Vaccinations in Rheumatology
Patient information

This information is for people with rheumatic disease (autoimmune conditions including certain types of arthritis and others such as lupus, muscle disease or vasculitis) to provide general information about vaccination. It does not provide specific advice for each condition or each vaccine.

For information on **COVID-19 vaccination for Rheumatology patients** see here.

Key message
Please get vaccinated.
It's a complex area, so will require discussion between you, your GP and rheumatologist. An infectious diseases specialist may need to be involved.

Benefits of vaccination?

- People with rheumatologic conditions such as rheumatoid arthritis, psoriatic arthritis and lupus are more susceptible to infection, due to the conditions but also because they are taking medicines that suppress the immune system.
- Infections may be more severe in people with these conditions.
- Receiving a vaccination for a virus makes you less likely to get infected or if you do get infected, then it will usually be a milder infection, with lower risk of requiring a visit to hospital.
- Many vaccines (e.g., the influenza vaccine) are free for rheumatology patients taking medication such as immune suppressing medications and for people with chronic conditions.

Are there risks with vaccinations?

- There is a small risk (less than 5 in 100) of a reaction (redness, itch, pain) at the injection site.
- The risk of more serious side effects is very low (less than 1 in 10,000).
- It is far more likely that the benefits will outweigh the risks.

What vaccines should I consider?

- It is important your vaccines are kept up to date, including influenza and pneumonia - more detail below.
- It's a tricky area, so you should talk to your general practitioner (GP) and/or rheumatologist about which vaccines are appropriate for you.

Are there vaccines to avoid?

"Live" vaccines should be avoided. Please discuss with your treating doctor. This is because live vaccines contain a small dose of weakened virus which can cause infection if the immune system is suppressed. For this reason, most vaccines are not live.

Common live vaccines in Australia:

Varicella (chicken pox) vaccine
Measles-mumps-rubella

For children: Rotavirus
For travellers:
Yellow Fever
Oral typhoid vaccine
BCG (Bacille-Calmette–Guérin) vaccine (Tuberculosis)
Japanese encephalitis vaccine

How about the varicella zoster (shingles) vaccine?

Varicella zoster (shingles)

Shingles is a disease caused by reactivation ("waking up") of the chickenpox virus. It causes painful fluid-filled blisters along the course of a nerve, e.g. on the trunk or in the eye. It is relatively common (1 in every 100 people) – especially in older people and in people with certain types of arthritis taking medication which suppresses the immune system.

Sometimes the pain is still there after the blisters go away. This is called "post-herpetic neuralgia" and is due to the virus damaging the nerve. This can be prevented with vaccination.

Shingrix is an inactivated (not live) vaccine

Type of herpes zoster vaccine	Safe with prednisolone, methotrexate and sulfasalazine	Safe with b/tsDMARDs*	Safe with other csDMARDs**	Cost
Shingrix - Inactivated vaccine (not live)	✓	✓	✓	Free for people: • aged ≥65yrs or • ATSI people ≥50yrs or • ≥18yrs at increased risk with immunocompromise or taking DMARDs (including methotrexate, azathioprine, biologics and JAK inhibitors). Speak to your rheumatologist to see if you qualify or see NIP – Shingles Factsheet for further details. Approx. $300 per dose (2 doses required $600 for the course) if not covered.

For more information, refer to the Australian Immunisation Handbook.

*b/tsDMARDs – biologic and targeted synthetic disease modifying anti-rheumatic drugs include the following medicines: abatacept, adalimumab, anakinra, baricitinib, certolizumab, etanercept, golimumab, guselkumab, infliximab, ixekizumab, rituximab, secukinumab, tocilizumab, tofacitinib, ustekinumab, upadacitinib.
**Other csDMARDs include the following medicines: hydroxychloroquine, leflunomide.

Because Shingrix vaccine is inactivated (not live) it is the preferred vaccine in people who are on immunosuppressive therapy as it can be given regardless of the other medicines being taken/used.

How about the influenza vaccine?

You are more vulnerable to severe influenza if you are taking a medication such as prednisolone or methotrexate, which suppresses the immune system. Please get the influenza vaccination every year.

Depending on your age, there are different types of influenza vaccine, but your GP will know which one to use. Influenza vaccine should not worsen your rheumatologic condition.

As influenza vaccine contains **killed** virus, it cannot give you the "flu". You therefore do not need to stop medication that suppresses your immune system. Some international guidelines recommend withholding methotrexate for 2 weeks after influenza vaccine to improve the efficacy of the vaccine. The influenza vaccine only contains 3-4 strains of the virus, so it won't protect you against every flu virus out there.

You should get influenza vaccine before the start of the flu season as protection is greatest in the first 4 months after vaccination. Discuss the timing with your GP or rheumatologist.

If a new influenza virus is detected, for example during an influenza pandemic, people who have lowered immunity (such as those with rheumatologic conditions) should receive 2 does of inactivated influenza vaccine at least 4 weeks apart, regardless of previous influenza vaccine.

How about the "pneumonia" or pneumococcal vaccine?

Again, if you are taking medication such as immune suppressing medications, which suppresses the immune system, you are more likely to get severe lung infection (pneumonia) from a bacteria called "Strep pneumonia". This can be prevented by the vaccine – which does not contain a live bacteria. You therefore cannot get pneumonia from it, nor do you need to stop rheumatology medication beforehand. Two different pneumococcal vaccines are available.

If you have never received the pneumococcal vaccine before, you should get the Prevenar-13 (13vPCV) vaccine first, and then, 2-12 months later, the Pneumovax-23 (23vPPV).

If you have received the pneumococcal vaccine (Pneumovax-23 or 23vPPV) before, we recommend the Prevenar-13 (13vPCV) vaccine 1 year after the Pneumovax-23 (23vPPV).

Travel vaccination

- There are lots of travel vaccines and which ones you need will depend on where you are going.
- Talk to your GP at least 6 months before travelling.
- If you are taking medication such as prednisone, MTX or a b/tsDMARD which suppresses the immune system, you may need to avoid "live" travel vaccines such as Yellow Fever.
- Some countries require the Yellow Fever vaccine to enter or leave. The strong recommendation is to avoid travelling to areas where Yellow Fever is common if on medication which lowers immunity. However, if you need to go, please discuss the risks of vaccination versus risk of the disease with your doctor.

Considerations around pregnancy and vaccination in newborn babies.

For mothers that receive immunosuppressing medicines such as TNFI's (other than certolizumab), the medicine can cross the placenta into the baby's bloodstream. As a result, your baby's immune system may also be suppressed, so live vaccines for your baby should be avoided until they are weaned.

Rotavirus can cause severe diarrhoea in babies. The rotavirus vaccine is the only live vaccine routinely given to babies less than 12 months old. Recent updates confirm rotavirus vaccine can be given to babies of mothers who have continued TNFIs* during pregnancy and in the first 6 months of life. Previous information had recommended it should be avoided in these children, current data suggests it is safe, and it can be given with precaution. There is an upper limit age at which children can receive the vaccine, and you should discuss this with your GP if your baby has missed doses. Most babies in Australia gets the rotavirus vaccine, so there's only a low chance your baby will be infected with rotavirus. If your baby does not have the rotavirus vaccine, you will need to discuss the implications (e.g. for childcare) with your GP and/or your Immunisation provider.
The other live vaccines (measles-mumps-rubella and varicella [chickenpox]) are given at 12 months of age or more.

*TNFI's include: adalimumab, certolizumab, etanercept, golimumab and infliximab.

Useful websites

https://www.health.gov.au/initiatives-and-programs/national-immunisation-program
https://www.health.gov.au/health-topics/immunisation
https://immunisationhandbook.health.gov.au
https://www.health.gov.au/resources/publications/national-immunisation-program-pneumococcal-vaccination-schedule-from-1-july-2020-clinical-decision-tree-for-vaccination-providers

Useful references for your GP are available on the ARA website here and at the following urls:

https://rheumatology.org.au/Portals/2/Documents/Public/Professionals/Vaccination%20Information/240916%20%20Vaccinations%20in%20AIRD%20for%20GPs%20and%20AHPs%20final.pdf?ver=2025-02-17-120126-550
https://rheumatology.org.au/Portals/2/Documents/Public/Professionals/Vaccination%20Information/240906%20Table%20of%20Vaccinations%20for%20patients%20with%20AIIRD%20JY.pdf?ver=2025-02-17-115814-383

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