

## Vaccination for adults with autoimmune inflammatory rheumatic diseases

This is the lay version of the EULAR recommendations for the vaccination of adults with autoimmune inflammatory rheumatic diseases. The original publication can be downloaded from the EULAR website: [www.eular.org](http://www.eular.org).

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### Introduction

Vaccines (also called vaccinations or immunisations) are a way of preventing infections before they happen. Vaccines help the immune system to recognise viruses and bacteria that cause disease and make defenses against them. Next time your immune system meets this type of infection again, it already has the defenses ready to deal with it.

There are two main types of vaccines: live and non-live (inactivated). Live vaccines contain weak versions and very small amounts of the bacteria or virus that cause the disease. Non-live vaccines contain killed bacteria or virus, or just parts of them. Non-live vaccines cannot cause disease, but they do not get such a good immune response, and they might need to be given more than once (sometimes called boosters).

Recommendations give advice to doctors and patients about the best way to treat and manage diseases. In 2011, EULAR published recommendations on vaccination for people with autoimmune inflammatory rheumatic diseases such as rheumatoid arthritis, lupus or sclerosis. These have now been updated to include new evidence. Doctors, health professionals and patients have worked together in a taskforce to develop these recommendations. The patients working on the team ensured that the patient point of view was included in the recommendations.

### What do we already know?

People with autoimmune inflammatory rheumatic diseases have weakened immune systems. Sometimes, it can be caused by the disease itself or because of the drugs they take, or both. Because of this, they are more likely to get infections than other people.

### What do the recommendations say?

Overall, there are six overarching principles and nine recommendations. Each recommendation is based on available scientific evidence or expert opinion. The more stars a recommendation has, the stronger (more) the evidence is and the more important it is that you and your doctor follow it.

The overarching principles say that your vaccination status should be checked every year to make sure you are up to date, and give you an opportunity to discuss any gaps with your doctor. Where possible, any vaccines should be given while your disease is in remission or stable, and before you start taking any immunosuppressive treatments, or medicines that affect your B cells. If you need a vaccine once you have started a B cell-depleting treatment, then it should be given at least 6 months after the last treatment, and more than 4 weeks before the next course starts. If you are taking steroids or DMARDs (disease-modifying anti-rheumatic drugs such as methotrexate), then it is fine for you to have non-live vaccines. Special care should be taken when considering a live vaccine in a person with an autoimmune inflammatory rheumatic disease. In general, live vaccines should be avoided if you are taking an immunosuppressive medicine, as they might cause an infection if your immune system is not working properly.

One star (\*) means it is a weak recommendation with limited evidence.

Two stars (\*\*) means it is a weak recommendation with some evidence.

Three stars (\*\*\*) means it is a strong recommendation with some evidence.

Four stars (\*\*\*\*) means it is a strong recommendation with a lot of evidence.

- **Most people with an autoimmune inflammatory rheumatic disease should have the 'flu vaccine.\*\*\***  
If you have an autoimmune inflammatory rheumatic disease, you are more at risk of getting flu (influenza) than other people. Some countries offer vaccines against types of seasonal or pandemic flu, and these work well in people with an autoimmune inflammatory rheumatic disease.
- **Most people with an autoimmune inflammatory rheumatic disease should have a pneumococcal vaccine.\*\***  
Pneumococcus is a type of bacteria that causes different types of infection. In people with autoimmune inflammatory rheumatic disease, it often causes lung infections (pneumonia). There are two different types of pneumococcal vaccine available, and either is fine to use.
- **You can follow the normal rules about when you need tetanus vaccine.\*\*\* / \***  
You can have the tetanus vaccine as often as healthy people. If you get a wound or cut and need a tetanus vaccine, make sure your doctor knows which medicines you are taking for your rheumatic disease. You may need a different type of tetanus vaccine if you are taking a type of medicine that decreases a type of immune cell called B cells.
- **If you are at risk of getting hepatitis A or B, you should be vaccinated. This includes booster or passive immunisation.\*\*\* / \*\***  
Hepatitis is more common in some countries. If you live in a country where it is common, or if you are travelling to an area where you might catch it, then you should be vaccinated. You may also be at risk if you work in a hospital, use intravenous drugs, are a man who has sex with men, or if you live with someone who has the infection.
- **If you are at risk of getting herpes zoster, vaccination can be considered.\*\*\***  
People with an autoimmune inflammatory rheumatic disease are more likely to get herpes zoster (shingles). There are two types of vaccines available: a live and non-live vaccine. In case of live vaccine, you might need a break from treatment to allow you to take the vaccine.
- **People with an autoimmune inflammatory rheumatic disease should avoid vaccination against yellow fever.\***  
Yellow fever is common in travel destinations such as South America and Africa, but people with an autoimmune inflammatory rheumatic disease should avoid taking this as it is a live vaccine, and could cause an infection if your immune system is weak. If you do need to protect yourself against yellow fever, then you might need a break from treatment to allow you to take the vaccine.
- **You can follow the normal rules about vaccination for HPV, though this may be more important if you have SLE.\*\***  
Human papilloma virus (HPV for short) has been linked with cancer of the cervix (the neck of the womb). Many countries have HPV vaccination programs. If you have an autoimmune inflammatory rheumatic disease, you can still take the HPV vaccine. Because HPV is more common in people with systemic lupus erythematosus (also called SLE or Lupus), it is especially important that you are protected.

- **Other healthy people living with a person with an autoimmune inflammatory rheumatic disease should stay up to date with their vaccinations, with the exception of oral polio, which should be avoided.\***

Anyone living with you can take live and non-live vaccines according to the normal rules in your country. This includes children you live with who are due to get the rotavirus vaccine. However, in this case you should avoid contact with their diapers (nappies) for at least 4 weeks. The only exception to this is the oral polio vaccine, which should be avoided in people living with someone else with an autoimmune inflammatory rheumatic disease.

- **If you are a new mother, and were treated with a biologic medicine during the second half of your pregnancy, you should delay giving your baby a live vaccine until they are at least 6 months old.\***

Biologic medicine (also called bDMARDs) can move from your blood to your baby while they are in your womb, and this might mean your baby's immune system is weak for several months after they are born. Your baby can have any non-live vaccines that are recommended, but it is best to wait until they are at least 6 months old until they get any live ones.

## Summary

Overall, the recommendations say that vaccines are important in people with autoimmune inflammatory rheumatic diseases. The recommendations advise people with an autoimmune inflammatory rheumatic disease of the steps they can take to protect themselves from infections. When you go for a vaccine you should always tell the doctor or nurse about your rheumatic disease and any medicines you are taking.

If you have any questions or concerns about vaccines, you should speak to your doctor.