

## HOW ONE NATUROPATHIC DOCTOR VIEWS THIS YEAR'S FLU VACCINATION

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As a naturopathic doctor, one of the prevailing tenets that I abide by in my profession is "First do no harm." I would like to address this in the context of this year's flu vaccination. In this article, I will discuss some of the issues surrounding influenza vaccination, and try to present a balanced, unbiased perspective.

Let's go to the CDC first. The CDC says that this year's flu vaccine is effective 50-60% of the time, and also that this vaccine is a very good match for this year's circulating viruses. This year's dominant flu strain appears to be a strain of H3N2, which has historically been associated with more severe flu's. The 2012 flu vaccine includes a 2009 H1N1 strain (that's the "swine flu"), a 2010 influenza b strain, and an H3N2 strain from 2011. (<http://www.cdc.gov/flu/about/season/flu-season-2012-2013.htm>)

There is also a strain named H3N2v, which started circulating in 2011, but was especially active over the summer of 2012, especially in Indiana and Ohio. About 300 cases were reported over the summer ([http://www.flu.gov/about\\_the\\_flu/h3n2v/index.html](http://www.flu.gov/about_the_flu/h3n2v/index.html)). This is also a swine flu that was passed over to humans. Non human- origin viral genomes mutate faster, which contributes to increased virulence.

[www.cbc.ca/news/technology/story/2009/04/27/virus-mutate.html](http://www.cbc.ca/news/technology/story/2009/04/27/virus-mutate.html)

Perhaps that is why this year's flu (as well as last year's flu) affected not only the elderly and immunocompromised, but also the young and vital as well.

When considering any vaccination, we need to look beyond just the individual, but look at the population as a whole. For a broader prospective, let's take a closer look at Rubella (as part of the MMR vaccination). Recommending against immunizing for Rubella puts a pregnant woman's fetus at risk of birth defects. Prior to rubella vaccination, many babies were born with severe neurological damage, including blindness, due to Rubella infected mothers. The same argument could be made for Pertussis (whooping cough). Getting a pertussis vaccination for people who are in contact with a baby under 6 months old is extremely important, as infants under 6 months old who contract pertussis have a much higher chance of dying from the disease, compared to an adult.

Let me address vaccine associated adverse reactions. While there can be injection-site issues, the more serious reactions are much less uncommon. My thought is that in many cases of negative vaccine reactions, there very well may be an underlying issue for which the vaccination is the trigger point. It would be interesting to see some research detailing what conditions (or combinations of conditions) may predispose an individual to adverse vaccine reactions. This lack of research puts

providers in a tricky situation, where they need to rely on theory and anecdotal evidence to help identify individuals at greater risk from a vaccine. The same may be said for information about preventing or minimizing adverse reactions for those at-risk individuals who do decide to have vaccinations. Naturopathy offers a support regimen after vaccination, to help minimize vaccination side effects. While I think that they are effective, my reports are strictly anecdotal.

From a naturopathic perspective, it makes good sense to look at family history, detoxification capacity, autoimmunity, neurological health, where a patient lives and travels, what kinds of health care and nutrition is available to them. These are all valuable and important pieces of the vaccination dilemma. This is an important step in eliminating vaccination dogma, eliminating the strictly yay or nay perspective, and truly assessing the risks and benefits to each individual, as well as the risks and benefits to the people around them, especially infants and elderly, less well nourished or immunocompromised people.

I cannot keep up with all the new vaccine updates, and so I utilize the knowledge that experts in this area, like the Center for Disease Control provide. But here comes my anti-vaccination perspective. Admittedly, I do feel a distrust in these governmental agencies, mostly due to political slants and funding issues that arise with vaccination trials. I am also not a fan of fear-based medicine and media. It seems like every year, we hear "This is predicted to be the worst flu season yet. Go get your flu shot immediately." That being said, I do realize that the flu is a serious disease, and in Massachusetts there have already been 6 deaths this year (one child, and the remaining 5 were elderly). Sadly, there will be flu related deaths every year. Some are directly from the influenza infection, and some can be traced to a deeper underlying medical condition.

And then there are the adjuvants (stabilizers and preservatives), and in my mind, straight up chemical toxins that are injected into the human body, bypassing our natural immunity. In this year's flu vaccine, be on the look out for thimerosal (AKA mercury). Be aware that the multi-dose vials do contain "trace" amounts of thimerosal. It's up to you to come up with your own conclusions about this, but here's a reference point. If you are administered the flu vaccine from a multi-dose vial, you are receiving 25 mcg of mercury. This almost doubles the amount the FDA considers safe for pregnant women to ingest weekly, and is 250 times greater than the Environmental Protection Agency's safe limit. You CAN get thimerosal free vaccines, but you need to insist on it. Also, be aware that this year's flu vaccine also contains egg, which is problematic if you have an egg allergy.

Another con-vaccine point: As far as flu vaccine efficacy goes, a 2012 study demonstrated the lack of efficacy for children under 2 years old. Here's an excerpt, "We included 75 studies with about 300,000 observations. We included 17 RCTs, (randomized controlled trials) 19 cohort studies and 11 case-control studies in the

analysis of vaccine efficacy and effectiveness. Evidence from RCTs shows that six children under the age of six needs to be vaccinated with live attenuated vaccine to prevent one case of influenza (infection and symptoms). *We could find no usable data for those aged two years or younger. Inactivated vaccines in children aged two years or younger are not significantly more efficacious than placebo.* Twenty-eight children over the age of six needs to be vaccinated to prevent one case of influenza (infection and symptoms). Eight need to be vaccinated to prevent one case of influenza-like-illness (ILI)." <http://www.ncbi.nlm.nih.gov/pubmed/22895945>. Another 2012 study concluded that the "evidence for safety, efficacy and effectiveness for those over 65 years old is of poor quality." <http://www.ncbi.nlm.nih.gov/pubmed/20166072>

Argh. Now I'm really at a loss! So, here are some numbers to help put this years "well-matched" vaccine into perspective. For adults, you have to vaccinate 33 people (when the vaccine and infecting strain are well matched,) and 100 people (when they're not well matched,) to prevent a single case of flu. That seems like a lot of vaccinations to prevent one flu. On an individual basis, they seem relatively ineffective (about a 50% reduction in your personal risk of getting sick).

But here's yet another way to look at the numbers. In 2010, the Cochrane Library published a report on Influenza immunization. They evaluated 50 studies published on the effectiveness of the flu vaccine. Their conclusion was that immunization for flu results in less than 2% reduction in the incidence of flu. That is, for those immunized against the flu in any given year, only about one person out of 100 received any benefit. They also found that the immunization did not reduce complication or days lost from work. <http://summaries.cochrane.org/CD001269/vaccines-to-prevent-influenza-in-healthy-adults>

Now, take that 2% data and put it on a large scale. If you lower the death rate from confirmed influenza from 2% to 1%, across millions of patients, that adds up to thousands of lives saved. So, that being said, getting a shot may do nothing for you, but could bring very big benefits to the whole of your fellow humans, particularly infants, the elderly, and immuno-compromised people.

OK, if you are not going to get the flu vaccination (or if you want even more prevention in addition to the vaccine) here are some tips for flu prevention. Keep your self warm. Influenza will thrive in the cooler temperature of the trachea. Warmth and fever will inhibit viral growth. Because more problematic influenza infections can result from smaller droplets getting deeper into the lungs (causing pneumonia), rest will reduce the oxygen requirement and lessen deep airflow.

Because influenza affects the cilia and damages the mucus membranes, nutrients like Vitamin A and zinc can help re-grow the epithelia. Keeping the mucus thin

can prevent secondary bacterial infections in the bronchi, lungs and ears. Lie down and rest, hydrate and stay warm. Some other very effective influenza prevention supplements are the probiotic strains of lactobacillus sp. and bifidobacter sp. A quick *pubmed* search will surely convince you that there is an abundance of scientific data which supports that these 2 species of beneficial flora cuts down your chances of getting sick with the flu (and if you do succumb then it cuts the duration of illness in half!) Also, Vitamin D is well studied (esp if you are deficient, which many of us northerners are) for flu prevention.

After writing this article, I'm still not sure what my decision will be for my young children and myself. From my research, it seems as though getting this year's flu shot is primarily to help the herd immunity, and not necessarily yourself (esp if you are under 2 yo or elderly). In Brattleboro VT, where I have a primary care practice, it is my priority to practice safe, un-biased naturopathic primary care. If the safest intervention is a vaccination, and if I can feel confident that I have explained the pros and cons of that particular disease (if the person was to get sick with it), and I have weighed the possible adverse reactions of that vaccine and done a careful and thoughtful history, then I feel like I have done my job. It is then up to the patient to decide. That's what naturopathic primary care is. Good, smart medicine that does not attach itself to dogma. Do what works, and what is safe. As for the "Do no harm" part- yes, it may very well be that we do harm when we don't do anything at all. Your choice, it's a difficult one to make.