OUR BEST SHOT:
The Truth About Vaccines for You and Your Loved Ones

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National Association of Area Agencies on Aging
Vaccines are one of the greatest success stories in modern medicine. Thanks to vaccines, polio no longer exists in the U.S., smallpox has been eliminated globally, and other serious diseases that were commonplace only a generation ago — such as measles, mumps, diphtheria, and tetanus — are becoming increasingly rare.

When the polio vaccine was introduced in 1955, grateful parents lined-up to get their children vaccinated against the crippling and deadly disease. Additional vaccines made more and more diseases a thing of the past, and we began to forget how serious they could be. Unfortunately, in recent years, misinformation and rumors about the safety and effectiveness of vaccines has been spreading — creating fear and doubt that has had serious consequences.
How Vaccines Work

Vaccines mimic natural infections — teaching your immune system how to deal with a bacteria or virus, but without causing illness. Vaccines contain a killed, weakened, or partial version of the bacteria or virus they are protecting against. It is extremely rare to get sick from a vaccine so despite what you may have heard, the flu vaccine doesn’t cause the flu!

Vaccines Protect Against Serious Diseases that Cause Disability and Death

VACCINES WILL PREVENT AN ESTIMATED

322 MILLION ILLNESSES
21 MILLION HOSPITALIZATIONS
732,000 DEATHS

among Americans born 1994-2013, over the course of their lifetimes.

Vaccines Prevent Outbreaks and Save Lives

Getting vaccinated not only keeps you safe, but can also keep your loved ones from getting sick. For example, although older adults don’t usually get whooping cough, they can carry the bacteria and expose others. Because infants are too young to be vaccinated against whooping cough, grandparents can help protect their little ones by getting vaccinated themselves and not spreading the disease.

Vaccines also play an important role in the community. People who get vaccinated protect those who are too young, too old, or too sick to be vaccinated themselves. The more people who are vaccinated, the lower the chance that the disease will spread. This is called “community immunity” or “herd immunity.”

Herd Immunity

Some of the population gets vaccinated

Contagious disease spreads through the population

Most of the population gets vaccinated

Spread of contagious disease is contained

1 in 2 infants who get WHOOPING COUGH are HOSPITALIZED and can even DIE

(CDC 2014)

(CDC 2017)
Science has Proven that Vaccines Don’t Cause Autism

Scientific studies continue to show that vaccines do not cause autism. The original article that sparked the fears and controversy years ago was shown to be fraudulent, and the lead author has lost his medical license. Since then, dozens of large studies of millions of children have found no evidence of a connection.

Specific concerns about the Measles, Mumps, &Rubella (MMR) vaccine are completely unfounded. The MMR vaccine is safe and does not cause autism. Still, because of all the misinformation, some people have become reluctant to vaccinate their children, and as a result, many diseases are experiencing resurgences. With measles for example, it is highly contagious and if exposed, an unvaccinated person has more than a 90% chance of getting the disease. So as the vaccination rates drop, the disease quickly reemerges and easily spreads through communities.

Vaccines can cause MINOR, but manageable, side effects like soreness, redness, or low-grade fever. People allergic to any of the vaccine ingredients can have a more severe reaction. But serious side effects of any kind are EXTREMELY RARE.

Mercury is No Longer Used in Infant Vaccines

Vaccines have never contained methyl-mercury — a toxic metal that can accumulate in the body and cause brain damage. Before 2001, some vaccines contained thimerosal — a preservative made of ethyl-mercury, which is safe. Even though thimerosal is safe, to prevent confusion, the FDA ordered that it be removed from childhood vaccines. The flu vaccine in multi-dose vials still uses it, although thimerosal-free versions are available.

Altering the CDC’s Recommended Vaccine Schedule is Dangerous

The timing of recommended vaccines for both kids and adults has been scientifically tested and carefully arranged to maximize the effectiveness of the vaccines and offer the best opportunity for protection.

People concerned about vaccinations sometimes spread out or delay the timing of when their kids are vaccinated. There is NO evidence that this provides any benefit. There IS evidence that it leaves kids and adults vulnerable to dangerous infectious diseases AND makes it more likely that they get infected and spread diseases to others.

Natural Immunity Beliefs are Dangerous

Exposing kids to diseases to allow them to “develop natural immunity” is not a safe choice. Infections come with the possibility of serious complications while vaccines let kids build immunity in a safe, controlled way. In this case, natural is not better.
Vaccines and Older Adults

Adults Still Need Vaccines

The immune system weakens with age, so older adults are more likely to be infected and develop complications from vaccine-preventable diseases — including long-term illness, hospitalization, and death. Immunity from some vaccines can decrease over time, which means booster doses are necessary to maintain protection. Also, some bacteria or viruses change over time making annual vaccination necessary.

Vaccines Work Even if They Don’t Completely Prevent a Disease

Some people may still get the disease they were vaccinated against, but they will typically be less ill and less likely to experience complications.

Skipping Vaccines is Even More Risky if You Have Serious Conditions

Chronic conditions like heart disease and respiratory illnesses, like COPD, can make it harder to fight off infection and make complications more severe. For example, flu increases your risk of heart attack if you have heart disease; can raise blood sugar to dangerous levels if you have diabetes; and can lead to pneumonia and serious respiratory problems if you have chronic lung disease.

Even if Your Doctor Doesn’t Bring it Up, You Still Need Vaccines

Most adults see more than one health care professional, and vaccine records may be scattered amongst them. Your health care professional may not know you are due for a vaccine or may forget to bring it up. That doesn’t mean you don’t need any vaccinations, so be sure to ask if you are up-to-date and use a wallet card or phone app to track which vaccines you have received and when.

### Vaccine Tracker

<table>
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<tr>
<th>Vaccine</th>
<th>Vaccine Type</th>
<th>Date</th>
<th>Next Dose Due</th>
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<td>Td booster</td>
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<td>Shingles</td>
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<td>Varicella (chicken pox)</td>
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<td>Pneumonia</td>
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