

# ADVANTAGE Flu Vaccinations

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## What is a vaccine?



A vaccine is a substance or fluid made from a germ that has been killed or made weak to prevent infections

## Can I still get flu after taking the vaccine?

Yes, everyone responds differently to the vaccine

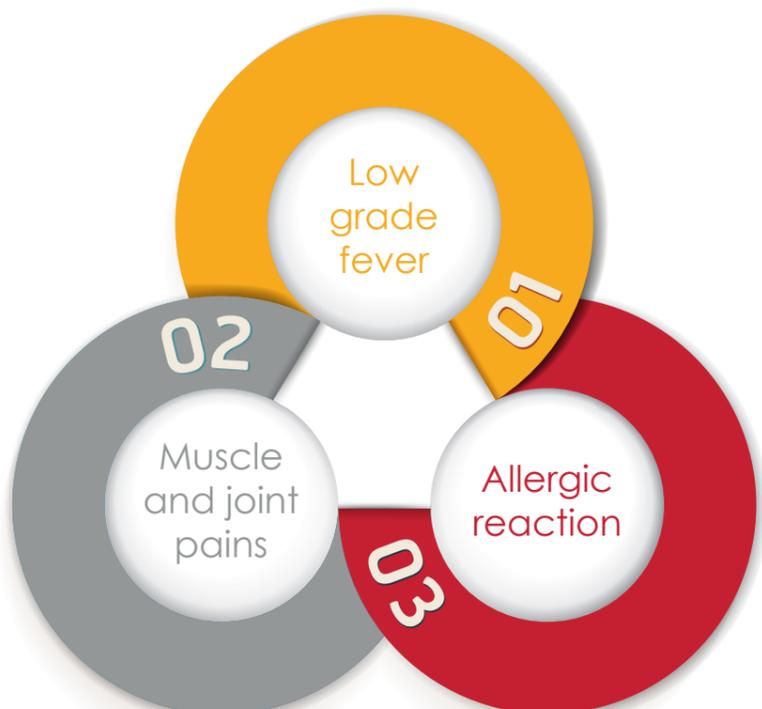


## Why take the flu vaccine every year?

The vaccine changes according to the type of virus every year



## What are some side effects?



## Questions

for Dr Thapelo Motshudi

### 1 What is a vaccine?

When we get sick from infections our immune system produces antibodies to fight off and kill whatever is infecting us. When the same infection comes back, the antibodies remember the germs that caused the initial sickness, and they are then able to kill them off before you become ill. This process is called immunity. A vaccine is made from a germ that has been killed or made weak, meaning that it does not have the ability to actually make you sick. But the body is unable to tell the difference between the real germ and the weakened one in the vaccine, so antibodies are produced as if it was an actual infection. This then means that later when the real germ infects you, there are antibodies that recognize the germ and kill it before you get sick.

### 2 Why take the flu vaccine every year?

Different strains of flu circulate every year, therefore the vaccine changes accordingly to suit the type of virus that is infecting us in that season or year. Every year about 2 – 4 new strains are expected to be in circulation and one needs protection against these. Not everyone can take the flu vaccine, but generally all healthy people above the age of six should not have a problem.

### 3 Are vaccines only for children?

The value of vaccines is not only for those taking them, but it is also to protect those who cannot take them for health reasons, or are particularly vulnerable for one reason or the other. For example, if you live in the same house with immune compromised or very elderly people, each time you get flu you're likely to transmit it to them too. Since they are weaker, the effects of the flu on them might be catastrophic. So by protecting yourself, you are helping them too. It is for that reason that health workers should always vaccinate themselves so as to protect the patients they treat, if not themselves. Adults should also take booster vaccines to prolong the protection offered by some of the shots they took as children. This is because not all vaccines provide life-long immunity, and some are only for adults. We also need vaccines when we travel to some countries or regions that have diseases we have no immunity to because they are not common in our country.

### 4 Can I still get flu after taking the vaccine?

Yes you can, and there are a number of reasons for this. Firstly, not everyone responds to the vaccine, and very young children and the elderly are at highest risk for not showing a positive response. It is also possible that you might receive the flu shot after you've already been infected, or you might not be vaccinated against the strains of flu circulating in your area, or a different organism that has symptoms that look like flu might even be the one responsible for the infection.

### 5 What are some of the side effects?

Some people get mild flu-like symptoms after getting the flu shot. These can include a low-grade fever, muscle and joint pains. However, the symptoms will not be as severe as getting flu itself. In a few and very rare cases some people get an allergic reaction.

### 6 Why do we need to vaccinate if people lived without vaccines before?

People also lived without antibiotics and all the other modern medical interventions, and they died early and in their millions from preventable diseases. Within the health community vaccines are generally considered to be one of the most successful public health initiatives, together with the introduction of sewage systems. Most of the opposition to vaccines stems from a lack of understanding, and/or an ideological position that natural products and remedies are better. This is called the naturalistic fallacy, and it is not supported by evidence. This type of motivated reasoning is also seen amongst opponents of genetically modified foods. Some diseases like smallpox, that used to "naturally" kill thousands of people, have now been eliminated due to vaccinations. For vaccines to be effective at least 90% of the population needs to take them, otherwise what is called herd immunity does not develop.