

Our Best Shot: The Importance of Vaccines for Older Adults

Workshop Participant Quiz — Answer Sheet

1. **FALSE.** First of all, you can't guarantee that everyone around you is vaccinated, and you may end up exposed to a disease you are unprotected against. Secondly, you may then expose your loved ones and the people around you to the disease. By getting vaccinated, you protect those around you who may not have effectively developed immunity from a vaccine, or who are too young or too sick to get vaccinated. This is called herd immunity — or community immunity — and a great example is the pertussis vaccine that protects against whooping cough. Most older adults that get whooping cough won't experience severe symptoms if they get infected, but they are still contagious and can pass it to others — like babies who are at greatest risk of severe illness and even death from pertussis, but are too young to be vaccinated.
2. **FALSE.** All of the recommended vaccines protect against diseases that can be very serious, and can even lead to hospitalization and death. For example, influenza causes millions of illnesses each year, and 3,000 – 49,000 flu-related deaths and an average of about 226,000 hospitalizations. And while hospitalization and death are less common with shingles, about 1 in 3 adults will get shingles at some point. Of those who do get shingles, around 1 in 5 people will get postherpetic neuralgia, which is severe pain that can last for months to years.
3. **FALSE.** A higher level of immunity is caused by an infection, but it also comes with the possibility of serious complications from the disease. Vaccines are far safer than allowing — or even causing by intentional exposure — a person to get a disease. Natural is not always better.
4. **TRUE.** The U.S. has a rigorous process in place for the approval of new vaccines, and closely and constantly monitors safety once they are in use. You have likely heard rumors linking vaccine ingredients — like the mercury-based preservative that is used to prevent contamination in some vaccines — with autism. There is **NO LINK** between receiving vaccines and developing autism, and the original article that started these rumors has been proven to be fraudulent. The most common side effects from vaccines are soreness, redness, tenderness, or swelling where the shot was given. Low-grade fever, headache, and muscle aches may also occur. And in very few cases there are more serious side effects. The benefits of vaccines far outweigh the risks.

5. **FALSE.** Vaccines contain either a killed (inactivated) or weakened virus or bacteria that triggers the immune system to produce specific antibodies that will be there to defend the body from future infections, and keep you from getting ill. An inactivated vaccine can't cause an infection. Weakened vaccines may cause a mild infection — like a few spots with chickenpox — which is actually an indicator that the vaccine is working. Full-blown infections caused by vaccines are extremely rare.
6. **TRUE.** Adjuvants are ingredients that are added to some vaccines to help the body produce a strong enough immune response to protect against future infections. Aluminum gels or aluminum salts are in a number of vaccines and have been safely used as adjuvants for more than 70 years and aluminum is one of the most common metals (found in nature and present in food, air, and water). The amount found in vaccines is low, safe, and regulated by the FDA.
7. **FALSE.** Just because you haven't had a disease, doesn't mean you'll never get it. In fact, as your immune system declines with age, your risk grows. You don't wear seatbelts because you've been in a car crash, you wear them as a precaution. Don't wait to get a disease before you decide to get vaccinated.
8. **TRUE.** Most vaccines cannot completely prevent disease. For example, the flu vaccine reduces the rate of flu in the overall population by about 50% to 60%, and the shingles vaccine reduces the rate of shingles by around 50%. So while there's no guarantee that you'll be disease free after vaccination, for those that get sick after having been vaccinated, the illness is usually shorter and less severe, with fewer complications. For example, with shingles, the risk of post-herpetic neuralgia — severe pain after the rash clears — is reduced by around 90% with the vaccine.
9. **FALSE.** Your immune system is able to respond to millions of intruders — or antigens — every day. It can handle getting a vaccine AND fighting minor illnesses at the same time. If you are very sick, talk to your healthcare professional before getting vaccinated.
10. **FALSE.** It's actually just the opposite — it's risky to NOT get vaccinated if you have certain conditions like heart disease or COPD. These and other diseases and conditions can make it harder to fight off infection and with some chronic diseases, the complications of infection can be more severe. For example, getting the flu if you have heart disease increases your risk of heart attack, if you have diabetes it can raise your blood glucose to dangerous levels, and if you have COPD can lead to pneumonia and other serious respiratory illnesses.