

# Immunisation for adults pre-dialysis, on dialysis or pre-/post-kidney transplantation

Whenever possible vaccinations should be given prior to commencing dialysis or transplant.

The administration of non-live vaccines should not delay the transplantation process. The administration of live vaccines is contraindicated during the 4 weeks before transplant.

If a patient is active on the deceased donor list and requires a live vaccine – suspend them from list for 4 weeks post-vaccination.

The administration of live vaccines is also contraindicated post-transplant. Pre-transplant includes – in transplant work-up, waiting for live donor transplant, or on deceased donor list.

For children aged under 18 years, please refer to the Starship Clinical renal vaccination record for paediatric CKD.

Vaccine	Additional notes	Recommended schedule	Pre-dialysis	On dialysis	Pre-transplant	Post-transplant
<i>Haemophilus influenzae</i> type b Hib (Act-HIB/Hiberix)		<ul style="list-style-type: none"> <li>Administer one dose</li> </ul>	Recommended NOT FUNDED	FUNDED	FUNDED	FUNDED
Hepatitis A (Havrix)	Give on the advice of renal specialist or transplant team	<ul style="list-style-type: none"> <li>Administer two doses at least 6 months apart</li> </ul>	NOT FUNDED	NOT FUNDED	FUNDED	FUNDED
Hepatitis B (Engerix-B)	Give on the advice of renal specialist or transplant team  Check serology 4 weeks after 3rd dose: <ul style="list-style-type: none"> <li>if non-immune, seek advice from renal specialist or transplant team</li> </ul>	If pre-dialysis (20mcg) <ul style="list-style-type: none"> <li>Administer one 20mcg dose at each visit at 0, 1, 6 month intervals</li> </ul> If on dialysis or pre-/post-transplant (40mcg) <ul style="list-style-type: none"> <li>Coadminister two doses of 20mcg/mL (i.e. 40 mcg) at each visit at 0, 1, 6 month intervals</li> </ul> If accelerated schedule requested by specialist or transplant team pre-transplant e.g. active on deceased donor list(40mcg) <ul style="list-style-type: none"> <li>Coadminister two doses of 20mcg/mL (i.e. 40mcg) at each visit</li> <li>Administer three doses at 0, 1, 2 months</li> </ul>	Recommended NOT FUNDED	FUNDED	FUNDED	FUNDED
Herpes zoster Recombinant ZV (Shingrix)	Recommended for adults from the age of 18 years.	<ul style="list-style-type: none"> <li>Administer two doses, at least 2–6 months apart</li> </ul>	FUNDED <ul style="list-style-type: none"> <li>Aged 65 years</li> <li>Aged 18 years+ for those with end-stage kidney disease (CKD 4 or 5) or pre- or post- solid organ transplant</li> </ul>			

Vaccine	Additional notes	Recommended schedule	Pre-dialysis	On dialysis	Pre-transplant	Post-transplant
Human papillomavirus HPV (Gardasil 9)	Recommended for males and females 18–45 years of age inclusively	<b>If pre-dialysis, on dialysis, or pre-/post-transplant:</b> <ul style="list-style-type: none"> <li>Administer three doses at 0, 2, and 6 month intervals</li> </ul> <b>If accelerated schedule requested by specialist or transplant team pre-transplant (funded &lt;27 years), e.g. active on deceased donor list:</b> <ul style="list-style-type: none"> <li>Administer three doses at 0, 1, and 2 month intervals</li> </ul>	<b>FUNDED</b> Up to 27 years of age (standard or accelerated schedule)			
			<b>Recommended NOT funded</b> 27–45 years			
Influenza	Annually, during the funded Influenza Immunisation Programme  Two doses are recommended in the first year post-transplant but only the first dose is funded  Influenza vaccination is recommended but not funded for household and other close contacts of pre-dialysis, dialysis, pre- and post-transplant patients	<b>If pre-dialysis, on dialysis, or pre-transplant:</b> <ul style="list-style-type: none"> <li>Administer one dose annually</li> </ul> <b>If post-transplant:</b> <ul style="list-style-type: none"> <li>Wait until 3 months post-transplant unless at high-risk of infection:               <ul style="list-style-type: none"> <li>If at high risk of infection, e.g. during influenza epidemic, wait until 1 month post-transplant</li> </ul> </li> <li>Administer one funded dose annually               <ul style="list-style-type: none"> <li>In the first-year post-transplant a second purchased influenza vaccination can be administered 4 weeks later to maximise the person's immune response to the vaccine</li> <li>In subsequent years only one dose is required annually</li> </ul> </li> </ul>	FUNDED	FUNDED	FUNDED	FUNDED
Meningococcal A,C,W,Y (MenQuadfi)	Prescription required for second primary dose	<ul style="list-style-type: none"> <li>Administer two doses at least 8 weeks apart</li> <li>Schedule a precall for a booster dose every 5 years</li> </ul>	NOT FUNDED unless on immunosuppressive therapy for longer than 28 days	NOT FUNDED unless on immunosuppressive therapy for longer than 28 days	FUNDED	FUNDED
Meningococcal B 4CMenB (Bexsero)	Can be co-administered with any other vaccine	<ul style="list-style-type: none"> <li>Administer two doses 8 weeks apart</li> <li>Schedule a precall for a booster dose every 5 years †</li> </ul>	NOT FUNDED unless on immunosuppressive therapy for longer than 28 days	NOT FUNDED unless on immunosuppressive therapy for longer than 28 days	FUNDED	FUNDED
Pneumococcal PCV13 (Prevenar 13)	If Pneumovax23 has been administered before Prevenar 13, wait one year to give Prevenar 13	<ul style="list-style-type: none"> <li>Administer one dose</li> </ul>	Recommended NOT FUNDED	FUNDED	FUNDED	FUNDED

† Although the need for a booster dose after this vaccination schedule has not been established, it is recommended and funded for certain special groups (refer to Pharmac Schedule)

Vaccine	Additional notes	Recommended schedule	Pre-dialysis	On dialysis	Pre-transplant	Post-transplant
<b>Pneumococcal 23PPV (Pneumovax 23)</b>	Administer Pneumovax23 a minimum of 8 weeks after Prevenar 13	<p><b>If aged 18 years to under 60 years:</b></p> <ul style="list-style-type: none"> <li>Administer one dose</li> <li>Schedule a precall for the second dose in 5 years</li> <li>Schedule a precall for the third/final dose 5 years after second dose or at age 65 years, whichever is later</li> </ul> <p><b>If aged 60 years or older:</b></p> <ul style="list-style-type: none"> <li>Administer one dose</li> <li>Schedule a precall for second/final dose in 5 years</li> </ul>	Recommended NOT FUNDED	FUNDED	FUNDED	FUNDED
<b>Polio IPV (Ipol)</b>	Check immunisation history for a primary course of three polio containing vaccines	<p><b>If unsure of polio immunisation history</b></p> <ul style="list-style-type: none"> <li>Administer three doses with a minimum of 4 weeks between each dose</li> </ul>	FUNDED	FUNDED	FUNDED	FUNDED
<b>SARS-CoV-2 (COVID-19)</b>	<p>A third primary dose of mRNA-CV is recommended for severely immunocompromised individuals</p> <p>Third dose should be given 8 weeks after second dose</p> <p>See Immunisation Handbook in relation to timing for current/planned immunosuppressive therapies</p>	<p><b>If pre-dialysis, on dialysis, or pre-transplant:</b></p> <ul style="list-style-type: none"> <li>Administer vaccine doses following the recommended schedule for the available COVID-19 vaccine</li> </ul> <p><b>If post-transplant:</b></p> <ul style="list-style-type: none"> <li>Wait until 3 months post-transplant, unless earlier administration indicated by specialist</li> <li>Administer vaccine doses following the recommended schedule for the available COVID-19 vaccine</li> </ul>	FUNDED	FUNDED	FUNDED	FUNDED
<b>Tetanus/diphtheria/pertussis Tdap (Boostrix)</b>	Check immunisation history for a primary course of three tetanus/diphtheria containing vaccines	<p><b>If unsure of tetanus/diphtheria immunisation history</b></p> <ul style="list-style-type: none"> <li>Administer three doses with a minimum of 4 weeks between each dose</li> </ul> <p><b>If has a confident recollection of completed tetanus/diphtheria immunisation</b></p> <ul style="list-style-type: none"> <li>Administer one Tdap at age 45 years if less than four documented tetanus containing vaccine doses</li> <li>Administer one Tdap at age 65 years</li> </ul>	FUNDED	FUNDED	FUNDED	FUNDED

Vaccine	Additional notes	Recommended schedule	Pre-dialysis	On dialysis	Pre-transplant	Post-transplant
<b>Measles/mumps/rubella MMR (Priorix)</b>	Individuals born in 1969 or later who do not have two documented doses of MMR vaccine, or on the Advice of renal specialist or transplant team	<p><b>If less than two documented doses</b></p> <ul style="list-style-type: none"> <li>• Complete a documented course of two MMR doses</li> <li>• Administer up to two doses at least 4 weeks apart,<sup>a,b,c</sup></li> <li>• Doses as advised by renal specialist or transplant team</li> </ul>	FUNDED	FUNDED	FUNDED for individuals who meet the eligibility criteria CONTRAINDICATED from 4 weeks pretransplant	CONTRAINDICATED
<b>Varicella (chickenpox) VV (Varivax)</b>	Give on the advice of renal specialist or transplant team	<ul style="list-style-type: none"> <li>• Administer two doses at least 4 weeks apart<sup>a,b,c,d</sup></li> </ul>	Recommended NOT FUNDED	Recommended NOT FUNDED	FUNDED for individuals who meet the eligibility criteria CONTRAINDICATED from 4 weeks pretransplant	CONTRAINDICATED

a. Patients who have received immunoglobulin or other blood products may require time for passive antibodies to decrease prior to administration of live varicella and MMR vaccines. Refer to Table A6.1: Suggested intervals between

immunoglobulin product administration or blood transfusion and MMR or varicella vaccination in the current Immunisation Handbook.

b. Two or more live vaccines can be given at the same visit. However, when live vaccines are administered at different visits, a minimum interval of 4 weeks is required.

c. Live vaccines should not be given in the 4 weeks prior to transplant. If a patient is active on the deceased donor list and requires a live vaccine, suspend them from list for 4 weeks post-vaccination.

d. Two doses of varicella vaccine are funded for a household contact of a pre- or post-transplant patient who is not immune to varicella, where the household contact has no clinical history of varicella infection or immunisation.

**Call 0800 IMMUNE (0800 466 863) for clinical advice**