

People with asthma aged 2 to 64 are a PRIORITY GROUP for receiving inactivated flu vaccine. Children younger than two and adults older than 64 also comprise priority groups. CDC's recent flu vaccine shortage announcement (www.cdc.gov/mmwr/PDF/wk/mm53d1005.pdf) reinforces that these high-risk groups should be given preference during times of vaccine shortage. People with asthma should seek and receive flu shots without hesitation during the 2004-05 flu season.

A View of Asthma in Oregon

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In This Issue

The Flu – A Major Troublemaker For People With Asthma

When the flu hits, people with asthma are hit hard	1
The flu shot – a major troublemaker for the flu	2
The numbers are a down(er).....	2
Flu shots are safe for people with asthma	2
The recommendations	3
Preventing the flu – it's worth a shot	3
Other safe bets for preventing the flu	3
References	4

"One of the greatest viral terrorists of our time is the flu. People with asthma should be leaders in protecting their own health and the health of those around them – they should get an annual flu shot."

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The Flu – A Major Troublemaker For People With Asthma

When the flu hits, people with asthma are hit hard

Influenza season will soon be upon us, and for those with asthma this means it's time to get a flu shot. The flu is caused by viruses that infect the respiratory tract (the nose, throat, and lungs) and is typically spread through the air from person to person when an infected person coughs or sneezes (droplet spread). The flu is different from the common cold or the "stomach flu" (an illness of the stomach or intestinal tract), in that it typically comes on suddenly, and commonly causes fever, headache, tiredness, dry cough, sore throat, nasal congestion and body aches ("flu-like symptoms").

About 10-20% of US residents get the flu each year: an average of 114,000 people are hospitalized and 36,000 people die each year from flu-related complications.¹ Influenza and pneumonia rank as the eighth leading cause of death in Oregon.²

Viral respiratory infections like the flu represent a potential double whammy for people with asthma. They not only cause inflammation and mucus production in the airways, but also heighten the body's response to other allergens and triggers. Research has shown that the influenza virus may be responsible for as many as 19% of asthma attacks or exacerbations among all age groups.³ People with asthma who contract the flu are at higher risk than the general population of developing complications (such as pneumonia, bronchitis, and ear infections), of time lost from work and school, of being hospitalized (especially among children younger than two, and the elderly), and of dying (especially among the elderly).¹

The flu shot – a major troublemaker for the flu

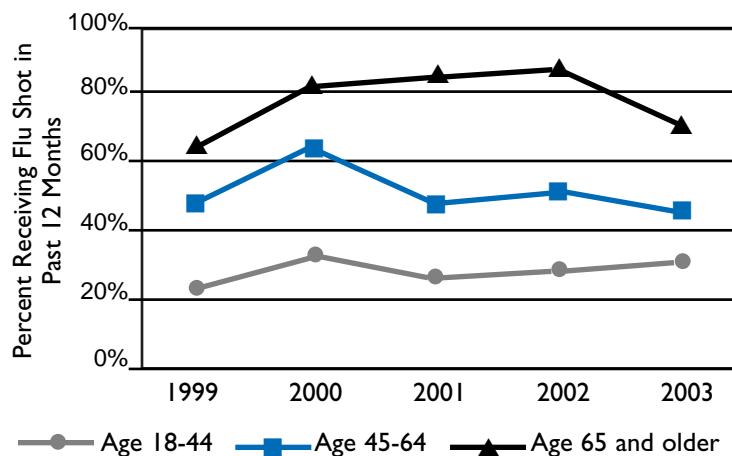
Influenza vaccination is the primary method for preventing influenza and related complications. Adults and children older than six months with asthma are among the primary candidates for annual influenza vaccinations. Vaccination of people with asthma could substantially reduce influenza-associated sickness and death among persons with asthma. It is estimated that vaccinating all children who have asthma may prevent 59-78% of asthma hospitalizations and emergency room visits during flu season.⁴ The American Lung Association (ALA) estimated that a typical hospitalization due to asthma costs \$4,058 in children and \$9,625 in adults (1999 national data).⁵ If every child and adult with asthma received a flu vaccination, then approximately \$363 million (adults) and \$398 million (children) would be saved.

The numbers are down(er)

Despite the havoc that the flu can wreak on those with asthma and the strong evidence that the flu shot can prevent this, a low percentage of Oregonians with asthma get flu shots – and this has been consistent over the last five years. In 2003, only 41% of adults with asthma received a flu shot, though the proportion of people getting a flu shot increased with age – 29% of those aged 18-44 with asthma received a flu shot, compared to 45% of those aged 45-64 and 71% of those aged 65 and older (Figure 1, below).

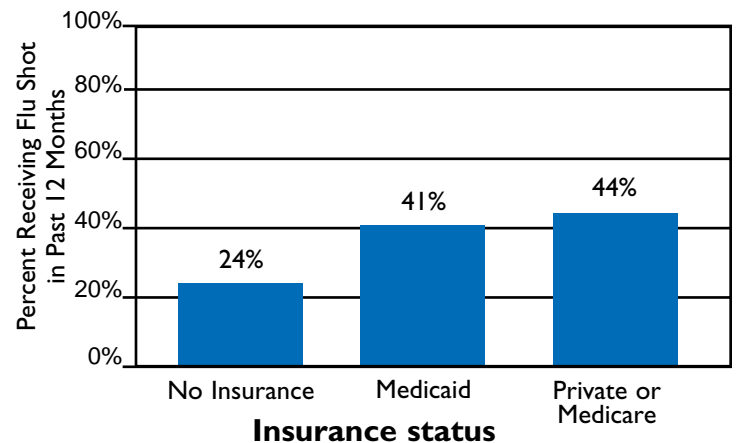
Flu shots were also more common among the insured. Among Oregonians with asthma, 24% of those with no insurance received a flu shot, compared to 41% of those with Medicaid and 44% of those with

Receipt of Flu Shots, by Year and Age Group, Among People with Asthma, Oregon



private insurance or Medicare (Figure 2, below). Associations between gender, educational level and race/ethnicity were less clear.⁶ National data paint a similar picture – only about one in three adults with asthma receive flu vaccinations.³ Among children with asthma, the national flu immunization prevalence is somewhere between 9% and 25%.⁷

Receipt of Flu Shots, by Year and Age Group, Among People with Asthma, Oregon, 2003



Flu shots are safe for people with asthma

Why do so few people get flu shots? More specifically, why do so few people with asthma get flu shots? There are a number of barriers that could factor in, e.g. availability, accessibility, cost, and cultural issues, but a barrier exclusive to the flu shot is the mistaken belief that the vaccine will cause the flu. Those with asthma may also worry that the influenza vaccination will adversely affect their asthma. There is good news on both these fronts:

The flu shot does not cause the flu. An inactivated vaccine (a vaccine that contains killed viruses) is the recommended type of flu shot for adults and children six months of age or older who have asthma and other high-risk conditions. A live, attenuated influenza vaccine also exists, but is only recommended for healthy persons aged 5 to 49 years old.¹ Since the flu shot does not contain any live virus, it is impossible to get the flu from the flu shot. By chance, some people do catch a cold around the time of getting the shot, and think the shot caused their illness, but it is not from the shot. For people who do get the flu after getting vaccinated, the shot will still help prevent complications, and will lower the risk of hospitalization and death.

The flu shot is safe for people with asthma. Recent, large studies have found that the flu vaccine is safe for adults and children with asthma, including those with severe persistent asthma.^{8,9} Research shows that there is no increase in the number, duration or severity of asthma attacks or exacerbations after vaccination.

The recommendations

The National Institute of Health's (NIH) National Asthma Education and Prevention Program (NAEPP), The Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP) and the ALA all recommend annual influenza vaccinations for adults and children as young as six months of age with asthma. National Healthy People 2010 (HP2010) goals are that 90% of non-institutionalized adults aged ≥ 65 years and 60% of non-institutionalized high-risk adults (including persons with asthma) aged 18 to 64 years receive annual influenza vaccinations. In Oregon, the *Guide to Improving Asthma Care* lists influenza immunization for all people with persistent asthma (and their household contacts) as one of the nine key indicators of quality medical care among Oregonians with asthma.

Preventing the flu – it's worth a shot

It is recommended that patients with asthma have an annual visit for asthma to ensure their asthma is well controlled. These visits provide important opportunities to administer or schedule the flu shot and to provide patient education. In addition, a number of other strategies have been developed to increase immunizations. These include:

- **Standing orders** for nurses and pharmacists in clinics, hospitals and nursing homes that enable providers other than a physician to deliver vaccinations to patients.
- **Feedback** to providers to inform them about the vaccination status of their asthma patients.
- **Mailed/telephoned reminders to patients** to let them know that they are due for their flu shot.
- **Expanded access** such as "drop-in" clinics, "express lane" vaccination services, Saturday clinics, and vaccination services at retail outlets to provide more opportunities for obtaining a flu shot.

- **Chart reminders** such as stickers or checklists that indicate asthma patients due for flu shots.
- **Patient education and healthcare provider education** on the safety and efficacy of the flu shot for their patients with asthma.

The CDC provides examples of these and other strategies at www.cdc.gov/nip/publications/flustrat.htm and a tool-kit for health care professionals at www.cdc.gov/flu/professionals/.

The Oregon Department of Human Services also provides a flu tool-kit for Oregon health care providers at www.oshd.org/acd/docs/influenza.cfm.

The Community Guide provides a systematic review of the effectiveness of selected population based interventions aimed at improving vaccination coverage in children, adolescents and adults at www.thecommunityguide.org/vaccine/default.htm.

Information about Oregon clinics administering flu vaccine can be obtained by dialing 1-800-SAFENET (1-800-723-3638).

Other safe bets for preventing the flu

The single best way to prevent the flu is to **get vaccinated** each year in the fall. The optimal time to vaccinate is usually October through November, but patients can talk to their health care providers about getting the flu shot as soon as it is available. Respiratory viruses are mainly spread from person to person via a cough or sneeze, however, there are other precautions one can take to prevent spreading or getting the flu:

- **Avoid close contact** with people who are sick, especially those coughing and sneezing within close proximity to others.
- If possible, **stay home** from work, school, and errands when you are sick, to help prevent others from catching the flu.
- **Cover your mouth and nose** with a tissue and turn away from those nearby when coughing or sneezing, or cough or sneeze into your elbow - not your hand.
- **Wash your hands often** to help protect you and others from germs.
- **Avoid touching your eyes, nose or mouth** to prevent spreading germs.

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