

Co-administration of vaccines for adults: a guide for immunisation providers

Vaccines are recommended throughout an individual's life to protect against severity and complications of vaccine-preventable diseases. An increasing number of vaccines are becoming available and are recommended for use in adults. Refer to the National Immunisation Program (NIP) schedule and NCIRS' immunisation schedules for all funded and recommended vaccines for adults.

The aim of this guide is to assist immunisation providers to identify vaccines that can be co-administered in people aged 18 years and older. While most vaccines can be co-administered with other vaccines at the same schedule point, separate injection sites should be used to ensure adequate immune response and reduce adverse events. This guide should be used in conjunction with the <u>Australian Immunisation</u> <u>Handbook</u> ('Handbook'), which provides detailed advice on vaccine dosage, administration, contraindications and precautions.

Immunisation providers should screen people before vaccination; obtain valid consent; and ensure that the correct equipment and procedures are in place, as per the Handbook. All vaccines administered should be reported to the Australian Immunisation Register.

Vaccine	Co-administration with other vaccines	Exception to co-administration and any recommended interval between vaccines	Further clinical considerations/ advice	Resources
Cholera	Yes, although not routinely recommended See 'Exceptions' column	• An interval of at least 8 hours is needed if receiving inactivated oral cholera vaccine and oral live attenuated typhoid vaccine on the same day. This is because the buffer in the cholera vaccine may affect how the capsules of oral typhoid vaccine move through the gastrointestinal tract.		Handbook cholera disease chapter
COVID-19	Yes		Co-administration of COVID-19 vaccine and another vaccine should occur in different limbs.	<u>COVID-19 clinical guidance</u>
Diphtheria-tetanus-pertussis (whooping cough)	Yes			 Handbook <u>diphtheria</u>, <u>tetanus</u> and <u>pertussis (whooping cough)</u> disease chapters <u>NCIRS fact sheet: Pertussis vaccines for Australians</u>



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Hepatitis A	Yes			Handbook hepatitis A disease chapter
Hepatitis B	Yes			 <u>Handbook hepatitis B disease chapter</u> <u>NCIRS fact sheet – Hepatitis B vaccines for Australians</u>
Human papillomavirus (HPV)	Yes			 <u>Handbook human papillomavirus disease chapter</u> <u>NCIRS fact sheet: Human papillomavirus vaccine for Australians</u> <u>NCIRS FAQs: HPV vaccines</u>
Influenza (flu)	Yes See 'Exceptions' column	 It is acceptable to co-administer Shingrix[®] with FluadQuad[®] on the same day if necessary. However, it is preferred to separate their administration by 5–7 days. 		 <u>Handbook influenza disease chapter</u> <u>ATAGI advice on seasonal influenza vaccines in 2023</u> <u>NCIRS fact sheet: Influenza vaccines for Australians</u> <u>NCIRS influenza resources</u>
Japanese encephalitis	Yes, for some vaccines See 'Exceptions' column	 Imojev[®] vaccine can be given at same time as yellow fever vaccine or MMR using separate syringes and injecting in separate limbs. An interval of at least 4 weeks is needed between Imojev[®] vaccine and another live parenteral vaccine if these cannot be administered on the same day. JEspect[®] vaccine can be given at the same time as hepatitis A vaccine, meningococcal ACWY and rabies vaccine using separate limbs. 	 Imojev[®] vaccine: No data on co- administration with other vaccines are available. Jespect[®] vaccine: Co- administration with some vaccines (including yellow fever vaccine) has not been assessed. 	 <u>Handbook Japanese encephalitis disease chapter</u> <u>CDNA advice regarding vaccination against Japanese encephalitis virus</u> <u>Japanese encephalitis virus (JEV) vaccination</u> <u>NCIRS FAQs: Japanese encephalitis</u>



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Measles-mumps-rubella (MMR)	Yes See 'Exceptions' column	An interval of at least 4 weeks is needed between MMR vaccine and another live parenteral vaccine (e.g. monovalent varicella vaccine) if these cannot be administered on the same day.		 Handbook <u>measles-mumps-rubella</u> disease chapters <u>NCIRS fact sheet: Measles vaccines for Australians</u> <u>NCIRS measles vaccination catch-up guide</u> <u>Catch-up immunisations</u>
Meningococcal ACWY	Yes			 <u>Handbook meningococcal disease chapter</u> <u>NCIRS resources: Meningococcal</u>
Pneumococcal	Yes			 <u>Handbook pneumococcal disease chapter</u> <u>ATAGI clinical advice on changes to recommendations for pneumococcal vaccines from 1 July 2020</u> <u>ATAGI clinical advice on changes to recommendations for the use and funding of pneumococcal vaccines from 1 July 2020</u> <u>NCIRS fact sheet: Pneumococcal vaccines for Australians</u> Immunisation Coalition PneumoSmart Vaccination Tool
Q fever	Not routinely recommended	Q fever vaccine is contraindicated for people who have a documented history of previous infection with Q fever or who have already received a Q fever vaccine.	 All people who are being considered for vaccination with Q fever vaccine must undergo serum antibody testing and skin testing before vaccination. People with a known allergy to eggs who want to receive Q fever vaccine should discuss this with an immunologist or allergist, or be referred to a specialised immunisation adverse events clinic. 	Handbook Q fever disease chapter



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Smallpox (for protection against mpox virus infection)	Yes See 'Exceptions' column		 Co-administration of Jynneos[®] vaccine and other live vaccines can be offered as an option, with appropriate counselling on the limitations of available evidence. ACAM2000[®] may be administered in some settings by those with specialised training. If administering this vaccine, refer to the <u>ATAGI</u> <u>clinical guidance on vaccination against monkeypox (mpox) for further advice.</u> 	 <u>ATAGI clinical guidance on vaccination against monkeypox</u> (mpox) <u>NCIRS FAQs: Mpox vaccines</u>
Typhoid	Yes, although not routinely recommended See 'Exceptions' column	• An interval of at least 8 hours is needed if receiving oral live attenuated typhoid vaccine and inactivated oral cholera vaccine on the same day. This is because the buffer in the cholera vaccine may affect how the capsules of oral typhoid vaccine move through the gastrointestinal tract.		Handbook typhoid disease chapter
Varicella (chickenpox)	Yes See 'Exceptions' column	 An interval of at least 4 weeks is needed between monovalent varicella vaccine or MMRV vaccine and another live parenteral vaccine (e.g. yellow fever vaccine) if these cannot be administered on the same day. 		Handbook varicella disease chapter



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Yellow fever	Yes, although not routinely recommended See 'Exceptions' column	• An interval of at least 4 weeks is needed between yellow fever vaccine and another live parenteral vaccine if these cannot be administered on the same day.	One Brazilian studyi suggested that co-administration of yellow fever and MMR vaccines on the same day resulted in lower seroconversion rates to the vaccine antigens than when the vaccines were given at least 4 weeks apart.	Handbook yellow fever disease chapter
Zoster (herpes zoster)	Yes See 'Exceptions' column	 It is acceptable to co-administer Shingrix[®] with FluadQuad[®] on the same day. However, separating their administration by 5–7 days should be considered due to the potential for an increase in mild to moderate adverse events if co- administered. An interval of at least 4 weeks is needed between Zostavax and another live parenteral vaccine if these cannot be administered on the same day. 		 <u>Handbook zoster (herpes zoster) disease chapter</u> <u>ATAGI advice on seasonal influenza vaccines in 2023</u> <u>Handbook table: Live shingles vaccine (Zostavax®) screening for contraindications</u> <u>NCIRS FAQs: (Shingrix® [RZV] and Zostavax® [ZVL])</u>

Further resources

- Australian Immunisation Handbook
- National Immunisation Catch-up Calculator
- NCIRS fact sheets, FAQs and other resources
- Specialist Immunisation Services

ⁱ Nascimento Silva JR, Camacho LA, Siqueira MM, et al. Mutual interference on the immune response to yellow fever vaccine and a combined vaccine against measles, mumps and rubella. *Vaccine* 2011; 29:6327-34.