

Debunking Flu Vaccine Myths

CLAIM: *A John Hopkins scientist released a report on flu vaccine dangers in the **British Medical Journal**.*

Peter Doshi, **an anthropologist** (not a medical research scientist), published an **opinion piece** in the BMJ on May 16, 2013 stating “The vaccine might be less beneficial and less safe than has been claimed, and the threat of influenza appears overstated”.¹ The was **not a research article or a peer-review study**.

CLAIM: ***Flu vaccines after 2015** might be more damaging than taking a chance on getting the flu. The ingredient getting the most flack is called an **adjuvant**. The particular one involved is called **Squalene**, and has been linked to auto-immune disease side effects.*

Fluad* is a flu vaccine licensed in Nov 2015 which contains MF59 adjuvant, an oil-in-water emulsion of squalene oil. **Squalene is a naturally occurring substance found in the human body** (it is also found naturally in animals and plants). There is no compelling clinical evidence that adjuvants are causally related to any autoimmune diseases.⁷

***ARC does not use the Fluad vaccine.**

CLAIM: *Even when the vaccine is closely matched to the type of influenza that's prevalent, **flu vaccines are not effective**.*

Flu vaccine efficacy: The U.S. Flu Vaccination Efficacy Network assessed odds of PCR-confirmed influenza among vaccinated compared to unvaccinated enrollees at 5 U.S. sites. During the 2016-2017 flu season, flu vaccine reduced outpatient influenza visits by 42% for influenza A and B viruses and by 34% for influenza A/H3N2 viruses.⁶

Annual vaccination reduces mortality from influenza by 41%. Among those who had been vaccinated previously, mortality was reduced by 75%, but among those being vaccinated for the first time, the reduction in mortality was only 9%.⁸

CLAIM: *The **mercury** in flu vaccines is a strong immune depressant, making the individual more susceptible to catching the flu for several weeks after the vaccine* (see above “Flu Vaccine Efficacy”). *The mercury also over stimulates the brain for several years, and that activation causes Alzheimer’s and other degenerative diseases.*

Thimerosal is an ethyl mercury-based preservative used in multi-dose vials to prevent contamination.³ Thimerosal is cleared from the human body more quickly than the mercury found in certain kinds of fish, and is therefore less likely to cause harm.⁵ There is no evidence of harm caused by the low doses of thimerosal in vaccines except for minor reactions like redness and swelling at the injection site.⁵

Debunking Flu Vaccine Myths

CLAIM: *Influenza vaccines are approved for use in older people despite **lack of data demonstrating a reduction in serious complications** such as secondary pneumonia, hospitalization, and death.*

During the 2016-2017 flu season, flu vaccine reduced hospitalization for influenza A and B viruses by 30% among all adults, and by 37% among adults ≥ 65 years of age.⁶ Annual vaccination is associated with a reduction in mortality in older adults who have been vaccinated previously (hazard ratio 0.76) but not in those who received the vaccine for the first time.⁸

CLAIM: *An Australian study found that one in every 110 children under the age of five had **convulsions** following vaccinations in 2009 for H1N1 influenza.*

Vaccines can cause fevers, but febrile seizures are relatively rare after vaccination. Flu vaccine was not found to be associated with febrile seizures in a study that looked at 45,000 children aged 6 to 23 months who received a flu vaccine from 1991 through 2003.² Flu vaccine and the 2009 H1N1 flu vaccine was not found to be associated with febrile seizures in children during the 2009-2010 flu season.² Studies have detected a small increased risk of febrile seizures in young children following the flu shot in some flu seasons. The risk of febrile seizures has been highest in children 12-23 months of age and highest when the flu shot is given together with PCV13.²

CLAIM: *H1N1 vaccine was associated with a spike in cases of **narcolepsy** among adolescents.*

An increased risk of narcolepsy was found following vaccination with Pandemrix, a monovalent 2009 H1N1 influenza vaccine that was used in several European countries during the H1N1 influenza pandemic.⁴ Pandemrix was not licensed for use in the U.S. CDC reviewed data from the U.S. and found no indication of any association between U.S. licensed H1N1 or seasonal influenza vaccine and narcolepsy.⁴

References:

1. <http://www.bmj.com/content/346/bmj.f3037>
2. <https://www.cdc.gov/flu/protect/vaccine/febrile.htm>
3. <https://www.cdc.gov/flu/protect/vaccine/thimerosal.htm>
4. <https://www.cdc.gov/vaccinesafety/concerns/history/narcolepsy-flu.html>
5. <https://www.cdc.gov/vaccinesafety/concerns/thimerosal/index.html>
6. <https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2017-06/flu-03-ferdinands.pdf>
7. <http://www.sciencedirect.com/science/article/pii/S0264410X15001309>
8. https://www.uptodate.com/contents/seasonal-influenza-vaccination-in-adults/print?source=search_result&search=flu%20vaccine&selectedTitle=1~150