

UKKA guidance on the care of vulnerable children and adults with kidney disease in response to the current rise in measles cases

In response to a rise in measles cases since late 2023, the [UK Health Security Agency \(UKHSA\) has issued high-level guidance on strategies to protect vulnerable patient groups](#).

The UKKA now applies this guidance for specific situations which occur during the care of people with kidney disease. The applied guidance for people with solid organ transplants and those preparing to receive solid organ transplants was prepared by the BTS which we replicate here. Applied guidance for other groups was prepared by the UKKA.

This guidance was created by a subgroup of the former UKKA COVID Committee*. The urgent need to generate and disseminate this guidance has precluded the use of formal guideline methodologies. The UKKA acknowledges a lack of evidence in this area and ongoing uncertainty about possible outcomes in people with kidney disease. Therefore, this is pragmatic guidance that does not override clinician responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian. Words like “recommend”, “suggest”, or “advise” do not confer special meaning regarding the strength of supporting evidence. Further versions of this guidance may become available as evidence develops.

The measles virus is very contagious. Measles has an R-number (reproduction number) of 15-20, which means 15-20 secondary (new) cases from each case in an unvaccinated population. By comparison, SARS-CoV-2's R-number in a non-immune population was around 3. We therefore encourage renal clinicians to fully engage with their local virologists if measles cases occur within your patient groups, particularly when there has been in-person contact with renal services (e.g. at face-to-face outpatient clinics, dialysis centres or in-patient settings).

The UKKA recommends

- a. That patients are informed that there is a current increase in measles cases across the country so that they are able to reduce contact with possible cases and make informed decisions about vaccination. Template patient information letters are available here [for people receiving immunosuppression for a kidney transplant or autoimmune disease](#) and [for people with kidney disease receiving in-centre haemodialysis treatment](#).
- b. That serological testing for measles IgG status should be offered, at the next routine face-to-face outpatient appointment for patients in any of the groups below, in at least those who do **NOT** have documented evidence of full vaccination against measles **OR** who have never had a positive IgG antibody test. However, immunity to measles may wane especially in immunosuppressed groups of patients. Therefore, where possible, and according to an assessment of local risk, units may choose to test all patients in the listed vulnerable patient groups for current measles IgG status regardless of previous vaccination status or previous measles IgG status.

- i. Patients about to start or are already receiving immunosuppression treatment for autoimmune conditions.
- ii. Patients who are receiving dialysis treatment who have previously received significant cumulative immunosuppression for either autoimmune disease or previous transplantation.
- iii. Patients who have already received a kidney, kidney pancreas or kidney liver transplant and who are currently on immunosuppression.
- iv. Patients who are already waitlisted, or in work-up for listing, for transplantation.

The advice that follows concerns establishing the immune status of each of these groups and advising regarding vaccination.

If such a patient under your care reports a measles exposure, contact your local [Health Protection Team](#), contact details including in and out-of-hours phone numbers are listed. This will enable appropriate risk assessment of the index case (and therefore the nature of exposure your patient may have had) and support with your risk assessment for post-exposure prophylaxis with intravenous immunoglobulin.

i. FOR PATIENTS ON OR REQUIRING IMMUNOSUPPRESSION FOR AUTOIMMUNE KIDNEY DISEASE

As there is limited evidence in this area, there is a lack of certainty about precise groups who may be at most risk from severe infection with measles. Given the initial lack of evidence, the writing group suggests that those who are severely immunosuppressed as defined by the [UK Health Security Agency, Annexe 2, p. 49](#).

FOR THOSE RECEIVING IMMUNOSUPPRESSION FOR AUTOIMMUNE DISEASE FOR THE FIRST TIME

- 1. For patients without prior immunosuppression exposure with a new diagnosis of native kidney autoimmune disease requiring significant immunosuppression who have documented evidence of previous complete measles vaccination or who have a positive measles IgG status.**

No further action needed as part of routine care.

- 2. For patients without prior immunosuppression exposure with a new diagnosis of native kidney autoimmune disease requiring significant immunosuppression who have no documented evidence of previous complete measles vaccination or do not have a positive measles IgG status.**
 - a. Where a delay in immunosuppression is possible without patient harm,** offer MMR vaccination to the patient and their immediate family (if family members are also unvaccinated). The recommended vaccine course in adults is two doses given four weeks apart. For children and young people under 18 years of age, one vaccine is offered, followed by a further assessment of serology and a further vaccine offered in the absence of seroconversion.

If patients make an informed choice of not accepting clinical recommendation to complete vaccine course and/or for family members to be vaccinated, document risk



versus benefit discussion and patient decision before planned immunosuppression start.

- b. Where a delay in immunosuppression is not possible due to organ threatening disease,** administration of a live MMR vaccine is likely to be contraindicated in majority of this patient population. The eligibility and safety of using live vaccines should be re-assessed if there are planned reductions in immunosuppression intensity or discontinuation of immunosuppression. Guidance on the level of immunosuppression at which a live vaccine is contra-indicated can be found in [chapter 6 of the green book](#). *For such patients, encourage vaccination of family members where not already completed.*

FOR PATIENTS ALREADY RECEIVING IMMUNOSUPPRESSION TREATMENT FOR AUTOIMMUNE DISEASE

- 3. For patients with longstanding autoimmune kidney disease who are already receiving immunosuppressive therapy, who have documented evidence of vaccination or immunity as evidenced by positive measles IgG status:**

No further action needed as part of routine care.

For individuals treated with intravenous immunoglobulin, their measles IgG result will be positive. No further action is required, unless the intravenous immunoglobulin is stopped, at which point measles IgG should be re-checked.

- 4. For patients with long-standing autoimmune kidney disease who are already receiving immunosuppression who do not have documented evidence of vaccination or immunity as evidenced by positive measles IgG status:**

Administration of a live MMR vaccine is likely to be contraindicated in the majority of this patient population. The eligibility and safety of using live vaccines should be re-assessed if there are planned reductions in immunosuppression intensity or discontinuation of immunosuppression. [Please see the green book chapter 6](#).

For such patients encourage vaccination of family members where not already completed.

ii. FOR PATIENTS RECEIVING DIALYSIS

- 5. There is no current evidence base for guidance in patients who are receiving haemodialysis or peritoneal dialysis.**

In the absence of evidence, clinicians may wish to suggest that patients who have previously received significant immunosuppression for autoimmune disease or for previous transplantation should be tested for immunity to measles by IgG antibody test and that guidance should be followed as for the above groups who are currently receiving immunosuppression.

It is routine UK practice to offer MMR vaccination to children receiving dialysis, after consulting [chapter 6 of Green Book](#) for other contraindications to live. Catch-up vaccination for adults receiving dialysis who did not have childhood MMR could be considered.

Should an outbreak occur on a dialysis unit, renal ward or in a clinic, liaise with local IPC. Guidance will be updated as evidence emerges. NHSE guidance on control can also be found at [NHS England](#)



» [Guidance for risk assessment and infection prevention and control measures for measles in healthcare settings.](#)

Recommendations for staff caring for vulnerable children and adults with kidney disease:

The UKKA recommends that units refer to the guidance contained in the [UKHSA measles guidance document](#) p.37 in consultation with their own occupational health departments.

iii. FOR SOLID ORGAN TRANSPLANT RECIPIENTS (see BTS website)

- 6. For currently immunosuppressed patients including solid organ transplant recipients who have documented evidence of vaccination or immunity as evidenced by positive measles IgG status:**

No further action needed as part of routine care.

- 7. For currently immunosuppressed patients including solid organ transplant recipients who do not have documented evidence of vaccination or immunity as evidenced by positive measles IgG status:**

Administration of a live MMR vaccine is likely to be contraindicated in the majority of this patient population. The eligibility and safety of using live vaccines should be re-assessed if there are planned reductions in immunosuppression intensity or discontinuation of immunosuppression ([please see chapter 6 of the green book](#)).

For such patients encourage vaccination of family members where not already completed.

iv. FOR TRANSPLANT WAIT LISTED PATIENTS

- 8. For patients who are about to be immunosuppressed (eg: already wait-listed or about to be wait-listed for organ transplantation) who have documented evidence of vaccination or positive measles IgG status:(children and young people will generally have 1 or 2 measles immunisations AND confirmation of positive measles IgG status):**

No further action is needed as part of routine care. Planned IS start (eg: receipt of an organ transplant) can proceed as necessary and additional testing after commencement of immunosuppression is not advised.

- 9. For patients who are about to be immunosuppressed (eg: already wait-listed or about to be wait-listed for organ transplantation) who do not have documented evidence of vaccination or immunity as evidenced by positive measles IgG status.**

Offer MMR vaccination to the patient and their immediate family (if family members are also unvaccinated). The recommended vaccine course in adults is two doses given four weeks apart. For children and young people under 18 years of age - one vaccine is offered, followed by assessment of serology and a further vaccine in the absence of seroconversion.

If patients make an informed choice of not accepting a clinical recommendation to complete vaccine course and/or for family members to be vaccinated, document the risk versus benefit discussion and patient decision before starting immunosuppression.

For patients making an informed choice to accept vaccination, an individualised risk-vs-benefit assessment and shared decision-making with the patient should inform whether commencement of



immunosuppression is delayed until after vaccination is complete (eg: suspension from organ transplant waiting list or delay to wait-listing/scheduled living donor transplant). For most patients, suspension from organ transplant waiting lists and/or delay to waitlisting or scheduled live donor transplant exclusively for the purpose of completing measles vaccination is unlikely to have an acceptable risk-vs-benefit ratio.

Information for families

Further information and advice on measles for children with kidney disease can be found via the infoKID (Information for parents and carers about children's kidney conditions) website [here](#).

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