

Coronavirus (SARS-CoV-2) causing COVID-19:

Information for donation and transplant professionals - Version 4 dated 27-11-2020

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 testing should be undertaken in all deceased donors, before proceeding with donation in certain cases as described below, and generally within 72 hours of donation for all other cases:

- Combined nose and throat swab (PCR test)
- Endotracheal aspirate* (PCR test)
- Blood (serology clotted) tube (for retrospective serology testing)

*Broncho- alveolar lavage is not currently recommended owing to the higher risk of aerosol generation.

NOTE: 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.

Where possible obtain the PCR results prior to proceeding with donation.

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>

Decision to proceed with donation and transplantation

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

- Donors in whom **COVID-19 is NOT suspected, probable or confirmed** – donation can proceed without prospective PCR test results being available, noting that access to timely PCR testing is currently variable.
- In a **suspected case of COVID-19** only proceed to organ retrieval and transplantation once negative PCR test results are received (donation workup can continue until this time).

A **suspected case** is a patient satisfying epidemiological **AND** clinical criteria, according to CDNA criteria, available at: <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm>

If it is not possible to obtain PCR test results, do not proceed in a suspected case.

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.

Obtain advice from an **Infectious Disease physician** where PCR tests are negative, there is a strong clinical suspicion of COVID-19 infection, and no other cause is identified.

Exclude as deceased donors:

- If **confirmed COVID-19 positive*** – do not work up for donation if known infection; stand down case if positive result obtained as part of donor workup.
* 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”.
- If **probable case of COVID-19** – A person with fever ($\geq 38^{\circ}\text{C}$) or history of fever (e.g. night sweats, chills) OR acute respiratory infection (e.g. cough, shortness of breath, sore throat) AND who is a household contact of a confirmed case of COVID-19, where testing has not been conducted.
- If **COVID-19 is suspected due to presence of severe bilateral community-acquired pneumonia** and no other cause is identified (irrespective of COVID-19 PCR test results).
- If **prior infection** (e.g. >28 days since COVID-19 diagnosed and clinical features fully resolved), 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. 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) <https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-Discharge-criteria.pdf>. Accessed 23 November 2020. 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

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:

- Nose and throat swab (PCR test)
- Blood (for retrospective serology testing)

Obtain the PCR results prior to proceeding with donation.

Routine testing of recipients prior to transplantation

NOTE: 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:

- Nose and throat swab (PCR test)
- Blood (for retrospective serology testing)

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 results 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 a notification should also be made to the Vigilance and Surveillance Expert Advisory Committee (VSEAC) of the Organ and Tissue Authority (OTA) in addition to any immediate state and territory reporting requirements. This notification to the national system 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>