

OREGON PUBLIC HEALTH DIVISION • DEPARTMENT OF HUMAN SERVICES

FACT OR FICTION: PERCEIVED KNOWLEDGE OF ASTHMA SELF-MANAGEMENT

Asthma is a common chronic disease in the US affecting one in 12 adults. Even when mild, asthma is associated with activity limitations, missed days of work or school, reduced quality of life, and high health-care costs. Nationally, asthma is among the top 20 reasons for an ER visit, accounting for 1.75 million visits each year.¹ In addition, almost 500,000 people in the US are hospitalized for asthma annually.² At its most severe, asthma can kill; in 2006, more than 3,500 people in the US died from asthma.³

Have you ever had a patient with asthma who thought that going to the emergency room demonstrated appropriate self-management? Hopefully not—but people’s perception of their knowledge about asthma may be off the mark. This *CD Summary* describes perceived knowledge of asthma control practices among Oregon adults, and presents information on actual asthma outcomes.

ASTHMA IN OREGON

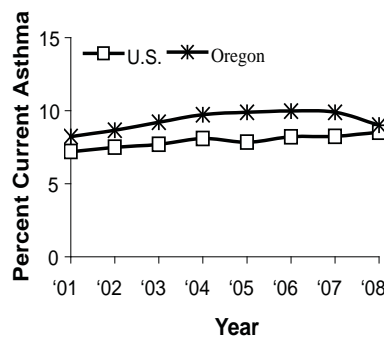
In 2008, 9%, or more than 260,000 adult Oregonians reported that they currently have asthma (Figure 1).^{*} The percent of Oregon adults with asthma is consistently higher than nationally, the reason for which is not known. From 2003–2007, Oregon ranked in the top ten states for adults with asthma. While the percent of adults with asthma in Oregon has recently leveled off, the percent nationally has been gradually increasing; since 2001, the percent has increased by 18%.

In Oregon, 14% of people with asthma say they went to an ER in the past 12 months, and each year, there are approximately 6.5 asthma hospitalizations per 10,000 residents. In 2006, 77 Oregonians died from asthma.

More Oregon women (12%) report having asthma than men (6%). It is not known why women are more likely

to have asthma, although studies indicate that physiological differences such as having generally smaller airways and different hormones could be contributing factors.⁴

Figure 1 Adult current asthma prevalence



Smoking and secondhand smoke are known triggers which can cause an increase in asthma symptoms. Unfortunately, 20% of adults with asthma smoke, compared to 17% of all adults. In addition, 24% of adults with asthma report being exposed to secondhand smoke.

PERCEIVED KNOWLEDGE AND OUTCOMES

While asthma cannot be cured, it can be controlled. Quality health care, correct medications, and good self-management are the most effective methods for people with asthma to control their symptoms.

The Oregon Asthma Program analyzes data from the Behavioral Risk Factor Surveillance System (BRFSS), a telephone survey of adults, to track the percent of Oregonians with asthma and what people think they know about self-management. Since 2005, Oregonians with asthma have also been asked about a wide range of health practices, outcomes, and training questions in a followup survey to the BRFSS.

These surveys show that more than 80% of Oregonians with asthma strongly agree that they know how to use their medications and control

their symptoms. However, almost 25% of those with high regard to their own knowledge have been to an emergency room or have had urgent treatment for worsening asthma symptoms. More than 5% have also stayed overnight at a hospital due to their asthma. In addition, over 20% had more than three episodes or attacks in the past three months. For the most, part men were more likely to have a high number of episodes or attacks while women were more likely to say they needed to see a health professional for urgent treatment (Figure 2). People younger than 55 years of age (28%) were twice as likely to report having an ER visit than those 55 years or older (12%).

Figure 2 Asthma outcomes and trainings



With the overwhelming number of people stating they know how to take their asthma medications and control their symptoms, it would be expected that most have received some formal, evidence-based tools or training on managing their asthma. However, only 39% of Oregonians with asthma report having ever been taught to use a peak flow meter to adjust their daily medications, and only 10% have ever taken a class on asthma management. In addition, only 25% have ever received an asthma action plan. Interestingly, women are twice as likely as men to report receiving training on the using a peak flow meter and having an asthma action plan than men; there was no difference by age.

* Oregon Behavioral Risk Factor Surveillance System 2008



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WHAT CAN PROVIDERS DO?

Health care providers are paramount to ensuring that Oregonians with asthma are educated about their disease and receive appropriate tools and resources to effectively manage their asthma. Even if patients state they know how to manage their disease, it is important to review their asthma action plan, talk about recent ER and hospital visits, and have frank discussions about the danger of smoking and second-hand smoke to people with asthma.

A number of tools are available to help providers ensure that patients with asthma understand how to best manage their disease. Patient education does improve overall understanding and disease control, although handing out pamphlets is not enough.⁵ People need opportunities to learn asthma management skills to become informed, involved patients.

RESOURCES

The Oregon Asthma Resource Bank is a web-based source available at www.oregon.gov/DHS/ph/asthma/resourcebank/oarbmaterials.shtml. The Resource Bank includes ready-to-print, clinically accurate asthma education handouts and provider tools based on the National Heart, Lung, and Blood Institute's Guidelines for the Diagnosis and Management (www.nhlbi.nih.gov/guidelines/asthma/). The Resource Bank includes an Asthma Action Plan.

Living Well with Chronic Conditions (www.oregon.gov/DHS/ph/livingwell/index.shtml) is a 6-week self-management class developed by Stanford University to help people

with chronic diseases such as asthma, to live healthier, more active lives. Participants have experienced significant improvement in their health behaviors and health status as a result of this program, including reduced hospitalizations and emergency department visits.

The **Oregon Quit Line**, 1-800-QUIT-NOW (1-800-784-8669), is a free, telephone-based assistance program that offers information and confidential, evidence-based cessation counseling. Faxing patient referrals to the Quit Line is easy and confidential. The Quit Line will call your patient. HIPAA-covered providers receive progress reports back from the Quit Line.

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H1N1 ANTIVIRAL UPDATE

Although use of influenza antiviral drugs in the US has increased during the 2009-10 flu season, not all recommended groups are getting treated. Updated treatment guidance (available at: www.cdc.gov/H1N1flu/recommendations.htm) is summarized below.

All hospitalized patients with suspected or confirmed 2009

H1N1 should be treated with a neuraminidase inhibitor—either oseltamivir or zanamavir—as early as possible after illness onset. Moderately ill patients, especially those with risk factors for severe illness, and those who appear to be getting worse, can also benefit from treatment. Although antiviral treatment is most effective when begun within 48 hours of onset, studies have shown that hospitalized patients still benefit from treatment even when started after 48 hours.

Although antiviral medications are recommended for patients at risk for severe disease, some people without risk factors may benefit from antivirals. To date, 40% of children and 20% of adults hospitalized with complications of 2009 H1N1 have no risk factors. Clinical judgment is essential!

When treatment is indicated, it should be started empirically, and NOT delayed while waiting for laboratory confirmation of H1N1. The earlier that antivirals are given, the more effective they are. Because rapid flu tests may be falsely negative, if you suspect flu, treat!

Although commercially produced pediatric oseltamivir suspension is in short supply, there are ample supplies of children's oseltamivir capsules, which can be mixed with syrup at home. In addition, pharmacies can compound adult oseltamivir capsules into a suspension for treatment of ill infants and children.