SOUTHERN SEVEN HEALTH DEPARTMENT

Community Needs Assessment & Improvement Plan 2020-2025

May 24, 2021
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Executive Summary

Southern Seven Health Department is pleased to announce the completion of the recertification application for the Illinois Project for Local Assessment of Needs (IPLAN). This five year plan, 2020 through 2025, includes the remittance of the Community Health Needs Assessment and Community Health Plan. This includes submitting supporting documents to the Illinois Department of Public Health for review and approval.

A signed letter of approval from the Board of Health is required that acknowledges an Organizational Capacity Self-Assessment or Organizational Strategic Plan was conducted, reviewed, and the Community Health Plan adopted. Southern Seven developed an organizational strategic plan in lieu of the organizational capacity self-assessment.

Southern Seven Health Department has a history of community planning, partnering, and collaborating with all seven counties. In 2009, when our 2010 IPLAN process was completed a commitment was made to meet quarterly with partners from the region over the next five years. This objective continues to remain in place and continues to be met each and every quarter. Through the Healthy Southern 7 Region Coalition (HS7RC) we have addressed many areas of health as a region while remaining attentive to the diverse population within the seven counties.
Southern Seven Health Department and a subcommittee of the Healthy Southern Seven Region formed a coalition to complete the 2020-2025 IPLAN. This project consisted of a community needs assessment and a community health plan that resulted in prioritizing the region’s top three health problems and the creation of an action plan designed to reduce risk factors associated with those conditions:

1. **Chronic Disease: Cardiovascular Disease, Diabetes, And Obesity**
   a. Promote healthier nutrition
   b. Increase physical activity
   c. Reduce blood cholesterol levels
   d. Reduce hypertension
   e. Reduce the use of tobacco products
   f. Promote access to care

2. **Cancer**
   a. Reduce use of tobacco products
   b. Promote healthier nutrition
   c. Increase physical activity
   d. Advocate for policies to influence environmental changes
   e. Promote access to care

3. **Behavioral Health**
   a. Reduce stigma and discrimination
   b. Increase screenings
   c. Improve referral process
   d. Promote access to care
In summary, Southern Seven has placed goals for the next five years in the following areas: promote increased physical activity; promote increased nutrition education; promote the continued efforts in the reduction of secondhand smoke exposure and the Illinois Quitline with healthcare providers for cessation; and finally promote early detection, screenings, and disease prevention efforts. As we continue to improve in these areas over the next five years, we hope to realize a decrease in overall cardiovascular disease, Cancer, Type II Diabetes and Obesity.

For more information regarding the 2020-2025 IPLAN, please contact Health Education Director, Natalie L. Sawyer at 618-634-2297 ext. 9136 or visit http://www.southern7.org
Community Health Needs Assessment

1. Purpose Statement

This needs assessment set out to identify the prevailing health conditions affecting the residents of the seven southernmost counties of Illinois. It is designed to identify strengths and resources available in each community. This specific assessment process consisted of a community survey, analysis of individual and county-level health data, and community stakeholder participation. Stakeholders utilized the data obtained from the assessment process to prioritize the top health conditions in our counties. This led to the development of an action plan with interventions aimed at improving individual and community health outcomes.

2. Community Participation

Southern Seven Health Department started this process with the full intent of holding focus groups in all of our seven counties. We wanted to make sure the community’s voices were heard for each specific county so we could compare their ideas and experiences to the collected data.
Each focus group included 5-9 participants and lasted approximately one hour in length. We had our first focus group in Pulaski County on February 6, 2020, which included 7 participants. The focus group participants included school administrators, school educators, ambulance service staff, and others all from Pulaski County. Our second focus group was held on February 19, 2020 in Alexander County. It included 9 participants and represented some of the same target groups. Our third and final focus group was held on February 20, 2020 in Union County and included 5 participants which also consisted of school educators, health care professionals, and farm workers. We were not able to continue or complete the focus groups for the remaining four counties because the COVID-19 pandemic began in March 2020. The results from the three focus groups are listed below.

<table>
<thead>
<tr>
<th>Pulaski County (7 Participants)</th>
<th>Alexander County (9 Participants)</th>
<th>Union County (5 Participants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Lack of Educational Resources</td>
<td>5. Heart Disease</td>
<td>5. Lack of Resources</td>
</tr>
</tbody>
</table>

Figure 1: S7 Focus Group Results; Top 5 Health Concerns
In addition to the focus groups, we also distributed a community survey amongst residents of the seven counties to determine their perception of the most serious health problems facing their community. The committee decided to use a survey template from the 2015 IPLAN (Appendix C). We decided to transform this survey into an online survey by utilizing Survey Monkey. We received a total 426 responses from a range of individuals in an effort to capture data from residents of different races, socioeconomic groups, gender, education levels, and ages. We published the online survey on social media and emailed the link to our partner agencies and coalitions. **Please review the results of the 426 responses below.** Additional results from the community survey can be found in Appendix J.

**Figure 2; Source: Survey Results, 2020**
Southern Seven Health Department (S7HD) also heavily relied on the assistance of the Healthy Southern 7 Region Coalition (HS7RC) for community participation to help assess the seven-county region health status and establish the top three health priorities. In fact, the HS7RC has met quarterly over the last ten years to address public health needs throughout the region. This diverse set of stakeholders provided valuable insight into regional dynamics affecting the community’s health. Under the direction of S7HD, members of the HS7RC formed a subcommittee that agreed to participate in a needs assessment and community health planning process.

The HS7RC could not meet in-person due to COVID-19 restrictions so we had virtual meetings as a substitute. Of course, the pandemic greatly impacted health departments in general. It changed the overall process for this specific IPLAN which makes it more distinctive.

Staff from S7HD and the HS7RC subcommittee held several virtual zoom meetings during the winter of 2021 to analyze data, set priorities, and discuss strategies to improve the region’s current health status. Appendix A lists the HS7RC and S7HD subcommittee members and their affiliations.
Method

Southern Seven Health Department formed an internal team to develop a method for completing the community health needs assessment for the 2020-2025 IPLAN. As a guide, the team utilized the IPLAN’s modified version of the APEXPH Part II. In September 2020, the Health Education Director collaborated with this team to set the timeline for completion of the needs assessment process. On January 20, 2021, the S7HD team met with the subcommittee of the HS7RC. At that meeting, the group reviewed a variety of information on the seven southernmost counties of Illinois: demographics, socioeconomic status (educational attainment, employment status, median household income, family and social support, and community safety), disease incidence, mortality and morbidity rates, as well as county health rankings. This review and analysis utilized secondary data from a variety of sources. These included the United States Census Bureau, National Center for Health Statistics, Illinois Center for Health Statistics, a division of the Illinois Department of Public Health; Illinois Department of Employment Security, the Illinois Behavioral Risk Factor Surveillance System (ICBRFS), and the IPLAN data system.

Analysis of the secondary data and the community survey contributed to the coalition’s estimation of the health status of the seven counties. Coalition members compiled data in accordance with IPLAN categories: demographic and socioeconomic characteristics, general health and access to care, maternal and child health, chronic disease, infectious disease, environmental/occupational/injury control. The final analysis of this data contributed to the prioritization of the three top health priorities.
Health Status Of Southern Seven’s Counties And Service Area

Demographic And Socioeconomic Characteristics

Southern Seven Health Department covers a seven county region which includes Alexander, Hardin, Johnson, Massac, Pope, Pulaski, and Union Counties.

- This 1,975 square mile area has a population of 61,936.
- This reflects an 8% decline in population since the 2015 report which showed a population of 67,363. The decline is apparent across all seven counties with Alexander County reporting the biggest decline at 25%.

Figure 3: Source: U.S. Census Bureau Quick Facts, 2019
Analysis of the data shows that Hardin, Massac, and Pulaski matched the overall 9% population loss, while Johnson, Pope, and Union lost less than 5%. As a result, the racial demographics within the seven counties has also changed.

At the time of the 2015 IPLAN report, 84.5% of the population was Caucasian. The Caucasian demographic has increased to 85.1% while the Black/African American demographic saw a minor decline by 1.2% and now is 11.8% of the reported population. Interestingly, those who reported as being two or more races increased significantly to 1.95%. The Hispanic/Latino demographic suffered the sharpest decline from 2.5% down to .6%. This overall decline is a direct reflection of the economic depression and lack of commerce that is pervasive throughout Southern Seven’s service area. The limited socioeconomic opportunities are reflected in the counties’ poverty rates.

The poverty rate for the combined counties largely remains unchanged at 19%.

**POPULATION**

of Southern 7 Area

Figure 4; Source: U.S. Census Bureau Quick Facts, 2019
Percentage Of Persons In Poverty

Figure 5; Source: U.S. Census Bureau Quick Facts, 2019

- While it is down 1% from 2015, it is still nearly double the national and state rates at 10.5% and 11.5% respectively.

- Median household income is $43,685 which again is well below the state average of $65,100 and the national average of $68,703.
Percentage Of Population Recieving Snap Benefits
2016

Figure 6; Source: U.S. Census Bureau Quick Facts, 2019

Prepared by Southern Seven Health Department based on latest data in 2016 from WK Kellogg Foundation 1/25/21
Of Illinois’ 102 counties, ranked 1-102 by per capita income, all of Southern Seven’s counties fall to the lowest 15 with Alexander being ranked 102. Massac County has the highest per capita at $20,216 but was still ranked 86th. Further analysis of the unemployment rates also shows the disparities present for Southern Seven counties. In Illinois, the average unemployment rate for 2019 was 4%, however, the average for the seven counties served by Southern Seven is 6.4%. Hardin and Pulaski Counties reported the highest unemployment rate of 6.6% while Massac and Pope Counties tied for the lowest unemployment rate with 5.6%

High unemployment rates, are, in part, due to the limited and competitive job market in the region.
Illinois Unemployment Rate by County
November 2020 – Not Seasonally Adjusted

IL Dept. of Employment Security, Economic Information & Analysis Division

Unemployment Rates

<table>
<thead>
<tr>
<th>Seasonally Adjusted</th>
<th>Not Seasonally Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>6.7%</td>
</tr>
<tr>
<td>Illinois</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

Unemployment Rate

- ≤ 3.9%
- 4.0% - 4.9%
- 5.0% - 5.9%
- ≥ 6.0%

Figure 8: Source: IDES, 2020
Nationally, 87.7% of people age 25 and older have a high school diploma or higher. In Illinois, that percentage raises to 88.9%.

- The average for the same populous in Southern Seven’s service area falls to 84.25% with only Union County meeting the national average of 87.7%. All other counties fall below both the national and state levels.

- It is further estimated that nationally 31.5% of all adults age 25 or older hold at least a Bachelor’s degree. For Illinois, the average rises 2.5 points to 34.1%. However, cumulatively, the average for the seven counties of the region is only 9.8%.

- Union County has the highest percentage of people with a Bachelor’s degree at 14.5% while Pulaski County has the lowest with 7.5%. There is no county in the region that meets the national let alone the state average. Those people who do have a bachelor’s degree often leave the region to find employment more suitable to their qualifications.
The health status of the counties served by Southern Seven is directly impacted by the economic distress, rural disposition, and lack of educational attainment pervasive to Southern Illinois in general. Residents of the seven counties often find it difficult to engage in a healthy lifestyle due to limited finances or the ability to travel where opportunities are available. This directly influences their choices regarding nutrition, physical activity, and medical treatment and services.
General Health And Access To Care

Despite the limited access and opportunities to health enhancing behaviors, the residents of Southern Seven’s region continue to assert confidence regarding their health status.

- According to the data collected for the Illinois County Behavioral Risk Factor Survey (ICBRFS) Round 6 (see Appendix R), 77.3% reported that they believed their general health was “good” to “excellent” while 22.7% state that it was “fair/poor”.

- Nonetheless, when looking at the number of days physical health was “not good” only 54% of respondents stated “none”. These numbers remain largely unchanged with only minor variances from the Round 5 data that was collected.

- Further analysis of the collected data shows an even bigger decline in the County Health Rankings. During Round 5, it was reported that the counties served by Southern Seven fell into the lowest third for the 102 counties in Illinois.

- Currently, in Round 6, six of the seven counties fall into the lowest 25% for health outcomes. Hardin County is ranked lowest at 102, Pulaski at 100, Alexander 99, Massac 96, Pope 78, Union at 76, and only Johnson has a higher ranking at 39. However, for health factors, all seven counties fell into the lowest 20% of the 102 counties. Pope County had the highest ranking at 80 while Alexander had the lowest at 102.
Data from the ICBRFS shows that most of the population in the Southern Seven region do exhibit many risk factors such as high cholesterol, high blood pressure, low physical activity, and attribute the days their physical health is not good to a chronic disease. 42.3% of respondents stated they had been told their cholesterol was high. 38.3% responded with yes when asked about having high blood pressure. Unfortunately, smoking which is linked to many chronic health conditions has increased from 25.8% to 28.1%. During Round 5, smoking had decreased nearly 5% but seems to have increased since that time. Nearly 59% of respondents stated they had at least one chronic health condition (heart disease, asthma, cancer, COPD, depression, and diabetes) while 33.1% of those respondents stated they also had 2 or more chronic conditions.

Access to care is a continuing issue and may be exacerbating the health status of the counties’ residents.

- According to County Health Rankings, Illinois has a physician patient ratio of 1250:1. Please reference Appendix E, F and G. Only Hardin County has a lower average with a ratio of 1010:1. The other six counties in the region all have much higher ratios or there is not enough data available to determine the ratio.

<table>
<thead>
<tr>
<th></th>
<th>Alexander</th>
<th>Hardin</th>
<th>Johnson</th>
<th>Massac</th>
<th>Pope</th>
<th>Pulaski</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Outcomes</td>
<td>99</td>
<td>102</td>
<td>39</td>
<td>96</td>
<td>78</td>
<td>100</td>
<td>76</td>
</tr>
<tr>
<td>Health Factors</td>
<td>102</td>
<td>98</td>
<td>83</td>
<td>92</td>
<td>80</td>
<td>99</td>
<td>88</td>
</tr>
</tbody>
</table>

Figure 10; Source: County Health Rankings
Health Outcome Summary Score

To calculate the summary score for Health Outcomes, we combined scores for Length of life (50%) and Quality of life (50%). The weights for specific measures were assigned based on relative importance within the factor and considerations of data reliability and availability. Within quality of life, we assign a higher weight to the low birthweight measure since this measure is based on a census of all live births whereas the other measures are based on a survey of a sample of the population.

Health Factors Summary Score

To calculate the summary score of health factors, the following weights were used: Health behaviors (30%), Clinical care (20%), Social and economic factors (40%), and the Physical environment (10%). Like the Health Outcomes summary score, weights at each level sum to 100%. The weights for specific measures were assigned based on relative importance within the factor and considerations of data reliability and availability.

Ranking

After we compute composite scores we sort them from lowest to highest within each state. The lowest score (best health) gets a rank of #1 for that state and the highest score (worst health) gets whatever rank corresponds to the number of units we rank in that state.

It is important to note that we do not suggest that the rankings themselves represent statistically significant differences from county to county. That is, the top ranked county in a state (#1) is not necessarily significantly healthier than the second ranked county (#2).
• For instance, Johnson County has the highest ratio of 12,900 to 1, Alexander 6,320:1, Massac 4780:1 and Union with 1,420:1. Both Pope and Pulaski counties do not have data available. There has been little change to the number of providers since the 2015 report. There continues to be three hospitals which serve the 7 county area.

• There are three hospitals (25 critical access beds each) in the region: Hardin County General Hospital in Hardin County, Massac Memorial Hospital in Massac County, and Union County Hospital in Union County.

• There are two Federally Qualified Health Care (FQHC) centers, with a total of 12 Clinic Locations: Rural Health Inc. (RHI) with Clinics in Johnson, Massac, and Union Counties; and Community Health and Emergency Services, Inc. (CHESI) with clinics in Alexander, Hardin, Pope, and Pulaski Counties.

• There are two Health Center’s with a total of four Clinic Locations: Massac Memorial has three Clinics in Massac County; and Southern Illinois Healthcare (SIH) has one Clinic in Union County and it’s podiatry only.

• There are no delivering hospitals within the seven counties, and though the FQHC’s and HC’s all provide Family Medicine, there is only one practicing Obstetrics and Gynecology (OB/GYN) Provider. Megan Walker, DNP, CNM, provides OB/GYN services at RHI Anna Medical Clinic in Union County. Please reference Appendix K for additional details.

• Further, the ICBRFS Round 6 shows that many residents, as much as 14%, are unable to visit a doctor due to cost. 7.1% of residents do not have adequate health care coverage and 14.1% of the population surveyed stated they could not fill their prescriptions due to cost while nearly 14% also do not have a personal doctor.
## Leading Causes Of Death Southern Seven Health Department Coverage Area

<table>
<thead>
<tr>
<th>CAUSE</th>
<th>ALEXANDER</th>
<th>HARDIN</th>
<th>JOHNSON</th>
<th>MASSAC</th>
<th>POPE</th>
<th>PULASKI</th>
<th>UNION</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of heart (heart disease)</td>
<td>20</td>
<td>12</td>
<td>27</td>
<td>22</td>
<td>12</td>
<td>22</td>
<td>66</td>
<td>25,655</td>
</tr>
<tr>
<td>Malignant neoplasms (cancer)</td>
<td>26 (1)</td>
<td>12</td>
<td>31</td>
<td>41</td>
<td>13</td>
<td>24</td>
<td>40</td>
<td>23,875</td>
</tr>
<tr>
<td>Cerebrovascular Diseases (Stroke)</td>
<td>6 (3)</td>
<td>3</td>
<td>3</td>
<td>8</td>
<td>1</td>
<td>6</td>
<td>13</td>
<td>6144</td>
</tr>
<tr>
<td>Accidents (Unintentional Injuries)</td>
<td>6 (3)</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>9</td>
<td>10</td>
<td>6086</td>
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<tr>
<td>Chronic lower respiratory diseases</td>
<td>6 (3)</td>
<td>13</td>
<td>16</td>
<td>20</td>
<td>2</td>
<td>1</td>
<td>14</td>
<td>5532</td>
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<tr>
<td>Alzheimer disease</td>
<td>2 (5)</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>14</td>
<td>3949</td>
</tr>
<tr>
<td>Diabetes mellitus (diabetes)</td>
<td>1 (6)</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>2822</td>
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<td>Nephritis, nephrotic syndrome and nephrosis (kidney disease)</td>
<td>5 (4)</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>2106</td>
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<tr>
<td>Influenza and pneumonia</td>
<td>5 (4)</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>12</td>
<td>2106</td>
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<tr>
<td>Septicemia</td>
<td>5 (4)</td>
<td>1</td>
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<td>7</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>1746</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
<td>58</td>
<td>129</td>
<td>192</td>
<td>47</td>
<td>90</td>
<td>244</td>
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Figure 11; Source: IDPH, 2019
Death Demographics By Resident In Southern Seven Counties, 2019

<table>
<thead>
<tr>
<th>Resident County</th>
<th>Total Deaths</th>
<th>Male</th>
<th>Female</th>
<th>Non-Hispanic White</th>
<th>Non-Hispanic Black</th>
<th>Non-Hispanic Other</th>
<th>Hispanic</th>
<th>Infants</th>
<th>Ages 1-17</th>
<th>Ages 18-24</th>
<th>Ages 25-44</th>
<th>Ages 45-64</th>
<th>Ages 65-84</th>
<th>Ages 85+</th>
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<tbody>
<tr>
<td>ILLINOIS</td>
<td>108,937</td>
<td>50.8</td>
<td>49.2</td>
<td>75.8</td>
<td>16.4</td>
<td>2.3</td>
<td>5.6</td>
<td>0.7</td>
<td>0.5</td>
<td>0.8</td>
<td>4.8</td>
<td>18.3</td>
<td>41.8</td>
<td>32.2</td>
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<tr>
<td>Alexander</td>
<td>111</td>
<td>56.8</td>
<td>43.2</td>
<td>71.2</td>
<td>28.8</td>
<td>0</td>
<td>0</td>
<td>1.8</td>
<td>1.8</td>
<td>0</td>
<td>3.6</td>
<td>14.4</td>
<td>54.1</td>
<td>24.3</td>
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<tr>
<td>Hardin</td>
<td>58</td>
<td>63.8</td>
<td>36.2</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3.5</td>
<td>0</td>
<td>3.5</td>
<td>20.7</td>
<td>41.4</td>
<td>31</td>
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<tr>
<td>Johnson</td>
<td>129</td>
<td>59.7</td>
<td>40.3</td>
<td>98.5</td>
<td>1.6</td>
<td>0</td>
<td>0</td>
<td>0.8</td>
<td>0</td>
<td>0</td>
<td>1.6</td>
<td>17.1</td>
<td>53.5</td>
<td>27.1</td>
</tr>
<tr>
<td>Massac</td>
<td>192</td>
<td>52.6</td>
<td>47.4</td>
<td>91.7</td>
<td>7.8</td>
<td>0.5</td>
<td>0</td>
<td>1.6</td>
<td>0.5</td>
<td>0</td>
<td>3.1</td>
<td>15.1</td>
<td>51</td>
<td>28.7</td>
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<tr>
<td>Pope</td>
<td>47</td>
<td>59.6</td>
<td>40.4</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2.1</td>
<td>0</td>
<td>0</td>
<td>21.3</td>
<td>48.9</td>
<td>27.7</td>
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<tr>
<td>Pulaski</td>
<td>90</td>
<td>52.2</td>
<td>47.8</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3.3</td>
<td>0</td>
<td>21.1</td>
<td>47.8</td>
<td>26.7</td>
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<tr>
<td>Union</td>
<td>244</td>
<td>52.9</td>
<td>47.1</td>
<td>98</td>
<td>1.2</td>
<td>0</td>
<td>0.8</td>
<td>0.4</td>
<td>1.2</td>
<td>3.7</td>
<td>18.4</td>
<td>45.5</td>
<td>30.7</td>
<td></td>
</tr>
</tbody>
</table>

Figure 12; Source: IDPH, 2019

Total Deaths represent total number of deaths; gender, race, and age groups are listed in percentages.
Prevalence Of Obesity Among Adults
By County, Illinois, 2010 - 2014

Percent of Adult Obesity

- <24.9
- 24.9 - 30.6
- 30.7 - 35.3
- >35.3
- No data available

Obesity prevalence is measured by Body Mass Index (BMI). BMI is calculated based on self-reported height and weight.

Source: Illinois County Behavioral Risk Factor Surveys, 2010 - 2014
Retrieved by IDPH Office of Health Promotion 4/14/2016

Figure 13: Source: IDPH, 2010-2014
Figure 14; Source: IDPH, 2019

Figure 15; Source: County Health Rankings, 2020
Figure 16: Source: County Health Rankings, 2020
Chronic disease, such as cancer, diabetes, and coronary heart disease continue to be the principal cause of loss of life for the Southern Seven Region (see Figure 11). During the last reporting period, Round 5, cancer was responsible for 23.3% of all deaths and now, the number has dropped by nearly two percentage points to 21.4.

- When looking at the values numerically, Illinois’ overall rate of death from cancer is 23,875 with all deaths being 108,937. This brings the percentage to 21.9% for the state. While the numbers for the Southern Seven jurisdiction are just shy of the state average according IDPH vital statistics, it remains the leading cause of death for the seven counties. In fact, of the top 20 counties with the highest lung cancer related deaths 55% of those are in the Southern Region of which Southern 7 resides.

The average death rate for lung cancer in the Southern Seven service area is 63.2 with 63 deaths annually. Pulaski County, based on the latest data available from the CDC, has the highest death rate in the state with 85.4 per 100,000. That is 121.8% above the national average. Hardin County is ranked 2nd with 82, Alexander 12th, Union 17th, Johnson 19th, Massac 29th, and only one of Southern Seven counties, Pope, falls into the lower 25th percentile ranking 85. Trend data does suggest that the numbers are stable. While Pulaski has the highest death rate, another Southern 7 county, Hardin, has the highest lung cancer incidence rate. Hardin County has 133.6 incidences per 100,000. Again, the percentage, 129.2%, is well above the national average. Pulaski County is ranked 2 and
reported to have 112.1 per 100,000 with 92.3%. Johnson County was ranked 12th, Massac 13th, Alexander 15th, Union 24th, and again Pope County 57th with an incidence rate of 72.1 per 100,000 or 23.7% which is lower than the national average of 58.3. According to the latest data available these incidence rates remain stable except for Alexander County which is falling.

Along with lung cancer, colorectal cancer continues to be a major cause of concern for those in the Southern Seven district. Regarding colorectal cancer, 35% of the top 20 Illinois counties for colorectal cancer are within the Southern Region. The average rate of death is 15.8 with less than 23 deaths per year while the average incidence rate for Southern 7 counties is 49.9 with less than 44 cases annually. Massac County has the highest mortality rate for colorectal cancer at 17.2, which is 25.5% higher than the national average while Alexander County has the highest incident rate at 54.6. Again, this rate is 42.2% higher than the national average. Recent trend data does suggest that the death rate is falling and incidence rates are remaining stable.

Very little can be determined regarding the deaths from breast cancer due to the suppression of data as a result of HIPAA. Southern 7 has less than 21 deaths annually from breast cancer however, 25% of the top 20 counties with the highest breast cancer death rates are in the Southern region. Further analysis shows that the average incidence rate for the Southern Seven Region is 121.5 per 100,000 with 56 new cases annually. Union County has the highest incidence rate of 151.3 and that is 20.3% higher than the national average. Further, trend data indicates that the rates are stable except for Union County which incidences have risen by 4.4% since the Round 5 reporting period.

- During the last reporting period, heart disease accounted for 22.7% of deaths in the Southern Seven jurisdiction.
For Illinois, the mortality rate for this reporting period is 23.6%. Death from heart disease continues to decline in the Southern Seven Counties. It has dropped two percentage points and is now 20.7%. Three of the seven counties exceeded the state average. However, Pope, Pulaski, and Union all had incidence rates ranging from 24.4 to 27%. Additionally, it is important to note that 74% of the population surveyed during Round 6 of the ICBRFS are reported as being overweight or obese. 38.3% of respondents also stated that they had been told they have high blood pressure and 42.3% stated they had been told they had high cholesterol. This however, is a drop in the rate from the 2015 reporting period where 46.6% had reported such. The increased access to care and possible increase in screenings may be directly impacting the reduction in the mortality rate due to heart disease.

- Diabetes continues to be a serious health issue for the residents in the
Southern Seven service area. Diabetes has decreased slightly from the 4th to the 5th round to 11.7%. Unfortunately, it has risen during this reporting period to an average of 13.8%. Please reference Figure 18 for additional details.

- Hardin County has an incidence rate of 5% while Alexander and Johnson both have an 8% rate. It is reported that both Pope and Union have matched the state average of 10% and Pulaski’s is double the state average. Massac County has the highest incidence rate for the Southern Seven region with 26%. ICBRFS data show that 67% of respondents have had a high blood sugar/diabetes test and 9.4% have been told by a health professional that they were pre-diabetic or borderline diabetic. Increased screening and more access to care may also be responsible for the increased rates of diabetes.
As mentioned above, overweight and obesity rates are a critical concern in the Southern Seven region. During Round 5, the prevalence rate was 71%. The average is now 74%. This is double the state average of 31.6%. Being overweight and/or obese increases the risk of several chronic health conditions and may be an underlying catalyst for the chronic diseases that are most prevalent within the agency’s service area. According to the ICBRFS data nearly half of all respondents, 45.8% responded by stating that they had not had any physical activity within the last 30 days and 65.1% of respondents stated that their physical activity did not meet physical activity guidelines. Lack of appropriate physical activity may be, at least in part, responsible for the continuing rise in the prevalence rates of overweight and obese populations.
Excluding the COVID-19 pandemic, sexually transmitted diseases and/or infections are the most closely monitored diseases within the Southern Seven region. The three most common STD’s in the state and the S7 region are Gonorrhea, Chlamydia, and Syphilis. Per 2015-2019 IDPH data, the State of Illinois reports over 634.1 per 100,000 confirmed cases of Chlamydia. In comparison, Alexander reported 558.4 per 100,000 confirmed cases in 2019. Pulaski is the second highest in the Southern Seven region with 405.8 per 100,000. Massac County reported 265.7, Union 252.7, Johnson at 222.5, Hardin 115.7, and Pope County had the lowest reported cases of Chlamydia with 89.5 per 100,000 people. These numbers are comparable to more urban areas of the state and in some cases significantly higher.

Like Chlamydia, the Gonorrhea rates are also similar or significantly higher than other urban areas in the state. For example, Cook County reported 350.0 cases of Gonorrhea per 100,000 people. The total for Illinois is markedly lower at 228.1 cases. However, Alexander County’s rate was 509.8 per 100,000 which is much higher than urban areas and the State’s totals. Hardin County reported only 23.1 per 100,000 people. Only two of Southern 7’s counties had a two digit total; the other one, Union, had a rate of 95.5 per 100,000.

Very few cases of Syphilis are present in the state with reported rates of 21.2 per 100,000 people. Only two counties in the S7 area had cases of Syphilis. Alexander had a reported 24.3 per 100,000 which again is higher than the state and urban averages. Union County, the only other county to report Syphilis cases had a rate of 11.2.
Figure 19: Alexander County

Figure 20: Hardin County
Figure 21: Johnson County

Figure 22: Massac County
Figure 23: Pope County

Figure 24: Pulaski County
Figure 25: Union County

Figure 26: Illinois
Maternal And Child Health

As in the previous round, there continues to be no hospitals in the region that have an OB/GYN delivery ward. Access to OB/GYN care continues to remain steady with OB/GYN services at both the FQHCs and at the Comprehensive Health Center in Metropolis.

![Bar chart showing total number of live births in S7 counties from 2016 to 2018](image)

Figure 27; Source: County Health Rankings, 2016-2020

- Overall, the low birth rate continues to decline, although according to data gathered from 2017 and 2018, Pulaski County saw a spike in the number of low birth weight infants. Nearly 15% of all babies born to Pulaski County parents were registered as low birth weight in 2019.
Figure 28; Source: IDPH, 2018

Figure 29; Source: IDPH, 2018
Teen birth rates also continue to decline. However, Hardin, Alexander, Massac and Pope Counties saw significant spikes in the teen birth rates in 2016 while the remaining counties all reported teen birth rates in the single digits. Hardin saw the biggest spike with 22.9% of the babies being born to teens. Alexander reported 17.7% of the birth rate was to teens. The two remaining counties, Massac and Pope had teen birth rates at 11.0% and 14.8% respectively. Over the region, however, the number of teen births continued to decline from 54 in 2016 to 36 in 2019.

Figure 30; Source: IDPH, 2018
PRIORITY NO. 1

Chronic Disease: Cardiovascular Disease, Diabetes, And Obesity

Cardiovascular Disease:

- The community health committee identified chronic disease as the first priority with specific emphasis on cardiovascular disease, diabetes, and obesity.

- Per the CDC, chronic diseases are defined broadly as conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both. Chronic diseases such as heart disease, cancer, and diabetes are the leading causes of death and disability in the United States.

- Per the National Center for Complementary and Integrative Health, Cardiovascular diseases (diseases of the heart or blood vessels) are the number one cause of death in the United States. The most common type of cardiovascular disease is coronary artery disease, in which the blood vessels that supply blood to the heart become narrowed or blocked. Please see Figure 17 for more details on the coronary artery disease in our region.
• The three risk factors for heart disease did not change from the 2010 IPLAN: hypertension, tobacco-use, and high blood cholesterol levels.

• Per 2015-2019 ICBRFS data, 58.9% of respondents reported that they have one or more chronic health conditions. Chronic health conditions were calculated from heart disease (heart attack/stoke/angina), current asthma, cancer, COPD, arthritis, depression and diabetes questions.

• In 2019, heart disease was the leading cause of death in Illinois—accounting for 23.5% of the total deaths. Please reference Figure 11 for the leading causes of death for each county. Heart disease also leads to increased morbidity and can lead to years of potential life lost (YPLL).

• Analysis of ICBRFS data revealed mixed results concerning the improvement of heart disease risk factors. 2015-2019 ICBRFS data illustrates that 38.3% of respondents were told that they had high blood pressure. That is an increase from 2010-2014 Round Five ICBRFS data that had 34.4% of respondents being told they had high blood pressure.

**Diabetes:**

• Per the CDC and crude estimates for 2018, it is estimated that 10.5% of the United States population (diagnosed and undiagnosed) had diabetes. This accounts for all ages.

• Per 2015-2019 BFRS data for the southern seven counties, 67% of respondents reported that had a high blood sugar/diabetes test in the past three years.

• Type II Diabetes accounts for 90% to 95% of diagnosed diabetes in adults.

• Diabetes can result in various complications including: retinopathy, the leading cause of blindness and visual disability; nephropathy, the leading
cause of dialysis and kidney transplant; neuropathy, the most common diabetic complication which can lead to sensory loss, damage to or loss of limbs, and impotence in men; and cardiovascular disease, leading to a heart attack, stroke, extremity pain, or diminished ability to heal. Individuals with prediabetes are at an increased risk for developing Type II Diabetes and other serious health complications including heart attack and stroke. Without lifestyle intervention, 15% to 30% of people will develop diabetes within five years.

**Obesity:**

- The prevalence of overweight and obesity in both children and adults continues to be a public health concern. A person whose weight is higher than what is considered as a normal weight adjusted for height is described as being overweight or having obesity.

- In the United States, about 42% of American adults had obesity in 2017-2018, National Health and Nutrition Examination Survey (NHANES) data showed. Another 30.7% of American adults were overweight, with a BMI of 25 to 29.9. This means that close to 73% of U.S. adults are either overweight or obese.

- The overweight and obesity rate of the southern seven counties has continued to rise and remains higher than the Illinois average; Southern 7 holds at 71% and 62% for Illinois. Per 2019 data, 31.9% of Illinois adults were obese while obesity rates for the southern seven counties are much higher at an average of 35.8%.

- An overabundance of chronic health conditions and diseases are associated with obesity including cancer, diabetes, heart disease, stroke, hypertension, high cholesterol, respiratory disease, fatty liver disease, kidney disease, sleep apnea, osteoarthritis, and reproductive problems.
• Obesity in children results in similar health concerns as adults. In addition, social stigma associated with youth obesity can lead to serious psychological and emotional burdens resulting in increased levels of sadness, loneliness, nervousness, smoking, and alcohol consumption.

**Outcome Objectives:**

**By 2025:**

• Reduce mortality rate attributed to cardiovascular disease to no more than 263 per 100,000 population Baseline: 266.3 per 100,000 population per 2016-2018 CDC S7 County Data

• Reduce the annual number of new cases of diagnosed diabetes in the population to 11% (Healthy People 2030 D-01) Baseline: 12.4% per 2020 County Health Rankings Data

• Reduce the percentage of children and adolescents with obesity (Healthy People 2030 NWS-04) to 15.5% Healthy People 2030 Baseline: 17.8 percent of children and adolescents aged 2 to 19 years had obesity in 2013-16

• Reduce the proportion of adults who are obese to 36% 2015-2019 ICBRFS Baseline: 42.3%

**Impact Objectives:**

**By 2023:**

• Decrease the percentage of individuals reporting they had “ever been told cholesterol high” to 40.3% 2015-2019 ICBRFS Baseline: 42.3%

• Reduce the percentage of individuals reporting “have been told they have high blood pressure” to 36.5%
2015-2019 ICBRFS Baseline: 38.3%

- Health department staff will work with those persons newly diagnosed with diabetes and raise formal diabetes education to 53% HP Baseline: 51.7%

- Increase the proportion of Southern Seven residents who report having exercised within the last 30 days to 56%
  2015-2019 ICBRFS Baseline: 54.2%

- Reduce the proportion of adults with hypertension to 35% 2015-2019 ICBRFS Baseline: 38.3%

- Reduce the proportion of Southern Seven residents that smoke to 25% 2015-2019 ICBRFS Baseline: 28.1%

**Proven Intervention Strategies:**

- Behavioral interventions to reduce screen time

- Use of electronic or mobile technology to support coaching or counseling for weight loss or maintenance

- Develop worksite programs for weight loss

- Promote physical activity & nutrition in community group settings

- Enhanced school based physical education

- Increase & maintain CATCH components in schools

- Increase support for and number of safe walking paths

- Point of decision prompts to encourage stair use

- Design health and communication and social marketing campaigns that use a variety of channels, including mass media.
Resources And Proposed Community Organizations To Coordinate Activities:

- Hospitals
- U of I Extension
- Southern Seven Health Department and Head Start
- Faith based organizations
- Community Behavioral Health Centers
- FQHCs
- IL Quit Line
- Shawnee Community College

Barriers:

- Funding
- Sensitivity of Issues
- Employers Noninterest
- Local Government Economics
- Resistance of Some Schools
- Lack of Motivation
- Competitive Advertising
- Food Deserts
- Nutrition & Physical Education is Low Priority
- Low Income Areas
- Access to Care
Corrective Actions To Reduce The Level Of The Indirect Contributing Factors:

- Healthy Southern Illinois Delta Network (HSIDN) and the HS7RC partners are dedicated to decreasing the rates of overweight and obesity within the seven southernmost counties of Illinois and are dedicated to meet the challenge of having more healthy and fit communities.

- U of I Extension will provide healthy cooking classes within the counties.

- WIC nurses will continue to encourage mothers to breastfeed for at least one year.

- Anna Rural Health will track all clinical measures (cardiovascular disease, diabetes, obesity) and report them to the Universal Data System.

- Southern Seven will offer free Chronic Disease Self-Management Classes within the community.

- Southern Seven will offer free Diabetes Self-Management Classes within the community.

- Head Start, Public Health, and WIC staff will be afforded the opportunity to participate in continuing education regarding optimal methods for talking to and providing education to clients about weight management for themselves and/or their children.

- WIC nurses will continue to follow nutrition practice standards set forth by the United States Department of Agriculture Food and Nutrition Services.
• WIC nurses will continue to conduct length/height by weight measurements at every certification and mid-certification appointment.

• WIC nurses will continue to provide appropriate weight management counseling and encourage follow-up with their primary care provider when infants and children are found to be at or above the 98th and 85th percentile respectively for their length/height by weight measurements.

• Nutrition education sessions will continue to be provided to WIC participants every three months through individual, group, or online education.

• Public health nurses will continue to monitor height and weight on clients during all billable services.

• Public health nurses will continue discussing weight management with all clients who meet or exceed a BMI of 25.

• Head Start Facilities will continue to comply with nutrition standards put forth by the USDA/Child and Adult Care Food Program (CACFP).

• Head Start Site Supervisors and Parent Coordinators will continue to take BMI measurements and educate parents about weight management when appropriate.

• Head Start Teachers will continue to incorporate nutrition and physical activity in the classroom.

• Head Start will continue to implement a monthly “Nurse Talk” during parent group meetings at some locations.

• Southern Seven’s Health Education Division will continue to raise awareness for women’s heart disease by educating the public on a variety
of health topics, which include proper nutrition and exercise’s role in mitigating the risk factors associated with heart disease and recognition of the early warning symptoms of a heart attack.

- Health Educators will continue to work with the Illinois CATCH onto Health Consortium to promote CATCH at schools, pre-k, and head start sites throughout the seven southernmost counties of Illinois. Health educators promote healthy food choices and recommended amounts of physical activity.

- Promotion of the CATCH program will contribute to changes in students’ attitude, knowledge, skills, and behaviors:
  - Students will know the difference between GO, SLOW, and WHOA foods.
  - Students will identify three negative consequences of tobacco use.
  - Students will identify three positive outcomes of avoiding tobacco use.
  - CATCH will result in an increase in students’ moderate to vigorous physical activity.

- Southern Seven’s administration and staff will collaborate with county and city officials to promote policy, systems, and environmental changes that reduce indirect and direct risk factors related to heart disease.

- Health Educators will continue to promote the Illinois Tobacco Quit line among the dentists in the seven southern counties of Illinois.

- Public Health Nurses will implement a variety of strategies to reduce the level of indirect risk factors:
  - Establish a baseline for client blood pressure to implement a tracking and surveillance system.
  - Increase lipid panel screenings through community outreach activities
• Continue referral and intervention on high blood pressure cases.

• Southern Seven, along with community members, will create and maintain a Diabetes Today Resource Team (DTRT).

• Southern Seven will assist the DTRT with their activities where applicable including developing a 5-year plan, updating, and distributing the Diabetes Resource Guide, promoting professional development, and increasing diabetes screening and referral practices.

• The Southern Seven Health Education Division will continue to work with local schools to encourage policy changes related to nutrition and physical activity for students and staff.

• Public health nurses will continue to encourage lipid panel and glucose screenings.

• Public health nurses will continue to take corrective action and make appropriate referrals when a client’s fasting blood glucose rises above 120 mg/dL.

• Southern Seven will implement a standardized education protocol for persons with diabetes.

• U of I Extension will promote healthy living, including exercise opportunities.

• U of I Extension will provide nutritional information on Disease, Diabetes, and Obesity, it will indirectly effect populations.

• Union County Hospital and Hardin County Hospital are dedicated to decreasing the rates of overweight and obesity within the seven southernmost counties of Illinois and are dedicated to meet the challenge of having more healthy and fit communities.
• Hardin County Hospital will educate communities about the importance of prevention and early detection in communities and promote worksite wellness among the region’s employers.

**Evaluation Plan To Measure Progress Towards Reaching Objectives:**

Health information and ICBRFS statistical data will be monitored and shared with stakeholders through the Executive Director and Division Directors. Community education sessions on the importance of good nutrition, increased physical activity, and implementing a healthy lifestyle will be promoted and monitored.
Figure 32
Health Problem Analysis Worksheet

Health Problem: Obesity

Risk Factor: Lack of Physical Activity
- Direct Contributing Factor: Limited Active Transport
- Indirect Contributing Factor: Lack of Walkable Communities

Risk Factor: Genetics/Environmental
- Direct Contributing Factor: Limited access to healthy food

Risk Factor: Poor Diet
- Direct Contributing Factor: Limited Access to Fresh Food
- Indirect Contributing Factor: Low Income Level
- Learned Patterns of Unhealthy Behaviors

Risk Factor: Sedentary Lifestyle
- Direct Contributing Factor: Poor Health Literacy
- Indirect Contributing Factor: Increased Screen Time

Risk Factor: Social and Cultural Norms
- Direct Contributing Factor: Not Breastfeeding
- Conveniences Foods & Oversized Portions

Figure 33
According to IDPH Causes of Death by Resident County for 2019, the second leading cause of death is cancer.

Cancer is the leading cause of death for four of the seven counties, which are Pope, Pulaski, Johnson, and Alexander.

The top four cancers for the Southern 7 region per both mortality and incidence rates are breast (female), prostate (male), lung and bronchus, and colon/rectum.

The region continues to see both male and female mortality highest for Lung and Bronchus cancers.

For deaths per 100,000, Pulaski ranks 1st at 86.4, Hardin is 2nd at 82.0, Alexander 12th at 60.7, Union 17th at 59.8, Johnson at 19th at 58.6, Massac at 29th at 55.1, and Pope is 85th in the state at 40.7. The United States rate is 38.5 while Illinois is 41.1.

There has been an increase in smoking rates since fifth round (2010-2014) from over 25.8% to 28.1% according to the most recent 2015-2019 ICBRFS data.

35% of Top 20 counties with the highest colorectal cancer death rates are in the Southern Region. Massac County has the highest death rate of 17.2 which is 25.5% higher than the US average rate. Alexander County has the highest incidence rate of 54.6 which is 42.2% higher than the US average rate.
Outcome Objectives:

By 2025:

- Reduce the overall cancer death rate to no more than 195 per 100,000 population (Healthy People 2030 C-01)
  Baseline: 199.6 per 100,000 population per National Cancer Institute State Cancer Profiles

- Reduce the initiation of the use of tobacco products among children and adolescents aged 12-17 years to 3%. (Healthy People 2020 TU-3.1)
  Baseline: 5.0 percent of children and adolescents aged 12 to 17 years who had not previously used tobacco products in their lifetime first used tobacco products in the past 12 months in 2015

Impact Objectives:

By 2023:

- Reduce the female breast cancer rate to 22%. (Healthy People 2030 C-04)
  Baseline: Illinois rate is 23.6% breast cancer deaths per 100,000 females

- Reduce the colorectal cancer death rate to 17%.
  Baseline: Illinois rate is 18.1% colorectal cancer deaths per 100,000 population

- Increase the percentage of cancer survivors who are living 5 years or longer after diagnosis to 66.2%. (Healthy People 2030 C-11)
  HP 2030 Baseline: 64.1 percent of persons with cancer were living 5 years or longer after diagnosis in 2014
Proven Intervention Strategies:

- Increase smoking cessation attempts
- Reduce health disparities
- Increase the proportion of people who discuss interventions to prevent cancer with their providers. HP 2030
- Increase access to early screening / medical care
- Increase persons over age 50 to receive Colorectal Screening
- Promote HPV vaccinations with adolescents
- Increase the proportion of women who received a cervical cancer and breast cancer screening based upon guidelines
- Support Health Provider client reminders for screenings
- Promote the Illinois Quitline by adding Quitline widget on employers websites
- Promote healthy and fit community efforts toward increasing physical activity / nutrition
Resources And Proposed Community Organizations To Coordinate Activities:

- Hospitals
- U of I Extension
- Southern Seven Health Department and Head Start
- Faith based organizations
- Community Behavioral Health Centers
- FQHCs
- IL Quit Line
- Shawnee Community College

Barriers:

- Funding
- Some people feel the “right” to smoke
- Lack of some local States Attorney support for enforcement in some counties
- Employers noninterest in wellness
- Education on preventative cancer screenings
- Access to early detection screening
- Lack of public knowledge or education /importance of screenings
- Low Socioeconomic Status
- Access to Medical Care
Corrective Actions To Reduce The Level Of The Indirect Contributing Factors:

- Offer free Courage to Quit smoking cessation classes to adults within our region.

- Offer “CATCH My Breath” to students in grades 5-12. “CATCH My Breath” is a youth e-cigarette, JUUL, and vape prevention evidence-based program.

- Partners to add the Quitline widget to their web sites for employees as well as patrons who visit their sites.

- Southern Seven Health Education Divisions are working with dentists in our region to encourage use of the Illinois Quitline referral system.

- Union County Hospital and Hardin County Hospital have signed up as a faxed referral sites.

- Anna Rural Health will continue to offer cancer screenings.

- HS7RC partners are all on board with creating better physical environments that support healthy living and outdoor safety for those who bicycle, run, and walk.

- Southern Seven plans to continue their 5K during which started in 2015.

- S7 and partners will educate communities about the importance of prevention and early detection in communities and promote worksite wellness among the region’s employers.

- Head Start sites and nearly all elementary schools within the seven counties have implemented CATCH including Food Service and staff wellness.
• Healthy Southern Illinois Delta Network (HSIDN) and the HS7RC partners continue to improve the number of walking paths marked with “Start Walk” signage.

• Hope Light Foundation will work with Southern Seven Health Department to evaluate cancer death and new case data and related determinants of health* to identify counties with greatest need for help. *Determinants of health: genetics, behavior, environmental and physical influences, medical care, and social factors.

• Hope Light Foundation will work with Southern Seven Health Department to develop and communicate cancer awareness information.

• Hope Light Foundation will work with Southern Seven Health Department and other organizations/academia to develop cancer education materials and training for healthcare providers based on needs assessments.

**Evaluation Plan To Measure Progress Towards Reaching Objectives:**

Health information and ICBRFS statistical data will be monitored and shared with stakeholders through the Executive Director and Division Directors. Community education sessions on the importance of good nutrition, increased physical activity, and implementing a healthy lifestyle will be promoted and monitored.
Behavioral Health

- Behavioral Health was identified as a top 3 problem in the southern seven area. Behavioral Health is the promotion of mental health, resilience, and well-being of individuals; the treatment of mental and substance use disorders; and the support of those who experience and/or are in recovery from these conditions, along with their family and communities.

- There are numerous types of mental health and substance use disorders that fall underneath the umbrella of Behavioral Health. Just like most other medical conditions, behavioral health can be diagnosed.

- One in four adults will be diagnosed with a mental illness every year in the United States, according to the CDC. We are seeing a steady rise in Behavioral Health diagnosis in the southern seven area.

- According to ICBRFS data (2015-1019) southern seven counties had a weighted response rate of 19.5% when asked about the number of mental health days that were considered to be “not good” over 1-7 days. Additionally, a weighted response rate of 13.2% occurred when asked about the number of mental health days that were considered to be “not good” over 8-30 days.

- Additionally, a weighted response rate of 18 percent for the southern seven counties was calculated when respondents were asked if they had ever been told they had a depressive disorder.
• According to the County Health Rankings data from 2015-2019, Massac reported 13 suicides and Union County reported 21. There was no available data for the other five counties. Both Union and Massac County have a higher suicide rate than the state as a whole, which is an average of 11.

Outcome Objectives:

By 2025:

• Decrease the proportion of persons that reported “not good” days (1-7 days) to 18.53%
  2015-2019 ICBRFS Baseline: 19.5%

• Decrease the proportion of persons that reported “not good” days (8-30 days) to 12.5%
  2015-2019 ICBRFS Baseline: 13.2%

Impact Objectives:

By 2023:

• Increase the proportion of persons with co-occurring substance use disorders and mental health disorders who receive treatment for both disorders to 8.2%. (HP 2030)
  2018 US baseline-3.4% percent of adults aged 18 years and over with co-occurring substance use disorders and mental health disorders received both mental health care and specialty substance use treatment.

• Increase the proportion of primary care office visits where adolescents and adults are screened for depression to 13.5%. (HP 2030)
  2016 US baseline- 8.5% of primary care office visits included screening for depression in persons aged 12 years and older in 2016
- Increase the proportion of children and adolescents with symptoms of trauma who receive evidence-based treatment. (HP 2030)

- Increase the proportion of children and adolescents with anxiety and/or depression who receive developmentally appropriate evidence-based treatments. (HP 2030)

- Increase the proportion of women who get screened for postpartum depression. (HP 2030)

**Proven Intervention Strategies:**

- Behavioral interventions to reduce screen time
- Use of electronic or mobile technology to support coaching or counseling for weight loss or maintenance
- Develop worksite programs for weight loss
- Promote physical activity & nutrition in community group settings
- Enhanced school based physical education
- Increase & maintain CATCH components in schools
- Increase support for and number of safe walking paths
- Point of decision prompts to encourage stair use
- Design health and communication and social marketing campaigns that use a variety of channels, including mass media.
Resources And Proposed Community Organizations To Coordinate Activities:

- Hospitals
- U of I Extension
- Southern Seven Health Department and Head Start
- Faith based organizations
- Community Behavioral Health Centers
- FQHCs
- IL Quit Line
- Shawnee Community College

Barriers:

- Funding
- Sensitivity of Issues
- Employers Noninterest
- Local Government Economics
- Resistance of Some Schools
- Lack of Motivation
- Competitive Advertising
- Food Deserts
- Nutrition & Physical Education is Low Priority
- Low Income Areas
- Access to Care
Corrective Actions To Reduce The Level Of The Indirect Contributing Factors:

- Southern Seven will collaborate with Arrowleaf, Centerstone, Union County Counseling Services Inc., and Massac County Mental Health & Family Counseling Center to promote community mental health, resilience, and well-being of community members.

- Increase treatment access for mental and substance disorders and the prevention of these conditions.

- Continue to promote and provide Mental Health First Aid to community members.

- Support those who experience and/or are in recovery from mental and substance use disorders, along with their families and community by helping to reduce stigma associated with these conditions.

- Rural Health will continue to offer behavioral health services at the following locations: Anna, Vienna and Goreville.

- Rural Health will continue to offer Medication Assisted (MAT) at all locations for treatment of opioid dependence.

- Increase implementation of “Signs of Suicide” curriculum.

- Head Start will continue to conduct a family needs assessment each year.

- Head Start will continue to contract with a Mental Health Consultants to visit and observe the children.

- Head Start will continue to implement “Second Step Violence” prevention curriculum in Head Start classrooms.
Evaluation Plan To Measure Progress Towards Reaching Objectives:

An annual review of several data sources by the Executive Director and Division Administration will determine progress towards reaching outcome and impact objectives. Data will be primarily collected and processed by external agencies: Illinois Behavioral Risk Factor Surveillance System, internal Southern Seven reporting numbers, Illinois Tobacco Quit line reporting numbers, Illinois Department of Public Health Vital Statistics, and the survey of school staff to assess effectiveness of Coordinated School Health programming.
APPENDIX

Appendix A
Healthy Southern 7 Region Coalition Subcommittee

Julie Swisher
Community Navigator
Illinois Breast & Cervical Cancer Program
CHESI
13245 Kessler Rd
Cairo, IL 62914
618-734-4400 ext 3031
Fax: 618-477-8557
jswisher@chesi.org

Shawnna Rhine
Southern 7 Health Department
Community Outreach Coordinator
37 Rustic Campus Dr. Ullin, IL
618-634-2297
srhine@s7hd.org

Chase Hileman
Community Outreach Coordinator
Rural Health, Inc.
513 North Main St.
Anna, IL 62906
618-833-4471 x1081
chileman@ruralhealthinc.org

Toni Kay Wright
Extension Educator SNAP-Education
University of Illinois Extension
101 E DeYoung St, Suite B, Marion, IL
62959
618-993-3304
tkwright@illinois.edu
Rhonda Andrews-Ray
S7HD Executive Director
Southern 7 Health Department
37 Rustic Campus Dr. Ullin, IL 62960
618-634-2297
rray@s7hd.org

Sandra Schwartz
Community Health Coordinator
SIH Community Benefits Department
1239 E. Main Street/PO Box 3988
Carbondale, IL 62902-3988
618-457-5200 ext. 67837
sandra.schwartz@sih.net

Todd Carr
Chief Quality Officer
Hardin Co General Hospital
6 Ferrell Rd/P.O. Box 2467; Rosiclare, IL 62982
618-285-6634
todd.carr@ilhcggh.org

Rick Goins
CEO
Massac Memorial Hospital
28 Chick Street Metropolis, IL 62960
rgoins@massachealth.org

Rudy Bess
Founding Director
The Hope Light Foundation
costallt@sbcglobal.net

Sherrie L. Crabb, MS, QMHP
Chief Executive Officer
Arrowleaf
PO Box 1328
Vienna, IL 62995
Office: 618.658.3079 Ext. 2
Fax: 618.658.2759
sherrie.crabb@myarrowleaf.org
Appendix B: IPLAN TEAM

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
<th>Address</th>
<th>City, State, Zip</th>
<th>Phone Number</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amber Toler</td>
<td>Health Educator</td>
<td>Southern Seven Health Dept.</td>
<td>260 Lick Creek Road</td>
<td>Anna, IL 62906</td>
<td>(618) 833-8561</td>
<td><a href="mailto:atoler@s7hd.org">atoler@s7hd.org</a></td>
</tr>
<tr>
<td>Clarissa Shepherd</td>
<td>Health Educator</td>
<td>Southern Seven Health Dept.</td>
<td>1230 Commercial Road</td>
<td>Metropolis, IL 62960</td>
<td>(618) 524-2212</td>
<td><a href="mailto:cshepherd@s7hd.org">cshepherd@s7hd.org</a></td>
</tr>
<tr>
<td>Natalie L. Sawyer</td>
<td>Health Education Director</td>
<td>Southern Seven Health Dept.</td>
<td>3014 Elm Street</td>
<td>Cairo, IL 62914</td>
<td>(618) 734-4167</td>
<td><a href="mailto:nsawyer@s7hd.org">nsawyer@s7hd.org</a></td>
</tr>
<tr>
<td>Cheryl Alvey</td>
<td>Health Educator</td>
<td>Southern Seven Health Dept.</td>
<td>513-1/2 East Vine Street</td>
<td>Vienna, IL 62995-1615</td>
<td>(618) 658-5011</td>
<td><a href="mailto:calvey@s7hd.org">calvey@s7hd.org</a></td>
</tr>
<tr>
<td>Marsha Sampson</td>
<td>Health Education Office Associate</td>
<td>Southern Seven Health Dept.</td>
<td>37 Rustic Campus Drive</td>
<td>Ullin, IL 62992-2226</td>
<td>(618) 634-9405</td>
<td><a href="mailto:msampson@s7hd.org">msampson@s7hd.org</a></td>
</tr>
<tr>
<td>Sara Sullivan</td>
<td>Health Educator</td>
<td>Southern Seven Health Dept.</td>
<td>260 Lick Creek Road</td>
<td>Anna, IL 62906</td>
<td>(618) 833-8561</td>
<td><a href="mailto:ssullivan@s7hd.org">ssullivan@s7hd.org</a></td>
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</table>
Appendix C:
Southern Seven Health Department
Community Health Problem Survey

Southern Seven Health Department
Administrative Office

37 Rustic Campus Drive
Ullin, IL 62992-2226
Phone: (618) 634-2297
Fax: (618) 634-9394
www.southern7.org

Dear Resident of Southern Illinois,

Southern Seven Health Department is currently involved in a project that evaluates the health needs of people in our counties and develops mechanisms to address those needs. In order to make the best possible effort, we are asking for community input. We would like to know what you feel are the three most significant health problems in Alexander, Hardin, Johnson, Massac, Pope, Pulaski, and Union Counties.

For the purpose of this survey, a health problem is defined as a situation or condition of people that is considered undesirable, is likely to exist in the future and is measured in terms of:

• Death
• Disease
• Disability

Thank you so much for your time and input!
Please select the three most significant health problems in the Southern Seven County region:

- Accidents
- Access to Health Care
- Aging Problems (arthritis, hearing/vision, etc.)
- Cancer
- Diabetes
- Mental Health Conditions
- Infectious diseases (hepatitis, TB, etc.)
- Sexually Transmitted Diseases
- Heart Disease / Stroke
- HIV / AIDS
- Substance Abuse/Alcoholism
- Obesity
- Asthma/Respiratory
- Suicide
- Violence (including domestic)
- Other __________________________

2. What county do you live in? ________________________________

3. Sex: [ ] Male [ ] Female


Southern Seven Health Department is an Equal Opportunity Employer and Provider, complies with applicable federal civil rights laws, and does not discriminate on the basis of race, color, national origin, age, disability, or sex.
Appendix D: Educational Attainment

Union County
Population 25 years and older: 12,232
No high school degree: 752
High school degree: 4,333
Bachelors Degree: 1,774

Pulaski County
Population 25 years and older: 3,894
No high school degree: 330
High school degree: 1,413
Bachelors Degree: 294

Alexander County
Population 25 years and older: 4,497
No high school degree: 416
High school degree: 1,832
Bachelors Degree: 447

Johnson County
Population 25 years and older: 9,208
No high school degree: 1,203
High school degree: 2,906
Bachelors Degree: 1,054

Pope County
Population 25 years and older: 3,332
No high school degree: 294
High school degree: 1,199
Bachelors Degree: 258

Hardin County
Population 25 years and older: 2,991
No high school degree: 403
High school degree: 967
Bachelors Degree: 258

Massac County
Population 25 years and older: 10,021
No high school degree: 825
High school degree: 3,365
Bachelors Degree: 1,011

Source: US Census, 2019
## Appendix E:
### Primary Care Physician To Patient Ratio

<table>
<thead>
<tr>
<th>County</th>
<th>Physician to Patient Ratio</th>
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<tbody>
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<tr>
<td>Massac</td>
<td>4,780:1</td>
</tr>
<tr>
<td>Johnson</td>
<td>12,900:1</td>
</tr>
<tr>
<td>Pulaski</td>
<td>Missing Data</td>
</tr>
<tr>
<td>Alexander</td>
<td>6,320:1</td>
</tr>
<tr>
<td>Pope</td>
<td>Missing Data</td>
</tr>
<tr>
<td>Hardin</td>
<td>1,010:1</td>
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<tr>
<td>Illinois Average</td>
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Source: County Health Rankings, 2016
## Appendix F:
### Dentist To Patient Ratio

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<td>Alexander</td>
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Source: County Health Rankings, 2016
## Appendix G: Mental Health Provider To Patient Ratio

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Source: County Health Rankings, 2019
Appendix H: WIC/FCM/Teen Births

TEEN BIRTHS BY AGE EACH CALENDAR YEAR BY SPECIFIC COUNTY
(Teens were enrolled in WIC/FCM Program)

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<tr>
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<td>4</td>
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Source: Southern Seven Health Department WIC/FCM data, 2016-2019
### Appendix I: Illinois Cancer Data 2021

#### Southern Seven Health Department Counties - Cancer Stats

Prepared by The Hope Light Foundation based on latest data in CDC State Cancer Profiles [https://statecancerprofiles.cancer.gov/](https://statecancerprofiles.cancer.gov/) on 4 Jan 2021

#### Illinois Cancer Site Statistics vs US and Southern 7 Health Department

<table>
<thead>
<tr>
<th>IL Cancer Site Rate Rank</th>
<th>Cancer Site</th>
<th>IL Death Rate</th>
<th>US Death Rate</th>
<th>S7 HD Cnty</th>
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<td>1</td>
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<td>41.1</td>
<td>38.5</td>
<td>63.2</td>
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<tr>
<td>2</td>
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<td>21.0</td>
<td>20.1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Prostate (Male)</td>
<td>20.0</td>
<td>19.0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Colon &amp; Rectum</td>
<td>14.7</td>
<td>13.7</td>
<td>16.8</td>
</tr>
<tr>
<td>5</td>
<td>Pancreas</td>
<td>11.3</td>
<td>11.0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Ovary (Female)</td>
<td>6.8</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Liver &amp; Bile Duct</td>
<td>6.4</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Leukemia</td>
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<td>6.3</td>
<td></td>
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<tr>
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<td>4.9</td>
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</tr>
<tr>
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<tr>
<td>11</td>
<td>Bladder</td>
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<td>4.3</td>
<td></td>
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<tr>
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<td>Brain &amp; ONS</td>
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<tr>
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<tr>
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<tr>
<td>18</td>
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<tr>
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**Note:**
* Data has been suppressed to ensure confidentiality and stability of rate estimates for counties that have 3 or fewer annual counts.

<table>
<thead>
<tr>
<th>IL Cancer Site Rate Rank</th>
<th>Cancer Site</th>
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<th>US Rate</th>
<th>S7 HD Rate</th>
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<td>58.3</td>
<td>97.9</td>
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<tr>
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<td>42.5</td>
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<td>18</td>
<td>Cervix (Female)</td>
<td>7.7</td>
<td>7.6</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Liver &amp; Bile Duct</td>
<td>7.7</td>
<td>8.4</td>
<td>13.2</td>
</tr>
<tr>
<td>20</td>
<td>Stomach</td>
<td>7.2</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Brain &amp; ONS</td>
<td>6.3</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Esophagus</td>
<td>4.8</td>
<td>4.5</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
* Data has been suppressed to ensure confidentiality and stability of rate estimates for counties that have 3 or fewer annual counts.

#### Notes:
- Prepared by The Hope Light Foundation on 7 January 2021.
- For more detailed information on the Top 4 cancers with highest death and incidence rates, i.e., lung, breast, prostate and colorectal, for Southern Seven Health Department counties, see following stats charts and synopsis narrative sheets.
- Mortality and Incidence rates (cases per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ..., 80-84, 85+). Rates are for invasive cancer only (except for bladder cancer which is invasive and in situ) or unless otherwise specified. Rates calculated using SEER*Stat. Population counts for denominators are based on Census populations as modified by NCI.

Ref: [https://statecancerprofiles.cancer.gov/](https://statecancerprofiles.cancer.gov/)
Southern Seven Health Department Counties - Cancer Stats

Prepared by The Hope Light Foundation based on latest data in CDC State Cancer Profiles [https://statecancerprofiles.cancer.gov](https://statecancerprofiles.cancer.gov) on 4 Jan 2023

**Lung Cancer Stats**

- **Death Rates for Illinois by County**
  - Lung & Bronchus, 2014 - 2018
  - All Races (Includes Hispanic), Both Sexes, All Ages
  - Age-Adjusted Annual Death Rate [deaths per 100,000] Quintile: 1

- **Incidence Rates for Illinois by County**
  - Lung & Bronchus, Late Stage*, 2015 - 2017
  - All Races (Includes Hispanic), Both Sexes, All Ages
  - Age-Adjusted Annual Incidence Rate [cases per 100,000] Quintile: 1

Note: *Data has been suppressed to ensure confidentiality and stability of rate estimates for counties with fewer than 3 annual counts.
Lung Cancer Stats Chart Synopsis
Southern 7 Health Department Counties:

**Death Rate**
- 55% of Top 20 counties with the highest lung cancer death rates are in the Southern Region.
- Average death rate for Southern 7 Counties is 63.2 with 63 annual deaths.
- Pulaski County has the highest death rate of 85.4 which is 121.8% higher than the US average rate.
- Recent trend indicates death rates are stable.

**Incidence Rate**
- 47% of top 20 counties with the highest lung cancer death rates are in the Southern Region.
- Average Incidence rate for Southern 7 Counties is 97.9 with 97 annual new cases.
- Hardin County has the highest incidence rate of 133.6 which is 129.2% higher than the US average rate.
- Recent trend indicates incidence rates are stable except for Alexander County that is falling.

**Incidence Rate – Late Stage**
- Average incidence rate with late stage diagnosis is 73.7 which accounts for 72 annual deaths.
- Hardin County has the highest late stage incidence rate of 108.6 which is 166.8% higher than the US average rate.
- Pope County has the highest percent of Southern 7 cases diagnosed in late stages at 86.2% which is 16.1% higher than the US average rate of 70.1%.
- Overall percent of cases diagnosed in late stages in Southern 7 Counties is 75.5% vs US average of 70.1%.
Colorectal Cancer Stats

Death Rates for Illinois by County
Colon & Rectum, 2014 - 2018
All Races (Includes Hispanic), Both Sexes, All Ages

Top 20 Counties with Highest Colorectal Cancer Death Rates

35% Central
45% Northern
20% Southern

Incidence Rates for Illinois by County
Colon & Rectum (Late Stage), 2013 - 2017
All Races (Includes Hispanic), Both Sexes, All Ages

Percent of Cases Diagnosed in Late Stages in S7 HD Counties: 65.9% vs 56.1% US Avg

Top 20 Counties with Highest Colorectal Cancer Incidence Rates

35% Central
55% Northern
10% Southern

Note: * Data has been suppressed to ensure confidentiality and stability of rate estimates for counties with fewer than 3 annual counts.
Colorectal Cancer Stats Chart Synopsis
Southern 7 Health Department Counties:

Death Rate

- 35% of Top 20 counties with the highest colorectal cancer death rates are in the Southern Region.
- Average death rate for Southern 7 Counties is 15.8 with fewer than 23 annual deaths.
- Massac County has the highest death rate of 17.2 which is 25.5% higher than the US average rate.
- Recent trend indicates death rates are falling.

Incidence Rate

- 35% of top 20 counties with the highest colorectal cancer death rates are in the Southern Region.
- Average Incidence rate for Southern 7 Counties is 49.9 with fewer than 44 annual new cases.
- Alexander County has the highest incidence rate of 54.6 which is 42.2% higher than the US average rate.
- Recent trend indicates incidence rates are stable

Incidence Rate – Late Stage

- Average incidence rate with late stage diagnosis is 27.2 which accounts for fewer than 29 annual deaths.
- Union County has the highest late stage incidence rate of 31.4 which is 45.4% higher than the US average rate.
- Union County has the highest percent of Southern 7 cases diagnosed in late stages at 61.5% which is 4.7% higher than the US average rate.
- Overall percent of cases diagnosed in late stages in Southern 7 Counties is 54.7% vs US average of 56.1%.
Breast Cancer Stats

Death Rates for Illinois by County
Breast, 2014 - 2018
All Races (Includes Hispanic), Female, All Ages

Percent of Cases Diagnosed in Late Stages in S7 HD Counties:
44.6% vs 32.5% US Avg

Incidence Rates for Illinois by County
Breast (Late Stage*), 2013 - 2017
All Races (Includes Hispanic), Female, All Ages

Note: * Data has been suppressed to ensure confidentiality and stability of rate estimates for counties with fewer than 3 annual counts.
Breast Cancer Stats Chart Synopsis
Southern 7 Health Department Counties:

Death Rate

- 46% of Top 20 counties with the highest breast cancer death rates are in the Southern Region.
- Average death rate for Southern 7 counties is unknown due to data being suppressed to ensure confidentiality and stability of rate estimates with all counties having 3 or fewer annual counts.
- Southern 7 counties have 21 or fewer annual deaths from breast cancer.

Incidence Rate

- 25% of Top 20 counties with the highest breast cancer death rates are in the Southern Region.
- Average Incidence rate for Southern 7 Counties is 121.5 with fewer than 56 annual new cases.
- Union County has the highest incidence rate of 151.5 which is 20.3% higher than the US average rate of 42.0.
- Recent trend indicates incidence rates are stable for all counties except for Union County that is rising by 4.4% over the recent 5-year period.

Incidence Rate – Late Stage

- Average incidence rate with late stage diagnosis is 47.0 which accounts for 25 or fewer annual deaths.
- Union County has the highest late stage incidence rate of 50.2 which is 19.5% higher than the US average rate of 42.0.
- Massac County has the highest percent of Southern 7 cases diagnosed in late stages at 34.4% which is 1.9% higher than the US average of 32.5%.
- Overall percent of cases diagnosed in late stages in Southern 7 Counties is 31.8% vs US average of 32.5%.
Prostate Cancer Stats

Prostate Cancer Stats

Death Rates for Illinois by County
Prostate, 2014 - 2016
All Races (includes Hispanic), Male, All Ages

Top 20 Counties with Highest Prostate Cancer
Death Rates

Percent of Cases Diagnosed in Late Stages in S7 HD Counties: 43.7% vs 20.1% US Avg

In incidence rates for Illinois by county prostate (Late Stage), 2013 - 2017
All Races (includes Hispanic), Male, All Ages

Top 20 Counties with Highest Prostate Cancer
Incidence Rates

Note: * Data has been suppressed to ensure confidentiality and stability of rate estimates for counties with fewer than 3 annual count!
Prostate Cancer Stats Chart Synopsis
Southern 7 Health Department Counties:

Death Rate

- 10% of Top 20 IL counties with the highest prostate cancer death rates are in the Southern Region.
- Average death rate for Southern 7 counties is unknown due to data being suppressed to ensure confidentiality and stability of rate estimates with all counties having 3 or fewer annual counts.
- Southern 7 counties have 21 or fewer deaths from prostate cancer.

Incidence Rate

- 40% of top 20 IL counties with the highest prostate cancer death rates are in the Southern Region.
- Average incidence rate for Southern 7 Counties is 102.4 with fewer than 48 annual new cases.
- Alexander County has the highest incidence rate of 124.1 which is 18.8% higher than the US average rate of 104.5.
- Recent trend indicates incidence rates are stable with the exception of Johnson County that is falling.

Incidence Rate – Late Stage

- Average incidence rate with late stage diagnosis is unknown due to data being suppressed to ensure confidentiality and stability of rate estimates with all counties having 3 or fewer annual counts.
- Overall percent of cases diagnosed in late stages in Southern 7 counties is estimated to be 43.7% vs 20.1% US average based on each county having 3 or fewer annual counts.
Appendix J:
Community Health Problem Survey Results

Please select the three (3) most significant health problems in the Southern Seven County region:

Source: Survey Results, 2020
What Is Your Gender?

Source: Survey Results, 2020
What County Do You Live In?

Source: Survey Results, 2020
Please Select Your Age Range

Source: Survey Results, 2020
## Appendix K: Community Organizations

<table>
<thead>
<tr>
<th>County</th>
<th>Hospital</th>
<th>Federally Qualified Health Center</th>
<th>Health Center</th>
<th>Behavioral Health Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexander</td>
<td>N/A</td>
<td>1. Community Health and Emergency Services Inc. (CHESI) Cairo Mega Clinic&lt;br&gt;2. CHESI Cairo Diagnostic Center&lt;br&gt;3. CHESI Tamms Community Health Center&lt;br&gt;4. CHESI Wellness on Wheels Van <em>(mobile unit, stationed in Cairo, but available to travel and provide services to any location as needed)</em></td>
<td>N/A</td>
<td>1. Arrowleaf</td>
</tr>
<tr>
<td>Hardin</td>
<td>Hardin County General Hospital&lt;br&gt;25 critical access inpatient beds</td>
<td>1. CHESI Hardin County Medical Clinic</td>
<td>N/A</td>
<td>1. Arrowleaf</td>
</tr>
<tr>
<td>Johnson</td>
<td>N/A</td>
<td>1. Rural Health Inc. (RHI) Vienna Medical Clinic&lt;br&gt;2. RHI Goreville Medical Clinic</td>
<td>N/A</td>
<td>1. Arrowleaf</td>
</tr>
<tr>
<td>Massac</td>
<td>Massac Memorial Hospital (MMH)&lt;br&gt;25 critical access inpatient beds</td>
<td>1. RHI Metropolis Medical Clinic</td>
<td>1. MMH’s Massac Medical Clinic&lt;br&gt;2. MMH’s Family Care Clinic&lt;br&gt;3. MMH’s Integrated Care Clinic</td>
<td>1. Massac County Mental Health and Family Counseling Center</td>
</tr>
<tr>
<td>Pope</td>
<td>N/A</td>
<td>1. CHESI Pope County Medical Clinic</td>
<td>N/A</td>
<td>1. Arrowleaf</td>
</tr>
<tr>
<td>Pulaski</td>
<td>N/A</td>
<td>1. CHESI Pulaski Medical Clinic</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Union</td>
<td>Union County Hospital (UCH)&lt;br&gt;25 critical access inpatient beds</td>
<td>1. RHI Anna Medical Clinic <em>(1 OB/GYN Provider)</em>&lt;br&gt;2. RHI Dongola Medical Clinic</td>
<td>1. Southern Illinois Healthcare (SIH) Primary Care Anna <em>(Podiatry only clinic)</em></td>
<td>1. Union County Counseling&lt;br&gt;2. Centerstone Fellowship House Campus</td>
</tr>
<tr>
<td>Totals</td>
<td>3 Hospitals&lt;br&gt;2 FQHCS&lt;br&gt;CHESI – 7 Locations&lt;br&gt;RHI – 5 Locations</td>
<td>2 HCs&lt;br&gt;MMH – 3 Locations&lt;br&gt;SIH – 1 Location</td>
<td>4 BHC’s Arrowleaf – 4 locations&lt;br&gt;MCMH &amp; FCC - 1 location&lt;br&gt;UCC - 1 location&lt;br&gt;Centerstone - 1 location</td>
<td></td>
</tr>
</tbody>
</table>
Appendix L:
Suicide Rates

- Number of deaths due to suicide per 100,000 population.
- The 2020 County Health Rankings used data from 2014-2018 for this measure.
- Pope, Hardin, Johnson, Alexander, and Pulaski counties had no reported suicides

Source: County Health Rankings, 2018
## Appendix M: Motor Vehicle Fatal Crash Data

<table>
<thead>
<tr>
<th>Counties</th>
<th>Motor Vehicle Fatal Crash Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Alexander</td>
<td>1</td>
</tr>
<tr>
<td>Hardin</td>
<td>1</td>
</tr>
<tr>
<td>Johnson</td>
<td>3</td>
</tr>
<tr>
<td>Massac</td>
<td>4</td>
</tr>
<tr>
<td>Pope</td>
<td>0</td>
</tr>
<tr>
<td>Pulaski</td>
<td>1</td>
</tr>
<tr>
<td>Union</td>
<td>1</td>
</tr>
<tr>
<td>State of Illinois</td>
<td>1,078</td>
</tr>
</tbody>
</table>

Source: IIHS.gov, CDC, Illinois.gov, 2016-2019
Appendix N: Violent Crime Data

Source: Illinois State Police Crime Rate Data, 2019
Source: Illinois State Police Crime Rate Data, 2019
Appendix O: Basic Illinois Data

Key Health Indicators in Illinois

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertility Rate</td>
<td>57.5 (births per 1,000 women 15-44 years of age)</td>
</tr>
<tr>
<td>Teen Birth Rate</td>
<td>15.8 (births per 1,000 females 15-19 years of age)</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>6.5 (infant deaths per 1,000 live births)</td>
</tr>
<tr>
<td>Marriage Rate</td>
<td>5.5 (marriages per 1,000)</td>
</tr>
<tr>
<td>Divorce Rate</td>
<td>1.5 (divorces per 1,000)</td>
</tr>
<tr>
<td>Leading Cause of Death</td>
<td>Heart Disease</td>
</tr>
<tr>
<td>Drug Overdose Death Rate</td>
<td>21.3 (per 100,000)</td>
</tr>
<tr>
<td>Firearm Death Rate</td>
<td>10.9 (per 100,000)</td>
</tr>
<tr>
<td>Homicide Rate</td>
<td>8.0 (per 100,000)</td>
</tr>
</tbody>
</table>

Other Birth Data in Illinois

<table>
<thead>
<tr>
<th>Illinois Birth Data 2018</th>
<th>State</th>
<th>Rank*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Births to Unmarried Mothers</td>
<td>39.3</td>
<td>24th*</td>
</tr>
<tr>
<td>Cesarean Delivery Rate</td>
<td>31.2</td>
<td>24th*</td>
</tr>
<tr>
<td>Preterm Birth Rate</td>
<td>10.7</td>
<td>13th*</td>
</tr>
<tr>
<td>Low Birthweight Rate</td>
<td>8.5</td>
<td>19th (tie)*</td>
</tr>
</tbody>
</table>

Leading Causes of Death in Illinois

1. Heart Disease
2. Cancer
3. Accidents
4. Stroke
5. Chronic Lower Respiratory Diseases
6. Alzheimer’s Disease
7. Diabetes
8. Kidney Disease
9. Influenza/Pneumonia
10. Septicemia
* Rankings are from highest to lowest.
** Rates for the U.S. include the District of Columbia and (for births) U.S. territories. Refer to notes in publication tables for more detail.
*** Death rates are age-adjusted. Refer to source notes below for more detail.
Sources
2018 birth data come from National Vital Statistics Reports, Vol. 68, No. 13pdf icon: leading cause of death data, including firearm, homicide, and drug poisoning mortality data, and infant mortality data come from CDC WONDER and rankings and rates are based on 2018 age-adjusted death rates. For more information on age-adjustment, refer to this reportpdf icon. States are categorized from highest rate to lowest rate. Although adjusted for variations in age-distribution and population size, differences by state do not take into account other state specific population characteristics that may affect the level of the birth characteristic or mortality. When the number of deaths or births events is small, differences by state may be unreliable due to instability in rates. When the number of deaths is small, rankings by state may be unreliable due to instability in death rates. Marriage and divorce data come from unpublished tables from the Division of Vital Statistics, National Center for Health Statistics, CDC.

Source: National Vital Statistics Reports, Vol 68, 2018
Appendix P: Sentinel Events

Southern Seven Health Department

COVID-19 UPDATE

OVERVIEW | December 31, 2020

Newly Confirmed: 72
Newly Recovered: 71
Total Active: 1271
Total Deaths: 76
Cumulative Total Cases: 4856

Union
1657
1077 Recovered
555 Active
25 Deaths

Johnson
996
791 Recovered
196 Active
9 Deaths

Pope
204
158 Recovered
45 Active
1 Death

Hardin
224
174 Recovered
43 Active
7 Deaths

Alexander
335
311 Recovered
19 Active
5 Deaths

Pulaski
556
445 Recovered
108 Active
3 Deaths

Massac
884
553 Recovered
305 Active
26 Deaths

Blue: county is experiencing overall stable COVID-19 metrics
Orange: there are warning signs of increased COVID-19 risk in the county

*All data provided are provisional and subject to change

Source: Southern Seven Health Department, 2020
Appendix Q: Illinois County Behavioral

Illinois County Behavioral Risk Factor Surveys
Round 6 (2015-2019)

Southern Seven
(Includes Alexander, Hardin, Johnson, Massac, Pope, Pulaski, and Union counties)

Prepared by:

Illinois Department of Public Health
Office of Policy Planning & Statistics
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Illinois County Behavioral Risk Factor Surveys

The Illinois County Behavioral Risk Factor Surveys (ICBRFS) is a statewide telephone survey that collects county level health data on health-related risk behaviors, chronic health conditions, health care access, and use of preventative services. The project provides local health planners with useful data to document need for interventions, direct limited public resources to population groups with the greatest risk, evaluate previous efforts to promote health, and support policy initiatives. The ICBRFS uses a standardized questionnaire and procedures established by the Centers for Disease Control and Prevention (CDC) and used for the nationwide program known as Behavioral Risk Factor Surveillance System (BRFSS).

This is the sixth time county level surveys have been conducted in Illinois. The interviews are conducted over a period of years and are referred to as a round. Round 6 started in 2015 with counties at the southernmost portion of the state and progressed north to the top of the state, completing all counties of Illinois in 2019. Previous rounds of surveys include Round 1 1996-2000, Round 2 2001-2003, Round 3 2004-2006, Round 4 2007-2009, and Round 5 2010-2014. In total, Round 6 included approximately 37,000 surveys across the state.

Because the ICBRFS respondents are randomly selected, measures of prevalence are subject to random sample errors. Each measure listed in the data tables includes the number of respondents (unweighted count), the estimated percent (weighted percentage), the 95% confidence interval (upper and lower limits), and the estimated population (weighted count).

Calculations are intentionally suppressed to reduce the possibility of making statements about the findings when the data is not strong enough to support any statistical conclusions. To provide high quality health information, prevalence estimates are suppressed when any of the following criteria are met: fewer than 6 respondents in the numerator (i.e. the number of respondents associated with the response categories, e.g. “Yes-No”), there are fewer than 50 respondents in the denominator (i.e. the total number of respondents to a question), the half-width of the confidence interval for the prevalence estimate is greater than 10. Additionally, not all survey questions are able to be analyzed for each county.

Weighted data are used in all calculations, so percentages shown in tables cannot be derived exactly from the numbers presented. ICBRFS data are weighted for the probability of selection of a telephone number, the number of adults in a household, and the number of phones in a household. The data is adjusted to reflect the demographic distribution of the county’s adult population (ages 18 and older).

It is advised not to compare county data to state rates from the BRFSS due to the difference in the methodology to weigh the data. Additionally, comparisons to other Illinois counties should be made with caution as ICBRFS completes counties on a rotating basis and counties will be surveyed during different timeframes within the survey rotation.
## Demographics

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>Southern Seven</td>
<td>52,277</td>
<td></td>
<td>465</td>
</tr>
<tr>
<td>AGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>5,195</td>
<td>9.9%</td>
<td>5.9%-16.3%</td>
<td>20</td>
</tr>
<tr>
<td>25-44</td>
<td>14,788</td>
<td>28.3%</td>
<td>22.1%-35.4%</td>
<td>90</td>
</tr>
<tr>
<td>45-64</td>
<td>18,797</td>
<td>36.0%</td>
<td>29.8%-42.7%</td>
<td>194</td>
</tr>
<tr>
<td>65+</td>
<td>13,497</td>
<td>25.8%</td>
<td>21.0%-31.3%</td>
<td>161</td>
</tr>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>26,462</td>
<td>50.6%</td>
<td>43.8%-57.4%</td>
<td>198</td>
</tr>
<tr>
<td>Female</td>
<td>25,815</td>
<td>49.4%</td>
<td>42.6%-56.2%</td>
<td>267</td>
</tr>
<tr>
<td>RACE/ETHNICITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>45,647</td>
<td>89.4%</td>
<td>84.0%-93.1%</td>
<td>408</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>2,489</td>
<td>4.9%</td>
<td>3.3%-7.2%</td>
<td>32</td>
</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>2,098</td>
<td>4.1%</td>
<td>1.6%-9.9%</td>
<td>8</td>
</tr>
<tr>
<td>Hispanic, All Races</td>
<td>848</td>
<td>1.7%</td>
<td>0.5%-5.7%</td>
<td>5</td>
</tr>
<tr>
<td>SEXUAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straight</td>
<td>48,314</td>
<td>97.0%</td>
<td>91.7%-98.9%</td>
<td>438</td>
</tr>
<tr>
<td>ORIENTATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesbian/Gay/Bisexual</td>
<td>1,514</td>
<td>3.0%</td>
<td>1.1%-8.3%</td>
<td>7</td>
</tr>
<tr>
<td>MARITAL STATUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>28,352</td>
<td>54.4%</td>
<td>47.4%-61.2%</td>
<td>259</td>
</tr>
<tr>
<td>Widowed</td>
<td>4,543</td>
<td>8.7%</td>
<td>5.9%-12.8%</td>
<td>59</td>
</tr>
<tr>
<td>Divorced/Separated</td>
<td>8,572</td>
<td>16.4%</td>
<td>11.6%-22.7%</td>
<td>88</td>
</tr>
<tr>
<td>Never Married</td>
<td>9,486</td>
<td>18.2%</td>
<td>12.7%-25.5%</td>
<td>48</td>
</tr>
<tr>
<td>Unmarried Couple</td>
<td>1,170</td>
<td>2.2%</td>
<td>1.1%-4.7%</td>
<td>9</td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.

Although the ICBRFS weighting methodology is to produce data that represents the population, users are cautioned not to use the demographic data to describe the characteristics of the population that was studied.

Data obtained directly from the census would be better for describing the population.
Illinois County Behavioral Risk Factor Surveys

### Demographics (continued)

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCOME</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $35,000</td>
<td>21,404</td>
<td>44.7%</td>
<td>38.0%-51.6%</td>
<td>216</td>
</tr>
<tr>
<td>$35,000 - $75,000</td>
<td>14,862</td>
<td>31.0%</td>
<td>24.9%-37.9%</td>
<td>126</td>
</tr>
<tr>
<td>$75,000 or More</td>
<td>11,616</td>
<td>24.3%</td>
<td>18.4%-31.2%</td>
<td>92</td>
</tr>
<tr>
<td>EMPLOYMENT</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Employed</td>
<td>27,298</td>
<td>52.2%</td>
<td>45.4%-58.9%</td>
<td>207</td>
</tr>
<tr>
<td>Out of Work</td>
<td>1,831</td>
<td>3.5%</td>
<td>2.0%-6.2%</td>
<td>16</td>
</tr>
<tr>
<td>Homemaker/Student</td>
<td>5,467</td>
<td>10.5%</td>
<td>6.2%-17.0%</td>
<td>38</td>
</tr>
<tr>
<td>Retired</td>
<td>12,060</td>
<td>23.1%</td>
<td>18.5%-28.4%</td>
<td>144</td>
</tr>
<tr>
<td>Unable to Work</td>
<td>5,621</td>
<td>10.8%</td>
<td>7.6%-15.1%</td>
<td>60</td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Less than High School</td>
<td>3,530</td>
<td>6.8%</td>
<td>4.9%-9.3%</td>
<td>48</td>
</tr>
<tr>
<td>High School Grad/GED</td>
<td>18,716</td>
<td>35.8%</td>
<td>29.7%-42.4%</td>
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</tr>
<tr>
<td>Some Post High School</td>
<td>20,027</td>
<td>38.3%</td>
<td>31.5%-45.6%</td>
<td>165</td>
</tr>
<tr>
<td>College Graduate</td>
<td>10,005</td>
<td>19.1%</td>
<td>14.6%-24.7%</td>
<td>93</td>
</tr>
<tr>
<td>HOME</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own Home</td>
<td>39,509</td>
<td>75.6%</td>
<td>68.6%-81.4%</td>
<td>371</td>
</tr>
<tr>
<td>Rent Home</td>
<td>9,930</td>
<td>19.0%</td>
<td>13.7%-25.7%</td>
<td>76</td>
</tr>
<tr>
<td>Other Arrangement</td>
<td>2,838</td>
<td>5.4%</td>
<td>2.9%-10.0%</td>
<td>18</td>
</tr>
</tbody>
</table>

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

*Indicates data does not meet standards of reliability and has been suppressed.

Although the ICBRFS weighting methodology is to produce data that represents the population, users are cautioned not to use the demographic data to describe the characteristics of the population that was studied.

Data obtained directly from the census would be better for describing the population.
# Illinois County Behavioral Risk Factor Surveys

## Health Status

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL HEALTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STATUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>5,373</td>
<td>10.3%</td>
<td>7.3%-14.3%</td>
<td>52</td>
</tr>
<tr>
<td>Very Good</td>
<td>13,969</td>
<td>26.7%</td>
<td>21.3%-32.9%</td>
<td>122</td>
</tr>
<tr>
<td>Good</td>
<td>21,073</td>
<td>40.3%</td>
<td>33.5%-47.5%</td>
<td>173</td>
</tr>
<tr>
<td>Fair</td>
<td>8,802</td>
<td>16.8%</td>
<td>12.5%-22.3%</td>
<td>80</td>
</tr>
<tr>
<td>Poor</td>
<td>3,061</td>
<td>5.9%</td>
<td>3.9%-8.7%</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GENERAL HEALTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good/Very</td>
<td>40,414</td>
<td>77.3%</td>
<td>71.6%-82.2%</td>
<td>347</td>
</tr>
<tr>
<td>Good/Excellent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair/Poor</td>
<td>11,863</td>
<td>22.7%</td>
<td>17.8%-28.4%</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER OF DAYS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HEALTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>28,146</td>
<td>54.0%</td>
<td>47.1%-60.8%</td>
<td>259</td>
</tr>
<tr>
<td>1-7 Days</td>
<td>11,186</td>
<td>21.5%</td>
<td>16.5%-27.4%</td>
<td>98</td>
</tr>
<tr>
<td>NOT GOOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-30 Days</td>
<td>12,791</td>
<td>24.5%</td>
<td>18.7%-31.5%</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER OF DAYS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MENTAL HEALTH NOT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>34,941</td>
<td>67.3%</td>
<td>60.3%-73.6%</td>
<td>321</td>
</tr>
<tr>
<td>1-7 Days</td>
<td>10,139</td>
<td>19.5%</td>
<td>14.0%-26.6%</td>
<td>71</td>
</tr>
<tr>
<td>GOOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-30 Days</td>
<td>6,846</td>
<td>13.2%</td>
<td>9.6%-17.8%</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER OF DAYS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICAL/MENTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>37,681</td>
<td>72.8%</td>
<td>65.7%-79.0%</td>
<td>341</td>
</tr>
<tr>
<td>1-7 Days</td>
<td>5,730</td>
<td>11.1%</td>
<td>7.4%-16.2%</td>
<td>53</td>
</tr>
<tr>
<td>HEALTH AFFECTED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities*</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8-30 Days</td>
<td>8,325</td>
<td>16.1%</td>
<td>10.9%-23.0%</td>
<td>67</td>
</tr>
</tbody>
</table>

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*Indicates data does not meet standards of reliability and has been suppressed.

1. Respondents reporting 0 days with mental and physical health problems in the past month were not asked this question, but are included as 0 days.
# Health Care Coverage & Utilization

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAVE HEALTH CARE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>3,702</td>
<td>7.1%</td>
<td>4.6%-10.7%</td>
<td>34</td>
</tr>
<tr>
<td>Yes</td>
<td>48,520</td>
<td>92.9%</td>
<td>89.3%-95.4%</td>
<td>430</td>
</tr>
<tr>
<td>HAVE MEDICARE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>33,244</td>
<td>64.3%</td>
<td>57.7%-70.5%</td>
<td>261</td>
</tr>
<tr>
<td>Yes</td>
<td>18,419</td>
<td>35.7%</td>
<td>29.5%-42.3%</td>
<td>202</td>
</tr>
<tr>
<td>HAVE PERSONAL DOCTOR</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>No</td>
<td>7,125</td>
<td>13.6%</td>
<td>9.3%-19.6%</td>
<td>49</td>
</tr>
<tr>
<td>Yes</td>
<td>45,122</td>
<td>86.4%</td>
<td>80.4%-90.7%</td>
<td>415</td>
</tr>
<tr>
<td>UNABLE TO VISIT DOCTOR DUE TO COST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>44,834</td>
<td>85.8%</td>
<td>80.9%-89.5%</td>
<td>398</td>
</tr>
<tr>
<td>Yes</td>
<td>7,443</td>
<td>14.2%</td>
<td>10.5%-19.1%</td>
<td>67</td>
</tr>
<tr>
<td>LAST ROUTINE CHECKUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Year</td>
<td>37,002</td>
<td>70.8%</td>
<td>63.5%-77.1%</td>
<td>361</td>
</tr>
<tr>
<td>Past 2 Years (&gt;1yr, &lt;2yrs)</td>
<td>4,763</td>
<td>9.1%</td>
<td>5.7%-14.2%</td>
<td>40</td>
</tr>
<tr>
<td>More than 2 Years</td>
<td>10,511</td>
<td>20.1%</td>
<td>14.5%-27.2%</td>
<td>64</td>
</tr>
<tr>
<td>COULD NOT FILL PRESCRIPTION DUE TO COST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>44,794</td>
<td>85.7%</td>
<td>80.7%-89.5%</td>
<td>397</td>
</tr>
<tr>
<td>Yes</td>
<td>7,463</td>
<td>14.3%</td>
<td>10.5%-19.3%</td>
<td>68</td>
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</tbody>
</table>

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# Dental Care Coverage & Utilization

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAST DENTAL VISIT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Year</td>
<td>29,584</td>
<td>56.6%</td>
<td>49.8%-63.1%</td>
<td>254</td>
</tr>
<tr>
<td>Past 2 Years</td>
<td>6,756</td>
<td>12.9%</td>
<td>8.9%-18.3%</td>
<td>51</td>
</tr>
<tr>
<td>(&gt;1yr, &lt;2yrs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 2 Years</td>
<td>15,937</td>
<td>30.5%</td>
<td>24.9%-36.8%</td>
<td>160</td>
</tr>
<tr>
<td>HAVE DENTAL INSURANCE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>28,795</td>
<td>55.9%</td>
<td>49.1%-62.5%</td>
<td>238</td>
</tr>
<tr>
<td>No</td>
<td>22,705</td>
<td>44.1%</td>
<td>37.5%-50.9%</td>
<td>222</td>
</tr>
<tr>
<td>COVERAGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COULD NOT VISIT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11,129</td>
<td>21.3%</td>
<td>16.3%-27.4%</td>
<td>89</td>
</tr>
<tr>
<td>DENTIST DUE TO COST</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>41,148</td>
<td>78.7%</td>
<td>72.6%-83.7%</td>
<td>376</td>
</tr>
</tbody>
</table>

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## Hypertension

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVER TOLD HAVE HIGH</td>
<td>No</td>
<td>32,236</td>
<td>61.7%</td>
<td>240</td>
</tr>
<tr>
<td>BLOOD PRESSURE¹</td>
<td>Yes</td>
<td>20,041</td>
<td>38.3%</td>
<td>225</td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.

1. Respondents reporting yes but only during pregnancy OR told borderline/pre hypertensive are included as No.
## Cholesterol

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVER HAD</td>
<td>Yes</td>
<td>41,367</td>
<td>79.7%</td>
<td>72.5%-85.4%</td>
</tr>
<tr>
<td>CHOLESTROL CHECKED</td>
<td>No</td>
<td>10,534</td>
<td>20.3%</td>
<td>14.6%-27.5%</td>
</tr>
<tr>
<td>LAST CHOLESTEROL TEST¹</td>
<td>Past Year</td>
<td>31,479</td>
<td>60.7%</td>
<td>53.5%-67.4%</td>
</tr>
<tr>
<td></td>
<td>Past 5 Years</td>
<td>8,592</td>
<td>16.6%</td>
<td>12.0%-22.3%</td>
</tr>
<tr>
<td></td>
<td>(&gt;1yr, &lt;5yrs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>More Than 5 Years</td>
<td>1,296</td>
<td>2.5%</td>
<td>1.2%-5.0%</td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>10,534</td>
<td>20.3%</td>
<td>14.6%-27.5%</td>
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<tr>
<td>EVER TOLD</td>
<td>Yes</td>
<td>17,502</td>
<td>42.3%</td>
<td>35.5%-49.4%</td>
</tr>
<tr>
<td>CHOLESTEROL HIGH²</td>
<td>No</td>
<td>23,865</td>
<td>57.7%</td>
<td>50.6%-64.5%</td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.

1. Asked only of those who report ever having cholesterol checked, respondents reporting No to having cholesterol checked included as Never.

2. Asked only of those who report ever having cholesterol checked.
# Cardiovascular Disease

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVER TOLD HAVE</td>
<td>No</td>
<td>49,604</td>
<td>95.0%</td>
<td>92.1%-96.9%</td>
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<tr>
<td>CORONARY HEART</td>
<td>Yes</td>
<td>2,585</td>
<td>5.0%</td>
<td>3.1%-7.9%</td>
</tr>
<tr>
<td>DISEASE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVER TOLD HAD HEART</td>
<td>No</td>
<td>49,039</td>
<td>94.3%</td>
<td>91.5%-96.1%</td>
</tr>
<tr>
<td>ATTACK</td>
<td>Yes</td>
<td>2,990</td>
<td>5.7%</td>
<td>3.9%-8.5%</td>
</tr>
<tr>
<td>EVER TOLD HAD STROKE</td>
<td>No</td>
<td>49,070</td>
<td>95.0%</td>
<td>92.4%-96.8%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2,567</td>
<td>5.0%</td>
<td>3.2%-7.6%</td>
</tr>
<tr>
<td>HISTORY OF CVD*</td>
<td>No</td>
<td>46,484</td>
<td>88.9%</td>
<td>85.2%-91.8%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>5,793</td>
<td>11.1%</td>
<td>8.2%-14.8%</td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.

1. History of CVD calculated when respondent answers yes to any cardiovascular disease history questions.
# Chronic Diseases

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAS ASTHMA NOW</td>
<td>Yes</td>
<td>6,712</td>
<td>13.0%</td>
<td>8.8%-18.7%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>45,068</td>
<td>87.0%</td>
<td>81.3%-91.2%</td>
</tr>
<tr>
<td>EVER TOLD COPD</td>
<td>Yes</td>
<td>6,393</td>
<td>12.2%</td>
<td>8.7%-17.0%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>45,884</td>
<td>87.8%</td>
<td>83.0%-91.3%</td>
</tr>
<tr>
<td>EVER TOLD CANCER</td>
<td>Yes</td>
<td>5,516</td>
<td>10.6%</td>
<td>7.3%-15.0%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>46,761</td>
<td>89.4%</td>
<td>85.0%-92.7%</td>
</tr>
<tr>
<td>EVER TOLD ARTHRITIS</td>
<td>Yes</td>
<td>19,167</td>
<td>36.7%</td>
<td>30.7%-43.1%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>33,110</td>
<td>63.3%</td>
<td>56.9%-69.3%</td>
</tr>
<tr>
<td>ARTHRITIS/Joint</td>
<td>Yes</td>
<td>15,197</td>
<td>29.1%</td>
<td>23.0%-36.1%</td>
</tr>
<tr>
<td>SYMPTOMS: LIMITS</td>
<td>No</td>
<td>36,992</td>
<td>70.9%</td>
<td>63.9%-77.0%</td>
</tr>
<tr>
<td>ACTIVITIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVER TOLD DEPRESSIVE</td>
<td>Yes</td>
<td>9,373</td>
<td>18.0%</td>
<td>13.9%-23.0%</td>
</tr>
<tr>
<td>DISORDER</td>
<td>No</td>
<td>42,656</td>
<td>82.0%</td>
<td>77.0%-86.1%</td>
</tr>
<tr>
<td>TOLD HAVE DIABETES</td>
<td>No</td>
<td>44,527</td>
<td>86.2%</td>
<td>81.5%-89.9%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>7,112</td>
<td>13.8%</td>
<td>10.1%-18.5%</td>
</tr>
<tr>
<td>CHRONIC HEALTH</td>
<td>No Chronic Disease</td>
<td>20,912</td>
<td>41.1%</td>
<td>34.2%-48.3%</td>
</tr>
<tr>
<td>CONDITIONS¹</td>
<td>1 Chronic Disease</td>
<td>13,126</td>
<td>25.8%</td>
<td>20.8%-31.6%</td>
</tr>
<tr>
<td></td>
<td>2+ Chronic Diseases</td>
<td>16,854</td>
<td>33.1%</td>
<td>27.2%-39.6%</td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.

1. Chronic Health Conditions calculated from heart disease (heart attack/stoke/angina), current asthma, cancer, COPD, arthritis, depression and diabetes questions.
**Diabetes**

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLD HAVE DIABETES¹</td>
<td>No</td>
<td>44,527</td>
<td>86.2%</td>
<td>385</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>7,112</td>
<td>13.8%</td>
<td>79</td>
</tr>
<tr>
<td>PAST THREE YEARS - HAD</td>
<td>Yes</td>
<td>29,760</td>
<td>67.0%</td>
<td>251</td>
</tr>
<tr>
<td>A HIGH BLOOD</td>
<td>No</td>
<td>14,634</td>
<td>33.0%</td>
<td>130</td>
</tr>
<tr>
<td>SUGAR/DIABETES TEST²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVER TOLD BY HEALTH</td>
<td>Yes</td>
<td>4,192</td>
<td>9.4%</td>
<td>35</td>
</tr>
<tr>
<td>PROFESSIONAL YOU HAVE</td>
<td>No</td>
<td>40,334</td>
<td>90.6%</td>
<td>350</td>
</tr>
<tr>
<td>PRE/BORDERLINE DIABETES³</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.

1. Respondents reporting yes but only during pregnancy OR told borderline/pre hypertensive are included as No.
2. Asked only of respondents who did not report ever being told they have diabetes.
3. Asked only of respondents who did not report ever being told they have diabetes or borderline/pre-diabetes.
## Illinois County Behavioral Risk Factor Surveys
### Round 6 (2015-2019) County Report

#### Obesity

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY MASS INDEX</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal or</td>
<td>13,043</td>
<td>25.9%</td>
<td>20.9%-31.6%</td>
<td>131</td>
</tr>
<tr>
<td>Underweight</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight</td>
<td>17,527</td>
<td>34.7%</td>
<td>28.0%-42.2%</td>
<td>150</td>
</tr>
<tr>
<td>Obese</td>
<td>19,880</td>
<td>39.4%</td>
<td>32.8%-46.4%</td>
<td>166</td>
</tr>
<tr>
<td>OVERWEIGHT OR OBSESE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>13,043</td>
<td>25.9%</td>
<td>20.9%-31.6%</td>
<td>131</td>
</tr>
<tr>
<td>Yes</td>
<td>37,406</td>
<td>74.1%</td>
<td>68.4%-79.1%</td>
<td>316</td>
</tr>
</tbody>
</table>

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

*Indicates data does not meet standards of reliability and has been suppressed.

1. BMI calculated from reported height and weight. BMI Categories: Underweight <18.5, Normal >=18.5 and <30, Overweight >=30 and <70, Obese >=70.
## Disability/Impairment (Quality of Life)

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITIES LIMITED BY IMPAIRMENT</td>
<td>Yes</td>
<td>14,594</td>
<td>28.8%</td>
<td>22.8%-35.8%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>36,008</td>
<td>71.2%</td>
<td>64.2%-77.2%</td>
</tr>
<tr>
<td>USE SPECIAL EQUIPMENT DUE TO IMPAIRMENT</td>
<td>Yes</td>
<td>5,983</td>
<td>11.8%</td>
<td>7.5%-18.2%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>44,564</td>
<td>88.2%</td>
<td>81.8%-92.5%</td>
</tr>
<tr>
<td>DISABILITY STATUS¹</td>
<td>No Disability</td>
<td>35,321</td>
<td>69.8%</td>
<td>62.9%-75.9%</td>
</tr>
<tr>
<td></td>
<td>Disability</td>
<td>15,281</td>
<td>30.2%</td>
<td>24.1%-37.1%</td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.

1. Disability status defined by responses to the need for special equipment and/or having an activity limitation due to physical, mental, or emotional problems.
# Illinois County Behavioral Risk Factor Surveys

## Disability/Impairment (Functional)

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLIND OR SIGHT IMPAIRED</td>
<td>Yes</td>
<td>3,997</td>
<td>80%</td>
<td>4.4%-13.9%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>46,271</td>
<td>92.0%</td>
<td>86.1%-95.6%</td>
</tr>
<tr>
<td>DEAF OR SEVERE</td>
<td>Yes</td>
<td>4,537</td>
<td>9.0%</td>
<td>6.0%-13.3%</td>
</tr>
<tr>
<td>DIFFICULTY HEARING</td>
<td>No</td>
<td>45,676</td>
<td>91.0%</td>
<td>86.7%-94.0%</td>
</tr>
<tr>
<td>SERIOUS DIFFICULTY CONCENTRATING, REMEMBERING OR MAKING DECISIONS</td>
<td>Yes</td>
<td>6,986</td>
<td>13.9%</td>
<td>10.1%-18.8%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>43,226</td>
<td>86.1%</td>
<td>81.2%-89.9%</td>
</tr>
<tr>
<td>DIFFICULTY WALKING OR CLIMBING STAIRS</td>
<td>Yes</td>
<td>10,067</td>
<td>20.3%</td>
<td>16.1%-25.4%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>39,408</td>
<td>79.7%</td>
<td>74.6%-83.9%</td>
</tr>
<tr>
<td>DIFFICULTY BATHING OR DRESSING</td>
<td>Yes</td>
<td>2,594</td>
<td>5.2%</td>
<td>3.2%-8.4%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>47,619</td>
<td>94.8%</td>
<td>91.6%-96.8%</td>
</tr>
<tr>
<td>DIFFICULTY DOING</td>
<td>Yes</td>
<td>4,282</td>
<td>8.6%</td>
<td>6.1%-12.1%</td>
</tr>
<tr>
<td>ERRANDS ALONE</td>
<td>No</td>
<td>45,290</td>
<td>91.4%</td>
<td>87.9%-93.9%</td>
</tr>
<tr>
<td>FUNCTIONAL DISABILITY¹</td>
<td>No Disability</td>
<td>33,182</td>
<td>66.0%</td>
<td>59.3%-72.1%</td>
</tr>
<tr>
<td></td>
<td>1 Disability</td>
<td>9,020</td>
<td>17.9%</td>
<td>13.2%-23.9%</td>
</tr>
<tr>
<td></td>
<td>2+ Disabilities</td>
<td>8,066</td>
<td>16.0%</td>
<td>12.0%-21.1%</td>
</tr>
</tbody>
</table>

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

*Indicates data does not meet standards of reliability and has been suppressed.

1. Functional disability status defined by responses to the six functional disability questions (sight, hearing, decisions, walking/climbing stairs, bathing/dressing, doing errands).
### Tobacco & E-Cigarettes

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCULATED SMOKING</td>
<td>Smoker</td>
<td>14,050</td>
<td>28.1%</td>
<td>21.8%-35.5%</td>
</tr>
<tr>
<td>STATUS1</td>
<td>Former Smoker</td>
<td>12,415</td>
<td>24.8%</td>
<td>19.8%-30.7%</td>
</tr>
<tr>
<td></td>
<td>Never Smoked</td>
<td>23,506</td>
<td>47.0%</td>
<td>40.1%-54.1%</td>
</tr>
<tr>
<td>QUIT SMOKING (FORMER SMOKERS)</td>
<td>Past Year</td>
<td>1,057</td>
<td>8.5%</td>
<td>4.7%-14.9%</td>
</tr>
<tr>
<td></td>
<td>More than 1 Year Ago</td>
<td>11,358</td>
<td>91.5%</td>
<td>85.1%-95.3%</td>
</tr>
<tr>
<td>USE SMOKELESS</td>
<td>No</td>
<td>45,867</td>
<td>91.8%</td>
<td>86.5%-95.1%</td>
</tr>
<tr>
<td>TOBACCO³</td>
<td>Yes</td>
<td>4,104</td>
<td>8.2%</td>
<td>4.9%-13.5%</td>
</tr>
<tr>
<td>CALCULATED E-CIGARETTE STATUS⁴</td>
<td>Current User</td>
<td>3,855</td>
<td>7.7%</td>
<td>4.6%-12.8%</td>
</tr>
<tr>
<td></td>
<td>Not Currently Using</td>
<td>9,200</td>
<td>18.4%</td>
<td>12.6%-26.1%</td>
</tr>
<tr>
<td></td>
<td>Never Used</td>
<td>36,916</td>
<td>73.9%</td>
<td>66.1%-80.4%</td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.

1. Calculated smoking status from tobacco questions.
2. Asked only if respondent reported smoking 100+ cigarettes and reported frequency is not at all.
3. Smokeless tobacco includes cigarettes, chewing tobacco, snuff, or snus.
4. Calculated e-cigarette status from e-cigarette questions.
# Alcohol

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>BINGE DRINKING</td>
<td>Not At Risk</td>
<td>43,205</td>
<td>88.1%</td>
<td>401</td>
</tr>
<tr>
<td>(CALCULATED)¹</td>
<td>At Risk</td>
<td>5,835</td>
<td>11.9%</td>
<td>38</td>
</tr>
<tr>
<td>HEAVY DRINKING</td>
<td>Not At Risk</td>
<td>46,776</td>
<td>95.6%</td>
<td>416</td>
</tr>
<tr>
<td>(CALCULATED)²</td>
<td>At Risk</td>
<td>2,169</td>
<td>4.4%</td>
<td>22</td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.

1. Calculated at risk for men having 5+ drinks on one occasion and women having 4+ drinks on one occasion.
2. Calculated at risk for men having >2 drinks per day and women having >1 drink per day.
# Immunization (Flu and Pneumonia)

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD INFLUENZA</td>
<td>Yes</td>
<td>20,761</td>
<td>42.7%</td>
<td>188</td>
</tr>
<tr>
<td>VACCINATION PAST 12</td>
<td>No</td>
<td>27,841</td>
<td>57.3%</td>
<td>249</td>
</tr>
<tr>
<td>MONTHS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVER HAD PNEUMONIA</td>
<td>Yes</td>
<td>16,577</td>
<td>34.9%</td>
<td>169</td>
</tr>
<tr>
<td>VACCINATION</td>
<td>No</td>
<td>30,877</td>
<td>65.1%</td>
<td>257</td>
</tr>
</tbody>
</table>

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

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# Illinois County Behavioral Risk Factor Surveys

## Cognitive Decline

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPERIENCED</td>
<td>Yes</td>
<td>2,920</td>
<td>10.2%</td>
<td>7.3%-13.9%</td>
</tr>
<tr>
<td>CONFUSION/MEMORY</td>
<td>No</td>
<td>25,837</td>
<td>89.8%</td>
<td>86.1%-92.7%</td>
</tr>
</tbody>
</table>

| LOSS PAST 12 MONTHS     | (AGE 45+)            |                                |                         |                       |                       |

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

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## HIV/STD/Sexual Behavior

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVER HAD HIV TEST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>14,053</td>
<td>29.1%</td>
<td>22.8%-36.3%</td>
<td>118</td>
</tr>
<tr>
<td>No</td>
<td>34,203</td>
<td>70.9%</td>
<td>63.7%-77.2%</td>
<td>314</td>
</tr>
<tr>
<td>TREATED FOR STD PAST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>NUMBER OF SEXUAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>12,813</td>
<td>27.2%</td>
<td>21.7%-33.4%</td>
<td>140</td>
</tr>
<tr>
<td>PARTNERS PAST 12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Partner</td>
<td>31,986</td>
<td>67.8%</td>
<td>61.3%-73.7%</td>
<td>266</td>
</tr>
<tr>
<td>2-3 Partners</td>
<td>1,417</td>
<td>3.0%</td>
<td>1.6%-5.7%</td>
<td>12</td>
</tr>
<tr>
<td>4+ Partners</td>
<td>971</td>
<td>2.1%</td>
<td>0.9%-4.5%</td>
<td>7</td>
</tr>
</tbody>
</table>

*Indicates data does not meet standards of reliability and has been suppressed.
Illinois County Behavioral Risk Factor Surveys

Physical Activities

<table>
<thead>
<tr>
<th>ICBRFS - Southern Seven</th>
<th>Estimated Population</th>
<th>Weighted Percent</th>
<th>95% Confidence Interval</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANY PHYSICAL ACTIVITY</td>
<td>Yes</td>
<td>26,534</td>
<td>54.2%</td>
<td>47.0%-61.2%</td>
</tr>
<tr>
<td>PAST 30 DAYS</td>
<td>No</td>
<td>22,439</td>
<td>45.8%</td>
<td>38.8%-53.0%</td>
</tr>
<tr>
<td>MEETS PHYSICAL ACTIVITY</td>
<td>Yes</td>
<td>13,467</td>
<td>34.9%</td>
<td>27.7%-42.7%</td>
</tr>
<tr>
<td>ACTIVITY GUIDELINES</td>
<td>No</td>
<td>25,169</td>
<td>65.1%</td>
<td>57.3%-72.3%</td>
</tr>
</tbody>
</table>

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

*Indicates data does not meet standards of reliability and has been suppressed.
Definitions

Binge Drinking
Respondents who report they did drink in the past 30 days and had five or more drinks for males or four or more drinks for females on one or more occasions in the past month.

Body Mass Index (BMI)
The calculation used to determine obesity status. BMI is calculated from a person's weight and height using the formula; weight in kilograms divided by height in meters squared (weight / height^2).

Cardiovascular Disease History (CVD)
Respondents who reported having a history of heart attack, coronary heart disease, or stroke.

Chronic Health Conditions
Respondents who report having any of the chronic diseases in the survey. Includes heart disease (heart attack/stoke/angina), current asthma, cancer, cancer, COPD, arthritis, depression, kidney disease and diabetes.

Current Smoker
Respondents who have smoked at least 100 cigarettes in their lifetime and now smoke some days or every day.

Disability
Defined by responses to the need for special equipment and/or having an activity limitation due to physical, mental, or emotional problems.

E-Cigarette Status
Respondents who have tried e-cigarettes and smoke e-cigarettes somedays or every day are current users. Not currently using status includes respondents who have tried e-cigarettes but respond “not at all” to how often they now smoke e-cigarettes. Respondents who answer no to have ever trying e-cigarettes are indicated with a never used status.

Functional Disability
Functional disability status defined by responses to the six functional disability questions (sight, hearing, decisions, walking/climbing stairs, bathing/dressing, doing errands).

Good Mental Health
Respondents who reported poor mental health for 13 days or less in the past 30 days.

Good Physical Health
Respondents who reported poor physical health for 13 days or less in the past 30 days.

Good General Health
Respondents who reported Good, Very Good, or Excellent general health status.

Heavy Drinking
Respondents reported having MORE than 2 drinks/day for MALES and MORE than 1 drink/day for FEMALES.

Obese
BMI greater than or equal to 30.

Overweight
BMI between 25 and less than 30.

Underweight/Normal
BMI less than 25.
# Illinois County Behavioral Risk Factor Surveys

## Survey Collection Years By County

<table>
<thead>
<tr>
<th>COUNTY OR GROUP</th>
<th>YEAR COLLECTED</th>
</tr>
</thead>
<tbody>
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122
Illinois County
Behavioral Risk Factor Survey
Questionnaire

Round 6 (2015-2019)
HEALTH STATUS

Would you say that in general your health is—
1 Excellent
2 Very good
3 Good
4 Fair
5 Poor

Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

______ Number of days

Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

______ Number of days

During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

______ Number of days

HEALTHCARE

Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, government plans such as Medicare, or Indian Health Service?

1 Yes 2 No

Medicare is a coverage plan for people 65 or over and for certain disabled people. Do you have Medicare?

1 Yes 2 No

Do you have one person you think of as your personal doctor or health care provider?

1 Yes, only one
2 More than one
3 No

Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?

1 Yes 2 No

About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

1 Within the past year (anytime < 12 months ago)
2 Within the past 2 years (1 year but < 2 years ago)
3 Within the past 5 years (2 years but < 5 years ago)
4 5 or more years ago
5 Never

Was there a time during the last 12 months when you needed to fill a prescription for medication, but could not because of the cost?

1 Yes 2 No
ORAL HEALTH

About how long has it been since you last visited a dentist or a dental clinic for any reason?
1. Within the past year (anytime < 12 months ago)
2. Within the past 2 years (1 year but < 2 years ago)
3. Within the past 5 years (2 years but < 5 years ago)
4. 5 or more years ago
8. Never

Do you have any kind of insurance coverage that pays for some or all of your routine dental care, including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid?
1. Yes 2. No

Was there a time during the last 12 months when you needed to see a dentist, but could not because of the cost?
1. Yes 2. No

CHOLESTEROL

Blood cholesterol is a fatty substance found in the blood. Have you EVER had your blood cholesterol checked?
1. Yes 2. No

About how long has it been since you last had your blood cholesterol checked?
1. Within the past year (anytime < 12 months ago)
2. Within the past 2 years (1 year but < 2 years ago)
3. Within the past 5 years (2 years but < 5 years ago)
4. 5 or more years ago

Have you EVER been told by a doctor, nurse or other health professional that your blood cholesterol is high?
1. Yes 2. No

HYPERTENSION

Have you EVER been told by a doctor, nurse, or other health professional that you have high blood pressure?
1. Yes
2. Yes, but female told only during pregnancy
3. No
4. Told borderline high or pre-hypertensive

Are you currently taking medicine for your high blood pressure?
1. Yes 2. No
CHRONIC HEALTH CONDITIONS

Has a doctor, nurse, or other health professional EVER told you that you had any of the following? For each, tell me “Yes,” “No,” or you’re “Not sure.”

(Ever told) you had a heart attack also called a myocardial infarction?

(Ever told) you had angina or coronary heart disease?

(Ever told) you had a stroke?

(Ever told) you had asthma?

Do you still have asthma?

(Ever told) you had any type of cancer?

(Ever told) you have Chronic Obstructive Pulmonary Disease or COPD, emphysema or chronic bronchitis?

(Ever told) you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?

Are you now limited in any way in any of your usual activities because of arthritis or joint symptoms?

(Ever told) you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?

(Ever told) you have diabetes?  "NOTE: If 'YES' and respondent is female ask Was this only when you were pregnant? If Respondent says pre-diabetes or borderline diabetes Code 4.

1 Yes
2 Yes, but female only during pregnancy
3 No
4 No, pre-diabetes or borderline
Diabetes (Pre-Diabetes)

Have you had a test for high blood sugar or diabetes within the past three years?
1 Yes 2 No

Have you ever been told by a doctor or other health professional that you have pre-diabetes or borderline diabetes? NOTE: If ‘Yes’ and respondent is female, ask: Was this only when you were pregnant?
1 Yes
2 Yes, during pregnancy
3 No

How old were you when you were told you have diabetes?
__Enter Age in Years

Are you now taking insulin?
1 Yes 2 No

About how often do you check your blood for glucose or sugar? Include times when checked by a family member or friend, but do NOT include times when checked by a health professional.
1 __ Times per day
2 __ Times per week
3 __ Times per month
4 __ Times per year

About how often do you check your feet for any sores or irritations? Include times when checked by a family member or friend, but do NOT include times when checked by a health professional.
1 __ Times per day
2 __ Times per week
3 __ Times per month
4 __ Times per year
5 5 5 No feet

About how many times in the past 12 months have you seen a doctor, nurse, or other health professional for your diabetes?
__ __ Number of times

A test for “A one C” measures the average level of blood sugar over the past three months. About how many times in the past 12 months has a doctor, nurse, or other health professional checked you for “A one C”?
__ __ Number of times

Have you ever taken a course or class in how to manage your diabetes yourself?
1 Yes 2 No
 DEMOGRAPHICS 

Indicate sex of respondent.
1 Male 2 Female

What is your age?
___ ___ Code age in years

Are you Hispanic, Latino/a, or Spanish origin?
1 Mexican, Mexican American, Chicano/a
2 Puerto Rican
3 Cuban
4 Another Hispanic, Latino/a, or Spanish origin
5 No

Which one or more of the following would you say is your race? Would you say: White, Black or African American, American Indian or Alaska Native, Asian or Pacific Islander?

Which one of these groups would you say best represents your race?

Are you... married, divorced, widowed, separated, never married or a member of an unmarried couple?
1 Married
2 Divorced
3 Widowed
4 Separated
5 Never married
6 Unmarried couple
9 Refused

What is the highest grade or year of school you completed?
1 Never attended school or only attended kindergarten
2 Grades 1 through 8
(Elementary)
3 Grades 9 through 11 (Some high school)
4 Grade 12 or GED (High school graduate)
5 College 1 year to 3 years (Some college or technical school)
6 College 4 years or more (College graduate)

Do you own or rent your home?
1 Own
2 Rent
3 Other arrangement

What county do you live in?
___ ___ ANSI/FIPS

What is the ZIP Code where you live?
_______ ZIP Code

Do you have more than one telephone number in your household?
1 Yes 2 No

How many of these telephone numbers are residential numbers?
1 One
2 Two
3 Three
4 Four
5 Five
6 Six or more

Do you have a cell phone for personal use?
Please include cell phones used for both business and personal use.
1 Yes 2 No

Are you currently...
1 Employed for wages
2 Self-employed
3 Out of work 1 year +
4 Out of work < 1 year
5 A Homemaker
6 A Student
7 Retired
8 Unable to work

How many children less than 18 years of age live in your household?
___ ___ # of children
Is your annual household income from all sources—
01  < $10,000
02  < $15,000
03  < $20,000
04  < $25,000
05  < $35,000
06  < $50,000
07  < $75,000
08  $75,000 or more

About how much do you weigh without shoes?

___ Weight kg or lbs

About how tall are you without shoes?

___ Height ft/in/m/cm

To your knowledge, are you now pregnant?

1 Yes  2 No

Do you consider yourself to be:
1 Heterosexual or Straight
2 Lesbian or gay
3 Bisexual

DISABILITY

Are you limited in any way in any activities because of physical, mental, or emotional problems?

1 Yes  2 No

Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?

1 Yes  2 No

Are you blind or do you have serious difficulty seeing, even when wearing glasses?

1 Yes  2 No

Are you deaf or do you have serious difficulty hearing?

1 Yes  2 No

Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?

1 Yes  2 No

Do you have serious difficulty walking or climbing stairs?

1 Yes  2 No

Do you have difficulty dressing or bathing?

1 Yes  2 No

Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor’s office or shopping?

1 Yes  2 No
TOBACCO

Have you smoked at least 100 cigarettes in your entire life? NOTE: For cigarettes, do not include: electronic cigarettes (e-cigarettes, NJOY, Bluetip), herbal cigarettes, cigars, cigarillos, little cigars, pipes, bidis, kreteks, water pipes (hookahs), or marijuana.
5 packs = 100 cigarettes

1  Yes  2  No

Do you now smoke cigarettes every day, some days, or not at all?
1  Every day
2  Some days
3  Not at all

How long has it been since you last smoked a cigarette, even one or two puffs?
01  Within the past month (< 1 month ago)
02  Within the past 3 months (1 month but < 3 months ago)
03  Within the past 6 months (3 months but < 6 months ago)
04  Within the past year (6 months but < 1 year ago)
05  Within the past 5 years (1 year but < 5 years ago)
06  Within the past 10 years (5 years but < 10 years ago)
07  10 years or more
08  Never smoked regularly

Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all?
1  Every day
2  Some days
3  Not at all

E-CIGARETTES

Have you ever tried electronic cigarettes or e-cigarettes such as BLU or NJOY even just one time in your entire life?
1  Yes  2  No

Do you now smoke E-cigarettes every day, some days or not at all?
1  Every day
2  Some days
3  Not at all

ALCOHOL

During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?

1 ___ Days per week
2 ___ Days in past 30 days

One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average? NOTE: A 40 ounce beer would count as 3 drinks, or a cocktail drink with 2 shots would count as 2 drinks.

___ Number of drinks

Considering all types of alcoholic beverages, how many times during the past 30 days did you have [5 for men, 4 for women] or more drinks on an occasion?

___ Number of times

During the past 30 days, what is the largest number of drinks you had on any occasion?

___ Number of drinks
PHYSICAL ACTIVITY

During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?

1 Yes 2 No

What type of physical activity or exercise did you spend the most time doing during the past month?

[See Physical Activity Coding List]

How many times per week or per month did you take part in this activity during the past month?

1__ Times per week
2__ Times per month

And when you took part in this activity, for how many minutes or hours did you usually keep at it?

____ Hours and minutes

What other type of physical activity gave you the next most exercise during the past month?

[See Physical Activity Coding List]

How many times per week or per month did you take part in this activity during the past month?

1__ Times per week
2__ Times per month

And when you took part in this activity, for how many minutes or hours did you usually keep at it?

____ Hours and minutes

IMMUNIZATION

There are two ways to get the flu vaccine, one is a shot in the arm and the other is a spray, mist, or drop in the nose called FluMist™. During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose?

1 Yes 2 No

A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person’s lifetime and is different from the flu shot. Have you ever had a pneumonia shot?

1 Yes 2 No
BREAST & CERVICAL CANCER SCREENING

A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram?

1  Yes  2  No

How long has it been since you had your last mammogram?

1  Within the past year  
   (anytime < 12 months ago)
2  Within the past 2 years  
   (1 year but < 2 years ago)
3  Within the past 3 years  
   (2 years but < 3 years ago)
4  Within the past 5 years  
   (3 years but < 5 years ago)
5  5 or more years ago

A Pap test is a test for cancer of the cervix. Have you ever had a Pap test?

1  Yes  2  No

How long has it been since you had your last Pap test?

1  Within the past year  
   (anytime < 12 months ago)
2  Within the past 2 years  
   (1 year but < 2 years ago)
3  Within the past 3 years  
   (2 years but < 3 years ago)
4  Within the past 5 years  
   (3 years but < 5 years ago)
5  5 or more years ago

A clinical breast exam is when a doctor, nurse, or other health professional feels the breasts for lumps. Have you ever had a clinical breast exam?

1  Yes  2  No

How long has it been since your last breast exam?

1  Within the past year  
   (anytime < 12 months ago)
2  Within the past 2 years  
   (1 year but < 2 years ago)
3  Within the past 3 years  
   (2 years but < 3 years ago)

COLORECTAL CANCER SCREENING

Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?

1  Yes  2  No

For a Sigmoidoscopy, a flexible tube is inserted into the rectum to look for problems. A Colonoscopy is similar, but uses a longer tube, and you are usually given medication through a needle in your arm to make you sleepy and told to have someone else drive you home after the test. Was your MOST RECENT exam a sigmoidoscopy or a colonoscopy?

1  Sigmoidoscopy
2  Colonoscopy

How long has it been since you had your last sigmoidoscopy or colonoscopy?

1  Within the past year  
   (anytime < 12 months ago)
2  Within the past 2 years  
   (1 year but < 2 years ago)
3  Within the past 3 years  
   (2 years but < 3 years ago)
4  Within the past 5 years  
   (3 years but < 5 years ago)
5  10 or more years ago

PROSTATE CANCER SCREENING

A Prostate-Specific Antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. Have you EVER HAD a PSA test?

1  Yes  2  No
COGNITIVE IMPAIRMENT

The next few questions ask about difficulties in thinking or remembering that can make a big difference in everyday activities. This does not refer to occasionally forgetting your keys or the name of someone you recently met, which is normal. This refers to confusion or memory loss that is happening more often or getting worse, such as forgetting how to do things you’ve always done or forgetting things that you would normally know. We want to know how these difficulties impact you.

During the past 12 months, have you experienced confusion or memory loss that is happening more often or is getting worse?

1  Yes  2  No

During the past 12 months, as a result of confusion or memory loss, how often have you given up day-to-day household activities or chores you used to do, such as cooking, cleaning, taking medications, driving, or paying bills?

1  Always
2  Usually
3  Sometimes
4  Rarely
5  Never

As a result of confusion or memory loss, how often do you need assistance with these day-to-day activities?

1  Always
2  Usually
3  Sometimes
4  Rarely
5  Never

When you need help with these day-to-day activities, how often are you able to get the help that you need?

1  Always
2  Usually
3  Sometimes
4  Rarely
5  Never

During the past 12 months, how often has confusion or memory loss interfered with your ability to work, volunteer, or engage in social activities outside the home?

1  Always
2  Usually
3  Sometimes
4  Rarely
5  Never

Have you or anyone else discussed your confusion or memory loss with a health care professional?

1  Yes  2  No

HIV/STD/SEXUAL BEHAVIOR

Please remember that your answers are strictly confidential and you don’t have to answer a question if you don’t want to. Although we will ask about tests you may have had we will not ask about the results of any tests.

Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth.

1  Yes  2  No

In the past year, have you been treated for a sexually transmitted or venereal disease?

1  Yes  2  No

During the past 12 months, with how many people have you had sexual intercourse?

Number of Sexual Partners
For questions or comments please contact:

Illinois Department of Public Health
Office of Policy Planning & Statistics
525 W. Jefferson Floor 2
Springfield, IL 62761

DPH.BRFSS@illinois.gov
217-785-2040