

Flu Vaccines Failing Seniors

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Story at-a-glance

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While turning 65 was associated with a significant increase in the rate of seasonal influenza vaccination, “no evidence indicated that vaccination reduced hospitalizations or mortality among elderly persons”

During the 2018 to 2019 flu season, the influenza vaccine failed to offer any protection more than half of the time, and for adults over 50, it was more or less useless, offering a mere 24% effectiveness rate against all influenza types

Health officials also frequently state that if you get an annual flu shot, it will lessen disease severity should you get infected with type A or B influenza, but previous research found only a reduction in initial headache complaints among those who had been vaccinated

WARNING!

This is an older article that may not reflect Dr. Mercola's current view on this topic. Use our search engine to find Dr. Mercola's latest position on any health topic.

Ever since the U.S. Centers for Disease Control and Prevention began recommending that all Americans 6 months of age and older get an annual flu shot, it's been touted as the best method of preventing influenza.

While it's true that influenza is a highly infectious airborne disease, controversy exists over the use of influenza vaccines, commonly known as flu shots, for its prevention, and this is particularly true for high-risk groups like seniors.

For starters, more than 80% of the respiratory influenza-like illness infections that occur during flu season are not actually caused by type A or type B influenza.¹ A flu shot, therefore, will not prevent the vast majority of respiratory infections caused by bacteria and other types of viruses during the flu season.

Further, there are hundreds of influenza viruses, and they're constantly changing, which means each year health officials must make an educated guess as to which strains are most likely to circulate in the upcoming flu season. The three or four type A and type B influenza viruses that are chosen are then added to that year's seasonal flu shot, with varying and often disappointing results.

It's also often stated that influenza vaccination reduces hospitalizations and deaths among the elderly, but research published in the Annals of Internal Medicine calls this into serious question.

Flu Vaccine Doesn't Reduce Hospitalizations, Death in Seniors

An observational study funded by the National Institute on Aging and conducted by researchers from the University of California, Berkeley, the University of California, Santa Cruz and Clemson University reviewed data from 170 million episodes of care and 7.6 million deaths among adults aged 55 to 75, from the year 2000 to 2014.

The goal was to determine the effectiveness of the influenza vaccine in reducing hospitalizations and deaths among elderly people in the study area in England and Wales, using a research design that reduced the possibility of bias and confounding.

While turning 65 was associated with a significant increase in the rate of seasonal influenza vaccination, the study's authors stated that "no evidence indicated that vaccination reduced hospitalizations or mortality among elderly persons."² The researchers concluded:

"Current vaccination strategies prioritizing elderly persons may be less effective than believed at reducing serious morbidity and mortality in this population, which suggests that supplementary strategies may be necessary."³

'Supplementary Strategies' Include Vaccinating Children

While stating that influenza vaccines did nothing to reduce hospitalizations and death rates among seniors, the researchers offered questionable "supplementary strategies" as a solution — namely increasing vaccination among other populations:

"Our findings raise questions ... about the overall effectiveness of a vaccination strategy that is limited to standard vaccines and focuses too much on elderly persons. Supplementary strategies, such as vaccinating children and others who are most likely to spread influenza, may also be necessary to address the high burden of influenza-related complications among older adults."⁴

However, it's important to note that flu shot effectiveness is typically low across all age groups, ranging from 10% during the 2004 to 2005 flu season to 60% during the 2010 to 2011 flu season. Further, in 10 out of 14 flu seasons between 2004/2005 and 2017/2018, overall influenza vaccine effectiveness was less than 50%.⁵

During the 2019 to 2020 flu season, the interim estimates released by the CDC state that the overall estimated effectiveness of seasonal influenza vaccine from October 23, 2019 to January 25, 2020 was just 45%.⁶

Likewise, during the 2018 to 2019 flu season, the vaccine failed to offer any protection more than half the time, and for adults over 50, it was more or less useless, offering a mere 24% effectiveness rate against all influenza types.⁷ Even the CDC stated, "... more effective influenza vaccines are needed."⁸

There are risks of side effects, as well, including among children. A 2009 U.S. study compared health outcomes for children between 6 months and age 18 who did and did not get annual flu shots over eight

consecutive flu seasons and found that children who had received inactivated influenza vaccinations had a three times higher risk of influenza-related hospitalization, with asthmatic children at greatest risk.⁹

This evidence suggests that annual flu shots may lead to reduced protection against influenza and even increase risks for coming down with influenza.¹⁰

Study Bias High Among Vaccine Studies in Elderly

The featured study is important, in part, because it attempted to eliminate bias that has been widespread among previous research into flu vaccines among the elderly.

For instance, a 2006 study found seniors who received influenza vaccines had a 44% reduced risk of dying during flu season compared to unvaccinated seniors, which sounds promising, until you learn that those who were vaccinated were also 61% less likely to die before the flu season ever started — a finding attributed to the "healthy user" effect.^{11,12}

"The reductions in risk before influenza season indicate preferential receipt of vaccine by relatively healthy seniors," the researchers noted. "In this study, the magnitude of the bias demonstrated by the associations before the influenza season was sufficient to account entirely for the associations observed during influenza season."¹³

A 2019 systematic review published in the journal *Vaccine* also found evidence of widespread bias. Out of 22 studies, 9% were found to be at moderate risk of bias, 59% were at serious risk of bias and 32% were at critical risk of bias. "For all-cause hospitalization outcomes, we found a wide range of results, mostly deemed at serious risk of bias," the researchers noted.¹⁴

Flu Vaccination's Dismal History Among Seniors

Despite the CDC's continued assurance that annual flu shots are the best bet for seniors to avoid getting infected with type A or B influenza, the product has a dismal history in terms of effectiveness. Research published in 2006 analyzed influenza-related mortality among the elderly population in Italy that was associated with increased vaccination coverage between 1970 and 2001.¹⁵

Researchers found that after the 1980s, there was no corresponding decline in excess deaths among the elderly, despite rising influenza vaccine uptake. According to the authors, "our study challenges current strategies to best protect the elderly against mortality, warranting the need for better controlled trials with alternative vaccination strategies."¹⁶

The Flucelvax vaccine introduced during the 2017-2018 flu season is grown in dog kidney cells rather than chicken eggs. Touted as a new-and-improved flu shot that would protect more people, U.S. Food and Drug Administration research found no significant difference between it and the conventional flu shot in protecting seniors.

While flu shots overall had only 24% effectiveness in preventing influenza-related hospitalizations in people aged 65 and older, the Flucelvax vaccine had an effectiveness rate of only 26.5% in that population.¹⁷

Health officials also frequently state that if you get the influenza vaccine, it will lessen disease severity should you get infected with type A or B influenza viruses. But a 2017 study by French researchers found

such claims not to be true. Looking at data from vaccinated and unvaccinated elderly patients diagnosed with influenza, all they found was a reduction in initial headache complaints among those who had been vaccinated:¹⁸

“Compared to non-vaccinated influenza patients, those who had been vaccinated had a slightly reduced maximum temperature and presented less frequently with myalgia, shivering and headache.

In stratified analyses, the observed effect was limited to patients infected with A(H3) or type B viruses. After adjusting by age group, virus (sub)type and season, the difference remained statistically significant only for headache, which was less frequent among vaccinated individuals ... Our findings reinforce the need for influenza vaccines providing better protection.”

Echoing other studies, a systematic review and meta-analysis published in The Lancet Infectious Diseases similarly stated, “Evidence for protection [from influenza vaccines] in adults aged 65 years or older is lacking.”¹⁹

Boosting Your Immune System to Ward Off the Flu

Natural killer (NK) cells are a specific type of white blood cell. They’re an important component of your cell-mediated (innate) immune system and are involved in both viral diseases and cancer. NK cells tend to lose functionality as you age, which explains why you may become more susceptible to influenza and other viral and bacterial infections as you get older.

Researchers discovered that with enough NK cells in your system, you will not contract influenza.²⁰ KLRD1 is a receptor gene found on the surface of NK cells, and the level of KLRD1 found in a person’s blood prior to exposure to the influenza virus was able to predict with high accuracy whether that individual would contract influenza.

People whose immune cells consisted of 10% to 13% NK cells did not get influenza while those whose levels fell below 10% did.²¹ Fortunately, you can counteract decline and boost your NK cells (no matter what your age), by doing the following — none of which involves getting an annual flu shot:

Get regular exercise — In one study, moderate exercise improved NK cell function in cancer patients.²²

Quit smoking — Quitting smoking will also help, as smoking impairs NK cell function.²³

Enzymatically modified rice bran (EMRB) — EMRB is produced by exposing rice bran fiber to enzymes isolated from the shiitake mushroom. In one 2013 study, a rice bran product called MGN-324 increased NK cell activity by as much as 84% in patients with multiple myeloma after three months of treatment.²⁵ In an earlier study, old mice injected with EMRB had a fivefold increase in NK cell activity within two days.²⁶

Cardamom — A relative of turmeric, known for its potent immune-boosting benefits, cardamom increases NK cell activity.²⁷

Black pepper — Like cardamom, black pepper has also been shown to enhance the cytotoxic activity of NK cells and promote healthy immune function.²⁸

Colostrum — Colostrum is milk produced within the first 24 to 48 hours of giving birth. Colostrum from cows is very similar to human colostrum, and colostrum products are typically derived from cows. The colostrum contains an array of immune and growth factors required by the offspring.

In a 2012 study on mice, oral administration of skimmed and concentrated bovine late colostrum was shown to activate the immune system and protect against influenza infection by boosting NK cell activity.²⁹

Another 2014 animal study concluded that, "Colostrum supplementation enhanced NK cell cytotoxicity and improved the immune response to primary influenza virus infection in mice." Colostrum-supplemented mice that did contract influenza also had less severe infection and a lower viral burden in the lungs compared to controls.³⁰

An earlier study, published in 2007, found treatment with oral colostrum for two months prevented influenza infection three times more effectively than influenza vaccination.³¹

Mushrooms — Mushrooms such as shiitake, maitake and oyster mushrooms, also boost NK cell activity courtesy of beta-glucans, a polysaccharide known for its immune-boosting and cancer-fighting activities.³²

Active hexose correlated compound (AHCC) — AHCC is a commercially available fermented mushroom extract that supports healthy immune function, primarily by enhancing NK cell activity. As noted in a paper published in the *Natural Medicine Journal*:³³

"Supplementation studies with AHCC have demonstrated positive effects on immune function in humans and animal models, including decreased tumor formation, increased resistance to viral and bacterial infection; enhanced NK cell activity ... increased T-cell proliferation, including altered T-cell activity; altered cytokine production ... increased nitric oxide release by peritoneal cells; and antioxidant and anti-inflammatory effects ...

Overall, AHCC has been suggested to enhance prognosis and quality of life in a variety of cancers, as well as to elicit potentially positive changes in cytokine production and lymphocyte populations — most notably increased NK cell activity."

Probiotics — Beneficial bacteria found in traditionally fermented foods also boost NK cell activity,³⁴ and those with low NK cell levels tend to experience greater benefits from probiotic supplementation than those with healthy levels of NK cells.

Ginseng — *Panax ginseng* augments NK cell activity and boosts cytokine production that lowers inflammation via a polysaccharide called ginsan.³⁵

Melatonin — Melatonin, a neurohormone produced by your pineal gland, is a well-recognized modulator of cancer risk that may also boost NK production. A 2005 paper discussed the immunoregulatory action of melatonin on your innate immune system, and that exogenous melatonin (melatonin supplementation) "augments NK cells and monocytes in both the bone marrow and the spleen with a latency of 7 to 14 days."³⁶

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