

what you

NEED TO KNOW about...

The Flu 'Shot' for H1N1 and Seasonal Flu



How do flu vaccines (flu shots) work?

Flu shots for H1N1 and seasonal flu:

- Cause us to make antibodies to fight the 'real' virus. If we come in contact with the real virus, we will be able to fight it off quickly, usually without getting sick.
- Are made with tiny parts of **dead** viruses
- Are not made with 'live' viruses

Can flu shots cause the flu?

No. There is no 'live' virus in the flu vaccine, so there is no chance of getting the flu from the vaccine. Remember that during 'flu' season, there are hundreds of viruses around that can cause cough, runny nose, diarrhea, fever and body aches. If people get sick after the flu vaccine, it is because they:

- Caught another virus, or;
- Got the shot when they already had the flu virus, and their bodies did not have enough time to make antibodies to fight it

Do flu vaccines really work?

No vaccine is perfect. But the flu shot will work well for 7-9 out of 10 healthy children and adults, if there is a good match between virus particles used to make the vaccine and the flu viruses that are going around. People who get the flu after getting the shot will have a much milder flu than if they didn't get the flu shot. The H1N1 flu shot will protect well against H1N1 flu.

Health care workers who get flu shots get sick less often and miss fewer days at work.

Do healthy children need flu shots?

Yes. Somewhere between 1 and 4 out of every 10 healthy preschool and school aged children get the flu every year. And it's not just children with health problems who can get very sick with seasonal flu. Healthy children under 2 have to be cared for in hospital as often as elderly people. And healthy babies under a year have the highest risk of death from flu.

Children with health problems could also get very, very sick if they get H1N1 or seasonal flu. This includes children with:

- Developmental problems, brain or neuromuscular disorders
- Immune system problems (including children taking medications that weaken their immune system)
- Heart or lung problems (for example, Cystic Fibrosis)
- Diabetes, obesity (these seem to increase the risks with H1N1 only)

H1N1 can spread quickly in children and youth. In Ontario in 2009, children between 5 and 19 years of age had most of the confirmed cases of H1N1.

Do healthy adults need flu shots?

Yes. Many people think that only people with health problems need a flu shot. But the last time there was a large flu outbreak, it was healthy adults who died most often. Healthy people who don't get a flu shot can pass the flu on to others (like their patients, children and other family members), even if they don't get really sick themselves. Preventing the spread of the flu also lowers the chance of people getting pneumonia caused by bacteria (close to 1 out of 3 people who died of H1N1 in the United States also had a bacterial infection).

Science lesson!

Seasonal flu: The flu viruses that go around every year.

Virus: Germs that cause many kinds of infections, like H1N1 and seasonal flu. Antibiotics won't work with viruses.

Bacteria: Germs that cause many kinds of infections. Antibiotics can kill bacteria.

Antibodies: Proteins our bodies make to fight viruses and bacteria. When we come in contact with these germs antibodies will kill them.

Immunity: Having antibodies to fight a virus so that you are protected (and won't get sick) from that virus.

Vaccine (like the flu shot): Cause us to make antibodies to viruses. They often contain tiny parts of dead viruses.

Pneumonia: A serious lung infection where the lungs can fill with fluid. Can be caused by viruses or bacteria.



I've heard that some people got Guillain-Barré syndrome (GBS) after getting an H1N1 vaccine in the 1970's-could this happen again?

In 1976, a very small number of people developed GBS (a disorder that causes temporary paralysis) after getting a shot for H1N1 (out of 48 million people who got the vaccine, less than 300 developed GBS). This vaccine did not go through the usual system of checks. While there was no proof that the shot caused GBS, we no longer use that vaccine. Studies since then have found that when it comes to GBS, there is no difference between people who get flu vaccines and those who don't.

Remember that the flu can cause many serious problems like:

- Swelling of the brain and brain coverings (encephalitis and meningitis)
- Movement disorders (like GBS)
- Coma
- Seizures

It's important to weigh concerns about GBS with the very real chance of serious problems the flu can cause.

Is there mercury in the flu shot? Is mercury linked with autism?

There are tiny amounts of thimerosal in the flu shot. Thimerosal prevents bacteria from growing in the bottle of vaccine. Thimerosal breaks down into a kind of mercury, but not the kind that causes mercury poisoning. Many large studies have showed us that **preservatives (like thimerosal) in vaccines do not cause autism**. In Denmark, thimerosal was taken out of vaccines, but this didn't reduce the number of children who developed autism. The World Health Organization and the Institute of Medicine have carefully reviewed this research and concludes that thimerosal **does not** cause autism.

What are adjuvants? Are they safe?

Adjuvants are added to vaccines to:

- Make vaccines more effective (cause us to make more antibodies and to make them more quickly)
- Allow vaccines to 'go further' so more people can get flu shots
- Help people with weaker immune systems to make more antibodies
- Have a good safety record (many vaccines given to babies in Canada have adjuvants added)



H1N1 vaccine with adjuvant has not yet been tested in pregnant women. Pregnant women will get H1N1 vaccines **without** adjuvant.

Can people with egg allergies get the flu shot?

Many vaccines are 'grown' in eggs, and there may be very small amounts of egg in the vaccine (if there is any at all). **People with a severe allergy to eggs (with hives, mouth swelling, trouble breathing and low blood pressure) should not get flu shots.** People with less serious egg allergies should be checked by an allergy doctor before getting flu shots.

Should pregnant or breastfeeding women get the flu shot?

Yes. Remember that the flu shot does not have any live virus in it. It can't cause the flu in a pregnant woman or her baby. The flu shot won't harm a baby who is breastfeeding. And the antibodies the woman makes after getting the flu shot will be shared with her unborn baby. This will help to protect the baby from the flu after it is born.

It's important for pregnant women to get the vaccine for H1N1 and seasonal flu. Pregnant women who get seasonal flu or H1N1 have a higher chance of:

- Becoming very, very sick
- Having to stay in hospital
- Dying



Questions?

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1-866-426-8885

Ottawa Public Health
www.ottawa.ca/residents/health

Telehealth Ontario
1-866-797-0000
Health information from
Registered Nurses,
24 hours a day, 7 days a week
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