# Table of Contents

**Perspective/Overview** .......................................................................................................................... 03
  - Participants ........................................................................................................................................ 04
  - Project Goals ...................................................................................................................................... 04

**Community Input and Collaboration** .................................................................................................. 06
  - Data Collection and Timeline ............................................................................................................. 06
  - Input of Public Health Officials ........................................................................................................ 07
  - Input of Medically Underserved, Low-Income, and Minority Populations ..................................... 09
  - Community Engagement and Transparency ...................................................................................... 09

**Community Selected for Assessment** ................................................................................................. 10
  - Saint Thomas DeKalb Hospital Patients - 2015 .............................................................................. 10

**Key Findings of the Community Health Assessment** .......................................................................... 11
  - Information Gaps ................................................................................................................................. 11
  - Process and Methods ........................................................................................................................ 11
  - Demographics of the Community ...................................................................................................... 12
  - Health Status Data ............................................................................................................................. 15
  - Focus Group, Survey Results, Health Status Comparisons ............................................................... 16
  - Community Survey Results .............................................................................................................. 18
  - Health Status Comparisons .............................................................................................................. 20

**Prioritization of Health Needs** ........................................................................................................... 34
  - Prioritization Criteria .......................................................................................................................... 34

**Community Health Summit Brainstorming – Focus Areas, Goals** ..................................................... 36

**Community Assets and Resources** ..................................................................................................... 39
The Community Health Needs Assessment (CHNA) defines priorities for health improvement, creates a collaborative community environment to engage stakeholders, and provides an open and transparent process to listen and truly understand the health needs of DeKalb County, Tennessee. Saint Thomas DeKalb Hospital has not previously conducted a CHNA, as it had been an investor-owned facility and exempt from the requirement. In 2015, Saint Thomas DeKalb Hospital was purchased by Saint Thomas Health, a 501(c)3
organization and is henceforth required to conduct a CHNA. Therefore, there was no evaluation of efforts since the previous CHNA.

Saint Thomas DeKalb Hospital, as the sponsor of the assessment, engaged national leaders in community health needs assessment to assist in the project. Stratasan, a healthcare analytics and facilitation company out of Nashville, Tennessee was engaged to marshal the process and provide community health data and facilitation expertise. Stratasan provided the analysis of community health data and facilitated a focus group and community health summit to assist the community with determining significant health needs and goals for improvement. Alexandra Norton, Saint Thomas Health’s Director, Community Health and Benefit in collaboration with Christi Granstaff, the Executive Director of the Tennessee Charitable Care Network, solicited individual insight from community leaders through in-person interviews and an e-mailed survey.

Saint Thomas Health Regional Hospitals’ Board of Directors will approve and adopt this CHNA, along with the associated Implementation Strategy.

This report is made widely available to the community via Saint Thomas Health’s website, http://www.sthealth.com/about-us/mission-integration/community/community-health-needs-assessment, and paper copies will be available free of charge at Saint Thomas DeKalb Hospital.

Participants

Individuals from fourteen community and health care organizations collaborated to implement a comprehensive CHNA process focused on identifying and defining significant health needs, issues, and concerns of DeKalb County, Tennessee. The three-month process centered on gathering and analyzing data as well as receiving input from persons who represented the broad interests of the community and had special knowledge of or expertise in public health to provide direction for the community and hospital to create a plan to improve the health of the community.

Project Goals

1. To implement a formal and comprehensive community health assessment process which will allow for the identification and prioritization of significant health needs of the community, to then inform resource allocation, decision-making and collective action that will improve health.

2. To initiate a collaborative partnership between all stakeholders in the community by seeking input from persons who represent the broad interests of the community.

3. To support the existing infrastructure and utilize resources available in the community to instigate health improvement in the community.
We initiated the Community Health Needs Assessment with the goal of identifying public health needs, and setting goals, objectives and priorities,” said Sue Conley, Chief Executive Officer, Saint Thomas DeKalb Hospital. “It is our goal to use our findings as a foundation for improving and promoting the health of the whole community.”

“The information we gathered both from public health data and from community stakeholders provided the insight the community needed to set priorities for significant health issues and will be used by Saint Thomas DeKalb Hospital to create an implementation plan. We hope other community organizations will join us.” added Alexandra Norton, Director, Community Health and Benefit, Saint Thomas Health. “The Community Health Summit was the final step in the assessment process. Now the real work—improving the health of the community and implementing the ideas presented—begins.”

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Photo credit: DeKalb County Website
In March 2016, Saint Thomas DeKalb Hospital contracted with Stratasan to assist in conducting a Community Health Needs Assessment for DeKalb County, Tennessee. Saint Thomas DeKalb Hospital sought input from persons who represent the broad interests of the community using several methods:

- Six community members participated in a focus group for their perspectives on community health needs and issues on April 18, 2016.
- Information gathering using secondary public health sources occurred in March and April of 2016.
- Eight community members were interviewed or surveyed regarding their perspectives on community health status and needs in April 2016.
- A Community Summit was conducted on April 26, 2016 with 12 community stakeholders. The audience consisted of representatives from healthcare, the DeKalb County Health Department, government, schools, the library and others.
Participation in the focus group, interviews and at the Community Health Summit creating the DeKalb County Community Health Needs Assessment and Improvement Plan:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Population Represented (kids, low income, minorities, w/o access)</th>
<th>How Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent business - ceramic art</td>
<td></td>
<td>Focus Group</td>
</tr>
<tr>
<td>Publisher - Healthy Living in the Cumberlands</td>
<td></td>
<td>Focus Group, Summit</td>
</tr>
<tr>
<td>Saint Thomas Health</td>
<td>All</td>
<td>Focus Group, Summit</td>
</tr>
<tr>
<td>Saint Thomas DeKalb Hospital</td>
<td>All</td>
<td>Focus Group, Summit</td>
</tr>
<tr>
<td>DeKalb County Board of Education</td>
<td>Students pre K to 12th</td>
<td>Summit</td>
</tr>
<tr>
<td>DeKalb County Health Department</td>
<td>All, Limited access to care</td>
<td>Summit</td>
</tr>
<tr>
<td>DeKalb County Library System</td>
<td>Kids and low income</td>
<td>Summit, Interview</td>
</tr>
<tr>
<td>DeKalb County Mayor</td>
<td>All</td>
<td>Summit, Interview</td>
</tr>
<tr>
<td>TCCN</td>
<td>Charitable clinics</td>
<td>Summit</td>
</tr>
<tr>
<td>DeKalb County Drug Court</td>
<td>Juveniles/adults</td>
<td>Summit</td>
</tr>
<tr>
<td>Coordinated School Health</td>
<td>Kids</td>
<td>Interview</td>
</tr>
<tr>
<td>Smithville Church of God</td>
<td></td>
<td>Interview</td>
</tr>
<tr>
<td>Health Connect America</td>
<td></td>
<td>Interview</td>
</tr>
<tr>
<td>Good Health Family Clinic</td>
<td></td>
<td>Interview</td>
</tr>
</tbody>
</table>

Input of Public Health Officials

At the Summit held on April 26, 2016 Michael Railling, MPH, Director, DeKalb County Health Department presented information and priorities from, 2016 TN Department of Health DeKalb County Community Health Status. For more information, visit http://tennessee.gov/health/section/statistics.

Mr. Railling reviewed demographics and an economic profile of DeKalb County. He also reviewed County Health Rankings recent data comparing DeKalb County to the other counties in the Upper Cumberland area in areas such as mortality, % poor or fair health, low birthweight babies, tobacco use, adult obesity, physical inactivity, injury deaths, alcohol impaired driving deaths, teen birth rate, uninsured, high school graduation, and children in single parent households. He compared the Upper Cumberland results to Tennessee and a national benchmark. From these metrics, the upper Cumberland region appeared fairly homogeneous in its health needs. Some highlights of the presentation follow.
Tennessee Big Three + 1 priorities as outlined in the report were:
1. Tobacco Use
2. Obesity
3. Physical Inactivity
4. Substance Abuse

Mr. Railling outlined what the state and local health departments are doing relative to each of these issues.

Tobacco use
• Baby and Me Tobacco Free
• Project TNT
• Tobacco Quitline
• Making public places smoke free
• T4 Peer Group

Obesity
• My Plate
• WIC
Input of Medically Underserved, Low-Income and Minority Populations - Community Engagement and Transparency

Input was received during the focus group, interviews and the summit.

Community Engagement and Transparency

We are pleased to share the results of the Community Health Needs Assessment with our community in hopes of attracting more advocates and volunteers to improve the health of the community. The following pages highlight key findings of the assessment. We hope the community will take the time to review the health needs of our community as the findings impact each and every citizen in one way or another and join in the improvement efforts. The comprehensive data analysis may be obtained via a PowerPoint on the website or by contacting Saint Thomas DeKalb Hospital.
Community

Selected for Assessment

Saint Thomas DeKalb Hospital’s health information provided the basis for the geographic focus of the CHNA. The map below shows where Saint Thomas DeKalb Hospital received its patients in 2015; most of Saint Thomas DeKalb Hospital’s inpatients came from DeKalb County (79%). Therefore, DeKalb County was selected as the primary focus of the CHNA.

The community included medically underserved, low-income or minority populations who live in the geographic areas from which Saint Thomas DeKalb Hospital draws its patients. All patients were used to determine the service area without regard to insurance coverage or eligibility for financial assistance under Saint Thomas DeKalb Hospital’s Financial Assistance Policy.

Saint Thomas DeKalb Hospital Patients - 2015

Source: Saint Thomas DeKalb Hospital, 2015
Key Findings
Community Health Assessment

Information Gaps

While this assessment was quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess all of the community's health needs.

For example, certain population groups (such as the homeless, institutionalized persons, or those who only speak a language other than English or Spanish) were not represented in the survey data.

Other population groups (for example, pregnant women, lesbian/gay/bisexual/transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups) might not be identifiable or might not be represented in numbers sufficient for independent analyses.

Process and Methods

Both primary and secondary data sources were used in the CHNA. Primary methods included:

• Community focus group
• Community interviews/survey

Secondary methods included:

• Public health data – death statistics, county health rankings
• Demographics – population, poverty, uninsured
• Psychographics

Photo credit: DeKalb County Website
Demographics of the Community

The table below shows the demographic summary of DeKalb County compared to Tennessee and the U.S.

- Source: ESRI

<table>
<thead>
<tr>
<th></th>
<th>DeKalb County</th>
<th>Tennessee</th>
<th>USA</th>
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<tbody>
<tr>
<td>Population (2015)</td>
<td>19,358</td>
<td>6,585,731</td>
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<td>Median Age (2015)</td>
<td>42.5</td>
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<td>Median Household Income (2015)</td>
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<td>$53,217</td>
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<td>Annual Pop. Growth (2015-20)</td>
<td>0.80%</td>
<td>0.82%</td>
<td>0.75%</td>
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<td>Household Population (2015)</td>
<td>7,643</td>
<td>2,591,245</td>
<td>120,746,349</td>
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<td>Dominant Tapestry (2015)</td>
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<td>Rooted Rural (10B)</td>
<td>Green Acres (6A)</td>
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<td>Employees (2015)</td>
<td>7,692</td>
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<td>Medical Care Index* (2015)</td>
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<td>88</td>
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<td>Average Health Expenditures (2015)</td>
<td>$1,655</td>
<td>$1,839</td>
<td>$2,098</td>
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<td>Total Health Expenditures (2015)</td>
<td>$12.6 M</td>
<td>$4.8 B</td>
<td>$253.3 B</td>
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Racial and Ethnic Make-up
- Source: ESRI

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<th></th>
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<th>80%</th>
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<td>Black</td>
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<tr>
<td>American Indian</td>
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<tr>
<td>Asian/Pacific Islander</td>
<td>0% Moore St.</td>
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<td>Mixed Race</td>
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<td>Other</td>
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<td>Hispanic Origin</td>
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</tbody>
</table>

- Source: ESRI

Median Household Income (2015)

- $200K+
- $150K-$199.9K
- $100K-$149.9K
- $75K-$99.9K
- $50K-$74.9K
- $35K-$49.9K
- $25K-$34.9K
- $15K-$24.9K
- <$15K

Photo credit DeKalb County Website
DeKalb County, Tennessee

- The population of DeKalb County was projected to increase from 2015 to 2020 (.80% per year), lower than the rate of TN at .82%, but higher than the U.S. at .75%.
- DeKalb County was older (42.5 median age) than TN and the U.S. and had lower median household income ($37,467) than both TN and the U.S.
- The medical care index measures how much the county spent out of pocket on medical care services. The U.S. index was 100. DeKalb County (79 index) spent 21% less than the average U.S. household out of pocket on medical care (doctor's office visits, prescriptions, hospital services).
- The racial make-up of DeKalb County was 91% white, 2% black, 5% mixed race, 2% other, and 8% Hispanic origin. (The numbers will total to over 100% due to Hispanic being an ethnic group, not a race)
- The median household income distribution of DeKalb County was 7% higher income (over $100,000), 58% middle income and 35% lower income (under $24,999).


Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people. There are higher population census tracts, 5,000-7,999 in Smithville and areas west, Liberty and Dowelltown.

The population was projected to grow most in the census tracts containing Smithville, Dowelltown and Liberty, areas west in the County, .83% to 1.64%. The census tracts east of Smithville area also growing, but not as much, .01% to .82%.
2015 Median Age & Income

These maps depict median age and median income by census tract. There was an area of older population, in the northeastern part of the county, around the lake. The median age in this tract is 45-54 compared to 40-44 throughout the remainder of the county.

There was an area of lower median household income $1-$24,999, Smithville. Not all households were at the median in a census tract, but these are indicators of segments of the population that may need focused attention. The remainder of the county is in the range of $35,000 to $49,999 median household income. The Smithville census tract also has the highest number of households making less than $15,000.

The rate of poverty in DeKalb County was 19% (2009-2013 data), which was above TN (17.6%) and the U.S. (15.4%). The poverty percentage was in the middle range of contiguous counties. Putnam was highest at 26.5% and Wilson was lowest at 10.2%.

DeKalb County’s unemployment was 6.0% compared to 5.4% for Tennessee and 5.0% for the U.S.. Unemployment decreased significantly in the last few years. DeKalb is in the middle range for unemployment in Tennessee.

Uninsured in DeKalb County was 19.8% in 2013, but for people less than 200% of poverty the percentage of uninsured was 27.6%. Approximately 18% of DeKalb County has Medicare, 28% have TennCare and 35% have other, which would most likely be insurance through an employer or private insurance.
Health Status Data

The major causes of death in DeKalb County were heart disease, followed by cancer, accidents, stroke, chronic lower respiratory disease, Alzheimer’s disease, diabetes, influenza and pneumonia, kidney disease, suicide and liver disease. Source: 2012-2014 Tennessee Department of Health; CDC official final deaths 2014.

Based on the latest County Health Rankings study performed by the Robert Wood Johnson Foundation and the University of Wisconsin, DeKalb County ranked 65th healthiest county in Tennessee out of the 95 counties ranked (1 = the healthiest; 95 = unhealthiest). County Health Rankings suggest the areas to explore for improvement in DeKalb County were: adult smoking, adult obesity, physical inactivity, access to exercise opportunities, teen births, uninsured, preventable hospital stays, percentage with some college, unemployment, and injury deaths. The areas of strength were identified as lower excessive drinking, higher high school graduation, lower children in single parent households, no drinking water violations, and fewer severe housing problems.

When analyzing the health status data, local results were compared to Tennessee, the U.S. (where available) and the top 10% of counties in the U.S. (the 90th percentile). Where DeKalb County’s results were worse than the State and U.S., there is an opportunity for group and individual actions that will result in improved community ratings. There were several lifestyle gaps that need to be closed to move DeKalb County up the ranking to be the healthiest community in Tennessee and eventually the Nation. For additional perspective, Tennessee was ranked the 43rd healthiest state out of the 50 states.

Source: Saint Thomas DeKalb Community Health Summit; Stratasan (2016)
Focus Group, Interview Results, Health Status Comparisons

Focus Group

Six community stakeholders representing the broad interests of the community participated in a focus group for their input into the community's health. There was broad community participation in the focus group, with participants representing a range of expertise and backgrounds. Below is a summary of the 90-minute discussion.

- The group described the health of the community as not very healthy with mental health and childhood diabetes mentioned as health issues.
- When asked about the top three issues facing the community, the group mentioned:
  - Education – lower post-secondary education
  - Education – people sending kids to private school leaving public schools
  - Education – Common core hurt education, teach to the test, but not critical thinking skills; no room for physical education, health, art or music classes.
- When asked about the biggest health issues for DeKalb County the group mentioned:
  - Eat Wise and Exercise program to combat obesity in schools. Started 3 years ago when an alarming 56% of 8th graders were obese and 42.3% were obese this year. Huge improvement.
  - Tennessee Promise has really helped kids go to college.
  - Obesity is higher now than in the past
  - Eat out more
  - Physical education has been cut to once a week or one semester. Activity is down
  - After school sports are available at the Sports Complex
- The group thought the following issues changed in the last three years:
  - Poor eating habits
  - Peer pressure to be like everyone else
  - Lack of mentors – young adults don't have adults to act as role models
  - Smoking
  - Drug abuse
  - It all comes back to education
  - Change starts with kids
- The group believed the behaviors that have the most negative impact on health are:
  - Obesity
  - Drug abuse
  - Diabetes
  - Childhood obesity and diabetes
  - High cost of health insurance
  - Uninsured – no Medicaid Expansion
- The group believed the environmental factors that have the most negative impact on health are:
  - Nurseries in Warren County use lots of pesticides and has affected property values around the nurseries into northern DeKalb County
  - The holding ponds in Warren County have used so much water, lowered the water table affecting the wells in DeKalb County
The group thought the biggest barriers to improving health were:

- Lots of fast food restaurants
- Not easy to get to DeKalb County – affects manufacturing and job creation
- Low wages
- So much technology, less outdoor time
- Apathy – lack of personal responsibility
- More expensive to eat healthy
- 187 children in the school system on the backpack program and subsidized lunch program – lack of resources
- No time in schools for PE and health class

The group listed the following as community assets to support health:

- Fiddler's Jamboree
- Center Hill Lake – water activities
- Parks around Lake and in town with walking trails
- Natural beauty of the area
- Appalachian Center for Crafts
- Lake Restaurants
- Community Complex – Community and Senior Center, TN Ag Extension
- Silver Sneakers program
- Parks – Edgar Evins State Park
- People who care about the community
- Rotary, Business and Professional Women and other organizations
- Schools are required to have 90 minutes of physical activity each week
- Health Department
- Saint Thomas DeKalb Hospital

Photo credit: Chuck Sutherland, used with permission; Center Hill Lake
• When asked where member of the community turn for basic healthcare needs, they responded:
  • Family and friends
  • Internet
  • Local primary care physicians
  • Urgent Care
  • Hospital ER
  • Some people avoid hospitals and doctors to their own detriment
• When asked what the community needs to manage health conditions or to stay healthy, the group listed:
  • Education – discuss health issues on a regular basis and build awareness
  • Could have a monthly evening gathering discussing different health issues sponsored by local groups – build awareness and knowledge of health issues
• When asked what priority health improvement action should DeKalb County focus on, the group listed:
  • Heart disease
  • Diabetes
  • Back
  • Joint issues
  • Chronic diseases

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Community Interviews

Eight community stakeholders representing the broad interests of the community participated in either an in person interview or an online survey, providing their input into the community’s health.

The participants were asked to select their top health issues from the listed issues. The top issue selected was alcohol and drug prevention/treatment followed by obesity, healthy weight, access to care, affordability, cost of care and mental and emotional health.

When asked about the top social and economic determinants that contribute to health, the group listed, health insurance coverage first, followed by education attainment, poverty – working poor, and income, wealth dispersion.

The participants felt the most important natural, social and structural environmental issues that contribute to health were second hand smoke, followed by affordable housing, transportation, access to healthy foods and limited sidewalks/safe recreational space.

When responding to the conditions or diseases that are causing illness and death in your community, the group listed alcohol and drug abuse/addiction followed by cancer, diabetes, cardiovascular disease – hypertension, and emotional and mental health.

The participants were asked how, from whom, where care was received and how it was coordinated. Access to care, mental health care and affordability/cost of care were mentioned most, followed by emergency department use for non-emergencies, health education, access to care overall and disease and treatment focused- not prevention focused.
When asked about the health behaviors, the choices we make that promote health or risk health, the participants responded, alcohol and drug abuse/addiction was mentioned most followed by tobacco use/smoking and physical activity.

When asked what reasons or barriers exist that cause the use of emergency rooms for non-emergencies, the participants responded:

• Uninsured either by choice or need
• Convenience
• Can’t get into see a doctor fast enough or when you need them
• Access to medical treatment
• Medicaid Gap
• Lack of dental care
• Outside hours of Health Dept.-provided primary care
• Difficulty in seeing a doctor on short notice
• Cost and access to care
• Limited or no insurance
• Limited patient understanding that not all health issues are in need of emergency assessment

When asked about what works well in the county that supports health and well-being, the responses were plentiful.

• Community Complex
• Parks
• Girl Talk - program of Coordinated School Health
• Annual screenings by Coordinated School Health
• Backpack program to feed kids over the weekend
• Health Department
• Private exercise facilities
• Family Medical Center
• 3 Star Grant providing exercise equipment, targeting 8th grade obesity
• Educating community about healthy choices
• FQHC - DeKalb County HD Sliding Scale
• Baby and Me Tobacco Free Program
• UCHRA Public Transportation
• Community collaborations
• Library
• CAB
• Haven of Hope
• Drug court
• Senior centers
• NHC
• Healthcare providers
• Faith-based groups
• Civic groups & businesses
• Government
• Caring community members
• City pool
• Good Health Family Clinic Wellness Days
When asked what health initiatives the county should focus on for the next three years, the participants responded:

- Health education: focused on obesity & nutrition
- Teen pregnancy
- Bullying/mental health
- Drug & alcohol use
- Tobacco use
- Affordable care
- Drug abuse
- Cancer
- Diabetes
- Reduce smoking
- Getting people physically active
- Reducing drug abuse
- Adequate doctors to serve county
- Alcohol and drug abuse
- Affordability of care
- Physical Activity/Nutrition/Obesity
- Ending the tobacco and drug epidemic
- Environmental health
- Good mental health
- Obesity

---

**Health Status Analysis and Comparisons**

Information from County Health Rankings and America’s Health Rankings was analyzed in the Community Health Needs Assessment in addition to the previously reviewed information and other public health data. Other data analyzed was referenced in the bullets below, such as: causes of death, demographics, socioeconomics, consumer health spending, focus group, and interviews. When data was available for Tennessee, the U.S. or the top 10% of counties (90th percentile), they were used as comparisons. Where the data indicated a strength or an opportunity for improvement, it is called out below. Strengths are important because the community can build on those strengths and it’s important to continue focus on strengths so they don’t become opportunities for improvement. The full data analysis can be seen in the CHNA PowerPoint. There were strengths and opportunities identified for measures and for the counties. Opportunities were denoted with red stars, and strengths were denoted using green stars. The years displayed on the County Health Rankings graphs show the year the data was released. The actual years of the data was contained in the source notes below the graphs.
Leading Causes of Death: Age-adjusted deaths per 100,000

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>263.8</td>
<td>203.1</td>
<td>169.8</td>
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<tr>
<td>Cancer</td>
<td>175.5</td>
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</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>62.9</td>
<td>52.3</td>
<td>42.1</td>
</tr>
<tr>
<td>Accidents</td>
<td>92.0</td>
<td>52.5</td>
<td>39.4</td>
</tr>
<tr>
<td>Stroke</td>
<td>65.5</td>
<td>44.2</td>
<td>36.2</td>
</tr>
<tr>
<td>Alzheimer’s Disease</td>
<td>49.6</td>
<td>37.0</td>
<td>23.5</td>
</tr>
<tr>
<td>Diabetes</td>
<td>26.3</td>
<td>24.4</td>
<td>21.2</td>
</tr>
<tr>
<td>Influenza and Pneumonia</td>
<td>22.3</td>
<td>21.5</td>
<td>15.9</td>
</tr>
<tr>
<td>Kidney Disease</td>
<td>21.5</td>
<td>14.1</td>
<td>13.2</td>
</tr>
<tr>
<td>Suicide</td>
<td>16.9</td>
<td>14.5</td>
<td>12.6</td>
</tr>
<tr>
<td>Liver Disease</td>
<td>13.1</td>
<td>11.5</td>
<td>10.2</td>
</tr>
</tbody>
</table>

- Source: Tennessee Department of Health, National Center for Health Statistics, CDC: 2013 Final Data

Red areas had death rates higher than the state. The major causes of death in DeKalb County were heart disease, followed by cancer, accidents, stroke, chronic lower respiratory disease, Alzheimer's disease, diabetes, influenza and pneumonia, kidney disease, suicide and liver disease.
Health Outcomes (Length of Life and Quality of Life)

Health Outcomes are a combination of length of life and quality of life measures. DeKalb County ranked 72nd in Health Outcomes out of 95 Tennessee counties. DeKalb County ranked 81st out of 95 Tennessee counties in length of life. Length of life was measured by years of potential life lost per 100,000 population prior to age 75.

Quality of Life

Quality of life was measured by: % reporting fair or poor health, the average number of poor physical health days and poor mental health days in the past 30 days, and % of live births with birthweight less than 2500 grams 5 pounds 8 ounces. DeKalb County ranked 53rd out of 95 counties for quality of life.
Quality of Life OPPORTUNITIES

- DeKalb County had a slightly higher percentage of the population with poor or fair health (22%) than the U.S. and TN.

- DeKalb County had a higher average number of poor physical health days than Tennessee and the U.S. with 4.8 poor physical health days out of the past 30 days.

- DeKalb County also had higher average number of poor mental health days than TN and the U.S. with 4.6 poor mental health days out of the past 30 days.

- DeKalb County had slightly higher percentage of low birthweight babies than TN, and more than the U.S.

*indicates a change in the Behavioral Risk Factor Surveillance System Survey calculations of results or changes in survey methodologies. 2016 cannot be compared to prior year results.
Health Factors or Determinants

Health factors or determinants were comprised of measures of related to health behaviors, clinical care, social & economic factors, and physical environment. DeKalb County ranked 59th out of 95 Tennessee counties for health factors.

Health Behaviors

Source: Obesity, physical inactivity - County Health Rankings; CDC Diabetes Interactive Atlas, 2012
Source: Access to exercise opportunities - County Health Rankings; ArcGIS Business Analyst, Delorme map data, ESRI and US Census Tigerline Files, 2013
Source: Smoking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS)
Source(s): Excessive drinking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS), 2014
Source: Alcohol-impaired driving deaths - County Health Rankings; Fatality Analysis Reporting System, 2010-2014
Source: STDs - County Health Rankings; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2013
Source: Teen birth rate – County Health Rankings; National Center for Health Statistics – Natality files, 2007-2013

Reducing Multiple Painkiller Prescribers

Tennessee 36%

2012 Action: Tennessee required prescribers to check the state's prescription drug monitoring program before prescribing painkillers.

2013 Result: Saw a 36% drop in patients who were seeing multiple prescribers to obtain the same drugs, which would put them at higher risk of overdose.

1,263 people, at least, died from opioid overdose in 2014 in Tennessee

For every one person who dies there are 851 people in various stages of misuse, abuse and treatment, according to estimates from the U.S. Centers for Disease Control and Prevention.

There are at least 1,074,813 Tennesseans, or about 1 in 6, misusing or abusing opioids or in treatment, by the CDC’s estimate.

For those who died in 2014 there are
• 12,630 in treatment admissions for abuse
• 32,838 emergency room visits for misuse or abuse
• 136,404 people who abuse opioids or are dependent
• 925,779 non-medical users

Source Tennessee Department of Health and U.S. Centers for Disease Control and Prevention

Source(s): TN Dept of Health, CDC (2014); PDMP Center of Excellence at Brandeis University (2014)
Health Behaviors STRENGTHS

- DeKalb County experienced lower excessive drinking than TN and the U.S.
- DeKalb County had lower sexually transmitted infections measured as chlamydia rate per 100,000 population than TN and the U.S.

Health Behaviors OPPORTUNITIES

- Adult obesity, although in line with Tennessee, was higher than the U.S. Obesity puts people at increased risk of chronic diseases: diabetes, kidney disease, joint problems, hypertension and heart disease. Obesity can cause complications in surgery and with anesthesia. It has been implicated in Alzheimer’s. It often leads to metabolic syndrome and type 2 diabetes. It is a factor in cancers, such as ovarian, endometrial, postmenopausal breast cancer, colorectal, prostate, and others.
- Physical inactivity was higher in DeKalb County than TN and the U.S.
- The percentage of the population with adequate access to locations for physical activity was lower in DeKalb County than TN and the U.S.
- Adult smoking in DeKalb County, was higher than TN and the U.S. Each year approximately 443,000 premature deaths can be attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birthweight and other adverse health outcomes.
- The percentage of driving deaths with alcohol involved was higher than TN and the U.S.
- The teen birth rate in DeKalb County was higher than TN and the U.S. at 59.7 births per 1,000 females age 15-19.
- The drug overdose mortality rate was higher than TN and the U.S. and increasing.
- One in six Tennesseans was estimated to be abusing opioids.
Clinical Care

Clinical care ranking is made up of eight indicators, and they account for 20% of the county rankings. DeKalb ranked 86th out of 95 Tennessee counties in clinical care.

Uninsured
(%<65 without health insurance)

Preventable hospital stays
(hospitalization rate for ambulatory-sensitive conditions per 1,000 Medicare enrollees)

Mammography screening
(% female Medicare enrollees receiving mammo screening) Higher is better

Diabetic screening
(% diabetic Medicare enrollees receiving HbA1c screening) Higher is better

Source: Uninsured - County Health Rankings; Small Area Health Insurance Estimates, 2013
Source: Preventable hospital stays, mammography screening, diabetic screening - County Health Rankings; Dartmouth Atlas of Health Care, 2013
Clinical Care STRENGTHS

- The percent of the Medicare population receiving diabetic screening was higher in DeKalb County than in TN and the U.S.

Clinical Care OPPORTUNITIES

- Percent uninsured was higher in DeKalb County than TN and the U.S.
- Preventable hospital stays, hospitalization rate for ambulatory-sensitive conditions per 1,000 Medicare enrollees was higher than TN and the U.S.
- Mammography screening was lower in DeKalb than TN and the U.S.
- The population per primary care physician was higher than TN and the U.S.
- The population per dentist was higher in DeKalb than TN and the U.S.
- 44.9% of the population of the Upper Cumberland was at risk due to lack of dental care.
- The population per mental health provider was higher in DeKalb than TN and the U.S.
- The percent of adults 20 and above with diabetes was slightly higher than TN.

Chuck Sutherland, photographer, used with permission
Social & Economic Factors

Social and economic factors account for 40% of the county rankings. There are eight measures in the social and economic factors category. DeKalb County ranked 48th out of 95 Tennessee counties in social and economic factors.

Source: High School graduation – County Health Rankings; States to the Federal Government via EDFacts, 2012-2013
Source: Some college - County Health Rankings; American Community Survey, 5-year estimates, 2010-2014
Source: Children in poverty - County Health Rankings; US Census, Small Area Income and Poverty Estimates, 2014
Source: Social associations - County Health Rankings; County Business Patterns, 2013
Unemployment Rate by County

Unemployment
6.0% – DeKalb Co. (2016)
5.4% – Tennessee (2016)
5.0% – U.S. (2016)

Unemployment Rate by County

Social & Economic Factors STRENGTHS

• High school graduation was higher in DeKalb County (98%) than TN and the U.S.
• The percentage of children in single-parent households was lower in DeKalb County, 25%, than TN and the U.S.
• Income inequality as measured by the ratio of household income at the 80th percentile to income at the 20th percentile was lower in DeKalb than TN and the U.S.
• Violent crime rate per 100,000 population was lower in DeKalb County than in TN and the U.S.

Source: Bureau of Labor Statistics

Source: Income inequality - County Health Rankings; American Community Survey, 5-year estimates 2010-2014
Source: Children in single parent households - County Health Rankings; American Community Survey, 5-year estimates, 2010-2014
Source: Injury deaths – County Health Rankings; CDC WONDER mortality data, 2009-2013
Source: Violent crime - County Health Rankings; Uniform Crime Reporting – FBI, 2011 - 2013
Social & Economic OPPORTUNITIES

• The percent of adults with some college was lower than TN and the U.S.

• The percentage of children in poverty was higher in DeKalb County than Tennessee and the U.S.; 29% of DeKalb County children lived in poverty.

• Social associations were lower in DeKalb County than TN but higher than the U.S. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations. Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality.

• Injury deaths were higher than TN and the U.S.

• Lower median household income in DeKalb County ($37,467) than TN ($44,695) and the U.S. ($53,217)

• DeKalb County had higher poverty (19%) than TN (17.6%) and the U.S. (15.4%)
Physical Environment

Physical environment contains five measures in the category. Physical environment accounts for 10% of the county rankings. DeKalb ranked 16th out of 95 Tennessee counties in physical environment.

Source: Drinking water violations – County Health Rankings; EPA, FY 2013-2014
Source: Severe housing problems – County Health Rankings; HUD Comprehensive Housing Affordability Strategy data, 2008-2012
Source: Driving alone to work and long commute – County Health Rankings: American Community Survey, 5-year estimates, 2010-2013

Source: Air pollution – County Health Rankings: CDC WONDER environmental data, 2010, Hamilton County Health Data Profile; CDC, TN Department of Health.
Physical Environment STRENGTHS

• There were no drinking water violations in DeKalb County. These statistics were prior to the Flint water crisis.

• There was a lower percentage of households with at least one of four housing problems, overcrowding, high housing costs, lack of kitchen or plumbing facilities than TN and the U.S., at the 90th percentile of all counties in the U.S.

Physical Environment OPPORTUNITIES

• DeKalb County had slightly higher percentage of workers who commuted alone and more than thirty minutes. A 2012 study in the American Journal of Preventive Medicine found that the farther people commute by vehicle, the higher their blood pressure and body mass index. Also, the farther they commute, the less physical activity the individual participated in. Source: County Health Rankings: [1] Hoehner, Christine M., et al. "Commuting distance, cardiorespiratory fitness, and metabolic risk." American journal of preventive medicine 42.6 (2012): 571-578.

The transportation choices that communities and individuals make have important impacts on health through active living, air quality, and traffic crashes. The choices for commuting to work can include walking, biking, taking public transit, or carpooling, the most damaging to the health of communities is individuals commuting alone. In most counties, this is the primary form of transportation to work. Source: County Health Rankings

There were Four Broad Themes that Emerged in this Process:

• DeKalb County needs to create a “Culture of Health” which permeates throughout the cities, employers, churches, and community organizations to engender total commitment to health improvement.

• There is a direct relationship between health outcomes and affluence (income and education). Those with the lowest income and education generally had the poorest health outcomes.

• While any given measure may show an overall good picture of community health, there are significantly challenged subgroups.

• It will take a partnership with a wide range of organizations and citizens pooling resources to meaningfully impact the health of the community. Many assets exist in the county to improve health.
# Results of the CHNA

## Prioritization of Health Needs

At the Community Health Summit, the attendees identified and prioritized the most significant health needs in the community for the next three-year period. The group used the criteria below to prioritize the health needs.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnitude / scale of the problem</td>
<td>The health need affects a large number of people within the community.</td>
</tr>
<tr>
<td>Severity of the problem</td>
<td>The health need has serious consequences (morbidity, mortality, and/or economic burden) for those affected.</td>
</tr>
<tr>
<td>Health disparities</td>
<td>The health need disproportionately impacts the health status of one or more vulnerable population groups.</td>
</tr>
<tr>
<td>Community assets</td>
<td>The community can make a meaningful contribution to addressing the health need because of its relevant expertise and/or assets as a community and because of an organizational commitment to addressing the need.</td>
</tr>
<tr>
<td>Ability to leverage</td>
<td>Opportunity to collaborate with existing community partnerships working to address the health need, or to build on current programs, emerging opportunities, or other community assets.</td>
</tr>
</tbody>
</table>
The following issues were prioritized and goals and actions were brainstormed by the group at the Community Health Summit and formed the foundation of DeKalb County's health initiatives. Using a nominal group technique, each attendee received three sticky notes and selected their top three health needs and posted their ideas on paper at the front of the room. The results of the activity are below with higher numbers indicating the number of “votes” or priority by topic. The bullets below the health need are the actual comments received on the sticky notes.

1. **Substance Abuse & Mental Health (12)**
   - Drug/alcohol abuse
   - Drug abuse – 2
   - Addiction
   - More prevention and education for alcohol and drug use for medical professionals and the public
   - Screen for drug/alcohol abuse during ER/Dr. visits accurately
   - Smoking – 2
   - Mental health – 3
   - Better access to local care for emotional and mental health services

2. **Obesity – Food/Fitness/Fun (10)**

3. **Access to Care (4)**
   - Access to healthcare
   - Uninsured
   - Access to insurance
   - Access to dental care

4. **Youth (2)**
   - Teen pregnancy
   - Child welfare

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Community Health Summit Brainstorming

Focus Areas, Goals

The most significant health needs resulted in four categories and the group brainstormed goals and actions around the most important health needs listed above.

Substance Abuse & Mental Health

Goal 1 - Increase care coordination
- Detox
- Geriatric psych
- Mental health beds
- Psychiatrists, psychologists, psychiatric nurse practitioners, addiction counseling
- Telemedicine
- Ask about drug abuse history – both doctors and hospitals

Goal 2 - Improve reimbursement through a public policy initiative

Goal 3 - Increase prevention activities

Action 1 – Add opioids to the message about tobacco and alcohol in schools
Action 2 – Expand audience of prevention beyond schools to parents and older adults

Note: Employers are having difficulty finding drug-free workers to pass a drug screening, therefore an economic impact to substance abuse
**Obesity – Food/Fitness/Fun**

- **Goal 1 - Increase activity**
  Action 1 – Build activity into everyday activities – stairs, parking far away

- **Goal 2 - Improve nutrition**
  Action 1 – Implement nutrition classes – what is healthy food, portions and how to cook it
  Action 2 – Utilize visual aids in teaching to improve the message

- **Goal 3 - Identify centers of influence to focus the message**
  - Workplaces
  - Churches
  - Schools
  - Media – TV, radio, newspapers, phone apps, magazines (Healthy Living in the Cumberlands)

**Access to Care**

- **Goal 1 - Improve access to healthcare for Medicaid and uninsured**
  Action 1 – Focus on insurance enrollment
  Action 2 – Improve specialist referrals for uninsured and Medicaid
  Action 3 – Improve knowledge of available resources such as the Health Department

- **Goal 2 – Improve access for older citizens**
  Action 1 – Improve transportation options and schedules

- **Goal 3 – Improve access to regular dental care**
  Action 1 – Provide sealants in schools
  Action 2 – Fluoride in the water
  Action 3 – Dentists to see uninsured and Medicaid
Youth Issues

Goal 1 - Decrease teen pregnancy
Action 1 – Promote Girl Talk
Action 2 – Initiate Guy Talk
Action 3 – Promote the abstinence education in schools

Goal 2 – Expand physical education in schools at every grade level, year round
Action 1 – Mobilize community group to advocate for physical activity to the school board

Goal 3 – Improve the welfare of children in the county
Action 1 – Increase mentors in the community
Action 2 – Encourage self esteem
Action 3 – Publicize and promote the parenting classes
Community Assets and Resources

Community Asset Inventory

A separate document that includes list of community assets and resources that can help improve the health of the community and assist with implementation of the plan accompanies this document.

The focus group and interviews also identified community resources to improve health, which are listed on pages 17 and 19 above.
Community Health Needs Assessment

completed by Saint Thomas DeKalb Hospital and Saint Thomas Health in partnership with:

Stratasan