LOGAN COUNTY DEPARTMENT OF PUBLIC HEALTH
&
ABRAHAM LINCOLN MEMORIAL HOSPITAL

LOGAN COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT 2014-2019

Public Health
Prevent · Promote · Protect
LOGAN COUNTY

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Letter of Approval

May 11, 2015

LaMar Hasbrouck, MD
Illinois Department of Public Health
535 W Jefferson St., Room 500
Springfield, IL 62761

Dear Dr. Hasbrouck,

At the May 11, 2015 meeting of the Logan County Board of Health, Emily Hauter, Emergency Response Coordinator of the Logan County Health Department, presented to the Board the Logan County Community Health Plan, which was developed using IPLAN and in accordance with the Certified Local Health Department Code (77 Ill. Adm. Code 600).

The Logan County Board of Health reviewed the above plan and, by vote, adopted said plan. Thank you for the opportunity to submit this plan and we look forward to hearing of the Logan County Health Department's recertification.

Sincerely,

William Sahs, President
Logan County Board of Health

Section I: Organizational Capacity Assessment

Purpose

The Organizational Capacity Assessment is an internal assessment that focuses on improving organizational performance in a local health department. This process shall address the internal capabilities of the local health department to conduct effective public health functions. These functions include an assessment of operational authority, community relations, information systems, and program management. This process is completed by members of the administration team at the local health department as well as the administrator. This assessment determines the strengths, weaknesses, opportunities and threats in the local health jurisdiction. This assessment assists health departments in creating an organizational action plan. This process has been made an ongoing process in Logan County every three to five years and therefore results in progressive improvement in the performance of the health department.

The Organizational Capacity Assessment was conducted using the Assessment Protocol for Excellence in Public Health Protocol (APEX-PH) process. This process is a means for local health departments to enhance their organizational capacity and to strengthen their leadership role in the community. A strong local health department will better serve the community and will successfully achieve local health needs and goals.

The Organizational Capacity Assessment was distributed to administrative staff from the Logan County Department of Public Health. The assessors were asked to rate applicable indicators to the health department based on the importance of each indicator. Based on the importance of the indicator, it can be determined the amount of improvement and focus that shall be put on that specific indicator. Each indicator will vary between local health departments, but an overall assessment of comparison is useful to the improvement of the local health department.

There were numerous indicators that were ranked by importance including:

- Authority to Operate
- Community Relations
- Community Health Assessment
- Public Policy Development
- Assurance of Public Health Services
- Financial Management
- Personnel Management
- Program Management
- Policy Board Procedures

These indicators were ranked based on four levels of importance which include high importance, moderate importance, low importance, and none. There were a total of seven Organizational Capacity Assessments that were completed anonymously by members of the LCDPH and Board of Health and were reviewed to determine the most important indicators for the health department.

Strengths and weaknesses identified in the Organizational Capacity Analysis can be found in Appendix A.

Priority I

1. Assurance of Public Health Services

Goal: The Health Department director assures health protection and health promotion services utilizing community-based organizations.

Objective: By 2019, establish partnerships within the community in order to better serve the Logan County population.

Action Plan: The senior management of the health department will work with employee groups in assessing health risks of employees and in managing those risks.

Priority II

2. Community Health Assessment

Goal: The Department will create a concrete and comprehensible mission statement.

Objective: By 2019, the department will create and implement a new mission statement.

Action Plan: The Department will create a concrete and comprehensible mission statement that all staff are able to adopt in relation to their duties. The mission statement and role of the Department will be reviewed and discussed with all units of government in relation to the health of the community. This mission statement will be reviewed every four years.

Priority III

3. Financial Management

Goal: The Department shall develop and receive authorization for a budget.

Objective: By 2019, Logan County Department of Public Health will develop a budget policy that will include the help of management staff.

Action Plan: The Department will create a budget that accurately reflects the necessities outlined in the action plan for health department programs that address health problems in the community with the help of management staff. The budget will be authorized annually by the policy board.

Section II: Illinois Project for Local Assessment of Needs (IPLAN)

The Illinois Project for Local Assessment of Needs (IPLAN) is a process that utilizes community input and resources to correct the most important health care problems in local health departments in Illinois. The IPLAN was developed by the Illinois Department of Public Health in collaboration with local health departments to meet the requirements set for in Section 600 of the Certified Local Health Department Code – Administrative Code 77-600 which states "The performance of the core public health functions is the unique feature that distinguishes a certified local health department from any other public health provider in a local area." The IPLAN is used as a re-certification process in order to identify and meet local needs and is conducted every 5 years.

The IPLAN was in part conducted using the Assessment Protocol for Excellence in Public Health (APEX-PH). APEX-PH was first developed in July 1987 and was intended for the use of local health departments as a process for organizational and community self-assessment, planned improvements, and continuing evaluation and reassessments. It is also used to enhance local health department organizational capacity and to strengthen the leadership role of the health department in the community it serves.

There are eight parts to the APEX-PH Community Process in order to formulate a successful plan which includes:

1. Prepare for the community process
2. Collect and analyze health data
3. Form a community health committee
4. Identify community health problems
5. Analyze community health problems
6. Prioritize community health problems
7. Inventory community health resources
8. Develop a community health plan

The External Community Health Committee was started by including members of the Healthy Communities Partnership, a standing community coalition that includes local organizations, businesses, individuals and churches in support of Logan County Residents. The External Community Health Committee met twice, in November and December of 2014.

The Internal Community Health Committee was a more focused group of health and medical professionals from the community. This group included administration from the health department, Abraham Lincoln Memorial Hospital, Memorial Physician Services, Springfield Clinic – Lincoln, and Mental Health Centers of Central Illinois. The Internal Community Health Committee met twice, in December and January of 2014.

For both the internal and external committee, the first meeting explained to the attendees the purpose of the IPLAN. The committee members received data before the meeting, and the data was also presented at the meeting. The committee members discussed the health status and health problems that were presented in the data and created a list of issues that were determined to be of concern in Logan County. Data sets were discussed from the following data groupings:

- Demographic and socioeconomic characteristics
    - 2010 US Census Report
    - Healthy Communities Institute
    - County Health Rankings
    - American Community Survey
    - US Department of Agriculture
    - US Bureau of Labor Statistics
    - Healthy People 2020
- General Health and Access to Care
    - Illinois Department of Public Health Vital Statistics
    - Illinois Department of Public Health – IPLAN Data
    - Healthy Communities Institute
    - Illinois Behavioral Risk Factor Surveillance System 2007-2009
    - US Department of Health and Human Services – Health Resources and Services Administration
    - County Health Rankings
    - Healthy People 2020
- Maternal and Child Health
    - Illinois Department of Public Health Vital Statistics
    - Healthy Communities Institute
    - IQuery
    - Illinois Department of Public Health – IPLAN Data
    - Illinois Department of Children and Family Services
    - Healthy People 2020
- Chronic Disease
    - Illinois Hospital Association
    - Healthy Communities Institute
    - Centers for Medicare & Medicaid Services
    - Centers for Disease Control and Prevention
    - Illinois Department of Public Health – IPLAN Data
    - IQuery

    - Illinois Behavioral Risk Factor Surveillance System
    - National Cancer Institute
    - Healthy People 2020
- Infectious Disease
    - LCDPH Reportable Disease Data
    - National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
    - Healthy Communities Institute
    - Illinois Department of Public Health Vital Statistics
    - Illinois Department of Public Health – IPLAN Data
    - Illinois Behavioral Risk Factor Surveillance System
    - Illinois Hospital Association
    - IQuery
    - Healthy People 2020
- Environmental/Occupational/Injury Control
    - LCDPH Environmental Health Data
    - US Environmental Protection Agency
    - Fatality Analysis Reporting System
    - Illinois Criminal Justice Information Authority
    - Illinois Department of Public Health Vital Statistics
    - Illinois Hospital Association
    - County Health Rankings
    - Illinois Department of Public Health – Environmental Health Statistics
    - Healthy People 2020
- Risk Factors and Screenings Rates
    - Illinois Behavioral Risk Factor Surveillance System 2007-2009
    - Illinois Youth Survey 2012
    - US Department of Agriculture – Food Environment Atlas
    - Illinois Hospital Association
    - Centers for Medicare & Medicaid Services
    - Healthy People 2020
- Sentinel Events
    - Noted throughout the presentation

Initial Health Priorities

- Asthma
- Bullying
- Lack of doctors for new patients
- Lack of doctors for Medicaid Patients
- Depression in older adults
- Affordable housing
- Increased use of marijuana and alcohol in teens
- Chronic Disease and prevention programs
- Lack of employment opportunities (18-24)
- Daily PE for district public schools
- ER visit wait time
- STD rates
- DUI in youth
- Colon Cancer

- Colon Cancer Screenings
- Mammograms
- Black income level
- ER Rate – long term complications for diabetes
- Suicide Rates
- Mental Health
- HS Graduation Rates
- Smoking in Pregnant women
- Childhood obesity
- Teen Birth Rate
- Child Abuse Rate
- Drug Addiction and Treatment in Low income population
- Suicide Rate
- Heroin
- Pneumonia
- Hepatitis
- Release of Toxins (PBT)
- Causes of infant mortality
- Arsenic in wells in parts of Logan County
- Obesity

The second IPLAN meeting for the External Community Health Committee consisted of members selecting the top 10 priorities from the list of health issues that was created in the first meeting.

Top 10 Health Priorities

- Marijuana and alcohol use in teens
- Mental health
- Smoking in pregnant women
- Child abuse
- Teen births
- Bullying
- Obesity (Adult and Childhood)
- Lack of doctors for new patients
- Drug addition and treatment
- Chronic disease and prevention programs

The second IPLAN meeting for the Internal Community Health Committee consisted of members evaluating the top 10 community health problems using the Hanlon Method, which rates the size of the health problem, the seriousness of the health problem and the effectiveness of available interventions to determine the health priority rankings. The final 3 health priorities for the IPLAN were chosen during this meeting.

Top 3 Health Priorities

- Smoking in pregnant women
- Drug and alcohol use in teens
- Obesity (Adult and Childhood)

Section III: Community Health Plan Results

Priority One – Smoking in Pregnant Women

A. Rationale

According to the Illinois Behavioral Risk Factor Surveillance System (IL BRFSS) 2008, 28.1% of mothers in Logan County reported smoking during their pregnancy. The 2015 *County Health Rankings* indicated that 28% of Logan County adults smoke, compared to 18% of Illinois state residents. Smoking while pregnant increases the chance for numerous health problems for both the fetus and mother. The Centers for Disease Control and Prevention (CDC) note that there can be issues with the placenta, which is the source of oxygen and food to the fetus during pregnancy. An example of this is a separation of the placenta from the uterus. Babies born with low birth weight are more likely than babies of normal weight to have health problems and require specialized medical care in the neonatal intensive care unit. In Logan County, 8.6% of babies had a low birth weight in 2011, which was a significant increase from 5.2% in 2010. A baby born to a mother who has smoked during her pregnancy is more likely to have less developed lungs, a lower birth weight, and to be born prematurely. The IL BRFSS 2011 concluded that 11.2% of births in Logan County were preterm. It is estimated that smoking during pregnancy causes up to ten percent of all infant deaths. Even after a baby is born, secondhand smoking can contribute to SIDS (Sudden Infant Death Syndrome), asthma onset, and stunted growth.

B. Risk and Contributing Factor Analysis

There are several health determinants for smoking while pregnant. This includes low socioeconomic status, education level, and a partner who smokes. According to the 2015 County Health Rankings, 74% of adults in Logan County graduated from high school in comparison to 82% at the state level. Studies have been conducted that found that the biggest reason for continuing to smoke while pregnant was having other members of your household continue to smoke, especially the pregnant woman's partner.

Per the CDC, smoking during pregnancy is the risk factor for birth defects, pre-term delivery, low birth weight, Sudden Infant Death Syndrome (SIDS), and maternal complications during pregnancy. It also increases the risk of birth defects, including cleft palate. Mothers who smoke while pregnant are more likely to have a miscarriage than those who don't.

C. Outcome Objective

By 2019, decrease the proportion of mothers who smoke during pregnancy to 25%, a reduction of 11% of the Logan County baseline. Baseline= 28.1%, IL BRFSS 2008.

D. Impact Objective

By 2019, increase the percent of females abstaining from smoking during pregnancy 75%. Baseline = 71.9%

E. Intervention Strategies

Awareness of the effects of smoking before, during, and after pregnancy should be continued to be introduced to adult females.

Increase partner support for smoking cessation.

Assist tobacco users in their willingness to quit.

Encourage the use of healthy coping strategies.

F. Discussion of Intervention Strategy Implementation

Promote smoking cessation at Health Fairs.

Partner with OB-GYN's in Logan County to promote/educate about tobacco cessation.

Promote smoking cessation through WIC department at LCDPH.

Promote Illinois Tobacco Quitline.

Funding: Illinois Tobacco Free Communities from IDPH. See additional funding when available.

Priority Two – Drug & Alcohol Use in Teens

A. Rationale

According to IL BRFSS 2012, 15% of teens smoke cigarettes, 28% of teens use marijuana, and 55% of teens consume alcohol in Logan County. The Illinois Youth Survey 2012 County Report for Logan County found that substance abuse significantly increases between 6th and 12th grade. 6th graders who reported using tobacco in the last 30 days was only 3%, in comparison to 28% of 12th graders. Alcohol consumption for the past 30 days in 6th grade students in Logan County was 4%, in comparison to 55% of 12th grade students. Marijuana use was reported by 1% of 6th graders in the past 30 days, whereas it was reported in 28% of 12th graders. Both marijuana and alcohol use rates were higher for 12th graders in Logan County than the state rate, which was 27% for marijuana and 47% for alcohol. Driving under the influence (DUI) rates are also greater in Logan County among adolescents than the state. 26% of Logan County12th grade students reported at least instance of DUI in last 12 months, while the state rate is 18%. In Logan County, 28% of 12th graders reported binge drinking within the last two weeks with greater than half of those reporting a twice or more occurrence.

B. Risk and Contributing Factor Analysis

The CDC cites substance abuse as a risk factor for violence, HIV infection, injury and other diseases in adolescents. According to research by the National Institute on Alcohol Abuse and Alcoholism, adolescents who begin drinking at a young age are more likely to

develop alcohol dependence than those who begin drinking at age 21. Patterns formed during adolescence play a critical role in health throughout adulthood. Alcohol use also impairs judgment and can lead to other high-risk behaviors such as drunk driving and sexual activity.

Contributing factors to youth substance abuse are a lack of communication between parents and children, peer pressure, accessibility, and exposure per the National Institute of Drug Abuse. Teens are more likely to use substances, such as marijuana and alcohol, when there is a lack of parental supervision and discussion. Peer and family consumption of drugs or alcohol increase exposure and availability.

C. Outcome Objective

By 2019, reduce the proportion of teens that smoke in Logan County to 13.5%, which is 10% of the baseline. Baseline = 15%, IL BRFSS 2012.

By 2019, reduce the proportion of teens who consume alcohol in Logan County to 49.5%, which is a 10 percent improvement. Baseline = 55%, IL BRFSS 2012.

D. Impact Objective

By 2019, increase the proportion of adolescents who disapprove of substance abuse (Healthy People 2020, SA – 3)

By 2019, increase the proportion of adolescents never using substances (Healthy People 2020, SA – 2)

By 2019, reduce the proportion of adolescents engaging in binge drinking (Healthy People 2020, SA – 14.4) to 8.6%. Baseline = 9.5%, Healthy People 2020.

E. Intervention Strategies

Monitor the activities of adolescents.

Decrease youth access to marijuana and alcohol.

Enforce the minimum legal drinking age law and illegal use of marijuana.

Reduce youth exposure to alcohol advertising.

Develop a comprehensive community-based program to reduce substance abuse in adolescents.

F. Discussion of Intervention Strategy Implementation

Partner with community organizations to help with awareness and education. Examples might include Chestnut Health Systems, Logan County Probation, etc.

Partner with the police in Logan County and Lincoln to help enforce/ and educate on the laws.

Continue with the counter marketing campaign about teens and smoking.

Funding: Illinois Tobacco Free Communities from IDPH and REALITY from IDPH, seek additional funding when available

Priority Three – Obesity (Adult & Childhood)

A. Rationale

According to the IL BRFSS 2007-2009, 30.4% of adult residents in Logan County were said to be obese. That is an increase of 5.5% from 24.9 % in the 2004-2006 BRFSS. In addition, 35.9% reported being overweight. That is an increase of 2.8% from 33.1% in the 2004-2006 BRFSS. Also, 86.3% of residents reported that they were not advised about their weight, and 56.6% of Logan County residents were trying to lose weight. Per the 2015 *County Health Rankings,* Logan County ranked 63rd in terms of Health Behaviors as compared to all counties within the state of Illinois. This determinant includes the risk factors of diet and exercise which directly effects weight control. The 2015 *County Health Rankings* also indicated that 32% of Logan County residents were obese, compared to 27% of Illinois state residents. The data collected by the IL BRFSS stated 33.40% of residents engaged in regular exercise for more than the past 6 months while 19.6% had no exercise at all. In addition, 42.1% met the moderate activity standard (3 x WK x 20 min) and 25.3% met the vigorous activity standard (5 x WK x 30 min). According to the Centers for Disease Control and Prevention, obesity also increases the risk factors of numerous diseases including coronary heart disease, Type 2 diabetes, cancer, hypertension, dyslipidemia, and liver and gallbladder disease. In addition, according to the data collected for *America's Health Rankings 2009*, the prevalence of obesity within the state of Illinois has increased 146% since 1990.

As indicated in the Illinois Youth Survey 2014 Country Report for Logan County, 33% of adolescents (grades 6 through 12) had a BMI in the overweight or obese ranges. The IL BRFSS 2009-2011 reported that 15.4% of low income preschool (ages 2-4) students are obese. Childhood obesity has both immediate and long-term health impacts. Children and adolescents who are obese are at greater risk for bone and joint problems, sleep apnea, and are more likely than normal weight peers to be teased and stigmatized which can lead to poor self-esteem. Moreover, obese youth are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure. Finally, overweight and obese youth are more likely than normal weight peers to be overweight or obese adults and are therefore at risk for the associated adult health problems, including heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis. Childhood obesity has more than tripled in the past thirty years. Healthy eating and regular physical activity can lower the risk of becoming obese.

B. Risk and Contributing Factor Analysis

The Centers for Disease Control and Prevention notes numerous factors that contribute to obesity including behavioral, genetic and environmental factors. The Logan County Community Health Committee 2010 also indicated lifestyle and nutrition as risk factors. In addition, the committee found several direct contributing factors including lack of exercise, stress, poor diet, financial hardship, and lack of motivation. Indirect contributing factors that the committee deemed responsible for obesity include family history, time conflicts, illness, inadequate education, and unemployment.

C. Outcome Objective

By 2019, reduce the proportion of adults who are obese in Logan County to 26%, a 14.5% reduction from the baseline. Baseline = 30.4%, IL BRFSS 2007-2009.

By 2019, reduce the proportion of children who are obese in Logan County (Healthy People 2020, NWS – 10.4) to 14.5%. Baseline = 16.1%, Healthy People 2020.

D. Impact Objective

By 2019, increase the contribution of fruits to the diets of the residents of Logan County (Healthy People 2020, NWS – 14) to 0.90 cup equivalent per 1,000 calories consumed. Baseline = 0.53 cup equivalent of fruits per 1,000 calories, Healthy People 2020.

By 2019, increase the contribution of vegetables to the diets of the residents of Logan County (Healthy People 2020, NWS – 15.1) to 1.14 cup equivalent per 1,000 calories consumed. Baseline = 0.77 cup equivalent of vegetables per 1,000 calories, Healthy People 2020.

By 2019, reduce the proportion of adults who engage in no leisure-time physical activity (Healthy People 2020, PA – 1) to 32.6%. Baseline = 36.2%, Healthy People 2020.

E. Intervention Strategies

Awareness of the effects of obesity should be continued to be introduced to young children as well as adults while adults are framed as role models for children.

Increase the availability and affordability of healthier food and beverage choices in public service areas and schools.

Improve mechanisms for purchasing foods from farms.

Limit advertisements of less healthy foods and beverages.

Discourage consumption of sugar-sweetened beverages.

Increase support for breastfeeding.

Increase opportunities for extracurricular activities and enhance traffic safety in areas where persons are or could be physically active.

Increase awareness of family history of obesity.

F. Discussion of Intervention Strategy Implementation

Partner with community agencies working for the same goal.

Partner with the hospital to promote outdoor trails in Logan County.

Partner with Health Community Partnerships with the 5-2-1-0 campaign in Logan County.

Promote healthy lifestyles with Women, Infants, and Children through LCDPH.

Educate and raise awareness through Health Fair theme and promotions along with health fair day of activities.

Implement CATCH into Logan County Schools

Funding Source: IDPH Coordinated School Health grants when available, seek funding sources available.

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A very special thank you to all members of the 2014 Internal and External Community Health Committees:

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Appendices

concAppendix A. Organizational Capacity Assessment Strengths and Weaknesses

Strengths: Identified as at least 4 respondents rating perceived importance as "High Importance" and at least 4 respondents rating current status as "Fully Met"
Weaknesses: Identified as at least 4 respondents rating perceived as "High Importance" and at least 4 respondents rating current status as "Partially Met" or "Not Met at All"

Area	Strength	Weakness
1. Indicators for Authority to Operate		
A. Legal Authority	None Identified	None Identified
B. Intergovernmental Relations	None Identified	None Identified
C. Legal Counsel	• The health department has legal counsel sufficient to provide advice as needed on administrative practices; department powers, duties, policies, and procedures; relevant laws and ordinances; contracts; and other legal matters	None Identified
II. Indicators for Community Relations		
A. Constituency Development	• The health department has a physician health officer, medical adviser(s), or consultant(s) to assist in maintaining relationships with the private medical community	None Identified
B. Constituency Education	• The local media looks to the health department as a source of information about the health of the community • The health department regularly provides background information and news information to the local media • The health department has a means of regular public communication, such as a regular newsletter of column in a community newspaper	None Identified
C. Documentation	None Identified	None Identified

III. Indicators for Community Health Assessment		
A. Mission and Role	• The health department has established a process for community health assessment and the development of a community health plan	• At least every two years, the health department formally requests all units of government within its jurisdiction to comment on the department's programs, plan, and budget
B. Data Collection and Analysis	None Identified	• The health department maintains a database of existing health resources and community health status
C. Resource Assessment	None Identified	None Identified
D. Planning and Development	• The health department has staff with education and experience in planning and evaluation	None Identified
E. Evaluation and Assurance	None Identified	None Identified
IV. Indicators for Public Policy Development		
A. Community Health Assessment and Planning	None Identified	None Identified
B. Community Health Policy	None Identified	None Identified
C. Public Policy and Public Health Issues	None Identified	None Identified
V. Indicators for Assurance of Public Health Services		
A. Public Policy Implementation	• The health department maintains a level of service without interruption to avoid crises affecting the health of the community	None Identified
B. Personal Health Services	None Identified	• The health department seeks to assure that all citizens receive the level of personal health services referred to in B1, above, regardless of their ability to pay (refers to "The health department

		monitors the availability of personal health services and assures an appropriate level of those health services in the community") • The health department identifies barriers health care access and develops plans to minimize them • The health department provides the services necessary to assure a clean, safe, and secure environment for the community
C. Involvement of Community in the Public Health Delivery System	None Identified	None Identified
VI. Indicators for Financial Management		
A. Budget Development and Authorization	• A department budget is adopted annually by the policy board • The health department receives locally assessed tax funds from the unit of government to which it is responsible • The health department has the authority to recommend and charge fees for the services it provides	• The health department has an adequate contingency fund for dealing with public health emergencies
B. Financial Planning and Financial Resource Development	• The health department has staff skilled in writing successful grant applications	• The health department has a diverse funding base to lessen disruption of services caused by withdrawal of funds from any one source
C. Financial Reporting and Administration	• An administrative officer or finance director is designated by the policy board to oversee all finances of the health department, including meeting all legal financial requirements, adherence to department fiscal policies, and reporting to the policy board regularly on financial matters	• Expenditures follow the budget and financial plan of the health department
D. Audit	• The health department has an independent, outside, annual financial and performance audit which conforms with requirements stipulated by general accounting principles • The annual audit is reviewed and clearly understood by the policy board and key department staff	None Identified

E. Documentation	• Appropriate journals, ledgers, registers, and financial reports are kept, using generally accepted accounting procedures	None Identified
VII. Indicators for Personnel Management		
A. Policy Development and Authorization	• A written job description, including minimum qualifications, exists for each position in the health department • Written personnel policies and procedures are developed or revised with staff input • If labor unions represent department staff, there is an established working relationship and labor contract between the health department policy board and each respective labor union • There is a documented procedure, authorized by the policy board and developed with input from senior management of the health department and staff where appropriate, for employee grievances, reprimands, suspensions, and dismissals	• There is a documented, structured salary administration plan that is authorized by the policy board and that is designed to attract and retain competent staff
B. Personnel Administration and Reporting	• The health department director is responsible for internal administration of the department • Written staff performance appraisals are conducted by supervisors with employees at established intervals • Health department announcements and program information are distributed to all employees via a standard mechanism • There are regularly scheduled meetings by work group, work site, division, and department • The policy board receives routine reports from the health department director relative to new employees, staffing changes, dismissals, grievances, etc. • The health department director selects qualified individuals as staff for the department • The health department provides appropriate confidentiality for all personnel records	None Identified
C. Staffing Plan and Development	• The health department staff have access to training provided by the state health authority in areas relevant to local health	• The health department has the ability to fill new and vacant positions in a timely manner

	problems	
D. Personnel Policy and Procedure Audit	None Identified	None Identified
E. Documentation	• An up-to-date coordinated, structured, and confidential file is maintained for every employee and volunteer	None Identified
VIII. Indicators for Program Management		
A. Organization and Structure	• Operating programs are authorized by the policy board • Staff meetings are held at reasonable frequencies, include appropriate staff, and are called and structured by appropriate individuals • The health department maintains emergency contact staff (on site or on call) to respond to local public health emergencies	None Identified
B. Evaluation	None Identified	None Identified
C. General Information Systems	None Identified	None Identified
D. Shared Resources	None Identified	None Identified
IX. Indicators for Policy Board Procedures	• Health department policy board members attend policy board and committee meetings • Policy board meetings are scheduled on a basis with sufficient frequency to ensure board control and direction of the health department • Policy board materials, including agenda and study documents, are mailed to members no less than three days in advance of board meetings	None Identified

Appendix B. Logan County Data Presentation

Logan County IPLAN/CHNA Data

Internal Advisory Committee Meeting

November 24, 2014

IPLAN and CHNA

- Community assessments completed to help understand our needs (and strengths!)
- Identify areas to focus on throughout the next 3-5 years

Data Areas

- Demographic and Socioeconomic
- General Health and Access to Care
- Maternal and Child Health
- Chronic Disease
- Infectious Disease
- Environmental, Occupational, and Injury Control
- Sentinel Events – Health conditions considered preventable or controllable with regular primary care. The occurrence of sentinel events can be interpreted to indicate inadequate access to primary care.
- Risk Factors and Screening Rates

Healthy People 2020

- A program of nationwide health-promotion and disease-prevention goals set by the United States Department of Health and Human Services
- The goals were first set in 1979, for the following decade. The goals were subsequently updated for Healthy People 2000, Healthy People 2010, and Healthy People 2020
- www.healthypeople.gov/

Epidemiology Term Review

- **Crude Rate**: Rates that apply to an entire population
- **Incidence Rate**: the number of NEW cases per population at risk in a given time period
- **Prevalence Rate**: the proportion of people in a population who have a particular disease at a specified point in time, or over a specified period of time. Includes not only new cases, but also old cases (people who remained ill during the specified point or period in time)
- **Age Adjusted Rate**: a statistical process applied to rates of disease, death, injuries or other health outcomes which allows communities with different age structures to be compared. Expressed as number of cases per 100,000 with confidence level.

Demographic and Socioecomonic

Logan County Population by Age – 2010 Census

Total population	30,305	100.0
Under 5 years	1,601	5.3
5 to 9 years	1,667	5.5
10 to 14 years	1,683	5.6
15 to 19 years	2,150	7.1
20 to 24 years	2,250	7.4
25 to 29 years	2,105	6.9
30 to 34 years	2,006	6.6
35 to 39 years	1,922	6.3
40 to 44 years	1,983	6.5
45 to 49 years	2,222	7.3
50 to 54 years	2,306	7.6
55 to 59 years	2,018	6.7
60 to 64 years	1,632	5.4
65 to 69 years	1,334	4.4
70 to 74 years	1,015	3.3
75 to 79 years	880	2.9
80 to 84 years	712	2.3
85 years and over	819	2.7

http://factfinder2.census.gov

Logan County Population MALE – 2010 Census

Male population	15,368	50.7
Under 5 years	833	2.7
5 to 9 years	868	2.9
10 to 14 years	831	2.7
15 to 19 years	1,145	3.8
20 to 24 years	1,259	4.2
25 to 29 years	1,205	4.0
30 to 34 years	1,105	3.6
35 to 39 years	1,010	3.3
40 to 44 years	1,025	3.4
45 to 49 years	1,132	3.7
50 to 54 years	1,165	3.8
55 to 59 years	1,003	3.3
60 to 64 years	805	2.7
65 to 69 years	624	2.1
70 to 74 years	456	1.5
75 to 79 years	375	1.2
80 to 84 years	261	0.9
85 years and over	265	0.9

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

Logan County Population FEMALE – 2010 Census

Female population	14,937	49.3
Under 5 years	768	2.5
5 to 9 years	798	2.6
10 to 14 years	852	2.8
15 to 19 years	1,005	3.3
20 to 24 years	991	3.3
25 to 29 years	900	3.0
30 to 34 years	901	3.0
35 to 39 years	912	3.0
40 to 44 years	958	3.2
45 to 49 years	1,090	3.6
50 to 54 years	1,141	3.8
55 to 59 years	1,015	3.3
60 to 64 years	827	2.7
65 to 69 years	710	2.3
70 to 74 years	559	1.8
75 to 79 years	505	1.7
80 to 84 years	451	1.5
85 years and over	554	1.8

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

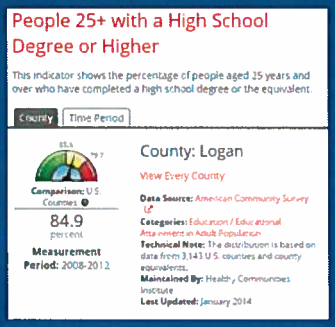
Logan County Population by Race/Ethnicity – 2010 Census

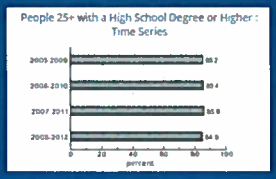
White	89.1%
Black	7.5%
American Indian/ Alaska Native	<1%
Asian	<1%
Native Hawaiian/ Other Pacific Isl.	<1%
Two or More	1.3%

RACE		
Total population	30,305	100.0
One Race	29,913	98.7
White	27,008	89.1
Black or African American	2,265	7.5
American Indian and Alaska Native	60	0.2
Asian	184	0.6
Asian Indian	28	0.1
Chinese	46	0.2
Filipino	39	0.1
Japanese	5	0.0
Korean	15	0.0
Vietnamese	32	0.1
Other Asian [1]	21	0.1
Native Hawaiian and Other Pacific Islander	5	0.0
Native Hawaiian	3	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	2	0.0
Some Other Race	371	1.2
Two or More Races	392	1.3
White; American Indian and Alaska Native [3]	87	0.3
White; Asian [3]	61	0.2
White; Black or African American [3]	154	0.5
White; Some Other Race [3]	43	0.1

http://quickfacts.census.gov/qfd/states/17/17107.html

Logan County Population 25+ with high school diploma



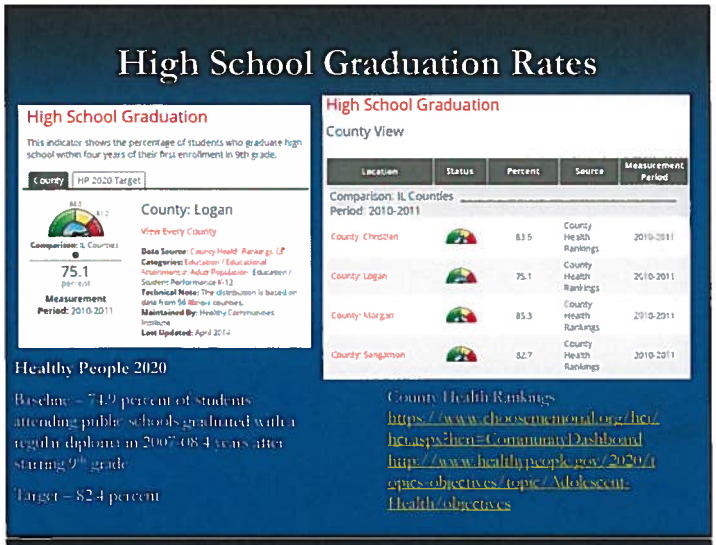


http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

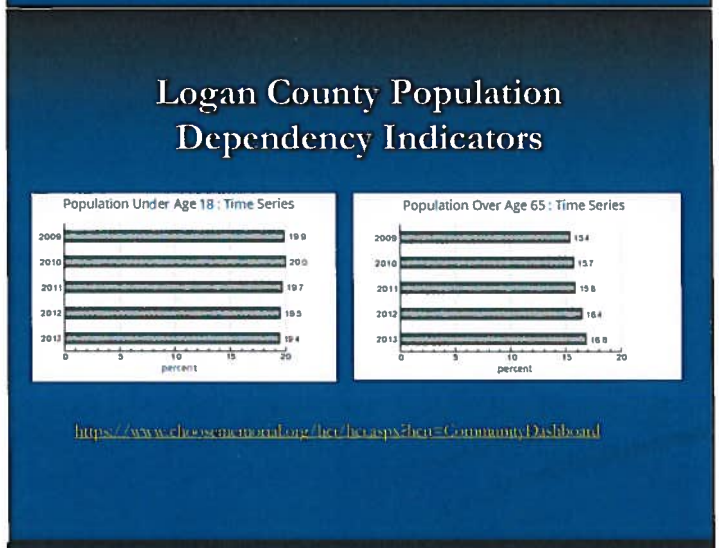
Logan County Population 25+ with high school diploma – compared to neighboring counties

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

Why is this important?
Graduating high school is an important personal achievement and is essential for an individual's social and economic advancement. Graduation rates are also an important indicator of the performance of the educational system.

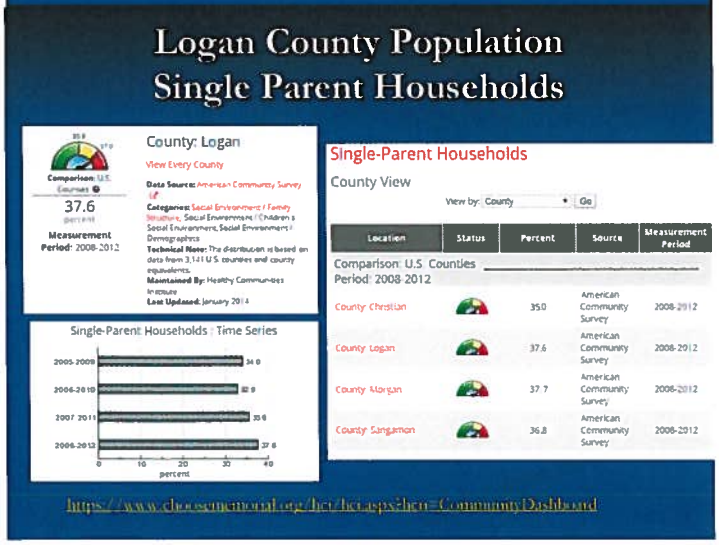


Why is this important?
Individuals who do not finish high school are more likely than people who finish high school to lack the basic skills required to function in an increasingly complicated job market and society. Adults with limited education levels are more likely to be unemployed, on government assistance, or involved in crime.

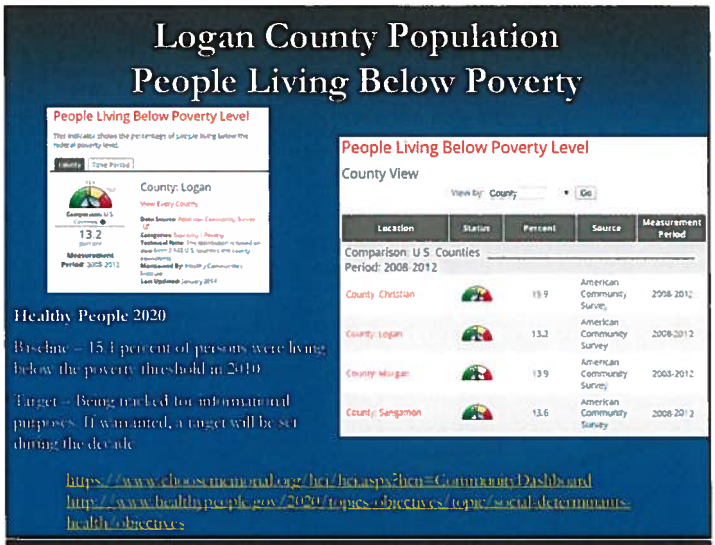


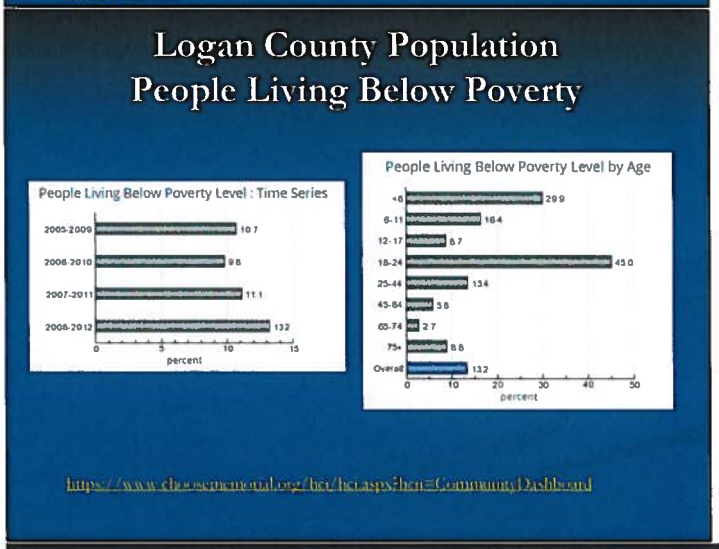
Why is this important?

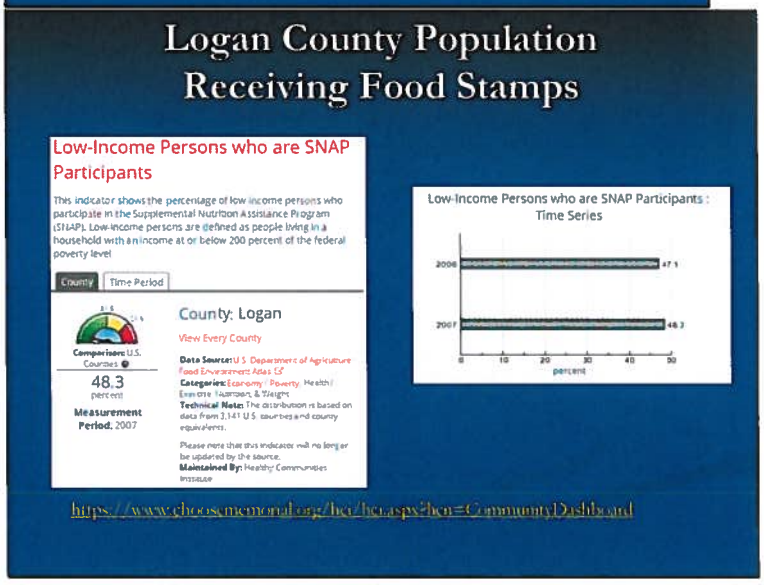
The age structure of a population is important in planning for the future of a community, particularly for schools, community centers, health care, and child care. A population with more youth will have greater education and child care needs, while an older population may have greater health care needs.



Why is this important?
Adults and children in single-parent households are at a higher risk for adverse health effects, such as emotional and behavioral problems, compared to their peers. Children in such households are more likely to develop depression, smoke, and abuse alcohol and other substances. Consequently, these children experience increased risk of morbidity and mortality of all causes. Similarly, single parents suffer from lower perceived health and higher risk of mortality.







Why is this important?
Federal poverty thresholds are set every year by the Census Bureau and vary by size of family and ages of family members. A high poverty rate is both a cause and a consequence of poor economic conditions. A high poverty rate indicates that local employment opportunities are not sufficient to provide for the local community. Through decreased buying power and decreased taxes, poverty is associated with lower quality schools and decreased business survival

Why is this important?
SNAP, previously called the Food Stamp Program, is a federal-assistance program that provides low-income families with electronic benefit transfers (EBTs) that can be used to purchase food. The purpose of the program is to assist low-income households in obtaining adequate and nutritious diets.

The number of Americans receiving SNAP benefits reached 39.68 million in February 2010, the highest number since the Food Stamp Program began in 1939. As of June 2009, the average monthly benefit was $133.12 per person and as of November 2009, one in eight Americans and one in four

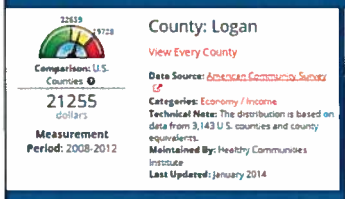
children were using SNAP benefits.

Why is this important?
The unemployment rate is a key indicator of the local economy. Unemployment occurs when local businesses are not able to supply enough and/or appropriate jobs for local employees and/or when the labor force is not able to supply appropriate skills to employers. A high rate of unemployment has personal and societal effects. During periods of unemployment, individuals are likely to feel severe economic strain and mental stress. Unemployment is also related to access to health care, as many individuals receive health insurance through their employer. A high unemployment rate places strain on financial support systems, as unemployed persons qualify for unemployment benefits and food stamp programs.

Logan County Residents Enrolled in Medicaid

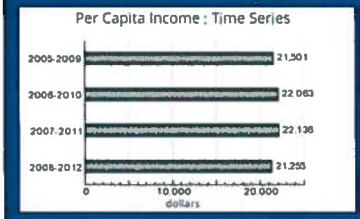
U.S. Bureau of Labor Statistics

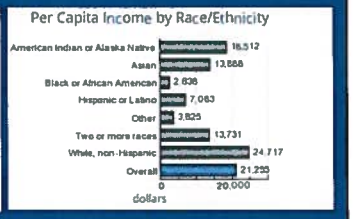
Per Capital Personal Income in Logan County



https://www.choosemenomal.org/hci/hci.aspx?hcn=CommunityDashboard

Per Capital Personal Income in Logan County





https://www.choosemenomal.org/hci/hci.aspx?hcn=CommunityDashboard

Why is this important?
Per capita income, or income per person, is the total income of the region divided by the population. It is an aggregate measure of all sources of income and therefore is not a measure of income distribution or wealth. Areas with higher per capita incomes are considered to be more prosperous; however, median income is a more accepted measure of the economic well-being of a region because median income is not skewed by extremely high or low outliers.

General Health and Access to Care

Leading Causes of Death Logan County 2008

Diseases of the Heart	66
Cancer	63
Stroke	24
Chronic Lower Respiratory Diseases	21
Accidents	15
Alzheimer's Disease	19
Diabetes	11
Flu/ Pneumonia	7
Kidney Disease (diabetes/ hypertension)	4
Septicemia	1
Suicide	1
Chronic Liver Disease/ Cirrhosis	3
Other	87

http://www.adph.state.al.us/health/bdmd/deathcauses_08.htm

Leading Causes of Death Logan County 2011

Diseases of the Heart	62
Cancer	59
Stroke	17
Chronic Lower Respiratory Diseases	17
Accidents	8
Alzheimer's Disease	18
Kidney	4
Diabetes	2
Flu/ Pneumonia	9
Septicemia	11
Suicide	5
Chronic Liver Disease/ Cirrhosis	1
Other	67

http://www.adph.state.al.us/health/bdmd/deathcauses_11.htm

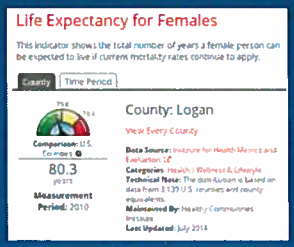
Cause-Specific Years of Potential Life Lost – Top 10 Causes (2006)

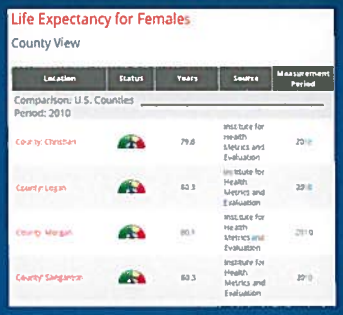
1. Diseases of Heart
2. Malignant Neoplasms
3. Accidents
4. Coronary Heart Disease
5. Motor Vehicle Accidents
6. Perinatal Conditions
7. Cerebrovascular Diseases
8. Colorectal Cancer
9. Lung Cancer
10. Chronic Lower Respiratory Diseases

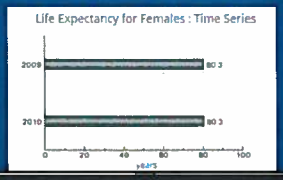
http://apps.dph.state.ky.us/data/County/cyd.asp?menu=1

Years of potential life lost is an estimate of the average years a person would have lived if he or she had not died prematurely. As a method, it is an alternative to death rates that gives more weight to deaths that occur among younger people.

Logan County Life Expectancy - Females



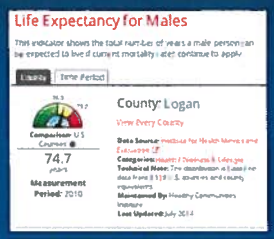


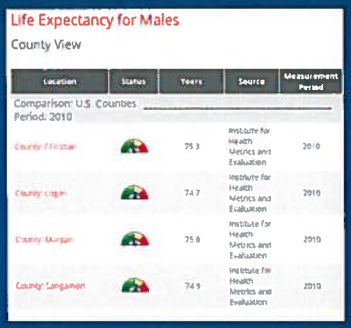


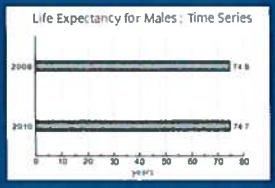
https://www.chooosemmental.org/hci/hci.asp?chci=Community Dashboard

Why is this important?
Life expectancy is a good measure of a population's longevity and general health. It is highly dependent on infant mortality rates and all-cause death rates. Although the overall U.S. average life expectancy at birth has been steadily increasing, there are great variations in life expectancy between racial and ethnic groups. In addition, great variations in life expectancy exist worldwide. These variations are mostly caused by differences in public health infrastructure, medical care, and diet.

Life Expectancy in Logan County - Males







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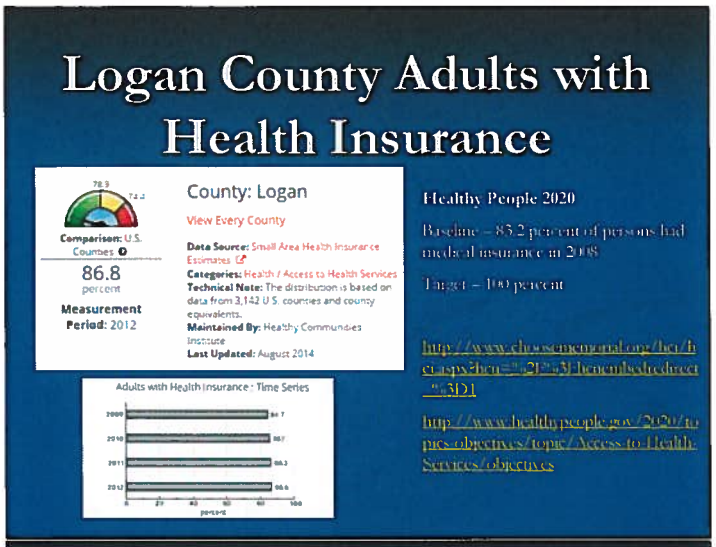
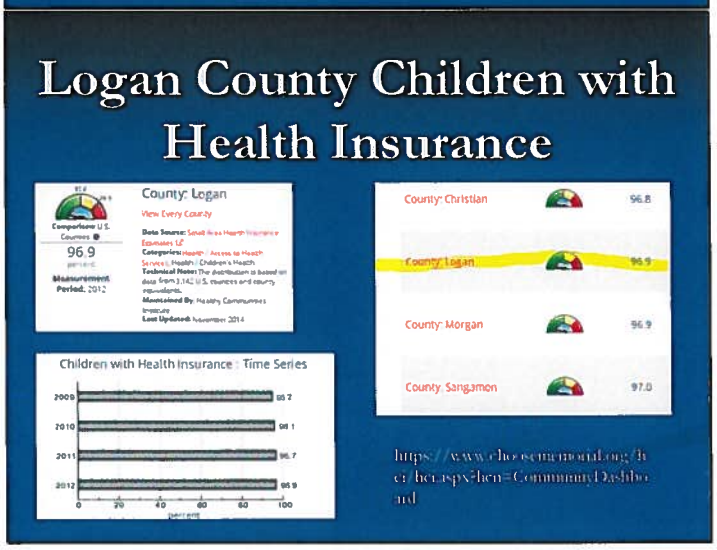




Why is this important?
Medical costs in the United States are extremely high, so people without health insurance may not be able to afford medical treatment or prescription drugs. They are also less likely to get routine checkups and screenings, so if they do become ill they will not seek treatment until the condition is more advanced and therefore more difficult and costly to treat. Many small businesses are unable to offer health insurance to employees due to rising health insurance premiums.

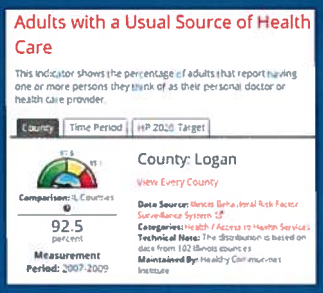
Why is this important?
Health insurance for children is particularly important. To stay healthy, children require regular checkups, dental and vision care, and medical attention for illness and injury. Children with health insurance are more likely to have better health throughout their childhood and adolescence. They are more likely to receive required immunizations, fall ill less frequently, obtain necessary treatment when they do get sick, and perform better at school. Having health insurance lowers barriers to accessing care, which is likely to prevent the development of more serious illnesses. This is not only of benefit to the child but also helps lower overall family health costs.

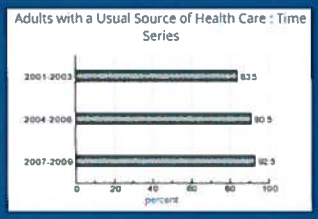
Adults – Last Physical

	1 Year or Less	More than 1 year/Never
Logan County	68.5%	31.5%

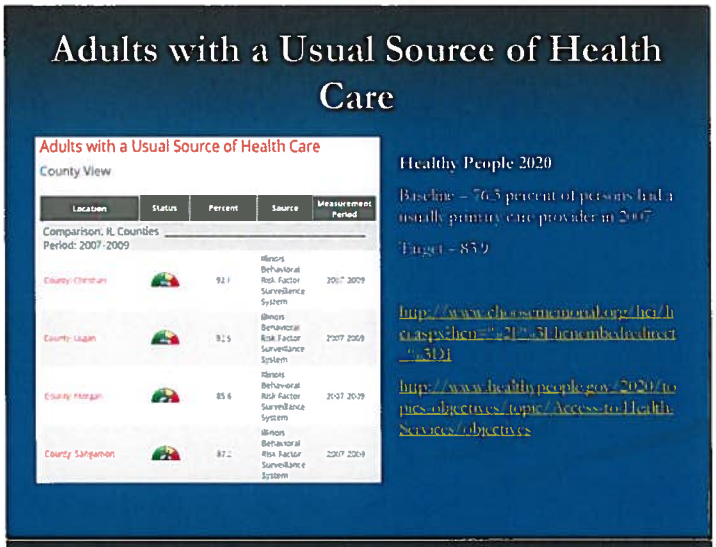
http://app.idph.state.il.us/brfss/countydata.asp?selTopicCounty=hlthus&areaCounty=Logan_54&show=freq&xyCounty=4&ttcm=county&yr=&area=&selTopic=

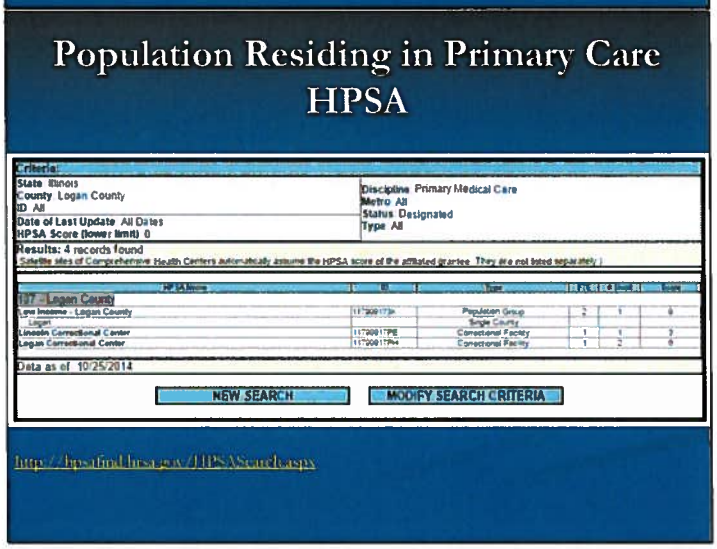
Adults with a Usual Source of Health Care

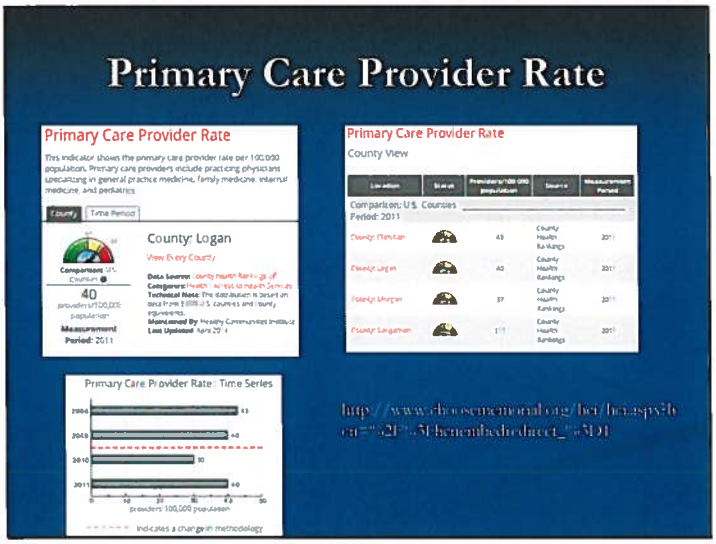




Why is this important?
People who lack a regular source of health care may not receive the proper medical services when they need them. This can lead to missed diagnoses, untreated conditions, and adverse health outcomes. People without a regular source of health care are less likely to get routine checkups and screenings. When they become ill, they generally delay seeking treatment until the condition is more advanced and therefore more difficult and costly to treat. Young children and elderly adults are most likely to have a usual source of care, whereas adults aged 18 to 64 years are the least likely. Maintaining regular contact with a health care provider is especially difficult for low-income people, who are less likely to have health insurance. This often results in emergency room visits, which raises overall costs and lessens the continuity of care.

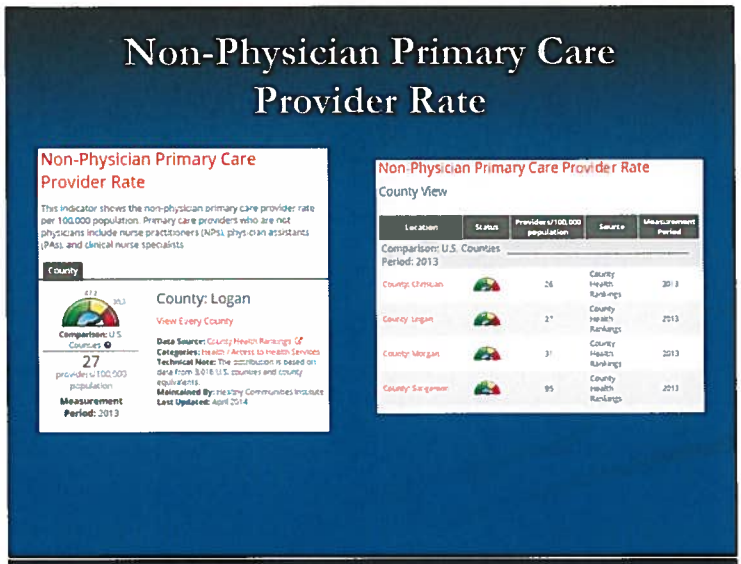


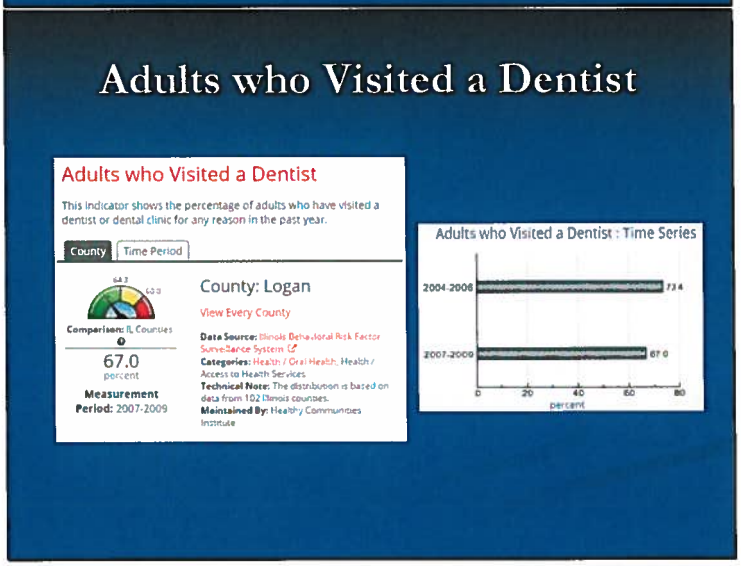




Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center, federally qualified health center or other public facility). Medically Underserved Areas/Populations are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality, high poverty and/or high elderly population. More about shortage areas

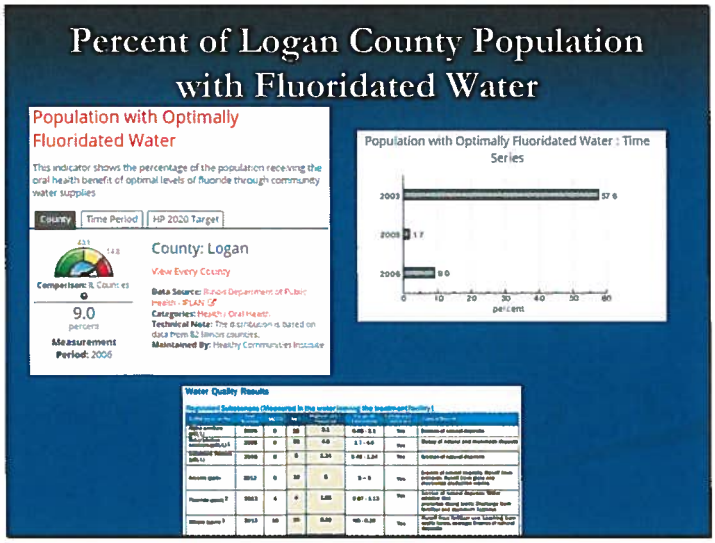
Why is this important?
Access to primary care providers increases the likelihood that community members will have routine checkups and screenings. Moreover, those with access to primary care are more likely to know where to go for treatment in acute situations. Communities that lack a sufficient number of primary care providers typically have members who delay necessary care when sick and conditions can become more severe and complicated.





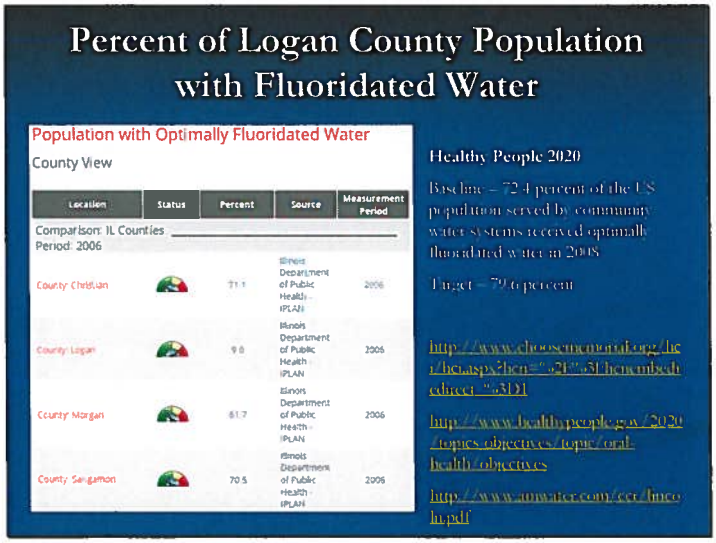
Why is this important?
Access to primary care providers increases the likelihood that community members will have routine checkups and screenings. Moreover, those with access to primary care are more likely to know where to go for treatment in acute situations. The number of physicians is not keeping up with population growth, leading to an increasing shortage of primary care physicians. However, the number of non-physician clinicians has been increasing and is projected to continue to rise, partially making up for the shortfall of physicians.

Why is this important?
Oral health has been shown to impact overall health and well-being. Nearly one-third of all adults in the United States have untreated tooth decay, or tooth caries, and one in seven adults aged 35 to 44 years old has periodontal (gum) disease. Given these serious health consequences, it is important to maintain good oral health. It is recommended that adults and children see a dentist on a regular basis. Professional dental care helps to maintain the overall health of the teeth and mouth, and provides for early detection of pre-cancerous or cancerous lesions.



Why is this important?
Water fluoridation, the adding of fluoride to public water supplies, has been conducted in the US since 1945 and has been proven effective in reducing tooth decay and thus reducing the burden of dental cavities in the population. A level of fluoride between 0.9 and 1.2 milligrams per liter is considered optimal for residents to receive the oral health benefits.

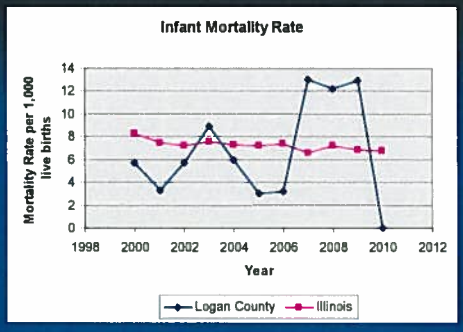
Fluoridated water prevents tooth decay by creating low levels of fluoride in saliva which helps to reduce the rate at which tooth enamel demineralizes. In 2008, 195.5 million people (72.4%) on public water systems had access to optimally fluoridated water, which is a substantial increase from the 2006 figure of 184 million people (69.2%). The Centers for Disease Control and Prevention have named water fluoridation as one of the 10 greatest public health achievements of the 20th century.



Maternal and Child Health

Live Births, Infant Mortality Rate

Year	Live Births	Logan County Rate per 1,000 live births	Infant Deaths	Illinois Rate per 1,000 live births
2001	349	5.73	2	8.5
2002	299	3.34	1	7.5
2003	348	5.74	2	7.2
2004	337	8.90	3	7.6
2005	334	5.99	2	7.5
2006	335	2.99	1	7.2
2007	343	5.99	1	7.1
2008	308	12.99	4	6.6
2009	327	12.23	4	7.2
2010	309	12.95	4	6.9
2011*	306	-	0	6.8
2012*	299			
2013*	281			
2014*	305			



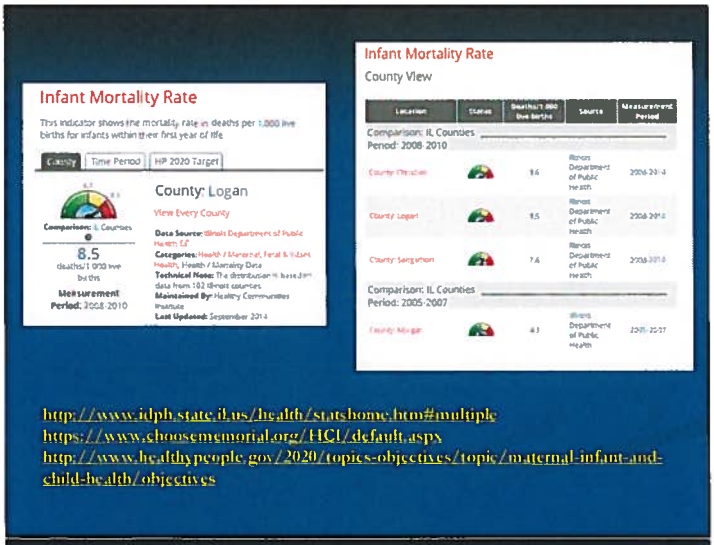
Healthy People 2020 Goal:

Baseline – 6.7 infant deaths per 1,000 live births within the first year of life in 2006

Target – 6.0 infant deaths per 1,000 live births

Why is this important?

Infant mortality rate continues to be one of the most widely used indicators of the overall health status of a community. The leading causes of death among infants are birth defects, pre-term delivery, low birth weight, Sudden Infant Death Syndrome (SIDS), and maternal complications during pregnancy.

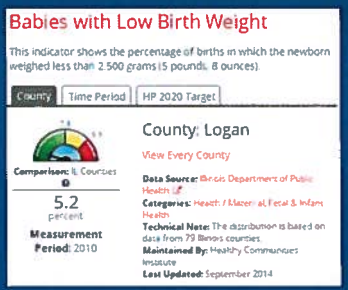


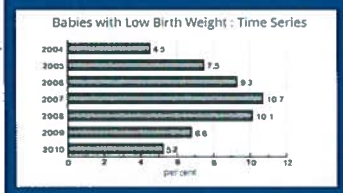
http://www.idph.state.il.us/health/statshome.htm#multiple
https://www.choosememorial.org/HCI/default.aspx
http://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives

Low Birth Weight

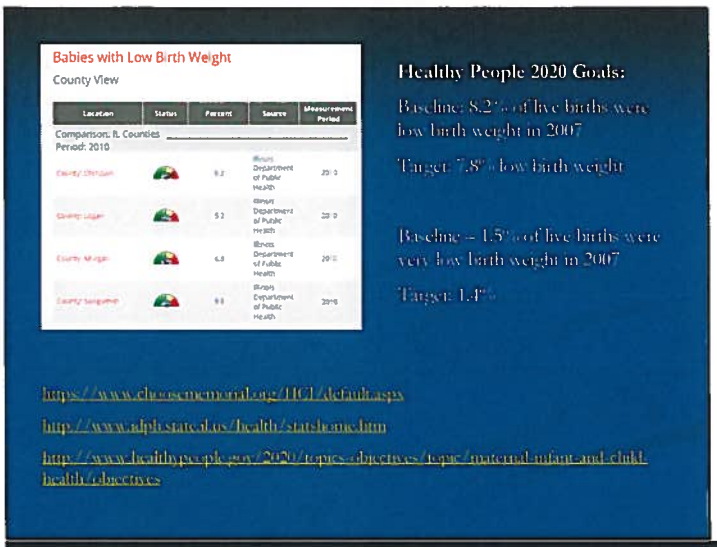
	Logan County		Illinois	
	Low Birth Weight	Very Low Birth Weight	Low Birth Weight	Very Low Birth Weight
2010	5.2%	*** (2)	8.3%	1.6%
2009	6.8%	*** (5)	8.4%	1.6%

Low Birth Weight





Why is this important?
Babies born with low birth weight are more likely than babies of normal weight to have health problems and require specialized medical care in the neonatal intensive care unit. Low birth weight is typically caused by premature birth and fetal growth restriction, both of which are influenced by a mother's health and genetics. The most important things an expectant mother can do to prevent low birth weight are to seek prenatal care, take prenatal vitamins, stop smoking, and stop drinking alcohol and using drugs.



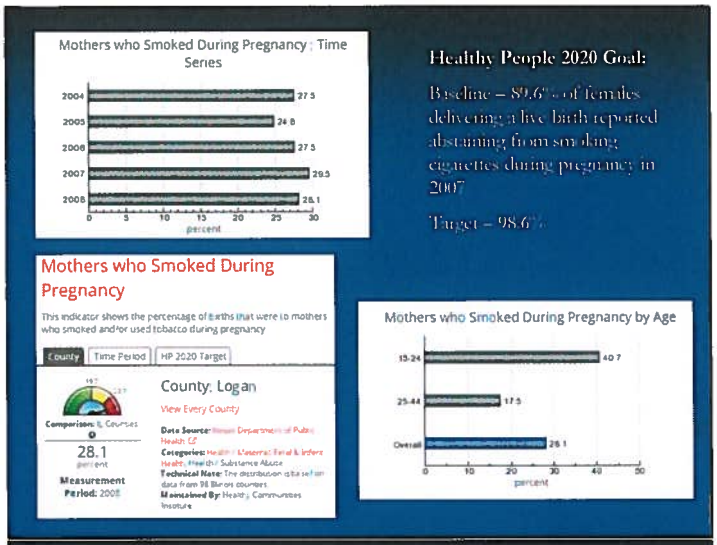
Mothers who smoke during pregnancy

	Logan County (Age-Adjusted Rate)	Illinois (Age-Adjusted Rate)
2008	285.2	89.8
2007	288.5	97.0
2006	224.8	98.7
2005	248.5	97.5
2004	279.8	116.4

Why is this important?
Smoking during pregnancy poses risks for both mother and fetus. A baby born to a mother who has smoked during her pregnancy is more likely to have less developed lungs and a lower birth weight, and is more likely to be born prematurely. It is estimated that smoking during pregnancy causes up to ten percent of all infant deaths. Even after a baby is born, secondhand smoking can contribute to SIDS (Sudden Infant Death Syndrome), asthma onset, and stunted growth.

http://iquery.illinois.gov/DataQuery/Default.aspx

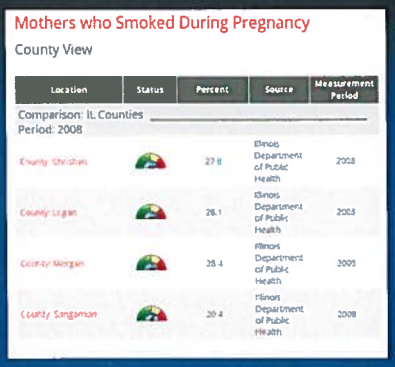
Age-Adjusted rate is expressed as the number of cases per 100,000.



Healthy People 2020 Goal:

Baseline – 89.6% of females delivering a live birth reported abstaining from smoking cigarettes during pregnancy in 2007

Target – 98.6%



http://iquery.illinois.gov/DataQuery/Default.aspx

https://www.chooseamericaorg/HCI/default.aspx

http://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives

Mothers who drink during pregnancy

	Logan County Age-Adjusted Rate	Illinois Age-Adjusted Rate
2007	*** (1 to 11)	3.2
2006	*** (1 to 11)	4.1
2005	*** (1 to 11)	3.7
2004	*** (1 to 11)	17.3
2003	*** (1 to 11)	4.8

Healthy People 2020 Goal:

Baseline – 89.4% of pregnant females aged 15-44 years reported abstaining from alcohol in the past 30 days in 2007

Target – 98.3%

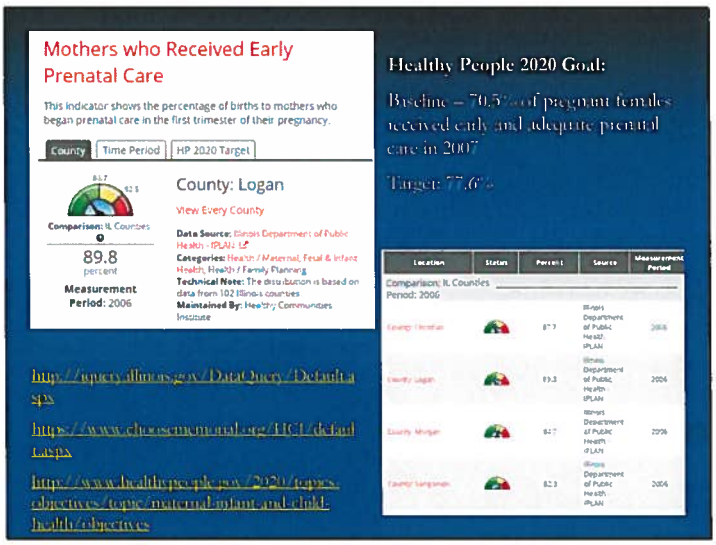
http://iquery.illinois.gov/DataQuery/Default.aspx

http://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives

Mothers who Received Early Prenatal Care - Kessner Index of Prenatal Care

	Logan			Illinois		
	Adequate	Intermediate	Inadequate	Adequate	Intermediate	Inadequate
2006	87.2%	9.9%	2.2%	74.7%	15.7%	8.4%
2005	84.5%	9.9%	5.7%	74.4%	15.2%	9.1%
2004	85.6%	11.7%	2.4%	73.1%	15.9%	9.7%
2003	84.0%	11.9%	3.9%	74.4%	16.3%	8.2%
2002	87.9%	9.8%	2.0%	75.1%	17.0%	7.0%

Why is this important?
Babies born to mothers who do not receive prenatal care are three times more likely to have a low birth weight and five times more likely to die than those born to mothers who do get care. Early prenatal care (i.e. care in the first trimester of a pregnancy) allows women and their health care providers to identify and, when possible, treat or correct health problems and health-compromising behaviors that can be particularly damaging during the initial stages of fetal development. Increasing the number of women who receive prenatal care, and who do so early in their pregnancies, can improve birth outcomes and lower health care costs by reducing the likelihood of complications during pregnancy and childbirth.



Infants Positive for Cocaine

	Logan		Illinois	
	Rate	Avg# /Year	Rate	Avg# /Year
1997-2001	N/A	N/A	44.5	813.2

Note: 5 year average rate and average number per year

http://app.idph.state.il.us/data/CountyLevel.aspx?menu=1

Leading Causes of Mortality, Ages 1-4

	Logan		Illinois	
	Number	Cause	Number	Cause (Top 4)
2006	0		174	Accidents (33%), Congenital Malformations (11%), Malignant Neoplasms (9%), MVA (9%)
2005	0		184	Accidents (21%), Congenital Malformations (13%), Malignant Neoplasms (11%), Homicide (8%)

Healthy People 2020

Baseline – 29.4 deaths among children aged 1 to 4 years per 100,000 population occurred in 2007

Target – 26.5 deaths per 100,000 population

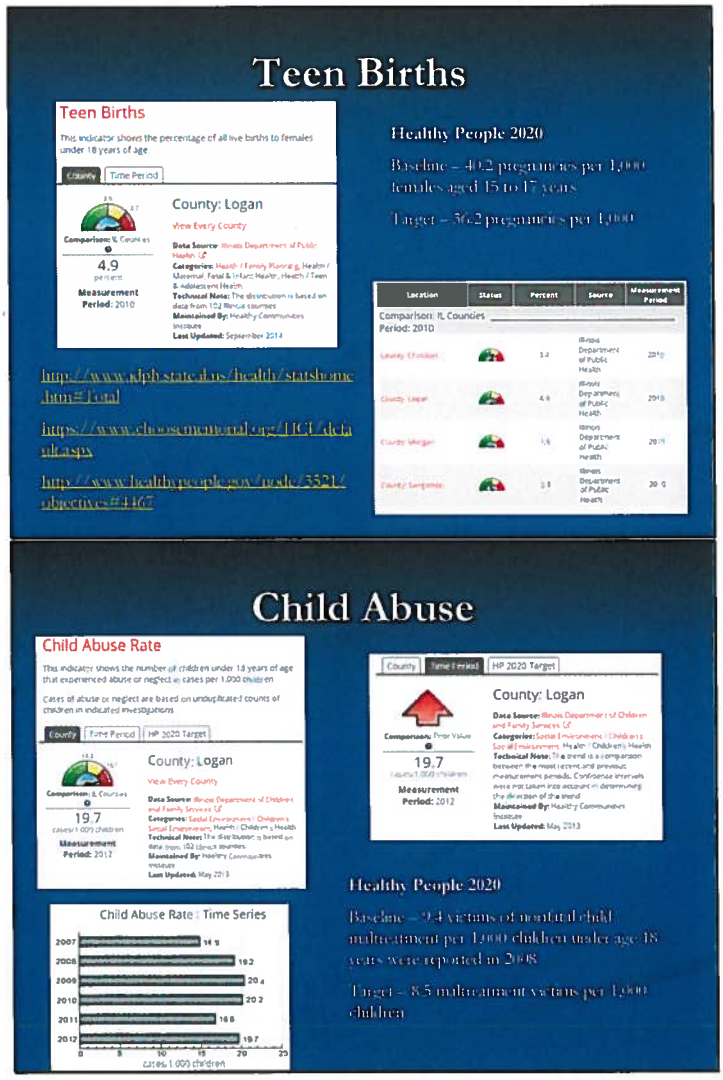
http://app.idph.state.il.us/data/CountyLevel.aspx?menu=1

Teen Births

	Logan		Illinois	
	Total Teen "s	Teen "s 17 and under	Total Teen "s	Teen "s 17 and under
2010	9.5"s	4.9"s	9.1"s	2.9"s
2009	11.7"s	4.9"s	9.6"s	3.1"s
2008	11.0"s	2.1"s	10.0"s	3.3"s
2007	10.7"s	3.2"s	10.1"s	3.5"s
2006	8.9"s	2.6"s	10.0"s	3.5"s

Why is this important?
Teen birth is of concern for the health outcomes of both the mother and the child. Pregnancy and delivery can be harmful to teenagers' health, as well as social and educational development. Babies born to teen mothers are more likely to be born preterm and/or low birth weight. Responsible sexual behavior is one of the ten leading health indicators of Healthy People 2020. Responsible sexual behavior reduces unintended pregnancies, and thus reduces the number of births to adolescent females.

Decreased total teen births in the past 4 years, however the number of teen births 17 and under has increased



Why is this important?
There are several types of child abuse including physical, sexual, and emotional abuse. Child abuse and neglect can have enduring physical, intellectual, and psychological repercussions into adolescence and adulthood. All types of child abuse and neglect have long lasting effects throughout life, damaging a child's sense of self, ability to have healthy relationships, and ability to function at home, at work, and at school.

Children Reported as Abused and Neglected

	Logan County			Illinois		
	# Children	Unique # Children*	Rate per 1,000	# Children	Unique # Children*	Rate per 1,000
FY2012	477	363	51.4	106,236	91,742	28.3

*Number and Unique Number of Children reported is an unduplicated count within the region. Some children are reported in multiple regions throughout the year.

http://www.state.il.us/dcfs/docs/DCFS_Annual_Statistical_Report_FY2012.pdf

Method of Delivery for Live Births - Cesarean

	Logan				Illinois			
	Total # Births	Cesarean	Age-Adjusted Rate	Crude Rate	Total # Births	Cesarean	Age-Adjusted Rate	Crude Rate
2007	308	92	302.2	29.8%	180,530	54,161	353.3	30.0%
2006	313	79	263.4	25.2%	180,503	53,066	344.8	29.4%
2005	335	92	299.7	27.5%	178,872	50,833	328.9	28.4%
2004	334	86	272.0	25.7%	180,665	48,932	314.3	27.1%
2003	337	84	267.6	24.9%	182,393	46,526	297.3	25.5%

Method of Delivery for Live Births - Cesarean

Healthy People 2020

Baseline – 26.5% of low-risk females with no prior cesarean birth had a cesarean birth in 2007

Target – 23.9%

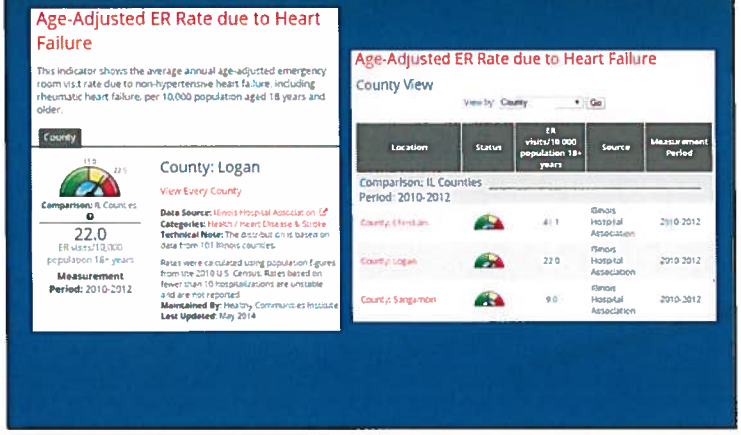
http://iquery.illinois.gov/DataQuery/Default.aspx

http://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives

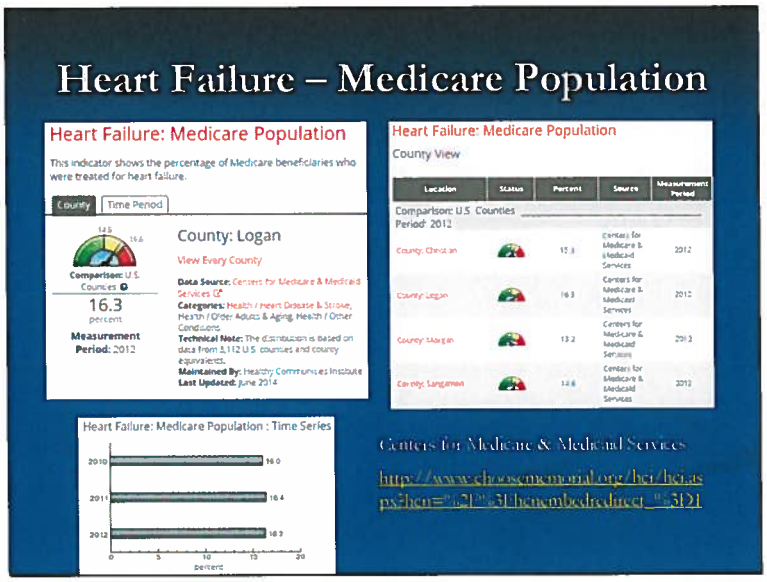
http://www.idph.state.il.us/health/bdmd/birth2.htm

Chronic Disease

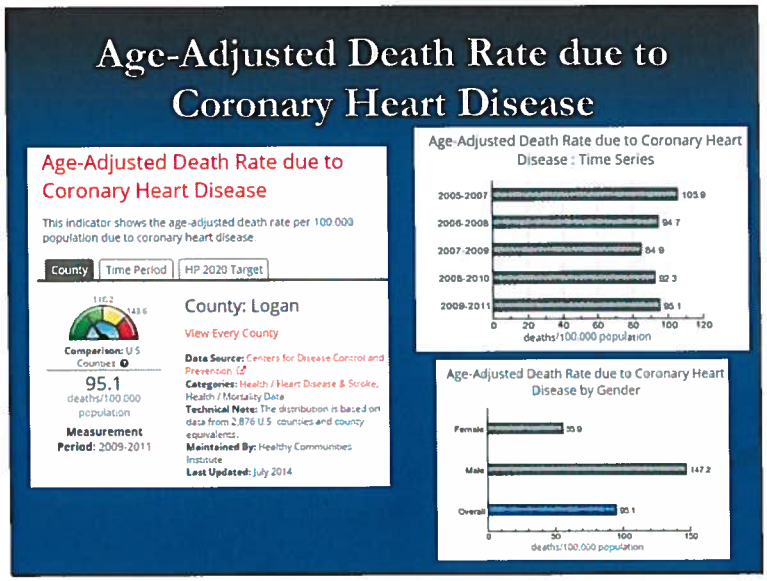
Age-Adjusted ER Rate due to Heart Failure



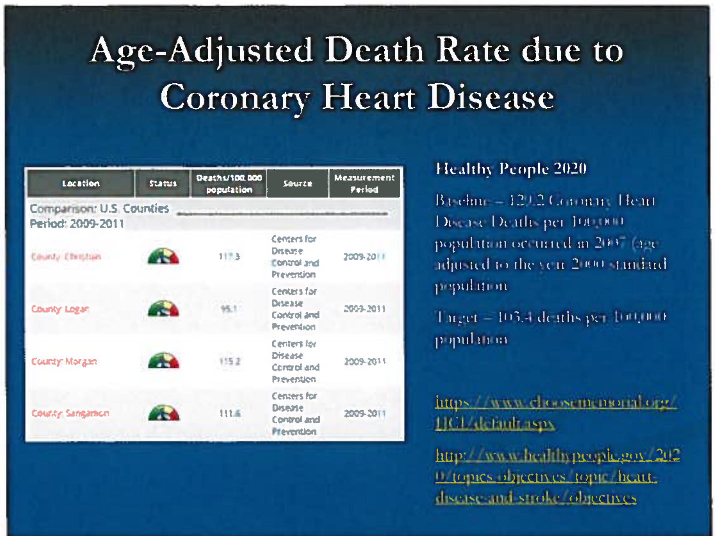
Why is this important?
Heart failure is a condition in which the heart can't pump enough blood to the body's other organs. This can result from a variety of conditions including coronary artery disease, diabetes, past heart attack, hypertension, heart infections, diseases of the heart valves or muscle, and congenital heart defects. Because the heart is not able to work efficiently, blood backs up in the tissues causing edema or swelling. Edema can occur in the legs and ankles as well as in the lungs, where it causes shortness of breath, especially while lying down. Around 5 million people in the United States have heart failure, and more than 287,000 people in the United States die each year with the disease. The estimated direct cost for heart failure in the U.S. in 2006 was $29.6 billion. According to the National Hospital Discharge Survey, hospitalizations for heart failure have increased from 402,000 in 1979 to 1,101,000 in 2004.

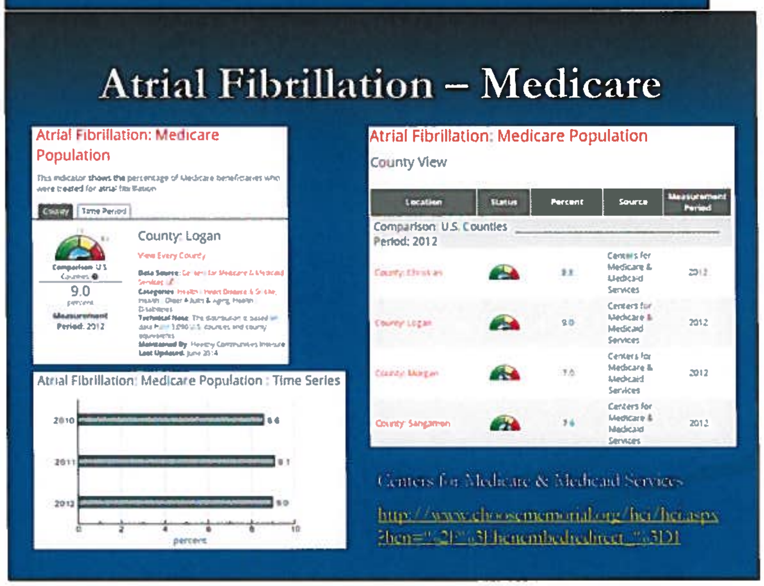


Why is this important?
Heart failure occurs when the heart cannot pump sufficient amounts of blood to the rest of the body, resulting in increased blood pressure and fluid retention in the limbs and/or organs. Heart failure is caused by a variety of conditions that weaken the heart, including coronary artery disease, diabetes, heart attack, high blood pressure, and congenital heart defects. Treatment for heart failure begins with a combination of medication, lifestyle changes, and maintaining a low blood pressure to prevent heart failure from advancing. If the condition worsens, more advanced treatments--such as surgery--may become necessary. According to the Centers for Disease Control and Prevention, approximately 5.7 million people in the United States have heart failure and the condition costs the nation $34.4 billion annually. The National Institute of Health states that heart failure is most common in people age 65 and older, and it is the number one reason older individuals are hospitalized.

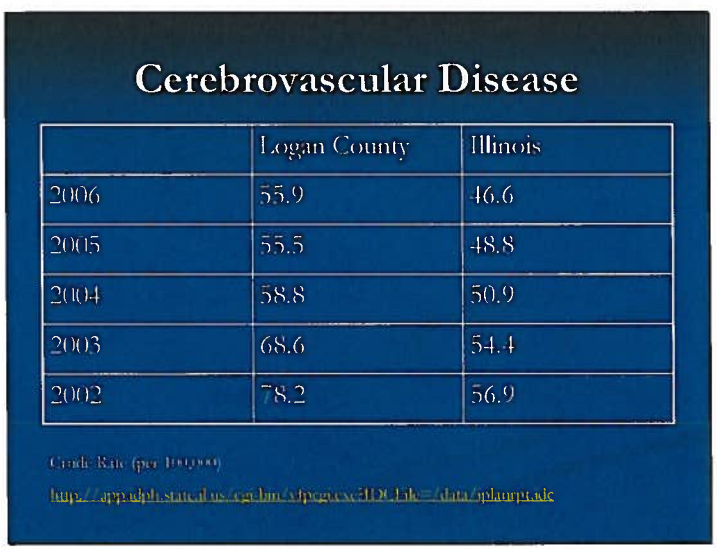


Why is this important?
Coronary heart disease occurs when the coronary arteries become narrowed or clogged by fat and cholesterol deposits (plaques) and cannot supply enough blood to the heart. As the arteries narrow, or as the plaques rupture, the flow of blood to the heart can slow or stop, causing chest pain (angina), shortness of breath, a heart attack or other symptoms. Nationally, Coronary Heart Disease makes up the majority of heart disease deaths. In 2006, 425,425 Americans died of coronary heart disease. Heart disease is also very costly economically with projected costs in 2010 of $316 billion on health care services, medications, and lost productivity.

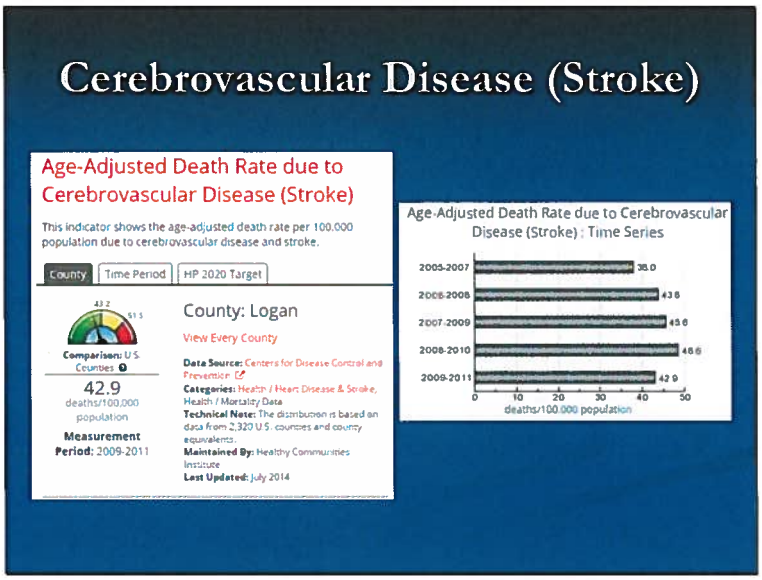




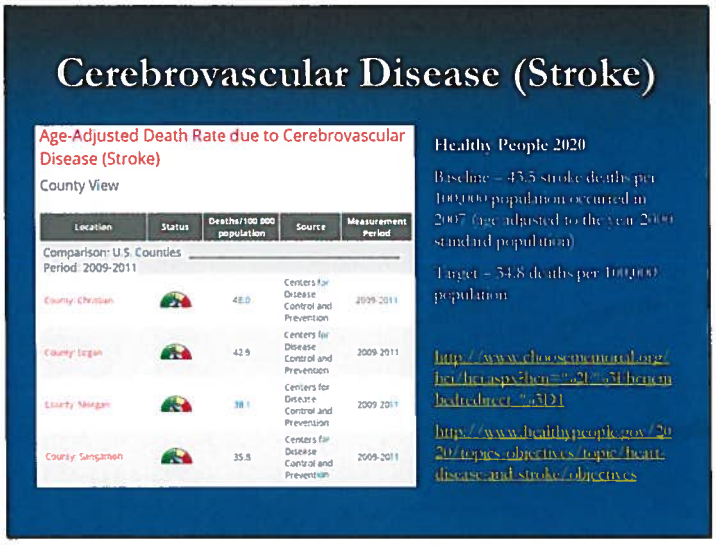
Why is this important?
Atrial fibrillation (AFib) is an irregular heartbeat that commonly causes poor blood flow to the body. Symptoms of atrial fibrillation include heart palpitations, shortness of breath and weakness. Although AFib itself is not usually life-threatening, it can lead to blood clots, stroke, heart failure and other heart-related complications that do require emergency treatment. According to the American Heart Association, an estimated 2.7 million Americans are living with AFib, and it is the most common "serious" heart rhythm abnormality in people over the age of 65 years.

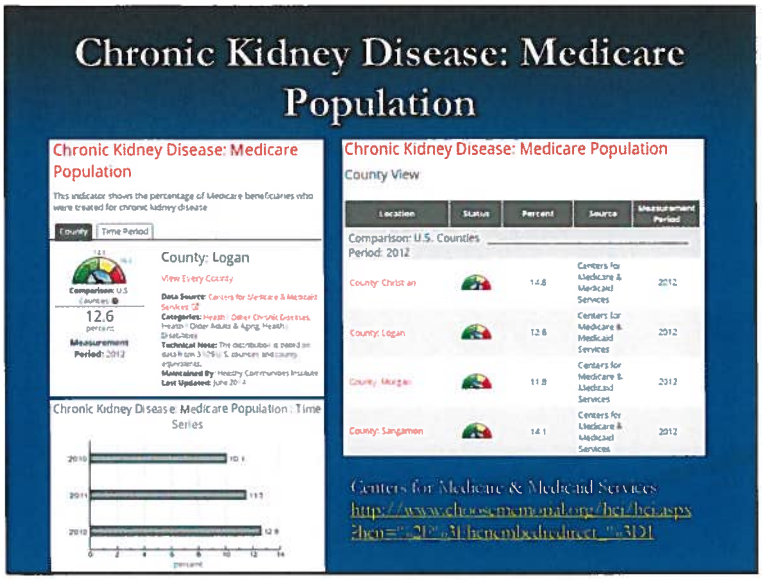


A group of brain dysfunctions related to disease of the blood vessels supplying the brain.

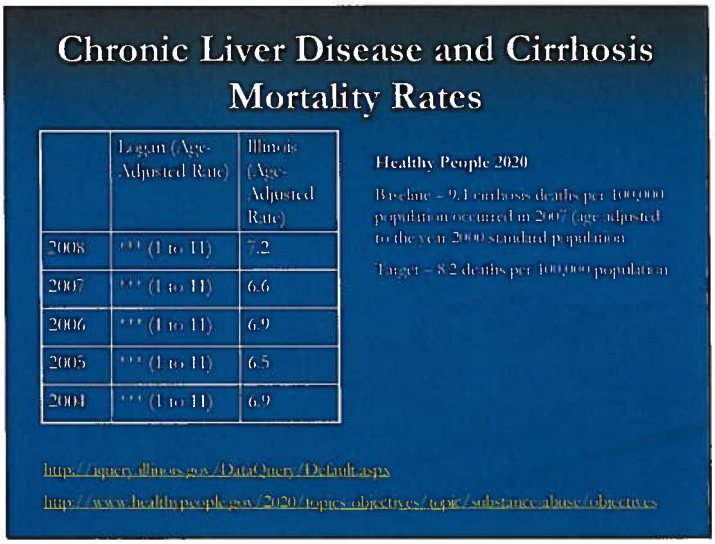


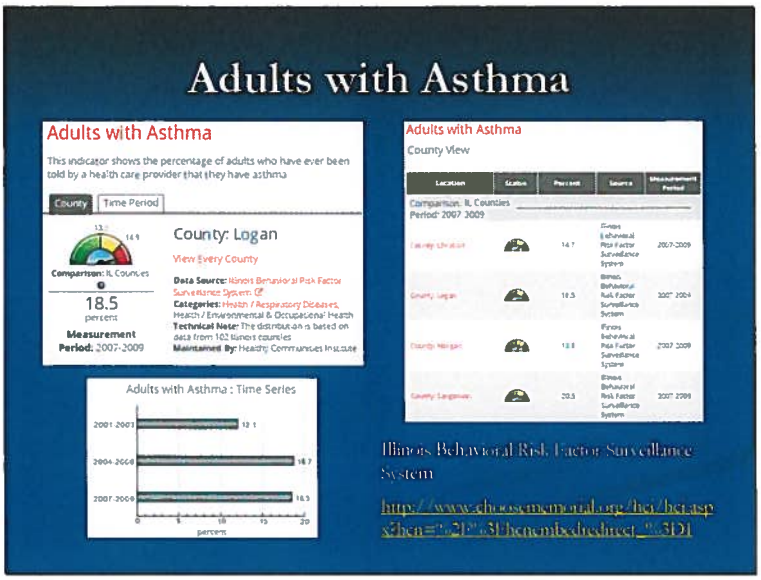
Why is this important?
Cerebrovascular diseases rank third among the leading causes of death in the U.S. Cerebrovascular disease can cause a stroke. A stroke occurs when blood vessels carrying oxygen to the brain become blocked or burst, thereby cutting off the brain's supply of oxygen. Lack of oxygen causes brain cells to die which can lead to death or disability. Each year, approximately 795,000 people in the U.S. will suffer a new or recurrent stroke. Although people of all ages may have strokes, the risk more than doubles with each decade of life after age 55. The most important modifiable risk factors for stroke are high blood pressure, high cholesterol and diabetes mellitus.



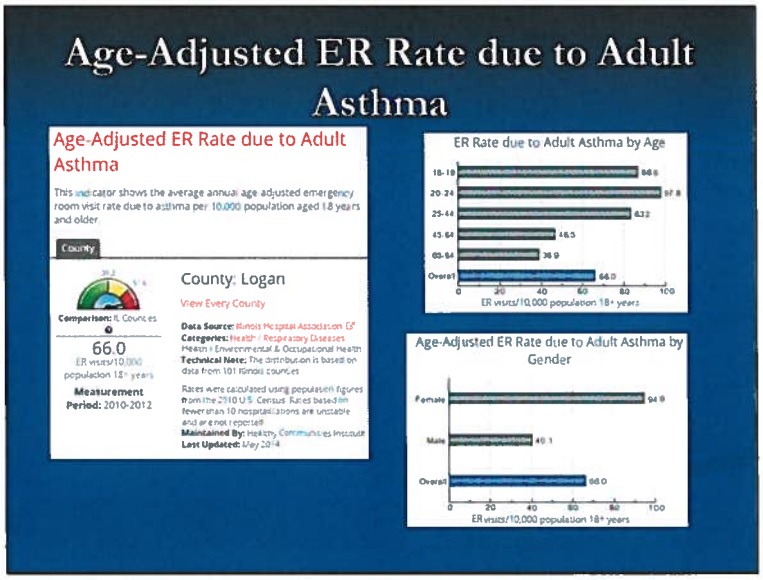


Why is this important?
The primary function of the kidneys is to remove wastes and excess water from the body. Chronic kidney disease (CKD), also known as chronic renal disease, is a progressive loss of this function over time. The symptoms of declining kidney function are non-specific and may include feeling generally unwell and a reduction of appetite. The primary causes of CKD are diabetes and high blood pressure. As kidney disease progresses it can lead to kidney failure, which requires dialysis or a kidney transplant. The National Kidney Foundation reports that 26 million adults have chronic kidney disease, and many others are at increased risk of developing the disease.

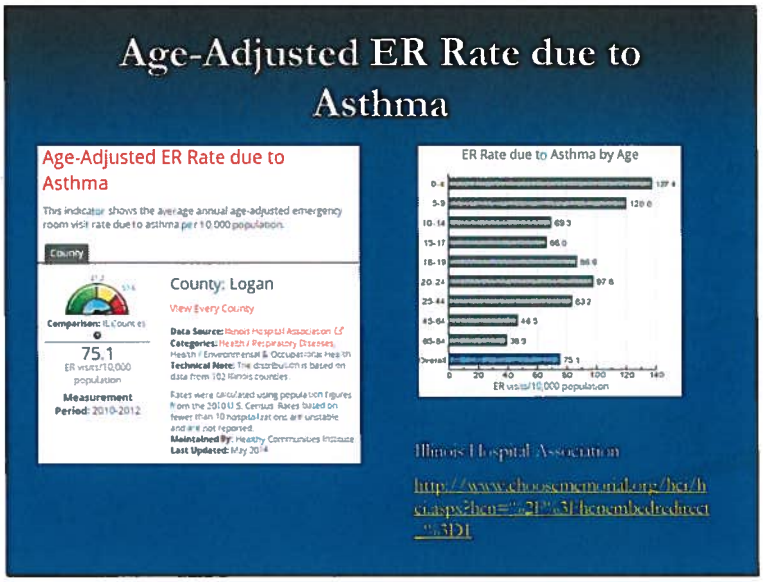




Why is this important?
Asthma is a condition wherein a person's air passages become inflamed, and the narrowing of the respiratory passages makes it difficult to breathe. Symptoms can include tightness in the chest, coughing, and wheezing. These symptoms are often brought on by exposure to inhaled allergens (like dust, pollen, cigarette smoke, pollution, and animal dander) or by exertion and stress. There is no cure for asthma, but for most people, the symptoms can be managed through a combination of long-term medication prevention strategies and short-term quick relievers. In some cases, however, asthma symptoms are severe enough to warrant hospitalization and can result in death. In 2009, the CDC estimated that 17.5 million non-institutionalized adults had been diagnosed with asthma nationwide.



Why is this important?
Asthma is a condition in which a person's air passages become inflamed, and the narrowing of the respiratory passages makes it difficult to breathe. Asthma is one of the most common long-term diseases of children, but it also affects 15.7 million non-institutionalized adults nationwide. Symptoms can include tightness in the chest, coughing, and wheezing. These symptoms are often brought on by exposure to inhaled allergens (like dust, pollen, cigarette smoke, and animal dander) or by exertion and stress. There is no cure for asthma, but for most people, the symptoms can be managed through a combination of long-term medication prevention strategies and short-term quick relievers. In some cases, however, asthma symptoms are severe enough to warrant hospitalization and can result in death.



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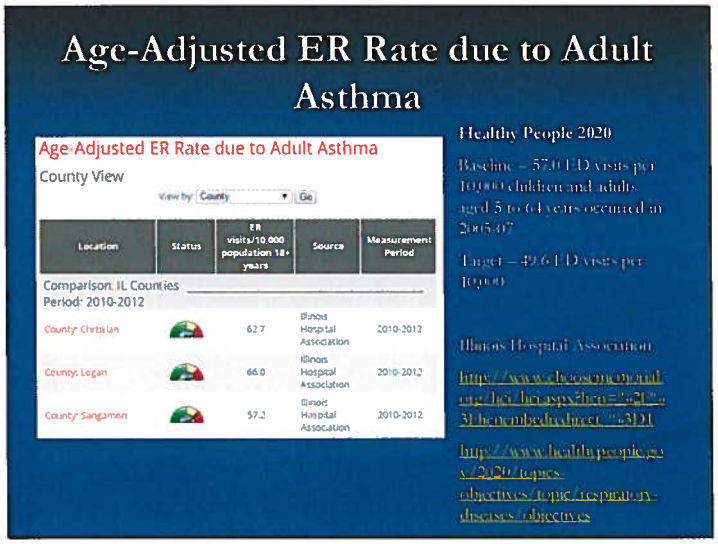
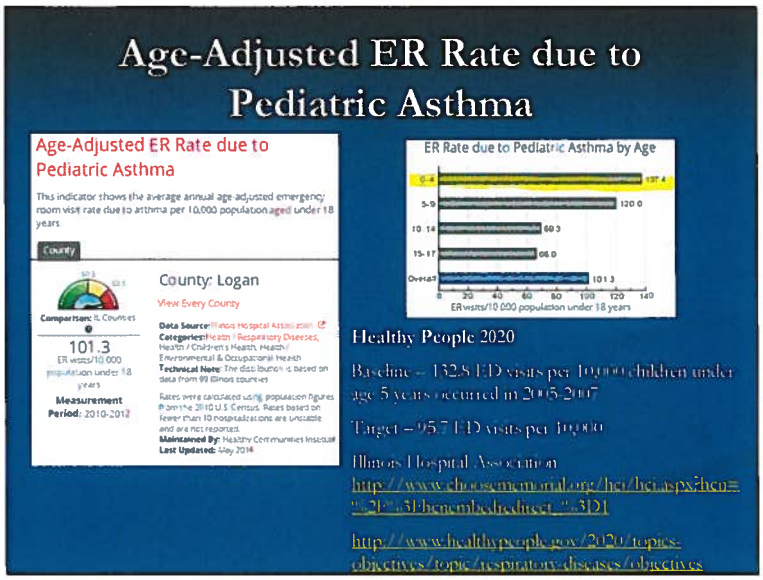
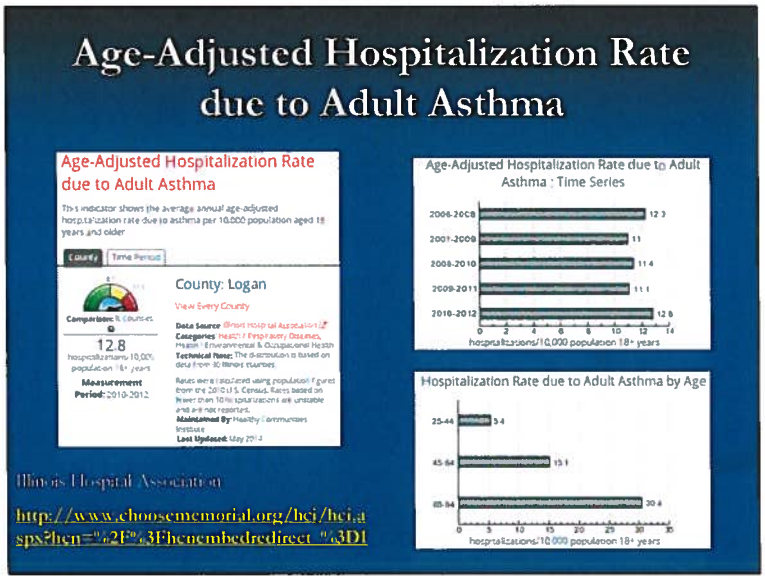




Why is this important?
Asthma is a condition in which a person's air passages become inflamed, and the narrowing of the respiratory passages makes it difficult to breathe. In the past thirty years, asthma has become one of the most common long-term diseases of children, but it also affects 15.7 million non-institutionalized adults nationwide. Symptoms can include tightness in the chest, coughing, and wheezing. These symptoms are often brought on by exposure to inhaled allergens, such as dust, pollen, mold, cigarette smoke, and animal dander, or by exertion and stress. Reducing exposure to poor housing conditions, traffic pollution, secondhand smoke and other factors impacting air quality can help prevent asthma and asthma attacks. There is no cure for asthma, but for most people, the symptoms can be managed through a combination of long-term medication prevention strategies and short-term quick relievers. In some cases, however, asthma symptoms are severe enough to warrant hospitalization and can result in death.



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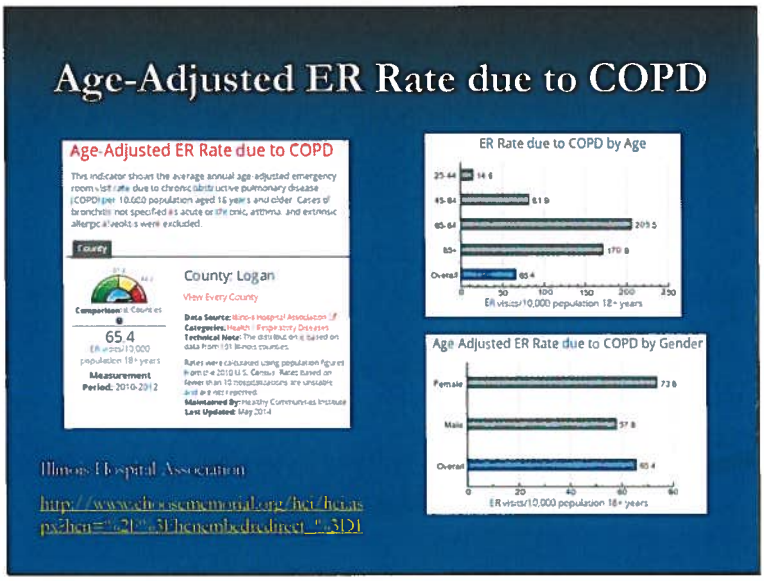
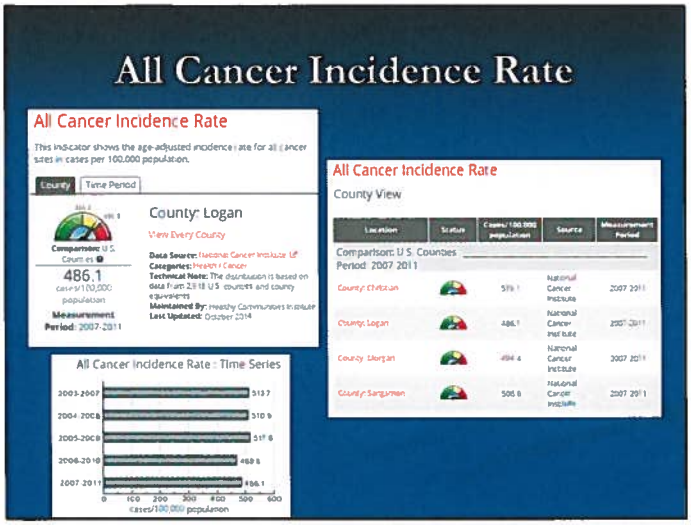
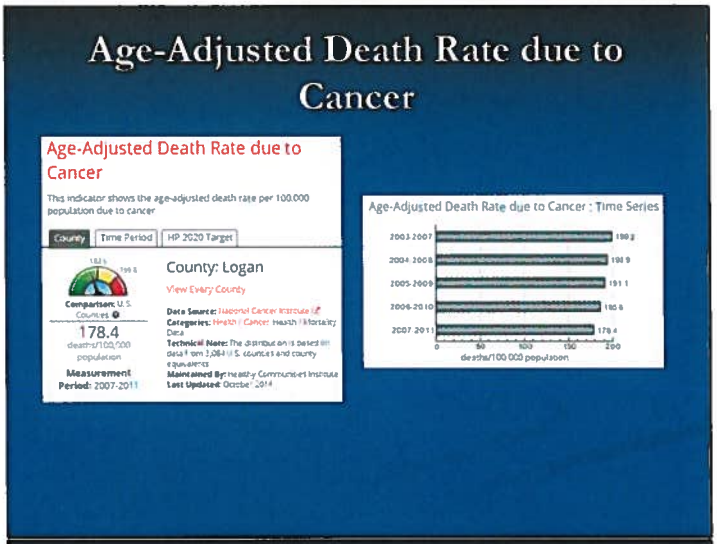


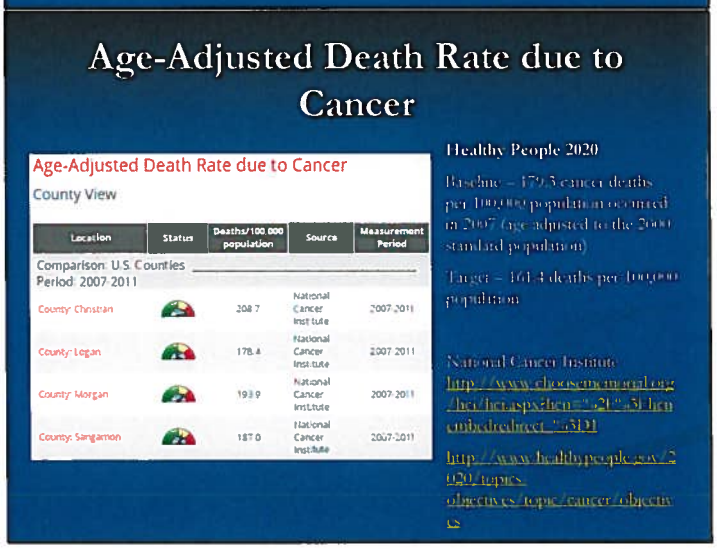
Why is this important?
Chronic obstructive pulmonary disease, or COPD, refers to a group of diseases that cause airflow blockage and breathing-related problems. According to the American Lung Association, COPD includes chronic bronchitis, emphysema, and bronchiectasis. It does not include other obstructive diseases such as asthma. COPD is the fourth leading cause of death in America, claiming the lives of 122,283 Americans in 2003. COPD is often related to tobacco use, but can also be caused by air pollutants in the home and workplace, genetic factors, and respiratory infections. In 2004, the cost to the nation for COPD was approximately $37.2 billion, including healthcare expenditures of $20.9 billion in direct health care expenditures, $7.4 billion in indirect morbidity costs and $8.9 billion in indirect mortality costs.

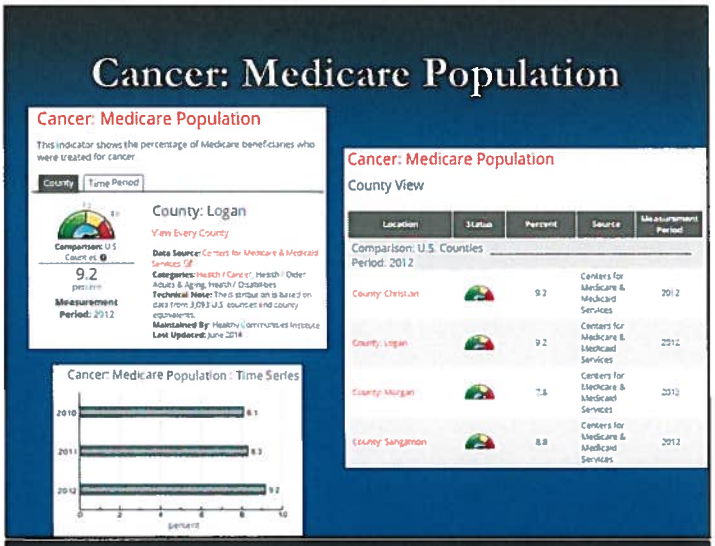


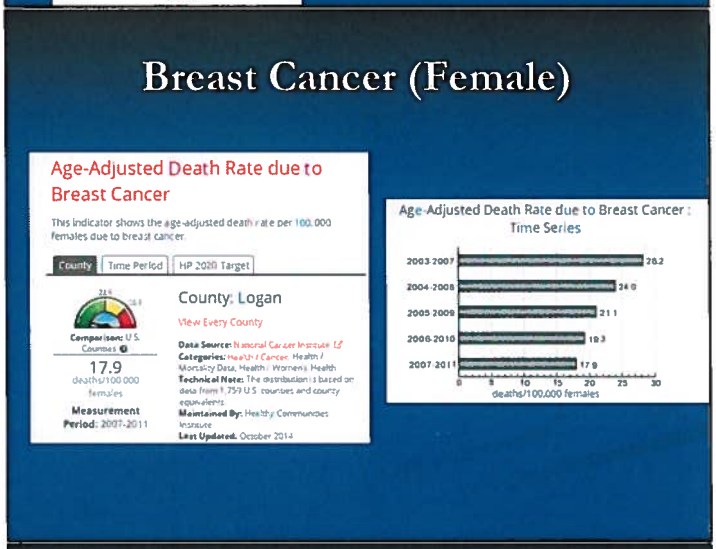
Why is this important?
Cancer is the second leading cause of death in the United States. It is estimated that 1,479,350 men and women (766,130 men and 713,220 women) were diagnosed with cancer, and 562,340 men and women died of cancer of all sites in 2009.

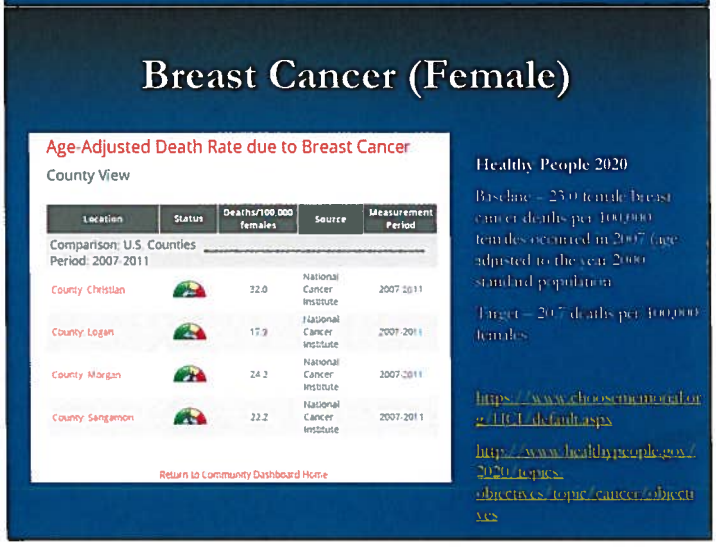


Why is this important?
Cancer is the second leading cause of death in the United States. The National Cancer Institute (NCI) defines cancer as a term used to describe diseases in which abnormal cells divide without control and are able to invade other tissues. There are over 100 different types of cancer. According to the NCI, lung, colon and rectal, breast, pancreatic, and prostate cancer lead to the greatest number of annual deaths.



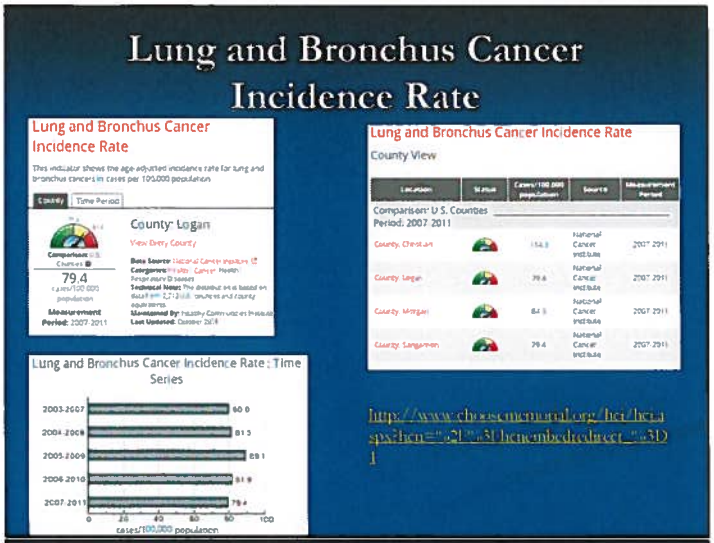


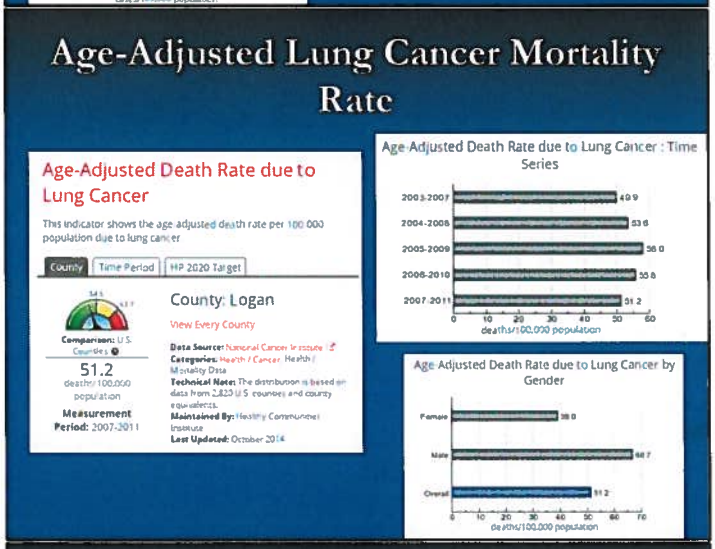


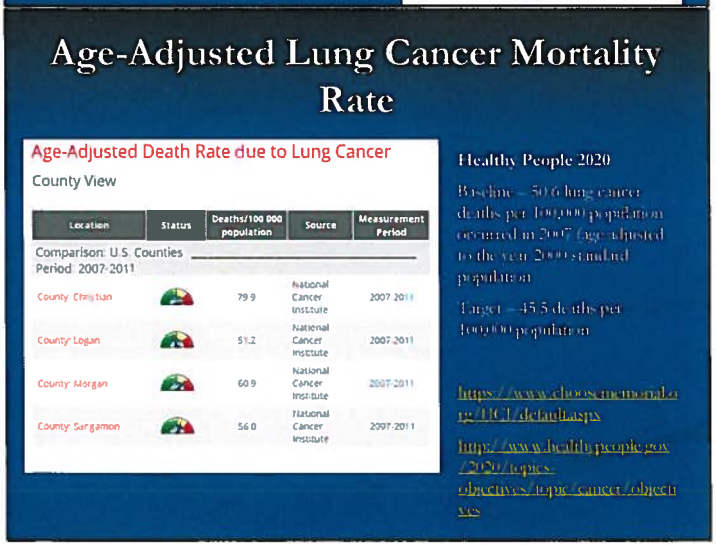


Why is this important?
Cancer is the second leading cause of death in the United States. The National Cancer Institute (NCI) defines cancer as a term used to describe diseases in which abnormal cells divide without control and are able to invade other tissues. There are over 100 different types of cancer. According to the NCI, lung, colon and rectal, breast, pancreatic, and prostate cancer lead to the greatest number of annual deaths.

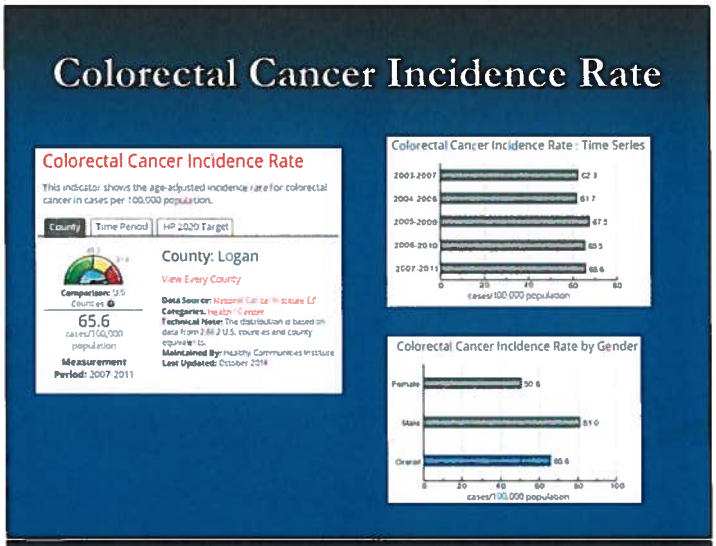
Why is this important?
According to the American Cancer Society, breast cancer is the second leading cause of cancer death and the second most common type of cancer among women in the U.S. The greatest risk factor in developing breast cancer is age. Since 1990, breast cancer death rates have declined progressively due to advancements in treatment and detection.



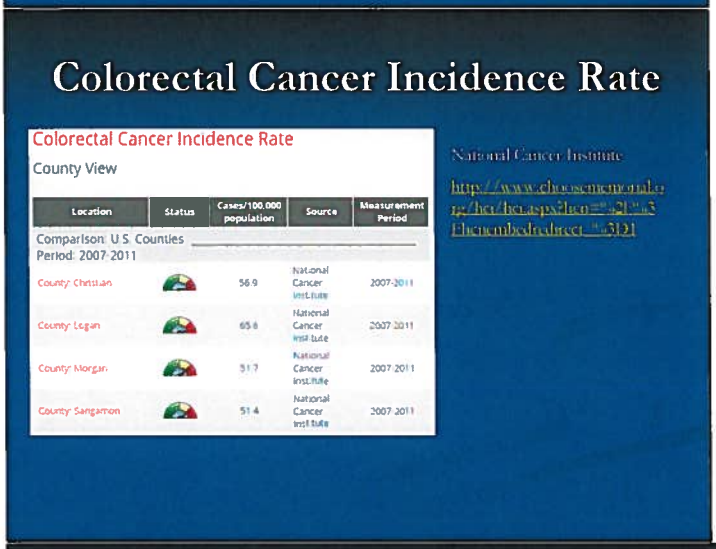


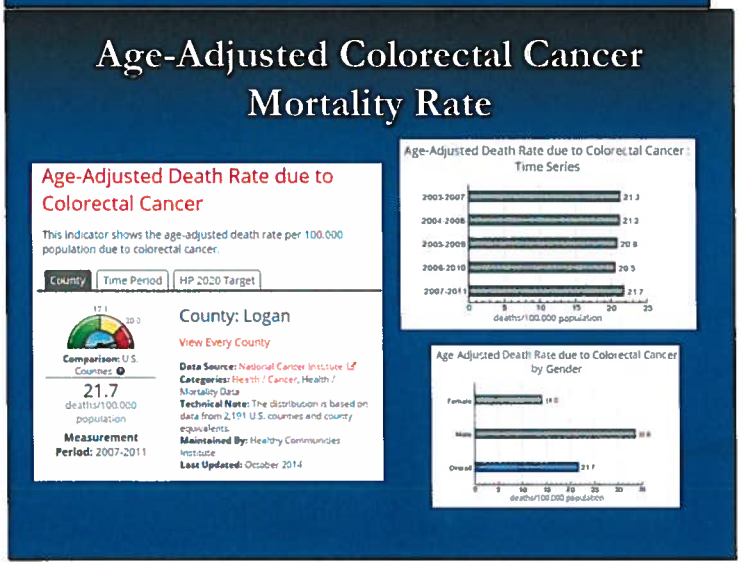


Why is this important?
According to the American Lung Association, more people die from lung cancer annually than any other type of cancer, exceeding the total deaths caused by breast cancer, colorectal cancer, and prostate cancer combined. The greatest risk factor for lung cancer is duration and quantity of smoking. While the mortality rate due to lung cancer among men has reached a plateau, the mortality rate due to lung cancer among women continues to increase.



Why is this important?
Colorectal cancer--cancer of the colon or rectum--is the second leading cause of cancer-related deaths in the United States. If adults aged 50 or older had regular screening tests, as many as 60% of the deaths from colorectal cancer could be prevented. In the U.S. in 2009, it is estimated that there were 106,100 new cases and 49,920 deaths from colorectal cancer.





Why is this important?
Colorectal cancer--cancer of the colon or rectum--is the second leading cause of cancer-related deaths in the United States. The Centers for Disease Control and Prevention estimates that if all adults aged 50 or older had regular screening tests for colon cancer, as many as 60% of the deaths from colorectal cancer could be prevented. While 90% of colorectal cancer cases occur in adults aged 50 or older, it is essential for individuals with risk factors (those with a family history of colorectal cancer, inflammatory bowel disease, or heavy alcohol use) to seek regular screening earlier.

Age-Adjusted Colorectal Cancer Mortality Rate

Age-Adjusted Death Rate due to Colorectal Cancer

County View

Location	Status	Deaths/100,000 population	Source	Measurement Period
Comparison: U.S. Counties				
Period: 2007-2011				
County: Christian		19.6	National Cancer Institute	2007-2011
County: Logan		21.7	National Cancer Institute	2007-2011
County: Morgan		19.0	National Cancer Institute	2007-2011
County: Sangamon		17.7	National Cancer Institute	2007-2011

Healthy People 2020

Baseline – 17.1 colorectal cancer deaths per 100,000 population occurred in 2007 (age adjusted to the year 2000 standard population

Target – 14.5 deaths per 100,000 population

https://www.cheesememorial.org/HCI/default.aspx

http://www.healthypeople.gov/2020/topics-objectives/topic/cancer/objectives

Cervical Cancer

	Logan County (Crude Mortality Rate per 100,000)	Illinois (Crude Mortality Rate per 100,000)
2006	*** (1)	2.6
2005	*** (0)	2.8
2004	*** (0)	3.0
2003	*** (0)	2.9
2002	*** (0)	4.0

Healthy People 2020

Baseline – 2.4 uterine cervix cancer deaths per 100,000 females occurred in 2007 (age adjusted to the 2000 standard population

Target – 2.2 deaths per 100,000 females

http://app.idph.state.il.us/cgi-bin/cfpcgi.exe?IDCfile=/data/plan/rate

https://www.healthypeople.gov/2020/topics-objectives/topic/cancer/objectives

Prostate Cancer (Male)

Prostate Cancer Incidence Rate

This indicator shows the age-adjusted incidence rate for prostate cancer in cases per 100,000 males.

County | Time Period

Comparison: U.S. Counties

128.5 cases/100,000 males

Measurement Period: 2007-2011

County: Logan

View Every County

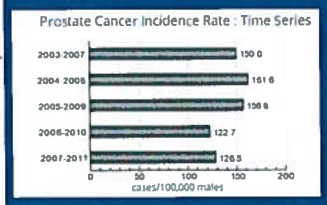
Data Source: National Cancer Institute

Categories: Health / Cancer, Health / Men's Health

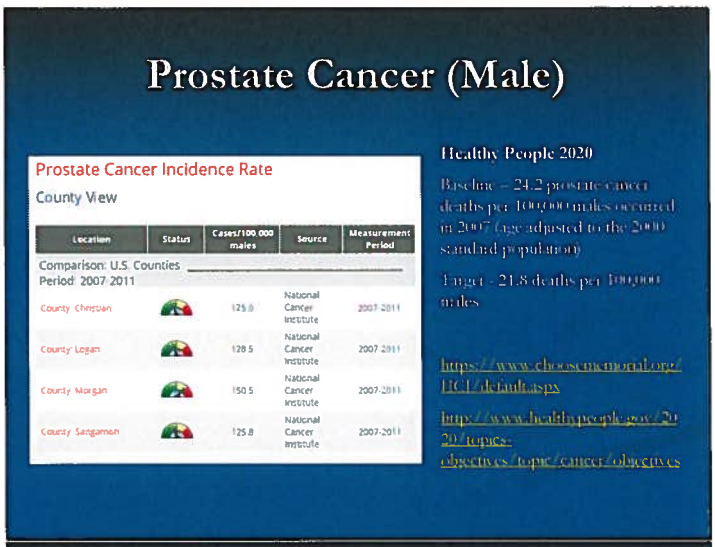
Technical Note: The distribution is based on data from 2,730 U.S. counties and county equivalents.

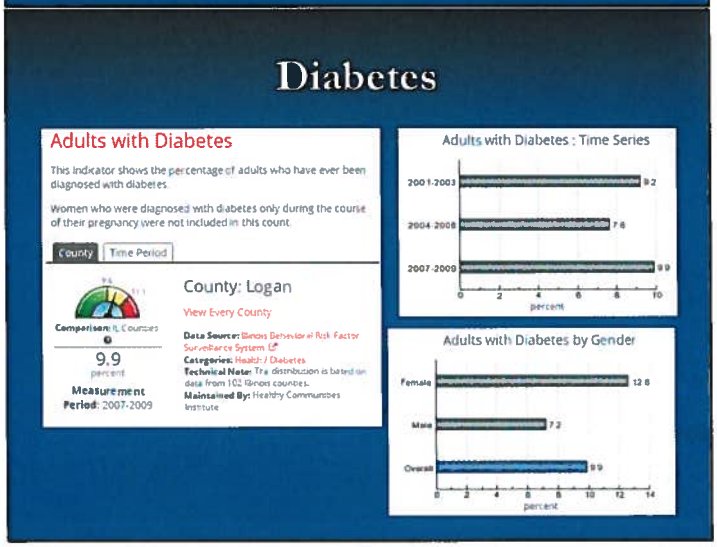
Maintained By: Healthy Communities Institute

Last Updated: October 2014



Why is this important?
Prostate cancer is the most common form of cancer among men in the United States. It is second only to lung cancer as a cause of cancer-related death among men. The prostate is a gland in the male reproductive system found below the bladder and in front of the rectum. Prostate cancer forms in tissues of the prostate and usually occurs in older men.





Note incidence rate vs. death rate

Why is this important?
In 2007, diabetes was the seventh leading cause of death in the United States. In 2010, an estimated 25.8 million people or 8.3% of the population had diabetes. Diabetes disproportionately affects minority populations and the elderly, and its incidence is likely to increase as minority populations grow and the U.S. population becomes older.

Diabetes can have a harmful effect on most of the organ systems in the human body; it is a frequent cause of end-stage renal disease, non-traumatic lower-extremity amputation, and a leading cause of blindness among working age adults. Persons with diabetes are also at increased risk for ischemic heart disease, neuropathy, and stroke. In economic terms, the direct medical expenditure attributable to diabetes in 2007 was estimated to be $116 billion.

Why is this important?
According to National Diabetes Education Program, "diabetes is a group of diseases marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both." Diabetes can have a harmful effect on most organ systems in the human body; it is a frequent cause of renal disease and lower-extremity amputation, and a leading cause of blindness among working age adults. Persons with diabetes are also at increased risk for ischemic heart disease, neuropathy, and stroke. The prevalence of diagnosed type 2 diabetes increased six fold in the latter half of the last century according to the CDC. Diabetes risk factors such as obesity and physical inactivity have played a major role in this dramatic increase. Age, race, and ethnicity are also important risk factors. The CDC estimates the direct economic cost of diabetes in the United States to be about $100 billion per year. This figure does not take into account the indirect economic costs attributable to potential work time lost to diabetes- related illness or premature death. In response to this public health challenge, Healthy People 2020 has identified goals that aim to "reduce the disease and economic burden of diabetes, and improve the quality of life for all persons who have or are at risk for diabetes." Goals include improved diabetes education,

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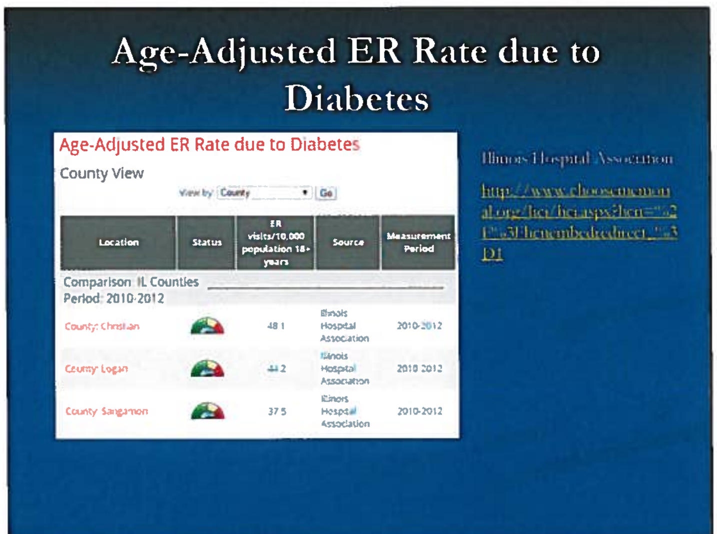
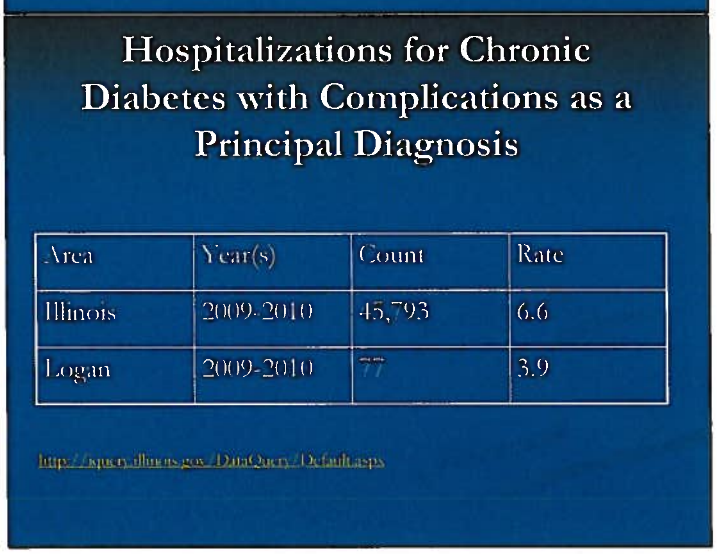
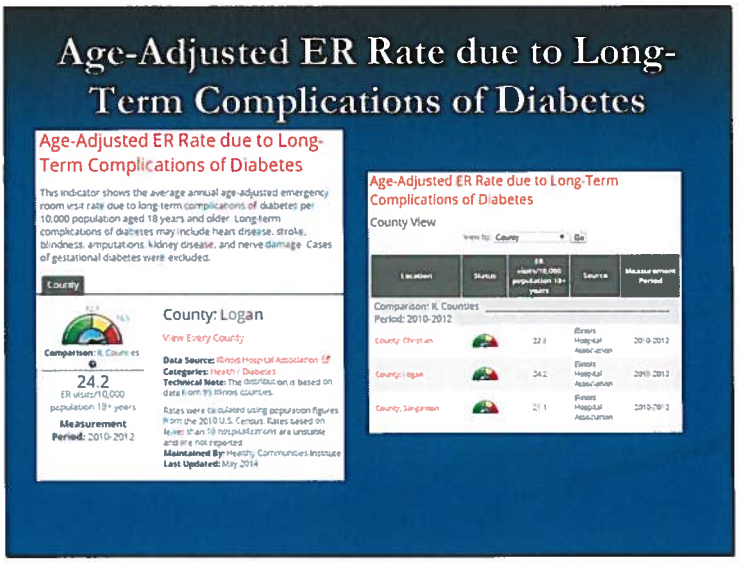


Location	Status	ER visits/10,000 population 18+ years	Source	Measurement Period
County: Christian		48.1	Illinois Hospital Association	2010-2012
County: Logan		44.2	Illinois Hospital Association	2010-2012
County: Sangamon		37.5	Illinois Hospital Association	2010-2012



Area	Year(s)	Count	Rate
Illinois	2009-2010	45,793	6.6
Logan	2009-2010	77	3.9



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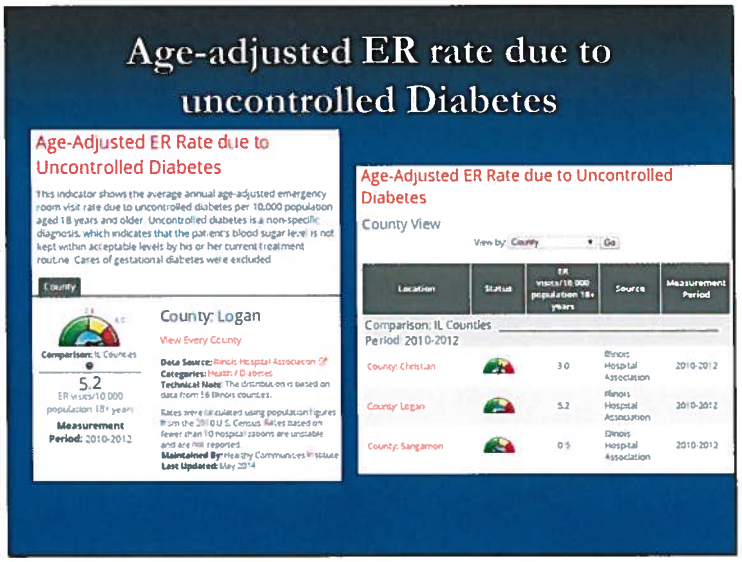

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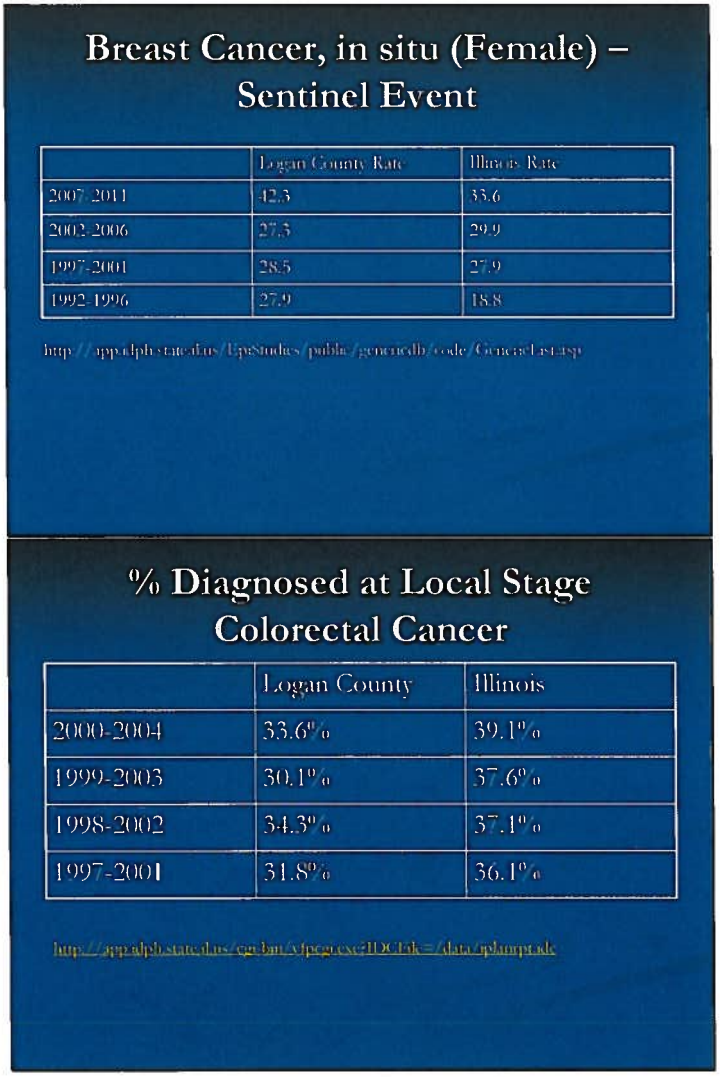


Considered earliest form of breast cancer – usually found because of mammograms

% Diagnosed at Local Stage Prostate Cancer

	Logan County	Illinois
2000-2004	89.3%	85.7%
1999-2003	86.9%	85.4%
1998-2002	83.8%	84.3%
1997-2001	79.6%	83.0%

http://app.idph.state.il.us/cgi-bin/xlpcga.exe?DO+file=/data/planrpt.ade

% Diagnosed at Late Stage Cervical Cancer – Sentinel Event

	Logan County	Illinois
2000-2004	44.4%	47.9%
1999-2003	36.4%	44.6%
1998-2002	44.4%	44.0%
1997-2001	60.0%	44.2%

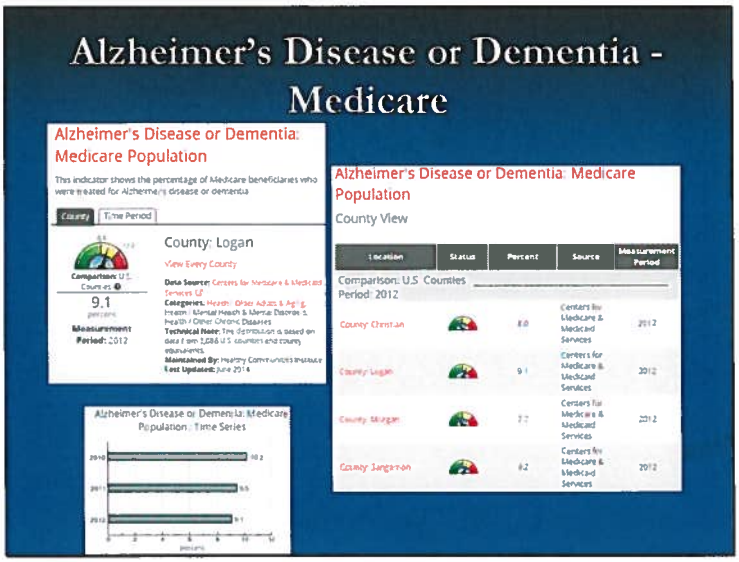
http://app.idph.state.il.us/cgi-bin/xlpcga.exe?DO+file=/data/planrpt.ade

Childhood Cancer Age Adjusted Incidence Rate

	Logan County	Illinois
2000-2004	***	143.0
1999-2003	***	142.6
1998-2002	***	143.4
1997-2001	***	144.4

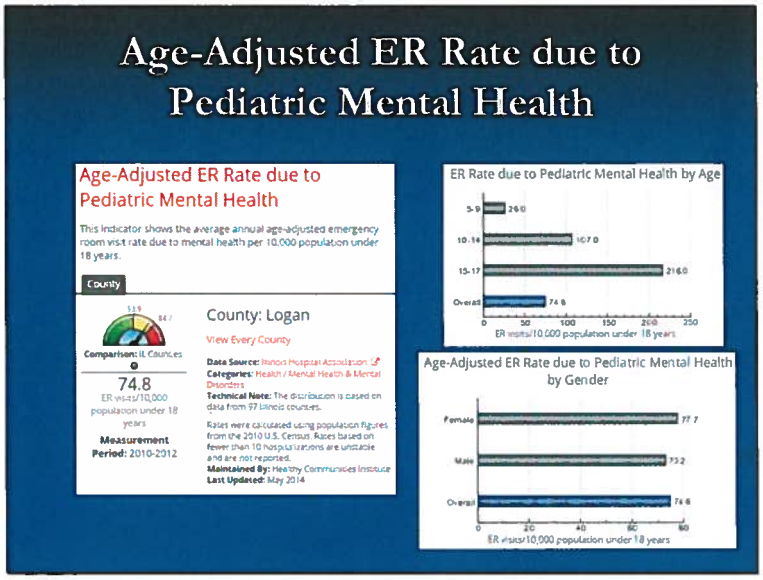
Rates are per 1,000,000, age-adjusted to the 2000 US standard. If number is <15, no rates calculated

http://app.idph.state.il.us/cgi-bin/xlpcga.exe?DO+file=/data/planrpt.ade

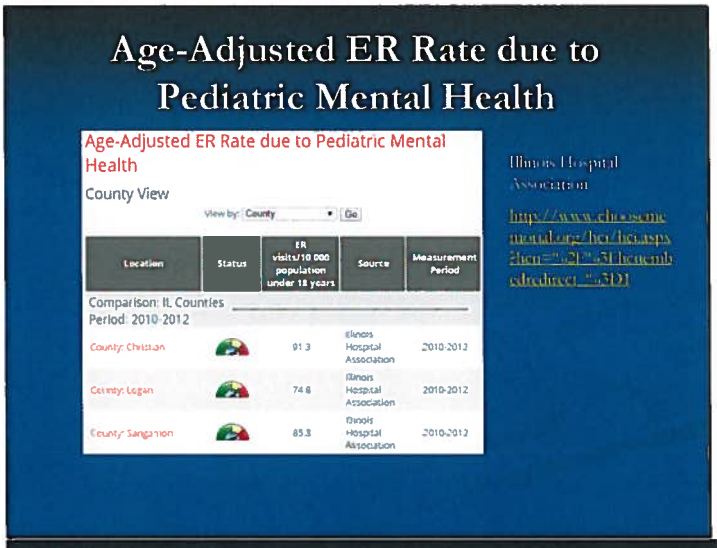


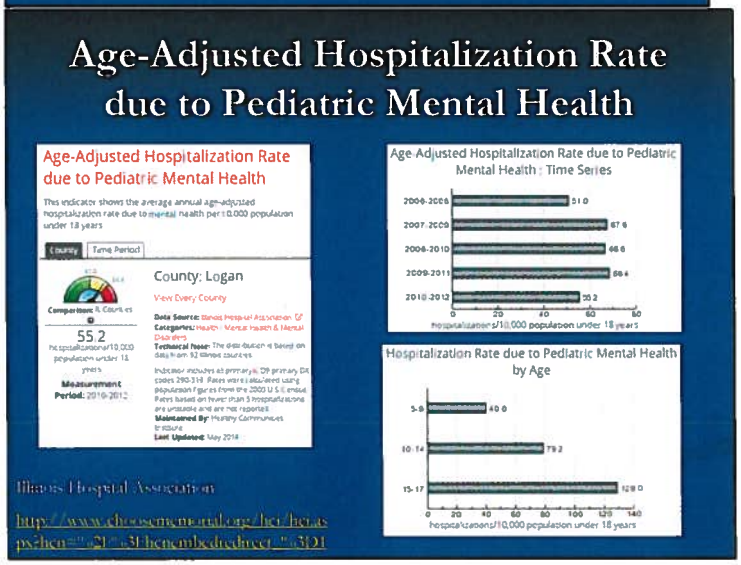
Why is this important?
Dementia is a non-specific syndrome that severely affects memory, language, complex motor skills, and other intellectual abilities seriously enough to interfere with daily life. Although dementia is much more common in the geriatric population (approximately 5 percent of those over 65 are said to be affected), it can occur in the younger population, in which case it is termed "early onset dementia."

Alzheimer's disease is the most common form of dementia among the geriatric population, accounting for 50 to 80 percent of dementia cases. It is a progressive and irreversible disease where memory and cognitive abilities are slowly destroyed making it impossible to carry out even simple, daily tasks. Alzheimer's disease typically manifests after the age of 60. According to the Centers for Disease Control and Prevention, Alzheimer's disease is the fifth leading cause of death among adults aged 65 and older. The Alzheimer's Association notes that the number of people age 65 and older with Alzheimer's disease is estimated to reach 7.1 million by 2025—a 40 percent increase from the estimated 5 million age 65 and older currently affected by the disease. Medicare costs for those with Alzheimer's and other dementias are estimated to be $107 billion dollars in 2013.



Why is this important?
Psychological distress can affect all aspects of our lives. It is important to recognize and address potential psychological issues before they become critical. Occasional down days are normal, but persistent problems should be evaluated and treated by a qualified professional; proper management of mental/emotional health problems can prevent psychological crises warranting hospitalization. According to the National Center for Health Statistics, treatment for mental disorders is a major cause of hospitalization for children and adolescents between the ages of 10 and 21 years.





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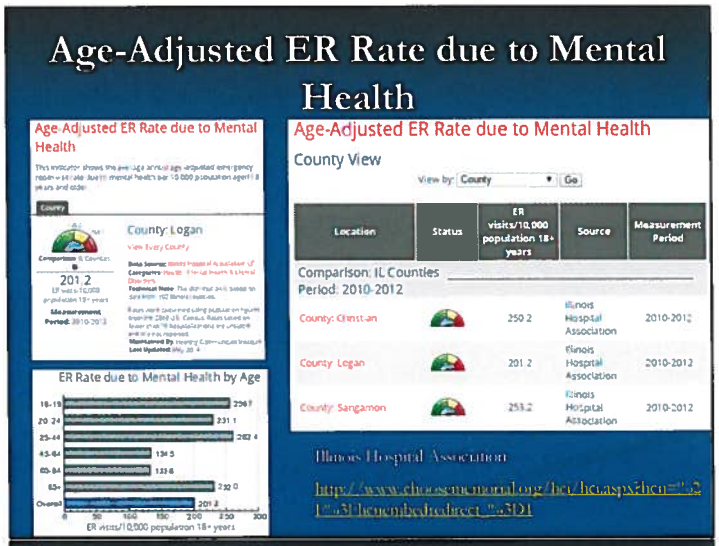

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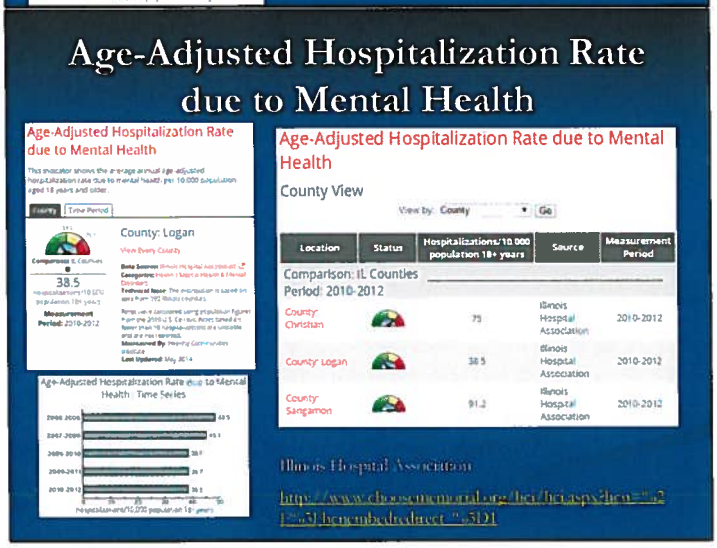

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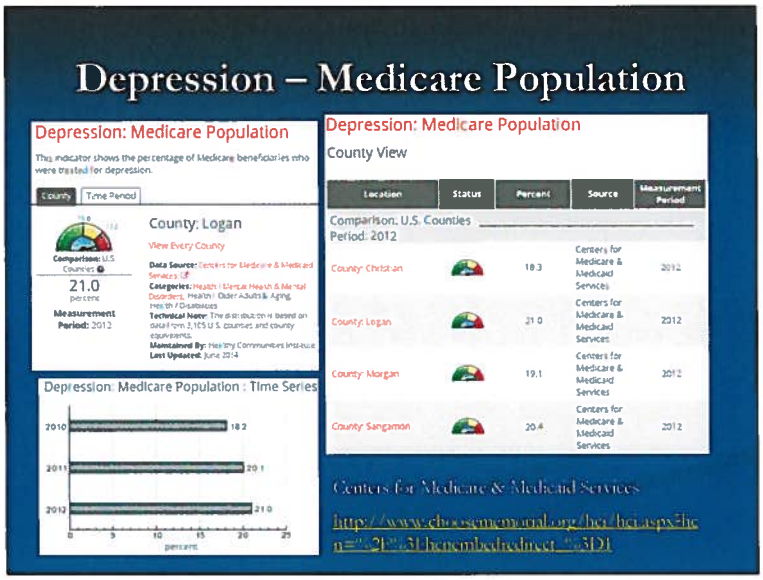
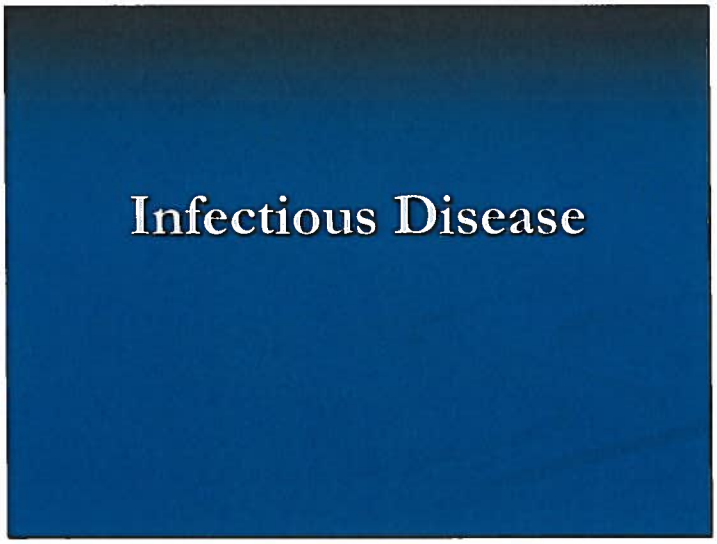


Why is this important?
Depression is a chronic disease that negatively affects a person's feelings, behaviors and thought processes. Depression has a variety of symptoms, the most common being a feeling of sadness, fatigue, and a marked loss of interest in activities that used to be pleasurable. Many people with depression never seek treatment; however, even those with the most severe depression can improve with treatments including medications, psychotherapies, and other methods.

According to the National Comorbidity Survey of mental health disorders, people over the age of 60 have lower rates of depression than the general population — 10.7 percent in people over the age of 60 compared to 16.9 percent overall. The Center for Medicare Services estimates that depression in older adults occurs in 25 percent of those with other illnesses, including: arthritis, cancer, cardiovascular disease, chronic lung disease, and stroke.



Syphilis

	2013	2012	2011	2010	2009
Syphilis (# of cases)	1	2	0	0	0

Healthy People 2020

Baseline – 14 new cases of primary and secondary syphilis per 100,000 females were reported in 2008

Target – 1.5 new cases per 100,000 population

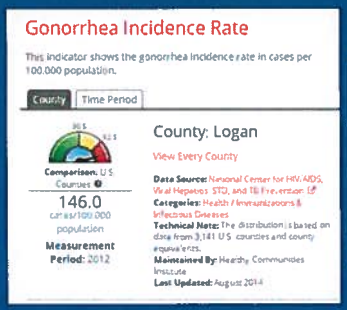
Baseline – 7.4 new cases of primary and secondary syphilis per 100,000 males were reported in 2008

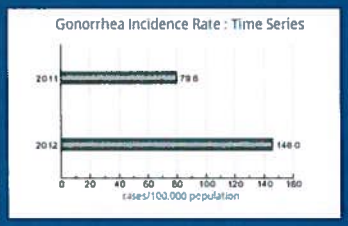
Target – 6.7 new cases per 100,000 population

https://www.healthypeople.gov/2020/topics-objectives/topic/sexually-transmitted-diseases/objectives

Case Numbers from LCDPH Reportable Disease Data

Gonorrhea





Gonorrhea

Location	Status	Cases/100,000 population	Source	Measurement Period
Comparison: U.S. Counties				Period: 2012
County: Christian		37.4	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2012
County: Logan		146.0	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2012
County: Morgan		38.6	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2012
County: Sangamon		243.9	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2012

Healthy People 2020

Baseline – 279.9 new cases of gonorrhea per 100,000 females aged 15 to 44 years were reported in 2008

Target – 251.9 new cases per 100,000 population

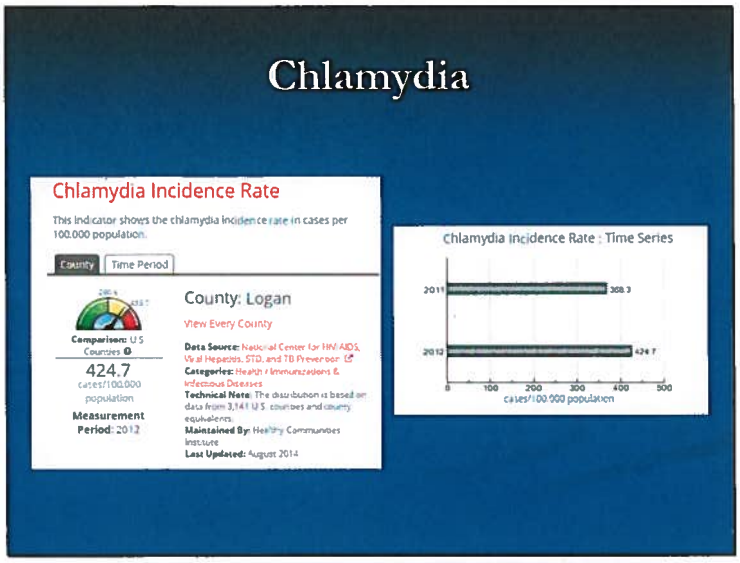
Baseline – 216.5 new cases of gonorrhea per 100,000 males aged 15 to 44 years were reported in 2008

Target – 194.8 new cases per 100,000 population

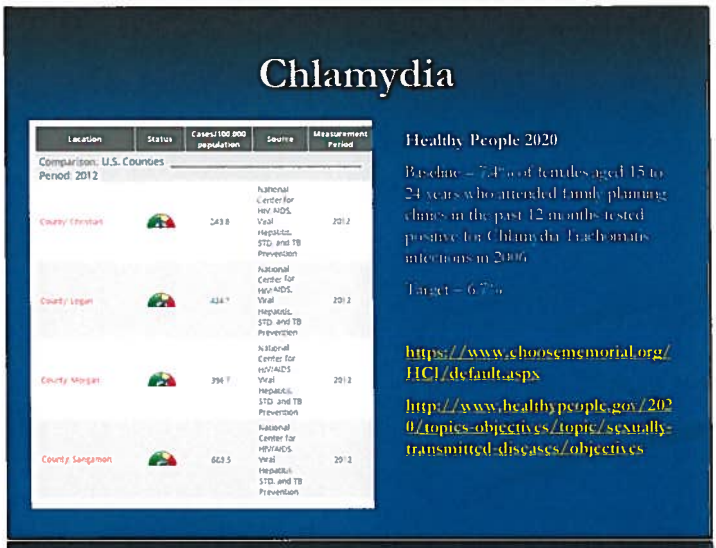
https://www.chooseimmunity.org/HCI/default.aspx

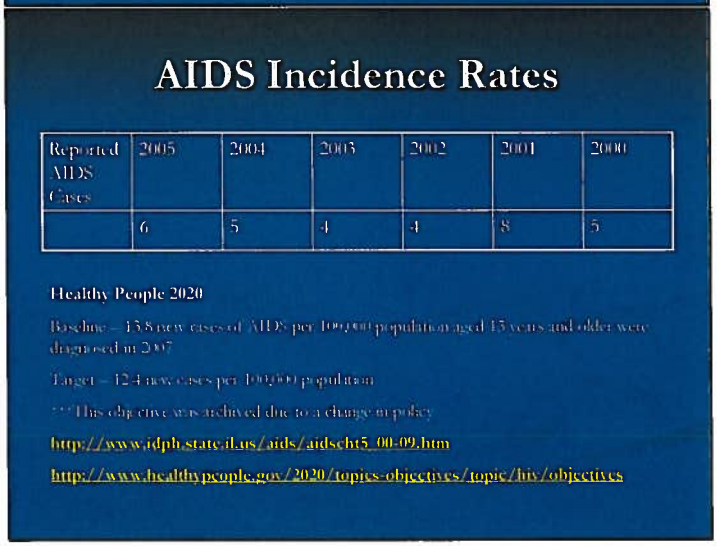
http://www.healthypeople.gov/2020/topics-objectives/topic/sexually-transmitted-diseases/objectives

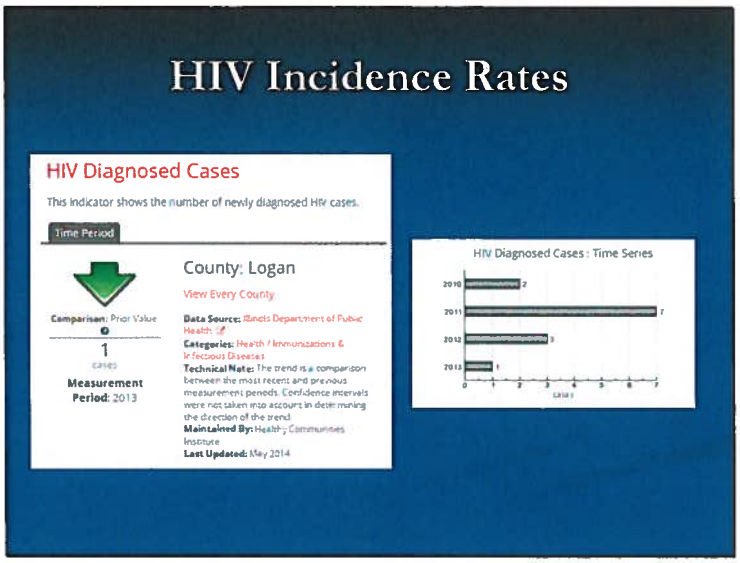
Why is this important?
Gonorrhea is a sexually transmitted infection (STI) caused by Neisseria gonorrhoeae. It is typically asymptomatic, but easy to treat. However, gonorrhea has developed resistance to antibiotics over the years, complicating treatment. Left untreated, gonorrhea can cause serious and permanent health problems in both women and men. In women, gonorrhea is a common cause of pelvic inflammatory disease. In the United States, the highest reported rates of infection are among sexually active teenagers, young adults, and African Americans.



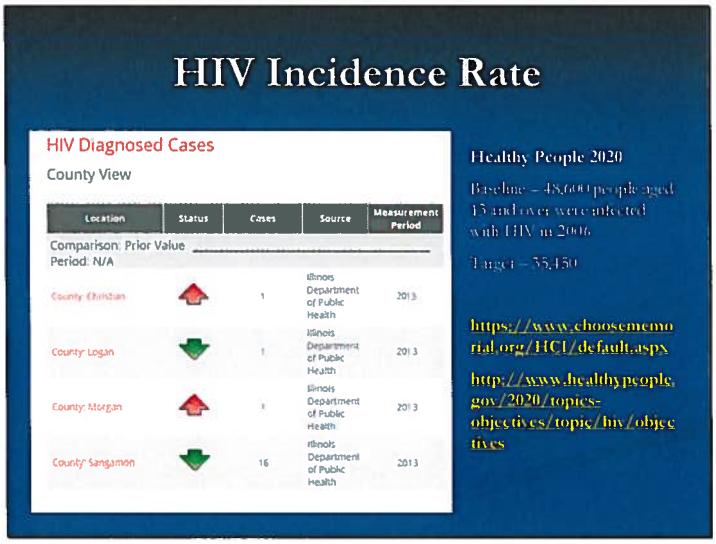
Why is this important?
Chlamydia, the most frequently reported bacterial sexually transmitted disease (STD) in the United States, is caused by the bacterium, Chlamydia trachomatis. Although symptoms of chlamydia are usually mild or absent, serious complications that cause irreversible damage, including infertility, can occur "silently" before a woman ever recognizes a problem. Chlamydia can also cause discharge from the penis of an infected man. Under-reporting of chlamydia is substantial because most people with chlamydia are not aware of their infections and do not seek testing.

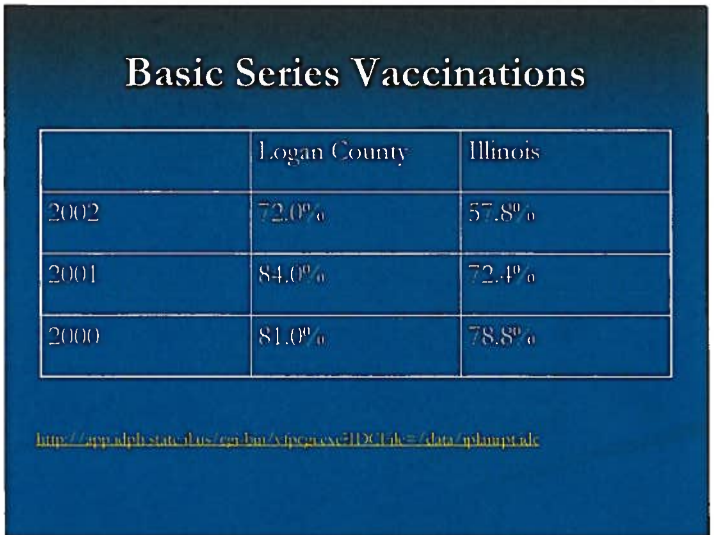




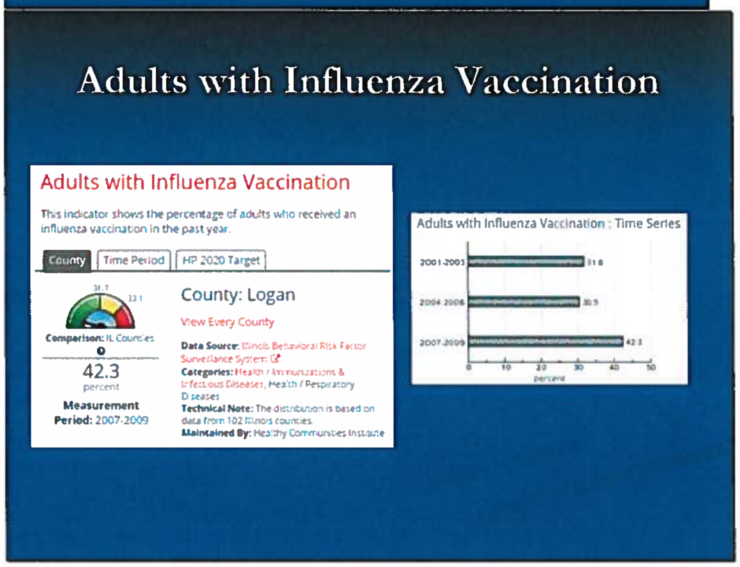


Why is this important?
The Centers for Disease Control and Prevention estimates that approximately one million Americans were living with HIV as of 2006 and estimates that one in five people infected with HIV do not know they are infected. Men who have sex with men of all races, African Americans, and Hispanics/Latinos are disproportionately affected by HIV. More HIV infections occur among young people under age 30 than any other age group. The total number of people living with HIV in the U.S. is increasing because fewer people die of complications from HIV each year. Improvements in treatment and improved access to treatment allow people with HIV to live longer and healthier lives. The annual number of new HIV infections has remained relatively stable in the U.S. in recent years; however, more than 55,000 new cases are reported annually and HIV/AIDS remains a significant cause of illness, disability, and death in the U.S.

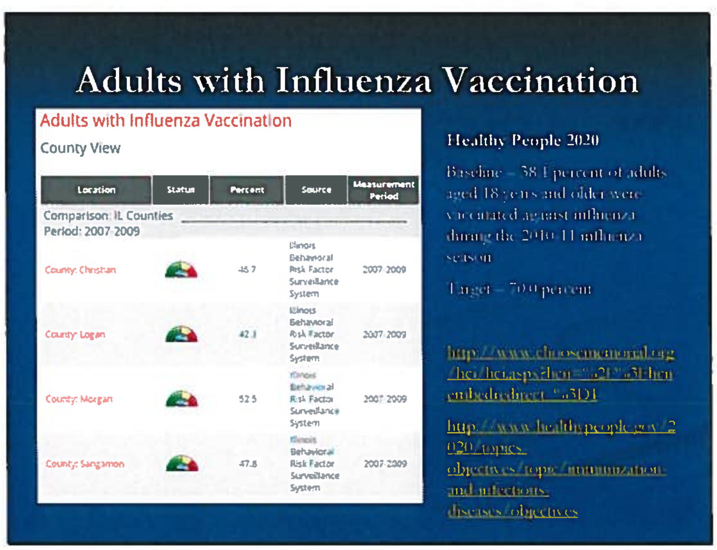


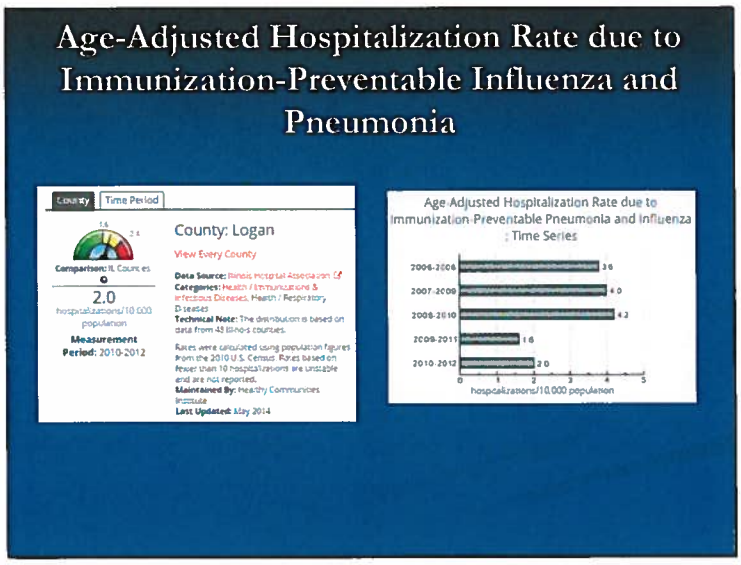


	Logan County	Illinois
2002	72.0%	57.8%
2001	84.0%	72.4%
2000	81.0%	78.8%

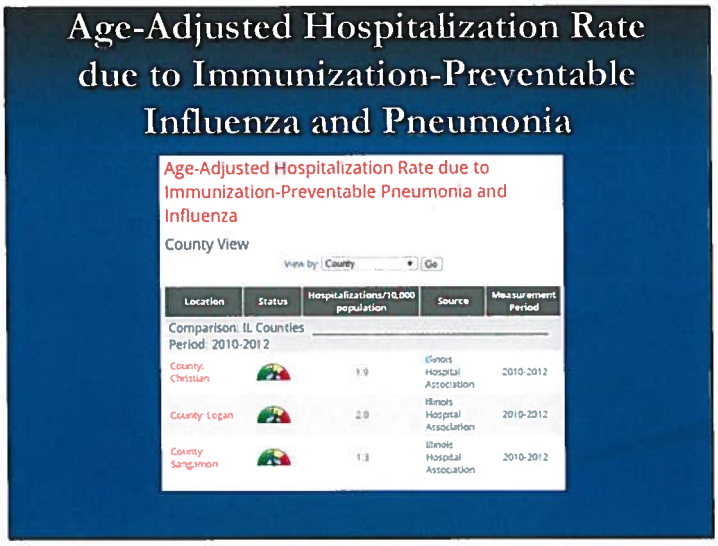


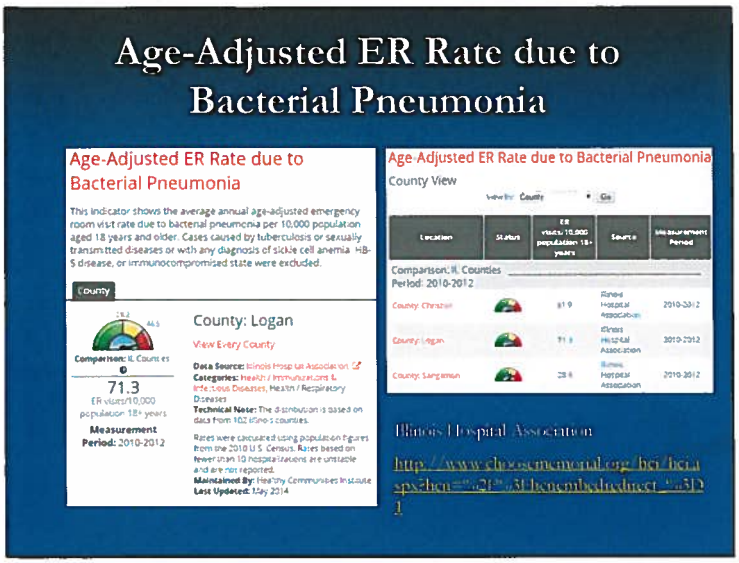
Why is this important?
Influenza is a contagious disease caused by the influenza virus. It can lead to pneumonia and can be dangerous for people with heart or breathing conditions. Infection with influenza can cause high fever, diarrhea and seizures in children. It is estimated that 226,000 people are hospitalized each year due to influenza and 36,000 die - mostly the elderly. The seasonal influenza vaccine can prevent serious illness and death. The Centers for Disease Control and Prevention (CDC) recommends annual vaccinations to prevent the spread of influenza.



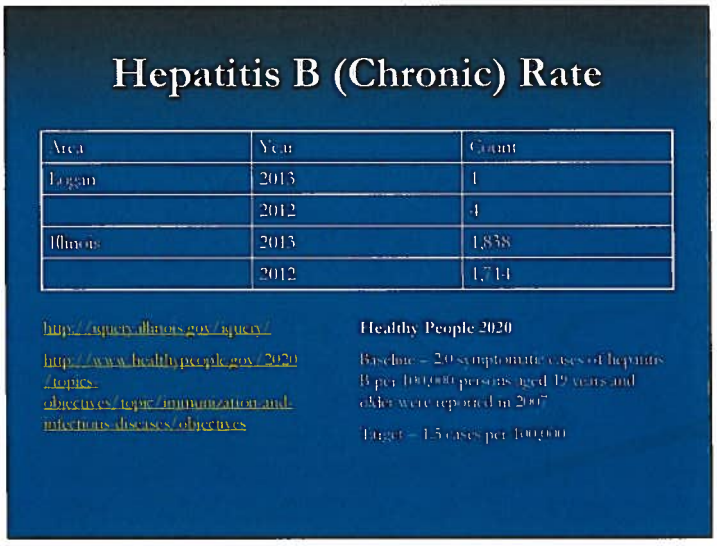


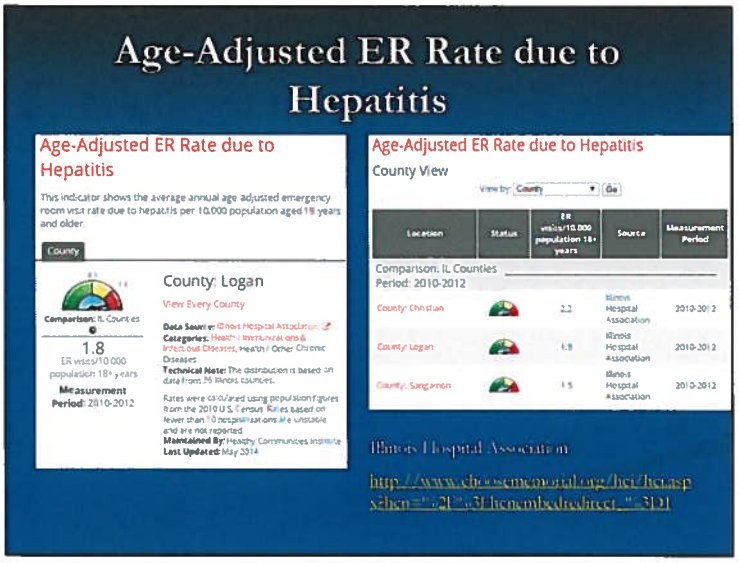
Why is this important?
According to the Mayo Clinic, more than 60,000 Americans die of pneumonia every year. Pneumonia is an inflammation of the lungs that is usually caused by infection with bacteria, viruses, fungi or other organisms. Pneumonia is a particular concern for older adults and people with chronic illnesses or impaired immune systems, but it can also strike young, healthy people. Worldwide, it's a leading cause of death in children. Although signs and symptoms vary, many cases of pneumonia develop suddenly, with chest pain, fever, chills, cough and shortness of breath. Infection often follows a cold or the flu, but it can also be associated with other illnesses or occur on its own. Some forms of bacterial pneumonia are treatable with antibiotics, but antibiotic-resistant strains are a growing problem.



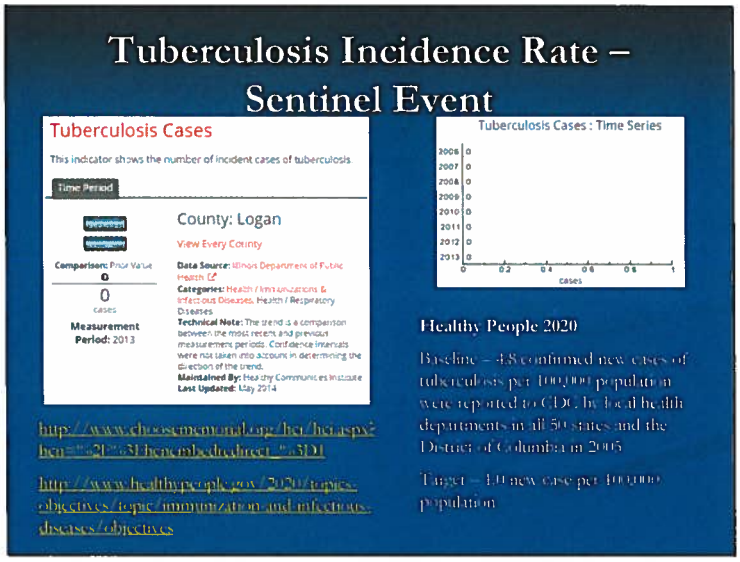


Why is this important?
According to the Mayo Clinic, more than 60,000 Americans die of pneumonia every year. Pneumonia is an inflammation of the lungs that's usually caused by infection with bacteria, viruses, fungi or other organisms. Pneumonia is a particular concern for older adults and people with chronic illnesses or impaired immune systems, but it can also strike young, healthy people. Worldwide, it's a leading cause of death in children. Although signs and symptoms vary, many cases of pneumonia develop suddenly, with chest pain, fever, chills, cough and shortness of breath. Infection often follows a cold or the flu, but it can also be associated with other illnesses or occur on its own. Some forms of bacterial pneumonia are treatable with antibiotics, but antibiotic-resistant strains are a growing problem.





Why is this important?
The term hepatitis refers to an inflammation of the liver resulting from a viral or non-viral infection, an autoimmune or metabolic condition, or alcohol or drug use. Hepatitis can also result from obstruction of the bile duct, for example due to gallstones. The disease may be acute or chronic. Chronic forms can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death. Certain types of hepatitis are extremely contagious; some are spread via blood or sexual contact, while others are spread via fecal-oral contact. Vaccines are available for some types of hepatitis, and it is now recommended that all children and adults receive the hepatitis B vaccine.



Why is this important?
Tuberculosis (TB) is a bacterial disease that usually affects the lungs, although other parts of the body can also be affected. The TB bacteria are spread through the air when a person with untreated pulmonary TB coughs or sneezes. Prolonged exposure to a person with untreated TB is usually necessary for infection to occur. In 9 out of 10 exposed people, the immune system halts the spread of the infection and the infected person does not become sick or spread disease to others. However, the bacilli remain dormant and can be activated if the immune system becomes severely weakened by HIV, diabetes, chemotherapy cancer treatments, or other causes. A person with TB disease is contagious until he/she has been on appropriate treatment for several days to weeks. The most important way to stop the spread of tuberculosis is for TB patients to cover the mouth and nose when coughing, and to take all TB medicine exactly as prescribed by their physician.

Environmental/ Occupational/ Injury Control

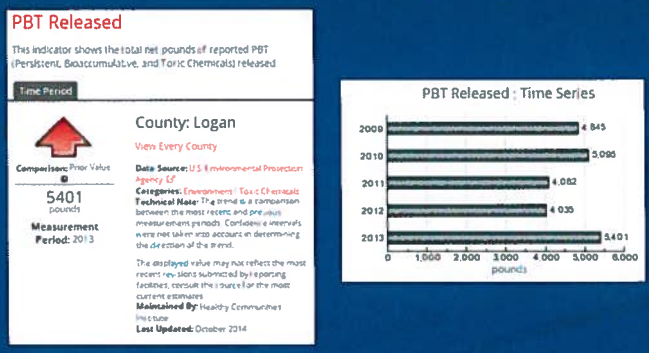
Environmental Indicators

Year	# Wells Tested	# Nitrates >10mg/l	% Nitrates >10mg/l	# Coliform ≥1	% Coliform ≥1
2014***	73	4	5.5%	23	31.5%
2013	104	6	5.8%	29	27.9%
2012	111	7	6.3%	47	42.3%
2011	100	4	4.0%	25	25.0%
2010	140	5	3.6%	43	30.7%

***2014 information is current as of 11/4/2014

Data from HCDPH Environmental Health

PBT (Persistent, Bioaccumulative, and Toxic Chemicals) Released



Why is this important?
Persistent, Bioaccumulative, and Toxic Chemicals, such as lead and mercury, can cause harmful effects to the environment and humans alike. However, these data only reflect releases and other waste management activities of chemicals, not whether (or to what degree) the public has been exposed to those chemicals.

PBT (Persistent, Bioaccumulative, and Toxic Chemicals) Released

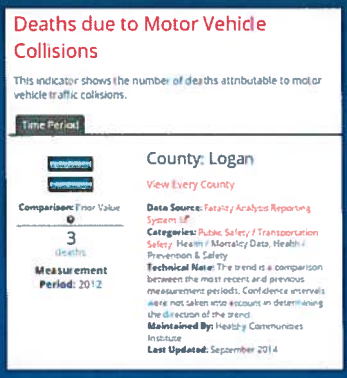
PBT Released

County View

Location	Status	Pounds	Source	Measurement Period
Comparison: Prior Value Period: N/A				
County: Christian	▼	6534	U.S. Environmental Protection Agency	2013
County: Logan	▲	5401	U.S. Environmental Protection Agency	2013
County: Morgan	▲	2561	U.S. Environmental Protection Agency	2011
County: Sangamon	▼	2208	U.S. Environmental Protection Agency	2013

https://www.choosementalhealth.org/hcr/hcr.aspx?hcm=Community Dashboard

Motor Vehicle Accident Mortality



Deaths due to Motor Vehicle Collisions

This indicator shows the number of deaths attributable to motor vehicle traffic collisions.

Time Period

County: Logan

View Every County

Comparison: Prior Value

3

deaths

Measurement Period: 2012

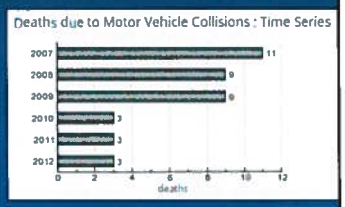
Data Source: Fatality Analysis Reporting System (F

Categories: Public Safety / Transportation Safety, Health / Mortality Data, Health / Prevention & Safety

Technical Note: The trend is a comparison between the most recent and previous measurement periods. Confidence intervals were not taken into account in determining the direction of the trend.

Maintained By: Healthy Communities Institute

Last Updated: September 2014



Deaths due to Motor Vehicle Collisions : Time Series

2007 11
2008 9
2009 9
2010 3
2011 3
2012 3

0 2 4 6 8 10 12

deaths

Mortality Rate is approximately 2.9 deaths per 100,000 population, using 2010 Census population estimate

Motor Vehicle Accident Mortality

Deaths due to Motor Vehicle Collisions

County View

Location	Status	Deaths	Source	Measurement Period
Comparison: Prior Value Period: N/A				
County: Christian	▲	10	Fatality Analysis Reporting System	2012
County: Logan	=	3	Fatality Analysis Reporting System	2012
County: Morgan	=	2	Fatality Analysis Reporting System	2012
County: Sangamon	=	22	Fatality Analysis Reporting System	2012

Healthy People 2020

Baseline – 13.8 motor vehicle traffic-related deaths per 100,000 population occurred in 2007 (age-adjusted to the year 2000 standard population)

Target – 12.4 deaths per 100,000 population

http://www.choosementalhealth.org/hcr/hcr.aspx?hcm=%2f%3fhcmembedding=1%3d1

http://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention/objectives

http://quickfacts.census.gov/qfd/states/17/17007.html

Why is this important?
Motor vehicle-related injuries kill more children and young adults than any other single cause in the United States. More than 41,000 people in the United States die in motor vehicle crashes each year, and crash injuries result in about 500,000 hospitalizations and four million emergency department visits annually.

Homicide Rates

Rates are per 100,000 people using total county populations

http://www.icjia.org/public/sac/instantatlas/MainSingleMap/atlas.html

https://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention/objectives

Healthy People 2020

Baseline – 6.1 homicides per 100,000 population occurred in 2007 (age adjusted to the year 2000 standard population)

Target – 5.5 homicides per 100,000 population

Suicide

2008	2009	2010	2011
1	1	2	5

Healthy People 2020

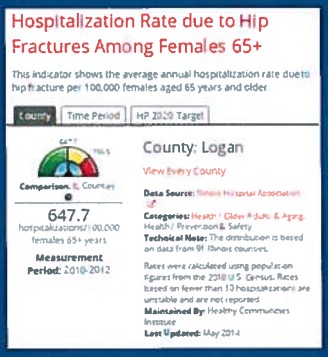
Baseline – 11.3 suicides per 100,000 population occurred in 2007

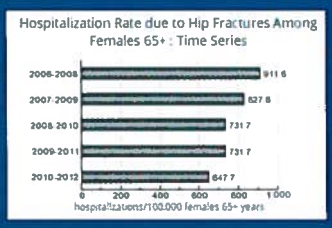
Target – 10.2 suicides per 100,000 population

http://www.idph.state.il.us/health/statshome.htm

http://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-disorders/objectives

Hip Fracture Hospitalization Rates – Females 65+





Hip Fracture Hospitalization Rates – Females 65+

Hospitalization Rate due to Hip Fractures Among Females 65+

County View

View by: County Go

Location	Status	Hospitalizations/100,000 females 65+ years	Source	Measurement Period
Comparison: IL Counties				
Period: 2010-2012				
County: Christian		814.4	Illinois Hospital Association	2010-2012
County: Logan		647.7	Illinois Hospital Association	2010-2012
County: Sangamon		856.6	Illinois Hospital Association	2010-2012

Healthy People 2020

Baseline – 823.5 hospitalizations for hip fractures per 100,000 female aged 65 years and older occurred in 2007 (age-adjusted to the year 2000 standard population)

Target – 741.2 hospitalizations per 100,000 population

http://www.chooseemotional.org/hcr/hcr.aspx?hcn=%21%3Fhcnembedredirect=%3D1

http://www.healthypeople.gov/2020/topics-objectives/topic/Arthritis-Osteoporosis-and-Chronic-Back-Conditions/objectives

Hip Fracture Hospitalization Rates – Males 65+

Hospitalization Rate due to Hip Fractures Among Males 65+

This indicator shows the average annual hospitalization rate due to hip fracture per 100,000 males aged 65 years and older.

County | Time Period | HP 2020 Target

Comparison: IL Counties

353.4

hospitalizations/100,000 males 65+ years

Measurement Period: 2010-2012

County: Logan

View Every County

Data Source: Illinois Hospital Association

Categories: Health / Older Adults & Aging, Health / Prevention & Safety

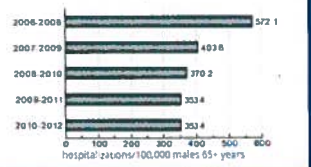
Technical Note: The distribution is based on data from 62 Illinois counties.

Rates were calculated using population figures from the 2010 U.S. Census. Rates based on fewer than 10 hospitalizations are unstable and are not reported.

Maintained By: Healthy Communities Institute

Last Updated: May 2014

Hospitalization Rate due to Hip Fractures Among Males 65+ : Time Series



Hip Fracture Hospitalization Rates – Males 65+

Hospitalization Rate due to Hip Fractures Among Males 65+

County View

View by: County Go

Location	Status	Hospitalizations/100,000 males 65+ years	Source	Measurement Period
Comparison: IL Counties				
Period: 2010-2012				
County: Christian		394.9	Illinois Hospital Association	2010-2012
County: Logan		353.4	Illinois Hospital Association	2010-2012
County: Sangamon		478.6	Illinois Hospital Association	2010-2012

Healthy People 2020

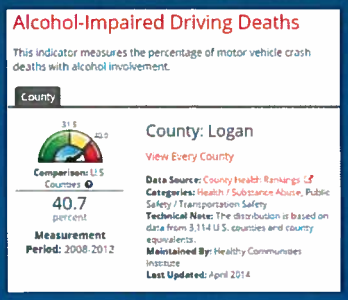
Baseline – 464.9 hospitalizations for hip fractures per 100,000 males aged 65 years and older occurred in 2007 (age-adjusted to the year 2000 standard population)

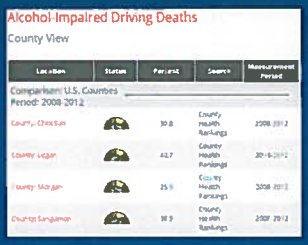
Target – 418.4 hospitalizations per 100,000 population

http://www.chooseemotional.org/hcr/hcr.aspx?hcn=%21%3Fhcnembedredirect=%3D1

http://www.healthypeople.gov/2020/topics-objectives/topic/Arthritis-Osteoporosis-and-Chronic-Back-Conditions/objectives

Alcohol-Related Motor Vehicle Mortality Rates





https://www.chausenmentalorg/hcc/hcc.aspx?hcc=Community Dashboard

Blood Lead Levels in Children

	Total Tested	5-9 µg/dL	10-14 µg/dL	15-19 µg/dL	20+ µg/dL	% over 5 µg/dL
2009	403	37	4	0	4	11.2%
2010	387	31	6	0	1	9.8%
2011	357	22	4	1	1	7.8%
2012	373	28	2	1	0	8.3%

Healthy People 2020

Baseline – 1.5µg/dL was the average blood lead level in children aged 1 to 5 years in 2005-08

Target – 1.4µg/dL

http://www.idph.state.il.us/envhealth/pdf/Lead_Surv_Rpt_10.pdf

http://www.idph.state.il.us/envhealth/pdf/Lead_Surv_Rpt_12.pdf

http://www.healthypeople.gov/2020/topics-objectives/topic/environmental-health/objectives

Aggravated Assault Rates

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total # Aggravated Assaults	87	97	114	81	80	87	110	93	90	74

Aggravated Assault

Healthy People 2020

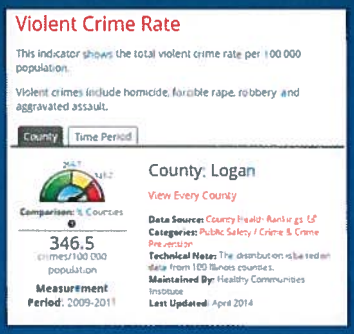
Baseline – 21.3 physical assaults per 1,000 population aged 12 years and older occurred in 2008

Target – 19.2 physical assaults per 1,000 population

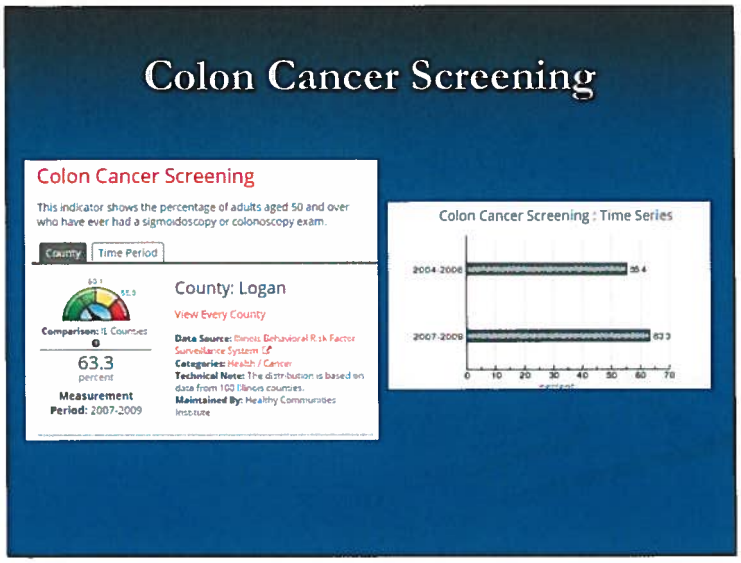
http://www.icjia.org/public/sac/instantatlas/MainSingleMap/atlas.html

http://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention/objectives

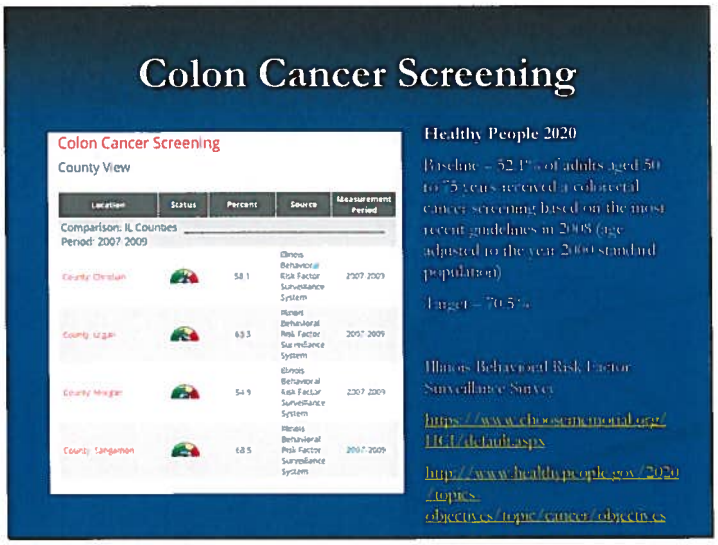
Violent Crime Rate

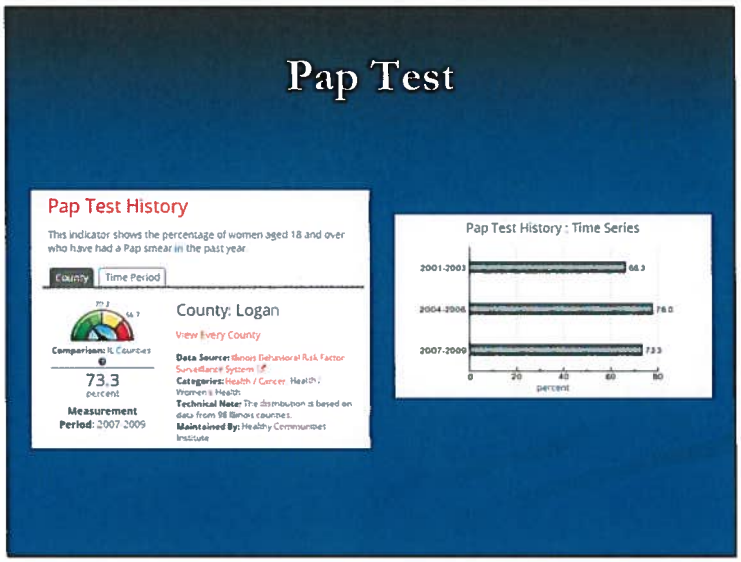


Behavioral Risk Factors and Screening Rates

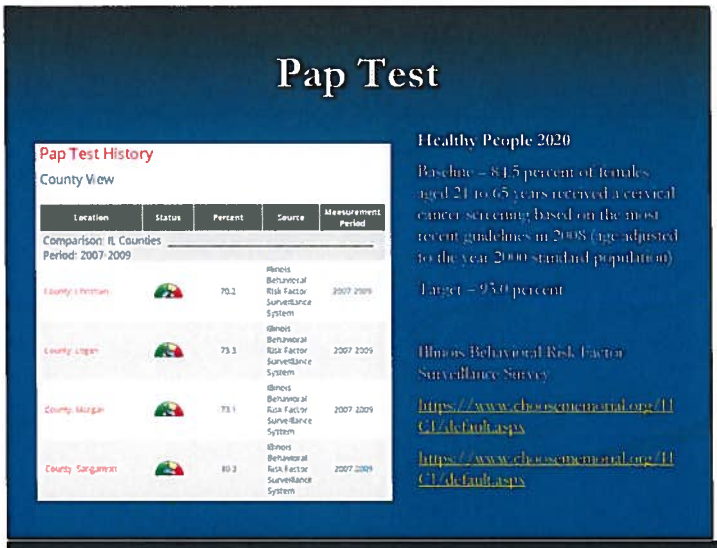


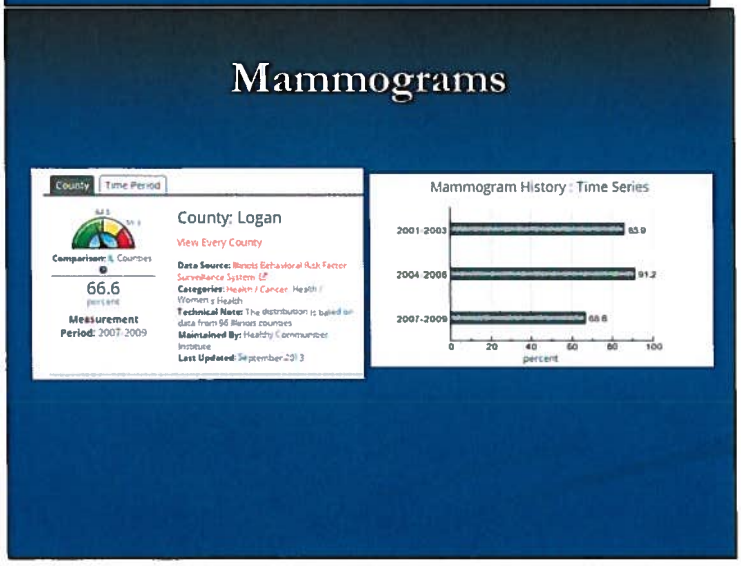
Why is this important?
Colorectal cancer is one of the most commonly diagnosed cancers in the United States, and is the second leading cancer killer in the U.S. If adults aged 50 or older had regular screening tests, as many as 60% of the deaths from colorectal cancer could be prevented. Recommended screening procedures include one of the following: Fecal occult blood tests (FOBT) annually; flexible sigmoidoscopy every 5 years; double-contrast barium enema every 5 years, or colonoscopy every 10 years. It is recommended that screening begin at age 50; however, testing may need to begin earlier and/or more often if colorectal cancer runs in the family, or if you've been diagnosed with inflammatory bowel disease. Speak with your doctor about when you should begin screening and how often you should be tested.





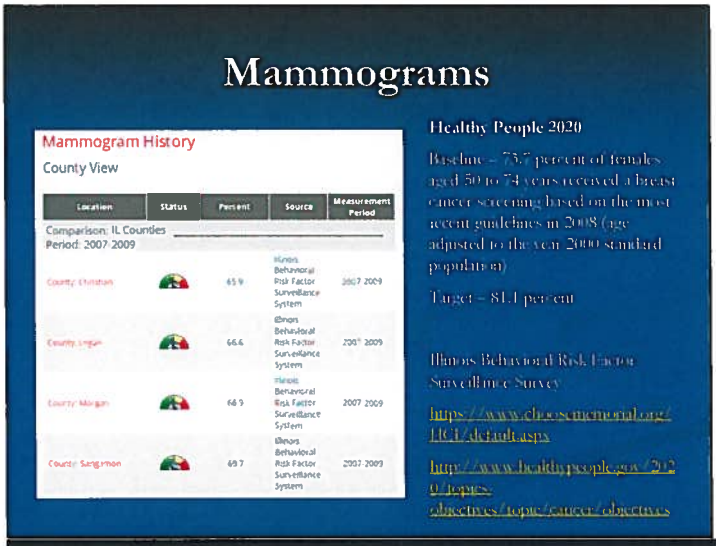
Why is this important?
The Pap test, also known as a Pap smear, checks for changes in the cells of the cervix that can be early signs of cervical cancer. Cervical cancer is a common cancer that has a very high cure rate when caught early. If Pap results are abnormal, further testing or treatment may be necessary. Many abnormalities resolve without leading to cancer. The American College of Obstetricians and Gynecologists recommends that all women get regular Pap tests. Women under 30 should have a Pap test every 2 years. After age 30, the frequency of testing depends on the woman's age and health history.

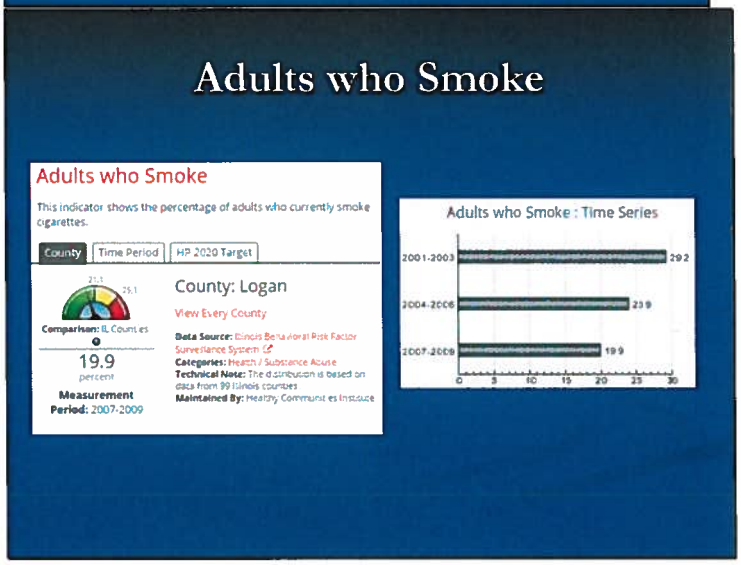




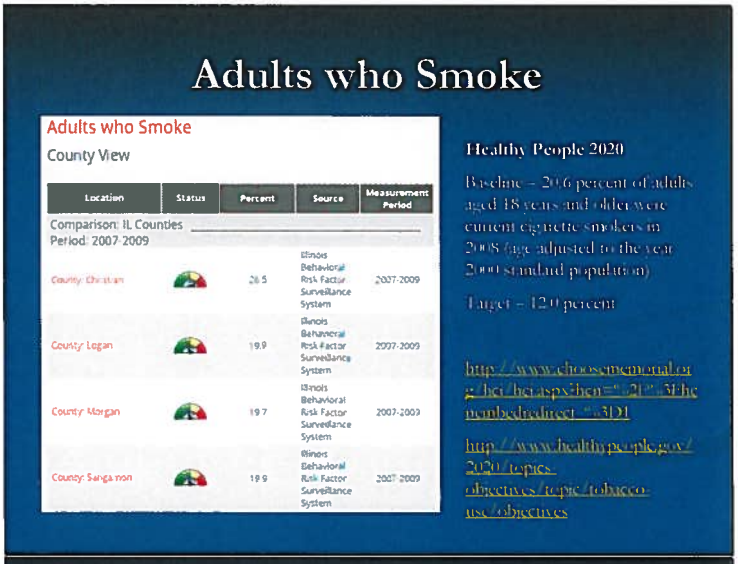
Why is this important?
A mammogram is an x-ray of the breast that can be used to detect changes in the breast such as tumors and calcifications. The test may be done for screening or for diagnostic purposes. A positive screening mammogram leads to further testing to determine if cancer is present. Mammograms may also be used to evaluate known cases of breast cancer. Although mammograms do not detect all cases of breast cancer, they have been shown to increase early detection, thus reducing mortality. Centers for Disease Control and Prevention provides low-income, uninsured, and underserved women access

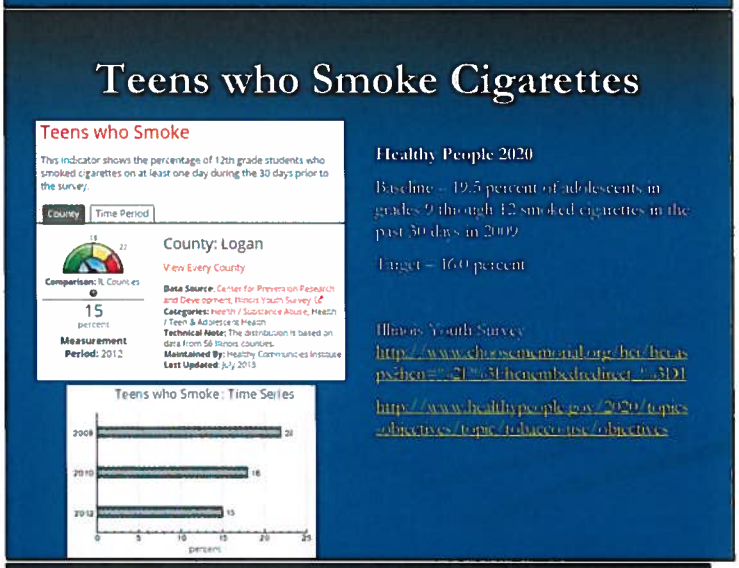
to free or low-cost mammograms through the National Breast and Cervical Cancer Early Detection Program (NBCCEDP).

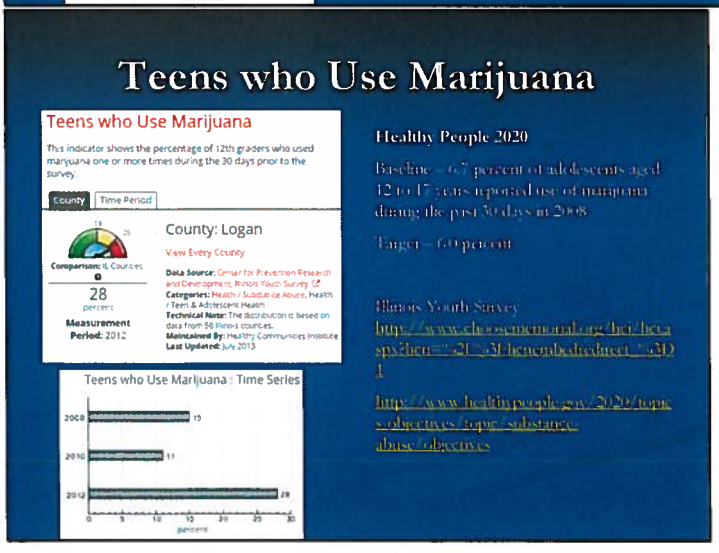




Why is this important?
Tobacco is the agent most responsible for avoidable illness and death in America today. Tobacco use brings premature death to almost half a million Americans each year, and it contributes to profound disability and pain in many others. Approximately one-third of all tobacco users in this country will die prematurely because of their dependence on tobacco. Areas with a high smoking prevalence will also have greater exposure to secondhand smoke for non-smokers, which can cause or exacerbate a wide range of adverse health effects, including cancer, respiratory infections, and asthma.

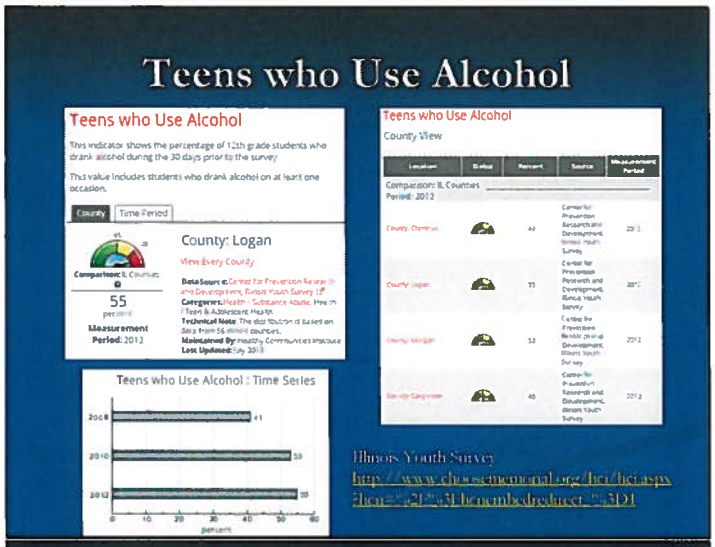


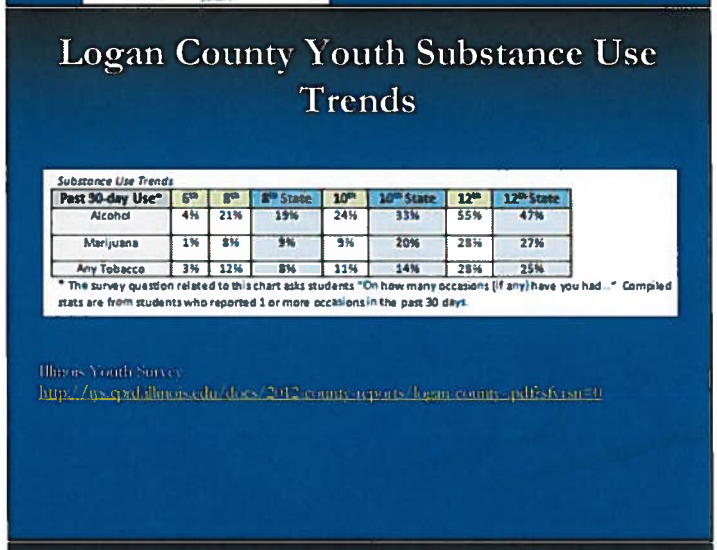


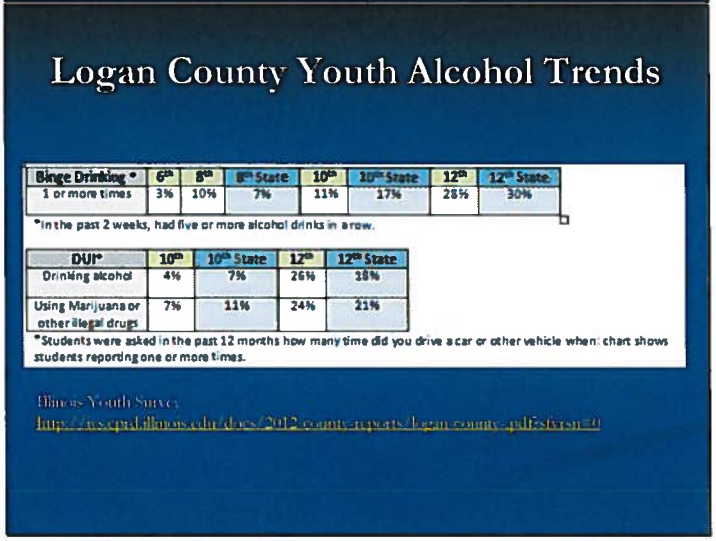


Why is this important?
Health behavior patterns formed in adolescence play a crucial role in health throughout life. Those who start smoking young are more likely to have a long-term addiction to nicotine than people who start smoking later in life, putting them at greater risk for smoking-related illness and death. Tobacco use is responsible for more than 430,000 deaths per year among adults in the United States. If smoking prevalence among adolescents persists, it is estimated that 5 million persons under the age of 18 will die prematurely from smoking-related diseases.

Why is this important?
Among youth, illicit drug use is associated with heavy alcohol use, tobacco use, delinquency, violence, and suicide. Marijuana is the most commonly abused illicit drug in the United States. Marijuana intoxication can cause distorted perceptions, impaired coordination, difficulty thinking and problem solving, and problems with learning and memory. Many research studies have shown that marijuana

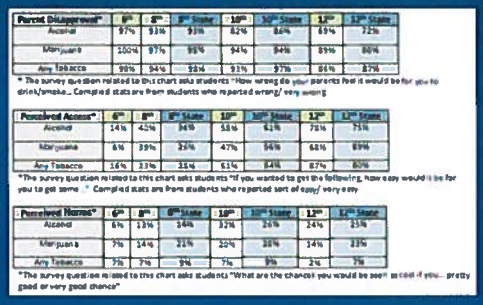






Why is this important?
According to research by the National Institute on Alcohol Abuse and Alcoholism, adolescents who begin drinking at a young age are more likely to develop alcohol dependence than those who begin drinking at age 21. Patterns formed during adolescence play a critical role in health throughout adulthood. Alcohol use also impairs judgment and can lead to other high-risk behaviors such as drunk driving and sexual activity.

Logan County Youth Parental Disapproval, Perceived Access, Perceived Norms



Parent Disapproval*	6th	8th	8th State	10th	10th State	12th	12th State
Alcohol	97%	93%	93%	82%	86%	69%	72%
Marijuana	100%	97%	98%	94%	94%	89%	86%
Any Tobacco	98%	94%	92%	93%	97%	86%	87%

* The survey question related to this chart asks students "How wrong do your parents feel it would be for you to drink/smoke... Compiled stats are from students who reported wrong/ very wrong

Perceived Access*	6th	8th	8th State	10th	10th State	12th	12th State
Alcohol	14%	42%	34%	58%	61%	78%	75%
Marijuana	6%	39%	32%	47%	56%	68%	69%
Any Tobacco	16%	33%	33%	61%	64%	87%	80%

*The survey question related to this chart asks students "If you wanted to get the following, how easy would it be for you to get some ..." Compiled stats are from students who reported sort of easy/ very easy

Perceived Norms*	6th	8th	8th State	10th	10th State	12th	12th State
Alcohol	6%	13%	14%	32%	26%	24%	25%
Marijuana	7%	14%	21%	20%	28%	14%	23%
Any Tobacco	7%	7%	9%	7%	9%	2%	7%

*The survey question related to this chart asks students "What are the chances you would be seen as cool if you... pretty good or very good chance"

Illinois Youth Survey
http://ys.cprd.illinois.edu/docs/2012-county-reports/logan-county-pdf?sfvrsn=0

Logan County Youth – Substance First Use

Mean Age of First Use*	12th	12th State
Alcohol	15.1	14.7
Marijuana	15.6	15.0
Any Tobacco	14.7	15.2

*Drug initiation among those who have ever used each drug: average (mean) age

Illinois Youth Survey
http://ys.cprd.illinois.edu/docs/2012-county-reports/logan-county-pdf?sfvrsn=0

Logan County Youth – Mental and Social Health

Mental, Social Health

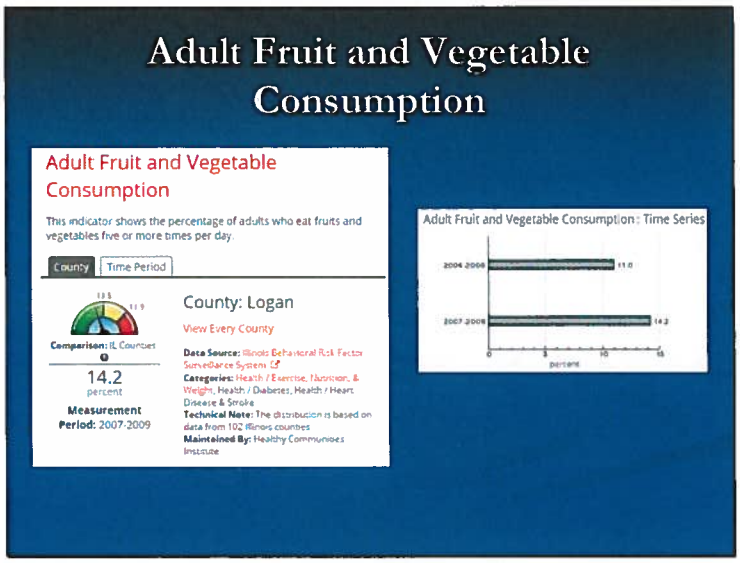
Depression*	8th	8th State	10th	10th State	12th	12th State
Yes	32%	28%	22%	29%	22%	25%

*Students reporting feeling so sad or hopeless almost every day for 2 weeks or more in a row that they stop doing some usual activities.

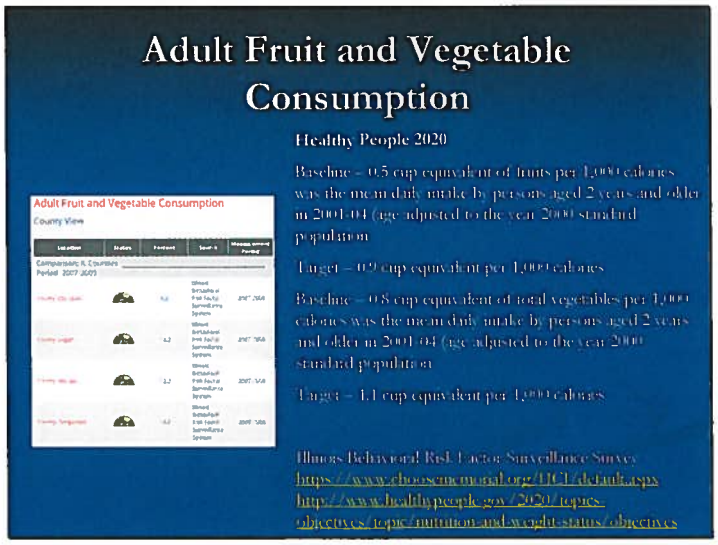
Bullying*	6th	8th	8th State	10th	10th State	12th	12th State
Ever bullied	55%	63%	46%	38%	37%	39%	29%

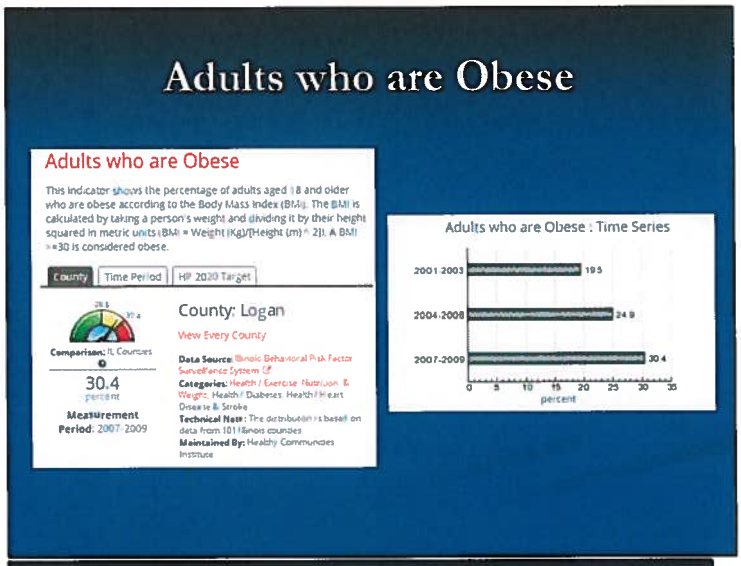
* Bullying Experience, during the past 12 months students reporting some type of bullying for another student at school

Illinois Youth Survey
http://ys.cprd.illinois.edu/docs/2012-county-reports/logan-county-pdf?sfvrsn=0

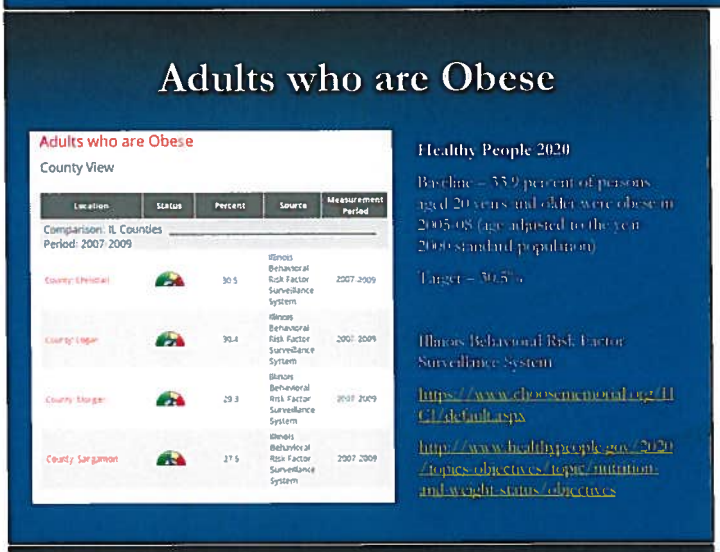


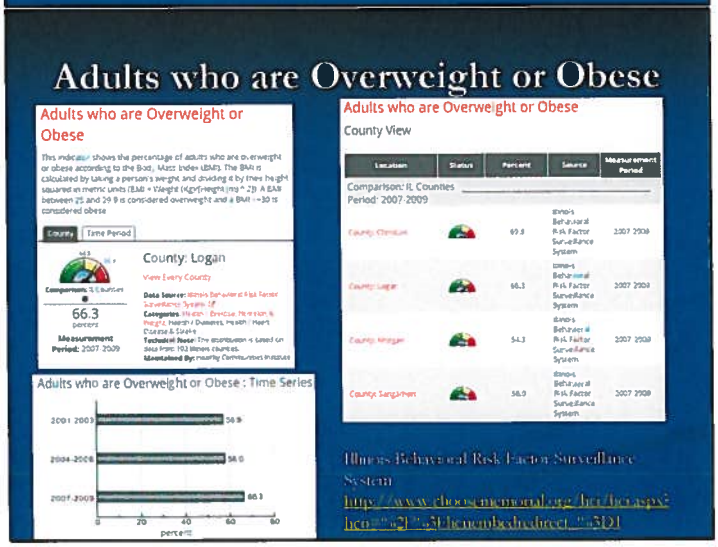
Why is this important?
It is essential to eat a fresh, healthy and balanced diet in order to maintain a healthy weight and prevent chronic disease. Numerous studies have shown a clear link between the amount and variety of fruits and vegetables consumed and rates of chronic diseases, especially cancer. According to the World Cancer Research Fund International, about 35 percent of all cancers can be prevented through increased fruit and vegetable consumption. The USDA currently recommends four and one-half cups (nine servings) of fruits and vegetables daily for a 2,000-calorie diet, with higher or lower amounts depending on the caloric level. Despite the benefits, many people still do not eat recommended levels of fruits and vegetables.



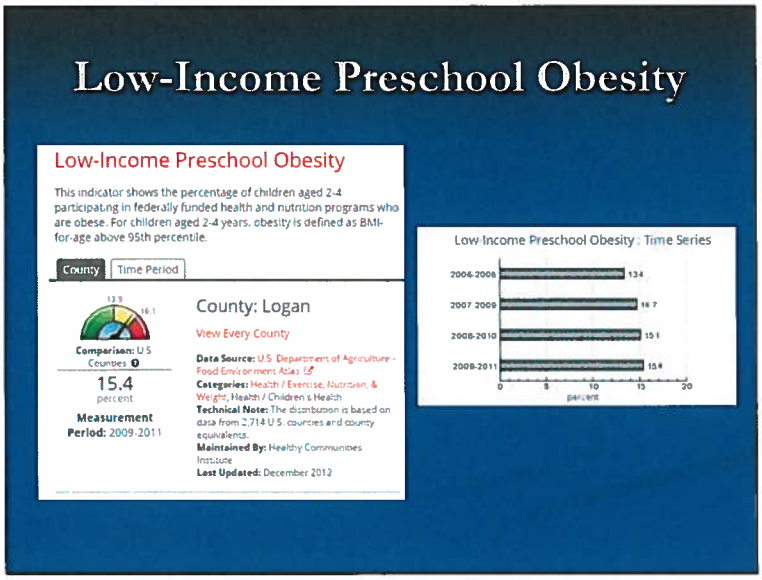


Why is this important?
The percentage of obese adults is an indicator of the overall health and lifestyle of a community. Obesity increases the risk of many diseases and health conditions including heart disease, Type 2 diabetes, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems, and osteoarthritis. Losing weight and maintaining a healthy weight help to prevent and control these diseases. Being obese also carries significant economic costs due to increased healthcare spending and lost earnings.



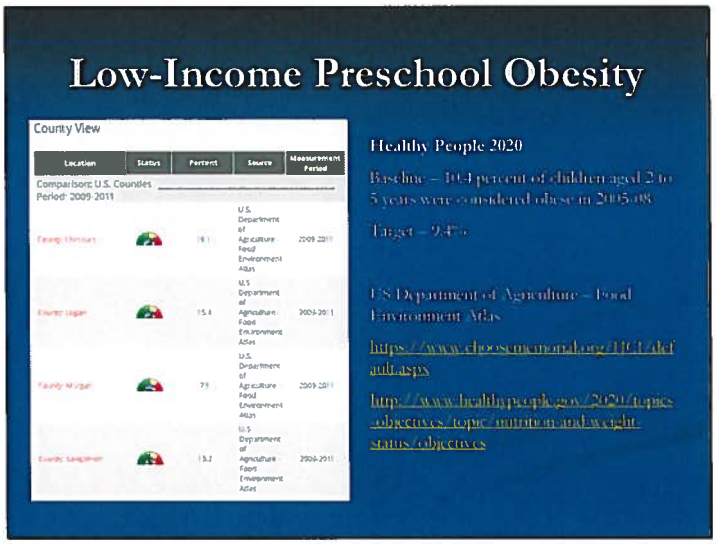


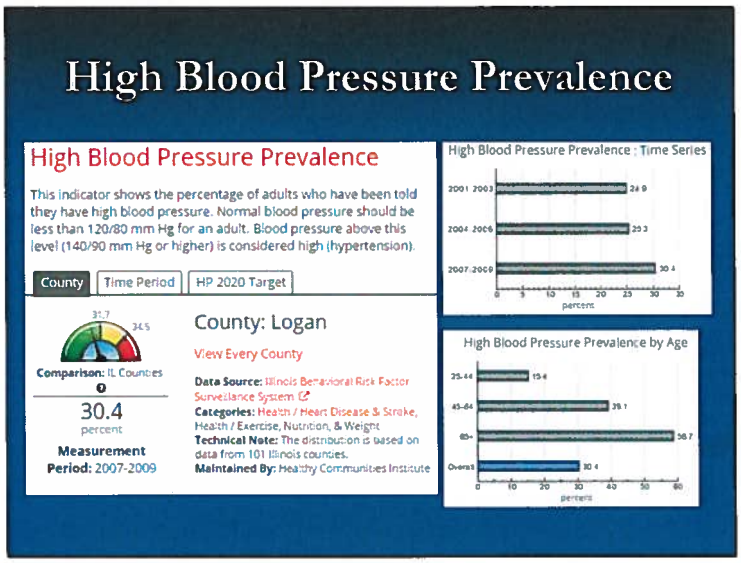
Why is this important?
The percentage of overweight and obese adults is an indicator of the overall health and lifestyle of a community. Being overweight or obese affects quality of life and puts individuals at risk for developing many diseases, especially heart disease, stroke, diabetes, and cancer. Losing weight helps to prevent and control these diseases. Being overweight or obese also carries significant economic costs due to increased healthcare spending and lost earnings.



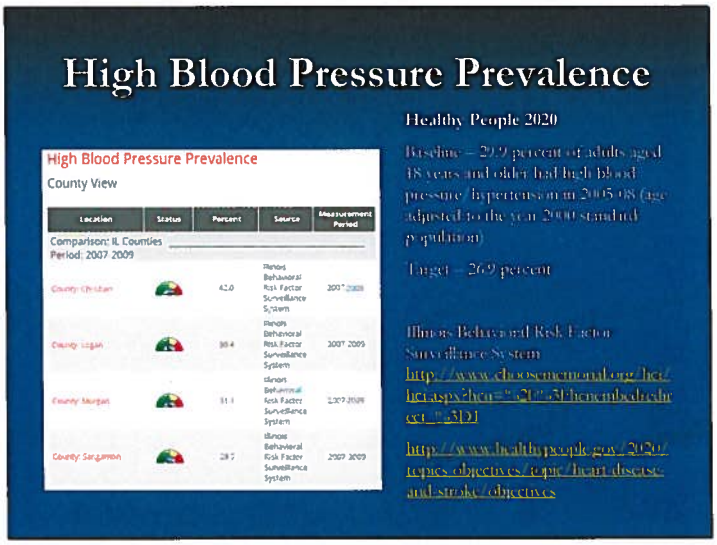
Why is this important?
Childhood obesity has both immediate and long-term health impacts. Children and adolescents who are obese are at greater risk for bone and joint problems, sleep apnea, and are more likely than normal weight peers to be teased and stigmatized which can lead to poor self-esteem. Moreover, obese youth are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure. Finally, overweight and obese youth are more likely than normal weight peers to be overweight or obese adults and are therefore at risk for the associated adult health problems, including heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis.

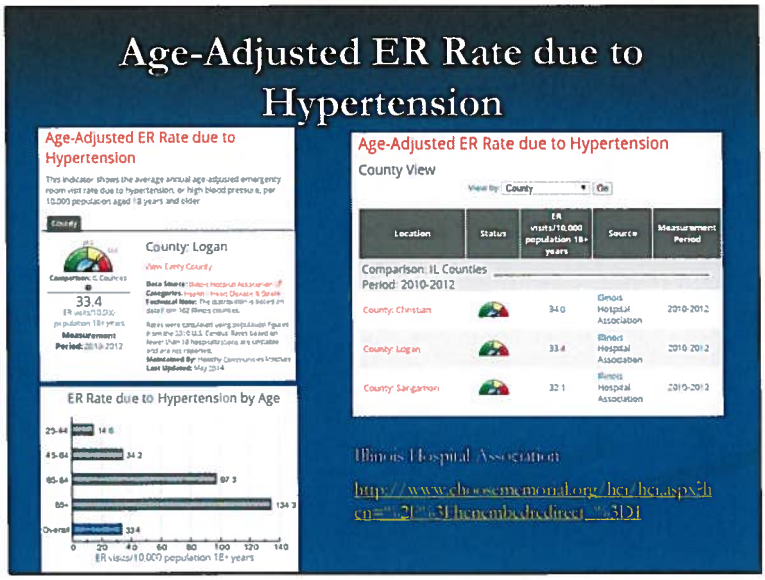
Childhood obesity has more than tripled in the past thirty years. Healthy eating and regular physical activity can lower the risk of becoming obese.



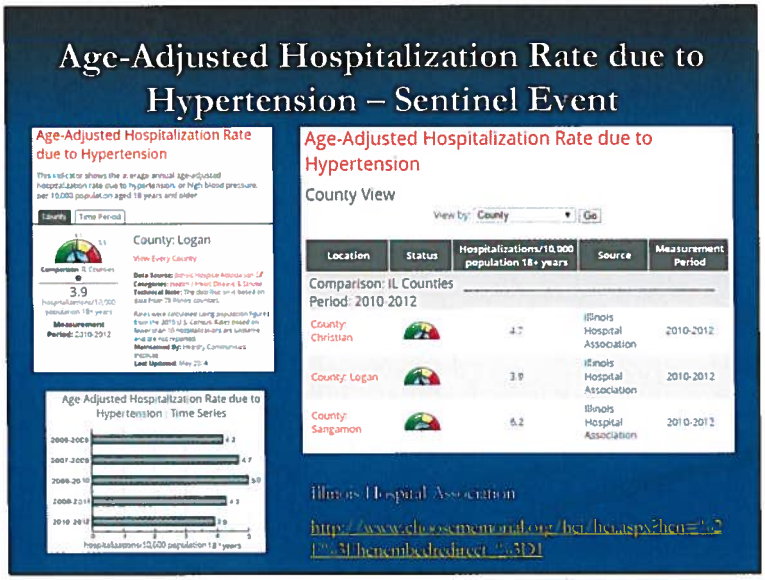


Why is this important?
High blood pressure is the number one modifiable risk factor for stroke. In addition to stroke, high blood pressure also contributes to heart attacks, heart failure, kidney failure, and atherosclerosis. The higher your blood pressure, the greater your risk of heart attack, heart failure, stroke, and kidney disease. In the United States, one in three adults has high blood pressure, and nearly one-third of these people are not aware that they have it. Because there are no symptoms associated with high blood pressure, it is often called the "silent killer." The only way to tell if you have high blood pressure is to have your blood pressure checked. High blood pressure can occur in people of any age or sex; however, it is more common among those over age 35. It is particularly prevalent in African Americans, older adults, obese people, heavy drinkers, and women taking birth control pills. Blood pressure can be controlled through lifestyle changes including eating a heart-healthy diet, limiting alcohol, avoiding tobacco, controlling your weight, and staying physically active.





Why is this important?
Hypertension, commonly known as high blood pressure, is a common and dangerous condition in which the pressure of the blood in blood vessels is higher than it should be. Hypertension increases the risk for heart disease and stroke, and if left untreated can lead to damage of the blood vessels and kidneys, vision loss, and angina. Many factors affect blood pressure, including salt intake, kidney health, and hormone levels. The risk for high blood pressure increases with obesity, diabetes, high salt intake, high stress levels, high alcohol intake, and tobacco use. The Centers for Disease Control and Prevention estimates that about one in three U.S. adults have high blood pressure, but only about half of people with high blood pressure have their condition under control. In 2010, the projected cost of health care services, medications, and missed days of work due to high blood pressure was $93.5 billion.



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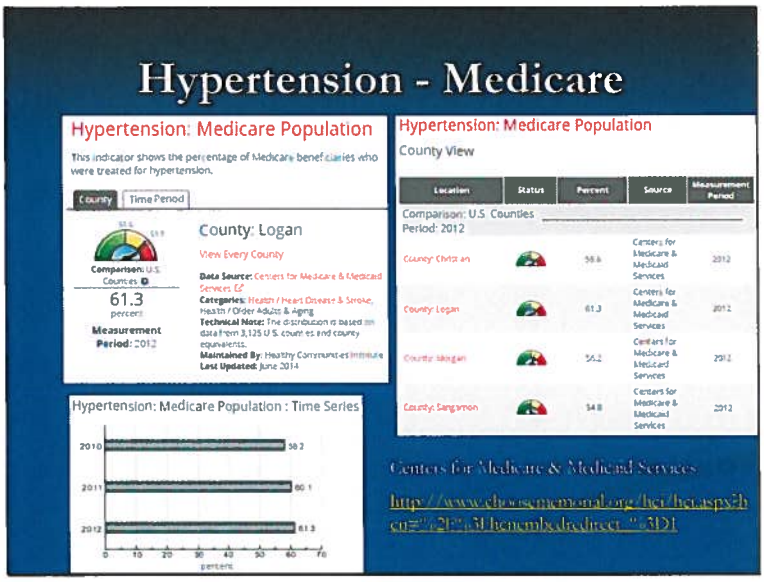
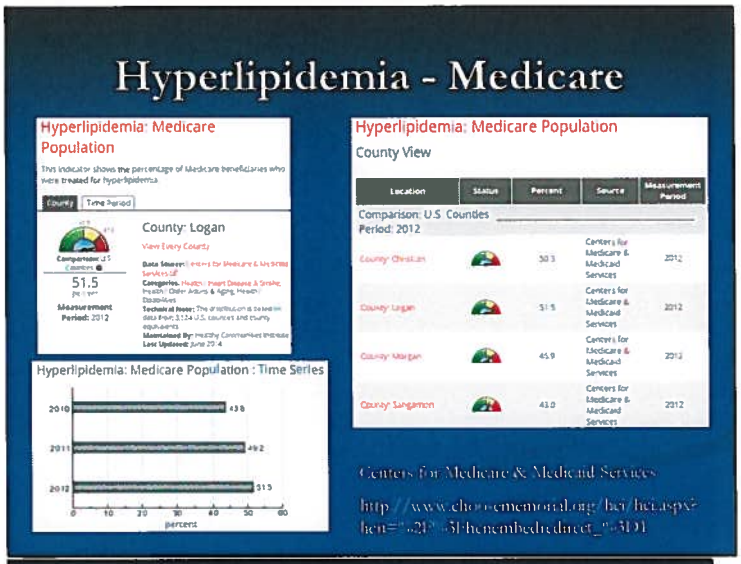
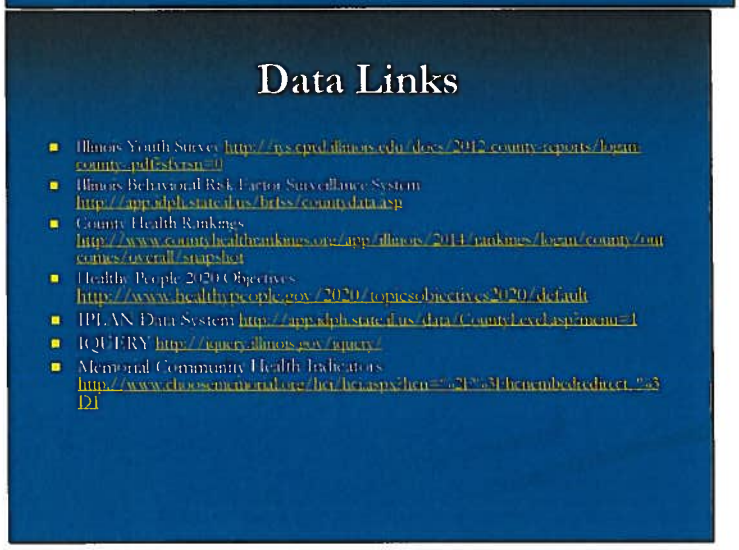


Why is this important?
Hypertension, also known as high blood pressure, is a significant increase in the blood pressure in the arteries. Many people with hypertension may not experience symptoms, even if their blood pressure is dangerously high. However, a few might experience severe headaches, dizziness, irregular heartbeats, and other symptoms. Hypertension is the leading cause of stroke and a major cause of heart attacks. In 2010, approximately 58 million persons adults were treated for hypertension. According to the Agency for Healthcare Research and Quality (AHRQ), direct medical spending to treat hypertension totaled $42.9 billion in 2010, with nearly half ($20.4 billion) of these costs attributed to prescription medications.





Why is this important?
Hyperlipidemia is an increase in the amount of fat (cholesterol and triglycerides) in the blood. Hyperlipidemia by itself has no symptoms; therefore, the only way a doctor can diagnose the condition is through laboratory tests. Hyperlipidemia can lead to atherosclerosis, heart disease and acute pancreatitis. Risk factors for the hyperlipidemia include gender, family history, chronic renal failure, physical inactivity, obesity, and smoking. In many cases, this condition is reversible through healthy eating and regular exercise.