



# Adult Health in the Tri-State, 2008



Welborn Baptist Foundation  
*Improving Health, Lives, and Community*

# Adult Health in the Tri-State, 2008

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## **An Adult Well-Being Report of Community Indicators in the Welborn Baptist Foundation Service Area**

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## Preface

The genesis of this report is Welborn Baptist Foundation's ongoing commitment to be data-driven and research-based in developing our agenda for change. Many of the issues discussed in this report are derived from the substance of the Foundation's Leading Community Health Indicators Report, last updated in 2006. These data are routinely available for the states and the nation, but are frequently not available for individual counties.

This is the first effort of its kind for Tri-State residents. It is the initial attempt to establish baseline health indicators at the county level for these types of data. This information is a powerful tool. It can measure the impact of formal policy, serve as an early detection system for problems, and provide a measure of accountability. By establishing a benchmark of where we stand today, we, as a community, can determine how to apply our resources towards implementing programs to help those who need it most. In the future we will be able to evaluate programs targeted to address these indicators as we track these numbers over time.

This effort has focused on chronic disease, overall health, and barriers to good health. Chronic disease markers are indicators of the general health of the population. Chronic disease places a considerable burden on our population, contributing to disability,

poor quality of life, and premature death. It adds enormous costs to our health care system. Yet, these conditions are largely preventable with lifestyle changes and screening programs for early detection.

The data show that the Tri-State is heavily affected by chronic diseases of the heart as well as diabetes, both of which go hand-in-hand with the area's higher than average rates of overweight/obesity and smoking. These and other related indicators are discussed in further detail in this report.

The five counties were carefully selected from the area served by the Foundation. They were chosen to be representative of the area's population centers, including both urban and rural populations, and to include counties from each of the three states that make up the area. Wherever data were available, we compared the data for these counties to state-level data for Indiana, Illinois, and Kentucky, as well as to data for the nation. ■



**Kevin R. Bain**  
Executive Director and CEO  
Welborn Baptist Foundation

## Letter from the Director and CEO

The Welborn Baptist Foundation is pleased to be able to add to the current body of knowledge about health issues in the Tri-State area through the publication of this comprehensive survey on adult health. As a companion piece to the published data contained in our ongoing Leading Community Health Indicators reports, this independent research with adults in Indiana, Kentucky, and Illinois offers a self-reported benchmark of the primary factors that contribute to our community's short-and long-term health status. Combined with comparable national figures, a picture begins to emerge of where our community stands not only in absolute terms, but relative to the nation as a whole.

By establishing a unique baseline of these indicators for the area, the Welborn Baptist Foundation hopes to accomplish multiple aims: 1) to provide a picture of the current state of health affairs in the community; 2) to generate a basis for informed dialogue about the urgency of the situation and proactive steps needed to address it; 3) to dimensionalize the issues for not-for-profit organizations, foundations, and legislators to develop individual and collective initiatives that tackle the root causes; and 4) to enable us to track progress made by these initiatives over time. In this way, the Foundation can help contribute to its mission to serve as a catalyst for healthy outcomes in the Tri-State.

We encourage the broad use and application of these report findings by all interested parties. Armed with a common understanding of the status quo, we can reinforce our current strengths, and chart a course for positive individual and community change accordingly.

Sincerely,

A handwritten signature in cursive script that reads "Kevin R. Bain".

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## Methodology & Limitations

This study was undertaken in response to the need identified by Welborn Baptist Foundation for reliable county-level data on key health issues. In order to make the findings from this study comparable to state and national data, the survey itself was modeled after the Behavior Risk Factor Surveillance Survey (BRFSS) that is conducted annually by the U.S. Centers for Disease Control & Prevention. The BRFSS is a random telephone survey, conducted through the state departments of health across the nation. Although some questions addressed areas of specific interest to the Foundation that may not be included in the BRFSS, most of the questions replicated those of the BRFSS. Wherever comparative state and national data were available, they were included in the discussion.

All adults age 18 and older in Vanderburgh, Warrick, and Spencer counties in Indiana, Henderson County, KY, and Saline County, IL were eligible to participate. A total of 2,239 adults responded, with special effort made to include sufficient minority individuals to allow racial/ethnic comparisons. The survey was conducted in February, March, and April, 2008, with the assistance of the Purdue University Computer-Assisted Telephone Interview Lab (CATI) in West Lafayette, Indiana.

The University of Southern Indiana's Office of Institutional Research and Assessment was commissioned by the Welborn Baptist Foundation to analyze the results of the survey, research background information related to the topics, and draft initial discussions. Prior to analysis, the data was weighted by age, race, and gender to match the U.S. Census demographic profile. Statistical analysis was performed using the program SPSS.

As with any survey of this type, the quality of the information that was gathered depends on how accurately the participants responded to the questions. The telephone numbers were computer-selected at random from a list purchased by Purdue University from Survey Sampling International, a major provider of sampling information for survey research. These telephone numbers were limited to residential land lines; no cell phones were called and persons without telephone service were not contacted in any other way. These limitations are equivalent to those applicable to the BRFSS. ■



## Report Highlights

### **Where we excel:**

We are doing well in certain screenings and post-diagnosis care. Preventive exams for diabetes, as well as for breast and colorectal cancer screening, are well established.

### **Where we have room to improve:**

Overall, obesity and its consequences such as heart disease, high blood pressure, and type 2 diabetes greatly exceed the national average.

Nearly a third of Tri-State 18-24 year olds currently have no health insurance.

The proportion of adults who smoke is greater than the national average, as is the proportion that suffers from smoking-related conditions such as heart disease, stroke, and high blood pressure.

### **Call to Action:**

In the following pages, you will see areas that must be addressed to ensure all members of our community are able to enjoy the best possible health. The most serious health conditions identified in this report are connected to Tri-State residents' high rates of overweight/obesity and smoking. Both are widely recognized as root causes of multiple chronic health conditions. National policy makers have labeled obesity as the most critical public health threat of the 21st century; smoking is the nation's single greatest avoidable cause of disease and death.

These two behaviors, in particular, boost our risk of developing serious chronic health conditions that detract from our quality of life and add a significant financial burden to the area's economy. This problem has taken many years to develop. No single factor bears all the blame for placing us in this position, and no single action alone can solve it overnight.

The positive news is that much of this burden is preventable by the individual choices and behaviors that we, as individuals and as a community, make during the course of our own daily lives. Making better choices both possible and the natural thing to do during the course of our daily routines is a collective responsibility that must involve the entire community: individuals of all ages, races and genders; families; schools; industries and government. We, as a community, must move toward providing an environment that encourages and enables healthy lifestyles for all our citizens.

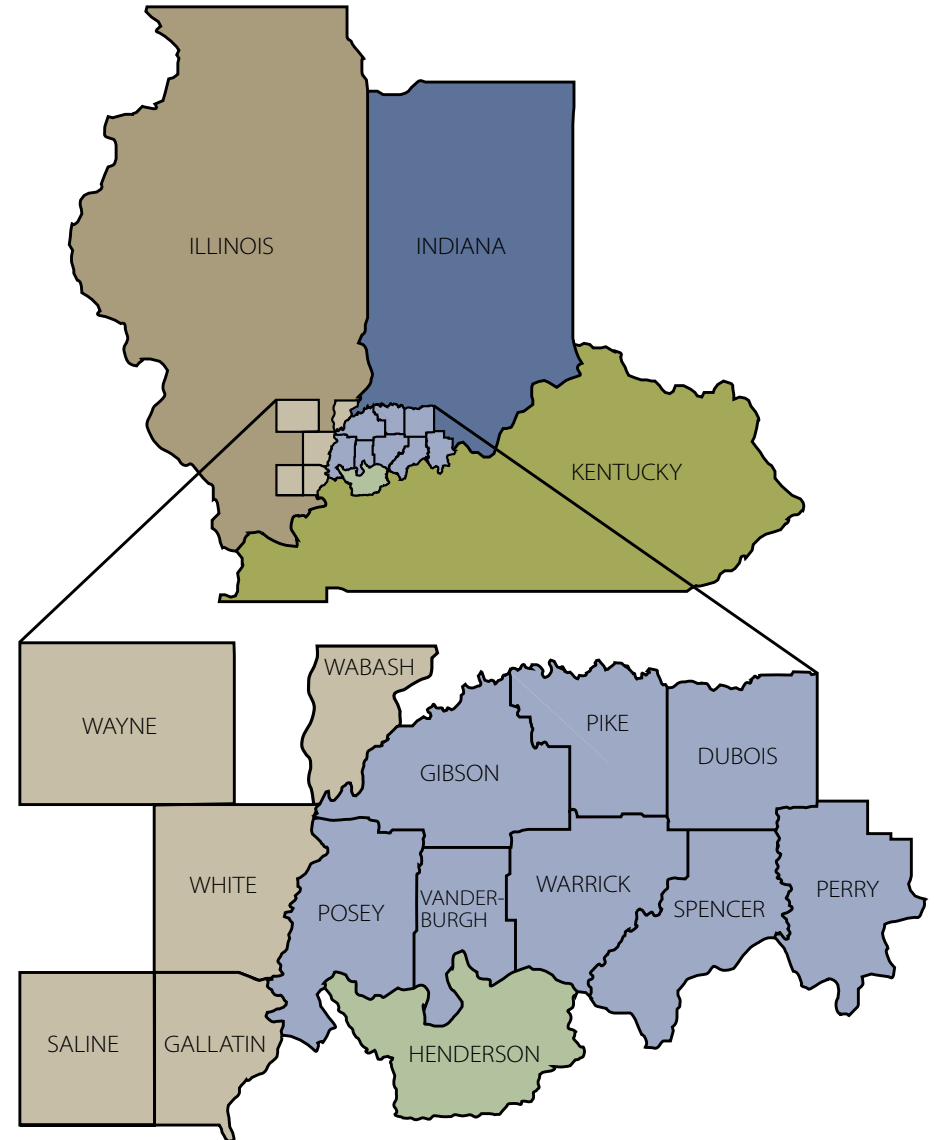
As individuals, we can use the information in this report as a springboard for further educating ourselves, making our own choices, and guiding our children and families into healthier lives.

As a community, we can use this information as a beginning to guide policy development, direct the use of our resources, set goals for improvement, and promote community responsibility for positive change.

## About the Survey Area

### Welborn Baptist Foundation Service Area

- The 14-county area is located in the Tri-State region that encompasses these counties:
  - Indiana:** Dubois, Gibson, Perry, Pike, Posey, Spencer, Vanderburgh, Warrick
  - Kentucky:** Henderson
  - Illinois:** Gallatin, Saline, Wabash, Wayne, White
- The area has 5,642 square miles of land and a population of approximately 504,000.
- Major cities include Evansville, Indiana and Henderson, Kentucky. Many smaller towns dot the landscape, and much of the area is rural.
- Two major waterways traverse the region: the Ohio River in the southern portion and the Wabash River in the western portion.
- The population is predominantly Caucasian (94%), with 4% African-American and 1% Hispanic or Latino.
- Approximately 77% of the total population is over age 18. 15% is over age 65.
- Approximately three-fourths (74%) of adults over age 25 have a high school diploma; 20% have a bachelor's degree or higher.
- Major economic activities include manufacturing, farming, health care, and financial services.







# Alcohol

**ALCOHOLIC BEVERAGES HAVE BEEN ENJOYED BY PEOPLE IN MANY CULTURES**

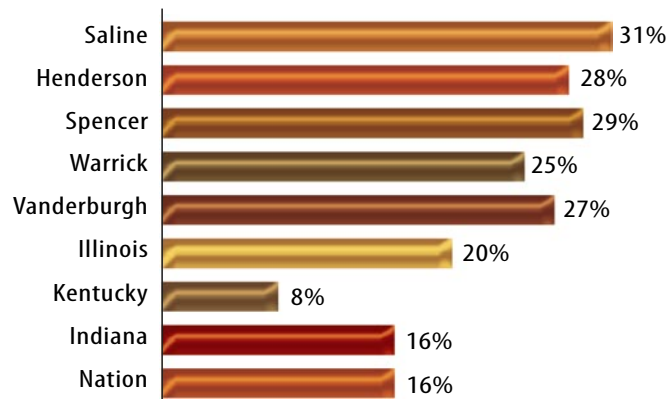
**THROUGHOUT HISTORY.** Excessive alcohol use can lead to increased risk of health problems such as liver disease or unintentional injuries. Approximately 16% of the U.S. population binge drink, which is defined as consuming five or more drinks on a single occasion for men, or four or more drinks for women. Excessive alcohol use is the third leading lifestyle-related cause of death for people in the U.S. each year. Alcohol-impaired driving, involving a driver with a blood alcohol concentration of 0.08% or higher, accounts for about one-third of all traffic fatalities. The highest percentage of these drivers are between the ages of 21 and 24. Among adult

The rate of **excessive** alcohol use in **all five counties exceeds** the national rate.

residents in these five counties, 41% reported having at least one drink in the past 30 days. More than a fourth of respondents who had at least one drink in the past 30 days also reported having at least one binge episode in the same time period. ■

## Binge Drinking Among Adults

Who Have Had at Least One Drink in the Past 30 Days



### Significant local findings include:

- All five counties exceed the national rate of binge drinking
- Almost 50% of the men in these five counties had at least one drink in the past 30 days and 35% of those have had a “binge episode”. Only 35% of women report having any alcoholic beverages in the last month
- Caucasian residents who drink alcoholic beverages are almost twice as likely to report having a “binge episode” (29%) than non-Caucasians in the past 30 days (16%)
- Binge drinking is more frequent among those individuals ages 18-44, and those who have less than a high school education



# Arthritis

**THE TERM ARTHRITIS REFERS TO MORE THAN 100 CHRONIC DISEASES AND CONDITIONS**

that cause swelling, stiffness, and pain in the joints and the tissues surrounding the joints. It is a complex set of disorders that can affect people at any age. The two most common forms are osteoarthritis, characterized by a loss of cartilage in the joints, and rheumatoid arthritis, which occurs when the body's immune system attacks the body and does permanent damage to the joints. All are disabling and limit the activity of those they affect.

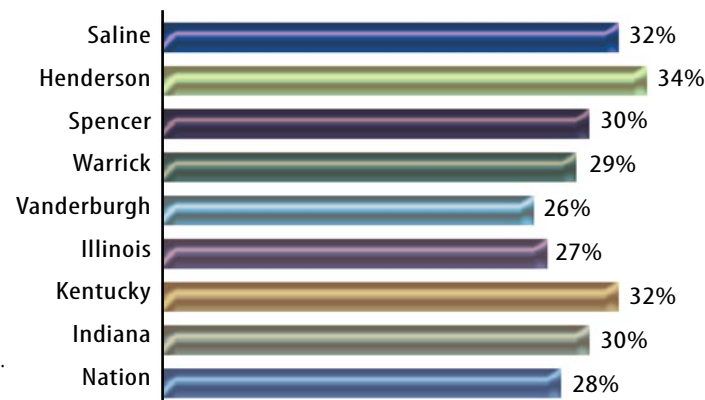
Over 46 million adults in the United States, approximately 30% of the U.S. population, report doctor-diagnosed arthritis. This number is expected to increase by 40%, to 67 million, over the next 25 years.

The **prevalence of arthritis varies greatly** among the counties.

All except Vanderburgh County are **greater than** the national average.

In the U.S., arthritis is the most common cause of disability, with about 1 in 20 adults reporting work limitations due to arthritis. The total annual costs attributed to arthritis are estimated at \$128 billion. While arthritis is more prevalent in older adults (65 and older) and increases with age, a significant number of younger adults also report having been diagnosed. Arthritis is more common among women than among men. Being overweight or obese increases the likelihood of developing arthritis (especially in the knees) as the disease progresses. ■

**Arthritis Prevalence**



## Significant local findings include:

- The prevalence of arthritis increases with age. Of those who have been diagnosed with arthritis, over half (55%) are age 65 or over, 43% are ages 45-64, 15% are ages 25-44, and 1.5% are ages 18-24
- Over one-third of the women and one-fourth of the men in this study report having arthritis
- For those ages 18-64, the prevalence of arthritis is greater among those in lower income levels
- The relationship between income and arthritis disappears after age 64
- Obese (36%) and overweight (31%) residents are significantly more likely to have been diagnosed with arthritis than those who have a normal weight (21%)



# Asthma

**A**STHMA IS A CHRONIC DISEASE THAT AFFECTS THE LUNGS AND CAUSES REPEATED EPISODES OF WHEEZING, TIGHTNESS IN THE CHEST, AND SHORTNESS OF BREATH. It is one of the most common long-term diseases of children. Various triggers such as tobacco smoke, airborne pollutants, pet dander, high humidity, certain foods and chemicals, and strong emotional states can cause asthma attacks. When an attack occurs, airways constrict and allow less air to flow in and out of the lungs. If not treated, asthma can result in death.

In the U.S., approximately 9% of adults (18.3 million) currently have asthma and 13% (28.5 million) had been diagnosed with asthma at some point in their life. Females are more likely

The **prevalence of asthma varies greatly** among the five counties. Saline County **far exceeds** the **national average**.

than males to be diagnosed with asthma. African-Americans are more likely than any other race to be diagnosed with asthma. While asthma is more prevalent in children, a child dying from asthma is rare. The likelihood of death due to asthma increases with age, and is heightened among those 75 and older.

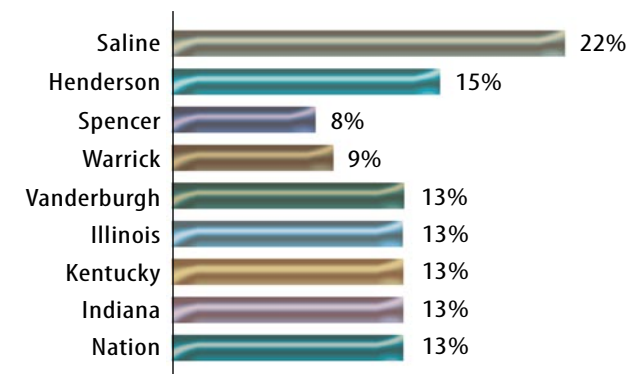
In 2007, approximately \$14.7 billion was spent on direct medical costs with an additional \$5 billion in indirect costs from lost work time due to the disease and death. In 2003, employed adults missed 10.1 million days of work due to asthma-related causes.

Overall results from the five-county study showed significantly different rates of asthma among the counties. The overall likelihood of adults in the Tri-State ever having been diagnosed with asthma is the same as the national average of 13%. ■

## Significant local findings include:

- Following national trends, Tri-State women are more likely than men to have ever been diagnosed with asthma (15% of women vs. 11% of men)
- The young are more likely to be affected by asthma. Almost one-fifth of respondents ages 18-24 reported having ever being diagnosed with asthma compared to only 11% of residents ages 65 and older
- Saline county residents have almost double the national prevalence for asthma, with 22% of adults living in this county reporting having ever been diagnosed with asthma

## Asthma Prevalence





# Blood Pressure

**B**LOOD PRESSURE IS THE FORCE OF BLOOD AGAINST THE WALLS OF THE ARTERIES.

It is often written as two numbers. The first or top number represents the pressure when the heart contracts (systolic pressure); the second represents the pressure when the heart rests between beats (diastolic pressure). Normal blood pressure is a systolic pressure of less than 120 mmHg and a diastolic pressure of less than 80 mmHg.

Blood pressure normally rises and falls throughout the day, but when it remains consistently too high it is called hypertension. Pre-hypertension is defined as systolic pressure 120-139 mmHg or diastolic

The prevalence of **high blood pressure** in all five counties **exceeds** the **national average**.

pressure 80-89 mmHg. Hypertension is defined as a systolic pressure 140 mmHg or higher or a diastolic pressure 90 mmHg or higher. Almost a third of U.S. adults have hypertension; estimates indicate approximately 90% of middle-aged adults will develop hypertension at some point in their life.

Hypertension is often called the “silent killer” because it has no noticeable symptoms until serious problems begin. These can include angina, heart disease, stroke, kidney disease or kidney failure, or blindness. In 2005, 24,902 deaths were attributed to hypertension and an estimated \$63.5 billion in direct and indirect costs in 2006.

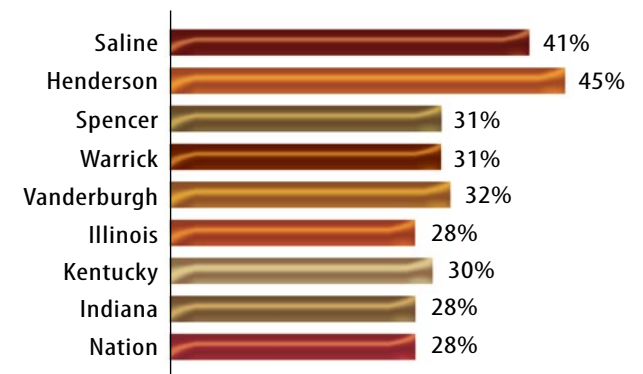
Most important, hypertension can be prevented or controlled through healthy lifestyle habits and/or medications when needed.

The prevalence of ever having a hypertension diagnosis was 35% among residents of the five counties in this study. This is significantly higher than the national prevalence of 28%. ■

## Significant local findings include:

- Prevalence of hypertension varies significantly across the five counties. Henderson County is the highest with 45%. All five counties in this study have rates higher than the nation
- The risk of hypertension increases with age. In this study, 56% of those 65 or older reported a diagnosis of hypertension compared to only 17% of those ages 18-24
- Being obese or overweight is a significant risk factor for hypertension. In this study, more than twice as many obese residents (47%) as well as 31% of overweight persons reported having hypertension. Only 23% of those who are at a healthy weight reported hypertension

## High Blood Pressure Prevalence



# Cancer Screening Practice

Cancer is currently the second-leading cause of death in the U.S., with approximately 1.5 million new cases in 2007 and over a half million deaths. The annual number of new cancer cases is expected to increase significantly over the next 50 years to 2.6 million.

Cancer is caused by both external factors (such as tobacco, diet, environment exposure to chemicals) and internal factors, such as inherited conditions.

In 2007, cancer was estimated to cost the American economy \$219.2 billion, with \$89 billion resulting from direct medical costs, \$18.2 billion from lost productivity due to illness, and \$112 billion from lost productivity due to premature death. With the expected increase in cancer diagnoses, the burden of costs associated with cancer will continue to rise. Changing certain behaviors such as smoking and environmental factors (e.g. occupational exposure to carcinogens) that increase cancer risk can help reduce the nation's cancer burden.

In the tri-state area, three common cancers are breast, prostate and colon. These cancers can be treated with high success rates if detected early, and screening tests are available for all three. Cervical cancer is also easily detected through routine screening.

Early detection and treatment of cancer has been shown to reduce mortality from cancers of the colon & rectum, breast, and uterine cervix. For breast cancer, the five-year survival rate for those diagnosed early at the localized stage is 98%; cervical cancer survival rate with early detection is nearly 100%; for colorectal cancer, the five-year survival rate with early detection is 90%.



## Breast Cancer Screening: Mammography and Clinical Breast Exams

Three tests are used in screening for breast cancer: mammography, clinical breast exam, and the breast self-exam (BSE). Mammograms are the best method for early detection of breast cancer. Mammography screening, accompanied by early treatment, can reduce mortality from breast cancer by approximately 20%-35% among women 50-69 years of age and approximately 20% in women ages 40-49. Although breast cancer is the most commonly diagnosed cancer among women of all races and is the second leading cause of cancer death among women, the number of women in the U.S. aged 40 or more years receiving regular mammograms has declined since 2000.

It is recommended that women start clinical breast exams (an examination by a doctor or nurse who uses his or her hands to feel for lumps or other changes) every 3 years beginning at age 20, every year at age 40, and start annual mammography screening at age 40. In addition, a woman should begin breast self-exams, where she checks her own breasts for lumps or changes, at the age of 20. ■



## Breast cancer screening

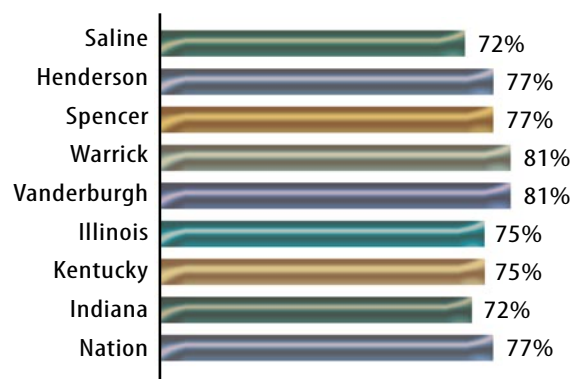
rates in **four of the five** counties meet or exceed the **national** average.

### Significant local findings include:

- Ninety-three percent of women age 40+ have ever had a mammogram and 71% of those have had one in the past 12 months
- Having health insurance dramatically increases the likelihood of having a mammogram. In the past two years among women 40 years of age and older, almost 80% who have some type of insurance have had a mammogram; only 54% of those without any insurance had a mammogram.
- The vast majority (88%) of women ages 25 or older in these counties have ever had a clinical breast exam, but only 64% of those age 18-24 have had a clinical breast exam
- Women of all ages with higher incomes and education levels are significantly more likely to have ever had a clinical breast exam

## Breast Cancer Screening

Mammogram in Past 2 Years (women age 40+ only)



## Cervical Cancer Screening: Pap Smear

In 2004, 11,892 women in the U.S. were diagnosed with cervical cancer, and 3,850 died from cervical cancer. Approximately 6 of every 10 cases of cervical cancer occurred in women who never received a Pap smear or had not been screened in the past five years. Not only is cervical cancer the easiest cancer in females to detect through screening, it is also highly curable if found and treated early. A regular Pap smear is recommended for all women beginning at the age of 21.

In this study, almost all (95%) of the women reported ever having had a Pap smear, but less than two-thirds have had one in the past 2 years. ■

### Significant local findings include:

- Only 80% of young women ages 18-24 in this study indicated ever having had a Pap smear. Adherence to this recommendation was almost 100% among those women age 25 or older
- Having some type of health insurance increases the likelihood of a woman having had a Pap smear in the past 2 years. Almost two-thirds of the women with insurance reported having such a test in the past 2 years compared to only 64% of those without insurance
- The likelihood of ever having had a Pap smear does not vary across race, age, education or income level, although younger women and those with higher levels of education and income are more likely to have had a Pap smear within the past 2 years

## Cervical Cancer Screening

Pap Smear Within Past 2 Years (women age 18+)





## Prostate Cancer Screening: PSA Tests and Digital Rectal Exams

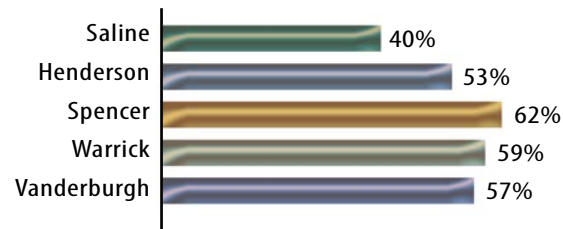
Prostate cancer is the most commonly diagnosed cancer among men and the second leading cause of cancer death in men. In 2004, 189,075 men were diagnosed with prostate cancer; 29,002 died from it. In his lifetime, a man has a 16% chance of being diagnosed with prostate cancer and a 3% chance of dying from prostate cancer. Prostate cancer risk increases with age.

There are two common screening tests for prostate cancer: the digital rectal examination (DRE) and a prostate specific antigen (PSA) blood test. Regular DRE and PSA tests are recommended for all men beginning at the age of 50, earlier for African-American men or those who have a father or brother with prostate cancer.

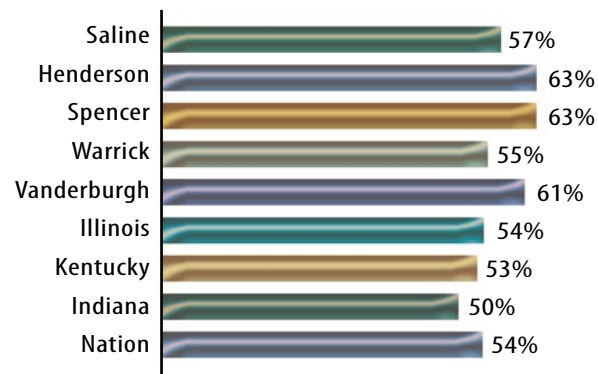
**Prostate cancer screening** rates in **all five counties** are **better than** the national average.

Almost 60% of the men age 40 or older in this study have had a PSA test within the past 2 years. This is higher than the national average of 54%. ■

**Prostate Cancer Screening**  
Digital Rectal Exam Within Past 2 Years (men age 40+ only)



**Prostate Cancer Screening**  
PSA Test in Within Past 2 Years (men age 40+ only)



### Significant local findings include:

- Having health insurance increases the likelihood that a man receives a PSA test. For men over age 40, 75% of those who have no health insurance have never had a PSA test; for those with health insurance, only 28% have never had the test
- Among those without health insurance, 52% of men over age 40 have not had a DRE; among those with insurance, only 26% have not had a DRE
- Low-income male residents are significantly less likely to have ever had a PSA test. Only 47% of the men age 40+ with a household income of \$25,000 or less report ever having such a test, compared to 72% of those with higher household incomes
- Almost three-fourths of adult males ages 40 and older report having had a digital rectal exam (DRE) at some time in their lives





## Colorectal Cancer Screening: Colonoscopy and Blood Stool Test

For both men and women, colorectal cancer is the third most commonly diagnosed cancer and the third leading cause of cancer death. In 2004, over 145,000 people were diagnosed with colorectal cancer, and more than 53,000 died from colorectal cancer. While colorectal cancer affects those of all races and ages, it is most prevalent among those ages 50 years and older.

There are two commonly recommended screening tests for colon cancer: colonoscopy and the home blood stool test. The colonoscopy, where a physician examines the inner lining of the large colon by inserting a very small camera tube via the rectum, is recommended at 10-year intervals starting at age 50.

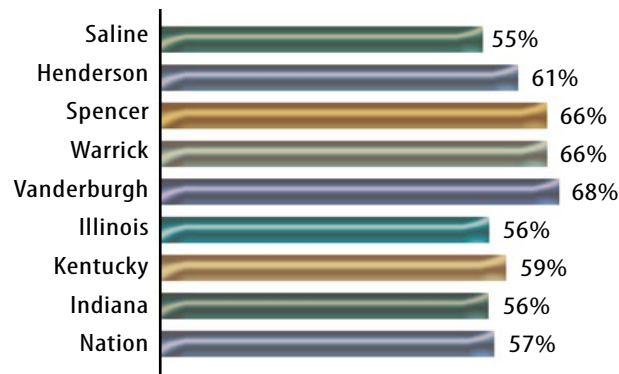
**Colon cancer screening** rates in **four of the five counties** are **better than** the national average.

The blood stool tests are typically done at home on an annual basis beginning at age 50.

With regular screening for colorectal cancer, an estimated 60% of deaths could be prevented with early detection and treatment. Although screening rates are increasing, more than a third of the population ages 50 and over, 41.8 million people, still are not screened. In fact, only 57% of the at-risk population was screened in 2004.

Of those in this study who are ages 50 and over, only 53% reported having ever had a home blood stool test, while 64% reported having a colonoscopy or sigmoidoscopy, higher than the national average of 57%. ■

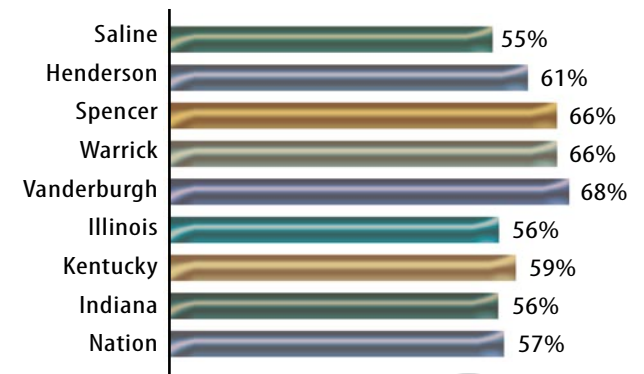
**Colon Cancer Screening**  
Blood Stool Test in Past 2 Years  
(men and women age 50+ only)



### Significant local findings include:

- The likelihood of having had a blood stool test increases from 35% for those who did not graduate from high school to 64% for those with a bachelor's degree or higher
- Non-Caucasians ages 50 and older are less likely than Caucasians to have had a colonoscopy or sigmoidoscopy, (46% versus 65%); all ethnicities are equally as likely to have had a blood stool test;
- Among those with health insurance, 46% have never had a blood stool test; without health insurance, the percentage increases to 64%
- For those with health insurance, 35% have never had a colonoscopy; without health insurance, the percentage increases to 58%

**Colon Cancer Screening**  
Ever Had a Colonoscopy (men and women age 50+ only)





# Cholesterol

## HIGH BLOOD CHOLESTEROL IS A MAJOR RISK FACTOR FOR HEART DISEASE, THE LEADING CAUSE OF DEATH IN THE U.S.

Cholesterol is a waxy, fat-like substance found in the body that is necessary for the body's normal function. The body makes enough cholesterol for its needs but when there is too much cholesterol in the blood, it gets deposited in arteries in the form of a buildup called plaque. Most of the excess cholesterol comes from diet. Over time, this buildup can cause the arteries to become narrow and obstruct the flow of oxygen-rich blood to the heart. A coronary artery can become blocked either by plaque buildup or by a plaque that ruptures or bursts, causing a clot. This leads to angina (chest pain) and potentially a heart attack.

Cholesterol is carried in the blood by particles called lipoproteins. There are two kinds of lipoproteins: high-density lipoproteins (HDL) that carry cholesterol to the liver to be removed from the body, and low-density lipoproteins (LDL) that carry cholesterol in the bloodstream. Too much LDL can lead to a buildup of cholesterol in the arteries. Ideally, the recommended combined level of both types of cholesterol should be less than 200 mg/dL.

High cholesterol does not produce symptoms, so many people do not know their blood cholesterol is too high. However, blood cholesterol can be easily checked and controlled.

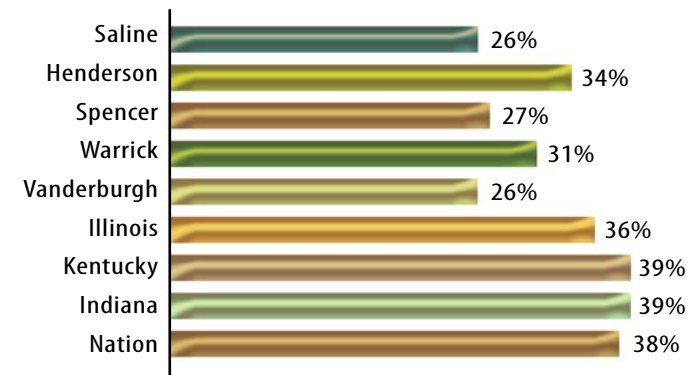
Risk factors for high cholesterol include being overweight or obese, physical inactivity, poor nutrition, inherited tendencies, and age.

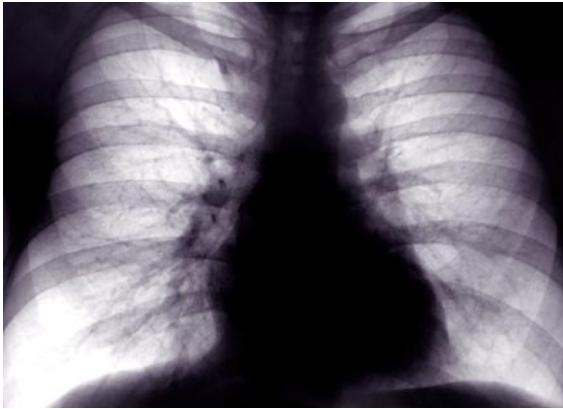
Many Tri-State residents have never had their cholesterol checked. Among those who have, the prevalence rate of high blood cholesterol varies significantly across the five counties but appears to be lower than the national average of 38%. This finding is not what one would expect in relation to what this study learned about the tri-state's overweight/obese status, but other factors may come into play. It is possible that the residents who are having their cholesterol checked routinely may also be taking healthful measures to control it. ■

### Significant local findings include:

- Residents of Henderson County had the greatest prevalence of high cholesterol; Vanderburgh County has the lowest
- Almost half of those adults ages 65 and older reported having been diagnosed with high cholesterol
- On average, more than a third of the obese (36%) and almost a third of overweight (31%) residents have high cholesterol compared to those who are neither overweight nor obese (18%)

### High Cholesterol Prevalence





# Chronic Lung Disease

**C**HRONIC LUNG DISEASE, COMMONLY KNOWN AS CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD), refers to a group of diseases that develop progressively, causing airflow blockage and breathing-related problems. It includes emphysema, chronic bronchitis, and in some cases asthma. Severe cases of COPD make simple tasks like walking or dressing difficult to complete.

Approximately 12 million Americans currently have a COPD diagnosis and it is estimated that an additional 12 million remain undiagnosed. COPD is the fourth leading cause of death in the U.S., killing over 120,000 people a year. Advances in therapies have improved the quality of life and survival rates for those with COPD.

The prevalence of **chronic lung** disease is more than **double** among current or **former smokers** compared to lifetime non-smokers.

In the U.S., the key factor in the development of COPD is smoking. COPD is more likely to occur in individuals who smoke or have a history of smoking. Between 1980 and 2000, the COPD death rate for women grew much faster than the rate for men, mirroring the increase in smoking rates among women. Among those currently smoking, COPD accounts for 73% of smoking-related health conditions .

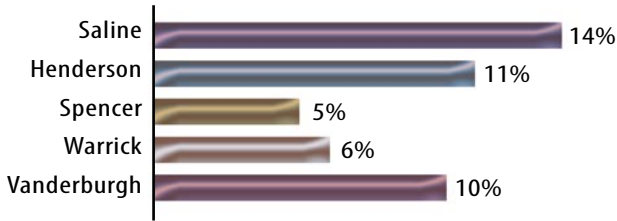
Environmental factors play a slight role in the development of COPD, accounting for approximately ten to twenty percent of people with COPD. Avoiding tobacco smoke, home and workplace air pollutants, and respiratory infections are key to preventing the initial development of COPD.

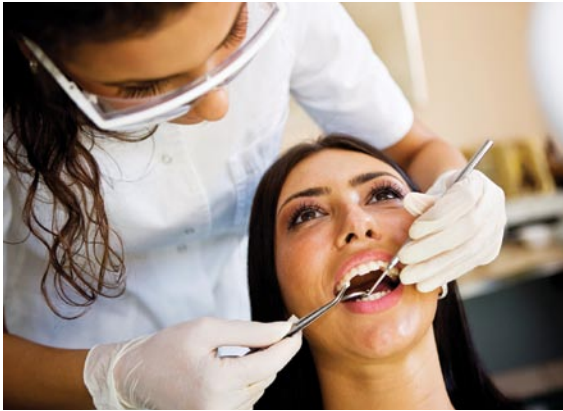
The overall prevalence rate of COPD in the five counties included in this study was 11%, although the rates vary significantly by county. ■

## Significant local findings include:

- Lifetime non-smokers are less than half as likely (7%) to have ever been diagnosed with COPD compared to current or former smokers (18%)
- Regardless of smoking status, the higher the education and income, the lower the prevalence of COPD
- Regardless of smoking status, the risk of COPD increases significantly with age. Less than 4% of those ages 18-24 report ever being diagnosed with COPD compared to 15% of those age 65 or older

## Chronic Lung Disease Prevalence





# Dental Care

## REGULAR DENTAL CARE IS ESSENTIAL TO GOOD ORAL HEALTH AS WELL AS OVERALL HEALTH.

The Surgeon General's report on oral health notes that oral diseases and conditions are associated with other health problems such as diabetes, heart disease, and adverse pregnancy outcomes.

Nationwide, tooth retention and general periodontal health have improved since 1994. However, the number of adults who report the condition of their teeth and mouth as excellent or very good has declined. In addition, the number of Americans who have had an annual dental exam in the past 12 months has declined since 1994.

Regular check-ups can detect early signs of oral health problems, and treatment can reverse current

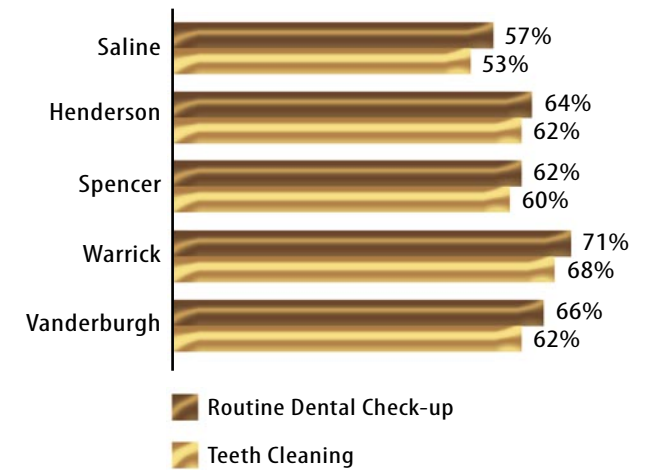
The rates of **dental care** are **similar** in **all five counties**.

problems and prevent future ones. In the U.S., 70% of adults report visiting a dentist in the past 12 months, but those in lower income brackets are less likely to report regular dental visits. For every adult 19 years or older without medical insurance, there are three without dental insurance.

The baby boom generation will be the first where the majority will maintain their natural teeth over their entire lifetime, having benefited from water fluoridation and fluoride toothpastes. According to the CDC, over the past 10 years, the number of adults in the U.S. missing all their natural teeth has declined from 31% to 25% for those age 60 or older. In spite of this, a surprising 1 in 20 adults age 40-59 is missing all of his/her teeth. Individuals can reduce dental problems by flossing daily, reducing or eliminating tobacco and alcohol use, avoiding sugary and starchy foods, and eating the recommended five servings per day of fruits and vegetables.

In this study, a significant percentage of the adult residents interviewed said they have not had a routine dental exam and/or a teeth cleaning in more than 4 years (14% and 17%, respectively). ■

## Dental Care - Past 12 Months



### Significant local findings include:

- Caucasian residents are significantly more likely (65%) than non-Caucasian residents (53%) to have had a routine dental exam and/or teeth cleaning in the past 12 months
- While overweight residents are somewhat less likely to receive regular dental care than those who are of a healthy weight (65% compared to 70%, respectively), obesity decreases the likelihood of receiving regular dental care. Only 59% of those who are obese report having visited a dentist in the past year
- The likelihood of having regular dental care through annual exams and teeth cleanings increases with level of education and income





# Diabetes

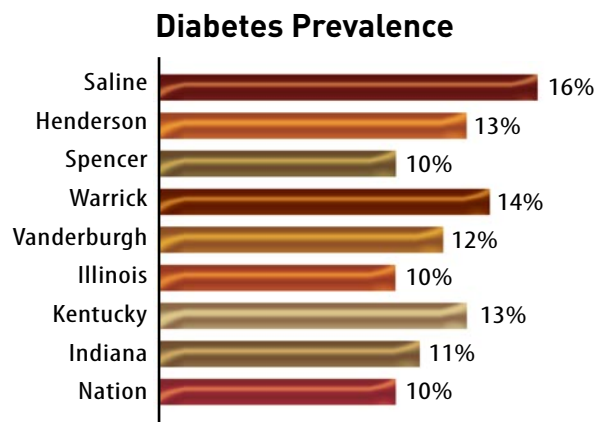
**D**IABETES IS A DISEASE IN WHICH THE BODY DOES NOT PRODUCE OR PROPERLY USE

**INSULIN**, a hormone needed to convert the food we eat into the energy we need for daily life. This results in abnormally high blood glucose levels and serious long-term complications such as heart disease, stroke, blindness, kidney failure, or limb amputations. The risk of complications can be reduced through proper medical care, diet and exercise.

The prevalence of diabetes in the U.S. has increased dramatically over the past few decades. Between 1980 and 2005, the number of Americans with diabetes nearly tripled from 5.6 million to 15.8 million. Although diabetes strikes individuals of all ages, it is most common among those aged 65 years or older.

The prevalence of **diabetes** in **four** of the counties **exceeds** the national average.

In this region, the prevalence of diabetes is significantly higher than the nation. Almost 13% of the adult population, approximately 65,520 persons, have been diagnosed with diabetes. The national prevalence is 11%. The prevalence varies greatly among the five counties.



## Types of Diabetes

- **Type 1:** accounts for 5% to 10% of all diagnosed cases of diabetes. It develops mostly in children and young adults and may be caused by autoimmune, genetic or environmental factors.
- **Type 2:** accounts for about 90% to 95% of all diagnosed cases of diabetes. It develops mostly in

middle-aged and older adults and usually results from overweight/obesity and physical inactivity.

- **Pre-Diabetes:** blood glucose levels are higher than normal but not yet high enough for a diagnosis of diabetes. Increases the risk for developing Type 2 diabetes, which can be delayed or prevented by

maintaining a healthy weight and being physically active.

- **Gestational Diabetes:** is more likely to occur in those who are overweight/obese. While gestational diabetes will generally disappear after the baby is born, the woman has an increased risk of developing Type 2 diabetes later in life.

### Significant local findings include:

- The vast majority of people with diabetes were diagnosed later in life, with 37% initially diagnosed between the ages of 36-50; 53% were diagnosed at age 51 or older
- Among obese residents, almost a quarter are diabetic; of those who are overweight, 10% have been told they have diabetes. Relatively few (4%) residents with a healthy weight are diabetic
- Residents with diabetes are significantly more likely to also have at least one other chronic disease or condition such as high blood pressure, arthritis, high cholesterol, chronic lung disease, angina, or to have ever had a heart attack or stroke



## Diabetes Care

Self-management of diabetes is an essential part of medical treatment and control of this disease. Depending on the type of diabetes one has (insulin dependent or not), self-management can include monitoring glucose levels, oral medications, insulin injections, proper nutrition and exercise, maintaining a healthy weight, and control of cholesterol and blood pressure.

One of the most essential keys to maintaining good health and avoiding complications of diabetes is good control of blood glucose (glycemic) levels. This involves two types of monitoring:

- Personal testing each day to monitor how food, physical activity, and medicine affect glucose levels;
- Physician testing of the hemoglobin A1c (HbA1c) level, which provides a snapshot of average glucose control over the past 60-90 days.

**Diabetes care**, including preventive exams and **blood glucose** monitoring, is **far better** than average.

Regular medical check-ups are vital. Individuals with diabetes are also encouraged to:

- Have yearly eye examinations, as diabetes is the leading cause of new cases of blindness among adults;
- Have regular foot examinations, as diabetes is known to cause severe damage to the circulatory and nervous systems in the feet and legs, increasing the risk of skin breakdown, ulcerations, and potentially amputation.

Diabetes care in the tri-state appears to be much better than the national average. Local data were compared to data from the Health Disparities Collaboratives (U.S. Dept. of Health and Human Services). These collaboratives are large groups of health centers that seek to improve the health care provided to underserved populations. Beginning in 1998, eighty-eight of these health centers participated in a national collaborative to improve diabetes care.

Among diabetic residents of the five counties, Henderson County residents are the most likely to have taken a course on how to manage their diabetes (68%). Only 50% of those in Saline County (which has the highest proportion of diabetics) and 48% of those in Spencer County have taken such a course. ■

### Significant local findings compared

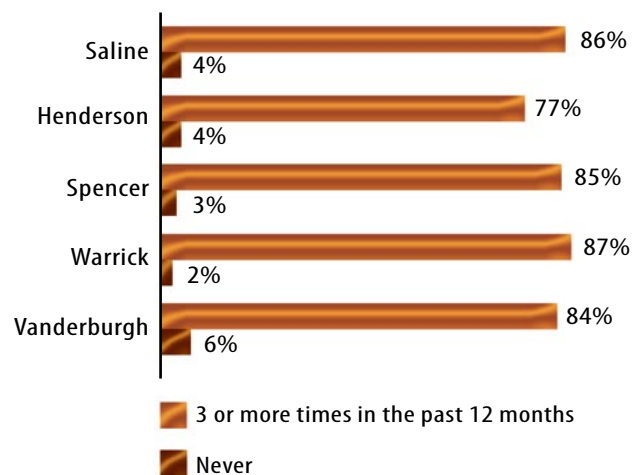
### to results from the National Health

### Disparities Collaboratives include:

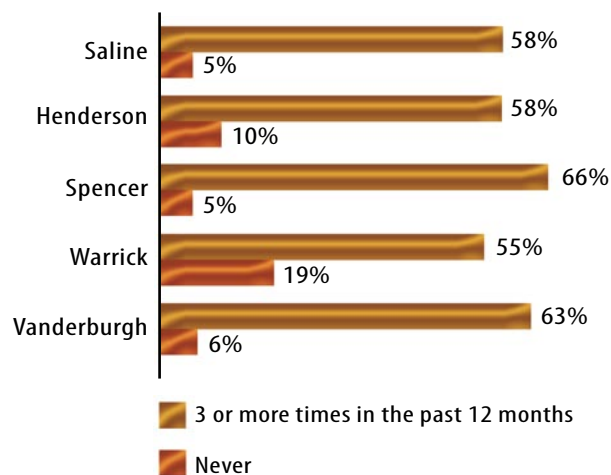
- 51-69% of persons with diabetes in these five counties meet the recommendation for twice-yearly HbA1c testing compared to 34-36% of the collaborative's patients
- 54-72% meet the recommendation for regular annual foot exams compared to 40-42% of the collaborative's patients
- 66-75% meet the recommendation for annual dilated eye exams, compared to 21-22% of the collaborative's patients

## Preventative Exams

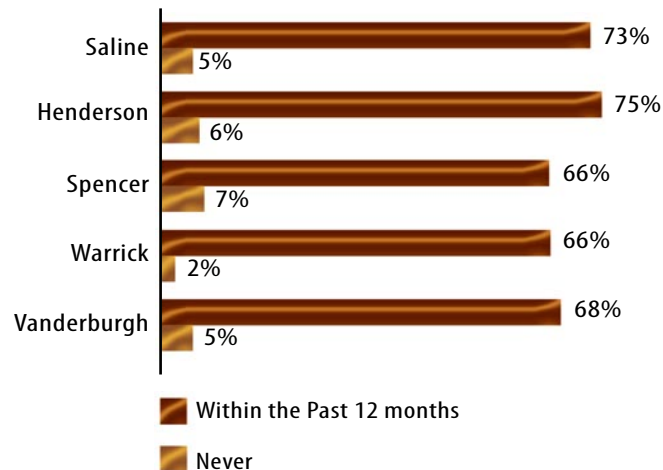
**HbA1c Blood Sugar Testing Among Diabetics**



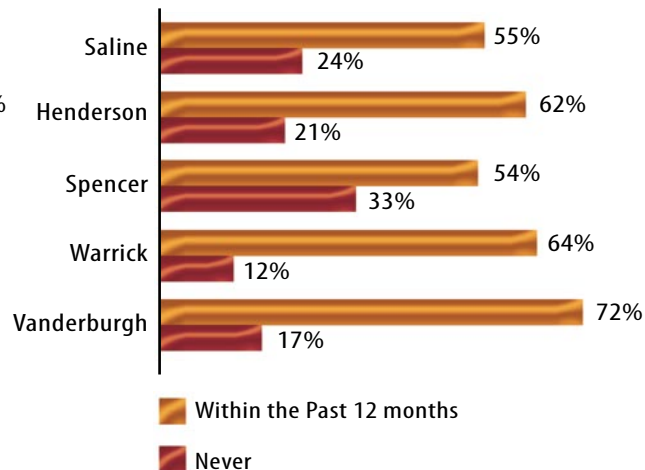
**Diabetes Check-Up by a Health Professional**



**Diabetic Eye Exam**



**Diabetic Foot Exam**



### Other significant local findings include:

- The majority of diabetic residents in these five counties meet the recommendation for twice-yearly testing of HbA1c
- On average, 70% of the diabetic residents report having had an eye exam that included dilation within the past 12 months. Very few report never having their eyes checked
- Almost two-thirds of diabetic residents report having a foot exam within the past 12 months, but a significant number in each county report never having such an exam. This is especially true in Spencer County, where a third of diabetics report never receiving a foot examination by a health professional







# Health Insurance

**H**AVING HEALTH INSURANCE INCREASES THE LIKELIHOOD OF ONE RECEIVING PROPER AND TIMELY PREVENTIVE CARE, AS WELL AS CARE WHEN SICK OR INJURED. Nationally, approximately 17% of adults ages 18-64 do not have any type of health insurance. People over age 65 are not included in these numbers because almost all of them have health insurance through Medicare.

The percentages of uninsured in Illinois (18%), Indiana (17%), and Kentucky (19%) are similar to the national average. The risk of being uninsured is higher among those who are unemployed, low-income, less educated, young (ages 18-24),

**Almost a third** of **18-24 year-olds** currently have **no health insurance**.

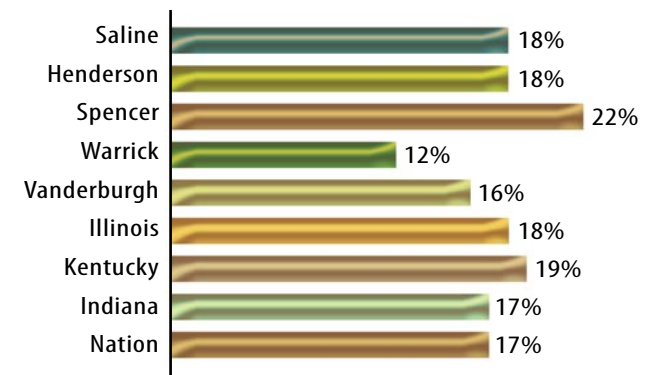
and Hispanics. Nationally, the proportion of persons with no health insurance coverage is approximately 10 percentage points higher for adults than for children.

Local statistics mirror national trends. Nationwide, for all persons under 65 years of age, the percentage of persons who are uninsured is highest among those aged 18-24 years (28%) and lowest among those under 18 years (9%). Starting at age 18, younger adults are more likely than older adults to lack health insurance coverage. Among adults 18-44 years of age, men are more likely than women to lack health insurance coverage. This study found that 19% of adults ages 18-64 in these five counties have had no health insurance during at least part of the past 12 months and 17% are currently without it. The lack of health insurance is highest among Vanderburgh County residents, with 26% of those ages 18-64 without health insurance at least part of the past year.

## Significant local findings include:

- Almost a fifth of the adult men ages 18-64 in these counties are currently without health insurance, while only 11% of the women report not having health insurance
- A high percentage of non-Caucasians ages 18-64 (27%) living in these counties do not have health insurance
- Almost a third (30%) of those aged 18-24 do not currently have health insurance
- Individuals ages 18-64 with higher levels of education and income are more likely to have health insurance
- 14% of those ages 18-64 who have at least one chronic disease do not currently have any type of health insurance

## Currently Without Any Health Insurance Adults age 18 to 64



## Access to Preventive Health Care

It is widely recommend that adults between the ages of 18 and 49 see a physician at least once every 3 years for routine checkups or preventive care exams, and that age 50 or older should have such exams on an annual basis. Preventive care exams typically include a physical exam, discussion of health issues, and screening tests for high blood pressure, cholesterol, and blood sugar levels. Having health insurance, a higher income, and a regular primary care provider are strong predictors that a person will receive appropriate preventive care.

Clinical preventive care has a substantial impact on many of the leading causes of disease and death. People need access to clinical preventive services that are effective in preventing disease (primary prevention) and in detecting asymptomatic disease or risk factors at early, treatable stages (secondary prevention).

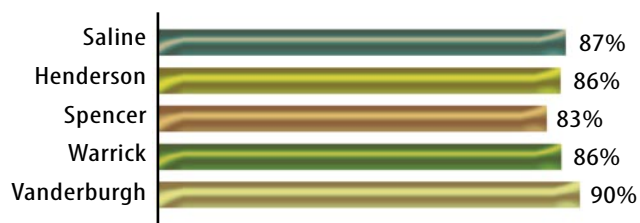
Improving access to appropriate preventive care requires addressing many barriers, including those that involve the patient, provider, and system of care. Patient barriers may include a need for knowledge, lack of a usual source of primary care, and lack of money to pay for preventive care. Provider and system of care barriers may include lack of affordable



health insurance, shortage of services and providers, or the location and hours of needed services.

In this study, 86% of the respondents reported at least one person they identify as their personal physician or health care provider and most (87%) have had a routine checkup in the past 2 years. Almost all of those who reported having one or more chronic diseases have a physician they consider their personal physician, while less than 75% of those without a serious health condition have a physician they consider their own. ■

### Routine Doctor Visit within the Past 2 Years



### Significant local findings include:

- The likelihood of having had a routine physician's exam in the past 2 years increases significantly with age, education and income
- Female residents are more likely than males to report having had a routine physician's exam
- Having health insurance dramatically increases the likelihood of having seen a physician for a routine exam in the past 2 years. Over 90% of those with insurance report having had such an exam in the past 2 years compared to only 61% of those without insurance
- Having a chronic disease significantly increases the likelihood of having had a routine exam within the past 12 months
- Almost 13% of the residents in the five counties report having difficulty seeing a physician when they needed or wanted to sometime in the past 12 months. The most frequently cited reason for the difficulty was cost, followed by the length of time in advance it takes to set up an appointment, being unable to take time off of work, and lack of transportation



# Healthy Weight

**B**EING AT A HEALTHY WEIGHT CONTRIBUTES TO GOOD HEALTH AT ANY AGE. One way to determine whether you are at a healthy weight is to calculate your “body mass index” (BMI), a calculation based on a person’s height and weight. For most people, BMI is a reliable indicator of body fatness.

BMI	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal
25.0 – 29.9	Overweight
30.0 and Above	Obese

Source: U.S. Centers for Disease Control and Prevention

The prevalence of **adult overweight/obesity** is **higher** than the **national average**; the **Tri-State’s** prevalence of **obesity is greater** than the prevalence of **overweight**.

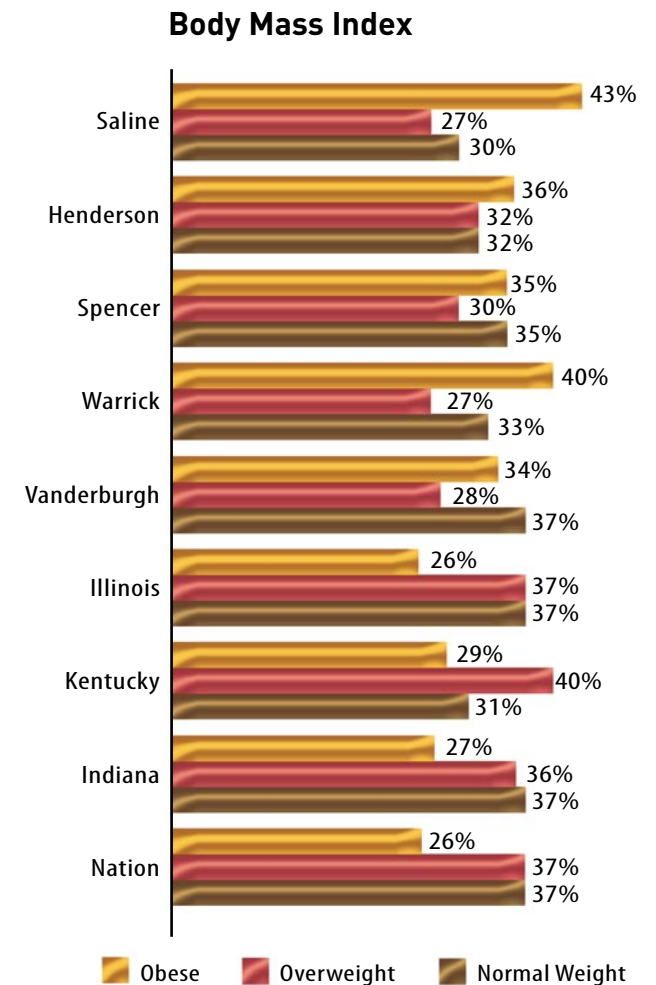
Overweight and obesity are issues of concern because they increase the risk of many diseases and conditions. These include:

- Hypertension (high blood pressure)
- Type 2 diabetes
- Osteoarthritis
- High cholesterol or triglycerides
- Coronary heart disease
- Stroke
- Gallbladder disease
- Sleep apnea and breathing problems
- Certain cancers (breast, colon)

The damage done to the body by being overweight or obese often begins at a very young age. Recent efforts at Univeristy of Missouri-Kansas to document signs of early damage by measuring the thickness of carotid artery walls in children ages 10-16, many whom were overweight or obese, found that three quarters of them had artery thickness similar to that of 45-year-old adults. If not reversed, conditions like these suggest that such children could develop

severe coronary heart disease at a much younger age than their parents, leading to a potential major public health problem in the future.

In this study, two-thirds of the adults (66%) in the five counties were either overweight or obese according to their BMI (37% obese and 29% overweight). This is higher than the national rate of 63% overweight or obese (26% obese and 37% overweight).



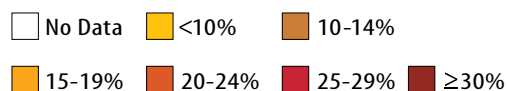
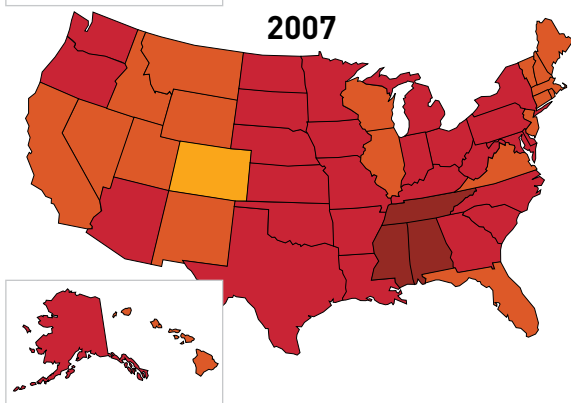
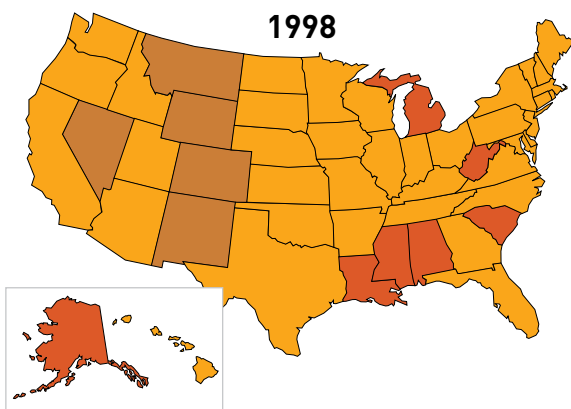
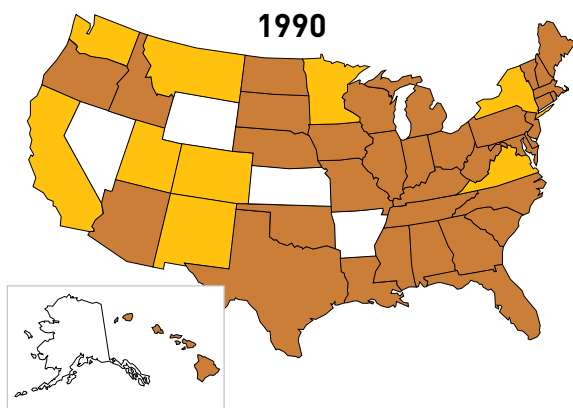
The tri-state is not alone in this status. In recent decades, overweight and obesity have reached epidemic proportions in populations whose environments offer an abundance of calorie-rich foods and few opportunities for physical activity. In many countries, including the U.S., obesity rates have been steadily increasing since the 1950's among both adults and children. Much of this is currently attributed to lifestyle choices related to eating and exercise.

Achieving and maintaining a healthy weight is not about a "diet" or "program". It is about individuals making ongoing daily lifestyle choices that lead to better health, and about designing communities and transportation systems that make these choices not only possible, but the easy and logical choices to make. ■

## Obesity Trends in the United States

### Obesity Trends\* Among U.S. Adults BRFSS, 1990, 1998, 2007

\*BMI  $\geq 30$ , or about 30lbs. overweight for 5'4" person



Source: CDC Behavioral Risk Factor Surveillance System

### Significant local findings include:

- Contrary to national and state statistics, the prevalence of obesity for tri-state adults is greater than the prevalence of overweight
- 7% of tri-state adults qualify as morbidly obese, with a BMI of 40 or greater
- Among the male population, over 41% are obese and almost a third are overweight. Among women, a third are obese and over a fourth are overweight
- Almost 50% of the non-Caucasian population is obese and slightly more than a third of the Caucasian residents fall into the obese category
- Overweight and obese residents in these five counties are significantly more likely to have one or more chronic disease such as arthritis, coronary heart disease, asthma, high blood pressure, diabetes, high cholesterol, chronic obstructive pulmonary disease. They are also more likely to have had a heart attack





# Heart Disease

## HEART DISEASE IS THE LEADING CAUSE OF DEATH IN THE UNITED STATES AND

IS A MAJOR CAUSE OF DISABILITY. Approximately 29% of all U.S. deaths are attributed to heart disease each year.

Heart disease is a term that includes several different heart conditions. The most common heart disease in the U.S. is coronary heart disease (CHD), which can lead to heart attack, stroke, or angina. Healthcare costs related to CHD are estimated at \$151.6 billion in direct and indirect costs in the U.S. in 2007.

The prevalence of **coronary heart disease** is **greater** in **all five counties** than the national average.

## Coronary Heart Disease and Angina

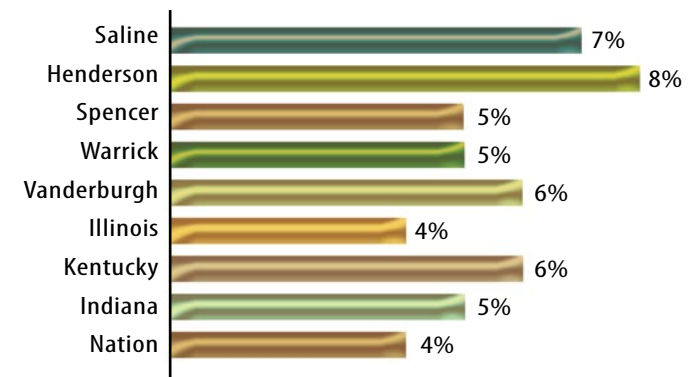
Coronary Heart Disease (CHD) occurs when the arteries supplying blood to the heart muscle become hardened and filled with plaque buildup, narrowing the space in arteries for blood flow and oxygen supply. Plaques are a mixture of fatty substances including cholesterol and other lipids. Plaques may also rupture and cause blood clots that block arteries.

The most common symptom of CHD is angina, a pain or discomfort like pressure or squeezing, in the chest area. The pain may also occur in the shoulders, arms, neck, jaw, or back and it may feel like indigestion. Angina occurs when an area of the heart does not get enough oxygen-rich blood. In the U.S., an estimated seven million men and women suffer from angina, with approximately 400,000 new cases every year.

### Significant local findings include:

- CHD or angina diagnoses are more prevalent among adults 45 years of age or older (14%) than among those age 44 or younger (1%). These percentages mirror the national averages;
- Tri-state adults with one or more of the key risk factors for CHD or angina are significantly more likely to report having been diagnosed with either CHD or angina;
- As obesity increases, there is a gradual increase in prevalence of CHD.

### Coronary Heart Disease and Angina Prevalence

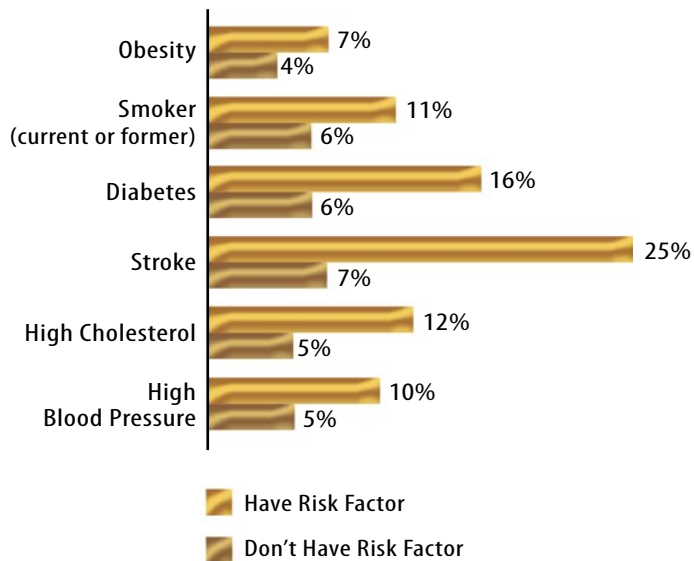


### Key Risk Factors for Heart Disease/Heart Attack

- High Blood Pressure
- High Blood Cholesterol
- Smoking
- Diabetes
- Sedentary Lifestyle
- Overweight/Obesity

In this study, 6% of adults in the five counties reported ever having been diagnosed with coronary heart disease or angina. This is one and a half times the national average of 4% for the general adult population.

### Heart Attack Risk Factor Prevalence



The overall prevalence of **heart attack** in the **five counties** is **greater** than the nation.

### Heart Attack

A heart attack, also known as myocardial infarction, is most often caused by coronary heart disease. It occurs when the blood supply to the heart is severely reduced or completely blocked. As a result, the heart muscle cells do not receive enough oxygen and may begin to die.

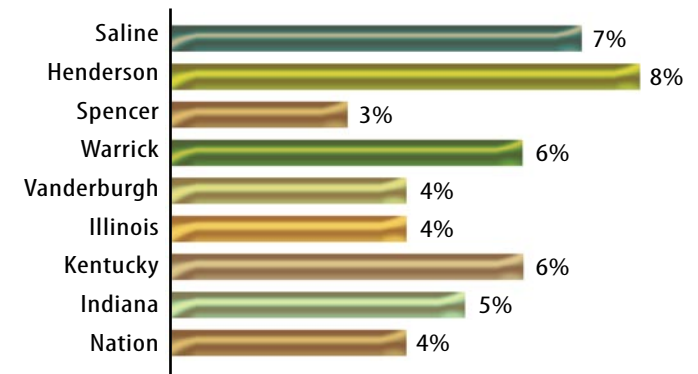
In the U.S., approximately 1.1 million men and women, equally, have a heart attack each year; half of them die from it. Half of those die within the first half hour of the first symptom and before they reach the hospital. A heart attack survivor may be left with a damaged heart that affects the heart rhythm, pumping action, and blood circulation. This places the person at increased risk of having another heart attack or other complication such as a stroke, kidney problems, and circulation problems.

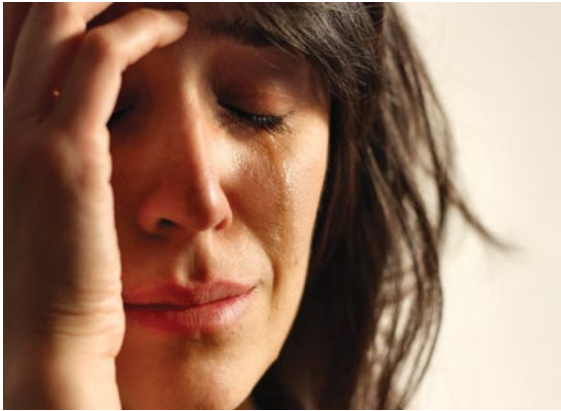
Of the survey respondents in this five-county study, 5% have had a heart attack, which is greater than the national average of 4%. ■

### Significant local findings include:

- Men in these five counties are significantly more likely than women to have had a heart attack (7% versus 4%, respectively)
- The likelihood of a heart attack dramatically increases with age. 13% of those 65 or older and 8% of those age 45 to 64 reported ever having had a heart attack, compared to less than 1% of those in the 25 to 44 age group and to 0% of those who are 18 to 24
- The prevalence rate for heart attack is significantly higher among study participants who have one or more of key risk factors for heart disease

### Heart Attack Prevalence





# Mental Health

**C**URRENTLY, ALMOST A THIRD OF THE U.S. POPULATION REPORTS SUFFERING MENTALLY OR EMOTIONALLY AT LEAST ONE DAY A MONTH

and this proportion is increasing. Since 1993, the average number of “mentally unhealthy days” reported has increased from 2.9 to 3.4 days per month. The percentage of those who say they have an average of 14 or more mentally unhealthy days a month has increased from 8% to 10%.

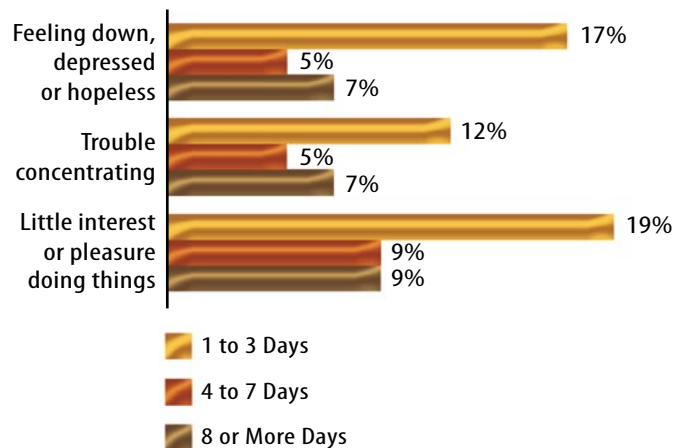
Adults ages 18-24 suffer the most mental health distress. Those with higher incomes and more education have fewer mentally unhealthy days. In a given year, approximately 10% of U.S. adults are affected by depression and about 18% are affected

**Depression** appears to be more common among **females**, younger adults, and **those 65 years** of age and older.

by anxiety. Anxiety disorders often occur together with depressive disorders.

In this study, while the majority of residents reported currently being “satisfied with life”, a quarter reported having been diagnosed with depression at some point in their life. Almost as many residents reported having been diagnosed with an anxiety disorder. Almost three-fourths of those who have been diagnosed with depression or anxiety have sought professional counseling. ■

**Mentally Unhealthy Days**  
Total Survey Respondents  
Number of Days in Past 2 Weeks



## Significant local findings include:

- Females and younger adults are more likely than males and those ages 65 or older to report ever having been diagnosed with an anxiety disorder or depression
- The percentage of residents with less than a high school education that report having had a depression diagnosis is more than double that of those who have completed a college degree
- Those with incomes of \$15,000 or less are twice as likely as those with incomes of \$50,000 or more to have ever been diagnosed with anxiety or depression
- Obese residents are much more likely to suffer from depression, although there is no significant difference across BMI categories regarding anxiety diagnosis status





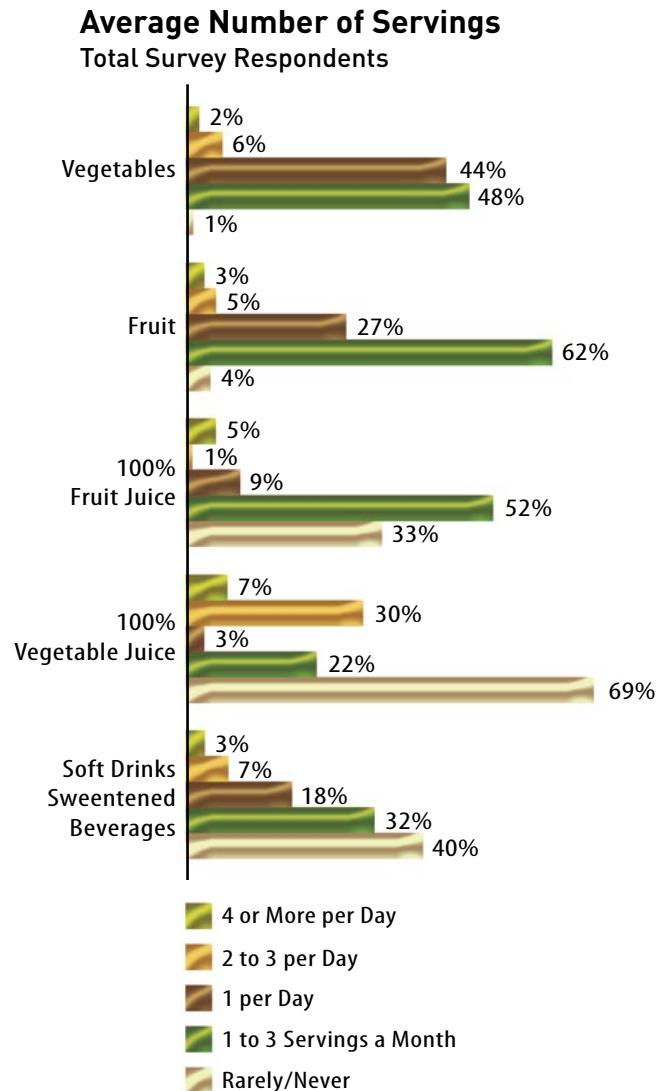
# Nutrition

**I**N THE U.S., MOST ADULTS CONSUME MORE THAN THE RECOMMENDED NUMBER OF CALORIES, yet fail to consume a sufficient amount of dark green vegetables, orange vegetables, legumes, whole grains, low-fat milk products, and fruit to maintain a balanced diet.

Daily recommendations include two cups of fruit and 2½ cups of vegetables each day.

The majority (61%) of Tri-State adults eat only one serving of fruit and 48% eat only one serving of vegetables a day. Most respondents said they live near a store that sells a variety of fresh or frozen fruits and vegetables, but almost a fifth said the cost of fresh fruit and vegetables does not fit into their budget. ■

The vast majority of **tri-state adults eat too few** fruits and vegetables. Nearly **three-fourths eat in a restaurant** at least once a week.



## Significant local findings include:

- Among non-Caucasian residents, 40% say that the price of fruits and vegetables is cost-prohibitive, compared to only 17% of Caucasian residents
- Over 20% of obese and 18% of overweight residents claim the cost of fruits and vegetables does not fit into their budget, compared to only 14% of those with a healthy weight
- Males, non-Caucasians, younger adults, those with a high school education or less, and those with incomes of \$25,000 or less are more likely to drink sweetened soft drinks on a regular basis
- Those ages 18-24 are the most likely to drink fruit juice on a regular basis, but are the least likely to ever drink vegetable juice
- On average, almost three-quarters of the residents report eating in a restaurant at least once a week. Males, Caucasians, those who have a college degree, and those who have incomes of \$25,000 or more are more likely to eat in a restaurant on a regular basis



# Physical Activity

**REGULAR PHYSICAL ACTIVITY IS STRONGLY ASSOCIATED WITH ENHANCED HEALTH AND REDUCED RISK OF PREMATURE MORTALITY.**

Lack of physical activity is one of the most important lifestyle behaviors afflicting our nation, as it plays a role in the most common chronic diseases, including coronary heart disease, hypertension, diabetes, and certain cancers.

## The recommended amount of exercise for a typical adult:

- At least 30 minutes of moderate exercise 5 times a week
- OR
- At least 20 minutes of vigorous exercise 3 times a week

The proportion of **Tri-State adults** who **reported meeting** the **recommended amount** of moderate exercise **is unexpected** in light of the area's high overweight/obesity rates.

A person who is exercising moderately should be able to carry on a conversation comfortably while engaged in the activity, while a person who is exercising vigorously would be too out of breath to carry on a conversation.

In this study, 20% of the respondents indicated they had participated in NO type of moderate exercise whatsoever in the previous 7 days. Fifty-five percent of them reported activity levels that met the CDC recommendation for moderate exercise. Almost three-fourths reported NO vigorous physical activity in the past 7 days, while a meager 13% met the recommendation for vigorous exercise. Comparable state and national data were not available.

Among the 80% who reported some moderate exercise in the past 7 days:

**4 sessions** = the average number of times participated in moderate exercise;

**45 minutes** = the average length of a moderate exercise session;

**4 hours** = average number of hours per week spent doing moderate exercise;

25% walk for exercise in their neighborhood almost daily.

Among the 27% who reported some vigorous exercise in the past 7 days:

**2 sessions** = the average number of times participated in vigorous exercise

**30 minutes** = the average length of a vigorous exercise session

**1 to 2 hours** = average number of hours per week spent doing vigorous exercise

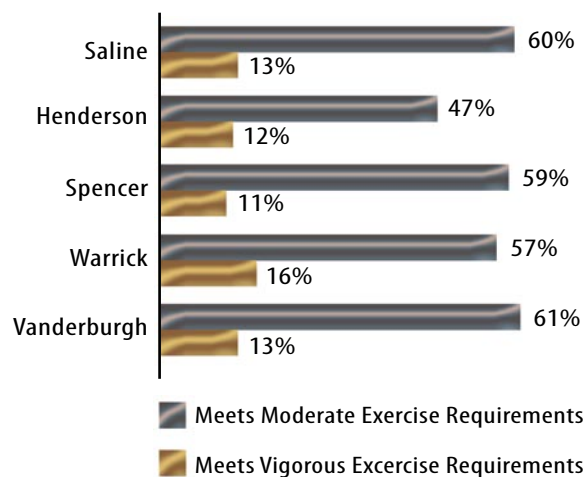
## Moderate Physical Activity:

- Walking briskly
- Light bicycling
- Scrubbing floors
- Golfing
- Raking leaves
- Hand washing/waxing a car
- Water aerobics

## Vigorous Physical Activity:

- Jogging/running
- Circuit training
- Swimming laps
- Racewalking
- Bicycling more than 10 mph
- Aerobics

## Physical Activity



Those who reported doing any type and amount of exercise in the past 7 days also responded that they were:

- More satisfied with life in general and tend to report their health as good or excellent;
- Less likely to have a chronic disease or a serious health issue such as a heart attack or stroke;
- Less likely to be obese.

## Opportunities for Physical Activity

The reasons adults don't engage in sufficient physical activity are many, ranging from busy lifestyles and work environments, to lack of safe and pleasant places to be active. While physical activity and proper nutrition are the cornerstones of maintaining a healthy weight, this survey yielded

surprising responses about the area's physical activity opportunities that appear quite mismatched with the area's high rates of overweight and obesity.

The majority of respondents (82%) reported having access to a safe, convenient and affordable place to exercise and many reported having jobs that routinely keep them physically active. Further exploration of the reasons for the region's low level of physical activity is warranted in order to better understand the barriers to actual participation.

While we do not yet have clear answers for our local area, state and national efforts have yielded valuable lessons learned and best practices that can serve us as models. These models demonstrate ways that many communities have successfully helped their residents incorporate physical activity into their daily routines. Some of the key components of these models include:

- Evaluating and altering the ways transportation is planned, including how streets are designed to safely accommodate non-motorized traffic;
- Setting new standards for designing neighborhoods and commercial development to connect people with their destinations in ways that free them from dependence on the use of automobiles;
- Strategically planning and locating parks and recreational facilities for maximum use. ■

### Significant local findings include:

- The majority of respondents (82%) reported having access to a safe, convenient and affordable place to exercise
- Over two-thirds of the respondents reported they currently are employed outside the home. Of those, half have jobs that routinely keep them active
- Most reported that their employer provides opportunities for exercise and fitness activities through on-site gym facilities and/or free or discounted memberships to area fitness clubs. Some also mentioned they received health insurance discounts for participation in wellness activities
- Relatively few residents (11%) reported safety concerns about exercising in their community. Those who expressed concerns listed personal safety, traffic, unsafe walkways and dangerous animals
- Less than a third of respondents reported using a fitness trail in the past 12 months. The most common reason given is that there is none convenient for use. Other frequent reasons include a preference for other activities, not having enough time or they don't enjoy fitness trails



# Smoking

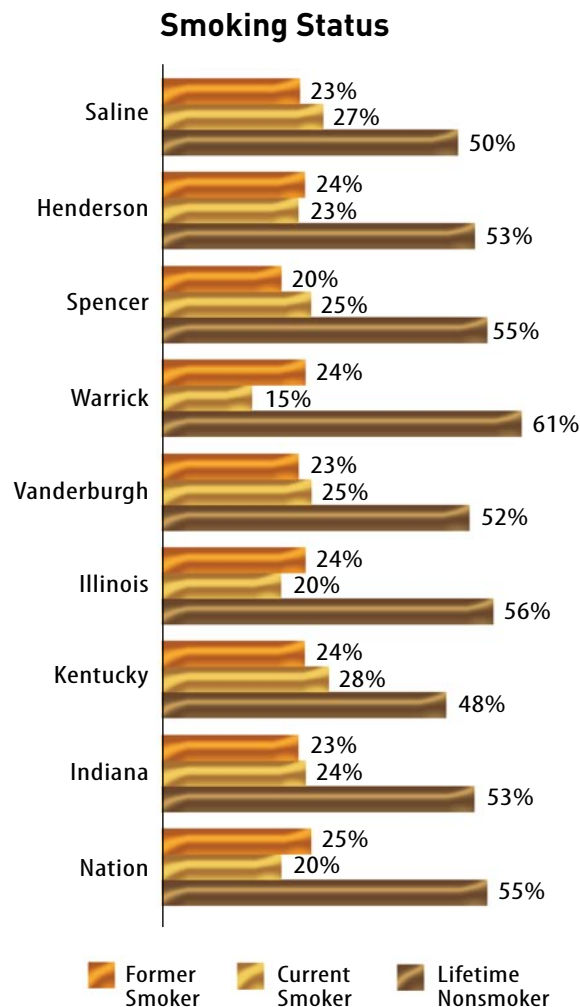
## SMOKING IS THE SINGLE GREATEST AVOIDABLE CAUSE OF DISEASE AND PREMATURE DEATH IN THE NATION.

It accounts for approximately 438,000 (1 out of every 5) deaths each year, including approximately 38,000 deaths related to second-hand smoke exposure. Smoking is estimated to be responsible for \$167 billion in annual losses to the U.S. economy, or about \$3,561 per adult smoker. The total economic costs associated with cigarette smoking are estimated at \$7.18 per pack of cigarettes sold in the U.S.

Smoking harms every organ in the body, resulting in enormous health consequences. This includes 90% of lung cancer deaths in men and almost 80% of lung cancer deaths in women.

The proportion of **adults** who smoke is **greater** than the **national** average; most started the habit as teenagers.

In this study, the percentage of adults in the five counties who report currently smoking is higher (23%) than the national average (20%). ■



### Significant local findings include:

- Almost a quarter of the residents have a current smoker living in their home
- Approximately three-fourths of respondents say smoking is not allowed anywhere in their home
- Of the current smokers, half have made a serious attempt to quit in the past year
- Among the youngest residents (ages 18-24), over a third are current smokers; as age increases, the number of individuals who ever smoked but who have quit increases dramatically
- The majority of smokers (current and former) started smoking as teenagers
- Following national trends, males and those with lower incomes and educations are more likely to report ever having smoked





# Stroke

**A STROKE OCCURS WHEN THE BLOOD SUPPLY TO PART OF THE BRAIN IS BLOCKED OR WHEN A BLOOD VESSEL IN THE BRAIN BURSTS, CAUSING DAMAGE TO PART OF THE BRAIN.** A stroke is also sometimes called a brain attack. While a stroke can occur at ANY age, approximately three-fourths of them occur in people over age 65. Stroke death rates are higher for African-Americans than for Caucasians, even at younger ages.

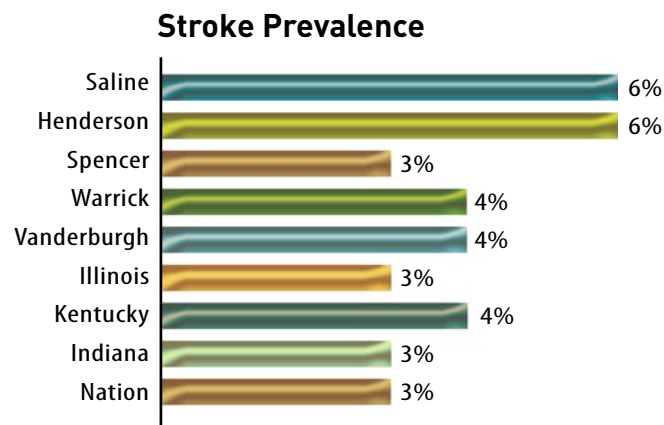
## Key Risk Factors for Stroke:

- Hypertension
- Heart Disease
- Diabetes
- High Cholesterol
- Tobacco Use
- Excessive Alcohol Use
- Irregular Heart Rhythms
- Genetic Risk Factors

The prevalence of **stroke** in **four** of the five counties **is greater** than that of the **nation** and all three states.

Stroke is the third leading cause of death in the U.S. and a leading cause of serious long-term disability. According to the American Heart Association, stroke cost the U.S. economy almost \$57 billion in both direct and indirect costs in 2005.

The best treatment for stroke is to try to prevent it by taking steps to lower your risk for stroke. This includes maintaining a healthy weight, controlling hypertension and high cholesterol, not using tobacco, and avoiding excessive alcohol use.



In this study, the prevalence of stroke among adult residents in the five counties was 4%, higher than the national prevalence of 3%. All except one of the counties, Spencer, exceed the national prevalence. ■

## Significant local findings include:

- Prevalence of stroke among residents ages 65+ in these five counties (9%) reflects the national prevalence patterns. This number reflects the increase in likelihood of a stroke as age increases
- A diagnosis of stroke among those ages 25-64 is 4 times more common among those with household incomes of less than \$25,000 (8% versus 2% of those with higher incomes)
- Over a fifth of residents who have had a heart attack have also had a stroke
- Of those who have been diagnosed with high blood pressure, 8% have had a stroke
- Strokes are more common among residents with diabetes. 10% of those who have been diagnosed with diabetes have also had a stroke compared to only 4% those who are not diabetic



# Vision & Eye Care

**MAJOR VISION IMPAIRMENT IS ONE OF THE MOST DREADED DISABILITIES.** Regular eye exams are an important tool for preventing many of the conditions that can lead to these disabilities. The recommended frequency of eye exams is dependent on age, race/ethnicity, or certain risk factors. The recommendations from Prevent

Comprehensive Eye Exam Frequency		
Age	Caucasian	African-American
20 - 39	Every 3 - 5 years	Every 2 - 4 years
40 - 64	Every 2 - 4 years	Every 2 - 4 years
65+	Every 1 - 2 years	Every 1 - 2 years

Source: Prevent Blindness America

**Residents with health insurance** are significantly **more** likely to have had an **eye exam** within the **past 2 years** than those without health insurance.

Blindness America are intended to be guidelines only. Persons with a family history of eye problems or risk factors should consult their physician for guidance.

Many cases of vision impairment and blindness result from allowing common eye problems to go undetected at treatable stages or by not adequately protecting eyes in hazardous situations. Diabetes, high blood pressure, and other chronic diseases, which also increase in prevalence as age increases, can adversely affect vision and eye health. Vision impairments are estimated to cost the U.S. economy approximately \$51.4 billion annually.

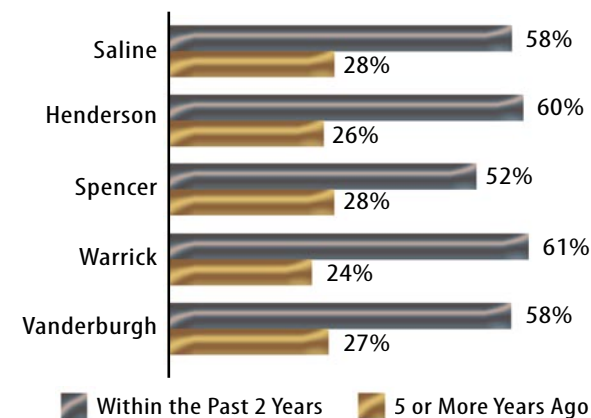
African-Americans are more frequently affected by blindness than Caucasians or Hispanics. Hispanics, however, have higher rates of other types of vision impairment than other races.

In this study, 57% of the respondents report having had an eye exam in the past 2 years; more than a fourth have not had an eye exam in over 5 years. ■

## Significant local findings include:

- Over three-fourths of residents age 65 and over report having an eye exam in the past 2 years, while less than half of those ages 18-44 have had a recent exam
- For residents in these five counties, having at least some college education significantly increases the likelihood of having had an eye exam within the past 12 months
- Residents who have been diagnosed with diabetes are more likely to have had a recent eye exam
- Those residents with health insurance are significantly more likely to have had an eye exam within the past 2 years (60%) than those without health insurance (39%)

## Eye Exams



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