

Asthma Varies with Gender and Age

Asthma prevalence, severity and response to treatment are different for males and females, children, adults and elderly.

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DENVER — The medical community has long recognized that asthma prevalence, severity and response to treatment vary significantly with age and gender. [Michael Wechsler, MD](#), professor of medicine and director of the Cohen Family Asthma Institute, and his colleagues recently reviewed and summarized the latest information about variations in asthma.



Among children ages 2 to 13, asthma is much more common and serious in boys than girls. But that shifts at about 14 with asthma becoming more common and serious in girls and women, especially in women over 23. Although asthma deaths have dropped significantly in the past two decades, women and girls are about twice as likely to die from asthma as are men and boys.

These differences are believed to be related to hormonal differences between men and women. During their premenstrual and menstrual periods women have lower lung function (FEV1) and more respiratory symptoms, leading to more airway hyperresponsiveness and a higher rate of health care utilization.

Pregnancy has variable effects on women with asthma. While asthma frequently improves during pregnancy, about a third of pregnant women suffer worsening symptoms.

The probability of having severe asthma increases directly with age until 45. Beyond 45 asthma severity continues to increase in men but not in women.

Treatment with the mainstay controller medication, inhaled corticosteroids, increasingly fails as asthma patients reach 30 and continues to increase as they grow older. Prevalence of asthma among older adults remains low, but it is generally more severe among the elderly leading to more complications and more deaths.

Age and gender can be important factors in developing a personalized approach to a patient's asthma care. According to Dr. Wechsler, the newly developed biologic medications, which target specific biologic pathways, may have a role in addressing age and gender differences in asthma but need further study to determine specifically how and when they can be used safely and effectively.

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Media Contacts

Our team is available to arrange interviews, discuss events and story ideas.

William Allstetter

303.398.1002

allstetterw@njhealth.org

Adam Dormuth

303.398.1082

dormutha@njhealth.org