

Diabetes, Arthritis & Asthma

Key Findings

According to the Auglaize County survey data, 27% of Auglaize County adults were diagnosed with arthritis. The Centers for Disease Control and Prevention (CDC) estimates that 1 of every 3 U.S. adults is affected by arthritis or chronic joint symptoms (CJS). Nine percent of Auglaize County adults had been diagnosed with asthma. In 2008, 8% of Auglaize County adults had been diagnosed with diabetes.

Diabetes Facts

- ❖ Diabetes was the 7th leading cause of death in Auglaize County for 2004-2006.
- ❖ In 2004-2006, Auglaize County age-adjusted mortality rates per 100,000 for diabetes by gender were 31.1 for males (35.3 Ohio) and 22.6 (25.6 Ohio) deaths for females.

(Source: American Heart Association, ODH, Information Warehouse)

Diabetes

- ◆ The 2008 health assessment project has identified that 8% of Auglaize County adults had been diagnosed with diabetes, increasing to 21% of those with incomes less than \$25,000 and 18% of those over the age of 65. The 2007 BRFSS reports an Ohio prevalence of 10% and 8% for U.S.
- ◆ Of those with diabetes, they were using the following methods to control their diabetes: diet control (50%), diabetes pills (76%), and insulin (21%).
- ◆ 11% of adults were told by a health professional they had pre-diabetes, increasing to 19% of those with incomes less than \$25,000 and 15% of those over the age of 65.
- ◆ Auglaize County adults diagnosed with diabetes also had one of the following characteristics or conditions:
 - 61% had been diagnosed with high blood cholesterol (compared to 39% of those not diagnosed with diabetes)
 - 76% had been diagnosed with high blood pressure (compared to 24% of those not diagnosed with diabetes)
 - 55% were age 60 or older (compared to 45% ages 59 and under)
 - 88% were obese or overweight (compared to 12% of those not diagnosed with diabetes)

Arthritis

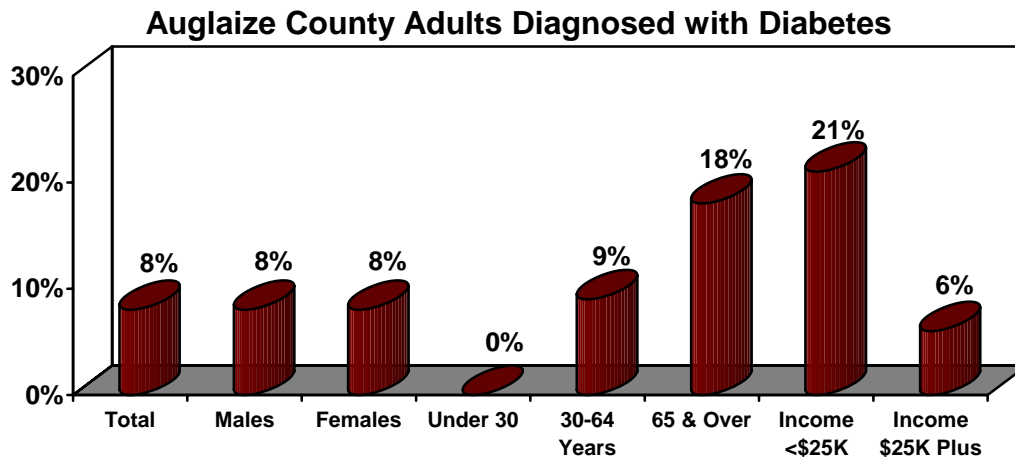
- ◆ Just over one-quarter (27%) of Auglaize County adults were told by a health professional that they had some form of arthritis. According to the 2007 BRFSS, 32% of Ohio adults and 28% of U.S. adults were told they have arthritis.
- ◆ In 2006, arthritis/rheumatism was the leading cause of disability among U.S. adults accounting for 9,500 deaths, 750,000 hospitalizations and 36 million ambulatory care visits (Source CDC – Arthritis at a Glance, 2007).
- ◆ Adults are at higher risk of developing arthritis if they have any of the following characteristics: female, Caucasian, 65 years of age or older, have less than 8 years of education, overweight, and live an inactive lifestyle (Source CDC).

Asthma

- ◆ In 2008, 9% of Auglaize County adults had been diagnosed with asthma, increasing to 14% of those under the age of 30 and 20% of those with incomes less than \$25,000.
- ◆ Of those with asthma, on average they were unable to work or carry out usual activities 1.9 days in the past year.
- ◆ 13% of Ohio adults have ever been diagnosed with asthma (Source: 2007 BRFSS).

Diabetes

The following graph demonstrates the percentage of Auglaize County adults who had been diagnosed with diabetes. Examples of how to interpret the information include: 8% of all Auglaize County adults had been diagnosed with diabetes, 0% of adults under age 30 had been diagnosed, and 18% of adults 66 and older reported they had diabetes.



Diabetes Complications

The complications associated with type 2 diabetes are numerous and serious including:

- ❖ **Heart disease and stroke** – 2 of 3 people with diabetes die from heart disease and stroke;
- ❖ **Kidney disease** caused by uncontrolled high blood pressure, uncontrolled blood sugar, and/or genetics;
- ❖ **Glaucoma** – diabetics are 40% more likely to suffer from glaucoma, which can develop into blindness;
- ❖ **Cataracts** – diabetics are 60% more likely to develop cataracts; cataracts can also lead to the development of glaucoma;
- ❖ **Retinopathy** – nonproliferative retinopathy does not cause loss of sight but can develop into proliferative retinopathy which causes loss of vision. Those with type 1 diabetes almost always develop nonproliferative retinopathy as do most people with type 2 diabetes; proliferative retinopathy is rare;
- ❖ **Neuropathy** is one of the most common complications of diabetes and is usually developed by diabetics who have had the disease for a long time or who have uncontrolled blood sugar. There are many forms of neuropathy but it is important to know that it can be very painful and disabling; however, for early neuropathy, symptoms can disappear with tight control of blood sugar, weight loss toward an ideal weight, and regular exercise;
- ❖ Various **Foot Complications** are experienced more commonly with people who have diabetes. Some of these foot complications include **neuropathy**, extremely **dry skin**, **calluses** that can develop into **foot ulcers** that do not heal quickly, **poor circulation**, and **amputation**. Amputation of the foot or leg is more common, usually as a result of decreased circulation, neuropathy, and/or slowly healing wounds;
- ❖ **Skin Complications** – Some of the many skin complications that diabetics are more likely to experience are **fungal infections**, **bacterial infections**, **atherosclerosis** (thickening of the arteries), **diabetic dermopathy** (harmless patches of light brown, scaly skin), **necrobiosis lipidica diabetorum** (NLD – red skin patches that can be itchy and painful that can break open into sores and need treatment), etc.; and,
- ❖ **Gastroparesis** occurs as a result of neuropathy where the nerves to the stomach are damaged and stop working. Multiple complications can result from the stomach taking too long to empty its contents ranging from uncontrolled blood sugar to complete blockage from the stomach to the small intestine.
- ❖ Well controlled diabetes can greatly reduce the complications of diabetes, but diabetics will still have a shortened life span.

(Source: American Diabetes Association, *All about Diabetes, Type 2 Diabetes, Complications*)

Diabetes

Adult Diabetes Screening Standards

Type 1 diabetes is usually diagnosed in children and young adults, and was previously known as juvenile diabetes. In type 1 diabetes, the body does not produce insulin. Type 2 diabetes is the most common form of diabetes. In type 2 diabetes, either the body does not produce enough insulin or the cells ignore the insulin, most likely because the insulin is defective.

The American Diabetes Association maintains that community screening is not recommended since there is no sufficient evidence that community screening for type 2 diabetes is cost-effective, as well as the potential harm caused by lack of continuous care following diagnosis; therefore, screening should be based upon clinical judgment and patient preference. Health care provider type 2 diabetes **screening standards for adults** are as follows:

- ❖ Every three years for those age 45 and over, especially for those with a Body Mass Index (BMI) of 25 or greater;
- ❖ Testing can be done more frequently for those at younger ages who are overweight and have one or more of the risk factors listed in the box on page 1;
- ❖ Patients who experience one or more of the known symptoms for diabetes (e.g. frequent urination, excessive thirst, extreme hunger, unusual weight loss, increased fatigue, irritability, blurry vision, etc.);
- ❖ Patients who have a family history of type 2 diabetes;
- ❖ Patients who belong to certain race/ethnic groups (specifically, African American, American Indian, Pacific Islander, or Hispanic American/Latino);
- ❖ Patients who have signs of or conditions associated with insulin resistance (e.g., high blood pressure, abnormal cholesterol, polycystic ovary syndrome, etc.); and,
- ❖ As deemed necessary by the health care professional.

Youth Diabetes Screening Standards

Since the incidence of type 2 diabetes for children and adolescents has been on the increase, it is important that health care providers also follow the standards for screening youth. The American Diabetes Association has a set of standards that have been developed for youth screening. The **standards for screening children and adolescents** are similar to those for adults and are as follows:

- ❖ Only children at high risk for developing or the presence of type 2 diabetes;
- ❖ Overweight youth defined as >85 percentile for BMI or 120% of ideal for weight;
- ❖ Youth experiencing any of the two known symptoms for diabetes (e.g. frequent urination, excessive thirst, extreme hunger, unusual weight loss, increased fatigue, irritability, blurry vision, etc.); and
- ❖ Every two years starting at age ten or at the onset of puberty for those experiencing symptoms or are overweight.

For more information about diabetes, please visit the American Diabetes Association's website at www.diabetes.org.

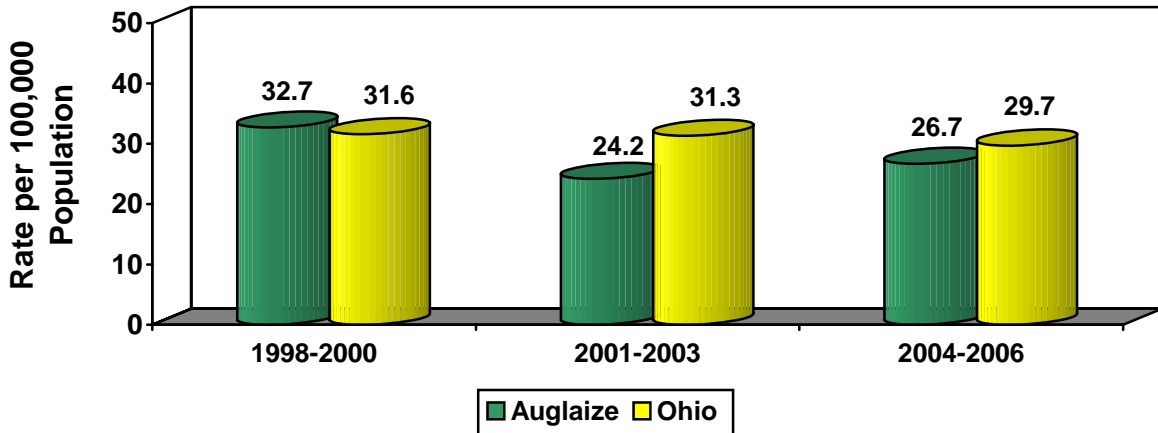
(Source: American Diabetes Association, Diabetes Care, Screening for Type 2 Diabetes, 2005)

Diabetes

The following graphs demonstrate age-adjusted deaths from diabetes for Auglaize County and Ohio residents with comparison to the Healthy People 2010 target objective.

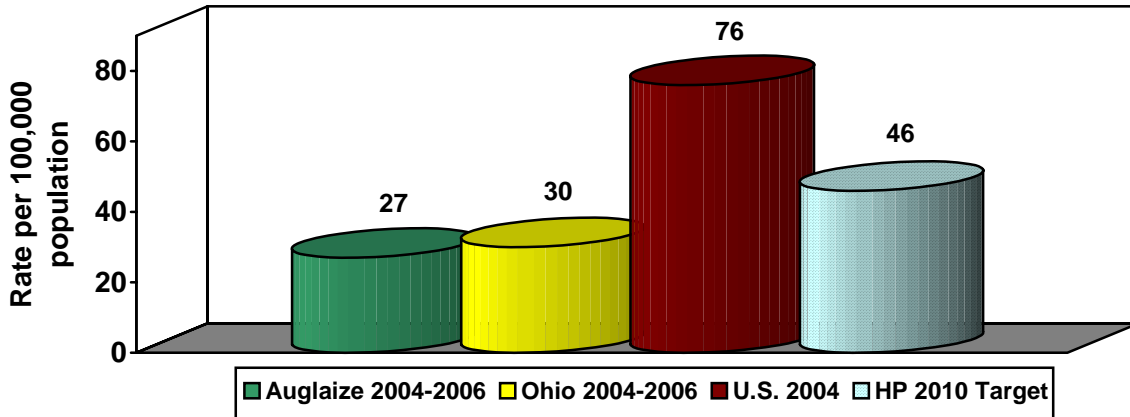
- ◆ Auglaize County’s age-adjusted diabetes mortality rates increased from 2001-2003 to 2004-2006.
- ◆ The 2004-2006 rates for Auglaize County are lower than for Ohio.

Diabetes Age-Adjusted Mortality Rates



(Source: ODH Information Warehouse)

Healthy People 2010 Objectives and Age-adjusted Mortality Rates for Diabetes*



**Age-adjusted rates/100,000 population, 2000 standard*

(Source: ODH Information Warehouse and Healthy People 2010, CDC)

Arthritis

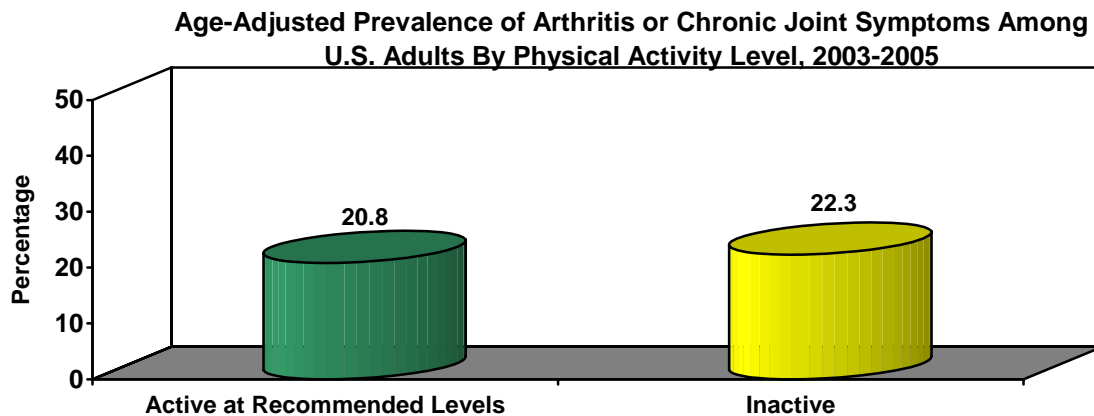
Arthritis Management Strategies

Suggestions from the *National Arthritis Action Plan: A Public Health Strategy* include:

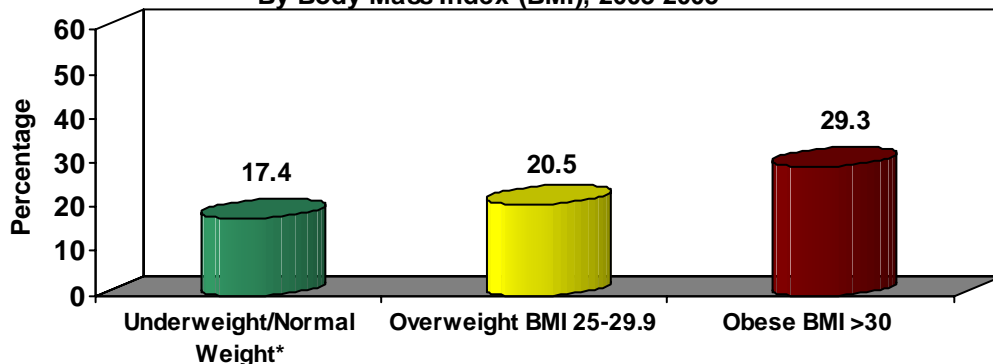
- Increase public awareness of arthritis as the leading cause of disability and an important public health problem.
- Prevent arthritis whenever possible.
- Promote early diagnosis and appropriate management for people with arthritis to ensure them the maximum number of years of healthy life.
- Minimize preventable pain and disability due to arthritis.
- Support people with arthritis in developing and accessing the resources they need to cope with their disease.
- Ensure that people with arthritis receive the family, peer and community support needed.

(Source: Arthritis Foundation, Association of State and Territorial Health Officials and Centers for Disease Control and Prevention, 1999)

The following graphs demonstrate the prevalence of arthritis and chronic joint symptoms among U.S. adults by physical activity level and by weight classification. It appears that those most at risk for developing these chronic problems are above normal weight and are inactive.



Age-Adjusted Prevalence of Doctor-Diagnosed Arthritis Among U.S. Adults By Body Mass Index (BMI), 2003-2005

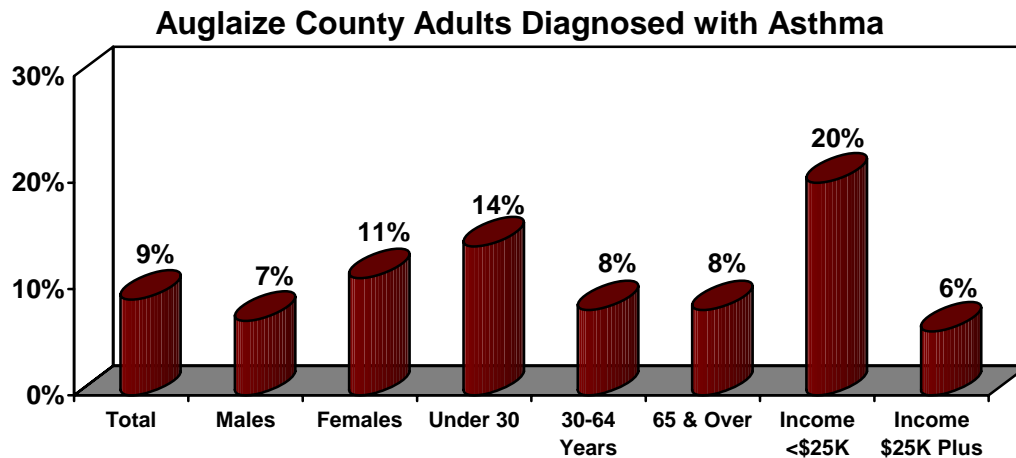


*Underweight is defined as a BMI of less than 18.5. Normal weight is defined as a BMI of 18.5-24.9.

(Source for graphs: CDC, MMWR Weekly, Prevalence of Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity Limitation – U.S. 2003-2005)

Asthma

The following graph demonstrates the percentage of Auglaize County adults who had been diagnosed with asthma. Examples of how to interpret the information include: 9% of all Auglaize County adults had been diagnosed with asthma, 7% of males had been diagnosed, and 11% of females reported they had asthma.



Asthma Control

Recommendations from the CDC's National Asthma Control Program include:

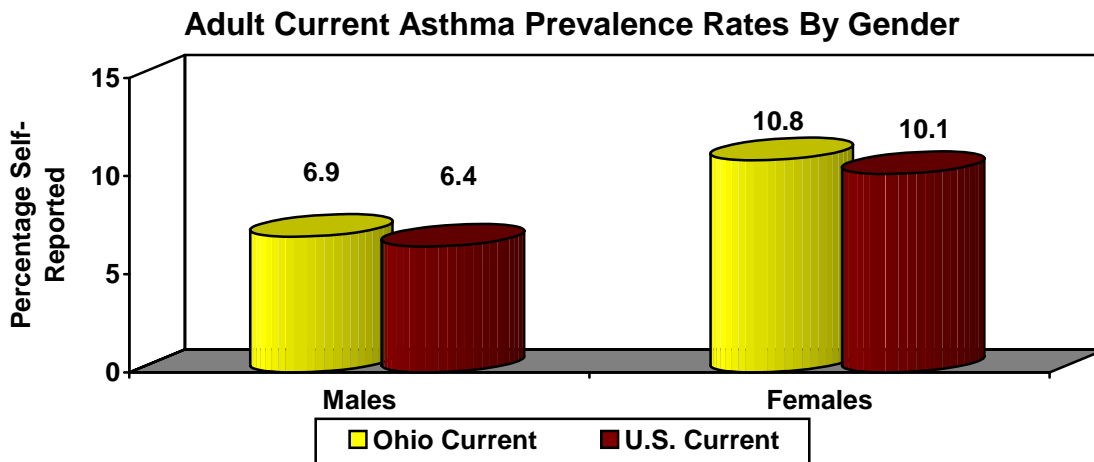
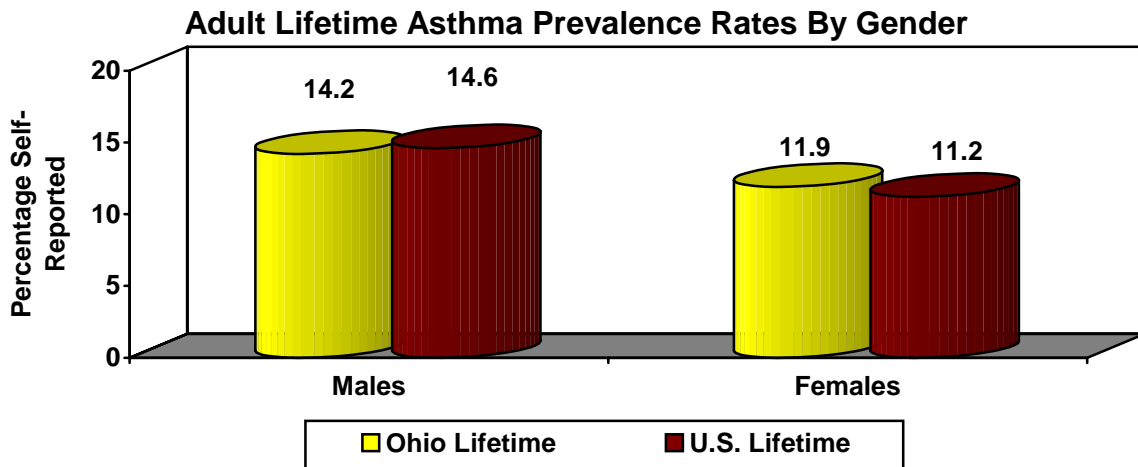
- Tracking: routinely collect and analyze asthma data to determine who is most affected in Auglaize County.
- Interventions: assure that research-based public health practices and programs are implemented to reduce the burden of asthma within the county.
- Partnerships: make sure that all stakeholders have the opportunity to be involved in developing, implementing and evaluating the local asthma control programs.

For youth, the CDC has published *Strategies for Addressing Asthma within a Coordinated School Health Program*, revised 2006. The six strategies identified include:

- Establishing management and support systems for asthma-friendly schools.
- Providing appropriate school health and mental health services for students with asthma.
- Providing asthma education and awareness programs for students and school staff.
- Providing a safe and healthy school environment to reduce asthma triggers.
- Providing safe, enjoyable physical education and activity opportunities for students with asthma.
- Coordinating school, family and community efforts to better manage asthma symptoms and reduce school absences among students with asthma.

Asthma

The following graphs demonstrate lifetime and current prevalence rates of asthma by gender for Ohio and U.S. residents.



(Source: Data from BRFSS 2006, reported by Air Pollution and Respiratory Health Branch, National Center for Environmental Health, Centers for Disease Control and Prevention)