

WHAT YOU SHOULD KNOW ABOUT VACCINES

I recently came across an article from the American Academy of Otolaryngology, Head and Neck Surgery, from 2006, that was pertinent then, and even more pertinent now, and I thought would bring this information forward as everyone will benefit from these tidbits of information.

Typically, there are two types of influenza or flu vaccines. There is the flu shot that is given via needle, typically into the arm, that is a vaccine which contains a virus that is killed. The killed vaccine stimulates the immune system, so that, when one is exposed, he is unlikely to get the flu. This type of vaccine is recommended for anyone older than six months of age, and is usually given to healthy people, and can even be given to people with chronic medical conditions.

There is also a second type of flu vaccine that is typically sprayed into the nose. This is made with a live, but weakened flu virus, and typically this type of delivery is recommended for patients that are between the ages of 5 and 50 years of age, and excludes pregnant patients. Each one of these vaccines contains a flu virus, and each year the flu virus is changed based on an international surveillance program, where scientists all over the world monitor circulating viruses. Countries in Asia are frequently used as a surveillance sight because they are densely populated, and there tends to be a lot of exposure and interaction between humans and animals, which sometimes is a jumping off point for viruses to mutate and change, and attack the human population. By doing this type of surveillance, we here in the United States can benefit greatly, and avoid some tragic outcomes.

The flu season usually starts in the Fall when the weather is colder. Sometimes people would think that sounds strange because cold weather usually is associated with killing things, and not proliferation of viruses, but it is true that viruses do better in colder months. The antibodies that are made by our immune system, and help protect us, usually start protection about 2 weeks after the vaccination.

Generally speaking, almost everybody should be vaccinated, and this includes patients who are 65 years and older, people who are confined to areas such as nursing homes, prison facilities, long care facilities and military bases. Both adult and children who have heart or lung disorders are also encouraged to get vaccines. This includes asthma. Patients who need regular medical care for chronic problems, such as chronic kidney disease, or weakened immune systems, also are good candidates for vaccination. Women who are pregnant during the influenza season are also at high risk and should be vaccinated, as the virus can cross the blood placenta barrier and affect the fetus. Health care providers also should be vaccinated, even if they are healthy, because they come in contact with others who are at high risk, and they see a much higher concentration of sick people than normally exposed to because of their work setting. Also, there are bodily fluids, such as mucous and blood, that they are exposed to that can increase the risk. Older people tend to be a little bit higher risk, but as we can see with the swine flu, this particular variety is attacking a younger patient.

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Is there any reason NOT to get vaccinated? There are some reasons; vaccines are typically grown in chicken eggs. The chicken eggs are used as a medium to grow the virus, so if you have allergies to chicken eggs, you should not be vaccinated. If there has been a past experience of severe reaction to the influenza virus, this should be considered when being vaccinated. There is a paralysis that is named after a French neurologist called '**Guillain-Barré**' syndrome, which can occur as a result of a vaccination. So, if someone is at high risk or suspicious of being at risk, please discuss with your doctor the pros and cons before getting vaccinated. Also, typically influenza vaccines are not used in children less than six months of age. Clearly someone who is ill at the time of contemplated vaccination, and/or is running a fever, should wait until their symptoms subside. Vaccinations typically have few side effects and great benefits. Some of the side effects include soreness at the injection site, maybe a low grade fever, some sore muscles, possibly some nasal symptoms such as runny nose, and less likely are: headaches, nausea, vomiting, sore throat and cough.

Lately, there has been a lot of press about the Swine Flu, and history suggests that it can be quite devastating. There was a pandemic in 1918, and there was a bit of a scare in 1976. The Centers for Disease Control thought there was going to be a second pandemic, which never panned out. This time around, we cannot be sure, and we need to be safe. We are seeing an uptick in the amount of people getting sick and dying, and I would encourage anyone that is contemplating not taking the vaccine if offered, to reconsider and talk with your doctor about the pros and cons.

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