



Influenza Vaccination 2016

'First Do No Harm'

In many ways flu vaccination is no different to hand hygiene, wearing gloves, masks, gowns and other infection prevention approaches including hepatitis B vaccinations. These are all measures designed to protect both us as healthcare workers and our patients, friends and family from harm. Patients who are hospitalised, elderly or need community health-care services are, by definition, at higher risk of infection.

Approximately 400 deaths each year in New Zealand are related to influenza infection. We cannot predict from year to year how severe the influenza season may be. The flu virus changes yearly, new strains emerge to which people are not immune. **Annual vaccination is the most effective prevention.**

Being a health-care worker is hard work, but it is also a privilege. Privilege brings responsibility. We have to weigh up, like it or not, does the safety of our patients come above our civil rights and free choice to opt out? Very few people have allergies to flu shots and very few religions discourage vaccination.

One of the primary ethical responsibilities of healthcare professionals is to create as healthy an environment as possible for our patients. Helping do so by getting an annual flu vaccination is not an unreasonable burden. If anything, it should be a point of pride, and in the process, we ourselves are safer also.

Why Get Vaccinated?

- Influenza (the flu) **can be a serious illness** that can lead to hospitalisation and sometimes death
- We can get or give the flu from or to anyone including patients, co-workers, friends and family
- If we get the flu, we can spread it to others even if we don't feel ill, **starting by shedding the flu virus the day before we get symptoms**
- By getting vaccinated we can **help protect ourselves and our patients** at work from getting the flu

What Does the Research Say?

- **Health care workers who get vaccinated help to reduce the following:**
 - **transmission** of influenza
 - **influenza-related illness and death, especially among people at increased risk for severe influenza illness i.e. our patients**
 - **staff illness** and absenteeism
- **Higher vaccination levels among healthcare workers** have been associated with **reduced nosocomial (hospital-acquired) influenza-related illness and deaths in settings like hospitals and nursing homes**
- **Influenza outbreaks in hospitals and long-term care facilities** have been attributed to **low influenza vaccination coverage** among health care workers in those facilities

Influenza (Flu) Facts

- Influenza (the flu) can be a **serious illness**. Anyone can get ill from the flu
- People with flu can **easily spread** it to others. Influenza viruses are spread mainly by droplets made when people with flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are up to about 1-2 metres away. Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth or nose including via finger food ingestion
- **Even healthy people can infect others beginning 1 day before any symptoms develop** and up to 5 to 7 days after becoming ill. Children may shed the virus for longer. Symptoms start 1 to 4 days after the virus enters the body. That means **that we may be able to pass on the flu to someone else before we know we are ill, as well as while we are ill**. Some people can even be infected with the flu virus but never develop any symptoms (subclinical infection). During this time, those people may also still spread the virus to others
- **Some people, such as older adults, pregnant women, and very young children as well as people with certain long-term medical conditions are at high risk of serious complications from the flu.** These medical conditions include chronic lung diseases e.g. asthma and chronic obstructive pulmonary disease (COPD), diabetes, heart disease, neurologic conditions and pregnancy.

These people are often our patients, and in our care!

- **The more vulnerable elderly usually do not gain as much immunity from flu vaccinations as healthy healthcare workers do – and we have the contact and may become the spreaders of infection, to them the more vulnerable, and them the less able to be successfully immunised against flu than us**
- Flu infects 5-10% of the population in average seasonal years. At 5% level a healthcare worker would only get flu once every 20 years on average, and so may think ‘I never catch the flu’, but can still be efficient spreaders to patients, friends, family and others when they do
- Annual vaccination is important because **influenza is unpredictable**, flu viruses are constantly changing and immunity from vaccination declines over time but lasts for all that year
- The annual flu vaccine is the first and best way to protect against influenza. It is not as effective as some vaccines (e.g. polio, rubella, measles) but it generally significantly reduces your chances of catching/spreading infection or its severity. This recommendation is the same even during years when the vaccine composition (the viruses the vaccine protects against) remains unchanged from the previous season

Flu Vaccine Facts

- **The flu vaccine provides protection against the three main flu virus strains** that ongoing worldwide patient sampling research (WHO) predicts will cause the most illness this season. The flu vaccine will help protect against three different strains of flu virus: two influenza A viruses (H3N2, and the 2009 H1N1 ‘swine flu’ now seasonal), and an influenza B virus. Antibodies to these flu strains develop in the body starting a few days after vaccination to more fully by 2 weeks after vaccination
- **Flu vaccines CANNOT cause the flu.** There is no viable or live virus in the injectable vaccine. Double blind research trials injecting either saline or the vaccine confirm this. Many other respiratory viruses, including some that can cause significant similar illness are circulating at the same time especially mid year/winter
- **Flu vaccines are safe.** Serious problems from the flu vaccine are very rare, and much, much rarer than the risk of complications from catching flu infection. The most common side effect that a person may experience is soreness where the injection was given. This is generally mild and usually goes away after a day or two. A mild temperature and/or muscle aches may sometimes occur for a day or two – this is not the flu but our immune system at work
- **Vaccination does not make our immune system ‘lazy’.** Daily we are exposed to millions of microbes, comparable to millions of mini vaccinations ongoing, but there are a few microbes our immune system is not so able to respond to, influenza virus is one
- USA flu vaccine efficacy data for acute respiratory illness prevention for the 2013/2014 winter showed **18-64 year olds had 60% efficacy, >65 year olds 52% efficacy.** So, the flu vaccine is not 100% effective like some vaccines, but a significant risk reduction all the same for a serious illness, and some even more than others

What viruses does the 2016 trivalent vaccine contain & protect against?

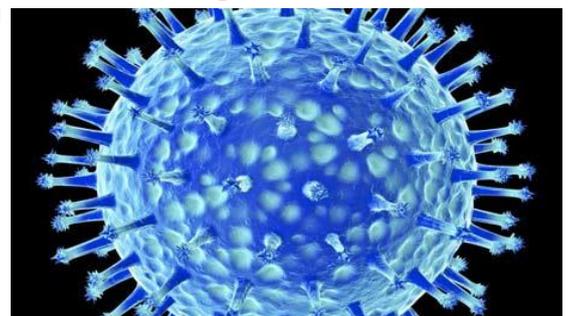
- A (H1N1): an A/California/7/2009 (H1N1) - like virus
- A (H3N2): an A/Hong Kong/4801/2014 (H3N2) like virus
- B/Brisbane/60/2008 like virus

If I got a flu vaccine last year, why do I need to get another one?

Our body’s level of immunity from a vaccine received last season is expected to have declined and the vaccine has been updated with the most likely predicted strains by WHO, on worldwide surveillance, to circulate this year.

The role that health care workers play in helping prevent influenza-related illness and death—especially in high-risk patients—is invaluable and often not fully recognised. By setting a good example among colleagues and patients, we have the opportunity to save more lives. Alternatively we should consider mitigating our risks from not being vaccinated by wearing a mask at work all winter months

Do the right thing, for the health of our patients at least, get vaccinated



Ref www.cdc.gov/flu/healthcareworkers.htm