COMMUNITY HEALTH NEEDS ASSESSMENT AND IMPLEMENTATION PLAN

2015

A Collaborative Approach to Impacting Population Health
in Montgomery and Macoupin Counties

HSHS St. Francis Hospital is an affiliate of Hospital Sisters Health System, a multi-institutional health care system comprised of 14 hospitals and an integrated physician network serving communities throughout Illinois and Wisconsin.

ST. FRANCIS COMMUNITY HEALTH NEEDS ASSESSMENT AND IMPLEMENTATION STRATEGY

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COMMUNITY HEALTH NEEDS ASSESSMENT

I. EXECUTIVE SUMMARY

Background
Provisions in the Affordable Care Act (ACA) require charitable hospitals to conduct a Community Health Needs Assessment (CHNA) and adopt implementation strategies to meet the needs identified through the CHNA. The CHNA is a systematic process involving the community to identify and analyze community health needs as well as community assets and resources in order to plan and act upon priority community health needs. This assessment process results in a CHNA Report which is used to plan, implement, and evaluate Community Benefit activities. Once the CHNA Report is completed, a set of implementation strategies is developed based on the evidence and assets and resources identified in the CHNA process.

Every three years, affiliates of Hospital Sisters Health System, including St. Francis Hospital, are required to conduct a CHNA and to adopt an Implementation Plan by an authorized body of the hospital in the same taxable year, and make the report widely available to the public. The hospital's previous CHNA Report and Implementation Plan was conducted and adopted in FY2012. In addition, the hospital completes an IRS Schedule H (Form 990) annually to provide information on the activities and policies of, and Community Benefit provided by the hospital.

To comply with these requirements, St. Francis Hospital led a collaborative approach in conducting its CHNA and adopting an Implementation Plan in FY2015 (July 1, 2014 through June 30, 2015) in partnership with representatives from the community. The Community Health Needs Assessment was developed and conducted by a consultant provided through the Illinois Critical Access Hospital Network (ICAHN).

ICAHN is a not-for-profit 501(c)(3) corporation, established in 2003 for the purposes of sharing resources, education, promoting operational efficiencies and improving health care services for member critical access hospitals and their rural communities. ICAHN, with 53 member hospitals, is an independent network governed by a nine-member board of directors, with standing and project development committees facilitating the overall activities of the network. ICAHN continually strives to strengthen the capacity and viability of its members and rural health providers. St. Francis Hospital is a member of the Illinois Critical Access Hospital Network.

The Community Health Needs Assessment will serve as a guide for planning and implementation of health care initiatives that will allow the hospital and its partners to best serve the emerging health needs of Litchfield and the surrounding area. Upon completion of the CHNA, the hospital developed a set of implementation strategies and adopted an Implementation Plan to address priority community health needs. The population assessed was Macoupin and Montgomery counties. Data collected throughout the assessment process was supplemented with:

- a local asset review;
- qualitative data gathered from broad community representation; and,
- focus groups, including input from local leaders, medical professionals, health professionals and community members who serve the needs of persons in poverty and the elderly.

IDENTIFICATION AND PRIORITIZATION OF NEEDS

On November 24, 2014, six persons including the Community Outreach Coordinator and the CEO from St. Francis, a physician with certifications in family and geriatric medicine, the Macoupin County Public Health Administrator, the Montgomery County Undersheriff, and a local business leader/community activist met to review the primary and secondary data collected to that point and to identify and prioritize significant health needs in the service area. The group reviewed over 60 pages of secondary data and data summaries from Community Commons, ESRI, USDA, County Health Rankings, Montgomery and Macoupin County IPLANs, National Cancer Institute, Illinois Behavioral Risk Factor Surveillance System, Illinois Department of Employment Security, Illinois State Board of Education and other sources, as well as the results of focus groups conducted with community members and medical professionals and partners. The group utilized a roundtable discussion to identify significant needs, largely consolidating concerns expressed in the focus groups which found support in the secondary data but also identifying some issues based on the secondary data alone. They then applied individual power rankings to the needs and discussed the tabulated results before finalizing the prioritization.

The health needs were identified based on:

- the burden, scope, severity, and urgency of the health need;
- health disparities associated with the health need;
- the importance the community places on addressing the health need;
- the community assets and resources that could be leveraged through strategic collaboration in the hospital's service area to address the health need;
- secondary data sources; and,
- local expertise and input.

The group identified and prioritized the following needs:

1. MENTAL HEALTH

- A unified, countywide process for intake and post-intake handling of criminal and non-criminal mental health needs introduced to the system by law enforcement and others
- Continued improvement in access to psychiatrists for youth and adults

2. HYPERTENSION-CARDIOVASCULAR (TOBACCO USE)

- Education about risk and prevention
- Self-management and self-engagement education

3. OBESITY

- Education
- Low income access to recreation and physical activity

4. WELLNESS

- Nutrition (access to healthy foods and education for youth, young adults, and the elderly about nutrition)
- Low income access to recreation and physical activity
- Life skills education
- Self-management education

5. CANCER

- Local infusion services
- Prevention information and testing
- Better understanding of types of cancer and frequency of cancer seen locally

6. EDUCATION

- About available health-related services for youth and adults
- For grandparents raising grandchildren
- About safety for all ages

7. DENTAL

- Better access to services for low income

ST. FRANCIS HOSPITAL

As part of the engagement process with key stakeholders, attention has been given to natural partnerships and collaborations that will be used to operationalize the Implementation Plan. The Implementation Plan is considered a "living document" – a set of strategies that can be adapted to the lessons learned while implementing Community Benefit programs and services relevant to the priority needs. The broader set of community health needs will continue to be monitored for consideration as future focus areas.

Introduction and Background
St. Francis Hospital is a not-for-profit hospital serving portions of Montgomery and Macoupin counties.

Current Services and Assets

Major Centers and Services	Statistics	New Services and Facilities
Baby Central	Total Admissions: 1,336	Newly remodeled ED providing better patient access, centralized monitoring area, innovative equipment, and a new helipad
Community Outreach	Outpatient Visits: 46,804	Completed and dedicated a new 16,000 square foot surgery center with four surgery suites, and 12 pre- and post-operative patient rooms
Emergency Care	Cardiac Rehab Visits: 3,792	
STAT Heart Program	Total Surgeries: 2,497	
Heart Aware Risk Assessment	ED Visits: 10,535	
Laboratory	Births: 286	
Orthopedics	MRIs: 1,606	
Pastoral Care	X-Rays: 16,066	
Physical Therapy	CT Scans: 6,542	
Radiology	Ultrasounds: 5,415	
Rehabilitation	Nuclear Medicine: 1,571	
Respiratory Therapy	Respiratory Therapy Treatments: 5,589	
Sleep Studies	Physical Therapy Treatments: 1,039	
Surgery	Cardiac Tests (EKG): 4,075	
Volunteers	Community Dental Services: $14,000	
	2013 Health Fair: $17,000	
	Produce Program: 320 Households	
	Total Auxilians: 245	

Hospital Accreditations, Certifications, and Awards
St. Francis Hospital is accredited by The Joint Commission, having received the Gold Seal of Approval, and is licensed by the Illinois Department of Public Health. The hospital is also approved by the Centers for Medicare and Medicaid Services.

HSHS St. Francis-Litchfield (SFL) won an award ranking the hospital second in the state for hospitals who participated in the Hospital Engagement Network (HEN) improvement projects. Also, HSHS SFL won an award from the HEN for accomplishing at least 10 quality initiatives and meeting or exceeding the state goals. One of those initiatives was a joint venture with The March of Dimes. HSHS SFL also won an award and banner for its work in eliminating early elective deliveries (EEDs).

Additionally, St. Francis Hospital received a Top Performer on Key Quality Measures ranking in 2013, and was selected as a winner of the Greenhealth Partner for Change Award by Practice Greenhealth.

COMMUNITY HEALTH NEEDS ASSESSMENT POPULATION

For the purpose of this CHNA, St. Francis Hospital defined its primary service area and populations as the general population within the geographic area in and surrounding the City of Litchfield defined in detail below. The hospital's patient population includes all who receive care without regard to insurance coverage or eligibility for assistance.

Montgomery and Macoupin County and Service Area Demographics

St. Francis Hospital's service area is comprised of approximately 203.49 square miles, with a population of approximately 29,479 and a population density of 144.87 persons per square mile. The service area consists of the following rural communities:

Cities	Townships	Villages
Litchfield	Gillespie	Butler
Hillsboro	Hillsboro	Eagerville
Irving	Mt. Olive	East Gillespie
Gillespie	North Litchfield	Mt. Clare
Mt. Olive	South Litchfield	Sawyerville
Witt	Walshville	Taylor City
Coffeen	Witt	Walshville
Benld		White City

Total Population Change, 2000 to 2010

According to the U.S. Census data, the population in the region declined from 79,671 to 77,869 between the years 2000 and 2010, a 2.26% decrease.

Report Area	Total Population 2000 Census	Total Population 2010 Census	Total Population Change, 2000-2010	Percentage Population Change, 2000-2010
Service Area Estimates	29,854	29,223	-631	-2.11%
Macoupin County	49,019	47,765	-1,254	-2.56%
Montgomery County	30,652	30,104	-548	-1.79%
State	12,419,231	12,830,632	411,401	3.31%

Data Source: Community Commons

In Macoupin County, the Hispanic population increased by 113 (37.05%) and increased in Montgomery County by 133 (40.8%).

In Macoupin County, additional population changes were as follows: White -2.99%, Black -10.25%, American Indian/Alaska Native 15.6%, Asian 44.94%, and Native Hawaiian/Pacific Islander -21.43%. In Montgomery County, additional population changes were as follows: White -1.55%, Black -16.71%, American Indian/Alaska Native -25.4%, Asian 58.57%, and Native Hawaiian/Pacific Islander 22.22%.

Population by Age Groups

Population by gender was 53.03% male and 47.51% female, and the region has the following population counts by age groups:

Report Area	Total Population	Ages 0-17	Ages 18-24	Ages 25-34	Ages 35-44
Service Area Estimates	29,479	6,095	2,704	3,800	4,038
Macoupin County	47,712	10,779	3,920	5,347	5,787
Montgomery County	29,977	6,215	2,524	3,636	3,949
State	12,823,860	3,112,738	1,251,175	1,774,620	1,730,297

Report Area	Ages 45-54	Ages 55-64	Ages 65+
Service Area Estimates	4,578	3,453	5,005
Macoupin County	7,261	6,453	8,165
Montgomery County	4,603	3,823	5,227
State	1,854,809	1,477,877	1,622,344

Data Source: Community Commons

Population without a High School Diploma (ages 25 and older)

Within the report area there are 3,003 persons aged 25 and older without a high school diploma (or equivalent) or higher. This represents 14.42% of the total population aged 25 and older. This indicator is relevant because educational attainment is linked to positive health outcomes.

Report Area	Population Ages 25+	Population Ages 25+ with no HS Diploma	% Population Age 25+ with no HS Diploma
Service Area Estimates	20,830	3,003	14.42%
Macoupin County	33,013	3,747	11.35%
Montgomery County	21,238	3,207	15.1%
State	8,459,947	1,102,449	13.03%

Note: This indicator is compared with the state average. Data Source: Community Commons

Population in Poverty (100% FPL and 200% FPL)

Poverty is considered a key driver of health status. Within the report area 14.74% or 3,817 individuals are living in households with income below the Federal Poverty Level (FPL). This is higher than the statewide poverty levels 13.66%.This indicator is relevant because poverty creates barriers to access including health services, nutritional food, and other necessities that contribute to poor health status.

Report Area	Total Population	Population Below 100% FPL	Population Below 200% FPL
Service Area Estimates	25,890	3,817	9,348
Macoupin County	46,311	5,591	14,734
Montgomery County	25,058	3,554	8,925
State	12,522,726	1,710,465	3,859,869

Note: This indicator is compared with the state average. Data Source: Community Commons

Poor General Health

Within the report area, 20.06% of adults 18 and older report having poor or fair health in response to the question, "Would you say that in general your health is excellent, very good, good, fair or poor?" The state rate is 15.4%. This indicator is relevant because poverty creates barriers to access including health services, nutritional food, and other necessities that contribute to poor health status.

Report Area	Total Population	Population Below 100% FPL	Population Below 200% FPL
Service Area Estimates	22,956	4,606	20.06%
Macoupin County	36,938	7,461	20.2%
Montgomery County	23,708	4,742	20%
State	9,654,603	1,486,809	15.4%

Note: This indicator is compared with the state average. Data Source: Community Commons

II. ESTABLISHING THE CHNA INFRASTRUCTURE AND PARTNERSHIPS

St. Francis Hospital led the planning, implementation, and completion of the Community Health Needs Assessment through a consulting arrangement with the Illinois Critical Access Hospital Network. Terry Madsen, an ICAHN consultant, attorney and former educator and community development specialist, met with hospital executive staff to define the community, scope of the project, and special needs and concerns. An internal working group, possible local sources for secondary data and key external contacts were identified, and a timeline was established.

Internal
St. Francis Hospital undertook a four-month planning and implementation effort to develop the CHNA, identify and prioritize community health needs for its service area, and formulate an Implementation Plan to guide ongoing population health initiatives with like-missioned partners and collaborators. These planning and development activities included the following steps:

- The project was overseen at the operational level by the Community Outreach Facilitator reporting directly to the CEO.
- Arrangements were made with ICAHN to facilitate two focus groups, a meeting to identify and prioritize significant needs, and a session to develop an implementation strategy to address the prioritized needs. ICAHN was also engaged to collect, analyze, and present secondary data and to prepare a final report for submission to St. Francis Hospital.
- The Community Outreach Facilitator worked closely with ICAHN's consultant to identify and engage key community partners and to coordinate local meetings and group activities.

External
St. Francis Hospital also leveraged existing relationships that provided diverse input for a comprehensive review and analysis of community health needs in the hospital's service area. These external component steps include:

- The Community Outreach Facilitator secured the participation of a diverse group of representatives from the community and the health profession.
- The ICAHN consultant provided secondary data from multiple sources set out below in the quantitative data list.
- Participation included representatives of both county health departments serving the area that is also served by the hospital.

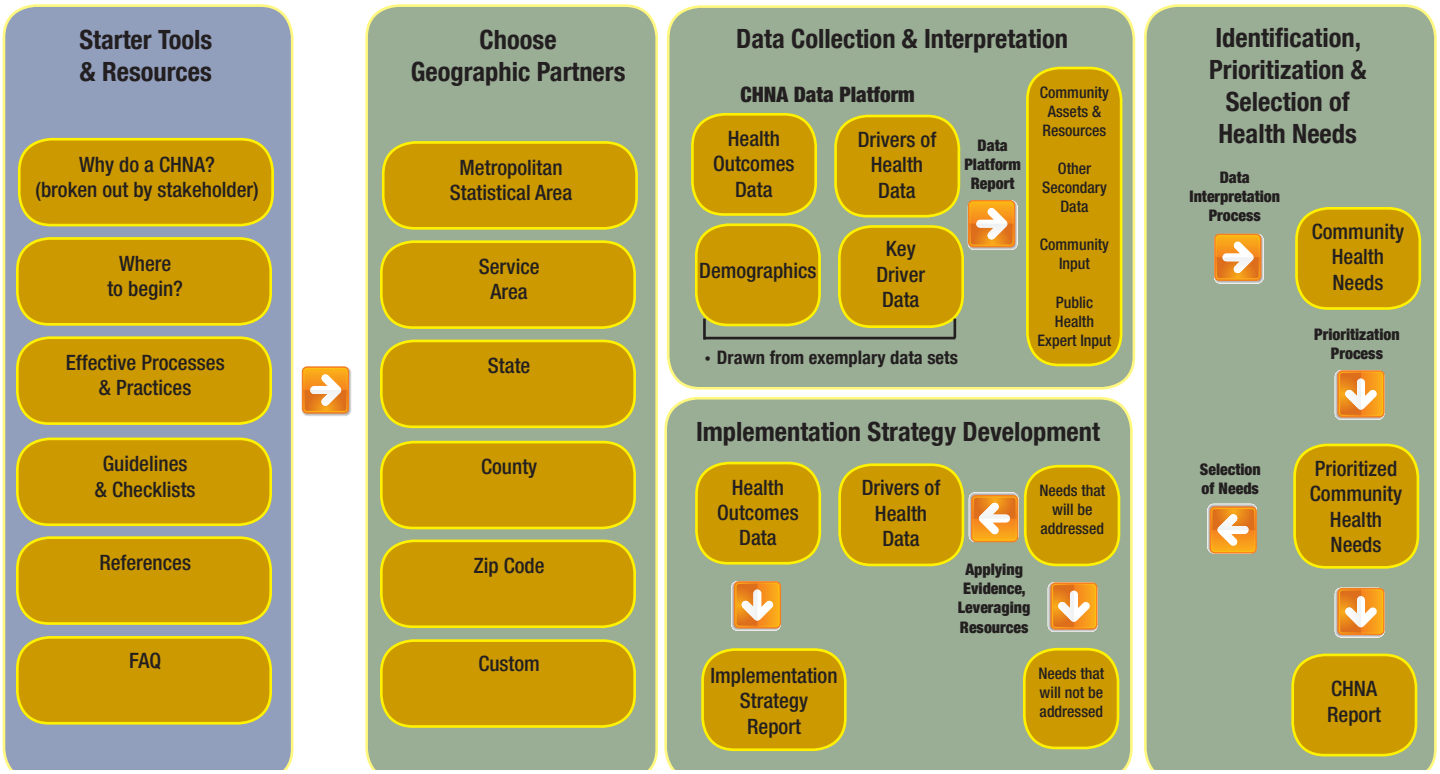
II. DEFINING THE PURPOSE AND SCOPE

The purpose of the CHNA was to 1) evaluate current health needs of the hospital's service area, 2) identify resources and assets available to support initiatives to address the health priorities identified, 3) develop an Implementation Plan to organize and help coordinate collaborative efforts impacting the identified health priorities, and 4) establish a system to track, report and evaluate efforts that will impact identified population health issues on an ongoing basis.

II. DATA COLLECTION AND ANALYSIS

Description of Process and Methods Used

The overarching framework used to guide the CHNA planning and implementation is based on the Catholic Health Association's (CHA) Community Commons CHNA flow chart below:



DESCRIPTION OF DATA SOURCES

Quantitative

Source	Description
Behavioral Risk Factor Surveillance System	The BRFSS is the largest, continuously conducted telephone health survey in the world. It enables the Center for Disease Control and Prevention (CDC), state health departments, and other health agencies to monitor modifiable risk factors for chronic diseases and other leading causes of death.
US Census	National census data is collected by the US Census Bureau every 10 years.
Centers for Disease Control	Through the CDC's National Vital Statistics System, states collect and disseminate vital statistics as part of the US's oldest and most successful intergovernmental public health data sharing system.
County Health Rankings	Each year, the overall health of each county in all 50 states is assessed and ranked using the latest publicly available data through a collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

Quantitative Data Sources continued on next page

Source	Description
Community Commons	Community Commons is an interactive mapping, networking, and learning utility for the broad-based healthy, sustainable, and livable communities' movement.
Illinois Department of Employment Security	The Illinois Department of Employment Security is the state's employment agency. It collects and analyzes employment information.
National Cancer Institute	The National Cancer Institute coordinates the National Cancer Program, which conducts and supports research, training, health information dissemination, and other programs with respect to the cause, diagnosis, prevention, and treatment of cancer, rehabilitation from cancer, and the continuing care of cancer patients and the families of cancer patients.
Illinois Department of Public Health	The Illinois Department of Public Health is the state agency responsible for preventing and controlling disease and injury, regulating medical practitioners, and promoting sanitation.
HRSA	The Health Resources and Services Administration of the U.S. Department of Health and Human Services develops health professional shortage criteria for the nation and uses that data to determine the location of Health Professional Shortage Areas and Medically Underserved Areas and Populations.
Local IPLANS	The Illinois Project for Local Assessment of Needs (IPLAN) is a community health assessment and planning process that is conducted every five years by local health jurisdictions in Illinois.
ESRI	ESRI (Environmental Systems Research Institute) is an international supplier of Geographic Information System (GIS) software, web GIS and geodatabase management applications. ESRI allows for specialized inquiries at the zip code, or other defined, level.
Illinois State Board of Education	The Illinois State Board of Education administers public education in the state of Illinois. Each year, it releases school "report cards" which analyze the makeup, needs, and performance of local schools.
USDA	USDA, among its many functions, collects and analyzes information related to nutrition and local production and food availability.

Qualitative

Qualitative data was reviewed to help validate the selection of health priorities. In alignment with IRS Treasury Notice 2011-52.2 and the subsequent final rules reported at 79 FR 78953, the qualitative/primary data received and reviewed included primary input from (1) at least one state, local, tribal, or regional governmental public health department (or equivalent department or agency) with knowledge, information, or expertise relevant to the health needs of the community); and, (2) members of medically underserved, low-income, and minority populations in the community, or individuals or organizations serving or representing the interests of such populations. The organizations and persons that participated are detailed below.

No written comments were received concerning the hospital facility's most recently conducted CHNA nor on the most recently adopted Implementation Strategy. A method for retaining written public comments and responses exists, but none were received.

Data was also gathered representing the broad interests of the community.

The hospital took into account input from persons who represent the broad interests of the community served by the hospital, including those with special knowledge of, or expertise in public health (local, regional, state and/or tribal). Members of medically underserved, low-income, and minority populations served by the hospital or individuals or organizations representing the interests of such populations also provided input. The medically underserved are members of a population who experience health disparities, are at risk of not receiving adequate medical care as a result of being uninsured or underinsured, and/or experiencing barriers to health care due to geographic, language, financial, or other barriers.
No public comments on the previous CHNA were known to the hospital.

Members of the CHNA Steering Committee, those who both participated in focus groups and the needs identification and prioritization process, were chosen based on their unique expertise and experience, informed perspectives, and involvement with the community. The CHNA Steering Committee members included:

CHNA Steering Committee Member	Area of Expertise
Lee Johns	Community activist, business leader, deacon at Holy Family Catholic Church
Dr. Chris Poirot	Physician with certifications in family and geriatric medicine; Chief Medical Officer, St. Francis Hospital
Rick Robbins	Undersheriff, Montgomery County
Kent Tarro	Public Health Administrator, Macoupin County
Patti Fischer	CEO, St. Francis Hospital
Vicky Fuller	Community Outreach Facilitator, St. Francis Hospital

Others providing input included through the focus groups included:
Dr. Eric Johnson – Optometrist
Jody Perkins – Montgomery County Health Department
Marge Oblinger – Administrator, Heritage Health Long Term Care Facility
Dawn Rosentreater – Director of Nursing, Heritage Health Long Term Care Facility
Amy Williams – Director, Evergreen Place, assisted living facility
John Wenzel – Director, Maple St. Clinic, Macoupin County Health Department
Nikki Bishop – County Board Member, Senior Home Care, Experience with long term care facilities
Marchelle Kassebaum – Regional Superintendent of Schools
Matt Houser – Director of Hearts United, mission experience
Roberta Meyer – Aide for Illinois State Representative Wayne Rosenthal
Chris Handshy – Litchfield EMS
Tatum Wertin – Litchfield High School student

V. IDENTIFICATION AND PRIORITIZATION OF NEEDS

As part of the identification and prioritization of health needs, the CHNA Steering Committee considered the estimated feasibility and effectiveness of possible interventions by the hospital to impact these health priorities; the burden, scope, severity, or urgency of the health need; the health disparities associated with the health needs; the importance the community placed on addressing the health need; and other community assets and resources that could be leveraged through strategic collaboration in the hospital's service area to address the health need.

As an outcome of the prioritization process, discussed above, several potential health needs or issues flowing from the primary and secondary data were not identified as significant current health needs and were not advanced for consideration for the Implementation Strategy.

VI. DESCRIPTION OF COMMUNITY HEALTH NEEDS IDENTIFIED

The following needs were identified as significant health needs and prioritized:

1. MENTAL HEALTH

- A unified, countywide process for intake and post-intake handling of criminal and non-criminal mental health needs introduced to the system by law enforcement and others
- Continued improvement in access to psychiatrists for youth and adults

Both focus groups raised issues surrounding intake and post-intake resources for persons with mental health issues. Medical professionals and law enforcement agreed that this issue created particular problems with persons brought to the facility by law enforcement. Finding local counseling and in-patent transfer options are extremely difficult on a regular basis. The need for mental health care was also raised in the focus groups. St. Francis Hospital is located in a designated Mental Health Professional Shortage Area (MH-HPSA score – 16). Mental illness, mental health needs, depression, eating disorders, substance abuse issues, juvenile suicide, and mental health services, prevention and management for all ages were all mentioned in the focus groups. Although the Macoupin County Health Department has begun providing psychiatric services at its clinic, all of the prioritization group agreed that the effort was insufficient to fully address the needs for services for persons of all ages.

2. HYPERTENSION-CARDIOVASCULAR (TOBACCO USE)

- Education about risk and prevention
- Self-management and self-engagement education

Mortality information from the Illinois Department of Public Health highlighted the impact of hypertension and cardiovascular diseases on the area. Hypertension was identified as a health concern by both focus groups. The identification and prioritization group felt that tobacco was a central issue requiring continued attention in addition to self-management and self-engagement of cardiovascular diseases.

3. OBESITY

- Education about risk and prevention
- Low income access to recreation and physical activity

Obesity, and the often related condition of diabetes and other illnesses, were concerns of both focus groups. Specific mention was made in the community focus group of the absence of opportunities for recreation and physical activities for low income and elderly residents. The identification and prioritization group believed this to be centered on issues surrounding the need for better education and better access to recreation and physical activity, especially for persons with low income and the elderly.

4. WELLNESS

- Nutrition (access to healthy foods and education for youth, young adults, and the elderly about nutrition)
- Low income access to recreation and physical activity
- Life skills education
- Self-management education

Wellness, and its many components, was discussed by both focus groups and secondary data concerning food access and choices, obesity, and healthy living indicators, particularly from Community Commons and County Health Rankings, supported many of those concerns. The identification and prioritization group identified the above needs as significant and also as inclusive of the various concerns seen.

5. CANCER

- Local infusion services
- Prevention information and testing
- Better understanding of types of cancer and frequency of cancer seen locally

Cancer, in various forms, was a concern of both focus groups and that concern was supported by the mortality tables and the National Cancer Institute ranking for Montgomery County. The identification and prioritization group identified absence of local infusion services (reflecting concerns over transportation and absence of local services in the focus groups) and the need for better prevention information and testing and a better understanding of the types and frequency of cancer seen locally as significant needs.

6. EDUCATION

- About available health-related services for youth and adults
- For grandparents raising grandchildren
- About safety for all ages

Access to information and education about many topics was raised in the focus groups and identified as a significant need.

7. DENTAL

- Better access to services for low income

St. Francis Hospital is located in a dental professional shortage area with a HPSA score of 12. The Medical Professionals and Partners focus group identified access to dental care as a need. The identification and prioritization group felt that although this situation seemed to be improving, it remained a significant need.

VII. RESOURCES AVAILABLE TO MEET PRIORITY HEALTH NEEDS

Service Lines

St. Francis Hospital provides full Emergency Department services with a physician on duty 24 hours per day/seven days per week. Emergency nurses are certified in advanced cardiac life support, pediatric advanced life support, and trauma. The Emergency Department provides services to rapidly identify a stroke or heart attack and provide immediate life-saving interventions. A full complement of radiology services is also available including mammography, MRI, sonography, interventional radiology, CT scan, and nuclear medicine scans. Laboratory services are also provided. Inpatient care services include maternity care, medical care, and surgical. A wide variety of surgical services are available including ENT services, Urology, Podiatry, General Surgery, and Endoscopy. Orthopedic surgical services include all primary orthopedic procedures as well as total joint replacement surgeries. Rehabilitation services include physical therapy, speech therapy, and occupational therapy.

Hospitals and Related Medical Groups

Other area hospitals and medical groups include Hillsboro Area Hospital, Hillsboro; Community Memorial Hospital, Staunton; Carlinville Area Hospital, Carlinville; Litchfield Family Practice, Litchfield; and Macoupin County Family Practice, Carlinville and Gillespie.

Community Organizations and Government Agencies

The hospital provides a food pantry for area residents and works with two other local food pantries. Other organizations and include Hearts United; the Salvation Army; Goodwill; Pregnancy Crisis Center; University of Illinois Extension, Montgomery County; and the Montgomery and Macoupin County Health Departments.

IMPLEMENTATION STRATEGY

VIII. IMPLEMENTATION STRATEGY

This Community Health Needs Assessment Implementation Strategy outlines how St. Francis Hospital intends to enhance its community benefit efforts in response to identified needs. A Community Health Needs Assessment was conducted by St. Francis Hospital in collaboration with several other community organizations during late 2014 and early 2015. This Implementation Strategy is in direct response to the prioritized community health care needs identified during the Community Health Needs Assessment.

St. Francis Hospital Mission and Core Values
St. Francis Hospital is a Catholic, not-for-profit institution. Its mission is to continue the healing ministry of Jesus Christ in the tradition of St. Francis by providing the highest quality health care with respect, care, competence, and joy. Its core values are: respect – recognizing and honoring the dignity of each person through its healthcare ministry; care – providing service with empathy and integrity through actions rooted in Catholic healthcare; competence – striving to be exceptional in all they do; and joy – expressing a commitment to serve with happiness, humor, and a positive attitude.

Target Areas and Populations
Sixteen cities, villages, and surrounding areas in Montgomery and Macoupin counties were the target of the Community Health Needs Assessment and thus are also the target geographical areas to be addressed through this Implementation Strategy.

How Significant Health Needs Were Identified and Prioritized
On November 24, 2014, six persons including the Community Outreach Coordinator and the CEO from St. Francis, a physician with certifications in family and geriatric medicine, the Macoupin County Public Health Administrator, the Montgomery County Undersheriff, and a local business leader/community activist met to review the primary and secondary data collected to that point and to identify and prioritize significant health needs in the service area.

The group reviewed over 60 pages of secondary data and data summaries from Community Commons, ESRI, USDA, County Health Rankings, Montgomery and Macoupin County IPLANs, National Cancer Institute, Illinois Behavioral Risk Factor Surveillance System, Illinois Department of Employment Security, Illinois State Board of Education and other sources, as well as the results of focus groups conducted with community members and medical professionals and partners.

The group utilized a roundtable discussion to identify significant needs, largely consolidating concerns expressed in the focus groups, which found support in the secondary data but also identifying some issues based on the secondary data alone. They then applied individual power rankings to the needs and discussed the tabulated results before finalizing the prioritization.

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- the burden, scope, severity, and urgency of the health need;
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- the importance the community places on addressing the health need;
- the community assets and resources that could be leveraged through strategic collaboration in the hospital's service area to address the health need;
- secondary data sources; and,
- local expertise and input.

The group identified and prioritized the following needs:

1. MENTAL HEALTH
- A unified, countywide process for intake and post-intake handling of criminal and non-criminal mental health needs introduced to the system by law enforcement and others
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2. CANCER
- Local infusion services
- Prevention information and testing
- Better understanding of types of cancer and frequency of cancer seen locally

3. DENTAL
- Better access to services for low income

4. OBESITY
- Education about risk and prevention
- Low income access to recreation and physical activity

5. HYPERTENSION-CARDIOVASCULAR (TOBACCO USE)
- Education about risk and prevention
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6. WELLNESS
- Nutrition (access to healthy foods and education for youth, young adults, and the elderly about nutrition)
- Low income access to recreation and physical activity
- Life skills education
- Self-management education

7. EDUCATION
- About available health-related services for youth and adults
- For grandparents raising grandchildren
- About safety for all ages

IMPLEMENTATION STRATEGY

The Implementation Strategy was developed through a facilitated meeting involving key administrative staff at St. Francis Hospital and a member of the Board of Directors, followed by a subsequent working meeting of the same group without the facilitator. The group reviewed the needs assessment process completed to that point and considered the prioritized significant needs and supporting documents along with the immediate past Implementation Strategy, a summary of the activities and impacts flowing from that strategy over the past two years, and internal and external resources potentially available to address the current prioritized needs.

The group then considered each of the prioritized needs and regrouped the similar or related needs to align into four categories. Under the resulting alignment, health needs and issues regarding hypertension, cardiovascular health, and wellness are addressed through the focus on obesity. Education is addressed across the continuum of all needs and is incorporated into the approach for each. For each of the four categories, actions the hospital intends to take were identified along with the anticipated impact of the actions, the resources the hospital intends to commit to the actions, and the external collaborators the hospital plans to cooperate with to address the need. The plan will be evaluated by periodic review of measurable outcome indicators in conjunction with annual review and reporting.

Process by Which Needs Will be Addressed:

1. MENTAL HEALTH

Actions the hospital intends to take to address the health need:
- Collaborate with local health providers to identify current resources, assess needs, and identify opportunities to improve access
- Explore tele-psychiatry
- Explore development of local behavioral health evaluation services
- Establish in-house security
- Identify or generate three data sets surrounding this need

Anticipated impact of these actions:

- A multi-faceted plan to address the identified mental health needs will be developed, and some portions will be implemented within two years.
- Through in-house efforts and collaboration with health departments, other providers, schools and law enforcement, it is anticipated that new solutions will provide better and safer access to mental health services for all segments of the population.
- Measurable outcomes to support evaluation will include the number of hours of mental health services available within the service area.
- Establish one quantifiable outcome measure to enable the facility to improve population health

Programs and resources the hospital plans to commit to address the health need:

- Administration
- Outreach Facilitator

Planned collaboration between the hospital and other facilities or organizations:

- Montgomery County Health Department
- Macoupin County Health Department
- Law Enforcement
- Emergency Medical Services
- St. Mary's Hospital, Decatur
- CONNECT Placement Network
- School Counselors

2. CANCER

Actions the hospital intends to take to address the health need:

- Collaborate with local partners to identify current activities and efforts regarding education and prevention, identify gaps, and develop plan to address those gaps
- Work with physicians for screening education
- Create a screening information campaign with handouts and posters
- Assess available screenings and needs and create a screening calendar
- Explore a navigator program for cancer within the service area to work with all available physicians
- Explore development of local infusion services
- Participate with the local American Cancer Association and other potential resources to explore local incidence of cancer
- Identify or generate three data sets surrounding this need

Anticipated impact of these actions:

- It is anticipated that the actions selected will improve understanding of the importance of screenings, access to screenings and better management of locally-based cancer care when appropriate.
- It is further anticipated that these impacts will particularly benefit the hospital's low income and elderly populations.
- It is also anticipated that better focused data on local incidence of cancer will enable more efficient and effective approaches to addressing, detecting, and treating cancer as well as enabling partners and collaborators to better address potential underlying local causes of some types of cancer.
- Measurable outcomes to support evaluation will include the number of screenings completed within the service area (colonoscopies, etc.) and attendance and success of tobacco cessation programs.
- Establish one quantifiable outcome measure to enable the facility to improve population health

Programs and resources the hospital plans to commit to address the health need:

- Outreach Facilitator
- Administration

Planned collaboration between the hospital and other facilities or organizations in addressing:

- Local American Cancer Association
- Area Physicians

3. DENTAL

Actions the hospital intends to take to address the health need:

- Continue to develop and expand programs launched over the past two years in response to the immediate prior CHNA

Anticipated impact of these actions:

- It is anticipated that the number of patients receiving dental care will continue to improve as a result of this program and that the impact will continue to be significant to low income and elderly members of the community.
- Measurable outcomes to support evaluation will be the number of patients served and the number of Emergency Department visits related to dental issues

Programs and resources the hospital plans to commit to address the health need:

- Outreach Facilitator

Planned collaboration between the hospital and other facilities or organizations in addressing:

- Lewis & Clark Community College
- Local Dentists
- Hillsboro Area Hospital

4. OBESITY

Actions the hospital intends to take to address the health need:

- Collaborate with the Litchfield Park District to develop and offer expanded physical activity programs at the community center, the pool, and in the parks
- Collaborate with schools to provide curriculum regarding wellness, nutrition, and health
- Working with businesses to provide access for indoor walking and possibly, other activities
- Expand the role of the dietitian who was employed as a result of the FY 2012 CHNA to include community engagement

Anticipated impact of these actions:

- It is anticipated that the coordination of efforts to provide better access to nutrition education and smarter choices for healthy foods in combination with better access to recreation and education, particularly for low income and elderly members of the community, will result in reduction of obesity in the service area.
- Measurable outcomes to support evaluation will include obesity rates, access to fitness facilities, and rates of fruit and vegetable consumption.

Programs and resources the hospital plans to commit to address the health need:

- Outreach Facilitator
- Dietitian

Planned collaboration between the hospital and other facilities or organizations in addressing:

- Litchfield Park District
- Large retailers
- Schools
- Grocery stores and food providers

Committed Resources

In addition to staff and facility resources, St. Francis Hospital has budgeted a percent increase in spending for discretionary community benefit activities to help support this Implementation Strategy.

Approval

The St. Francis Hospital Board of Directors reviews on an annual basis the prior fiscal year's Community Benefit Report and approves the Community Benefit Implementation Strategy for addressing priorities identified in the most recent Community Health Needs Assessment and other plans for community benefit.

This Implementation Strategy for the Community Needs Assessment of St. Francis Hospital was approved by the St. Francis Hospital Board of Directors on this 28th day of April, 2015.

IX. DOCUMENTING AND COMMUNICATING RESULTS

This CHNA Report will be available to the community on the hospital's public website: www.stfrancis-litchfield.org. A hard copy may be reviewed at the hospital by inquiring at the information desk at the Main Entrance.

The hospital will also provide in its annual IRS Schedule H (Form 990) the URL of the web page on which it has made the CHNA Report and Implementation Plan widely available to the public, as well as a description of the actions taken during the taxable year to address the significant health needs identified through its most recent CHNA in addition to the health indicators that it did not address and why.

X. STEPS TAKEN TO MEET THE LAST IMPLEMENTATION STRATEGY

Since the development of the last Implementation Strategy, the hospital has taken several steps to meet the strategies selected. The steps taken are set out below in the context of the action plan along with impacts where available.

Action Plan: Diabetes

Action Item	Timeframe
Discuss collaboration and coordination of diabetic education possibilities at Macoupin County Diabetes Coalition meeting	April 2012-completed
Contact RN Care Coordinators of the Medical Home program at LFPC and MFPC to assess possibility of collaboration regarding diabetic education	April 2012-completed
Arrange meeting with Macoupin and Montgomery County Health Departments, St. Francis Hospital Community Outreach Facilitator, RN Care Coordinators and Friendship Home Administrator to discuss partnership possibilities regarding continuity of care for diabetic patients in the community	June 2012-completed
Consider evidence based program options as well as Healthy People 2020 guidelines	August 2012-completed
Explore potential for patient referral to the diabetic self management courses	August 2012-completed
Identify methods to follow up with patients after completing the course. Examples include follow up by RN Care Coordinators via Medical Home Program, physician office visits, direct contact with patient via mail or phone, or support groups	November 2012-completed

Action Plan: Dental Care

Action Item	Timeframe
Bring Lewis and Clark Community College mobile van to the Litchfield area to provide dental hygiene services and dental exams	Scheduled May 2012-completed
Work with Lewis and Clark Community College to identify referral sources for those needing additional care	May 2012-completed
Plan future visits of the mobile dental services	June 2012-ongoing Mobile unit visited twice in 2012, three visits in 2013, and four visits in 2014
Contact Hillsboro Area Hospital regarding partnership to sponsor and coordinate free day of dental care for 2012	May 2012-completed Community Dental days conducted in both Litchfield and Hillsboro in 2013 and 2014
Identify participating dental offices to provide free day of dental care	June 2012-completed
Arrange meeting with all identified partners to coordinate free day of dental care including logistics such as date, times, locations, as well as target population to be served	June 2012-completed
Work with all partners to establish measurable goals and outcomes such as number of people served, number of cavities filled, or extractions completed	July 2012-completed September 2012

Action Plan: Teen Substance Abuse

Action Item	Timeframe
Identify existing services available to address teen substance abuse: • Services available through both MCHD and MACHD • Locust Street Resource Center in Carlinville • Lincoln Prairie Behavioral Health • Montgomery County Health Department provides classes to all 6th and 7th grades in all four school districts regarding drug, alcohol, and tobacco use	March 2012-completed
Work with identified partners and programs to develop measurable goals and outcomes	Partnered with five different law enforcement agencies to install secure drop boxes for collection of unused medications
Consider evidence based programs or Healthy People 2020 goals	Partnered with seven different schools to provide education and information to parents about the program
Assess and evaluate program effectiveness and communicate results to program partners, hospital leadership, board of directors, and general public	Worked with pharmacies, funeral homes, and home health agencies to provide public education about the program Ongoing: Feedback from law enforcement is very positive, all collections boxes are well utilized and many pounds of unused meds are being collected.

Action Plan: Hypertension

Action Item	Timeframe
Complete facilitator training for Chronic Disease Self Management Program	June 2014-completed
Arrange meeting with Macoupin and Montgomery County Health Departments, St. Francis Hospital Community Outreach Facilitator, RN Care Coordinators, and Friendship Home Administrator to discuss collaboration and partnership possibilities for chronic disease management program related to individuals with hypertension	January 2013-Completed Summer 2014
Establish baseline parameters, short-term goals, and future goals for the identified measurable outcomes	First class provided in the fall of 2014
Assess potential for expansion of chronic disease self-management classes to new sites	April 2013-complete Education and BP screenings provided at St. Clare Food Pantry

Action Plan: Health Screening

Action Item	Timeframe
Continue current screening programs	Ongoing
Research grant options	Grant opportunity identified and grant funds utilized to purchase POC Hgb A1C testing

XI. REFERENCES

- County Health Rankings, 2014 County Health Rankings
- Community Commons, 2015 Community Commons
- Illinois Department of Employment Security, 2015
- National Cancer Institute, 2015 (data through 2011)
- Illinois Department of Public Health, 2015
- Health Professional Shortage Areas (HRSA) and Medically Underserved Areas/Populations, 2015
- Macoupin County Health Department, IPLAN, 2009
- Montgomery County Health Department, IPLAN, 2011
- ESRI, 2015
- Illinois State Board of Education, Illinois Report Card, 2013-2014
- USDA, Atlas of Rural and Small Town America
- Courtesy: Community Commons, <www.communitycommons.org>, October 8, 2014
- Support documentation on file and available upon request

XII. APPENDIX

Appendix I
This Appendix consists of secondary and primary data analyzed, including discussion in some cases, in the course of production of the CHNA from a variety of resources. It was considered by the identification/prioritization group.

Appendix II
This Appendix provides the full Community Commons Report for the targeted service area. It was considered by the identification/prioritization group.

Appendix III
This Appendix provides the current USDA Food Access Map for the service area. It was considered by the identification/prioritization group.

Appendix I
The County Health Rankings rank the health of nearly every county in the nation and show that much of what affects health occurs outside of the doctor's office. The County Health Rankings confirm the critical role that factors such as education, jobs, income, and environment play in how healthy people are and how long they live.

Published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, the Rankings help counties understand what influences how healthy residents are and how long they will live. The Rankings look at a variety of measures that affect health such as the rate of people dying before age 75, high school graduation rates, access to healthier foods, air pollution levels, income, and rates of smoking, obesity and teen births. The Rankings, based on the latest data publicly available for each county, are unique in their ability to measure the overall health of each county in all 50 states on the multiple factors that influence health. ***(County Health Rankings and Roadmaps, 2014)***

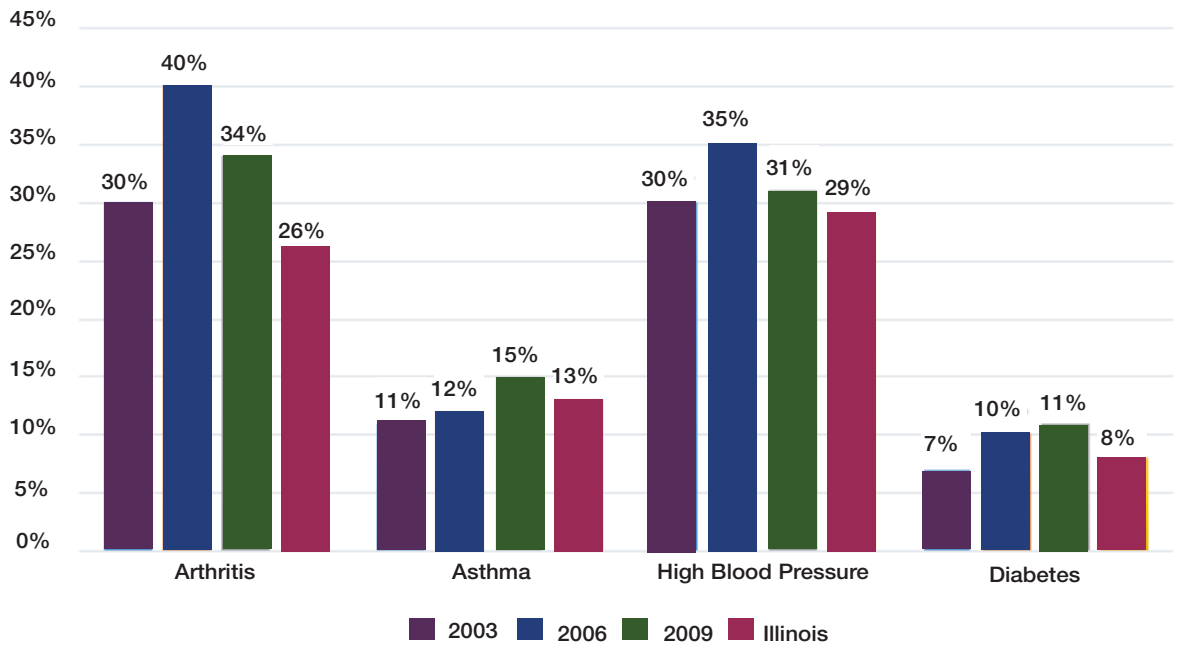
County Health Rankings
http://www.countyhealthrankings.org/#app/illinois/2014/rankings/outcomes/overall
Macoupin County is ranked 46 out of 102 Illinois counties in the Rankings for Health Outcomes released in April 2014. Montgomery County is ranked 77 out of 102 Illinois counties in the Rankings for Health Outcomes released in April 2014.
The following table highlights area of interest from the County Health Rankings.

Table 1. Health Ranking Observations – Macoupin County

Observation	Macoupin County	Montgomery County	Illinois
Adults reporting poor or fair health	N/A	18%	15%
Adults reporting no leisure time physical activity	31%	24%	24%
Adult obesity	30%	25%	28%
Children under 18 living in poverty	20%	20%	21%
Teen birth rate (ages 15-19)	34	45	36/1,000
Motor vehicle crash death rate	16	16	10/100,000
Alcohol crash deaths/ total crash deaths	54%	43%	38%
Uninsured	12%	11%	15%
Unemployment	N/A	11.9%	8.9%

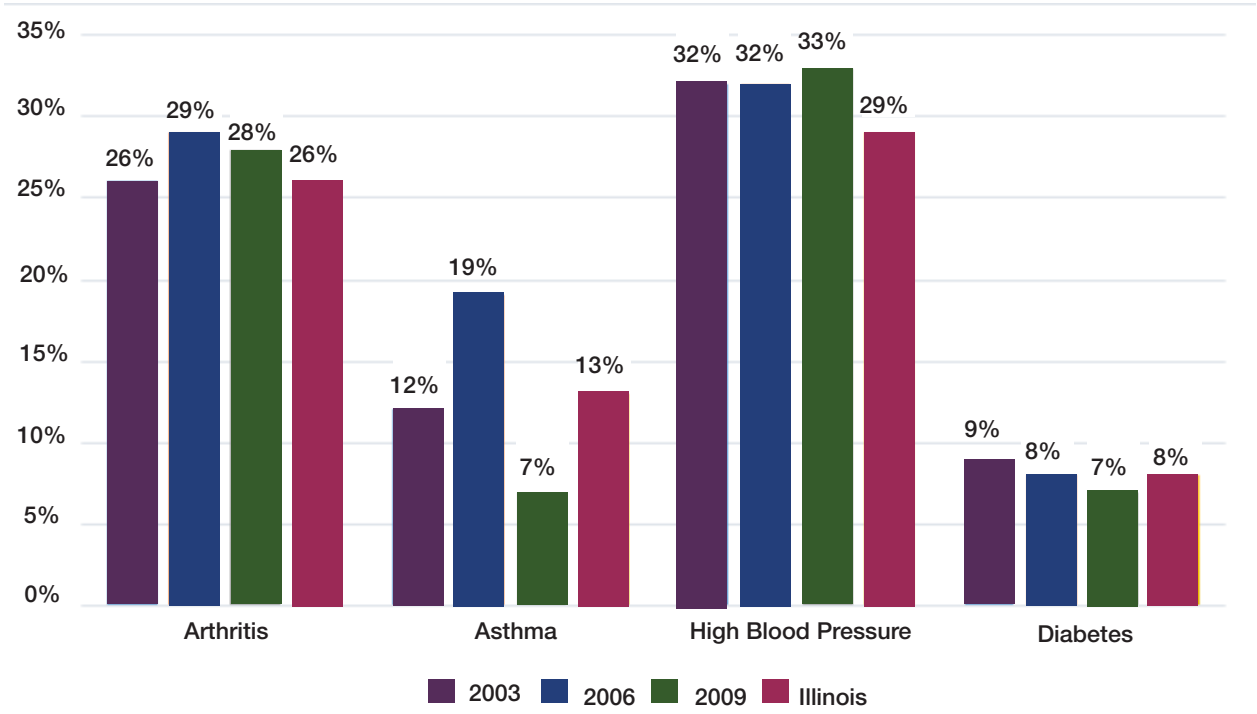
The Illinois Behavioral Risk Factor Surveillance System provides health data trends through the Illinois Department of Public Health in cooperation with the Center for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services.

Table 2. Diagnosed Disease Factors – Macoupin County



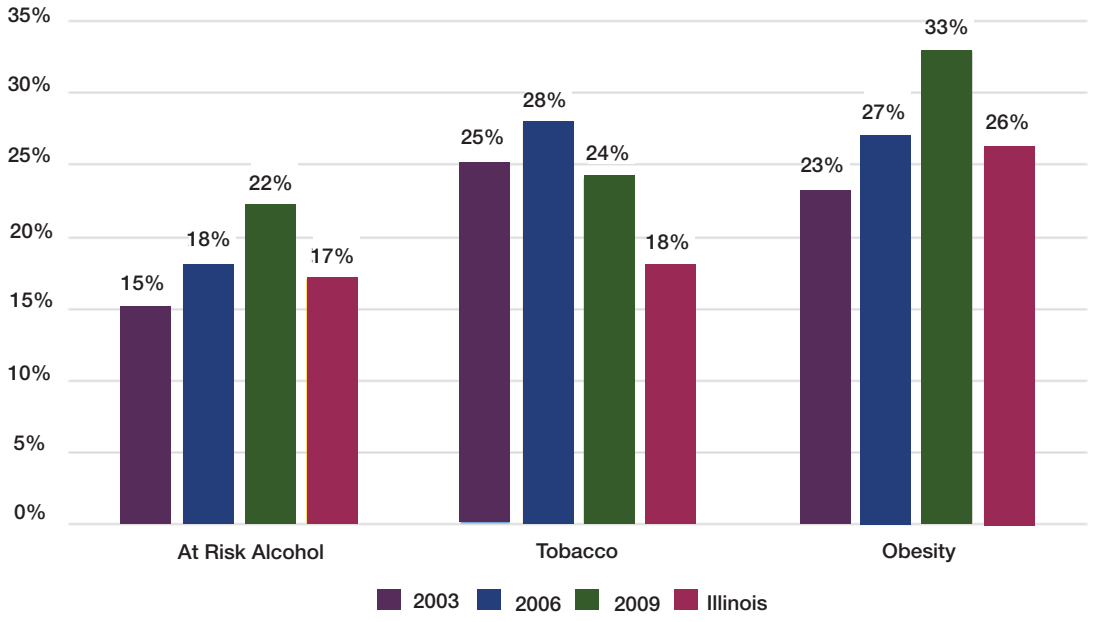
Diagnosis of arthritis and high blood pressure have exceeded the state level in the past decade, and reports of diagnosis of asthma and diabetes have increased over recent years to exceed the state level.

Table 3. Diagnosed Disease Factors – Montgomery County



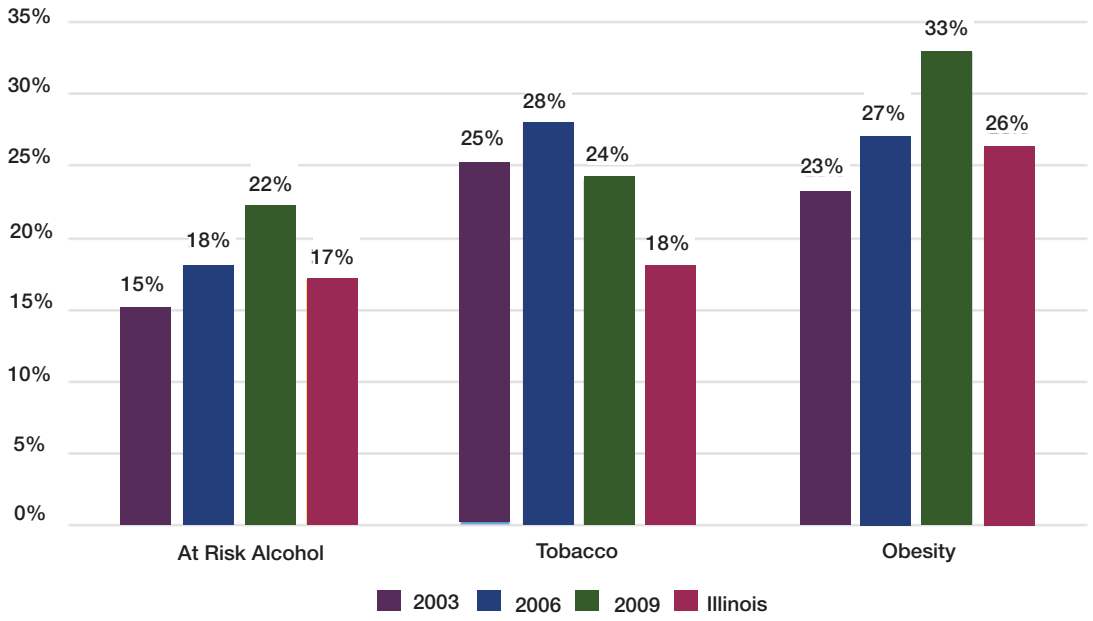
Diagnosis of high blood pressure exceeded the state level in the past decade, and diagnosis of arthritis has equaled or exceeded the state level in the past decade. Diagnosis of diabetes has decreased over the past decade, and levels of asthma has varied.

Table 4. Health Risk Factors – Macoupin County



The percent of persons at risk for acute or binge drinking has risen in recent years to the point where it is now higher than the state percentage. Tobacco use has consistently exceeded the state levels. The rate of persons reporting obesity has risen above the state level in the IBRFSS and the more recent data available from the County Health Rankings.

Table 5. Health Risk Factors – Montgomery County



The percent of persons at risk for acute or binge drinking has varied in recent years and is now higher than the state percentage. Tobacco use has consistently exceeded the state levels. The rate of persons reporting obesity is consistently just below the state level in the IBRFSS and the more recent data from the County Health Rankings. Teen birth rates (ages 15-19) exceed the state rate.

Table 6. Health Risk Factors

The Illinois Department of Health releases countywide mortality tables from time to time. The most recent table available for Macoupin and Montgomery Counties, showing the causes of the death within the counties is set out below.

Disease Type	Macoupin County Number of Deaths	Montgomery County Number of Deaths
Diseases of the Heart	114	85
Malignant Neoplasms	110	88
Cerebro-Vascular Diseases (Stroke)	28	16
Lower Respiratory Diseases	41	23
Accidents	24	12
Alzheimer's Disease	17	18
Nephritis, Nephrotic Syndrome, and Nephrosis	12	3
Diabetes Mellitus	8	11
Influenza and Pneumonia	16	15
Septicemia	8	9
Intentional Self Harm (Suicide)	3	3
Chronic Liver Disease, Cirrhosis	4	4
All Other Causes	106	64
Total Deaths	517	351

The mortality numbers are much as one would expect with diseases of the heart and cancer as the leading causes of death in both counties. These numbers are consistent with the mortality reports from the other Illinois counties. The State Cancer Profiles compiled by the National Cancer Institute lists Macoupin County at Level 8 for all cancers, which means that the cancer rate overall is similar to the U.S. rate and is falling over the recent past. The State Cancer Profiles lists Montgomery County at Level 5 for all cancers, which means the cancer rate overall is above the U.S. rate and is falling over the recent past. ***(National Cancer Institute)***

Synthesized Secondary Data
The demographics for St. Francis Hospital service area reflect similar income levels when compared to many other rural areas and are lower than Illinois overall.

At least portions of the service area report a higher percent of population diagnosed with arthritis, diabetes, and high blood pressure than state percentages. Diseases of the heart and cancer are the two leading causes of death throughout the service area. Obesity, persons at risk for alcohol, and tobacco use are all above state levels. Death from motor vehicle crashes and the ratio of alcohol crash deaths are reported as being higher in the service area than the statewide rate. Adults reporting no leisure time physical activity exceed the state levels. Teen birth rates are high.

Summary
The secondary data and previous planning conclusions draw attention to several common issues of rural demographics and economics and draw emphasis to issues related to wellness, education, and risky behavior with regard to substances, obesity, teen health, and related issues.

PRIMARY SOURCE INFORMATION

Focus Group 1 – Litchfield Community Representatives
A focus group comprised of community leaders met on Tuesday, October 7, 2014. The group included representatives of the county board, county law enforcement, local schools and others. The session opened with the identification of several positive events that took place within the St. Francis Hospital service area during the past five years.
The following developments were cited:

- Wellness center in Hillsboro
- Good access to information and services for low income population
- Hospital is a significant positive for the community
- Interagency cooperation in general is good
- New wellness program for county employees
- MES providers are increasingly delivering ALS level services
- New specialty physicians and services
- Good cooperation and coordination among first responders
- Physical therapist from the hospital works with three high schools
- CPR/ADD training is required for high school students
- Community support for the hospital
- Growing availability of assisted living
- Surgical center at the hospital
- Public transportation is good
- Renewed attention to mental health
- Community recognizes the need for wellness (Increased use of the SNAP Center)
- Medical providers are paying closer attention to opiate prescribing concerns

The group then discussed a wide variety of health needs and concerns in several general categories including:

- The cost of health care
- Lack of mental health services in schools
- Medication disposal
- Better nutrition and exercise
- Assist schools in educating families about selecting doctor visits over ED visits
- Truancy

- Better access to information for parents on where services can be found
- A safe haven for teens
- Services for grandparents raising children
- Training on child safety and child restraints
- Affordable senior housing
- Wellness
- Out of area transfers due to lack of local services
- Abuse of ambulance services and ED
- Mental health services, prevention, management for all ages
- Prescription drug abuse
- Absence of recreation and exercise opportunities for low income and elderly – especially indoor walking path
- Need simple/easy/low or no cost opportunities to address wellness
- Cooperation and coordination around mental health services among law enforcement, EMS and ED staff
- Education for elderly about need to/how to call for timely help
- Juvenile mental health services to address, particularly, suicide and personal harm threats (social media) that currently fall to law enforcement to handle
- Crisis response/assistance for first responders facing trauma
- Better communication about medical marijuana – hospital view, providers views, law enforcement view
- Life skills training to avoid bad choices and unhealthy lifestyles
- Address the lack of moral responsibility (moral depravity) that leads to some cases of poverty
- Homeless in Litchfield (up to 6 non-repetitive cases per week were reported)
- Income, employment, and the local economy
- Methamphetamines
- Heroin
- Adverse childhood experiences

The following health concerns were discussed:

- Depression
- Hypertension
- Obesity
- Eating disorders
- Domestic relations/violence
- Mental illness – across the board
- Need for more spirituality and caring
- Cardiovascular
- Diabetes
- Lung and colon cancer
- Alzheimer's
- Laziness (Lack of physical activity)
- Hoarding and other unhealthy living conditions
- STDs
- Hepatitis C

Focus Group 2 – Medical Professionals and Partners

A focus group comprised of health care professionals and partners met on Wednesday, October 8, 2014. The group included physicians, representatives of the health departments, longterm care and assisted living representatives, and others. This session was also opened with the identification of several positive events that took place within the St. Francis Hospital service area during the past five years. The following developments were cited:

- Growth of outpatient services at St. Francis
- Increased number of surgeons
- Cooperation between hospital and Heritage facilities is good, including protocols
- Collaboration on mental health
- Collaboration on fresh produce for WIC clients – hospital to health department
- Collaboration between the hospital and eye care providers
- One call transfer with St. John's in Springfield

The group then discussed a wide variety of health needs and concerns in several general categories including:

- Mental Health
  - o Outpatient and inpatient
  - o Processing is slow, difficult to get care
  - o ED is not really equipped for some circumstances – example overdoses
- No cataract surgery in Litchfield
- Cost of scanning and care for breast and cervical cancer patients who have insurance (Medicaid does cover the services – the issue is with insurance)
- Availability of public transportation for non-emergency transports, especially out of area
- Lack of local hours for specialists
- Lack of marketing of local health services in general
- Lack of marketing/information around health issues in general
- Better communication between hospital and post-care providers (transition of care)
- There are not enough providers that take Medicare
- Lack of local care for Alzheimer's/dementia patients in crisis
- Dental care
- Hearing care
- Better referrals and coordination for local eye care
- Awareness of local eye care services
- Education on resources for providers about Medicaid and Critical Access Hospitals
- Security with violent patients
- Cancer care (chemotherapy)

The following health concerns were also discussed:

- Mental health
- Obesity and Diabetes – especially in children
- Hypertension
- Lifestyle
- Macular degeneration

ST. FRANCIS HOSPITAL, LITCHFIELD, IL
2014 Community Healthcare Needs Assessment Focus Groups

Community Group
Tuesday, Oct. 7, 2014
Nikki Bishop – County Board Member, Senior Home Care, Experience with longterm care facilities
Rick Robbins – Montgomery County Undersheriff
Marchelle Kassebaum – Regional Superintendent of Schools
Lee Johns – Deacon at Holy Family Catholic Church, Small Business owner, previous hospital board member
Matt Houser – Director of Hearts United, mission experience
Roberta Meyer – Aide for Representative Wayne Rosenthal
Chris Handshy – Litchfield EMS
Tatum Wertin – Litchfield High School Student
Kent Tarro – Macoupin County Health Department
Vicky Fuller – Community Outreach Facilitator, St. Francis Hospital
Patti Fischer – CEO, St. Francis Hospital

Medical Provider Group
Wednesday, Oct. 8, 2014
Dr. Eric Johnson – Optometrist
Dr. Chris Poirot – Family Practice physician, Chief Medical Officer St. Francis Hospital
Jody Perkins – Montgomery County Health Department
Marge Oblinger – Administrator Heritage Health Long Term Care Facility
Dawn Rosentreater – Director of Nursing Heritage Health Long Term Care Facility
Amy Williams – Director Evergreen Place, assisted living facility

DEMOGRAPHIC DATA

Table 7. High School Graduation Rates

Report Area	Average Freshman Base Enrollment	Estimated Number of Diplomas Issued	On-Time Graduation Rate
Service Area Estimate	375	274	72.98
Macoupin County	742	642	86.5
Montgomery County	410	326	79.6
Illinois	169,361	131,670	77.7

Within the report area 72.98% of students are receiving their high school diploma within four years. This is less than the Healthy People 2020 target of 82.4%. This indicator is relevant because research suggests education is one the strongest predictors of health. ***(Freudenberg & Ruglis, 2007)***

Social and Economic Factors

Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community.

Physical Environment

A community's health also is affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health.

Grocery Store Access

This indicator reports the number of grocery stores per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences.

Report Area	Total Population	Number of Establishments	Establishments Rate Per 100,000 Population
Service Area Estimate	29,396	4	16.75
Macoupin County	47,765	8	16.75
Montgomery County	30,104	4	13.29
Illinois	12,830,632	2,887	22.5

Table 8. Recreation and Fitness Facility Access

This indicator reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

Report Area	Total Population	Number of Establishments	Establishments Rate Per 100,000 Population
Service Area Estimate	29,396	3	10.47
Macoupin County	47,765	5	10.47
Montgomery County	30,104	4	13.29
Illinois	12,830,632	1,290	10.05

Appendix II

COMMUNITY HEALTH NEEDS ASSESSMENT

Advancing Community Health and Well Being

Core Health Indicators Report

Report Area
Custom Area

Data Category
Demographics | Social & Economic Factors | Physical Environment | Clinical Care | Health Behaviors

Demographics
Current population demographics and changes in demographic composition over time play a determining role in the types of health and social services needed by communities.

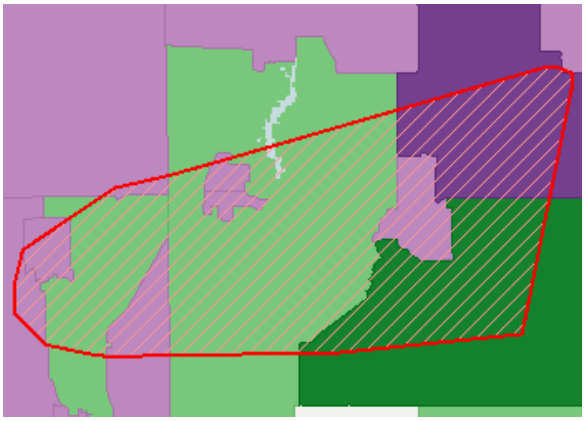
Data Indicators: Demographics
Change in Total Population

Change in Total Population

According to the U.S. Census Bureau Decennial Census, between 2000 and 2010 the population in the report area fell by 689 persons, a change of -2.29%. A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

Report Area	Total Population, 2000 Census	Total Population, 2010 Census	Total Population Change, 2000-2010	Percent Population Change, 2000-2010
Custom Area Estimates*	30,085	29,396	-689	-2.29%
Macoupin County, IL	49,019	47,765	-1,254	-2.56%
Montgomery County, IL	30,652	30,104	-548	-1.79%
Illinois	12,419,231	12,830,632	411,401	3.31%
United States	280,421,907	307,745,539	27,323,632	9.74%

Data Source: US Census Bureau, Decennial Census: 2000 - 2010. Source geography: Tract



Population Change, Percent by Tract, US Census 2000-2010

- Over 10.0 % Increase ( )
- 1.0 - 10.0% Increase ( )
- Less than 1.0% Change (/-)
- 1.0 - 10.0% Decrease (-)
- Over 10.0% Decrease (-)
- No Population or No Data
- Report Area

Population Change (2000-2010) by Gender

Report Area	Male Population Change, Total	Male Population Change, Percent	Female Population Change, Total	Female Population Change, Percent
Custom Area Estimates*	no data	no data	no data	no data
Macoupin County, IL	-326	-1.37%	-928	-3.69%
Montgomery County, IL	211,965	-0.36	-491	-3.31%
Illinois	12,419,231	3.49%	199,436	3.15%
United States	12,757,602	9.24%	12,613,855	8.8%

Population Change (2000-2010) by Hispanic Origin

Report Area	Hispanic Population Change, Total	Hispanic Population Change, Percent	Non-Hispanic Population Change, Total	Non-Hispanic Population Change, Percent
Custom Area Estimates*	no data	no data	no data	no data
Macoupin County, IL	113	37.05%	-1,367	-2.81%
Montgomery County, IL	133	40.8%	-681	-2.25%
Illinois	497,316	32.5%	-85,915	-0.79%
United States	15,098,149	42.7%	10,153,011	4.09%

Percent Population Change (2000-2010) by Race

Report Area	White	Black	American Indian/ Alaska Native	Asian	Native Hawaiian/ Pacific Islander	Other Race	Multiple Race
Custom Area Estimates*	no data	no data	no data	no data	no data	no data	no data
Macoupin County, IL	-2.99%	-10.25%	15.6%	44.94%	-21.43%	63.89%	41.53%
Montgomery County, IL	-1.55%	-16.71%	-25.4%	58.57%	22.22%	0.69%	47.14%
Illinois	0.57%	-0.56%	41.79%	38.56%	-12.15%	19.19%	23.39%
United States	4.89	15.27%	21.65%	43.27%	47.12%	24.03%	32.16%

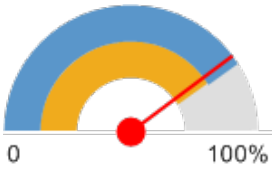
Social and Economic Factors

Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community.

High School Graduation Rate *(EdFacts)*

Within the report area, 79.73% of students are receiving their high school diploma within four years. This indicator is relevant because research suggests education is one the strongest predictors of health. ***(Freudenberg & Ruglis, 2007)***

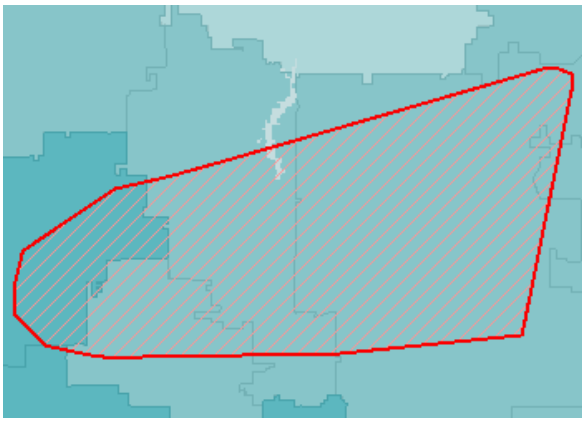
Report Area	Total Student Cohort	Estimated Number of Diplomas Issued	Cohort Graduation Rate
Custom Area Estimates*	339	270	79.73
Macoupin County, IL	462	403	87.36
Montgomery County, IL	367	287	78.04
Illinois	160,783	132,518	82.4
United States	3,351,452	2,754,352	82.2



Cohort Graduation Rate

- Custom Area Estimates* (79.73%)
- Illinois (82.4%)
- United States (82.2%)

Note: This indicator is compared with the state average.
Data breakout by demographic groups are not available.
Data Source: US Department of Education, *EDFacts*: 2011-12. Accessed via *DATA.GOV.*
Source Geography: School District



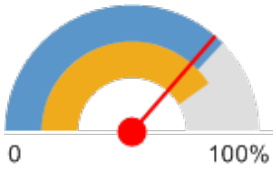
On-Time Graduation, Rate by School District (Secondary), ED*Facts* 2011-12

- Over 10.0 % Increase ( )
- 1.0 - 10.0% Increase ( )
- Less than 1.0% Change (/-)
- 1.0 - 10.0% Decrease (-)
- Over 10.0% Decrease (-)
- Report Area

High School Graduation Rate (NCES)

Within the report area, 72.98% of students are receiving their high school diploma within four years. This is less than the Healthy People 2020 target of 82.4%. This indicator is relevant because research suggests education is one the strongest predictors of health. ***(Freudenberg & Ruglis, 2007)***

Report Area	Average Freshman Base Enrollment	Estimated Number of Diplomas Issued	On-Time Graduation Rate
Custom Area Estimates*	375	274	72.98
Macoupin County, IL	742	642	86.5
Montgomery County, IL	410	3267	79.6
Illinois	169,361	131,670	77.7
United States	4,024,345	3,039,015	75.5



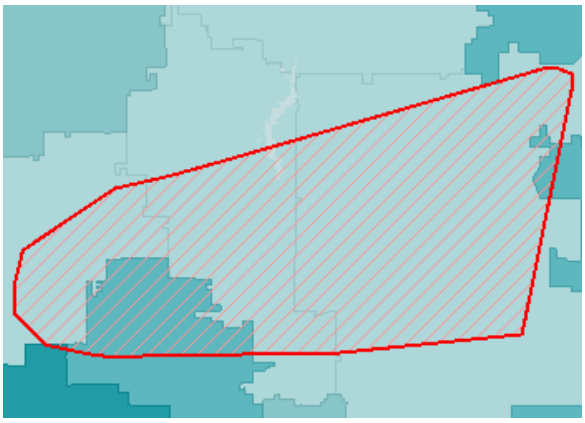
On-Time Graduation Rate

- Custom Area Estimates* (72.98%)
- Illinois (82.4%)
- United States (75.5%)

Note: This indicator is compared with the state average.
Data breakout by demographic groups are not available.
Data Source: US Department of Education, *EDFacts*: 2011-12. Accessed via *DATA.GOV.*
Source Geography: School District

HP 2020 Target >=82.4

Note: This indicator is compared with the Healthy People 2020 Target. Data breakout by demographic groups are not available.
Data Source: National Center for Education Statistics, *NCES - Common Core of Data*: 2008-09. **Source Geography:** County



On-Time Graduation, Rate by School District (Secondary), NCES CCD 2008-09

- Over 94.1%
- 85.1 - 94.0%
- 75.1 - 85.0%
- Under 75.1%
- No Data or Data Suppressed
- Report Area

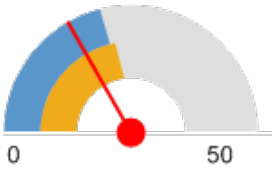
Physical Environment

A community's health also is affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health.

Grocery Store Access

This indicator reports the number of grocery stores per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

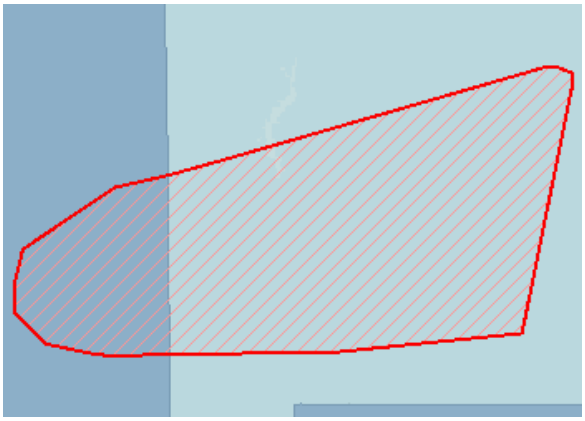
Report Area	Total Population	Number of Establishments	Establishments, Rate Per 100,000 Population
Custom Area Estimates*	29,396	4	**16.75**
Macoupin County, IL	47,765	8	**16.75**
Montgomery County, IL	30,104	4	**13.29**
Illinois	12,830,632	2,887	22.5
United States	312,471,327	66,047	21.14



Grocery Stores, Rate (Per 100,000 Population)

- Custom Area Estimates* (16.75%)
- Illinois (22.5%)
- United States (21.14%)

Note: This indicator is compared with the state average.
Data Source: US Census Bureau, *County Business Patterns*: 2012. Additional data analysis by *CARES*.
Source Geography: County



Grocery Stores and Supermarkets, Rate (Per 100,000 Population) by County, CBP, 2012

- Over 35.0
- 25.1 - 35.0
- 15.1 - 2.5.0
- Under 15.1
- No Grocery Stores
- Report Area

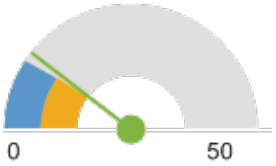
Grocery Stores and Supermarkets, Rate Per 100,000 Population by Year, 2008 through 2012

Report Area	2008	2009	2010	2011	2012
Custom Area Estimates*	no data	no data	no data	no data	no data
Macoupin County, IL	25.12	20.94	20.94	16.75	16.75
Montgomery County, IL	16.61	16.61	16.61	13.29	13.29
Illinois	21.33	21.2	21.99	22.06	22.5
United States	20.28	20.36	20.6	20.59	21.14

Recreation and Fitness Facility Access

This indicator reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

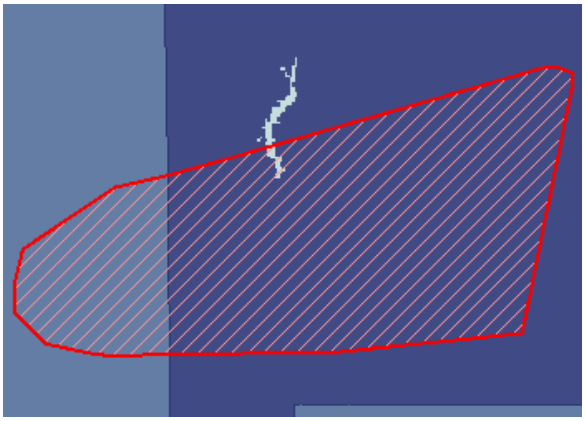
Report Area	Total Population	Number of Establishments	Establishments, Rate Per 100,000 Population
Custom Area Estimates*	29,396	3	**10.47**
Macoupin County, IL	47,765	5	**10.47**
Montgomery County, IL	30,104	4	**13.29**
Illinois	12,830,632	1,290	10.5
United States	312,471,327	29,511	9.44



Recreation and Fitness Facilities, Rate (Per 100,000 Population)

- Custom Area Estimates* (16.75%)
- Illinois (22.5%)
- United States (21.14%)

Note: This indicator is compared with the state average.
Data Source: US Census Bureau, *County Business Patterns*: 2012. Additional data analysis by *CARES*.
Source geography: County



Recreation and Fitness Facilities, Rate (Per 100,000 Population) by County, CBP 2012

- Over 12.0
- 8.1 - 12.0
- 4.1 - 8.0
- Under 4.1
- No Fitness and Recreation Center
- Report Area

Recreation and Fitness Facilities, Rate Per 100,000 Population by Year, 2008 through 2012

Report Area	2008	2009	2010	2011	2012
Custom Area Estimates*	no data	no data	no data	no data	no data
Macoupin County, IL	4.19	8.37	6.28	10.47	10.47
Montgomery County, IL	9.97	13.29	13.29	13.29	13.29
Illinois	10.11	9.82	9.67	9.8	10.05
United States	9.91	9.71	9.57	9.44	9.44

Clinical Care

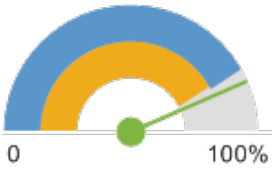
A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsurance, financial hardship, transportation barriers, cultural competency, and coverage limitations affect access.

Rates of morbidity, mortality, and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests, and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

Diabetes Management Hemoglobin A1c Test

This indicator reports the percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test, a blood test which measures blood sugar levels, administered by a health care professional in the past year. In the report area, 458 Medicare enrollees with diabetes have had an annual exam out of 526 Medicare enrollees in the report area with diabetes, or 87.02%. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Medicare Enrollees	Medicare Enrollees with Diabetes	Medicare Enrollees with Diabetes with Annual Exam	Percent Medicare Enrollees with Diabetes With Annual Exam
Custom Area Estimates*	4,364	526	458	87.02%
Macoupin County, IL	6,850	901	790	87.79%
Montgomery County, IL	4,649	539	466	86.64%
Illinois	1,287,225	152,978	128,109	83.74%
United States	51,875,184	6,218,804	5,212,097	83.81%



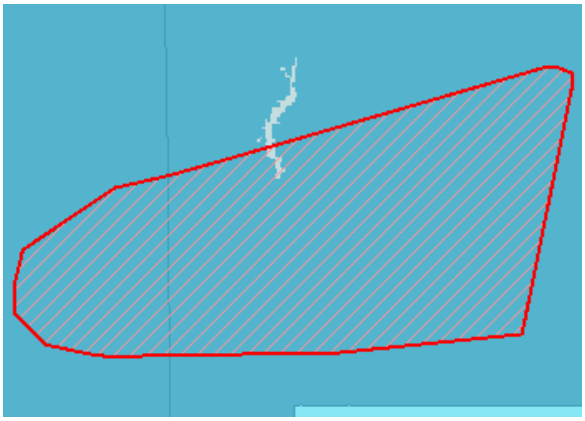
Percent Medicare Enrollees with Diabetes with Annual Exam

Custom Area Estimates* (87.02%)

Illinois (83.74%)

United States (83.81%)

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.
Data Source: Dartmouth College Institute for Health Policy & Clinical Practice, *Dartmouth Atlas of Health Care;* 2010.
Source geography: County



Patients with Annual HA1C Test (Diabetes), Percent of Medicare Enrollees with Diabetes by County, DA 2010

Over 88.0%

84.1 - 88.0%

80.1 - 84.0%

Under 80.1%

No Data or Data Suppressed

Report Area

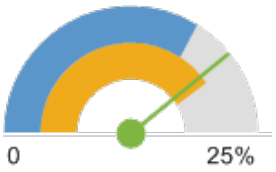
Health Behaviors

Health behaviors such as poor diet, a lack of exercise, and substance abuse contribute to poor health status.

Alcohol Consumption

This indicator reports the percentage of adults aged 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day on average for men and one drink per day on average for women). This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

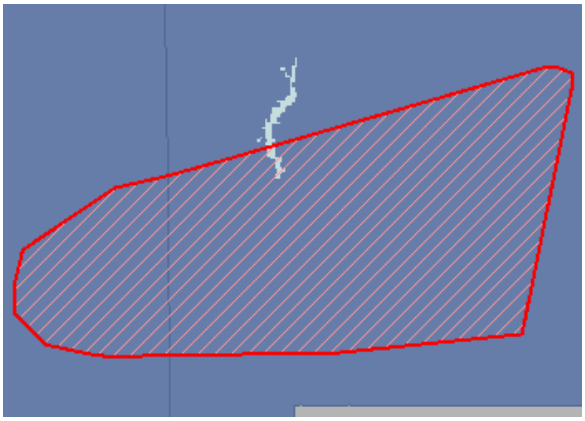
Report Area	Total Population Age 18	Estimated Adults Drinking Excessively	Estimated Adults Drinking Excessively (Crude Percentage)	Estimated Adults Drinking Excessively (Age-Adjusted Percentage)
Custom Area Estimates*	23,102	3,987	17.26%	19.58%
Macoupin County, IL	36,938	7,314	19.8%	21.4%
Montgomery County, IL	23,708	3,675	15.5%	18.3%
Illinois	9,654,603	1,930,921	20%	20.4%
United States	232,556,016	38,248,349	16.45%	16.94%



Estimated Adults Drinking Excessively (Age-Adjusted Percentage)

- Custom Area Estimates* (19.58%)
- Illinois (20.4%)
- United States (16.94%)

Note: This indicator is compared with the state average.
Data Source: Centers for Disease Control and Prevention *Behavioral Risk Factor Surveillance System*:2006-12. Accessed via the *Health Indicators Warehouse.*
Source Geography: County



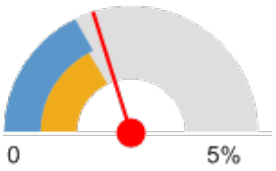
Excessive Drinking, Percent of Adults Age 18 by County, BRFSS 2006-12

- Over 22.0%
- 18.1 - 22.0%
- 14.1 - 18.0%
- Under 14.1%
- No Data or Data Suppressed
- Report Area

Alcohol Expenditures

This indicator reports estimated expenditures for alcoholic beverages purchased at home, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

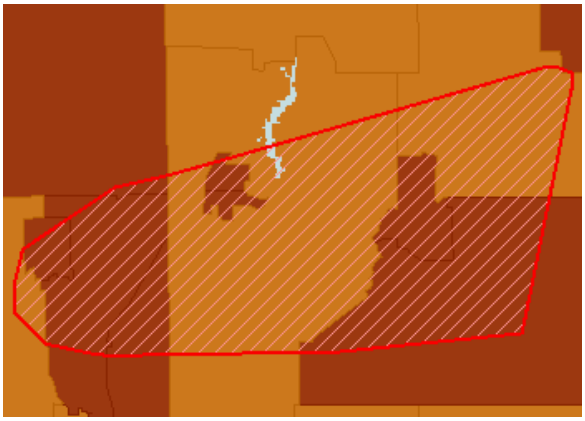
Report Area	Average Total Household Expenditures (USD)	Average Household Alcoholic Beverage Expenditures (USD)	Alcoholic Beverage Expenditures, County Rank (In-State)	Alcoholic Beverage Expenditures, County Percentile	Percent Alcoholic Beverage Expenditures
Custom Area Estimates*	43,100	865	no data	no data	**2.01%**
Macoupin County, IL	no data	no data	66	64.71%	no data
Montgomery County, IL	no data	no data	67	65.69%	no data
Illinois	52,831	923	no data	no data	1.75%
United States	50,932	910	no data	no data	1.79%



Alcoholic Beverage Expenditures, Percent of Total Household Expenditures

- Custom Area Estimates* (2.01%)
- Illinois (1.75%)
- United States (1.79%)

Note: This indicator is compared with the state average.
Data Source: Nielsen, *County Nielsen Site Reports*: 2011.
Source Geography: Tract



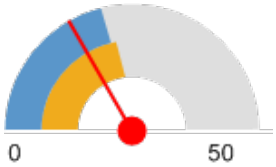
Alcoholic Beverage Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen 2011

- Over 35.0
- 25.1 - 35.0
- 15.1 - 2.5.0
- Under 15.1
- No Grocery Stores
- No Grocery Stores
- Report Area

Fruit/Vegetable Consumption

In the report area, an estimated 19,609, or 85.2% of adults over the age of 18 are consuming less than 5 servings of fruits and vegetables each day. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may cause of significant health issues, such as obesity and diabetes.

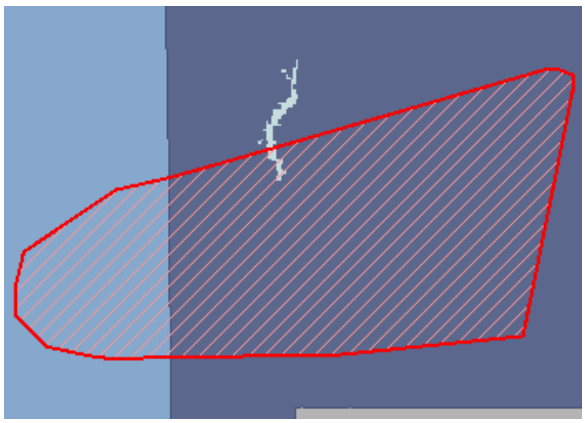
Report Area	Total Population Age 18	Estimated Population with Inadequate Fruit/Vegetable Consumption	Percent Population with Inadequate Fruit/Vegetable Consumption
Custom Area Estimates*	23,015	19,609	85.2%
Macoupin County, IL	37,214	28,915	77.7%
Montgomery County, IL	23,496	20,841	88.7%
Illinois	9,591,923	7,318,637	76.3%
United States	227,279,010	171,972,118	75.67%



Percent Adults with Inadequate Fruit/Vegetable Consumption

- Custom Area Estimates* (82.5%)
- Illinois (76.3%)
- United States (75.67%)

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available
Data Source: Center for Disease Control and Prevention, *Behavioral Risk Factor Surveillance System;* 2005-09. Accessed via the *Health Indicators Warehouse.*
Source Geography: County



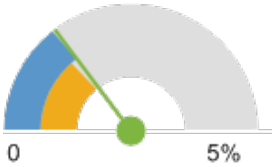
Inadequate Fruit/Vegetable Consumption, Percent of Adults Age 18 by County, BRFSS 2005-09

- Over 85.0%
- 80.1 - 85.0%
- 75.1 - 80.0%
- Under 75.1%
- No Data or Data Suppressed
- Report Area

Fruit/Vegetable Expenditures

This indicator reports estimated expenditures for fruits and vegetables purchased for in-home consumption, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may illustrate a cause of significant health issues, such as obesity and diabetes.

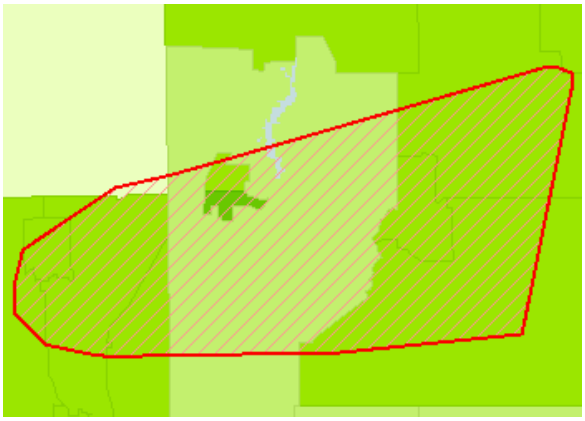
Report Area	Average Total Household Expenditures (USD)	Average Household Fruit/Vegetable Expenditures (USD)	Fruit/Vegetable Expenditures, County Rank (In-State)	Fruit/Vegetable Expenditures, County Percentile	Percent Fruit/ Vegetable Expenditures
Custom Area Estimates*	43,100	634	no data	no data	1.47%
Macoupin County, IL	no data	no data	62	60.78%	no data
Montgomery County, IL	no data	no data	85	83.33%	no data
Illinois	52,831	722	no data	no data	1.37%
United States	50,932	737	no data	no data	1.45%



Fruit/Vegetable Expenditures, Percent of Total Household Expenditures

Custom Area Estimates* (1.47%)
Illinois (1.37%)
United States (1.45%)

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.
Data Source: Nielsen *Nielsen Site Reports*: 2011.
Source Geography: Tract



Fruit and Vegetable Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen 2011

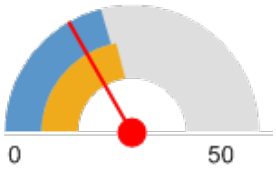
Over 35.0
25.1 - 35.0
15.1 - 2.5.0
Under 15.1
No Grocery Stores
No Grocery Stores

Report Area

Physical Inactivity

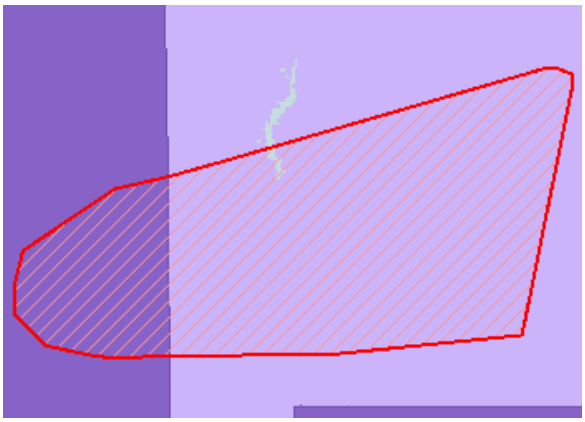
Within the report area, 5,768 or 25.73% of adults aged 20 and older self-report no leisure time for activity, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?". This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as obesity and poor cardiovascular health.

Report Area	Total Population Age 20	Population With No Leisure Time Physical Activity	Percent Population With No Leisure Time Physical Activity
Custom Area Estimates*	22,423	5,768	25.73%
Macoupin County, IL	35,735	10,935	29%
Montgomery County, IL	23,047	5,416	22.4%
Illinois	9,361,500	2,887	22.5
United States	312,471,327	2,217,069	23.42%



Percent Population With No Leisure Time Physical Activity
Custom Area Estimates* (25.73%)
Illinois (23.42%)
United States (23.41%)

Note: This indicator is compared with the state average.
Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, *Diabetes Atlas:* 2010.
Source Geography: County



No Leisure Time Physical Activity, Adults Age 20, Percent by County, CDC, NCCDPHP 2010

- Over 29.0%
- 26.1 - 29.0%
- 23.1 - 26.0%
- Under 23.1%
- Report Area

Adults With No Leisure Time Physical Activity by Gender

Report Area	Total Males with No Leisure Time Physical Activity	Percent Males with No Leisure Time Physical Activity	Total Females with No Leisure Time Physical Activity	Percent Females with No Leisure Time Physical Activity
Custom Area Estimates*	no data	no data	no data	no data
Macoupin County, IL	4,351	24.4	5,838	29.4%
Montgomery County, IL	5,098	28.4%	5,838	29.4%
Illinois	2,046,366	22.56%	2,426,536	24.47%
United States	47,761,489	21.75%	59,408,212	24.88%

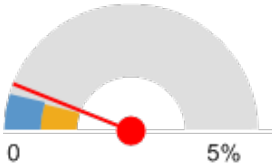
Percent Adults Physically Inactive by Year, 2004 through 2010

Report Area	2004	2005	2006	2007	2008	2009	2010
Custom Area Estimates*	no data	no data	no data	no data	no data	no data	no data
Macoupin County, IL	23.9%	22.3%	22.2%	23.7%	24.8%	25.4%	29%
Montgomery County, IL	24.5%	23.8%	23.4%	25%	26.3%	27.4%	22.4%
Illinois	23.2%	22.44%	22.11%	23.07%	23.66%	24.48%	23.42%
United States	22.96%	22.82%	22.93%	23.2%	23.51%	23.67%	23.41%

Soda Expenditures

This indicator reports soft drink consumption by census tract by estimating expenditures for carbonated beverages, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues such as diabetes and obesity.

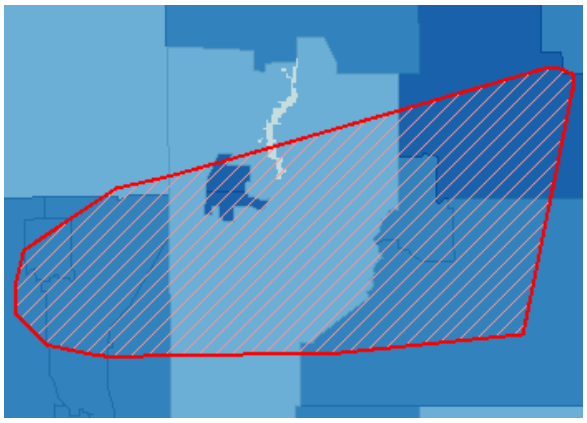
Report Area	Average Total Household Expenditures (USD)	Average Household Soda Expenditures (USD)	Soda Expenditures, County Rank (In-State)	Soda Expenditures, County Percentile	Percent Soda Expenditures
Custom Area Estimates*	43,100	265	no data	no data	**0.61%**
Macoupin County, IL	no data	no data	56	54.9%	no data
Montgomery County, IL	no data	no data	78	76.47%	no data
Illinois	52,831	267	no data	no data	0.5%
United States	50,932	252	no data	no data	0.49%



Soda Expenditures, Percent of Total Household Expenditures

- Custom Area Estimates* (0.61%)
- Illinois (0.5%%)
- United States (0.49%)

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.
Data Source: Nielsen, *Nielsen Reports:* 2011.
Source Geography: Tract



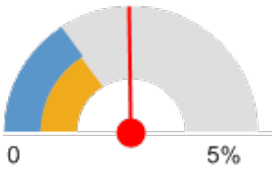
Soda Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen 2011

- Top 80th Percentile (Highest Expenditures)
- 60th - 80th Percentile
- 40th - 60th Percentile
- 20th - 40th Percentile
- Bottom 20th Percentile (Lowest Expenditures)
- No Data or Data Suppressed
- Report Area

Tobacco Expenditures

This indicator reports estimated expenditures for cigarettes, as a percentage of total household expenditures. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

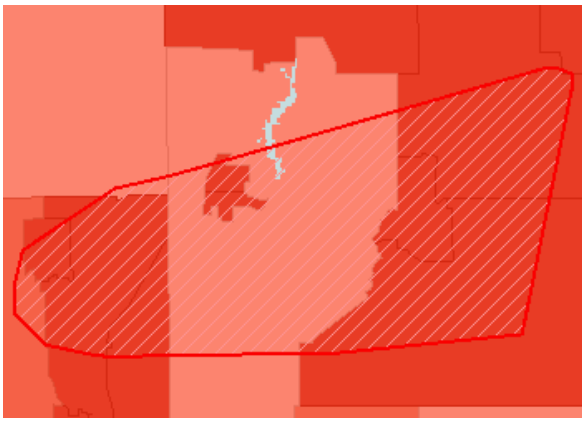
Report Area	Average Total Household Expenditures (USD)	Average Household Cigarette Expenditures (USD)	Cigarette Expenditures, County Rank (In-State)	Cigarette Expenditures, County Percentile	Percent Cigarette Expenditures
Custom Area Estimates*	43,100	1,067	no data	no data	**2.47%**
Macoupin County, IL	no data	no data	62	60.78%	no data
Montgomery County, IL	no data	no data	84	82.35%	no data
Illinois	52,831	841	no data	no data	1.59%
United States	50,932	810	no data	no data	1.59%



Cigarette Expenditures, Percent of Total Household Expenditures

- Custom Area Estimates* (2.47%)
- Illinois (1.59%)
- United States (1.59%)

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.
Data Source: Nielsen, *Nielsen Reports:* 2011.
Source Geography: Tract



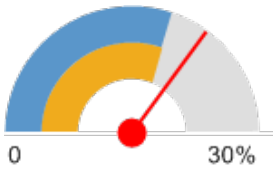
Cigarette Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen 2011

- Top 80th Percentile (Highest Expenditures)
- 60th - 80th Percentile
- 40th - 60th Percentile
- 20th - 40th Percentile
- Bottom 20th Percentile (Lowest Expenditures)
- Bottom 20th Percentile (Lowest Expenditures)
- Report Area

Tobacco Usage - Current Smokers

In the report area an estimated 4,976, or 21.54% of adults age 18 or older self-report currently smoking cigarettes some days or every day. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

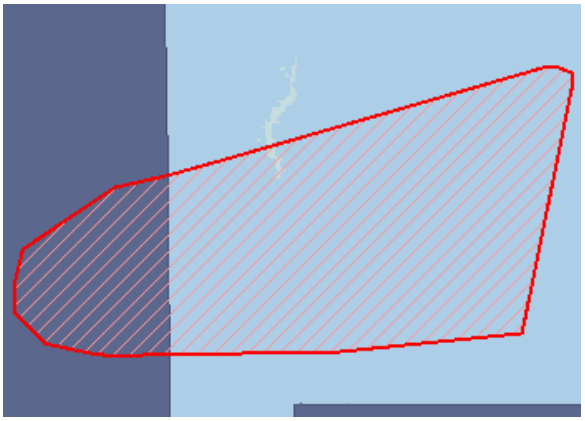
Report Area	Total Population Age 18	Total Adults Regularly Smoking Cigarettes	Percent Population Smoking Cigarettes (Crude)	Percent Population Smoking Cigarettes (Age-Adjusted)
Custom Area Estimates*	23,102	4,976	21.54%	21.05%
Macoupin County, IL	36,938	9,678	26.2%	27.7%
Montgomery County, IL	23,708	4,599	19.4%	18%
Illinois	9,654,603	22.56%	18.3%	18.4%
United States	232,556,016	1,766,792	59,408,212	18.08%



Percent Population Smoking Cigarettes (Age-Adjusted)

- Custom Area Estimates* (21.05%)
- Illinois (18.4%)
- United States (18.08%)

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.
Data Source: Centers for Disease Control and Prevention, *Behavioral Risk Factor Surveillance System:* 2006-12. Accessed via the *Health Indicators Warehouse:*
Source Geography: County



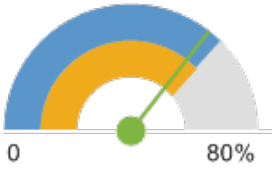
Current Smokers, Adult, Percent of Adults Age 18 by County, BRFSS 2006-12

- Over 26.0%
- 22.1 - 26.0%
- 18.1 - 22.0%
- Under 18.1%
- No Data or Data Suppressed
- Report Area

Tobacco Usage - Quit Attempt

An estimated 56.73% of adult smokers in the report area attempted to quit smoking for at least 1 day in the past year. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease and supporting efforts to quit smoking may increase positive health outcomes.

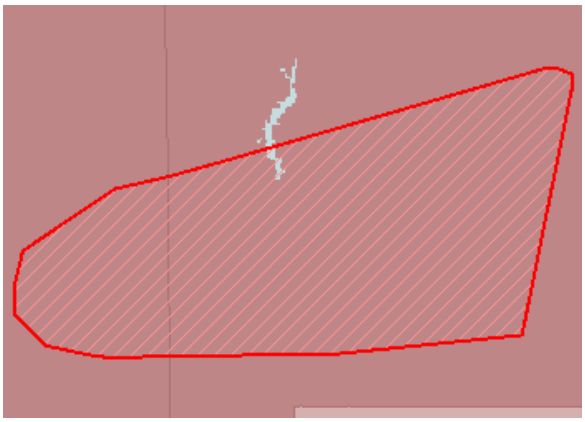
Report Area	Survey Population (Smokers Age 18)	Total Smokers with Quit Attempt in Past 12 Months	Percent Smokers with Quit Attempt in Past 12 Months
Custom Area Estimates*	8,070.89	4,578.94	**56.73%**
Macoupin County, IL	15,802	8,798	**55.68%**
Montgomery County, IL	7,429	4,264	**57.39%**
Illinois	1,903,115	1,164,973	61.21%
United States	45,526,654	27,323,073	60.02%



Percent Smokers with Quit Attempt in Past 12 Months

- Custom Area Estimates* (56.73%)
- Illinois (61.21%)
- United States (60.02%)

Note: This indicator is compared with the state average.
Data Source: Centers for Disease Control and Prevention, *Behavioral Risk Factor Surveillance System:* 2011-12. Additional data analysis by *CARES.*
Source Geography: County



Smokers Who Quit / Attempted to Quit in Past 12 Months, Percent by County, BRFSS 2011-12

- Over 35.0
- 25.1 - 35.0
- 15.1 - 2.5.0
- Under 15.1
- No Grocery Stores
- Report Area

Adult Smokers with Quit Attempt in Past 1 Year by Race / Ethnicity, Percent

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Other Race (Non-Hispanic)	Hispanic / Latino
Custom Area Estimates*	no data	no data	no data	no data
Illinois	57.5%	71.54%	54.02%	66.17%
United States	56.63%	70.87%	62.25%	65.83%

FOOTNOTES

Change in Total Population

Data Background

The U.S. Census counts every resident in the United States. It is mandated by Article I, Section 2 of the Constitution and takes place every 10 years. The census collects information about the age, sex, race, and ethnicity of every person in the United States. The data collected by the decennial census determine the number of seats each state has in the U.S. House of Representatives and is also used to distribute billions in federal funds to local communities. For more information about this source, refer to the United States Census 2010 website.

Methodology

The data is downloaded in text format from the U.S. Census Bureau's FTP site for the years 2000 and 2010. The text documents are then uploaded into a SQL database. The demographics indicators are mapped using population provided for county area (Sum Level 050). Total populations are derived directly from data provided. The rate of population change is calculated using Total Population 2010 - Total Population 2000 = Population Change.

NOTES

Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the US Decennial Census based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories in the 2010 Census are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity.

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of every census tract which falls within the custom area, based on the proportion of the population from the tract which also falls within the area. Population proportions are determined for each census tract by dividing the sum of each census block's population by the total census tract population. In this way, when a custom area contains 50% of the area of a census tract, but contains 90% of that census tract's population, the figure for that census tract is weighted at 90% in the custom area tabulation.

These estimates are weighted based on the total population (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the 2010 census tract. See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

High School Graduation Rate (ED*Facts)*

Data Background

EDFacts is a U. S. Department of Education (ED) initiative to collect, analyze, report on, and promote the use of high-quality, kindergarten through grade 12 (K–12) performance data for use in education planning, policymaking, and management and budget decision-making to improve outcomes for students. EDFacts centralizes data provided by state education agencies, local education agencies, and schools, and provides users with the ability to easily analyze and report on submitted data. ED collects performance data at the school and school-district levels and provides public use files containing data that have been modified to protect against the ability to determine personally identifiable information on students.

Methodology

Graduation rates are acquired for all US school-districts in the United States from US Department of Education (ED) EdFacts data tables. States are required to report graduation data to the US Department of Education under Title I, Part A of the Elementary and Secondary Education Act (ESEA). Specifically, states are required to report rates based on a cohort method, which would provide a more uniform and accurate measure of the high school graduation rate that improved comparability across states. The cohort graduation rate is defined as "the number of students who graduate in four years with a regular high school diploma divided by the number of students who form the adjusted cohort for the graduating class." From the beginning of 9th grade (or the earliest high school grade), students who are entering that grade for the first time form a cohort that is "adjusted" by adding any students who subsequently transfer into the cohort and subtracting any students who subsequently transfer out, emigrate to another country, or die. County-level summaries are calculated by CARES using small-area estimation technique based on the proportion of the population aged 15-19 in each school district/county. The population figures for this calculation are based on data from the 2010 US Decennial Census at the census block geographic level.

For more information please consult the original data the original data or download the complete EdFacts Data Documentation.

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

Data Limitations

- Graduation rates for some school districts are provided by EdFacts as ranges; range mid-points were calculated by CARES to facilitate data manipulation.
- Data is not currently available for three states – Idaho, Kentucky, and Oklahoma – due to incomplete student cohort data for the four years prior to 2011.

* Custom Area Estimates

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each school district which falls within the custom area, based on the proportion of the population from the school district which also falls in the area. Population proportions are determined for each school district using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each school district) which fall within the custom area by the total population of each school district that intersects the custom area. In this way, when a custom area contains 50% of the area of a school district, but contains 90% its population, the figure for that school district is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the base geography for which the indicator is reported.

These estimates are weighted based on the total population age 15-19 (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the 2010 school district.

See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

High School Graduation Rate (NCES)

Data Background

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfils a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries. Citation: Documentation to the NCES Common Core of Data Public Elementary/Secondary School Universe Survey (2011).

The National Center for Education Statistics releases a dataset containing detailed information about every public school in the United States in their annual Common Core of Data (CCD) files. The information from which this data is compiled is supplied by state education agency officials. The CCD reports information about both schools and school districts, including name, address, and phone number; descriptive information about students and staff demographics; and fiscal data, including revenues and current expenditures. For more information, please visit the Common Core of Data web page.

Methodology

Graduation rates are acquired for all US counties from the 2012 County Health Rankings (CHR). The 2011 County Health Rankings (CHR) used graduation rates calculated from the National Center for Education Statistics (NCES) using an estimated cohort. This measure is generally known as the Averaged Freshman Graduation Rate (AFGR). Starting in 2012, CHR reports cohort graduation rates collected from State Department of Education websites. These rates are an improvement over the AFGR rates previously reported due to student-level outcomes tracking that accounts better for transfers, early and late completers. For 12 states, CHR continues to use NCES-based AFGRs. These states are: AL, AK, AR, CT, HI, ID, MT, NJ, ND, OK, SD and TN.

Total freshmen cohorts were compiled for all counties from school-level data, provided by NCES for academic years 2005-06 through 2007-08. Using the graduation rates from the 2012 CHR and these class sizes, the number of graduates* was estimated for each county. On-time graduation rate, or average freshman graduation rate, is re-calculated for unique service areas and aggregated county groupings using the following formula:

Graduation Rate = [Estimated Number of Graduates] / [Average Base Freshman Enrollment] * 100.

*Average freshman graduation rate is a measure of on-time graduation only. It does not include 5th year high school completers, or high-school equivalency completers such as GED recipients. For more information on average freshman graduation rates, please review the information on page 4 of the NCES Common Core of Data Public-Use Local Education Agency Dropout and Completion Data File

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county.

Index values are not available for custom areas; total populations estimates by race and ethnicity for custom areas are weighted based on the population of each racial or ethnic group as reported in the 2010 Decennial Census. The base geography for these calculations is the county. See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Grocery Store Access

Data Background

County Business Patterns (CBP) is an annual series that provides sub-national economic data by industry. Data for establishments are presented by geographic area, 6-digit NAICS industry, legal form of organization (U.S. and state only), and employment size class. Information is available on the number of establishments, employment during the week of March 12, first quarter payroll, and annual payroll. ZIP Code Business Patterns data are available shortly after the release of County Business Patterns. It provides the number of establishments by employment-size classes by detailed industry in the U.S.

County Business Patterns basic data items are extracted from the Business Register (BR), a database of all known single and multi-establishment employer companies maintained and updated by the U.S. Census Bureau. The BR contains the most complete, current, and consistent data for business establishments. The annual Company Organization Survey provides individual establishment data for multi-establishment companies. Data for single-establishment companies are obtained from various Census Bureau programs, such as the Economic Census, Annual Survey of Manufactures and Current Business Surveys, as well as from administrative record sources.

Citation: U.S. Census Bureau: County Business Patterns (2012).

For more information about this source, including data collection methodology and definitions, refer to the County Business Patterns website.

Methodology

Population figures are acquired for this indicator from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Industry counts are acquired from the U.S. Census Bureau, County Business Patterns data file. Industries are stratified based on the 2012 North American Industry Classification System (NAICS) a coding system used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. Establishment rates for each county are derived using the following formula:

Rate = [Establishment Count] / [Population] * 100,000

The specific NAICS codes used to identify establishment categories within the County Business Patterns (CBP) are listed below.

- Grocery stores and supermarkets: 445110
  Grocery stores are establishments engaged in selling a “general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry”. Examples include supermarkets, commissaries and food stores. Convenience stores are excluded.
- Fast food restaurants: 722513 (formerly 722211)
  Any “limited service” establishments where the customer typically orders or selects items and pay before eating. Establishments may include carryout restaurants, delicatessens, drive-ins, pizza delivery shops, sandwich shops, and other fast food restaurants.
- Alcoholic beverage retailers: 445310
  Establishments engaged in “retailing packaged alcoholic beverages, such as ale, beer, wine, and liquor.” Bars and other venues serving alcoholic beverages intended for immediate consumption on the premises are not included.
- Recreational Facilities: 713940
  Establishments engaged in operating facilities which offer “exercise and other active physical fitness conditioning or recreational sports activities”. Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools.

A complete list of NAICS codes and definitions is available using the NAICS Association’s free lookup service.

NOTES

Data Limitations

- Data are reported based on the primary NAICS code of the establishment. By definition, the primary NAICS code should reflect 50% or more of the establihsment's activity. This definition may exclude some establishments from a particular industry classification. For example, a convenience store which also sells liquor may be classified only as a convenience store (445120) and not a beer, wine and liquor store (445310).

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

Data Limitations

Reported data represent summaries limited by county boundaries. When comparing rates, consider the following:

- Rates assume uniform distribution of both establishments and populations throughout the county and may not detect disparities in access for rural or minority populations.
- Summaries may over-represent or under-represent county rates when populations or establishments are highly concentrated on county border lines.
- Rates do not describe quality of the establishment or utilization frequency.

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county.

These estimates are weighted based on the total population (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the county.
See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Recreation and Fitness Facility Access

Data Background

County Business Patterns (CBP) is an annual series that provides sub-national economic data by industry. Data for establishments are presented by geographic area, 6-digit NAICS industry, legal form of organization (U.S. and state only), and employment size class. Information is available on the number of establishments, employment during the week of March 12, first quarter payroll, and annual payroll. ZIP Code Business Patterns data are available shortly after the release of County Business Patterns. It provides the number of establishments by employment-size classes by detailed industry in the U.S.

County Business Patterns basic data items are extracted from the Business Register (BR), a database of all known single and multi-establishment employer companies maintained and updated by the U.S. Census Bureau. The BR contains the most complete, current, and consistent data for business establishments. The annual Company Organization Survey provides individual establishment data for multi-establishment companies. Data for single-establishment companies are obtained from various Census Bureau programs, such as the Economic Census, Annual Survey of Manufactures and Current Business Surveys, as well as from administrative record sources.

Citation: U.S. Census Bureau: County Business Patterns (2012).

For more information about this source, including data collection methodology and definitions, refer to the County Business Patterns website.

Methodology

Population figures are acquired for this indicator from the U.S. Census Bureau, 2010 Decennial Census, Summary File 1. Industry counts are acquired from the U.S. Census Bureau, County Business Patterns data file. Industries are stratified based on the 2012 North American Industry Classification System (NAICS) a coding system used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. Establishment rates for each county are derived using the following formula:

Rate = [Establishment Count] / [Population] * 100,000

The specific NAICS codes used to identify establishment categories within the County Business Patterns (CBP) are listed below.

- Grocery stores and supermarkets: 445110
  Grocery stores are establishments engaged in selling a "general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry". Examples include supermarkets, commissaries and food stores. Convenience stores are excluded.
- Fast food restaurants: 722513 (formerly 722211)
  Any "limited service" establishments where the customer typically orders or selects items and pay before eating. Establishments may include carryout restaurants, delicatessens, drive-ins, pizza delivery shops, sandwich shops, and other fast food restaurants
- Alcoholic beverage retailers: 445310
  Establishments engaged in "retailing packaged alcoholic beverages, such as ale, beer, wine, and liquor." Bars and other venues serving alcoholic beverages intended for immediate consumption on the premises are not included.
- Recreational Facilities: 713940
  Establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities". Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools.

A complete list of NAICS codes and definitions is available using the NAICS Association's free lookup service.

NOTES

Data Limitations

- Data are reported based on the primary NAICS code of the establishment. By definition, the primary NAICS code should reflect 50% or more of the establihsment's activity. This definition may exclude some establishments from a particular industry classification. For example, a convenience store which also sells liquor may be classified only as a convenience store (445120) and not a beer, wine and liquor store (445310).

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

Data Limitations

Reported data represent summaries limited by county boundaries. When comparing rates, consider the following:

- Rates assume uniform distribution of both establishments and populations throughout the county and may not detect disparities in access for rural or minority populations.
- Summaries may over-represent or under-represent county rates when populations or establishments are highly concentrated on county border lines.
- Rates do not describe quality of the establishment or utilization frequency.

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county. These estimates are weighted based on the total population (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the county.

Diabetes Management Hemoglobin A1c Test

Data Background

The Dartmouth Atlas of Healthcare is an online repository of health data and maps based on information included in the massive Medicare database maintained by the Center for Medicare and Medicaid Services (CMS). The project uses Medicare claims data in conjunction with other demographic data to provide information and analysis about national, regional, and local markets, as well as hospitals and their affiliated physicians. The Dartmouth Atlas of Health Care is produced and maintained by The Dartmouth Institute for Health Policy and Clinical Practice.

For more information about this source, including methodologies and definitions, refer to the Dartmouth Atlas of Healthcare website.

Methodology

The Dartmouth Institute analyzes data drawn from enrollment and claims files from the Medicare program. Analysis is restricted to the fee-for-service population over age 65; HMO patients are not included. Indicator data tables express the proportion of Medicare Part B patients screened for medical conditions based on the following formula:

Percentage = [Number Screened] / [Total Patients] *100

When appropriate, statistical adjustments are carried out to account for differences in age, race and sex.

Access to the complete methodology is available in the Dartmouth Institute's Report of the Dartmouth Atlas Project.

NOTES

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county.

These estimates are weighted based on the total population age 65 (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the county.

See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Alcohol Consumption

Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "

Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation's health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please vist the Behavioral Risk Factor Surveillance System home page.

Methodology

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following question:

"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?"

Respondents are considered heavy drinkers if they were male and reported having more than 2 drinks per day, or females that reported having more than 1 drink per day. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

[Heavy Drinkers] = ([Indicator Percentage] / 100) * [Total Population]

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county.

These estimates are weighted based on the total population age 18 (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the county.

See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Alcohol Expenditures

Data Background

Nielsen is a publically held information company and a primary supplier of consumer spending data around the world, using both statistical analysis and field sampling techniques to produce accurate and timely information. Published annually, SiteReports provide market analysis to Nielsen customers at multiple geographic levels, spanning a wide range of topics including population demographics, household spending, and market potential. The SiteReports Consumer Buying Power (CBP) database is created using statistical models estimated from the Bureau of Labor Statistics' Consumer Expenditure Surveys (CEX). This survey provides information on the buying habits of American consumers, including expenditures, income, and other characteristics of the consumer unit (families and single consumers). The Consumer Expenditure Survey consists of two surveys: the quarterly Interview survey and the weekly Diary Survey. The surveys target the total non-institutionalized population (urban and rural) of the United States. The data is collected from the independent quarterly interview and weekly diary surveys of approximately 7,500 sample households. Each survey has its own independent sample, and each collects data on household income and socioeconomic characteristics. The current Nielsen Consumer Buying Power data uses a rolling five years of data from the Consumer Expenditure Survey, administered from 2005 through 2009. In addition to this data, the Nielsen Consumer Buying Power database also incorporates information from the following sources:

- Nielsen Demographic Update
- Nielsen Cartographics
- U.S. Census Bureau: Census of Retail Trade

For more information, please visit the Nielsen SiteReports website.

Methodology

Census tract level average and aggregated total household expenditures and category expenditures were acquired from the 2011 Nielsen Consumer Buying Power (CBP) SiteReports. Tract-level and county-level expenditure estimates are proprietary Nielsen data restricted from public distribution and subject to terms of use agreements. Indicator data tables contain state and national ranks for counties, and percent expenditure estimates based on aggregated tract-level data. The percent expenditure figures calculated for custom geographic areas can be expressed using the following formula:

Percent Expenditures = [Category Expenditures] / [Total Area Expenditures] * 100

To generate acceptable county-level output for indicator report pages, percent expenditures for each food-at-home category were sorted and ranked by county. Each county's within-state rank and that rank's percentile are displayed in the indicator data table. This information is not available for custom geographic areas, for states, or for the total United States. County percentiles are calculated using the following formula:

Percentile = [County Within State Rank] / [Total Number of Counties in State] * 100

To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map. Additional attributes include each tract's within-state rank and quintile. Definitions for food-at-home categories used for consumer spending indicators are based on categories in the BLS Consumer Expenditure Survey (CEX), and are listed below.

- Soft drinks: Soft drink expenditures included in this category are any non-alcoholic carbonated beverages purchased for consumption at home. Soft drinks purchased at restaurants and other dining establishments are not included.
- Alcoholic beverages: Alcohol expenditures included in this category are any beer, wine, and liquor purchased for consumption at home. Alcohol purchased at restaurants and bars is not included.
- Fruit and vegetables: Fruit and vegetables expenditures included in this category are all fresh, frozen and canned fruits and vegetables purchased for consumption at home.
- Tobacco: Tobacco expenditures included in this category are cigarettes only; cigars and other tobacco products are not included.

Further details about the analysis used by Nielsen group can be found in the Consumer Buying Power Methodology.

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

Fruit/Vegetable Consumption

Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "

Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation's health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please vist the Behavioral Risk Factor Surveillance System home page.

Methodology

Indicator percentages are acquired for years 2005-2009 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Data are based on the percentage of respondents who report regularly consuming five or more servings of fruits or vegetables each week. Fried potatoes and chips are excluded. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults consuming 5 servings) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

[Population Consuming 5 Servings] = ([Indicator Percentage] / 100) * [Total Population].

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2005-2009 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county.

These estimates are weighted based on the total population age 18 (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the county.

See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Fruit/Vegetable Expenditures

Data Background

Nielsen is a publicly held information company and a primary supplier of consumer spending data around the world, using both statistical analysis and field sampling techniques to produce accurate and timely information. Published annually, SiteReports provide market analysis to Nielsen customers at multiple geographic levels, spanning a wide range of topics including population demographics, household spending, and market potential. The SiteReports Consumer Buying Power (CBP) database is created using statistical models estimated from the Bureau of Labor Statistics' Consumer Expenditure Surveys (CEX). This survey provides information on the buying habits of American consumers, including expenditures, income, and other characteristics of the consumer unit (families and single consumers). The Consumer Expenditure Survey consists of two surveys: the quarterly Interview survey and the weekly Diary Survey. The surveys target the total non-institutionalized population (urban and rural) of the United States. The data is collected from the independent quarterly interview and weekly diary surveys of approximately 7,500 sample households. Each survey has its own independent sample, and each collects data on household income and socioeconomic characteristics. The current Nielsen Consumer Buying Power data uses a rolling five years of data from the Consumer Expenditure Survey, administered from 2005 through 2009. In addition to this data, the Nielsen Consumer Buying Power database also incorporates information from the following sources:

- Nielsen Demographic Update
- Nielsen Cartographics
- U.S. Census Bureau: Census of Retail Trade

For more information, please visit the Nielsen SiteReports website.

Methodology

Census tract level average and aggregated total household expenditures and category expenditures were acquired from the 2011 Nielsen Consumer Buying Power (CBP) SiteReports. Tract-level and county-level expenditure estimates are proprietary Nielsen data restricted from public distribution and subject to terms of use agreements. Indicator data tables contain state and national ranks for counties, and percent expenditure estimates based on aggregated tract-level data. The percent expenditure figures calculated for custom geographic areas can be expressed using the following formula:

Percent Expenditures = [Category Expenditures] / [Total Area Expenditures] * 100

To generate acceptable county-level output for indicator report pages, percent expenditures for each food-at-home category were sorted and ranked by county. Each county's within-state rank and that rank's percentile are displayed in the indicator data table. This information is not available for custom geographic areas, for states, or for the total United States. County percentiles are calculated using the following formula:

Percentile = [County Within State Rank] / [Total Number of Counties in State] * 100

To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map. Additional attributes include each tract's within-state rank and quintile. Definitions for food-at-home categories used for consumer spending indicators are based on categories in the BLS Consumer Expenditure Survey (CEX), and are listed below.

- Soft drinks: Soft drink expenditures included in this category are any non-alcoholic carbonated beverages purchased for consumption at home. Soft drinks purchased at restaurants and other dining establishments are not included.
- Alcoholic beverages: Alcohol expenditures included in this category are any beer, wine, and liquor purchased for consumption at home. Alcohol purchased at restaurants and bars is not included.
- Fruit and vegetables: Fruit and vegetables expenditures included in this category are all fresh, frozen and canned fruits and vegetables purchased for consumption at home.
- Tobacco: Tobacco expenditures included in this category are cigarettes only; cigars and other tobacco products are not included.

Further details about the analysis used by Nielsen group can be found in the Consumer Buying Power Methodology.

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

* Custom Area Estimates

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of every census tract which falls within the custom area, based on the proportion of the population from the tract which also falls within the area. Population proportions are determined for each census tract by dividing the sum of each census block's population by the total census tract population. In this way, when a custom area contains 50% of the area of a census tract, but contains 90% of that census tract's population, the figure for that census tract is weighted at 90% in the custom area tabulation.

These estimates are weighted based on the total population (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the 2010 census tract.
See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Physical Inactivity

Data Background

The Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion monitors the health of the Nation and produces publically available data to promote general health. The division maintains the Diabetes Data and Trends data system, which includes the National Diabetes Fact Sheet and the National Diabetes Surveillance System. These programs provide resources documenting the public health burden of diabetes and its complications in the United States. The surveillance system also includes county-level estimates of diagnosed diabetes and selected risk factors for all U.S. counties to help target and optimize the resources for diabetes control and prevention.

Citation: Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions (FAQ). (2012).

Methodology

Data for total population and estimated obese population data are acquired from the County Level Estimates of Diagnosed Diabetes, a service of the Centers for Disease Control and Prevention's National Diabetes Surveillance Program. Diabetes and other risk factor prevalence is estimated using the following formula:

Percent Prevalence = [Risk Factor Population] / [Total Population] * 100.

All data are estimates modeled by the CDC using the methods described below:
The National Diabetes Surveillance system produces data estimating the prevalence of diagnosed diabetes and population obesity by county using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and data from the U.S. Census Bureau's Population Estimates Program. The BRFSS is an ongoing, monthly, state-based telephone survey of the adult population. The survey provides state-specific information on behavioral risk factors and preventive health practices. Respondents were considered to have diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes. Respondents were considered obese if their body mass index was 30 or greater. Body mass index (weight [kg]/height [m]2) was derived from self-report of height and weight. Respondents were considered to be physically inactive if they answered "no" to the question, "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?"

Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors. For example, 2003, 2004, and 2005 were used for the 2004 estimate and 2004, 2005, and 2006 were used for the 2005 estimate. Estimates were restricted to adults 20 years of age or older to be consistent with population estimates from the U.S. Census Bureau. The U.S. Census Bureau provides year-specific county population estimates by demographic characteristics—age, sex, race, and Hispanic origin. .

The county-level estimates were based on indirect model-dependent estimates. The model-dependent approach employs a statistical model that "borrows strength" in making an estimate for one county from BRFSS data collected in other counties. Bayesian multilevel modeling techniques were used to obtain these estimates. Separate models were developed for each of the four census regions: West, Midwest, Northeast and South. Multilevel Poisson regression models with random effects of demographic variables (age 20–44, 45–64, 65 ; race; sex) at the county-level were developed. State was included as a county-level covariate.

Citation: Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions (FAQ). (2012).

Rates were age adjusted by the CDC for the following three age groups: 20-44, 45-64, 65 . Additional information, including the complete methodology and data definitions, can be found at the CDC's Diabetes Data and Trends website.

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county.

These estimates are weighted based on the total population age 18 (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the county.

See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Soda Expenditures

Data Background

Nielsen is a publicly held information company and a primary supplier of consumer spending data around the world, using both statistical analysis and field sampling techniques to produce accurate and timely information. Published annually, SiteReports provide market analysis to Nielsen customers at multiple geographic levels, spanning a wide range of topics including population demographics, household spending, and market potential. The SiteReports Consumer Buying Power (CBP) database is created using statistical models estimated from the Bureau of Labor Statistics' Consumer Expenditure Surveys (CEX). This survey provides information on the buying habits of American consumers, including expenditures, income, and other characteristics of the consumer unit (families and single consumers). The Consumer Expenditure Survey consists of two surveys: the quarterly Interview survey and the weekly Diary Survey. The surveys target the total non-institutionalized population (urban and rural) of the United States. The data is collected from the independent quarterly interview and weekly diary surveys of approximately 7,500 sample households. Each survey has its own independent sample, and each collects data on household income and socioeconomic characteristics. The current Nielsen Consumer Buying Power data uses a rolling five years of data from the Consumer Expenditure Survey, administered from 2005 through 2009. In addition to this data, the Nielsen Consumer Buying Power database also incorporates information from the following sources:

- Nielsen Demographic Update
- Nielsen Cartographics
- U.S. Census Bureau: Census of Retail Trade

For more information, please visit the Nielsen SiteReports website.

Methodology

Census tract level average and aggregated total household expenditures and category expenditures were acquired from the 2011 Nielsen Consumer Buying Power (CBP) SiteReports. Tract-level and county-level expenditure estimates are proprietary Nielsen data restricted from public distribution and subject to terms of use agreements. Indicator data tables contain state and national ranks for counties, and percent expenditure estimates based on aggregated tract-level data. The percent expenditure figures calculated for custom geographic areas can be expressed using the following formula:

Percent Expenditures = [Category Expenditures] / [Total Area Expenditures] * 100

To generate acceptable county-level output for indicator report pages, percent expenditures for each food-at-home category were sorted and ranked by county. Each county's within-state rank and that rank's percentile are displayed in the indicator data table. This information is not available for custom geographic areas, for states, or for the total United States. County percentiles are calculated using the following formula:

Percentile = [County Within State Rank] / [Total Number of Counties in State] * 100

To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map. Additional attributes include each tract's within-state rank and quintile. Definitions for food-at-home categories used for consumer spending indicators are based on categories in the BLS Consumer Expenditure Survey (CEX), and are listed below.

- Soft drinks: Soft drink expenditures included in this category are any non-alcoholic carbonated beverages purchased for consumption at home. Soft drinks purchased at restaurants and other dining establishments are not included.
- Alcoholic beverages: Alcohol expenditures included in this category are any beer, wine, and liquor purchased for consumption at home. Alcohol purchased at restaurants and bars is not included.
- Fruit and vegetables: Fruit and vegetables expenditures included in this category are all fresh, frozen and canned fruits and vegetables purchased for consumption at home.
- Tobacco: Tobacco expenditures included in this category are cigarettes only; cigars and other tobacco products are not included.

Further details about the analysis used by Nielsen group can be found in the Consumer Buying Power Methodology.

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

* Custom Area Estimates

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county.

These estimates are weighted based on the total population age 18 (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the county.

See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Tobacco Expenditures

Data Background

Nielsen is a publicly held information company and a primary supplier of consumer spending data around the world, using both statistical analysis and field sampling techniques to produce accurate and timely information. Published annually, SiteReports provide market analysis to Nielsen customers at multiple geographic levels, spanning a wide range of topics including population demographics, household spending, and market potential. The SiteReports Consumer Buying Power (CBP) database is created using statistical models estimated from the Bureau of Labor Statistics' Consumer Expenditure Surveys (CEX). This survey provides information on the buying habits of American consumers, including expenditures, income, and other characteristics of the consumer unit (families and single consumers). The Consumer Expenditure Survey consists of two surveys: the quarterly Interview survey and the weekly Diary Survey. The surveys target the total non-institutionalized population (urban and rural) of the United States. The data is collected from the independent quarterly interview and weekly diary surveys of approximately 7,500 sample households. Each survey has its own independent sample, and each collects data on household income and socioeconomic characteristics. The current Nielsen Consumer Buying Power data uses a rolling five years of data from the Consumer Expenditure Survey, administered from 2005 through 2009. In addition to this data, the Nielsen Consumer Buying Power database also incorporates information from the following sources:

- Nielsen Demographic Update
- Nielsen Cartographics
- U.S. Census Bureau: Census of Retail Trade

For more information, please visit the Nielsen SiteReports website.

Methodology

Census tract level average and aggregated total household expenditures and category expenditures were acquired from the 2011 Nielsen Consumer Buying Power (CBP) SiteReports. Tract-level and county-level expenditure estimates are proprietary Nielsen data restricted from public distribution and subject to terms of use agreements. Indicator data tables contain state and national ranks for counties, and percent expenditure estimates based on aggregated tract-level data. The percent expenditure figures calculated for custom geographic areas can be expressed using the following formula:

Percent Expenditures = [Category Expenditures] / [Total Area Expenditures] * 100

To generate acceptable county-level output for indicator report pages, percent expenditures for each food-at-home category were sorted and ranked by county. Each county's within-state rank and that rank's percentile are displayed in the indicator data table. This information is not available for custom geographic areas, for states, or for the total United States. County percentiles are calculated using the following formula:

Percentile = [County Within State Rank] / [Total Number of Counties in State] * 100

To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map. Additional attributes include each tract's within-state rank and quintile. Definitions for food-at-home categories used for consumer spending indicators are based on categories in the BLS Consumer Expenditure Survey (CEX), and are listed below.

- Soft drinks: Soft drink expenditures included in this category are any non-alcoholic carbonated beverages purchased for consumption at home. Soft drinks purchased at restaurants and other dining establishments are not included.
- Alcoholic beverages: Alcohol expenditures included in this category are any beer, wine, and liquor purchased for consumption at home. Alcohol purchased at restaurants and bars is not included.
- Fruit and vegetables: Fruit and vegetables expenditures included in this category are all fresh, frozen and canned fruits and vegetables purchased for consumption at home.
- Tobacco: Tobacco expenditures included in this category are cigarettes only; cigars and other tobacco products are not included.

Further details about the analysis used by Nielsen group can be found in the Consumer Buying Power Methodology.

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

* **Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of every census tract which falls within the custom area, based on the proportion of the population from the tract which also falls within the area. Population proportions are determined for each census tract by dividing the sum of each census block's population by the total census tract population. In this way, when a custom area contains 50% of the area of a census tract, but contains 90% of that census tract's population, the figure for that census tract is weighted at 90% in the custom area tabulation.

These estimates are weighted based on the total population (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the 2010 census tract.

See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Tobacco Usage - Current Smokers

Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "

Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation's health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please vist the Behavioral Risk Factor Surveillance System home page.

Methodology

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Data are based on the percentage of respondents answering the following question:

"Do you now smoke cigarettes every day, some days, or not at all?"

Respondents are considered smokers if they reported smoking every day or some days. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adult smokers) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

[Adults Smokers] = ([Indicator Percentage] / 100) * [Total Population].

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

NOTES

Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county.

These estimates are weighted based on the total population age 18 (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the county.
See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Tobacco Usage - Quit Attempt

Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "

Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2011-2012. Percentages are generated based on valid responses to the following questions:

"During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?"

Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population using the methods described in the BRFSS Comparability of Data documentation.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the Behavioral Risk Factor Surveillance System home page.

NOTES

Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

*** Custom Area Estimates**

Custom area estimates are generated for this indicator using population weighted allocations. These estimates are aggregates of each county which falls within the custom area, based on the proportion of the population from the county which also falls in the area. Population proportions are determined for each county using 2010 census block centroids. This is accomplished by dividing the summed population of the census blocks (associated with each county) which fall within the custom area by the total population of each county that intersects the custom area. In this way, when a custom area contains 50% of the area of a county, but contains 90% of its population, the figure for that county is weighted at 90% in the custom area tabulation. This approach assumes spatial uniformity of the reported figure throughout the county.

These estimates are weighted based on the total population age 18 (numerator and denominator) as reported in the 2010 Decennial Census. The base geography for these calculations is the county.
See population-weighted small area estimate diagram for an illustration of how data are summarized for custom report areas.

Report prepared by Community Commons, October 08, 2014.
dents answering the following question:

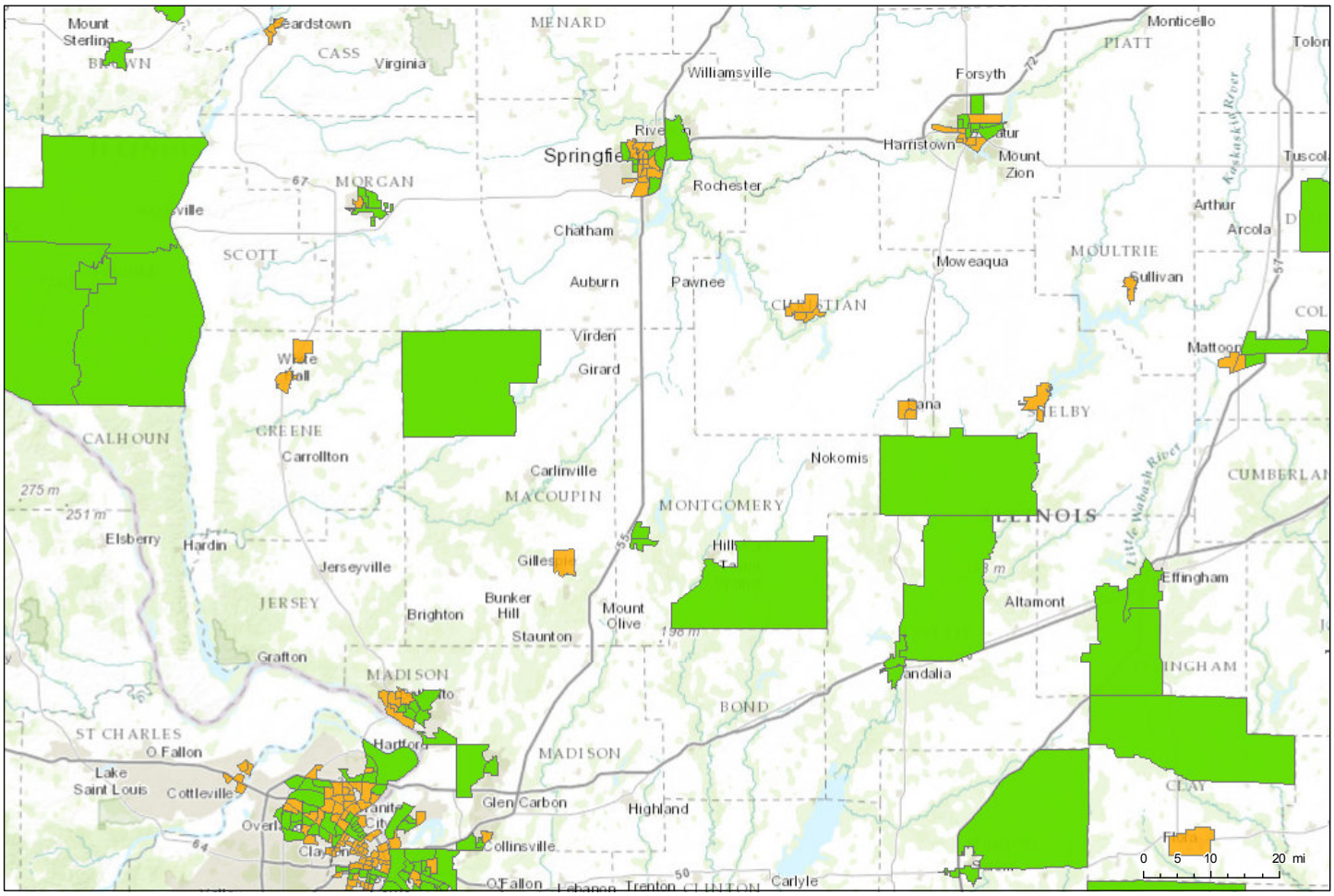
"Do you now smoke cigarettes every day, some days, or not at all?"

Respondents are considered smokers if they reported smoking every day or some days. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adult smokers) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

[Adults Smokers] = ([Indicator Percentage] / 100) * [Total Population].

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

Appendix III



LILA at 1 and 10

LILA at 1/2 and 10

Montgomery and Macoupin Food Access

Date: 9/2/2014 Source: USDA Economic Research Service, ESRI. For more information: http://www.ers.usda.gov/data-products/food-access-research-atlas/documentation.aspx

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Community Health Needs Assessment I 2015
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