

# COVID-19 rapid guideline: renal transplantation

NICE guideline

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[www.nice.org.uk/guidance/ng178](https://www.nice.org.uk/guidance/ng178)

## Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

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## Overview

This guideline covers children, young people and adults who need or who have had a kidney transplant, and people who are donating a kidney (live donors). It also advises transplant and referring centres on how to run their services while keeping them safe for patients, donors and staff during the COVID-19 pandemic. Kidney transplants improve life expectancy and quality of life, and cost less than dialysis in the long term, so providing effective and safe services will benefit patients and make the best use of resources.

On **19 August 2020**, we added recommendations for regional networks on responding to changes in local prevalence of COVID-19. We aligned recommendations for donors and recipients with our COVID-19 guideline on arranging planned care in hospitals and diagnostic services.

NICE has also produced [COVID-19 rapid guidelines on chronic kidney disease and dialysis service delivery](#).

Follow the usual professional guidelines, standards and laws (including those on equalities, safeguarding, communication and mental capacity), as described in [making decisions using NICE guidelines](#).

This guideline is for:

- health and care practitioners
- health and care staff involved in planning and delivering services
- commissioners

The recommendations bring together:

- existing national and international guidance and policies
- advice from specialists working in the NHS from across the UK. These include people with expertise and experience of treating patients for the specific health conditions covered by the guidance during the current COVID-19 pandemic.

We developed this guideline using the [interim process and methods for developing rapid guidelines on COVID-19](#) in response to the rapidly evolving situation. We will review and update the

recommendations as the knowledge base develops using the interim process and methods for guidelines developed in response to health and social care emergencies.



# 1 Leadership, planning and service organisation

1.1 Regional renal networks should work with NHS commissioners and NHS Blood and Transplant to manage the renal transplant pathway and use a network approach to supporting deceased and living donor transplantation. This includes:

- ensuring that there are COVID-19-secure sites or areas for:
  - transplant recipient and donor assessment
  - transplantation and donation
  - follow-up after transplantation
  - ongoing care for all patients with a transplant
- reviewing assessment pathways for transplant recipients and living donors
- considering alternative sites for parts of the pathway (while following [Human Tissue Authority guidance for transplant centres considering using different premises](#)).

1.2 Regional renal networks should work with NHS commissioners and NHS Blood and Transplant to:

- communicate and collaborate with NHS England and NHS Improvement regional teams and local directors of public health to determine the current prevalence of COVID-19 in local communities
- respond to local and national information on COVID-19, including weekly COVID-19 surveillance reports from Public Health England
- adapt processes so that services can be stepped up or down as needed according to COVID-19 prevalence. [19 August 2020]

1.3 Regional renal networks, transplant centres and non-transplanting centres should work together to develop local policies outlining the testing and self-isolation strategies needed if local transmission rates of SARS-CoV-2 increase.

[19 August 2020]

- 1.4 Before re-opening or expanding a transplant programme, centres should be confident that:
- appropriate internal and external governance arrangements are in place, including arrangements for data collection and reporting
  - they can meet normal service specification requirements on staff, facilities and equipment
  - they have access to rapid turnaround testing for SARS-CoV-2
  - they can care for transplant recipients and donors in COVID-19-secure areas during inpatient stays
  - they and the associated non-transplanting centres can carry out assessment and follow-up, minimise risk (see [communication and minimising risk](#)), and provide COVID-19-secure areas as needed.
- 1.5 Transplant centres should discuss plans to re-open, expand or transfer patients to another centre with:
- NHS Blood and Transplant (taking account of [NHS Blood and Transplant Kidney Advisory Group guidance on re-opening of transplant programmes](#))
  - NHS commissioners
  - associated non-transplanting centres
  - other transplant centres (as appropriate).
- 1.6 Transplant centres should tell patients and living donors (and their families and carers, as appropriate) about their re-opening and expansion plans, and discuss transfers with them.
- 1.7 Transplant centres should review donors and patients on the waiting list, taking account of the risks and benefits for them in the context of COVID-19. Discuss this with each donor and patient and their families and carers (as appropriate). Make decisions as part of a multidisciplinary team, and in conjunction with NHS Blood and Transplant and NHS commissioners.

- 1.8 Transplant and non-transplanting centres should make arrangements to use local services for investigations where possible.
- 1.9 Transplant and non-transplanting centres should use remote phlebotomy services to minimise face-to-face contact.
- 1.10 Transplant and non-transplanting centres should consider SARS-CoV-2 testing for patients on the waiting list who do not have symptoms of COVID-19, in line with local policies.
- 1.11 Transplant and non-transplanting centres (as appropriate) should tell NHS Blood and Transplant and the Renal Registry about transplant recipients and patients on the waiting list who have COVID-19.
- 1.12 If testing capacity is available, transplant and non-transplanting centres (as appropriate) should offer SARS-CoV-2 testing to frontline staff who do not have symptoms of COVID-19, in line with local policies.



## 2 Transplant recipients

2.1 For patients who have had a kidney transplant:

- Review the advice on shielding in [UK government guidance on shielding and protecting people defined on medical grounds as extremely vulnerable to COVID-19](#) with individual patients and their families and carers (as appropriate). Explain how it applies to them, taking into account their particular circumstances and risks.
- Explain that the guidance for them may change in the future, as a result of advice from their primary care team, their specialists, or changes in government guidance.
- Advise the patient and their families and carers (as appropriate) about attending appointments and how to seek help if they are unwell (see [communication and minimising risk](#)).
- Ensure the patient has been added to the central shielding list and their GP is aware.
- Follow the recommendations in [UK government guidance on infection prevention and control for COVID-19](#) on using personal protective equipment (PPE) when caring for people who are shielding.

2.2 For patients who are stable on their immunosuppressant regimen, assess whether it is safe to do less frequent blood tests for routine monitoring. Discuss any planned changes with the patient and their families and carers (as appropriate).

2.3 Prescribe usual quantities of medicines to meet the patient's clinical needs. Prescribing larger quantities of medicines may put the supply chain at risk.

2.4 If patients develop respiratory symptoms or a fever, consider other possible infective and non-infective causes as well as COVID-19. Be aware that patients having immunosuppressant treatments may have atypical presentations of COVID-19. For example, patients taking prednisolone may not develop a fever.

2.5 Think about modifying the immunosuppressant regimen for patients with COVID-19. The [British Transplantation Society and the Renal Association have published guidance on the management of transplant recipients diagnosed with](#)

or suspected of having COVID-19.

## 3 Transplant donors

### Deceased donors

- 3.1 For advice on COVID-19 screening and assessment in potential deceased donors, follow [NHS Blood and Transplant Kidney Advisory Group guidance on re-opening of transplant programmes](#).

### Living donors

- 3.2 Transplant specialists should talk to potential donors about:

- the implications of kidney donation in the context of COVID-19 and how risks can be mitigated
- the delay to transplantation if they contract COVID-19
- the importance of avoiding infection.

For further information, see:

- sections 1 and 2 of [NICE's COVID-19 rapid guideline on arranging planned care in hospitals and diagnostic services](#)
  - [British Transplantation Society and NHS Blood and Transplant guidance for clinicians on consent for solid organ transplantation in adults, children and young people and living organ donation in the context of COVID-19. \[amended 19 August 2020\]](#)
- 3.3 For donors who are self-isolating because they have known or suspected COVID-19, defer donations until they have been symptom-free for at least 28 days and have a negative nasopharyngeal swab test result for SARS-CoV-2.
- 3.4 For donors who are self-isolating because they have been in close contact with someone with COVID-19, defer donations for at least 28 days from the first day of isolation and until they have a negative nasopharyngeal swab test result for SARS-CoV-2.
- 3.5 Tell donors and members of their household to follow comprehensive social-

distancing and hand-hygiene measures for 14 days before the transplant.

[amended 19 August 2020]

3.6 Discuss with donors whether they should also self-isolate for 14 days before admission. Include in the discussion:

- their individual risk of contracting COVID-19 and likelihood of a poorer outcome if they do
- the current local prevalence of COVID-19
- the delay to transplantation if they contract COVID-19.

Make a shared decision about the need for 14-day self-isolation based on this discussion. [19 August 2020]

3.7 Tell all donors to:

- have a nasopharyngeal swab test for SARS-CoV-2 no more than 3 days before admission, with the results available beforehand
- self-isolate from the day of the test until admission. [19 August 2020]

3.8 Assess donors for COVID-19 before scheduling the transplant, on the day before admission and on admission:

- Assess them for symptoms of COVID-19.
- Check their history of social distancing and any possible contact with people who might have COVID-19.
- Conduct rapid turnaround nasopharyngeal swab testing for SARS-CoV-2 if a test has not been done in the 3 days before admission or if the results are not available.
- Conduct a respiratory assessment.

Discuss beforehand how the assessments will be done, for example, by telephone or video consultation to minimise face-to-face contact. [amended 19 August 2020].

3.9 Do not start the donation until the donor and recipient have negative swab test results for SARS-CoV-2.

- 3.10 Be aware that a negative result does not definitely rule out infection and must be interpreted in the context of other assessments. Do not start the donation if the donor or recipient is likely to have COVID-19 despite a negative test result.

## 4 Patients being considered for kidney transplant

4.1 Transplant specialists should discuss the risks and benefits of transplantation in the context of COVID-19 with patients and their families and carers (as appropriate). For further information, see:

- sections 1 and 2 of [NICE's COVID-19 rapid guideline on arranging planned care in hospitals and diagnostic services](#)
- [British Transplantation Society and NHS Blood and Transplant guidance for clinicians on consent for solid organ transplantation in adults, children and young people and living organ donation in the context of COVID-19. \[amended 19 August 2020\]](#)

4.2 For patients on the kidney transplant waiting list who have received a letter telling them they are at high risk of severe illness from COVID-19:

- Review the advice on shielding in [UK government guidance on shielding and protecting people defined on medical grounds as extremely vulnerable to COVID-19](#) with individual patients and their families and carers (as appropriate). Explain how it applies to them, taking into account their particular circumstances and risks.
- Explain that the guidance for them may change in the future, as a result of advice from their primary care team, their specialists, or changes in government guidance.
- Advise the patient and their families and carers (as appropriate) about attending appointments and how to seek help if they are unwell (see [communication and minimising risk](#)).
- Follow the recommendations in [UK government guidance on infection prevention and control for COVID-19](#) on using personal protective equipment (PPE) when caring for people who are shielding.

4.3 If patients on the kidney transplant waiting list need dialysis, see the [NICE rapid guideline on dialysis service delivery](#) for guidance on minimising their risk of contracting COVID-19.

4.4 For patients on the kidney transplant waiting list who have symptoms of

#### COVID-19:

- suspend them from the waiting list, and do nasopharyngeal swab testing for SARS-CoV-2
- if the test is negative, assess the likelihood that they may have COVID-19 before returning them to the waiting list (because a negative result does not definitely rule out infection)
- if the test is positive, assess whether they are well enough to return to the waiting list when they have:
  - recovered from COVID-19
  - been symptom-free for at least 28 days
  - had a negative swab test result for SARS-CoV-2.

4.5 Discuss with patients who have been scheduled for a living donor transplant the importance for them and their household members of self-isolating for 14 days before the transplant if they can. Include in the discussion:

- their individual risk of contracting COVID-19 and likelihood of a poorer outcome if they do
- the current local prevalence of COVID-19
- the delay to transplantation if they contract COVID-19.

Make a shared decision about self-isolation with patients and their families and carers (as appropriate). [19 August 2020]

4.6 If patients who have been scheduled for a living donor transplant or their household members do not self-isolate, tell them to follow comprehensive social-distancing and hand-hygiene measures for 14 days before the transplant. [19 August 2020]

4.7 Tell patients who have been scheduled for a living donor transplant to:

- have a nasopharyngeal swab test for SARS-CoV-2 no more than 3 days before admission, with the results available beforehand

- self-isolate from the day of the test until admission. [19 August 2020]

4.8 For patients who have been scheduled for a living donor transplant and who need dialysis in the 14 days before their transplant, do this in a COVID-19-secure area.



## 5 Care at the time of the transplant

- 5.1 Transplant centres should review induction and immunosuppression regimens, taking into account the overall immunosuppression burden for patients in the context of COVID-19.
- 5.2 If possible, admit patients receiving a deceased donor kidney earlier than usual, to allow time for COVID-19 assessment before transplant and to minimise cold ischaemia time. [amended 19 August 2020]
- 5.3 Assess patients for COVID-19 on admission for their transplant (and the day before for patients who have been scheduled for a living donor transplant):
- check their history of social distancing and any possible contact with people who might have COVID-19
  - conduct rapid turnaround nasopharyngeal swab testing for SARS-CoV-2 if a test has not been done in the 3 days before admission or if the results are not available (see recommendation 4.7)
  - conduct a respiratory assessment. [amended 19 August 2020]
- 5.4 Do not routinely request chest CT scans to screen for COVID-19 in patients with no symptoms.
- 5.5 The transplant or immunosuppression should not start until the patient has a negative nasopharyngeal swab test result for SARS-CoV-2. [NHS Blood and Transplant Kidney Advisory Group has given guidance on swab testing in its guidance for re-opening or expansion of kidney transplant programmes and COVID-19.](#)
- 5.6 Be aware that a negative result does not definitely rule out infection and must be interpreted in the context of other assessments. Do not start the transplant or immunosuppression if the patient is likely to have COVID-19 despite a negative test result.
- 5.7 If patients need dialysis after transplantation, do this in a COVID-19-secure area.

- 5.8 See sections 5 and 6 of [NICE's COVID-19 rapid guideline on arranging planned care in hospitals and diagnostic services](#) for recommendations on providing care for transplant recipients and donors during their hospital stay and after leaving hospital. [19 August 2020]

## 6 Communication and minimising risk

6.1 Communicate with patients, potential living donors, their families and carers, and support their mental wellbeing to help alleviate any anxiety they may have about COVID-19. Signpost to sources of information, support groups (including NHS Volunteer Responders) and government guidance. For example:

- [UK government guidance on the mental health and wellbeing aspects of COVID-19](#)
- [Kidney Care UK COVID-19 guidance for patients with kidney disease](#)
- [National Kidney Federation COVID-19 information and advice for patients](#)
- [Give a kidney COVID-19 FAQs](#)
- [NHS Blood and Transplant coronavirus update](#)
- local kidney patient organisations.

6.2 Advise all patients:

- not to stop or change any medicine unless advised to by their healthcare professional
- to keep a list of the medicines they take and the conditions they have, to give to healthcare staff if they need treatment for COVID-19
- to attend scheduled appointments or for dialysis, even if they are shielding
- to seek help in an emergency as normal
- to contact their specialist team promptly if they are unwell.

6.3 Minimise face-to-face contact by:

- using telephone, video or email consultations whenever possible
- cutting non-essential face-to-face appointments
- contacting patients via text message, telephone or email
- using electronic prescriptions rather than paper

- using different methods to deliver prescriptions and medicines, for example, pharmacy deliveries, postal services, NHS Volunteer Responders or introducing drive-through pick-up points for medicines.

6.4 If patients or potential living donors need to attend face-to-face appointments, blood tests or other investigations, ask them and their families and carers (as appropriate) to help reduce the risk of contracting or spreading COVID-19 by:

- following relevant parts of government advice on social distancing (this differs across the UK)
- coming to the appointment alone
- having only 1 person accompany them if they cannot come alone
- avoiding public transport if possible.

6.5 Minimise time in the waiting area by:

- careful scheduling
- encouraging patients to arrive at the scheduled time (not too early)
- texting or phoning patients when you are ready to see them, so that they can wait outside, for example, in their car
- providing a 'clean route' through the hospital or clinic
- delivering treatment promptly
- ensuring prescriptions are dispensed rapidly.

6.6 Tell patients and their families and carers (as appropriate) that if they think they have COVID-19 they should contact the [NHS 111 online](#) coronavirus service and seek advice from their hospital specialist team as soon as possible. In an emergency they should call 999.

## 7 Patients known or suspected to have COVID-19

- 7.1 When patients with known or suspected COVID-19 have been identified, follow appropriate [UK government guidance on infection prevention and control for COVID-19](#). This includes recommendations on using personal protective equipment (PPE), patient transfers, and options for outpatient settings.
- 7.2 If a patient not previously known or suspected to have COVID-19 shows symptoms at presentation, follow [UK government guidance on investigation and initial clinical management of possible cases](#). This includes information on testing and isolating patients.
- 7.3 If COVID-19 is later diagnosed in a patient not isolated from admission or presentation, follow [UK government guidance on management of exposed healthcare workers and patients in hospital settings](#).

## 8 Healthcare workers

- 8.1 Healthcare workers with known or suspected COVID-19, or who live in a household in which another person is known or suspected to have COVID-19, should self-isolate and arrange to be tested in line with local protocols. They should only return to work in accordance with [UK government's guidance \(COVID-19\) on management of staff and exposed patients or residents in health and social care settings](#). [amended 19 August 2020]
- 8.2 If a healthcare professional needs to self-isolate, ensure that they can continue to help if they are well enough to do so by:
- enabling telephone or video consultations and virtual attendance at multidisciplinary team meetings
  - identifying patients who are suitable for remote monitoring and follow-up and those who are vulnerable and need support
  - carrying out tasks that can be done remotely.
- 8.3 Support staff to keep in touch as much as possible, to support their mental wellbeing.
- 8.4 Provide all staff with visible leadership and supportive messaging, to maintain morale.
- 8.5 Take account of the information on the [NHS Employers website](#) about good partnership working and issues to consider when developing local plans to combat COVID-19.

## Update information

**19 August 2020:** We added recommendations for regional networks in section 1 on determining changes to local prevalence of COVID-19 in order to adapt services as appropriate. We aligned recommendations for live donors and recipients in sections 3 and 4 with NICE's COVID-19 rapid guideline on arranging planned care in hospitals and diagnostic services.

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