

Are Vaccines Safe for People With Arthritis?

People with rheumatoid arthritis or lupus have special considerations when it comes to vaccinations.

Keeping your vaccinations up-to-date is especially important if you have rheumatoid arthritis (RA) or lupus. Not only do the immunosuppressive drugs used to treat these conditions increase your risk of getting an infectious disease such as the flu or pneumonia, they make it harder for your body to recover from these illnesses.

Yet only 38% of people age 65 and older with RA get vaccinated against pneumonia, and only 32% get a yearly flu shot, according to a 2003 study published in the *Journal of Rheumatology*. Part of this failure to follow standard vaccination recommendations may come from the fear that vaccination could cause problems for people with autoimmune disorders. When a person is vaccinated, the immune system responds by producing antibodies that offer protection against the disease. Because both RA and lupus involve a malfunction of the immune system, some experts have theorized that vaccination could be dangerous or ineffective for people with these conditions.

In fact, vaccines have been accused of causing everything from autism to multiple sclerosis to arthritis. Careful studies have found no cause-and-effect relationships, however, and people who are diagnosed with these disorders after vaccination would have developed them anyway. The rubella vaccine can cause a form of arthritis that may last for several weeks, but this type of arthritis goes away on its own and does not progress to RA or lupus.

Another concern is that vaccination might worsen RA or lupus. Many studies have looked at the effects of vaccination on lupus, and found that getting vaccinated does not worsen the disease. The effects of vaccina-

tion on RA have been studied less extensively, but the studies that have been performed have found no link. Some vaccines can cause fever or aches that may be confused with an arthritis flare-up, but these side effects go away on their own in a day or two and do not worsen arthritis.

Still, people with these conditions do have some special considerations when it comes to vaccination.

Although RA and lupus do not prevent vaccines from working, the medications used to treat them can. According to Robert Bollinger, M.D., a professor of infectious diseases at Hopkins, people who are taking high doses of corticosteroids or other disease-modifying drugs (such as more than 20 mg a day of prednisone) are considered to be immunosuppressed. If the immune system is suppressed, it is less able to produce antibodies in response to vaccination. In order for vaccination to work, people with RA and lupus should have their immunizations during times when their disease is well controlled with only low-dose medication (or no drugs at all).

A final concern is that vaccines might be dangerous for people with autoimmune disorders. Although most vaccines are safe for everyone, people who are immunosuppressed should not get vaccines that are made with live viruses or bacteria (see the inset box at right); a suppressed immune system could allow the microbes to spread unchecked through the body. This includes attenuated vaccines, in which the vaccine has been weakened but not killed.

Many vaccines are made with killed bacteria or viruses, or else employ a protein or a sugar extracted from a virus or bacterium. These types of vaccines are safe for everyone.

Safest Vaccines (Protein or Sugar)

Diphtheria
Haemophilus influenza B (HIB)
Hepatitis B*
Meningococcus
Pertussis (whooping cough)
Pneumococcus
Tetanus

Safe Vaccines (Killed Bacterium or Virus)

Anthrax (not available to the general public)
Cholera
Hepatitis A
Hepatitis B*
Influenza, injected
Plague
Polio
Rabies
Typhoid

Unsafe For Immunosuppressed People (Attenuated Live Virus)

Influenza, nasal spray (FluMist)[†]
Measles
Mumps
Rubella (German measles)

Most Unsafe For Immunosuppressed People (Live Bacterium)

BCG (tuberculosis)
Smallpox (not available to the general public)
Varicella (chicken pox)
Yellow fever

* Available in two forms: protein and killed virus.

[†]Not for use in people with RA or lupus.