# ASTHMA AND INFLUENZA: WHAT YOU NEED TO KNOW

## **Key Facts**

Influenza, also known as the seasonal flu, is an unpredictable and highly contagious viral infection of the nose, throat and lungs.<sup>1</sup> These viruses travel through air droplets when an infected individual coughs, sneezes or talks.<sup>2</sup> It can spread when someone inhales the air droplets or touches infected objects, transferring germs.<sup>2</sup>

- The most vulnerable in our society are the most at risk from influenza: children, the elderly and persons with chronic health conditions, like diabetes, cardiac or pulmonary disorders and asthma<sup>3</sup>
- In fact, individuals with chronic health conditions such as asthma have the highest risk for influenza-related complications<sup>3</sup>
- Between 500-1,500 Canadians die each year from pneumonia complications related to influenza<sup>4</sup>
  - Although the burden of influenza can vary from year to year, it is estimated that, in a given year, an average of 12,200 hospitalizations related to influenza and approximately 3,500 deaths attributable to influenza occur<sup>3</sup>

# **Effects on Individuals with Asthma**

- Adults and children with asthma are more likely to develop pneumonia after getting sick with influenza than people who do not have asthma<sup>5</sup>
- An influenza infection in the lungs can trigger asthma attacks and a worsening of asthma symptoms, which can also lead to pneumonia and other acute respiratory diseases<sup>5</sup>
- Asthma is the most common medical condition among children hospitalized with influenza and one of the more common medical conditions among hospitalized adults<sup>5</sup>
- If you get sick with influenza symptoms, call your doctor as treatment should begin as soon as possible because antiviral drug treatment works best when started early<sup>5</sup>

Asthma.ca<sup>\*</sup> Asthma Society of Canada

### Minimizing Your Risk of Contracting Influenza

Health Canada recommends that the best way to prevent influenza is by getting a flu shot.<sup>6</sup> Dr. Susan Waserman, Chair of the Medical and Scientific Committee of the Asthma Society of Canada, especially encourages people with asthma and their families to get a flu shot yearly to help prevent complications with their chronic condition.<sup>7</sup>

"Flu shots are recommended annually to help reduce the frequency of asthma exacerbations, as viral and upper respiratory tract infections can both cause asthma episodes and make people with asthma more sensitive to asthma triggers."<sup>7,8</sup>

It's also important that anyone who is a caregiver or health worker for vulnerable populations should take the flu shot to protect themselves and those they care for.<sup>3</sup> A High Dose flu shot should be taken by those 65 years of age and older.<sup>3</sup>



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- <sup>1</sup> Government of Canada. About the Flu. <u>http://healthycanadians.gc.ca/</u> <u>diseases-conditions-maladies-affections/disease-maladie/flu-grippe/</u> <u>about-a\_propos-eng.php</u>. Accessed July 2016.
- <sup>2</sup> Mayo Clinic. Causes. <u>http://www.mayoclinic.org/diseases-conditions/flu/basics/causes/con-20035101</u>. Accessed July 2016.
- <sup>3</sup> An Advisory Committee Statement (ACS) National Advisory Committee on Immunization (NACI) Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2016-2017.
- <sup>4</sup> Influenza (flu). The Asthma Society of Canada. Available at <u>http://asthma.ca/corp/services/pdf/asthma\_influenza\_shots\_eng.pdf</u>
- <sup>5</sup> Centers for Disease Control and Prevention. Flu and People with Asthma. <u>http://www.cdc.gov/flu/asthma/</u>. Accessed July 2016
- <sup>6</sup> Public Health Agency of Canada. Prevention of flu (influenza). <u>http://</u> healthycanadians.gc.ca/diseases-conditions-maladies-affections/diseasemaladie/flu-grippe/prevention-eng.php. Accessed July 2016.
- <sup>7</sup> Common Asthma Triggers. The Asthma Society. Accessed September 28, 2015. Available at <u>http://www.asthma.ca/adults/about/inflammatoryTriggers.php</u>.
- <sup>8</sup> Asthma Society of Canada. Influenza. Available at: <u>http://asthma.ca/corp/</u> services/pdf/asthma influenza shots eng.pdf. Accessed July 2016.
- <sup>9</sup> Centers for Disease Control and Prevention. Key Facts About Seasonal Flu Vaccine. <u>http://www.cdc.gov/flu/protect/keyfacts.htm</u>. Accessed July 2016.
- <sup>10</sup> FLUZONE® Quadrivalent Product Monograph. Sanofi Pasteur 2014.
- <sup>11</sup> Influenza (Seasonal) Fact Sheet N°211 March 2014. World Health Organization. Accessed July 2016. Available at <u>http://www.who.int/</u> mediacentre/factsheets/fs211/en/.
- <sup>12</sup> Centers for Disease Control and Prevention. People at High Risk of Developing Flu-Related Complications. <u>http://www.cdc.gov/flu/about/ disease/high\_risk.htm</u>. Accessed July 2016.
- <sup>13</sup> Public Health Agency of Canada. An Advisory Committee Statement (ACS) National Advisory Committee on Immunization (NACI). July 2014.

### **Flu Vaccines**

Influenza vaccines work by stimulating the body to make antibodies against the influenza virus within about two weeks after vaccination. Antibodies against influenza help provide protection against infection with the viruses that are in the vaccine.<sup>9</sup> Vaccination is important for people with asthma because influenza can cause further inflammation to their airways and lungs.<sup>5</sup> Some influenza vaccine options include:

#### Four-Strain

- A four-strain influenza vaccine has been introduced as part of Canada's public health immunization programs
- Different than three-strain influenza vaccines (TIV), the four-strain (or quadrivalent) influenza vaccine (QIV) protects against four different influenza virus strains: two influenza A strains and two influenza B strains<sup>10</sup>
- The World Health Organization (WHO) recommends that QIV be used where available<sup>11</sup>

#### High Dose

- Older adults can suffer the most severe consequences of influenza<sup>12</sup>
- Adults 65 years and older typically experience 70% of hospitalizations and 90% of deaths due to influenza<sup>9</sup>
- While most people can recover from influenza in as few as seven days, it generally takes longer for seniors to recover, and they may be at higher risk of developing more severe complications, including pneumonia or worsening underlying medical conditions<sup>13</sup>
- The High Dose influenza vaccine has been demonstrated in a large, randomized controlled trial to be more than 24% more effective than a standard-dose vaccine in adults 65 years of age and older against the flu<sup>13</sup>

To find out if the four-strain vaccine or the High Dose vaccine is available in your province, and how you can receive it, contact your health care provider.

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