Asthma is a Serious Disease

Asthma is an inflammatory disease that targets the airways of the lungs and can cause difficulty breathing. Inflammation (swelling) and increased amounts of mucus production occur in the lining of the tubes that carry air to and from the lungs. In addition, the airways become extra sensitive, and may react to things like cold air, dust, cigarette smoke, and pollen. When airways react, the muscles that surround the outside of the airway tubes start to contract. As these muscles contract, they tighten and the tubes leading to the lungs become even smaller. These effects are usually temporary, but can cause shortness of breath, coughing, wheezing, and other symptoms. Figure 1 shows the difference between a normal airway (left) and an airway affected by inflammation and increased mucus (right).

While we do not know what causes asthma, we do know that certain things called “triggers” can cause asthma symptoms to increase. Not everyone with asthma has the same triggers, but some common triggers include exercise and allergens (things that cause allergic reactions).

How Many People in Oregon Have Asthma?

During the past 20 years, asthma has increased throughout the United States. By looking at the percent of people with asthma in Oregon, we have learned that the same thing is happening here. The measure of how many Oregonians (what percent of the population) have asthma is called the “prevalence” of asthma. We know that right now more than 282,000 people in Oregon have asthma. This means that the prevalence of asthma in Oregon is about 8%. Knowing how many people in Oregon have asthma is important. It helps us monitor the disease, and helps us to understand the impact of asthma in Oregon. Information about the prevalence of asthma for both adults and children in Oregon is included in this report.

Who Has Asthma?

While it is sometimes thought that asthma is only a childhood disease, we know that this is not true. Asthma affects both children and adults. Also, asthma affects men and women, people of any age, and of any race/ethnicity.

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A View of Asthma in Oregon

In a phone survey of adult Oregonians asking about health, the data show that 8.5% of adults living in Oregon, or about 218,000 adults, currently have asthma. (Figure 2) This percentage places Oregon among the top 8 states in the country with the highest prevalence of adult asthma. The survey also found that almost 12% of adult Oregonians reported having asthma at some point in their life.

The prevalence of asthma is different between men and women. Asthma seems to be almost twice as common among adult women than among adult men. Currently, it is estimated that 11.3% of women in Oregon have asthma, compared to only 6.2% of men. (Figure 3)

Unlike other chronic diseases, the percent of people with asthma is fairly consistent among all adult age groups. In adult Oregonians the percentage of adults with asthma ranges from 6.8% to 8.4%. (Figure 4)

Though asthma affects people of all income levels, we know from studies in other states that asthma is more of a problem in households with low incomes. This appears to be true in Oregon as well. Asthma is much more common among Oregonians with the lowest incomes. (Figure 5) Further study is needed in this area because although this appears to be a common trend, there are most likely other factors contributing to these findings as well.
Asthma in Children

Nationally, it is estimated that about 7.5% of children have asthma. This would mean that in Oregon, more than 63,000 children have asthma. Most of our data about asthma among children comes from school health forms completed by parents. In the Multnomah Education Service District (MESD), 7.2% of school children, or about 7,000 kids, had asthma reported on their school health form.

Among public school children in the MESD, asthma was reported slightly more often among boys (7.7%) than among girls (6.6%). Reported asthma was most common among American Indian and African American children, and least common among Asian/Pacific Islander children. (Figure 6)

Hospitalization for Asthma

Usually, people with asthma who properly manage and control their disease do not need to be hospitalized for asthma. Sometimes however, even people with good overall care need to be hospitalized for asthma. In Oregon in 1999, there were more than 2,300 hospitalizations for asthma.

The “annual rate of hospitalization for asthma” is the number of hospitalizations for asthma during one year, divided by the state’s population for that year. Currently, the annual rate of hospitalizations for asthma in Oregon is 7.0 per 10,000. Among all Oregonians, rates of hospitalizations are highest in young children and in older adults.

The rates of hospitalizations for asthma vary according to age and sex. For children ages 10 and younger, hospitalization rates are highest among males. After age 14 however, hospitalization rates are higher among females. The reason why adult women with asthma have higher hospitalization rates than adult men with asthma remains unclear.

Death from Asthma

Most asthma deaths can be prevented with quality medical care, the use of the correct prescription medications, and good self-management behaviors. Though most asthma deaths are preventable, each year in Oregon between 90 and 100 people die from asthma. Data about asthma deaths from 1980-1998 show that the rate of Oregonians dying from asthma is slightly increasing, which parallels the national trends. (Figure 7) The cause of this increase, however, is unknown.

Figure 6. Asthma Prevalence Among Children in MESD by Race: 2000

Figure 7. Death Rate for Asthma: Oregon and the U.S. 1980-1998
Right now more than 282,000 people living in Oregon have asthma. Asthma can be controlled and managed, but it cannot be cured. To address asthma in Oregon, various people and organizations within the state are taking steps to improve asthma control.

The Oregon Asthma Program (OAP) is a statewide program that originated in the fall of 1999 with the goal of creating a statewide network to address this important disease. The OAP is working to make sure that all Oregonians with asthma get quality medical care, and have the right information and skills to manage their disease. To do this, the OAP works with many different partners in the community who care about asthma in Oregon.

The OAP will be releasing future issues of this newsletter, and will focus on various topics relating to this complex disease. If you do not wish to receive future mailings, please contact the OAP.

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If you have questions about asthma, or want to learn how to better manage your disease, your doctor is an excellent resource for asthma information. Please speak with your doctor, or call the Oregon Asthma Program at (503) 731-4025.

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