BACKGROUND

Asthma is a lung disease characterized by wheezing, breathlessness, chest tightness, and coughing. The cause of asthma is unclear, but triggers such as pollen, animal dander, mold, cockroaches, dust mites, tobacco smoke, physical activity, certain foods and medication have been associated with asthma. Asthma has no cure, but it can be controlled by taking medicine and avoiding the triggers. The two asthma prevalence measures are the self-reported lifetime and current asthma. Lifetime asthma is defined as answering “yes” to the question “Have you ever been told by a doctor (nurse or other health professional) that you have asthma?” Current asthma is defined as answering “yes” to the preceding question, followed by answering “yes” to the subsequent question “Do you still have asthma?”

WHO DOES THE ISSUE IMPACT?

Asthma can affect people at all ages. In Pennsylvania, adult lifetime asthma prevalence increased from 12.9% in 2011 to 15.8% in 2019. This means that one in six adults reported lifetime asthma in PA in 2019. Females consistently reported a higher lifetime asthma prevalence than males from 2011 to 2019. Lifetime asthma prevalence increased in both sexes, up 28% in males and 19% in females from 2011 to 2019. Approximately one in seven males and one in five females reported lifetime asthma in Pennsylvania in 2019. By race and ethnicity, adult lifetime asthma prevalence was generally highest in Hispanics, followed by non-Hispanic Blacks and non-Hispanic Whites from 2011 to 2019. The prevalence increased 24%, 12%, and 23% in Hispanics, non-Hispanic Blacks, and non-Hispanic Whites, respectively. In 2019, approximately one in four Hispanics, one in five non-Hispanic Blacks, and one in seven non-Hispanic Whites reported lifetime asthma. Data in other racial and ethnic groups are insufficient for analysis. By age, lifetime asthma prevalence was generally higher among younger adults than older adults. From 2011 to 2019, lifetime asthma prevalence increased in all age groups as follows: 34% in adults aged 18 – 24 years, 12% in adults aged 25 – 34 years, 39% in adults aged 35 – 44 years, 27% in adults aged 45 – 54 years, 16% in adults aged 55 – 64 years, and 19% in adults aged 65 years or older. In each of the above corresponding age groups, approximately one in four, one in five, one in six, one in seven, one in eight, and one in nine adults reported lifetime asthma in 2019. By educational level, lifetime asthma prevalence was highest among adults with less education than a high school diploma from 2011 to 2019. Approximately one in six of these adults reported lifetime asthma, compared to one in seven adults who had a college degree or higher education in 2019. By income, lifetime asthma prevalence was highest among adults with an annual household income of less than $15,000 from 2011 to 2019. Approximately one in four of these adults reported lifetime asthma, compared to one in seven adults whose income level was $50,000 or higher in 2019.

![Adult Lifetime Asthma Prevalence (%) by Sex, PA, 2011–2019](image1)

![Adult Current Asthma Prevalence (%) by Sex, PA, 2011–2019](image2)
In Pennsylvania, adult current asthma prevalence increased from 9.0% in 2011 to 10.9% in 2019. This means that approximately one in nine adults reported current asthma in 2019. Females consistently had a higher current asthma prevalence than males from 2011 to 2019. Current asthma prevalence increased in both genders, up 16% in males and 23% in females. Approximately one in 13 males and one in seven females reported current asthma in Pennsylvania in 2019. By race and ethnicity, adult current asthma prevalence was lowest among non-Hispanic Whites. The prevalence in Hispanics and non-Hispanic Blacks was similar. The prevalence increased in all three groups from 2010 to 2019. In 2019, one in six non-Hispanic Blacks, one in six Hispanics, and one in 10 non-Hispanic Whites reported current asthma. By age, current asthma prevalence was generally higher among younger adults than older adults. From 2011 to 2019, current asthma prevalence increased in all age groups. In 2019, one in six adults aged 18 – 24 years reported current asthma, compared to one in 12 adults aged 65 years or older who reported current asthma. By educational level, current asthma prevalence was highest among adults with less education than a high school diploma. In 2019, one in seven of these adults reported current asthma, compared to one in 11 adults with a college degree or higher who reported current asthma. Similarly, current asthma prevalence was highest among adults with an annual household income of less than $15,000. In 2019, one in five of these adults reported current asthma, compared to one in 12 adults with an income of $50,000 or higher who reported current asthma.

**ASTHMA PREVALENCE AMONG CHILDREN 0 – 17 YEARS OF AGE, 2011 – 2019**

Child lifetime asthma prevalence decreased from 13.8% in 2011 to 12.3% in 2019. This means one in eight children had lifetime asthma in Pennsylvania in 2019. The prevalence was higher in boys than in girls. While the prevalence remained relatively unchanged in girls, the prevalence decreased 19% in boys from 2011 to 2019. In 2019, one in seven boys and one in nine girls had lifetime asthma. By race and ethnicity, lifetime asthma prevalence was lowest among non-Hispanic White children. In 2019, approximately one in nine non-Hispanic White children, one in six non-Hispanic Black children, and one in six Hispanic children had lifetime asthma. By age, the prevalence was generally higher among older children. From 2011 to 2019, the prevalence increased 28%, 46%, and 42% among children aged 5 – 9 years, 10 – 14 years, and 15 – 17 years. The prevalence decreased 26% among children 0 – 4 years of age. In 2019, one in 13 children aged 0 – 4 years, one in six children aged 5 – 9 years, one in seven children aged 10 – 14 years, and one in six children aged 15 – 17 years had lifetime asthma. Child current asthma prevalence decreased from 10.0% in 2011 to 7.9% in 2019. This means that one in 13 children had current asthma in Pennsylvania in 2019. The prevalence was higher in boys than in girls. From 2011 to 2019, the prevalence remained relatively unchanged in girls, while the prevalence in boys decreased 31%. In 2019, one in 10 boys and one in 15 girls had current asthma. By race and ethnicity, current asthma prevalence was lowest among non-Hispanic White children. In 2019, one in 15 non-Hispanic White children, one in nine non-Hispanic Black children, and one in eight Hispanic children had current asthma. By age, the prevalence was lowest among children aged 0 – 4 years. From 2011 to 2019, the prevalence decreased 29% and 37% among children aged 5 – 9 years and 10 – 14 years. The prevalence remained relatively unchanged among children aged 0 – 4 years and 15 – 17 years. In 2019, one in 17 children aged 0 – 4 years, one in 14 children aged 5 – 9 years, one in 11 children aged 10 – 14 years, and one in nine children aged 15 – 17 years had current asthma.
WHAT ARE WE DOING?

The Department of Health, through a cooperative agreement with the Centers for Disease Control and Prevention (CDC), is working "to improve the reach, quality, effectiveness, and sustainability of asthma control services and to reduce asthma morbidity, mortality and disparities by implementing evidence-based strategies across multiple sectors." The two main approaches of this work are enhancing infrastructure and leveraging partnerships to expand the six EXHALE strategies: Education on asthma self-management; EXtinguishing smoking and exposure to second-hand smoke; Home visits for trigger reduction and asthma self-management education (AS-ME); Achievement of guidelines-based medical management; Linkages and coordination of care; and Environmental policies or best practices to reduce indoor and outdoor asthma triggers. In collaboration with multiple partners, the Department of Health is supporting asthma home visiting, asthma self-management education in schools and community locations, smoking cessation and outreach, quality improvement initiatives for physician practices and health systems, and policy education and outreach campaigns on topics such as second-hand smoke, school stock inhalers, and air quality. The Department of Health also facilitates the Pennsylvania Asthma Partnership, the development and implementation of the statewide Asthma Strategic Plan, and asthma surveillance.

WHAT CAN YOU DO? ¹

• Take your medicine exactly as your doctor tells you and stay away from things that can trigger an attack to control your asthma.

• You can breathe in some medicines and take other medicines as a pill. Asthma medicines come in two types—quick-relief and long-term control. Quick-relief medicines control the symptoms of an asthma attack. If you need to use your quick-relief medicines more and more, visit your doctor to see if you need a different medicine. Long-term control medicines help you have fewer and milder attacks, but they don’t help you while you are having an asthma attack.

• Asthma medicines can have side effects, but most side effects are mild and temporary. Ask your doctor about the side effects of your medicines.

• You can control your asthma. Discuss with your doctor and make your own asthma action plan. Decide who should have a copy of your plan and where he or she should keep it. Take your long-term control medicine even when you don’t have symptoms.

RESOURCES FOR MORE INFORMATION

• Pennsylvania Department of Health Asthma Control Program: https://www.health.pa.gov/topics/programs/Asthma/Pages/Asthma.aspx

• The Centers for Disease Control and Prevention Asthma Program: https://www.cdc.gov/asthma/default.htm

If you have any questions, contact us at RA-DHPAAsthma@pa.gov

¹ The Centers for Disease Control and Prevention. (2019, September 6). Learn how to control asthma. https://www.cdc.gov/asthma/faqs.htm

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