Erie County
Community Health Needs Assessment
2015

Erie County, Pennsylvania

Erie County
Department of Health
ecdh.org

Erie County Community Health Needs Assessment

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Introduction

A community health needs assessment (CHNA) is a tool used to evaluate the health status of residents and identify areas of concern within the community. Data comes from multiple sources, including input from residents themselves. The long-range goal is to provide focus areas for collaborative action and outreach among community stakeholders and residents.

Under the Patient Protection and Affordable Care Act (ACA), nonprofit, tax-exempt hospitals must conduct a CHNA every three years for their primary service area in collaboration with community partners including public health. As part of the national public health accreditation process, the Erie County Department of Health (ECDH), in order to maintain its current national public health accreditation status, must complete a CHNA every five years in collaboration with community partners including the nonprofit, tax-exempt hospitals within its jurisdiction. The first collaborative CHNA was completed in 2012. A basic community health improvement plan was initiated.

The objectives of the 2015 Erie County Community Health Needs Assessment are to (1) provide a comprehensive overview of the health status of Erie County, (2) identify priority health needs within the county, (3) organize these priorities into strategic issues, (4) share this information with the community at large, including stakeholders, and (5) use these priorities to guide community outreach and future collaborative action among organizations within the community.

Mobilizing for Action through Planning and Partnerships (MAPP), developed by the National Association of County and City Health Officials (NACCHO), was selected as a guide for this assessment (Figure 1).

Figure 1. MAPP Planning Process

MAPP relies on four assessments to provide the information needed to develop strategic issues, goals, strategies, and action plans for the community. These assessments are: (1) Community Health Status Assessment, which provides quantitative and qualitative data about the health needs of residents, (2) Community Themes and Strengths Assessment, which helps to identify issues and topics of interest to the community, (3) Forces of Change Assessment, which identifies current or future issues that may affect the community or public health system, and (4) Local Public Health System Assessment, which identifies organizations that contribute to the public's health.

Overview and Methodology

The MAPP process provides a roadmap for both a CHNA and a Community Health Improvement Plan (CHIP) and allows for integration of activities between the two. It is facilitated by public health leaders, focuses on collaboration, allows for community input, and facilitates both the prioritization of public health issues and the identification of community resources. As part of the CHNA, "Wellness in mind, body, and spirit" was chosen as the vision. Priorities and strategic issues identified through the CHNA process will be used in implementing the CHIP. This document includes the CHNA and its recommendations for community action.

ECDH epidemiologists Valerie Bukowski, MS and Jeff Quirk, PhD authored the Health Needs Assessment. Valerie Bukowski, MS coordinated the assessment process.

This report is divided into the following sections: (1) Demographics, (2) Maternal, Infant, and Child Health, (3) Mortality, Cancer, and Injury, (4) Infectious Diseases, (5) Chronic Diseases and Conditions, (6) Preventive Health Services, (7) Health Risk Behaviors, (8) Mental and Behavioral Health, (9) Special Populations, (10) Health-Related Quality of Life, (11) Health Care Access, (12) Health Care Providers, (13) Safety and Crime, (14) Environmental Health, (15) Quality of Life, and (16) Focus Groups. Selected Healthy People 2010 and 2020 goals are also included. Data sources are listed at the end of each section.

Because this is a comprehensive needs assessment, both quantitative and qualitative data are included. Health indicators are reported as individual data points and are also included in trend analyses. Statistics for gender, race, ethnicity, age, education, and income are listed when available. Finally, indicators are compared to state, national, and Healthy People 2020 data. Qualitative data was compiled from seven focus groups conducted throughout Erie County. Using the same questions for each group, participant responses provided perceptual views from county residents about the health of their community.

Priorities for Erie County were identified using a priority matrix, ranking system, and asset inventory. Final strategic issues and overarching challenges were then developed.

Steering Committee

As a collaborative project, the assessment process was guided by a group of leaders representing a cross section of the community. The process began in March 2014 with an organizational teleconference among the four nonprofit hospitals and ECDH. Erie County was identified as the service area for all hospitals and fiscal year deadlines were identified. A draft report with delivery for public comment on or after July 1, 2015 met timeline requirements for all four hospitals. The group identified community partners as Steering Committee members. Both a letter of invitation and a description of duties were sent to these partners.

With the Erie County Department of Health (ECDH) as lead agency, Corry Memorial Hospital, Millcreek Community Hospital, Saint Vincent Hospital, UPMC Hamot, Community Health Net, the Erie Community Foundation, Erie County Office of Drug and Alcohol Abuse, Erie County Office of Mental Health and Intellectual Disabilities, the Northwest Pennsylvania Area Health Education Center, and the United Way of Erie County formed a collaboration in order to complete a comprehensive Erie County Community Health Needs Assessment. Members of the committee are listed below.

Steering Committee Members

Melissa Lyon	Director	Erie County Department of Health
Terry DeLellis	Director of Nursing	Corry Memorial Hospital
John Bergquist	Controller	Millcreek Community Hospital
James Amsterdam, MD	Chief Medical Officer	Saint Vincent Hospital
Carol Morehouse, SSJ	Senior Vice-President, Mission Integration	Saint Vincent Hospital
Carrie Ennis	Director, Strategic Planning	UPMC Hamot
Marlia Coates	Director, Operations and Community Services	Community Health Net
Michelle Robertson	Program Manager	Erie Community Foundation
John DiMattio	Director	Erie County Department of Human Services
David Sanner	Executive Director	Erie County Office of Drug & Alcohol Abuse
Jeanette Redenius Natalie	Early Intervention Coordinator	Erie County Office of Mental Health & Intellectual Disabilities
Patricia Stubber	Executive Director	Northwest Pennsylvania Area Health Education Center
Del Birch	Vice President, Community Building	United Way of Erie County
Valerie Bukowski	Assessment Coordinator Epidemiologist	Erie County Department of Health

The schedule for meetings/teleconferences/email communications is listed below.

Steering Committee Meetings

April 29, 2014	Meeting	Organizational
May 22, 2014	Meeting	Timeline

		Qualitative Data: Advisory Committee selection
June 26, 2014	Meeting	Qualitative Data: Advisory Committee survey
September 25, 2014	Meeting	Qualitative Data: Advisory Committee survey results
October 23, 2014	Meeting	Qualitative Data: Focus Group identification Quantitative Data: Review
November 18, 2014	Teleconference	Qualitative Data: Focus Group selection and questions
January 22, 2015	Email	Qualitative Data: Focus Group update
February 26, 2015	Teleconference	Qualitative Data: Focus Group preliminary results Quantitative Data: Identify additional data sources and gaps
April 16, 2015	Teleconference	Assessment Document: Review draft Focus Group Report: Review draft Prepare for prioritization
April 23, 2015	Meeting	Prioritization: Session 1
May 4, 2015	Meeting	Prioritization: Session 2
May 28, 2015	Teleconference	Review Strategic Issues and Priorities Blueprint Finalize Focus Group recommendations Approve public comment via Advisory Committee survey
June 25, 2015	Email	Review survey questions for Advisory Committee

Community Themes and Strengths: Qualitative Data – Advisory Committee

The goal in 2015 was to build upon the focus group results found in the 2012 CHNA and ask questions that would elicit more pointed comments. In addition to both quantitative data and the results from the 2012 CHNA, the steering committee wanted a broader and more informed view of the issues affecting the residents of Erie County. In order to achieve this, they opted to survey a diverse group of community partners. This group was identified as the advisory committee. A total of 125 invitations were sent to a cross section of organizations within Erie County. Twenty-five individuals accepted. These committee members represent organizations that service a cross-section of Erie County residents. They are listed below.

<u>Advisory Committee Members</u>

Rebecca Ellsworth	Adagio Health Erie
David Dausey, Dean	School of Health Professions and Public Health, Mercyhurst University
Karen Jakiel, Senior Representative	American Cancer Society, East Central Division
Tammy Bartasavich, Co-Project Director	Center for Organizational Research & Evaluation (CORE)
Chris Hornick, Executive Director	Corry Area Chamber of Commerce
Karen Croyle, Executive Director	Corry Counseling Services
Nicole Bolash, Director	Health Promotion and Education, ECDH - Outreach
Karen Tobin, Director	Environmental Services, ECDH – Environmental Issues
Kimberly Kennedy, Director	Office for Students with Disabilities, Edinboro University
Bill Hagerty, Executive Director	EmergyCare

Laura Salamonsen, Program Manager	Erie City School District, CHAMPS Afterschool Enrichment
Charlotte Berringer, Director	Community Health Services, ECDH
Susan Carlson, Supervisor	Infectious Disease, ECDH
Kris Balinski, Supervisor	Maternal and Child Health, ECDH
Mark Kresse, Manager, Health Services	GE Transportation; Erie County Healthcare Collaboration
Debora Jamison, Director	Erie County WIC Program
Dylanna Jackson, Director	International Institute of Erie
Rochelle Krowinski, Executive Director	LifeWorks Erie
Peter Albright	Medical Group of Corry
Patricia Stubber, Executive Director	Multi-Cultural Health Evaluation Delivery System
Robert Wooler, Director	Nonprofit Partnership
Rose Graham, Executive Director	Sisters of St. Joseph (SSJ) Neighborhood Network
Rebecca Brumagin, Executive Director	The Achievement Center

Members of the committee completed two surveys, one at the beginning of the assessment process and one at the end. In the first survey, committee members were asked to identify the population they served and then select the top three problems, health concerns, and obstacles to good personal health for both the residents of Erie County and their population served. Results are listed by rank in Table 1 with the first problem in each list ranked as one. More than three issues are included for a topic whenever a tie occurred among top ranked issues. Responses to this first survey were used to help craft the 2015 focus group questions.

The second survey was used to determine how well the assessment results aligned with the needs of Erie County residents. Survey respondents were asked to identify the population they served and then select the focus group themes, priority indicators, target populations, and overarching challenges that applied to their clients. Results are listed in Table 2. The percent response refers to the percentage of survey respondents who felt the theme or indicator applied to their service population. All respondents agreed that the population they served would benefit from programming based on the themes, priority indicators, target populations, and overarching challenges identified as a result of the assessment.

Table 1. Advisory Committee: Targeted Areas of Concern

	Erie County Residents	Population Served
Primary Problems	Crime Drug abuse Poverty Violence Aging population Jobs	Poverty Healthcare utilization Drug Abuse Cost of health care Education
Primary Health Concerns	Obesity Other substance abuse Financial distress & health Diabetes/Pre-diabetes Prescription drug abuse	Obesity Other substance abuse Financial distress & health Alcohol abuse
Obstacles to Good Personal Health	Poverty/Money/Jobs Education/Health literacy Apathy	Education/Health literacy Poverty/Money/Jobs Apathy

Table 2. Advisory Committee: Alignment of Themes with Population Served

	Themes and Indicators	% Response
Focus Group	Transportation Low health literacy Communication Need for all services	78% 56% 44% 44%
Priority Indicators	Nutrition Tobacco use Obesity Physical inactivity Depression (Poor mental health) Alcohol/Other substance abuse	88% 88% 75% 75% 75% 75%
Target Populations	Adults Youth Low income Refugees Homeless Aging population None of the above	100% 100% 100% 88% 75% 63% 0%
Overarching Challenges	Health literacy; Communication Poverty Health-related transportation Disparities Medical and dental shortage for underserved	88% 75% 75% 63% 50%

Community Themes and Strengths: Qualitative Data – Focus Groups

Focus groups are used to provide resident perceptions of health issues within the community. They can consist of community leaders whose responses represent the interests of the population they serve or they can consist of targeted population groups. The goals for the 2015 focus groups were to: (1) conduct the groups in strategic geographic locations throughout the county, (2) include community leaders, especially those who provide social services, (3) include populations that reflect the socioeconomic diversity of the county, and (4) include end users of the health system.

Groups were facilitated by the Northwest Pennsylvania Area Health Education Center and conducted in January and February of 2015. Five health-related questions, crafted by the Steering Committee and incorporating the results of the advisory committee survey, were used for all groups. Participant responses provided perceptual views from county residents about the health of their community. The group responses were analyzed to identify general indicators and themes. The questions are listed below.

Health Behaviors

- What do you do to stay healthy?
- What keeps you from being healthy?
- How do you get exercise?
- Do you have any dietary concerns?
- Do you have access to healthy foods?

Behavioral Health/Mental Health

- What kinds of mental health/behavioral health issues do you see in your community and Erie County in general?

Healthcare Utilization

- What do you think is the primary responsibility of the local health system in improving the health of the community?
- What changes should be made in our local and/or county systems?
- Where do you find information about the health care options and services available to you?
- Tell us about any trouble you, friends, or family have had getting needed or wanted health services in the past few years.
- What about health literacy?
- What about transportation?
- Are there other services that are needed?

Erie County consists of one large city (the City of Erie), one small city (the City of Corry), several large metropolitan suburbs, and many small rural communities. A high rate of poverty is one of the primary sociodemographic characteristics of Erie County. Using a census tract poverty map of the county, the Steering Committee identified strategic locations for community based focus groups. Overall, one large Erie County community focus group and three smaller community focus groups were conducted. These three included the City of Erie, the City of Corry/Union City

Borough/Union Township, and Albion Borough/Girard Township. Invitations were sent to a diverse list of community organizations including nonprofit, religious, law enforcement, government, education, health care, social service, mental health, and advocate groups. To encourage candid discussion, all group participants were assured confidentiality. Because of this, only the names of participating organizations are listed below.

Erie County Focus Group
Barber National Institute
Greater Erie Community Action Committee (GECAC), Area Agency on Aging
Mercyhurst Civic Institute
Stairways Behavioral Health
Erie County, Office of the County Executive
SafeNet
Family Services of NWPA
Northwest Tri-County Intermediate Unit (IU#5)
Safe Harbor
Erie Regional Chamber and Growth Partnership
Early Connections
Erie County Office of Drug and Alcohol Abuse
Erie VA Medical Center, Health Promotion and Disease Prevention
Erie VA Medical Center, Infection Control
Gaudenzia Crossroads – Erie, Shout Outreach
GECAC, Head Start, Family and Community Engagement Services Program
Neighborhood Resource Organization (NRO)
Community Resources for Independence (CRI)

City of Erie Focus Group
Bayfront Eastside Task Force (BEST)
Erie United Methodist Alliance, Healthcare for the Homeless
Multicultural Community Resource Center (MCRC)
Gannon University, Community and Governmental Relations
City of Erie, Community Development
Erie City School District, School Health

City of Corry & Union City Focus Group
Erie County Housing Authority, Section 8 Housing
Corry Counseling Services
Corry Ministerium
Safe Journey
Union City Family Support Center
Corry Area Free Clinic
Corry Ambulance Services, Inc.
Love, Inc.
Corry Memorial Hospital, Corry Oncology Clinic

Albion & Girard Focus Group
Northwestern Food Pantry, Albion
Council of Churches, Girard
Northwestern School District, School Health
Girard Borough, Borough Council
Love, Inc. of West Erie County
Girard School District, School Curriculum

In addition to these community groups, three targeted population focus groups were conducted. They are: (1) low income residents in North East, many of whom were WIC clients, (2) public housing residents of Harbor Homes in the City of Erie, and (3) mental health system users who were identified through Erie County Care Management and the Mental Health Association.

The major focus group themes are: (1) health related transportation issues, (2) difficulty navigating through the health care system, (3) low health literacy, (4) unclear communication by healthcare providers, (5) food insecurity, (6) homelessness, (7) domestic violence, (8) violence, and (9) drugs and alcohol abuse.

All groups commented on the lack of adequate financial resources to enable more services, but all recognized the lack as a universal issue related to current economic times in the area. One leadership group expressed the desire to work together to better serve their community and more efficiently utilize scarce resources. Health and overall success were attributed to education and the ability to utilize education to earn a family sustaining wage. The targeted focus groups identified health literacy, including both communication with healthcare providers and health system navigation, as a major theme and a necessary component for health management. This was followed by health-related transportation issues and food insecurity. Many relied on local food banks for food, especially the elderly who could not always ride the bus to the grocery store. Others relied on family members to help them navigate the health system and identify appropriate services. Trust of providers and the health care system was identified as an essential piece of health management.

Health Status Assessment: Quantitative Data

The ECDH epidemiology staff completed the Community Health Needs Assessment. Health indicators are reported as individual data points, are included in trend analyses, and are compared to available state, national, and Healthy People 2020 statistics. When possible, health indicators are also reported according to gender, race, ethnicity, age, education, and income.

Primary data includes local health statistics calculated and reported by ECDH epidemiologists and available on the ECDH website as well as health behavior statistics for Erie County adults originally reported in a 2011 Erie County Behavioral Risk Factor Surveillance System (BRFSS) Survey that was conducted locally.

Secondary data includes state health statistics and health care reports from the Pennsylvania Department of Health (PA DOH), aggregate three year sum BRFSS data for select Erie County indicators as reported by PA DOH for the years of 2011-2014, national health statistics available on the Centers for Disease Control and Prevention (CDC) website, demographic data from the U.S. Census Bureau, hospital-related information from the Hospital and Healthsystem Association of Pennsylvania, and related data and information from various local, state, and national organizations. A list of relevant Healthy People 2010 and 2020 goals is also included. All data sources are listed at the end of each titled section, most are linked directly to the source, and all were current as of June 2015. The most recent data available at the time of collection is reported. For the BRFSS, a change in weighting methodology used by Pennsylvania to adjust for irregular distribution within the sample population began in 2011. This may shift estimates and trend lines for Pennsylvania. Because the sampling used for the Erie County BRFSS was representative of the county population, traditional subpopulation weighting was used.

Notable data deficiencies include limited youth health indicators, a lack of data related to the lesbian, gay, bisexual and transgender (LGBT) community, a lack of comprehensive community mental health statistics, and limited data for adult drug abuse including prescription drugs.

With the exception of ECDH, sources are not responsible for any of the analyses, interpretations, or conclusions that appear in this Assessment.

Forces of Change

Members of the Steering Committee were given a list of questions and responses from the 2012 CHNA for consideration and then asked for their input. The questions and corresponding responses are listed below.

Community Health Impact

- What are important characteristics of a healthy community for all who live, work, and play here?
  - Mind, body, and spirit wellness of residents
  - Happy, healthy, and engaged residents
  - Residents who assume responsibility for their health
  - Residents who use available resources
  - Respect among all residents
- How do you envision the local public health system in the next five years?
  - Leaner; doing more with less
  - Increased collaboration among community members
  - Focused community efforts on selected health indicators
  - Continued consolidation of current health care delivery systems
  - Targeted efforts on disease prevention

External Forces and Issues

Forces: Trends - Patterns over time such as migrations in and out of a community
Factors - Discrete elements such as ethnic population, urban setting
Events - One-time occurrences such as passage of new legislation

Issues: Social, economic, political, technological, environmental, scientific, legal, ethical, and organizational factors.

- What is occurring or might occur that affects the health of our community or the local public health system?
  - Aging population
  - Influx of refugees
  - High poverty rate
  - Health Care Reform Act and its implications
  - Economic uncertainty (possible loss of local employers)
  - Health care systems joined with insurance companies
  - High incidence of substance abuse
  - Increased number of low wage, low skill individuals and/or families
  - Shrinking budgets and reduced public health system workforce
  - Continued increase of technology usage accompanied by a sedentary lifestyle, especially among children and adolescents

Challenges and Opportunities

- What specific challenges/threats/barriers or opportunities are generated by these occurrences?

  Challenges
  - Electronic health/medical records
  - More providers may be needed (especially primary care providers)
  - Possible increase of Medicaid recipients
  - Dental care, especially for low income population
  - Less reimbursement but more services
  - Quality-based (performance) payment
  - Health care supply and access limits associated with insurance restrictions
  - Culturally appropriate health care delivery
  - Increased health care needs of older individuals
  - Limits on the amount of time spent using technology, especially among children and adolescents
  - Maintain services with reduced workforce
  - Sufficient economic resources

  Opportunities
  - School-based health centers in schools located in neighborhoods with high risk residents
  - More people will be insured
  - Women's preventive services per the Affordable Care Act
  - Improved quality of care based on pay for performance
  - Health records available to all health care providers ensures a more coordinated

level of patient care
- Technology can be used to promote both an active lifestyle and healthy eating
- Collaboration among community partners to maintain services

Local Public Health System Assessment: Assets and Resources

Many of the health-related resources available in Erie County are listed in the body of the assessment and can be found at Health Care Providers and Leisure and Recreation (Parks and Trails).

There are many organizations within Erie County that provide a wide range of services, programs, and opportunities for county residents. Many are listed in the Gannon University Human Service Directory located at Gannon University | Human Service Directory. Services are listed by category and by agency. Included in the list of categories are advocacy, alcohol/drug & addictions, animals, camps, churches, community action, counseling, daycare & after school programs, education, emergency, employment/volunteerism & career, food/clothing/shelter, funeral homes, health care, home health care, hospice, hospitals-full or partial hospitalizations, housing, assisted living, independent living, transitional living, legal concerns/government, mental health/mental retardation, pregnancy & adoption, recreation, senior citizens, services/utilities, support groups, transportation, and veterans.

A broad cross-section of community organizations, including law enforcement and education, partnered to address tobacco issues within the county. They are: Coalition Pathways, Community Health Net, Stairways Behavioral Health, Millcreek Township Police Department, City of Corry Police Department, City of Erie Police Department, Erie County Sheriff's Office, American Cancer Society, Harbor Creek School District, Millcreek Township School District, Erie City School District, Lake Erie College of Osteopathic Medicine School of Pharmacy, the Regional Cancer Center, UPMC Hamot, Erie City Mission, LifeWorks Erie, Pyramid Healthcare, Multicultural Community Resource Center (MCRC), GE Transportation, Erie County Drug and Alcohol Coalition, Methodist Towers, Plastikos, Inc., and the Erie County Department of Health which is also the regional program manager for the Northwest Pennsylvania Tobacco Control Program.

The Junior League of Erie offers a hands-on "Kids in the Kitchen" nutrition program and also partners with the Erie County Department of Health, the Regional Chamber and Growth Partnership, the Second Harvest Foodbank of Northwest PA, the Sisters of Saint Joseph Neighborhood Network, and other community organizations on the Access to Healthy Foods Committee.

Nutrition and physical activity are addressed by the YMCA, LifeWorks Erie, the Wellsville Program, the Penn State Cooperative Extension, the Erie County Diabetes Association, Early Connections (an early childhood focused organization), Kid's Cafes, individual hospital health and wellness initiatives, and individual health plans and insurance providers.

Physical activity is the focus of the Erie Walks Initiative and the Let's Move Outside: Erie County Recreational Passport Initiative. Additionally, Erie County offers over six hundred recreational and nutritional opportunities which are listed under the Bundle Up! Program, the Eat Fresh! Program, the Go Fish! Program, the Go to (Sports) Camp! Program, the Golf! Program, the Join! Program, the Lace Up! Program, the Play at the Park! Program, the Play in the Water! Program, and the Roll! Program.

Over thirty community organizations, including the American Heart Association, the Erie County Diabetes Association, and the American Cancer Society, focus on prevention and treatment of heart disease, hypertension, diabetes, and cancer. Additionally, representatives of both health care and health prevention organizations have collaborated to form a Cancer Task Force with a focus on cancer awareness and prevention.

Currently, there are over twenty-five organizations and facilities within Erie County that address alcohol and drugs, approximately twenty organizations and facilities that provide emergency and crisis intervention, over twenty organizations that provide information and referral services, approximately six organizations that address language and communication problems, and approximately thirty organizations and facilities that provide mental health and mental retardation services.

As part of its community programming, the United Way of Erie County has implemented a community health initiative. The Erie Community Foundation, which offers competitive grants to community groups, has introduced Erie Vital Signs, a website that includes health statistics, as a tool for grant seekers. A school-based health center (Wayne Primary Care) has opened in an inner city school and another will open in a rural West County community. The Pathways Program for diabetes control and prevention is offered within the Erie community, General Electric Transportation has introduced a collaborative initiative to focus on health literacy and health cost containment, and Gannon University, an urban school, focuses efforts on the inner city neighborhoods surrounding its campus.

See Appendix A for a list of these community resources.

Prioritization

Making decisions about health priorities can be influenced by many factors including differing opinions. Prioritization techniques provide a structured, relatively unbiased approach to analyze health problems and identify areas of concern within the community. A prioritization matrix was used for the Erie County prioritization process. It is a common tool used when health problems are evaluated against a number of criteria because it provides the ability to assign varying degrees of importance or weights to these criteria.

Epidemiologists reviewed both the qualitative and quantitative data in the CHNA and identified sixty-seven indicators for evaluation in the prioritization process. These indicators were listed on work sheets and included county, state, national, and Healthy People 2020 statistics as well as cross references that identified the indicator as a disparity, as a targeted focus of other

community organizations, as a CDC health indicator, and as a County Health Rankings indicator. A sample sheet can be found in Appendix B.

The prioritization matrix included the following six criteria: (1) magnitude of the problem, (2) seriousness of the problem, (3) variance against benchmarks, (4) feasibility and ease of implementation, (5) impact on other health outcomes, and (6) availability of community resources (Appendix C). Weights were assigned to each one of these criteria based on scoring results by members of the Steering Committee.

Using the health indicator data sheet and the Summary Peer County Report for Erie County (found at CHSI - Profile), members of the Steering Committee rated each indicator using a Likert scale of 1 to 10. Scores for each indicator were tallied and ranked. These scored indicators were then divided into quartiles. Using this information as well as considering available assets and resources, the Steering Committee identified strategic health issues, priority indicators, target populations, and overarching challenges for Erie County (Table 3).

Four strategic health issues were identified for Erie County. They are lifestyle behavior change, chronic disease prevention and control, cancer prevention and early detection, and mental health. Additionally, seven overarching challenges were targeted. These are issues that impact the health of Erie County residents and should be considered in any community-based health action plan. Finally, priority health indicators were listed for each strategic issue and target populations were identified.

Table 3. Erie County Strategic Issues, Overarching Challenges, and Priority Indicators

Strategic Issues & Target Populations

	Adults	Youth	Aging Population	Low Income	Homeless	Refugee
LIFESTYLE BEHAVIOR CHANGE						
Nutrition	•	•	•	•	•	
Physical Inactivity	•	•	•	•		
Tobacco	•	•		•	•	
Alcohol/Other Substance Use Disorder	•	•		•	•	
CHRONIC DISEASE PREVENTION & CONTROL						
Obesity	•	•	•	•		
Cardiovascular Disease	•		•	•		
Diabetes & Pre-Diabetes	•		•	•		
COPD/Adult Asthma Preventable Hospitalizations	•		•	•		
CANCER PREVENTION & EARLY DETECTION						
Lung, Breast, Prostate, Colorectal	•		•	•		
MENTAL HEALTH						
Depression (Poor Mental Health)	•	•	•	•	•	•
Suicide	•	•				

Overarching Challenges

POVERTY

DISPARITIES

MEDICAL & DENTAL PROFESSIONAL SHORTAGE FOR UNDERSERVED

HEALTH-RELATED TRANSPORTATION

HEALTH LITERACY: KNOWLEDGE, UNDERSTANDING, & COMMUNICATION

LACK OF A CENTRAL SOURCE OF INFORMATION & REFERRAL

HEALTH SYSTEM NAVIGATION

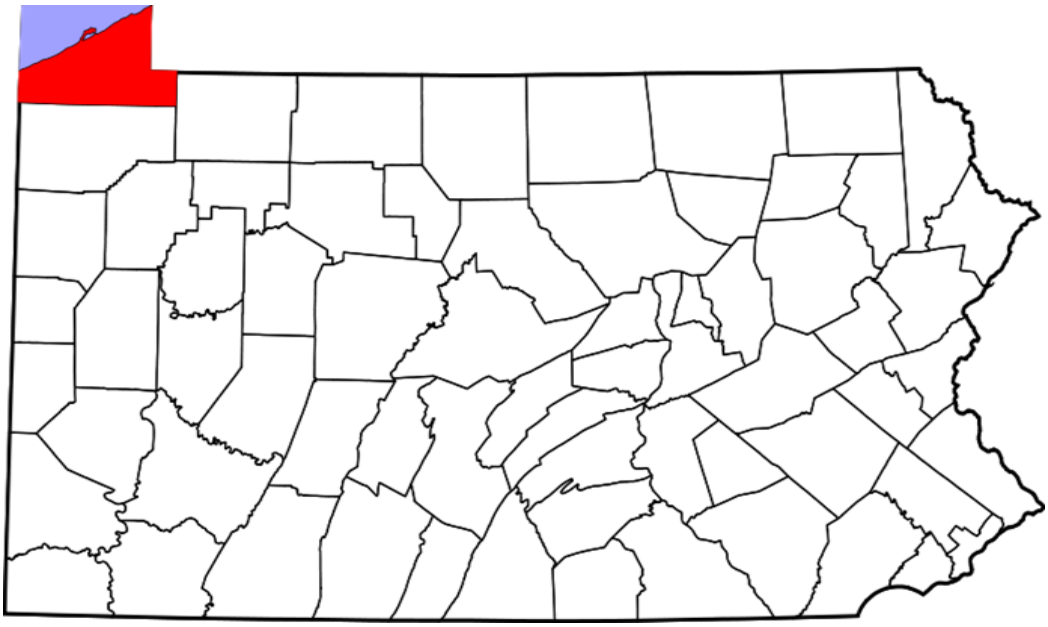
Demographics

Erie County and Its Municipalities

Erie County is located in northwestern Pennsylvania on the south shore of Lake Erie (Figure 1). Established in 1800, it is the Commonwealth's lone link to the Great Lakes. Erie County is bordered on the north by Lake Erie and the province of Ontario, Canada, on the south by Crawford County, Pennsylvania, on the west by Ashtabula County, Ohio, and on the east by Chautauqua County, New York and Warren County, Pennsylvania.

Erie is the largest of Pennsylvania's 67 counties, with a total area of 1,558.2 square miles. Overall, 799.2 square miles are land (1.8% of Pennsylvania's total land area), and 759.0 square miles are water (57.9% of Pennsylvania's total water area).

Figure 1. Erie County, Pennsylvania



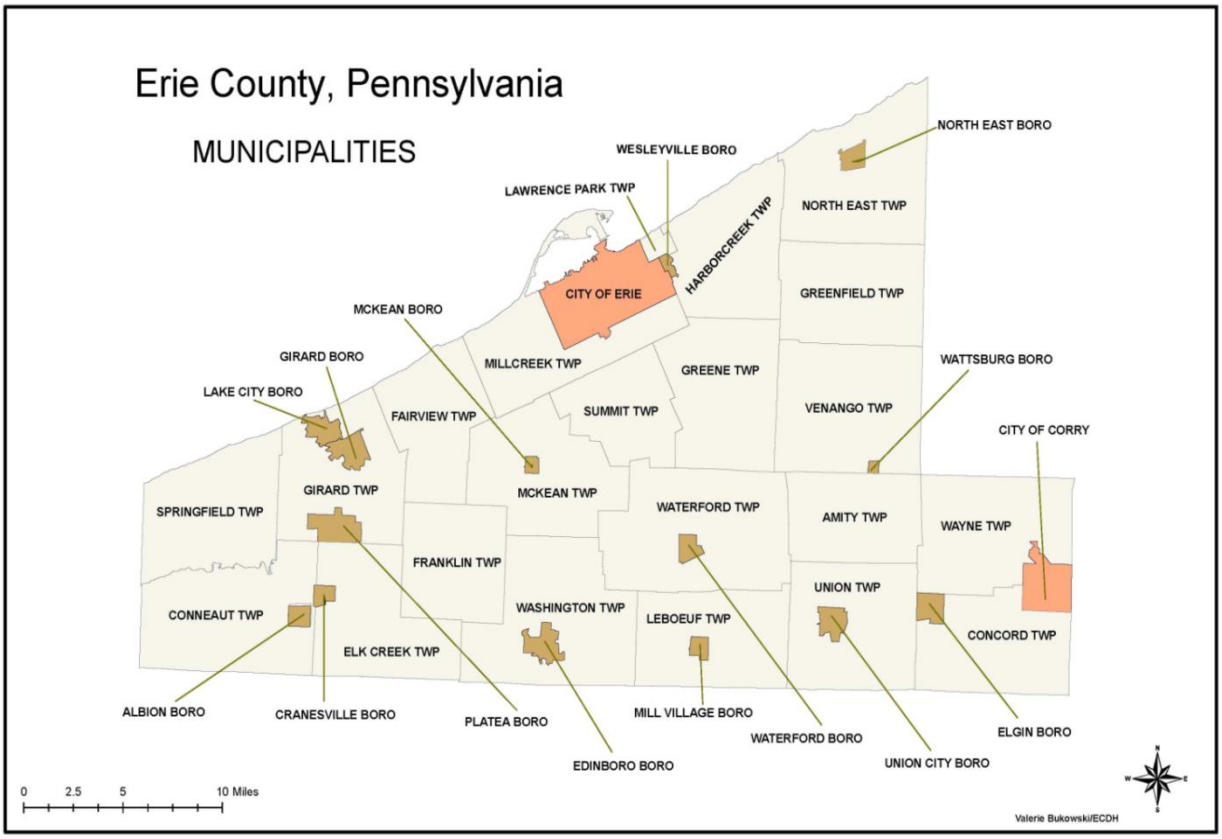
Erie County's population totaled 280,294 residents in 2013. This amounted to 2.2% of Pennsylvania's population of 12,773,801, and placed Erie as the 14th most populous county in the Commonwealth. The county population was 80.0% urban and 20.0% rural according to the 2010 Census.

The 38 municipalities of Erie County are comprised of 2 cities, 14 boroughs, and 22 townships (Figure 2). The county seat is located in the City of Erie, which is currently the fourth most populous municipality in the state, behind Philadelphia, Pittsburgh, and Allentown.

Erie County's 38 municipalities vary greatly in total population, size (land area), and population density (Table 1). In 2013, municipality populations ranged from a low of 217 residents in Elgin Borough to a high of 100,671 in the City of Erie, land areas ranged from a low of 0.3 square

miles in Wattsburg Borough to a high of 50.0 in Waterford Township, and population densities ranged from a low of 38.4 persons per square mile in Amity Township to a high of 6,171.7 in Wesleyville Borough. The overall population density of Erie County was 350.7 persons per square mile.

Figure 2. The 38 Municipalities of Erie County



The ten largest county municipalities in 2013 were the City of Erie (100,671), Millcreek Township (54,239), Harborcreek Township (17,479), Fairview Township (10,221), Summit Township (6,700), Edinboro Borough (6,610), the City of Corry (6,513), North East Township (6,358), Girard Township (5,028), and Greene Township (4,688). Taken together, these municipalities accounted for more than three-quarters (78.0%) of the total county population.

Since 1980, Erie County's population has remained relatively level at approximately 280,000 residents. However, during the period 1980 to 2013, the population in the City of Erie declined from 119,123 to 100,671, a loss of 18,452 residents. This population loss of 15.5% was largely due to resident out-migration to the nearby municipalities of Millcreek Township, Harborcreek Township, and Summit Township. From 1980 to 2013, Millcreek Township grew by 9,936 residents (from 44,303 to 54,239, +22.4%), Harborcreek Township grew by 2,835 residents (from 14,644 to 17,479, +19.4%), and Summit Township grew by 1,319 residents (from 5,381 to 6,700, +24.5%).

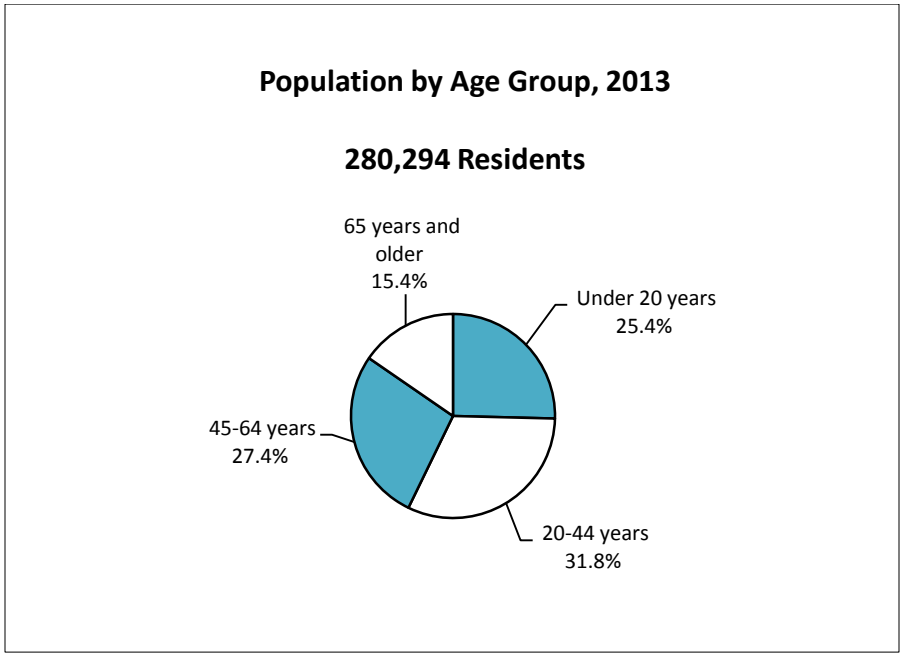
Table 1. Population, Land Area, and Population Density of Erie County Municipalities, 2013

Place	Population	Land Area (Square Miles)	Persons per Square Mile
Pennsylvania	12,773,801	44,742.70	285.5
Erie County	280,294	799.15	350.7
Albion Borough	1,491	1.08	1,380.6
Amity Township	1,077	28.02	38.4
Concord Township	1,322	33.11	39.9
Conneaut Township	4,370	43.07	101.5
City of Corry	6,513	5.99	1,087.3
Cranesville Borough	623	0.94	662.8
Edinboro Borough	6,610	2.29	2,886.5
Elgin Borough	217	1.47	147.6
Elk Creek Township	1,796	34.74	51.7
City of Erie	100,671	19.08	5,276.3
Fairview Township	10,221	28.97	352.8
Franklin Township	1,635	28.66	57.0
Girard Borough	3,065	2.34	1,309.8
Girard Township	5,028	31.50	159.6
Greene Township	4,688	37.39	125.4
Greenfield Township	1,949	33.77	57.7
Harborcreek Township	17,479	34.09	512.7
Lake City Borough	2,999	1.80	1,666.1
Lawrence Park Township	3,915	1.84	2,127.7
LeBoeuf Township	1,686	33.47	50.4
McKean Borough	382	0.57	670.2
McKean Township	4,397	36.80	119.5
Millcreek Township	54,239	32.07	1,691.3
Mill Village Borough	403	0.92	438.0
North East Borough	4,234	1.30	3,256.9
North East Township	6,358	42.15	150.8
Platea Borough	421	3.34	126.0
Springfield Township	3,386	37.38	90.6
Summit Township	6,700	24.05	278.6
Union Township	1,644	36.47	45.1
Union City Borough	3,263	1.83	1,783.1
Venango Township	2,301	43.42	53.0
Washington Township	4,447	45.16	98.5
Waterford Borough	1,557	1.23	1,265.9
Waterford Township	3,900	49.95	78.1
Wattsburg Borough	395	0.30	1,316.7
Wayne Township	1,641	38.07	43.1
Wesleyville Borough	3,271	0.53	6,171.7

Population by Age and Sex

Of the 280,294 people residing in Erie County in 2013, 142,071 (50.7%) were female and 138,223 (49.3%) were male. With respect to age, 71,108 (25.4%) were under 20 years, 89,151 (31.8%) were ages 20 to 44 years, 76,971 (27.4%) were ages 45 to 64 years, and 43,064 (15.4%) were 65 years and older (Figure 3, Table 2).

Figure 3. Erie County's Population by Age Group, 2013



Since the year 2000, Erie County's population has experienced an interesting transition. The number of residents under 45 years of age decreased from 177,932 to 160,259 (a drop of 9.9%), while the number of residents 45 years and older increased from 102,871 to 120,035 (an increase of 16.7%) (Table 3).

The population of Erie County is aging. The median age in Erie County increased to a new high of 39.0 years in 2013, up from 36.2 years in 2000, and 32.9 years in 1990. The median age for males and females in 2013 was 37.4 and 40.5 years, respectively. The aging of the baby boom generation (people born between 1946 and 1964) into older age groups, declining birth rates, and improved mortality are some of the key contributors to the observed increase in median age.

Table 2. Erie County's Population by Age and Sex, 2013

Age Group	Erie County	Erie County Males	Erie County Females
All ages	280,294	138,223	142,071
< 20	71,108	36,420	34,688
20 - 44	89,151	45,045	44,106
45 - 64	76,971	38,078	38,893
65 and older	43,064	18,680	24,384
< 5	16,219	8,257	7,962
5 - 9	16,953	8,679	8,274
10 - 14	17,391	9,040	8,351
15 - 19	20,545	10,444	10,101
20 - 24	21,667	10,956	10,711
25 - 29	18,727	9,592	9,135
30 - 34	16,682	8,517	8,165
35 - 39	15,004	7,458	7,546
40 - 44	17,071	8,522	8,549
45 - 49	18,101	9,022	9,079
50 - 54	20,230	10,060	10,170
55 - 59	20,827	10,282	10,545
60 - 64	17,813	8,714	9,099
65 - 69	13,153	6,374	6,779
70 - 74	9,871	4,591	5,280
75 - 79	7,145	3,072	4,073
80 - 84	5,822	2,336	3,486
85 and older	7,073	2,307	4,766

Table 3. A Comparison of Erie County's Population from July 1, 2000 to July 1, 2013

Age Group	July 1, 2000	July 1, 2013	Numeric Change
All ages	280,803	280,294	-509
< 20	80,000	71,108	-8,892
20 - 44	97,932	89,151	-8,781
45 - 64	62,628	76,971	+14,343
65 and older	40,243	43,064	+2,821

Population by Race and Hispanic Origin

Of the 280,294 people residing in Erie County in 2013, 248,795 (88.8%) were White, 21,022 (7.5%) were Black or African American, 3,758 (1.3%) were Asian, 713 (0.2%) were American Indian or Alaska Native, 126 (0.04%) were Native Hawaiian or Other Pacific Islander, and 5,880 (2.1%) were classified as Two or More Races. A total of 10,365 (3.7%) residents were Hispanic, of any race (Table 4).

Table 4. Erie County's Population by Race and Hispanic Origin

Race or Hispanic Origin	July 1, 2000	July 1, 2013
All Races	280,803	280,294
White	257,904	248,795
Black or African American	17,625	21,022
Asian	1,979	3,758
American Indian or Alaska Native	476	713
Native Hawaiian or Other Pacific Islander	75	126
Two or More Races	2,744	5,880
Hispanic (of any race)	6,170	10,365

Erie County's racial and Hispanic composition continues to grow more diverse. From July 1, 2000 to July 1, 2013, the number of Whites in Erie County decreased by 3.5%, the Black population increased by 19.3%, the number of Asians increased by 89.9%, the number of residents classified as Two or More Races increased by 114.3%, and the Hispanic population rose by 68.0%.

For the combined years 2009-2013, the bulk of Erie County's Black and Hispanic populations resided in the City of Erie (80.7% and 69.0% of the total Black and Hispanic populations, respectively). Millcreek Township, Conneaut Township (home of the State Correctional Institution at Albion), and Harborcreek Township were other notable residential locales for these two populations.

Native and Foreign-Born Residents

Of the 280,518 people living in Erie County in 2009-2013, 269,304 (96.0%) were native residents of the United States and 11,214 (4.0%) were foreign-born. Overall, 221,620 (79.0%) county residents were born in Pennsylvania. Of the 11,214 foreign-born residents, 5,367 (47.9%) were naturalized U.S. citizens. In 2009-2013, the twenty leading places of birth for the foreign-born population were Ukraine (934), Bosnia and Herzegovina (727), Mexico (554), China (477), Germany (452), India (428), Vietnam (376), Poland (312), Canada (306), Russia (300), Italy (267), Iraq (262), Philippines (254), England (253), Dominican Republic (236), Nepal (214), Sudan (200), Taiwan (192), Romania (149), and Korea (146).

Household Characteristics

There were 109,675 households in Erie County in 2009-2013, with an average household size of 2.4 persons. Overall, there were 69,788 (63.6%) family households, with an average size of 3.1 persons, and 39,887 (36.4%) nonfamily households, with an average size of 1.2 persons. Selected housing and household characteristics are presented in Table 5.

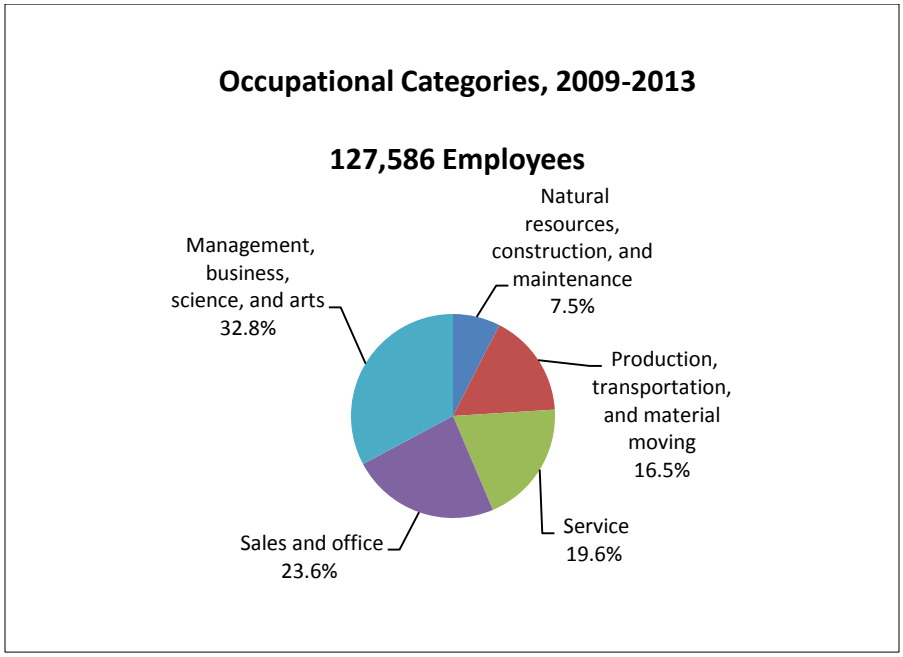
Table 5. Erie County Household Characteristics, 2009-2013

Subject	Number	Percent
Households and Group Quarters		
Population estimate	280,518	100.0
In households	267,945	95.5
In family households	218,352	77.8
In nonfamily households	49,593	17.7
In group quarters	12,573	4.5
Household Types		
Total households	109,675	100.0
Family households	69,788	63.6
With own children under 18 years	29,108	26.5
Married couple family	51,198	46.7
With own children under 18 years	18,005	16.4
Female householder, no husband present	13,892	12.7
With own children under 18 years	8,523	7.8
Male householder, no wife present	4,698	4.3
With own children under 18 years	2,579	2.4
Nonfamily households	39,887	36.4
Householder living alone	33,185	30.3
Householder 65 years and over	10,221	9.3

Employment and Occupations

The Erie County civilian labor force population aged 16 years and older was 140,593 persons in 2009-2013, of which 127,586 (90.7%) were employed and 13,007 (9.3%) were unemployed. Among those employed, 62,367 (48.9%) were female and 65,219 (51.1%) were male. The five major occupational categories for the civilian labor force population are shown in Figure 4.

Figure 4. Major Occupations for the Erie County Civilian Labor Force Population, 2009-2013



Income

In 2009-2013, Erie County household income distribution levels differed substantially for family and nonfamily households (Table 6). Overall, 27.9% of all households had income below $25,000 and 15.3% had income above $100,000 in the past 12 months. Nearly half (49.3%) of nonfamily households had income below $25,000.

The median household income was $45,202, the median family household income was $58,451, and the median nonfamily household income was $25,361. Median family and nonfamily household incomes were substantially higher for White versus Black and Hispanic householders.

Table 6. Erie County Income Levels in the Past 12 Months, 2009-2013

Subject	Households	Family Households	Nonfamily Households
Total number with income	109,675	69,788	39,887
Less than $25,000	27.9%	17.2%	49.3%
$25,000 to $49,999	26.3%	24.2%	30.0%
$50,000 to $74,999	18.6%	21.8%	12.1%
$75,000 to $99,999	11.8%	15.5%	4.7%
$100,000 to $149,999	10.3%	14.2%	2.7%
$150,000 or more	5.0%	7.1%	1.2%
Median income	$45,202	$58,451	$25,361
White householder	$47,087	$61,276	$26,233
Black householder	$22,561	$29,774	$14,571
Hispanic householder	$21,885	$27,877	$13,294

Poverty

In 2009-2013, 16.9% of Erie County residents and 23.4% of children under 18 years lived below the poverty level in the past 12 months (Table 7). Poverty levels were markedly higher for Blacks (40.6%) and Hispanics (40.6%) compared to Whites (14.2%).

Among families with related children under 18 years, high poverty levels were observed for both female (46.5%) and male (25.7%) single parent families compared to married couple (8.5%) families.

Overall, 2009-2013 poverty rates varied greatly among Erie County's 38 municipalities. The highest poverty rates were observed in the City of Erie (27.8%) and the City of Corry (25.7%), while the lowest rates were observed in Summit Township (3.8%) and Greenfield Township (4.9%),

Of the 268,118 Erie County residents for whom poverty status was determined during 2009-2013, 45,408 (16.9%) lived below the poverty level in the past 12 months. The municipalities with the largest number of people living below the poverty level were the City of Erie (26,827 residents, 59.1% of the total), Millcreek Township (5,515 residents, 12.1% of the total), and the City of Corry (1,656 residents, 3.6% of the total).

Table 7. Erie County Poverty Status in the Past 12 Months, 2009-2013

Subject	Percent Below Poverty Level
Total population	16.9
Male	15.6
Female	18.2
Under 18 years	25.1
18 - 64 years	15.8
65 years and older	9.1
White	14.2
Black	40.6
Hispanic, of any race	40.6
All families	12.0
With related children under 18 years	21.4
Married couple familes	5.0
With related children under 18 years	8.5
Female householder, no husband present	35.8
With related children under 18 years	46.5
Male householder, no wife present	18.5
With related children under 18 years	25.7
White householder families	10.0
Black householder families	35.8
Hispanic householder families	41.2

Education

The total estimated school enrollment for the Erie County population 3 years and over was 72,719 students in 2009-2013. Overall, 7,471 (10.3%) of students were in nursery school, preschool, or kindergarten, 27,474 (37.8%) were in elementary school grades 1 to 8, 15,002 (20.6%) were in high school grades 9 to 12, 19,092 (26.3%) were in college, and 3,680 (5.1%) were in graduate or professional school.

In 2009-2013, 89.9% of Erie County residents 25 years and over had at least graduated from high school, 15.8% had a bachelor's degree, and 9.0% had earned a graduate or professional degree. Striking differences were observed for high school and college educational attainment by race and Hispanic origin (Table 8).

Table 8. Erie County Educational Attainment, 2009-2013

Subject	Both Sexes	Males	Females
Less than high school diploma (population 25 years and over)			
All races	10.1%	11.0%	9.2%
White	9.9%	9.8%	8.1%
Black or African American	20.4%	20.2%	20.6%
Hispanic or Latino (of any race)	27.0%	31.9%	22.0%
Bachelor's degree or higher (population 25 years and over)			
All races	24.8%	24.6%	24.9%
White	25.6%	25.7%	25.4%
Black or African American	11.8%	7.9%	16.0%
Hispanic or Latino (of any race)	11.8%	9.9%	13.9%

Sources

Erie County Department of Health, Community Health Profiles
Erie County Department of Health

Erie County Department of Health, Demographics
Erie County Department of Health

Pennsylvania State Data Center
PASDC Home

United States Census Bureau, Population Estimates Program
People and Households - U.S. Census Bureau

United States Census Bureau, 2009-2013 Five-Year American Community Survey
American Community Survey Main - U.S. Census Bureau

Maternal, Infant, and Child Health

Erie County Resident Live Births

There were 9,603 resident live births reported in Erie County during the period 2010 to 2012, for a corresponding crude live birth rate of 11.4 births per 1,000 population. A total of 9,269 (96.5%) of these births were single births, 313 (3.3%) were twin births, and 21 (0.2%) were grouped as triplets or more births. With respect to gender, males accounted for a slight majority (51.4%) of babies.

Overall, 7,504 (78.1%) of the 9,603 resident births were to White women, 1,238 (12.9%) were to Black women, 693 (7.2%) were to women classified as Other Race, and 168 (1.7%) were to women categorized as Unknown Race. A total of 509 (5.3%) births were to women of Hispanic origin, of any race. The crude live birth rates for the White, Black, and Hispanic populations were 10.0, 20.1, and 17.8 births per 1,000, respectively. Overall, the Erie County live birth rate dropped from 14.9 births per 1,000 population in 1990-1992 to 11.4 in 2010-2012, a decline of 23.5%

Erie County resident age-specific birth rates for 2010-2012 are presented in Table 1. The highest birth rate was observed for women in the 25-29 years age group (110.3 births per 1,000 females aged 25-29 years). Just over three-quarters (78.6%) of all resident births during 2010-2012 occurred to women aged 20-34 years.

Births to teenage mothers (under the age of 20) accounted for 10.2% of all births in 2010-2012, compared to 12.4% of births in 2000-2002, and 14.3% of births in 1990-1992.

Table 1. Erie County Resident Live Births by Age of Mother, 2010-2012

Age Group	Births	Rate
All ages	9,603 (100.0%)	11.5
Under 15	16 (0.2%)	0.6
15 - 19	963 (10.0%)	30.0
15 - 17	283 (2.9%)	16.8
18 - 19	680 (7.1%)	44.6
20 - 24	2,542 (26.5%)	75.2
25 - 29	2,834 (29.5%)	110.3
30 - 34	2,168 (22.7%)	92.1
35 - 39	864 (9.0%)	37.1
40 - 44	199 (2.1%)	7.5
45 and older	16 (0.2%)	0.6
Unknown age	3	

Note: For women of all ages, the rate is per 1,000 total population. All other rates are per 1,000 females for each specified age group.

Among Erie County's 38 municipalities, the total number of live births during 2010-2012 ranged from a low of 6 babies in Elgin Borough to a high of 4,823 in the City of Erie.

Erie County's four most populous municipalities - the City of Erie (100,671 residents in 2013 and 4,823 births in 2010-2012), Millcreek Township (54,239 residents and 1,459 births), Harborcreek Township (17,479 residents and 309 births), and Fairview Township (10,221 residents and 229 births) - accounted for 71.0% of all resident live births. The City of Erie alone accounted for over half (50.2%) of all births.

Births to Teens

From 1990-1992 to 2010-2012, the Erie County live birth rate for female residents 15 to 19 years of age fell by 41.4%, from 51.2 to 30.0 births per 1,000 females 15-19 years (Table 2, Figure 1). Overall, the rate for younger teenagers aged 15-17 years fell by 53.2%, while the rate for older teenagers 18-19 years dropped by 32.8%.

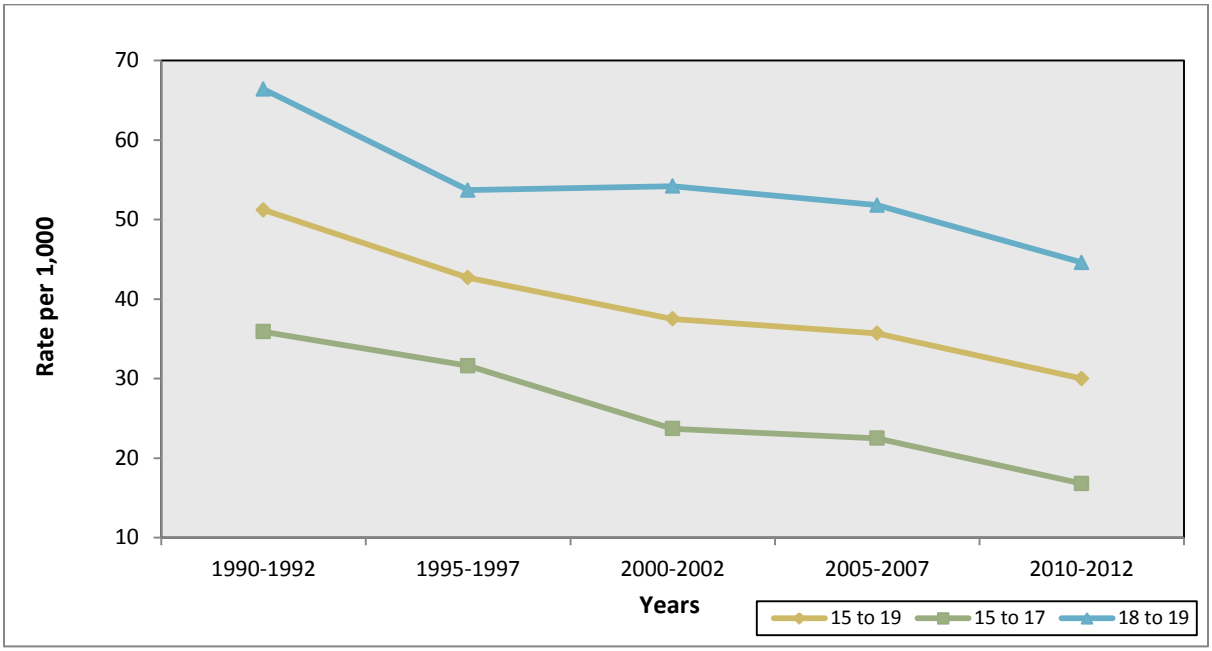
Historically, the lowest three-year total number of births to Erie County female residents 15-19, 15-17, and 18-19 years of age were recorded during the most recent period of 2010-2012. These totals were 963, 283, and 680 births, respectively.

Table 2. Erie County Teen Live Births and Birth Rates, 1990-1992 to 2010-2012

	Ages 15 to 19			Ages 15 to 17			Ages 18 to 19		
Years	Number	Rate	PA Rate	Number	Rate	PA Rate	Number	Rate	PA Rate
1990-1992	1,735	51.2	43.5	606	35.9	27.9	1,129	66.4	63.3
1995-1997	1,501	42.7	37.2	551	31.6	24.1	950	53.7	55.0
2000-2002	1,252	37.5	31.6	437	23.7	17.7	815	54.2	51.1
2005-2007	1,230	35.7	29.3	427	22.5	15.9	803	51.8	48.2
2010-2012	963	30.0	25.0	283	16.8	13.0	680	44.6	40.6

Note: Rates are per 1,000 females for each specified age group.

Figure 1. Erie County Teen Live Births Rates, 1990-1992 to 2010-2012



Infant Mortality

Infant mortality is defined as the death of an infant less than one year of age. From 2010-2012, there were a total of 65 resident infant deaths in Erie County, with a corresponding infant mortality rate of 6.8 deaths per 1,000 live births (Table 3). Although Whites accounted for the majority (67.7%) of infant deaths, the rate among Blacks (11.3) was nearly double the rate for Whites (5.9).

A total of 47 (72.3%) of the 65 resident infant deaths occurred during the neonatal period (the first 27 days of life), with a corresponding neonatal mortality rate of 4.9 deaths per 1,000 live births. The rates among Whites and Blacks were 4.4 and 8.1, respectively.

Table 3. Erie County Infant and Neonatal Mortality Rates, 2010-2012

	All Races (9,603 Births)			White (7,504 Births)			Black (1,238 Births)			Hispanic (509 Births)		
Deaths	Count	Erie Co.	PA	Count	Erie Co.	PA	Count	Erie Co.	PA	Count	Erie Co.	PA
Infants (less than 1 year of age)	65	6.8	6.9	44	5.9	5.8	14	11.3	14.1	2	3.9	7.2
Neonates (less than 28 days of age)	47	4.9	4.9	33	4.4	4.1	10	8.1	9.3	2	3.9	5.2

Note: Rates denote the number of deaths per 1,000 live births.

Selected Summary Statistics

Selected summary statistics for Erie County resident live births for the period 2010-2012 are included in Table 4. Brief summaries for some of the major topics follow Table 4.

Table 4. Selected Summary Statistics for Erie County Resident Births, 2010-2012

	All Races (9,603 Births)			White (7,504 Births)			Black (1,238 Births)			Hispanic (509 Births)		
Subject	Count	Erie Co.	PA	Count	Erie Co.	PA	Count	Erie Co.	PA	Count	Erie Co.	PA
% Low Birth Weight Infants	809	8.4	8.2	555	7.4	7.1	166	13.4	13.2	52	10.2	8.6
(Unknown)	17			7			1			1		
% Received Prenatal Care in First Trimester	7,106	75.2	71.8	5,808	78.4	77.0	759	62.8	56.2	342	68.7	57.4
(Unknown)	149			95			30			11		
% Unmarried Mothers	4,669	48.9	41.7	3,256	43.6	32.2	1,026	83.3	79.6	356	70.2	67.1
(Unknown)	54			38			7			2		
% Cesarean Section Deliveries	3,534	36.8	31.4	2,762	36.8	31.6	417	33.7	31.0	206	40.0	30.4
(Unknown)	6			3			1			0		
% Non-Smoking Mothers During Pregnancy	7,309	76.3	84.7	5,654	75.5	82.8	929	75.3	86.3	401	79.1	90.9
(Unknown)	26			14			4			2		
% Received WIC Food During Pregnancy	4,623	48.9	39.8	3,161	42.6	30.3	901	74.1	68.1	376	75.0	73.2
(Unknown)	149			90			22			8		
% Medicaid as Source of Payment	3,845	40.2	33.0	2,599	34.8	25.1	759	61.7	59.6	302	59.7	56.2
(Unknown)	46			34			8			3		

Note: Unknowns excluded from calculations.

Low Birth Weight Infants

Overall, 8.4% of Erie County live births were classified as low birth weight (less than 2,500 grams or 5 pounds and 9 ounces) in 2010-2012. The percentage of low birth weight babies born to Black mothers (13.4) was higher than the percentages for White (7.4) and Hispanic (10.2) mothers.

During 2010-2012, 1.3% of Erie County live births were classified as very low birth weight (less than 1,500 grams or 3 pounds and 5 ounces) and 7.0% were classified as high birth weight (greater than 4,000 grams or 8 pounds and 13 ounces).

Prenatal Care

From 2010-2012, 75.2% of Erie County live births were to mothers who had received prenatal care during the first trimester of pregnancy and 1.0% were to mothers who had no prenatal care at all during their pregnancy.

The percentages of Erie County births to White, Black, and Hispanic mothers who had received prenatal care in the first trimester were 78.4, 62.8, and 68.7, respectively. Although the percentage of births to White mothers who had no prenatal care was only 0.8, the percentage among Black mothers was 2.6.

Marital Status of Mother

From 2010-2012, nearly half (48.9%) of Erie County live births were to unmarried mothers. The percentages among White, Black, and Hispanic mothers were 43.6, 83.3, and 70.2, respectively. The percentage of unmarried mothers in Erie County rose from 34.5 in 1990-1992 to 48.9 in 2010-2012 (Figure 2). For Pennsylvania, the percentage rose from 32.9 to 41.7.

Cesarean Section Deliveries

During 2010-2012, over one-third (36.8%) of Erie County live births were cesarean section deliveries. The percentage of cesarean section deliveries in Erie County has nearly doubled from 20.1 in 1990-1992 to 36.8 in 2010-2012 (Figure 3). For Pennsylvania, the percentage rose from 22.1 to 31.4.

Figure 2. Percent of Live Births to Unmarried Mothers, 1990-1992 to 2010-2012

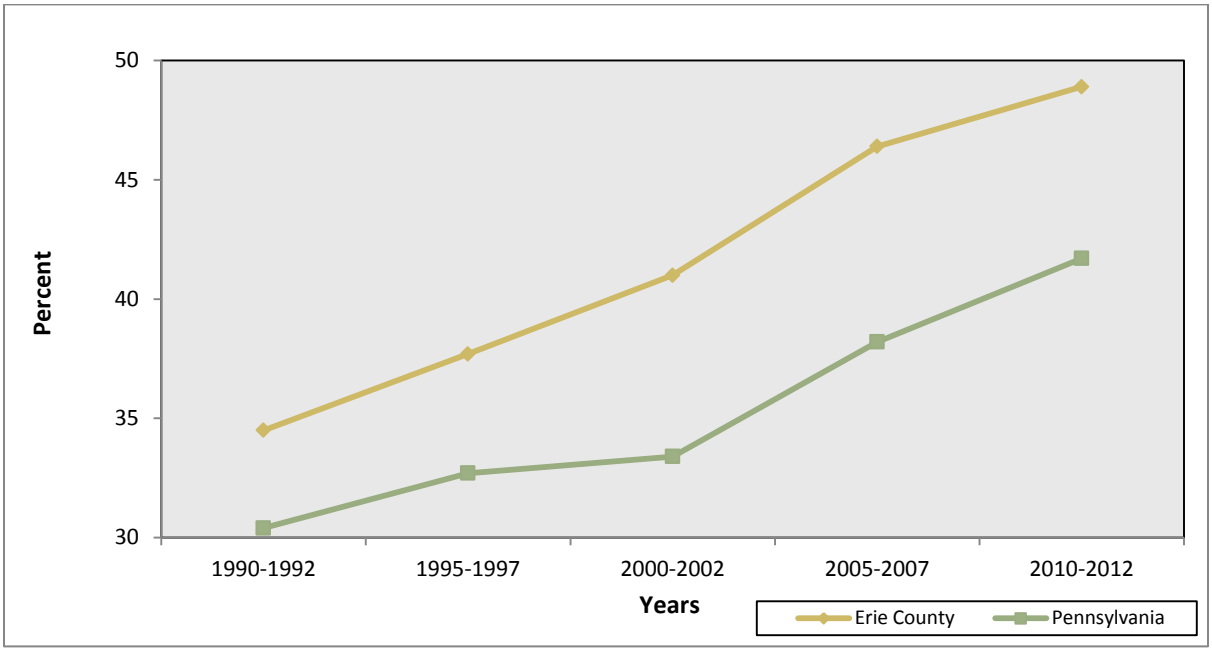
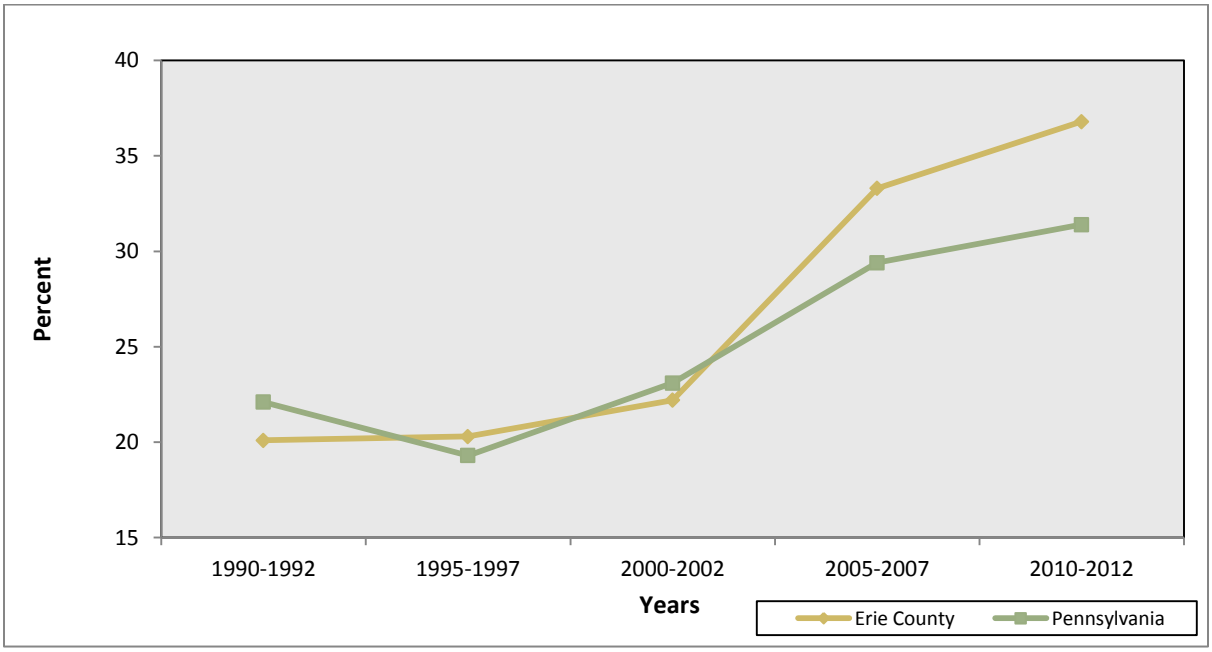


Figure 3. Percent of Live Births Delivered by Cesarean Section, 1990-1992 to 2010-2012



Smoking During Pregnancy

During 2010-2012, 76.3% of Erie County live births were to mothers who did not smoke during pregnancy. The percentages among White, Black, and Hispanic mothers were 75.5, 75.3, and 79.1, respectively.

The percentage of non-smoking mothers in Erie County has remained essentially unchanged since 1990-1992, when the percentage equaled 73.7. For Pennsylvania, the percentage of non-smoking mothers rose from 79.2 in 1990-1992 to 84.7 in 2010-2012.

Sources

Erie County Department of Health, Community Health Profiles
Erie County Department of Health

Erie County Department of Health, Maternal, Infant & Child Health
Erie County Department of Health

Pennsylvania Department of Health, Division of Health Informatics
PADOH Health Statistics Home

Mortality, Cancer, and Injury

Erie County Resident Deaths

A total of 8,076 Erie County residents died during the period 2009 to 2011, for a corresponding crude death rate of 9.6 deaths per 1,000 population (Table 1). Overall, 3,873 (48.0%) deaths were to males and 4,203 (52.0%) were to females. The crude death rates for males and females were 9.4 and 9.8 deaths per 1,000, respectively.

Although only 8.4% of all resident deaths occurred in persons under the age of 50 years, over half (51.1%) occurred in those 80 years and older. Of the 75 total infant deaths, 53 (70.7%) occurred during the neonatal period (first 27 days of life).

With respect to race and ethnicity, 7,639 (94.6%) deaths were to Whites, 389 (4.8%) were to Blacks, and 48 (0.6%) were to persons classified as Other or Unknown Race. A total of 59 (0.7%) deaths were to Hispanics or Latinos, of any race.

Table 1. Erie County Resident Deaths, 2009-2011

Age Group	Total Population (%)	Males (%)	Females (%)
All Ages	8,076 (100.0)	3,873 (100.0)	4,203 (100.0)
0 - 9	102 (1.3)	60 (1.5)	42 (1.0)
10 - 19	31 (0.4)	18 (0.5)	13 (0.3)
20 - 29	118 (1.5)	84 (2.2)	34 (0.8)
30 - 39	129 (1.6)	85 (2.2)	44 (1.0)
40 - 49	302 (3.7)	171 (4.4)	131 (3.1)
50 - 59	708 (8.8)	419 (10.8)	289 (6.9)
60 - 69	1,010 (12.5)	598 (15.4)	412 (9.8)
70 - 79	1,552 (19.2)	832 (21.5)	720 (17.1)
80 and older	4,124 (51.1)	1,606 (41.5)	2,518 (59.9)
Infant deaths	75 (0.9)	46 (1.2)	27 (0.6)
< 28 days	53 (0.7)	31 (0.8)	21 (0.5)
28 - 364 days	22 (0.3)	15 (0.4)	6 (0.1)
Race or Ethnicity			
White	7,639 (94.6)	3,628 (93.7)	4,011 (95.4)
Black or African American	389 (4.8)	221 (5.7)	168 (4.0)
Hispanic or Latino (any race)	59 (0.6)	35 (0.9)	24 (0.6)

Note: Two infant deaths were of unknown sex.

Among Erie County's 38 municipalities, the total number of resident deaths during 2009-2011 ranged from a low of 7 in Elgin Borough to a high of 3,231 in the City of Erie. Erie County's three most populous municipalities - the City of Erie (100,671 residents in 2013 and 3,231 deaths in 2009-2011), Millcreek Township (54,239 residents and 1,545 deaths), and Harborcreek Township (17,479 residents and 442 deaths) - accounted for nearly two-thirds (64.6%) of all county deaths. The City of Erie alone accounted for 40.0% of all county deaths.

Of the 75 county infant deaths that occurred during 2009-2011, 53 (70.7%) were classified as residents of the City of Erie. The municipality with the next highest number of infant deaths was Millcreek Township, with 5. In 2009-2011, 91.5% of all Black infant deaths and 78.0% of all Hispanic/Latino infant deaths occurred among City of Erie residents.

Leading Causes of Death

In the period 2009-2011, Erie County's age-adjusted death rate for all causes of death was 777.1 deaths per 100,000 population. The age-adjusted rates for males and females were 924.9 and 665.2, respectively. With respect to race, the age-adjusted rates for Whites and Blacks were 772.3 and 926.5, respectively (Tables 2 and 3).

Although the 10 leading causes of death for Erie County residents in 2009-2011 collectively accounted for 6,261 (77.5%) of the 8,076 county deaths, heart disease and cancer (malignant neoplasms) accounted for nearly half (48.5%) of all resident deaths.

With the exception of Alzheimer's disease, the age-adjusted death rates for males were higher than the rates for females for each of the leading causes. Due to low counts, age-adjusted rates for Blacks were calculated for only three leading causes - heart disease, cancer, and stroke. Blacks experienced substantially higher death rates than Whites for each of these causes.

Table 2. Erie County Leading Causes of Death & Age-Adjusted Death Rates by Sex, 2009-2011

	Total Population			Males			Females		
Cause of Death	Deaths	Erie Co.	PA	Deaths	Erie Co.	PA	Deaths	Erie Co.	PA
All Causes of Death	8,076	777.1	765.0	3,873	924.9	918.8	4,203	665.2	645.1
Heart Disease	2,095	193.7	186.6	1,027	245.2	237.0	1,068	157.1	148.5
Cancer (Malignant Neoplasms)	1,819	181.6	180.0	922	216.0	218.6	897	158.5	153.7
Chronic Lower Respiratory Diseases	476	45.9	38.9	242	58.7	46.0	234	38.3	34.4
Stroke (Cerebrovascular Diseases)	439	40.1	39.3	156	37.4	39.3	283	41.5	38.5
Accidents (Unintentional Injuries)	338	37.5	40.8	212	51.2	55.9	126	25.2	27.0
Alzheimer's Disease	253	21.7	19.3	73	18.1	15.8	180	21.4	21.1
Diabetes Mellitus	221	22.1	20.2	119	28.4	23.8	102	16.6	17.3
Nephritis, Nephrotic Syndrome & Nephrosis	208	19.4	17.7	93	22.6	22.3	115	17.4	14.8
Influenza & Pneumonia	193	16.8	14.7	84	19.9	18.3	109	14.3	12.4
Suicide (Intentional Self-Harm)	111	12.9	12.2	87	21.0	20.1	24	5.4	4.9

Notes: Age-adjusted rates were computed by the direct method using the year 2000 U.S. standard million population age distribution. Erie County and Pennsylvania rates are per 100,000 U.S. standard population. NA = Not available.

Table 3. Erie County Leading Causes of Death & Age-Adjusted Death Rates by Race, 2009-2011

	Total Population			White			Black		
Cause of Death	Deaths	Erie Co.	PA	Deaths	Erie Co.	PA	Deaths	Erie Co.	PA
All Causes of Death	8,076	777.1	765.0	7,639	772.3	754.2	389	926.5	971.2
Heart Disease	2,095	193.7	186.6	1,994	191.6	184.0	87	212.9	235.4
Cancer (Malignant Neoplasms)	1,819	181.6	180.0	1,721	182.0	178.3	86	236.6	230.9
Chronic Lower Respiratory Diseases	476	45.9	38.9	464	46.3	39.8	11	NA	33.8
Stroke (Cerebrovascular Diseases)	439	40.1	39.3	417	40.8	38.2	21	66.4	55.5
Accidents (Unintentional Injuries)	338	37.5	40.8	319	38.1	42.5	18	NA	33.7
Alzheimer's Disease	253	21.7	19.3	249	21.6	20.0	3	NA	13.1
Diabetes Mellitus	221	22.1	20.2	203	20.8	19.4	16	NA	32.2
Nephritis, Nephrotic Syndrome & Nephrosis	208	19.4	17.7	193	18.0	16.6	15	NA	31.8
Influenza & Pneumonia	193	16.8	14.7	185	15.6	14.7	7	NA	15.3
Suicide (Intentional Self-Harm)	111	12.9	12.2	105	14.6	13.4	4	NA	5.8

Notes: Age-adjusted rates were computed by the direct method using the year 2000 U.S. standard million population age distribution. Erie County and Pennsylvania rates are per 100,000 U.S. standard population. NA = Not available.

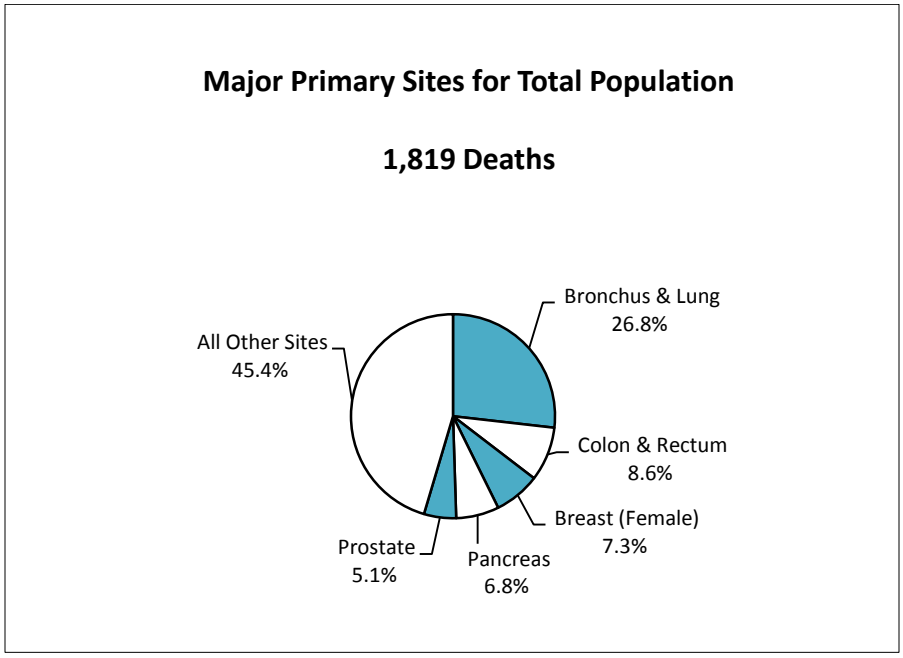
Cancer Mortality

From 2009 to 2011, there were a total of 1,819 cancer deaths (primary malignant neoplasms) among Erie County residents, for a corresponding age-adjusted death rate of 181.8 deaths per 100,000 population (Table 4). Overall, 922 (50.7%) deaths were to males and 897 (49.3%) deaths were to females. The age-adjusted death rates for males and females were 216.0 and 158.5 deaths per 100,000, respectively.

With respect to race and ethnicity in Erie County, 1,721 (94.6%) cancer deaths were to Whites, 86 (4.7%) deaths were to Blacks, 12 (0.7%) deaths were to persons of Other/Unknown Race, and 22 (1.2%) deaths were to Hispanics or Latinos (of any race).

Erie County's five leading cancer mortality sites were: (1) bronchus and lung (26.8% of all deaths), (2) colon and rectum (8.6%), (3) female breast (7.3%), (4) pancreas (6.8%), and (5) prostate (5.1%). These sites accounted for over half (54.6%) of all cancer deaths (Figure 1). As the leading cause of cancer death, lung cancer killed nearly as many people as colorectal, breast, pancreatic, and prostate cancers combined (487 versus 504 deaths).

Figure 1. Erie County Resident Cancer Deaths, 2009-2011



Among Erie County males, the five leading cancer mortality sites were: (1) bronchus and lung (28.2% of all deaths), (2) prostate (10.0%), (3) colon and rectum (8.0%), (4) pancreas (6.2%), and (5) urinary bladder (4.7%). These sites accounted for 57.1% of all male cancer deaths.

Among Erie County females, the five leading cancer mortality sites were: (1) bronchus and lung (25.3% of all deaths), (2) breast (14.7%), (3) colon and rectum (9.1%), (4) pancreas (6.4%), and (5) ovary (5.6%). These sites accounted for 61.1% of all female cancer deaths.

Table 4. Erie County Cancer Deaths & Age-Adjusted Death Rates by Site/Type, 2009-2011

Total Population				Males				Females			
Cancer Site/Type	Cases	Erie	PA	Cancer Site/Type	Cases	Erie	PA	Cancer Site/Type	Cases	Erie	PA
All Cancer Sites	1,819	181.6	180.0	All Cancer Sites	922	216.0	218.6	All Cancer Sites	897	158.5	153.7
Bronchus & Lung	487	48.7	48.6	Bronchus & Lung	260	60.5	62.3	Bronchus & Lung	227	40.1	38.7
Colon & Rectum	156	15.4	16.7	Prostate	92	22.7	20.9	Breast	132	23.4	23.4
Breast (Female)	132	23.4	23.4	Colon & Rectum	74	17.3	20.2	Colon & Rectum	82	14.1	14.0
Pancreas	124	12.4	11.6	Pancreas	57	15.4	13.3	Pancreas	57	10.0	10.2
Prostate	92	22.7	20.9	Urinary Bladder	43	10.3	8.8	Ovary	50	9.0	8.2
Leukemia	75	7.6	7.4	Leukemia	42	9.9	9.8	Leukemia	33	5.9	5.6
NonHodg. Lymph.	66	6.6	6.7	Esophagus	41	9.5	8.8	NonHodg. Lymph.	29	4.2	5.2
Urinary Bladder	57	5.5	4.9	NonHodg. Lymph.	37	9.1	8.8	Uterus	26	4.9	5.2
Esophagus	54	5.4	4.9	Liver	30	6.7	8.2	Kidney	24	4.2	2.7
Ovary	50	9.0	8.2	Melanoma	22	5.2	4.5	Mult.Myeloma	18	NA	2.8
Liver	46	4.6	5.5	Brain	22	5.2	5.2	Liver	16	NA	3.2
Kidney	43	4.3	4.0	Stomach	21	4.7	4.4	Melanoma	14	NA	1.9
Melanoma	36	3.8	3.0	Kidney	19	NA	5.7	Urinary Bladder	14	NA	2.3
Brain	36	3.7	4.2	Oral Cavity	17	NA	3.4	Brain	14	NA	3.5
Stomach	34	3.3	3.1	Mult.Myeloma	8	NA	4.1	Stomach	13	NA	2.1
Uterus	26	4.9	5.2	Larynx	8	NA	2.0	Esophagus	13	NA	1.8
Mult.Myeloma	26	2.6	3.3	Thyroid	4	NA	0.5	Cervix	11	NA	2.2
Oral Cavity	22	2.3	2.2	Hodg. Lymphoma	3	NA	0.4	Oral Cavity	5	NA	1.2
Larynx	11	NA	1.1	Testis	0	NA	0.3	Larynx	3	NA	0.5
Cervix	11	NA	2.2	All Other Sites	122	NA	NA	Hodg. Lymphoma	3	NA	0.3
Hodg. Lymphoma	6	NA	0.4					Thyroid	2	NA	0.5
Thyroid	6	NA	0.5					All Other Sites	111	NA	NA
Testis	0	NA	0.3								
All Other Sites	223	NA	NA								

Notes: The primary site and type groupings followed the site definitions used by the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute. Age-adjusted rates were computed by the direct method using the year 2000 U.S. standard million population age distribution. Erie County and Pennsylvania rates are per 100,000 U.S. standard population. NA = Not available.

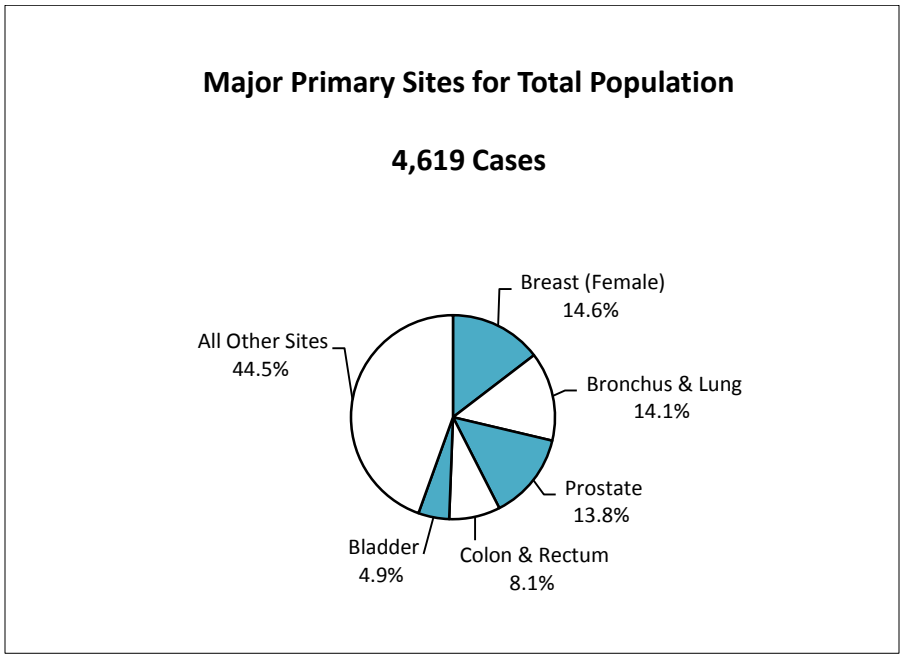
Cancer Incidence

From 2009 to 2011, there were a total of 4,619 new cancer cases (primary invasive cancers and in situ urinary bladder cancers) diagnosed among Erie County residents, for a corresponding age-adjusted cancer incidence rate of 473.4 cases per 100,000 population (Table 5). Overall, cancers were diagnosed in 2,263 (49.0%) males and 2,356 (51.0%) females. The age-adjusted incidence rates for males and females were 511.1 and 451.3 cases per 100,000, respectively.

With respect to race and ethnicity in Erie County, cancers were diagnosed in 4,370 (94.6%) Whites, 203 (4.4%) Blacks, 46 (1.0%) persons of Other/Unknown Race, and 48 (1.0%) Hispanics or Latinos (of any race).

Erie County's five leading cancer incidence sites were: (1) female breast (14.6% of all diagnoses), (2) bronchus and lung (14.1%), (3) prostate (13.8%), (4) colon and rectum (8.1%), and (5) urinary bladder (4.9%). These sites accounted for 55.5% of all resident diagnoses (Figure 2).

Figure 2. Erie County Resident Cancer Cases, 2009-2011



Among Erie County males, the five leading cancer incidence sites/types were: (1) prostate (28.2% of all diagnoses), (2) bronchus and lung (15.3%), (3) colon and rectum (9.0%), (4) urinary bladder (7.5%), and (5) non-Hodgkin lymphoma (4.9%). These sites/types accounted for 64.9% of all male diagnoses.

Among Erie County females, the five leading cancer incidence sites were: (1) breast (28.7% of all diagnoses), (2) bronchus and lung (12.9%), (3) colon and rectum (7.3%), (4) uterus (7.0%), and (5) thyroid (6.6%). These sites accounted for 62.5% of all female diagnoses.

Table 5. Erie County Cancer Cases & Age-Adjusted Incidence Rates by Site/Type, 2009-2011

Total Population				Males				Females			
Cancer Site/Type	Cases	Erie	PA	Cancer Site/Type	Cases	Erie	PA	Cancer Site/Type	Cases	Erie	PA
All Cancer Sites	4,619	473.4	497.0	All Cancer Sites	2,263	511.1	558.4	All Cancer Sites	2,356	451.3	456.0
Breast (Female)	675	130.9	127.9	Prostate	639	139.5	136.2	Breast	675	130.9	127.9
Bronchus & Lung	652	65.8	66.9	Bronchus & Lung	347	78.9	81.5	Bronchus & Lung	305	56.3	56.6
Prostate	639	139.5	136.2	Colon & Rectum	203	45.9	52.4	Colon & Rectum	173	30.8	39.2
Colon & Rectum	376	37.5	45.1	Urinary Bladder	170	38.7	43.8	Uterus	165	31.2	32.0
Urinary Bladder	225	22.7	24.9	NonHodg. Lymph.	111	25.6	26.2	Thyroid	156	35.3	30.2
NonHodg. Lymph.	217	22.5	21.4	Melanoma	87	20.2	25.4	NonHodg. Lymph.	106	19.3	17.5
Thyroid	200	23.1	20.4	Leukemia	80	19.1	17.7	Melanoma	76	15.6	17.4
Uterus	165	31.2	32.0	Kidney	76	16.2	22.2	Ovary	76	14.7	12.9
Melanoma	163	17.3	20.6	Oral Cavity	74	16.2	17.1	Leukemia	63	12.6	10.9
Leukemia	143	15.3	13.9	Pancreas	64	14.5	14.8	Pancreas	63	11.0	11.6
Kidney	129	13.4	16.4	Thyroid	44	10.7	10.1	Urinary Bladder	55	10.3	11.2
Pancreas	127	12.7	13.1	Stomach	40	9.2	9.9	Kidney	53	10.2	11.6
Pharynx	111	11.4	11.3	Esophagus	34	7.5	9.2	Oral Cavity	37	7.0	6.4
Ovary	76	14.7	12.9	Brain	29	6.9	8.2	Cervix	25	5.4	7.8
Stomach	65	6.7	6.8	Liver	28	5.5	11.2	Brain	25	5.3	5.9
Brain	54	6.0	7.0	Larynx	23	4.9	6.5	Stomach	25	4.7	4.4
Liver	48	4.6	7.1	Testis	21	5.5	6.7	Mult. Myeloma	24	3.9	5.1
Esophagus	46	4.4	5.2	Mult. Myeloma	17	NA	7.6	Liver	20	3.8	3.6
Mult.Myeloma	41	3.9	6.2	Hodg. Lymph.	8	NA	3.7	Esophagus	12	NA	1.9
Larynx	28	2.7	3.8	All Other Sites	168	NA	NA	Hodg. Lymph.	10	NA	3.0
Cervix	25	5.4	7.8					Larynx	5	NA	1.6
Testis	21	5.5	6.7					All Other Sites	207	NA	NA
Hodg. Lymph.	18	NA	3.3								
All Other Sites	375	NA	NA								

Notes: The primary site and type groupings followed the site definitions used by the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute. Age-adjusted rates were computed by the direct method using the year 2000 U.S. standard million population age distribution. Erie County and Pennsylvania rates are per 100,000 U.S. standard population. NA = Not available.

Injury Hospitalizations

In 2013, there were a total of 2,932 hospitalizations due to injury in Erie County (Table 6). Most of these hospitalizations were the result of unintentional injuries (accidents). Overall, 2,265 (77.3%) were due to accidents, 363 (12.4%) were self-inflicted injuries, 85 (2.9%) were assault injuries, and 219 (7.5%) were classified as undetermined injuries.

Females accounted for a slight majority (52.5%) of hospitalizations. Among the seven age group categories presented in Table 6, children under five years and seniors 75 years and older accounted for 1.1% and 31.9% of hospitalizations, respectively.

A total of 91 (3.1%) injury hospitalizations were fatal. Nearly three out of every five (59.3%) fatalities occurred in persons 75 years and older.

In 2013, the three leading mechanisms of injury hospitalization in Erie County were falls, poisonings, and motor vehicle traffic occupant injuries. These mechanisms collectively accounted for 60.5% of hospitalizations.

There were a total of 1,192 hospitalizations due to falls, and over half (55.8%) of these occurred in seniors 75 years and older.

Table 6. Erie County Injury Hospitalizations, 2013

Subject	All Ages	Under 5	5-14	15-24	25-44	45-64	65-74	75+
All Injuries	2,932	32	66	286	522	750	340	936
Male	1,392	14	28	160	299	422	159	310
Female	1,540	18	38	126	223	328	181	626
Fatal	91	0	0	4	8	17	8	54
Nonfatal	2,841	32	66	282	514	733	332	882
Intent								
Unintentional	2,265	23	47	154	306	563	310	862
Self-Inflicted	363	0	18	91	148	102	2	2
Assault	85	5	1	23	23	24	7	2
Undetermined	219	4	0	18	45	61	21	70
Leading Mechanisms								
Fall	1,192	4	9	19	72	237	186	665
Poisoning	438	2	15	80	168	141	14	18
Motor vehicle traffic occupant	143	1	3	30	40	33	16	20
Struck by, against	84	2	8	18	20	26	6	4
Cut, pierce	79	0	2	30	31	12	2	2

Sources

Erie County Department of Health, Cancer
Erie County Department of Health

Erie County Department of Health, Community Health Profiles
Erie County Department of Health

Erie County Department of Health, Mortality
Erie County Department of Health

Pennsylvania Department of Health, Division of Health Informatics
PADOH Health Statistics Home

Pennsylvania Department of Health, Division of Health Risk Reduction
Injuries in Pennsylvania, County Profiles 2013.pdf

Infectious Diseases

Campylobacteriosis

Campylobacteriosis infection is caused by *Campylobacter* bacteria. In 2013, there were 26 reported cases in Erie County with a crude incidence rate of 9.3 cases per 100,000 (19.8 for PA) compared to 18 cases in 2012 with a rate of 6.4. From 2011-2013, there were 77 reported cases in Erie County with an average annual crude incidence rate of 9.2 (17.0 for PA) compared to 76 cases from 2010-2012 with a rate of 9.0.

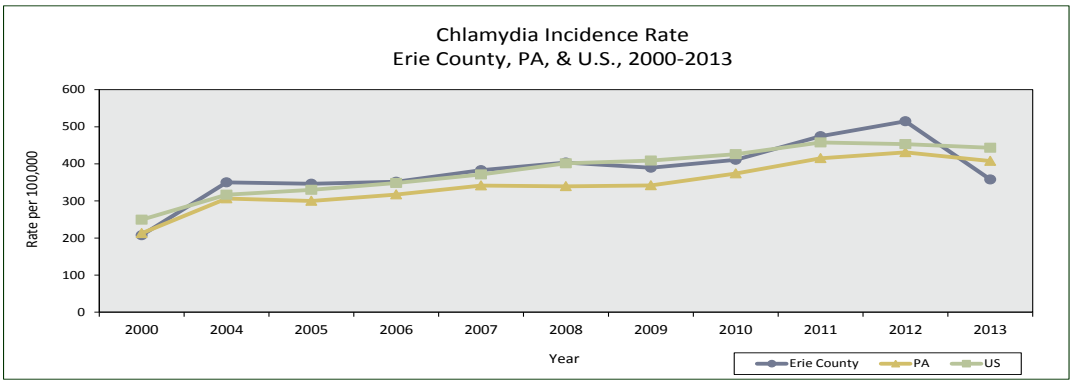
Chlamydia

Chlamydia is a common sexually transmitted infection (STI) caused by the bacteria *Chlamydia trachomatis*. Symptoms can be mild or absent and a majority of infections are not diagnosed. Less than 60% of sexually active young women are screened annually.

Following a steady increase from 2000 to 2012, the number of reported chlamydia cases fell in 2013 to 1,004 (1,445 for 2012) (Table 1).

The annual crude incidence rate of chlamydia in Erie County decreased significantly by 30.5% from 514.9 per 100,000 in 2012 to 357.8 in 2013 (407.5 for PA; 443.5 for U.S.) (Figure 1, Table 1).

Figure 1. Chlamydia Incidence, 2000-2013



Rate decreases were seen for all demographic groups with the exception of Hispanic. Of these rate decreases, all were significant with the exception of age 30-34 and 35 and above. The largest percent rate decreases were seen for non-Hispanic Whites (40.9%) and age 15-19 (40.8%).

The average annual crude incidence rate of chlamydia in Erie County decreased significantly from 466.9 cases per 100,000 in 2010-2012 to 449.2 in 2011-2013 (417.8 for PA; 451.5 for U.S.).

Of all chlamydia cases reported in 2013, 67% were female, 43% were non-Hispanic White compared to 36% for non-Hispanic Black and 5% for Hispanic, 43% were age 20-24, and 32% were age 15-19 (Figure 2, Table 1).

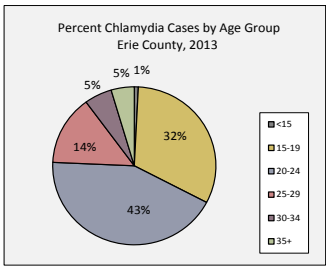
Table 1. Chlamydia Incidence, 2012-2013

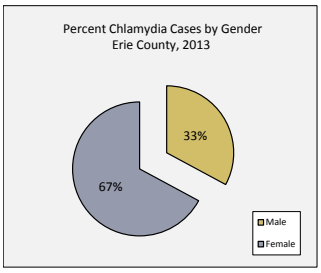
Chlamydia Case Count, Percent of Total, and Incidence Rate
Erie County, PA, & U.S., 2012 & 2013

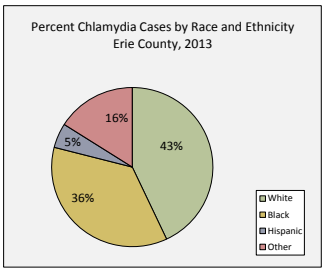
	2012		2013		2012	2013	
	# Cases	% of Total	# Cases	% of Total	Rate	Rate	% Rate Change
Erie County							
Total	1,445		1,004		514.9	357.8	-30.5
Male	461	31.9	330	32.9	333.6	239.2	-28.3
Female	984	68.1	674	67.1	690.8	472.6	-31.6
White, non-Hispanic	701	48.5	429	42.7	289.8	171.2	-40.9
Black, non-Hispanic	472	32.7	363	36.2	2,410.6	1,750.8	-27.4
Hispanic	53	3.7	50	5.0	521.1	525.3	0.8
<15 years *	9	0.6	8	0.8	17.6	15.4	-12.2
15-19 years	512	35.4	320	31.9	2,425.2	1,434.7	-40.8
20-24 years	593	41.0	432	43.0	2,640.1	1,933.0	-26.8
25-29 years	200	13.8	143	14.2	1,119.5	830.9	-25.8
30-34 years	76	5.3	55	5.5	466.8	354.9	-24.0
35+ years	55	3.8	46	4.6	36.2	30.4	-16.2
Pennsylvania							
Total	54,993		52,056		430.9	407.5	-5.4
United States							
Total	1,422,976		1,401,906		453.3	443.5	-2.2

Note: Red indicates significant difference from previous year; *Numbers less than 20 provide statistically unreliable rates;
Crude rate equals number of cases per 100,000 population; 95% Confidence Interval used;
For percent of total for age groups, the denominator is the total number of cases for a reported age; Before 2003 some reported cases did not include age;
Total includes unknown gender, race, and age; Hispanic origin can be of any race; There may be multiple diseases in one person; Some individuals may become infected more than once;
U.S Census Bureau, Intercensal Population Estimates used for Erie County and PA; U.S. Census Bureau, Vintage Postcensal Series Population Estimates used for U.S.;
Current year population used for Erie County, PA, and U.S. rate calculations

Figure 2. Chlamydia Demographics, 2013







Giardiasis

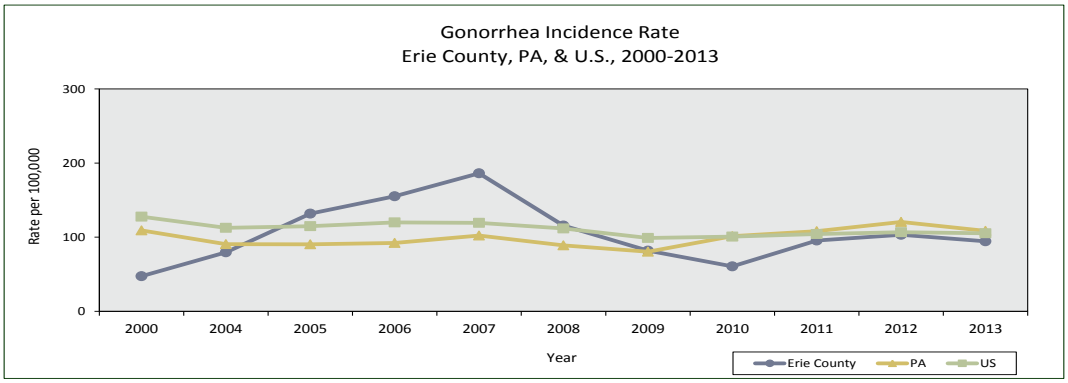
Giardiasis is a diarrheal disease caused by the parasite *Giardia lamblia*. In 2013, there were 54 reported cases in Erie County with a crude incidence rate of 19.3 cases per 100,000 (5.9 for PA; 4.8 for U.S.) compared to 42 cases in 2012 with a rate of 15.0. From 2011-2013, there were 130 reported cases in Erie County with an average annual crude incidence rate of 15.5 (5.8 for PA; 5.0 for U.S.) compared to 96 cases from 2010-2012 with a rate of 11.4 (5.9 for PA; 5.6 for U.S.)

Gonorrhea

Gonorrhea is a common STI caused by the bacteria *Neisseria gonorrhoeae.* Untreated, gonorrhea can cause pelvic inflammatory disease (PID) in women and may lead to infertility in men.

In 2013, 265 cases of gonorrhea were reported in Erie County (290 for 2012) (Table 2).

Figure 3. Gonorrhea Incidence, 2000-2013



The annual crude incidence rate of gonorrhea in Erie County decreased from 103.3 per 100,000 in 2012 to 94.5 in 2013 (108.6 for PA; 105.3 for U.S.) (Figure 3, Table2). The Healthy People 2020 Goal is 257.0 cases per 100,000 females aged 15-44 and 198.0 cases per 100,000 males aged 15-44. Rate decreases were seen for all demographic groups with the exception of males, age below 15, and age 35 and above. The largest percent rate decreases were seen for Hispanic (35.9%), non-Hispanic Whites (26.0%), and age 30-34 (25.0%).

The average annual crude incidence rate of gonorrhea in Erie County increased significantly from 86.5 cases per 100,000 in 2010-2012 to 97.8 in 2011-2013 (112.4 for PA; 105.4 for U.S.).

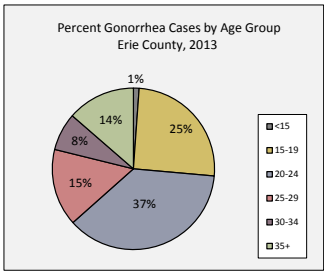
Table 2. Gonorrhea Incidence, 2012 & 2013

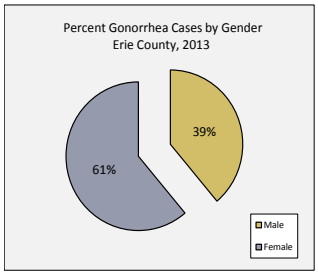
Gonorrhea Case Count, Percent of Total, and Incidence Rate Erie County, PA, & U.S., 2012 & 2013							
	2012		2013		2012	2013	
	# Cases	% of Total	# Cases	% of Total	Rate	Rate	% Rate Change
Erie County							
Total	290		265		103.3	94.5	-8.6
Male	96	33.1	103	38.9	69.5	74.7	7.5
Female	194	66.9	162	61.1	136.2	113.6	-16.6
White, non-Hispanic	133	45.9	102	38.5	55.0	40.7	-26.0
Black, non-Hispanic	117	40.3	108	40.8	597.5	520.9	-12.8
Hispanic	25	8.6	15	5.7	245.8	157.6	-35.9
<15 years *	2	0.7	3	1.1	3.9	5.8	48.1
15-19 years	73	25.2	67	25.3	345.8	300.4	-13.1
20-24 years	104	35.9	98	37.0	463.0	438.5	-5.3
25-29 years	48	16.6	41	15.5	268.7	238.2	-11.3
30-34 years	28	9.7	20	7.5	172.0	129.1	-25.0
35+ years	35	12.1	36	13.6	23.1	23.8	3.1
Pennsylvania							
Total	15,390		13,875		120.6	108.6	-9.9
United States							
Total	334,826		333,004		106.7	105.3	-1.2

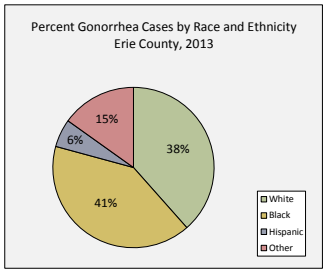
Note: Red indicates significant difference from previous year; *Numbers less than 20 provide statistically unreliable rates;
Crude rate equals number of cases per 100,000 population; 95% Confidence Interval used;
For percent of total for age groups, the denominator is the total number of cases for a reported age; Before 2003 some reported cases did not include age;
Total includes unknown gender, race, and age; Hispanic origin can be of any race; There may be multiple diseases in one person; Some individuals may become infected more than once;
U.S Census Bureau, Intercensal Population Estimates used for Erie County and PA; U.S. Census Bureau, Vintage Postcensal Series Population Estimates used for U.S.;
Current year population used for Erie County, PA, and U.S. rate calculations

Of all gonorrhea cases reported in 2013, 61% were female, 38% were non-Hispanic White compared to 41% for non-Hispanic Black and 6% for Hispanic, 37% were age 20-24, 25% were age 15-19, and 16% were age 25-29 (Figure 4, Table 2).

Figure 4. Gonorrhea Demographics, 2013







Haemophilus Influenza

Haemophilus influenza invasive disease is caused by the bacteria *Haemophilus influenzae*. Transmission is by direct contact or by droplets during coughing and sneezing.

In 2013, there were 7 reported cases of *H. influenzae* in Erie County with a crude incidence rate of 2.5 cases per 100,000 (1.6 for PA; 1.2 for U.S.) compared to 3 cases in 2012 with a rate of 1.1. From 2011-2013, there were 13 reported cases with an average annual incidence rate of 1.6 (1.8 for PA; 1.1 for U.S.) compared to 11 cases from 2010-2012 with a rate of 1.3.

Hepatitis A

Hepatitis A is an acute, vaccine-preventable liver disease caused by the hepatitis A virus (HAV) that is transmitted by the fecal-oral route via person-to-person contact or by contaminated food or water. HAV infection does not result in chronic infection or chronic liver disease.

In 2013, there was 1 reported case of hepatitis A in Erie County with a crude incidence rate of 0.4 cases per 100,000 (0.4 for PA; 0.6 for U.S.) compared to 2 reported cases in 2012 with a rate of 0.7. From 2011-2012, there were 5 reported cases with an average annual incidence rate of 0.6 (0.5 for PA; 0.5 for U.S.) compared to 6 cases from 2010-2012 with a rate of 0.7. The Healthy People 2020 Goal is 0.3 cases per 100,000 population.

Hepatitis B

Hepatitis B is a vaccine-preventable liver disease caused by hepatitis B virus (HBV) and is transmitted by contact with the blood or other body fluids of infected individuals. HBV infection can lead to chronic or lifelong infection and liver disease.

Acute Hepatitis B In 2013, there were no reported cases of acute hepatitis B in Erie County. In 2013, a crude incidence rate of 0.3 cases per 100,000 was reported for PA and a rate of 1.0 reported for U.S. In 2012, there were 2 reported cases in Erie County with a rate of 0.7. From 2011-2013, there were 3 reported cases of acute hepatitis B in Erie County with an average annual incidence rate of 0.4 (0.5 for PA; 0.9 for U.S.) compared to 5 cases from 2010-2012 with a rate of 0.6. The Healthy People 2020 Goal is 1.9 cases per 100,000 population aged 19 and above.

Chronic Hepatitis B In 2013, there were 19 reported cases of chronic hepatitis B in Erie County with a crude incidence rate of 6.8 cases per 100,000 (12.8 for PA) compared to 22 cases in 2012 with a rate of 7.8. From 2011-2013, there were 61 reported cases of chronic hepatitis B in Erie County with an average annual incidence rate of 7.2 (14.8 for PA) compared to 57 cases from 2010-2012 with a rate of 6.8.

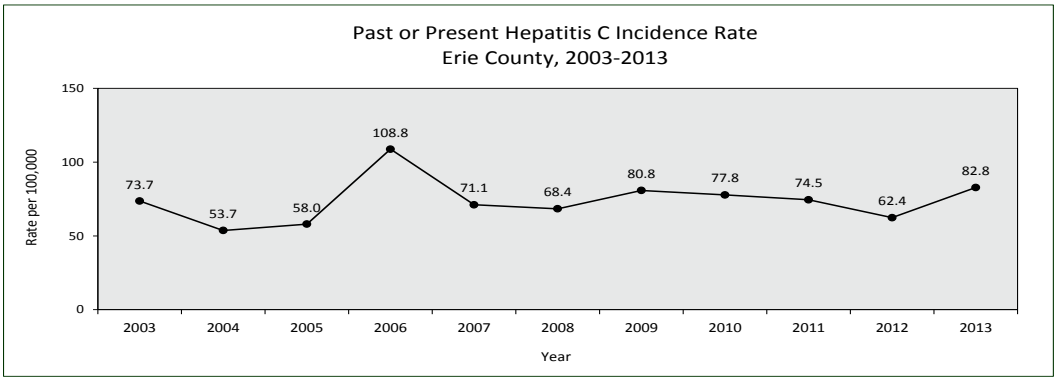
Hepatitis C

Hepatitis C is a liver disease caused by the hepatitis C virus (HCV) and is spread by contact with the blood of an infected person. Most individuals with HCV infection develop a chronic infection that is asymptomatic with chronic liver disease developing decades later.

Acute Hepatitis C In 2013, there were 10 reported cases of acute hepatitis C in Erie County with a crude incidence rate of 3.6 cases per 100,000 (0.6 for PA; 0.7 for U.S.) compared to 7 cases in 2012 with a rate of 2.5. From 2011-2013, there were 18 reported cases of acute hepatitis C in Erie County with an average annual incidence rate of 2.2 (0.5 for PA; 0.6 for U.S.) compared to 15 cases from 2010-2012 with a rate of 1.8. The Healthy People 2020 Goal is 0.2 new cases per 100,000 population.

Past or Present Hepatitis C In 2013, there were 232 reported cases of past or present hepatitis C in Erie County with a crude incidence rate of 82.8 cases per 100,000 (69.7 for PA) compared to 175 cases in 2012 with a rate of 62.4. From 2011-2013, there were 616 reported cases of past or present hepatitis C in Erie County with an average annual incidence rate of 73.2 (70.8 for PA) compared to 602 cases from 2010-2012 with a rate of 71.6. From 2005 to 2006, the incidence rate for past or present hepatitis C increased by 88%, but then dropped to stable levels (Figure 5).

Figure 5. Past or Present Hepatitis C Incidence, 2003-2013



HIV Surveillance

HIV infection and AIDS have been combined into a single case definition for HIV infection. This definition categorizes the disease into three stages plus an unknown stage, with stage 3 classified as AIDS.

Pennsylvania (including Erie County) no longer reports AIDS cases separately. Only HIV disease is reported regardless of the stage of the disease (stage 1, 2, 3 [AIDS] or unknown). The terms

HIV disease, used by Pennsylvania in its surveillance reporting, and HIV infection, used by the United States in its surveillance reporting, are interchangeable.

The rates reported below are crude rates per 100,000 population. All case counts are reported as of December 31, 2012 with the exception of the number of individuals currently living with HIV infection in the United States. These counts represent cases reported as of December 31, 2011.

Figure 6. HIV Disease Incidence, 2006-2012

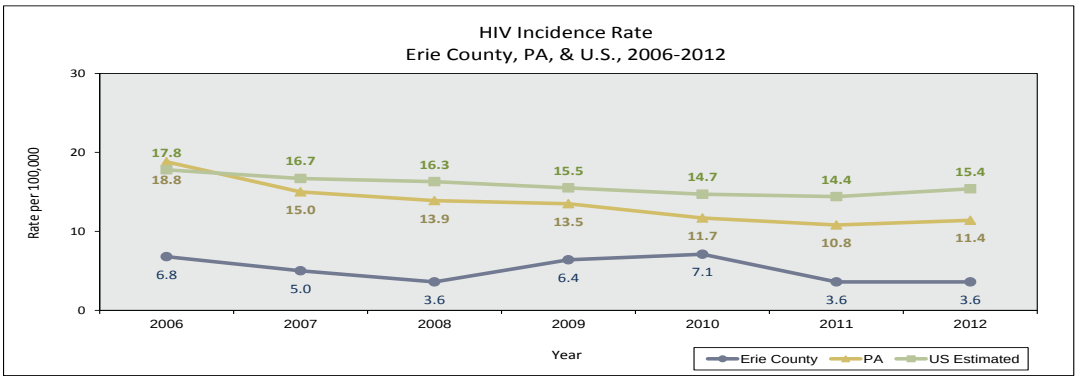


Table 3. HIV Disease Incidence, 2006-2012

		Before 2006	2006	2007	2008	2009	2010	2011	2012	TOTAL TO 12/31/12	CURRENTLY LIVING^^
Erie County	HIV Disease Cases*	406	19	14	10	18	20	10	10	496	305
	Rate^	--	6.8	5.0	3.6	6.4	7.1	3.6	3.6	--	--
Pennsylvania	HIV Disease Cases*	42,863	2,335	1,866	1,729	1,700	1,491	1,382	1,461	55,754	33,464
	Rate^	--	18.8	15.0	13.9	13.5	11.7	10.8	11.4	--	--
United States	HIV Infection Cases*		NA	NA	49,434	46,346	44,079	42,218	42,181	NA	904,467
	Rate^		--	--	--	--	--	--		--	--
	HIV Infection Estimated**Cases*		42,543	48,785	50,316	47,532	46,017	45,382	48,893	NA	899,273
	Estimated Rate^		17.8	16.7	16.3	15.5	14.7	14.4	15.4	--	284.9

Note: HIV disease or HIV infection refers to a diagnosis of HIV infection regardless of the stage of disease (stage 1, 2, 3 [AIDS], or unknown) and refers to all persons with a diagnosis of HIV infection;
NA = Not available; -- denotes that the rate is not calculated;
^Crude rate per 100,000 population; Current year populations used for rate calculations;
*As of December 31, 2012; All counts represent name-based reported cases unless otherwise noted; U.S. reported case counts represent 50 states, the District of Columbia, and 6 U.S. dependent areas;
Pennsylvania initiated confidential name-based reporting in 2002; In 2005, the CDC recommended that all states and U.S. dependent areas adopt confidential, name-based HIV infection case reporting;
^^ For Erie County and Pennsylvania, currently living to December 31, 2012; For U.S., currently living to December 31, 2011;
**Estimating case counts adjusts for reporting delays and missing risk-factor information but not for incomplete reporting;
Sources: PA DOH HIV/AIDS Surveillance Summary, 2012; CDC HIV Surveillance Report, Volume 24: Diagnoses of HIV Infection in the United States and Dependent Areas, 2012

As of December 31, 2012, a total of 496 HIV disease cases had been reported in Erie County with 305 currently living. In 2012, 10 (10 in 2011) newly diagnosed HIV disease cases were reported for a crude incidence rate of 3.6 cases per 100,000 compared to 11.4 for PA, and 15.4 for U.S. estimated cases (Figure 6, Table 3).

HIV Testing Based on the Behavioral Risk Factor Surveillance System (BRFSS) survey, the self-reported percentage of Erie County adults aged 18-64 who were ever tested for HIV (excluding

blood donations) decreased to 32% in 2011-2013 compared to 40% in 2011 (Figure 7). This was significantly lower than PA at 38% (2011-2013) and lower than the U.S. at 35% (2013).

From 2011 to 2011-2013, the percentage of those who were ever tested for HIV (excluding blood donations) decreased for all demographic groups with reported values (Table 4). Significant decreases were seen for females and non-Hispanic White adults.

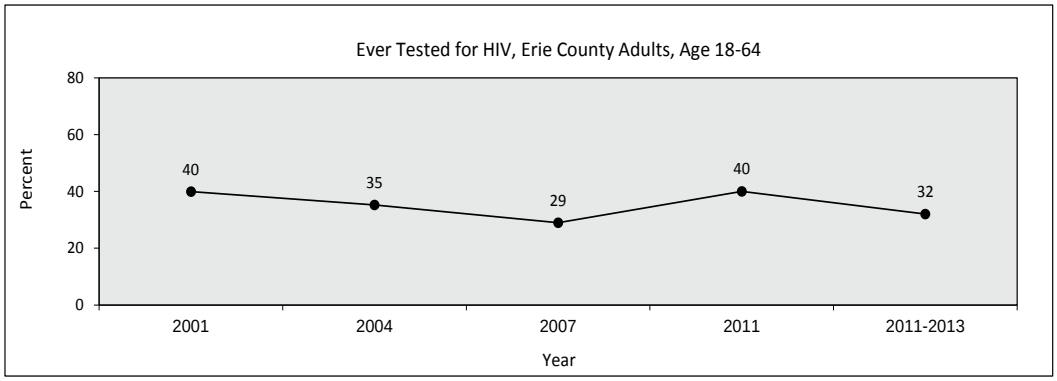
Table 4. Lifetime HIV Testing, 2011 & 2011-2013

Ever Tested for HIV (Excluding Blood Donations), Age 18-64
Erie County Adult BRFSS, 2011 & 2011-2013

	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	40%	36% – 43%	32%	28% – 37%	-8%		38%
Gender							
Male	36%	32% – 40%	35%	29% – 41%	-1%		36%
Female	43%	39% – 48%	29%	24% – 35%	-14%	***	41%
Age							
18-29	41%	35% – 47%	NA				40%
30-44	52%	46% – 58%	NA				52%
18-44	NA		40%	34% – 47%			
45-64	31%	26% – 35%	21%	17% – 26%	-10%		29%
Education							
<High School	61%	48% – 74%	NA				42%
High School	40%	34% – 45%	NA				35%
<= High School			29%	23% – 36%			
Some College	42%	36% – 47%	39%	32% – 48%	-3%		40%
College Graduate	37%	31% – 42%	28%	22% – 35%	-9%		40%
Income							
<$25,000	49%	43% – 56%	42%	34% – 51%	-7%		NA
$25,000-$49,999	39%	33% – 45%	32%	25% – 41%	-7%		36%
$50,000+	37%	32% – 43%	26%	20% – 32%	-11%		NA
Race/Ethnicity							
White, non-Hispanic	37%	34% – 40%	29%	25% – 33%	-8%	***	32%
Black, non-Hispanic	69%	56% – 82%	NA				72%
Hispanic	61%	43% – 79%	NA				59%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Figure 7. Lifetime HIV Testing 2001 to 2011-2013



Influenza

Influenza (also known as the flu) is a vaccine-preventable respiratory illness caused by influenza viruses. The virus is usually spread from person to person during coughing and sneezing.

To standardize disease case counting, the CDC assigns a number to every week (Sunday through Saturday) in the calendar year with Week 1 at the beginning of the year. The flu season officially begins with CDC Week 40 of one year and ends with CDC Week 39 of the following year. Case counts for the flu season correspond to the cases reported during these weeks.

For the 2013-2014 Erie County flu season, a total of 700 cases were reported (687 seasonal Type A and 13 Type B (Figures 8, 9). Among age groups, 5% of all cases were under 2 years old, 17% were aged 2 to 17, 12% were aged 18 to 25, 36% were aged 26 to 49, 20% were aged 50-64, and 10% were aged 65 and above. Two deaths and 84 hospitalizations were reported.

Annual influenza case counts were 1,152 for calendar year 2013 compared to 289 for 2012, 834 for 2011, and 30 for 2010.

Figure 8. Influenza Cases by Flu Season, 2003-2004 to 2013-2014

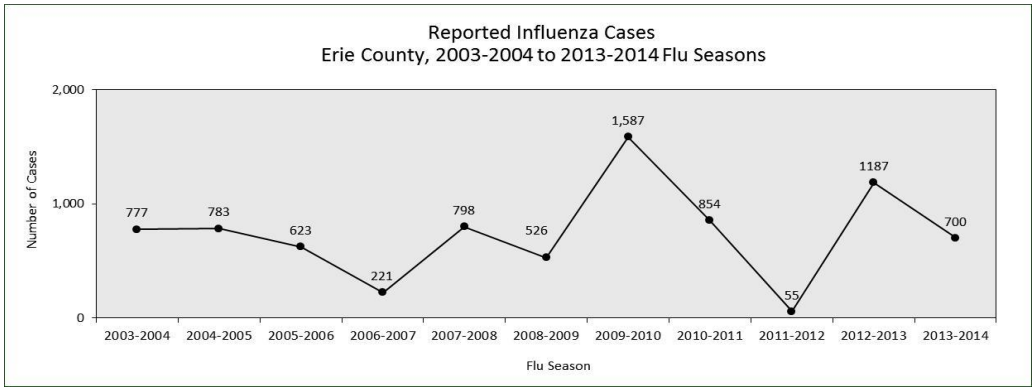
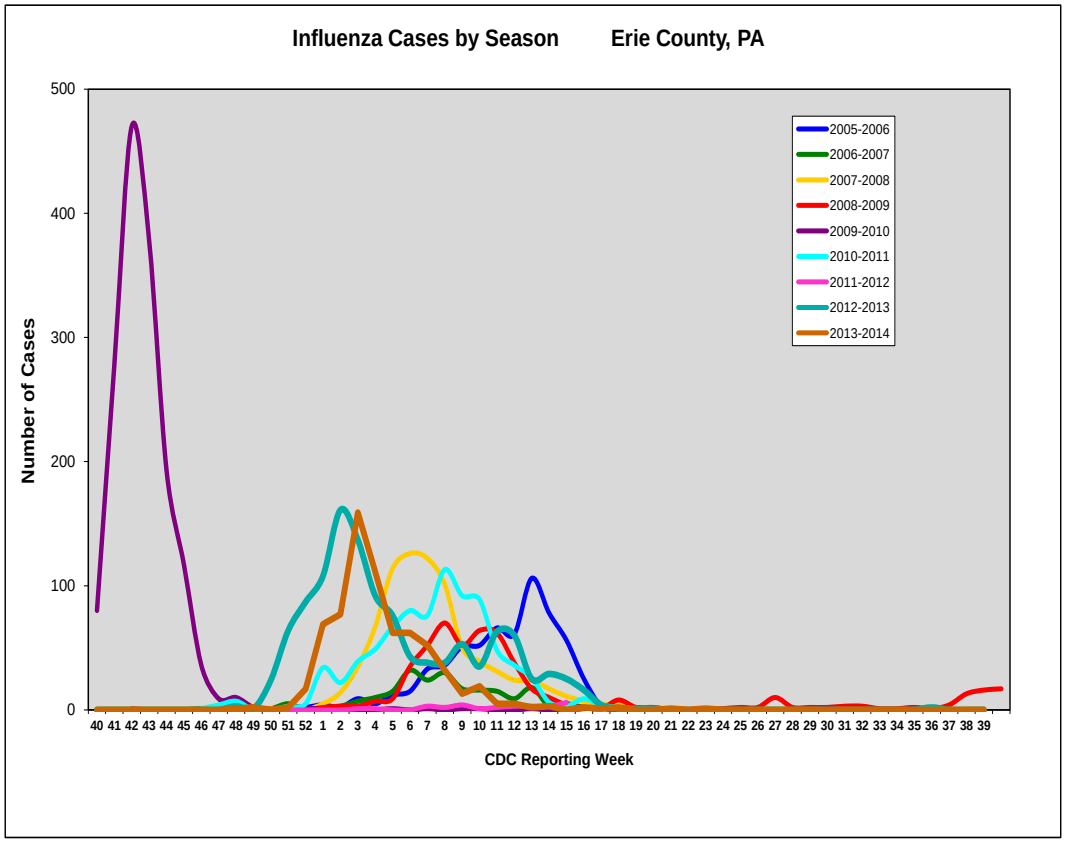


Figure 9. Influenza Cases by Flu Season, 2005-2006 to 2013-2014



Listeriosis

Listeriosis is caused by the bacteria *Listeria monocytogenes.* Transmission occurs through ingestion of organisms in contaminated food. Infection during pregnancy can result in miscarriage, stillbirth, prematurity, or infection of the newborn.

In 2013, there was 1 case of listeriosis reported in Erie County for a crude incidence rate of 0.4 cases per 100,000 (0.4 for PA; 0.2 for U.S.). In 2012, there was 1 reported case in Erie County for a rate of 0.4.

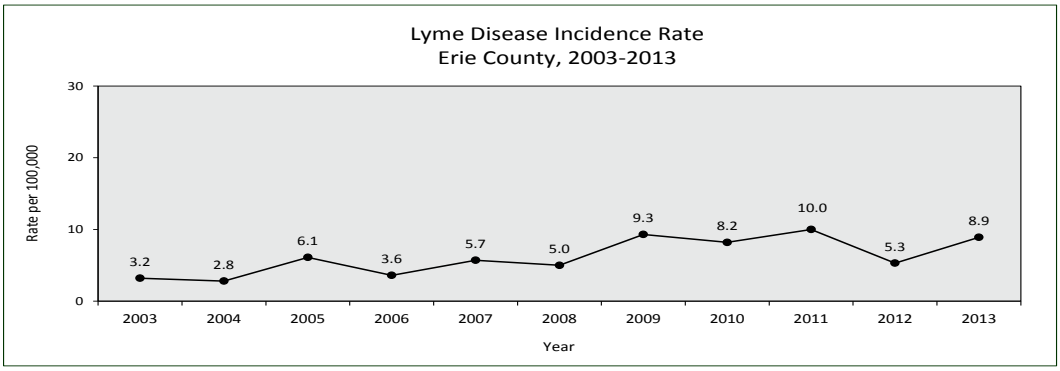
Lyme Disease

Lyme disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans by the bite of infected blacklegged ticks.

In 2013, there were 25 cases of Lyme disease reported in Erie County for a crude incidence rate of 8.9 cases per 100,000 (45.1 for PA; 11.7 for U.S.) compared to 15 cases in 2012 with a rate of

5.3. From 2011-2013, there were 68 reported cases of Lyme disease with an incidence rate of 8.1 (42.2 for PA; 10.8 for U.S.) compared to 66 cases from 2010-2012 with a rate of 7.8 (Figure 10).

Figure 10. Lyme Disease Incidence, 2003-2013



Measles

Measles is a vaccine-preventable disease spread through coughing or sneezing and is characterized by rash, high fever, coughing, and runny nose. Complications can occur.

There were no reported cases of measles in Erie County in 2013. The last reported case occurred in 1991.

Meningitis

Meningitis is an infection of the fluid of a person's spinal cord and the fluid that surrounds the brain.

Viral or Aseptic Meningitis is a clinically diagnosed meningitis that has no laboratory confirmation of bacterial or fungal infection. Viral meningitis is usually less severe than bacterial meningitis and normally doesn't require specific treatment.

In 2013, there were 6 reported cases of aseptic meningitis in Erie County with a crude incidence rate of 2.1 cases per 100,000 (3.3 for PA) compared to 13 cases in 2012 with a rate of 4.6. From 2011-2013, there were 40 reported cases of aseptic meningitis with an incidence rate of 4.7 (3.5 for PA) compared to 40 cases from 2010-2012 with a rate of 4.7.

Meningococcal Disease is a vaccine-preventable type of meningitis caused by the bacteria *Neisseria meningitidis* and is one of the major types of bacterial meningitis.

In 2013, there was 1 reported case of meningococcal disease in Erie County with a crude incidence rate of 0.4 cases per 100,000 (0.2 for PA; 0.2 for U.S.). In 2012, 1 case was reported in Erie County for a rate of 0.4. From 2011-2013, there were 2 reported cases of meningococcal disease with an incidence rate of 0.3 (0.2 for PA; 0.2 for U.S.) compared to 1 case from 2010-2012 with a rate of 0.1. The Healthy People 2020 Goal is 0.3 cases per 100,000 population.

Mumps

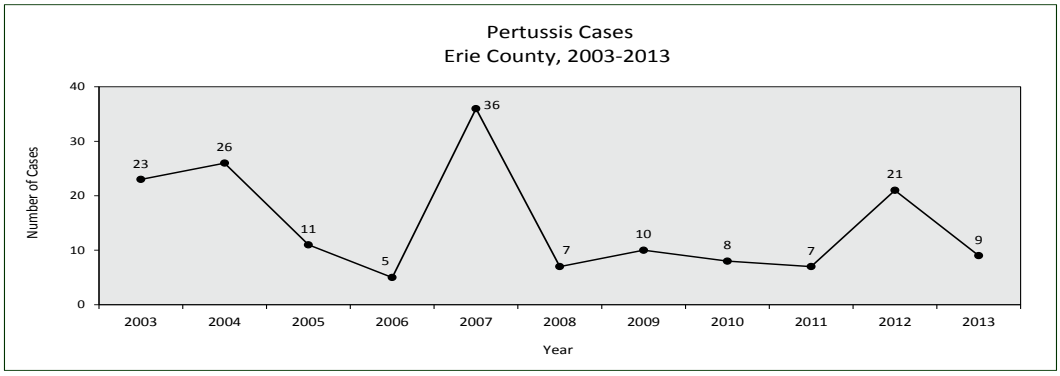
Mumps is a vaccine-preventable disease caused by the mumps virus. From 2003 to 2013, only one case of mumps occurred in Erie County. It was reported in 2006.

Pertussis (Whooping Cough)

Pertussis, a vaccine-preventable respiratory disease caused by the bacteria *Bordetella pertussis,* is found mainly in children.

In 2013, there were 9 cases of pertussis reported in Erie County for a crude incidence rate of 3.2 cases per 100,000 (5.0 for PA; 9.2 for U.S.) compared to 21 cases in 2012 with a rate of 7.5 (Figure 11). From 2011-2013, there were 37 reported cases of pertussis with an incidence rate of 4.4 (8.7 for PA; 10.3 for U.S.) compared to 36 cases from 2010-2012 with a rate of 4.3.

Figure 11. Pertussis Cases, 2003-2013



Respiratory Syncytial Virus

Respiratory syncytial virus (RSV) is the most common cause of bronchiolitis and pneumonia in children under 1 year of age in the United States.

In 2013, there were 121 reported cases of RSV in Erie County compared to 160 cases in 2012. Of the 121 cases, 90 (74%) were in infants less than one year of age and 19 (16%) were in children 1 year of age. From 2011-2013, there were 528 reported cases of RSV for an average of 176 cases per year compared to 595 cases from 2010-2012 for an average of 198 cases per year.

Rubella (German Measles)

Rubella is a vaccine-preventable viral disease that causes fever and rash. Rubella can cause birth defects in pregnant women who become infected. There were no reported cases of rubella in Erie County from 2003 to 2013.

Salmonellosis

Salmonellosis is an infection caused by *Salmonella* bacteria and is passed via the fecal-oral route from the feces of animals or humans to other animals or humans.

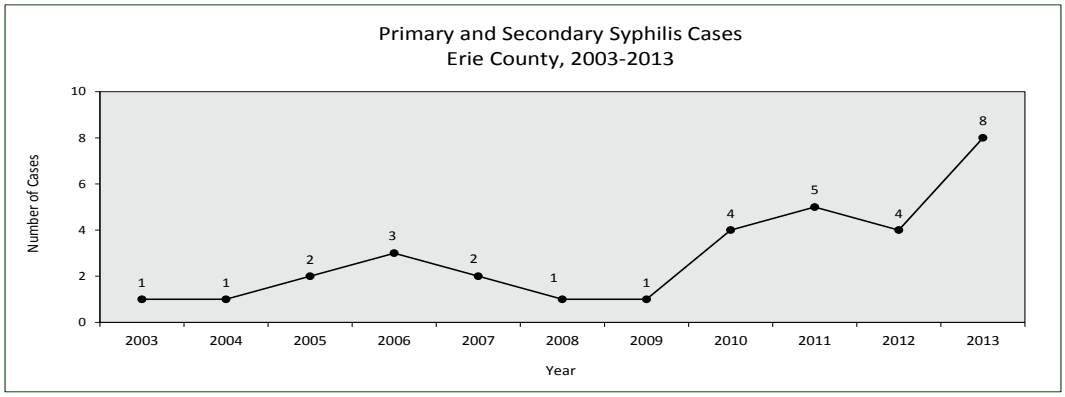
In 2013, there were 24 cases of salmonellosis reported in Erie County for a crude incidence rate of 8.6 cases per 100,000 (12.7 for PA; 16.3 for U.S.) compared to 22 cases in 2012 with a rate of 7.8. From 2011-2013, there were 70 reported cases of salmonellosis with an incidence rate of 8.3 (13.6 for PA; 16.8 for U.S.) compared to 130 cases from 2010-2012 with a rate of 15.5.

Syphilis

Syphilis is an STI caused by the bacterium *Treponema pallidum* and is usually passed from person to person through direct contact with a syphilis sore. Without treatment symptoms disappear, but the infection remains in the body as latent syphilis.

Primary and Secondary Syphilis Since 2009, Erie County has seen an increase in syphilis cases. In 2013, there were 8 cases of primary and secondary syphilis reported in Erie County for a crude incidence rate of 2.9 (3.7 for PA; 5.5 for U.S.) compared to 4 cases in 2012 with a rate of 1.4 (Figure 12). From 2011-2013, 17 cases were reported for an average annual crude incidence rate of 2.0 cases per 100,000 (3.5 for PA; 5.0 for U.S.). From 2010-2012, there were 13 cases of primary and secondary syphilis for a crude incidence rate of 1.3. The Healthy People 2020 Goals are 1.4 cases per 100,000 females and 6.8 cases per 100,000 males.

Figure 12. Primary and Secondary Syphilis Cases, 2003-2013



Early Latent Syphilis In 2013, 7 cases of early latent syphilis were reported in Erie County for a crude incidence rate of 2.5 (4.6 for PA; 4.5 for U.S.) compared to 3 cases in 2012 for a rate of 1.1. From 2011-2013, 12 cases were reported for an average annual crude incidence rate of 1.4 cases per 100,000 (3.8 for PA). From 2010-2012, there were 7 cases of early latent syphilis for a crude incidence rate of 0.8.

Late and Late Latent Syphilis In 2013, 1 case of late and late latent syphilis was reported in Erie County for a crude incidence rate of 0.4 cases per 100,000 (2.9 for PA) compared to 2 cases reported in 2012 with a rate of 0.7. From 2011-2013, 3 cases were reported for an average annual crude incidence rate of 0.4 (2.6 for PA; 6.1 for U.S.). From 2010-2012, there were 3 cases of late and late latent syphilis for a crude incidence rate of 0.4.

Syphilis, Congenital

Congenital syphilis occurs when a pregnant woman who has syphilis passes the disease to her baby in utero. There were no reported cases of congenital syphilis in Erie County in 2013. Crude incidence rates were <0.1 for PA and 8.7 for the U.S. The last reported case in Erie County occurred in 1998. The Healthy People 2020 Goal is 9.1 per 100,000 live births.

Tuberculosis

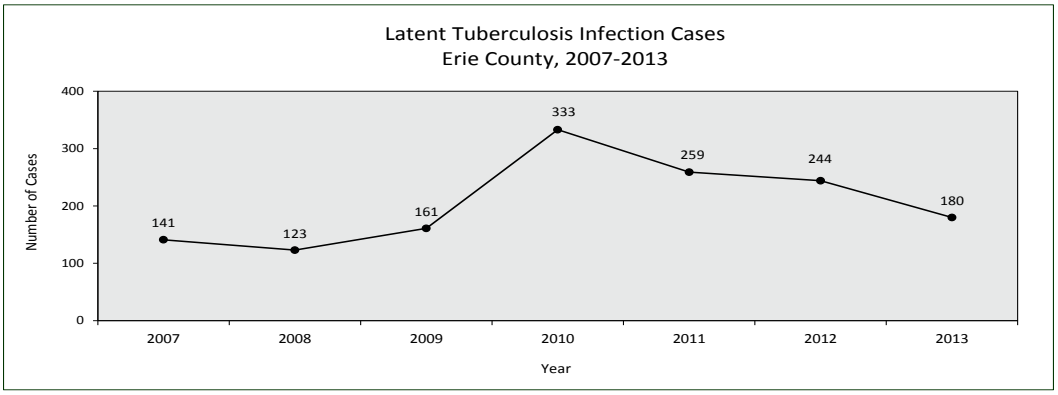
Tuberculosis (TB) is a mycobacterial disease that is spread from person to person through the air and usually affects the lungs.

Active Tuberculosis In 2013, there were 5 cases of tuberculosis disease reported in Erie County for a crude incidence rate of 1.8 cases per 100,000 (1.7 for PA; 3.1 for U.S.) compared to 13 cases in 2012 with a rate of 4.6. From 2011-2013, there were 29 reported cases of tuberculosis with an average annual incidence rate of 3.4 (1.8 for PA; 3.2 for U.S.) compared to

29 cases from 2010-2012 with a rate of 3.4. The Healthy People 2020 Goal is 1.0 new case per 100,000 population.

Latent Tuberculosis Infection (LTBI) In 2013, there were 180 cases of LTBI reported in Erie County compared to 244 cases in 2012, 259 in 2011, and 333 in 2010 (Figure 13). Erie County has a large refugee resettlement population which may account for elevated case counts.

Figure 13. Latent Tuberculosis Infection Cases, 2007-2013



Varicella zoster (Chickenpox)

Chickenpox is a vaccine-preventable disease caused by infection with the *Varicella zoster* virus.

In 2013, there were 11 cases of chickenpox reported in Erie County for a crude incidence rate of 3.9 cases per 100,000 (6.2 for PA; 3.6 for U.S.) compared to 17 cases in 2012 with a rate of 6.1. From 2011-2013, there were 52 reported cases of chickenpox with an annual average incidence rate of 6.2 (7.2 for PA; 4.2 for U.S.) compared to 57 cases from 2010-2012 for a rate of 6.8.

West Nile Virus

West Nile virus is transmitted to humans by mosquitoes. About 20% of infected individuals develop mild symptoms (West Nile fever) and less than 1% develop a neurological infection (West Nile encephalitis).

In 2013, 1 case of West Nile fever was reported in Erie County for a crude incidence rate of 0.4 cases per 100,000 (0.1 for PA; 0.4 for U.S.). In 2012, there were 3 cases of West Nile fever reported for a rate of 1.1. There were no cases of West Nile encephalitis reported in Erie County during this same time period.

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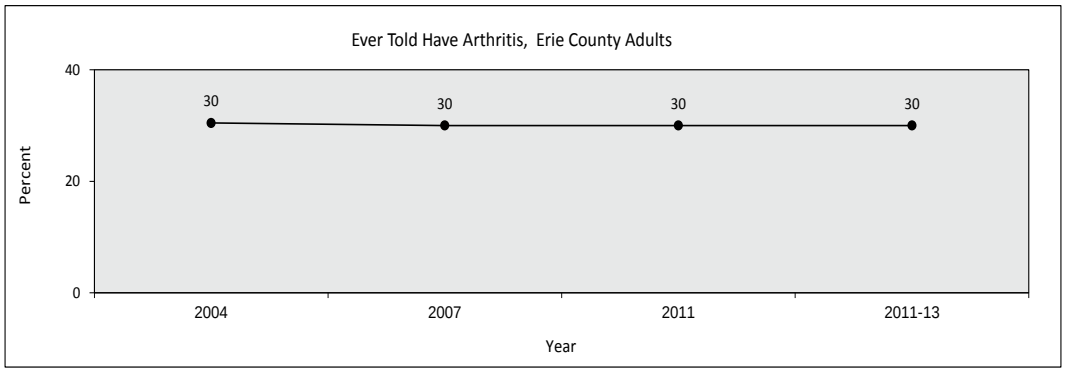
Chronic Diseases and Conditions

Arthritis

Arthritis is one of the most common health conditions among adults and a primary cause of disability. The Centers for Disease Control and Prevention (CDC) estimates that approximately 53 million American adults have self-reported doctor-diagnosed arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia and 23 million have activity limitations.

Arthritis Diagnosis Based on the Behavioral Risk Factor Surveillance System (BRFSS) survey, the self-reported percentage of Erie County adults aged 18 and above who have ever been diagnosed with arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia remained constant at 30% for 2011-2013 compared to 2011, 2007, and 2004 (Figure 1). This was higher than PA at 29% (2011-13) and the U.S. at 26% (2009).

Figure 1. Lifetime Arthritis Prevalence, 2004 to 2011-2013



Despite this lack of reported change for all adults, a higher percentage point increase of arthritis diagnosis from 2011 to 2011-2013 was seen for those with income of $25,000-$49,999 (Table 1). In 2011-2013, differences in prevalence were seen within age, income, education, and gender groups. A comparatively higher percentage was seen for age 45 and above (especially age 65 and above), lower household income, education less than a college degree (especially less than or equal to high school), and females. The highest prevalence of arthritis was seen for age 65 and above (52%).

Arthritis Limitations In 2011, 43% (42% in 2004) of Erie County adults diagnosed with arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia reported being limited in any of their usual activities because of arthritis or joint symptoms. This was lower than PA at 50% (2011) and higher than the Healthy People 2020 goal of 35.5%.

Children and Youth During the 2011-2012 school year, 0.14% (0.20% for PA) of Erie County students (grades K-12) had a medical diagnosis of arthritis or rheumatic disease compared to 0.16% in 2010-2011 (0.18% for PA), and 0.15% in 2009-2010 (0.18% for PA).

Table 1. Lifetime Arthritis Prevalence, 2011 & 2011-2013

Ever Told Have Arthritis, Rheumatoid Arthritis, Gout, Lupus, or Fibromyalgia Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	30%	28% – 33%	30%	27% – 33%	0%		29%
Gender							
Male	25%	22% – 29%	26%	22% – 31%	1%		25%
Female	35%	31% – 39%	34%	30% – 39%	-1%		33%
Age							
18-29	4%	2% – 6%	NA				5%
30-44	15%	11% – 19%	NA				15%
18-44	NA		13%	9% – 18%			NA
45-64	41%	37% – 46%	40%	35% – 45%	-1%		36%
65+	61%	54% – 67%	52%	45% – 59%	-9%		56%
Education							
<High School	48%	37% – 59%	NA				38%
High School	41%	36% – 46%	NA				33%
<=High School	NA		35%	30% – 41%			NA
Some College	28%	24% – 33%	27%	22% – 33%	-1%		28%
College Graduate	20%	16% – 24%	21%	17% – 26%	1%		21%
Income							
<$25,000	38%	32% – 43%	34%	28% – 40%	-4%		NA
$25,000-$49,999	25%	20% – 30%	36%	30% – 44%	11%		32%
$50,000+	23%	19% – 27%	23%	18% – 28%	0%		NA
Race/Ethnicity							
White, non-Hispanic	31%	28% – 34%	30%	27% – 34%	-1%		30%
Black, non-Hispanic	20%	9% – 32%	NA				26%
Hispanic	17%	3% – 30%	NA				20%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

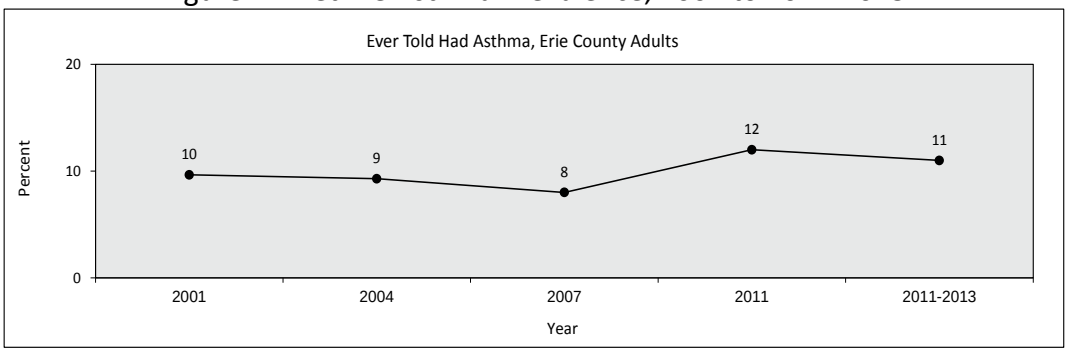
Asthma

According to the CDC, Pennsylvania is one of several states with the highest percentage of persistently severe asthma among adults at 67.4% (64.8% for U.S.; 76.4% highest for Alabama). Pennsylvania is also one of several states with the lowest percentage of persistently severe asthma among children at 52.8% (60.3% for U.S.; 45.0% lowest for Oregon).

Lifetime Prevalence Based on the BRFSS, the self-reported asthma lifetime prevalence (ever diagnosed with asthma) for Erie County adults aged 18 and above was 11% in 2011-2013

compared to 12% in 2011 and 8% in 2007 (Figure 2). This was lower than PA at 14% (2011-2013) and the U.S. at 14% (2010).

Figure 2. Lifetime Asthma Prevalence, 2001 to 2011-2013



From 2011 to 2011-13, the largest decrease in asthma diagnosis occurred for females and non-Hispanic Whites (Table 2).

Table 2. Lifetime Asthma Prevalence, 2011 & 2011-2013

Ever Told Had Asthma Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-13				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	12%	10% – 14%	11%	9% – 13%	-1%		14%
Gender							
Male	10%	7% – 12%	10%	7% – 14%	0%		11%
Female	14%	12% – 17%	11%	8% – 15%	-3%		16%
Age							
18-29	17%	13% – 22%	NA				18%
30-44	14%	10% – 18%	NA				14%
18-44	NA		12%	8% – 16%			NA
45-64	10%	7% – 13%	11%	8% – 15%	1%		13%
65+	8%	5% – 12%	9%	6% – 13%	1%		10%
Education							
<High School	19%	10% – 27%	NA				18%
High School	13%	10% – 16%	NA				12%
<=High School	NA		10%	7% – 14%			NA
Some College	13%	9% – 16%	14%	9% – 20%	1%		15%
College Graduate	10%	7% – 13%	8%	5% – 12%	-2%		12%
Income							
<$25,000	15%	11% – 19%	15%	11% – 21%	0%		NA
$25,000-$49,999	11%	7% – 14%	9%	6% – 13%	-2%		12%
$50,000+	11%	8% – 14%	9%	6% – 13%	-2%		NA
Race/Ethnicity							
White, non-Hispanic	12%	10% – 14%	9%	7% – 12%	-3%		13%
Black, non-Hispanic	6%	0% – 13%	NA				18%
Hispanic	24%	9% – 40%	NA				19%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

In 2011-13, differences in prevalence were seen within age, income, and education groups. A comparatively higher percentage was seen for age 18-64, household income below $25,000, and education less than a college degree (especially some college). The highest prevalence of asthma was seen for income below $25,000 (15%).

Current Asthma Prevalence Based on the BRFSS, the current asthma prevalence (still have asthma) among Erie County adults aged 18 and above decreased to 7% in 2011-2013 compared to 8% in 2011 and 6% in 2007 (Figure 3). This was lower than PA at 10% (2011-2013) and the U.S. at 9% (2010).

Figure 3. Current Asthma Prevalence, 2004 to 2011-2013

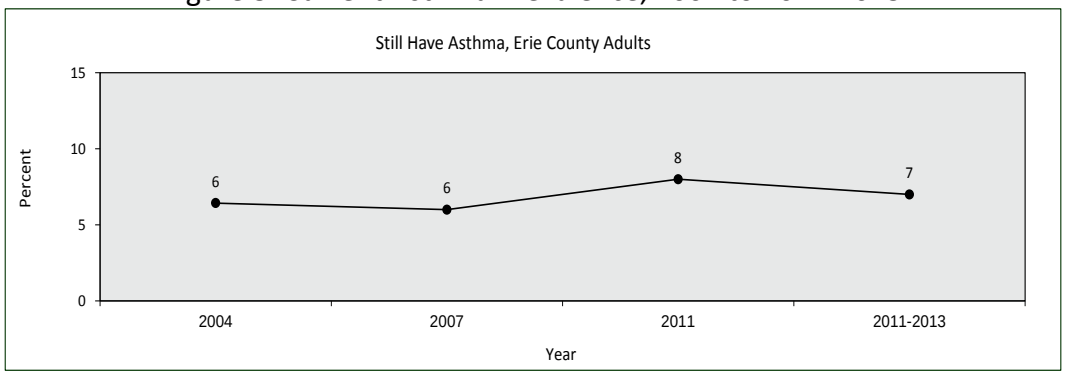


Table 3. Current Asthma Prevalence, 2011 & 2011-2013

Still Have Asthma Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	8%	6% – 9%	7%	6% – 10%	-1%		10%
Gender							
Male	6%	4% – 8%	6%	4% – 10%	0%		7%
Female	10%	7% – 12%	8%	6% – 11%	-2%		12%
Age							
18-29	10%	7% – 14%	NA				12%
30-44	10%	6% – 13%	NA				10%
18-44	NA		7%	5% – 11%			NA
45-64	7%	4% – 9%	8%	5% – 12%	1%		10%
65+	5%	2% – 7%	6%	4% – 10%	2%		8%
Education							
<High School	12%	5% – 19%	NA				14%
High School	9%	7% – 12%	NA				9%
<=High School	NA		7%	5% – 10%			NA
Some College	7%	4% – 10%	10%	6% – 15%	3%		10%
College Graduate	7%	4% – 9%	5%	3% – 9%	-2%		8%
Income							
<$25,000	12%	8% – 15%	11%	7% – 16%	-1%		NA
$25,000-$49,999	5%	3% – 8%	7%	5% – 11%	2%		9%
$50,000+	8%	5% – 11%	5%	3% – 8%	-3%		NA
Race/Ethnicity							
White, non-Hispanic	8%	6% – 9%	6%	5% – 8%	-2%		9%
Black, non-Hispanic	6%	0% – 13%	NA				13%
Hispanic	18%	4% – 32%	NA				14%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

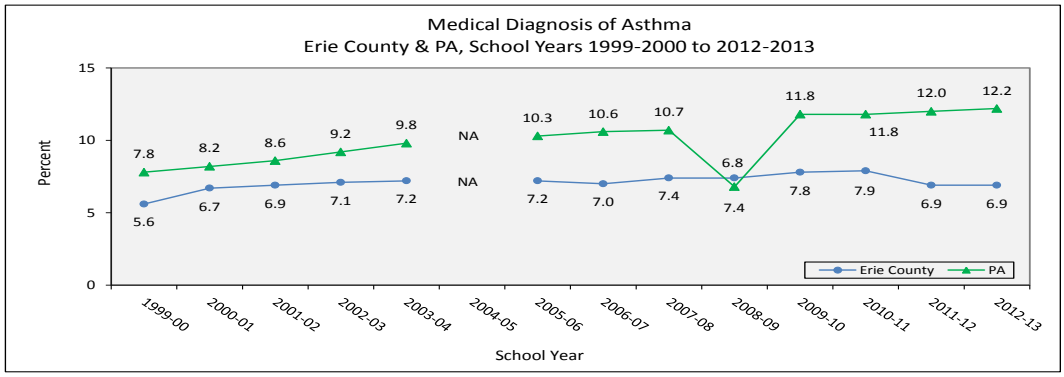
In 2011-2013, comparatively higher percentages were seen for those with some college and those with household income below $25,000 (Table 3).

Children and Youth As part of the adult BRFSS, two asthma questions focus on children in the household. In 2011, the lifetime asthma prevalence for Erie County children under age 18 remained at 9% when compared to 2004 and 2001. The percentage of households with children under age 18 who were ever diagnosed with asthma remained stable at 15% (17% in 2007; 15% in 2004 and 2001).

In 2011, the current asthma prevalence for Erie County children under age 18 remained at 7% when compared to 2004 and 2001. The percentage of households with children under age 18 who currently have asthma remained relatively stable at 12% (13% in 2007; 11% in 2004 and 2001).

During the 2012-2013 school year current asthma prevalence reported for Erie County students (grades K-12) was 6.9% (12.2% for PA) compared to 6.9% in 2011-2012 and 7.9% in 2010-2011 (Figure 4).

Figure 4. Student Asthma Prevalence, School Years 1999-2000 to 2012-2013



Cancer Prevalence

Earlier in this document (pp. 39-40), cancer incidence for Erie County was reported. This statistic provides a snapshot of annual cancer diagnoses within Erie County, but does not provide information about cancer survivors. Advances in early detection and treatment have increased the survival rate for individuals diagnosed with cancer. According to the American Cancer Society, there were almost 14.5 million children and adults with a diagnosis of cancer in the United States who were alive in 2014. Of these, 64% were diagnosed 5 or more years ago and 15% were diagnosed 20 or more years ago. The number of survivors is expected to increase to 19 million in 2024.

Cancer Survivors Based on the BRFSS, the self-reported complete (lifetime) prevalence of Erie County adults aged 18 and above who were ever told they had cancer was 12% in 2011 (Table 4). This was higher than 10% for PA (2009). In 2011, a significant difference was seen between males (8%) and females (15%) as well as between ages 45-64 (14%) and 65 and above (32%). Overall, the percentage of individuals who reported a lifetime cancer diagnosis increased with age, decreasing education, and decreasing income.

Table 4. Cancer Prevalence, 2007 & 2011

Ever Told Had Cancer Erie County Adult BRFSS, 2011					
	2007		2011		PA 2009
		CI		CI	
All Adults	NA		12%	10% – 13%	10%
Gender					
Male	NA		8%	6% – 10%	8%
Female	NA		15%	12% – 18%	12%
Age					
18-29	NA		2%	0% – 3%	1%
30-44	NA		2%	0% – 4%	3%
45-64	NA		14%	10% – 17%	10%
65+	NA		32%	25% – 38%	27%
Education					
<High School	NA		18%	10% – 26%	12%
High School	NA		14%	11% – 18%	11%
Some College	NA		10%	7% – 13%	8%
College Graduate	NA		9%	6% – 12%	10%
Income					
<$25,000	NA		13%	9% – 17%	NA
$25,000-$49,999	NA		11%	8% – 15%	10%
$50,000+	NA		11%	8% – 14%	NA
Race/Ethnicity					
White, non-Hispanic	NA		12%	10% – 14%	11%
Black, non-Hispanic	NA		6%	0% – 13%	4%
Hispanic	NA		3%	0% – 10%	5%

Note: CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available

Skin Cancer Based on the BRFSS, the self-reported lifetime prevalence of Erie County adults aged 18 and above who were ever told they had skin cancer (melanoma, basal cell carcinoma, or squamous cell carcinoma) was 6% in 2011-2013 (5% for PA) compared to 5% in 2011.

Percentages were similar for most subgroups (4%-6%), but were higher for ages 65 and above (18%) and for those with income of $25,000-$49,999 (8%).

Cancer Other Than Skin Cancer Based on the BRFSS, the self-reported lifetime prevalence of Erie County adults aged 18 and above who were ever told they had cancer other than skin cancer was 6% in 2011-2013 (7% for PA) compared to 8% in 2011. Within demographic groups, percentages were comparatively higher for females (10%), age 65 and above (22%), less than high school education (12%), high school education (10%), and income below $25,000 (11%).

Prostate Cancer Based on the BRFSS, the self-reported lifetime prevalence of Erie County males age 40 and above who were ever told they had prostate cancer increased to 6% in 2011 compared to 5% in 2007, 6% in 2004, and 5% in 2001. In 2010, Pennsylvania reported prostate cancer diagnosis for men age 50+ at 7%. According to the National Cancer Institute, the five-year survival rate for all stages of prostate cancer diagnosed between 2004 and 2010 was nearly 99%.

In 2011, comparatively higher percentages were seen for those with less than a high school education (24%) and those with household income below $25,000 (11%).

Cardiovascular Disease

In Erie County, diseases of the heart, including heart attack and chronic heart disease, was the leading cause of death for years 2009-2011 while cerebrovascular disease (stroke) was fourth. Inactivity, obesity, high blood pressure, cigarette smoking, high cholesterol, and diabetes are risk factors associated with heart attack, heart disease, and stroke.

Heart Attack Based on the BRFSS, the self-reported prevalence of Erie County adults aged 35 and above who were ever told they had a heart attack (myocardial infarction) was 6% in 2011-2013 compared to 6% in 2011 and 5% in 2007 and 2004 (Figure 5). This mirrored PA at 6% (2011-2013), but was higher than the U.S. at 4% (2010).

From 2011 to 2011-2013, the prevalence of heart attack diagnosis significantly increased for those with income of $25,000-$49,999 and increased for those aged 65 and above (Table 5). In 2011-2013, comparative differences in prevalence were seen within education groups, income groups and age groups. A higher percentage was seen for those with less than or equal to a high school education, with household income below $50,000, and aged 65 and above (Table 5).

Overall, the percentage of individuals who reported a heart attack diagnosis increased with age, decreasing education, and decreasing income.

Figure 5. Heart Attack Prevalence, 2001 to 2011-2013

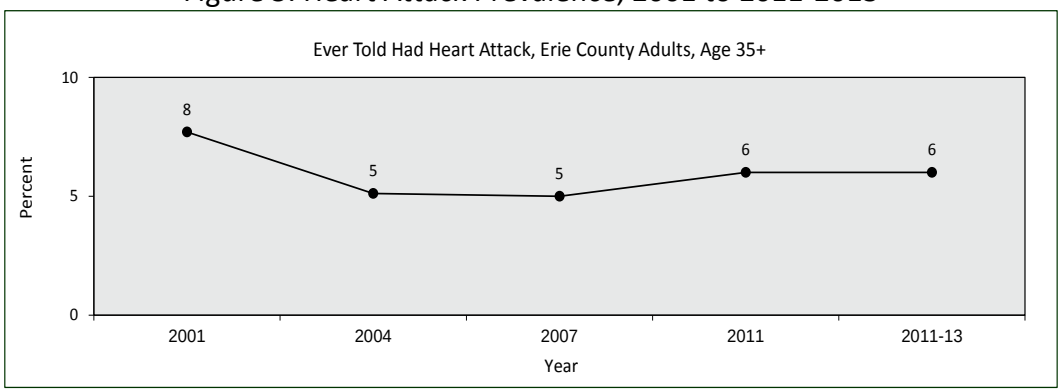


Table 5. Heart Attack Prevalence, 2011 & 2011-2013

Ever Told Had a Heart Attack, Age 35+
Erie County Adult BRFSS, 2011 & 2011-2013

	2011	CI	2011-2013	CI	Point Change^	Sig	PA 2011-13
All Adults	6%	4% - 7%	6%	5% - 9%	0%		6%
Gender							
Male	7%	5% - 10%	8%	5% - 12%	1%		9%
Female	4%	2% - 6%	5%	3% - 8%	1%		4%
Age							
35-44	2%	0% - 4%	NA				1%
45-54	2%	0% - 5%	NA				NA
55-64	6%	3% - 9%	NA				NA
45-64	NA		5%	3% - 8%			5%
65+	10%	6% - 13%	14%	10% - 20%	4%		13%
Education							
<High School	29%	16% - 41%	NA				12%
High School	5%	3% - 8%	NA				7%
<=High School	NA		9%	6% - 13%			NA
Some College	5%	2% - 8%	5%	2% - 9%	0%		5%
College Graduate	2%	0% - 4%	3%	1% - 5%	1%		3%
Income							
<$25,000	10%	6% - 15%	11%	7% - 16%	1%		NA
$25,000-$49,999	3%	0% - 5%	10%	6% - 16%	7%	***	7%
$50,000+	2%	0% - 3%	1%	0% - 2%	-1%		NA
Race/Ethnicity							
White, non-Hispanic	5%	4% - 7%	6%	4% - 8%	1%		6%
Black, non-Hispanic	0%	NCI	NA				6%
Hispanic	NSR		NA				5%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Heart Disease Based on the BRFSS, the prevalence of Erie County adults aged 35 and above who were ever told they had heart disease (including angina and coronary heart disease) was 8% in 2011-2013 compared to 7% in 2011 and 8% in 2007 (Figure 6). This was higher than PA at 7% (2011-2013) and the U.S. at 4% (2010). In Erie County, heart disease was the leading cause of death for years 2009-2011.

From 2011 to 2011-2013, heart disease prevalence increased significantly among those with household income of $25,000-$49,999 (Table 6) and increased for those with household income below $25,000 and for those aged 65 and above. In 2011-2013, comparative differences in prevalence were seen within education groups, income groups and age groups. A higher percentage was seen for those with less than or equal to a high school education, with household income below $50,000, and aged 65 and above (Table 6).

Heart disease increased with increasing age, decreasing education, and decreasing income.

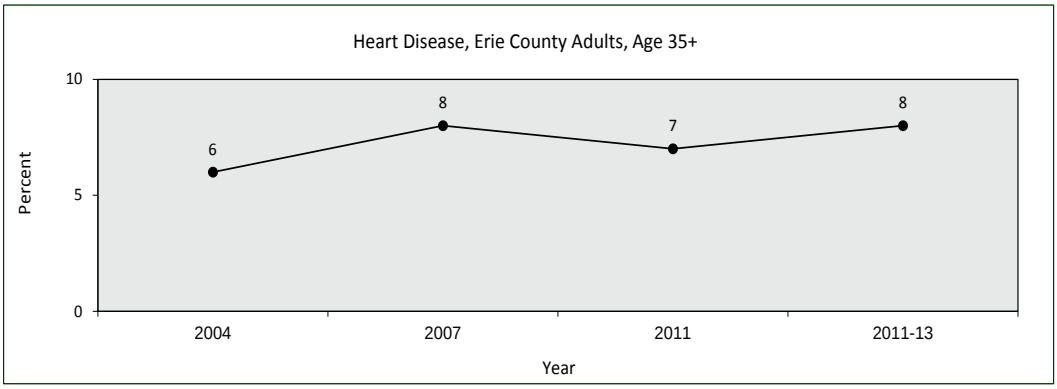
Table 6. Heart Disease Prevalence, 2011 & 2011-2013

Ever Told Had Heart Disease, Age 35+
Erie County Adult BRFSS, 2011 & 2011-2013

	2011	CI	2011-2013	CI	Point Change^	Sig	PA 2011-13
All Adults	7%	5% - 9%	8%	6% - 10%	1%		7%
Gender							
Male	10%	7% - 13%	10%	7% - 14%	0%		9%
Female	5%	3% - 7%	5%	3% - 8%	0%		5%
Age							
35-44	2%	0% - 4%	0%	0% - 3%	-2%		1%
45-54	3%	0% - 6%	NA				NA
55-64	9%	5% - 12%	NA				NA
45-64	NA		8%	5% - 12%			5%
65+	12%	7% - 16%	14%	10% - 19%	2%		14%
Education							
<High School	19%	8% - 30%	NA				12%
High School	7%	4% - 10%	NA				7%
<=High School	NA		9%	6% - 13%			NA
Some College	6%	3% - 9%	7%	4% - 11%	1%		6%
College Graduate	7%	4% - 11%	6%	4% - 9%	-1%		5%
Income							
<$25,000	9%	5% - 13%	11%	7% - 17%	2%		NA
$25,000-$49,999	3%	1% - 6%	11%	7% - 17%	8%	***	7%
$50,000+	8%	5% - 11%	4%	2% - 7%	-4%		NA
Race/Ethnicity							
White, non-Hispanic	7%	5% - 9%	8%	6% - 10%	1%		7%
Black, non-Hispanic	4%	0% - 11%	NA				6%
Hispanic	NSR		NA				5%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Figure 6. Heart Disease Prevalence, 2004 to 2011-2013



Stroke Based on the BRFSS, the prevalence of Erie County adults aged 35 and above who were ever told they had a stroke was 5% in 2011-2013 compared with 5% in 2011 and 4% in both 2007,2004, and 2001 (Figure 7). This was higher than PA at 4% (2011-2013) and the U.S. at 3% (2010). In Erie County, stroke was the fourth leading cause of death for years 2009-2011.

In 2011-2013, comparative differences in prevalence were seen within education groups, income groups and age groups. A higher percentage was seen for those with less than or equal to a high school education, with household income below $25,000, and aged 65 and above (Table 7).

Stroke prevalence increased with increasing age, decreasing education, and decreasing income.

Figure 7. Stroke Prevalence, 2001 to 2011-2013

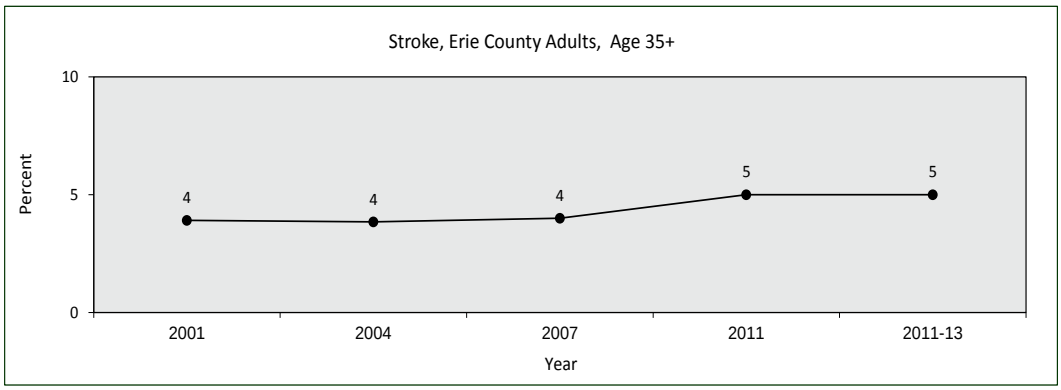


Table 7. Stroke Prevalence, 2011 & 2011-2013

Ever Told Had a Stroke, Age 35+ Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	5%	4% - 7%	5%	3% - 7%	0%		4%
Gender							
Male	5%	3% - 7%	5%	3% - 8%	0%		4%
Female	6%	3% - 8%	4%	3% - 7%	-2%		4%
Age							
35-44	2%	0% - 5%	1%	0% - 3%	-1%		1%
45-54	3%	0% - 5%	NA				NA
55-64	5%	2% - 8%	NA				NA
45-64	NA		4%	2% - 7%			3%
65+	9%	5% - 13%	9%	6% - 14%	0%		8%
Education							
<High School	20%	9% - 31%	NA				8%
High School	6%	3% - 8%	NA				5%
<=High School	NA		7%	4% - 10%			NA
Some College	6%	3% - 9%	2%	1% - 5%	-4%		3%
College Graduate	2%	0% - 3%	3%	1% - 6%	1%		2%
Income							
<$25,000	7%	3% - 10%	8%	5% - 13%	1%		NA
$25,000-$49,999	5%	2% - 8%	5%	3% - 9%	0%		4%
$50,000+	1%	0% - 3%	2%	1% - 4%	1%		NA
Race/Ethnicity							
White, non-Hispanic	4%	3% - 6%	5%	3% - 7%	1%		4%
Black, non-Hispanic	21%	6% - 37%	NA				6%
Hispanic	NSR		NA				4%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Cholesterol Blood Level and Awareness

High cholesterol is a major risk factor for coronary heart disease and heart attack. Current guidelines recommend that adults be screened for blood cholesterol levels and, if needed, to follow appropriate treatment plans and lifestyle changes to control these levels.

High Cholesterol Based on the BRFSS, the self-reported prevalence of Erie County adults aged 18 and above who were ever told they had high blood cholesterol increased to 39% in 2011 compared with 38% in 2007 and 35% in 2004 (Figure 8). This was higher than PA at 38% (2011)

and the U.S. at 38% (2011). The Healthy People 2020 Goal for high cholesterol diagnosis is 13.5% for adults aged 20 and above.

Figure 8. Elevated Blood Cholesterol Prevalence, 2001-2011

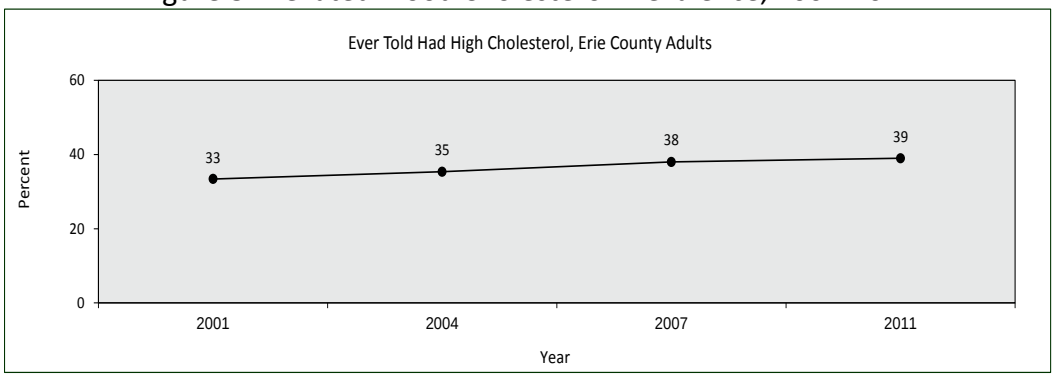


Table 8. Elevated Blood Cholesterol Prevalence, 2007 & 2011

Ever Told Had High Blood Cholesterol Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2011
		CI		CI	Point Change^	Sig	
All Adults	38%	35% – 42%	39%	36% – 42%	1%		38%
Gender							
Male	39%	34% – 45%	41%	36% – 45%	2%		40%
Female	38%	33% – 42%	38%	33% – 42%	0%		36%
Age							
18-29	NA		15%	8% – 22%			11%
30-44	20%	15% – 26%	25%	19% – 31%	5%		23%
45-64	45%	40% – 50%	46%	41% – 51%	1%		45%
65+	58%	51% – 64%	51%	44% – 58%	-7%		52%
Education							
<High School	NSR		48%	35% – 62%			43%
High School	40%	35% – 46%	48%	42% – 53%	8%		42%
Some College	36%	30% – 44%	39%	33% – 45%	3%		35%
College Graduate	37%	31% – 44%	32%	27% – 38%	-5%		33%
Income							
<$25,000	49%	42% – 57%	43%	36% – 49%	-6%		NA
$25,000-$49,999	38%	32% – 44%	37%	30% – 43%	-1%		41%
$50,000+	34%	28% – 39%	35%	30% – 40%	1%		NA
Race/Ethnicity							
White, non-Hispanic	38%	35% – 42%	39%	36% – 43%	1%		39%
Black, non-Hispanic	NA		33%	18% – 49%			30%
Hispanic	NA		NSR				38%

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

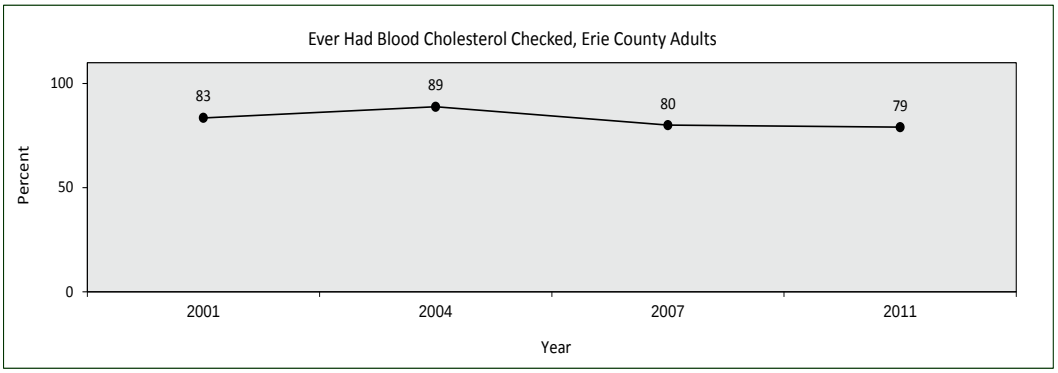
In 2011, comparative differences in prevalence were seen within education groups, income groups, and age groups. A higher percentage was seen for those with less than or equal to a high school education and with household income below $25,000. A significantly higher percentage was seen for age 45 and above compared to other age groups (Table 8).

The prevalence of high cholesterol increased with increasing age, decreasing education, and decreasing income.

Cholesterol Check Based on the BRFSS, the prevalence of Erie County adults aged 18 and above who ever had their blood cholesterol checked decreased to 79% in 2011 compared with 80% in 2007 and 89% in 2004 (Figure 9). This was lower than PA at 82% (2011) and comparable to the U.S. at 79% (2011).

From 2007 to 2011, the prevalence of those who ever had their blood cholesterol checked decreased significantly for those with household income of $25,000-$49,999 (82% to 70%, respectively) and increased significantly for those with household income of $50,000 and above (87% to 96%, respectively).

Figure 9. Blood Cholesterol Screening, 2001-2011



In 2011, comparative differences in prevalence were seen within education groups and age groups. Significantly higher percentages were seen for ages 45-64 (95%) and 65 and above (96%) and for those with household income of $50,000 and above (96%).

Cholesterol Checked in Past Five Years Based on the BRFSS, the prevalence of Erie County adults aged 18 and above who had their blood cholesterol checked in the past five years was 76% in 2011 compared with 76% in 2007 and 85% in 2004. This was lower than PA at 78% (2011), comparable to the U.S. at 76% (2011), and lower than the Healthy People 2020 goal of 82.1%.

From 2007 to 2011, the prevalence of those who had their blood cholesterol checked in the past five years decreased significantly for those with household income of $25,000-$49,999 and increased significantly for those with household income of $50,000 and above (Table 9). Those with household income below $25,000 saw an increase in this percentage.

In 2011, comparative differences in prevalence were seen within education groups and age groups. Significantly lower percentages were seen for those with some college and lower percentages were seen for ages 18-29 and 30-44. A significantly higher percentage was seen for those with household income of $50,000 and above.

Table 9. Five Year Blood Cholesterol Screening, 2007 & 2011

Had Blood Cholesterol Checked In the Past 5 Years Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2011
		CI		CI	Point Change^	Sig	
All Adults	76%	72% – 79%	76%	73% – 78%	-1%		78%
Gender							
Male	72%	66% – 77%	75%	71% – 79%	3%		75%
Female	80%	75% – 83%	76%	72% – 79%	-4%		80%
Age							
18-29	36%	26% – 47%	38%	32% – 44%	2%		45%
30-44	72%	65% – 77%	70%	64% – 76%	-2%		72%
45-64	90%	87% – 93%	91%	88% – 94%	1%		89%
65+	94%	90% – 97%	96%	93% – 98%	2%		95%
Education							
<High School	NSR		82%	73% – 91%			70%
High School	78%	72% – 83%	83%	79% – 87%	5%		77%
Some College	71%	62% – 79%	67%	62% – 72%	-4%		78%
College Graduate	78%	72% – 83%	82%	77% – 86%	4%		84%
Income							
<$25,000	63%	55% – 71%	68%	63% – 73%	5%		NA
$25,000-$49,999	79%	72% – 85%	66%	61% – 72%	-13%	***	77%
$50,000+	81%	76% – 86%	91%	88% – 94%	10%	***	NA
Race/Ethnicity							
White, non-Hispanic	77%	73% – 80%	76%	74% – 79%	-1%		79%
Black, non-Hispanic	NA		73%	60% – 85%			78%
Hispanic	NA		52%	33% – 71%			69%

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Chronic Obstructive Pulmonary Disease (COPD)

COPD is a term used to identify a group of lung diseases including emphysema and chronic bronchitis. It is also known as Chronic Lower Respiratory Disease (CLRD). Smoking is the primary risk factor for COPD. Asthma, occupational exposure to dust and chemicals, other air pollutants

in the home and workplace, genetic factors, and recurrent respiratory infections are also linked to this disease. In Erie County, CLRD was the third leading cause of death for years 2009-2011.

Based on the BRFSS, the self-reported prevalence of Erie County adults aged 18 and above who were ever told they had COPD, emphysema, or chronic bronchitis remained at 7% in 2011-2013 compared to 7% in 2011 (Table 10). This mirrored PA at 7% (2011-2013) but was higher than the U.S. at 6% (2013).

Table 10. COPD, Emphysema, and Chronic Bronchitis Prevalence, 2011 & 2011-2013

Ever Told Had COPD, Emphysema, or Chronic Bronchitis Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	7%	6% – 9%	7%	5% – 10%	0%		7%
Gender							
Male	7%	5% – 9%	7%	4% – 10%	0%		6%
Female	7%	5% – 9%	8%	6% – 11%	1%		8%
Age							
18-29	4%	2% – 6%	NA				2%
30-44	2%	0% – 4%	NA				4%
18-44	NA		2%	1% – 5%			NA
45-64	8%	5% – 10%	9%	6% – 13%	1%		8%
65+	15%	10% – 20%	15%	10% – 22%	0%		13%
Education							
<High School	17%	8% – 25%	NA				13%
High School	13%	10% – 16%	NA				8%
<=High School	NA		10%	7% – 14%			NA
Some College	5%	3% – 7%	6%	3% – 11%	1%		7%
College Graduate	2%	0% – 3%	2%	1% – 4%	0%		3%
Income							
<$25,000	13%	9% – 16%	10%	7% – 15%	-3%		NA
$25,000-$49,999	4%	2% – 7%	10%	6% – 16%	6%		7%
$50,000+	5%	3% – 7%	1%	0% – 4%	-4%		NA
Race/Ethnicity							
White, non-Hispanic	7%	5% – 8%	7%	5% – 9%	0%		7%
Black, non-Hispanic	2%	0% – 6%	NA				7%
Hispanic	NSR		NA				4%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

In 2011-2013, comparative differences in prevalence were seen within education groups, income groups, and age groups. Significantly lower percentages were seen for those with household income of $50,000 and above and lower percentages were seen for college

graduates as well as those with some college. The percentage of diagnosed COPD was higher for females compared to males.

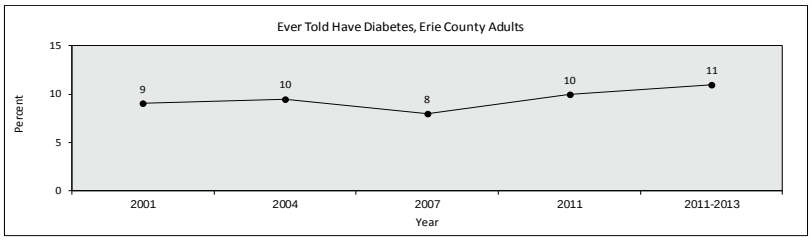
Overall, COPD prevalence increased with age, decreasing education, and decreasing income.

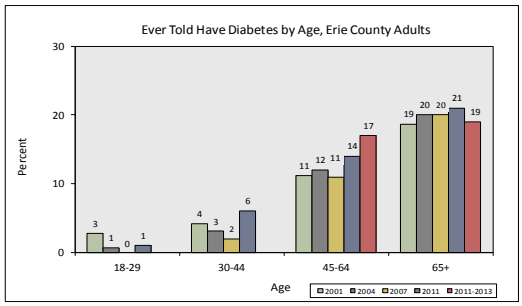
Diabetes

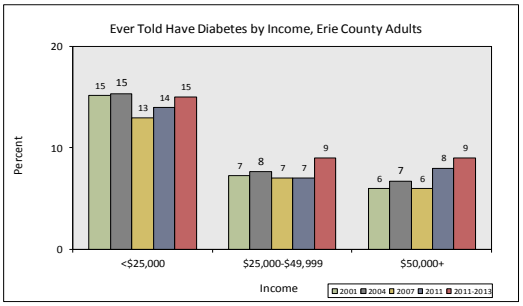
Diabetes is the leading cause of kidney failure, lower limb amputations, and blindness and a major cause of heart disease and stroke. Approximately 90 to 95 percent of diagnosed diabetes cases are type 2. Risk factors for type 2 diabetes are age, overweight, inactivity, hypertension, family history, race, and gestational diabetes during pregnancy. In Erie County, diabetes was the seventh leading cause of death for years 2009-2011.

Diabetes Diagnosis Based on the BRFSS, the self-reported prevalence of Erie County adults aged 18 and above who were ever told they had diabetes increased to 11% in 2011-2013 compared with 10% in 2011 and 8% in 2007 (Figure 10). This is higher than PA at 10% (2011-2013) and the U.S. at 9% (2010).

Figure 10. Diabetes Prevalence, 2001 to 2011-2013







In 2011-13, differences in prevalence were seen within age, income, and education groups. A comparatively higher percentage was seen for those age 45 and above (especially age 65 and above), lower household income (especially below $25,000), and education less than a college degree (especially less than or equal to high school). The highest prevalence of diabetes was seen for age 65 and above (19%) (Table 11).

Table 11. Diabetes Prevalence, 2011 & 2011-2013

Ever Told Had Diabetes Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-13				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	10%	8% – 12%	11%	10% – 14%	1%		10%
Gender							
Male	10%	8% – 13%	13%	10% – 16%	3%		10%
Female	10%	8% – 12%	10%	8% – 13%	0%		10%
Age							
18-29	1%	0% – 2%	NA				NA
30-44	6%	3% – 8%	NA				NA
18-44	NA		4%	2% – 7%			3%
45-64	14%	10% – 17%	17%	13% – 21%	3%		12%
65+	21%	15% – 26%	19%	15% – 25%	-2%		21%
Education							
<High School	12%	5% – 19%	NA				16%
High School	14%	10% – 17%	NA				12%
<=High School	NA		13%	10% – 16%			NA
Some College	10%	7% – 14%	11%	8% – 16%	1%		9%
College Graduate	7%	4% – 9%	9%	6% – 12%	3%		6%
Income							
<$25,000	14%	10% – 18%	16%	12% – 21%	2%		NA
$25,000-$49,999	7%	4% – 10%	13%	9% – 18%	6%		11%
$50,000+	8%	5% – 11%	8%	5% – 11%	0%		NA
Race/Ethnicity							
White, non-Hispanic	10%	9% – 12%	12%	10% – 14%	2%		10%
Black, non-Hispanic	8%	1% – 16%	NA				13%
Hispanic	7%	0% – 16%	NA				10%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and th percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Diabetes Testing Based on the BRFSS, the self-reported prevalence of non-diabetic Erie County adults aged 18 and above who were tested for high blood sugar in the past three years was 54% in 2011-2013 compared with 57% for PA.

Pre-Diabetes Pre-diabetes is diagnosed as a higher than normal blood sugar level. Individuals with this condition have a greater risk of developing type 2 diabetes. In 2011-13, 8% of Erie County adults aged 18 and above had ever been told they had pre-diabetes (6% for PA) compared to 6% in 2011 (Table 12).

From 2011 to 2011-2013, pre-diabetes diagnosis increased for age 65 and above, household income of $25,000-$49,999, and females.

Differences in prevalence were seen within income, age, and education groups. Comparatively higher percentages were seen for ages 45 and above (especially age 65 and above), income below $50,000 (especially $25,000-$49,999), and less than or equal to high school education.

The highest prevalence of pre-diabetes was seen for age group 65 and above (18%).

Table 12. Pre-Diabetes Prevalence, 2011 & 2011-2013

Ever Told Had Pre-Diabetes Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-13				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	6%	5% – 8%	8%	6% – 10%	2%		6%
Gender							
Male	8%	5% – 10%	7%	5% – 10%	-1%		6%
Female	5%	3% – 7%	9%	6% – 12%	4%		7%
Age							
18-29	3%	1% – 5%	NA				2%
30-44	3%	1% – 5%	NA				4%
18-44	NA		3%	1% – 5%			NA
45-64	9%	6% – 12%	10%	7% – 14%	1%		8%
65+	11%	7% – 16%	18%	12% – 25%	7%		11%
Education							
<High School	6%	1% – 12%	NA				7%
High School	8%	5% – 11%	NA				6%
<=High School	NA		9%	7% – 13%			NA
Some College	6%	3% – 9%	6%	3% – 9%	0%		7%
College Graduate	5%	3% – 8%	6%	4% – 11%	1%		5%
Income							
<$25,000	8%	4% – 11%	9%	6% – 13%	1%		NA
$25,000-$49,999	6%	3% – 9%	11%	7% – 17%	5%		7%
$50,000+	5%	3% – 8%	6%	4% – 10%	1%		NA
Race/Ethnicity							
White, non-Hispanic	7%	5% – 8%	8%	6% – 10%	1%		6%
Black, non-Hispanic	2%	0% – 6%	NA				8%
Hispanic	11%	0% – 23%	NA				7%

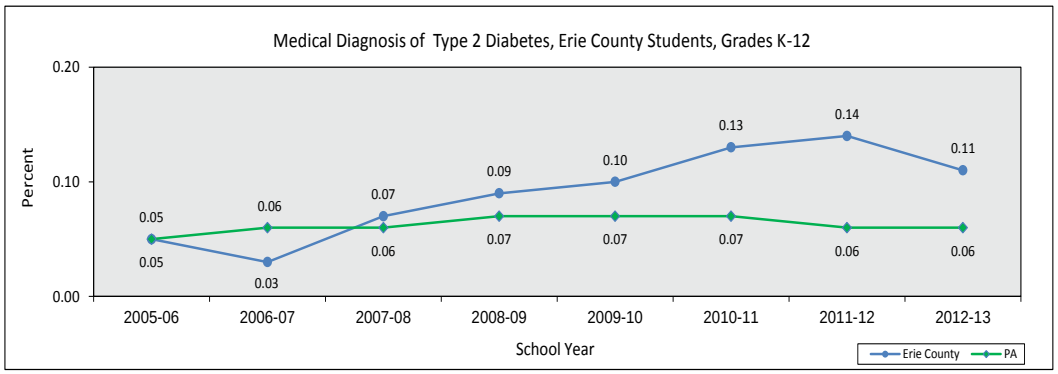
Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and th percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Children and Youth Results from the SEARCH for Diabetes in Youth long term study among youth age 19 and below indicate a 21% increase in type 1 diabetes for youth aged 0 through 19

years and a 30% increase in type 2 diabetes for youth aged 10 through 19 years from 2001 to 2009. In 2009, the overall crude prevalence of type 1 diabetes for ages 0 through 19 was 0.19% while the prevalence of type 2 diabetes for ages 10 through 19 was 0.05%.

During the 2012-2013 school year, 0.36% (0.33% for PA) of Erie County students (grades K-12) had a medical diagnosis of type 1 diabetes. This prevalence remained relatively constant since 2005-2006. During the 2012-2013 school year, 0.11% (0.06% for PA) of Erie County students (grades K-12) had a medical diagnosis of type 2 diabetes compared with 0.14% in 2011-2012 (0.06% for PA), and 0.13% in 2010-2011 (0.07% for PA) (Figure 11).

Figure 11. Diabetes Prevalence, Erie & PA, 2005-2006 to 2012-2013



Hypertension

Hypertension (high blood pressure) is associated with heart disease, stroke, and kidney failure. The CDC estimates that only 52% of adults age 18 and above with hypertension have their condition under control. Risk factors include family history, age, gender, race, lifestyle health behaviors, and diabetes.

Hypertension Diagnosis Based on the BRFSS, the self-reported prevalence of Erie County adults aged 18 and above who were ever told they had high blood pressure increased to 31% in 2011 compared with 28% in 2007 (Figure 12). This mirrored PA at 31% (2011) and the U.S. at 31% (2011), but was higher than the Healthy People 2020 goal of 26.9%.

From 2007 to 2011, the percentage of those who were ever told they had high blood pressure increased significantly among males, those aged 45-64, and those with household income of $50,000 and above (Table 13).

In 2011, differences in prevalence were seen within gender, age groups, education groups, and income groups. Significantly higher percentages were seen for males, age 45-64, and age 65 and above. Comparatively higher percentages were seen for those with less than a high school education, high school graduates, and those with household income below $25,000.

Figure 12. Hypertension Prevalence, Erie County, 2001-2011

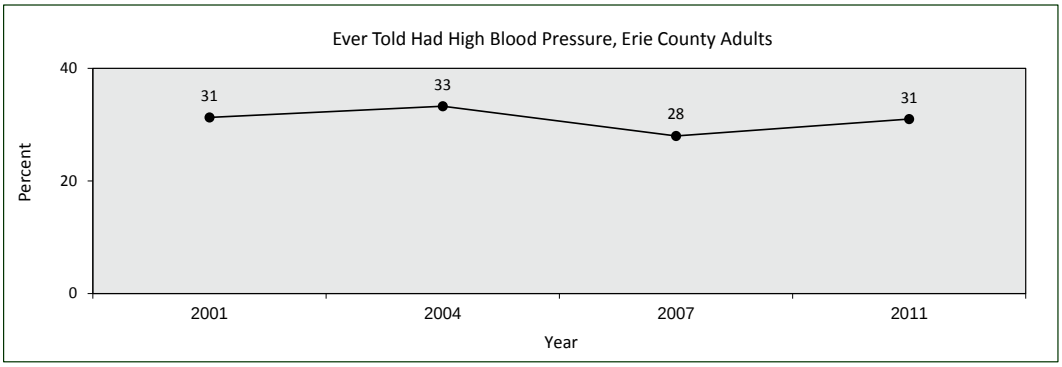


Table 13. Hypertension Prevalence, 2007 & 2011

Ever Told Have High Blood Pressure Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2011
		CI		CI	Point Change^	Sig	
All Adults	28%	25% – 30%	31%	29% – 34%	3%		31%
Gender							
Male	28%	23% – 32%	36%	32% – 40%	8%	***	32%
Female	27%	24% – 31%	27%	24% – 31%	0%		30%
Age							
18-29	9%	4% – 17%	9%	5% – 12%	0%		8%
30-44	14%	10% – 20%	22%	17% – 27%	8%		18%
45-64	30%	26% – 35%	40%	35% – 44%	10%	***	38%
65+	60%	53% – 66%	55%	49% – 62%	-5%		58%
Education							
<High School	38%	26% – 52%	41%	30% – 52%	3%		38%
High School	32%	27% – 37%	37%	32% – 42%	5%		36%
Some College	21%	16% – 27%	29%	25% – 34%	8%		29%
College Graduate	24%	19% – 29%	28%	23% – 33%	4%		23%
Income							
<$25,000	35%	29% – 41%	39%	33% – 44%	4%		NA
$25,000-$49,999	27%	22% – 33%	25%	20% – 30%	-2%		35%
$50,000+	21%	17% – 25%	29%	25% – 34%	8%	***	NA
Race/Ethnicity							
White, non-Hispanic	28%	25% – 31%	31%	29% – 34%	3%		31%
Black, non-Hispanic	NA		39%	25% – 52%			37%
Hispanic	NA		24%	9% – 40%			25%

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Medication Use Based on the BRFSS, the prevalence of Erie County adults aged 18 and above who currently take medication for their high blood pressure decreased to 79% in 2011 compared with 80% in 2007 and 81% in 2004 (Figure 13, Table 14). This was higher than PA at 78% (2011).

Figure 13. Hypertension Medication Use Prevalence, 2004-2011

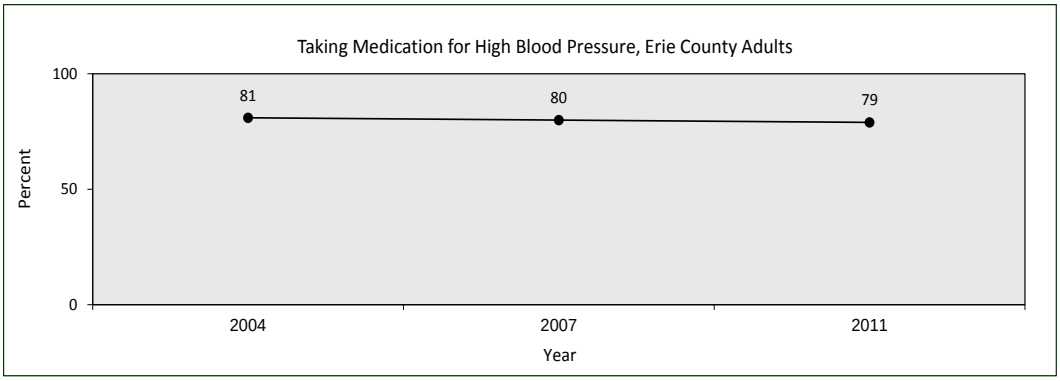


Table 14. Hypertension Medication Use, 2007 & 2011

Taking Medication for High Blood Pressure Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2011
		CI		CI	Point Change^	Sig	
All Adults	80%	74% – 84%	79%	74% – 83%	-1%		78%
Gender							
Male	73%	64% – 80%	77%	71% – 83%	4%		74%
Female	86%	78% – 91%	81%	75% – 87%	-5%		82%
Age							
18-29	NA		26%	8% – 44%			12%
30-44	NA		55%	42% – 68%			54%
45-64	88%	82% – 93%	85%	79% – 90%	-4%		80%
65+	92%	86% – 95%	92%	87% – 97%	0%		94%
Education							
<High School	NSR		81%	67% – 96%			77%
High School	83%	75% – 89%	90%	84% – 95%	7%		81%
Some College	NSR		71%	63% – 80%			77%
College Graduate	82%	71% – 89%	81%	73% – 89%	-1%		75%
Income							
<$25,000	83%	72% – 90%	72%	64% – 80%	-11%		NA
$25,000-$49,999	74%	63% – 83%	67%	56% – 77%	-7%		81%
$50,000+	80%	69% – 88%	92%	87% – 98%	12%		NA
Race/Ethnicity							
White, non-Hispanic	80%	73% – 84%	80%	76% – 84%	0%		79%
Black, non-Hispanic	NA		63%	42% – 85%			76%
Hispanic	NA		NSR				NA

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Kidney Disease

Chronic kidney disease (CKD) is a condition in which the kidneys gradually lose function over time. Treatment focuses on slowing the progress toward kidney failure by targeting the underlying cause. Diabetes and hypertension are primary causes of CKD and final kidney failure. Other risk factors are heart disease, smoking, obesity, high cholesterol, age, genetics, and race.

Based on the BRFSS, the self-reported prevalence of Erie County adults age 18 and above who were ever told they had chronic kidney disease increased to 3% in 2011-2013 (2% for PA) compared to 2% in 2011. In 2011-2013, comparatively higher percentages were seen for age 65 and above (5%), age 45-64 (4%), and those with income less than $25,000 (4%). The lowest percentage was 1% for age 18-44 followed by 2% for males, those with some college and college degrees, and those with income of $50,000 and above.

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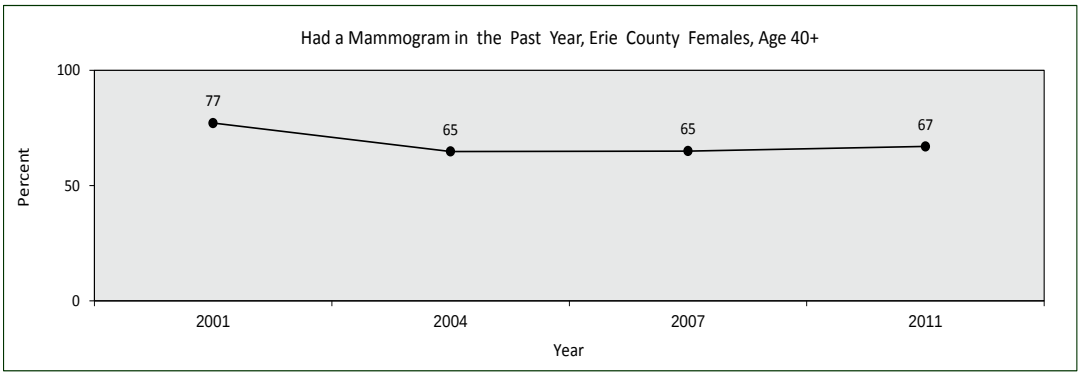
Preventive Health Services

Breast Cancer Screening

Breast cancer is the most frequently diagnosed cancer in women. The American Cancer Society recommends that women receive an annual mammogram beginning at age 40 and considers mammography to be the single most effective screening tool for early stage breast cancer.

Mammogram Based on the Behavioral Risk Factor Surveillance Survey (BRFSS), the self-reported percentage of Erie County females aged 40 and above who had a mammogram in the past year increased to 67% in 2011 compared with 65% in 2007 (Figure 1). This was higher than PA at 58% (2010).

Figure 1. Annual Mammogram Prevalence, 2001-2011



From 2007 to 2011, a significant increase in annual mammogram screening was seen among women aged 65-74.

Differences in prevalence were seen within income, age, and education groups. Comparatively lower percentages were seen for age 40-49, income below $25,000, and some college (Table 1).

The highest percentage of annual mammogram screening was 94% for women with less than a high school education followed by age 65-74 (85%) and women with household income of $50,000 and above (80%). The lowest percentage was 51% for women with household income below $25,000 followed by age 40-49 (53%).

Table 1. Annual Mammogram Prevalence, 2007 & 2011

Had a Mammogram in the Past Year, Females, Age 40+ Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2010
		CI		CI	Point Change^	Sig	
Adult Females, Age 40+	65%	61% – 70%	67%	62% – 72%	2%		58%
Age							
40-49	60%	51% – 69%	53%	41% – 64%	-7%		52%
50-64	71%	64% – 77%	67%	60% – 74%	-4%		62%
65-74	65%	51% – 77%	85%	77% – 94%	20%	***	68%
75+	62%	51% – 72%	66%	54% – 78%	4%		54%
Education							
<High School	NSR		94%	86% – 100%			52%
High School	66%	60% – 72%	72%	65% – 79%	6%		57%
Some College	65%	55% – 74%	59%	50% – 69%	-6%		57%
College Graduate	71%	62% – 79%	72%	63% – 81%	1%		63%
Income							
<$25,000	57%	48% – 66%	51%	42% – 61%	-6%		NA
$25,000 to $49,999	71%	62% – 78%	68%	58% – 78%	-3%		60%
$50,000+	72%	64% – 79%	80%	73% – 87%	8%		NA
Race/Ethnicity							
White, non-Hispanic	65%	60% – 70%	67%	62% – 72%	2%		59%
Black, non-Hispanic	NA		NSR				58%
Hispanic	NA		NSR				NSR

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Clinical Breast Exam Based on BRFSS reports, the self-reported annual clinical breast exam prevalence for Erie County females aged 40 and above increased to 67% in 2011 compared with 66% in 2007 (Figure 2). This was higher than PA at 62% (2010).

Differences in prevalence were seen within income, age, and education groups. Comparatively lower percentages were seen for age 75 and above, income below $25,000, and some college (Table 2).

Figure 2. Annual Clinical Breast Examination Prevalence, 2001-2011

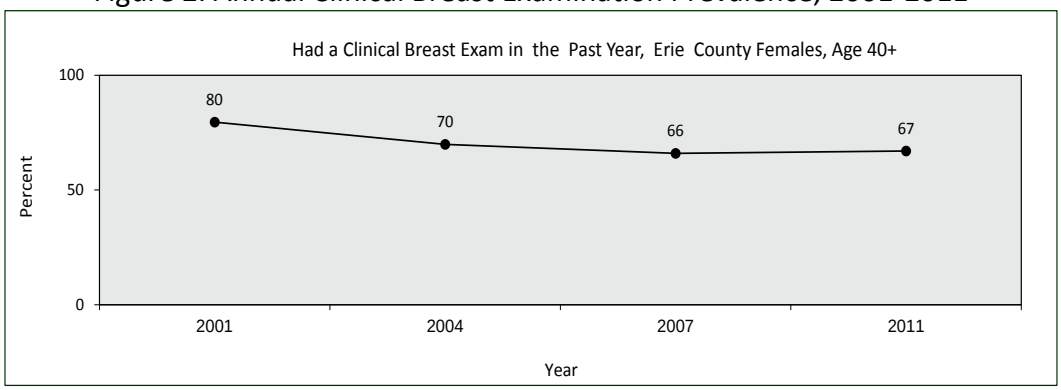


Table 2. Annual Clinical Breast Exam Prevalence, 2007 & 2011

Had a Clinical Breast Exam in the Past Year, Females, Age 40+ Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2010
		CI		CI	Point Change^	Sig	
Adult Females, Age 40+	66%	61% – 70%	67%	63% – 72%	1%		62%
Age							
40-49	65%	56% – 73%	70%	59% – 80%	5%		67%
50-64	70%	63% – 76%	69%	62% – 76%	-1%		65%
65-74	69%	55% – 80%	77%	67% – 87%	8%		64%
75+	54%	43% – 65%	49%	36% – 62%	-5%		47%
Education							
<High School	NSR		84%	71% – 100%			52%
High School	66%	59% – 72%	72%	65% – 79%	6%		58%
Some College	68%	58% – 76%	61%	51% – 71%	-7%		62%
College Graduate	71%	62% – 79%	73%	64% – 82%	2%		71%
Income							
<$25,000	55%	46% – 64%	52%	43% – 62%	-3%		NA
$25,000 to $49,999	72%	64% – 79%	66%	56% – 77%	-6%		60%
$50,000+	74%	66% – 81%	83%	76% – 90%	9%		NA
Race/Ethnicity							
White, non-Hispanic	66%	61% – 70%	67%	62% – 72%	1%		62%
Black, non-Hispanic	NA		NSR				66%
Hispanic	NA		NSR				NSR

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

The highest percentage of annual clinical breast exam was 84% for women with less than a high school education followed by household income of $50,000 and above (83%), and age 65-74 (77%). The lowest percentage was 49% for age 75 and above and 52% for household income below $25,000.

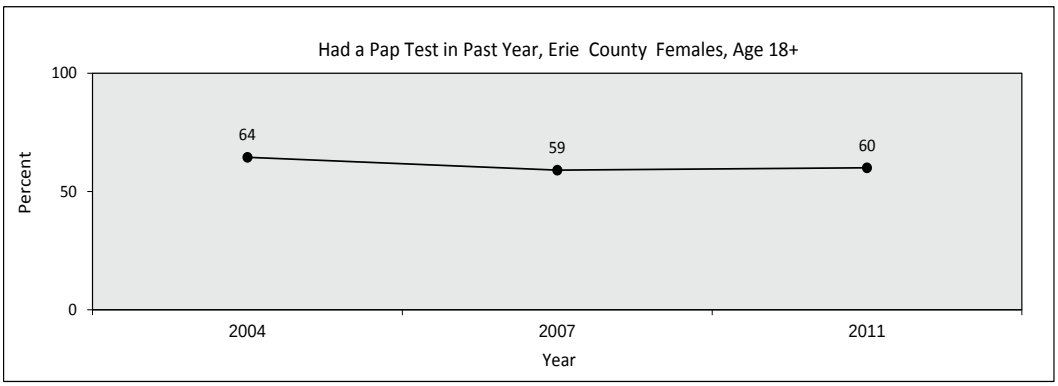
From 2007 to 2011, several demographic groups experienced a decline in annual clinical breast exams: age 50-64 (70% to 69%, respectively), household income below $25,000 (55% to 52%, respectively), household income of $25,000-$49,999 (72% to 66%, respectively), and some college education (68% to 61%, respectively).

Cervical Cancer Screening

The most common early cancer screening method for cervical cancer is the Pap test which can detect both precancerous and early stage cancer cells.

Based on BRFSS reports, the self-reported annual Pap test prevalence for Erie County females aged 18 and above increased to 60% in 2011 compared with 59% in 2007 (Figure 3). Values were not available for PA.

Figure 3. Annual Pap Test Prevalence, 2004-2011



From 2007 to 2011, a significant increase in annual Pap testing was seen among women with household income of $50,000 and above (70% to 81%, respectively) (Table 3).

In 2011, differences in prevalence were seen within income, age, and education groups. Annual screening was significantly higher for college graduates compared with other education groups and significantly higher for household income of $50,000 and above compared with other income groups. Comparatively lower percentages were seen for age 65 and above, income below $25,000, and less than a high school education (Table 3).

The highest percentage for an annual Pap test was 81% for females with household income of $50,000 and above. The lowest percentage was 33% for age 65 and above followed by household income below $25,000 (46%) and less than a high school education (47%).

Based on available data, several population groups experienced a steady decline in annual Pap testing from 2004 to 2011: age 18-29 (81% to 66%, respectively), household income below $25,000 (59% to 46%, respectively), and some college education (66% to 57%, respectively).

Table 3. Annual Pap Test Prevalence, 2007 & 2011

Had a Pap Test in the Past Year, Females Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA
		CI		CI	Point Change^	Sig	
Adult Females	59%	54% – 63%	60%	56% – 64%	1%		NA
Gender							
Male	NA		NA				NA
Female	59%	54% – 63%	60%	56% – 64%	1%		NA
Age							
18-29	NSR		66%	58% – 74%			NA
30-44	64%	55% – 72%	74%	67% – 81%	10%		NA
45-64	62%	56% – 68%	61%	55% – 68%	-1%		NA
65+	31%	24% – 39%	33%	24% – 41%	2%		NA
Education							
<High School	NSR		47%	32% – 62%			NA
High School	54%	48% – 61%	58%	51% – 64%	4%		NA
Some College	60%	51% – 68%	57%	50% – 64%	-3%		NA
College Graduate	69%	61% – 76%	75%	69% – 82%	6%		NA
Income							
<$25,000	45%	36% – 54%	46%	38% – 53%	1%		NA
$25,000-$49,999	65%	57% – 71%	57%	49% – 65%	-8%		NA
$50,000+	70%	62% – 76%	81%	76% – 87%	11%	***	NA
Race/Ethnicity							
White, non-Hispanic	59%	54% – 63%	58%	54% – 62%	-1%		NA
Black, non-Hispanic	NA		NSR				NA
Hispanic	NA		NSR				NA

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Colorectal Cancer Screening

Colorectal cancer is a commonly diagnosed cancer among all adults. It is preventable by removal of premalignant polyps and is curable when diagnosed early. Fecal occult blood testing (FOBT), sigmoidoscopy, and colonoscopy are the most commonly used screening methods.

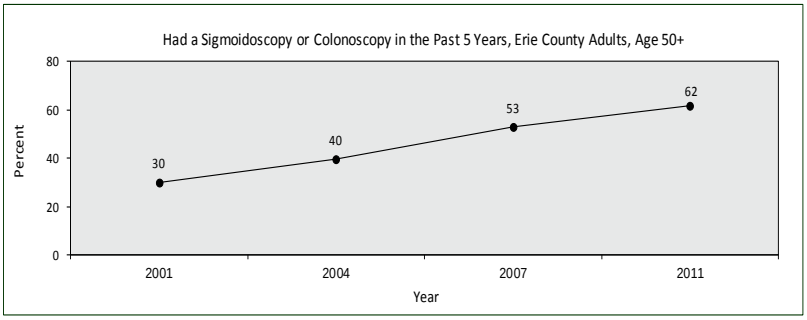
Sigmoidoscopy and Colonoscopy Based on the BRFSS, the self-reported prevalence of adults aged 50 and above who had a sigmoidoscopy or colonoscopy (proctoscopy) within the past five years increased significantly to 62% in 2011 compared with 53% in 2007 (Figure 4). This represents a greater than 100% increase from 2001 to 2011.

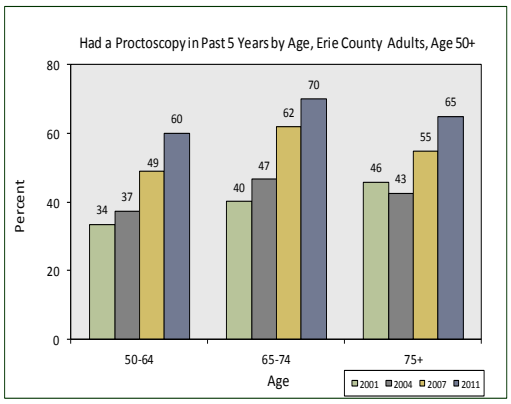
From 2007 to 2011, significant increases were also seen for age 50-64, those with a high school education, those with household incomes of $50,000 and above, and non-Hispanic Whites (Table 4).

Even though percentage increases were seen within all subgroups, differences exist within income groups. In 2011, the prevalence for those with income of $50,000 and above was significantly higher compared with other income groups.

The highest percentage of sigmoidoscopy or colonoscopy screening was 74% for household income of $50,000 and above. The lowest percentage was 51% for household income below $25,000.

Figure 4. Sigmoidoscopy or Colonoscopy Prevalence, 2001-2011





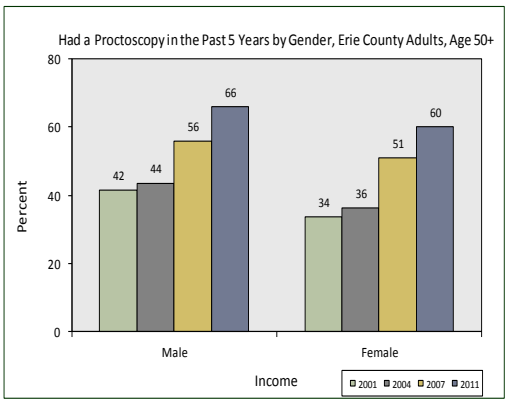


Table 4. Sigmoidoscopy or Colonoscopy Prevalence, 2007 & 2011

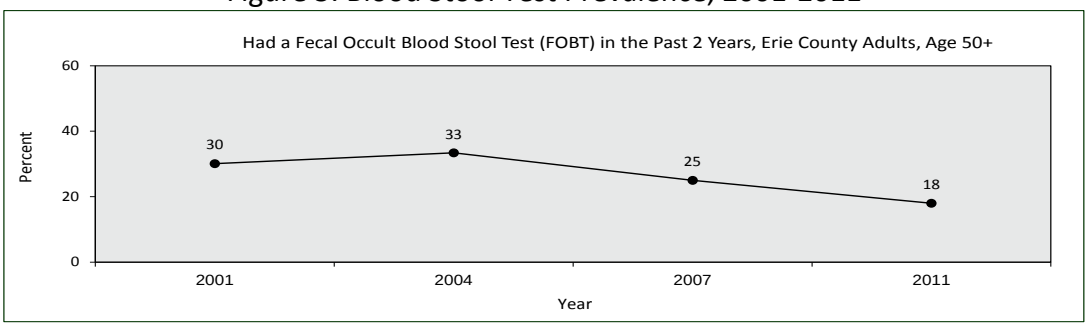
Had a Sigmoidoscopy or Colonoscopy in the Past Five Years, Age 50+ Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA
		CI		CI	Point Change^	Sig	
All Adults, Age 50+	53%	49% – 58%	62%	58% – 66%	9%	***	NA
Gender							
Male	56%	49% – 63%	66%	60% – 71%	10%		NA
Female	51%	45% – 56%	60%	54% – 65%	9%		NA
Age							
50-64	49%	44% – 55%	60%	55% – 65%	11%	***	NA
65-74	62%	52% – 71%	70%	62% – 78%	8%		NA
75+	55%	45% – 63%	65%	55% – 74%	10%		NA
Education							
<High School	NSR		67%	53% – 82%			NA
High School	49%	43% – 55%	67%	61% – 73%	18%	***	NA
Some College	53%	43% – 62%	57%	49% – 65%	4%		NA
College Graduate	65%	57% – 72%	69%	61% – 76%	4%		NA
Income							
<$25,000	48%	40% – 57%	51%	43% – 59%	3%		NA
$25,000-$49,999	54%	46% – 61%	56%	48% – 65%	2%		NA
$50,000+	56%	49% – 64%	74%	68% – 81%	18%	***	NA
Race/Ethnicity							
White, non-Hispanic	53%	49% – 58%	62%	58% – 66%	9%	***	NA
Black, non-Hispanic	NA		NSR				NA
Hispanic	NA		NSR				NA

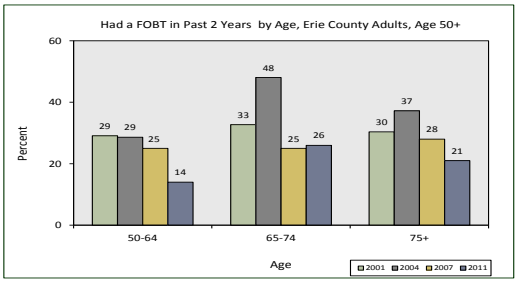
Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Fecal Occult Blood Test (FOBT) Based on the BRFSS, the self-reported prevalence of adults aged 50 and above who had a blood stool test within the past two years decreased significantly to 18% in 2011 compared with 25% in 2007 (Figure 5). This represents a 40% decrease from 2001 to 2011. The Erie County prevalence of 18% is higher than the U.S. at 17% (2010). Values were not available for PA.

From 2007 to 2011, significant decreases were also seen for males, age 50-64, those with household income of $25,000-$49,999, and non-Hispanic Whites (Table 5). The prevalence of FOBT decreased for all groups with the exception of age 65-74. The highest prevalence of FOBT was 35% for less than a high school education and the lowest was 14% for age 50-64.

Figure 5. Blood Stool Test Prevalence, 2001-2011





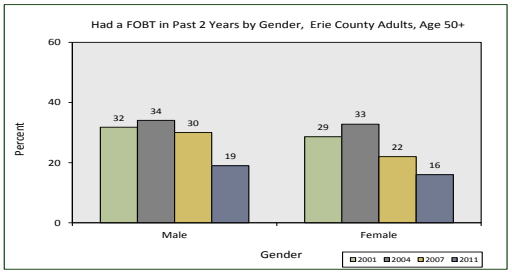


Table 5. Blood Stool Test Prevalence, 2007 & 2011

Had a Fecal Occult Blood Stool Test in the Past Two Years, Age 50+
Erie County Adult BRFSS, 2007 & 2011

	2007	CI	2011	CI	Point Change^	Sig	PA
All Adults, Age 50+	25%	22% – 29%	18%	15% – 21%	-7%	***	NA
Gender							
Male	30%	24% – 36%	19%	15% – 24%	-11%	***	NA
Female	22%	18% – 27%	16%	12% – 20%	-6%		NA
Age							
50-64	25%	20% – 30%	14%	10% – 18%	-11%	***	NA
65-74	25%	17% – 34%	26%	18% – 33%	1%		NA
75+	28%	20% – 37%	21%	12% – 29%	-7%		NA
Education							
<High School	NSR		35%	20% – 50%			NA
High School	25%	20% – 32%	17%	13% – 22%	-8%		NA
Some College	23%	16% – 32%	15%	9% – 20%	-8%		NA
College Graduate	28%	22% – 36%	20%	13% – 26%	-8%		NA
Income							
<$25,000	26%	19% – 35%	19%	12% – 25%	-7%		NA
$25,000-$49,999	31%	24% – 38%	16%	10% – 22%	-15%	***	NA
$50,000+	24%	18% – 31%	21%	15% – 27%	-3%		NA
Race/Ethnicity							
White, non-Hispanic	24%	21% – 28%	18%	14% – 21%	-6%	***	NA
Black, non-Hispanic	NA		NSR				NA
Hispanic	NA		NSR				NA

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

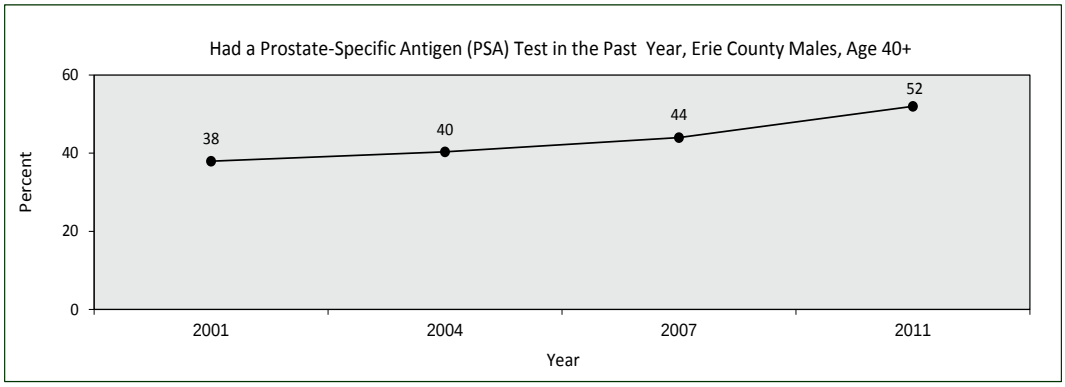
Prostate Cancer Screening

Prostate cancer is the most frequently diagnosed cancer in men (excluding skin cancer) and is the second leading cause of cancer death in males. National incidence rates are higher in African-American men than in Whites.

Both the CDC and the American Cancer Society (ACS) recommend that men talk with their health care provider about whether to be screened for prostate cancer and then make an informed decision. Current methods of screening are the prostate-specific antigen (PSA) blood test and the digital rectal exam.

PSA Blood Test Based on the BRFSS, the self-reported prevalence of males aged 40 and above who had a PSA blood test within the past year increased to 52% in 2011 compared with 44% in 2007 (Figure 6). This represents a 37% increase from 2001 to 2011. PA reported that 56% (2010) of men age 50 and above had a PSA test in the past year.

Figure 6. PSA Blood Test Prevalence, 2001-2011



From 2007 to 2011, a significant increase was seen for males with household income of $50,000 and above (Table 6).

Differences in prevalence were seen within income, age, and education groups. Comparatively higher percentages were seen for age 65 and above, income of $50,000 and above, and college graduates.

The highest percentage of annual PSA screening was 67% for age 65 and above followed by income of $50,000 and above (60%) and college graduates (60%). The lowest percentage was 17% for age 40-49 followed by some college (43%), income <$25,000 (45%), and income $25,000-$49,999 (45%).

Table 6. PSA Blood Test Pevalence, 2007 & 2011

Had a Prostate-Specific Antigen Test in the Past Year, Males, Age 40+ Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2010
		CI		CI	Point Change^	Sig	*Age 50+*
All Males, Age 40+	44%	38% – 50%	52%	46% – 57%	8%		56%
Age							
40-49	16%	8% – 28%	17%	8% – 26%	1%		NA
50-64	51%	42% – 60%	51%	44% – 59%	0%		49%
65+	64%	53% – 74%	67%	58% – 77%	3%		NA
Education							
<High School	NSR		57%	33% – 80%			40%
High School	41%	32% – 51%	55%	46% – 64%	14%		56%
Some College	50%	37% – 63%	43%	33% – 54%	-7%		54%
College Graduate	44%	34% – 54%	60%	51% – 70%	16%		59%
Income							
<$25,000	NSR		45%	33% – 57%			NA
$25,000-$49,999	52%	42% – 63%	45%	34% – 56%	-7%		55%
$50,000+	41%	33% – 51%	60%	51% – 69%	19%	***	NA
Race/Ethnicity							
White, non-Hispanic	44%	38% – 50%	51%	46% – 57%	7%		57%
Black, non-Hispanic	NA		NSR				51%
Hispanic	NA		NSR				NSR

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Digital Rectal Exam Based on the BRFSS, the self-reported prevalence of males aged 40 and above who had a digital rectal exam within the past year decreased to 42% in 2011 compared with 46% in 2007 (Figure 7). PA reports that 47% of men age 50 and above had an annual digital rectal exam (2010).

In 2011, differences in prevalence were seen within income, age, and education groups. Comparatively higher percentages were seen for age 65 and above, income of $50,000 and above, and college graduates (Table 7).

The highest percentage of annual digital rectal exams was 51% for both age 65 and above and household income of $50,000 and above followed by college graduates (50%). The lowest

percentage was 15% for age 40-49, followed by less than a high school education (23%) and income of $25,000-$49,999 (29%).

Figure 7. Digital Rectal Exam Prevalence, 2001-2011

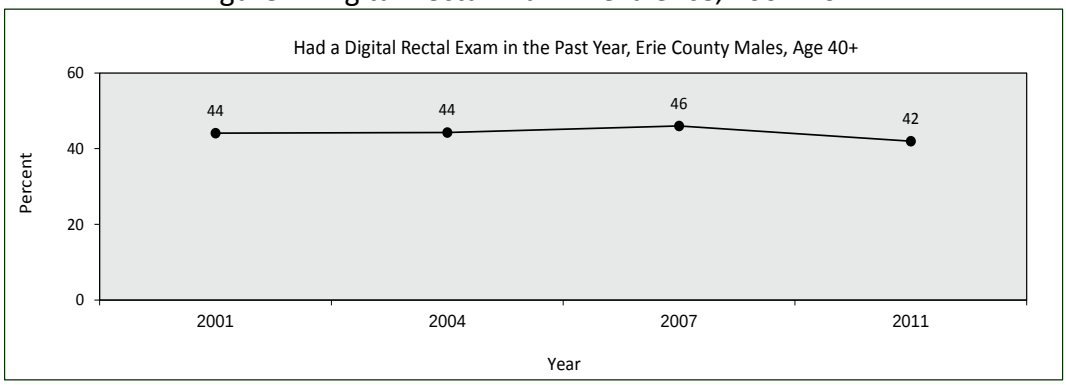


Table 7. Digital Rectal Exam Prevalence, 2007 & 2011

Had a Digital Rectal Exam in the Past Year, Males, Age 40+ Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2010
		CI		CI	Point Change^	Sig	*Age 50+*
All Males, Age 40+	46%	40% – 52%	42%	37% – 47%	-4%		47%
Age							
40-49	15%	9% – 26%	15%	6% – 23%	0%		NA
50-64	58%	49% – 66%	45%	37% – 52%	-13%		54%
65+	61%	50% – 71%	51%	41% – 61%	-10%		NA
Education							
<High School	NSR		23%	2% – 43%			39%
High School	44%	34% – 53%	44%	35% – 53%	0%		46%
Some College	51%	38% – 64%	38%	28% – 48%	-13%		44%
College Graduate	46%	36% – 56%	50%	40% – 60%	4%		51%
Income							
<$25,000	NSR		37%	25% – 48%			NA
$25,000-$49,999	45%	35% – 56%	29%	19% – 39%	-16%		43%
$50,000+	47%	38% – 56%	51%	42% – 60%	4%		NA
Race/Ethnicity							
White, non-Hispanic	46%	40% – 52%	43%	32% – 53%	3%		48%
Black, non-Hispanic	NA		NSR				45%
Hispanic	NA		NSR				NSR

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

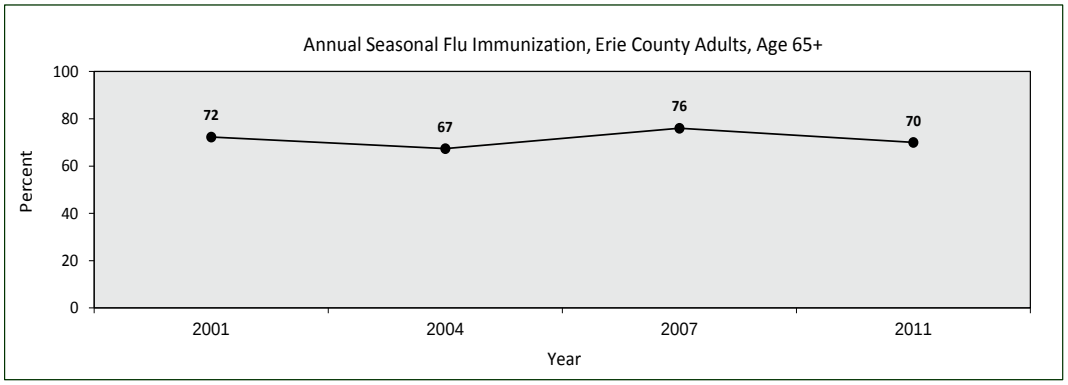
Influenza Immunization

Influenza is a contagious respiratory illness caused by influenza viruses. It causes mild to severe illness, and at times can lead to death. Complications of flu can include bacterial pneumonia, ear infections, sinus infections, dehydration, and worsening of chronic medical conditions. Influenza and pneumonia was the ninth leading cause of death in Erie County for years 2009-2011.

Age 65+ Based on the BRFSS, the self-reported percentage of Erie County adults aged 65 and above who had a flu shot within the past year dropped to 70% in 2011 compared with 76% in 2007 (Figure 8). This was higher than the U.S. at 61% (2011), but lower than the Healthy People 2020 Goal of 90%. Values for PA were not available.

Note that this statistic has been combined in the 2011 BRFSS. Before 2011, separate questions were asked for the flu shot and the nasal spray vaccine. In the 2011 survey, one question included both the flu shot and the nasal spray vaccine. Before 2011, approximately 1% of those surveyed reported nasal spray vaccine.

Figure 8. Seasonal Flu Immunization Prevalence, Age 65+, 2001-2011



From 2007 to 2011, all groups, with the exception of college graduates and high school graduates, experienced a decrease in seasonal flu immunizations for age 65 and above. Females and those with household income less than $25,000 saw the largest decreases (Table 8). The only increase was for college graduates.

In 2011, differences in prevalence were seen within gender, education groups, and income groups. Comparatively lower percentages were seen for those with some college education, those with household income below $25,000, and females, while comparatively higher percentages were seen for college graduates and high school graduates.

The highest percentage of seasonal flu immunizations among ages 65 and above was 82% for college graduates, followed by high school graduates (80%). The lowest percentage was 57% for some college followed by income below $25,000 (61%).

Table 8. Seasonal Flu Immunization Prevalence, Age 65+, 2007 & 2011

Had a Seasonal Flu Shot or Nasal Flu Vaccine in the Past Year, Age 65+* Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA
		CI		CI	Point Change^	Sig	
Adults, Age 65+	76%	70% – 82%	70%	64% – 76%	-6%		NA
Gender							
Male	75%	64% – 83%	73%	64% – 82%	-2%		NA
Female	78%	69% – 84%	68%	59% – 76%	-11%		NA
Education							
<High School	NSR		70%	52% – 88%			NA
High School	80%	72% – 87%	80%	72% – 88%	0%		NA
Some College	NSR		57%	43% – 70%			NA
College Graduate	76%	64% – 85%	82%	70% – 94%	6%		NA
Income							
<$25,000	75%	64% – 84%	61%	50% – 72%	-14%		NA
$25,000-$49,999	77%	66% – 85%	72%	59% – 84%	-5%		NA
$50,000+	NSR		73%	58% – 88%			NA
Race/Ethnicity							
White, non-Hispanic	77%	71% – 82%	70%	64% – 76%	-7%		NA
Black, non-Hispanic	NA		NSR				NA
Hispanic	NA		NSR				NA

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change; *Before 2011, there were two separate questions for flu shot and nasal spray vaccine but they were combined into one question in 2011

Age 50+ Based on the BRFSS, the self-reported percentage of Erie County adults aged 50 and above who had a flu shot within the past year increased to 60% in 2011 (50% for PA) compared with 58% in 2007 (Table 9).

Note that this statistic has been combined in the 2011 BRFSS. Before 2011, separate questions were asked for the flu shot and the nasal spray vaccine. In the 2011 survey, one question included both the flu shot and the nasal spray vaccine. Before 2011, approximately 1% of those surveyed reported nasal spray vaccine.

Table 9. Seasonal Flu Immunization Prevalence, Age 50+, 2007 & 2011

Had a Seasonal Flu Shot or Nasal Flu Vaccine in the Past Year, Age 50+* Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2011
		CI		CI	Point Change^	Sig	
Adults, Age 50+	58%	54% – 63%	60%	55% – 64%	2%		50%
Gender							
Male	55%	48% – 61%	60%	55% – 66%	5%		48%
Female	62%	56% – 67%	59%	53% – 64%	-3%		52%
Age							
50-64	44%	39% – 50%	53%	48% – 58%	9%		41%
65+	76%	70% – 82%	70%	64% – 76%	-6%		NA
Education							
<High School	NSR		60%	45% – 75%			50%
High School	61%	55% – 67%	66%	60% – 72%	5%		47%
Some College	58%	49% – 67%	54%	46% – 62%	-4%		52%
College Graduate	55%	47% – 63%	63%	55% – 71%	8%		55%
Income							
<$25,000	64%	56% – 72%	49%	41% – 57%	-15%		NA
$25,000-$49,999	58%	51% – 66%	62%	53% – 70%	4%		49%
$50,000+	54%	46% – 61%	62%	55% – 70%	8%		NA
Race/Ethnicity							
White, non-Hispanic	59%	54% – 63%	60%	56% – 64%	1%		51%
Black, non-Hispanic	NA		NSR				45%
Hispanic	NA		NSR				NA

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change; *Before 2011, there were two separate questions for flu shot and nasal spray vaccine but they were combined into one question in 2011

From 2007 to 2011, seasonal flu immunization for age 50 and above decreased for those with household income below $25,000 but increased for age 50-64, college graduates, and income $50,000 and above (Table 9).

In 2011, differences in prevalence were seen within age, education groups, and income groups. Comparatively lower percentages were seen for those with some college education, those with household income below $25,000, and age 50-64 while comparatively higher percentages were seen for age 65 and above.

The highest percentage of seasonal flu immunizations among ages 50 and above was 70% for age 65 and above followed by high school graduates (66%). The lowest percentage was 49% for income <$25,000 followed by age 50-64 (53%) and some college (54%).

Immunization Location In 2011, for all adults aged 18 and above, 40% received their flu vaccination at a doctor's office or health maintenance organization (HMO), 24% at their workplace, 16% at a store (e.g., supermarket, drug store), 8% at a hospital, 4% at a senior, recreation, or community center, 3% at another type of clinic or health center, 3% at some other kind of place, 1% at a health department, 1% at a school, and less than 1% at an emergency room.

Children and Youth As part of the adult BRFSS, one seasonal influenza question focuses on children over the age of 6 months who are part of the household. In 2011, 396 surveyed households reported having a total of 808 children under the age of 18 but older than 6 months. Of these, 363 (45%) had been vaccinated for seasonal flu in the past year.

Pneumonia Immunization

Based on the BRFSS, the self-reported percentage of Erie County adults aged 65 and above who ever had a pneumonia vaccination increased to 79% in 2011-2013 compared to 73% in 2011 and 71% in 2007 (Figure 9). This was significantly higher than PA at 71% (2011-2013) and higher than the U.S. at 70% (2013) but lower than the Healthy People Goal of 90%.

From 2011 to 2011-2013, those with household income of $25,000-$49,999 saw the highest increase in pneumonia vaccination.(Table 10). The prevalence of pneumonia vaccination for males, those with less than or equal to a high school education, and those with household income of $25,000-$49,999 in Erie County is significantly higher than it is for the state.

In 2011-2013, the highest percentage of pneumonia vaccination among ages 65 and above was 85% for income of $25,000-$49,999 followed by 83% for those with less than or equal to a high school degree. The lowest percentage was 72% for college graduates.

Figure 9. Pneumonia Vaccination Prevalence, 2001 to 2011-2013

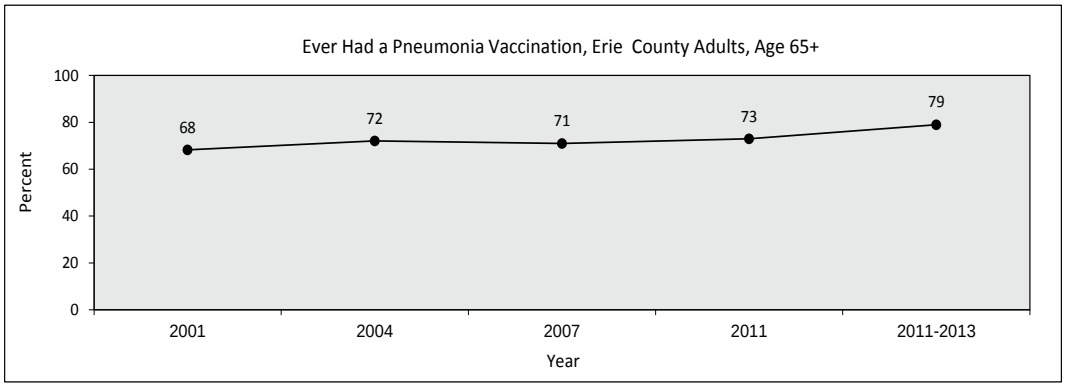


Table 10. Pneumonia Vaccination Prevalence, 2011 & 2011-2013

Ever Had a Pneumonia Vaccination, Age 65+ Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
Adults, Age 65+	73%	67% – 79%	79%	73% – 84%	6%		71%
Gender							
Male	74%	64% – 83%	80%	71% – 88%	6%		67%
Female	72%	64% – 80%	78%	70% – 84%	6%		73%
Education							
<High School	96%	87% – 100%	NA				67%
High School	82%	75% – 90%	NA				70%
<=High School	NA		83%	76% – 88%			NA
Some College	64%	51% 77%	NA				74%
College Graduate	74%	60% – 89%	72%	59% – 82%	-2%		73%
Income							
<$25,000	74%	64% – 85%	78%	67% – 86%	4%		NA
$25,000-$49,999	68%	55% – 81%	85%	76% – 91%	17%		73%
$50,000+	65%	49% – 82%	NA				NA
Race/Ethnicity							
White, non-Hispanic	73%	67% – 79%	79%	73% – 84%	6%		72%
Black, non-Hispanic	NSR		NA				63%
Hispanic	NSR		NA				51%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Oral Health

Dental Visits Regular dental visits provide early detection and treatment of cavities, professional removal of tartar and plaque, and early diagnosis of oral cancer. Left untreated, tooth decay can result in infection and tooth loss, while plaque, and the bacteria it harbors, can lead to periodontal gum disease. Oral infections and gum disease have been linked to diabetes, heart disease, stroke, and premature, low-weight births.

Based on the 2011 BRFSS, 70% of Erie County adults aged 18 and above visited the dentist in the past year for any reason (Table 11). This is lower than PA at 71% (2010), but comparable to the U.S. at 70% (2010).

Table 11. Annual Dental Visit Prevalence, 2011

Visited a Dentist Within the Past Year Erie County Adult BRFSS, 2011				
	2007	2011		PA 2010
			CI	
All Adults	NA	70%	67% – 72%	71%
Gender				
Male	NA	66%	63% – 70%	68%
Female	NA	73%	69% – 76%	73%
Age				
18-29	NA	73%	68% – 78%	68%
30-44	NA	72%	67% – 77%	72%
45-64	NA	72%	68% – 77%	73%
65+	NA	59%	52% – 65%	67%
Education				
<High School	NA	61%	50% – 71%	49%
High School	NA	68%	63% – 72%	62%
Some College	NA	69%	64% – 73%	70%
College Graduate	NA	82%	78% – 86%	84%
Income				
<$25,000	NA	50%	45% – 56%	NA
$25,000-$49,999	NA	66%	60% – 71%	65%
$50,000+	NA	92%	89% – 94%	NA
Race/Ethnicity				
White, non-Hispanic	NA	70%	67% – 73%	73%
Black, non-Hispanic	NA	68%	55% – 81%	55%
Hispanic	NA	76%	60% – 91%	71%

Note: CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available

In 2011, differences in prevalence were seen within age groups, gender, education groups, and income groups. Significantly lower percentages were seen for those with household incomes below $50,000, for age 65 and above, and for those with less than a college degree. The percentage of females who visited the dentist in the past year was 73% compared with 66% for males. Annual dental visit prevalence increased with increasing income and education.

The highest prevalence of annual dental visits was seen for those with household income $50,000 and above (92%) and college graduates (82%). The lowest percentage for annual dental visits was 50% for income below $25,000 followed by age 65 and above (59%) and less than a high school education (61%).

Children and Youth The Pennsylvania Department of Health (PA DOH) annually reports services provided to students in kindergarten and grades 1, 3, and 7 (K,1,3,7) through the mandated dental examination program, the dental hygiene services program, and the fluoride tablet program.

For the 2012-2013 school year, 9,555 students (K,1,3,7) in Erie County were seen by a dentist. Of these, 53% visited their family dentist (75% for PA), while 47% were seen by the school dentist (25% for PA) (Table 12).

Table 12. Student Dental Examination Prevalence, Grades K,1,3, & 7

Pennsylvania Mandated Dental Examination Program, Grades K,1,3,7
Number and Percent of Students Examined During the 2012-2013 School Year

	Grades K,1,3,7				*Other Grades*	*All Examined Students*	
	Family Dentist*		School Dentist**		School Dentist***	Referred for Further Trtmnt	Completed Referral Returned
School or School District	# students	% of all K,1,3,7	# students	% of all K,1,3,7	# students	# students	# students
General McLane SD	386	85%	69	15%	11	45	13
Montessori Regional CS	101	84%	19	16%	0	7	0
Harbor Creek SD	309	82%	68	18%	10	27	1
Wattsburg Area SD	234	76%	74	24%	9	18	1
Fairview SD	241	68%	115	32%	0	4	3
Millcreek Township SD	1,454	67%	726	33%	71	197	54
Girard SD	236	62%	142	38%	5	30	3
Iroquois SD	161	58%	116	42%	0	16	0
North East SD	213	55%	175	45%	40	40	5
Northwestern SD	174	54%	146	46%	11	68	5
Union City Area SD	128	54%	109	46%	135	33	2
Erie Rise Leadership Academy CS	77	50%	76	50%	31	0	0
Fort LeBoeuf SD	230	48%	245	52%	23	42	12
Erie City SD	1,091	37%	1,854	63%	75	610	17
Perseus House CS of Excellence	27	36%	49	64%	0	11	0
Corry Area SD	45	9%	452	91%	0	57	5
Robert B. Wiley Community CS	13	8%	141	92%	0	32	2
Erie County Total	5,120	53%	4,435	47%	421	1,237	123
PA Total	250,873	75%	81,890	25%	10,704	36,580	6,780

Note: *indicates that students were examined by a family dentist; **indicates that students were examined by a school dentist; ***indicates students from other grades who were examined by a school dentist; Includes all students in both public and private/non-public schools, combined, served by the school district

Differences in these percentages were seen among schools and school districts. For the General McLane School District, 85% of students in grades K,1,3,7 visited their family dentist for their mandated dental exam while only 15% were seen by the school dentist. Other school districts with high percentages of students seen by a family dentist were Montessori Regional Charter School (84%), Harbor Creek (82%), and Wattsburg Area School District (76%).

For the Robert B. Wiley Community Charter School, only 8% of students in grades K,1,3,7 visited a family dentist for their mandated dental exam while 92% were seen by the school dentist. The other schools or school districts with low percentages of students seen by a family dentist were Corry Area School District (9%), Perseus House Charter School of Excellence (36%), and Erie City School District (37%).

No data was reported for the dental hygiene services program in Erie County. The Wattsburg Area School District and the Union City Area School District were the only schools or school districts to enter statistics in the fluoride tablet program. Wattsburg Area reported 324 students and Union City Area reported 182 students participating in the program.

Water Fluoridation Fluoride treatment has been shown to aid in preventing cavities. Both the American Dental Association (ADA) and the Department of Health and Human Services (HHS) recommend fluoride levels of 0.7 parts per million (ppm) in drinking water to achieve optimal cavity prevention. In Erie County, fluoridated water (0.7 ppm) is provided to everyone served by the following public water systems: North East water supply, Edinboro water supply, and the City of Erie water supply. In addition to residents of Erie City, the City of Erie water supply services most of Millcreek Township, parts of Summit Township, parts of Fairview, parts of Wesleyville, parts of Lawrence Park, and parts of Harborcreek.

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Health Risk Behaviors

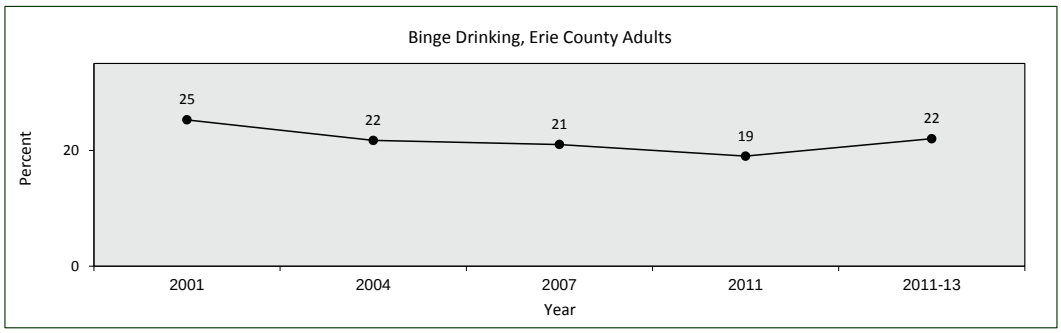
Alcohol Use - Adults

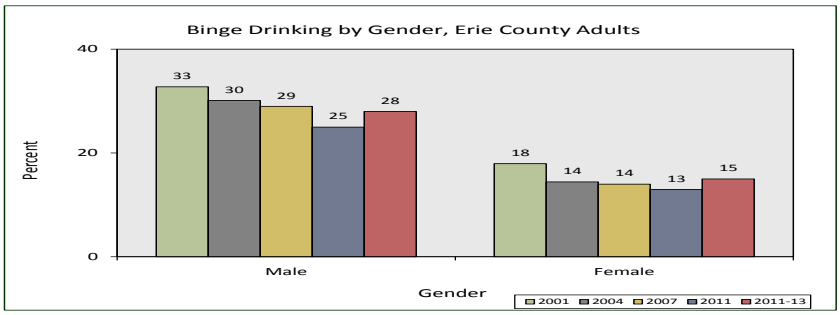
Despite its socially acceptable status, alcohol is harmful when used excessively. Excessive alcohol use impairs judgment, affects behavior, increases the risk for alcohol dependence and impaired health, and can cause fetal alcohol spectrum disorders in the children of mothers who drink excessively while pregnant. Excessive alcohol use includes binge drinking, heavy drinking, and chronic drinking.

Binge Drinking The CDC defines binge drinking as males having five or more drinks or females having four or more drinks on one occasion. Binge drinking accounts for more than half of the annual deaths resulting from excessive alcohol consumption in the United States. Current statistics released by the CDC identify binge drinking as a growing national problem with drinkers binging about four times a month and consuming an average of eight drinks per binge. In 2011, Erie County residents age 18 and above who binge drank did so an average of four times a month and consumed an average of seven drinks per binge.

Based on the Behavioral Risk Factor Surveillance System (BRFSS) survey, the self-reported percentage of Erie County adults aged 18 and above who binge drank in the past thirty days increased to 22% in 2011-2013 (18% for PA; 17% for U.S. in 2013) compared to 19% in 2011 and 21% in 2007 (Figure 1). The prevalence of binge drinking among Erie County adults is significantly higher than PA and higher than the U.S. but lower than the Healthy People 2020 goal of 24.3%.

Figure 1. Binge Drinking Prevalence, 2001 to 2011-2013





From 2011 to 2011-2013, the prevalence of binge drinking increased for all demographic groups with the exception of income of $50,000 and above which decreased and college graduates which remained the same (Table 1). The prevalence of binge drinking for those with less than or equal to a high school education in Erie County is significantly higher than it is for the state.

In 2011-2013, differences in prevalence were seen within demographic groups (Table 1). Binge drinking was significantly higher for males compared with females and for age 18-44 compared with other age groups. A higher percentage of binge drinking was also seen for those with income of $50,000 and above compared with other income groups.

The highest prevalence of monthly binge drinking was seen among age 18-44 (31%) followed by those with household income of $50,000 and above (28%) and males (28%). The lowest percentage was 6% for age 65 and above followed by 15% for females.

Table 1. Binge Drinking Prevalence, 2011 & 2011-2013

Binge Drinking at Least Once in the Past 30 Days
Erie County Adult BRFSS, 2011 & 2011-2013

	2011	CI	2011-2013	CI	Point Change^	Sig	PA 2011-13
All Adults	19%	17% – 21%	22%	19% – 25%	3%		18%
Gender							
Male	25%	22% – 29%	28%	23% – 33%	3%		24%
Female	13%	10% – 16%	15%	12% – 19%	2%		12%
Age							
18-29	31%	25% – 36%	NA				32%
30-44	24%	19% – 29%	NA				23%
18-44	NA		31%	25% – 37%			NA
45-64	15%	11% – 18%	19%	15% – 24%	4%		15%
65+	6%	2% – 9%	6%	3% – 11%	0%		5%
Education							
<High School	10%	4% – 17%	NA				14%
High School	17%	13% – 20%	NA				16%
<=High School	NA		21%	17% – 27%			NA
Some College	18%	14% – 22%	20%	15% – 27%	2%		19%
College Graduate	25%	21% – 30%	25%	19% – 31%	0%		20%
Income							
<$25,000	14%	10% – 18%	19%	14% – 26%	5%		NA
$25,000-$49,999	16%	12% – 20%	18%	13% – 24%	2%		17%
$50,000+	31%	26% – 36%	28%	23% – 35%	-3%		NA
Race/Ethnicity							
White, non-Hispanic	19%	16% – 21%	21%	18% – 24%	2%		18%
Black, non-Hispanic	28%	15% – 40%	NA				16%
Hispanic	19%	4% – 33%	NA				20%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change; The CDC defines binge drinking as males having five or more drinks or females having four or more drinks on one occasion

Heavy Drinking The CDC defines heavy drinking as males having more than two drinks per day or females having more than one drink per day. Heavy drinking prevalence in Erie County has been tracked since 2007.

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who drank heavily increased to 7% in 2011-2013 (6% for PA; 6% for U.S. in 2013) compared to 6% in 2011 and 2007 (Table 2).

Figure 2. Heavy Drinking Prevalence, 2011 & 2011-2013

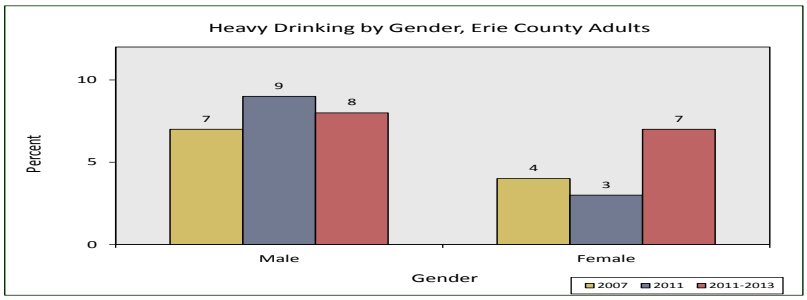


Table 2. Heavy Drinking Prevalence, 2011 & 2011-2013

Heavy Drinking Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	6%	4% – 7%	7%	5% – 10%	1%		6%
Gender							
Male	9%	6% – 11%	8%	5% – 12%	-1%		7%
Female	3%	2% – 4%	7%	5% – 10%	4%	***	5%
Age							
18-29	8%	5% – 11%	NA				9%
30-44	6%	3% – 9%	NA				6%
18-44	NA		11%	7% – 16%			NA
45-64	6%	3% – 8%	5%	3% – 8%	-1%		6%
65+	3%	1% – 5%	4%	2% – 6%	1%		3%
Education							
<High School	3%	0% – 6%	NA				6%
High School	6%	4% – 9%	NA				6%
<=High School	NA		8%	5% – 12%			NA
Some College	5%	3% – 8%	8%	5% – 12%	3%		6%
College Graduate	7%	4% – 9%	6%	4% – 11%	-1%		6%
Income							
<$25,000	6%	3% – 9%	5%	3% – 8%	-1%		NA
$25,000-$49,999	5%	2% – 7%	7%	4% – 11%	2%		6%
$50,000+	7%	5% – 10%	9%	6% – 14%	2%		NA
Race/Ethnicity							
White, non-Hispanic	6%	4% – 7%	7%	5% – 9%	1%		6%
Black, non-Hispanic	6%	0% – 13%	NA				5%
Hispanic	10%	0% – 21%	NA				7%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change; The CDC defines heavy drinking as males having more than two drinks per day or females having more than one drink per day

From 2011 to 2011-2013, the prevalence of heavy drinking increased significantly from 3% to 7% for females (Figure 2; Table 2). Differences in prevalence were seen within age and income groups. A higher percentage was seen for age 18-44 compared with other age groups and for income $50,000 and above compared with other income groups. The highest prevalence of heavy drinking among all demographic groups was reported for age 18-44 (11%) followed by income $50,000 and above (9%).

Chronic Drinking The CDC defines chronic drinking as having an average of two or more drinks per day for the past 30 days. Chronic drinking prevalence in Erie County has been tracked since 2007.

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who indicated that they were chronic drinkers remained at 6% in 2011-2013 (6% for PA) compared to 6% in both 2011 and 2007 (Table 3).

Table 3. Chronic Drinking Prevalence, 2011 & 2011-2013

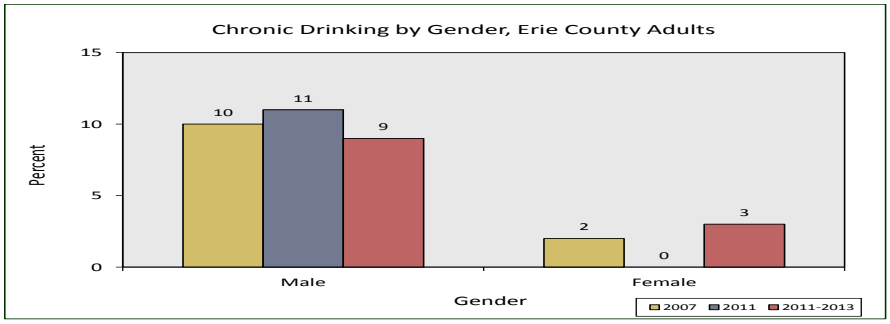
Chronic Drinking
Erie County Adult BRFSS, 2011 & 2011-2013

	2011	CI	2011-2013	CI	Point Change^	Sig	PA 2011-13
All Adults	6%	4% – 7%	6%	5% – 9%	0%		6%
Gender							
Male	11%	8% – 13%	9%	6% – 14%	-2%		10%
Female	0%	0% – 1%	3%	2% – 5%	3%	***	2%
Age							
18-29	5%	2% – 7%	NA				7%
30-44	6%	3% – 9%	NA				6%
18-44	NA		9%	6% – 14%			
45-64	7%	4% – 9%	4%	3% – 7%	-3%		6%
65+	4%	1% – 7%	4%	2% – 6%	0%		4%
Education							
<High School	3%	0% – 6%	NA				6%
High School	6%	3% – 8%	NA				6%
<=High School	NA		6%	4% – 11%			NA
Some College	6%	4% – 8%	6%	3% – 9%	0%		5%
College Graduate	6%	4% – 9%	7%	4% – 12%	1%		6%
Income							
<$25,000	6%	3% – 8%	5%	3% – 8%	-1%		NA
$25,000-$49,999	3%	1% – 6%	6%	3% – 10%	3%		6%
$50,000+	9%	6% – 12%	7%	4% – 11%	-2%		NA
Race/Ethnicity							
White, non-Hispanic	6%	4% – 7%	5%	4% – 7%	-1%		6%
Black, non-Hispanic	4%	0% – 10%	NA				5%
Hispanic	10%	0% – 21%	NA				5%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change; The CDC defines chronic drinking as having an average of two or more drinks per day for the past 30 days

From 2011 to 2011-2013, a significant increase in chronic drinking was seen for females (Figure 3; Table 3).

Figure 3. Chronic Drinking Prevalence, 2011 & 2011-2013



In 2011-2013, chronic drinking was significantly higher for males compared with females and higher percentage was seen for age 18-44 compared to other age groups. The highest prevalence of chronic drinking among all demographic groups was reported for males (9%) and age group 18-44 (9%).

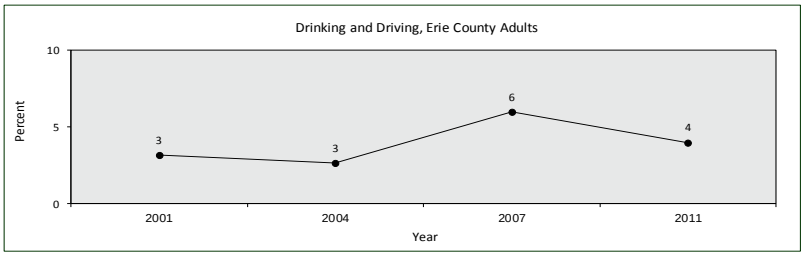
Drinking and Driving Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who drove in the past month with perhaps too much to drink decreased to 4% in 2011 compared with 6% in 2007 (Figure 4). This was higher than PA at 3% (2010).

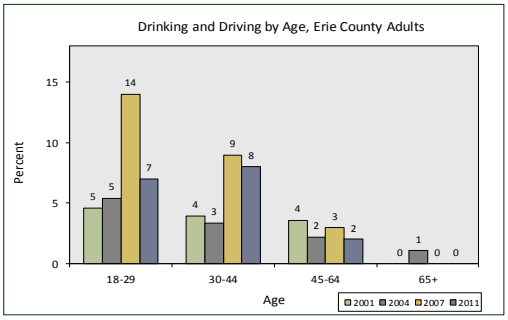
From 2007 to 2011, the prevalence of drinking and driving decreased for all demographic groups with the exception of females, age 65 and above, and high school graduates which remained unchanged. The largest decrease was seen for age 18-29 followed by males and college graduates.

In 2011, drinking and driving was significantly higher for males compared with females and for ages 18-29 and 30-44 compared with ages 45-64 and 65 and above (Table 4).

The highest prevalence of drinking and driving among all demographic groups was reported for Hispanic adults (10%) followed by ages 30-44 (8%) and 18-29 (7%).

Figure 4. Drinking and Driving Prevalence, 2001-2011





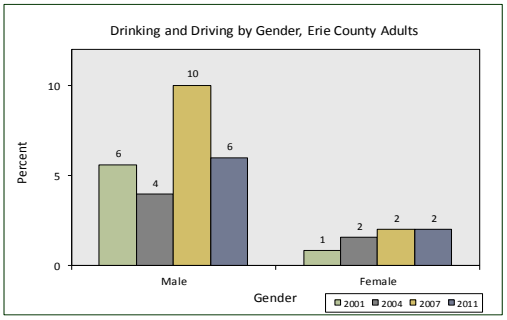


Table 4. Drinking and Driving Prevalence, 2007 & 2011

Drinking and Driving in the Past Month with Perhaps Too Much to Drink
Erie County Adult BRFSS, 2007 & 2011

	2007	CI	2011	CI	Point Change^	Sig	PA 2010
All Adults	6%	4% – 8%	4%	3% – 5%	-2%		3%
Gender							
Male	10%	7% – 15%	6%	4% – 8%	-4%		5%
Female	2%	1% – 4%	2%	1% – 3%	0%		1%
Age							
18-29	14%	7% – 25%	7%	4% – 10%	-7%		5%
30-44	9%	5% – 14%	8%	5% – 11%	-1%		4%
45-64	3%	1% – 5%	2%	1% – 3%	-1%		3%
65+	0%	0% – 3%	0%	0% – 1%	0%		1%
Education							
<High School	NSR		3%	0% – 6%			0%
High School	4%	2% – 8%	4%	2% – 6%	0%		4%
Some College	8%	4% – 14%	5%	3% – 7%	-3%		3%
College Graduate	8%	4% – 13%	4%	2% – 6%	-4%		3%
Income							
<$25,000	5%	2% – 10%	4%	2% – 7%	-1%		NA
$25,000-$49,999	5%	3% – 9%	3%	1% – 5%	-2%		4%
$50,000+	8%	5% – 14%	6%	3% – 8%	-2%		NA
Race/Ethnicity							
White, non-Hispanic	6%	4% – 9%	4%	3% – 5%	-2%		3%
Black, non-Hispanic	NA		2%	0% – 6%			3%
Hispanic	NA		10%	0% – 21%			4%

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Alcohol Use - Youth

Since 2005, Erie County has participated in the biannual Pennsylvania Youth Survey (PAYS) sponsored by the Pennsylvania Commission on Crime and Delinquency (PCCD). PAYS surveys 6th, 8th, 10th, and 12th grade students to determine youth behaviors and attitudes. In 2013, 6,410 surveys were completed.

Alcohol is the most used drug among students in both Erie County and Pennsylvania. Four alcohol behaviors were evaluated: lifetime alcohol use, past-30-day alcohol use, binge drinking, and drinking and driving.

Lifetime Alcohol Use From 2011 to 2013, the overall lifetime use of alcohol among Erie County students increased (Table 5). In 2013, 44.0% (40.3% in 2011) of Erie County students reported that they had used alcohol at least once in their lifetime compared with 46.9% for PA. Usage ranged from a low of 15.6% in 6th grade to a high of 71.4% in 12th grade. When compared to national rates (27.8% for 8th grade; 52.1% for 10th grade; 68.2% for 12th grade), Erie County rates were higher for all grades. From 2011 to 2013, lifetime alcohol use prevalence decreased for 6th and 8th grade, but increased for 10th and 12th grade. The largest increase (59.2% in 2011 to 71.4% in 2013) was seen for 12th grade.

From 2009 to 2013, the overall prevalence of lifetime alcohol use decreased from 46.6% in 2009 to 44.0% in 2013.

Table 5. Youth Alcohol Use Prevalence, 2011 & 2013

Alcohol Use Among Erie County Middle and High School Students
Erie County 2011 & 2013 PAYS

	*Lifetime Use**			*Past-30-Day Use***			*Binge Drinking****			*Drinking and Driving*****		
	Erie County		PA	Erie County		PA	Erie County		PA	Erie County		PA
Grade	2011	2013	2013	2011	2013	2013	2011	2013	2013	2011	2013	2013
6th	18.6%	15.6%	13.3%	5.3%	3.6%	3.0%	1.6%	1.7%	1.3%	0.3%	0.2%	0.2%
8th	38.1%	36.7%	35.1%	12.8%	10.0%	9.6%	6.2%	3.0%	3.1%	0.6%	0.6%	0.4%
10th	54.8%	58.9%	61.5%	27.8%	25.2%	26.2%	14.4%	11.5%	11.7%	1.8%	1.5%	1.8%
12th	59.2%	71.4%	74.2%	32.8%	36.3%	40.6%	18.5%	19.6%	21.8%	9.0%	9.0%	8.7%
Overall	40.3%	44.0%	46.9%	17.5%	17.7%	20.3%	9.1%	8.2%	9.7%	2.4%	2.6%	2.9%

Note: *Indicates that the student ever used alcohol; **Indicates that the student used alcohol within the past 30 days; ***Indicates that the student reported having five or drinks in a row within the past two weeks; ****Indicates driving while or shortly after drinking

Past-30-Day Alcohol Use From 2011 to 2013, the overall 30 day use of alcohol among Erie County students increased slightly. In 2013, 17.7% (17.5% in 2011) of Erie County students

reported that they had used alcohol within the past 30 days compared with 20.3% for PA. Usage ranged from a low of 3.6% in 6th grade to a high of 36.3% in 12th grade. When compared to national rates (10.2% for 8th grade; 25.7% for 10th grade; 39.2% for 12th grade), Erie County rates were similar for 8th and 10th grade, but higher for 12th grade. From 2011 to 2013, past-30-day alcohol use prevalence in Erie County decreased for 6th, 8th, and 10th grades, but increased for 12th grade.

From 2009 to 2013, overall prevalence of past 30-day-alcohol decreased from 22.1% in 2009 to 17.7% in 2013.

Binge Drinking PAYS defines binge drinking as having five or more drinks in a row within the past two weeks. From 2011 to 2013, overall binge drinking among Erie County students decreased. In 2013, 8.2% (9.1% in 2011) of Erie County students reported that they had that they had at least one episode of binge drinking within the past two weeks compared with 9.7% for PA. Usage ranged from a low of 1.7% in 6th grade to a high of 19.6% in 12th grade. When compared to national rates (5.1% for 8th grade; 13.7% for 10th grade; 22.1% for 12th grade), Erie County rates were lower for all grades. From 2011 to 2013, binge drinking prevalence in Erie County remained similar for 6th grade, decreased for 8th and 10th grades, and increased for 12th grade.

From 2009 to 2013, overall prevalence of binge drinking has steadily decreased from 11.7% in 2009 to 8.2% in 2013.

Drinking and Driving In 2013, 2.6% (2.4% in 2011) of Erie County students reported having driven a car shortly after drinking compared with 2.9% for PA. From 2009 to 2013, overall prevalence of drinking and driving decreased from 3.9% in 2009 to 2.6% in 2013.

Drunk or High at School In 2013, 7.0% (7.8% in 2011) of Erie County students reported that they had ever been drunk or high at school compared with 6.0% in PA. From 2009 to 2013, overall prevalence of being drunk or high at school has steadily decreased from 9.6% in 2009 to 7.0% in 2013.

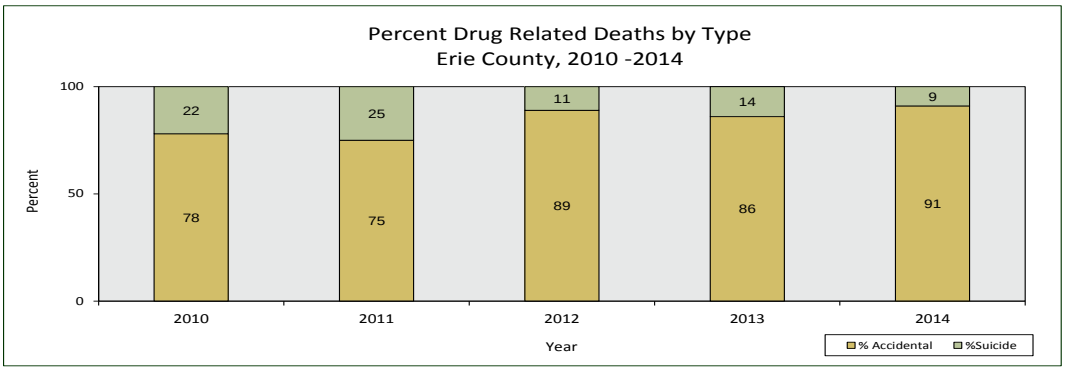
Drug Related Deaths

Based on statistics provided by the Erie County Coroner's Office, drug related deaths, especially accidental drug related deaths, have been increasing (Figure 5). The following cases were reported for years 2010 through 2014:

- 2010 – 23 total drug related deaths, 18 (78%) accidental, and 5(22%) suicidal overdose
- 2011 – 52 total drug related deaths, 39 (75%) accidental, and 13 (25%) suicidal overdose
- 2012 – 54 total drug related deaths, 48 (89%) accidental, and 6 (11%) suicidal overdose
- 2013 – 57 total drug related deaths, 49 (86%) accidental, and 8 (14%) suicidal overdose
- 2014 – 60 total drug related deaths, 56 (91%) accidental, and 4 (9%) suicidal overdose

Thirty-one (55%) of the 56 accidental drug related deaths in 2014 involved heroin.

Figure 5. Drug Related Deaths, 2010 to 2014



Drug Use - Youth

Since 2005, Erie County has participated in the biannual Pennsylvania Youth Survey (PAYS) sponsored by the Pennsylvania Commission on Crime and Delinquency (PCCD). PAYS surveys 6th, 8th, 10th, and 12th grade students to determine youth behaviors and attitudes. In 2013, 6,410 valid surveys were completed.

Lifetime Marijuana Use Marijuana is the third most used drug (after alcohol and tobacco) among students in both Erie County and Pennsylvania. It is also the most widely used illicit drug. From 2011 to 2013, the overall lifetime use of marijuana among Erie County students increased (Table 6). In 2013, 19.0% (18.4% in 2011) of Erie County students reported that they had used marijuana at least once in their lifetime compared with 18.9% for PA. Usage ranged from a low of 1.5% in 6th grade to a high of 42.3% in 12th grade. When compared to national rates (16.5% for 8th grade; 35.8% for 10th grade; 45.5% for 12th grade), Erie County rates were lower for all grades. From 2011 to 2013, lifetime marijuana use prevalence remained the same for 6th grade, decreased for 8th and 10th grade, and increased for 12th grade.

From 2009 to 2013, the overall prevalence of lifetime marijuana use steadily increased from 17.1% in 2009 to 19.0% in 2013.

Past-30-Day Marijuana Use From 2011 to 2013, the overall 30 day use of marijuana among Erie County students increased. In 2013, 10.4% (9.6% in 2011) of Erie County students reported that they had used marijuana within the past 30 days compared with 10.3% for PA. Usage ranged from a low of 0.8% in 6th grade to a high of 22.6% in 12th grade. When compared to national rates (7.0% for 8th grade; 18.0% for 10th grade; 22.7% for 12th grade), Erie County rates were lower for all grades. From 2011 to 2013, past-30-day marijuana use prevalence in Erie County decreased for 6th, 8th, and 10th grades, but increased for 12th grade.

From 2009 to 2013, overall prevalence of past 30-day-marijuana use increased from 9.5% in 2009 to 10.4% in 2013.

Table 6. Youth Marijuana Use Prevalence, 2011 & 2013

Marijuana Use Among Erie County Middle and High School Students Erie County 2011 & 2013 PAYS									
	*Lifetime Use**			*Past-30-Day Use***			*Driving Under Influence****		
	Erie County		PA	Erie County		PA	Erie County		PA
Grade	2011	2013	2013	2011	2013	2013	2011	2013	2013
6th	1.5%	1.5%	0.8%	1.1%	0.8%	0.4%	0.3%	0.1%	0.1%
8th	12.4%	9.3%	6.4%	6.3%	4.9%	3.3%	0.6%	0.6%	0.4%
10th	30.6%	27.9%	25.8%	17.4%	16.0%	14.4%	3.5%	2.4%	2.4%
12th	39.1%	42.3%	40.3%	19.1%	22.6%	21.8%	12.1%	14.5%	12.4%
Overall	18.4%	19.0%	18.9%	9.6%	10.4%	10.3%	3.3%	4.0%	4.1%

Note: *Indicates that the student ever used marijuana; **Indicates that the student used marijuana within the past 30 days; ***Indicates driving while or shortly after using marijuana

Driving Under the Influence of Marijuana In 2013, 4.0% (3.3% in 2011) of Erie County students reported having driven a car shortly after marijuana use compared with 4.1% for PA. From 2009 to 2013, overall prevalence of driving under the influence of marijuana has fluctuated from 3.9% in 2009 to 3.3% in 2011 and 4.0% in 2013.

Prescription Drug Use Illicit use of prescription drugs is a growing problem among students in both Erie County and Pennsylvania. It is the fourth most used drug, after alcohol, tobacco, and marijuana, among Erie County students.

In 2013, the overall lifetime use of pain relievers by students was 8.7% for Erie County compared with PA at 6.8%, while the past-30-day use was 2.7% for Erie County compared with 2.1% for PA (Table 7). From 2009 to 2013, overall prevalence of lifetime pain reliever use has fluctuated from 7.9% in 2009 to 6.4% in 2011 and 8.7% in 2013 while the past-30-day use has steadily decreased from 5.6% in 2009 to 2.7% in 2013.

In 2013, the overall lifetime use of tranquilizers by students was 2.3% for Erie County compared with PA at 2.5%, while the past-30-day use was 0.7% for Erie County compared with 0.7% for PA. From 2009 to 2013, overall prevalence of lifetime tranquilizer use has fluctuated from 2.8% in 2009 to 2.0% in 2011 and 2.3% in 2013 while the past-30-day use has steadily decreased from 1.8% in 2009 to 0.7% in 2013.

In 2013, the overall lifetime use of stimulants by students was 4.3% for Erie County compared with PA at 3.7%, while the past-30-day use was 1.5% for Erie County compared with 1.1% for PA. From 2009 to 2013, overall prevalence of lifetime stimulant use has fluctuated from 5.4% in

2009 to 3.3% in 2011 and 4.3% in 2013 while the past-30-day use has steadily decreased from 1.6% in 2009 to 1.5% in 2013.

Table 7. Youth Illicit Prescription Drug Use Prevalence, 2013

Illicit Prescription Drug Use Among Erie County Middle and High School Students Erie County 2013 PAYS												
	Narcotic Pain Relievers				Tranquilizers				Stimulants			
	*Lifetime Use**		*30-Day-Use***		*Lifetime Use**		*30-Day-Use***		*Lifetime Use**		*30-Day-Use***	
Grade	Erie County	PA	Erie County	PA	Erie County	PA	Erie County	PA	Erie County	PA	Erie County	PA
6th	2.5%	2.1%	1.2%	1.0%	0.4%	0.2%	0.1%	0.1%	0.6%	0.2%	0.2%	0.1%
8th	5.6%	4.1%	1.8%	1.5%	0.8%	0.8%	0.2%	0.2%	1.2%	1.1%	0.5%	0.4%
10th	10.6%	8.3%	3.0%	2.6%	3.0%	2.7%	0.9%	0.9%	5.7%	3.9%	2.1%	1.0%
12th	18.1%	12.1%	5.2%	3.0%	5.8%	5.9%	1.7%	1.4%	11.2%	9.1%	3.9%	2.8%
Overall	8.7%	6.8%	2.7%	2.1%	2.3%	2.5%	0.7%	0.7%	4.3%	3.7%	1.5%	1.1%

Note: *Indicates ever using the drug; **Indicates using the drug in the past 30 days

Other Drug Use Prevalence of other drug use among Erie County students is reported in Table 8. From 2011 to 2013, lifetime use of inhalants decreased from 9.8% to 6.6% (6.1% for PA) and past-30-day use of inhalants decreased from 5.1% to 1.9% (1.7% for PA). Lifetime use of all other drugs increased from 2011 to 2013 while past-30-day use either remained the same or decreased with the exception of steroids and performance enhancing drugs which increased. Lifetime use of synthetic drugs is 3.4% for 2013.

Table 8. Youth Other Drug Use Prevalence, 2011 & 2013

Other Drug Use, Grades 6-12 Erie County 2011 & 2013 PAYS				
	*Lifetime Use**		*Past-30-Day Use***	
Substance	2011	2013	2011	2013
Inhalants	9.8%	6.6%	5.1%	1.9%
Synthetic Drugs	NA	3.4%	NA	0.7%
Hallucinogens	2.5%	3.3%	0.9%	0.8%
Ecstasy	2.0%	2.8%	0.7%	0.6%
Cocaine	1.4%	1.9%	0.4%	0.4%
Steroids & PEDs***	0.8%	1.2%	0.3%	0.6%
Crack Cocaine	0.4%	0.8%	0.3%	0.2%
Methamphetamine	0.4%	0.7%	0.3%	0.3%
Heroin	0.3%	0.7%	0.2%	0.2%

Note: *Indicates ever using the drug; **Indicates using the drug within the past 30 days; PEDs=Performance enhancing drugs; NA=Not available

Nutrition

Poor nutrition has been associated with high serum cholesterol, high blood pressure, cardiovascular disease, diabetes, obesity, and dental caries as well as other diseases. The *Dietary Guidelines for Americans, 2010*, established by the United States Department of Agriculture (USDA) and Health and Human Services (HHS), provides recommendations to help individuals make healthy food choices and reduce their risk for disease. Consumers are advised to eat more fruits, vegetables, whole grains, fat-free and low-fat dairy products, lean meats, seafood and other protein sources while limiting consumption of refined grains, solid fats, alcohol, and foods that contain a high content of cholesterol, saturated fats, trans fats, sodium, and added sugar. The "Scientific Report of the 2015 Dietary Guidelines Advisory Committee" is available and the *Dietary Guidelines for Americans, 2015* is scheduled for release in 2015.

Fruits and Vegetables Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who eat fruits and vegetables five or more times per day significantly decreased to 10% in 2011 compared with 21% in 2007 and 22% in 2004 (Figure 6). Erie County remains lower than the PA value of 15% (2011) and the U.S. value of 24% (2009). Note that the wording of this question changed in the 2011 BRFSS survey. Before 2011, the number of *servings* of fruits and vegetables per day was reported. In 2011, the number of *times* fruits and vegetables were eaten per day was reported.

Figure 6. Fruit and Vegetable Consumption Prevalence, 2001-2011

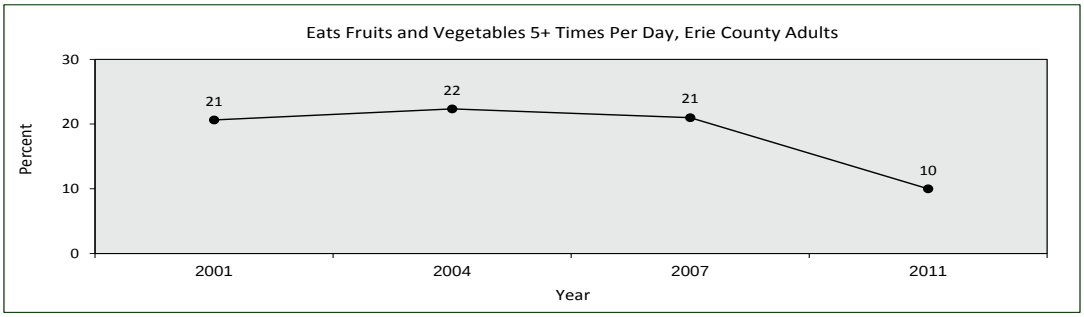


Table 9. Fruit and Vegetable Consumption Prevalence, 2007 & 2011

Eats Fruits and Vegetables 5+ Times Per Day* Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2011
		CI		CI	Point Change^	Sig	
All Adults	21%	18% – 24%	10%	8% – 11%	-11%	***	15%
Gender							
Male	15%	11% – 20%	8%	6% – 10%	-7%	***	11%
Female	25%	22% – 29%	11%	9% – 14%	-14%	***	18%
Age							
18-29	25%	17% – 37%	10%	6% – 13%	-15%	***	14%
30-44	16%	12% – 22%	9%	5% – 12%	-7%	***	14%
45-64	19%	15% – 23%	10%	7% – 13%	-9%	***	15%
65+	25%	20% – 30%	10%	5% – 14%	-15%	***	16%
Education							
<High School	NSR		6%	1% – 11%			10%
High School	17%	13% – 21%	10%	7% – 12%	-7%	***	12%
Some College	20%	15% – 27%	8%	5% – 11%	-12%	***	16%
College Graduate	29%	23% – 35%	13%	9% – 16%	-16%	***	19%
Income							
<$25,000	20%	15% – 27%	7%	4% – 9%	-13%	***	NA
$25,000-$49,999	18%	13% – 23%	8%	5% – 11%	-10%	***	13%
$50,000+	24%	19% – 29%	13%	9% – 16%	-11%	***	NA
Race/Ethnicity							
White, non-Hispanic	20%	17% – 23%	10%	8% – 11%	-10%	***	14%
Black, non-Hispanic	NA		10%	2% – 19%			18%
Hispanic	NA		14%	1% – 27%			11%

Note: *The wording of this question changed in 2011; *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

From 2007 to 2011, significant decreases in prevalence were seen for all demographic groups with the exception of those not reported in 2007 (non-Hispanic Black adults, Hispanic adults, and those with less than a high school education) (Table 9). The highest percentage point decreases in fruit and vegetable consumption were seen for college graduates, ages 18-29 and 65 and above, females, and those with household income below $25,000.

In 2011, differences in prevalence occurred within demographic groups. Comparatively lower percentages were seen for those with less than a high school education (6%), those with household incomes below $25,000 (7%) and $25,000-$49,999 (8%), males (8%), and those with some college (8%).

In 2011, the highest prevalence of five fruit and vegetable consumption per day was seen for Hispanic adults (14%) followed by college graduates (13%), those with household income $50,000 and above (13%), and females (11%).

Whole Grains Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who ate one or more servings of whole grains per day significantly decreased to 64% in 2011 compared with 82% in 2007.

From 2007 to 2011, significant decreases in prevalence were seen for all demographic groups with the exception of those not reported in 2007 (non-Hispanic Black adults and Hispanic adults) and those with less than a high school education.

In 2011, differences in prevalence occurred within demographic groups. The prevalence of one or more daily whole grain serving was significantly higher for those with income of $50,000 and above (71%) compared to other income groups (58% for all others). Comparatively lower percentages were seen for Hispanic adults (40%), those with some college (61%), age 30-44 (61%), and males (62%).

The highest prevalence of one or more servings of whole grain per day was seen for those with household income of $50,000 and above (74%), age 65 and above (71%), and high school graduates (70%). The lowest prevalence was 40% for Hispanic adults.

Dairy Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who ate two or more servings of dairy per day significantly decreased to 39% in 2011 compared with 69% in 2007.

From 2007 to 2011, significant decreases in prevalence were seen for all demographic groups with the exception of those not reported in 2007 (non-Hispanic Black adults, Hispanic adults, and those with less than a high school education).

In 2011, differences in prevalence were seen within demographic groups. A significantly lower percentage was seen for males (34%) compared with females (43%) and for those with household income below $25,000 (34%) compared with those with income of $50,000 and above (47%). Comparatively higher percentages were seen for college graduates (45%), age 18-29 (45%), and age 30-44 (42%). Comparatively lower percentages were seen for Hispanic adults (21%), non-Hispanic Black adults (27%), and age 65 and above (29%).

The highest prevalence of two or more servings of dairy per day was seen for those with household income of $50,000 and above (47%). The lowest prevalence was 21% for Hispanic adults.

Dairy consumption prevalence decreased with increasing age: 18-29 (45%), 30-44 (42%), 45-64 (37%), and 65 and above (29%) and increased with increasing income: household income below $25,000 (34%), household income of $25,000-$49,999 (37%), and household income of $50,000 and above (47%).

Sugar Sweetened Beverages Based on the BRFSS, 6% of Erie County adults aged 18 and above reported drinking three or more sugar sweetened beverages per day in 2011.

Hispanic adults reported the highest consumption at 18% followed by non-Hispanic Black adults (14%), age 30-44 (11%), and some college education (9%). Age 65 and above reported the lowest percentage of consumption at 1% followed by college graduates (4%), females (5%), age 45-64 (5%), and those with household income of $50,000 and above (5%).

Food Deserts

As defined by the United States Department of Agriculture, a food desert is a geographic area where residents, especially those with low-income, do not have ready accessibility to healthy and affordable food retailers. Low income areas are defined as census tracts with a poverty rate of 20% or higher, or tracts with a median family income less than 80% of the median family income for the state or metropolitan area. Low vehicle access is defined as tracts in which more than 100 households have no access to a vehicle and are more than ½ mile from the nearest supermarket. Food Desert census tracts are both low income and low vehicle access census tracts.

Erie County has ten food deserts which are identified by their census tract number. Seven are in the City of Erie: *Census Tract 6* which is bordered by Franklin Avenue to Brandes Street and East 12th Street to Lake Erie, *Census Tract 10* which is bordered by Sassafras Street to Greengarden Boulevard and West 12th to West 9th Street/Bayfront Parkway, *Census Tract 16* which is bordered by Bird Drive/Groveland Drive to Elm Street and the Bayfront Connector to Buffalo Road*, Census Tract 18* which is bordered by Ash Street to State Street and East 26th to East 21st Street, *Census Tract 19* which is bordered by West 18th to West 26th Street and State Street to Chestnut Street, *Census Tract 25* which is bordered by Parade Street to State Street and East 33rd to East 26th Street, and *Census Tract 26* which is bordered by Brandes Street to Parade Street and East 33rd to East 26th Street (Figure 7a). Corresponding low income areas and low motor vehicle access areas are shown in Figures 7b and 7c. The other three food deserts in Erie County are: *Census Tract 102.01*, Lake City Borough and Girard Borough, *Census Tract 122.02*, Edinboro Borough, and *Census Tract 119.00*, City of Corry (Figure 8a). Corresponding low income areas and low motor vehicle areas are shown in Figures 8b and 8c.

Figure 7a. City of Erie Food Deserts, 2015

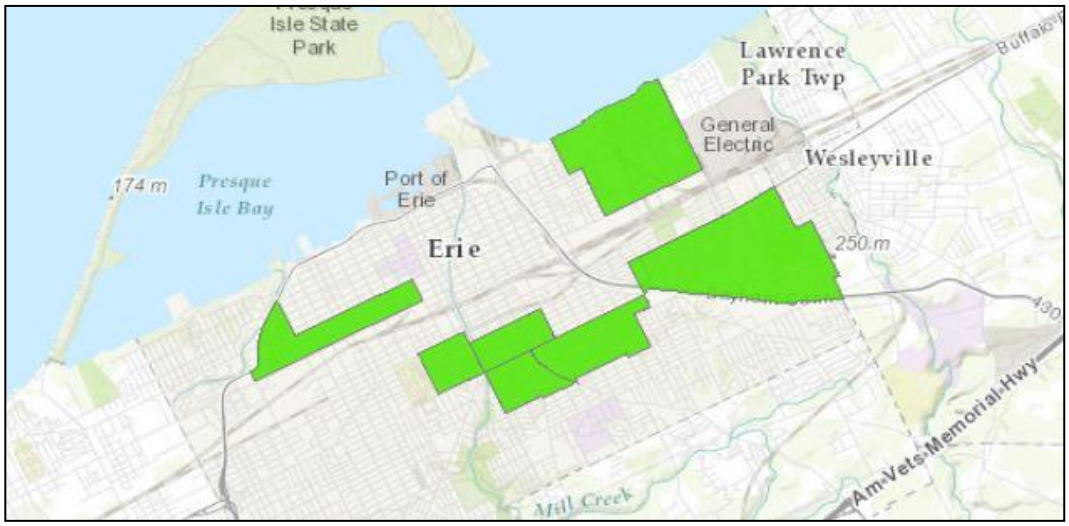


Figure 7b. Low Income Areas and Food Deserts, City of Erie, 2015

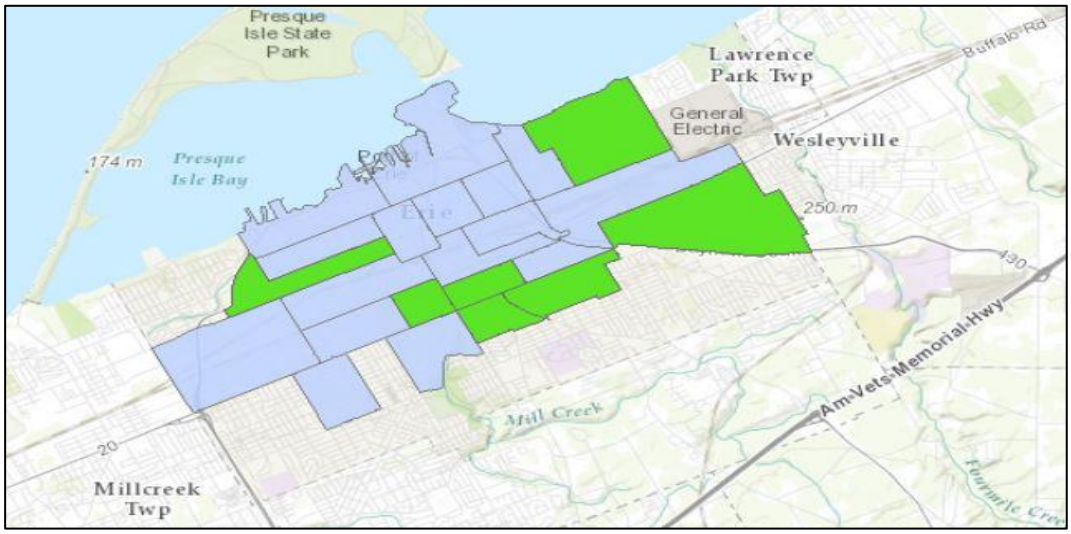


Figure 7c. Low Vehicle Access Areas and Food Deserts, City of Erie, 2015

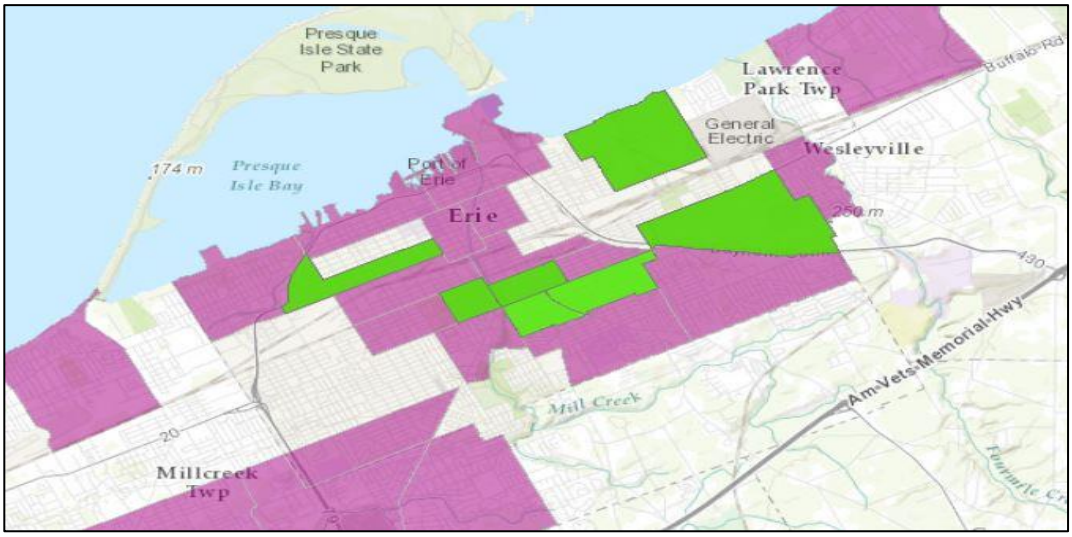


Figure 8a. Erie County Food Deserts, 2015

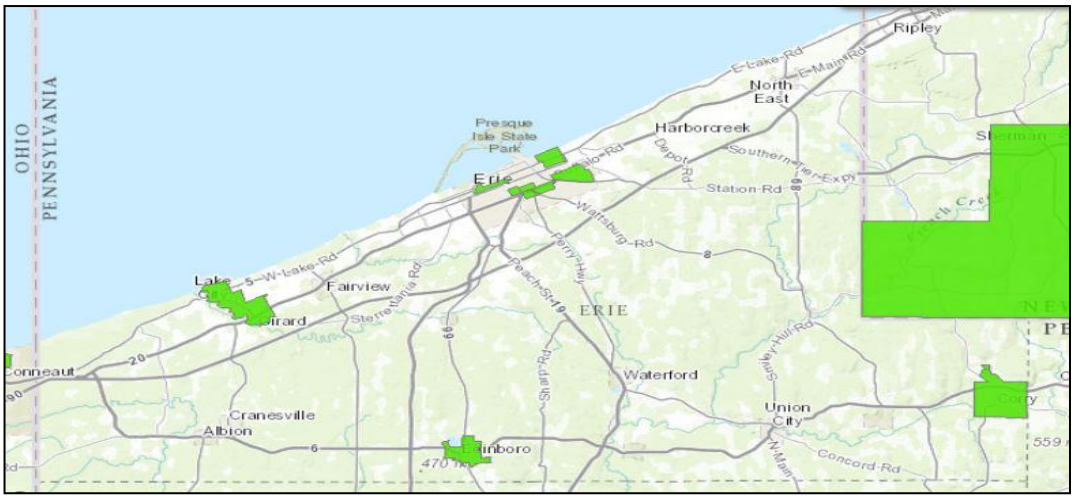


Figure 8b. Low Income Areas and Food Deserts, Erie County, 2015

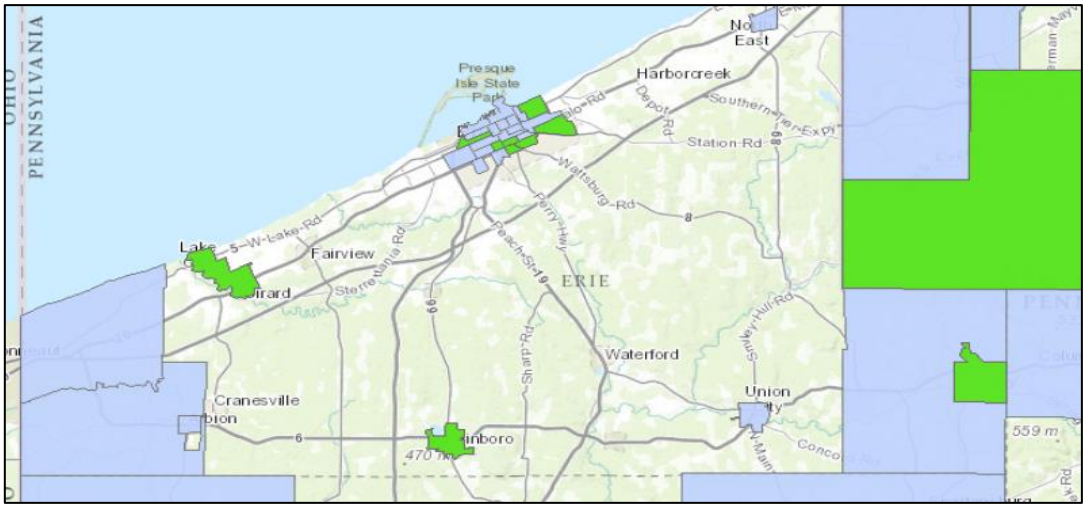
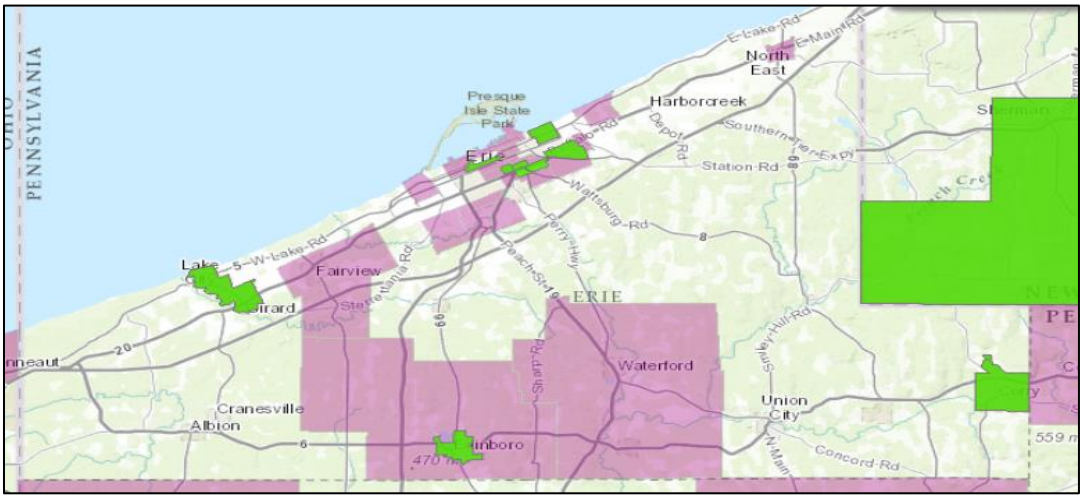


Figure 8c. Low Vehicle Access Areas and Food Deserts, Erie County, 2015

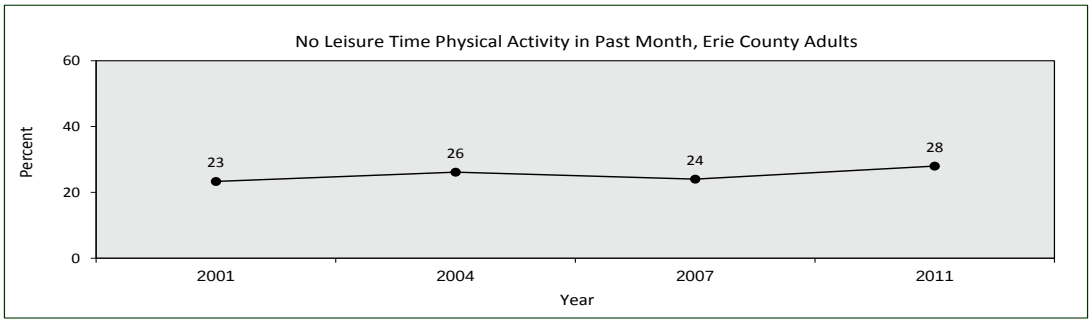


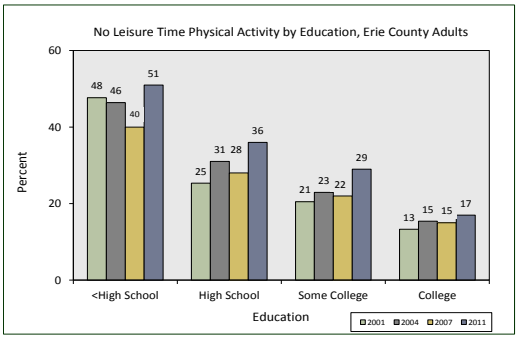
Physical Activity

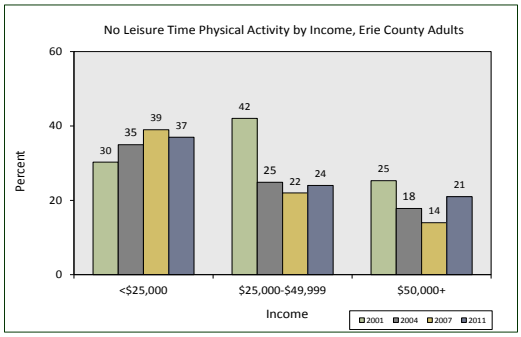
Physical activity is important to good health and is one of the most effective ways to maintain body weight. It reduces blood pressure, arthritis pain, disability associated with arthritis, depression symptoms, anxiety symptoms, and reduces the risk for type 2 diabetes, heart attack, stroke, several types of cancer, osteoporosis, and falls.

No Leisure Time Physical Activity Based on the BRFSS, the percentage of Erie County adults aged 18 and above who reported having no leisure time physical activity in the past month increased to 28% in 2011 compared with 24% in 2007 (Figure 9). This was higher than PA at 26% (2011) and the U.S. at 24% (2010), but lower than the Healthy People 2020 Goal of 33%.

Figure 9. Physical Inactivity Prevalence, 2001-2011







From 2007-2011, all demographic groups saw an increase in the prevalence of no leisure physical activity with the exception of those age 65 and above and those with household income below $25,000. The highest percentage point increase was seen for those with less than a high school education (Table 10).

In 2011, differences in prevalence occurred within all demographic groups. A significantly lower percentage was seen for college graduates compared with all other education groups. A significantly higher percentage was seen for those with household income below $25,000 compared with all other income groups. Higher percentages were seen for age 65 and above and females. A comparatively higher percentage was also seen for Hispanic adults.

The highest prevalence of no leisure time physical activity was seen for those with less than a high school education (51%) followed by Hispanic adults (48%). The lowest prevalence was for college graduates (17%) followed by income of $50,000 and above (21%)

No leisure time physical activity decreased with increasing education (51% for less than high school to 17% for college graduates) and with increasing income (37% for household income below $25,000 to 21% for household income of $50,000 and above).

Table 10. Physical Inactivity Prevalence, 2007 & 2011

No Leisure Time Physical Activity in the Past Month Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2011
		CI		CI	Point Change^	Sig	
All Adults	24%	21% – 27%	28%	25% – 31%	4%		26%
Gender							
Male	19%	15% – 24%	25%	21% – 28%	6%		24%
Female	29%	25% – 33%	31%	28% – 35%	2%		28%
Age							
18-29	18%	11% – 27%	24%	19% – 29%	6%		20%
30-44	22%	17% – 28%	28%	23% – 33%	6%		23%
45-64	24%	20% – 28%	28%	24% – 32%	4%		27%
65+	35%	29% – 41%	33%	27% – 39%	-2%		35%
Education							
<High School	40%	28% – 53%	51%	40% – 61%	11%		40%
High School	28%	24% – 33%	36%	31% – 40%	8%		32%
Some College	22%	17% – 29%	29%	24% – 33%	7%		23%
College Graduate	15%	11% – 21%	17%	13% – 21%	2%		13%
Income							
<$25,000	39%	32% – 47%	37%	32% – 42%	-2%		NA
$25,000-$49,999	22%	17% – 27%	24%	19% – 29%	2%		27%
$50,000+	14%	10% – 19%	21%	16% – 25%	7%		NA
Race/Ethnicity							
White, non-Hispanic	24%	21% – 27%	27%	25% – 30%	3%		26%
Black, non-Hispanic	NA		29%	16% – 41%			27%
Hispanic	NA		48%	30% – 66%			34%

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Leisure Time Physical Activities Based on the BRFSS, for those individuals who reported some leisure time physical activity in the past month, walking (53%) was the most prevalent followed by running (10%), gardening (5%), weight lifting (4%), bicycling (3%), aerobics video or class

(3%), elliptical/EFX machine (3%), and bicycling machine (2%). Participation in other activities ranged from below 1% to 1% of the survey population.

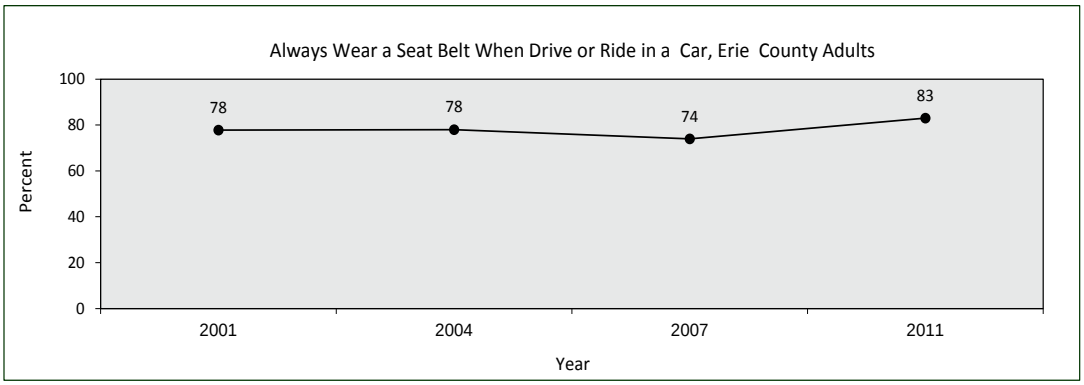
Exercise Per Week In 2011, for all demographic groups except Hispanic adults, individuals who participated in leisure time physical activity exercised an average of four times per week. Hispanic adults reported exercising 5 times per week.

Muscle Strength Activities Per Week In 2011, for all demographic groups, individuals who participated in leisure time physical activity spent an average of one time per week participating in muscle strengthening activities.

Seat Belt Use

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who always wear a seat belt when they drive or ride in a car significantly increased to 83% in 2011 compared with 74% in 2007 (Figure 10). This was higher than PA at 77% (2011), but lower than the U.S. at 85% (2010) and the Healthy People 2020 Goal of 92.4%.

Figure 10. Seat Best Use Prevalence, 2001-2011



From 2007 to 2011, all demographic groups, with the exception of those with some college education, reported an increase in seat belt use (Table 11). Significant increases were seen for males, females, age 45-64, age 65 and above, those with a high school education, college graduates, those with household income of $50,000 and above, and non-Hispanic White adults. The highest percentage point increases in seat belt use were seen for high school graduates (15%) and those with a household income of $50,000 and above (15%).

Table 11. Seat Belt Use Prevalence, 2007 & 2011

Always Wear a Seat Belt When Drive or Ride In a Car Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA 2011
		CI		CI	Point Change^	Sig	
All Adults	74%	70% – 77%	83%	80% – 85%	9%	***	77%
Gender							
Male	67%	62% – 73%	78%	75% – 82%	11%	***	72%
Female	80%	75% – 83%	87%	84% – 89%	7%	***	82%
Age							
18-29	64%	52% – 74%	77%	72% – 82%	13%		68%
30-44	73%	66% – 79%	79%	74% – 84%	6%		77%
45-64	77%	72% – 81%	85%	82% – 89%	8%	***	79%
65+	79%	73% – 84%	89%	85% – 93%	10%	***	83%
Education							
<High School	NSR		93%	87% – 100%			66%
High School	73%	67% – 78%	88%	85% – 91%	15%	***	75%
Some College	76%	69% – 82%	75%	71% – 80%	-1%		77%
College Graduate	81%	75% – 86%	90%	86% – 93%	9%	***	86%
Income							
<$25,000	68%	60% – 75%	73%	69% – 78%	5%		NA
$25,000-$49,999	77%	70% – 82%	79%	75% – 84%	2%		75%
$50,000+	77%	72% – 82%	92%	90% – 95%	15%	***	NA
Race/Ethnicity							
White, non-Hispanic	74%	71% – 77%	83%	81% – 85%	9%	***	78%
Black, non-Hispanic	NA		65%	52% – 79%			74%
Hispanic	NA		79%	65% – 94%			78%

Note: *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

In 2011, significant differences in prevalence were seen within gender, income, and education groups. Significantly higher percentages were seen for females and those with household income of $50,000 and above while significantly lower percentages were seen for those with some college education.

Seat belt use was highest for those with less than a high school education (93%), those with household income of $50,000 and above (92%), and college graduates (90%). The lowest overall percentage of seat belt use was seen for non-Hispanic Black adults at 65%.

Seat belt use increased with increasing age, education, and income.

Sleep

The health community has begun to recognize the importance of adequate sleep in maintaining good health and preventing chronic disease. Inadequate sleep has been associated with diabetes, cardiovascular disease, obesity, and depression and is a cause of motor vehicle and machinery-related crashes. The CDC recommends 7 to 9 hours of sleep for adults.

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who slept less than 7 hours in a 24 hour period was 37% in 2011 (Table 12). This was lower than PA at 39% (2010).

Table 12. Inadequate Sleep Prevalence, 2011

Slept Less Than 7 Hours in a 24 Hour Period Erie County Adult BRFSS, 2011				
	2007	2011		PA 2010
			CI	
All Adults	NA	37%	34% – 39%	39%
Gender				
Male	NA	37%	33% – 41%	36%
Female	NA	37%	33% – 41%	42%
Age				
18-29	NA	38%	32% – 44%	47%
30-44	NA	44%	38% – 50%	48%
45-64	NA	34%	30% – 39%	39%
65+	NA	30%	24% – 37%	20%
Education				
<High School	NA	41%	30% – 52%	37%
High School	NA	41%	36% – 46%	37%
Some College	NA	37%	32% – 42%	44%
College Graduate	NA	35%	30% – 40%	39%
Income				
<$25,000	NA	38%	32% – 43%	NA
$25,000-$49,999	NA	33%	27% – 38%	37%
$50,000+	NA	42%	37% – 47%	NA
Race/Ethnicity				
White, non-Hispanic	NA	37%	34% – 40%	39%
Black, non-Hispanic	NA	27%	14% – 39%	43%
Hispanic	NA	32%	15% – 49%	34%

Note: CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available

In 2011, differences in prevalence were seen within age groups, education groups, and income groups. Comparatively higher percentages were seen for age 30-44, those with less than a high school education, high school graduates, and those with household income of $50,000 and above.

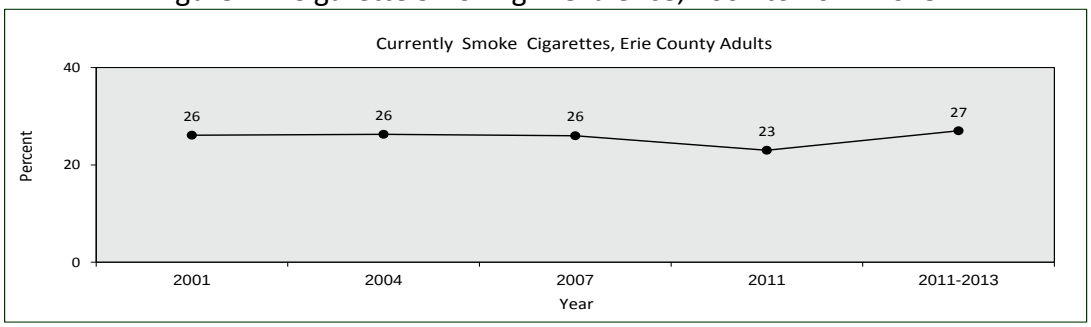
The highest prevalence of inadequate sleep was seen for age 30-44 (44%) followed by those with household income of $50,000 and above (42%), those with less than a high school education (41%), and high school graduates (41%). The lowest overall percentage of inadequate sleep was seen for non-Hispanic Black adults at 27% followed by age 65 and above (30%).

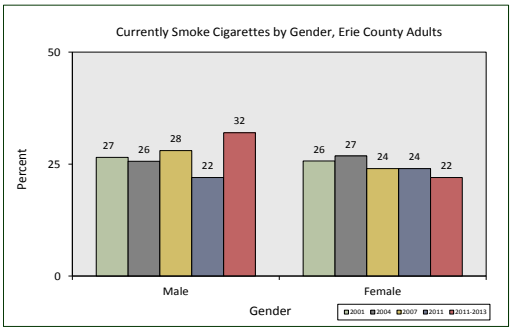
Tobacco Use - Adults

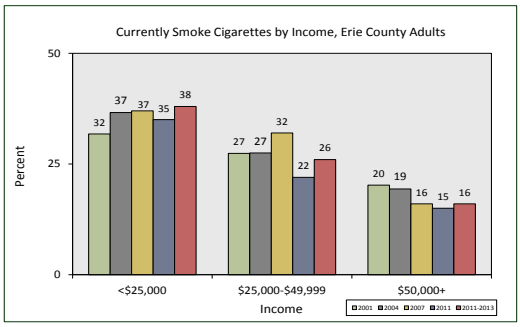
Tobacco use causes disease, disability, and death. Cigarette smoking is associated with lung cancer and cancers of the lip, oral cavity, pharynx, esophagus, pancreas, larynx, uterine cervix, urinary bladder, and kidney. Cancer rates associated with cigarette smoking are highest among African-American men. Cigarette smoking causes coronary heart disease and abdominal aortic aneurysms, doubles the risk of stroke, and increases the risk of developing peripheral vascular disease. Approximately 90% of all deaths from chronic obstructive lung diseases are attributable to cigarette smoking. Pregnant women who smoke have a greater risk of pregnancy complications, premature birth, and low birth weight infants. Infants of mothers who smoked during pregnancy have a greater risk of sudden infant death syndrome (SIDS).

Current Smoker Based on the BRFSS, the percentage of Erie County adults aged 18 and above who currently smoke increased to 27% in 2011-2013 compared to 23% in 2011 (Figure 11). This is significantly higher than PA at 22% (2011-2013), the U.S. at 19% (2013), and the Healthy People 2020 Goal of 12.0%.

Figure 11. Cigarette Smoking Prevalence, 2001 to 2011-2013







From 2011 to 2011-2013, the prevalence of current smoking significantly increased for males and increased for all demographic groups with the exception of college graduates (Table 13). The prevalence of smoking for males and those age 18-44 in Erie County is significantly higher than it is for the state.

Table 13. Current Smoking Prevalence, 2011 & 2011-2013

Current Smokers Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	23%	21% – 25%	27%	24% – 31%	4%		22%
Gender							
Male	22%	19% – 26%	32%	27% – 38%	10%	***	23%
Female	24%	20% – 27%	22%	18% – 27%	-2%		20%
Age							
18-29	27%	22% – 32%	NA				27%
30-44	28%	23% – 33%	NA				28%
18-44	NA		35%	29% – 42%			NA
45-64	23%	19% – 27%	26%	21% – 32%	3%		22%
65+	10%	6% – 14%	12%	8% – 18%	2%		9%
Education							
<High School	42%	31% – 52%	NA				37%
High School	30%	26% – 35%	NA				25%
<=High School	NA		35%	29% – 41%			NA
Some College	23%	19% – 27%	26%	20% – 33%	3%		22%
College Graduate	13%	9% – 16%	10%	7% – 15%	-3%		9%
Income							
<$25,000	35%	30% – 40%	38%	31% – 45%	3%		NA
$25,000-$49,999	22%	17% – 27%	26%	20% – 33%	4%		23%
$50,000+	15%	11% – 19%	16%	12% – 22%	1%		NA
Race/Ethnicity							
White, non-Hispanic	22%	19% – 24%	23%	20% – 27%	1%		20%
Black, non-Hispanic	35%	21% – 48%	NA				28%
Hispanic	31%	14% – 48%	NA				26%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

In 2011-2013, differences in prevalence were seen within all demographic groups. Current smoking was significantly higher for males compared with females and significantly lower for age 65 and above and college graduates. Current smoking was also significantly higher for less than $25,000 compared with income of $50,000 and above.

The highest prevalence of current smoking was seen among those with household income less than $25,000 (38%), age 18-44 (35%), and those with less than or equal to a high school education (35%). The lowest percentage was 10% for college graduates, 12% for age 65 and above, and 16% for income of $50,000 and above.

Current smoking decreased with increasing age, increasing education, and increasing income.

Among all demographic groups, the highest prevalence of cigarette smoking was seen for those with income below $25,000 (38%).

Ever Smoked Based on the BRFSS, the percentage of Erie County adults aged 18 and above who smoked at least 100 cigarettes in their lifetime (ever smoked) increased to 53% in 2011-2013 compared to 50% in 2011 and 52% in 2007. This is higher than PA at 47% (2011-2013) and the U.S. at 43% (2010).

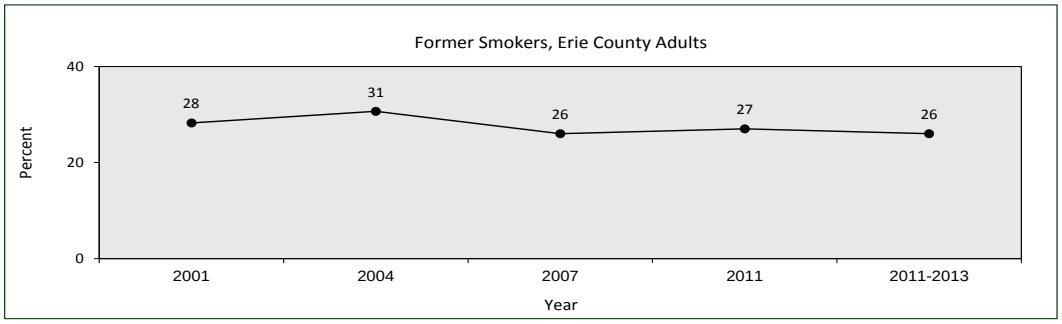
From 2011 to 2011-2013, large increases in the prevalence of ever smoked were seen for males (52% to 60%, respectively), income of $25,000-$49,999 (49% to 57%, respectively), income less than $25,000 (58% to 65%, respectively), and some college (47% to 51%, respectively). Decreases were seen for females (48% to 46%, respectively), age 65 and above (59% to 55%, respectively), income of $50,000 and above (44% to 40%, respectively), and college graduates (37% to 34%, respectively).

In 2011-2013, differences in prevalence were seen within gender, education, and income groups. Percentages were significantly higher for males (60%) compared with females (46%), significantly higher for less than a high school education compared with college graduates, and significantly lower for income of $50,000 and above.

The prevalence of ever smoking increased with decreasing education, income, and age.

Former Smoker Based on the BRFSS, the percentage of Erie County adults aged 18 and above who are former smokers decreased to 26% in 2011-2013 compared to 27% in 2011 (Figure 12). This mirrors PA at 26% (2011-2013) and the U.S. at 25% (2010).

Figure 12. Former Smoker Prevalence, 2001 to 2011-2013



From 2011 to 2011-2013, the prevalence of former smokers among demographic groups decreased or remained unchanged for all groups with the exception of those with some college and those groups with income below $50,000 (Table 14).

Table 14. Former Smoker Prevalence, 2011 & 2011-2013

Former Smoker Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	27%	25% – 30%	26%	23% – 29%	-1%		26%
Gender							
Male	30%	26% – 34%	28%	24% – 33%	-2%		29%
Female	25%	21% – 28%	24%	20% – 28%	-1%		22%
Age							
18-29	12%	8% – 16%	NA				9%
30-44	18%	13% – 22%	NA				20%
18-44	NA		15%	11% – 20%			NA
45-64	32%	28% – 37%	31%	27% – 36%	-1%		28%
65+	48%	42% – 55%	42%	36% – 49%	-6%		42%
Education							
<High School	38%	27% – 48%	NA				26%
High School	34%	30% – 39%	NA				26%
<=High School	NA		27%	23% – 32%			NA
Some College	24%	19% – 28%	25%	20% – 31%	1%		26%
College Graduate	24%	20% – 29%	24%	19% – 29%	0%		24%
Income							
<$25,000	23%	18% – 27%	27%	22% – 33%	4%		NA
$25,000-$49,999	28%	23% – 33%	31%	25% – 38%	3%		28%
$50,000+	29%	24% – 34%	24%	19% – 29%	-5%		NA
Race/Ethnicity							
White, non-Hispanic	28%	25% – 31%	28%	25% – 31%	0%		27%
Black, non-Hispanic	20%	9% – 32%	NA				17%
Hispanic	21%	6% – 35%	NA				20%

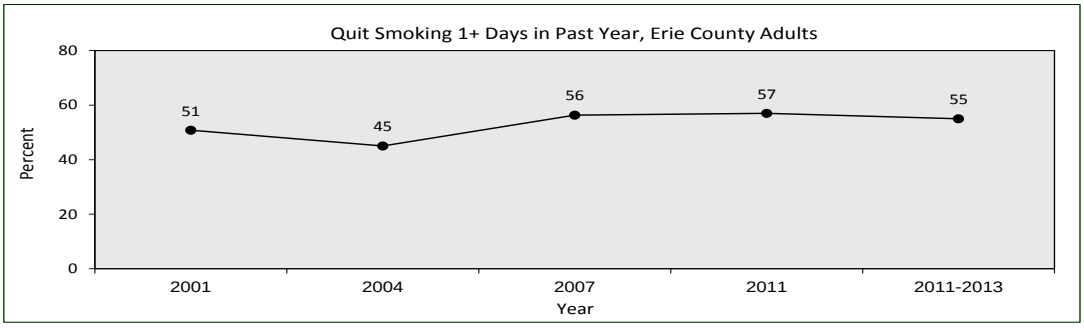
Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

In 2011-2013, differences in prevalence were seen within gender, age, and income groups. The percentage of former smokers was significantly lower for age 18-44 compared with other age groups. A higher percentages of former smokers were seen for males, age 65 and above, those with less than or equal to a high school education, and those with income of $25,000-$49,999.

The percentage of former smokers increased with increasing age and decreasing education. The highest prevalence of former smokers was seen for those aged 65 and above (42%) followed by age 45-64 (31%) and income of $25,000-$49,999 (31%). The lowest was 15% for age group 18-44.

Quit Smoking at Least 1 Day in Past Year Based on the BRFSS, the percentage of Erie County adults aged 18 and above who quit smoking at least 1 day in the past year decreased to 55% in 2011-2013 compared to 57% in 2011 and 56% in 2007 (Figure 13). This is higher than PA at 54% (2011-2013).

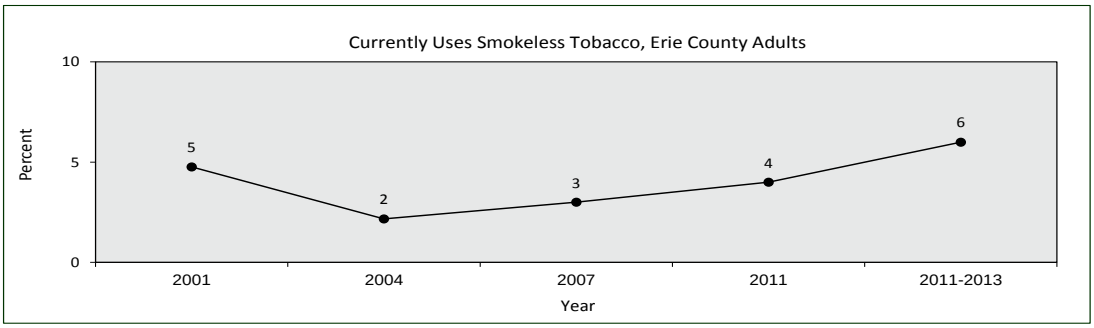
Figure 13. Smoking Cessation Prevalence, 2001 to 2011-2013



Data for smoking cessation prevalence among Erie County residents for 2011-2013 is limited. This restricts comparisons with 2011 statistics. The prevalence of smokers who quit smoking at least 1 day in the past year decreased for males (62% to 61%, respectively) and females (52% to 47%, respectively) but increased for age 45-64 (52% to 55%, respectively) and income below $25,000 (54% to 55%, respectively).

Smokeless Tobacco Based on the BRFSS, the percentage of Erie County adults aged 18 and above who currently use smokeless tobacco such as chewing tobacco, snuff, or snus increased to 6% in 2011-2013 compared to 4% in 2011, 3% in 2007, 2% in 2004, and 5% in 2001 (Figure 14). This is higher than PA at 4% (2011-2013).

Figure 14. Smokeless Tobacco Use Prevalence, 2001 to 2011-2013



From 2011 to 2011-2013, the prevalence of smokeless tobacco use increased for males, age 45-64, some college, college graduates, income of $25,000-$49,999, income of $50,000 and above, and non-Hispanic White adults (Table 14). Smokeless tobacco use for those with some college in Erie County is significantly higher than it is for the state.

In 2011-2013, differences in prevalence were seen within gender, age, education, and income groups. Percentages were significantly higher for males compared to females. Higher percentages were also seen for age 18-44, some college, and income of $50,000 and above.

The percentage of smokeless tobacco use increased with decreasing age and increasing income. The highest prevalence was seen for males (11%) followed by age 18-44 (9%), some college (8%), and income of $50,000 and above (8%). The lowest was 0% for females followed by 2% for age 65 and above.

Table 14. Smokeless Tobacco Use Prevalence, 2011 & 2011-2013

Currently Use Smokeless Tobacco Such as Chewing Tobacco, Snuff, or Snus Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	4%	3% – 5%	6%	4% – 8%	2%		4%
Gender							
Male	8%	6% – 11%	11%	8% – 14%	3%		8%
Female	0%		0%	0% – 2%	0%		1%
Age							
18-29	7%	4% – 10%	NA				7%
30-44	4%	2% – 7%	NA				5%
18-44	NA		9%	6% – 13%			NA
45-64	3%	1% – 5%	4%	2% – 7%	1%		3%
65+	3%	1% – 5%	2%	1% – 5%	-1%		2%
Education							
<High School	0%		NA				7%
High School	6%	4% – 8%	NA				5%
<=High School	NA		4%	3% – 7%			NA
Some College	6%	3% – 8%	8%	5% – 14%	2%		4%
College Graduate	2%	0% – 3%	6%	3% – 10%	4%		2%
Income							
<$25,000	4%	2% – 6%	4%	2% – 7%	0%		NA
$25,000-$49,999	3%	1% – 5%	6%	3% – 10%	3%		5%
$50,000+	5%	3% – 8%	8%	5% – 13%	3%		NA
Race/Ethnicity							
White, non-Hispanic	4%	3% – 5%	6%	4% – 8%	2%		5%
Black, non-Hispanic	0%	NCI	NA				2%
Hispanic	7%	0% – 16%	NA				4%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Secondhand Smoke Based on the BRFSS, the percentage of Erie County adults age 18 and above who never allow smoking in their house significantly decreased to 43% in 2011 compared with 68% in 2007 (Table 16). Note that the wording of this question changed in the 2011 BRFSS survey. In 2007, the question stated "Which statement best describes the rules about smoking inside your home? 1) Smoking is not allowed anywhere inside the house". In 2011, the

question stated “Not counting decks, porches, or garages, inside your home, smoking is … 1) Never allowed”.

From 2007 to 2011, the percentage of households that never allowed smoking in the house significantly decreased for all demographic groups with the exception of age 18-29 and those with household income of $50,000 and above.

Table 16. Secondhand Smoke in Homes, 2007 & 2011

Smoking is Never Allowed in the House* Erie County Adult BRFSS, 2007 & 2011							
	2007		2011				PA
		CI		CI	Point Change^	Sig	
All Adults	68%	64% – 71%	43%	37% – 49%	-25%	***	NA
Gender							
Male	68%	62% – 73%	46%	37% – 55%	-22%	***	NA
Female	67%	63% – 71%	39%	31% – 47%	-28%	***	NA
Age							
18-29	65%	53% – 75%	54%	43% – 65%	-11%		
30-44	67%	60% – 74%	47%	36% – 59%	-20%	***	NA
45-64	69%	64% – 73%	31%	21% – 40%	-38%	***	NA
65+	69%	62% – 74%	39%	19% – 59%	-30%	***	NA
Education							
<High School	NSR		41%	23% – 59%			
High School	61%	55% – 66%	41%	32% – 51%	-20%	***	NA
Some College	67%	59% – 74%	42%	31% – 52%	-25%	***	NA
College Graduate	82%	77% – 86%	57%	42% – 71%	-25%	***	NA
Income							
<$25,000	60%	52% – 67%	32%	24% – 41%	-28%	***	NA
$25,000-$49,999	60%	54% – 67%	37%	26% – 49%	-23%	***	NA
$50,000+	81%	76% – 85%	73%	61% – 86%	-8%		NA
Race/Ethnicity							
White, non-Hispanic	68%	64% – 71%	43%	36% – 49%	-25%	***	NA
Black, non-Hispanic	NA		NSR				NA
Hispanic	NA		NSR				NA

Note: *The wording of this question changed in 2011; *** indicates significant difference between 2007 and 2011; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Tobacco Use - Youth

Since 2005, Erie County has participated in the biannual Pennsylvania Youth Survey (PAYS) sponsored by the Pennsylvania Commission on Crime and Delinquency (PCCD). PAYS surveys 6th, 8th, 10th, and 12th grade students to determine youth behaviors and attitudes. In 2013, 6,410 valid surveys were completed.

Tobacco is the second most used drug among students in both Erie County and Pennsylvania. Four tobacco behaviors were evaluated: lifetime cigarette use, past-30-day cigarette use, lifetime smokeless tobacco use, and past-30-day smokeless tobacco use.

Lifetime Cigarette Use From 2011 to 2013, the overall lifetime use of cigarettes among Erie County students decreased (Table 17). In 2013, 18.8% (24.6% in 2011) of Erie County students reported that they had smoked a cigarette at least once in their lifetime compared with 17.6% for PA. Usage ranged from a low of 4.1% in 6th grade to a high of 36.1% in 12th grade. When compared to national rates (14.8% for 8th grade; 25.7% for 10th grade; 38.1% for 12th grade), Erie County rates were lower for 8th and 12th grades but higher for 10th grade. From 2011 to 2013, lifetime cigarette use prevalence decreased for all grades.

From 2009 to 2013, the overall prevalence of lifetime cigarette use steadily decreased from 26.2% in 2009 to 18.8% in 2013.

Table 17. Youth Tobacco Use Prevalence, 2011 & 2013

Tobacco Use Among Erie County Middle and High School Students Erie County 2011 & 2013 PAYS												
	Cigarette Use						Smokeless Tobacco Use					
	*Lifetime Use**			*Past-30-Day Use***			*Lifetime Use**			*Past-30-Day Use***		
	Erie County		PA	Erie County		PA	Erie County		PA	Erie County		PA
Grade	2011	2013	2013	2011	2013	2013	2011	2013	2013	2011	2013	2013
6th	6.6%	4.1%	2.4%	0.8%	1.3%	0.5%	1.9%	1.5%	1.0%	0.6%	0.7%	0.3%
8th	24.0%	12.2%	10.2%	7.6%	4.4%	3.9%	7.5%	5.8%	4.6%	3.6%	2.6%	1.9%
10th	34.5%	26.8%	21.2%	15.7%	12.6%	9.9%	17.1%	11.5%	10.9%	9.4%	5.5%	5.8%
12th	40.8%	36.1%	35.2%	15.5%	17.4%	17.0%	19.5%	20.0%	18.9%	10.0%	9.3%	10.3%
Overall	24.6%	18.8%	17.6%	8.9%	8.4%	8.0%	10.3%	9.1%	9.0%	5.2%	4.2%	4.7%

Note: *Indicates that the student ever used cigarettes or smokeless tobacco; **Indicates that the student used cigarettes or smokeless tobacco within the past 30 days; Smokeless tobacco includes chewing tobacco, snuff, and snus

Past-30-Day Cigarette Use From 2011 to 2013, the overall 30 day use of cigarettes among Erie County students decreased. In 2013, 8.4% (8.9% in 2011) of Erie County students reported that they had smoked a cigarette within the past 30 days compared with 8.0% for PA. Usage ranged from a low of 1.3% in 6th grade to a high of 17.4% in 12th grade. When compared to national rates (4.5% for 8th grade; 9.1% for 10th grade; 16.3% for 12th grade), Erie County rates were similar for 8th grade and higher for 10th and 12th grades. From 2011 to 2013, past-30-day cigarette use prevalence in Erie County decreased for 8th and 10th grades and increased for 6th and 12th grades.

From 2009 to 2013, overall prevalence of past 30-day-cigarette use has decreased from 10.2% in 2009 to 8.4% in 2013.

Lifetime Smokeless Tobacco Use From 2011 to 2013, the overall lifetime use of smokeless tobacco among Erie County students decreased (Table 17). In 2013, 9.1% (10.3% in 2011) of Erie County students reported that they had used smokeless tobacco at least once in their lifetime compared with 9.0% for PA. Usage ranged from a low of 1.5% in 6th grade to a high of 20.0% in 12th grade. When compared to national rates (7.9% for 8th grade; 14.0% for 10th grade; 17.2% for 12th grade), Erie County rates were lower for 8th and 10th grades but higher for 12th grade. From 2011 to 2013, lifetime smokeless tobacco use prevalence decreased for 6th, 8th, and 10th grades and increased for 12th grade.

From 2009 to 2013, the overall prevalence of lifetime smokeless tobacco use steadily decreased from 13.1% in 2009 to 9.1% in 2013.

Past-30-Day Smokeless Tobacco Use From 2011 to 2013, the overall past-30-day use of smokeless tobacco among Erie County students decreased (Table 17). In 2013, 4.2% (5.2% in 2011) of Erie County students reported that they had used smokeless tobacco at least once in the past-30-days compared with 4.7% for PA. Usage ranged from a low of 0.7% in 6th grade to a high of 9.3% in 12th grade. When compared to national rates (2.8% for 8th grade; 6.4% for 10th grade; 8.1% for 12th grade), Erie County rates were lower for 8th and 10th grades but higher for 12th grade. From 2011 to 2013, the prevalence of smokeless tobacco use within the past 30 days decreased for all grades.

From 2009 to 2013, the overall prevalence of past-30-day smokeless tobacco use steadily decreased from 7.0% in 2009 to 4.2% in 2013.

Weight Control

Body Mass Index (BMI) is a calculated variable based on an individual's height and weight and is used as an indicator to categorize weight status. A BMI below 18.5 is labeled as underweight, 18.5–24.9 as normal weight, 25.0–29.9 as overweight, and 30.0 and above as obese. A BMI of 25 or above is labeled as overweight including obese.

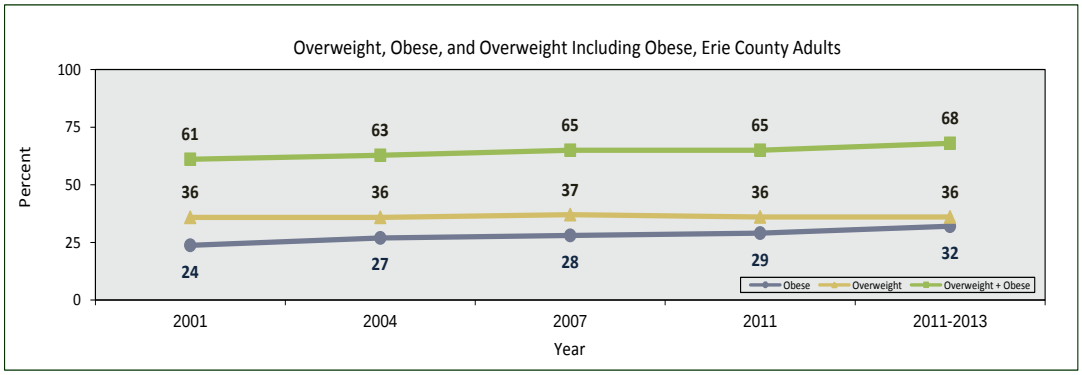
Overweight and obesity are known risk factors for type 2 diabetes, heart disease, stroke, hypertension, osteoarthritis, sleep apnea, respiratory problems, and some cancers. Obesity is also associated with high blood cholesterol, high levels of triglycerides, pregnancy complications, liver and gallbladder disease, menstrual irregularities, infertility, stress incontinence, and increased surgical risk.

The CDC estimates that 42% of Americans will be obese and 11% severely obese by 2030 with an estimated associated health care cost of $550 billion.

In the BRFSS survey, respondents are asked to report their height and weight. BMI is calculated using this information.

From 2001 to 2011-2013, the percentage of Erie County residents aged 18 and above who were overweight has remained relatively stable (Figure 15). However, during this same period, the prevalence of obesity has increased by 8 percentage points (24% to 32%, respectively) and this is reflected in the 7 percentage point increase for overweight including obese (61% to 68%, respectively).

Figure 15. Overweight, Obese, & Overweight Including Obese Prevalence, 2001 to 2011-2013



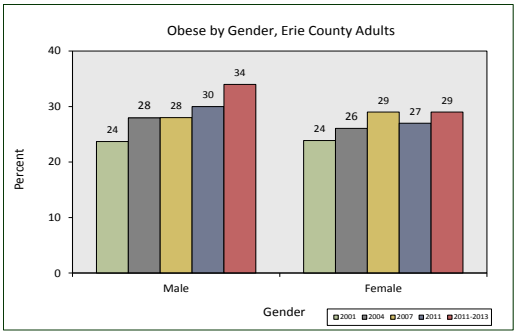
Obese Based on the BRFSS, the percentage of Erie County adults aged 18 and above who were obese (BMI ≥30) increased to 32% in 2011-2013 compared to 29% in 2011, 28% in 2007, 27% in 2004, and 24% in 2001 (Figure 15). This is higher than PA at 29% (2011-2013), the U.S. at 28% (2011), and the Healthy People 2020 Goal of 30.6% of those aged 20 and above.

From 2011 to 2011-2013, the prevalence of obesity increased for all demographic groups with the exception of those with some college education and household income of $50,000 and above (Table 18).

In 2011-2013, differences in prevalence were seen within all demographic groups. Obesity was higher for males, age 45-64, those with less than or equal to a high school education, and those with income less than $25,000 (Figure 16).

The highest prevalence of obesity was seen among those with household income less than $25,000 (39%) and age 45-64 (36%). The lowest percentage was 25% for both college graduates and those with income of $50,000 and above. The prevalence of obesity decreased with increasing education and income.

Figure 16. Obese Prevalence, 2001 to 2011-2013



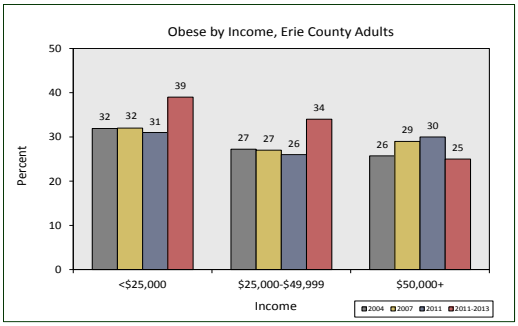


Table 18. Obese Prevalence, 2011 & 2011-2013

Obese (BMI ≥30) Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	29%	26% – 31%	32%	29% – 36%	3%		29%
Gender							
Male	30%	26% – 34%	34%	29% – 40%	4%		29%
Female	27%	23% – 31%	29%	25% – 35%	2%		29%
Age							
18-29	22%	17% – 27%	NA				19%
30-44	32%	27% – 38%	NA				31%
18-44	NA		28%	23% – 35%			NA
45-64	31%	27% – 36%	36%	31% – 42%	5%		34%
65+	28%	22% – 34%	34%	27% – 41%	6%		29%
Education							
<High School	25%	15% – 34%	NA				32%
High School	32%	27% – 37%	NA				32%
<=High School	NA		35%	30% – 41%			NA
Some College	33%	28% – 38%	32%	25% – 39%	-1%		31%
College Graduate	24%	19% – 29%	25%	19% – 31%	1%		21%
Income							
<$25,000	31%	26% – 36%	39%	32% – 46%	8%		NA
$25,000-$49,999	26%	21% – 31%	34%	27% – 42%	8%		32%
$50,000+	30%	25% – 34%	25%	20% – 31%	-5%		NA
Race/Ethnicity							
White, non-Hispanic	28%	25% – 31%	30%	27% – 34%	2%		29%
Black, non-Hispanic	38%	24% – 51%	NA				35%
Hispanic	35%	17% – 52%	NA				35%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Overweight Based on the BRFSS, the percentage of Erie County adults aged 18 and above who were overweight (BMI = 25.0-29.9) remained at 36% in 2011-2013 compared to 2011 (Figure 15). This is the same as PA at 36% (2011-2013) and the same as the U.S. at 36% (2010).

In 2011-2013, differences in prevalence were seen within gender and income groups. Overweight was higher for males (41%) compared to females (31%) and higher for those with income of $50,000 and above (39%) compared to other income groups.

The highest prevalence of overweight was seen among males (41%) followed by income of $50,000 and above (39%), and age 45-64 (38%). The lowest percentage was 31% for females.

Overweight Including Obese Based on the BRFSS, the percentage of Erie County adults aged 18 and above who were overweight including obese (BMI ≥25) increased to 68% in 2011-2013 compared with 65% in 2011 and 2007, 63% in 2004, and 61% in 2001 (Figure 15). This is higher than PA at 65% (2011-2013) and the U.S. at 65% (2013).

From 2011 to 2011-2013, the prevalence of overweight including obese increased for all demographic groups with the exception of those aged 65 and above and those with household income of $50,000 and above (Table 19).

Table 19. Overweight Including Obese Prevalence, 2011 & 2011-2013

Overweight Including Obese (BMI ≥25)
Erie County Adult BRFSS, 2011 & 2011-2013

	2011	CI	2011-2013	CI	Point Change^	Sig	PA 2011-13
All Adults	65%	62% – 68%	68%	64% – 71%	3%		65%
Gender							
Male	71%	67% – 74%	75%	69% – 79%	5%		71%
Female	59%	55% – 63%	60%	55% – 65%	1%		58%
Age							
18-29	53%	47% – 59%	NA				48%
30-44	62%	56% – 67%	NA				66%
18-44	NA		62%	55% – 68%			NA
45-64	71%	67% – 75%	74%	69% – 79%	3%		71%
65+	72%	66% – 78%	71%	65% – 77%	-1%		69%
Education							
<High School	67%	57% – 77%	NA				66%
High School	73%	68% – 77%	NA				68%
<=High School	NA		72%	66% – 77%			NA
Some College	66%	61% – 71%	66%	58% – 72%	0%		64%
College Graduate	62%	56% – 67%	62%	55% – 68%	0%		59%
Income							
<$25,000	61%	55% – 66%	75%	69% – 81%	14%		NA
$25,000-$49,999	57%	52% – 63%	68%	61% – 75%	11%		69%
$50,000+	74%	70% – 79%	64%	57% – 70%	-10%		NA
Race/Ethnicity							
White, non-Hispanic	65%	62% – 68%	67%	63% – 70%	2%		64%
Black, non-Hispanic	59%	45% – 73%	NA				72%
Hispanic	66%	48% – 83%	NA				70%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

In 2011-2013, differences in prevalence were seen within all demographic groups. Overweight including obese was significantly higher for males compared to females, significantly higher for age 45-64 compared to age 18-44, higher for those with less than or equal to a high school education, and higher for those with income less than $25,000.

The highest prevalence of overweight including obese was seen among males (75%) and those with household income less than $25,000 (75%) followed age 45-64 (74%) and those with less than or equal to a high school education (72%). The lowest percentage was 60% for females. The prevalence of overweight including obese decreased with increasing education and income.

Children and Youth BMI-for-Age

The Pennsylvania Department of Health (PA DOH) has reported growth screens/BMI-for-age-percentiles for school children in grades K-6 since the 2006-07 school year and in grades K-6 and 7-12 since the 2007-08 school year. The growth screens/BMI-for-age-percentiles are as follows: <5th percentile, at risk for underweight; 5th to <85th percentile, healthy weight; 85th to 95th percentile, overweight; and ≥95th percentile, obese. A BMI below 18.5 is labeled as underweight, 18.5–24.9 as normal weight, 25.0–29.9 as overweight, and 30.0 and above as obese.

Grades K-6 In 2012-2013, 23,972 students in grades K-6 were screened in Erie County. There was a marked change in BMI-for-age percentiles reported for this school year compared with previous years. The percentile rank for obese students decreased to 15.7% (16.7% in 2011-2012; 16.9% in 2010-2011), the rank for overweight students increased to 38.1% (16.2% in 2011-2012; 15.2% in 2010-2011), the rank for healthy weight students decreased to 43.7% (64.1% in 2011-2012; 65.5% in 2010-2011), and the rank for those at risk for underweight remained relatively stable at 2.5% (3.0% in 2011-2012; 2.4% in 2010-2011). In PA, for the 2012-2013 school year, 3.3% of students in grades K-6 were underweight, 58.4% a healthy weight, 22.0% overweight, and 16.4% obese (Table 20; Figure 17).

Grades 7-12 In 2012-2013, 19,275 students in grades 7-12 were screened in Erie County. There was a marked change in BMI-for-age percentiles reported for this school year compared with previous years. The percentile rank for obese students decreased to 14.7% (19.9% in 2011-2012; 18.2% in 2010-2011), the rank for overweight students increased to 32.9% (18.6% in 2011-2012; 16.2% in 2010-2011), the rank for healthy weight students decreased to 50.0% (60.1% in 2011-2012; 63.6% in 2010-2011), and the rank for those at risk for underweight remained relatively stable at 2.3% (2.5% in 2011-2012; 2.0% in 2010-2011). In PA, for the 2012-2013 school year, 2.9% of students in grades 7-12 were underweight, 57.1% a healthy weight, 22.1% overweight, and 18.0% obese (Table 20; Figure 18).

For the 2012-2013 school year, overall growth screens/BMI-for-age percentiles for Erie County students in grades K-12 were 2.4% (3.1% for PA) at risk for underweight, 46.5% (57.8% for PA) healthy weight, 35.8% (22.0% for PA) overweight, and 15.3% (17.1% for PA) obese.

For the 2011-2012 school year, overall growth screens/BMI-for-age percentiles for Erie County students in grades K-12 were 2.7% (2.5% for PA) at risk for underweight, 62.3% (64.4% for PA) healthy weight, 17.3% (16.1% for PA) overweight, and 17.7% (17.0% for PA) obese.

From 2011-2012 to 2012-2013, Erie County grades K-12 saw a larger reduction in healthy weight students compared with PA (62.3% to 46.5% for Erie; 64.4% to 57.8% for PA) , a larger increase in overweight students compared with PA (17.3% to 35.8% for Erie; 16.1% to 22.0% for PA), and a larger reduction in obese students compared to no change for PA (17.7% to 15.3% for Erie; 17.0% to 17.1% for PA).

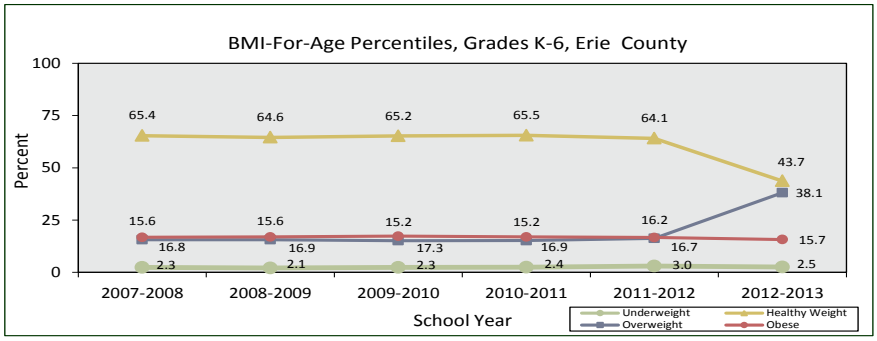
Table 20. BMI-For-Age-Percentiles, Grades K-12, 2012-2013 School Year

Growth Screens/BMI-For-Age Percentiles, Grades K-6 and 7-12
Erie County, 2012-2013 School Year

	# Students Screened	Underweight Risk		Healthy Weight		Overweight		Obese	
		# Students	Percent	# Students	Percent	# Students	Percent	# Students	Percent
Erie County									
Grades K-6	23,972	603	2.5%	10,484	43.7%	9,126	38.1%	3,759	15.7%
Grades 7-12	19,275	447	2.3%	9,646	50.0%	6,340	32.9%	2,842	14.7%
Total	43,247	1,050	2.4%	20,130	46.5%	15,466	35.8%	6,601	15.3%
Pennsylvania									
Grades K-6	932,829	30,465	3.3%	544,496	58.4%	204,830	22.0%	153,038	16.4%
Grades 7-12	788,803	22,506	2.9%	450,634	57.1%	173,996	22.1%	141,667	18.0%
Total	1,721,632	52,971	3.1%	995,130	57.8%	378,826	22.0%	294,705	17.1%

Note: Includes students in both public and private/non-public schools combined, served by the school district; <5th percentile = at risk for underweight; 5th to <85th percentile = healthy weight; 85th to 95th percentile = overweight; ≥95th percentile = obese

Figure 17. BMI-For-Age Percentiles, K-6, Erie County & PA



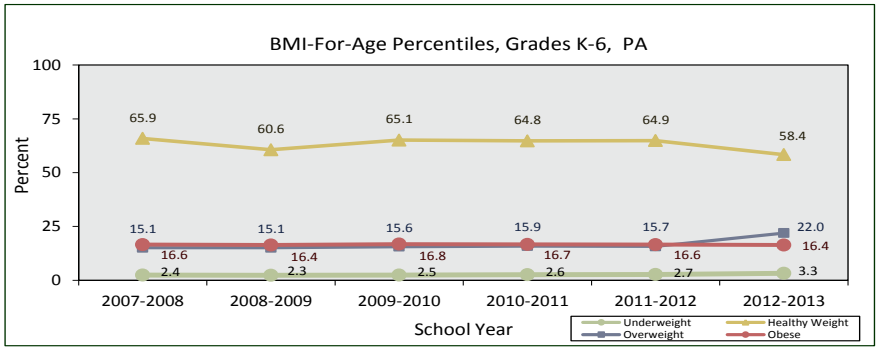
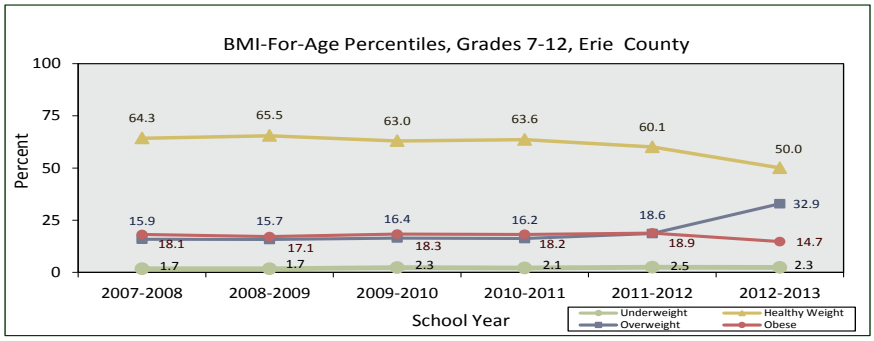
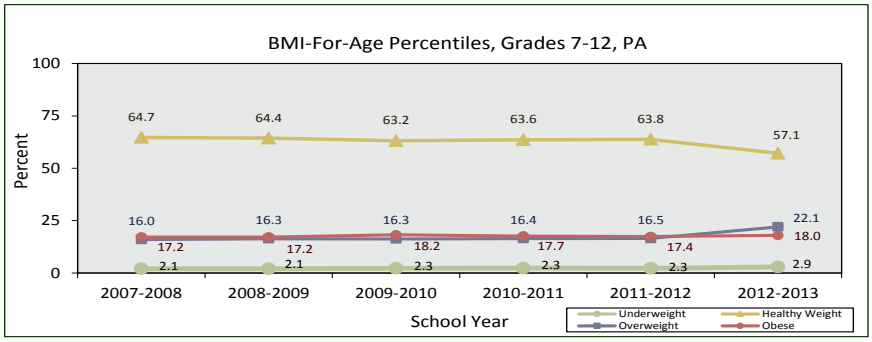


Figure 18. BMI-For-Age Percentiles, 7-12, Erie County & PA





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Mental and Behavioral Health

Depression - Adults

Based on the Behavioral Risk Factor Surveillance Survey (BRFSS), the self-reported percentage of Erie County adults aged 18 and above who were ever told they had a depressive disorder was 21% in 2011-2013 compared to 19% in 2011 (Table 1). This is higher than PA at 18% (2011-2013).

Table 1. Depressive Disorder Prevalence, 2011 & 2011-2013

Depression Diagnosis Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	19%	17% – 22%	21%	18% – 22%	2%		18%
Gender							
Male	17%	13% – 20%	17%	14% – 22%	0%		14%
Female	22%	19% – 25%	25%	21% – 30%	3%		23%
Age							
18-29	24%	19% – 29%	NA				18%
30-44	16%	12% – 20%	NA				20%
18-44	NA		21%	16% – 26%			
45-64	22%	18% – 26%	26%	21% – 31%	4%		21%
65+	13%	8% – 17%	13%	9% – 19%	0%		13%
Education							
<High School	28%	18% – 38%	NA				28%
High School	22%	18% – 26%	NA				18%
<=High School	NA		23%	19% – 28%			NA
Some College	21%	17% – 26%	23%	18% – 29%	2%		20%
College Graduate	15%	11% – 19%	13%	10% – 17%	-2%		13%
Income							
<$25,000	29%	24% – 34%	28%	23% – 35%	-1%		NA
$25,000-$49,999	16%	11% – 20%	27%	21% – 34%	11%	***	17%
$50,000+	14%	10% – 17%	13%	9% – 17%	-1%		NA
Race/Ethnicity							
White, non-Hispanic	20%	17% – 22%	21%	18% – 24%	1%		18%
Black, non-Hispanic	14%	4% – 24%	NA				18%
Hispanic	29%	12% – 45%	NA				25%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^indicates a percentage point change

From 2011 to 2011-2013, depression diagnosis increased significantly for those with household income of $25,000-$49,999 and increased for females, age group 45-64, and those with some college.

In 2011-2013, differences in prevalence were seen within all demographic groups. Prevalence was significantly lower for college graduates and those with household income of $50,000 and above and lower for males and age 65 and above.

The highest prevalence of depression diagnosis was seen among those with household income less than $25,000 (28%) followed by those with income of $25,000-$49,999 (27%), age 45-64 (26%), and females (25%). The lowest percentage was 13% for age 65 and above, college graduates, and those with income of $50,000 and above.

Depression diagnosis decreased with increasing education and increasing income.

Depression - Youth Symptoms

Since 2005, Erie County has participated in the biannual Pennsylvania Youth Survey (PAYS) sponsored by the Pennsylvania Commission on Crime and Delinquency (PCCD). PAYS surveys 6th, 8th, 10th, and 12th grade students to determine youth behaviors and attitudes. In 2013, 6,410 valid surveys were completed.

Studies have shown depression to be the primary risk factor for teen suicide. Four questions were asked to determine student feelings of sadness, worthlessness, and hopelessness. They are: In the past year, 1) I felt depressed or sad most days, 2) Sometimes I think that life is not worth it, 3) At times, I think I am no good at all, and 4) All in all, I am inclined to think that I am a failure. For Erie County, prevalence increased for these behaviors from 2011 to 2013 and remains higher than PA (Table 2).

Table 2. Youth Symptoms of Depression, 2011 & 2013

Symptoms of Depression Erie County 2011 & 2013 PAYS												
	Felt Depressed or Sad Most Days in Past Year			*Sometimes Think That Life is Not Worth It*			*At Times Think That I Am No Good At All*			*Think I Am a Failure*		
	Erie County		PA	Erie County		PA	Erie County		PA	Erie County		PA
Grade	2011	2013	2013	2011	2013	2013	2011	2013	2013	2011	2013	2013
6th	31.8%	31.3%	26.4%	17.2%	16.7%	14.7%	27.0%	27.1%	24.7%	13.9%	14.5%	12.3%
8th	35.1%	35.1%	30.9%	24.9%	25.5%	23.2%	29.8%	34.3%	31.8%	16.8%	19.5%	17.9%
10th	36.1%	39.8%	36.0%	22.6%	30.1%	26.9%	31.4%	41.5%	37.7%	15.0%	21.9%	20.7%
12th	35.7%	35.4%	32.6%	22.5%	26.8%	24.4%	34.7%	37.3%	35.2%	14.4%	18.6%	17.9%
Overall	34.4%	35.4%	31.7%	21.7%	24.7%	22.6%	30.2%	34.9%	32.7%	15.1%	18.6%	17.4%

From 2011 to 2013, the percentage of students who 1) felt depressed or sad most days in the past year increased from 34.4% to 35.4% [31.7% for PA], 2) sometimes think that life is not worth it increased from 21.7% to 24.7% [22.6% for PA], 3) at times, think that they are no good at all increased from 30.2% to 34.9% [32.7% for PA], and 4) think they are a failure increased from 15.1% to 18.6% [17.4% for PA].

Suicide Risk - Youth

Since 2005, Erie County has participated in the biannual Pennsylvania Youth Survey (PAYS) sponsored by the Pennsylvania Commission on Crime and Delinquency (PCCD). PAYS surveys 6th, 8th, 10th, and 12th grade students to determine youth behaviors and attitudes. In 2013, 6,410 valid surveys were completed.

In 2013, five questions specific to suicide were added to determine depressed behavior, suicidal intention, suicide attempts, and the seriousness of those attempts. They are: In the past year, 1) Did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities, 2) Did you ever seriously consider attempting suicide, 3) Did you make a plan about how you would attempt suicide, 4) How many times did you actually attempt suicide, and 5) If you attempted suicide, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse. Prevalence for all suicide risk behaviors was higher for Erie County compared with PA (Table 3).

Table 3. Youth Suicide Risk, 2013

Suicide Risk Erie County 2013 PAYS										
	Very Sad/Hopeless Last 2 Weeks		*Considered Suicide*		*Planned Suicide*		*Attempted Suicide*		*Medical Treatment for Attempt*	
	Erie County	PA	Erie County	PA	Erie County	PA	Erie County	PA	Erie County	PA
Grade	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013
6th	19.7%	16.8%	8.4%	6.9%	5.7%	4.7%	5.0%	4.2%	1.6%	1.0%
8th	24.3%	22.3%	18.5%	14.7%	12.9%	10.9%	9.4%	7.6%	3.1%	1.9%
10th	30.2%	27.3%	22.1%	20.4%	17.0%	15.7%	12.0%	9.6%	3.4%	2.4%
12th	27.7%	26.1%	22.4%	18.9%	17.2%	14.0%	11.5%	8.5%	2.8%	1.4%
Overall	25.3%	23.4%	17.7%	15.6%	13.0%	11.6%	9.4%	7.6%	2.7%	1.7%

In 2013, the percentage of students who 1) felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities was 25.3% [23.4% for PA], 2) ever seriously considered attempting suicide was 17.7% [15.6% for PA], 3) made a plan on how they would attempt suicide was 13.0% [11.6% for PA], 4) ever attempted suicide was 9.4% [7.6% for PA], and 5) needed medical treatment for their suicide attempt was 2.7% [1.7% for PA].

Anxiety Disorder

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who were ever told they had an anxiety disorder was 17% in 2011 (Table 4).

Table 4. Anxiety Disorder Prevalence, 2011

Ever Told Had an Anxiety Disorder Erie County Adult BRFSS, 2011				
	2007	2011		PA
			CI	
All Adults	NA	17%	15% – 19%	NA
Gender				
Male	NA	13%	11% – 16%	NA
Female	NA	21%	17% – 24%	NA
Age				
18-29	NA	25%	20% – 30%	NA
30-44	NA	17%	12% – 21%	NA
45-64	NA	16%	12% – 19%	NA
65+	NA	10%	6% – 13%	NA
Education				
<High School	NA	22%	13% – 31%	NA
High School	NA	20%	16% – 24%	NA
Some College	NA	17%	13% – 21%	NA
College Graduate	NA	15%	11% – 19%	NA
Income				
<$25,000	NA	28%	23% – 33%	NA
$25,000-$49,999	NA	15%	11% – 19%	NA
$50,000+	NA	11%	8% – 14%	NA
Race/Ethnicity				
White, non-Hispanic	NA	17%	15% – 20%	NA
Black, non-Hispanic	NA	10%	2% – 19%	NA
Hispanic	NA	17%	3% – 30%	NA

Note: CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA incidates the data is not available

In 2011, differences in prevalence were seen within demographic groups. Prevalence was comparatively lower for age 65 and above, non-Hispanic Black adults, and those with income of $50,000 and above. It was comparatively higher for those with household income below $25,000 and for age 18-29.

The highest prevalence of anxiety disorder diagnosis was seen among those with household income less than $25,000 (28%), age 18-29 (25%), and less than a high school education (22%). The lowest percentage was 10% for age 65 and above and non-Hispanic Black adults followed by income of $50,000 and above (11%) and males (13%).

Anxiety disorder decreased with increasing age, increasing education, and increasing income.

Attention Deficit Disorder/Hyperactivity (ADD/ADHD)

Attention deficit hyperactivity disorder (ADHD) is a developmental and behavioral disorder of children that can carry into adolescence and adulthood. Hallmark behaviors of this disease are severe and frequent inattention, hyperactivity, and impulsivity.

The Pennsylvania Department of Health (PA DOH), Division of School Health reports the prevalence of ADD/ADHD among students in public and non-public/private schools for each school year. For the 2012-2013 school year, 6.5% of Erie County students (6.5% in 2011-2012) were diagnosed with ADD/ADHD compared with 6.2% for PA.

Financial Stress

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who were worried about money was 32% in 2011 (Table 5).

In 2011, differences in prevalence were seen within demographic groups. Prevalence was significantly lower for age 65 and above compared with other age groups, significantly lower for college graduates compared with other education groups, significantly higher for those with household income below $25,000 compared with the other income groups, and significantly higher for females compared with males.

The highest prevalence of financial stress was seen for those with household income below $25,000 (50%) followed by age 18-29 (47%), those with less than a high school education (46%), non-Hispanic Black adults (44%), and age 30-44 (43%). The lowest prevalence was seen for age 65 and above (15%) followed by those with household income of $50,000 and above (20%) and college graduates (21%). Financial stress decreased with increasing age, increasing education, and increasing income.

Table 5. Financial Stress Prevalence, 2011

Worried or Stressed About Having Enough Money Erie County Adult BRFSS, 2011				
	2007	2011		PA
			CI	
All Adults	NA	32%	29% – 35%	NA
Gender				
Male	NA	26%	23% – 30%	NA
Female	NA	37%	33% – 41%	NA
Age				
18-29	NA	47%	40% – 54%	NA
30-44	NA	43%	37% – 49%	NA
45-64	NA	26%	22% – 30%	NA
65+	NA	15%	10% – 20%	NA
Education				
<High School	NA	46%	35% – 58%	NA
High School	NA	39%	34% – 44%	NA
Some College	NA	35%	30% – 40%	NA
College Graduate	NA	21%	17% – 26%	NA
Income				
<$25,000	NA	50%	45% – 56%	NA
$25,000-$49,999	NA	30%	24% – 35%	NA
$50,000+	NA	20%	16% – 25%	NA
Race/Ethnicity				
White, non-Hispanic	NA	31%	28% – 34%	NA
Black, non-Hispanic	NA	44%	30% – 59%	NA
Hispanic	NA	35%	16% – 53%	NA

Note: CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA incidates the data is not available

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Special Populations

Refugees and Immigrants

A refugee is a person who is outside his or her country of nationality and who is unable or unwilling to return to that country because of persecution or a well-founded fear of persecution, based on race, religion, nationality, public opinion, or membership in a particular social group. Refugees legally enter the United States in search of freedom, peace, and opportunity for themselves and their families. An immigrant is a person who chooses to resettle to another country. The United States has a legal process for that immigrant to seek legal residency and eventually citizenship.

Erie County is currently one of the leading refugee resettlement counties in Pennsylvania. From October 1, 2013 to September 30, 2014, 3,033 newly arrived refugees settled in 18 Pennsylvania counties. For individual counties, the highest number of refugees settled in Philadelphia County (729 refugees, 24.0%), followed by Erie County (621, 20.5%), Lancaster County (613, 20.2%), Allegheny County (511, 16.8%), Dauphin County (192, 6.3%), Lackawanna County (191, 6.3%), and Lehigh County (88, 2.9%).

The 621 newly arrived refugees who settled in Erie County from October 1, 2013 to September 30, 2014 were from the following countries: Bhutan (205 refugees, 33.0%), Somalia (192, 30.9%), Iraq (77, 12.4%), Myanmar - formerly Burma (54, 8.7%), Democratic Republic of the Congo (45, 7.2%), Ethiopia (21, 3.4%), Syria (8, 1.3%), Nepal (5, 0.8%), Eritrea (4, 0.6%), Afghanistan (3, 0.5%), Ukraine (3, 0.5%), Cuba (2, 0.3%), and Russia (2, 0.3%).

From January 1, 2003 to December 31, 2014, a total of 5,250 refugees from 35 countries resettled in Erie County. Tabular and visual summaries of these Erie County refugees are presented in Table 1 and Figure 1, respectively.

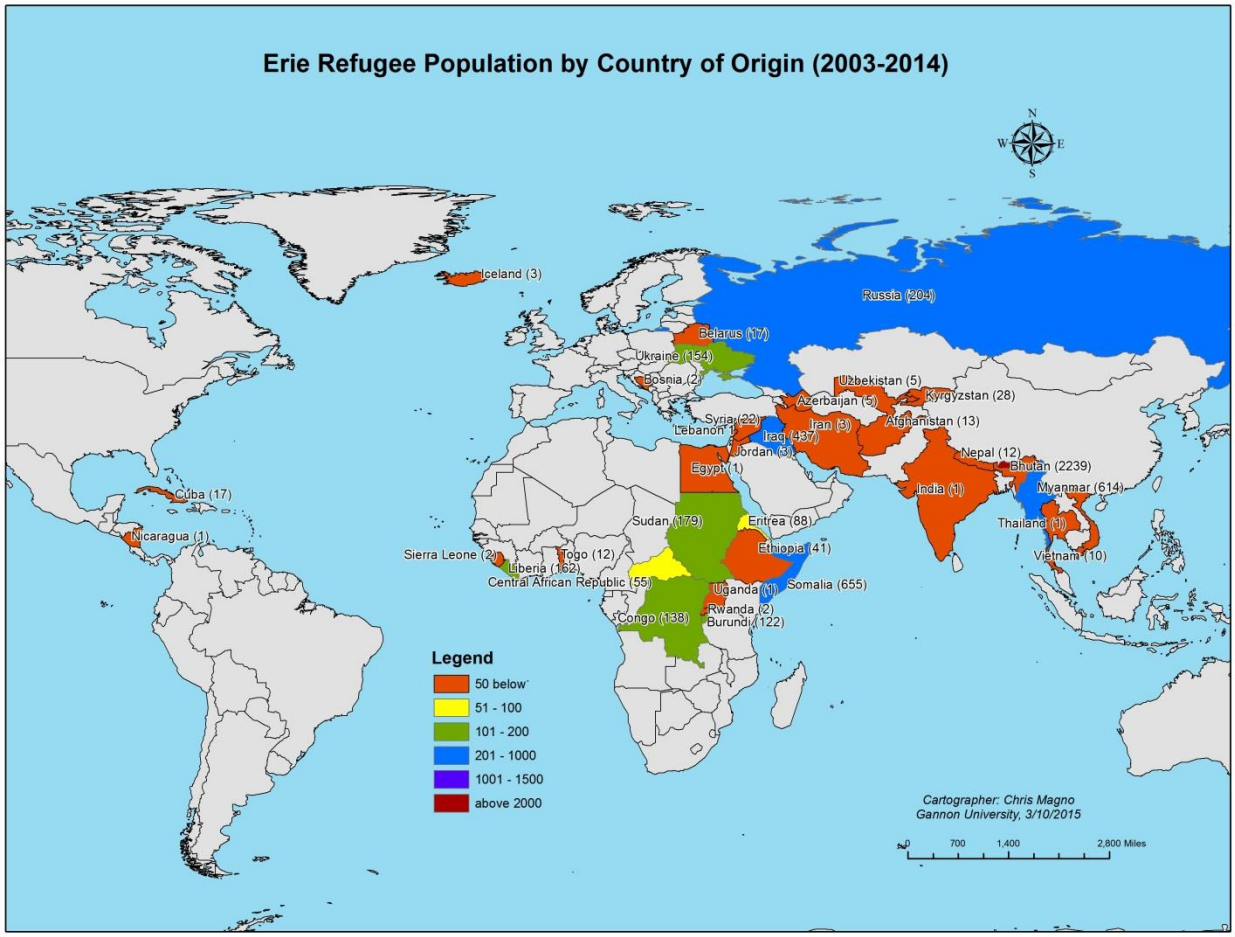
In Erie County, the International Institute of Erie and Catholic Charities of Erie assist refugees in resettling in Erie County. The Multicultural Community Resource Center (MCRC) and St. Benedict's Education Center are refugee service contractors that provide employment services, vocational English as a second language, and skills training to refugees, eligible immigrants, and secondary migrants.

Because of the high rate of communicable diseases in their country of origin, each new refugee and eligible immigrant is required to undergo a health assessment. The primary components of the assessment are: 1) medical history and physical exam, 2) immunizations, 3) screenings for tuberculosis, sexually transmitted infections, HIV, hepatitis, and intestinal parasites, 4) mental/behavioral health screenings, and 5) specialist referrals and any needed follow-up. In Erie County, the Multicultural Health Evaluation Delivery System (MHEDS) and St. Vincent Hospital have signed participating provider agreements with the Pennsylvania Refugee Resettlement Program to provide health services to refugees, eligible immigrants, and secondary migrants. The Erie County Department of Health also provides case management services for this population.

Table 1. Erie County Refugee Population by Country of Origin, 2003-2014

Country	Number of Refugees	Percent of Total
Afghanistan	13	0.25
Azerbaijan	5	0.10
Belarus	17	0.32
Bhutan	2,239	42.65
Bosnia	2	0.04
Burma	614	11.70
Burundi	122	2.32
Central African Republic	55	1.05
Cuba	17	0.32
Democratic Republic of the Congo	138	2.63
Egypt	1	0.02
Eritrea	88	1.68
Ethiopia	41	0.78
Iceland	3	0.06
India	1	0.02
Iran	3	0.06
Iraq	437	8.32
Jordan	3	0.06
Kyrgyzstan	28	0.53
Lebanon	1	0.02
Liberia	162	3.09
Nepal	12	0.23
Nicaragua	1	0.02
Russia	204	3.89
Rwanda	2	0.04
Sierra Leone	2	0.04
Somalia	655	12.48
Sudan	179	3.41
Syria	22	0.42
Thailand	1	0.02
Togo	12	0.23
Uganda	1	0.02
Ukraine	154	2.93
Uzbekistan	5	0.10
Vietnam	10	0.19
Total	5,250	100.00

Figure 1. Erie County Refugee Population by Country of Origin, 2003-2014



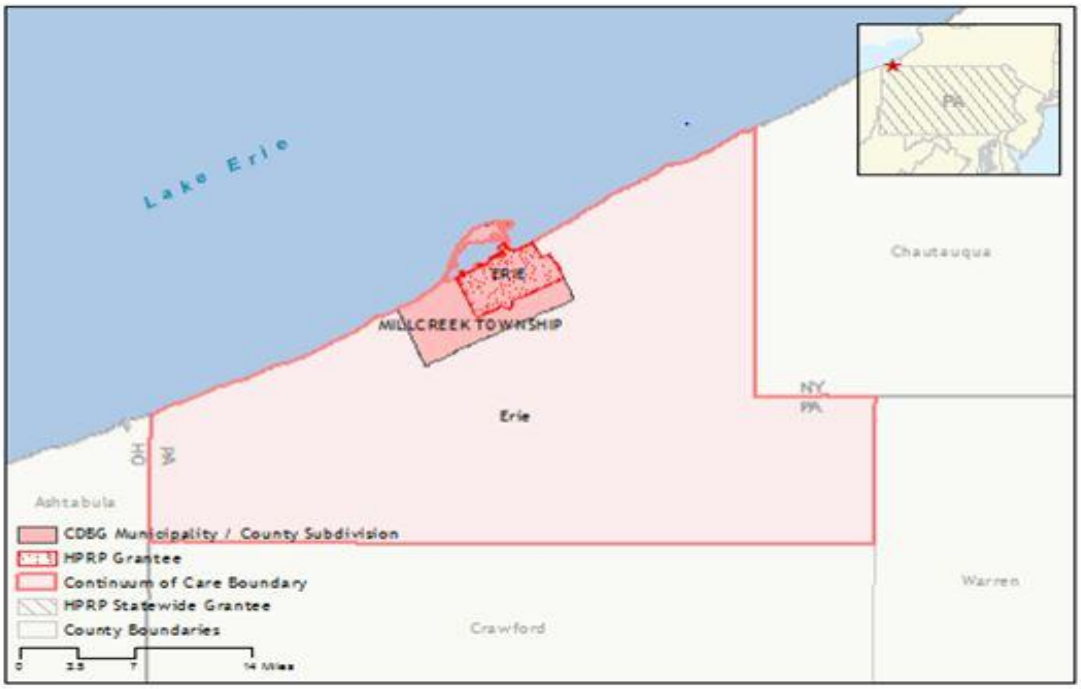
In 2011, MHEDS provided approximately 12,600 services to its clients. All services were equally distributed among males and females. The greatest percentage of services were provided to Bhutanese refugees (35%) followed by natives of Nepal (16%), natives of Iraq (9%), natives of Somalia (8%), and natives of Puerto Rico (4%). MHEDS also provided 2,362 WIC program services to non-migrants and 681 WIC program services to migrants. Statistics for the eligible immigrant and secondary migrant populations in Erie County are not available.

Homeless

Through its Continuum of Care (CoC) Program, the Department of Housing and Urban Development (HUD) awards homeless assistance grants to address homelessness and its effect on people's lives. CoC Program funds may be used under five program components: permanent housing (PH), transitional housing (TH), supportive services only (SSO), Homeless Management Information System (HMIS), and homelessness prevention.

Erie City & County is a CoC grantee identified as PA-605 (Figure 2). Health care services for the general homeless population are provided by Community Health Net, one of two Federally Qualified Health Centers (FQHC) in Erie County, and the Healthcare for the Homeless Partnership, a joint effort with Saint Vincent Hospital (Mobile Medical Unit), Allegheny Health Network, Community Shelter Services, the Erie United Methodist Alliance (EUMA), and Community Health Net. The Erie VA Medical Center provides health care and supportive services including mental/behavioral health for homeless veterans. Erie County Care Management (ECCM) provides supportive services including mental/behavioral health for the general homeless population while the Greater Erie Community Action Committee (GECAC) provides supportive services.

Figure 2. Erie City & County Continuum of Care (CoC) Map, 2015



In Erie County, HMIS-Erie is a centralized database housed and administered by EUMA and funded by a Hope for the Homeless CoC grant. EUMA is responsible for maintaining data integrity and producing data reports as well as conducting annual trainings and providing updates on changes to HUD programs to partner organizations. Every organization in Erie County with CoC funding is required to enter data in HMIS-Erie. As a result, almost all projects and organizations within the county that service the homeless are included. Two levels of information are entered for each client: Universal Data Elements (UDE) which are basic demographics, and data that is unique to the reporting organization. As part of its reporting requirements, EUMA provides annual point-in-time homeless population counts for Erie County to HUD.

The point-in-time count for 2014 was taken on January 24, 2014. On that day, the Erie City & County CoC serviced 408 individuals (15,333 for PA) (Table 2). Of these, 39% (158) were persons in households with adults and children compared with 46% for PA, 61% (248) were persons in

households with only individuals compared with 54% for PA, and 53% (215) were emergency shelter compared with 50% for PA (Table 1).

Table 2. Homeless Population by Household Type, 2011 & 2014

Point-in-Time Counts of Homeless Population by Household Type Erie City and County CoC & PA, January 28, 2011 and January 24, 2014																
Household Type	Sheltered								Unsheltered				Total			
	Emergency Shelter				*Transitional Housing*											
	Erie County		PA		Erie County		PA		Erie County		PA		Erie County		PA	
	2011	2014	2011	2014	2011	2014	2011	2014	2011	2014	2011	2014	2011	2014	2011	2014
Households																
Households with Adult(s) and Children*	33	21	950	1,018	15	28	1,423	1,339	4	8	23	27	52	57	2,396	2,384
Households with Only Individuals	132	--	4,464	--	71	--	2,355	--	22	--	974	--	225	--	7,793	--
Households without Children**	--	157	--	4,655	--	67	--	2,674	--	23	--	919	--	247	--	8,248
Households with Only Children***	--	0	--	20	--	1	--	5	--	0	--	0	--	1	--	25
Total	165	178	5,414	5,693	86	96	3,778	4,018	26	31	997	946	277	305	10,189	10,657
Persons in Households																
Households with Adult(s) and Children*	121	58	2,883	3,012	46	76	4,281	3,869	9	24	65	93	176	158	7,229	6,974
Households with Only Individuals	134	--	4,504	--	71	--	2,368	--	24	--	995	--	229	--	7,867	--
Households without Children**	--	157	--	4,700	--	68	--	2,692	--	23	--	939	--	248	--	8,331
Households with Only Children***	--	0	--	21	--	2	--	7	--	0	--	0	--	2	--	28
Total	255	215	7,387	7,733	117	146	6,649	6,568	33	47	1,060	1,032	405	408	15,096	15,333

Note: Point-in-time counts are taken annually to provide an unduplicated count of homeless persons

*At least one adult age 18 and above and at least one child under age 18; **Only adults age 18 and above;***Persons under age 18; --Not reported

The point-in-time count for households serviced was 305 households (10,657 for PA). Of these, 19% (57) were households with adults and children compared with 22% for PA, 81% (247) were households with individuals only compared with 77% for PA, and 58% (178) were persons in emergency shelters compared with 53% for PA.

From 2011 to 2014, the number of households in emergency shelters increased 8% from 165 to 178 (5% for PA), the number of households in transitional housing increased 12% from 86 to 96 (6% for PA), and the number of unsheltered households increased 19% from 26 to 31 (5%

decrease for PA). From 2011 to 2014, the number of persons in emergency shelters decreased 16% from 255 to 215 (5% increase for PA), the number of persons in transitional housing increased 25% from 117 to 146 (1% decrease for PA), and the number of unsheltered persons increased 42% from 33 to 47 (3% decrease for PA).

In 2014, point-in time counts were also taken for subpopulations serviced. For Erie County, 349 individuals were identified by subpopulation (12,103 for PA) (Table 3). Of these, 13% (46) were chronically homeless compared with 13% for PA, 38% (132) were severely mentally ill compared with 30% for PA, 33% (116) were chronic substance abusers compared with 27% for PA, 6% (21) were veterans compared with 12% for PA, and 9% (33) were victims of domestic violence compared with 17% for PA.

Table 3. Homeless Population by Subpopulation, 2011 & 2014

Point-in-Time Counts of Homeless Population by Subpopulation
Erie City and County CoC & PA, January 28, 2011 and January 24, 2014

Subpopulation	Sheltered				Unsheltered				Total			
	Erie County		PA		Erie County		PA		Erie County		PA	
	2011	2014	2011	2014	2011	2014	2011	2014	2011	2014	2011	2014
Chronically Homeless	56	38	938	1134	5	8	570	473	61	46	1,508	1,607
Severely Mentally Ill	81	119	2,363	3,175	10	13	382	464	91	132	2,745	3,639
Chronic Substance Abuse	28	99	2,765	2,840	9	17	398	405	37	116	3,163	3,245
Veterans	28	20	1,262	1,336	8	1	130	75	36	21	1,392	1,411
Persons with HIV/AIDS	0	1	157	155	0	0	13	25	0	1	170	180
Victims of Domestic Violence	27	33	1,518	1,954	0	0	13	67	27	33	1,531	2,021
Unaccompanied Youth (Under age 18)	0	--	31	--	0	--	1	--	0	--	32	--
Total	220	310	9,034	10,594	32	39	1,507	1,509	252	349	10,541	12,103

Note: Point-in-time counts are taken annually to provide an unduplicated count of homeless persons
--Not reported

From 2011 to 2014 in Erie County, the number of chronically homeless individuals decreased 24% from 61 to 46 (7% increase for PA), the number of homeless severely mentally ill increased 45% from 91 to 132 (33% for PA), the number of homeless chronic substance abusers increased 214% from 37 to 116 (3% for PA), the number of homeless veterans decreased by 42% from 36 to 21 (1% increase for PA), the number of homeless persons with HIV/AIDS increased from 0 to

1 (6% increase for PA), and the number of homeless victims of domestic violence increased 22% from 27 to 33 (32% for PA).

Disabled

A disabled person can be defined as someone with a physical, sensory (deafness, blindness), intellectual, or mental health impairment significant enough to make a difference in their daily lives.

Arthritis Disability Based on the Behavioral Risk Factor Surveillance System (BRFSS) Survey, the self-reported percentage of Erie County adults aged 18 and above with arthritis whose arthritis or joint pain limits their activity was 43% in 2011 (Table 4). This was lower than PA at 50% (2011).

Table 4. Arthritis Disability Prevalence, 2011

Arthritis or Joint Symptoms that Limit Usual Activities Erie County Adult BRFSS, 2011				
	2007	2011	CI	PA 2011
All Adults	NA	43%	38% – 48%	50%
Gender				
Male	NA	49%	41% – 57%	45%
Female	NA	39%	32% – 45%	53%
Age				
18-29	NA	NSR		NA
30-44	NA	58%	42% – 73%	58%
45-64	NA	43%	36% – 50%	51%
65+	NA	37%	29% – 45%	47%
Education				
<High School	NA	58%	41% – 75%	54%
High School	NA	49%	41% – 56%	47%
Some College	NA	41%	32% – 51%	54%
College Graduate	NA	37%	26% – 49%	49%
Income				
<$25,000	NA	47%	38% – 56%	NA
$25,000-$49,999	NA	37%	27% – 48%	46%
$50,000+	NA	38%	27% – 49%	NA
Race/Ethnicity				
White, non-Hispanic	NA	42%	37% – 48%	48%
Black, non-Hispanic	NA	NSR		60%
Hispanic	NA	NSR		NA

Note: CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available

In 2011, differences in prevalence occurred within demographic groups. Prevalence was higher for males, age 30-44, those with less than a high school education, and those with household income below $25,000.

The highest prevalence of arthritis disability was seen for age 30-44 (58%) and those with less than a high school education (58%), followed by males (49%), high school graduates (49%), and those with household income below $25,000 (47%). The lowest prevalence was 37% for those aged 65 and above, college graduates, and those with household income of $25,000-$49,999.

Limited activity due to arthritis or joint pain decreased with increasing age, education, and income.

Use of Special Equipment Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who have health problems that require the use of special equipment was 10% in 2011-2013 compared to 8% in 2011 and 6% in 2007 (Table 5). This was higher than PA at 9% and the U.S. at 8% (2013).

Table 5. Use of Special Equipment Prevalence, 2011 & 2011-2013

Health Problems that Require the Use of Special Equipment
Erie County Adult BRFSS, 2011 & 2011-2013

	2011	CI	2011-2013	CI	Point Change^	Sig	PA 2011-13
All Adults	8%	7% – 10%	10%	8% – 12%	2%		9%
Gender							
Male	8%	6% – 10%	9%	7% – 13%	1%		8%
Female	8%	6% – 10%	10%	7% – 14%	2%		9%
Age							
18-29	2%	0% – 4%	NA				2%
30-44	6%	3% – 9%	NA				5%
18-44	NA		5%	3% – 10%			NA
45-64	9%	6% – 12%	11%	8% – 16%	2%		9%
65+	17%	12% – 22%	17%	12% – 22%	0%		19%
Education							
<High School	22%	13% – 31%	NA				15%
High School	10%	7% – 13%	NA				9%
<=High School	NA		12%	9% – 16%			NA
Some College	7%	4% – 10%	9%	6% – 15%	2%		8%
College Graduate	6%	3% – 8%	5%	3% – 7%	-1%		5%
Income							
<$25,000	17%	13% – 22%	16%	12% – 22%	-1%		NA
$25,000-$49,999	5%	3% – 8%	12%	7% – 18%	7%		8%
$50,000+	4%	2% – 6%	3%	1% – 6%	-1%		NA
Race/Ethnicity							
White, non-Hispanic	8%	6% – 10%	9%	7% – 11%	1%		8%
Black, non-Hispanic	2%	0% – 6%	NA				12%
Hispanic	17%	3% – 31%	NA				7%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

From 2011 to 2011-2013, the prevalence of special equipment use due to health problems remained relatively stable for all demographic groups with the exception of those with household income of $25,000-$49,999 which increased from 5% to 12%.

In 2011-2013, differences in prevalence were seen within demographic groups. Use of special equipment was significantly higher for those age 65 and above compared with age 18-44, for those with less than or equal to a high school education compared with college graduates, and for those with household income below $25,000 compared with those with household income of $50,000 and above.

The highest prevalence of use of special equipment was seen among age 65 and above (17%) and those with household income less than $25,000 (16%). The lowest percentage was 3% for income of $50,000 and above followed by age 18-44 and college graduates at 5%.

The use of special equipment due to health problems decreased with decreasing age, increasing education, and increasing income.

Vision Impairment Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who have ever been told that they have vision impairment, even when wearing glasses was 14% in 2011 (Table 5). This is lower than PA at 18%.

Table 5. Vision Impairment Prevalence, 2011

Ever Told Have a Vision Impairment, Even When Wearing Glasses Erie County Adult BRFSS, 2011				
	2007	2011		PA 2011
			CI	
All Adults	NA	14%	12% – 16%	18%
Gender				
Male	NA	11%	9% – 14%	17%
Female	NA	17%	14% – 20%	19%
Age				
18-29	NA	10%	6% – 13%	14%
30-44	NA	10%	7% – 14%	12%
45-64	NA	13%	9% – 16%	18%
65+	NA	28%	22% – 34%	29%
Education				
<High School	NA	21%	12% – 30%	22%
High School	NA	16%	12% – 19%	19%
Some College	NA	15%	11% – 18%	19%
College Graduate	NA	13%	9% – 16%	15%
Income				
<$25,000	NA	22%	17% – 26%	NA
$25,000-$49,999	NA	10%	7% – 14%	18%
$50,000+	NA	11%	8% – 14%	NA
Race/Ethnicity				
White, non-Hispanic	NA	14%	12% – 16%	18%
Black, non-Hispanic	NA	10%	2% – 19%	16%
Hispanic	NA	10%	0% – 21%	24%

Note: CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available

In 2011, differences in prevalence occurred within demographic groups. Prevalence was significantly higher for age 65 and above compared with other age groups and for those with

household income below $25,000 compared with other income groups. Comparatively higher percentages were seen for females and for those with less than a high school education.

The highest prevalence of vision impairment was seen for age 65 and above (28%) followed by those with household income below $25,000 (22%) and those with less than a high school education (21%). The lowest prevalence was 10% for several demographic groups.

Vision impairment even when wearing glasses increased with increasing age and decreased with increasing education and increasing income.

Disability – American Community Survey As defined by the U.S. Census Bureau, a disability is a long-lasting physical, mental, or emotional condition. Among the civilian noninstitutionalized population in Erie County in 2009-2013, 15.2% had a disability (Table 6). For those 65 years and older, 23.2% had ambulatory difficulty, 16.7% had hearing difficulty, and 15.5% had independent living difficulty. The corresponding percentages for Pennsylvania were 22.0%, 14.6%, and 15.4%, respectively.

Table 6. Erie County and Pennsylvania Disability Characteristics, 2009-2013

Subject	Erie County % with a Disability	Pennsylvania % with a Disability
Total civilian noninstitutionalized population	15.2	13.2
Male	15.0	12.8
Female	15.3	13.6
White	14.7	13.1
Black or African American	22.9	15.7
Hispanic or Latino (of any race)	16.8	13.2
Population under 5 years	0.2	0.8
With a hearing difficulty	0.1	0.5
With a vision difficulty	0.1	0.4
Population 5 to 17 years	9.2	6.5
With a hearing difficulty	0.8	0.6
With a vision difficulty	1.0	0.8
With a cognitive difficulty	7.7	5.1
With an ambulatory difficulty	0.7	0.6
With a self-care difficulty	1.1	1.0
Population 18 to 64 years	13.1	10.7
With a hearing difficulty	2.4	2.0
With a vision difficulty	1.9	1.6
With a cognitive difficulty	6.3	4.7
With an ambulatory difficulty	6.4	5.3
With a self-care difficulty	2.1	1.8
With an independent living difficulty	4.4	3.9
Population 65 years and over	37.5	35.1
With a hearing difficulty	16.7	14.6
With a vision difficulty	6.1	6.1
With a cognitive difficulty	8.1	8.2
With an ambulatory difficulty	23.2	22.0
With a self-care difficulty	7.7	7.6
With an independent living difficulty	15.5	15.4

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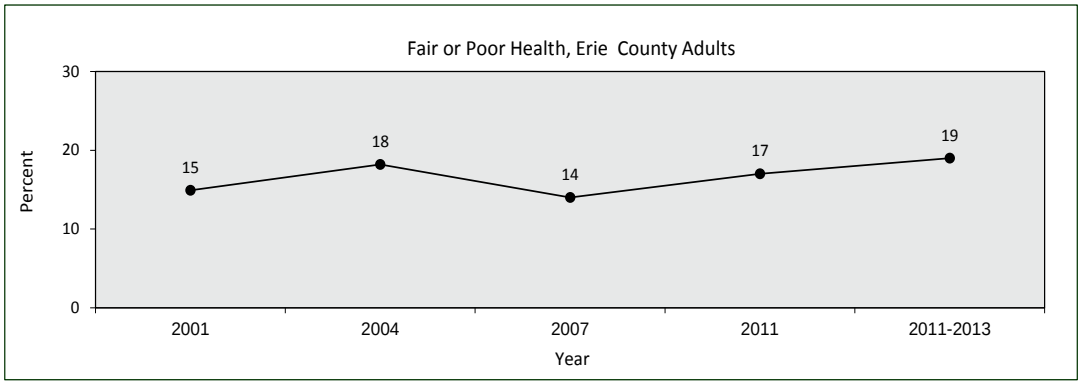
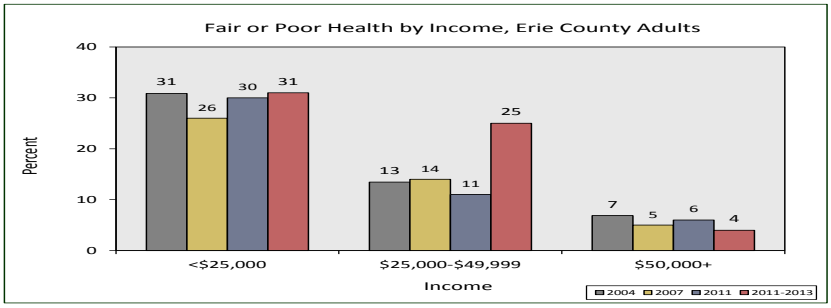
Health-Related Quality of Life

Fair or Poor Health

Based on the Behavioral Risk Factor Surveillance Survey (BRFSS), the self-reported percentage of Erie County adults aged 18 and above with fair or poor health increased to 19% in 2011-2013 compared to 17% in 2011, 14% in 2007, 18% in 2004, and 15% in 2001 (Figure 1). This was higher than PA at 17% (2011-2013) and the U.S. at 17% (2013).

Figure 1. Fair or Poor Health Prevalence, 2001 to 2011-2013





From 2011 to 2011-2013, the prevalence of fair or poor health significantly increased for those with household income of $25,000-$49,999 (Figure 1, Table 1).

In 2011-2013, differences in prevalence were seen within demographic groups. Fair or poor health was significantly lower for age 18-44 compared with age 65 and above, significantly higher for those with less than a high school education compared with college graduates, and significantly higher for those with household income below $25,000 compared to those with income of $50,000 and above.

The highest prevalence of fair or poor health was seen among those with household income less than $25,000 (31%), those with less than or equal to a high school education (27%), and age 65 and above (26%). The lowest percentage was 4% for income of $50,000 and above and 7% for college graduates.

Fair or poor health increased with increasing age, decreasing education, and decreasing income.

Table 1. Fair or Poor Health Prevalence, 2011 & 2011-2013

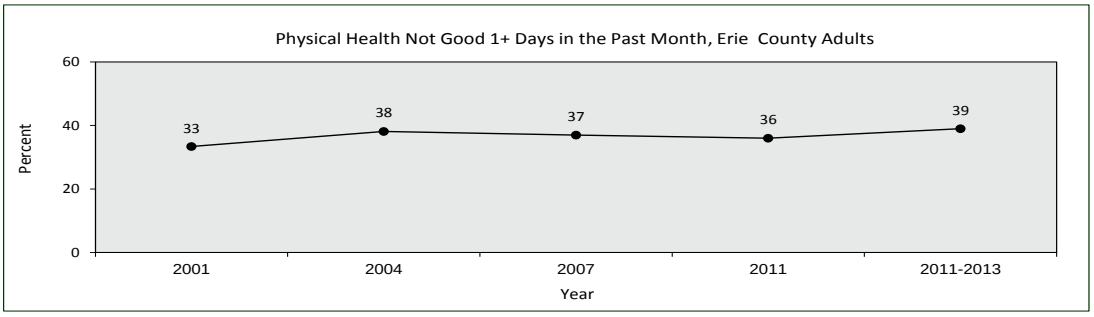
Fair or Poor Health Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	17%	15% – 19%	19%	16% – 22%	2%		17%
Gender							
Male	18%	15% – 21%	19%	15% – 24%	1%		17%
Female	16%	13% – 19%	18%	15% – 23%	2%		17%
Age							
18-29	11%	8% – 15%	NA				8%
30-44	12%	8% – 16%	NA				13%
18-44	NA		12%	9% – 17%			NA
45-64	19%	15% – 23%	23%	18% – 28%	4%		19%
65+	26%	20% – 31%	26%	20% – 33%	0%		25%
Education							
<High School	37%	26% – 47%	NA				36%
High School	23%	19% – 27%	NA				19%
<=High School	NA		27%	22% – 32%			NA
Some College	18%	14% – 22%	12%	9% – 17%	-6%		14%
College Graduate	6%	3% – 8%	7%	4% – 11%	1%		7%
Income							
<$25,000	30%	25% – 36%	31%	25% – 37%	1%		NA
$25,000-$49,999	11%	8% – 15%	25%	19% – 32%	14%	***	16%
$50,000+	6%	4% – 9%	4%	2% – 7%	-2%		NA
Race/Ethnicity							
White, non-Hispanic	16%	13% – 18%	17%	15% – 20%	1%		15%
Black, non-Hispanic	25%	12% – 37%	NA				22%
Hispanic	41%	23% – 59%	NA				24%

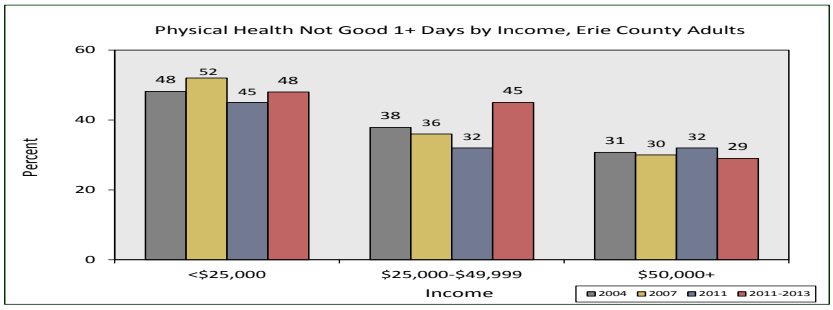
Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Poor Physical Health

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above whose physical health was not good one or more days in the past month increased to 39% in 2011-2013 compared to 36% in 2011, 37% in 2007, 38% in 2004, and 33% in 2001 (Figure 2). This was higher than PA at 38% (2011-2013).

Figure 2. Poor Physical Health Prevalence, 2001 to 2011-2013





From 2011 to 2011-2013, the prevalence of poor physical health increased significantly for those with household income of $25,000-$49,999 and increased for all demographic groups with the exception of some college and income of $50,000 and above (Figure 2, Table 2).

In 2011-2013, differences in prevalence were seen within demographic groups. Poor physical health was significantly lower for income of $50,000 and above compared with other income groups and lower for college graduates compared with other education groups.

The highest prevalence of poor physical health was seen among those with household income less than $25,000 (48%), income of $25,000-$49,999 (45%), age 45-64 (44%), and less than or equal to high school (43%). The lowest percentage was 29% for those with household income of $50,000 and above and 33% for college graduates.

Poor physical health decreased with increasing education and increasing income.

Table 2. Poor Physical Health Prevalence, 2011 & 2011-2013

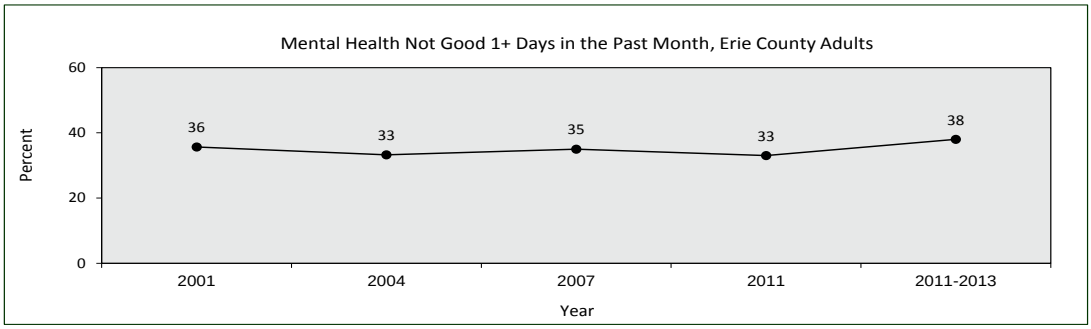
Physical Health Not Good 1+ Days in the Past Month Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	36%	34% – 39%	39%	35% – 43%	3%		38%
Gender							
Male	35%	31% – 39%	38%	33% – 43%	3%		34%
Female	38%	34% – 42%	41%	36% – 46%	3%		41%
Age							
18-29	37%	31% – 43%	NA				37%
30-44	38%	32% – 43%	NA				35%
18-44	NA		36%	30% – 42%			NA
45-64	38%	33% – 42%	44%	39% – 50%	6%		38%
65+	32%	26% – 38%	39%	32% – 46%	7%		40%
Education							
<High School	50%	40% – 61%	NA				49%
High School	40%	36% – 45%	NA				38%
<=High School	NA		43%	37% – 49%			NA
Some College	39%	33% – 44%	37%	30% – 44%	-2%		38%
College Graduate	30%	25% – 35%	33%	27% – 39%	3%		32%
Income							
<$25,000	45%	39% – 50%	48%	41% – 55%	3%		NA
$25,000-$49,999	32%	27% – 37%	45%	38% – 53%	13%	***	38%
$50,000+	32%	27% – 37%	29%	24% – 35%	-3%		NA
Race/Ethnicity							
White, non-Hispanic	36%	34% – 39%	39%	35% – 43%	3%		37%
Black, non-Hispanic	32%	19% – 45%	NA				40%
Hispanic	43%	25% – 61%	NA				41%

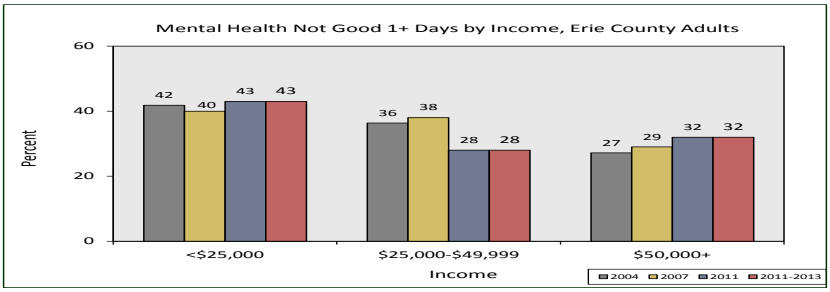
Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Poor Mental Health

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above whose mental health was not good one or more days in the past month increased to 38% in 2011-2013 compared to 33% in 2011, 35% in 2007, 33% in 2004, and 36% in 2001 (Figure 3). This was higher than PA at 36% (2011-2013).

Figure 3. Poor Mental Health Prevalence, 2001 to 2011-2013





From 2011 to 2011-2013, the prevalence of poor mental health increased significantly for males and increased for all demographic groups with the exception of those with household income of $50,000 and above. The largest percentage point increase from 2011 to 2011-2013 was 10% for males and those with household income of $25,000-$49,999 (Figure 3, Table 3).

In 2011-2013, differences in prevalence were seen within demographic groups. Poor mental health was significantly lower for income of $50,000 and above compared to those with household income below $25,000, significantly lower for age 65 and above compared with other age groups, and lower for college graduates compared with other education groups.

The highest prevalence of poor mental health was seen among those with household income less than $25,000 (46%), age 18-44 (45%), females (42%), and those with less than or equal to a high school education (42%). The lowest percentage was 23% for age 65 and above followed by college graduates (31%), and those with household income of $50,000 and above (31%).

Poor mental health decreased with increasing age, increasing education, and increasing income.

Table 3. Poor Mental Health Prevalence, 2011 & 2011-2013

Mental Health Not Good 1+ Days in the Past Month Erie County Adult BRFSS, 2011 & 2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	33%	30% – 35%	38%	34% – 42%	5%		36%
Gender							
Male	25%	21% – 28%	35%	29% – 40%	10%	***	30%
Female	40%	36% – 44%	42%	37% – 47%	2%		41%
Age							
18-29	42%	36% – 48%	NA				46%
30-44	37%	31% – 43%	NA				41%
18-44	NA		45%	39% – 52%			NA
45-64	32%	28% – 37%	38%	33% – 44%	6%		34%
65+	17%	12% – 22%	23%	17% – 29%	6%		24%
Education							
<High School	47%	36% – 57%	NA				43%
High School	35%	30% – 39%	NA				34%
<=High School	NA		42%	36% – 48%			NA
Some College	36%	31% – 41%	37%	31% – 44%	1%		39%
College Graduate	28%	23% – 33%	31%	25% – 37%	3%		33%
Income							
<$25,000	43%	37% – 48%	46%	39% – 53%	3%		NA
$25,000-$49,999	28%	22% – 33%	38%	32% – 46%	10%		34%
$50,000+	32%	27% – 37%	31%	25% – 37%	-1%		NA
Race/Ethnicity							
White, non-Hispanic	32%	29% – 35%	37%	33% – 40%	5%		35%
Black, non-Hispanic	44%	29% – 58%	NA				40%
Hispanic	41%	23% – 59%	NA				46%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and th percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Restricted Activity

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above whose poor physical and/or mental health prevented their usual activity one or more days in the past month increased to 25% in 2011-2013 compared to 21% in 2011 (Table 4). This was higher than PA at 22% and the U.S. at 20% (2013). For Erie County in 2007, this percentage was 20%.

Table 4. Restricted Activity Prevalence, 2011 & 2011-2013

Poor Physical and/or Mental Health Prevented Usual Activity 1+ Days in the Past Month Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	21%	19% – 23%	25%	22% – 29%	4%		22%
Gender							
Male	19%	16% – 22%	26%	21% – 31%	7%		20%
Female	23%	20% – 27%	24%	20% – 29%	1%		24%
Age							
18-29	22%	17% – 27%	NA				22%
30-44	24%	19% – 29%	NA				24%
18-44	NA		28%	22% – 35%			NA
45-64	24%	19% – 28%	27%	22% – 32%	3%		23%
65+	11%	7% – 15%	15%	11% – 20%	4%		19%
Education							
<High School	21%	12% – 30%	NA				30%
High School	23%	19% – 27%	NA				21%
<=High School	NA		30%	25% – 35%			NA
Some College	25%	20% – 30%	21%	16% – 27%	-4%		24%
College Graduate	17%	13% – 20%	20%	15% – 25%	3%		18%
Income							
<$25,000	33%	28% – 39%	35%	28% – 42%	2%		NA
$25,000-$49,999	17%	13% – 22%	25%	19% – 32%	8%		22%
$50,000+	16%	12% – 20%	17%	13% – 23%	1%		NA
Race/Ethnicity							
White, non-Hispanic	21%	19% – 23%	25%	22% – 29%	4%		21%
Black, non-Hispanic	28%	15% – 40%	NA				NA
Hispanic	21%	6% – 37%	NA				NA

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

From 2011 to 2011-2013, the prevalence of restricted activity due to poor physical or mental health increased for all demographic groups with the exception of those with some college who saw a 4% percentage point reduction. The largest percentage point increase from 2011 to 2011-2013 was 8% for those with household income of $25,000-$49,999 and 7% for males (Table 4).

In 2011-2013, differences in prevalence were seen within demographic groups. Restricted activity was significantly lower for age 65 and above compared to other age groups, higher for those with less than or equal a high school education, and higher for those with household income below $25,000. Restricted activity due to poor physical or mental health was significantly higher for income less than $25,000 compared with income of $50,000 and above.

The highest prevalence of restricted activity was seen among those with household income below $25,000 (35%) and those with less than or equal to a high school education (30%). The lowest percentage was 15% for age 65 and above followed by household income of $50,000 and above (17%).

Restricted activity due to poor physical or mental health decreased with increasing age, increasing education, and increasing income.

Limited Activity

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who reported that their activities were limited in any way due to physical, mental, or emotional problems was 23% in 2011-2013 compared to 21% in PA (2013) (Table 5).

Table 5. Limited Activity Prevalence, 2011-2013

Limited in Activity Due to Physical, Mental, or Emotional Problems Erie County Adult BRFSS, 2011-2013				
	2011	2011-2013		PA 2013
			CI	
All Adults	NA	23%	20% – 26%	21%
Gender				
Male	NA	22%	18% – 26%	20%
Female	NA	23%	19% – 28%	23%
Age				
18-29	NA	NA		10%
30-44	NA	NA		15%
18-44	NA	14%	10% – 18%	NA
45-64	NA	32%	27% – 38%	25%
65+	NA	26%	21% – 32%	28%
Education				
<High School	NA	NA		30%
High School	NA	NA		22%
<=High School	NA	26%	22% – 31%	NA
Some College	NA	21%	16% – 27%	22%
College Graduate	NA	16%	12% – 21%	14%
Income				
<$25,000	NA	32%	26% – 38%	NA
$25,000-$49,999	NA	25%	20% – 32%	20%
$50,000+	NA	13%	9% – 17%	NA
Race/Ethnicity				
White, non-Hispanic	NA	22%	20% – 26%	21%
Black, non-Hispanic	NA	NA		23%
Hispanic	NA	NA		24%

Note: CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

In 2011-2013, differences in prevalence were seen within demographic groups. Limited in activity some way was significantly lower for age 18-44 compared with other age groups, significantly lower for income of $50,000 and above compared with other income groups, and

comparatively higher for those with less than or equal a high school education and those with household income below $25,000. Limited in activity in any way due to poor physical, mental, or emotional problems was significantly higher for those with less than or equal to a high school education compared with college graduates.

The highest prevalence of limited in activity was seen among those with household income below $25,000 (32%) and age 45-64 (32%). The lowest percentage was 13% for household income of $50,000 and above followed by age 18-44 (14%) and college graduates (16%).

Limited in activity in any way due to physical, mental or emotional problems decreased with increasing education and increasing income. For Erie County in 2011-2013, the prevalence of limited in activity in any way was higher for all demographic groups with the exception of age 65 and above when compared with PA (2013).

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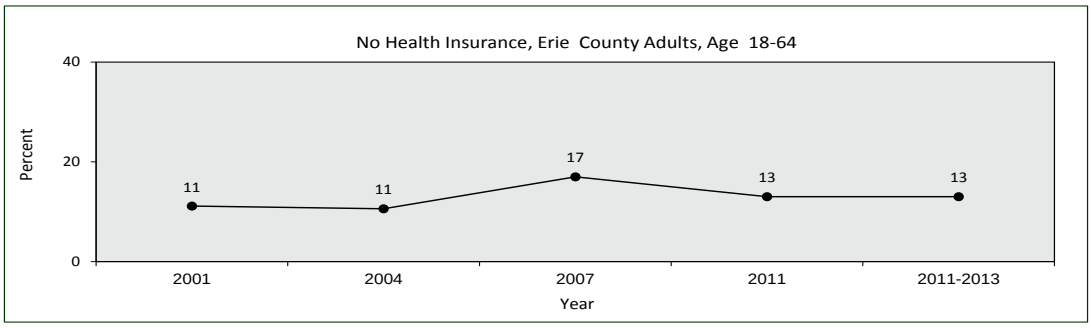
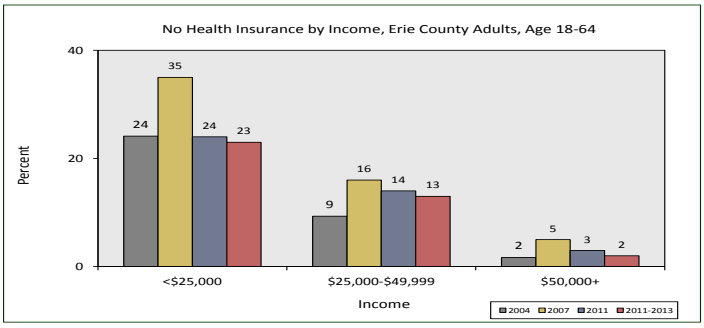
Health Care Access

Health Insurance

Based on the Behavioral Risk Factor Surveillance System (BRFSS) Survey, the self-reported percentage of Erie County adults aged 18-64 with no health insurance remained at 13% in 2011-2013 compared with 13% in 2011 (Figure 1). This was lower than PA at 16% and the U.S. at 20% (2013), but higher than the Healthy People 2020 Goal of 0% (100% with health insurance).

Figure 1. No Health Insurance Prevalence, 2001 to 2011-2013





From 2011 to 2011-2013, the prevalence of residents with no health insurance decreased for all demographic groups with the exception of age 45-64 and males (Table 1).

In 2011-2013, differences in prevalence were seen within demographic groups. Lack of health insurance was significantly higher for those with less than or equal to a high school education compared with college graduates and for income below $25,000 compared with income of $50,000 and above (Figure 1, Table 1).

The highest prevalence of no health insurance was seen among those with household income below $25,000 (23%) and those with less than or equal to a high school education (18%). The lowest percentage was 2% for household income of $50,000 and above followed by college graduates (5%).

Lack of health insurance among adults age 18-64 decreased with increasing age, increasing education, and increasing income.

Table 1. No Health Insurance Prevalence, 2011 & 2011-2013

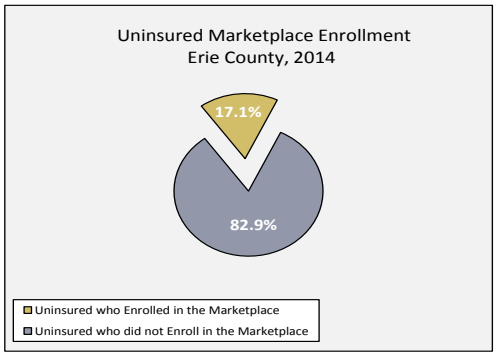
No Health Insurance, Age 18-64 Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	13%	11% – 15%	13%	11% – 17%	0%		16%
Gender							
Male	13%	10% – 16%	15%	11% – 20%	2%		18%
Female	13%	10% – 15%	11%	8% – 15%	-2%		14%
Age							
18-29	19%	14% – 24%	NA				23%
30-44	15%	11% – 19%	NA				17%
18-44	NA		14%	10% – 19%			NA
45-64	8%	5% – 10%	12%	9% – 16%	4%		11%
Education							
<High School	24%	13% – 35%	NA				33%
High School	18%	13% – 22%	NA				19%
<=High School	NA		18%	13% – 24%			NA
Some College	13%	9% – 17%	12%	8% – 18%	-1%		14%
College Graduate	7%	4% – 10%	5%	3% – 9%	-2%		6%
Income							
<$25,000	24%	18% – 29%	23%	17% – 31%	-1%		NA
$25,000-$49,999	14%	9% – 18%	13%	8% – 19%	-1%		18%
$50,000+	3%	1% – 5%	2%	1% – 6%	-1%		NA
Race/Ethnicity							
White, non-Hispanic	12%	9% – 14%	11%	9% – 14%	-1%		14%
Black, non-Hispanic	29%	16% – 41%	NA				23%
Hispanic	29%	12% – 45%	NA				28%

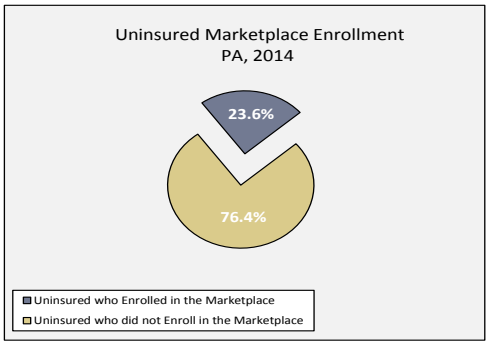
Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Marketplace Enrollment and Uninsured Population

With passage of the Affordable Care Act, uninsured individuals now have the opportunity to acquire health insurance coverage through a health insurance marketplace. As of July 2014, using data provided by The Hospital & Healthsystem Association of PA (HAP) including 2012 estimated population counts from the U.S. Census Bureau, 17.1% of uninsured Erie County residents had enrolled in the marketplace and are now covered by health insurance compared with 23.6% for PA (Figure 2). Montgomery County reported the highest number of enrolled at 45.4%.

Figure 2. Marketplace Enrollment, 2014





Medicaid

For 2013, 60,996 Erie County residents received medical assistance (Table 2). This represents 21.8% (22.1% in 2011) of the population compared with 16.4% (16.5% in 2011) for Pennsylvania. From 2011 to 2013, the number of elderly and disabled Medicaid recipients increased while the number of children and families and the number of chronically ill who receive Medicaid has decreased. Of all 67 counties in Pennsylvania, Erie County ranked fourth in percent of Medicaid recipients. Highest was Philadelphia County at 31.8% followed by Fayette County at 24.7% and Cameron at 22.4%.

For 2013, a total of 63,795 adults and children were eligible for medical assistance. On January 1, 2015 Pennsylvania expanded Medicaid eligibility from income below 100% of the federal poverty level (FPL) to income below 138% FPL. The number of Erie County adults and children now eligible for assistance as reported for June 2015 is 72,357.

Table 2. Medicaid Recipients, 2011 & 2013

Medicaid Recipients
Erie County & PA, 2011^ & 2013^

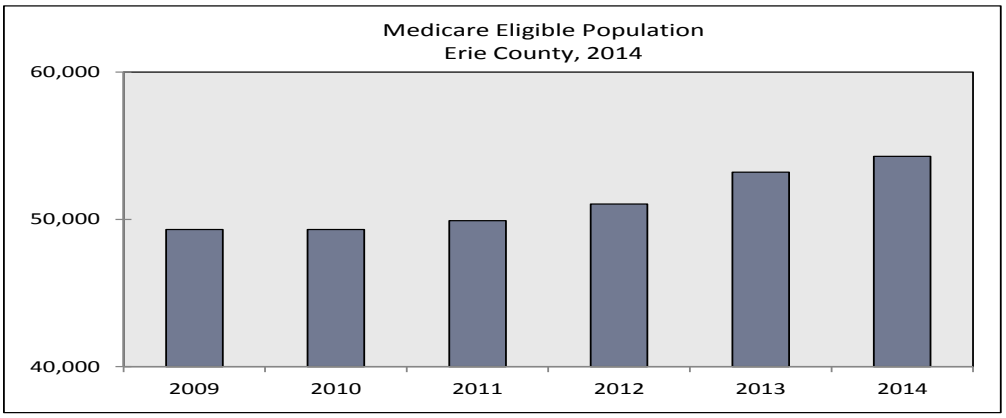
	Erie County		PA	
	2011	2013	2011	2013
Total Population*	280,149	280,294	12,632,780	12,763,536
Medicaid Recipients				
Elderly	7,503	8,416	296,129	331,401
Disabled	13,654	14,624	469,334	507,264
Children & Families	38,102	36,634	1,210,489	1,200,222
Chronically Ill**	2,548	1,322	107,069	54,295
Total Medicaid Recipients	61,807	60,996	2,083,021	2,093,182
% of Population Receiving Medicaid	22.1%	21.8%	16.5%	16.4%

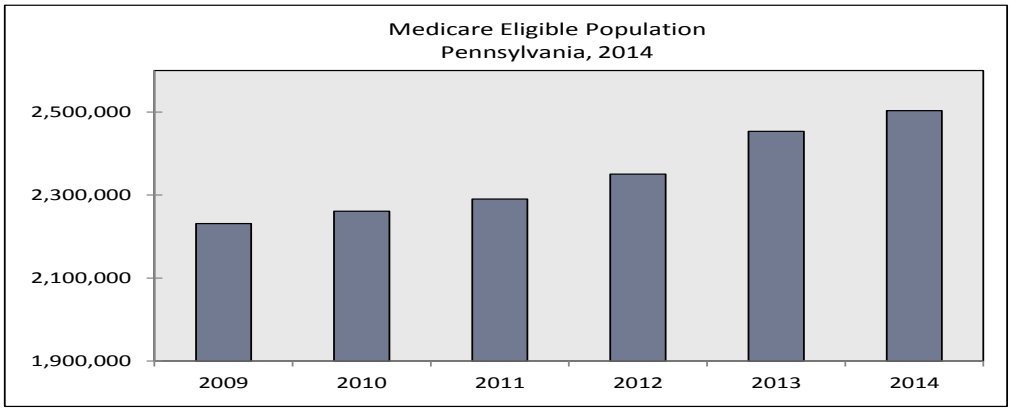
Note: *Estimated population; ** for single adults, age 21-64; ^indicates calendar year and represents counts reported January 2012 and January 2014
Source: Medical Assistance Recipients by Category, by PA County, Pennsylvania Department of Public Welfare, Report 568, Unduplicated persons

Medicare

From 2009 to 2014, the number of Erie County residents who were eligible for Medicare increased by 10.1% from 49,317 to 54,287 (Figure 3). During this same time period, the number of Pennsylvania residents who were eligible for Medicare increased by 12.2% from 2,231,347 to 2,503,511. For 2014, 19.4% of all Erie County residents were eligible for Medicare while 19.6% of all Pennsylvania residents were eligible for Medicare. For 2014, Cameron County had the largest percentage of Medicare eligible residents at 28.5% while Centre County had the lowest at 14.0%.

Figure 3. Medicare Eligible Population, 2014

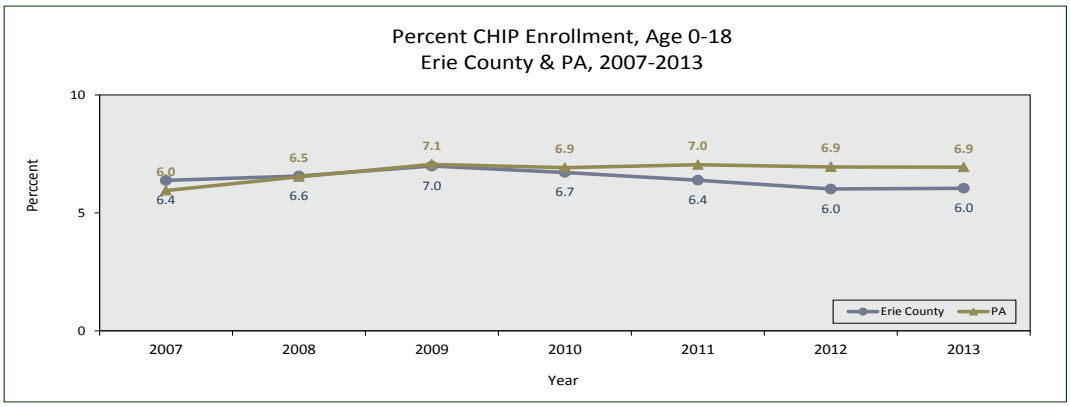




Children's Health Insurance Program (CHIP)

In 2013, 6.0% (6.9% for PA) of Erie County children under 19 years of age were enrolled in the Children's Health Insurance Program (CHIP) compared with 6.0% in 2012 (6.9% for PA) (Figure 4).

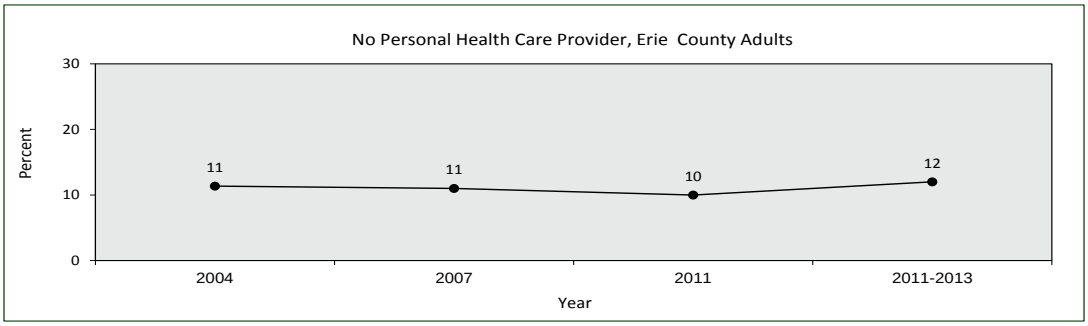
Figure 4. CHIP Enrollment, 2007-2013

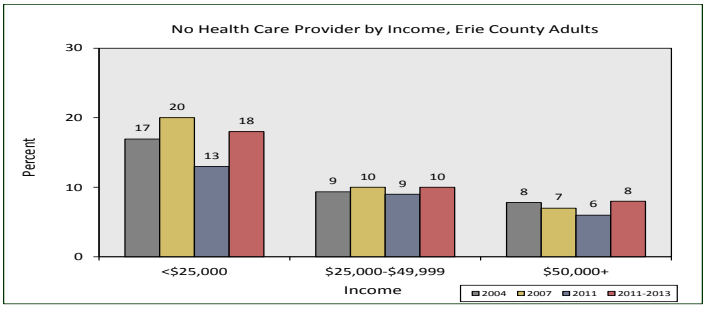


Personal Health Care Provider

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who did not have a personal health care provider increased to 12% in 2011-2013 compared with 10% in 2011 and 11% in 2007 and 2004 (Figure 5). This was lower than PA at 13% and the U.S. at 23% (2013).

Figure 5. No Personal Health Care Provider Prevalence, 2004 to 2011-2013





From 2011 to 2011-2013, the prevalence of residents with no personal healthcare provider increased for all demographic groups with the largest increases for income less than $25,000 and age 45-64 (Table 3).

In 2011-2013, differences in prevalence were seen within demographic groups. Lack of a personal health care provider was significantly higher for males compared with females and for age 18-44 compared with all other age groups. Prevalence was also higher for income below $25,000 compared with other income groups (Figure 5, Table 3).

The highest prevalence of no personal health care provider was 18% for household income below $25,000 and age 18-44 followed by males at 16%. The lowest percentage was 3% for age 65 and above followed by females (7%) and income of $50,000 and above (8%).

Lack of a personal health care provider decreased with increasing age, increasing education, and increasing income.

Table 3. No Personal Health Care Provider Prevalence, 2011 & 2011-2013

Does Not Have a Personal Health Care Provider Erie County Adult BRFSS, 2011 & 2011-2013							
	2011		2011-2013				PA 2011-13
		CI		CI	Point Change^	Sig	
All Adults	10%	8% – 12%	12%	10% – 15%	2%		13%
Gender							
Male	14%	11% – 17%	16%	13% – 21%	2%		18%
Female	6%	4% – 8%	7%	5% – 11%	1%		9%
Age							
18-29	19%	14% – 24%	NA				27%
30-44	13%	9% – 17%	NA				18%
18-44	NA		18%	14% – 24%			NA
45-64	5%	3% – 8%	9%	6% – 13%	4%		8%
65+	3%	1% – 5%	3%	1% – 7%	0%		3%
Education							
<High School	17%	8% – 25%	NA				17%
High School	10%	7% – 13%	NA				14%
<=High School	NA		13%	10% – 18%			NA
Some College	12%	9% – 16%	12%	8% – 17%	0%		13%
College Graduate	7%	4% – 10%	10%	6% – 15%	3%		11%
Income							
<$25,000	13%	10% – 17%	18%	13% – 24%	5%		NA
$25,000-$49,999	9%	6% – 13%	10%	7% – 16%	1%		14%
$50,000+	6%	4% – 9%	8%	5% – 13%	2%		NA
Race/Ethnicity							
White, non-Hispanic	9%	8% – 11%	10%	8% – 12%	1%		11%
Black, non-Hispanic	17%	6% – 28%	NA				19%
Hispanic	21%	6% – 35%	NA				22%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Routine Checkup

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who visited a doctor for a routine checkup in the past two years decreased to 84% in 2011-2013 compared with 86% in 2011 (Figure 6). This was higher than PA at 83% and the U.S. at 81% (2013).

From 2011 to 2011-2013, the prevalence of residents who visited a doctor for a routine checkup in the past two years decreased for all demographic groups with the exception of those with income of $25,000-$49,999 and those with some college. The largest decrease was seen for income of $50,000 and above (Table 4).

Figure 6. Routine Checkup Prevalence, 2001 to 2011-2013

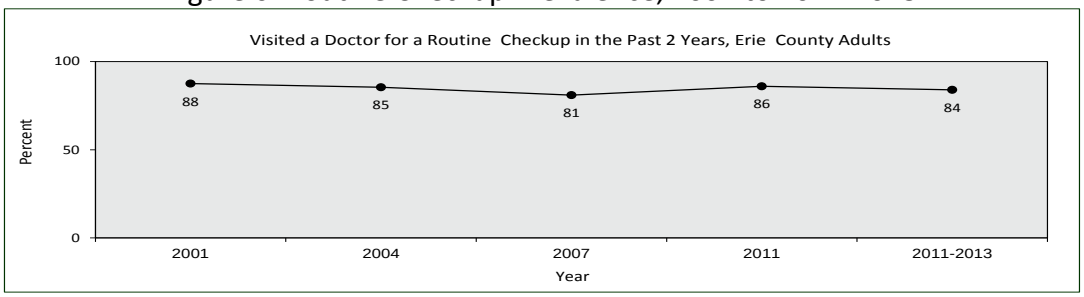


Table 4. Routine Checkup Prevalence, 2011 & 2011-2013

Visited a Doctor for a Routine Checkup Within the Past 2 Years
Erie County Adult BRFSS, 2011 & 2011-2013

	2011	CI	2011-2013	CI	Point Change^	Sig	PA 2011-13
All Adults	86%	84% – 88%	84%	81% – 87%	-2%		83%
Gender							
Male	85%	82% – 88%	82%	77% – 86%	-3%		79%
Female	88%	85% – 90%	87%	83% – 90%	-1%		86%
Age							
18-29	78%	73% – 83%	NA				76%
30-44	83%	78% – 87%	NA				75%
18-44	NA		79%	74% – 84%			NA
45-64	89%	86% – 92%	86%	81% – 89%	-3%		85%
65+	95%	93% – 98%	93%	88% – 96%	-2%		94%
Education							
<High School	99%	97% – 100%	NA				78%
High School	94%	92% – 97%	NA				84%
<=High School	NA		85%	80% – 89%			NA
Some College	82%	78% – 86%	82%	76% – 87%	0%		83%
College Graduate	88%	85% – 92%	85%	79% – 89%	-3%		83%
Income							
<$25,000	84%	80% – 88%	82%	76% – 87%	-2%		NA
$25,000-$49,999	73%	68% – 79%	82%	76% – 87%	9%		82%
$50,000+	98%	97% – 100%	88%	83% – 91%	-10%	***	NA
Race/Ethnicity							
White, non-Hispanic	86%	84% – 88%	85%	82% – 87%	-1%		82%
Black, non-Hispanic	94%	87% – 100%	NA				90%
Hispanic	75%	59% – 91%	NA				83%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

In 2011-2013, differences in prevalence were seen within demographic groups. A routine doctor visit and checkup was significantly lower for age 18-44 compared with age 65 and above. Prevalence was higher for females compared with males, age 65 and above compared with other age groups, and income of $50,000 and above compared with other income groups.

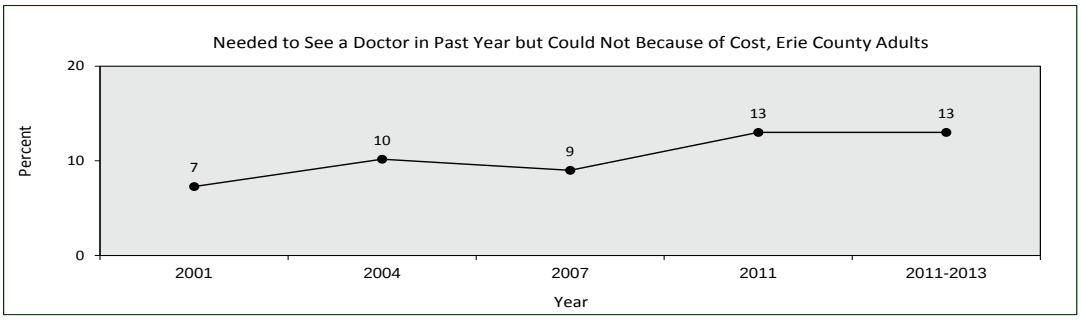
The highest prevalence of a routine doctor visit and checkup in the past two years was 93% for age 65 and above followed by income of $50,000 and above (88%), females (87%), and age 45-64 (86%). The lowest percentage was 79% for age 18-44.

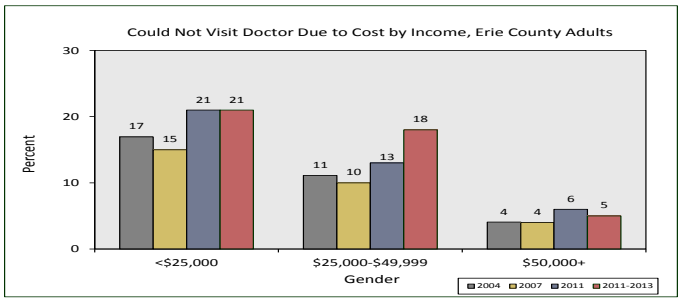
Routine doctor visit and checkup in the past two years increased with increasing age.

Lack of Care Due to Cost

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who needed to see a doctor in the past year but could not because of cost remained at 13% in 2011-2013 compared with 2011 (Figure 7). This mirrors PA at 13%, but is lower than the U.S. at 15% (2013).

Figure 7. Lack of Needed Care Due to Cost Prevalence, 2001 to 2011-2013





From 2011 to 2011-2013, the prevalence of residents who could not visit a doctor in the past year because of cost either remained the same or changed minimally with the exception of those with income of $25,000-$49,999 who saw a 5% percentage point increase (Figure 5, Table 5).

In 2011-2013, differences in prevalence were seen within demographic groups. The need to see a doctor but did not because of cost was significantly higher for age 18-44 compared with age 65 and above, for those with less than or equal to a high school education compared with college graduates, and for those with income below $25,000 compared with income of $50,000 and above.

The highest prevalence of needing to see a doctor in the past year but could not because of cost was 21% for income below $25,000 followed by income of $25,000-$49,999 (18%), age 18-44 (18%), and less than or equal to a high school education (16%). The lowest percentage was 5% for both age 65 and above and income of $50,000 and above followed by college graduates (6%).

Needing to see a doctor in the past year but could not because of cost decreased with increasing age, increasing education, and increasing income.

Table 5. Lack of Needed Care Due to Cost Prevalence, 2011 & 2011-2013

Needed to See a Doctor in the Past Year but Could Not Because of Cost
Erie County Adult BRFSS, 2011 & 2011-2013

	2011	CI	2011-2013	CI	Point Change^	Sig	PA 2011-13
All Adults	13%	11% – 15%	13%	11% – 16%	0%		13%
Gender							
Male	10%	8% – 13%	13%	10% – 18%	3%		12%
Female	15%	12% – 18%	13%	10% – 17%	-2%		13%
Age							
18-29	19%	15% – 24%	NA				18%
30-44	19%	14% – 23%	NA				17%
18-44	NA		18%	13% – 23%			NA
45-64	11%	8% – 14%	13%	9% – 17%	2%		12%
65+	2%	0% – 4%	5%	2% – 9%	3%		4%
Education							
<High School	34%	23% – 44%	NA				19%
High School	15%	12% – 19%	NA				13%
<=High School	NA		16%	13% – 21%			NA
Some College	14%	11% – 18%	13%	9% – 19%	-1%		14%
College Graduate	6%	3% – 8%	6%	3% – 10%	0%		7%
Income							
<$25,000	21%	17% – 26%	21%	16% – 27%	0%		NA
$25,000-$49,999	13%	9% – 16%	18%	13% – 25%	5%		12%
$50,000+	6%	4% – 9%	5%	3% – 9%	-1%		NA
Race/Ethnicity							
White, non-Hispanic	12%	10% – 14%	12%	9% – 14%	0%		10%
Black, non-Hispanic	20%	9% – 32%	NA				20%
Hispanic	31%	14% – 48%	NA				27%

Note: *** indicates significant difference between 2011 and 2011-2013; CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available; ^ indicates a percentage point change

Lack of Medication Due to Cost

Based on the BRFSS, the self-reported percentage of Erie County adults aged 18 and above who needed prescribed medication in the past year but did not get it due to cost was 12% in 2011 (Table 6).

Table 6. Lack of Needed Medication Due to Cost Prevalence, 2011

Did Not Get Needed Prescribed Medication in Past Year Due to Cost Erie County Adult BRFSS, 2011				
	2007	2011		PA
			CI	
All Adults	NA	12%	10% – 14%	NA
Gender				
Male	NA	8%	6% – 10%	NA
Female	NA	16%	13% – 19%	NA
Age				
18-29	NA	16%	12% – 20%	NA
30-44	NA	15%	11% – 19%	NA
45-64	NA	11%	8% – 14%	NA
65+	NA	4%	1% – 7%	NA
Education				
<High School	NA	19%	10% – 27%	NA
High School	NA	15%	11% – 18%	NA
Some College	NA	13%	9% – 16%	NA
College Graduate	NA	8%	5% – 11%	NA
Income				
<$25,000	NA	21%	17% – 26%	NA
$25,000-$49,999	NA	11%	7% – 15%	NA
$50,000+	NA	6%	4% – 8%	NA
Race/Ethnicity				
White, non-Hispanic	NA	12%	10% – 13%	NA
Black, non-Hispanic	NA	14%	4% – 24%	NA
Hispanic	NA	14%	1% – 26%	NA

Note: CI indicates confidence interval; NSR indicates the total is less than 20 and the percentage is considered not statistically reliable; NCI indicates the percentage was 0.0% or 100.0% and no confidence interval was calculated; NA indicates the data is not available

In 2011, differences in prevalence occurred within demographic groups. Not getting prescribed medication in the past year due to cost was significantly higher for those with household income below $25,000 compared with all other income groups and for females compared with males. Prevalence was also higher for those with less than a high school education and aged 18-29 (Table 6).

The highest prevalence of not getting prescribed medication in the past year because of cost was 21% for income below $25,000 followed by less than a high school education (19%). The lowest percentage was 4% for age 65 and above followed by income of $50,000 and above (6%).

Not getting needed medication in the past year because of cost decreased with increasing age, increasing education, and increasing income.

Health Care Provider Location

When Erie County adults aged 18 and above needed health care due to illness, 71% usually went to a doctor's office. But in the past 12 months, 64% went to the doctor's office for health care when they were sick (Table 7).

Table 7. Health Care Choice When Ill Prevalence, 2011

Choice of Health Care Provider When Ill Erie County Adult BRFSS, 2011		
	Where Go For Care When Sick	
Location	Usually Go	Past 12 Months
Doctor's Office	71%	64%
No Usual Place	15%	23%
Hospital Emergency Room	5%	9%
Urgent Care Center	4%	5%
Hospital Outpatient Department	3%	4%
Public Health Clinic or Community Health Center	2%	2%
Some Other Kind of Place	1%	2%

Note: Total is greater than 100% because some respondents visited more than one type of health care provider within the past twelve months

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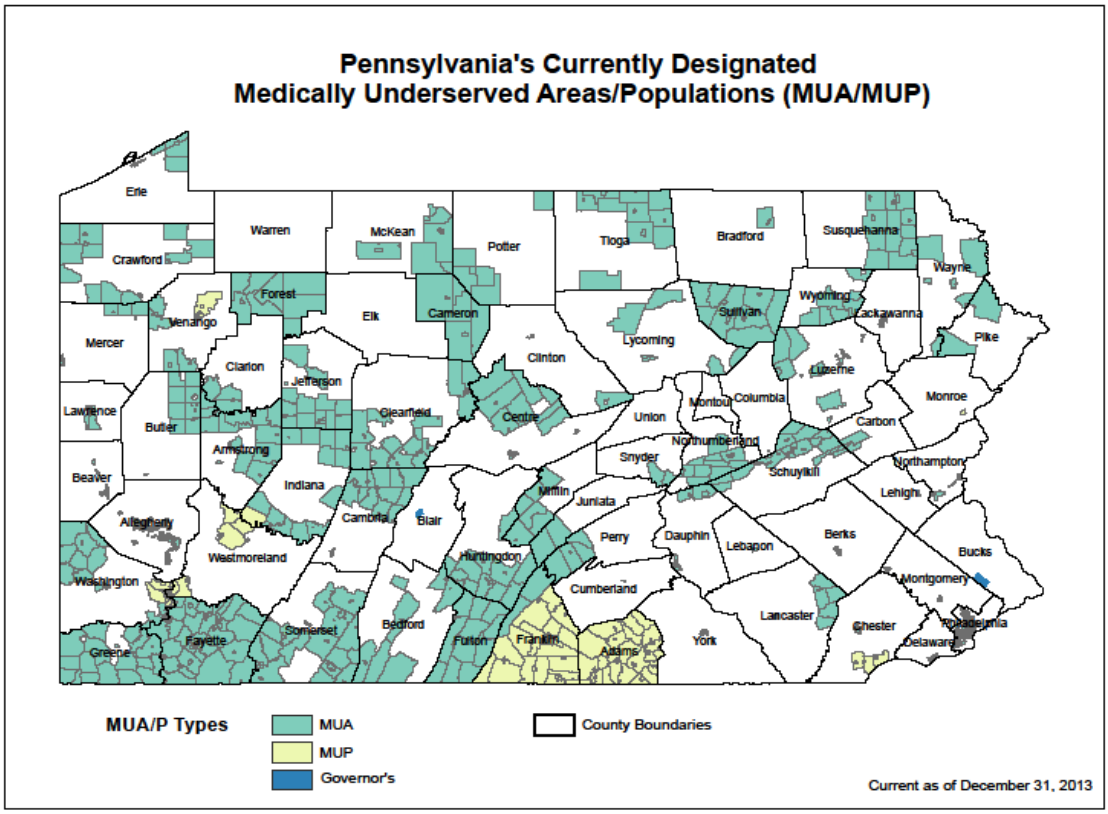
Health Care Providers

Federally Designated Underserved Areas

Not all communities or populations have equal access to needed medical, dental, or mental health care. The federal government classifies areas within the United States that are deficient in access to this health care as a Medically Underserved Area (MUA), a Medically Underserved Population (MUP), or a Health Professional Shortage Area (HPSA). MUA/MUPs are geographic areas or populations with a shortage of health services. The MUA/MUP designation is determined by the availability of health care providers, infant mortality, poverty rate, and percentage of the population aged 65 and above. A HPSA can be a geographic area (a county or service area), a target population group within a geographic area (low income population), or an institution (comprehensive health center, federally qualified health center, prison).

The Health Resources and Services Administration (HRSA) Division of the U.S. Department of Health and Human Services (HHS) has designated three areas within Erie County as MUA/MUP service areas (Figure 1).

Figure 1. Pennsylvania MUA/MUP, 2013



The first service area includes Census Tracts 115.05, 116, 117.01, and 117.02 (North East and surrounding area) (Figure 2), the second service area includes Census Tracts 13, 15, 18, and 19 (City of Erie), and the third service area includes Census Tracts 1 and 12 (City of Erie) (Figure 3).

Figure 2. Erie County Census Tract Map

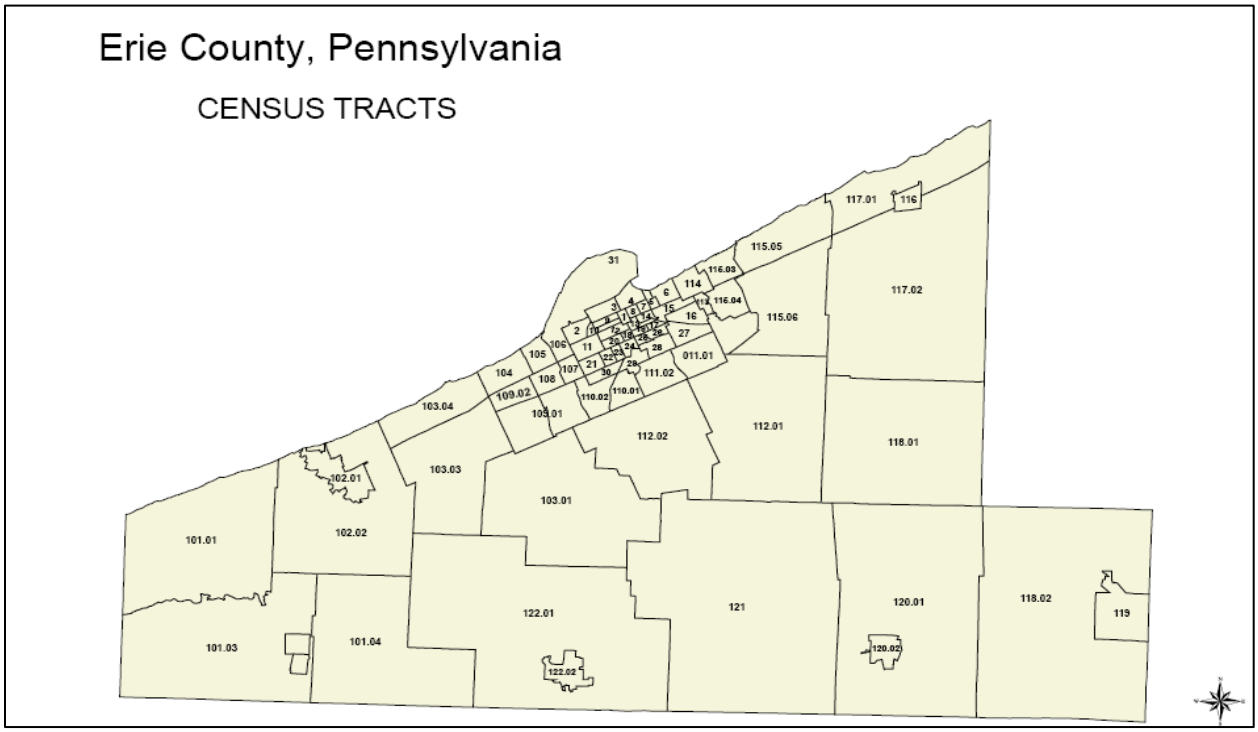
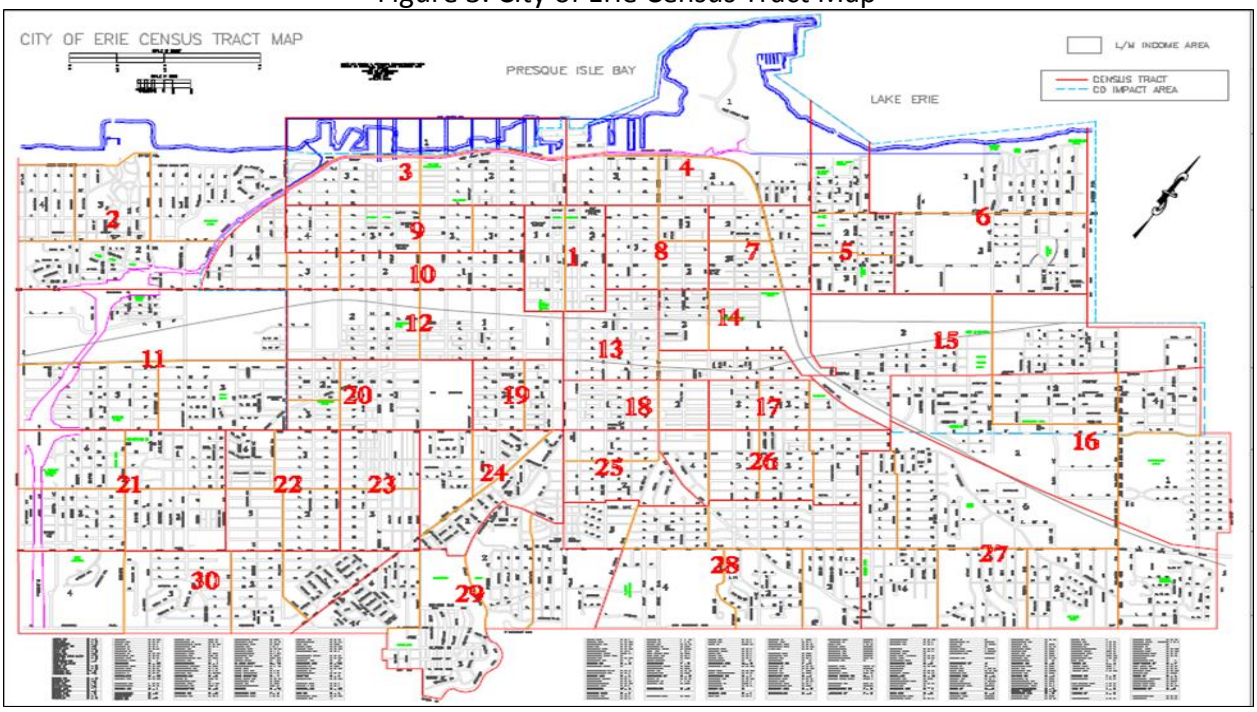
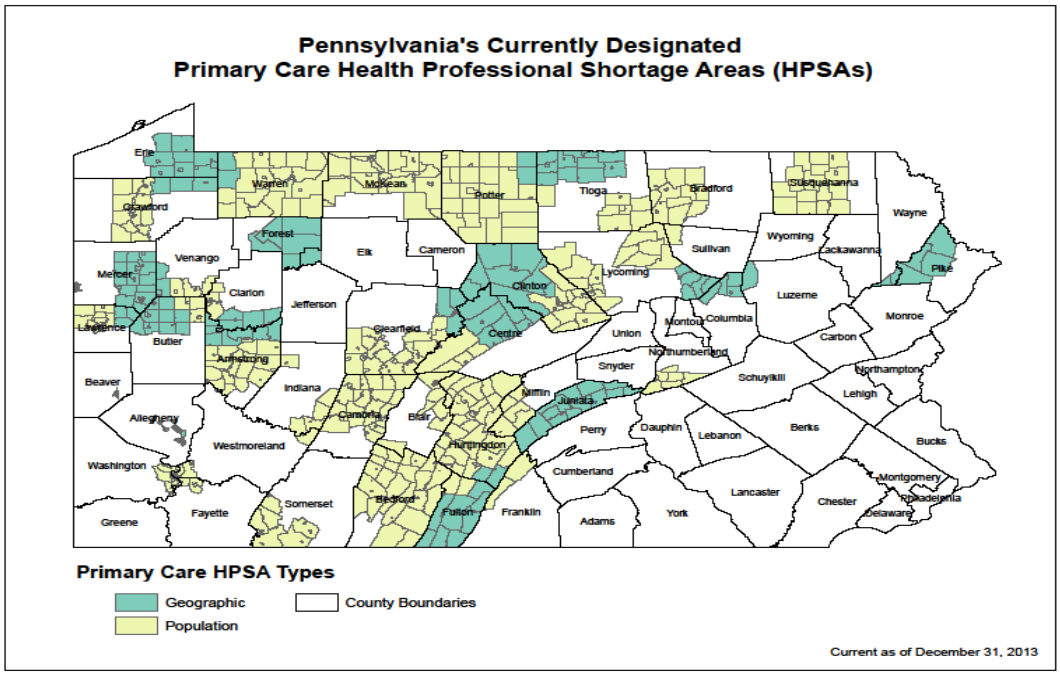


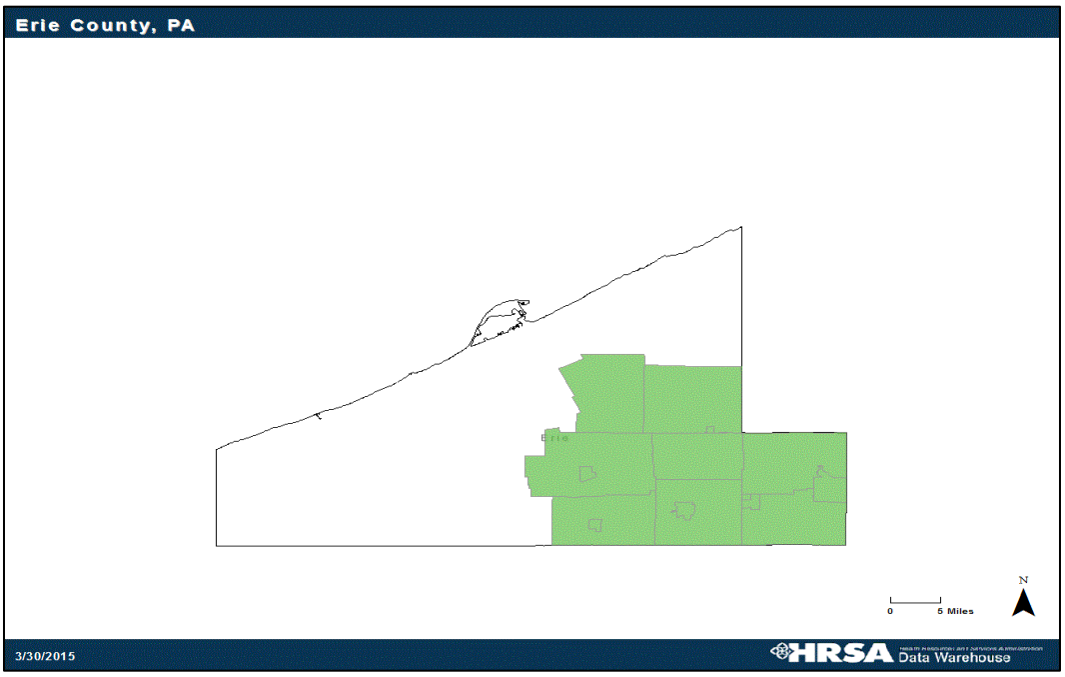
Figure 3. City of Erie Census Tract Map



HRSA has also designated the entire low income population of Erie County as a Dental HPSA lacking 18 full time equivalent (FTE) dentists and the Union City/Corry service area as a Primary Medical Care HPSA lacking 11 FTE primary care providers (Figure 4). There are no HRSA-identified mental health provider shortages in Erie County.

Figure 4. Pennsylvania Primary Care Health Professional Shortage Areas, 2013





Community Health Net (FQHC)

In 2013, 60,996 (21.8%) of Erie County residents received medical assistance. A Federally Qualified Health Center (FQHC) is a community-based organization that provides comprehensive primary care and preventive care, including health, oral, and mental health/substance abuse services to persons of all ages, regardless of their ability to pay or their health insurance status. FQHCs are called Community/Migrant Health Centers (C/MHC), Community Health Centers (CHC), or 330 Funded Clinics and provide services to MUA/MUPs, migrants and seasonal agricultural workers, the homeless population, and residents of public housing.

Community Health Net is a community health center. It consists of a main facility that offers medical, vision, dental, and pharmacy services, six satellite health care locations (Barber National Institute, Harborcreek Youth Services, Harborcreek Health Center, Stairways Campus, John Horan Gardens, and Highpoint Towers) and four satellite dental locations.

Primary Health Network (FQHC)

In February 2015, Wayne Primary Care joined Primary Health Network, a Federally Qualified Health Network, to become a school-based Federally Qualified Health Center located inside Wayne School. Wayne School, a PreK-8 elementary school within the Erie City School District, is located in an area of the City of Erie characterized by high ethnic, racial, and socioeconomic disparities.

Wayne Primary Care is a community health center that offers family medicine services including primary and mental health care.

Multi-Cultural Health Evaluation Delivery System (MHEDS)

MHEDS was developed in 1972 as a joint project of the Erie Diocesan Mission Office and the Erie Council of Churches to meet the primary health care needs of African American and Hispanic Farm Workers.

MHEDS service area includes all of Erie County. Its largest group of patients are members of the resettled refugee populations, and the migrant and seasonal farm workers. General primary care services are offered in two locations: 2928 Peach Street and 1841 East 18th Street, in Erie, PA.

Patient countries of origin mainly include Bhutan and Nepal, Bosnia, Burma, Democratic Republic of the Congo, Eritrea, Ethiopia, Haiti, Iraq, Mexico, Puerto Rico, Russia, Somalia, Sudan,

and Ukraine. In addition to health care, MHEDS offers an onsite WIC (Women, Infants, and Children) program, interpretation and translation services, Latino drug and alcohol education, prevention, and case management, patient education, and general support. It serves as an approved provider for the Pennsylvania Refugee Resettlement Program, conducting health screens and referral services as necessary for newly arriving refugees. MHEDS workers are mostly hired from the populations served, allowing for a higher level of cultural competence, understanding, and trust. MHEDS also offers immigration services including a Civil Surgeon to provide the required physical examination. During 2014, MHEDS staff provided care to 4,245 unique patients with a total of 7,299 visits.

Rural Health Centers

Erie County is considered a metropolitan county as defined by the Office of Management and Budget and reported by the Pennsylvania Office of Rural Health (Figures 4,5).

Figure 4. Pennsylvania Rural and Urban Municipalities, 2010

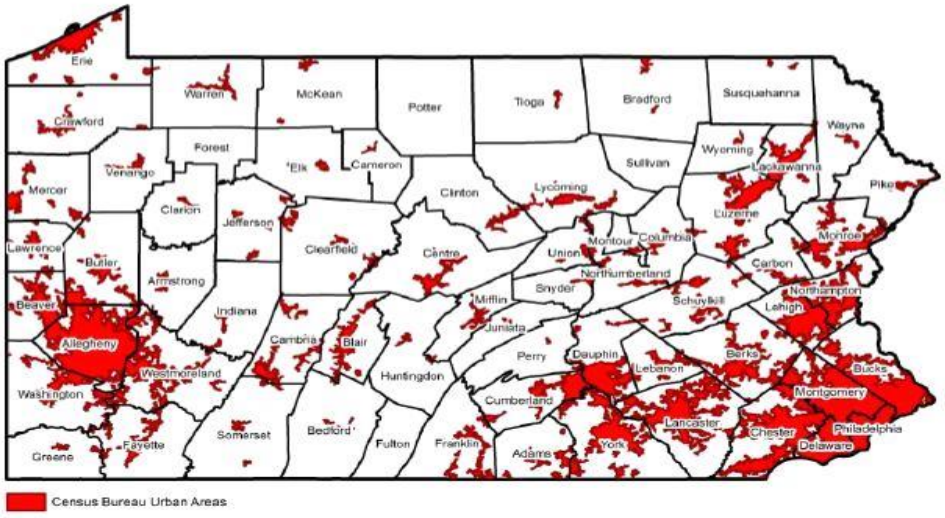
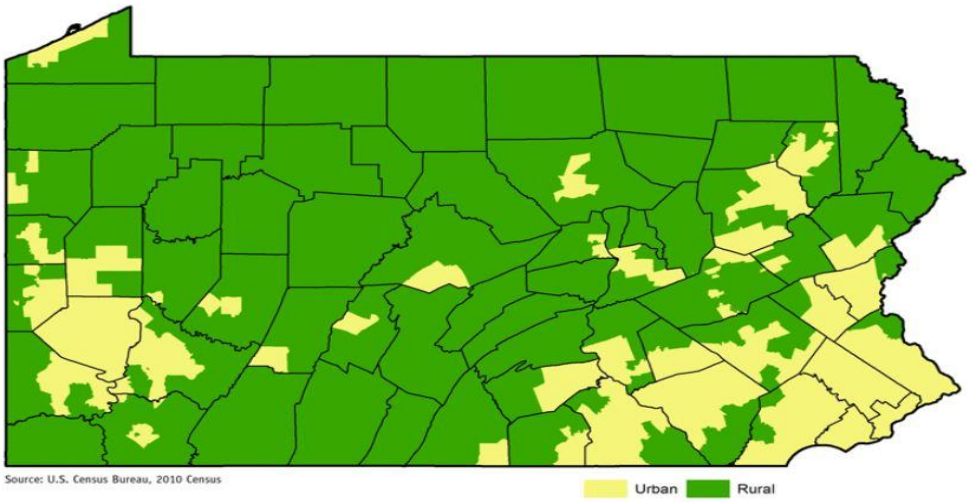


Figure 5. Pennsylvania Rural and Urban School Districts, 2010



As defined by the Rural Assistance Center, a Rural Health Clinic/Center (RHC) is a clinic certified to receive special Medicare and Medicaid reimbursement. The purpose of the RHC program is to improve access to primary care in underserved rural areas. RHCs are required to use a team approach of physicians and midlevel practitioners such as nurse practitioners, physician assistants, and certified nurse midwives to provide services. The clinic must be staffed at least 50% of the time with a midlevel practitioner. RHCs are required to provide out-patient primary care services and basic laboratory services.

There are two RHCs in Erie County. They are the Medical Group of Corry in Corry and John E. Balmer, DO in Union City.

Free Clinics

The St. Paul's Neighborhood Free Clinic is a nonprofit clinic located in the City of Erie that provides free primary health care and dental care by volunteer health professionals to qualified individuals. The clinic does not offer pediatric care or emergency services. Appointments are required for care.

Established in 2012, the Corry Area Free Clinic provides primary health care services by volunteer health professionals to qualified individuals. Appointments are required for care.

Mental Health & Drug and Alcohol Services

The Erie County Offices of Mental Health/Intellectual Disabilities and Drug and Alcohol Abuse assure that a full array of mental health, intellectual disability, and drug and alcohol services are in place and made accessible to the citizens of Erie County, regardless of income-level. These activities include both Medical Assistance HealthChoices and eligibility-based Base funded services. A listing of the major providers of mental health and/or drug and alcohol services for Erie County residents enrolled in Medical Assistance and/or eligible for Base funded services is presented in Table 1.

Table 1. Major Erie County Mental Health & Drug and Alcohol Service Providers

Service Provider	Mental Health Services	Drug and Alcohol Services
Achievement Center	X	
Barber National Institute	X	
Bethesda Children's Home	X	
Brevillier Village	X	
Catholic Charities Counseling & Adoption Services	X	X
Children's Behavioral Health	X	
Community Country Day School	X	
Counseling Services Center, Inc. (Corry Counseling)	X	
Crime Victim Center	X	
Deerfield Dual Diagnosis, LP	X	X
Erie City School District	X	
Erie County Care Management, Inc.	X	
Esper Treatment Center		X
Family Services of NW PA	X	
Gateway Center		X
Gaudenzia Erie	X	X
Glenbeigh Center of Erie		X
Harborcreek Youth Services	X	
Independence Court	X	
Lakeshore Community Services,Inc.	X	
Lakeview Estates	X	
Mental Health Association of Northwestern PA	X	
Multi-Cultural Health Evaluation Delivery System		X
Millcreek Community Hospital	X	X
Multicultural Community Resource Center		X
National Alliance for the Mentally Ill of Erie County	X	
Northwest Tri-County Intermediate Unit #5	X	
PERSAD Center, Inc.	X	
Perseus House, Inc.	X	
Pyramid Healthcare		X
Safe Harbor Behavioral Health	X	
Saint Vincent Health Center Behavioral Services	X	
Sarah A. Reed Children's Center	X	
St. Martin Center, Inc.	X	
Stairways Behavioral Health	X	X
White Deer Run/Cove Forge		X

The Offices of Mental Health/Intellectual Disabilities and Drug and Alcohol Abuse provided 2013 aggregate data for Erie County residents whose mental health services were provided by HealthChoices or Base funds and/or whose drug and alcohol services were provided by HealthChoices funds. Resident services provided by other means, such as private insurance, were not included in the following data summaries.

In 2013, 19,438 Erie County residents received mental health and/or drug and alcohol services. The demographic profile for these clients was: 49% male, 51% female, 17% ages 0-11, 14% ages 12-17, 12% ages 18-24, 9% ages 25-29, 23% ages 30-44, 23% ages 45-64, and 3% ages 65 and older.

In 2013, 44% of services provided for children and adults were for episodic mood disorders, followed by adjustment reaction (12%), hyperkinetic syndrome of children (10%), schizophrenic disorders (5%), anxiety, dissociative and somatoform disorders (5%), drug dependence (5%), and pervasive developmental disorders (3%). Compared with males, females had higher percentages of services received for episodic mood disorders (57% to 43%), adjustment reaction (52% to 48%), and anxiety, dissociative and somatoform disorders (54% to 46%), but lower percentages of services received for hyperkinetic syndrome of children (30% to 70%), schizophrenic disorders (38% to 62%), pervasive developmental disorders (19% to 81%), and drug dependence (45% to 55%).

Percentages of services received among age groups were: 1) for ages 0-11, hyperkinetic syndrome of children (32%), adjustment reaction (28%), and pervasive developmental disorders (11%), 2) for ages 12-17, episodic mood disorders (26%), hyperkinetic syndrome of children (22%), and adjustment reaction (19%), 3) for ages 18-24, episodic mood disorders (53%) and adjustment reaction (9%), 4) for ages 25-29, episodic mood disorders (56%) and drug dependence (12%), 5) for ages 30-44, episodic mood disorders (59%), drug dependence (8%), and schizophrenic disorders (7%), 6) for ages 45-64, episodic mood disorders (61%) and schizophrenic disorders (14%), and 7) for ages 65 and above, episodic mood disorders (57%) and schizophrenic disorders (18%).

During the fiscal year 2013-2014, the Erie County Office of Drug and Alcohol Abuse scheduled 2,618 in-person assessments to determine the appropriate level of care for treatment. The Office utilizes a variety of substance abuse treatment resources, including 2 detoxification units (Millcreek Community Hospital and Gaudenzia Erie), 3 residential facilities (2 of which offer dual services), 2 halfway houses, and 5 outpatient providers located in Erie, Corry, North East, Girard, and Edinboro.

Drug overdose deaths (acute drug poisonings) have risen sharply throughout the United States in the past decade. This increase has been linked with the prescription drug abuse epidemic and the recent re-emergence of heroin. Most overdose deaths are unintentional. Overall, 246 accidental overdose deaths occurred among Erie County residents during 2002-2011, compared to just 70 during 1992-2001. Recent local reports indicate that overdose deaths are now occurring at historic highs. In an effort to combat prescription drug abuse, the Erie County Department of Health, the LECOM School of Pharmacy, and the Erie office of the Pennsylvania Attorney's General have teamed together to offer MedReturn drug collection units at 12 law enforcement facilities located throughout Erie County. The offering of MedReturn units as an alternative for medication disposal has proven to be a very successful public health initiative by removing from circulation large quantities of unused, unneeded, or expired medications with significant abuse potential (e.g., opioid pain relievers).

Medical Professionals

In 2012, there were 719 physicians (599 in 2010) who were employed in health care and provided direct patient care in Erie County (Table 1). Of these, 649 (90%; 93% in 2010) accepted Medicaid and 669 (93%; 94% in 2010) accepted Medicare. The average age of a physician in Erie County is 48.

Table 1. Medical Professionals, 2012, 2013

Medical and Dental Professionals
Erie County and Pennsylvania, 2012, 2013

	Erie County			PA		
Profession*	Estimated Number of Professionals*	% of Total	Population per Professional*	Estimated Number of Professionals*	% of Total	Population per Professional*
All Physicians	719	–	390	34,517		368
Primary Care	273	38.0%	1,028	12,223	35.4%	1,039
Family Medicine	176	24.5%	1,594	4,574	13.3%	2,777
General Practice	NA	–	–	277	0.8%	45,857
Internal Medicine	54	7.5%	5,196	3,992	11.6%	3,182
Pediatrics^	21	2.9%	3,038	1,879	5.4%	1,486
Obstetrics & Gynecology^^	20	2.8%	6,051	1,228	3.6%	4,593
Gynecology (Only)	0	–	–	273	0.8%	20,659
All Dentists	146	–	1,922	7,336	–	1,732
General Dentists	115	78.8%	2,440	5,583	76.1%	2,275
Registered Nurses	3,664	–	77	155,213	–	82
Licensed Practical Nurses	1,006	–	279	34,830	–	365
Physician Assistants	147	–	1,909	5,502	–	2,309
Dental Hygienists	161	–	1,743	6,732	–	1,887

Reporting years: Physicians and Physician Assistants, 2012; Dentists and Dental Hygienists, 2013; Registered Nurses, 2012/2013; Licensed PracticaL Nurses, 2012

Note: *Health practitioners who are employed in health care and provide direct patient care in Erie County; Population per professionals is the population per capita that is served per medical profession; Number of professionals are estimated and equals the number of survey respondents divided by the percent response rate; ^ For pediatrics, per population age 0-17; ^^For obstetrics & gynecology, per female population age 13 and above; Census 2010 population used to calculate population per professional
Source: 2012 Pulse of Pennsylvania's Physician and Physician Assistant Workforce; 2013 Pulse of Pennsylvania's Dentist and Dental Hygienist Workforce; 2012/2013 Pulse of Pennsylvania's Registered Nurse Workforce; 2012 Pulse of Pennsylvania's Licensed Practical Nurse Workforce

In 2013, there were 146 dentists (142 in 2010) who were employed in health care and provided direct patient care in Erie County. Of these, 33 (23%; 13% in 2010) accepted Medicaid and 29 (20%; 11% in 2010) accepted Medicare. For the 60,734 Medicaid recipients in Erie County, the population per dentist is 1,840 (3,253 in 2009) compared with 1,922 (1,976 in 2010) for the total population. The average age of a dentist in Erie County is 53.

Pediatric Care

In 2010, Allied Pediatric Health completed a Needs Analysis and Strategic Plan for Erie County and the surrounding counties serviced by the Erie County medical community. Results for Erie County alone are reported.

Three main challenges in overall pediatric health care for Erie County were identified. The first focused on access to pediatric subspecialty care. For calendar years 2008 and 2009 and including the CHIP, Medicaid, insured, and uninsured pediatric population of Erie County, an estimated 19,032 (16%) of all pediatric short stay visits (a physical health care service requiring less than a 24 hour stay) were out-migrations. Of all children in Erie County, 57% were covered by private insurance (including CHIP), 5% were uninsured, and 38% were Medicaid recipients. Most Erie County pediatricians did not accept Medicaid insurance and local pediatric subspecialists had a three to nine month waiting list for Medicaid patients.

The second challenge focused on obstacles to pediatric subspecialty care for the underserved community. For many children, lack of transportation to services in Pittsburgh, Cleveland, Buffalo, or other locations was a very real barrier to receiving care. Even for local pediatric subspecialists, parents listed lack of transportation, cost of transportation, inability to take time off from work, and caring for other children as barriers to initial and/or ongoing visits for their ill child.

The third challenge focused on awareness and coordination of existing local pediatric services. Many local health care providers and agencies were not aware of all available pediatric physical health services in Erie County and stated a need for coordinated and comprehensive information about local pediatric services including the ages and payers that the physicians accepted. Lack of coordination by existing providers and loss of pediatric subspecialists were also cited as needs.

Children's Hospital Specialty Care Center Erie is a pediatric subspecialty office, located in Erie, that offers access to pediatric specialists in endocrinology, gastroenterology, nephrology, neurology, neurosurgery, and pulmonary medicine. These specialists from Children's Hospital of Pittsburgh of UPMC travel to the center to provide outpatient services, including diagnostic evaluations and follow-up care.

Pharmacists

According to the Pennsylvania Board of Pharmacy, there were 70 actively licensed pharmacies operating throughout Erie County in January, 2015. These included community, institutional, and specialty pharmacies. Additionally, there were 353 actively licensed pharmacists and 504 active pharmacy interns registered in the county. These figures are indicative of a local growing pharmacy workforce. This growth has in large part been driven by the Doctor of Pharmacy

(Pharm.D.) degree offered by the Lake Erie College of Osteopathic Medicine School of Pharmacy (LECOM SOP)

An accelerated 3-year Pharm.D. program was introduced by the LECOM SOP in 2001. Following accreditation in 2005, the SOP expanded to a sister campus in Bradenton, Florida to offer a traditional, 4-year pharmacy pathway. The SOP provides a full array of educational options for students. In 2014, the SOP welcomed its first class of 24 students for the 4-year Distance Education Pathway in Bradenton, where students complete their coursework off-campus.

There are approximately 430 students currently enrolled in the three graduating classes of the accelerated program in Erie. The first two years of the program focus on the didactic portion of pharmacy education. The third year is geared toward experiential education, where students participate in six 6-week rotations in various settings. In 2014, 1,453 candidates applied for one of 143 first-year seats in the accelerated program. In May, 2014, 138 third-year students graduated with a Pharm.D. degree.

Hospital Utilization

There are seven hospitals in Erie County. Corry Memorial Hospital, Millcreek Community Hospital, Saint Vincent Hospital, and UPMC Hamot are acute care facilities. HealthSouth Rehabilitation Hospital of Erie and Select Specialty Hospital Erie are specialty facilities, while the Veterans Affairs Medical Center is part of the federal system and provides services for veterans. Erie Shriners Ambulatory Surgery Center and Outpatient Specialty Care Center is a pediatric specialty facility while the Regional Cancer Center is a cancer specialty facility. Acute care hospital utilization data for Erie County and Pennsylvania is shown in Tables 2 and 3.

Table 2. Acute Care Hospital Utilization, 2013-2014

Acute Care Hospital Utilization
Erie County & PA, 2013-2014*

Utilization Variables	Corry Memorial	Millcreek Community Hospital	Saint Vincent Health Center	UPMC Hamot	Total	PA
Long Term Care Unit	No	No	No	No	–	–
Licensed Beds	20	144	384	446	994	35,564
Beds Set Up and Staffed	20	144	384	311	859	32,525
Admissions	665	5,270	13,301	19,138	38,374	1,494,119
Discharges	667	5,273	14,545	18,896	39,381	1,498,447
Patient Days of Care	2,817	29,278	67,174	85,249	184,518	7,425,686
Discharge Days	2,814	29,357	70,013	86,586	188,770	7,468,645
Bed Days Available	7,300	52,560	140,160	97,922	297,942	11,939,938
Average Length of Stay (Days)	4.22	5.57	4.81	4.58	4.79	4.98
Occupancy Rate	38.6	55.7	47.9	87.1	61.90	62.2
Live Births	2	115	1,043	2,292	3,452	124,903

Note: *Reporting period July 1, 2013 through June 30, 2014
Source: 2013-2014 Pennsylvania Department of Health, Hospital Reports

Table 3. Acute Care Hospital Emergency Services, 2013-2014

Acute Care Hospital Emergency Services Capability and Utilization Erie County & PA, 2013-2014*						
Utilization Variables	Corry Memorial	Millcreek Community Hospital	Saint Vincent Health Center	UPMC Hamot	Total	PA
Emergency Services Capability	General	General	Comprehensive	Comprehensive	–	–
Visits to Emergency Room	10,814	15,463	61,245	78,769	166,291	5,913,494
Inpatient Admissions from Emergency Room	628	3,816	11,781	11,108	27,333	1,000,315
Doctors with Clinical Privileges in Emergency Medicine (Total)	2	1	19	20	42	3,094
Board Certified	1	1	18	20	40	2,530
Other	1	0	1	0	2	564
Hospital Owned/Leased Ambulance Services**						
ALS	Yes	No	No	Yes	–	–
BLS	Yes	No	No	Yes	–	–
AIR	No	No	No	Yes	–	–
MICU	No	No	No	Yes	–	–
MCCU	No	No	No	Yes	–	–

Note: *Reporting period July 1, 2013 through June 30, 2014; **ALS = Advanced Life Support; BLS = Basic Life Support; AIR = Air Ambulance; MICU = Mobile Intensive Care Unit; MCCU = Mobile Critical Care Unit
Source: Pennsylvania Department of Health, 2013-2014 Hospital Reports

Potentially Preventable Hospitalizations

In 2010, slightly more than 12% of Pennsylvania adults aged 18 and above were hospitalized in general acute care hospitals with potentially preventable hospitalizations. As defined by the Pennsylvania Health Care Cost Containment Council (PHC4), potentially preventable hospitalizations are inpatient stays that might have been avoided with timely and effective outpatient care and management of twelve acute and chronic conditions and diseases. Of these twelve, heart failure, COPD or asthma among older adults, and bacterial pneumonia had the highest percentage of hospital stays. Potentially preventable hospitalizations are reported as number of hospitalizations per 10,000 adult residents aged 18 and above.

For 2010, rates of potentially preventable hospitalizations for Pennsylvania counties were reported for 1) all twelve acute and chronic conditions and diseases, 2) COPD and asthma among older adults, 3) heart failure, and 4) bacterial pneumonia.

For all twelve acute and chronic conditions and diseases, Erie County ranked 21st with a rate of 152.2 (186.9 for PA) (Table 4). Pike County ranked 1st with the lowest rate of 64.7 and Philadelphia County ranked 67th with the highest rate of 299.4.

For COPD and asthma among older adults, Erie County ranked 23rd with a rate of 44.5 (61.2 for PA). Pike County was 1st at 12.1 and Venango County was 67th at 122.3.

For heart failure, Erie County ranked 32nd along with Perry County with a rate of 41.1 (46.3 for PA). Union County was 1st at 23.8 and Philadelphia County was 67th at 78.8.

For bacterial pneumonia, Erie County ranked 17th with a rate of 28.6 (32.5 for PA). Union County was 1st at 10.6 and Cameron County was 67th with a rate of 60.4.

Table 4. Potentially Preventable Hospitalizations, 2010

Potentially Preventable Hospitalizations Erie County & PA, 2010		
	Erie County	PA
Hospitalization	Rate*	Rate*
All Acute and Chronic Conditions	152.2	186.9
COPD of Asthma in Older Adults	44.5	61.2
Heart Failure	41.1	46.3
Bacterial Pneumonia	28.6	32.5

Note: *Rate per 10,000 adult residents age 18 and above
Source: Pennsylvania Health Care Cost Containment Council (PHC4)

Ambulatory Surgery Center Utilization

Ambulatory Surgery Centers are health care facilities focused on providing same-day surgical care, including diagnostic and preventive procedures. There are six ambulatory surgery centers in Erie County. Three are affiliated with acute care hospitals and three are independent. Utilization data for all centers is shown in Table 5.

Table 5. Ambulatory Surgery Center Utilization, 2013-2014

Ambulatory Surgery Center Utilization and Services Erie County & PA, 2013-2014*										
	Acute Care Hospitals				Independent Centers				Total	
Utilization Variables	UPMC Hamot Surgery Center	Saint Vincent Endoscopy Center	Saint Vincent Surgery Center of Erie	Acute Care Hospital Total	Greater Erie Surgery Center	Village SurgiCenter of Erie	Shriners Hospitals for Children Erie	Independent Total	Erie County	PA
Patient Surgical Visits (Total)	18,184	3,956	9,139	31,279	2,622	6,178	329	9,129	40,408	996,263
0-17 Years	NA	0	1,087	1,087	0	421	311	732	1,819	46,881
18-64 Years	NA	2,766	4,802	7,568	1,593	3,445	18	5,056	12,624	515,700
65 Years and Above	4,923	1,190	3,250	9,363	1,029	2,312	0	3,341	12,704	371,070
Ultrasound Exams	0	0	0	0	0	0	0	0	0	9,134
Diagnostic X-Rays	0	0	97	97	0	1,173	123	1,296	1,393	47,088
Total Operations	18,184	3,956	9,139	31,279	2,622	6,178	329	9,129	40,408	1,006,534
Total Operating Rooms	6	0	5	11	1	5	2	8	19	667
Availability of Services										
Cardiopulmonary Lab	No	No	No		No	No	No			
EKG	No	No	Yes		No	Yes	No			
Pharmacy	No	No	No		No	Yes	No			
Clinical Lab	No	No	Yes		No	Yes	No			
Inhalation Therapy	No	No	No		No	No	No			

Note: *Reporting period July 1, 2013 through June 30, 2014
Source: Pennsylvania Department of Health, 2013-2014 Ambulatory Surgery Center Reports

Home Health Agencies

Home Health Agencies provide health care services to ill, disabled, or vulnerable individuals in their homes or places of residence, enabling them to live as independently as possible. Home health agencies provide skilled nursing care and other skilled care services like physical therapy, occupational therapy, and speech therapy. Home health services must be ordered by a physician. All home health agencies are licensed by the Pennsylvania Department of Health. There are ten licensed home health agencies in Erie County.

Homecare Agencies

Personal care and private duty homecare agencies provide help with everyday activities, such as bathing, dressing and preparing meals. There are thirty four licensed homecare agencies in Erie County.

Hospice

As defined by the Pennsylvania Department of Health, hospice care is designed to provide comfort and support to patients and their families as they approach the end of life. There are eight licensed hospice providers in Erie County.

Nursing Home Utilization

A nursing home provides care for individuals who need constant nursing care or significant assistance with daily living skills. Skilled nurses and nursing aides are usually available 24 hours a day. There are twenty-one licensed nursing homes in Erie County. Utilization data for these homes is shown in Table 6.

Table 6. Nursing Home Utilization, Erie County, 2014

Nursing Home Utilization by Facility
Erie County & PA, 2014*

Facility	Licensed Beds	Patient Days Medicare	Patient Days Medicaid	Patient Days VA	Patient Days Private Insurance	Patient Days Self Pay	Patient Days Other	Patient Days Total	Bed Days Available	Occupancy Rate
Abington Crest Nursing & Rehab Center	80	1,544	20,726	0	2,619	1,894	0	26,783	29,200	91.72
Ball Pavilion	85	1,861	19,227	0	1,017	7,148	0	29,253	31,025	94.29
Corry Manor	121	4,840	30,858	288	361	5,325	0	41,672	44,165	94.36
Edinboro Manor	121	3,704	26,827	921	2,854	7,529	0	41,835	44,165	94.72
Elmwood Gardens	51	2,964	10,407	0	26	4,601	0	17,998	18,615	96.69
Fairview Manor	121	3,216	29,428	554	3,867	5,332	23	42,420	44,165	96.05
Forestview	80	3,071	8,326	0	0	16,016	0	27,413	29,200	93.88
Golden Living Center Walnut Creek	115	11,690	17,682	0	2,226	2,405	774	34,777	41,975	82.85
Golden Living Center Western Reserve	133	3,431	35,449	697	4,475	2,263	0	46,315	48,545	95.41
Manchester Commons	64	3,715	11,421	0	150	5,757	0	21,043	22,320	94.28
Manorcare Health Services Erie	120	4,814	31,536	665	1,792	1,928	24	40,759	43,800	93.06
Millcreek Community Hosp Trans Care Unit	24	2,876	0	0	4,037	19	0	6,932	8,760	79.13
Millcreek Manor	50	1,262	12,408	0	791	3,231	0	17,692	18,250	96.94
Pennsylvania Soldiers & Sailors Home	107	0	10,057	25,045	0	3,360	0	38,462	39,055	98.48
Pleasant Ridge Manor East	76	1,502	20,798	0	196	1,513	0	24,009	27,740	86.55
Pleasant Ridge Manor West	312	6,127	83,165	0	205	9,888	1	99,386	113,880	87.27
Presque Isle Rehab & Nursing Center	141	4,378	34,155	0	1,796	1,425	0	41,754	51,465	81.13
Saint Mary's at Asbury Ridge	80	6,906	10,513	0	306	10,394	0	28,119	29,200	96.30
Saint Mary's East	139	8,208	26,289	0	74	14,869	0	49,440	50,735	97.45
Sarah A Reed Retirement Center	106	4,397	18,687	0	0	13,125	0	36,209	38,690	93.59
Village at Luther Square	110	2,295	31,935	0	674	3,084	0	37,988	40,150	94.62
Erie County Total	2,236	82,801	489,894	28,170	27,466	121,106	822	750,259	815,100	92.05

Note: *Reporting period January 1, 2013 through December 31, 2014
Source: Pennsylvania Department of Health, 2013 Nursing Home Reports

Sources

Erie County Medication Return Drug Collection Units
LECOM MedReturn

Erie County Office of Drug and Alcohol Abuse
Erie County Drug & Alcohol Abuse

Erie County Office of Mental Health/Intellectual Disabilities
Erie County Mental Health & Intellectual Disabilities

Lake Erie College of Osteopathic Medicine, School of Pharmacy
LECOM School of Pharmacy

Pennsylvania State Board of Pharmacy
Board of Pharmacy Home

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Safety and Crime

Crime

In Pennsylvania, crimes are reported by type of offense. Part I offenses include manslaughter by negligence and Crime Index offenses. Crime Index offenses are more serious and include murder and non-negligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson. They are reported as either violent crimes or property crimes and are used nationally as a standard for comparison. Part II offenses include all other offenses.

Rates for both Crime Index offenses and Part II offenses are higher for Erie County compared with the state (Table 1). In 2013, there were 20,306 actual crimes of all types (21,832 for 2012) reported to the Pennsylvania Uniform Crime Reporting (UCR) Program for Erie County. Of these, 7,430 were confirmed Crime Index offenses with a rate of 2,649.3 per 100,000 population and included 2,131 arrests while 12,876 were Part II offenses with a rate of 4,591.2 and included 7,065 arrests. For Erie City, there were 3,689 Crime Index offenses reported for a rate of 3,659.2 and 6,047 Part II offenses reported for a rate of 5,998.2. For Pennsylvania, 878,971 actual crimes of all types (917,029 for 2012) were reported to the UCR in 2013. Of these, 306,917 were confirmed Crime Index offenses with a rate of 2,402.7 per 100,000 population and included 88,188 arrests while 572,036 were Part II offenses with a rate of 4,478.2 and 352,493 arrests.

Similar comparisons are seen in 2012 as well. There were 8,119 Crime Index offenses reported and confirmed in Erie County for a rate of 2,884.8 and included 1,977 arrests while 13,710 were Part II offenses with a rate of 4,871.4 and 7,640 arrests. For Erie City, there were 3,995 Crime Index offenses reported for a rate of 3,917.7 and 5,906 Part II offenses reported for a rate of 5,791.8. For PA, there were 323,472 Crime Index offenses reported and confirmed for a rate of 2,534.3 and included 89,080 arrests while 593,537 were Part II offenses with a rate of 4,650.3 and 363,147 arrests.

Table 1. Reported Offenses, 2012 & 2013

	2012*			**2013***		
	Erie City	Erie County	PA	Erie City	Erie County	PA
Crime Index Offenses	3,917.7	2,884.8	2,534.3	3,659.2	2,649.3	2,402.7
Part II Offenses	5,791.8	4,871.4	4,650.3	5,998.2	4,591.2	4,478.2

*Rate per 100,000 population

Since 2011, both Crime Index offenses and Part II offenses in PA have decreased. In both Erie County and Erie City, a similar trend is seen for Crime Index offenses, but not Part II offenses.

Crime and violence have become areas of concern in Erie County. In 2010, a cross section of Erie County leaders and partners formed Unified Erie, a collaborative violence reduction initiative which follows a three-pronged approach of crime prevention, law enforcement, and reentry for offenders. In 2014, the Neighborhood Resource Organization (NRO) was created to help neighborhood watch groups reduce violence and develop programs with a focus on youth.

Child Abuse

Anyone under the age of 18 is considered a child. Child abuse or maltreatment includes doing something to directly harm a child (act of commission) or not doing something that puts a child at risk of harm (act of omission). Acts of commission include physical abuse, sexual abuse, and psychological or emotional abuse while acts of omission include physical neglect, emotional neglect, medical and dental neglect, educational neglect, inadequate supervision, and exposure to violent environments.

In 2013, there were 902 total reports of child abuse, including 58 suspected re-abuse cases, in Erie County with 114 (12.6%) of these reports substantiated compared with 900 total reports in 2012 and 84 (9.3%) substantiated. Of the 902 cases reported in 2013, 355 (39.4%) were investigated within 30 days and 490 (54.3%) were investigated within 31-60 days of the initial report. For Pennsylvania, there were 26,944 total reports of child abuse in 2013, including 1,500 suspected re-abuse cases, with 3,425 (12.7%) substantiated compared with 26,664 total reports in 2012 and 3,565 (13.4%) of these substantiated. Of the 26,944 cases reported in 2013, 13,210 (49.0%) were investigated within 30 days and 13,722 (50.1%) were investigated within 31-60 days of the initial report.

In 2013, 78.2% of all reports of child abuse in Pennsylvania were mandated reports. Of these, the top three were reported by school (39.5%), by public/private social service agencies (20.3%), and by hospital (14.7%). Of all perpetrators in Pennsylvania, the major offenders were family members (56.3%), paramours (12.6%), babysitters (12.1%), and other household members (9.0%).

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Environmental Health

The Erie County Department of Health (ECDH) has many programs to safeguard the health of county residents and of visitors to Erie County. What follows is a description of these programs as well as current statistics regarding air quality and childhood lead poisoning.

Food Safety

The Food Protection Program utilizes inspection, enforcement, and education to protect the public who patronize public food facilities in Erie County. ECDH enforces the Pennsylvania Retail Food Act. The Department inspects approximately 1,600 permanent food facilities including restaurants, taverns, grocery, and convenience stores. In addition, over 500 temporary food facilities at events such as fairs and carnivals are inspected each year. The Department also holds a 2-day food safety and certification class for restaurant personnel 11 times per year. The students are given a nationally recognized test which certifies them as a food handler.

Water Supply

The Water Supply Program enforces the rules and regulations of the Pennsylvania Safe Drinking Water Act in Erie County. ECDH inspects the water supplies of public facilities such as restaurants and businesses that serve 25 or more people for at least 60 days out of the year. These water supplies are categorized as Transient Non-Community water supplies meaning they server a population that comes and goes. The Department also reviews the results of required routine bacteriological and chemical samples of these water supplies. There are approximately 100 water supplies regulated by ECDH.

Water Pollution

The Water Pollution Control Program enforces the rules and regulations of the Clean Streams Law and the Pennsylvania Sewage Facilities Act in Erie County. The goal is to protect the health of the public, terrestrial, and marine aquatic life by routinely inspecting permitted discharges from sewage and industrial waste treatment plants and by reviewing plant monitoring reports. ECDH also responds to unpermitted spills and discharges and assures that proper cleanup of the contaminants is achieved. There are approximately 70 large- scale Sewage/Industrial Waste permitted discharges that are regulated in Erie County, as well as over 400 permitted Small Flow Treatment Facilities. ECDH also issues an average of 125 on-lot septic permits annually.

Public Bathing

The Public Bathing Place Program enforces the rules and regulations of the Pennsylvania Department of Health in Erie County. In addition to the Public Beach Program, the Department inspects and monitors the bacteriological quality of all public swimming pools and water rides in the county. This involves routine inspections of outdoor pools during the summer as well as year-round monitoring of indoor pools. If a facility does not meet the required water quality standards, the pool is closed until the water quality is acceptable. There are about 100 public pool facilities with 154 permitted public pools, spas or water attractions in Erie County.

School Environment

The School Environment Program enforces the rules and regulations regarding the public safety conditions in schools. ECDH annually inspects 75 public schools, in the fall, looking for physical hazards and issues related to food safety, and re-inspections are conducted in the spring. ECDH also conducts fall and spring cafeteria inspections of 17 non-public schools that participate in the National School Lunch program.

Camps and Campgrounds

The Recreational Environment Program regulates organized camps and campgrounds. This program focuses on inspection of the water supply, sewage disposal, availability of an adequate number of restrooms, and general maintenance of the facilities. There are 8 organized camps and 25 campgrounds in Erie County that are regulated by ECDH.

Manufactured Home Parks

The Manufactured Home Park (MHP) Program regulates all MHPs in Erie County. This program focuses on the inspection of water and sewer related issues, maintenance of the park specifically related to handling of trash and hazardous conditions of the manufactured homes, and the potential for the spread of vectors that could cause damage or carry disease. There are 88 manufactured home parks that are regulated by ECDH.

Vector Control

The Vector Control Program addresses two disease vectors. The first is *Ixodes* tick identification. This program identifies the species of ticks brought to the Department by citizens who find a tick on themselves, a family member, or a pet. The Department also receives ticks from physicians and hospitals. The Department determines if the tick is one that could potentially carry the Lyme disease spirochete and informs the client. In 2014, 163 ticks were submitted to ECDH for identification.

The second disease vectors are mosquito species which transmit the West Nile virus. The Department monitors and traps mosquitoes throughout Erie County, applies larvicide on areas of standing water, and applies adulticide if mosquitoes test positive for the virus. In addition, ECDH also collects select species of dead birds that are tested to determine if they carry West Nile virus. In 2014 only one mosquito pool and one bird tested positive for the virus. No humans tested positive in 2014.

Beach Monitoring and Notification

ECDH has administered the Pennsylvania Beach Monitoring and Notification Program since 2006. ECDH is the only local agency in the country that directly receives and administers the federal funds allocated for the National Beach Monitoring and Notification Program administered by the Environmental Protection Agency (EPA). The program is intended to increase the monitoring of beach water as well as to conduct sanitary surveys of the Lake Erie watershed to locate possible sources of bacterial contamination affecting beaches. It is also intended to provide additional means to inform the public of water quality at swimming beaches.

In 2014 there were 31 Advisories and 30 Precautionary Advisories issued at Presque Isle State Park Beaches. At Freeport Beach there were two Restrictions issued.

Air Quality

According to the American Lung Association, there was a weighted annual average of 6 days per year during 2010-2012 that Erie County experienced ozone air pollution in unhealthy ranges (greater than the national ambient air quality standard of 0.075 parts per million).

Childhood Lead Poisoning

Among Erie County children under the age of seven that were tested in 2013, there were 114 confirmed cases of elevated blood lead levels greater than or equal to 10 micrograms per deciliter (µg/dl). Overall, the percentage of children with levels greater than or equal to 10 µg/dl was 2.7% (for Pennsylvania, 1.9%).

Among Erie County children under the age of seven that were tested in 2013, there were 27 confirmed cases of elevated blood lead levels greater than or equal to 15 µg/dl. Overall, the percentage of children with levels greater than or equal to 15 µg/dl was 0.6% (for Pennsylvania, 0.5%).

In 2013, Erie County ranked fifth in the state for testing children under the age of seven for lead. Of all children younger than seven in Erie County, 17.7% were tested for lead. Philadelphia was first at 28.2%.

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Quality of Life

In general, “quality of life” is defined as one’s personal satisfaction or dissatisfaction with the conditions in which one lives. States, counties, and municipalities across the country use various indicators to measure the quality of life or vital signs of their communities, such as employment trends, educational attainment, home values, health outcomes, cost of living statistics, and the like. For the purposes of this Needs Assessment, this chapter provides an overview of some of the major resources in Erie County that enhance the well-being of residents in relation to leisure and recreation, social engagement, and modes of transportation.

Leisure and Recreation

Arts, Culture, and Entertainment

Erie County is home to a diverse range of arts, culture, and entertainment resources. These resources include, but are not limited to, large organizations and venues in downtown Erie, heritage venues and sites in many communities, colleges and universities with arts and cultural programming, church-based cultural activities, arts councils, ethnic communities and traditions, and artists representing a wide range of disciplines. These resources contribute to the region’s identity, economy, and quality of life.

In 2012-2013, Erie Arts & Culture identified over 50 nonprofit arts and cultural organizations which play a substantial role in the cultural life of the community by promoting participation in, appreciation for, and understanding of the visual, performing, folk, and media arts. The list includes government-owned or operated cultural facilities and institutions, municipal arts agencies and councils, private community arts organizations, unincorporated arts groups, living collections, university presenters, and arts programs that are embedded under the umbrella of a non-arts organization or facility.

Erie County has a rich and varied heritage stemming from the area's unique geographical location and natural harbor, and is home to 18 historical museums and societies, 12 organizations dedicated to historical research and living history demonstrations, and 15 ethnic heritage groups. The following is a list of museums and historical societies in Erie County: Erie Maritime Museum/Flagship Niagara League, Erie County Historical Society, Harborcreek Area Historical Society, North East Area Historical Society, Union City Museum, Hornby School Restoration Society, Corry Area Historical Society, Lake Shore Railway Museum, Museum of GE History, Lawrence Park Historical Society, Wattsburg Area Historical Society, Valley School Museum, Fairview Area Historical Society, Edinboro Area Historical Society, Hurry Hill Farm and Maple Syrup Museum, Goodell Gardens and Homestead, Judson House/Fort LeBeouf Museum and Hazel Kibler Museum.

In addition to these varied arts and cultural resources, Erie County offers residents a variety of entertainment opportunities. The Erie Bayhawks (NBA D-League Basketball), Erie Otters

(Ontario Hockey League), Erie Seawolves (Eastern League AA Baseball), Erie Explosion (Professional Indoor Football League), Lake Erie Speedway, and numerous athletic teams from the region's colleges and universities call Erie County home. Lake Erie Wine Country, located in the largest grape-growing region east of the Rockies, extends roughly 50 miles from Silver Creek, New York to Harborcreek Township, Erie County. Eleven of the 23 commercial and estate wineries of the Lake Erie Wine Country are found in Erie County. The Erie County Convention Center Authority owns and operates four multi-use venues in downtown Erie, including the Bayfront Convention Center, the 6,000 seat stadium Jerry Uht Park, the 7,000 seat Erie Insurance Arena, and the 2,250 seat Warner Theatre. The Erie Zoo and Botanical Gardens is a 15 acre park located within the City of Erie and houses over 400 animals from around the world and 2,500 specimens of 600 species of plants. Waldameer and Water World is an amusement/water park with 75 attractions located at the base of Presque Isle State Park. Splash Lagoon Indoor Waterpark Resort is approximately 80,000 square feet, and features seven water slides, two hot tubs, one large activity pool, a children's area, a 6,500 square-foot arcade, and a large Laser Tag area. Asbury Woods Nature Center/Asbury Park has over 200 acres of diverse habitats and 4.5 miles of walking trails. The Nature Center's "green" building features live animal exhibits, hands-on displays, and educational programs. The Tom Ridge Environmental Center, also located at the base of Presque Isle State Park, offers 7,000 square feet of exhibits that highlight Presque Isle's history, and a glass-enclosed 75 foot tower providing spectacular views of Lake Erie.

Festivals and Events

There are more than 50 wide-ranging festivals and events occurring annually in Erie County. Some of the more notable summertime happenings include the following community events: the Lake City Fire Company Carnival, North East Firemen's Cherry Festival, Discover Presque Isle Days, Girard Dan Rice Days, Celebrate Erie extravaganza in downtown Erie, Erie County Fair in Wattsburg, Waterford Community Fair, Albion Area Fair, and Edinboro Highland Games.

The number and availability of ethnic festivals are of special note. Conveniently located on the shores of a Great Lake, Erie County has long been considered a prosperous region to settle for generations of immigrants from across the globe. Many of the so-called "old" neighborhoods continue to honor their rich cultural histories through community outreach and cultural education. Annual festivals and events serve as celebrations of the rich ethnic diversity of our community. The Troika Russian Festival, Asian Festival, Italian Festival, Zabawa Polish Festival, Panegyri Greek Festival, German Heritage Festival, Slavic Festival, and Erie Irish Festival allow citizens the opportunity to experience and enjoy ethnic foods, drink, entertainment, architecture, and tradition.

Libraries

The public libraries in the Commonwealth of Pennsylvania are divided into 29 library districts. The library district servicing Erie and Crawford Counties is the Erie District. The Erie District is headquartered in the Erie County Public Library's Blasco Memorial Library, which is known as

the District Center. As the District Center, Blasco Memorial Library serves a population of nearly 370,000 northwest Pennsylvania residents.

Public libraries in Erie County include the Erie County Public Library and its four branch libraries (Edinboro, Iroquois Avenue, Lincoln Community Center in Fairview, and Millcreek), and the six following independent public libraries: Albion Area Public Library, Corry Public Library, McCord Memorial Library in North East, Rice Avenue Community Public Library in Girard, Union City Public Library, and Waterford Public Library.

In addition to these public libraries, several academic and special collections libraries are available as well. Academic libraries include Edinboro University's Baron-Forness Library, Penn State Erie's Lilley Library, Gannon University's Nash Library, Lake Erie College of Osteopathic Medicine's Health Sciences Library, and Mercyhurst University's Hammermill Library. Special collections libraries include the Erie County Law Library, Erie County Historical Society and Museums Library, Erie Insurance Group Library, UPMC Hamot Medical Library, Lord Corporation Information Center, Millcreek Community Hospital Library, Saint Vincent Hospital Library, and the Veterans Affair Medical Center Library.

Parks and Trails

Erie County boasts over 100 municipal parks and playgrounds, 15 separate State Game Lands which collectively encompass 16 square miles, and two State Parks. Presque Isle State Park is a 3,200 acre sandy peninsula that extends into Lake Erie. Presque Isle offers its visitors numerous recreational activities, including swimming, boating, fishing, hiking, bicycling, and in-line skating. Erie Bluffs is Pennsylvania's newest State Park, encompassing over 500 undeveloped acres along the Lake Erie shoreline in western Erie County.

Erie County's pedestrian, bicycle, and trail network serves many of the urban areas with an extensive public sidewalk system and multi-use pathways, while also connecting to rural areas with a combination of bicycle routes, off-road recreational trails, and rail-trail corridors. Notable focal points of this system include:

BicyclePA Route A is a 199 mile route running north-south from Greene County at the Pennsylvania/West Virginia border to Erie County. Route A enters Erie County along PA 98 before turning onto PA 832 and connecting with Presque Isle. **BicyclePA Route Y** runs east-west through the entire state from Ohio to New York and enters Erie County from Crawford County along US 19 before turning east onto US 6 to Warren County. **BicyclePA Route Z** runs east-west from Ohio to New York, primarily following PA 5 and the Great Lakes Seaway Trail.

The **Great Lakes Seaway Trail** is a designated National Scenic Byway and a 518 mile route connecting the shores of Lake Erie to the Niagara River, Lake Ontario and the St. Lawrence River in New York. The trail runs east-west through Erie County for approximately 64 miles primarily along PA 5, but including portions of Alternate PA 5, the Bayfront Parkway, Presque Isle Drive and US 20. The Great Lakes Seaway Trail provides biking and driving links to historical locations, cultural heritage sites and scenic vistas.

The **PA Route 6 Heritage Corridor** is one of twelve Pennsylvania Heritage Areas. The corridor runs east-west across the state's northern tier through 11 counties along US Route 6. Through Erie County the corridor also includes US Route 6N, which turns off the main corridor west of Mill Village Borough and runs through the Boroughs of Albion and Edinboro. The corridor is managed by the Route 6 Alliance.

The **Bayfront District Trail Network** runs through the City of Erie connecting various amenities and providing public access to the waterfront for pedestrians and bicyclists. This network includes the Bayfront Connector Trail, a paved multipurpose trail that runs along the Bayfront Connector and connects Presque Isle State Park to Penn State Erie.

The **Karl Boyes Trail** is a designated National Recreation Trail. This 13 mile multipurpose trail makes a circuit of Presque Isle State Park and is regularly used by walkers, bicyclists, in-line skaters, and joggers.

The Northwest Pennsylvania Trail Association's **Corry Junction Greenway Trail** is Erie County's first rail-to-trail venture. It runs north-south for approximately 7 miles through the Brokenstraw Valley and along the old Penn Central rail corridor to connect Corry to Clymer, New York.

Social Engagement

A key indicator of quality of life is social belonging. In Erie County, the two large urban centers of Erie and Corry have all the amenities of a city, while providing residents with a small-town feel. Residents take pride in their communities, and commitment to community organizations, clubs, and religious activities is strong, as can be seen by the large number of civic groups and churches in the area.

Erie County is proud to have a vast offering of religious organizations and churches. Every major denomination can be found in the county including Baptist, Catholic, Muslim, Lutheran, Methodist, Buddhist, Presbyterian, Jewish, and many more. In 2010, there were over 300 congregations residing in Erie County.

Civic and social organizations are comprised of people who join together to provide a service or services to their community. Erie County is home to over 100 civic and social organizations. The American Legion, Loyal Order of Moose, Girl Scouts, Elks Lodge, Lions Club, YMCA, Masonic Lodge, Polish Falcons Club, Veterans of Foreign Wars, and Erie Yacht Club are all examples of local civic and social organizations.

With over 15% of Erie County's population 65 years of age and older, senior centers are an important part of the social fabric of the county as they enrich and enhance the quality of life for senior citizens. There are currently 12 senior centers located in Erie County - 6 of these centers are located in the City of Erie and the rest are located throughout the county in Albion, Corry, Fairview, Millcreek, North East, and Union City.

Modes of Transportation

There are two public airports that serve the Erie County region. These are the Erie International Airport/Tom Ridge Field, located in Millcreek Township, and the Corry-Lawrence Airport in the City of Corry. Erie International Airport/Tom Ridge Field is host to three airlines which provide connecting flights through each of their respective hubs. US Airways Express operates daily roundtrip flights between Erie and Philadelphia, United Air Lines offers daily nonstop jet service to its connecting hub in Chicago, and Delta Air Lines offers flights to its connecting hub in Detroit. The Corry-Lawrence Airport is operated by the Airport Authority of the City of Corry, and is a general aviation facility serving travelers and businesses in northwestern Pennsylvania and western New York.

The Erie Metropolitan Transit Authority (EMTA, or the "e") operates local public transit service in the county. The fixed bus route services include daily routes traversing the City of Erie and outlying communities. In addition to these daily routes, the "e" also operates routes serving Mercyhurst University, Mercyhurst North East, Gannon University, Penn State Erie, and Edinboro University. EMTA also operates the LIFT paratransit transportation system for residents who live beyond bus routes or are unable to utilize bus services. Included in this system are a rural transportation program for persons with disabilities and a medical assistance transportation program for qualified individuals. Additional EMTA services include welfare to work, bike rack, and senior citizen programs, as well as the free BayLiner Trolley which serves many downtown Erie destinations.

Within Erie County, regularly scheduled inter-city motor coach service is provided by Greyhound Lines, with additional charter operations provided by the carriers Anderson Coach and Travel and Coach USA. Greyhound Lines operates out of Erie's Intermodal Center and provides both passenger motor coach service and package express services. Greyhound service links Erie passengers to over 2,300 North American destinations.

Amtrak passenger rail service is operated out of Union Station in the City of Erie. Amtrak provides service through Erie County along the Lakeshore Limited Line from Chicago to Albany, where the line splits to serve New York City or Boston. Service is limited to one train in each direction daily (1:48 AM for the westbound train, and 7:20 AM for the eastbound train).

Erie Yellow Cab is the largest taxi service provider within Erie County. Yellow Cab provides point-to-point transportation throughout the county and surrounding areas, as well as delivery and courier services. Public cab stands are located at the airport, Greyhound bus station, and within a few blocks of the Amtrak train station. Additional taxi services are provided by the Corry Cab Company and several private limousine services. Seasonal water taxi services are provided by the Erie-Western Pennsylvania Port Authority with connections between the Erie Bayfront and the Waterworks area at Presque Isle State Park.

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Focus Groups

Introduction

Seven focus groups were conducted throughout Erie County targeting the following areas/groups: City of Corry & Union City (community leaders); Albion, Girard, and Lake City (community leaders); North East (low income residents); City of Erie (community leaders); Erie County (community leaders); Mental Health system users (Erie County Care Management and the Mental Health Association); and Harbor Homes Public Housing residents. The purpose of a focus group is to gather additional information that will enrich and validate the quantitative data secured for the remaining portion of the Needs Assessment. Focus groups were conducted during the months of January and February, 2015.

Methodology

Embracing a goal of health equity, the Steering Committee identified invitees based on geography and organizational function as related to county level health disparities. Healthy People 2020 defines a health disparity as "a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion."

Individuals represented a broad list of agencies involved in education, government, religion, health, and social services. Agencies represented on the Advisory Committee were not invited to the focus groups so as not to add weight to their contribution. The targeted focus group invitees were chosen from disparate populations including low income, racial and ethnic minorities, and those with limited English proficiency.

Questions

Questions for the sessions were determined by the Steering Committee members based on various data from the Erie County Health Department including the 2012 Needs Assessment and focus group report, results from the Advisory Committee survey, data from the PA Department of Health, the 2013 Pennsylvania Youth Survey (PAYS), and Healthy People 2020 Goals and Objectives. Questions and prompts were based on three categories: Health Behaviors, Behavioral/Mental Health, and Healthcare Utilization. With respect to Health Behaviors, the main question was "What do you do to keep healthy?" Prompts were:

- What keeps you from being healthy?
- How do you get exercise?
- Do you have any dietary concerns?
- Do you have access to healthy foods?

Regarding Behavioral/Mental Health, there was one question: "What kinds of mental health/behavioral health issues do you see in your community and Erie County in general?" Healthcare Utilization involved a combination of questions and prompts with the main question being: "What do you think is the primary responsibility of the local health system in improving the health of the community?" Prompts were:

- What changes should be mad in our local and/or county systems?
- Where do you find information about the health care options and services available to you?
- Tell us about any trouble you, friends, or family have had getting needed or wanted health services in the past few years.
- What about health literacy?
- What about transportation?
- Are there other services needed?

The same questions were asked of each group with prompts used if discussion did not include that information. Prior to the presentation of questions, attendees were given background information about the Community Health Needs Assessment. This included why it was being done, who was involved in the performance of the Assessment, what will be contained in the final report, and the mechanism for release of the completed document. They were also instructed on the use of focus groups and participation in them. Permission to record the sessions was requested. Each was given the option to leave if they did not wish to be recorded. Permission was granted in all sessions by all attendees. Each session was led by a facilitator and supported by an ECDH staff member who took notes and performed the audio recordings. Recordings were destroyed once the notes were prepared by the ECDH staff member and reviewed by the facilitator for accuracy. Attendees of the resident focus groups were offered twenty dollars each to defray any costs of transportation, loss of work, childcare, or other expense that may have occurred as a result of their presence at the session. The qualitative data from the focus groups were reviewed and manually coded to determine common themes as well as those themes unique to specific groups. These findings were reviewed by the Steering Committee to determine conclusions and prioritized recommendations. The two tables

shown below provide the general responses as categorized by question and location (Table 1, Focus Groups 1-4; Table 2, Focus Groups 5-7).Table 1. Focus Groups 1-4

QUESTIONS	RESPONSE BY LOCATION			
	Albion, Girard, and Lake City	**Corry & Union City**	**Erie City**	**Erie County**
	Community Leaders	*Community Leaders*	*Community Leaders*	*Community Leaders*
Health Behaviors				
What do you/your clients do to stay healthy?	exercise, healthy eating, supplements	exercise, healthy eating, stay away from doctors	exercise, healthy food, emotional health, follow prescription medication regimen	diet, exercise, preventative medicine; mind, body, spirit orientation
What keeps you/your clients from being healthy?	low literacy, no diagnostic facilities, no transportation	homelessness (clients), food desert	neighborhood safety, unhealthy eating habits, refugees have special issues (LEP, cultural adjustment), bullying	barriers to care access (transportation, provider not in network, long wait for appointments, not enough dentists accepting MA, homelessness), day to day survival comes first, organizational trust issues
How do you/your clients get exercise?	community/employer programs, home exercise	community/employer programs, walking, running, home exercise	community programs, walking/jogging, biking	community/employer programs, exercise at home
Any dietary concerns? Access to healthy foods?	cost, food insecurity/not enough food pantry presence for demand	availability/cost of healthy foods, especially in winter	homeless have nutrition issues, schools serving healthier foods for breakfast/lunch, not much leeway in school curriculum to address healthy behaviors, refugees have gardens	food insecurity, food deserts, prohibitive cost of healthy and/or organic foods
Mental/Behavioral Health				
What mental/behavioral health issues do you see in your community?	alcohol & drug abuse/meth labs, anxiety, bipolar, depression, mental disabilities, PAYS survey, youth using tobacco, no mental health services available	homelessness, domestic violence, drugs & alcohol, depression, PAYS survey, not enough mental health counseling services, one domestic violence organization to serve region south of I-90, transport regulations a barrier	violence/crime, homelessness (including teens), large number of homeless have MH issues, refugees at risk because of history, language, culture shock	*youth:* PAYS survey, ACE study *adults:* addiction, suicide attempts, anger, anxiety, relationship issues, adults have no filters/boundaries, stigma with counseling, doctors quick to prescribe medication, loneliness/isolation, shortage of psychiatric care
Healthcare Utilization				
What do you think is the primary responsibility of a healthcare system in improving the health care of the community?	basic services including medical, dental, mental health, WIC, welfare	never answered directly, only recommendations regarding issues	prevention services, accountability for provider, patient, & system needed, helping individuals understand & navigate insurance/treatment systems	highest quality services in most efficient way with continuity of care, regardless of ability to pay, integration of disciplines between physical and mental health services, navigation
What changes are needed in Erie County's healthcare system(s)?	more services and/or transportation to Erie for medical, dental, MH, WIC, welfare	improved communication between service providers and primary care offices	specialists, especially dermatologists, higher quality of care in prevention and other services, ways for children to get to appointments when parents are not permitted to leave work	more who accept MA, accommodate LEP, better communication between providers and clients, agencies work together/share information, coordination of health services including medical, dental, MH/BH care among

QUESTIONS	RESPONSE BY LOCATION			
	Albion, Girard, and Lake City	Corry & Union City	Erie City	Erie County
				providers, continue improving public transportation
Where do you find information about the health care options & services available to you?	online, word of mouth to find doctor, school system, Gannon Social Service Directory	conversation, Gannon Social Service Directory	various programs talk/inform each other	media, word of mouth, Gannon Social Services Directory, referral network
Tell us about any trouble you, friends, or family members have had getting health services in the past few years.	welfare office errors barrier to care, prescription medications too expensive—either self-lower doses or not taking	transportation, issues with insurances, not enough communication between providers	understanding what/how insurance covers procedures/treatments an issue for all	navigation of services and systems is an issue for students of families of migrant families, but English-speaking mentor also has difficulty navigating
What about health literacy?	low literacy levels, low high school graduation rate, need adult education classes	many clients have no skills whatsoever	low literacy in general, patient compliance an issue because they do not understand the treatment, making sure patients understand should be a priority	some do not know what services they are receiving, difficult to navigate—they trust/rely on organizations for help
What about transportation?	transportation is a barrier	transportation is a barrier for individuals & the system (mental health transports)	transportation a barrier	public transportation big issue, though improvements have been made
Is personal safety a concern?	not mentioned	yes with respect to domestic violence	yes	yes
What other issues exist?	can't take advantage of Imagination Library because parents can't read, transient populations, political boundaries an issue, many families do not have a family doctor	need more homeless shelters, homeless do not have needed employment skills, domestic violence an issue—Erie County has 2 fewer cases than Allegheny County, no pediatrics specialties/no inpatient pediatrics at SVH or UPMC-H	homeless go to hospital because they may not have a medical home, hard to track their care, some lack skills to manage medications, all schools required to have a homeless liaison	educate consumers regarding health insurance, lack of communication between providers regarding issues that impact patient on several levels, past trauma impacts individuals, but it may not be considered
Suggestions/comments	mobile dentistry, food stamps should include other necessities, West County feels like it is an island, school-based health center in Girard is promising, willing to work together and help, establish branch of Community Foundation	coordinate services jointly within the communities (plans to do that were made by attendees at the close of the meeting), poor economic base & lack of economic opportunity is the root cause of the social service issues		Veterans have unique issues including PTSD, ask "what happened", not "what's wrong?" (applies to anyone who may have been subjected to violence), maternal child health should be addressed early, easier to integrate information with OB-GYN providers than with medical providers
Themes	• transportation • low literacy • navigation • food insecurity • need for all services	• transportation • homelessness • communication • domestic violence • food insecurity	• transportation • homelessness • low literacy • navigation • violence • refugees	• transportation • drugs/alcohol • homelessness • refugees • low literacy • veterans • navigation • violence • food insecurity • communication

Table 2. Focus Groups 5-7

QUESTIONS	RESPONSE BY LOCATION		
	Harbor Homes	**Mental Health Association**	**North East**
	Consumers	*Consumers*	*Consumers*
Health Behaviors			
What do you do to stay healthy?	attempt healthy diet and exercise, personal and environmental hygiene	keep doctor appointments, healthy foods when possible, exercise	diet, exercise, prevention (flu shots & well-child checkups)
What keeps you from being healthy?	Lack of health insurance, limited English proficiency (refugees), lack of effective communication with providers, insurers, cannot afford to purchase medicine	homeless, hard to navigate services, pre-authorization problems for needed medications	primary care provider may have alternative schedule/not be there every week day
How do you get exercise?	walking and exercise in home	YMCA (health insurance provides membership), walking	walking, playing with their children
Any dietary concerns? Access to healthy foods?	healthy foods are available but cost prohibitive, need more food bank locations	hard to figure out what is healthy, some places provide healthy food for the homeless and some do not	easy access to fresh fruits & vegetables from gardens/local farmers, freeze for winter use
Mental/Behavioral Health			
What mental/behavioral health issues do you see in your community?	insomnia, depression, refugees have their own issues related to limited English proficiency and history in homeland/exile	ADHD, depression	children: autism, grief, difficulties related to divorce; adults: those with depression do not know where to go for treatment, do not have a PCP for to help with referral
Healthcare Utilization			
What do you think is the primary responsibility of a healthcare system in improving the health care of the community?	providing needed care regardless of ability to pay	helping individual navigate the services and the system, not only providing information, but also helping the patient understand the information	provide services that meet the needs with navigation and education
What changes are needed in Erie County's healthcare system(s)?	better communication between providers and patients/clients, help with navigation and transportation, physicians should take MA	need help with prescription prior authorizations, sometimes no mental health meds for several days—both dangerous and unhealthy	speak in layman's terms, make it easier/help with navigation, offer hours outside of regular work time, doctor spends about five minutes spent with patient—do not have enough time to explain issues
Where do you find information about the health care options & services available to you?	word of mouth, television, computers if available, housing office	meetings	internet, word of mouth, Ask-a-Nurse, print materials at local businesses
Tell us about any trouble you, friends, or family members have had getting health services in the past few years.	doctors don't accept all insurances, people need help, but don't know how to get it, medication costly, some lose their insurance and do not realize it until they have a problem, couldn't get needed dental extractions because insurance doesn't cover & individual can't afford	most mental health patients are homeless and do not have cars, can take 3-4 hours in transit, CHN has home health nurse but client does not have a home, need help getting services, consultation & information provided upon discharge from hospital, but no one follows up	not enough specialists in area—travel to Erie or Pittsburgh, inability to get time off work to go to appointments
What about health literacy?	health care workers talk too technical, should speak in layman's terms, especially for serious illnesses	some are not able to read, navigation within and between the mental and medical health systems is a challenge, insurance case managers help	health professionals should speak in layman's terms, people need help with paperwork and understanding (medications)
What about transportation?	walking distance here, but need more to get to pharmacy & referral appointments	getting to the doctor's office is one of the biggest problems, most are homeless and do not have cars, can take 3-4 hours in transit	difficult, especially to Pittsburgh
Is personal safety a concern?	somewhat	not mentioned	not mentioned
What other issues exist?	elderly need help to get to grocery stores, health care appointments, etc., need more food bank presence	sometimes the medication regimen works and then the insurer changes formulary,	provide office hours that coincide more with workers' schedules (they may not have

QUESTIONS	RESPONSE BY LOCATION		
	Harbor Homes	Mental Health Association	North East
		hospital discharges you, tells you to follow up with PCP, but you may not have one, no place to recuperate from surgery if you are homeless	sick or vacation days to allow them time for appointments during current office hours), no services for men other than primary care
Themes	• transportation • low literacy/unclear communication by healthcare workers • navigation • food insecurity • need for all services	• transportation • unclear communication by healthcare workers • navigation • homelessness & related follow-up issues • preauthorization for MH prescription medications • food insecurity	• transportation • unclear communication by healthcare workers • navigation—decrease number of system & insurance hoops • need expanded hours to accommodate the various work schedules

Abbreviations

ACE study Adverse Childhood Experience

ADHD Attention Deficit Hyperactivity Disorder

BH Behavioral Health

CHN Community Health Net

HMIS Homeless Management Information System

LEP Limited English Proficiency

MH Mental Health

PAYS Pennsylvania Youth Survey

PCP Primary Care Provider

PTSD Post Traumatic Stress Disorder

SVH Saint Vincent Hospital

UPMC-H UPMC Hamot

WIC Women, Infants, & Children nutrition program

Recommendations and Discussion

There are three major recommendations based on the information gathered through the focus group activity:

(1) Health literacy (including the ability of health care providers to offer information in a way that is easier to understand by their patients) is an area that should be addressed.

(2) Navigation of the health care systems (both physical and written navigation) is an issue that, if addressed, will likely result in better use, care compliance, and engagement on the part of Erie County residents.

(3) For future consideration, the City of Erie and Erie County focus groups should be combined into one.

According to Nutbeam (2008), recommendations 1 and 2 are both part of the overall evolving concept of health literacy. Definitions range from "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (Institute of Medicine (IOM), 2004) to current definitions that not only embrace the notions introduced by the IOM, but also include a focus on specific skills needed to navigate the health system and the importance of clear communication on behalf of the health care provider. An individual's culture must also be considered in this communication because it affects "how people communicate, understand, and respond to health information" (U. S. Department of Health and Human Services, 2015). Additionally, the American Medical Association (2003) reports that "poor health literacy is a stronger predictor of a person's health than age, income, employment status, education level, and race." It further states that patients and providers need to work together to improve outcomes, with individual patients taking an active role in decision making. Furthermore, it is recommended that providers use effective communication techniques such as the "teach-back" method and that plain language be used in print materials.

Healthy People 2020 Objectives related to Health Communication and Health Care Information Technology (HC/HCIT) include HC/HIT 1: Improve the health literacy of the population; and 2: Increase the proportion of persons who report that their health care providers have satisfactory communication skills. These objectives relate directly to the conclusions derived from the focus group data.

Sources

American Medical Association
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American Medical News - amednews.com

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Nutbeam, D. (2008). The evolving concept of health literacy. Social Science and Medicine 67:2072-78.

2013 Pennsylvania Youth Survey
http://www.episcenter.psu.edu/pays2013.

U. S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion
Health Literacy - Fact Sheet: Health Literacy Basics
http://www.health.gov/communication/hlactionplan/pdf/Health_Literacy_Action_Plan.pdf

Selected Healthy People 2010 and 2020 Goals

Healthy People Goals		
Objective	2010	2020
Maternal, Infant and Child Health		
Infant Mortality	4.5 deaths per 1,000 live births	6.0 deaths per 1,000 live births
Neonatal Mortality	2.9 deaths per 1,000 live births	4.1 deaths per 1,000 live births
Prenatal Care During First Trimester	90.0% of live births	77.9% of live births
Low Birth Weight Infants (< 5 lbs. 9 ozs.)	5.0% of live births	7.8% of live births
Nonsmoking Mother During Pregnancy	99.0% of live births	98.6% of live births
Mortality, Cancer, and Injury		
Cancer Age-Adjusted Death Rate	159.9 per 100,000 population	160.6 per 100,000 population
Lung Cancer Age-Adjusted Death Rate	44.9 per 100,000 population	45.5 per 100,000 population
Colorectal Cancer Age-Adjusted Death Rate	13.9 per 100,000 population	14.5 per 100,000 population
Female Breast Cancer Age-Adjusted Death Rate	22.3 per 100,000 population	20.6 per 100,000 population
Prostate Cancer Age-Adjusted Death Rate	28.8 per 100,000 population	21.2 per 100,000 population
Stroke Age-Adjusted Death Rate	48.0 per 100,000 population	33.8 per 100,000 population
Accident Age-Adjusted Death Rate	17.5 per 100,000 population	36.0 per 100,000 population
Motor Vehicle Accident Age-Adjusted Death Rate	9.2 per 100,000 population	12.4 per 100,000 population
Homicide Age-Adjusted Death Rate	3.0 per 100,000 population	5.5 per 100,000 population
Infectious Diseases		
AIDS Crude Incidence Rate	1.0 case per 100,000 pop age 13+	13.0 cases per 100,000 pop age 13+
Gonorrhea Crude Incidence Rate	19.0 cases per 100,000 population	-----
Gonorrhea Crude Incidence Rate	-----	257.0 cases per 100,000 females 15-44
Gonorrhea Crude Incidence Rate	-----	198.0 cases per 100,000 males 15-44
Hepatitis A Crude Incidence Rate	4.3 cases per 100,000 population	0.3 cases per 100,000 population
Acute Hepatitis B Crude Incidence Rate	-----	1.5 cases per 100,000 pop age 19+
Acute Hepatitis C Crude Incidence Rate	1.0 case per 100,000 population	0.2 cases per 100,000 population
Measles Incidence	0 cases per year	-----
Meningococcal Disease Crude Incidence Rate	1.0 case per 100,000 population	0.3 cases per 100,000 population
Mumps Incidence	0 cases per year	-----
Primary and Secondary Syphilis Crude Incidence Rate	0.2 cases per 100,000 population	-----
Primary and Secondary Syphilis Crude Incidence Rate	-----	1.4 cases per 100,000 females
Primary and Secondary Syphilis Crude Incidence Rate	-----	6.8 cases per 100,000 males
Congenital Syphilis Incidence	1.0 case per 100,000 live births	9.1 cases per 100,000 live births
Tuberculosis (Active) Incidence	1.0 case per 100,000 population	1.0 case per 100,000 population

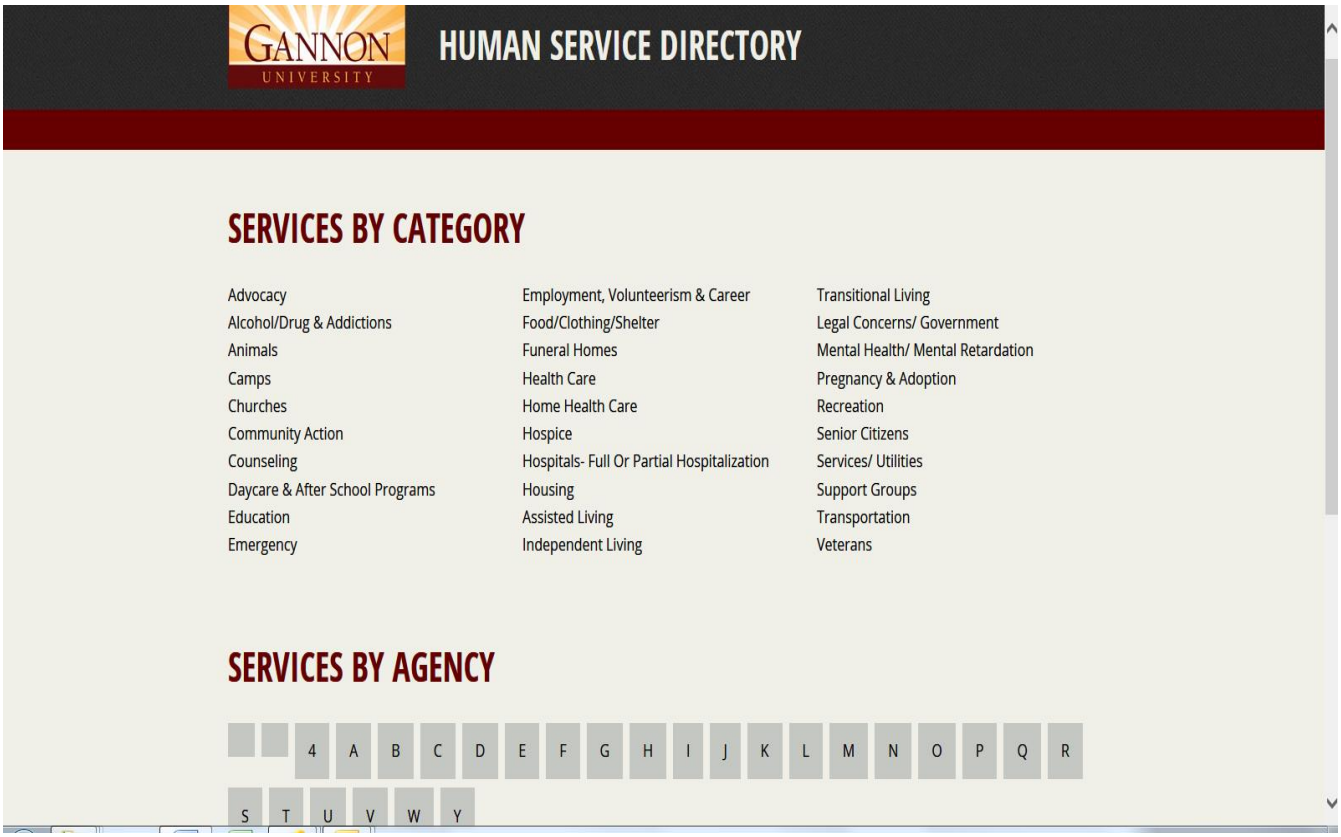
Healthy People Goals (Continued)

Objective	2010	2020
Chronic Diseases and Conditions		
Hypertension	16.0% of pop age 20+ has hypertension	26.9% of pop age 18+ has hypertension
Cholesterol	80.0% age 18+ had chol. check last 5 yrs	82.1% age 18+ had chol. check last 5 yrs
Cholesterol	17.0% age 20+ have high cholesterol	13.5% age 20+ have high cholesterol
Preventive Health Services		
Mammogram	70.0% women 40+ had mammo in last 2 yrs	81.1% women 50-74 had a screening*
Pap Test	90.0% women 18+ had Pap test in last 3 yrs	93.0% women age 21-65 had screening*
Colonoscopy/Sigmoidoscopy	50.0% age 50+ ever had either procedure	70.5% of pop age 50-75 had a screening*
Fecal Occult Blood Test (FOBT)	50.0% age 50+ had test in past 2 years	70.5% of pop age 50-75 had a screening*
Flu Shot	90.0% age 65+ had flu shot in past year	90.0% age 65+ had flu shot in past year
Flu Shot	60.0% age 18-64 had flu shot in past year	80.0% age 18-64 had flu shot in past year
Pneumonia Vaccination	90% of pop age 65+ ever vaccinated	90.0% of pop age 65+ ever vaccinated
Pneumonia Vaccination	16.0% of pop age 18-64 ever vaccinated	60.0% of high risk 18-64 ever vaccinated
Health Risk Behaviors		
Smoking Cessation	75.0% of 18+ quit at least 1 day in past yr	80.0% of 18+ quit at least 1 day in past yr
Seat Belt	92.0% of age 18+ always use safety belt	92.4% of occupants always use safety belt
Smoke Alarms	100% of households have smoke alarm	-----
Binge Drinking	6.0% 18+ binge drink in past month	24.3% 18+ binge drink in past month
Binge Drinking	-----	22.7% h.s. seniors binge drink in past 2 wk
Exercise	20.0% age 18+ no leisure physical activity	32.6% age 18+ no leisure physical activity
Healthy Weight	60.0% of pop age 20+ at healthy weight	33.9% of pop age 20+ at healthy weight
Obese	15.0% of pop age 20+ are obese	30.6% of pop age 20+ are obese
Health Care Access		
Health Insurance	100% of pop age 18-64 have insurance	100% of pop has health insurance

Note: * In Healthy People 2020, recommended cancer screenings are based on the most recent guidelines for that particular cancer

Appendix A: Community Resources

Gannon University Human Services Directory



Gannon University | Human Service Directory

Free Clinics and Community Health Centers in Erie County
April 2015

[Erie, PA Free Clinics | Affordable Medical and Dental Clinics in Erie County]
http://freeclinicdirectory.org/pennsylvania_care/erie_pa_county.html

Additional Resources
Erie County
April 2015

- Mental Health and Drug & Alcohol Service Providers – 2015 Erie County Community Health Needs Assessment, page 195
- Regional Tobacco Coalition, Northwest PA
- School-Based Health Centers
- GE Health Collaborative Initiative (Health Literacy)
- Erie Vital Signs
- United Way Health Initiatives
- Erie County Policy and Planning Council
- Erie Together
- Gannon University, Erie GAINS
- Mercyhurst University, Public Health Department

Nutrition and Physical Activity Resources
Erie County
April 2015

- Junior League of Erie – "Kids in the Kitchen" Program (Nutrition)
  -Has DVD and dietitians
- Wellsville Program (Nutrition and Physical Activity)
- YMCA (Nutrition and Physical Activity)
- LifeWorks Erie (Nutrition and Physical Activity)
- Penn State Cooperative Extension (Nutrition and Family Fitness)
  -Has a train the trainer program
- Erie County Diabetes Association (Nutrition and Physical Activity)
  -"HOP Sports" Youth Physical Fitness Program
- Early Connections
  -Uses NAP-SACC (Nutrition and physical activity self-assessment for child care)
  -Implements policy changes
- Kid's Cafes
- Food Access Committee, City of Erie (Nutrition)
  -City of Erie, Regional Chamber, Food Bank, SSJ Network, ECDH, and others
- Erie Walks Initiative (Physical Activity)
- Let's Move Outside: Erie County Recreational Passport Initiative (Physical Activity)
- Individual Hospital Health and Wellness Initiatives
- Individual Health Plans and Insurance Providers
- Erie County Recreational and Nutritional Opportunities (Nutrition and Physical Activity)
- BikeErie
- Healthy Corner Store Initiative

Heart Disease and Hypertension Resources
Erie County
April 2015

- American Heart Association
  -Link to CPR training
- Individual Hospitals
  -Cardiac support groups
- Primary Care Providers
- Cardiac Specialists
- All community groups involved in lifestyle and behavioral changes: tobacco use, nutrition, physical activity

Diabetes Resources
Erie County
April 2015

- Erie County Diabetes Association
  - Disease Management
    -Safe-net blood glucose testing supplies
    -Insulin syringes
    -Insulin pump supplies
    -1:1 diabetes management education
    -Assistance in accessing community health care resources
  - Education
    -Nurse information and referral hotline
    -Diabetes group education
    -Support groups
    -Website health tools
    -Seasonal newsletter
  - Community Outreach
    -Community nurse presentations
    -Participation in health fairs
    -Annual kidney screenings
    -Diabetes risk and blood pressure screenings
    -Dissemination of current literature
    -Childhood obesity programs
- All community groups involved in lifestyle and behavioral changes: tobacco use, nutrition, physical activity

Erie County Cancer Resource Guide - 2015

- Cancer Task Force – Coordinated by the Regional Cancer Center, the task force includes representatives from the American Cancer Society, Corry Memorial Hospital, Erie County Department of Health, LECOM Health System, Saint Vincent Hospital, Northwest Regional Tobacco Coalition, and UPMC Hamot. In the past, the group has focused on health literacy.

- American Cancer Society – Erie County and Corry 814-866-5174
- Assistance
  - Financial
    - Child Care Information Services of Erie County 814-451-6683
    - Erie County Assistance Office 814-461-2000
    - St. Martin Center, Inc. 814-452-6113
    - Veterans Affairs 814-451-6270
  - Clothing
    - Erie United Methodist Alliance 814-453-4080
    - Salvation Army
      - -Corry 814-664-7100
      - -Erie (Sassafras) 814-456-4239
      - -Erie (Liberty) 814-454-6497
      - -Erie (Keystone) 814-868-1787
  - Food
    - Bethany Outreach Center 814-456-6254
    - Community of Caring 814-453-5556
    - Emmaus Soup Kitchen 814-459-8754
    - Metro Erie Meals on Wheels 814-452-6930
    - 2nd Harvest Food Bank NWPA 814-459-3663
    - Tri-Boro Senior Center 814-474-2211
  - General
    - GECAC 814-459-4581
    - JFK Center 814-898-0400
    - Voices of Independence 814-874-0064
  - Legal
    - Erie County Bar Association 814-459-3111
    - Erie Human Relations Commission 814-451-7021
    - Northwest Legal Services 814-452-6957
  - Medical
    - Healthy Lungs PA 800-220-1990
    - National Association of Counties Prescription Drug Discount Card Program 877-321-2652
    - PA Bureau of Pharmacy Assistance 800-225-7223
  - Utilities
    - Children's Cancer Recovery Foundation 717-545-7600
    - Dollar Energy Fund 800-683-7036

- Assurance Wireless 888-898-4888

- Bereavement & Grief Services
  - Asera Care Hospice 814-836-5255
  - Camp Christian, Inc. 724-455-2700
  - Heartland Hospice 814-878-5990
  - Highmark Caring Place 814-878-5990
  - Hospice of Metropolitan Erie 814-456-6689
  - Office Parish Social Ministry Catholic Church 814-824-1254
  - Visiting Nurse Association of Erie County 814-454-2831
- Breast Prostheses & Accessories
  - Blackburn's 814-454-2863
  - Great Lakes Home Healthcare Services 814-877-6631
  - Green Prosthetics & Orthotics, LLC 814-833-2311
  - PA Artificial Limb & Brace Co. 814-868-5231
  - St. Vincent Health Center 814-452-5879
  - Villa Medical Supply 814-866-1999
- Camps
  - American Cancer Society: East Central Division 717-533-6144
  - Camp CaN-DOO 570-839-8950
  - Oncology Nursing Society 412-623-3666
  - Ronald McDonald House of Danville 570-271-6300
- Child Care Referral
  - Child Care Information Services of Erie County 814-451-6580
    OR 814- 451-6683
- Counseling Services
  - Corry Counseling 814-664-7761
  - Family Services of NWPA 814-866-4500
- Crisis Hotline
  - Safe Harbor Behavioral Health 814-456-2014
    OR 800-300-9558
- Health Education
  - LifeWorks Erie 814-453-8755
  - The Regional Cancer Center 814-838-9000
  - UPMC Hamot Medical Center 814-877-6145
- Homemaker & Chore Services
  - Community Resources for Independence 814-838-7222
  - Compassionate Care 814-504-7318
  - Helpmates 814-772-6850
- Insurance Counseling
  - GECAC 814-459-4581
  - PA Health Law Project 717-236-6310
- Mammogram: Free/Reduced Cost
  - The Regional Cancer Center 814-838-9000

- Medical Equipment: Free/Reduced Cost
  - Ramps of Hope 814-774-5688
  - American Home Patient 814-864-4974
  - Apria Healthcare 814-454-5995
  - Carter Orthopedics Ltd. 814-455-5383
  - Lincare 814-456-7108
  - Lynch Home Medical Supply 814-899-3636
  - Blackburn's 814-454-2863
  - Villa Medical Supply 814-866-1999
- Respite Care
  - Visiting Angels ONLINE
  - Visiting Nurse Association of Erie County 814-454-2831
- Scholarship
  - Children's Cancer Recovery Foundation 717-545-7600
  - FinAid 724-538-4500
- Support
  - American Cancer Society Corry/Erie 888-227-5445
  - First Alliance Church 814-838-4251
  - Meadville Medical Center: Yolanda G. Barco Oncology Foundation 814-373-4251
  - Roman Catholic Diocese of Erie 814-456-0671
  - The Regional Cancer Center
- Transportation: Road
  - EMTA 814-452-3515
  - Senior Helpers 814-454-9500
  - American Cancer Society: Road to Recovery
- Vision Services
  - Bureau of Blindness & Visual Services 814-871-4401
  - Sight Center of NWPA 814-455-0995
- Wellness
  - Coventina Day Spa 814-796-9038
  - The Eastside Family YMCA 814-899-9622
  - Meadville Medical Center: Yolanda G. Barco Oncology Foundation 814-373-4251
- Wigs: Free/Reduced
  - Empyrean Day Spa & Salon 814-734-1909
  - Hairdos & Sassy Nails 814-725-2436
  - Hairwaves 814-864-3342
  - Patti Myers Hair Fashions 814-868-3094
  - Salon Verdi (Fran DiSante) 814-455-7100
  - Studio Hue 814-452-4310
  - Heavenly Hats 920-264-7960 (FREE)
  - L. Erickson USA 888-884-3653 (FREE)

- ACS: Corry/Erie
- ACS: East Central Division

- Wigs: Retail
  - Anton's Hair Company 452-562-7979
  - Healing Hats 724-349-8304
- Wish Fulfillment
  - The Dream Factory 814-515-2437
  - Unity - A Journey of Hope 724-963-3607

Appendix B: Sample Health Indicator Data Sheet

HEALTH RISK BEHAVIORS															
		Erie County		PA		U.S.									
Indicator		2011	2011-2013	2011	2011-2013	2010	2013	HP 2020	Disparity	Focus Group	CDC Health Indicator	RWJF County Ranking	Vital Signs	GECAC	Policy & Planning Council
Binge Drinking	% age 18+	19.0	22.0	18.0	18.0	15.0	17.0	24.3	X		X	X	X		
Binge Drinking	% grs 6,8,10,12	9.1	8.2 (2013)	12.4	9.7 (2013)	NA			X		X	X			
Heavy Drinking	% age 18+	6.0	7.0	7.0	6.0	5.0	6.0		X			X		X	
Chronic Drinking	% age 18+	6.0	6.0	6.0	6.0	NA			X			X		X	
Drink, 30 Days	% grs 6,8,10,12	17.5	17.7 (2013)	23.3	20.3 (2013)	NA			X		X				X
Drink, Ever	% grs 6,8,10,12	40.3	44.0 (2013)	44.0	46.9 (2013)	NA			X					X	X
Drink & Drive	% age 18+	4.0	NA	3.0 (2010)		NA			X						
Drink & Drive	% grs 6,8,10,12	2.4	2.6 (2013)	3.9	2.9 (2013)	NA			X						
Marijuana, 30 Day	% grs 6,8,10,12	9.6	10.4 (2013)	10.7	10.3 (2013)	NA			X		X				X
Marijuana, Ever	% grs 6,8,10,12	18.4	19.0 (2013)	19.0	18.9 (2013)	NA			X						X
Current Smoker	% age 18+	23.0	27.0	22.0	22.0	17.0	19.0	12.0	X		X	X	X	X	
Smoked, 30 Day	% grs 6,8,10,12	8.9	8.4 (2013)	9.5	8.0 (2013)	NA			X		X				X
Ever Smoked	% age 18+	50.0	53.0	44.0 (2010)	47.0	43.0	43.0 (2010)		X						
Ever Smoked	% grs 6,8,10,12	24.6	18.8 (2013)	23.3	17.6 (2013)	NA									X
Former Smoker	% age 18+	27.0	26.0	25.0	26.0	25.0	25.0 (2010)								
Quit Smoking, 1+ day	% age 18+	57.0	55.0	53.0	54.0	NA									
Current Smokeless Tobacco	% age 18+	4.0	6.0	4.0	4.0	NA									

Appendix C: Prioritization Matrix Template Sheet

Scale 1-10 1=Low 10=High	TOTAL	**Magnitude**	**Seriousness**	**Variance against Benchmark**	**Feasibility; Ease of Implementation**	**Impact on Other Health Outcomes**	**Availability of Community Resources**
INDICATOR							