19 is at least two upper respiratory tract (URT) samples negative for SARS CoV2 RNA testing collected ≥24 hours apart (ECDC 2020). These are collected ≥7 days following symptoms or >3 days following fever resolution or >14 days if asymptomatic illness (ECDC 2020).

Routine testing of living donors

If a potential living donor has acute respiratory infection symptoms, donation should be delayed until symptoms have resolved even if the test is negative. Only in time critical circumstances, and where the transplantation team has appropriately considered epidemiological and clinical risks, should transplantation proceed prior to resolution of acute respiratory infection symptoms.

It is also recommended that routine testing of living donors (generally kidney donation) is undertaken for SARS-CoV-2 (virus causing COVID-19), preferably within the 48 hours prior to donation:

- Combined nose and throat swab (PCR test)

Obtain the PCR result prior to proceeding with donation.

Routine testing of recipients prior to transplantation

It is also recommended that routine testing of recipients is undertaken for SARS-CoV-2 (virus causing COVID-19) preferably occurs within the 48 hours of transplantation for recipients of living donor organs and also for recipients of deceased donor organs shortly prior to transplantation, if possible:

- Combined nose and throat swab (PCR test)

For intended recipients of living donor organs a negative result should be obtained prior to proceeding. For recipients of deceased donor organs, where possible obtain the PCR result prior to proceeding with transplantation although this should be at the discretion of the transplant team in time constrained circumstances.

Recipients (or their delegates) should be questioned to ascertain epidemiological risk and clinical features for COVID-19 prior to proceeding with transplantation. Where there is suspicion for recipient COVID-19 infection negative PCR results should be obtained prior to proceeding with transplantation. Careful consideration should be given to recipients who are at epidemiological risk and may be in the incubation

period of COVID-19 where PCR tests may be negative.

Reporting suspected or confirmed cases of donor derived COVID-19 in transplant recipients

In the event of a suspected or confirmed case of donor derived COVID-19 in a recipient the local Donation Agency should be immediately contacted and any other state/territory reporting requirements undertaken. In addition, a notification should be submitted to the Vigilance and Surveillance Expert Advisory Committee (VSEAC) of the Organ and Tissue Authority (OTA), which may be made through your DonateLife State Medical Director or by contacting “saen@donatelife.gov.au”.

Information sources

- American Society of Transplantation. SARS-CoV-2 (Coronavirus, 2019-nCoV): Recommendations and guidance for organ donor testing. 5 October 2020. Available at:
[https://www.myast.org/sites/default/files/Donor%20Testing_100520_revised_ReadyToPostUpdated 10-12.pdf](https://www.myast.org/sites/default/files/Donor%20Testing_100520_revised_ReadyToPostUpdated%2010-12.pdf)
- Communicable Disease Network of Australia (CDNA) COVID-19 national guidelines. Available at:
<https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm>
- Public Health Laboratory Network (PHLN) guidance document for testing for COVID-19. Available at:
<https://www1.health.gov.au/internet/main/publishing.nsf/content/Publications-13>
- TTS. Guidance on Coronavirus Disease 2019 (COVID-19) for Transplant Clinicians Montréal, Canada: The Transplantation Society; 2020 [updated 8 June 2020; cited 2020. Available from:
<https://tts.org/23-tid/tid-news/657-tid-update-and-guidance-on-2019-novel-coronavirus-2019-ncov-for-transplant-id>