

## Special

## Flu + vaccines

## Arming yourself with information is the first best defence this cold and flu season

Q&A with Dr. Bonnie Henry, Chair, Canadian Coalition for Immunization Awareness and Promotion

**As we approach flu season, what measures should we take to protect ourselves and our children?**

The best ways to prevent any type of respiratory virus are simple: wash your hands frequently, cover your mouth when you cough, and sneeze into your sleeve. If you have a fever, stay home, because fever is a good indicator that you're fighting off something that might be contagious to others.

Influenza is the most serious of the respiratory illnesses around at this time of year, but we have a very safe and effective vaccine. It protects us and the people around us from influenza.

**What symptoms should we look out for?**

The symptoms of influenza are much more severe than those of the common cold and may include a very high fever and headache, often with sudden onset, within half an hour or a few minutes. It affects the lungs and breathing passages, so you may have symptoms such as a cough. Even healthy individuals describe it as 'being hit by a truck,' and report profound fatigue or exhaustion. Recovery can take a week to two weeks.

**When we do get the flu, what are the recommended treatments?**



It's best to try to prevent it in the first place. But if you do get sick with influenza, rest and drink plenty of fluids to help your body's immune system fight off the virus.

For people with underlying illnesses such as heart disease or

immune system problems, antiviral medications may help as well. But to work best, they should be taken within the first 24 to 48 hours of the onset of symptoms. If you or your children have underlying illnesses such as asthma or cystic fibrosis,

or are undergoing treatment for cancer, talk to your doctor ahead of time about antiviral medication.

**What should we know about the new vaccines approved for use in Canada this year?**

One is a nasal spray called FluMist. It's a live vaccine, but the virus is 'attenuated' or killed. Rather than being injected, it is sprayed in your nose. There is good data that shows it's really effective, particularly in children between the ages of two and 18. It may not be available in provincial public programs, but you can get it from your physician.

The other thing that's new this year is a vaccine with an adjuvant for the immunization of seniors. The immune systems of older people don't respond as well as those of younger people, so the protection they get from vaccines is not as good. This new vaccine has a compound that helps boost the immune system. It's available in some provinces for individuals over the age of 75, and we're hoping it will help them get a better response from the immunization.

**When should people with flu symptoms go to the hospital?**

It varies by health condition and age. If young children have any difficulty breathing at all, take them in or call the Nurse Line or your physician for advice. For adults, the really worrisome symptom is severe difficulty taking a breath. The influenza virus can cause pneumonia, or you can develop secondary bacterial

pneumonia because of the inflammation caused by the virus. The signs are usually a high fever that won't go away and a decreased level of consciousness – individuals aren't as responsive and have real difficulty breathing.

**Should we be concerned about the possibility of a continuation of the H1N1 outbreak this year?**

The pandemic strain H1N1 came out of Mexico in 2009. We saw it again last year, and the patterns we've been monitoring around the world indicate it is likely we will see it again this year. But H1N1 is now included in the immunization, so this year's flu vaccine provides protection.

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## FLU + VACCINES

## ILLNESS PREVENTION

## New solutions help address challenges facing child vaccinations

With the arrival of fall and another flu season on the horizon, parents might find themselves asking, "Should my child get the flu vaccine?" Most end up answering "No," judging from the level of vaccination among children in Canada.

"Children aren't getting vaccinated at the rates they should," says Dr. Jane Finlay, a pediatrician at B.C. Children's Hospital in Vancouver. "Even among children at high risk of influenza complications – where the B.C. government pays for their vaccines – only about 20 per cent are getting vaccinated."

Vaccination rates across Canada are similarly low. Yet, the case for vaccinating children is strong, starting with the fact that they're more likely to contract the flu. According to Health Canada, children are two to three times more likely than adults to get infected. "Even though influenza is rarely fatal in children, it is a miserable disease," says Dr. Finlay. "Kids who get the flu often end up on antibiotics, usually unnecessarily, and many will get secondary ear infections and, less commonly, pneumonia."

Pediatric infectious disease specialist Dr. Earl Rubin, a medical microbiologist at the Montreal Children's Hospital of the McGill University Health Centre, says he is a huge proponent of universal, yearly vaccination for everyone over the age of six months.

"Many people don't recognize the importance of vaccinating healthy school-age children in particular, and the significant benefits, not only for themselves, but for the community." He says children "are the primary 'shedders and spreaders' of the illness; they contract it at school and bring it home."

Drs. Finlay and Rubin both say there are multiple barriers to widespread flu vaccination among children and youth. Attitudes are one factor; a lot of people believe the vaccine isn't effective or is simply unnecessary. The perception that the benefits of vaccination are overblown was likely worsened after the over-reaction to the 2009 pandemic, says Dr. Rubin. "The following flu

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**Dr. Jane Finlay,**  
Pediatrician, B.C. Children's Hospital, Vancouver

season, there was a decrease in vaccination, after the hysteria that surrounded it and the perception that it was 'much ado about nothing.'"

Varying provincial policies concerning the funding of flu vaccinations also mean some citizens face cost barriers. And if a province pays for vaccinating certain groups only, it can send a message that others don't need to worry about protecting themselves.

Beyond such policy and perception issues, some parents are

simply reluctant to put their child through the distress of getting a needle. Fortunately, these families and their kids now have another option: FluMist, an easy-to-administer nasal-spray flu vaccine. For the current flu season, Canada's National Advisory Committee on Immunization has stated that FluMist, the only needle-free vaccine, is the preferred flu vaccine for children aged two to 17, with a few exceptions (for example, children with severe asthma).

"I recently gave the flu shot to

children in one family and there was the usual crying. I gave FluMist to the next family, and I got hugs," says Dr. Finlay.

Not only is the vaccine applied more gently, the product outperforms traditional shots.

"It has been shown consistently in trial after trial that for children aged two to 17, FluMist is more effective," says Dr. Rubin. In children two to five, it reduced the number of flu cases by more than 50 per cent, compared with needle vaccines.



While the health benefits of flu and other vaccine programs are well documented a range of issues contribute to lagging vaccination rates among children. Pediatrician Jane Finlay says, "Many people don't recognize the importance of vaccinating healthy school-age children in particular, and the significant benefits, not only for themselves but for the community." PHOTO: ISTOCKPHOTO.COM



## Caring begins with prevention.

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## ONLINE

For more information, visit:

immunize.cpha.ca

## NEED A FLU SHOT?

Vaccination clinics are available across the country. For more information about the flu and where you can get your flu shot, visit [www.fightflu.ca](http://www.fightflu.ca) or the following locations in your province:

## British Columbia

- Vancouver: Raven Song Community Health Centre, 2450 Ontario Street
- Victoria: Shoppers Drug Mart, 2947 Tillicum Road
- Visit: [immunizeBC.ca](http://immunizeBC.ca)

## Alberta

- Calgary: South Calgary Health Centre, 31 Sunpark Plaza SE
- Edmonton: Northgate Health Centre, 9499 137 Avenue
- Visit: [myhealth.alberta.ca](http://myhealth.alberta.ca)

## Saskatchewan

- Saskatoon: Public Health - South East, 3006 Taylor Street East
- Cudworth: Senior Centre, 216 Main Street
- Visit: [health.gov.sk.ca](http://health.gov.sk.ca)

## Manitoba

- Winnipeg: ACCESS Downtown clinic, 640 Main Street
- Brandon: Brandon Regional Health Centre, 150 McTavish Avenue East
- Visit: [manitoba.ca/health/flu](http://manitoba.ca/health/flu)

## Ontario

- Hamilton: McMaster Children's Hospital - Main Lobby, 1200 Main Street West
- Toronto: Toronto City Hall, 100 Queen Street West
- Call Service Ontario INFOline at 1-877-844-1944

## Quebec

- Montréal: Centre de santé et de services sociaux d'Achunsiac et Montréal-Nord 1725, boulevard Gouin Est, Montréal
- Québec: Centre de santé et de services sociaux de la Vieille-Capitale, 1, avenue du Sacré-Coeur
- Visit: [info.grippe.gouv.qc.ca](http://info.grippe.gouv.qc.ca)

## New Brunswick

- Fredericton: Jean Coutu Pharmacy, 598 Union Street
- Moncton: Shoppers Drug Mart, 350 St. George Street
- Saint John: Zellers Pharmacy Lancaster Mall, 651 Fairville Boulevard
- Call: Tele-care 811

## Nova Scotia

- Halifax: Halifax Clinic - Halifax Shopping Centre, 7001 Mumford Road, Unit 603L
- Sydney: Public Health Services, 235 Townsend Street, 2nd Floor
- Visit: [gov.ns.ca/flu](http://gov.ns.ca/flu)

## Prince Edward Island

- Charlottetown: Four Neighbourhoods Health Centre, 152 St. Peters Rd
- Summerside: Harbourside Health Centre, 243 Harbour Drive
- Visit: [gov.pe.ca/flu](http://gov.pe.ca/flu)

## Newfoundland and Labrador

- Labrador City: Labrador City Union Hall, 105 Hudson Dr
- Deer Lake: Public Health Office, 20 Farm Road
- Call: 1-888-709-2929

## Yukon

- Whitehorse: Whitehorse Health Centre, 9010 Quartz Road
- Dawson: Dawson Health Centre, 530 Church Street
- Visit: [hss.gov.yk.ca](http://hss.gov.yk.ca)

## Northwest Territories

- Yellowknife: Yellowknife Health & Social Services Authority, 4702 Franklin Avenue; The Yellowknife Elks Lodge, 4919 - 49th Street
- Visit: [hlthss.gov.nt.ca](http://hlthss.gov.nt.ca)

## Nunavut

- Iqaluit Public Health Building #155
- Visit: [fluNU.ca](http://fluNU.ca)



WORKPLACE WELLNESS

# Flu clinic a sound starting point for any wellness program

Most Canadians know Rogers Communications for its telephone, Internet and media products and services. But each year, for several days in November, the company becomes a hub for influenza prevention, with teams of health care professionals administering flu shots to hundreds of Rogers employees across the country.

“Rogers is a company that’s founded on a culture of caring, and one of the ways the company takes care of its people is through our wellness program,” says Dr. David Satok, medical director at Rogers Communications. “It’s why we have flu clinics – because a flu clinic is the standard starting point for any wellness program.”

As flu season starts and Canadians brace themselves for yet another onslaught of fever, chills, muscle aches and fatigue, employers across the country are also preparing to cope with drops in productivity and workplace morale. Canadian employers lose an estimated 1.5 million workdays because of the flu, resulting in millions of dollars in lost revenue.

Employers can and should minimize the impact of flu on the workplace, say health and workplace wellness experts. In fact, it makes perfect business sense to do so.

“It’s an easy win,” says Elizabeth Mills, president and CEO of

Workplace Safety & Prevention Services, a non-profit organization in Mississauga, Ont., that provides health and safety products, training and consulting services to Ontario businesses. “Taking steps to prevent your employees from getting the flu is good for your business because you’ll be able to reduce sick time. And at the same time, it’s a way for you to show your employees you really care about them.”

While some companies, such as Rogers, choose to pay for the flu vaccines they provide employees, there are ways to run flu clinics on a small budget. Employers can work with their province’s public health agency to organize an onsite flu clinic, with the province footing the cost of the vaccines and the employer paying for nurses and other related expenses.

Sue Kelly, director of health and wellness at We Care Health Services, a Toronto-based nursing services company, says a growing number of companies are hosting flu clinics right in their workplaces.

“It’s so convenient for employees because they don’t have to go someplace else to get their flu shot,” she says. “For employers, the benefit is that people don’t have to take time away from work to get their shot.”

Every dollar an employer spends in a flu prevention program yields a return on investment of about \$3

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Elizabeth Mills,  
President and CEO, Workplace  
Safety & Prevention Services

to \$6, says Kelly. When employees are protected from the flu, sick days go down, productivity goes up and employers save on the cost of health and disability insurance.

Dr. Satok says companies that don’t have the resources for an onsite flu clinic can do something as

simple as giving their employees time off to get a flu shot. A recently published U.S. study showed that simply prompting employees to write down the date and time they intend to go for a shot increased their likelihood of getting vaccinated.



The elderly account for 90 per cent of all influenza-related deaths and 70 per cent of hospitalizations. For these and other reasons seniors are nearly twice as likely as the general population to be vaccinated against the flu annually.

PHOTO: ISTOCKPHOTO.COM

RESEARCH

## Vaccine paradox: Until now, those at highest risk were the least protected

Seniors are more likely to get vaccinated against influenza than Canadians at any other age. More than 60 per cent of people over the age of 65 roll up their sleeves for their annual flu shot, compared to about 35 per cent of the general population. That’s not surprising, given that the elderly have the greatest cause to worry about flu complications, says Dr. Jay Keystone, director of the Medisys Travel Health and Immunization Clinic in Toronto and Professor of Medicine at the University of Toronto. “When you look at who gets really sick, is hospitalized or dies from the flu, seniors and young children are at the top of the list,” he says. The elderly account for 90 per cent of all influenza-related deaths and 70 per cent of hospitalizations.

The problem is that while seniors are getting vaccinated, the standard influenza vaccine is far less effective in preventing flu in the elderly compared to younger adults. “As we age, our immune system deteriorates so our response to the vaccine isn’t as strong,” explains Dr. Keystone.

That’s not to say seniors should skip the flu shot. Far from it. Seniors who get the flu after immunization tend to be less ill, have fewer complications and are less likely to be hospitalized compared to those who get the flu and have not been immunized.

But this flu season, seniors have an alternative to the traditional seasonal influenza vaccine. In February this year, Health Canada approved a new adjuvant vaccine called Fludac, which includes an added “helper” that enhances the immune response. In the elderly, including those with chronic diseases, adjuvanted vaccines have

been shown to reduce hospitalization rates. Importantly, research also shows that Fludac – which has been available in other countries for 10 years, with 50 million doses distributed worldwide – can help protect against influenza strains not included in the vaccine.

Young children face similar risks from the flu as seniors. “When children are exposed to influenza the first time, the standard vaccine doesn’t elicit an adequate immune response,” says Toronto pediatrician Dr. Saul Greenberg. As a result, children aged six months to nine years should receive two doses of the flu vaccine the first year they are immunized, and one dose every year after. While the vaccine isn’t fully effective in young children, “partial protection against the flu is better than no protection at all,” says Dr. Greenberg.

Children ages two to 18 may get added protection from a nasal spray flu vaccine called FluMist. Studies show this vaccine offers children better antibody coverage and reduced rates of infection compared to standard injectable vaccine. Fludac may also confer improved immunization for children, but it is not yet approved for use in this age group.

The bottom line is that everyone in the family should get their annual flu shot. “Vaccination protects not only those who are vaccinated but also others in the community,” says David Fisman, Associate Professor with the Dalla Lana School of Public Health in Toronto. “There is a school of thought that says since children and adults in the workforce are responsible for the greatest transmission of influenza, they should be vaccinated to protect seniors and others at high risk.”

By the numbers

60%

of Canadians over age 65 get an annual flu shot

90%

of flu-related deaths occur among seniors

50 million

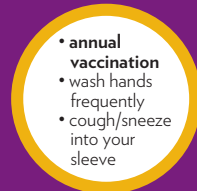
Doses of Fludac, a new adjuvant vaccine shown to reduce flu-related hospitalization rates, now available across Canada

35%

of the general Canadian population get an annual flu shot

### IS IT A COLD OR INFLUENZA?

COLD	SYMPTOM	INFLUENZA
rare	fever	usual high fever (102°F/39°C to 104°F/40°C) – sudden onset, lasts 3-4 days
rare	headache	usual – can be severe
sometimes, mild	general aches and pains	usual – often severe
sometimes, mild	fatigue and weakness	usual, severe, may last 2-3 weeks or more
unusual	extreme fatigue	usual early onset – can be severe
common	runny, stuffy nose	common
common	sneezing	sometimes
common	sore throat	common
sometimes, mild to moderate	chest discomfort, coughing	usual – can be severe
can lead to sinus congestion or earache	complications	can lead to pneumonia and respiratory failure; can worsen a current chronic condition; can be life-threatening



FOR MORE INFORMATION, VISIT IMMUNIZE.CA

SOURCE: CANADIAN COALITION FOR IMMUNIZATION AWARENESS & PROMOTION (CCIAIP)

FluMist® is a vaccine indicated for the active immunization of individuals 2-59 years of age against influenza disease caused by influenza virus subtypes A and type B contained in the vaccine. The vaccine contains the strains recommended by the WHO (northern hemisphere) for this influenza season and is not indicated to protect against other strains of the virus. FluMist® is for the prevention, not treatment, of influenza.

FluMist® is contraindicated in individuals with a history of hypersensitivity, especially anaphylactic reactions to eggs, egg proteins, gentamicin, gelatin or arginine or to any other ingredient in the formulation. FluMist® is contraindicated in individuals with a history of hypersensitivity to previous influenza vaccination.

Most common adverse reactions for FluMist® in children were runny/stuffy nose, decreased appetite, weakness, headache and fever. The most common adverse reactions in adults were runny/stuffy nose, headache, sore throat, weakness and cough.

FluMist® may not protect all individuals receiving the vaccine. FluMist® is for intranasal administration only (0.1 mL per nostril).

Visit [www.flumistcanada.ca](http://www.flumistcanada.ca) for more information and talk to a doctor to see if FluMist® is right for you.



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