

Summit County Health and Health Disparities Report



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INTRODUCTION

The Health and Health Disparities Initiative began as one of the five major strategic goals of the Summit 2020 project adopted in 2010 by the Social Services Advisory Board (SSAB). The purpose of the Health and Health Disparities initiative is to develop and implement an all-inclusive plan to promote improved health and reduce health disparities for all Summit County residents.

The rationale for this document is to provide a broad overview of key indicators of population health. A related purpose is to examine important disparities which have been identified in the literature and present data for Summit County where possible. Taken together, the information contained in the indicators and their related disparities will provide community leaders with an important resource that can aid in the development of a comprehensive plan for improving health and social conditions while developing strategies to address disparities highlighted in this report.

Organization and Structure of the Report

Each indicator begins with a discussion of why it is important, and how the indicator is defined. From there, each indicator presents those disparity areas which the Data Work Group identified as a priority during its deliberations. Each section also includes a brief synopsis of the most frequently mentioned disparities identified in the literature. Finally, each section includes a comparison with Ohio and the nation (where possible and appropriate), as well as present disparity data for the priority indicators identified for each.

Description of the Initiative Process and Methods

The Health and Health Disparities initiative development process began in July 2013 with a facilitated discussion with an assembly of community leaders who work in and around health and human services. The goal of the discussion was to agree on health disparity issues that will become the areas of focus for the Summit 2020 project's work in health and health disparities.

The next phase of the initiative began in February 2014 with the commencement of the Health and Health Disparities Data Workgroup. The function of this group was to develop a framework for the organization of the health disparity indicators, develop a final list of indicators, and to identify priority disparities to include in the Health and Health Disparities data report.

After considering several models for analyzing health disparities, including the Institute of Medicine's Ecological Model, the University of Wisconsin / Robert Wood Johnson Foundation's County Health Rankings, and the Healthy People 2020 Leading Health Indicators model, the Work Group chose to adopt the Leading Health Indicators model (LHI). This model was selected and organized using a Health Determinants and Health Outcomes by Life Stages conceptual framework for identifying and prioritizing the most important health issues which pose a threat to the public's health and well-being. In knowing and understanding the factors which may contribute to health problems and health disparities, the Healthy People 2020 LHI framework helps in the development and implementation of better, more effective strategies for addressing these health problems.

The health problems and health disparities presented in the LHI framework are influenced by five broad and interrelated determinants at both the individual and societal levels. These factors include physical environment, social environment, individual behavior health services, and biology and genetics. Within the Healthy People 2020 LHI framework, a number of goals and objectives have been specified and organized into groups of leading health indicators in an effort to help identify and measure those major determinants and risk factors which have the greatest influence over health and health disparities.

The leading health indicators are intended to highlight the determinants and risk factors across the entire age spectrum to include everyone from infancy through old age. The factors which contribute to health and disease often build up over time and contribute to larger health problems and lowered quality of life. By understanding that factors may differ among different age groups, strategies and interventions can better target the specific risk factors and determinants at key points to reduce the overall burden of disease and promote longer, healthier lives.

The Work Group continued to meet every two weeks from February 2014 until June 2014, to develop indicators to flesh out the LHI model. The Work Group began with the original 26 indicators and 12 topic areas identified by Healthy People 2020, then began the process of tailoring the LHI model to more accurately represent Summit County's unique mix of needs and priorities. During this process, the Work Group built up a wish list of 130 possible indicators, then began to prioritize and eliminate indicators until arriving at a final list of 25 indicators spread across the same 12 topic areas as in the Healthy People 2020 LHI framework. About half of those indicators were the same or were similar to those chosen by the LHI framework.

Once the final list of indicators was decided upon, the Work Group then set about identifying the highest priority disparities to examine for each indicator. The final list of indicators chosen as well as the priority disparities investigated is presented in the table below. A brief description of the categorization of priority disparity variables follows.

PRIORITY INDICATORS

To best understand the nature of heath and health disparities in Summit County, a number of different socioeconomic and demographic factors were assessed for each indicator. These factors were selected based on what has been cited as an area of disparity in other health districts nationwide and include age, gender, race, education, income, education, and geography. In assessing the disparities that exist between these different factors we hope to identify the essential areas in need of intervention.

Age: Age has been grouped in a variety of different manners that reflect not only the data source they came from but also in a way which adequately examines any age disparity that may exist. There are a number of indicators pertaining to youth where age has been stratified by grade rather than actual age.

Gender: Gender has been split to depict differences between males and females.

Race: Race has been predominately categorized in two different ways. The first group stratifies race without regard to ethnicity (white, black, other) while the second group is stratified by both race and ethnicity (non-Hispanic white, non-Hispanic black, Hispanic & other). It is important to note that less than 5% of Summit County residents are of Hispanic ethnicities or races other than white or black (including Asian, Hawaiian/Pacific Islander, or Alaskan Native/American Indian, etc). For this reason, we were unable to measure many disparities separately among those groups of minorities in Summit County. Estimates of the combined group of Hispanic/Other should be interpreted with caution because such a group is actually very diverse and likely has individualized health needs that are not presented in this report.

Contrarily, many of the indicators pertaining to youth, race and ethnicity are designated in five separate categories (white, black, Asian, Hispanic, other) based on the availability of these categories.

Income: Income has been primarily categorized as having an annual income of less than \$35,000, between \$35,000-\$75,000, or greater than \$75,000.

Education: Education is mainly depicted as less than a high school diploma/high school diploma or more. In some cases it has been categorized as having attended some college or having a college degree.

Geography: All geographical analyses are separated by the same 20 Summit County geographic clusters. These geographic clusters are designated based on the 2010 Summit County census tracts which have been grouped together based on similar demographic characteristics.

Local Data Indicator		Measurement	Data Source	Disparities Investigated					
				Age	Gender	Race	Income	Education	Geography
Access t	o Health Ser	vices (AHS)							
AHS-1	Medical Insurance	Percent of persons without medical insurance	2008-2012 ACS	•	•	•			•
AHS-2	Behavioral Health Services	Percent of adults with poor mental health in need of mental health services	2008 BRFSS	•	•	•	•		
Clinical	Preventative	Services (CPS)							
CPS-1	Colorectal Cancer Screening	Percent of adults 50 years of age and older that reported never having a sigmoidoscopy or colonoscopy	2008 BRFSS			•		•	
CPS-2	Diabetes	Percent of adults 18 years of age and older that reported ever being told by a doctor that they have diabetes	2008 BRFSS	•			•		
CPS-3	Late-Stage Cancer	Percent of breast, prostate, and colorectal cancers diagnosed at a late (i.e., distant) stage	2002-2011 OCISS			•			•
Environ	mental Qual	ity (EQ)							
EQ-1	Housing Quality	Percent of residential housing units rated in "Fair", "Poor", "Very Poor", or "Unsound" condition by the Summit County Fiscal Office	December 2013 Summit County Fiscal Office parcels data						•
Injury & Violence (IV)									
IV-1	Elder Abuse	Rate of elder abuse, neglect, self-neglect, and exploitation per 1,000 persons 60 years of age and older	2013-2014 APS data		•				•
IV-2	Child Abuse	Penetration rate of protective services provided by SCCS per 1,000 children 18 years of age and younger	2010-2013 SCCS data	•		•			

Local Data Indicator		Measurement	Data Source	Disparities Investigated					
				Age	Gender	Race	Income	Education	Geography
Materna	al, Infant, &	Child Health (MICH)							
MICH-1	Infant Mortality	Average annual rate of infant mortality per 1,000 live births	2000-2009 linked Ohio birth-death certificate data			•		•	•
MICH-2	Premature Birth	Percent of live births born at less than 37 weeks gestation	2008-2012 Ohio birth certificate data	•		•		•	
MICH-3	Early Prenatal Care	Percent of live births to mothers who did not receive prenatal care during the 1st three months of pregnancy	2008-2012 Ohio birth certificate data			•		•	•
Mental	Health & Me	ental Disorders (MHMI))						
MHMD- 1	Suicide	Average annual rate of suicide per 100,000 persons	2001-2010 Ohio death certificate data	•	•	•			
MHMD- 2	Adult Depressive Episode	Percent of adults age 18 and older who have had a depressive episode	2008 BRFSS	•	•	•			
MHMD- 3	Adolescent Depressive Episode	Percent of adolescents in middle and high school who have had a depressive episode	2013 Summit County YRBS		•	•			
Nutritio	n, Physical A	ctivity, & Obesity (NPA	AO)						
NPAO-1	Adult Obesity	Percent of persons with a state issued driver's license or identification card that have a body mass index of 30 or greater (i.e., are obese)	2008-2012 Ohio BMV data		•				•
NPAO-2	Adolescent Obesity	Percent of middle and high school students that have a body mass index in the 95th percentile or greater (i.e., are obese)	2013 Summit County YRBS	•	•	•			
Oral Health (OH)									
OH-1	Oral Health Care	Percent of adults 18 years of age and older who did not visit a dentist or dental clinic in the past year	2008 BRFSS			•	•	•	

Local Data				Disparities Investigated					
Inc	dicator	Measurement	Data Source	Age	Gender	Race	Income	Education	Geography
Reprodu	uctive & Sexu	al Health (RSH)							
RSH-1	Adolescent Sexual Activity	Percent of middle and high school students that report having had sexual intercourse	2013 Summit County YRBS	•	•	•			
RSH-2	Pregnancy Spacing	Percent of live births to mothers who conceived less than 18 months from previous live birth	2008-2012 Ohio birth certificate data	•		•		•	
Social D	eterminants	(SD)							
SD-1	Education	Percent of persons 25 years of age and older without a high school diploma or equivalent	2008-2012 ACS		•	•			•
SD-2	Poverty	Percent of persons living below 100% of the federal poverty level	2008-2012 ACS	•	•	•		•	
SD-3	Premature Death	Number of years of potential life lost (YPLL) per 100,000 persons	2008-2012 Ohio death certificate data		•	•			•
Substanc	ce Abuse (SA)								
SA-1	Adult Alcohol Abuse	Percent of adults who engage in binge drinking and heavy drinking	2008 BRFSS	•		•			
SA-1	Adolescent Substance Abuse	Percent of middle and high school students that report use of alcohol, marijuana, or prescription pain killers	2013 Summit County YRBS	•		•			
Tobacco Use (TU)									
TU-1	Adult Smoking	Percent of adults 18 years of age and older who report currently smoking cigarettes every day or some days	2008 BRFSS	•		•	•	•	
TU-2	Adolescent Smoking	Percent of middle and high school students who report smoking cigarettes	2013 Summit County YRBS	•	•	•			

ACS – American Community Survey

ADM – Alcohol, Drug Addiction, and Mental Health Services APS – Adult Protective Services

BMV – Bureau of Motor Vehicles

BRFSS – Behavioral Risk Factor Surveillance System OCISS – Ohio Cancer Incidence Surveillance System SCCS – Summit County Children Services YRBS – Youth Risk Behavior Survey

EXECUTIVE SUMMARY

There were a number of substantial disparities found among the indicators assessed in this report. These key findings, discussed in the section below, represent areas where improvement is needed as well as potential areas for intervention to ensure good health and well-being for every Summit County resident.

Substantial Age Disparities

- Working-age adults were more likely to lack health insurance coverage
- Young adults were most likely to report having had a depressive episode and the most likely to report having poor mental health that remains undiagnosed
- Seniors were much more likely to have been diagnosed with diabetes
- Young children had the highest rate of case plans or Alternative Response plans within Summit County
- Suicide was more common among middle-aged adults
- High school seniors were most likely to engage in sexual activity as well as substance and tobacco use
- Poverty was highest among children and adolescents
- Young adults were most likely to engage in excessive drinking behaviors
- Tobacco use was highest among middle-aged adults

Substantial Gender Disparities

- Males were more likely to report poor mental health that remains undiagnosed
- Males were much more likely to commit suicide or die prematurely
- Male adolescents were most likely to have had a depressive episode
- Obesity was higher among male adolescents
- Elder abuse, neglect, self-neglect, and exploitation was most common among senior females

Substantial Racial Disparities

- Other racial groups were most likely to be uninsured
- Hispanic/other racial groups were more likely to report poor mental health that remains undiagnosed
- Blacks were least likely to report having had a colorectal cancer screening
- Late-stage prostate cancer diagnoses were more common among Hispanic/other racial groups
- Black children had the highest rates of having a case plan or Alternative Response plan within Summit County Children Services (SCCS)
- Infant mortality, premature births, and lack of early prenatal care was most common among non-Hispanic black mothers
- Non-Hispanic whites had the highest suicide rate
- Non-Hispanic black adults were most likely to have had a depressive episode
- Those among other racial groups in middle school and among Hispanic groups in high school were most likely to report having had a depressive episode
- Obesity was highest among black adolescents

- Blacks were most likely to report not having visited a dentist or dental clinic within the past year
- Black middle school students and white high school students were most likely to report engaging in sexual activity
- Short inter-birth intervals were more common among black mothers
- Other racial groups had the highest proportion of not having a high school diploma
- Poverty was most common among black populations
- Blacks were most likely to die prematurely
- Excessive drinking was highest among Hispanic/other racial groups
- Among adolescents, Hispanics were more likely to engage in drinking, marijuana, prescription drug use, and tobacco use
- Hispanics/other racial groups showed higher rates of tobacco use among adults

Substantial Income Disparities

- Those who made \$75,000 or more reported the highest rate of poor mental health that remains undiagnosed
- Diabetes was more common among those who made less than \$35,000 annually
- Those who made less than \$35,000 were much more likely to report not having visited a dentist or dental clinic within the past year
- Tobacco use was much more common among those who make less than \$35,000 annually

Substantial Education Disparities

- Those who had a high school diploma or less were more likely to report not having visited a dentist or dental clinic within the past year
- Short inter-birth intervals were most common among those with a high school diploma or less
- Poverty was highest among those with no high school diploma
- Tobacco use was more common among those with no high school diploma

Substantial Geographical Disparities

- Residents living in the city of Akron census tracts were most likely to lack medical coverage
- Late-stage breast cancer diagnoses were more common among residents of the Akron North cluster
- Late-stage colorectal cancer diagnoses were more common among residents of the Hudson cluster
- Late-stage prostate cancer diagnoses occurred more among residents of the Akron Central and Norton clusters
- Homes in the Akron Central cluster were most likely to be rated as poor or less in quality
- The rate of elder abuse, neglect, self-neglect, and exploitation was highest among residents of the Akron Central cluster
- The rate of infant deaths was highest among residents of the Akron Central cluster
- Akron Southwest residents were more likely to be obese
- Akron Southwest mothers were most likely to report receiving no early prenatal care
- Akron Central residents were more likely to not have a high school diploma
- Premature deaths was highest among residents of the Akron Southwest cluster

These key findings highlight some of the most critical areas of disparity among our priority indicators for Summit County. The specific differences and disparities for each indicator may be further explored and understood in the following sections of this report.



ACCESS TO HEALTH SERVICES

Access to health services affects the health and quality of life of the people in our community. With regular access to health services, health problems can be detected earlier and in their most treatable stages. When members of our community have limited access to health services, it impacts their ability to reach their full health potential and allows for poor health outcomes over time.

Having access to quality health services allows for disease prevention, illness detection and treatment, as well as a decreased chance of early death. It also promotes overall physical, social, and mental health. As public health workers, our goal is to improve our community's access to quality health care services as well as increase regular and reliable medical care and medical insurance to achieve the best health outcomes.

Local Access to Health Services (AHS) Data Indicators

- AHS-1: Medical Insurance
- AHS-2: Behavioral Health Services

AHS-1: MEDICAL INSURANCE

Bottom Line

In 2012, nearly 83% of the population had medical insurance in the United States; however, 45.2 million people under the age of 65 were uninsured.¹⁻² Health insurance is a significant factor that contributes to quality of care, since medical insurance coverage allows patients to access the health care system. Those who are uninsured are:

- less likely to receive medical care;
- more likely to die early; and are
- more likely to have poor health status.³

Healthy People data have shown differences in those with medical insurance among various populations. For instance, national estimates consistently record that Hispanics and blacks are more likely to lack coverage.¹ Additionally, men are more likely to be uninsured than women.¹ Other characteristics that are known to be associated with disparities in access to medical insurance include age (where young adults are less likely to have coverage) and education (where those with lower levels of education are less likely to be insured).¹

Indicator Measurement

This indicator is a measure of the percent of persons in the civilian non-institutionalized population who did not have comprehensive health insurance coverage. Data for this indicator were obtained from the 2008-2012 American Community Survey.

Local Findings

It is estimated that from 2008-2012, 11.2% of Summit County residents were without health insurance. The Healthy People 2020 target is to have 100% medical insurance coverage among all residents of the United States. This means we need to see our percentage of uninsured residents completely eliminated to reach the target by the year 2020.





Male residents in Summit County were considerably

more likely to lack health insurance than females

than uninsured females in our county.

(12.8% versus 9.6%, respectively). This means that

there were roughly 1 and 1/3 more uninsured males

Age

Summit County residents between the ages of 18-64 had the highest percentage of persons without insurance coverage (15.7%) when compared to residents under the age of 18 (5.8%) and those 65 and older (0.3%). To eliminate this disparity, there needs to be a 98.1% decrease among those between the ages of 18 and 64. It is worth noting that those who under the age of 18 may qualify for health insurance coverage under the Children's Health Insurance Program (CHIP), while those who are 65 and older may qualify for coverage under Medicare.



Race

Gender

Whites in Summit County had the lowest percent of persons without medical insurance (9.9%). Black residents, on the other hand, were nearly 1 and 1/2 times more likely to lack coverage (16.9%), while residents of other races were nearly twice as likely to be uninsured (19.8%). To eliminate the racial disparity, we need to see at least a 50% decrease in the percentage of non-white residents that do not health insurance coverage.



Geography

Summit County residents living in the city of Akron census tract clusters had the highest percentage of people without medical insurance (at least 13% or more). Akron Central (20.2%) and Akron West (19.3%) had the greatest percent of uninsured residents overall, while Twinsburg (4.1%) and Hudson (3.5%) had the lowest percent of persons without health insurance.



AHS-2: BEHAVIORAL HEALTH SERVICES

Bottom Line

According to recent national estimates, 6.7% of our adults and 10.7% of our adolescents 12-17 years of age report that they had at least one major depressive episode (MDE) in the past year.¹ Among those that experienced an MDE, only 68.6% of adults and 38.1% of adolescents received treatment for depression.¹ In addition, 5.2% of adolescents and 8.5% of adults report that they had a substance use disorder resulting from dependence or abuse of alcohol or illicit drugs and only 11.0% received treatment at a specialty facility.¹ Thus, many of the most vulnerable in our population go without needed behavioral health treatments and services that have been proven to:

- reduce substance use,
- improve psychiatric symptoms and functioning,
- decrease hospitalization,
- increase housing stability,
- reduce arrests, and
- improve quality of life.³

While the Affordable Care Act (ACA) now requires some health plans to cover behavioral health services, those seeking help often find it difficult to access mental health and substance abuse treatments.³ For this reason, the Summit County Alcohol, Drug Addiction, and Mental Health Services (ADM) Board works to help all people in our community "connect with high quality and affordable alcohol, drug addiction, and mental health services."⁴ Yet, there are substantial behavioral health disparities that continue to exist among specific populations, including select racial and ethnic groups; lesbian, gay, bisexual, transgender, and questioning (LGBTQ) persons; people with disabilities; transition-age youth; and young adults.⁵

Indicator Measurement

This indicator is a measure of the estimated percent of the population age 18 and older who have had a depressive episode but have not received mental health services. Those who have had a depressive episode were defined as those individuals who reported having experienced more than seven days, out of the past thirty days, on which mental health status (i.e. stress, depression, and problems with emotions) was not good. Those who had not received mental health services were determined to be those who had a depressive episode but had not been told by a doctor that they had an anxiety or depression disorder. The data for this indicator were obtained using the 2008 Behavioral Risk Factor Surveillance System (BRFSS).

Local Findings

Just over half (51%) of Summit County residents who reported having poor mental health remained undiagnosed with anxiety or depression disorders which is greater than the proportion of those undiagnosed in the whole state of Ohio (41%)



Age

Those between the ages of 18 and 44 were 1.7 times as likely to report poor mental health that was undiagnosed as those between the ages of 45 and 64 (62.4% and 36.4%, respectively). To eliminate the age disparity, there needs to be a 41.7% decrease in those with poor mental health that remain undiagnosed between the ages of 18 and 44.

Male

(60.8%)





Gender

Males were about 1.5 times as likely as females to report poor mental health for more than seven days and remain undiagnosed.

Race

Roughly three quarters of those in the Hispanic/other populations were the most likely to report having undiagnosed poor mental health (75.9%). Less than half of those in the non-Hispanic white populations reported having undiagnosed poor mental health (46%). There needs to be a 39.4% decrease among those Hispanic/other populations who report having undiagnosed poor mental health in order to eliminate the racial disparity.





Income

Residents who made \$75,000 or more had the highest percentage who reported undiagnosed poor mental health (67.9%), whereas those who made less than \$35,000 had the lowest rate of reporting undiagnosed poor mental health (46.8%). To eliminate this disparity there needs to be a 31.1% decrease among those who made \$75,000 or more who reported undiagnosed poor mental health.



CLINICAL PREVENTATIVE SERVICES

Not only does our social, economic, and physical environment influence our health, but access to clinical preventative services also provides the opportunity for a better quality of life in our community. As public health workers our goal is to improve our community's health by promoting these preventative services in various community settings. Scheduled and routine screenings are important to help improve health in our community.

These services can help prevent a number of diseases before they worsen as well as reduce the chances of premature death. By encouraging members of our community to use these services, we hope to achieve the best possible health outcomes and not only save our community members money but also give them peace of mind. Having access to these scheduled and routine screenings is essential to promoting positive health outcomes among all members of our community.

Local Clinical and Preventative Services (CPS) Data Indicators

- CPS-1: Colorectal Cancer Screening
- CPS-2: Diabetes
- CPS-3: Late-Stage Cancer

CPS-1: COLORECTAL CANCER SCREENING

Bottom Line

Colorectal cancer (CRC) is the second leading cause of cancer-related deaths among cancers that affect both men and women.¹ In 2010, 28 million Americans between the ages of 50 and 75 had never received CRC screening.¹ CRC screening is the most effective way to reduce the risk of getting CRC.

Those most at risk for CRC are:

- men and women,
- people who are 50 and older (risk increases with age),
- those with inflammatory bowel disease, and
- those with a family member who had colorectal polyps or colorectal cancer.²

Healthy People 2020 data have shown differences in CRC screening among various populations. National estimates consistently report that CRC screening among whites is higher than other racial groups.³ Also, as education level increases, so do CRC screening rates.³ Age is another characteristic that is known to be associated with disparities in CRC screening.³

Indicator Measurement

This indicator is a measure of the percent of the population 50 years of age and older who reported never having a sigmoidoscopy or colonoscopy. Data for this indicator were obtained from the 2008 Behavioral Risk Factor Surveillance System (BRFSS).

Local Findings

Over one third of Summit County adults who were 50 and older reported never having had a sigmoidoscopy or colonoscopy. The Healthy People target is 29.5%. To reach the target by the year 2020, there needs to be a 16.4% decrease in the number of adults who report never having had one of these preventative screenings.





Race

Those among the black population were the least likely to report having had a CRC screening (45.8%) and were 1.3 times as likely as whites (34.2%) and nearly twice as likely as other racial groups to report not having had a CRC screening. To eliminate this racial disparity, there needs to be a 44.3% reduction among the black population who report never having had a CRC screening.

Education

Residents who had no high school diploma (41.5%) were nearly 1.2 times as likely as those with a high school diploma (34.9%) to report never having had a CRC screening. We need to see a 15.9% decrease among those with no high school diploma in order to eliminate this education disparity.

CPS-2: DIABETES

Bottom Line

Diabetes is the 7th leading cause of death in the United States with 29.1 million people estimated to currently have diabetes.¹ The risk of death for adults with diabetes is 50% higher than adults without diabetes.¹ Exercise, weight loss, and a healthy diet can help reduce the risk for diabetes as well as manage ones diabetes.

People with diabetes are at a higher risk for other health problems as well such as:

- blindness;
- kidney failure;
- heart disease;
- stroke; and
- loss of toes, feet, or legs.¹

The American Diabetes Association has shown differences in diabetes among various populations. For instance, national estimates continue to report that rates of diabetes among non-Hispanic blacks and Hispanics are significantly higher than that of non-Hispanic whites.²⁻³ Also, higher education level was associated with lower rates of diabetes.³ Other characteristics that are known to be associated with disparities are age and geographical location.³

Indicator Measurement

This indicator is a measure of the percent of the population who have ever been told by a health care professional that they have diabetes. Note that this does not include pregnancy-related diabetes. Data for this indicator were obtained from the 2008 Behavioral Risk Factor Surveillance System (BRFSS).

Local Findings

A total of 9.7% of Summit County residents reported having been told that they have diabetes, which was not far off of the Ohio figure of 9.9%. This means that virtually one out of every ten residents have been told that they have diabetes.

Age

Those who were age 65 and older were at a greater risk for being told they have diabetes (20.8%). They were 6.5 times as likely to report having been told they have diabetes as those who were under age of 45 (3.2%). A decrease of 84.6% among the older populations is needed to reduce this age disparity.

Income

Those who made less than \$35,000 annually were three times as likely to report having been told they have diabetes compared to those who made more than \$75,000 (15% and 5%, respectively). They were also 1.5 times as likely to report having diabetes compared to those who made between \$35,000 and \$74,999. There needs to be a 66.7% decrease among those who make less than \$35,000 to eliminate this income disparity.

CPS-3: LATE-STAGE CANCER

Bottom Line

Late-stage cancer is the most dangerous stage at which cancer can be found. Often, late-stage diagnoses lead to poorer health outcomes, increased risk of death, and higher medical costs.¹ Risks associated with cancers like breast, cervical, colorectal, and prostate can all be reduced with the use of screening measures such as:

- breast cancer mammography;
- dervical cancer pap tests;
- colorectal cancer fecal occult blood testing, sigmoidoscopy, or colonoscopy; and
- prostate cancer prostate-specific antigen (PSA) test¹

The Centers for Disease Control and Prevention has consistently shown differences in late-stage cancer diagnoses among various populations. For instance, national estimates report that late-stage cancer incidence was higher among non-Hispanic blacks and Hispanics than in non-Hispanic whites.² Other characteristics known to be associated with disparities in late-stage cancer diagnoses include age and geographical location.²

Indicator Measurement

This indicator is a measure of the percent of breast, prostate, and colorectal cancers diagnosed at a distant Surveillance, Epidemiology, and End Results (SEER) summary stage (i.e. the percent of breast, prostate, and colorectal cancers diagnosed at a late-stage). Data for this indicator were obtained from the Ohio Cancer Incidence Surveillance System (OCISS) for the years 2002-2011.

Local Findings

In Summit County, one in three (36.8%) breast cancers diagnosed between 2002 and 2011 were late-stage, three in five (57.6%) colorectal cancers were late-stage and one in ten (10.7%) prostate cancers were diagnosed as late-stage. From this, we can see that colorectal cancer had the highest rate for late-stage diagnosis.

Race

Colorectal cancer had the highest percentage of late-stage diagnoses with Hispanic and other racial groups having the highest rate of late-stage diagnoses (61.1%) compared to non-Hispanic white populations (57.5%). This was similar for those with breast cancer where Hispanic and other racial groups had the highest rate compared to non-Hispanic whites and non-Hispanic blacks (44.4%, 36.1%, and 41.3%, respectively). Again, this was the case with prostate cancer where Hispanic and other racial groups were 1.6 times as likely as non-Hispanic whites to be diagnosed in late-stage prostate cancer (17.4% and 10.8%, respectively).

Geography

Breast: The highest proportion of late-stage breast cancer diagnoses was in the Akron North cluster where nearly half (46.8%) of all breast cancers diagnosed were late-stage. Residents of the Franklin cluster had the lowest proportion where only one in four breast cancer diagnoses (25.1%) were late-stage.

Colorectal: Hudson had the highest percentage of late-stage colorectal cancer diagnoses (71.7%) while the lowest percentages were among those residents of the Richfield/Boston cluster (50%). In both cases, however, there were fewer than 100 total cases over 10 years. In clusters with at least 100 colorectal cancers diagnosed, Akron West had the highest proportion of late-stage diagnoses (65%) and Akron Northwest had the lowest (50.4%).

Prostate: The highest proportion of late-stage diagnoses for prostate was in Richfield/Boston (14.7%) and the lowest was in Akron Northwest (8%). Among those clusters with more than 100 prostate cancer cases, Munroe Falls/Tallmadge had the greatest percentage (13.8%) of late-stage diagnoses.

Indicator CPS-3b: Percent of colorectal cancers diagnosed in late-stage

50.0 - 52.1
52.2 - 57.1
57.2 - 61.9
62.0 - 71.7

Indicator CPS-3c: Percent of prostate cancers diagnosed in late-stage

Summit 2020 Clusters

ENVIRONMENTAL QUALITY

Our environment has a direct impact on our quality of life and health status. Poor environmental quality can lead to serious health problems in every stage of life from infancy through adulthood. Community members that live in poor conditions are more likely to experience water damage as well as be exposed to lead-based paint and other hazards/toxins that can cause health problems. These poor conditions also depict the level of economic problems in that neighborhood.

Environmental quality that promotes healthy communities, homes, schools, and workplaces are essential as we spend so much time living in these areas. As public health workers we want to improve our community's environmental health by encouraging built environments that support healthy lifestyles and promote adequate housing so that community members of all ages may have the best chances at a healthy environment and better health outcomes.

Local Environmental Quality (EQ) Data Indicators

• EQ-1: Housing Quality

EQ-1: HOUSING QUALITY

Bottom Line

Inadequate housing is a housing unit (apartment, mobile home, house, etc) that has moderate or severe physical problems such as plumbing, heating, or electricity problems, lack of running water, exposed wiring, peeling of lead paint (older homes), mold, and other toxins.¹ In 2009, 5.2% of houses in the United States were determined to be inadequate.¹

Factors that are associated with inadequate housing are:

- poor hygiene;
- possible food and water contamination;
- poor health and chronic conditions (respiratory problems), and
- stress.²

Indicator Measurement

This indicator is a measure of the percent of residential housing units rated in "Fair", "Poor", "Very Poor", or "Unsound" condition by the Summit County Fiscal Office. Data for this indicator were obtained from audit records provided by the Summit County Fiscal Office and were current as of December 2013.

Local Findings

In 2013, just over 6% of Summit County's residential housing were rated as "Fair", "Poor", "Very Poor", or "Unsound". This is about 15% higher than the 2009 US rate for inadequate housing.

Geography

Residential houses in the Akron Central and Akron Southwest clusters had the highest concentration of housing that have been rated as "Fair", "Poor", "Very Poor", or "Unsound" (30% and 20.4%, respectively). The Hudson and Twinsburg clusters had the lowest concentration of such housing both at 0.9%.

INJURY & VIOLENCE

Injuries and violence have an important impact on the well-being of our community. Children and older adults are the most vulnerable populations in our community. Learning, as well as cognitive and emotional development, can be delayed in our children when they experience stress and negativity in their environment. For older adults, there is a much greater risk for developing health problems and there may be negative impacts on their independence when exposed to violence and neglect.

It is important to be able to identify, measure, and protect the most vulnerable members of our community. Children and adult services are often needed to identify, investigate, and track these devastating incidents. As public health workers, educating community members about injury and violence prevention, especially regarding our children and older adults, is essential to promote positive development and better health among our community members.

Local Injury & Violence (IV) Data Indicators

- IV-1: Elder Abuse
- IV-2: Child Abuse

IV-1: ELDER ABUSE

Bottom Line

Elder abuse is when someone who is older than 60 is either abused or neglected by a caregiver or family member.¹ Because of the lack of data on this topic, the best estimate of older adults that are abused or neglected ranges from 1 to 2 million nationwide.²

There are some factors that can be protective against elder abuse and neglect such as:

- having strong relationships with people of different social status;
- resources and services in community agencies that serve the elderly and their caregivers;
- regular training on elder abuse and neglect for employees;
- strong sense of community; and
- effective monitoring systems and policies regarding patient care.³

The National Center on Elder Abuse has shown differences in elder abuse and neglect among various populations. For example, national estimates consistently record that elder abuse and neglect among women is higher than among men.⁴ Age is another characteristic that is known to be associated with disparities in elder abuse and neglect.⁴

Indicator Measurement

This indicator is a measure of the rate of reported cases of "Elder Abuse", "Neglect", "Self-neglect", and "Exploitation" per 1,000 persons 60 years of age and older. Data for this indicator were obtained from Adult Protective Services (APS) at the Summit County Department of Job and Family Services between

the October 2013 and September 2014 fiscal year. Rates were calculated using estimates from the 2010 US decennial census, Summary File (SF)1, containing 100% data, as population denominators. Note that APS only provides services for reported cases and thus this indicator is not representative of actual cases.

Local Findings

Between the October 2013 and September 2014 fiscal year, there were a total of 933 incidents reported to Summit County's APS unit. This equals a rate of about 6.4 per 1,000 people who were 60 and older.

Gender

Female residents aged 60 and older were 1.5 times as likely to be victims of "Elder Abuse", "Neglect", "Self-neglect", and "Exploitation" compared to male residents—with rates at 6.7 per 1,000 and 4.6 per 1,000, respectively.

Geography

Older residents of the Akron Central and Akron West had the highest rate of "Elder Abuse", "Neglect", "Self-neglect", and "Exploitation" (20.9 per 1,000 and 12.3 per 1,000, respectively). In all, the eight clusters that make up Akron, all had rates which exceed the county's average. The clusters with the lowest rates were Richfield/Boston (1.1 per 1,000) and Hudson (1.3 per 1,000)

Indicator IV-1: APS cases per 1,000 persons who are age 60 and older

Summit 2020 Clusters

IV-2: CHILD ABUSE

Bottom Line

Child abuse and neglect occurs when a child under the age of 18 is abused or neglected by a parent, caregiver, or another person of trust.¹ In 2012, there were nearly 700,000 victims of child abuse and neglect in the US. This means that, for every 1,000 children, nine are either abused or neglected.

There are some factors that can be protective against child abuse and neglect such as:

- a supportive family environment;
- stable family relationships and nurturing parenting skills;
- having caring adults outside the family;
- parental employment, household rules, and child monitoring; and
- communities that support parents and promote abuse and neglect prevention.³

The National Center for Injury Prevention and Control has shown differences in abuse and neglect among various populations. For instance, national estimates consistently record that child abuse and neglect among younger children occurs more often than among older children.² Another characteristic known to be associated with disparities in child abuse and neglect is race.²

Indicator Measurement

This indicator is a measure of the rate of protective services provided by Summit County Children Services (SCCS) per 1,000 children in the total population. Data for this indicator were obtained from SCCS and included all children 18 years of age and younger who had a SCCS-managed case plan or alternative response service plan between 2010 and 2013. Rates were calculated using estimates from the 2010 US decennial census, Summary File (SF)1, containing 100% data, as population denominators. Note that SCCS only provides services for reported cases and thus, this indicator is not representative of actual cases.

Local Findings

Just over 2,000 children in Summit County had either a case plan or an Alternative Response plan between 2010 and 2013. The rate of these plans has declined since 2010 from about 18.1 per 1,000 to about 15.9 per 1,000 in 2013. This change represents a 12% decrease between 2010 and 2013.

Age

Children who were under age 5 had the highest likelihood of having a case plan or Alternative Response plan (22.3%) compared to those who were between the ages of 5 and 9 (17.7%) and those who were between the ages of 10 and 17 (11.4%). To eliminate this disparity there needs to be a 48.9% decrease among those children under age 5.

Race

Black children and adolescents had higher rates of case plans or Alternative Response plans (28.6 per 1,000) and were 2.4 times as likely as whites (11.8 per 1,000) and 1.3 times as likely as other races to have one. To eliminate the racial disparity, there needs to be a 58.7% decrease of case plans and Alternative Response plans among those in the black population.

MATERNAL, INFANT & CHILD HEALTH

Improving the health and well-being of our future generations is a global public health priority. Ensuring good health among adults for tomorrow involves keeping our children healthy today. In fact, many of our public health programs are intended to provide our children with the best start in life. Such programs guarantee access to quality medical care, help our kids establish healthy lifestyles, and seek to build strong families and communities to support our children as they grow.

As well, when children are born healthy, they have a better chance of staying healthy throughout life. It is for precisely this reason that many of our public health initiatives are dedicated to improving birth outcomes by attending to the health of women before, during, and after pregnancy. Addressing the health of our mothers during all life stages promotes healthier pregnancies; prevents death, disability, and developmental delays among our children; and ensures that our future generations will reach their full potential.

Local Maternal, Infant, & Child Health (MICH) Data Indicators

- MICH-1: Infant Mortality
- MICH-2: Premature Birth
- MICH-3: Early Prenatal Care

MICH-1: INFANT MORTALITY

Bottom Line

Infant mortality is the death of a baby before his or her first birthday. Such an event is a devastating occurrence for many of our families. Unfortunately, well over 20,000 infants die each year in the United States.¹

Nearly 60% of those infants die because:

- they are born with a serious birth defect;
- they are born too small and are too early (premature);
- they are victims of Sudden Infant Death Syndrome (SIDS);
- they are affected by maternal complications of pregnancy; or
- they are victims of injuries, such as suffocation.¹

National infant mortality surveillance has shown that considerable differences in infant mortality exist among various populations. For instance, national estimates consistently document that black infants are approximately 2.5 times more likely to die in the first year of life than non-Hispanic white infants.² Other characteristics that are known to be associated with disparities in infant mortality include: the mother's age and education level, and how early in pregnancy mothers begin receiving prenatal care.²

Indicator Measurement

This indicator is a measure of the average annual rate of infant mortality per 1,000 live births. Data for this indicator were obtained from the linked Ohio birth-death certificate files for the years of 2000-2009. Note that infant mortality statistics are sometimes calculated according to a different method using unlinked birth and death certificate files. Therefore, caution should be used when comparing infant mortality rates from different data sources.

Local Findings

From 2000-2009, there were 7.2 infant deaths per 1,000 live births among Summit County residents. The Healthy People 2020 target for infant mortality is less than 6.0 infant deaths per 1,000 live births. In order to reach the target by the year 2020, a 16.7% decrease in infant mortality among Summit County residents is needed.

Race

In Summit County, non-Hispanic black mothers were 2.5 times as likely to experience the loss of an infant when compared to non-Hispanic white mothers. In fact, infant mortality needs to be reduced by 59.3% among non-Hispanic black mothers in order to eliminate the racial disparity in Summit County.

Education

There was a clear trend of decreased infant mortality across categories of increasing educational attainment among mothers who were 19 and older in Summit County. Mothers without a high school diploma were 2.1 times as likely to experience infant mortality as mothers who had attended college (10.7 per 1,000 and 5.5 per 1,000, respectively). Among mothers without a high school diploma, a 48.6% decrease in infant mortality is needed to eliminate the educational disparity.

Geography

Infant mortality was highest among the Akron Central and Akron West clusters (14.3 per 1,000 and 12.1 per 1,000, respectively). It was lowest in the Richfield/Boston and Franklin clusters (1.5 per 1,000 and 3.9 per 1,000).

MICH-2: PREMATURE BIRTH

Bottom Line

In 2012, approximately 1 of every 9 infants born in the United States was born prematurely.¹ A large percentage of infants die from preterm-related problems compared to other causes.

Some risk factors for having a preterm baby are:

- cigarette smoking, alcohol use, or illicit drug use during pregnancy;
- certain infections during pregnancy; chronic health problems in the mother (high blood pressure, diabetes, and clotting disorders);
- problems with the uterus or cervix; and
- carrying more than one baby (twins, triplets, or more).²

Research has shown significant differences exist in premature infants among numerous populations. One of the most common disparities is race. Specifically, non-Hispanic black women are nearly 50% more likely to have a premature baby than non-Hispanic white women. Other disparities in premature births include the education level of the mother, low or high maternal age, and the income level of the mother.

Indicator Measurement

This indicator is a measure of the percent of live births to residents of Summit County that were born preterm. Preterm infants included those that were born at less than 37 weeks of gestation. Note that preterm infants include those that were born very preterm, or at less than 32 weeks gestation. Data for this indicator were obtained from the Ohio birth certificate data files for 2008-2012.

Local Findings

Between 2008 and 2012, 13.6% of all births among Summit County residents were considered to be premature. In comparison, the Healthy People 2020 target for premature births is 11.1%. To reach the target by year 2020, an 18.4% decrease in premature birth among Summit County residents is needed.

Age

In Summit County, teenage and advanced maternal age (AMA) mothers were more likely to experience a preterm birth compared to mothers of maternal age (MA). In fact, preterm births need to be reduced by 18.3% among teen and AMA mothers in order to eliminate the age disparity in Summit County.

Race

In Summit County, non-Hispanic black mothers were more likely to experience a preterm birth when compared to non-Hispanic white mothers. In fact, preterm births need to be reduced by 38.1% among non-Hispanic black mothers in order to eliminate the racial disparity in Summit County.

Education

There was a clear trend of decreased preterm births across categories of increasing educational attainment among mothers 19 years of age and older in Summit County. Mothers who had a high school diploma or less were more likely to experience preterm birth than mothers who had a college degree (15.5% and 11%, respectively). Among mothers who had a high school diploma or less, a 29.0% decrease in preterm births is needed to eliminate the educational disparity.

MICH-3: EARLY PRENATAL CARE

Bottom Line

In 2011, nearly 74% of women giving birth received prenatal care in the first trimester.¹ Early prenatal care ensures a healthy pregnancy. It promotes the management of a woman's risk factors, health conditions, education, and counseling on healthy behaviors to use during and after pregnancy.¹ Benefits of early prenatal care include:

- reduces the risk of pregnancy complications;
- allows for a healthy and safe diet for the mother;
- encourages regular exercise;
- educates mother on avoiding exposure to potentially harmful substances;
- controls for existing conditions such as high blood pressure and diabetes; and
- reduces the infant's risk for complications²

Research has shown significant differences in early prenatal care among education level. For instance, early prenatal care increases as education level increases (58.0% of mothers with less than a high school diploma received early prenatal care versus 86.3% of mothers with a bachelor's degree or higher). Other significant differences exist in early prenatal care among various racial groups.

Indicator Measurement

This indicator is a measure of the percent of mothers who received prenatal care during their first trimester, or first three months of pregnancy. Data for this indicator were obtained from the Ohio birth certificate data files from 2008-2012.

Local Findings

Nearly one in four (23.3%) pregnant women in Summit County did not receive first trimester prenatal care between 2008 and 2012. The Healthy People target is less than 22.1% who do not receive early prenatal care. To reach the target by 2020, there needs to be a 5.2% decrease.

Race

NH-black pregnant women were less likely than those of other racial groups to receive prenatal care in the first trimester—nearly one in three (32.5%). To eliminate the racial disparity, there needs to be a 37.5% decrease in NH-black pregnant women not receiving prenatal care within the first trimester.

Education

Pregnant women who had a high school diploma or less (31.3%) were 1.4 times to 2.5 times as likely to have not received prenatal care within the first trimester compared to those who had some college (22.6%) and those with a college degree or more (12.5%). To eliminate the education disparity, there needs to be a 60% decrease in those women with a high school diploma or less receiving no prenatal care in the first trimester.

Geography

Pregnant women living in the Akron Southwest and Akron Central clusters were the least likely to receive prenatal care in the first trimester (33.3% and 31.1%, respectively). Those in the Richfield/ Boston cluster or the Hudson cluster were least likely to not receive prenatal care (12.7% and 13.25%).

MENTAL HEALTH & MENTAL DISORDERS

Our mental health affects our overall physical health and is associated with many of the common chronic diseases of today. Poor mental health can impact one's activities, relationships, coping skills, and productivity. Not only do mental health disorders have an effect on the people that suffer with them, they also affect others, such as our families, schools, and community as a whole. This is why it is essential that we ensure that our community members have positive mental health.

As public health workers, we want to improve the health of our community by promoting positive mental health through wellness initiatives, school awareness programs, and ensuring access to quality mental health services. Those who do not have access to quality mental health services are at a higher risk for unhealthy and unsafe behaviors, such as alcohol and drug abuse, violence, and suicide.

Local Mental Health & Mental Disorders (MHMD) Data Indicators

- MHMD-1: Suicide
- MHMD-2: Adult Depressive Episode
- MHMD-3: Adolescent Depressive Episode

MHMD-1: SUICIDE

Bottom Line

Suicide is defined as death caused by self-directed injurious behavior with intent to die as a result of the behavior.¹ Over the past decade, the rate of suicide has increased by 15% to nearly 38,400 suicides in the United States in 2010.¹⁻² Suicide begins with suicidal thoughts and behavior. However, there are some factors that can be protective against suicide, such as:

- effective clinical care for abuse (mental, physical, and substance abuse);
- easy access to a variety of clinical interventions;
- family and community support; and
- problem solving skills, conflict resolution skills, and nonviolent ways of handling disputes.³

The National Center for Injury Prevention and Control has shown that there are differences in suicide among various populations. For instance, these estimates consistently report that suicide among males is four times higher than among females.⁴ Males represent 79% of all suicides in the U.S.⁴ Other characteristics that are known to be associated with disparities in suicide include age and race.⁴

Indicator Measurement

This indicator is a measure of the average annual age-adjusted rate of suicide per 100,000 population. Data for this indicator were obtained from the Ohio Death Certificate data files for 2001-2010. Rates were calculated using the 2010 US census, Summary File (SF)1, containing 100% data, as population denominators and the direct method of age-adjustment using the 2000 US Census standard population.
Local Findings

On average, there were roughly 11.5 suicides per 100,000 residents of Summit County per year. The Healthy People 2020 target for suicides is to have less than 10.2 suicides per 100,000 people. To reach this target by the year 2020, we need to see a decrease of 11.3% in the rate of suicide in Summit County.





Age

In Summit County, there was an increasing trend in average annual rate of suicide as residents aged. This trend peaked for those between the ages of 45 and 54 where there were roughly 20 suicides per 100,000 people each year.

Gender

Male residents of Summit County were 3.5 times as likely to commit suicide as female residents in Summit County. To eliminate this gender disparity, suicides need to decrease by 72% among males.





Race

The suicide rate was highest among the non-Hispanic white population who were 3.3 times as likely to commit suicide as Hispanic residents or residents of other races. This means that there needs to be at least a 69.3% decrease in suicides among the non-Hispanic white population in order to eliminate the racial disparity.

MHMD-2: ADULT DEPRESSIVE EPISODE

Bottom Line

The Substance Abuse and Mental Health Services Administration (SAMHSA) estimates that nearly one in five adults in the U.S. had a diagnosable mental or emotional illness including depression and anxiety disorders.¹ SAMHSA states that these mental health illnesses involve alterations in thinking, mood, and behaviors which can drastically effect not only one's quality of life but also the quality of life of family and community members.² Over the long run, left unchecked, there are a number of negative consequences that can result from these poor mental health status such as:

- weakened immune system;
- heart disease;
- increased substance abuse (tobacco, alcohol and other drugs);
- suicide or homicide; and
- social conflicts³

Research suggests that more females suffer from mental health disorders including depression and anxiety disorders.⁴ Depressive disorders have been found to be more prevalent among white populations, however, this could be due to a lack of access to diagnosing physicians.⁴

Indicator Measurement

This indicator is a measure of the estimated percent of the population age 18 and older who had a depressive episode. This was defined as those individuals who reported having experience more than seven days, out of the past thirty, on which mental health status (i.e. stress, depression, and problems with emotions) was not good. The data for this indicator were obtained using the 2008 Behavioral Risk Factor Surveillance System (BRFSS).

Local Findings

Summit County residents had similar rates of having experienced more than seven days of a depressive episode compared to the whole state of Ohio (15.2% and 15.1%, respectively).



Age

Younger adults between the ages of 18 and 44 were more than twice as likely to report having a depressive episode as those who were age 65 and older (18.2% and 8.7%, respectively). To eliminate this age disparity, those between the ages of 18 and 44 need to have a 52.2% decrease in reporting depressive episodes.





Gender

Around one in seven females (13.3%) reported having a depressive episode whereas one in six males (17%) reported having a depressive episode.

Race

Non-Hispanic whites and Hispanic/other populations reported similar rates of depressive episodes(13.4% and 13.8%, respectively). Non-Hispanic blacks were nearly twice as likely as both of these populations to report having a depressive episode. To eliminate this racial disparity, there needs to be a 47.5% decrease among non-Hispanic blacks who report a depressive episode.



MHMD-3: ADOLESCENT DEPRESSIVE EPISODE

Bottom Line

Among children and youth, the term "serious emotional disturbance" (SED) refers to a diagnosable mental, behavioral, or emotional disorder with "functional impairment that substantially interferes with or limits the child's role or functioning in family, school, or community activities."¹ The Substance Abuse and Mental Health Services Administration (SAMHSA) states that, while there is no current indicator to measure the number of children with SED, estimates suggest that somewhere between 13%-20% of our children suffer from it.¹ Functional impairment is debilitating for anyone who experiences it, but it is especially devastating for youth as it often occurs during periods of critical development.² Such impairments, when left untreated, increase the risk for our children to drop out of school, fail a grade, and spend time in a juvenile corrections facility.²

Indicator Measurement

This indicator is a measure of the percent of adolescents who reported having had a depressive episode. A depressive episode was defined as feeling so sad or hopeless every day for two or more consecutive weeks during the past year that the adolescent stopped engaging in usual activities. Data for this indicator were obtained from the high school and middle school reports from the 2013 Summit County Youth Risk Behavior Survey (YRBS) released by the Summit County Adolescent Health Consortium.

Local Findings

One out of five middle school students (21.7%) and almost one out of three high school students (29.4%) reported having had a depressive episode in 2013. The Healthy People 2020 target for this is 7.5%. To reach this target by the year 2020, there needs to be a 34.6% decrease among middle school students and a 74.5% decrease among high students who report having had a depressive episode.



Gender

Females in both middle school and high school reported nearly double the rates of having had a depressive episode compared to their male counterparts. About one third of middle school females (29.2%) and over one third (38.6%) of all high school females had a depressive episode compared to just one in five high school males.





Race

Among middle school students, those within the Other category of racial and ethnic populations reported the highest rate of having had a depressive episode (31.2%). In high school, however, the rate was highest among Hispanic students (41.5%). In both middle school and high school, Asian students reported the lowest rate of having had a depressive episode (19.7% and 24.5%).



NUTRITION, PHYSICAL ACTIVITY & OBESITY

In order to ensure the health of our community, it is important that we encourage healthy behaviors such as good nutrition and physical activity. These behaviors are not only important to the growth and development of our children, but also help the entire community to decrease the risks of many health problems and chronic diseases.

Creating policies and supportive environments that promote these individual behaviors are important to have in various settings such as schools, work sites, and health care organizations in our communities. Health behaviors are encouraged through a number of programs and initiatives in our community that help us gain access to healthy foods and promote physical activity.

Local Nutrition, Physical Activity, & Obesity (NPAO) Data Indicators

- NPAO-1: Adult Obesity
- NPAO-2: Adolescent Obesity

NPAO-1: ADULT OBESITY

Bottom Line

In the past 20 years, obesity has increased in the United States and rates continue to rise. More than one-third, or 35%, of U.S. adults were obese in 2010. In 2008, this serious burden had a medical cost of \$147 billion U.S. dollars.¹

People that are obese have higher risks for health problems such as:

- coronary heart disease
- type 2 diabetes
- cancers (endometrial, breast, and colon)
- stroke
- liver and gallbladder disease
- sleep apnea and respiratory problems; and
- high blood pressure and high cholesterol.¹

The National Center for Health Statistics (NCHS) has shown that differences in obesity rates exist among various populations. For instance, national estimates consistently document that non-Hispanic black adults have the highest rates of obesity compared to non-Hispanic whites.² Other characteristics that are known to be associated with obesity include gender and age.²

Indicator Measurement

This indicator is a measure of the percent of residents 18 years of age and older that were obese, or had a body mass index (BMI) of 30 or greater. Data for this indicator were obtained from registration records provided by the Ohio Bureau of Motor Vehicles (BMV) and contained all adult residents who acquired or renewed an Ohio-issued driver's license or identification card during the calendar years of 2008-2012.

Local Findings

It was estimated that one in five, or 21.5% of residents were obese between 2008 and 2012. The Healthy People target for adult obesity is 30.5% which means that Summit County has successfully met the 2020 target.





Gender

In Summit County, one quarter of all licenseholding males were considered to be obese. On the other hand, only one fifth of females were considered to be obese. To eliminate the gender disparity, there needs to be a 16.7% decrease among males who are obese.

Geography

Residents of the Akron Southwest and Akron Central clusters had the highest proportion of license holders who were determined to be obese with almost one in three adults in Akron Southwest being obese (29.9%). The Hudson cluster had the lowest proportion of obese adults (11.7%).

Indicator NPAO-1: Percent of adults with active driver's licenses with a BMI of 30 or above





NPAO-2: ADOLESCENT OBESITY

Bottom Line

Along with adult obesity, child and adolescent obesity rates have increased and remain high. In 2012, 17% (or 12.7 million) of children and adolescents aged 2-19 years were obese.¹ Because of these high obesity rates in this age population, more children and adolescents are having health complications such as heart disease, high cholesterol, high blood pressure, diabetes, sleep apnea, and cancer.²

Some reasons for childhood obesity include:

- environment;
- lack of physical activity;
- heredity and family;
- dietary patterns; and
- income level.²

The National Center for Health Statistics (NCHS) has also shown differences in obesity rates among various child and adolescent populations. National estimates continue to show significant racial and age disparities in obesity among children (22.4% of Hispanic and 20.2% of non-Hispanic black children are obese).¹ Additional characteristics that are known to be associated with childhood and adolescent obesity include gender and income level.¹

Indicator Measurement

This indicator is a measure of the percent of adolescents that were obese, or had a body mass index (BMI) in the 95th percentile of their peers in the same age group and sex. Data for this indicator were obtained from the high school and middle school reports from the 2013 Summit County Youth Risk Behavior Survey (YRBS) released by the Summit County Adolescent Health Consortium.

Local Findings

Only 12.9% of high school students and 11.7% of middle school students were considered obese in Summit County which is about 11% and 12% less than the Healthy People 2020 target.



Gender

Middle school males had a higher percentage of obesity (14.2%) than their female counterparts (8.9%). This same trend was also seen between high school males (15.7%) and high school females (10.1%).





Race

We saw similar trends in racial disparities among both groups of adolescents. Black students had the highest percentages of obesity at 15.6% and 18.1% for those in middle school and those in high school respectively. This was 2.5 to 2.8 times the rate we see in Asian students. To eliminate this disparity, obesity rates need to be reduced by 61% and 64% for blacks in middle and high school.



ORAL HEALTH

To have a community that is healthy inside and out, good oral health is just as important to our overall health and well-being. Access to professional treatment (dentist), daily flossing, and using fluoride toothpaste are ways we can all have good oral health. Not only does poor oral health affect your teeth, smile, taste, and facial expressions, those with poor oral health are at a higher risk for cavities, infections, gum disease, oral cancer, and other diseases.

Encouraging access and use of the dentist will allow for lower levels of disease in our community. Many of the dental services and initiatives we provide are devoted to improving oral health in our community. Our individual behaviors, along with visits to the dentist, can prevent many of the poor oral health conditions of today.

Local Oral Health (OH) Data Indicators

• OH-1: Oral Health Care

OH-1: ORAL HEALTH CARE

Bottom Line

Every year, more than 30,000 new cases of oral and pharynx cancers are diagnosed while over 8,000 deaths are due to oral cancer.¹ Furthermore, one-third of all adults in the United States have untreated tooth decay.¹ Oral health care is not only important, but these oral health problems are also preventable. Visiting the dentist annually can help reduce the risk for oral health problems. In the United States, 70% of adults reported visiting the dentist in the past 12 months.¹ Although the majority of the population visits the dentist, many do not have access to the oral healthcare system.

There are various populations that are affected when it comes to having access to the oral health care system. Some of these populations include:

- racial and ethnic groups;
- children;
- older adults;
- those that live in rural and urban underserved areas;
- uninsured and publicly insured individuals; and
- lower income levels²

Indicator Measurement

This indicator is a measure of the percent of the population 18 years of age and older who did not visit a dentist or a dental clinic within the past year. The data for this indicator were obtained using the 2008 Behavioral Risk Factor Surveillance System (BRFSS).

Local Findings

In Summit County, it was estimated that less than one third of all adults who are 18 and older visited a dental clinic in 2008.

About 1 in 3 (28.7%) adults did not visit a dental clinic





Income

There was a definite trend associated with income level and having visited a dentist or dental clinic. Almost half, or 44.4%, of those with the lowest income (less than \$35,000) reported not having visited one while only 10.6% of those making more than \$75,000 annually reported not having visited one. To eliminate this disparity, we need to see a 76.1% decrease in those reporting no dental visits by those making less than \$35,000.



Blacks were found to be the most likely to report not having visited a dentist or dental clinic in the past year than whites (47.6% and 25.1%, respectively). To eliminate this disparity, there needs to be a 47.3% decrease in blacks reporting that they had not visited a dental clinic or dentist.





Education

Those who had a high school education or less were more likely to report not having visited a dentist as compared to those with a college degree or more (50.4% and 27.2%, respectively). There needs to be a decrease of 46% in people with a high school education or less to eliminate this disparity.



REPRODUCTIVE & SEXUAL HEALTH

Reproductive and sexual health is a key element of the overall health and quality of life for both men and women in our community. Reproductive and sexual health includes a broad range of health needs beginning at adolescence and beyond. Services are provided to ensure that our community's reproductive and sexual health needs are met. These services include HIV and STD testing and treatment, prenatal care, teen pregnancy, fertility, screening for reproductive cancers, and family planning.

Access to these services is essential to the health of not only our community members today, but also the community members of the future. Improving reproductive and sexual health is important to help eliminate other health issues such as health disparities, infectious diseases and infertility, financial stability, and education level for our families.

Local Reproductive & Sexual Health (RSH) Data Indicators

- RSH-1: Adolescent Sexual Activity
- RSH-2: Pregnancy Spacing

RSH-1: ADOLESCENT SEXUAL ACTIVITY

Bottom Line

Adolescent sexual activity is the number of middle and high school students that have ever engaged in sexual activity. In U.S. high school students, nearly 47% had ever had sexual intercourse in 2012.¹ A great number of young people engage not only in sexual activity, but in risky sexual behaviors such as failure to use a condom and having multiple sexual partners.¹ These risky behaviors can result in the following unintended and long-term health outcomes:

- STD/HIV;
- further spread of STD/HIV, if untreated;
- teen pregnancy;
- fetal and perinatal health problems; and
- reproductive health problems.¹

The Youth Risk Behavior Survey has shown differences in adolescent sexual activity among various populations. National estimates continuously report that black high school students are nearly 38% more likely to ever engage in sexual activity than white high school students.² Other characteristics that are known to be associated with disparities are age and gender.²

Indicator Measurement

This indicator is a measure of the percent of adolescents who reported that they ever had sexual intercourse. Data for this indicator were obtained from the high school and middle school reports from the 2013 Summit County Youth Risk Behavior Survey (YRBS) released by the Summit County Adolescent Health Consortium.

Local Findings

In 2013, 42% of high school students reported having had sexual intercourse. Only 2.5% of middle students, on the other hand, reported having had sexual intercourse.





Age

Middle School

Girls

Middle School

Boys

2020 Target:

6.1

Target met

2020 Target:

7.3

Target met

Among middle school students, the proportion of 7th and 8th grade students who ever had sexual intercourse was similarly low at 2.3% and 2.6%, respectively. Among high school students, there was a major trend in increasing sexual activity as these adolescents aged with 14.5% of 9th graders being sexually active to nearly half (47.5%) of all 12th graders being sexually active.

42.0

39.7

High School

Girls

High School

Boys

2020 Target:

19.8

Reduce by

52.8%

2020 Target:

20.8 Reduce by

47.6%

Gender

Currently, only the proportion of middle school students who have ever had sexual intercourse (2% of girls and 3% of boys) has met the Healthy People target. The proportion of high school girls who were sexually active needs to be reduced by 52.8% and high school boys by 47.6% in order to achieve the target by the year 2020.



Race

3.0

2.0

Racial disparities were more apparent for middle school students with 55.4% of black students having ever had sex versus only 18.7% of Asian students. These differences were less like what we saw among high school students who ranged from 52.3% to 59.5%.

RSH-2: PREGNANCY SPACING

Bottom Line

The inter-birth interval (IPI) describes the amount of time spaced between pregnancies. Research has shown that spacing out pregnancies by at least 18 months decreases the risk of poor birth outcomes. In 2006-2010, 33.1% of pregnancies were conceived within 18 months of a previous live birth.¹ Multiple studies have shown a 10%-50% increase in preterm births among mothers who had an IPI of less than 18 months.² Short IPIs have been associated with other problems for both the infant and the mother, including:

- low birth weight;
- small size for gestational age;
- uterine rupture for women attempting a vaginal birth after a previous cesarean; and
- placental abruption.¹

Healthy People 2020 report differences in short IPIs among various populations. Non-Hispanic black women (39.0%) are more likely to have a short IPI than non-Hispanic white women and Hispanic women (35.5% and 25.3%). Other characteristics that are known to be disparities among mothers with a short IPI include age and education level.

Indicator Measurement

This indicator is a measure of the percent of mothers with a previous pregnancy who had an interpregnancy interval (IPI) of less than 18 months. The IPI of a mother is defined as the number of months from the previous live birth to the beginning of the current pregnancy. Data for this indicator were obtained from the Ohio birth certificate data files from 2008-2012.

Local Findings

In Summit County, only 6.1% of live births were within the short IPI. This was significantly less than the Healthy People 2020 objective of 29.8% which means that Summit County has successfully met the target.



Age

In Summit County, the highest proportion of short IPIs occurred for women who were between the ages of 20 and 34. This may be impacted by age itself. The 2012 National Vital Statistics Report stated that the fertility rate in general is highest for this middle age range and lowest in the upper and lower age ranges.





Race

Black mothers had the highest rate of short IPIs (8.4%) compared to those of other races (5.4%). To eliminate this disparity, there needs to be a 35.7% decrease among black mothers who had a short IPI.

Education

We saw a decreasing trend as education level increased between those who had a high school diploma or less, those with some college experience, and those who had a college degree or more. Those who had a high school diploma or less were nearly twice as likely to have had a shorter IPI compared to women with a college degree or more (8.7% and 4.2%, respectively). To eliminate the disparity we see, there needs to be a 51.2% decrease in shorter IPIs among those mothers who have a high school diploma or less.





SOCIAL DETERMINANTS

Social determinants are the conditions in our community that influence our health and include individual behavior, social environment, physical environment, and access to health services. Our goal as public health workers is to create an environment that promotes good health for all. Our health begins in our own communities and is determined by the resources available in the places we spend the most time such as our homes, schools, and work places.

Access to important services that impact our health is an essential need for the adults and children in our county. Community programs ensure that the resources which enhance our quality of life are accessible to all. It is important that all of our community members are given the chance to be as healthy as possible.

Local Social Determinants (SD) Data Indicators

- SD-1: Education
- SD-2: Poverty
- SD-3: Premature Death

SD-1: EDUCATION

Bottom Line

Educational attainment is the level of education completed. In 2009, 85% of adults aged 25 and over in the United States had at least a high school diploma or GED; however, only 28% had a bachelor's degree or higher.¹ In society, education level is important and plays a huge role in physical, mental, and emotional health. Higher education is associated with:

- higher income;
- better insurance and benefits;
- regular doctor visits; and
- better health.¹

National surveillance systems have found differences in educational attainment in various populations. The US Census Bureau found that, overall, women are more likely to have completed high school or more education.¹ In addition, level of education was lower for non-Hispanic blacks and Hispanics than for non-Hispanic whites and Asians.¹

Indicator Measurement

This indicator is a measure of the percent of residents 25 years of age and older who do not have at least a high school diploma or equivalent (i.e., GED). Data for this indicator were obtained from the 2008-2012 American Community Survey.

Local Findings

Summit County had the smallest proportion of people who did not have at least high school diploma or GED, with only about 10% of residents lacking a diploma. This was lower than the whole State of Ohio (11.8%) and the United States (14.3%).





Gender

One out of every ten males and one out of every ten females in Summit County did not have a high school diploma or equivalent (10.1% and 9.7%, respectively).

Race

White residents had the lowest proportion of those with no high school diploma or GED (8.6%) and those of other races had the highest proportion (14.3%). To eliminate this racial disparity, we need to see about a 40% decrease among those other races in those who reported not having a high school diploma or GED.



Geography

The two clusters with the lowest proportion of persons with no high school diploma were Hudson (1.7%) and Copley/Bath/Fairlawn (4.5%). The highest proportion of those with no high school diploma were residents in the Akron Central and Akron Southwest clusters (24.5% and 20.7%, respectively).



SD-2: POVERTY

Bottom Line

In 2013, nearly 14.5% (or 45.3 million) of people in the United States were considered to be in poverty; specifically, 19.9% of children were in poverty.¹ Those in poverty are known to have poor health outcomes due to the following:

- no access to health care;
- have a disability;
- lack health insurance;
- have poor health status; and
- lack access to preventative care.²

Much research has shown the differences in poverty status among different groups. For instance, children were 30 - 50% more likely to be in poverty than any other group. Other characteristics such as race, gender, and education are associated with poverty status.

Indicator Measurement

This indicator is a measure of the percent of the population living below 100% of the federal poverty level (FPL) during the past 12 months. Data for this indicator were collected from the 2008-2012 American Community Survey (ACS).

Local Findings

The percentage of Summit County residents who lived below the poverty threshold between 2008 and 2012 was estimated to be 14.8%. The Healthy People target is 15.1% which means that Summit County has met the target.





Age

Those who were under the age of 18 had the highest rate of poverty in Summit County with one out of every five living under the poverty threshold. They were also nearly 3 times as likely as those who were 65 and older to be impoverished during the preceding 12 months.

Gender

One is six male residents of Summit County were estimated to be under the poverty threshold whereas only one in eight female residents were estimated to be under the poverty threshold (16.4% and 13.1%, respectively).





Race

Blacks were estimated to be 3 times as likely as whites (33.5% and 10.9%) to be under the poverty threshold. To eliminate this racial disparity, there needs to be a 67.5% reduction in poverty among the black population.

Education

Those with less than a high school diploma were estimated to be more than 3 times as likely to be under the poverty threshold than those who had a high school diploma or more (28.9% and 9.0%, respectively). To eliminate this disparity there needs to be a 68.9% decrease among those with no high school diploma who live below the poverty threshold.



SD-3: PREMATURE DEATH

Bottom Line

Early death is measured by years of potential life lost (YPLL). YPLL tells us the total number of years not lived by people who die before reaching age 75, the average life expectancy.¹ The following are some of the reasons for early death:

- cancer;
- unintentional injuries (motor vehicle accidents);
- heart disease;
- pneumonia and influenza; and
- chronic lower respiratory disease.¹

Research and surveillance has shown significant differences in YPLL among multiple populations. A huge racial disparity exists; specifically, non-Hispanic blacks are likely to die earlier compared to non-Hispanic whites overall.² Also, men were more likely to die earlier than women.²

Indicator Measurement

This indicator is a measure of the rate of years of potential life lost (YPLL) per 100,000 population. YPLL was calculated using the official Centers for Disease Control and Prevention's methodology which assumes a standard life expectancy of 75 years and defines YPLL as the number of years a death was premature of that life expectancy. Data for this indicator were obtained from the Ohio Death Certificate data files for 2008-2012. Rates were calculated using the 2010 US decennial census, Summary File (SF)1, containing 100% data, as population denominators.

Local Findings

Summit County averaged 7,061 YPLL per 100,000 people between 2008 and 2012 which was only slightly worse than the national average of 6,972, but better than Ohio's rate of 7,783.





Gender

Male residents had more than one and a half times more YPLLs than female residents did (8,786 YPLL per 100,000 and 5,442, respectively).

Race

Blacks had the highest rate of YPLL (9,935) which was 1.5 times the rate of YPLL per 100,000 than whites and 2.6 times the rate of other races (6,668 and 3,814 YPLL). To eliminate the racial disparity, there needs to be 61.6% fewer YPLLs among the black population in Summit County.



Geography

The number of years of potential life lost per 100,000 people was highest among six of seven Akron clusters and the Barberton cluster with values ranging roughly between 9,171 and 11,755. Clusters in the Northern half of Summit County had the fewest YPLLs ranging from about 3,013 to 4,483.





SUBSTANCE ABUSE

Substance abuse refers to the continuing and patterned use of harmful substances such as alcohol and illicit drugs. Chronic use and misuse of these substances can lead to physical and mental dependence as well as many other physical health and social problems which are often associated with poor health outcomes.

The effects of substance abuse impact not only the abusers, but also their family members and other members of the community. It can be associated with unstable social conditions, family issues, financial problems, loss in productivity in school and daily activities, as well as injuries and crime. Addressing the problem of substance abuse is needed to promote strategies that combat substance abuse and improve the well being of our youth.

Local Substance Abuse (SA) Data Indicators

- SA-1: Adult Alcohol Abuse
- SA-2: Adolescent Substance Abuse

SA-1: ADULT ALCOHOL ABUSE

Bottom Line

Alcohol abuse refers to the excessive use of alcohol in a number of different settings. For example, heavy drinking is defined as the chronic, daily use of excessive alcohol whereas binge drinking refers to the use of excessive alcohol in one particular sitting. The effects of excessive alcohol use include a number of both short-term and long-term effects including:

- unintentional injuries (motor vehicle crashes)liver and heart diseases;
- breast, mouth, throat, esophagus, liver and colon cancer;
- depression and anxiety; and
- memory and learning problems.¹

A number of racial and ethnic disparities have been found regarding alcohol abuse. It was found that Hispanic and black populations showed higher rates of complete alcohol abstinence compared to whites but when they did drink they had higher rates of excessive alcohol use than whites.² Age disparities have also been found particularly regarding younger populations, between 18 and 24, who drink at much higher rates than those who are older.³

Indicator Measurement

This indicator is a measure of the percent of the population 18 years of age and older who reported excessive drinking in the past 30 days. Excessive drinking is defined as engaging in either binge drinking or heavy drinking behaviors. Binge drinking is having five or more drinks in one sitting for males and

four or more drinks in one sitting for females. Heavy drinking is having more than two drinks per day for males and more than one drink per day for females. The data for this indicator were obtained using the 2008 Behavioral Risk Factor Surveillance System (BRFSS).

Local Findings

In 2008, 14.7% of Summit County residents reported being a binge drinker or a heavy drinker which is less than the whole state of Ohio (15.6%). The Healthy People 2020 target for excessive drinking is 25.4% which suggest that Summit County has met the target.





Age

Younger populations between the ages of 18 and 44 were the most likely to have reported excessive drinking (21.2%) and were 7.3 times as likely to report it as adults who were 65 and older. To eliminate this disparity, there needs to be an 86.3% decrease in binge drinking and heavy drinking among those younger populations.

Race

Those in the Hispanic and other racial populations were nearly twice as likely as non-Hispanic blacks and 1.5 times as likely as non-Hispanic whites to report excessive drinking (21.8%, 9.4%, and 15.1%, respectively). To eliminate this racial disparity, there needs to be a 56.9% decrease among those in the Hispanic/other populations.



SA-2: ADOLESCENT SUBSTANCE ABUSE

Bottom Line

Adolescent substance abuse are those that use alcohol, marijuana, or non-prescribed prescription drugs. In 2012, 17.4% of adolescents reported using alcohol or illicit drugs in the past 30 days.¹ In 2011, nearly 40% of high school students used alcohol within the past 30 days.² Some characteristics that allow adolescents to be at risk for developing alcohol and drug problems are:

- A family history of substance abuse
- Those who are depressed, and
- Those who have low self-esteem³

The Youth Risk Behavior Survey has shown differences in various populations in regards to adolescence substance abuse. These national estimates continue to report that non-Hispanic whites are more likely to currently drink alcohol and ever use prescription drugs compared to non-Hispanic blacks.⁴ Estimates also document that non-Hispanic blacks are more likely to currently use marijuana compared to non-Hispanic whites.⁴ Other characteristics that are known to be disparities in substance abuse are age and gender.⁴

Indicator Measurement

This indicator is a measure of the percent of adolescents who reported that they have used alcohol or marijuana in the past 30 days or have ever taken prescription pain killers without a prescription. Data for this indicator were obtained from the high school and middle school reports from the 2013 Summit County Youth Risk Behavior Survey (YRBS) released by the Summit County Adolescent Health Consortium.

Local Findings

Summit County middle school students were well below the 2020 target for alcohol and marijuana use (8.6% and 5.2%). High school students had a higher rate for alcohol (30.3%) and marijuana use (21.1%). To reach the 2020 target, there needs to be a 45.2% and 21.3% reduction for alcohol and marijuana among high school students. Having ever used prescription pain killers without a prescription was also higher among high school students than in middle school students (15.6% and 6.9%).





Age

Substance abuse appeared to increase with age. Current alcohol use increased by age from 6.0% among 7th graders to 43.6% in 12th graders. Those in middle school exhibited a higher rate in prescription drug use than in current marijuana use. The opposite was seen in high school students who used marijuana more than prescription pain killers.

Race

Alcohol: Hispanics had the highest rate of alcohol consumption. They were 14.5 times as likely to consume alcohol in middle school and 2.5 times as likely to consume alcohol in high school compared to Asian students. To eliminate this disparity, there needs to be a 93.1% and 61.1% decrease in drinking among middle and high school Hispanic students, respectively.



Marijuana: Hispanics were also more likely to have smoked marijuana in the past 30 days with rates 25.8 and 3.7 times that of Asian students in middle and high school. Their rate needs to be reduced by over 96% in middle school and 73% in high school in order to eliminate the racial disparity.



Prescription drug use: Again, we see that Hispanics had the highest rates of having ever taken a prescription pain killer without a prescription. Interestingly, this rate was higher among middle school students than in high school students. To eliminate the racial disparity, we would need a reduction of 82% in middle school Hispanics and 66% in high school Hispanics who take prescription pain killers without a prescription.





TOBACCO USE

Our health behaviors play a major role in our health outcomes. Smokers not only hurt themselves, but also affect those around them. This is why eliminating tobacco use is essential to promoting a healthy community. Those that use tobacco are more likely to have poorer health outcomes including many different types of cancer, heart disease, lung disease, and birth complications.

Several initiatives and policies in Summit County address the behavior of tobacco use and exposure to secondhand smoke. This behavior is a preventable one and can reduce death and disease in our community; thus, a better, healthier community.

Local Tobacco Use (TU) Data Indicators

- TU-1: Adult Smoking
- TU-2: Adolescent Smoking

TU-1: ADULT SMOKING

Bottom Line

Tobacco use contributes to many of the leading causes of death in the United States and is arguably the most modifiable factor that can reduce risk of early death. In 2012, 42.1 million adults in the US, or 18.1%, currently smoked cigarettes. Each year cigarette smoking contributes to more than 480,000 deaths, or one of every five deaths. Additionally, more than 16 million people suffer from a disease that is caused by smoking. Some diseases caused by smoking are:

- cancer;
- heart disease;
- lung diseases (emphysema, bronchitis, and chronic airway obstruction); and
- poor birth outcomes (low birth weight, stillbirth, and infant death).¹

National surveillance systems present differences in smoking behaviors among various populations. For instance, national estimates consistently show that those with higher education have lower rates of smoking than people with lower education.² Other characteristics that are known to be associated with disparities in smoking rates include: age, race, gender, and income levels.²

Indicator Measurement

This indicator is a measure of the percent of the population 18 years of age and older who reported currently smoking cigarettes every day or some days. Data for this indicator were obtained from the 2008 Behavioral Risk Factor Surveillance System (BRFSS).

Local Findings

Roughly one in five of adult residents in Summit County reported currently smoking cigarettes. To reach the Healthy People target by the year 2020, there will need to be a 37.8% decrease in adults who currently smoke cigarettes.



1 in 5 (19.3%) Summit County Adults

Currently Smokes



Race

Those among Hispanic/other populations showed similar rates of smoking compared to non-Hispanic blacks (25% and 24.6%, respectively) while non-Hispanic whites had the lowest rates of smoking (18.1%). If we want to eliminate this disparity, we need to reduce smoking by 27.6% among the Hispanic/other populations.

Income

Those who made less than \$35,000 were nearly three times as like to say they were smokers compared to those who made between more than \$75,000. To eliminate this disparity, there needs to be a 65.9% decrease among those who made less than \$35,000 annually.





Education

Those with no high school diploma were more than 2.6 times as likely to say that they currently smoked compared to those who had a high school diploma or more (47% and 17.5%, respectively).

TU-2: ADOLESCENT SMOKING

Bottom Line

We know that tobacco use is the most preventable cause of disease and death in adulthood; yet, tobacco use normally begins during childhood and adolescence. In 2013, nearly 23% of high school students and 6.5% of middle school students reported using cigarettes in the past 30 days in the United States.¹

Some risk factors associated with childhood and adolescent smoking include:

- stress;
- low self-esteem;
- having parents, siblings, or friends that smoke; and
- exposure to tobacco advertising.²

Multiple tobacco surveillance systems report differences in tobacco use among various populations. For instance, national estimates consistently document that non-Hispanic white adolescents are more likely to use tobacco than non-Hispanic black or Hispanic adolescents.² Other characteristics that are known to be associated with disparities in tobacco use include: older adolescent age and gender.²

Indicator Measurement

This indicator is a measure of the percent of adolescents who reported that they have smoked cigarettes during the past 30 days. Data for this indicator were obtained from the high school and middle school reports from the 2013 Summit County Youth Risk Behavior Survey (YRBS) released by the Summit County Adolescent Health Consortium.

Local Findings

About one in four high school students in Summit County reported having smoked tobacco within the past 30 days. Only 9.3% of middle school students reported smoking. To reach the Healthy People target, we would need to reduce smoking among high school students by 15.3% by the year 2020.







Gender

There were no significant differences between middle school boys and middle school girls in terms of who was more likely to be a smoker. In high school, however, one in eight girls (12.3%) and one in seven boys reported (14.6%) currently smoking.

Race

The highest rate of current smokers exists among Hispanic students in both middle school and high school. Surprisingly, about one in four (24.3%) Hispanic middle school students smoked compared to just over one in five Hispanic high school students (22.5%). These were hugely significant compared to other races.



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APPENDIX

ALPHABETICAL LIST OF DATA SOURCES

American Community Survey (ACS) Data

The American Community Survey (ACS) is an annual nationwide survey of a sample of households in the United States. It is conducted among a sample of all persons living in housing units and/or group quarters. The ACS measures a variety of sociodemographic characteristics which can aid in identifying health disparities. One-year, three-year, and five-year combined estimates are available depending on population size and characteristics of interest. For the purpose of this report, we used 5-year combined estimates, typically for 2008-2012. Additionally, data for county census tracts were aggregated, where appropriate, to calculate statistics at the cluster level.

Keep in mind that measures estimated by the ACS represent a sample of the population, rather than the 100-percent population. Therefore, statistics based on these samples may differ from those that would have been obtained had the entire population been surveyed. Margins of error (MOEs) and confidence intervals are not presented in the body of this report in an effort to make the presented data more palatable for a general audience. However, the estimates provided should be interpreted with caution as the actual estimated measures lie within a range of values for which we can be 95% confident that the actual measure exists. Further information regarding the accuracy of ACS data is available from the US Census Bureau.

Behavioral Risk Factor Surveillance System (BRFSS) Data

The Behavioral Risk Factor Surveillance System (BRFSS) is the largest state-sponsored health survey in the nation. This phone-based survey includes a variety of questions of health and health behaviors and provides valuable information on demographics, employment, and income; health insurance coverage; access to care or preventative services and unmet needs; utilization and quality; adult health status and behaviors. In 2008, an oversample of residents in Summit County was conducted, which resulted in a larger sample size that allows for more in-depth analyses of the data.

Like the American Community Survey, the 2008 BRFSS was conducted among a sample of the population rather than 100-percent of Ohio residents. Therefore, statistics based on these samples may differ from those that would have been obtained had the entire population been surveyed. Margins of error (MOEs) and confidence intervals are not presented in the body of this report in an effort to make the presented data more palatable for a general audience. However, the estimates provided should be interpreted with caution as the actual estimated measures lie within a range of values for which we can be 95% confident that the actual measure exists.

Ohio Birth Certificate Data

Demographics, perinatal risk factors, and birth outcomes for all live births occurring in the state of Ohio are reported according to the "long form" of the Ohio birth certificate and are submitted as the birth certificate record to the Ohio Department of Health (ODH) through the Electronic Birth Registration System (EBRS). A live birth is defined by the National Center for Health Statistics (NCHS) as any product of conception that shows any signs of life (i.e. breathing, beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles) after delivery, regardless of gestational age.

Each record represents the perinatal experience of one live birth (i.e. infant) and contains information regarding: maternal and paternal demographics, maternal residence, prenatal care, maternal risk factors, obstetric procedures, characteristics of labor and delivery, infant birth outcomes, abnormal conditions, and congenital anomalies. For the purpose of this report, births in the calendar years of 2006 through 2010 to mothers residing in Summit County were analyzed and represent all Summit County resident births during that time frame. The mother's residential address and zip code at the time of birth were utilized for geocoding to obtain the mother's Summit County census tract of residence. The census tract was subsequently categorized into one of 20 Summit County geographies, or county clusters.

Ohio Bureau of Motor Vehicles (BMV) Data

Ohio Bureau of Motor Vehicles (BMV) data are available from the Ohio Department of Public Safety (ODPS). For the purpose of this report, the data contained records for over 400,000 Summit County residents, all of whom were 18 years of age or older and held an active Ohio driver's license or identification card issued or renewed between 2008-2012. For each record, the residential address was geocoded to the 2010 census block and the body mass index (BMI) was calculated from the reported height and weight of individuals using to the standard BMI calculation for adults (weight / height² x 703)

Ohio Cancer Incidence Surveillance System (OCISS) Data

The Ohio Cancer Incidence Surveillance System (OCISS) collects data regarding individual diagnoses of cancer from a variety of hospitals and facilities, including ambulatory surgery and radiation therapy centers, free-standing pathology laboratories, nursing homes, and physician offices. Each OCISS record represents one primary malignant cancer diagnosis and contains a minimum of 39 data elements regarding: patient demographics, residence, cancer diagnosis, site, histology, staging, and treatment. For the purpose of this report, cancer diagnoses among residents of Summit County in the calendar years of 2002 through 2011 were analyzed and represent all Summit County resident cancer diagnoses reported during that time frame. The patient's residential address and zip code at the time of cancer diagnosis were utilized for geocoding to obtain the patient's Summit County census tract of residence. The census tract was subsequently categorized into one of 20 Summit County geographies, or county clusters.

As part of the cancer record, the cancer type is recorded as the site and histology in the form of the International Classification of Diseases for Oncology, 3rd Revision (ICD-O-3) codes as seen in the table below for the specific cancers discussed in this report. For the purpose of these analyses, cancers were categorized in the manner of the Surveillance, Epidemiology, and End Results (SEER) Program at the National Cancer Institute at a distant, or late-stage. Specific to this report, breast cancers were limited to patients that were female and prostate cancers were limited to patients that were male.

Cancer Site/Type

Breast Cancer (female) Colorectal Cancer Prostate Cancer *ICD-O-3 Site Code(s)* C500-C509 C180-C189; C199; C209; C260 C619 *ICD-O-3 Histology Code(s)* Excluding types 9590-9989 Excluding types 9590-9989 Excluding types 9590-9989

Ohio Death Certificate Data

Demographics and causes of death for all fatalities occurring in the state of Ohio are reported according to the "long form" of the Ohio death certificate and are submitted as the death certificate record to the Ohio Department of Health (ODH) through the Electronic Death Registration System (EDRS).

Each record represents the death of one person and contains information regarding: decedent demographics, residence, occupation, causes of death, and other descriptors of the fatality. For the purpose of this report, deaths among all residents of Summit County that occurred in the calendar years of 2001 through 2012 were analyzed and represent the universe of all deaths during that time frame. The decedent's residential address and zip code at the time of death were utilized for geocoding to obtain the decedent's census tract of residence. The census tract was subsequently categorized into one of 20 Summit County geographies, or county clusters.

The calculation of years of potential life lost (YPLL) was based on data from 2008-2012. The rate of suicide was calculated using death records for the calendar years 2001-2010. As part of the death record, the underlying cause of death is recorded in the form of the International Classification of Diseases, 10th Revision (ICD-10) code which utilizes the National Center for Health Statistics (NCHS) 113 selected causes of death listings. Specific to this report, suicide was coded as death by intentional self-harm or suicide (ICD code U03; X60-X64; Y87.0).

Ohio Infant Birth-Death Certificate Linked Data

Infant birth-death certificate linked data are created by the Ohio Department of Health (ODH) by linking birth certificates to matching death certificates for all infants who died before their first birthday. Infant birth-death certificate linked data include all of the information from the birth certificate, as well as the information from the death certificate, including age and cause of death. Please see the sections on Ohio birth and death certificate data for additional information regarding the specific elements of each separate data file.

Infant mortality data in this report are based on Ohio infant birth-death certificate linked data for the period 2000-2009 where the maternal residence at the time of the infant's birth was in Summit County.

It is also important to note that ODH has historically used different data sources for the calculation of infant mortality statistics. In their reports, ODH has calculated infant mortality rates from unlinked birth certificates and death certificates of the same calendar year (i.e., all births in 2009 and all infant deaths in 2009). Due to differing methodologies, caution should be used when comparing infant mortality statistics from multiple sources. In this report, both Ohio and Summit County rates were obtained from the Ohio birth-death certificate linked data and may not correspond identically to the rates reported by ODH.

Summit County Adult Protective Services (APS) Data

Reports of abuse, neglect, self-neglect, and exploitation among adults age 65 and older residing in Summit County are maintained and investigated by Summit County Adult Protective Services (APS). These adults in need of protective services are deemed by the number of cases of abuse, neglect, self-neglect, and exploitation reported to APS. For the purpose of this report, records of adults in need of APS were recorded for the October 2013 to September 2014 fiscal year and represent all Summit County resident reports of elder abuse, neglect, self-neglect, and exploitation during that time frame. It is important to note that many instances of elder abuse, neglect, self-neglect, and exploitation are not reported to APS for management. Thus, the estimates of reported elder abuse, neglect, self-neglect, and exploitation presented in this report under-represent true estimates of actual occurrence.

Summit County Children's Services (SCCS) Data

Reports of child abuse and neglect among children 17 years of age and younger residing in Summit County are maintained and investigated by Summit County Children's Services (SCCS). Those children that are deemed in need of protective services are assigned a case plan or an Alternative Response Service plan that is managed by SCCS. For the purpose of this report, the records of children assigned a plan by SCCS in the calendar years of 2010 through 2013 were analyzed and represent all Summit County resident report of child abuse and neglect during that time frame. It is important to note that many instances of actual child abuse and neglect are not reported to SCCS for management. Thus, the estimates of reported child abuse and neglect presented in this report under-represent true estimates of actual occurrence.

Summit County Fiscal Office Parcel Data

The Summit County Fiscal Office collects data on all land parcels in Summit County. Among other variables, the data includes audit indicators of land use and condition rating. For this report, all records of parcels recorded as residential as of December 2013 were included in the analyses and represent the universe of all Summit County residential housing units at that time. The land parcel's spatial location in Summit County was utilized for geocoding to obtain the census tract of the residence. The census tract was subsequently categorized into one of 20 Summit County geographies, or county clusters.

Summit County Youth Risk Behavior Survey (YRBS) Data

Similar to the BRFSS, the Youth Risk Behavior Survey (YRBS) is another survey meant to collect information of health and health behaviors, the only difference being that the YRBS is geared towards adolescents and young adults. The results from the most recent 2013 Summit County YRBS are documented in a report released by the Summit County Adolescent Health Consortium in 2014 and are used in this report for estimates of adolescent obesity, sexual activity, substance abuse, and tobacco use.

Keep in mind that measures estimated by the YRBS represent a sample of the population, rather than the 100-percent population. Therefore, statistics based on these samples may differ from those that would have been obtained had the entire population been surveyed. Margins of error (MOEs) and confidence intervals are not presented in the body of this report in an effort to make the presented data more palatable for a general audience. However, the estimates provided should be interpreted with caution as the actual estimated measures lie within a range of values for which we can be 95% confident that the actual measure exists.

US Decennial Census Summary File 1 (SF1) 100% Data

The United States Census is a decennial, constitutionally-mandated count of every resident in the US. The Census form used in 2010 was one of the shortest forms in the history of the Census and only contained ten questions, as many of the questions previously asked on the Census form are now asked in the American Community Survey. These ten Census questions were designed to collect information on the following: the number of people who were living or staying in each house, apartment, and mobile home; whether each residence was owned with a mortgage, owned without a mortgage, rented, or occupied without rent, and every resident's sex, age, date of birth, race, and ethnicity. Data from the US decennial Census are available every ten years for an abundance of geographies, including blocks, block groups, census tracts, cities, villages, county subdivisions, counties, and states. For the purpose of this report, data for census tracts were aggregated (where appropriate) to calculate statistics at the county cluster level. In addition, analyses in this report frequently used 2010 US Census data to provide denominators when incidence rates were calculated.

DATA TABLES

Access to Health Services (AHS)		
Summit County Clusters	AHS-1 No Medical Insurance	
Akron Central	20.2	
Akron North	16.9	
Akron Northwest	13.0	
Akron South	17.4	
Akron Southeast	13.6	
Akron Southwest	18.1	
Akron West	19.3	
Barberton	14.2	
Copley / Bath / Fairlawn	6.9	
Coventry / Green	10.6	
Cuyahoga Falls	10.6	
Franklin	6.7	
Hudson	3.5	
Munroe Falls / Tallmadge	5.8	
Norton	8.4	
Richfield / Boston	5.9	
Sagamore Hills / Northfield / Macedonia	7.0	
Springfield / Lakemore	11.6	
Stow / Silver Lake	7.3	
Twinsburg	4.1	

Clinical Preventative Services (CPS)			
Summit County Clusters	CPS-3: Late- Stage Breast Cancer	CPS-3: Late- Stage Colorectal Cancer	CPS-3: Late- Stage Prostate Cancer
Akron Central	36.6	68.8	14.7
Akron North	46.8	52.1	11.3
Akron Northwest	41.1	50.4	8.0
Akron South	36.6	61.7	12.5
Akron Southeast	33.6	54.4	8.2
Akron Southwest	42.7	56.5	7.8
Akron West	41.8	65.0	9.2
Barberton	31.3	57.1	9.2
Copley / Bath / Fairlawn	36.1	57.8	13.7
Coventry / Green	38.3	58.7	8.6
Cuyahoga Falls	36.0	56.8	9.9
Franklin	25.5	58.3	11.3
Hudson	39.4	71.7	12.8
Munroe Falls / Tallmadge	37.4	54.3	13.8
Norton	26.6	54.7	14.7
Richfield / Boston	32.3	50.0	10.0
Sagamore Hills / Northfield / Macedonia	33.7	58.1	10.6
Springfield / Lakemore	38.6	51.0	10.0
Stow / Silver Lake	37.3	59.8	11.2
Twinsburg	40.2	61.9	13.0

Environmental Quality (EQ)		
Summit County Clusters	EQ-1: Poor Housing	
Akron Central	30.0	
Akron North	9.4	
Akron Northwest	4.2	
Akron South	10.6	
Akron Southeast	5.4	
Akron Southwest	20.4	
Akron West	15.6	
Barberton	7.1	
Copley / Bath / Fairlawn	1.8	
Coventry / Green	4.1	
Cuyahoga Falls	1.6	
Franklin	3.1	
Hudson	0.9	
Munroe Falls / Tallmadge	1.8	
Norton	5.8	
Richfield / Boston	3.9	
Sagamore Hills / Northfield / Macedonia	1.1	
Springfield / Lakemore	9.0	
Stow / Silver Lake	1.8	
Twinsburg	0.9	

Injury & Violence (IV)	
Summit County Clusters	IV-1: Elder Abuse per 1,000
Akron Central	20.9
Akron North	10.1
Akron Northwest	4.7
Akron South	8.9
Akron Southeast	10.0
Akron Southwest	10.8
Akron West	12.3
Barberton	7.5
Copley / Bath / Fairlawn	3.5
Coventry / Green	4.7
Cuyahoga Falls	4.7
Franklin	2.1
Hudson	1.3
Munroe Falls / Tallmadge	3.8
Norton	6.2
Richfield / Boston	1.1
Sagamore Hills / Northfield / Macedonia	2.8
Springfield / Lakemore	6.0
Stow / Silver Lake	4.1
Twinsburg	3.4

Maternal, Infant & Child Health (MICH)		
Summit County Clusters	MICH-1: Infant Deaths per 1,000 live births	
Akron Central	14.3	
Akron North	7.3	
Akron Northwest	5.4	
Akron South	8.5	
Akron Southeast	10.2	
Akron Southwest	9.6	
Akron West	12.1	
Barberton	8.0	
Copley / Bath / Fairlawn	4.5	
Coventry / Green	4.6	
Cuyahoga Falls	5.3	
Franklin	3.9	
Hudson	6.3	
Munroe Falls / Tallmadge	7.6	
Norton	8.0	
Richfield / Boston	1.5	
Sagamore Hills / Northfield / Macedonia	4.0	
Springfield / Lakemore	6.2	
Stow / Silver Lake	4.8	
Twinsburg	5.8	

Nutrition, Physical Activity, & Obesity (NPAO)		
Summit County Clusters	NPAO-1: Adult Obesity	
Akron Central	27.7	
Akron North	26.2	
Akron Northwest	18.6	
Akron South	25.5	
Akron Southeast	27.6	
Akron Southwest	29.9	
Akron West	26.8	
Barberton	26.8	
Copley / Bath / Fairlawn	14.6	
Coventry / Green	20.0	
Cuyahoga Falls	19.6	
Franklin	20.2	
Hudson	11.7	
Munroe Falls / Tallmadge	20.1	
Norton	20.9	
Richfield / Boston	15.2	
Sagamore Hills / Northfield / Macedonia	17.8	
Springfield / Lakemore	24.8	
Stow / Silver Lake	18.1	
Twinsburg	18.7	

Reproductive & Sexual Health (RSH)		
Summit County Clusters	RSH-2: No Prenatal Care	
Akron Central	31.1	
Akron North	29.7	
Akron Northwest	23.3	
Akron South	28.2	
Akron Southeast	26.5	
Akron Southwest	33.3	
Akron West	26.3	
Barberton	30.1	
Copley / Bath / Fairlawn	15.1	
Coventry / Green	18.2	
Cuyahoga Falls	17.5	
Franklin	21.5	
Hudson	13.2	
Munroe Falls / Tallmadge	19.4	
Norton	20.7	
Richfield / Boston	12.7	
Sagamore Hills / Northfield / Macedonia	18.8	
Springfield / Lakemore	21.7	
Stow / Silver Lake	16.4	
Twinsburg	19.8	

Social Determinants (SD)			
Summit County Clusters	SD-1: No HS Diploma	SD-3: YPLLs	
Akron Central	24.5	9,171	
Akron North	17.8	9,878	
Akron Northwest	7.3	6,087	
Akron South	16.7	9,307	
Akron Southeast	14.7	9,578	
Akron Southwest	20.7	11,755	
Akron West	13.0	10,160	
Barberton	15.0	9,977	
Copley / Bath / Fairlawn	4.5	4,832	
Coventry / Green	8.4	6,201	
Cuyahoga Falls	6.2	6,017	
Franklin	6.8	6,904	
Hudson	1.7	3,013	
Munroe Falls / Tallmadge	7.1	5,846	
Norton	8.4	6,805	
Richfield / Boston	4.8	4,483	
Sagamore Hills / Northfield / Macedonia	6.0	4,285	
Springfield / Lakemore	14.0	7,805	
Stow / Silver Lake	5.7	4,615	
Twinsburg	6.1	4,343	

We would like to thank the following agencies whose financial support of the Summit 2020 project made this report possible:

Summit County Department of Job and Family Services Summit County Children's Services Board Summit County Alcohol, Drug Addiction and Mental Health Services Board Summit County Board of Developmental Disabilities

We would also like to thank the more than 300 community volunteers who commit their time and talent to the Summit 2020 project, as well as County Executive Russell M. Pry and Summit County Council for their continued support.

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