

The Mission of the Iroquois County Public Health Department is to fulfill society's interest in assuring conditions in which people can reach their maximum health potential.

# Iroquois County, Illinois Community Health Plan

**2014 – 2019**



“If we, as a society, are to improve the conditions that affect the health of all of us, we must begin in local communities, dealing with local conditions.”

Future of Public Health; Institute of Medicine (IOM) 19



# **Community Health Assessment and Community Health Plan Iroquois County, Illinois**

**2014 – 2019**

Submitted to the  
Illinois Department of Public Health

Presented by the  
Iroquois County Public Health Department  
and  
Iroquois County Board of Health

Prepared by:  
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## Table of Contents

Organizational Capacity, Board of Health Letter of Acceptance	5
Community Health Plan, Board of Health Letter of Adoption	6
Iroquois County Board of Health Members List	7
Statement of Purpose IPLAN Coordinator	8
Executive Summary	9
Community Advisory Coalition Committee List	12
IPLAN Process	13
Organizational Capacity	14
Community Process	15
Community Health Assessment	17
Determinants of Health	18
Demographics-Socioeconomic Characteristics	18
General Health and Access to Care	26
Maternal and Child Health	39
Chronic Disease	51
Infectious Disease	58
Environmental, Occupational and Injury Control	63
Sentinel Events	74
Community Health Plan	76
Reduce Breast and Cervical Cancer	78
Supportive Data	79
Health Problem Worksheet	86
Health Problem Analysis Worksheet	88
Outcome and Impact Objectives	89
Intervention Strategies / Community Partnerships	91

## Table of Contents, cont.

### Community Health Plan, cont.

Reduce Obesity in Preschool Children Ages 2 – 5	94
Supportive Data	95
Health Problem Worksheet	100
Health Problem Analysis Worksheet	102
Outcome and Impact Objectives	103
Intervention Strategies / Community Partnerships	104
Reduce Tobacco Use	107
Supportive Data	108
Health Problem Worksheet	119
Health Problem Analysis Worksheet	121
Outcome and Impact Objectives	122
Intervention Strategies / Community Partnerships	123
Sources	125
Appendix A. IPLAN Coordinator Job Description	130



# Iroquois County Public Health Department

Dee Ann Schippert, RN, BSN  
Public Health Administrator

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April 28, 2014

Tom Szpyrka, IPLAN Administrator  
Division of Health Policy, Illinois Department of Public Health  
525 W. Jefferson St.  
Springfield, IL 62761

Dear Mr. Szpyrka:

Please accept this letter as official confirmation that the IPLAN for Iroquois County has been completed along with the organizational capacity assessment and preliminary strategic planning process required for the initial certification of the Iroquois County Public Health Department. The Iroquois County Board of Health has reviewed and approved the IPLAN on April 28, 2014.

The document was submitted to each BOH member by email for their review and comments, prior to the formal presentation by Sheila A. Lawson, IPLAN Consultant and Steven Williams, MPH; Ford-Iroquois Public Health Department, Interim Administrator on April 28, 2014.

Please feel free to contact Dee Ann Schippert, Administrator, Iroquois County Public Health Department if you have questions regarding the organizational capacity assessment or other aspects of the IPLAN.

Best Regards,

A handwritten signature in black ink, appearing to read 'John Shure', is written over a light blue horizontal line.

John Shure, President  
Iroquois County Board of Health

The Iroquois County Public Health Department does not discriminate in admission to programs or treatment of employment in programs or activities in compliance with the Illinois Human Rights Act; the U.S. Civil Rights Act; Section 504 of the Rehabilitation Act; the Age Discrimination Act; the Age Discrimination in Employment Act; and the U.S. and Illinois Constitution. If you feel you have been discriminated against, you have a right to file a complaint with the Illinois Department of Aging; for information call 1-800-252-8966 (Voice & TDD), or contact Iroquois County Public Health Department at 1-815-432-2483.

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# Iroquois County Public Health Department

Dee Ann Schippert, RN, BSN  
Public Health Administrator

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April 28, 2014

Tom Szpyrka, IPLAN Administrator  
Division of Health Policy  
Illinois Department of Public Health  
525 W. Jefferson St.  
Springfield, IL 62761

Dear Mr. Szpyrka:

Please accept this letter as documentation of the adoption of the Iroquois County Community Health Plan for 2014-2019. The Iroquois County Board of Health voted unanimously to adopt the Iroquois County Community Health Plan for 2014-2019 at the April 28, 2014 meeting.

Please feel free to contact Dee Ann Schippert, Administrator, Iroquois County Public Health Department if you have questions regarding the organizational capacity assessment or other aspects of the IPLAN.

Best Regards,

A handwritten signature in black ink, appearing to read 'John Shure', is written over a light blue horizontal line.

John Shure, President  
Iroquois County Board of Health

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**Iroquois County Public Health Department  
Board of Health Member List**

John Shure, President

Michelle Fairley, R.N.

Lauren Luecke, M.M.F.T.

Tammy Pree, R.N.

V. Aravind Reddy, M.D.

James Tungate, MA, Ph.D., J.D., D.H.L.

Rodney Yergler, D.D.S. PC

Philip Zumwalt, M.D.

## Statement of Purpose

In accordance with requirements set by the Illinois Department of Public Health rules, Title 77: Part 600.400: Public Health Practice Standards, we submit the 2014-2019 Iroquois County Community Health Plan. This document was designed under the guidance structure provided by the Illinois Project for Local Assessment of Needs (IPLAN). The plan is a result of a comprehensive, community-based public health needs assessment, including reviews of relevant data, collective perceptions of the community participants, and dialogue about the overall health of Iroquois County. This document is presented as a guidance structure to improve the overall health and well being of Iroquois County residents over the next five years, by setting attainable goals with measurable outcomes and enhancing community resource partnerships. Additionally, the newly created Iroquois County Public Health Department has created a new staff position – an *IPLAN Coordinator*. The *IPLAN Coordinator* will work with community partners and organizations, primary care and other healthcare providers, public, private and voluntary entities, schools, public interest groups, and other resources to facilitate, coordinate, implement and monitor the activities required to successfully meet the goals of the IPLAN. Much like the legislation introduced and passed by the Illinois General Assembly that created an *Implementation Coordination Council (HB5565)* to be appointed by the Governor, to carry forward the Illinois State Health Improvement Plan (SHIP), the Iroquois County *IPLAN* Coordinator will promote the IPLAN’s “common agenda” for health improvement of Iroquois County residents.



## Executive Summary

Iroquois County has a history of numerous long-standing health challenges within its communities. These challenges are deep-rooted and many have become cultural norms. These problems continue to influence health behaviors throughout the county. The Robert Wood Johnson Foundation's County Health Rankings and Roadmaps are an indication of these problems demonstrated with Iroquois County's overall *Health Outcome* rankings as follows: 28<sup>th</sup> in 2011, 43<sup>rd</sup> in 2012, and 68<sup>th</sup> in 2013 out of 102 counties. There was improvement in 2014 in the overall ranking to 56<sup>th</sup>. Even with the increased ranking, the significant decline from 2011 to 2013 demonstrates the need to more closely address certain health indicators within the County. One of the leading indicators utilized in the ranking system gauges Iroquois county resident's potential for premature death (years of potential life lost before age 75). Iroquois County's ranking for "Mortality" (changed to "Length of Life" in 2014) moved from a low of 48<sup>th</sup> in 2011 to a high of 85<sup>th</sup> in 2014. This particular trend in ranking is most disturbing and has numerous causes. In 2014, the percentages for adult smoking (24%), adult obesity (32%), and physical inactivity (31%) are all higher in Iroquois County than Illinois' percentages of 18%, 28% and 24% respectively. Furthermore, Illinois' percentages are not as good as the "Top U.S. Performers" which are as follows: adult smokers – 14%, adult obesity – 25%, and physical inactivity-21%.

This trend in ranking is disturbing and has influenced the health priorities selected for the Community Plan. Additional other possible causes for changes in rankings include the increased number of Medicaid eligible recipients and School Free and Reduced Lunch Program eligible children. These numbers have increased due to declining socio-economic status within the county. Iroquois County has continued to struggle with economic revitalization efforts well before the recent U.S. and State economic recession. However, Iroquois County is continues to make efforts to address the many challenges.

The 2014-2019 Iroquois County Community Health Plan was accomplished with direct contribution from numerous individuals representing a variety of agencies and organizations (See Advisory Committee Coalition Members List) from across the county. Development of this Plan has been a collaborative effort between the community partners, local primary health care and mental health care providers, local hospital, local and state government representatives, local volunteer organizations, community stakeholders representing a variety of assistance and service organizations, and input from county residents.

The IPLAN process was initiated with an Internal Organizational Capacity Assessment to determine the health and well being of the proposed Iroquois County Public Health Department (ICPHD). To quote the *Illinois State Health Improvement Plan 2010*, we clearly understand the role of public health as, "...the science and art of preventing disease, prolonging life, promoting health through organized community efforts, and the public health system is the collection of public, private and voluntary entities as well as individuals and informal associations that contribute to the public's health within a jurisdiction." Furthermore, the goals and objectives will be accomplished by decreasing

fragmentation in the current healthcare system and promoting collaboration among all public, private and voluntary stakeholders.

Late in 2013, the Iroquois and Ford County Commissions voted to dissolve the Ford-Iroquois Public Health Department (FIPHD) and create two separate health departments. During this period the FIPHD's Administrator resigned and the home health agency was closed. FIPHD also lost a number of employees. The remaining staff worked diligently to maintain all services during this interim period. In September, 2013, FIPHD hired BE Smith to recruit a replacement Interim Administrator for the purpose of facilitating the dissolution of the bi-county health department and assist with the formation of the two new health departments. In November, 2013; Steven Williams, MPH (through BE Smith) was appointed as the Interim Administrator for FIPHD. Mr. Williams has worked with the FIPHD BOH and both new BOHs in order to assure that the new health departments are certified in a timely manner. It is anticipated that both counties new health departments will be certified by June 1, 2014.

This organizational capacity assessment was especially critical for, newly formed and awaiting certification, Iroquois County Public Health Department. As discussed, dramatic restructuring was experienced in 2014 due to the Ford-Iroquois Public Health Department (FIPHD) dissolving and re-forming into the proposed Iroquois County Public Health Department and the proposed Ford County Public Health Department combined with the fiscal crisis of the State of Illinois. The Ford-Iroquois Public Health Department suffered a reduction in staffing. Additional human resources were lost in 2013 with the closure of the home health division within FIPHD.

The Internal Organizational Assessment crystallized the need for true community involvement by our partners and citizens to improve community health as programs and services once provided by the FIPHD have now been subcontracted to local partners. This assessment determined overall health of the department in terms of the following: financial health and staffing; structure and effectiveness of current programs and services offered to the community; and overall effectiveness of communication with staff, the Board of Health, local government and the public. At the same time, the internal assessment provided administration with an opportunity to set goals, strategies and outcomes for the department as a whole during the coming five years.

The Community Advisory Coalition Committee (CACC) invested a great deal of thought, effort and time in identifying three (3) community health indicators (health problems). The committee members demonstrated a genuine concern to weigh and balance the information provided including the data presented by FIPHD staff, as well as committee member's beliefs, experiences, and perceptions as community stakeholders. The committee expressed considerable concern about how the community can address many of the health issues as the State's fiscal crisis continues and funding sources diminish. There was extensive discussion regarding combating community "cultural" issues such as obesity, use of preventive health services and tobacco use. Tobacco use among the youth was an especially concerning issue and discussed at-length. The committee desired specific focus on striving

to influence youth to not “take the first puff” as well as education on the long term effects of tobacco use. Other health concerns and issues were discussed. Even more importantly, the Committee desired to know how the newly formed ICPHD and stakeholders within the community would educate, provide access to, inspire and give confidence to Iroquois County citizens, especially the youth. The Committee agreed that with these activities and elements might provide opportunity for individuals to make better life choices. There was much discussion about being proactive and positive in the approaches and strategies for the health concerns listed. The committee expressed the desire to address prevention efforts that include education, mentoring and the desire to strive for effective strategies that effect change and transformation verses simply a “band-aid” approach.

During the discussions, access to care and lack of knowledge and awareness were common themes for many of the health concerns identified. Several in the group expressed a desire to make these issues two of the top identified health concerns. After continued discussion, group consensus was reached that access to care and education combined with providing information are critical components of planning a healthier community and building healthier lives. These critical components will be addressed as part of the intervention strategies to be developed for the identified health priorities.

As planning progressed, the CACC conducted lengthy discussions regarding numerous health problems in Iroquois County. Any one of these health problems could have been selected as one (1) of the three (3) community health priorities. The problems discussed and *not* selected included the following: Sexual Assault Awareness; Assistance for Seniors with Disabilities; Mental Health Awareness; Reduce Drug and Alcohol Abuse; Teen Pregnancy Awareness; Obesity and Wellness for Middle School Students; Obesity and Wellness for High School Students; and Water and Air Quality Environmental Issues;

As planning progressed, the CACC identified and reached consensus upon the following three (3) community health priorities to be addressed by setting attainable goals with measurable outcomes within the 2014 – 2019 plan:

1. Reduce Breast and Cervical Cancer
2. Reduce Obesity in Preschool Children Ages 2 – 5
3. Reduce Tobacco Use

The Iroquois County Public Health Department staff members, along with the community partners on the Community Advisory Coalition Committee, join the Iroquois County Public Health Department Board of Health in submitting for approval this 2014 – 2019 five (5)-year plan to improve the health of Iroquois County residents.

## Community Advisory Coalition Committee List

The newly formed Iroquois County Public Health Department extends sincere appreciation and gratitude to the community representatives who willingly gave of their time, talents and perspectives to ensure the IPLAN was successfully completed. The following is a list of members and organizations represented:

Ford-Iroquois Public Health Department

\*Dee Ann Schippert RN, BSN

\*Ellen McCullough, MSW

\*Terry Eimen BS, LEHP, CPHA

\*Karry Hines RN, BSN

\*Danielle Walls, BS

\*Sandra Sikma

LuAnn Armantrout, RN

Consultant

Ford-Iroquois Public Health Department

\*Steven Williams, MPH

Interim Administrator

Iroquois County Board

\*Rodney Copas, Chairman

Iroquois Mental Health Clinic

\*Alberta Burton, MSW, LCPC

Iroquois County Probation Department

Barb King

Greg Barrett

University of Illinois Extension Office

Chelsey Byers, MA

Milford School District

Dale Hastings, Superintendent

Iroquois County Board Member

\*John Shure

\*Executive Committee Member

Iroquois Sexual Assault Services

Kami Garrison, Education Coordinator

Superintendent of Schools, Unit 9

Kenny Lee

Options

Independent Living Specialist

Lenda Brasel

Iroquois Memorial Hospital

\*Mary Kay Lavicka, CRTT

Outreach Director

Harbor House

Nalena Buhrmester

Iroquois Sexual Assault Services

Medical/Legal Advocate

Tammy Barragree

University of Illinois Extension Office

Liea Kedem

Unit 9 School Nurse

\*Teresa Castonguay RN, BSN

Milford Unit School Nurse

Debra Longest, RN, BSN

IPLAN Consultant

\*Sheila A. Lawson, BS, PCMH CCE

We would like to express special appreciation to Mr. Tom Szpyrka, IPLAN Administrator, Illinois Department of Public Health. Mr. Szpyrka attended several IPLAN meetings and provided invaluable guidance, suggestions, resources and direction for completion of the Iroquois County Community Health Assessment and Community Health Plan.

## **IPLAN Process**

This document was designed under the guidance structure provided by the Illinois Project for Local Assessment of Needs (IPLAN). The Iroquois County Public Health Department IPLAN team chose to follow the Assessment Protocol for Excellence in Public Health (APEXPH) process for assessment and development of the Community Health Plan.

An initial planning meeting for the IPLAN was held on January 8, 2014. The following individuals attended: Dee Ann Schippert, RN, BSN, Ellen McCullough, MSW; Terry Eimen, BS, LEHP, CPHA; LuAnn Armantrout, RN; Sandra Sikma; Danielle Walls, BS; and Steven Williams, MPH, Interim Administrator, FIPHD. At this meeting, Mr. Williams appointed the internal IPLAN team. Mr. Williams requested that Dee Schippert lead the process for both Iroquois and Ford Counties. Mrs. Schippert is a tenured, experienced Community Disease and School Health Coordinator with extensive community awareness and networks developed over the years. Based on this experience and knowledge of the communities, Mrs. Schippert could engage those in the community that would serve on the committees. With time and resources at premium value, this 12 month process must be accomplished in less than 14 weeks. While the process has been challenging considering that the bi-county health department was also being dissolved, all of the senior staff at FIPHD have provided excellent input and served on both county committees.

An IPLAN consultant, Sheila A. Lawson, BS, PCMH CCE, was added to the team January, 2014 to provide assistance with the following: gathering and compiling data; scribing the actual IPLAN; and facilitation as needed. Mrs. Lawson has many years experience as a medical management consultant including facility and service assessments, strategic planning and feasibility studies. Mrs. Lawson is also a recognized NCQA Patient Centered Medical Home Certified Content Expert with extensive experience in primary care medical homes.

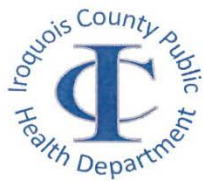
The IPLAN team attended several meetings for the purpose of the organization including the decision to utilize the APEXPH process and the IPLAN variation for plan development. The team initiated discussions regarding which community stakeholders should be invited to be participate on the CACC and to determine how to best approach, to engage, and to elicit community input. A list of stakeholders was compiled and a tentative schedule for community meetings was developed.

This document was designed under the guidance structure provided by the Illinois Project for Local Assessment of Needs (IPLAN). The proposed Iroquois County Public Health Department IPLAN team chose to follow the Certified Local Health Department Code standards for completion of the Community Health Needs Assessment; and, the IPLAN version of APEXPH to complete the Community Health Plan.

## Organizational Capacity

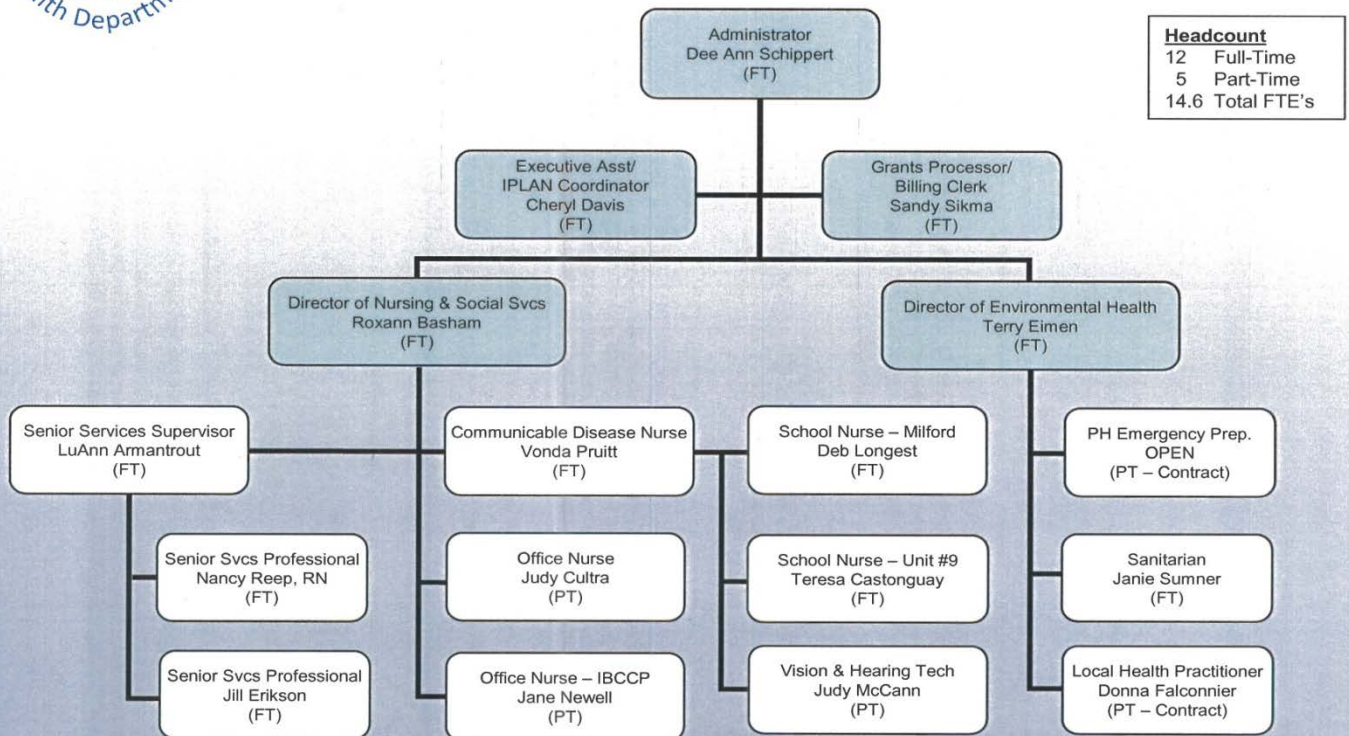
The next step in the process was the completion of the self-assessment of the organizational capacity of the Iroquois County Public Health Department (ICPHD) utilizing the APEX Organizational Capacity Assessment Tool. Worksheets were completed by the proposed Iroquois County Public Health Department administrative staff. Additional input was solicited from health department supervisors and other staff members. The Health Department Administrator held several meetings from January, 2014 through April, 2014 with the administrative staff discussing the results to reach a consensus on the perceived importance of each indicator. Results were compiled to identify strengths, weaknesses, opportunities and threats. The findings were compared to the organizational assessment completed for the previous IPLAN (2009-2014). The Organizational Capacity Assessment was finalized and reviewed by the Board of Health in April, 2014.

The following is the newly formed Iroquois County Public Health Department Organizational Chart:



## IROQUOIS COUNTY HEALTH DEPARTMENT

Organizational Chart  
As of April 24, 2014



## The Community Process

Ford-Iroquois Public Health Department (FIPHD) began the Community Process necessary for the IPLAN prior to the decision to dissolve FIPHD. When the decision was final to dissolve FIPHD and create Iroquois County Public Health Department and Ford County Public Health Department; two (2) Advisory Committees were formed for the purposes of IPLAN completion. The accomplishments and information from the original committee were shared with the new committees and the new work began on a new IPLAN.

The following is a listing of Advisory Committee meetings and major outcomes:

January 27, 2014

- Ford-Iroquois Public Health Department employees discussed priorities and planning phases with community partners, divided into two (2) groups as follows Ford County members and Iroquois County members.
- Mrs. Shelia Lawson was introduced and hired as the IPLAN Consultant, for both counties.

January 29, 2014

- Discussed was the data researched by Mrs. Lawson that would be presented to the partner coalition meeting scheduled for February 3, 2014.

February 3, 2014

- Dee Schippert shared with the bi-counties' IPLAN committees, through PowerPoint Presentations developed by Sheila Lawson, the broad statistical data that had been compiled and provided the groups with the health issues and concerns for the bi-county jurisdiction.
- With the development of two separate Health Departments, two separate IPLANS will be developed for certification.
- Moving forward, separate IPLAN committee meetings will be conducted for each county.

February 10, 2014

- Presented to the general committee was priority and ranking clarification.
- Volunteers were requested and an Executive Committee was formed.

February 14, 2014

- Priorities were agreed upon by the Executive Committee, using the Hanlon Method.  
Ranked as follows:  
(1) Breast & Cervical Cancer Prevention (Reduce Breast and Cervical Cancer)  
(2) Obesity Prevention 2 – 5 Year Olds (Reduce Obesity in Preschool Children Ages 2 – 5)  
(3) Tobacco Use Related to Chronic Disease (Reduce Tobacco Use)

February 18, 2014

- Committee members used the health analysis worksheets and in a joint effort, each priority was dissected and factors assigned accordingly.

February 25, 2014 & March 4, 2014

- The Executive Committee identified the impact and outcome objectives for the ranked priorities and determined the risk factors, contributing factors, barriers, and resources available.

March 24, 2014

- IPLAN Consultant, Shelia Lawson, presented a rough draft of the IPLAN to the coalition.
- Special guest, Tom Szpyrka, Illinois Department of Public Health (IDPH), IPLAN Administrator was introduced to the committee.
- Mr. Szpyrka, reiterated to the group that IDPH was aware of the dissolution situation, and would be as helpful as possible in expediting review of the draft and returning the draft with recommendations.
- A completed draft will be submitted to IDPH by April 15, 2014.

April 28, 2014

- BOH presented with Organizational Capacity Assessment and Community Health Plan for final approval.





## **Community Health Assessment**

### **Determinants of Health**

A variety of health indicators were analyzed to create a community health profile. The purpose of this analysis was to determine the status of the health of the residents of Iroquois County. Selected indicators are described in this section as chosen by the Health Department and IPLAN required data groupings.

The proposed Iroquois County Public Health Department initiated development of the Community Profile by first examining the definition of a “health problem.” According to the Assessment Protocol for Excellence in Public Health (APEXPH), a health problem is defined as: “a situation or condition of people which is considered undesirable, is likely to exist in the future, and is measured as death, disease or disability”. (Source: Next, data from a variety of sources and categories was gathered and analyzed including, but not limited to the following: demographics, social data, health status, risk factors and resource data. Finally, the “health problems” were identified by health department staff and the Community Advisory Coalition Committee.

### **Demographics and Socioeconomic Characteristics**

Data on the basic demographic characteristics is important in understanding current or potential health concerns. Economic conditions of persons including housing and employment can strongly influence health status.

#### **Social Determinants of Health**

The health care and public health systems need to understand health is affected by social and economic conditions, including income, education, and race/ethnicity. Institutional racism has an impact on health outcomes. Health care and public health should be integrated with human services, education systems, environmental health, and economic development. Research has shown that disparities in health care and outcomes due to social and racial inequalities are drastically reduced in areas where there is a high supply/proportion of primary care physicians relative to the overall physician workforce in the area. (ILLINOIS STATE HEALTH IMPROVEMENT PLAN 2010, Public Health System Priority: Improve Access to Health Services, page 10)

The table below is a demographic “snapshot” that demonstrates changes in Iroquois County from 2000 to 2010 and some information is compared to the Illinois state demographics.

<b>Iroquois County Quick Facts</b>					
<b>Subject</b>	<b>2000 Census</b>		<b>2010 Census</b>		
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	
Total Population	31,334	100.0	29,718	100.0	Since 2000, there has been a decrease in population by approximately 5.4%.
Male	15,366	49.0	14,519	48.9	
Female	15,968	51.0	15,199	51.1	
Median Age Both Sexes	39.6	X	43.4	X	Since 2000, the median age of residents has increased 3.8 years.
Median Age Male	X	X	41.7	X	
Median Age Female	X	X	44.7	X	
Total Age 65+	5,672	18.1	5,627	18.9	
Age 65+ Male	2,331	7.4	2,413	8.1	
Age 65+ Female	3,341	10.7	3,214	10.8	
<b>RACE – One Race</b>					
Race – White	30,295	95.9	28,155	94.7	As demonstrated by this data, there has been little change in Iroquois County resident ethnicity since 2000.
Race – Black or African American	223	0.7	233	0.8	
American Indian and Alaska Native	54	0.2	51	0.2	
Asian	94	0.3	103	0.3	
<b>HISPANIC OR LATINO AND RACE</b>					
Hispanic or Latino (of any race)	1,217	3.9	1,584	5.3	According to the data, there has been a slight increase (1.4%) in the Hispanic population within Iroquois County over the 10 year period.
Not Hispanic or Latino	30,117	96.1	28,134	94.7	
<b>Housing Units</b>					
Total Housing Units	13,362	100.0	13,452	100.0	The number of vacant housing units increased by 2.6 percent (2.6%). While the number of owner-occupied units decreased slightly 0.8 percent (0.8%), the number of renter-occupied units increased by 0.8 percent (0.8%).
Occupied housing Units	12,220	91.5	11,956	88.9	
Vacant housing units	1,142	8.5	1,496	11.1	
Owner-occupied Units	9,335 of 12,220	76.4	9,040 of 11,956	75.6	
Renter-occupied Units	2,885 of 12,220	23.6	2,916 of 11,956	24.4	

Subject	2000 Census	2010-2012 3-Year Estimate	Illinois 2010-2012	Median household income and median family income have both increased since 2000. However, household income still remains well below the State's average.
Median household income	\$38,071	\$46,794	\$56,853	
Median family income	\$45,417	\$58,667	X	
Per capital income	\$18,435	\$24,831	\$29,519	

Sources:

- Table DP-1. Profile of General Demographic Characteristics: 2000; U.S. Census Bureau, Census 2000.
- Table DP-1. Profile of General Population and Housing Characteristics: 2010, U.S. Census Bureau, 2010 Census.  
[http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_DP\\_DPDP1](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1)
- U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing Unit Estimates, County Business Patterns, Non-employer Statistics.

Subject Education	2000 Census		2008-2012 5-Year Estimate		Since 2000, there has been a 7.4% increase in individuals graduating from high school bringing the total percent to 87.7% of students finishing. Iroquois County exceeds the State rate by .7%. (Illinois is 87.0%) However, Illinois' rate for residents with a bachelor's degree or higher is 31.1% and Iroquois County is 14.1%. There was an increase county-wide of 2.3%, from 11.8% to 14.1%.
	Number	Percent	Number	Percent (Estimated)	
Educational Attainment Population 25 years and older	21,111	100.0	20,628	100.0	
Less than 9 <sup>th</sup> grade	1,713	8.1	866	4.2	
9 <sup>th</sup> to 12 <sup>th</sup> grade, no diploma	2,440	11.6	1,671	8.1	
High school graduate (includes equivalency)	8,576	40.6	8,334	40.4	
Some college, no degree	4,573	21.7	5,054	24.5	
Associate degree	1,310	6.2	1,815	8.8	
Bachelor's degree	1,523	7.2	2,042	9.9	
Graduate or professional degree	976	4.6	866	4.2	
Percent high school graduate or higher	X	80.3	X	87.7	
Percent bachelor's degree or higher	X	11.8	X	14.1	

Sources: Table DP-2. Profile of General Demographic Characteristics: 2000; U.S. Census Bureau, Census 2000 and Table S1501. EDUCATIONAL ATTAINMENT, 2008-2012 American Community Survey 5-Year Estimates, U.S. Census Bureau, American FactFinder.

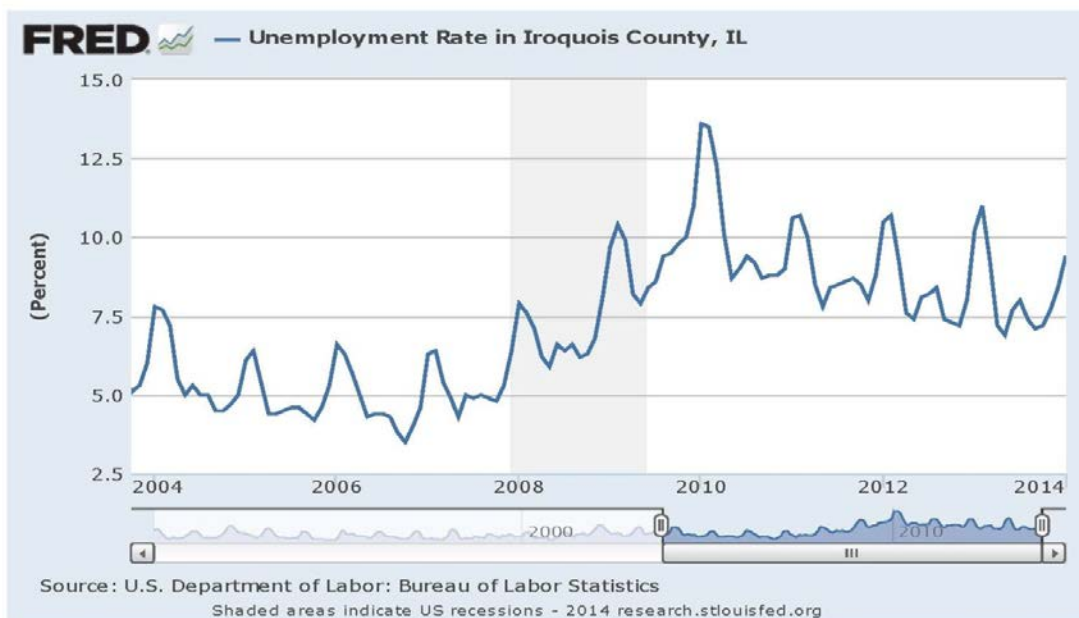
## Unemployment in Iroquois County

Unemployment in Iroquois County has remained higher than the unemployment rate for the State of Illinois. Health is driven by social determinants and achieving health improvement requires addressing the social circumstances that affect people’s ability to be healthy. Lower socio-economic status, including education, income, and community assets, significantly contributes to health disparities. Specifically, unemployment affects many areas of an individual’s life and the lives of the family members, especially children.

According to the Illinois Department of Employment Security (IDES), Local Employment Dynamics data, 301 new jobs were created in Iroquois County during the first quarter of 2012. The average over Q1-2012 and the prior three quarters was 482 jobs created. This is the most current data available. The average net job flow (jobs created – jobs lost) for the same period was 57 jobs created. (*IDES – May 2012*)

Iroquois County and Illinois Unemployment Rate 2004 - 2014		
Month and Year	Iroquois County Unemployment Rate	Illinois Unemployment Rate
January 2004	7.8%	6.4%
January 2006	6.6%	5.2%
January 2008	7.9%	5.5%
January 2009	9.7%	8.0%
January 2010	13.6%	11.4%
January 2011	10.6%	9.4%
January 2012	10.5%	9.1%
January 2013	10.2%	9.2%
January 2014	9.4%	8.7%

The Iroquois data above is depicted on chart below



Updated: March 23, 2014

<http://research.stlouisfed.org/fred2/series/ILIROQ5URN>

## Poverty

Documented data for poverty varies from source to source. Poverty is a problem for many in Iroquois County. Even though, as of 2012, Iroquois County's poverty rate (11.7%) was better than the State's poverty rate (13.7%), poverty is still a prevailing disparity that permeates all areas of an individual's life as well as that of the family. The Public Health Department is concerned for the health of adults and particularly children affected by poverty. The following is an excerpt from the Illinois State Health Improvement Plan that clearly describes the role of poverty related to health care:

**“Health Disparities and Changing Demographics:** Disparities in health outcomes for racial, ethnic and other minority groups drive deteriorating health trends and overall high rates of illness and death; similarly, changing demographics, including proportionately higher numbers of immigrants and elderly, are going to continue to impact health order to improve health outcomes, special attention must be paid to these factors. Furthermore, poorer health outcomes for racial, ethnic and other special populations are social justice issues antithetical to America's values of equity and fairness. The 2009/10 SHIP team defined health disparities as disparities related to: race, ethnicity, gender, geography, age, socio-economic status (education, income, and community assets), sexual orientation and disability status.” Source: Illinois State Health Improvement Plan (SHIP) 2010, Pg. 6.

Facts related to poverty in Iroquois County (reflected in the charts, graphs and tables below):

- poverty rate has increased 3% from 8.7% in 1999 (2000 Census) to 11.7% in 2012 (estimate)
- there are racial inequalities related to poverty levels, e.g. for 2012, white – 10.8%; black – 61.6%; Hispanic – 26.1%
- there is a higher percentage of children in poverty than adults, under 18 years – 16.6% and 18 – 64 years – 10.6%
- there is also a distinct correlation between educational attainment and poverty status as demonstrated by the following:
  - POVERTY RATE FOR THE POPULATION 25 YEARS AND OVER FOR WHOM POVERTY STATUS IS DETERMINED BY EDUCATION ATTAINMENT
    - Less than high school graduate 23.0%
    - High school graduate (includes equivalency) 10.2%
    - Some college or associate's degree 6.9%
    - Bachelor's degree or higher 3.5%

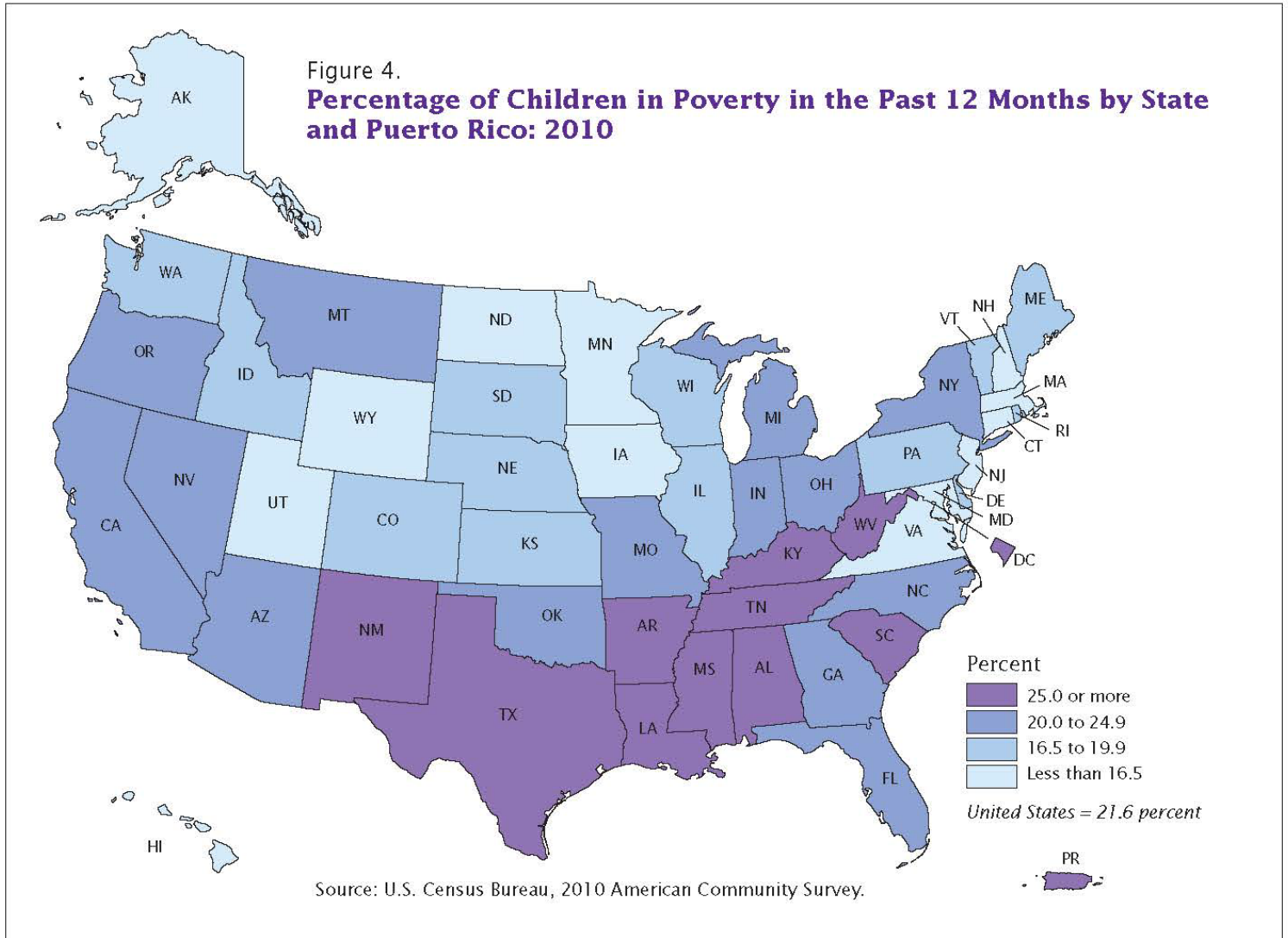
Source: Table S1501. EDUCATIONAL ATTAINMENT; 2008-2012 American Community Survey 5-Year Estimates; U.S. Census Bureau; American FactFinder

<b>Population by Poverty Status in 1999 for Counties: 2000</b>				
Population for whom poverty status is determined	Total Population	Total	Number	Percent
Iroquois County	31,334	30,581	2,669	8.7%

<b>POVERTY STATUS IN THE PAST 12 MONTHS, 2008-2012</b>					
<b>American Community Survey 5-Year Estimates</b>					
<b>Subject</b>	<b>Total</b>		<b>Below poverty level</b>		<b>Percent below poverty level</b>
	<b>Estimate</b>	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>	<b>Estimate</b>
Population for whom poverty status is determined	28,929	+/-167	3,399	+/-376	11.7%
<b>AGE</b>					
Under 18 years	6,764	+/-102	1,123	+/-178	16.6%
18 to 64 years	16,942	+/-57	1,790	+/-237	10.6%
65 years and over	5,223	+/-118	486	+/-98	9.3%
<b>SEX</b>					
Male	14,304	+/-108	1,529	+/-216	10.7%
Female	14,625	+/-122	1,870	+/-215	12.8%
<b>RACE AND HISPANIC OR LATINO ORIGIN</b>					
White	27,864	+/-226	3,013	+/-360	10.8%
Black or African American	279	+/-46	172	+/-61	61.6%
American Indian and Alaska Native	57	+/-28	14	+/-12	24.6%
Asian	150	+/-15	79	+/-59	52.7%
Some other race	316	+/-105	76	+/-60	24.1%
Two or more races	263	+/-65	45	+/-24	17.1%
Hispanic or Latina origin	1,628	+/-14	425	+/-171	26.1%

Source: Table S1701. POVERTY STATUS IN THE PAST 12 MONTHS, 2008-2012 American Community Survey 5-Year Estimates, U.S. Census Bureau, American FactFinder

According to the graph below Illinois' percentage of children in poverty is 16.5% - 19.9% which is better than the United States at 27.6.

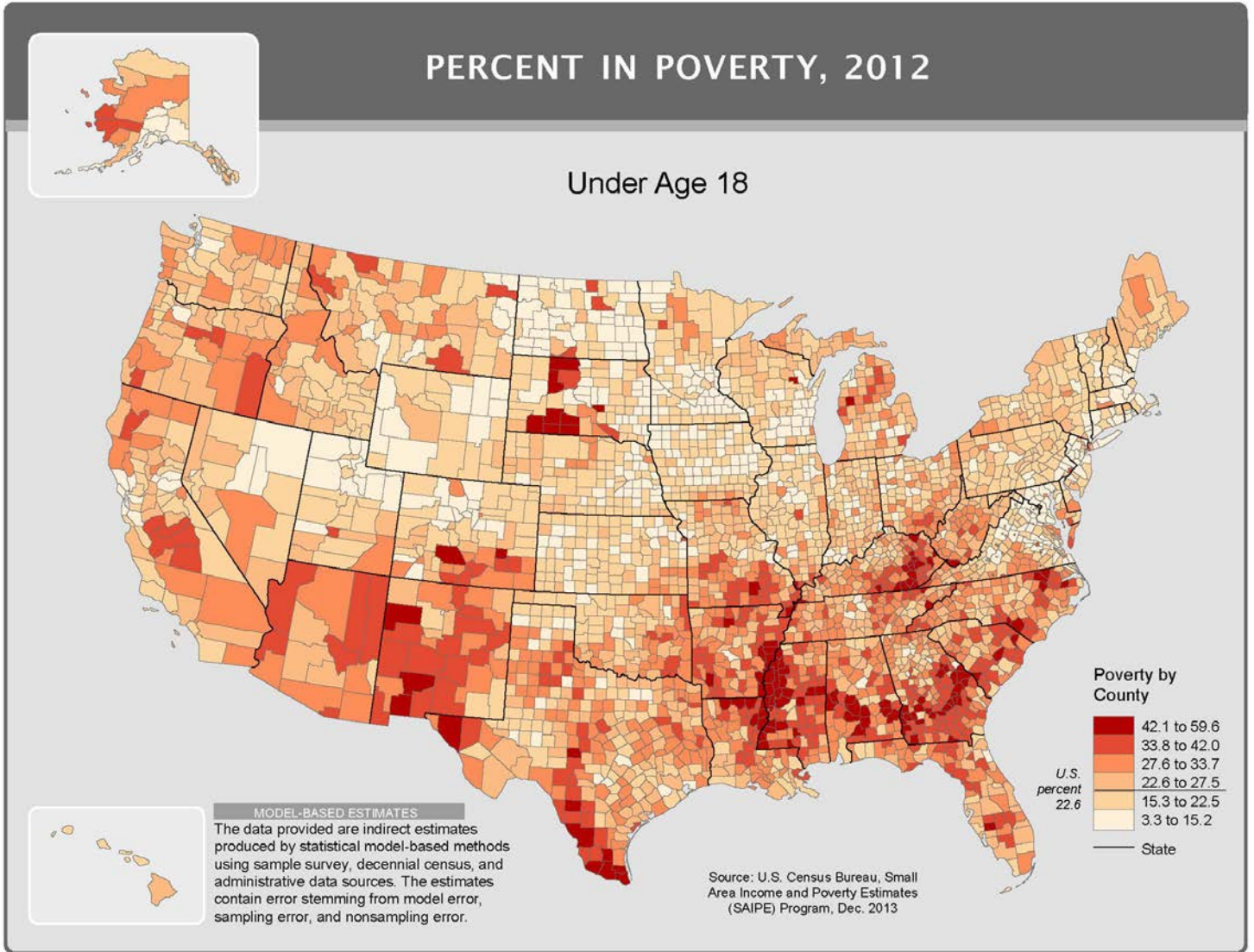


Source: Child Poverty in the United States 2009 and 2010: Selected Race Groups and Hispanic Origin, *American Community Survey Briefs*, Issued November 2011.

According to Robert Wood Johnson Foundation *County Health Rankings & Roadmaps*, Iroquois County's Children in Poverty percent is as follows: 2011 – 17%; 2012 – 18%; 2013 – 21%; and 2014 – 21%. The disturbing analysis is that the percentage increased three (3) consecutive years. In contrast, the encouraging information is that the percentage remains at or below the state percentage and there was no increase from 2013 to 2014. From this same data, there is data that causes some concern. The percent of children eligible for free lunch was 27% in 2011 and in 2012; however, in 2013, the percentage increased to 37%. Again, Iroquois County remains below the state percentage of 39% in 2013.



The pictograph below depicts Iroquois County children (under age 18) that are in poverty as of 2012 in comparison to every county in the United States. Iroquois' percent is 15.3 to 22.5 % which is lower than the U.S. at 22.6%.



## General Health and Access to Care

The 2010 Illinois State Health Improvement Plan (SHIP) lists the first “Public Health System Priorities” as **Improve Access to Health Services**. As a county, state and nation, “poor access to public health services and medical care are major determinants of poor health outcomes and high health care costs. The public health system should:

- Ensure that health services meet the needs of racially and ethnically diverse groups;
- Optimize integration of prevention and primary care through reform of payment and delivery systems, such as the development of pervasive network of patient-centered medical homes.
- Assure universal health care access and coverage.”

(Source: Illinois State Health Improvement Plan 2010, pg. 1)

The SHIP adds that the strategic issue is how Illinois residents’ can effectively gain access and use quality affordable health care and public health services, including many of the services discussed in this Community Assessment. The services include prevention programs, oral health, vision care and mental health, medical and long-term care.

The Robert Wood Johnson Foundation (RWJF) reflects many of the struggles Iroquois County confronts regarding general health and access to care. The following is an excerpt by the RWJF explaining “County Health Rankings and Roadmaps A Healthier Nation, County by County.”

“Where we live matters to our health. The health of a community depends on many different factors, including the environment, education and jobs, access to and quality of healthcare, and individual behaviors. We can improve a community’s health by implementing effective policies and programs. For example, people who live in communities with smoke-free laws are less likely to smoke or to be exposed to second-hand smoke, which reduces lung cancer risk. In addition, people who live in communities with safe and accessible park and recreation space are more likely to exercise, which reduces heart disease risk.

However, health varies greatly across communities, with some places being much healthier than others. And, until now, there has been no standard method to illustrate what we know about what makes people sick or healthy or a central resource to identify what we can do to create healthier places to live, learn, work and play.

We know that much of what influences our health happens outside of the doctor’s office – in our schools, workplaces and neighborhoods. The *County Health Rankings & Roadmaps* program provides information on the overall health of your community and provides the tools necessary to create community-based, evidence-informed solutions.

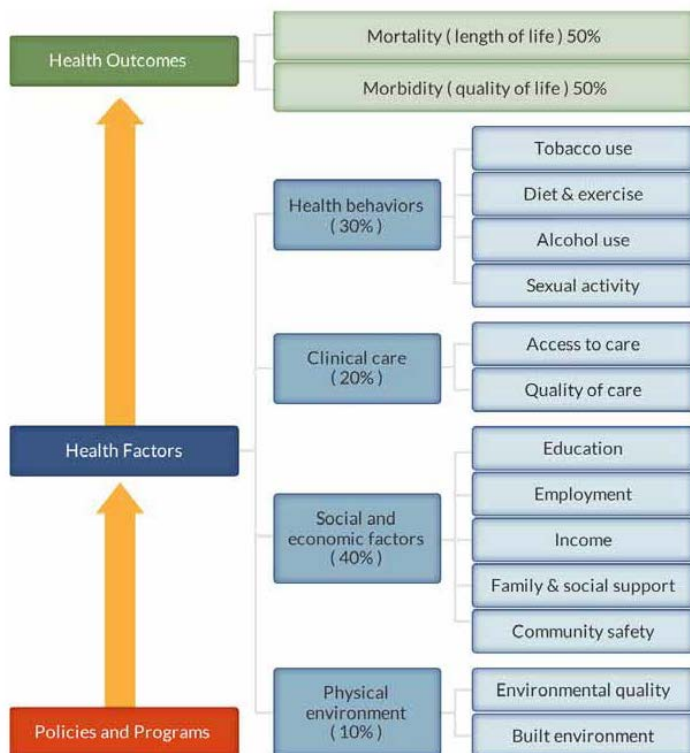
The *County Health Rankings & Roadmaps* program includes the *County Health Rankings* project, launched in 2010, and the newer *Roadmaps* project that mobilizes local communities, national partners and leaders across all sectors to improve health. The program is based on this model of population health improvement:



In this model, health outcomes are measures that describe the current health status of a county. These health outcomes are influenced by a set of health factors. Counties can improve health outcomes by addressing all health factors with effective, evidence-informed policies and programs

Everyone has a stake in community health. We all need to work together to find solutions. The *County Health Rankings & Roadmaps* serve as both a call to action and a needed tool in this effort. “(Source: County Health Ranking & Roadmaps A Healthier Nation, County by County; 2013 Rankings Illinois; [www.countyhealthrankings.org/illinois](http://www.countyhealthrankings.org/illinois))

The following graph depicts how RWJF ranks health outcomes and health factors. The summary rankings are 50%/50% of mortality and morbidity. The summary for health factor rankings are based on weighted scores of four types of factors: behavioral, clinical, social and economic, and environmental. The weights for the factors (shown in parentheses in the figure) are based upon a review of the literature and expert input, but represent just one way of combining these factors.



The following is in regard to Iroquois County and some of this information was mentioned in the Executive Summary. The data discussed is in the table below this text. The dramatic drop in ranking compared to other counties in Illinois from 2011 to 2013 caused a degree of alarm; however, with the recent release of 2014 rankings showed an increase of 12, moving Iroquois County to 56<sup>th</sup>. That ranking indicated there is definitely much room for improvement. Even more alarming, is the dramatic increase from in “Mortality” from 48 to 85 of 102. Access to primary care is a recurring problem for most rural counties and Iroquois County is no exception. The ratio of primary

care providers to residents has improved since 2011, however the ratio is nearly double that of the State’s. The number of uninsured Iroquois County residents is slightly higher at 13% compared to Illinois’ at 11%. There is a tremendous state-wide effort to enroll individuals for

insurance coverage through the marketplace and the Affordable Care Act. This should be beneficial for any qualified Iroquois County residents. There is an Iroquois County Marketplace Navigator located at the ICPHD that assists individuals in attaining marketplace insurance. Based on RWJF rankings additional areas of concern will be addressed in other sections of the IPLAN. Below is a comparison of 2011, 2012, 2013 and 2014 for several Health Indicators:

<b>Robert Wood Johnson Foundation County Health Rankings for Iroquois County Information</b>								
<b>Health Outcomes and Health Factors</b>	<b>YEAR</b>							
	<b>2011</b>		<b>2012</b>		<b>2013</b>		<b>2014</b>	
	<b>Iroquois</b>	<b>Illinois</b>	<b>Iroquois</b>	<b>Illinois</b>	<b>Iroquois</b>	<b>Illinois</b>	<b>Iroquois</b>	<b>Illinois</b>
<b>Health Outcomes</b> (Overall Ranking of 102 counties)	28		43		68		56	
<b>Mortality</b> (Premature death)	48		47		85		85	
<b>Clinical Care</b>	88		66		70		73	
Uninsured adults	18%	17%	13%	15%	13%	16%	13%	11%
Uninsured children					5%	5%		
Could not see a doctor due to cost					9%	12%		
Primary care physicians	2,306:1	976:1	2,306:1	976:1	2,281:1	1,292:1	2,680:1	1,270:1
Preventable hospital stays	112	83	101	77	93	75	82	73
Mental health providers	14,992:1	2,372:1	14,992:1	2,372:1	14,829:1	2,340:1	825:1	864:1
Dentists	X	X	3,785:1	1,978:1	3,347:1	1,630:1		
Diabetic screening	80%	80%	87%	82%	84%	84%	82%	84%
Mammography screening	60%	63%	62%	66%	61%	65%	58%	
Health care costs	X	X	\$8,658	\$9,798	\$9,322	\$9,950		

The following table graphically demonstrates that nearly 10% (9.5%) of Iroquois County residents are uninsured. The 19 to 25 year olds are by far the largest percentage group at 24.8%, with adult's age 18 to 64 next at 14.6%. There are approximately 254 children under 18 years of age that are uninsured (3.8%). It is not a surprising that 65 and over population are insured due to Medicare at 99.4%.

<b>HEALTH INSURANCE COVERAGE STATUS</b>						
<b>2010-2012 American Community Survey 3-Year Estimates</b>						
<b>Subject</b>	<b>Iroquois County, Illinois</b>					
	<b>Total</b>		<b>Number Uninsured</b>		<b>Percent Uninsured</b>	
	<b>Estimate</b>	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>	<b>Estimate</b>	
Total civilian non-institutionalized population	28,869	+/-168	2,735	+/-341	9.5%	
<b>AGE</b>						
Under 18 years	6,736	+/-99	254	+/-114	3.8%	
18 to 64 years	16,795	+/-93	2,449	+/-304	14.6%	
65 years and older	5,338	+/-146	32	+/-36	0.6%	
19 to 25 years	2,126	+/-126	527	+/-100	24.8%	
<b>SEX</b>						
Male	14,181	+/-169	1,461	+/-200	10.3%	
Female	14,688	+/-137	1,274	+/-223	8.7%	
<b>RACE AND HISPANIC OR LATINO ORIGIN</b>						
One Race	N	N	N	N	N	
White alone	27,736	+/-227	2,616	+/-339	9.4%	
Black or African American alone	N	N	N	N	N	
American Indian and Alaska Native alone	N	N	N	N	N	
Asian alone	N	N	N	N	N	
Native Hawaiian and Other Pacific Islander alone	N	N	N	N	N	
Some other race alone	323	+/-143	83	+/-50	25.7%	
Two or more races	302	+/-125	15	+/-14	5.0%	
White alone, not Hispanic or Latino	26,537	+/-168	2,416	+/-322	9.1%	
Hispanic or Latino (of any race)	1,683	+/-10	285	+/-109	16.9%	
Source: Table S2701. HEALTH INSURANCE COVERAGE STATUS, 2010-2012 American Community Survey 3-Year Estimates, U.S. Census Bureau, American FactFinder.						

The Illinois Behavioral Risk Factor Surveillance System (BRFSS) provides data that complements the U.S. Census data with 9.5% of Iroquois residents without health care coverage. Interestingly, 88.7% of residents “have usual person as health care provider” which aligns with patient-centered primary care.

<b>HEALTH CARE UTILIZATION 2007 – 2009</b>					
<b>4th Round BRFSS Iroquois County Adults</b>		<b>Count</b>	<b>Col %</b>	<b>Confidence Interval %</b>	<b>Unweighted Count</b>
<b>DO YOU HAVE HEALTH CARE COVERAGE</b>	<b>Yes</b>	20,492	90.5%	± 3.9%	384
	<b>No</b>	2,142	9.5%	± 3.9%	35
<b>Total</b>		<b>22,634</b>	<b>100.0%</b>		<b>419</b>
<b>HAVE USUAL PERSON AS HEALTH CARE PROVIDER</b>	<b>Yes</b>	20,076	88.7%	± 4.3%	383
	<b>No</b>	2,558	11.3%	± 4.3%	36
<b>Total</b>		<b>22,634</b>	<b>100.0%</b>		<b>419</b>
<b>DO YOU HAVE MEDICARE</b>	<b>Yes</b>	5,883	28.9%	± 5.0%	142
	<b>No</b>	14,495	71.1%	± 5.0%	240
<b>Total</b>		<b>20,378</b>	<b>100.0%</b>		<b>382</b>
<b>LAST ROUTINE CHECKUP</b>	<b>1 year or less</b>	14,708	66.0%	± 6.0%	298
	<b>More than 1 year/Never</b>	7,581	34.0%	± 6.0%	118
<b>Total</b>		<b>22,290</b>	<b>100.0%</b>		<b>416</b>
<b>12 MOS: NO DOCTOR VISIT DUE TO COST</b>	<b>Yes</b>	1,358	6.0%	± 2.8%	29
	<b>No</b>	21,276	94.0%	± 2.8%	390
<b>Total</b>		<b>22,634</b>	<b>100.0%</b>		<b>419</b>
<b>12 MOS: DIDN'T GET MEDS DUE TO COST</b>	<b>Yes</b>	2,317	10.3%	± 3.7%	43
	<b>No</b>	20,181	89.7%	± 3.7%	374
<b>Total</b>		<b>22,498</b>	<b>100.0%</b>		<b>417</b>
<b>12 MO: COULD NOT AFFORD DENTIST</b>	<b>Yes</b>	3,522	15.6%	± 4.2%	68
	<b>No</b>	19,066	84.4%	± 4.2%	350
<b>Total</b>		<b>22,588</b>	<b>100.0%</b>		<b>418</b>
<b>12 MO: TIME YOU HAD NO COVERAGE</b>	<b>Yes</b>	1,090	5.3%	± 3.5%	18
	<b>No</b>	19,343	94.7%	± 3.5%	365
<b>Total</b>		<b>20,433</b>	<b>100.0%</b>		<b>383</b>
IDPH, ICHS, 4th Round County BRFSS					
Unweighted counts of 5 or less or confidence intervals of 12.5% or more do not meet standards of reliability.					

Important data that merits noting is that Iroquois County saw an increase in the number of children enrolled in medical assistance program every year from 2007 - 2011, with an overall increase of 635 children. Interestingly, the overall population has not increased significantly. However, there appears to be a correlation between the poverty level increasing and children's enrollment increasing. See the chart and graph below for details.

Enrollment of Children in Medical Assistance Programs by County, 2005 To 2011						
Year(s): 5 selected   Data Type: Number						
Location	Data Type	2007	2008	2009	2010	2011
Illinois	Number	1,363,789	1,455,172	1,553,255	1,630,495	1,677,575
Iroquois	Number	2,960	3,093	3,298	3,452	3,595

Data Provided by: [Voices for Illinois Children](#)

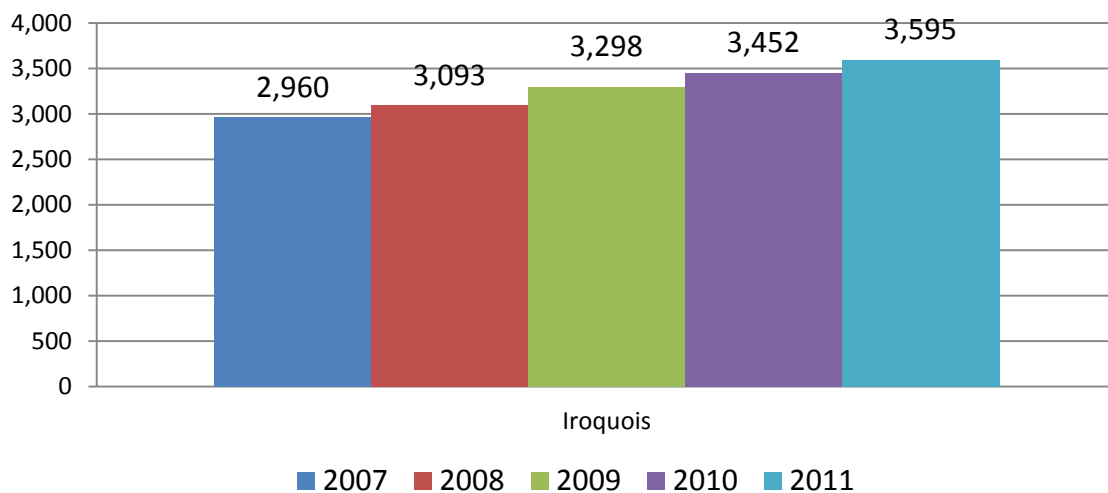
#### DEFINITIONS & SOURCES

**Definitions:** Medicaid and the Children's Health Insurance Program (CHIP) are funded jointly by the federal government and state governments. "All Kids expansion" in Illinois, which is supported by state funding only, offers health care coverage to uninsured children who are not eligible for Medicaid or CHIP.

**Data Source:** Illinois Department of Healthcare and Family Services.

<http://datacenter.kidscount.org/data/tables/6079-enrollment-of-children-in-medical-assistance-programs-by-county-2005-to-2011?loc=15&loct=5#detailed/5/2227/true/867,133,38,35,18/any/12745>

### Enrollment of Children in Medical Assistance Programs by County, 2005 To 2011



## Access to Dental Care

According to Robert Wood Johnson Foundation 2012 and 2013 Health Rankings, Iroquois County is well below the state’s ratio of dentists to residents. The ratios are as follows: 2012: 3,785:1 and 2013: 3,347:1 opposed to Illinois’ ratio of 1,630:1. Affordability also appears to be an issue as demonstrated below in the BRFSS information regarding *Health Care Utilization*.

HEALTH CARE UTILIZATION 2007 – 2009					
4th Round BRFSS Iroquois County Adults		Count	Col %	Confidence Interval %	Unweighted Count
<b>12 MO: COULD NOT AFFORD DENTIST</b>	<b>Yes</b>	3,522	15.6%	± 4.2%	68
	<b>No</b>	19,066	84.4%	± 4.2%	350
<b>Total</b>		<b>22,588</b>	<b>100.0%</b>		<b>418</b>

IDPH, ICHS, 4th Round County BRFSS  
 Unweighted counts of 5 or less or confidence intervals of 12.5% or more do not meet standards of reliability.

### Children’s Dental Care

Iroquois County Public Health Department is the recipient of a Dental Sealant Grant to provide services for children ages Kindergarten through Eighth Grade (K – 8) that are Medicaid eligible. However, through a contract with “Miles for Smiles” all school age children are eligible to receive these services.

The program is designed to provide data collection; educational components; client referral; infection control and quality assurance (long and short-term retention rates and sealant application procedures). Specific services provided includes; examinations, cleaning, dental sealant application and fluoride treatments. This program was previously administered under the direction of the Ford-Iroquois Public Health Department.

One of the State’s priority health concerns is “Oral Health.” The following is take from the Illinois SHIP (pg. 3), “good oral health is important to overall health. Poor oral health is a risk factor for chronic diseases such as heart disease and diabetes. The public health system should ensure: Access to preventive oral health services; (and) Screening and treatment for oral cancers and other oral health related conditions.



## Access to Mental Health

According to the *National Alliance on Mental Illness Facts and Numbers released March 2013*,

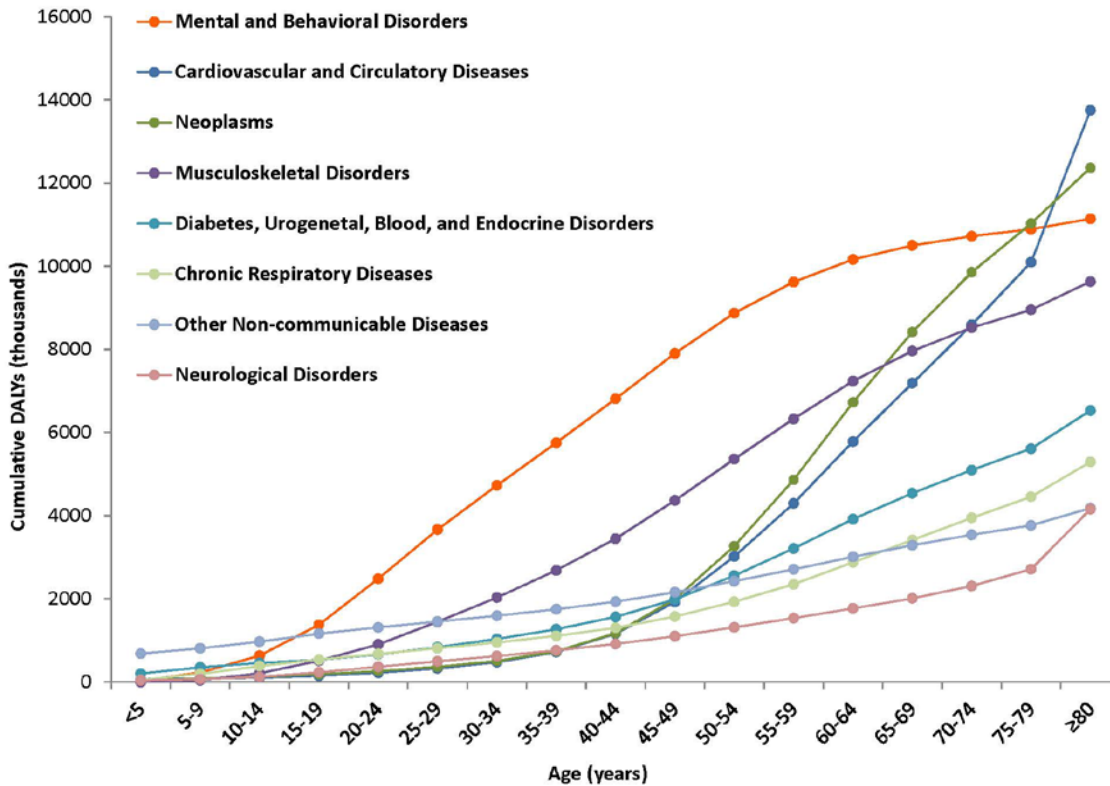
- One (1) in four (4) adults – approximately 6.1 million – experience mental illness in a given year;
- One (1) in 17 – about 13.6 million – live with a serious mental illness such as schizophrenia, major depression or bipolar disorder;
- Approximately 20 percent of youth ages 13 to 18 experience severe mental disorders in a given year. For ages 8 to 15, the estimate is 13 %;
- Approximately 6.7% of American adults – about 14.8 million people – live with major depression;
- Approximately 18.1% of American adults – about 42 million people – live with anxiety disorders, such as panic disorder, obsessive-compulsive disorder (OCD), posttraumatic stress disorder (PTSD), generalized anxiety disorder and phobias.
- One half of all chronic mental illness begins by the age of 14, three-fourths by age 24. Despite effective treatment there may be decades between the first appearance of symptoms and when people get help.

The following is based on the *Illinois Mental Health 2013 – 2018 Strategic Plan*:

- The term “serious mental illness” is used to describe the unique needs of individuals who are age 18 and older who have been diagnosed with a mental illness resulting in impairment of emotional or behavioral functioning that interferes with their ability to live in the community without supportive treatment.
- Utilizing the federal definition and methodology for determining the prevalence rate of serious mental illness, it is estimated that more than 526,000 adults in Illinois — 5.4 percent of the adult population — had a serious mental illness in 2012.
- The term “serious emotional disorder” is used to describe the unique needs of children and adolescents under age 18 who have, in the past year, been diagnosed with a mental, emotional, or behavioral disorder resulting in functional impairment that substantially interferes with or limits the child’s role or functioning in family, school, or community activities.
- Using the federal definition and methodology for determining the prevalence rate of serious emotional disorder, it is estimated that nearly 175,000 children and adolescents in Illinois — 7% of the population under age 18 — had a serious emotional disorder in 2012. Department of Mental Health (DMH) supported community-based services for 35,670 children and their families, approximately 20 percent of those diagnosed with serious emotional disorder.

The *National Institute for Mental Health* describes “DALYs” as the burden of disability associated with a disease or disorder can be measured in units called disability-adjusted life years (DALYs). DALYs represent the total number of years lost to illness, disability, or premature death within a given population. DALYs are calculated by adding the number of years of life lost to the number of years lived with disability for a certain disease or disorder. The follow chart demonstrates the devastating effect of mental and behavioral disorders, over all other leading diseases, from a young age throughout a lifetime.

### Cumulative U.S. DALYs for the Leading Disease/Disorder Categories by Age (2010)

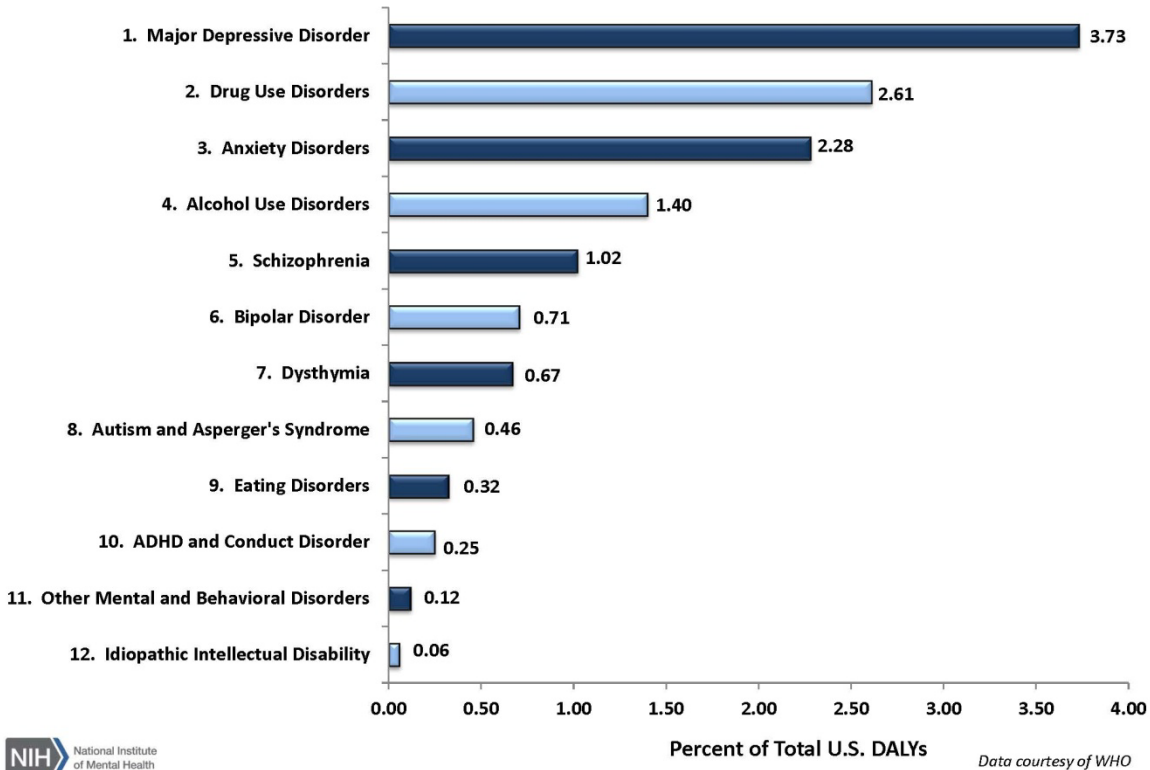


Data courtesy of WHO

Source: National Institute for Mental Health; Data courtesy of World Health Organization (WHO)  
<http://www.nimh.nih.gov/statistics/index.shtml>

The following shows the percent of disability-adjusted life years (DALYs) by disorder:

### U.S. DALYs for Mental and Behavioral Disorders as a Percent of Total U.S. DALYs (2010)

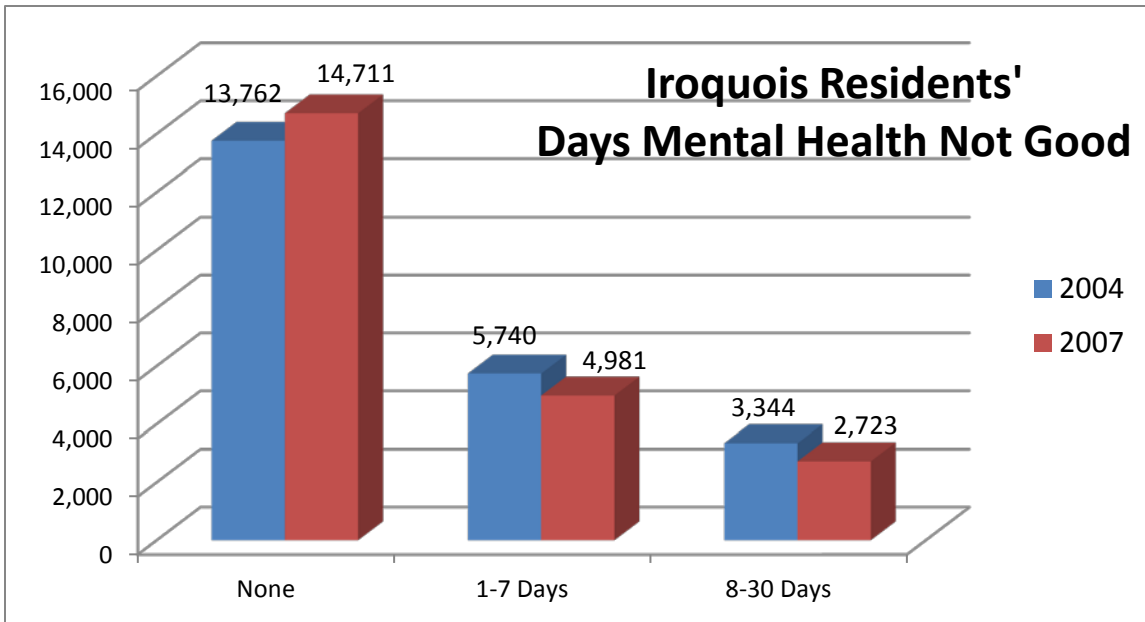


Source: National Institute for Mental Health; Data courtesy of World Health Organization (WHO)  
<http://www.nimh.nih.gov/statistics/index.shtml>

Until the opening of *Iroquois Mental Health Center* in Watseka, Iroquois County has had a significant shortage of mental health providers. In 2013, according to RWJF the ratio was 14,829:1 compared to Illinois’s ratio of 2,340:1; in 2014, the ratio is now 825:1 with Illinois at 864:1 and “Top U.S. Performers” at 536:1. The new health center provides many valuable services for Iroquois County and surrounding counties. Some of the services include:

- Batterers Intervention and Treatment Program (BIT)
- Teen Group
- Psychiatric Services
- Employee Assistance Programs
- Mental Health Case Management for Adults with Severe Mental Illnesses
- Child and Adolescent Services
- Outpatient Clinical Services
- Alcohol and Substance Abuse Services
- Psychosocial Rehabilitation Services
- Individual Placement Services (IPS)

The following demonstrates the number of Iroquois County residents that report having days that their mental health is not good. There appears to be a decrease in the number reporting days that were “not good.” Source: IDPH, ICHS 3<sup>rd</sup> Round County BRFSS; 4<sup>th</sup> Round County BRFSS;



The following detail data based on the chart above. This data indicates that mental health issues cross age, sex and income boundaries. The reporting methodology changed from 3<sup>rd</sup> round to 4<sup>th</sup> round making it difficult to actually compare years to years. The data demonstrates the need for mental health services.

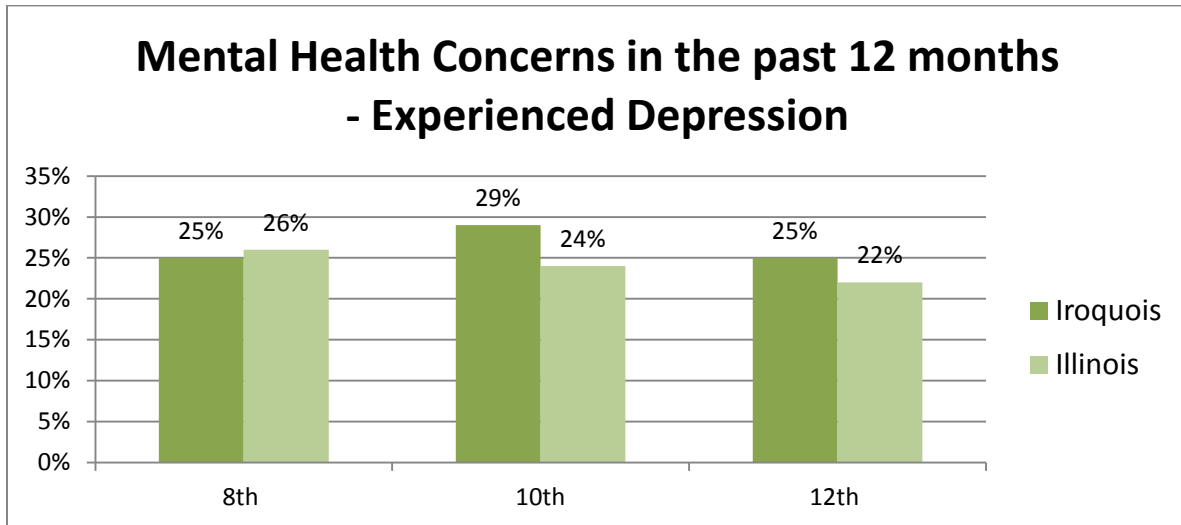
Now thinking about your mental health, includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?													
Iroquois County		Days Mental Health Not Good											
		None				1-7 Days				8-30 Days			
		2004-2006		2007-2009		2004-2006		2007-2009		2004-2006		2007-2009	
		Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Age of Respondent	18-24	*	*	*	*	*	*	*	*	*	*	*	*
	25-44	4,536	61.5	*	*	1,781	24.2			1,058	14.3		
	45-64	5,842	74.9	*	*	1,303	16.7	1,512	58.7	651	8.3	1,065	41.3
	65+	4,797	88.5	*	*	337	6.2			286	5.3		
Sex of Respondent	Male	8,000	72.2	*	*	1,942	17.5			1,139	10.3		
	Female	8,441	71.8	*	*	2,116	18.0	2,916	59.0	1,202	10.2	2,022	41.0
Income Level	<\$15,000	*	*	*	*	*	*	*	*	*	*	*	*
	\$15-35,000	5,086	76.2	*	*	930	13.9			656	9.8	*	*
	\$35-50,000	3,312	74.1	*	*	780	17.4			379	8.5	*	*
	>\$50,000	5,358	69.1	*	*	1,658	21.4	2,616	71.5	743	9.6	1,041	28.5

The following has been extrapolated from the Illinois Youth Survey 2012. This survey is administered county-wide, involved seven (7) elementary and middle schools, and six (6) high schools. There were 1,157 students surveyed from 1,392 total students with a percentage surveyed of 83%. This is invaluable information for education, intervention and planning for anyone working with Iroquois County's youth.

During the past 12 months did you ever:	8th		10th		12th	
	%	N	%	N	%	N
Seriously consider attempting suicide	N/A	N/A	19%	50	15%	38
Feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities	25%	77	29%	77	25%	66

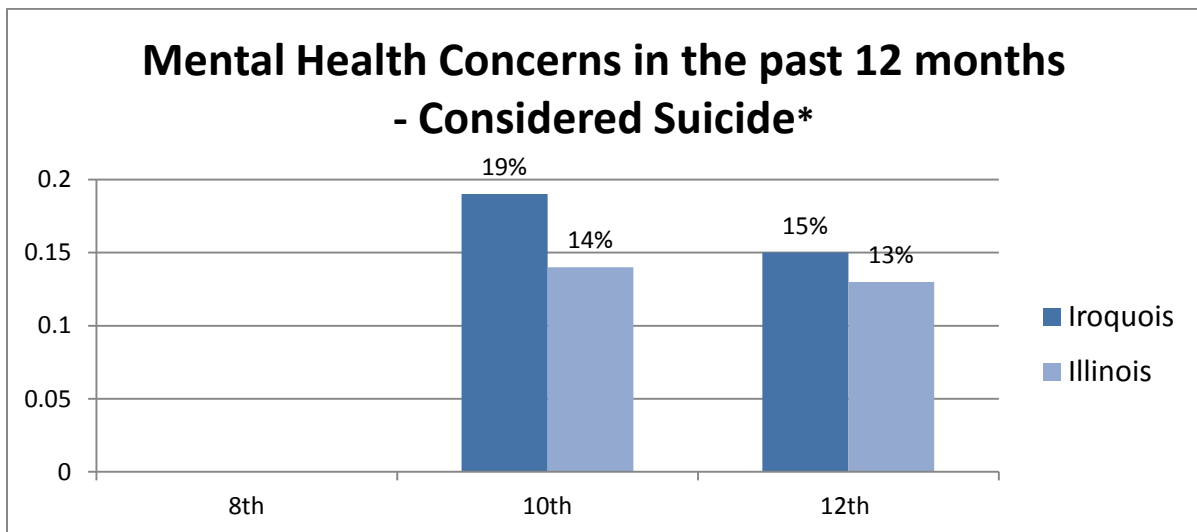
The following graphs compare Iroquois County Youth to other youth in the State.

Regarding depression, Iroquois County 8<sup>th</sup> graders appear to be slightly better than “normal” in as much as the percentage of students experience depression. However, there are higher percentages of Iroquois County students in the 10<sup>th</sup> and 12<sup>th</sup> grades that experienced depression compared to the overall State’s average.



Iroquois School Data – 2012; Illinois Data – 2010

Regarding “Considered Suicide”, Iroquois County 8<sup>th</sup> graders are not surveyed regarding thoughts of suicide. There are higher percentages of Iroquois County students in the 10<sup>th</sup> and 12<sup>th</sup> grades that considered suicide than the State’s average.



\*8 Grade Students not surveyed for this information.

Iroquois School Data – 2012; Illinois Data – 2010

## Maternal and Child Health

The Maternal Child Health (MCH) Programs provide services for low-income families below 200% of the federal poverty level. The focuses are on the pregnant women and ways to impact birth outcomes and to decrease the infant morbidity and mortality rates, to decrease prematurity and low birth rates. The program also provides referrals and follow-up services to dental, medical and mental health services as needed by the family. The programs also focus on the growth and developmental milestones of infants and children providing for services to be implemented early to insure that the child's development is on target with his peers.

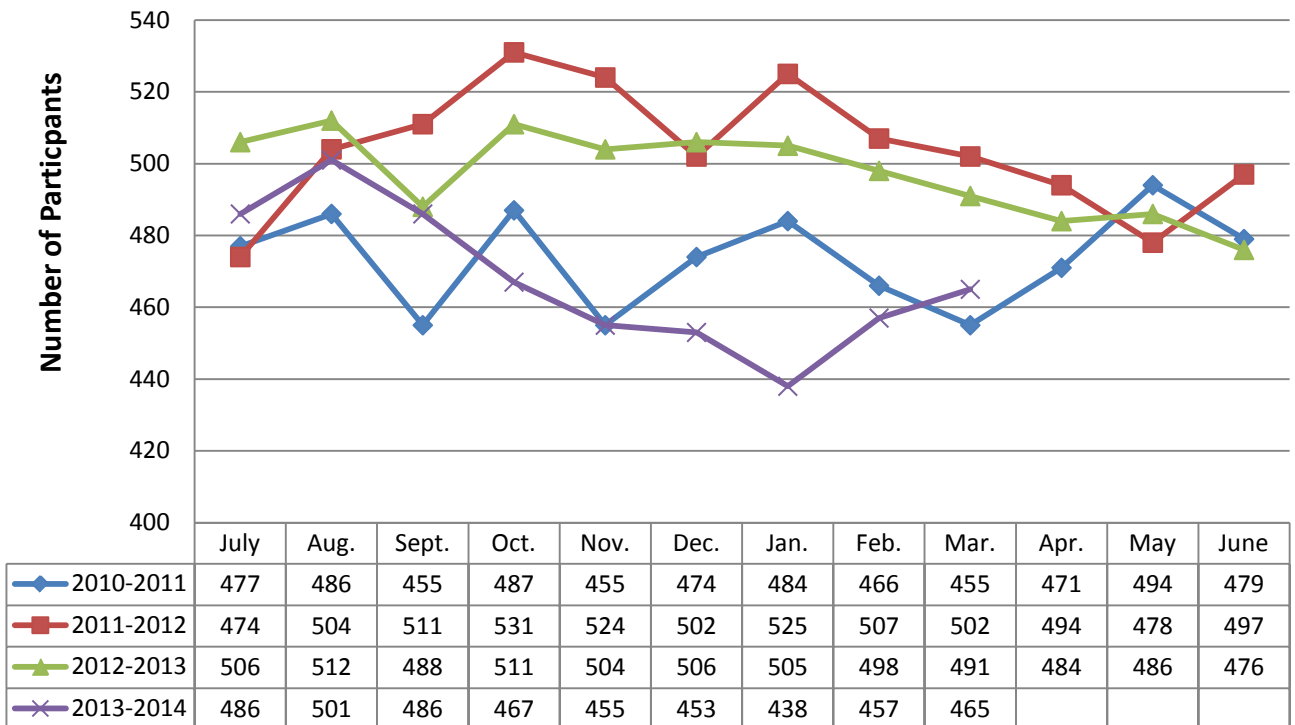
To quote *Healthy People 2020 Maternal, Infant and Child Health* (Source: Healthy People 2020; [healthypeople.gov](http://healthypeople.gov)), "The well-being of mothers, infants, and children determines the health of the next generation and can help predict future public health challenges for families, communities, and the medical care system. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. Despite major advances in medical care, critical threats to maternal, infant, and child health exist in the United States among the Nation's most pressing challenges are reducing the rate of preterm births, which has risen by more than 20% from 1990 to 2006 "(Source: Martin JA, Hamilton BE, Sutton PD, et al. Births: Final Data for 2006. Natl Vital Stat Rep. 2009; 57(7). Hyattsville, MD: National Center for Health Statistics, Centers for Disease Control and Prevention. [http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57\\_07.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_07.pdf)), and reducing the infant death rate, which in 2011 remained higher than the infant death rate in 46 other countries. (Source: Central Intelligence Agency. Country comparisons: infant mortality rate. *The World Factbook*: <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2091rank.html>.)

High Risk Infant Follow-up (HRIF)/Adverse Pregnancy Outcomes Reporting System (APORS) targets infants and children up to two years of age who meet eligible medical criteria/diagnoses. "The goals of HRIF services are: promotion of optimal growth and development; teach the family care of the high-risk infant; prevent complications; decrease morbidity and mortality; decrease stress and the potential for abuse; and ensure early identification and referral for further treatment and evaluation." (*DHS Illinois Department of Human Services Bureau of Maternal and Child Health Program Manual*, <http://www.dhs.state.il.us/page.aspx?item=65730>).

The Healthworks (HWIL) Program provides services to all DCFS Wards in legal care and custody. The program provides medically and socially-related services to the wards to promote health and well-being. Services are provided to the wards through age five years of age. Services also continue with wards that are pregnant and continue with the children of those wards as well.

The Women, Infants and Children (WIC) Program is a special supplemental nutrition program for women, infants and children. It provides nutritional services to low-income pregnant, breastfeeding and postpartum women, infants and children to the age of 5 years that are at risk nutritionally, at no cost. The mission of the program is to “improve the health status of women, infants, and children to reduce the incidence of infant mortality, premature births and low birth weight; and to aid in the developmental of children.” *DHS Scope of Services for WIC*. Based on assessment results, the participant is counseled in breastfeeding, nutrition education, environmental and family information and other health information. Participants receive nutrition and dietary counseling and education on a quarterly basis. Cash value food vouchers are received by participants to supplement diets with the appropriate fruits, vegetables and dairy products and with formula for infants. Only foods allowed by the WIC program are purchasable which allows for the education of participants to buy appropriate nutritional foods for their families. The WIC program can also be utilized in conjunction with the SNAP Program (food stamps). The graph below provides numbers of WIC program participants by month by year from July 2011 through March 2014.

### Iroquois County Women, Infants, and Children (WIC) Program Participants by Month by Year



Source: Ford-Iroquois Public Health Department



The Lead Program provides screenings for children to five (5) years of age. With the number of older houses in the Iroquois County area, lead based paint chips and dust particles provide for a dangerous and unsafe environment for small children. Blood lead percentages are checked regularly to insure that a child's exposure is minimal and that development – both physically and mentally – occur within milestone parameters. (See – Environmental, Occupational & Injury Control for additional Lead Poisoning Information) ICPHD will participate in Lead Screening and Testing Protocol for all children in numerous service programs without limitation.

Based on 2012 data, in the United States each year, 11.5% of infants are born preterm and 8.0% of infants are born with low birth weight. (Source: National Center for Health Statistics, Centers for Disease Control and Prevention. 2012 Data; <http://www.cdc.gov/nchs/fastats/births.htm>.) In addition to increasing the infant's risk of death in its first few days of life, preterm birth and low birth weight can lead to devastating and lifelong disabilities for the child. Primary among these are visual and hearing impairments, developmental delays, and behavioral and emotional problems that range from mild to severe. Preconception (before pregnancy) and interconception (between pregnancies) care provide an opportunity to identify existing health risks and to prevent future health problems for women and their children. These problems include heart disease, diabetes, genetic conditions, sexually transmitted diseases, and unhealthy weight."

A wide range of conditions and health behaviors affect the health, wellness, and quality of life of women, children, and families. Important indicators to monitor for maternal and child health include: birth data and outcomes, adequate prenatal care, and risk factors including smoking, alcohol use during pregnancy, and teen birth rates.

The Public Health Department's Family Case Management (FCM) Program provides services to income-eligible prenatal and postpartum women, infants and children to two (2) years of age. During this period of time, the pregnant and postpartum women are screened for perinatal depression during their first office visit and immediately following delivery. By monitoring the risk for perinatal depression, the woman's primary care provider is able to follow up immediately with services needed to insure that the psychological and mental health of each woman is targeted early and prevents any negative outcomes that perinatal depression may have affecting the bonding of mother and child. "The mission of the case management programs is to improve the health status of women via appropriate pre-conception, inter-conception, prenatal and postpartum care; thereby, improving the incidence of infant morbidity and mortality, premature births and low birth weight and to aid in the medical care, and growth and development of infants and children." (*DHS Illinois Department of Human Services Bureau of Maternal and Child Health Program Manual*, <http://www.dhs.state.il.us/page.aspx?item=65730>).

The table below demonstrates that Iroquois County’s infant mortality rate has remained exceptionally low, almost nonexistent, compared to the state’s rate. There are many factors that can affect this indicator including poverty, teen pregnancy, education levels, or the increase in the number of low-birth weight infants.

Infant Mortality Rate

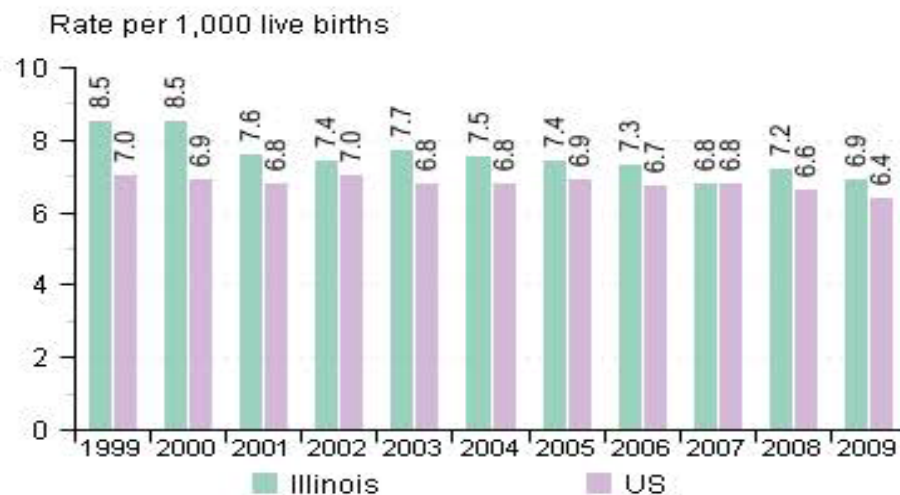
Year	Iroquois County Infant Mortality Number	Iroquois County Infant Mortality Rate	Illinois Rate Infant Mortality Rate
2004	3	**	7.3
2005	4	**	7.2
2006	1	**	7.4
2007	2	**	6.6
2008	3	**	7.2
2009	1	**	6.9

\*\* - If < 10 deaths/events or no population data, no rates are calculated.

Source: Illinois Project for Local Assessment of Needs Data System Report 3.02

*This indicator reports the number and rate per 1,000 live births of infant deaths. Description: The infant mortality rate is the number of deaths under one year of age divided by the number of live births, usually expressed as deaths per 1000 live births (Bland, 1987). An infant death is the death of a live-born child before his or her first birthday. Deaths in the first year of life may be further classified according to age as neonatal and postneonatal. Neonatal deaths are those that occur during the first 27 days of life; postneonatal deaths are those that occur between 28 days and 1 year of age (Health, United States, 1993).*

Infant mortality rates: Illinois and US, 1999-2009



Source: March of Dimes Peristats: National Center for Health Statistics, final mortality data, 1990-1994 and period linked birth/infant death data, 1995-present.

Healthy People 2020 Objective for Infant Mortality is “Infant deaths: reduce to no more than 6 per 1,000 live births.”

Leading Causes of Mortality (Ages 1-4)

Year	Iroquois County Child Mortality Number
2002	0
2003	1 Motor Vehicle Accident
2004	0
2005	0
2006	1 Motor Vehicle Accident

\*\* - If < 10 deaths/events or no population data, no rates are calculated.

Source: Illinois Project for Local Assessment of Needs Data System Report 3.09.02

*This indicator reports the number of total deaths for leading causes of death for children, ages 1-4 years. The total number of deaths by race includes deaths due to all causes of death, without double-counting of subcategory causes.*

According to *March of Dimes* data released February 2014, in an average week in Illinois, there are 377 babies born preterm; 68 babies born very preterm; 254 babies born low birth weight; and 48 babies born very low birth weight. (Source: National Center for Health Statistics, final natality data.) The following is utilized for definition purposes: preterm is less than 37 completed weeks of pregnancy. Late preterm is between 34 and 36 weeks gestation. Very preterm is less than 32 completed weeks; Low birthweight is less than 2500 grams (5 1/2 pounds); very low birth weight is less than 1500 grams (3 1/3 pounds).

Preterm and Low Birthweight Births in Illinois

	2001	2011	2020 US Objective
Preterm <sup>(1)</sup>	12.5%	12.1%	11.4%
Low Birthweight <sup>(1)</sup>	8.0%	8.2%	7.8%

While Iroquois County has several low birth weight babies each year the overall rate stays below the state’s rate. However, the Illinois’ state average is above the objective for improvement set by Healthy People 2020 which is “Low birth weight: reduce to no more than 7.8% of live births.”

## Birth Characteristics by Resident County 2009

Resident County	Total Births	Low Birth Weight (<2,500 grams)		Very Low Birth Weight (<1,500 grams)		Preterm (<37 weeks)		Adequate Prenatal Care (Kotelchuck) **		Cesarean Section **		Mother Unmarried		Not H.S. Graduate, Age 20+ **	
		Births	Percent	Births	Percent	Births	Percent	Births	Percent	Births	Percent	Births	Percent	Births	Percent
ILLINOIS	171,077	14,372	8.4	2,655	1.6	17,109	10.0	125,932	80.2	53,296	31.5	69,728	40.8	21,313	14.0
Iroquois	309	16	5.2	5	*	30	9.7	222	74.0	110	35.9	133	43.0	29	10.7

\* Rate or percentage does not meet standards of reliability (numerator <10 or denominator <100)

-0- Percentage zero corresponding to '0' in frequency column

\*\* Unknowns excluded from denominator when calculating percentage

Source: IDPH Vital Statistics

### Low Birth Weight (1,500 – 2,499 grams) and Very Low Birth Weight (under 1,500 grams)

Year	Iroquois County Low Birth Weight Number	Iroquois County Low Birth Weight Rate	Illinois Low Birth Weight Rate	Iroquois County Very Low Birth Weight Number	Iroquois County Very Low Birth Weight Rate	Illinois Very Low Birth Weight Rate
2004	20	5.6	6.8	1 to 11	**	1.7
2005	15	4.4	6.9	1 to 11	**	1.6
2006	18	5.3	7.0	1 to 11	**	1.6
2007	20	6.2	6.9	1 to 11	**	1.6
2008	22	6.8	6.8	1 to 11	**	1.6

\*\* - If < 10 deaths/events or no population data, no rates are calculated.

Source: IDPH Vital Statistics; IQuery: Data Search

*This indicator reports the number and percent of infants of moderately low birth weight (less than 2,500 grams) and very low birth weight (less than 1,500 grams). Description: Birth weight is defined as the first weight of the newborn obtained after birth. Low birth weight is defined as less than 2,500 grams or 5 pounds 8 ounces. Before 1979, low birth weight was defined as 2,500 grams or less. Very low birth weight is defined as less than 1,500 grams or 3 pounds 4 ounces (Health, United States, 1993).*

According to the CDC, there is no known safe amount of alcohol to drink while pregnant. There is also no safe time during pregnancy to drink and no safe kind of alcohol. In addition, the CDC urges pregnant women **not** to drink alcohol any time during pregnancy. Women also should not drink alcohol if they are planning to become pregnant or are sexually active and do not use effective birth control because a woman could become

pregnant and not know for several weeks or more. Iroquois County has a very low number of reported cases of women drinking during pregnancy.

#### Alcohol use during pregnancy

Year	Iroquois County Percent	Iroquois County Number	Illinois Percent	Illinois Rate
2003	0.9%	3	0.4%	660
2005	0.9%	3	0.3%	573
2006	0.6%	2	0.3%	629

Source: Source: Illinois Project for Local Assessment of Needs Data System Report 3.05 Rate is Cases Per 100,000

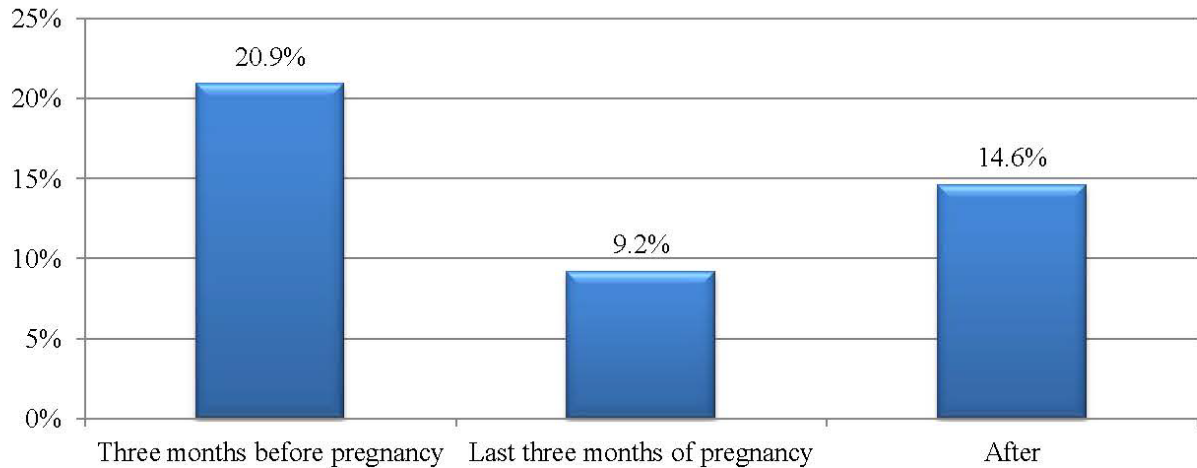
*This indicator reports the number and percent of mothers who drink during pregnancy. Description: The exact role of alcohol in producing specific impairment in the developing fetus has not been conclusively proved. However, the information available to date favors either a direct or an indirect role of alcohol in problems in fetal development. There is ample evidence that alcohol is capable of causing bodily damage in almost all systems. The developing baby does not have efficient alcohol metabolizing systems, and the result is these substances are likely to stay with the baby over an extended period of time. The possible harm to the newborn baby from transfer of alcohol in breast milk also argues against the use of alcohol while breast-feeding (Schuckit, 1995).*

According to the *March of Dimes peristats*, smoking is an important determinant of health and a significant factor contributing to preterm and low birth weight births. In 2012, 18.2% of women of childbearing age reported smoking in Illinois. (Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention). Maternal cigarette smoking during pregnancy increases the risk for pregnancy complications, such as placental previa, placental abruption, and premature rupture of the membrane; and poor pregnancy outcomes, such as preterm delivery, restricted fetal growth, and sudden infant death syndrome (SIDS). Smoking during pregnancy resulted in an estimated 776 infant deaths in the United States annually during 2000—2004. (Source: United States. Department of Health and Human Services. *How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010.)

According to the 2009 Illinois Pregnancy Risk Assessment Monitoring System (PRAMS) report, 20.9 percent of women smoked three months prior to their pregnancy, 9.2 percent of women smoked during the last three months of their pregnancy, and 14.6 percent of women smoked after their pregnancy.

The following chart shows smoking prevalence before, during and after pregnancy.

**Figure 12. Prevalence of Smoking Before, During and After Pregnancy, Illinois, 2009**



Source: Illinois Pregnancy Risk Assessment Monitoring System

Iroquois County has significantly high numbers of women who smoke during pregnancy compared to the State’s percent and rate. In addition, the State has made progress in reducing the number of women who smoke during pregnancy and Iroquois County continues to increase.

**Mothers who Smoked during Pregnancy**

Year	Iroquois County Percent	Iroquois County Number	Illinois Percent	Illinois Rate
2003	21.4%	72	9.6%	17,508
2004	21.8%	77	10.2%	18,352
2005	18.5%	63	8.6%	15,317
2006	24.5%	83	8.6%	15,456

Source: Source: Illinois Project for Local Assessment of Needs Data System IPLAN DATA SYSTEM Report 3.04

Rate is Cases Per 100,000 Live Births

Description: the number of live births among mothers who smoked during pregnancy.

*This indicator reports the number of live births among mothers who smoked during pregnancy. The number of live births among mothers who smoked during pregnancy is defined as those who indicated this status on the birth certificate.*

The rate of mothers receiving adequate care in Iroquois County remained slightly better than the State of Illinois.

#### Prenatal Care (Kessner) Iroquois County Resident

Year	Adequate	Intermediate	Inadequate
2004	272	16	16
2005	269	48	21
2006	262	61	14
2007	227	66	26

Source: IQUERY <http://query.illinois.gov> Rate is cases per 100,000 population.

*This indicator reports the number of live births among mothers who received adequate care during pregnancy. The adequacy of care for each live birth determined by the Modified Kessner Index uses the estimated gestational age of the infant at time of delivery, the trimester the prenatal care began and the number of prenatal visits. The adequacy of care is divided into three categories: adequate, intermediate and inadequate (IDPH, Illinois Center for Health Statistics, 2001)*

#### Teen Births

“Births to teen mothers” is a critical indicator of increased risk for both mother and child. Iroquois County’s teen birth rate has consistently exceeded the state average of 9-10%; however, the rate has remained within 1-2% that of the State. While teen pregnancy in our community is not the most prevalent health problem, for the 35 – 40 families teen pregnancy affects each year – it is most definitely a real-life problem. There are community resources and assistance available for these families and specifically for the teen mother and baby.

The Illinois Department of Public Health statistics indicate that births to mothers in the State of Illinois under 20 years of age from 2008-2009 have decreased in number and continue to fall according to the *Facts About Teen Pregnancy* article written by Robin Elise Weiss, LCCE in August 23, 2013. However, the rate of teen pregnancy is still "the highest in industrialized countries." Since many of teen pregnancies are unplanned and unexpected, teen mothers do not receive prenatal care as needed. This might be due to the fear of telling parents, denial or delayed testing. Because the teen is still growing and developing, delaying prenatal care not only puts her at risk but also the unborn child as well. Many teen births are delivered early or have complications, increasing the likelihood of a low birth weight and increased chance of infant mortality.

Teen Births in Iroquois County By Year						
Year	Live Births	Mother < 20	% of births to teens Iroquois	% of births to teens Illinois	Infant Mortality cases	Infant Mortality rate
2004	354	36	10.2	9.9	3	**
2005	340	40	11.8	9.7	4	**
2006	339	39	11.5	10.0	1	**
2007	324	36	11.1	10.1	2	**
2008	322	35	10.9	10.0	3	**
2009	309	36	11.7	9.6	1	**

\*\* - If < 10 deaths/events or no population data, no rates are calculated.

Source: IDPH Vital Statistics

### Healthy Families Illinois

The Healthy Families Illinois (HFI) Program helps encourage and support new families and is offered during pregnancy or within the first two weeks of delivery. The program is voluntarily accepted by families and encourages and supports families through home visitation services. Once the program is accepted by the family, goals are set, resources are implemented, and encouragement is given to build on the parenting skills that the parent(s) already possesses, (the will strengthening of the bonds of the family and parent/child dyad are improved.) Child developmental milestones are monitored through the use of developmental and social/emotional screenings, with referrals given as needed, to insure that the child has the best possible start in school. Children also are monitored for child well visits and immunizations needed per CDC guidelines. Education and supportive persuasion help to decrease the risk factors and concerns that the family first presents with when services are initiated. Subsequent pregnancies are fewer of those families involved with the HFI program than with families without the services. The program is currently in its 14th year of operation and has been a supportive part of over 204 familial lives since its inception into the Iroquois County area in the year 2000.

The program has been accredited and reaccredited through the Prevent Child Abuse America/Prevent Child Abuse Illinois programs and continues to provide the quality home visitation services to the families set forth by the strict Healthy Families America (HFA) Standards and Model. The Iroquois County HF! Program is one of 44 programs providing services to families throughout the State of Illinois and one of 600 sites throughout the United States.



The risk of child abuse and neglect becomes more of a concern if very young teens choose to be parents before becoming acclimated to the maturity of parenting and the employment world. *The Child Abuse and Neglect Statistics Fiscal Year 2011 and the Child Abuse and Neglect Statistics Fiscal Year 2012* depict the rate of child abuse and neglect data per 1,000 children by county and also the number for the same years by the State of Illinois rate. The numbers are more than shocking and reflect the need of services in the Iroquois County area to educate young parents, as well as mature parents, in appropriate child rearing skills.

The Child Abuse and Neglect report rate, as taken by the Illinois Central Registry, has increased in the last two years 2011-2012 and is far above the State measures of 27.4 and 28.3 for the same years. The Sexual Abuse reports have surpassed the State Reports by almost two times the rate, increasing from 2011 by .9 per 1,000 children. With the move of the DCFS office from Iroquois County to Danville, due to budget cuts, camaraderie of the Department of Children and Family Services (DCFS) investigator with direct service providers is no longer present. With the distance between the two services, it is nearly impossible to combine the prevention/intervention measures that many families could benefit from.

Home visitation programs have found to be instrumental in decreasing the risk factors that may cause a family to be placed into DCFS services very early in the parenting career. As depicted in the chart below, the indicated reports for child abuse and sexual abuse have also risen from 2011-2012.

Year	Iroquois County Indicated Abuse Reports per 1,000 Children	Illinois Indicated Reports per 1,000 Children	Iroquois County Indicated Sexual Abuse Reports per 1,000	Illinois Sexual Abuse Reports per 1,000 Children
2011	9.5	8.0	0.4	0.6
2012	10.8	8.2	0.8	0.67

Source: Child Abuse and Neglect Statistics: Fiscal Year 2011 and Fiscal Year 2012

With the rise in child sexual abuse rates Iroquois County, so also are the Sex Offender Registry statistical rates. As of March 2014, there are 56 registered sex offenders in the Iroquois County. *Homefacts.com* reflects that Iroquois County, has a ratio of 19.01 offenders per 10,000 residents. This is higher than the national average of 0.00 offenders per 10,000 residents." For the vast Iroquois County area, these numbers are staggering. Iroquois County Sexual Assault Services (ISAS) advocates on behalf of the victims of Iroquois County both in the legal and medical realms and insures that victims are provided the best possible legal, medical and counseling services that are available. The following is number of child abuse and neglect cases in Iroquois County compared to the State for 2007 – 2011:

## Substantiated Cases of Child Abuse and Neglect by County, FY 2007 To FY 2011

Location	Data Type	2007	2008	2009	2010	2011
Illinois	Number	26,399	27,947	27,610	27,032	26,054
Iroquois	Number	72	67	75	86	75

### DEFINITIONS & SOURCES

**Definitions:** Substantiated cases of child abuse and neglect are those in which an investigation by the Illinois Department of Children and Family Services produced sufficient evidence to confirm that child abuse and neglect did occur.

**Data Source:** Illinois Department of Children and Family Services.

**Data Provided by:** [Voices for Illinois Children](#)

### Maternal Child Health Referrals for Service

Referral sources for Maternal Child Health programs are received in the following manner: inner-agency referrals; Iroquois Memorial Hospital; social service community partners; and primary care and mental health care providers; and area health care staff members; and all other Iroquois County residents and businesses.

## Chronic Disease

According to the Centers for Disease Control and Prevention (CDC), “As a nation, 75% of our health care dollars goes to treatment of chronic diseases. These persistent conditions—the nation’s leading causes of death and disability—leave in their wake deaths that could have been prevented, lifelong disability, compromised quality of life, and burgeoning health care costs.”

### Death Demographics

The mortality numbers for Iroquois County are much as one would expect with diseases of the heart and cancer as the leading causes of death in the county. These numbers are consistent with the mortality reports from other Illinois counties.

### Death Demographics 2010

Resident County	Total Deaths	Sex		Race			Hispanic Origin	Age Group (Years)						
		Male	Female	White	Black	Other		< 1	1 - 14	15 - 24	25 - 44	45 - 64	65 - 84	85 +
<b>ILLINOIS</b>	<b>99,624</b>	<b>48,744</b>	<b>50,880</b>	<b>82,759</b>	<b>15,068</b>	<b>1,797</b>	<b>3,905</b>	<b>1,116</b>	<b>400</b>	<b>1,191</b>	<b>4,266</b>	<b>19,068</b>	<b>41,263</b>	<b>32,320</b>
Iroquois	380	177	203	377	3	0	5	3	1	4	16	75	166	115

The following depicts total deaths by year in Iroquois County:

Iroquois County Total Deaths by Year	
YEAR	TOTAL DEATHS
2008	388
2009	346
2010	380

### Leading Causes of Death

Chronic diseases – such as heart disease, stroke, cancer, diabetes, and arthritis – are among the most common, costly, and preventable of all health problems in every part of the U.S. including Iroquois County. The leading causes of death in Iroquois County are heart disease, cancer and stroke.

While diabetes and arthritis are not leading causes of death, arthritis is the most common cause of disability, with nearly 19 million Americans reporting activity limitations. (Source: Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation—United States, 2003–2005. MMWR 2006;55:1089–1092) And, diabetes continues to be the leading cause of kidney failure, non-traumatic lower-extremity amputations, and blindness among adults, aged 20-74. (Source: National diabetes fact sheet, 2007. U.S. Department of Health and Human Services; 2008)

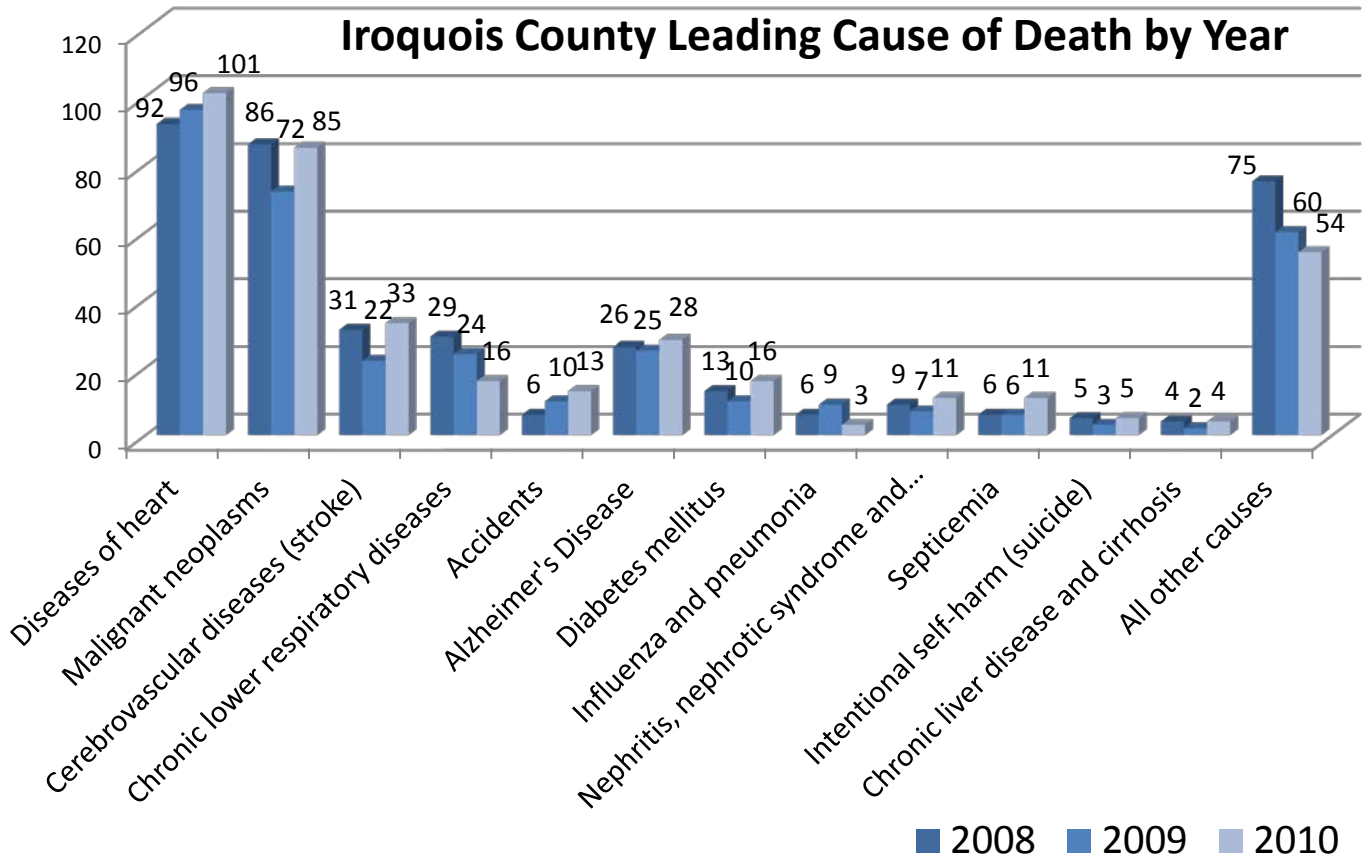
The State Cancer Profiles compiled by the National Cancer Institute list Iroquois County at Priority Level 6 for all cancers when compared to Illinois, which means that the cancer rate overall is stable and similar to the Illinois rate; and, when compared to the United States, the Priority Level 4 which indicates stable, but higher than the U.S. rate. (Source: <http://statecancerprofiles.cancer.gov/>; Death Rate/Trend Comparison by Cancer, death years through 2010 Illinois Counties versus Illinois All Cancer Sites, All Races, Both Sexes 2010)

The following is a list of leading causes of death in Iroquois County for 2008, 2009 and 2010:

<b>Leading Causes of Death in Iroquois County</b>			
	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Diseases of heart</b>	92	96	101
<b>Malignant neoplasms</b>	86	72	85
<b>Cerebrovascular diseases (stroke)</b>	31	22	33
<b>Chronic lower respiratory diseases</b>	29	24	16
<b>Accidents</b>	6	10	13
<b>Alzheimer's Disease</b>	26	25	28
<b>Diabetes mellitus</b>	13	10	16
<b>Influenza and pneumonia</b>	6	9	3
<b>Nephritis, nephrotic syndrome and nephrosis</b>	9	7	11
<b>Septicemia</b>	6	6	11
<b>Intentional self-harm (suicide)</b>	5	3	5
<b>Chronic liver disease and cirrhosis</b>	4	2	4
<b>All other causes</b>	75	60	54

Source: IDPH Vital Statistics

The following graphically depicts the leading causes of death by year for Iroquois County:



Source: IDPH Vital Statistics

## Risk Factors

Heart disease is the leading cause of death in Iroquois County. There are some “risky” behaviors that are specifically associated with heart disease as well as other poor health outcomes and health problems. Some of these risk factors related to behaviors have increased in Iroquois County. The number of adult smokers has increased 3.3% and the number of obese adults has increased overall 1.3%. There are also changes in physical activity and nutrition some are healthy and others are not as healthy. The following “dashboard” demonstrates **positive** and **negative** changes in risky behaviors related to heart disease and other illnesses. The comparisons are for 2004-2006 to 2007-2009:

### Behavior Risk Factor Surveillance System Comparison Data Iroquois County

Risk Factor	2004-2006	2007-2009	% changed
Smoker	21.6%	24.9%	3.3% ↑
Smoking is not allowed anywhere inside your home	64.6%	70.9%	6.3% ↑
Told (you have) high blood pressure	37.9%	33.6%	4.3% ↓
Taking blood pressure medicine	80.4%	89.8%	9.4% ↑
Told cholesterol high	34.3%	42.4%	8.1% ↑
Underweight/normal	37.0%	37.6%	0.6% ↑
Overweight	33.8%	32.0%	1.8% ↓
Obese	29.2%	30.5%	1.3% ↑
Meets or exceeds recommended physical activity standard	40.7%	47.4%	5.4% ↑
Does not meet activity standard	45.1%	37.2%	2.5% ↓
Inactive	14.2%	15.4%	1.2% ↑
<3 servings fruits and vegetables per day	59.5%	51.9%	7.6% ↓
3-4 servings fruits and vegetables per day	28.6%	33.5%	2.7% ↑
>5 servings fruits and vegetables per day	11.9%	14.6%	2.7% ↓
<b>Source: Illinois Behavioral Risk Factor Surveillance System</b>			

Obesity is a problem plaguing every community in our nation. The following examines Iroquois County changes in weight. The change in “overweight” is positive, the number of Iroquois County residents considered “overweight” decreased from 2004-2006 to 2007-2009. But, the 65+ age group increased slightly. However, the number of “obese” individuals increased significantly (8%) in the 45-64 age group and 4.7 % in 65+. Obesity has an impact on an individual’s overall health and specifically exacerbates the following chronic illnesses: diabetes, heart disease, and hypertension.

At risk for health problems related to being overweight (based on body mass index calculated from height and weight (BMI)) by Age			
Risk Factor: Overweight	2004-2006	2007-2009	% changed
18 – 24	*	*	*
25 – 44	28.8%	26.2%	2.6% ↓
45 – 64	43.3%	29.7%	13.6% ↓
65+	35.4%	36.8%	1.4% ↑

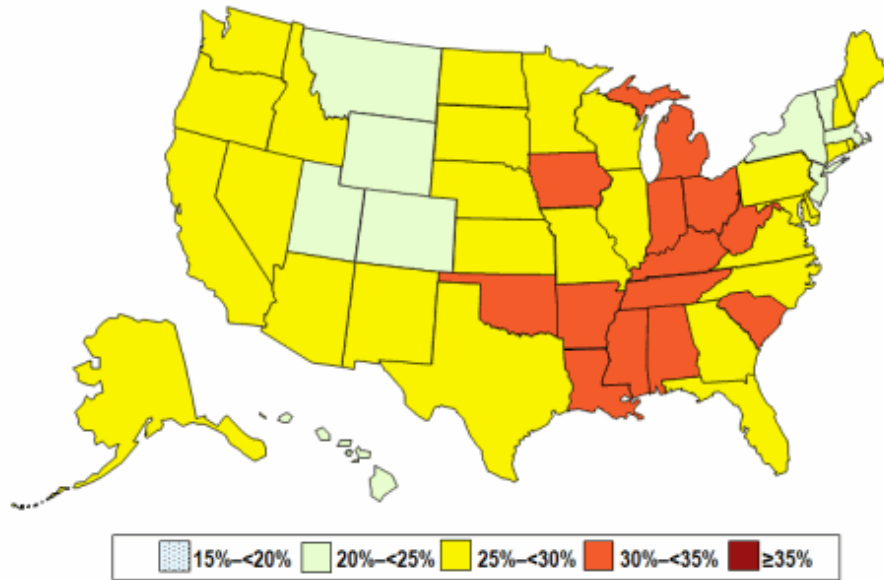
At risk for health problems related to being overweight (based on body mass index calculated from height and weight (BMI)) by Age			
Risk Factor: Obese	2004-2006	2007-2009	% changed
18 – 24	*	*	*
25 – 44	36.4%	28.9%	7.5% ↓
45 – 64	30.0%	38.0%	8.0% ↑
65+	24.5%	29.2%	4.7% ↑

To quote the Illinois SHIP (pg 3), “obesity, sedentary lifestyle, and poor nutrition are risk factors for numerous chronic diseases and they exacerbate others, including heart disease, diabetes, hypertension, asthma, and arthritis. Obesity has reached an alarming rate in Illinois, with 62 percent of adults overweight; 21 percent of children are obese, the fourth (4<sup>th</sup>) worst rate in the nation. The Illinois public health system must act quickly to reverse this epidemic through: implementation of individual, family, environmental, and policy initiatives to increase physical activity (and) implementation of individual, family, environmental, and policy initiatives to improve nutrition.”

The graph below demonstrates Illinois' Self-Reported Obesity Among Adults in 2012 at 28.2%. (Source: <http://www.cdc.gov/obesity/data/adult.html#Socioeconomic>)

## Prevalence\* of Self-Reported Obesity Among U.S. Adults BRFSS, 2012

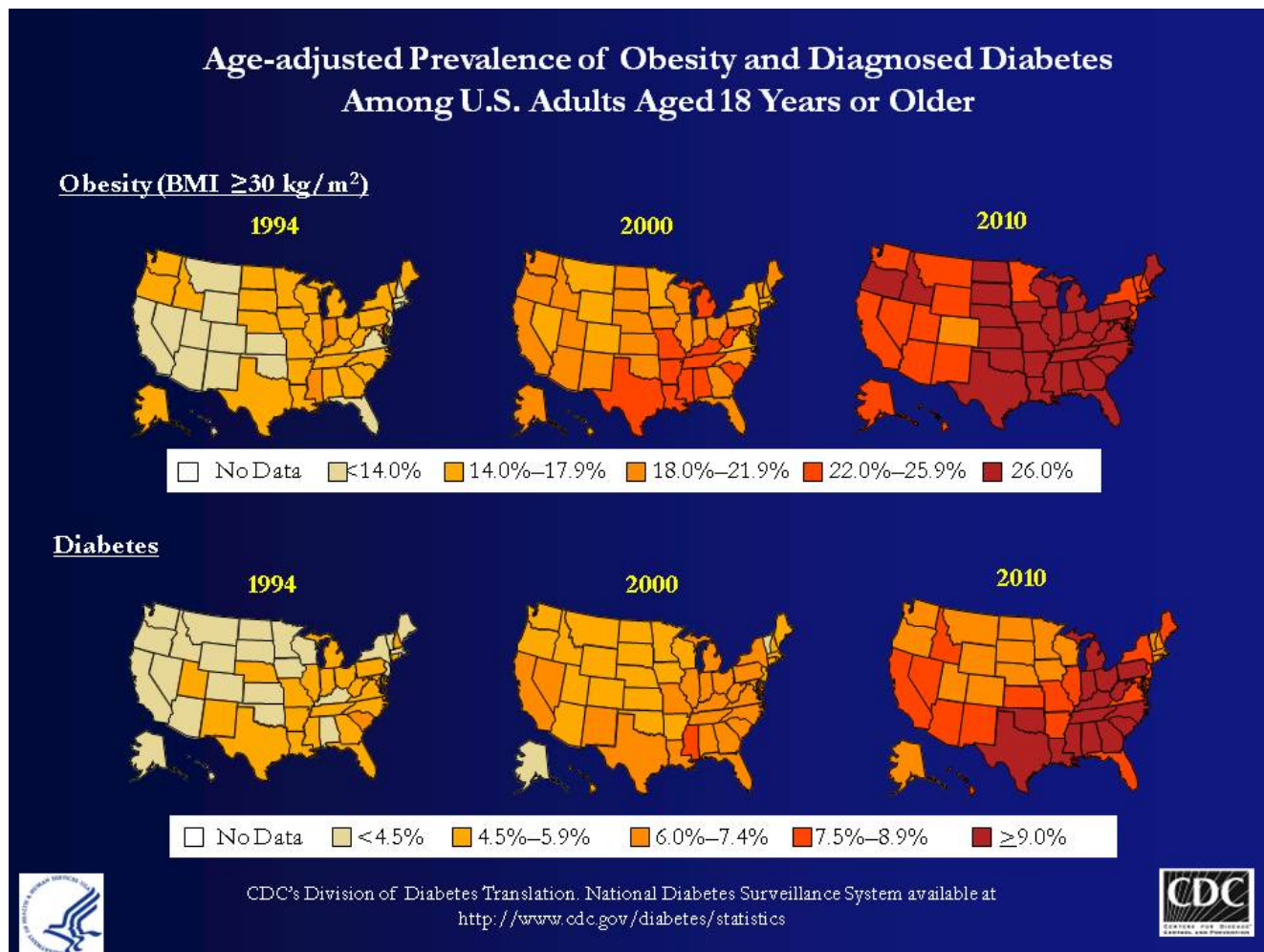
\*Prevalence reflects BRFSS methodological changes in 2011, and these estimates should not be compared to those before 2011.



During the past 20 years, there has been a dramatic increase in obesity in the United States and rates remain high. More than one-third of U.S. adults (35.7%) and approximately 17% (or 12.5 million) of children and adolescents aged 2–19 years are obese. (CDC) Based on BFRSS data 2007-2009, Iroquois County has 32% (7,060) overweight residents and 30.5% (6,731) obese residents. Obesity is associated with a number of serious health conditions including heart disease, diabetes, and some cancers.



The following depicts the seriousness of the Nation's obesity epidemic and the correlation of this epidemic to diabetes. The State of Illinois' obesity rate is 26.0% (or greater) and the rate of diabetes is 7.5%-8.9%. Iroquois County's rate of diabetes is 10.3 percent (10.3%) which is slightly higher than the State's percentage (Source: BRFSS).



Content source: [Division of Diabetes Translation](#)  
[National Center for Chronic Disease Prevention and Health Promotion](#)

A program combating obesity in Iroquois County's youth was recognized for success. The grant-funded program was the Coordinated School Health Grant (CSHG). The Unit 9 School District implemented the Coordinated School Health Grant (CSHG) for the past several years. The grant focused on the health benefits of improving nutrition and promoting healthy lifestyles. During that time, the percentage of students in grades K-5 with a BMI (Body Mass Index) of 25 or above was reduced from 13.1 % in May of 2004 to 6.6% in November, 2009.

## Infectious Disease

Sexually transmitted diseases (STDs) affect individuals of all ages especially ages 15-24. CDC estimates that this age group accounts for approximately 25% of the sexually active population, but accounts for 50% of the 20 million new sexually transmitted infections that occur in the United States each year. Each of these infections is a potential threat to an individual's immediate and long-term health and well-being. An STD not only increases a person's risk for HIV infection, it can lead to severe reproductive health complications, such as infertility and ectopic pregnancy. Both young men and young women are heavily affected by STDs — but young women face the most serious long-term health consequences. It is estimated that undiagnosed STDs cause 24,000 women to become infertile each year. Also, health care spending for STDs is estimated to be \$16 billion annually.

Based on the United States Facts from CDC's annual report, *Sexually Transmitted Disease Surveillance, 2012*, state and local STD case reports from a variety of private and public sources indicate the majority of STD cases are reported in non- STD clinic settings, such as private physician offices and health maintenance organizations; and many cases of Chlamydia, gonorrhea, and syphilis continue to go undiagnosed and unreported.

In addition, data on several additional STDs — such as human papillomavirus, herpes simplex virus, and trichomoniasis — are not routinely reported to CDC. As a result, the annual surveillance report captures only a fraction of the true burden of STDs in America. This probably hold true for every local community in the State of Illinois including Iroquois County. However, it is important to review, analyze, seek insights, and monitor trends related to STD diagnoses at the local, state, and national levels.

### The following is a “Snapshot: STDs in the United States, 2012”

#### Chlamydia

- Cases reported in 2012: 1,422,976
- Rate per 100,000 people: 456.7; overall stable (increase of 0.7%) since 2011

#### Gonorrhea

- Cases reported in 2012: 334,826
- Rate per 100,000 people: 107.5; 4.1% increase since 2011

#### Syphilis (primary and secondary)

- Cases reported in 2012: 15,667
- Rate per 100,000 people: 5.0; 11.1% increase since 2011
- The rate increase was solely among men, particularly gay and bisexual men

#### Syphilis (congenital)

- Cases reported in 2012: 322
- Rate per 100,000 live births: 7.8; 10% decrease since 2011

## STD Information for the State of Illinois

**Chlamydia and Gonorrhea** – Chlamydial and gonorrheal infections in women are usually asymptomatic and often go undiagnosed. Untreated, these infections can lead to pelvic inflammatory disease, which can cause tubal infertility, ectopic pregnancy, and chronic pelvic pain. In 2008, Illinois:

- Ranked 9th among 50 states in Chlamydia infections (460.4 per 100,000 persons) and ranked 8th among 50 states in gonorrheal infections (160.9 per 100,000 persons).
- Reported rates of Chlamydia among women (661.3 cases per 100,000) were 2.6 times greater than those among men (253.4 cases per 100,000).

**Syphilis** – Primary and secondary (P&S) syphilis (the stages when syphilis is most infectious) remains a problem in the southern United States and some urban areas.

- Illinois ranked 13th among 50 states, with 4.3 cases of P&S syphilis per 100,000 persons.
- The number of congenital syphilis cases decreased from 54 in 1999 to 20 in 2008.

### HIV/AIDS Epidemic

HIV/AIDS has claimed the lives of more than 550,000 Americans. Today, about 1.1 million Americans are living with HIV, the virus that causes AIDS, and one fifth of those infected are unaware of their infection. Illinois reported 37,880 AIDS cases to CDC, cumulatively, from the beginning of the epidemic through December 2008.

- Illinois ranked 8th highest among the 50 states in cumulative reported AIDS cases.

**Source: Illinois Profile 2010:** <http://www.idph.state.il.us/home.htm> **CDC:** <http://www.cdc.gov/nchhstp/>

## Iroquois County STD Information

Fortunately, Iroquois County has not seen significant increases in STD reported cases. However, based on national data, there are more than likely significant numbers of unreported cases particularly among youth ages 15-24. See graphic below for estimates:

Source: CDC



There are a number of unique factors that place the youth of Iroquois County at particularly high risk for harm from STDs. Undetected and unreported cases are only two (2). The info-graph below has been provided by the CDC for use in STD education and prevention. The risk factors shown are significant and require action. Even though Iroquois County STD statistics have remained somewhat stable and low, the goal is to continue to have low rates of STDs and prevent future health problems caused by STDs and specially those associated with human papillomavirus (HPV). The info-graph highlights some information that may or may not have been thought about by adults and young people regarding STDs and states in simple terms what can be done as protection.

### Unique factors place youth at risk



**Insufficient Screening**  
Many young women don't receive the chlamydia screening CDC recommends



**Confidentiality Concerns**  
Many are reluctant to disclose risk behaviors to doctors



**Biology**  
Young women's bodies are biologically more susceptible to STIs



**Lack of Access to Healthcare**  
Youth often lack insurance or transportation needed to access prevention services



**Multiple Sex Partners**  
Many young people have multiple partners, which increases STI risk

### Young people can protect themselves

**GET TESTED**

**REDUCE RISK BEHAVIORS**

**GET VACCINATED AGAINST HPV**

The following represents numbers of reported cases of Chlamydia, Early Syphilis, and Gonorrhea in Iroquois County from 2008 – 2012.

Sexually Transmitted Infections (STI) by Year										
STI	2008		2009		2010		2011		2012	
	Iroquois	Illinois	Iroquois	Illinois	Iroquois	Illinois	Iroquois	Illinois	Iroquois	Illinois
Chlamydia	28	59,169	25	60,542	27	60,672	39	64,939	35	67,701
Gonorrhea	2	20,674	4	19,962	1	15,777	2	17,037	6	18,149
Early Syphilis	1		*		*		*		*	

\* No data available for the selected

Data Source: Illinois Department of Public Health (IDPH) IQuery; STD Morbidity Case Report; IDPH Sexually Transmitted Diseases Section.

Sexually Transmitted Infections (STI) by Year by Gender										
STI	2008		2009		2010		2011		2012	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Chlamydia	4	24	6	19	5	22	12	27	8	27
Gonorrhea										
Early Syphilis	1	*	*	*	*	*	*	*	*	*

\* No data available for the selected

Data Source: Illinois Department of Public Health (IDPH) IQuery; STD Morbidity Case Report; IDPH Sexually Transmitted Diseases Section.

The following is numbers of HIV and AIDS cases in Iroquois County as of December 31, 2011 and cumulative cases since 2005:

County	HIV Incident Cases			AIDS Cases			HIV	AIDS
	Diagnosed as of 12/31/11	Cumulative Cases Diagnosed Since 2005	2005-2011 HIV Diagnosis Rate	Diagnosed as of 12/31/11	Cumulative Cases Diagnosed Since 2005	2005-2011 AIDS Diagnosis Rate	HIV (non-AIDS) Living as of 12/31/11	AIDS Living as of 12/31/11
Iroquois	1	5	2.4	2	3	1.4	3	10

Source: Illinois HIV/AIDS/STD MONTHLY SURVEILLANCE UPDATE December 2011; Illinois Department of Public Health.

The following are CDC screening recommendations for STDs

- Annual Chlamydia screening for all sexually active women age 25 and under, as well as older women with risk factors such as new or multiple sex partners.
- Yearly gonorrhea screening for at-risk sexually active women (e.g., those with new or multiple sex partners, and women who live in communities with a high burden of disease).
- Syphilis, HIV, Chlamydia, and hepatitis B screening for all pregnant women, and gonorrhea screening for at-risk pregnant women starting early in pregnancy, with repeat testing as needed, to protect the health of mothers and their infants.
- Screening at least once a year for syphilis, Chlamydia, gonorrhea, and HIV for all sexually active gay, bisexual, and other men who have sex with men (MSM). MSM who have multiple or anonymous partners should be screened more frequently for STDs (i.e., at 3-to-6 month intervals). In addition, MSM who have sex in conjunction with illicit drug use (particularly methamphetamine use) or whose sex partners participate in these activities should be screened more frequently.

Source: CDC. Sexually Transmitted Diseases Treatment Guidelines, 2010. MMWR 2010;59(No. RR-12).n

## Environmental, Occupational and Injury Control

### Physical Environment

In 2014, based on Robert Wood Johnson Foundation (RWJF) County Health Rankings the physical environment category for Iroquois County ranked 60 out of 102 counties. This was a slightly better than 2013 at 61. Iroquois County has been up and down in Physical Environment rankings.

Overall, Iroquois County air quality in the 2014 county rankings reported air pollution – particulate matter of 13.4 and Illinois at 12.5 with “Top U.S. Performers” at 9.5. Access to recreational facilities remained at 7 for the years of 2011, 2012, and 2013; there was no reporting for this category in 2014.

Robert Wood Johnson Foundation County Health Rankings for Iroquois County Information								
Health Outcomes and Health Factors	YEAR							
	2011		2012		2013		2014	
	Iroquois	Illinois	Iroquois	Illinois	Iroquois	Illinois	Iroquois	Illinois
<b>Physical Environment</b> (Overall Ranking of 102 counties)	46		38		61		60	
Air pollution-particulate matter days/Daily Fine particulate matter	0	3	0	3	12.4	12.3	13.4	12.5
Air pollution-ozone days	0	4	0	4				
Access to healthy foods	39%	53%						
Access to recreational facilities	7	10	7	10	7	10		
Limited access to health foods			4%	4%	4%	4%		
Fast food restaurants			47%	51%	45%	50%		
Drinking water safety					3%	3%	2%	3%
Severe housing problems							12%	18%
Driving alone to work							79%	73%
Long commute-driving alone							31%	39%

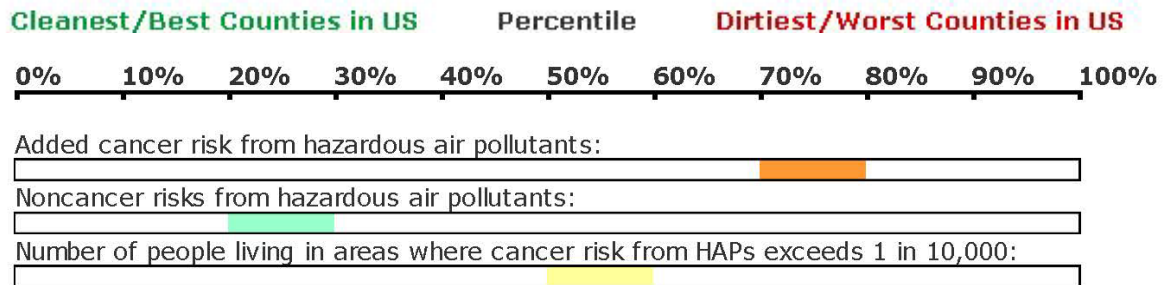
## Air Quality

### Iroquois County Air Quality

#### Air Quality Rankings: Health Risks, Exposure, and Emissions

Iroquois County ranks 42nd in regards to Hazardous air Pollutants (HAP) in regards to individual's added risk for cancer. Iroquois County's ranking is 48th in the area where cancer risk exceeds 1 in 10,000 and with a non-cancer cumulative hazards index is at 98<sup>th</sup> in the State. Iroquois County ranks 37<sup>th</sup> in respect to total environmental releases with 479,004 pounds. The noncancerous risk related to pounds of Toluene equivalents ranks Iroquois County at 76th. From 1988 to 2002 the total non-cancer risk scores have decreased by 98 percent, N-hexane (14,000) pounds of toluene-equivalent releases.

- Ranking Areas by Health Risk



#### Cancer Risks and Noncancer Hazards in IROQUOIS County

##### **Cancer Risks from Hazardous Air Pollutants:**

Average individual's added cancer risk:	<u>400</u> per 1,000,000
Population in areas where cancer risk exceeds $10^{-3}$ :	0
Population in areas where cancer risk exceeds $10^{-4}$ :	31,334
HAP with the highest contribution to cancer risk:	<u>DIESEL EMISSIONS</u>

##### **Noncancer Hazards from Hazardous Air Pollutants:**

Average individual's cumulative hazard index:	<u>0.52</u>
Population in areas where hazard index exceeds 1:	0
HAP with the highest contribution to noncancer hazards:	<u>DIESEL EMISSIONS</u>

**Source:** Scorecard Good Guide; The Pollution Information Site; <http://scorecard.goodguide.com>

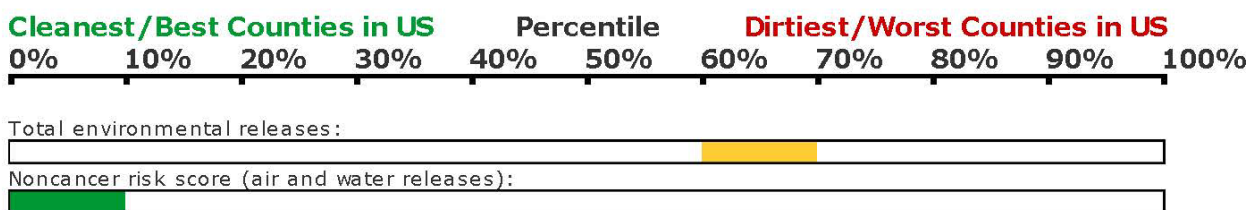
“Average Individual's Added Cancer Risk” (per 1,000,000) is the estimated individual risk of getting cancer due to a lifetime exposure to outdoor hazardous air pollutants. Because the Clean Air Act's goal is to reduce lifetime cancer risks from hazardous air pollutants (HAPs) to one in one million, Scorecard\* expresses added cancer risk in these units: an added risk of 550 per 1,000,000, for example, is 550 times higher than the Clean Air Act goal” Iroquois County's level is 430 per 1,000,000.



*\*Scorecard is a website resource for information about pollution problems and toxic chemicals. Scorecard combines exposure data from the U.S. EPA's National Scale Air Toxics Assessment and toxicity data to estimate the health risks posed by chemical pollutants in ambient air.*

“Cumulative hazard index” is the total hazard index, summing over all HAPs with noncancer effects in an area. Each HAP contributes its single chemical hazard index to the total. Scorecard calculates a cumulative index across all health effects and also effect-specific hazard indices (for neurotoxicity, reproductive toxicity, etc.)” “To attain the Clean Act's goal of "an ample margin of safety to protect public health," a chemical's hazard index should be substantially below one. A hazard index of 55, for example, is 55 times higher than the Clean Air Act goal.” Iroquois County’s level is 0.52.

**2002 Rankings: Major Chemical Releases or Waste Generation in IROQUOIS County\***



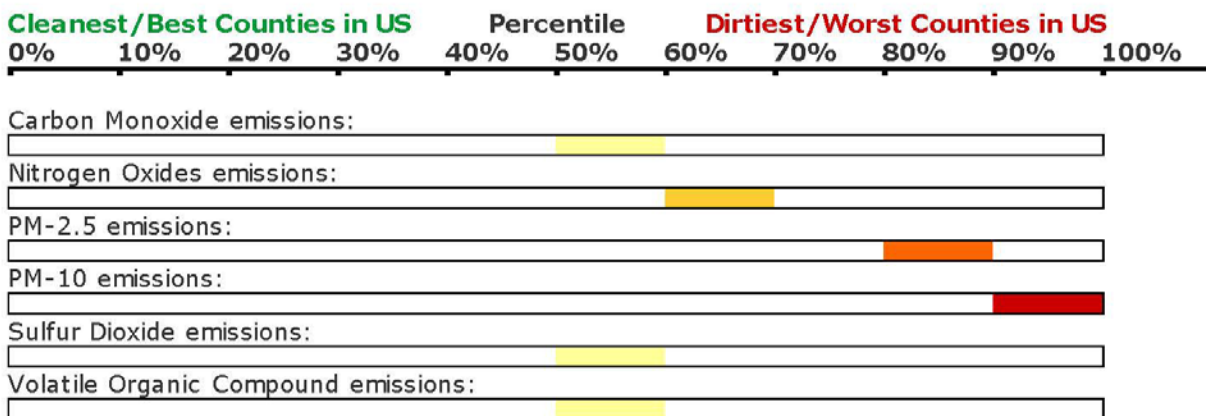
**2002 TRI Pollution Releases Sorted by Health Effect\***

	Air Releases (Pounds from TRI sources)	Water Releases (Pounds from TRI sources)
Suspected Developmental Toxicants	479,004	
Suspected Neurotoxicants	479,004	
Suspected Reproductive Toxicants	479,004	
Suspected Respiratory Toxicants	479,004	

\*Note: Some chemicals are associated with more than one health effect, so their release may be counted multiple times in this table. Therefore, it is not appropriate to sum releases sorted by health effect.

Source: Scorecard.goodguide.com

**Air Quality Rankings: Health Risks, Exposure, and Emissions**



**1999 Emissions Summary of Criteria Air Pollutants** (Expressed in tons of pollutant emitted)

	Carbon monoxide	Nitrogen oxides	PM-2.5	PM-10	Sulfur dioxide	Volatile organic compounds
<u>Mobile Sources</u>	<u>13,749</u>	<u>4,839</u>	<u>854</u>	<u>4,219</u>	<u>475</u>	<u>1,6054</u>
<u>Area Sources</u>	<u>485</u>	<u>384</u>	<u>2,2445</u>	<u>10,752</u>	<u>155</u>	<u>1,424</u>
<u>Point Sources</u>	<u>148</u>	<u>41</u>	<u>1044</u>	<u>514</u>	<u>13</u>	<u>133</u>
All sources	14,382	5,264	3,203	15,485	643	3,163

Source: [Scorecard.goodguide.com](http://Scorecard.goodguide.com)

## Water Quality

### Iroquois County Water Quality

Residents of Iroquois County obtain their drinking water from ground water aquifers. The Mahomet aquifer supplies the majority of water wells within Iroquois County. Approximately 68% percent of the population in Iroquois County is served by a community water supply system. As of March, 2014, there are 26 community water supply systems within the county that are regulated by the Environmental Protection Agency (EPA). The EPA utilizes the Safe Drinking Water Act, enforces legal limits and monitors stricter health guidelines for contaminants.

According to the [Environmental Working Group](#), an advocacy organization, 23 of the 26 community water supply systems identified contaminants which were below the legal limits, but above the health guidelines. All 26 systems detected contaminants within health guidelines and legal limits.

Additionally, 32% of the population receives their drinking water from private, semi-private, or non-community water supplies which are regulated by the Iroquois County Public Health Department enforcing the Illinois Department of Public Health "Private Water Well Construction Code" and "Water Well and Pump Installer's Licensing Code". Iroquois County Public Health Department provides educational material to all residents requesting information on drinking water supplies, encourages private, semi-private, and non-community supplies to at least annually sample their water wells for Coliform bacteria and nitrates.

Iroquois County contains a portion of the one (1) watershed within its borders. This watershed is the Iroquois. There are three (3) water bodies within the Iroquois watershed that have reported percentage of surface water problems with the state and the EPA data (3%) and raked twenty-sixth (26<sup>th</sup>) for impaired water bodies. The water bodies are: Shaved Tail Creek, Beaver Creek, and the Iroquois River.

These three (3) water bodies are divided into Total Daily Maxim Load (TDML) development categories. The TDML is a calculated quality standard developed to determine the maximum amount of a pollutant that a water body can receive and still meet water quality standards. The standards by water body are as follows:

- Beaver Creek water body which is located in the Northeastern portion of Iroquois County has a medium TDML priority ranking. The leading pollutants /stressors on surface waters for this water body are biotic Communities.
- Shave Tail Creek located central portion of the county and is listed having a low TDML priority ranking. The designated beneficial uses of this water body include partially supported aquatic life support and overall use. Fish consumption and primary contact recreation are not specifically supported. The leading cause of pollutants/ stressors of this surface water are organic enrichment/ low dissolved oxygen, siltation, and suspended solids, with the leading cause of water quality problems associated with agriculture.
- Iroquois River is the major water body within Iroquois County. This water body starts in Iroquois County at the county line bordering Indiana runs west then northerly merging with Shave Tail Creek and Beaver Creek. This water body has a low TDML rating, but the leading pollutant/stressor of this surface water is FCA-PCBs with the impairment source not being reported. Polychlorinated biphenyls (PCB) are reported as the leading pollutant/ stressors for the Iroquois River. The beneficial uses and the support status are not reported; however, the Iroquois River is known locally for the same activities as stated for Shave Tail Creek. The EPA lists' high future vulnerability indicators within this watershed lead by Agricultural runoff potential, atmospheric deposition, and the risk to aquatics/wetland species.

### Clean Water Act Comparative Ranking



Percentage of Surface Waters with Impaired or Threatened Uses (state + EPA data):



Number of Impaired Waterbodies (as reported by the state):



**NOTE:** Data limitations affect the accuracy of these rankings.

Source: [Scorecard.goodguide.com](http://Scorecard.goodguide.com)

<b>Beneficial Use Most Impaired</b>	<b>Percent of All Impairment</b>
Aquatic life Support	33%
Primary contact recreation (Swimming)	33%
Fish Consumption	33%
Overall Use	33%

<b>Leading Pollutants/Stressors</b>	<b>Percent Water Bodies Affected</b>
Sediments	33%
Impaired Biological Community	33%
Low Dissolved Oxygen/Organic Enrichment	33%
Organic Compounds	33%

Source: [Scorecard.goodguide.com](http://Scorecard.goodguide.com)

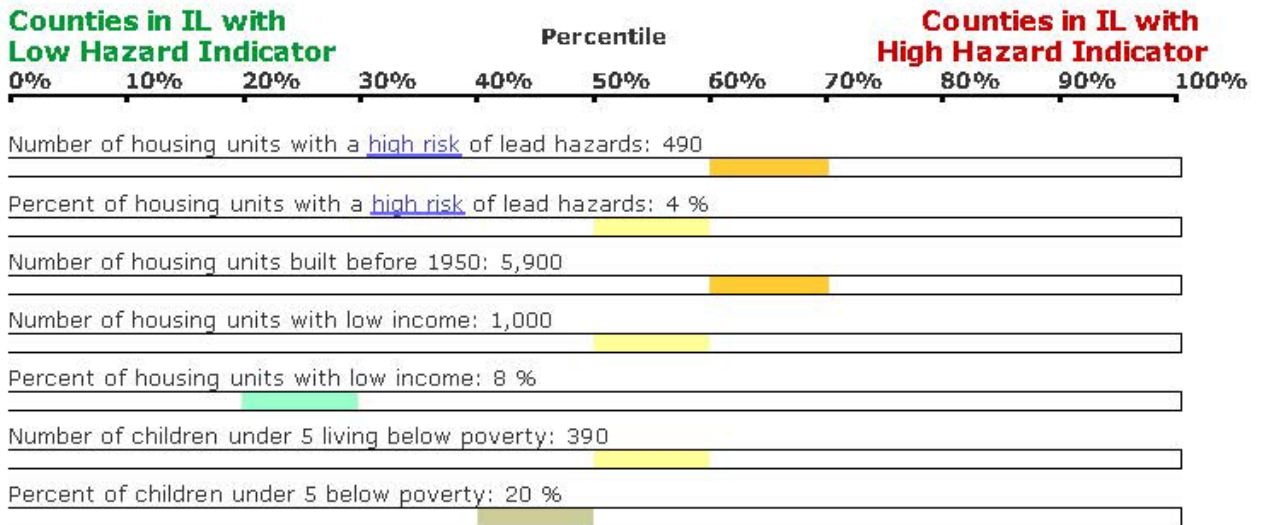
## Lead Poisoning Hazard

Lead poisoning is one of the foremost environmental health threats to children in the U.S. Almost a half million children - 2.2% of all preschoolers - have enough lead in their blood to reduce intelligence and attention span, cause learning disabilities, and damage permanently a child's brain and nervous system. Most children are poisoned by lead in and around their home when they are exposed to harmful levels of lead-contaminated dust, deteriorated lead-based paint, and lead-contaminated soil. Scorecard identifies the communities with the worst lead hazards. Lead risk for Iroquois County's children is an ongoing challenge because of the high number of older homes and apartments. The public health department tests and reports any elevated blood levels in accordance with the Lead Poisoning Prevention Act. The following is information regarding lead hazards in Iroquois.

Iroquois County compared to other counties in Illinois:

### **POLLUTION LOCATOR | Lead Hazards | Ranking Areas by Lead Hazard Indicators**

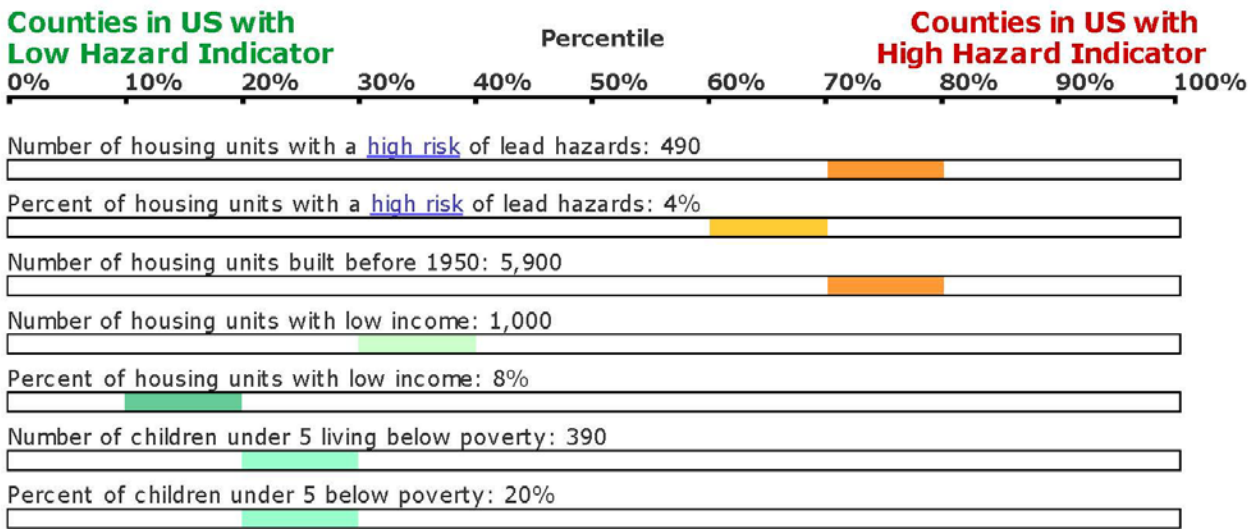
County: **IROQUOIS**



Source: [Scorecard.goodguide.com](http://Scorecard.goodguide.com)

Iroquois County compared to other counties in the United States:

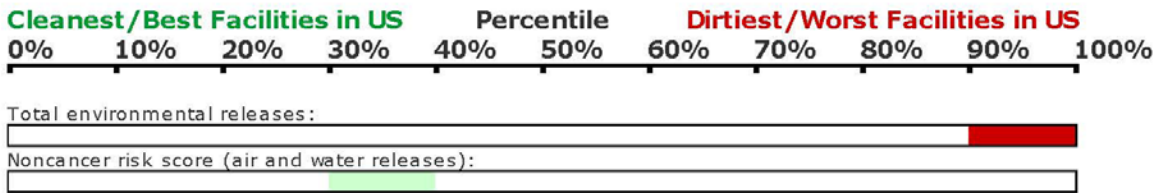
• Lead Hazard Indicators and Comparative Rankings



Source: Scorecard.goodguide.com

There is concern for the future health of Iroquois' residents due to high concentration releases of an environmental toxin called N-Hexan. The quality of Iroquois County's air is being affected by a local factory strategically located in the path of the prevailing west winds. The factory in Gilman is responsible for "Total Environmental Releases" of 479,004 N-Hexan. See graph below:

• 2002 Rankings: Major Chemical Releases or Waste Generation at This Facility\*



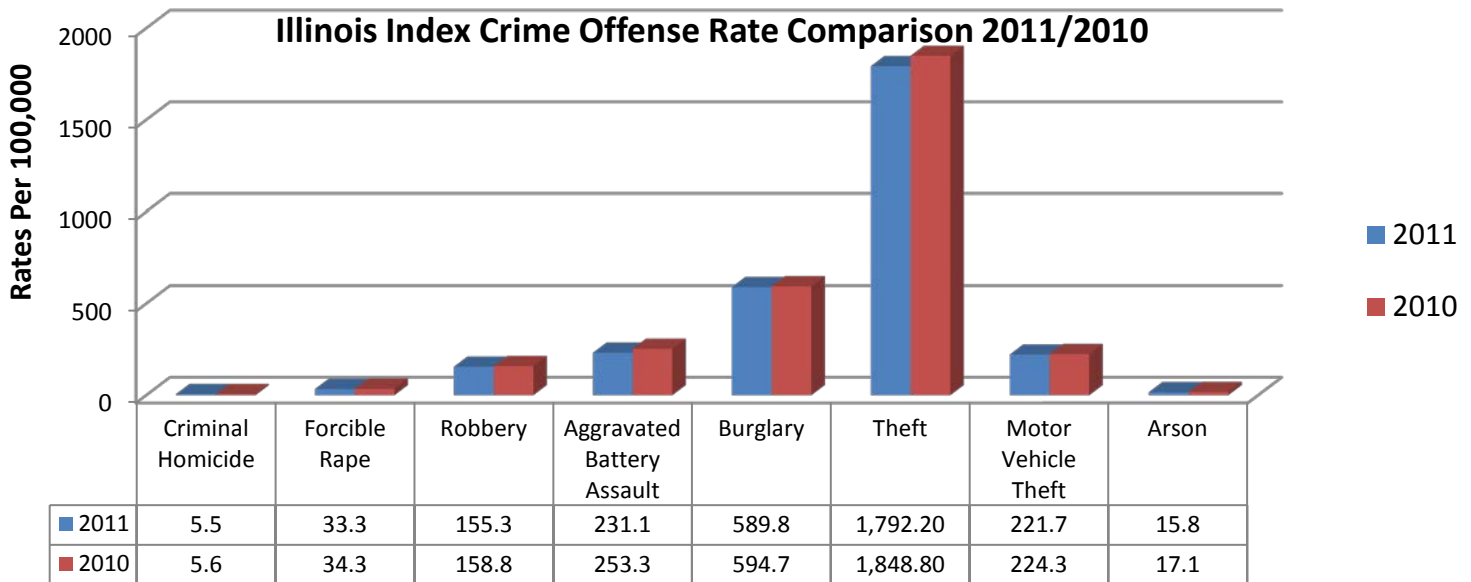
Source: Scorecard.goodguide.com

## Violence

Violence is a serious public health problem. From infants to the elderly, it affects people in all stages of life. In 2010, the United States had over 16,250 homicides and over 38,360 took their own life. Nearly 180,000 people die from violence and injuries each year—nearly 1 person every 3 minutes. (Source: <http://www.cdc.gov/injury/wisqars/>). The number of violent deaths is tragic for every victim and unfortunately just the beginning of many heartaches and problems for victim’s families. Also, many survive violence and are left with permanent physical and emotional scars. The victims, families, and friends are faced with life-long mental, physical, and even financial problems. Violence also erodes communities by reducing productivity, decreasing property values, and disrupting social services.

Violence and injuries affect *everyone*, regardless of age, race, or economic status. In the first half of life, more Americans die from violence and injuries — such as motor vehicle crashes, falls, or homicides — than from any other cause, including cancer, HIV, or the flu. (Source: CDC)

In 2011, the State of Illinois had 395,484 total criminal offenses in the following categories: criminal murder, rape, robbery, aggravated assault, burglary, theft, motor vehicle theft, and arson. See the graph below:



(Source: Crime Trends Illinois State Police, 2009)

The following depicts numbers of cases filed and arrests for crimes in Iroquois County for 2005 – 2011. Any crime is too much crime; however, overall, Iroquois County does not have a high rate of documented violent crimes. Additionally, since 2005, the overall number of “Misdemeanor Cases Filed” has decreased; however, the “Total Felony Arrests” have increased and decreased each year with a significant increase from 2010 to 2011.

<b>Illinois Uniform Crime Reports (I-UCR) Index and Drug Arrests for Iroquois County 2005 - 2011</b>							
CRIME	2005	2006	2007	2008	2009	2010	2011
Misdemeanor Cases Filed	666	701	566	572	476	379	430
Total Felony Arrests	321	302	324	215	219	160	245
<b>Violent Index Arrests</b>							
Violent Index Arrests	97	125	86	33	32	22	17
Murder Arrests	0	2	0	1	2	0	0
Criminal Sexual Assault Arrests	8	8	10	8	2	0	2
Robbery Arrests	1	2	1	0	0	1	0
Aggravated Assault	88	113	75	24	28	21	15
<b>Total Property Index Arrests</b>							
Total Property Index Arrests	61	60	92	76	78	64	125
Burglary	21	27	43	30	40	27	52
Theft	39	27	47	45	35	34	70
Motor Vehicle Theft	1	6	1	1	1	3	3
Arson	0	0	1	0	2	0	0
<b>Total Drug Arrests</b>							
Total Drug Arrests	163	117	146	106	109	74	103
<p>Note: Index arrests include Violent Index offenses (murder, criminal sexual assault, robbery, aggravated assault) and Property Index arrests (burglary, theft, motor vehicle theft, arson).</p> <p><b>Source: Illinois State Police</b></p> <p>Illinois Criminal Justice Information Authority (ICJIA) uses the latest data published in Crime in Illinois by the Illinois State Police and the latest population estimates provided by the National Center for Health Statistics. Counties may not add up to the state total if the state total was updated in a later edition of Crime in Illinois</p>							

The following provides more specific information regarding Iroquois County crime offenses and arrest rates in 2011 and 2010. The total index of Crime Offenses increased 7.1 percent and the total index Crime Arrest Rate increased 65.1 percent. The Drug Crime Arrest Rate increased 39.1 percent. Of particular note, the *Supplemental Data* below indicates an increase in “Domestic Related Offenses” of 9 percent and, even more significant, an increase in “Crimes Against Children” from 20 offenses in 2010 to 42 in 2011. The rate of change from 2010 to 2011 was 110%. There have been increases in every category from 2010 to 2011, there is additional information below this data that further explains interpretation.



## Iroquois County

2011 Population: 29,475  
2010 Population: 29,718

### Index Crime Offenses/Crime Rate Comparison 2011/2010

Year	Total Index Crime Offenses	Criminal Homicide	Forcible Rape	Robbery	Aggravated Battery/ Assault	Burglary	Theft	Motor Vehicle Theft	Arson
2011	421	0	9	0	11	138	256	5	2
2010	393	0	2	1	20	131	233	6	0
% Chg	7.1%	N/C	350.0%	-100.0%	-45.0%	5.3%	9.9%	-16.7%	N/C
2011	(1,428.3)	(0.0)	(30.5)	(0.0)	(37.3)	(468.2)	(868.5)	(17.0)	(6.8)
2010	(1,322.4)	(0.0)	(6.7)	(3.4)	(67.3)	(440.8)	(784.0)	(20.2)	(0.0)
% Chg	(8.0%)	(N/C)	(355.2%)	(-100.0%)	(-44.6%)	(6.2%)	(10.8%)	(-15.8%)	(N/C)

*Rate per 100,000 is in parentheses.*

### Index Crime Arrest Rate Comparison 2011/2010

Year	Total Index Crime Offenses	Criminal Homicide	Forcible Rape	Robbery	Aggravated Battery/ Assault	Burglary	Theft	Motor Vehicle Theft	Arson
2011	142	0	2	0	15	52	70	3	0
2010	86	0	0	1	21	27	34	3	0
% Chg	65.1%	N/C	N/C	-100.0%	-28.6%	92.6%	105.9%	0.0%	N/C
2011	(481.8)	(0.0)	(6.8)	(0.0)	(50.9)	(176.4)	(237.5)	(10.2)	(0.0)
2010	(289.4)	(0.0)	(0.0)	(3.4)	(70.7)	(90.9)	(114.4)	(10.1)	(0.0)
% Chg	(66.5%)	(N/C)	(N/C)	(-100.0%)	(-28.0%)	(94.1%)	(107.6%)	(1.0%)	(N/C)

*Rate per 100,000 is in parentheses.*

### Drug Crime Arrest Comparison 2011/2010

Year	Rate per 100,000	Total Drug Arrests	Cannabis Control Act	Controlled Substances Act	Hypodermic Syringes/ Needle Act	Drug Paraphernalia Act	Methamphetamine Act
2011	369.8	109	28	28	2	45	6
2010	265.8	79	31	18	1	24	5
% Chg	39.1%	38.0%	-9.7%	55.6%	100.0%	87.5%	20.0%

### Supplemental Data and Hate Crime Total Offenses Reported 2011/2010

Year	Domestic Related Offenses	Crimes Against Children	Attacks Against School Personnel	Hate Crime
2011	182	42	1	0
2010	167	20	1	0
% Chg	9.0%	110.0%	0.0%	N/C



Continuation of information regarding Crime Rates and Comparison of 2011 to 2010:

<b>UCR Reporting Agencies' Index Crime Offenses (Excludes State Agencies)</b>													
Agency	V *	Year	Population	Rate per 100,000	Total Index Crime	Criminal Homicide	Forcible Rape	Robbery	Aggravated Assault/ Battery	Burglary	Theft	Motor Vehicle Theft	Arson
IROQUOIS CO SO	Y	2011	22,049	1,056.7	233	0	4	0	6	92	126	5	0
		2010	22,283	888.6	198	0	2	0	7	84	103	2	0
		% Chg	-1.1%	18.9%	17.7%	N/C	100.0%	N/C	-14.3%	9.5%	22.3%	150.0%	N/C
CHEBANSE PD (MCA)	Y	2011	668	0.0	0	0	0	0	0	0	0	0	0
		2010 <sup>(1)</sup>	651	1,382.5	9	0	0	0	0	0	9	0	0
		% Chg	2.6%	-100.0%	-100.0%	N/C	N/C	N/C	N/C	N/C	-100.0%	N/C	N/C
GILMAN PD	N	2011 <sup>(1)</sup>	1,819	N/C	--	--	--	--	--	--	--	--	--
		2010	1,649	363.9	6	0	0	0	1	2	3	0	0
		% Chg	10.3%	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
WATSEKA PD	Y	2011	5,271	3,566.7	188	0	5	0	5	46	130	0	2
		2010	5,290	3,402.6	180	0	0	1	12	45	118	4	0
		% Chg	-0.4%	4.8%	4.4%	N/C	N/C	-100.0%	-58.3%	2.2%	10.2%	-100.0%	N/C

Source: Illinois Criminal Justice Information Authority (ICJIA) uses the latest data published in Crime in Illinois by the Illinois State Police and the latest population estimates provided by the National Center for Health Statistics. Counties may not add up to the state total if the state total was updated in a later edition of Crime in Illinois

The following is regarding the information above:

“County totals reflect crime data reported by police departments and the sheriffs’ office located within the county; however, data reported from state agencies is excluded. Below each county primary page is a listing of agencies within the county that submitted data for the 2011 and/or 2010 reporting years (see list above). The Sheriff’s Department is listed first, followed by an alphabetical listing of the remaining agencies. The index crime rate, as well as index crime offense category totals, is provided for each agency.

Caution should be exercised when reviewing and using this information. Many social factors related to crime and a community’s population must be considered when making statistical comparisons. A community may have a small residential population but a large transient population due to a substantial number of employers, motels, entertainment attractions, etc., within its jurisdiction. A large transient population increases the potential for criminal behavior within a small jurisdiction. The resulting higher population-based crime rate does not compensate for a transient population. The final statistics can lend to the impression that crime is more prevalent due to the exclusion of the transient population in calculation processes.”

## Sentinel Events

### Definition of Sentinel Event:

Sentinel events are those events that are unanticipated or outside the norm. The Joint Commission on Accreditation of HealthCare Organizations defines a sentinel event as: A sentinel event is an unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof. Serious injury specifically includes loss of limb or function. The phrase “or the risk thereof” includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome. Such events are called “sentinel” because they signal the need for immediate investigation and response. (Source: Joint Commission on Accreditation of Healthcare Organizations Jan 2011) [http://www.jointcommission.org/assets/1/6/2011\\_CAMBHC\\_SE.pdf](http://www.jointcommission.org/assets/1/6/2011_CAMBHC_SE.pdf).

Data from the IPLAN Data System for sentinel events is quite old with 2001 & 2004 being the most recent data available for listed events.

Sentinel Events listed from the IPLAN Data System for 2001 include:

Year	Iroquois County Sentinel Events by Number and Year				
	Infants (0-1) Hospitalization for Dehydration	Children (1-17) Hospitalization for Rheumatic Fever	Children (1-14) Hospitalization for Asthma	Adults (>=18) Tuberculosis	Adults (>=18) Hospitalized for Hypertension
2001	6	0	9	0	35
2000	5	0	16	1	33
1999	2	0	8	0	19
1998	5	0	5	0	21

Data from the IPLAN Data System (2004) shows that the rate of breast cancer in Iroquois County is not measurable and therefore much lower than the State's rate (29.8). There were no cases of cervical cancer reported for 2000-2004 for Iroquois County. Therefore, Iroquois County numbers were too low in 2004 to determine a rate.

Sentinel Events listed from the IPLAN Data System for 2004 include:

Iroquois County Sentinel Events – Cancer ( 5-year average age-adjusted rate and 5 year number)					
Year		Iroquois County Rate	Iroquois County Number	Illinois Rate	Illinois Number
2000-2004	In situ Breast Cancer	22.6	24	29.8	9,831
	Late Cervical Cancer	0.0	7	24.3	1,096
1999-2003	In situ Breast Cancer	20.7	22	29.2	9,509
	Late Cervical Cancer	0.0	9	4.2	1,366
1998-2002	In situ Breast Cancer	21.2	22	28.9	9,321
	Late Cervical Cancer	0.0	8	4.3	1,380

Note: Rates are per 100,000, age-adjusted to 2000 US standard and years overlap.

\*If number <15, no rates calculated

# Community Health Plan 2014 – 2019

## **COMMUNITY HEALTH PLAN**

The following is the 2014 – 2019 Community Health Plan as proposed for Iroquois County.

Reduce Breast and Cervical Cancer

## Supportive Data Reduce Breast and Cervical Cancer

Research is clear that early detection of breast and cervical cancer is vital to cancer survival rates. As indicated from data below, 67.5% of women had a mammogram and 91.5% over the age of 40 said “yes.” However, when asked “when was your last on”, 37.8% said >1 year and in the age 40 and over, 37.7% have been greater than a year. With early detection a critical factor for survival, annual mammograms are recommended. Iroquois County women are not meeting the recommendation.

The same is true for cervical cancer screening (pap test), a very high percentage have had a pap (95.8%), but 33.3% have allowed more than a year to pass since their last pap.

The following information is from the IDPH regarding mammography and cervical cancer screening for women in Iroquois County.

4th Round BRFSS Iroquois County Adults		Count	Col %	Confidence Interval %	Unweighted Count
EVER: HAD A MAMMOGRAM	Yes	7,945	67.5%	± 7.5%	215
	No	3,820	32.5%	± 7.5%	60
<b>Total</b>		<b>11,765</b>	<b>100.0%</b>		<b>275</b>
HAD MAMMOGRAM (women 40 and older)	Yes	7,453	91.5%	± 4.3%	206
	No	688	8.5%	± 4.3%	17
<b>Total</b>		<b>8,142</b>	<b>100.0%</b>		<b>223</b>
LAST MAMMOGRAM	<= 1 year	4,911	62.2%	± 7.1%	124
	> 1 year	2,988	37.8%	± 7.1%	90
<b>Total</b>		<b>7,900</b>	<b>100.0%</b>		<b>214</b>
LAST MAMMOGRAM (women 40 and older)	<= 1 year	4,615	62.3%	± 7.3%	120
	> 1 year	2,793	37.7%	± 7.3%	85
<b>Total</b>		<b>7,408</b>	<b>100.0%</b>		<b>205</b>
EVER: HAD A PAP SMEAR	Yes	11,224	95.8%	± 3.2%	264
	No	496	4.2%	± 3.2%	10
<b>Total</b>		<b>11,719</b>	<b>100.0%</b>		<b>274</b>
LAST PAP SMEAR	<= 1 year	7,463	66.7%	± 6.4%	159
	> 1 year	3,722	33.3%	± 6.4%	104
<b>Total</b>		<b>11,185</b>	<b>100.0%</b>		<b>263</b>

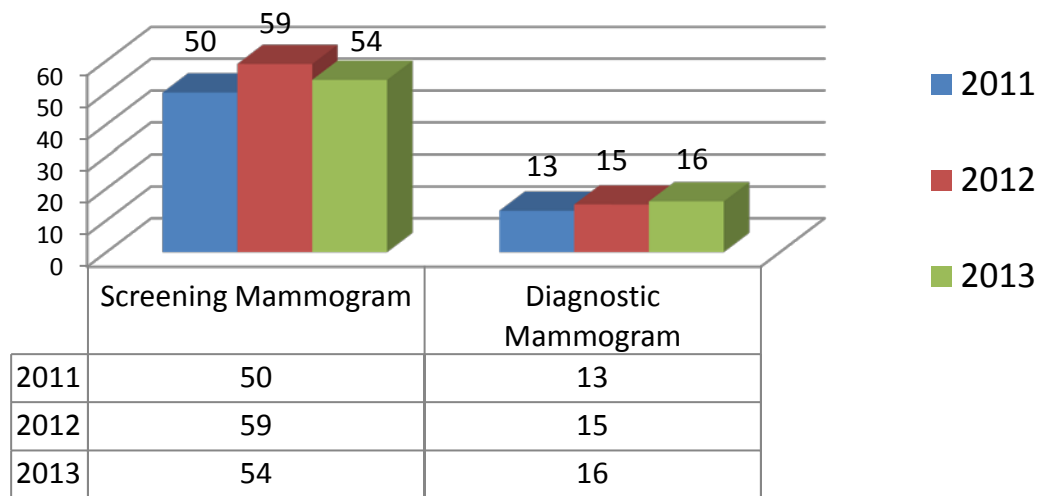
<b>EVER: HAD A CLINICAL BREAST EXAM</b>	<b>Yes</b>	10,750	91.6%	± 5.8%	257
	<b>No</b>	992	8.4%	± 5.8%	17
<b>Total</b>		<b>11,742</b>	<b>100.0%</b>		<b>274</b>
<b>LAST CLINICAL BREAST EXAM</b>	<b>&lt;= 1 year</b>	8,278	77.0%	± 5.7%	193
	<b>&gt; 1 year</b>	2,472	23.0%	± 5.7%	64
<b>Total</b>		<b>10,750</b>	<b>100.0%</b>		<b>257</b>

IDPH, ICHS, 4th Round County BRFSS

Unweighted counts of 5 or less or confidence intervals of 12.5% or more do not meet standards of reliability.

The following depicts the number and type of mammography services provided by Iroquois Memorial Hospital.

### Iroquois Memorial Hospital Mammography Services



The breast and cervix cancer rates for Iroquois County are as follows:

Iroquois County Cancer Incidence Counts and five-year Age-adjusted Rates by Sex All Sites Combined and Selected Sites, All Races, 2007 - 2011				
Site	Count	Rate	LCI (lower confidence interval)	UCI (upper confidence interval)
Breast* (invasive)	138	126.8	105.7	151.4
Cervix	6	7.6	2.6	17.1
Breast in Situ (not in total)	27	25.9	16.9	38.4

\*There were no reported cases of Breast Cancer in males for this time period.  
Source: Illinois Department of Public Health, Illinois State Cancer Registry, data as of November 2013



With the health problems associated with sexually transmitted infections, the increasing number of cancers in both adults and young adults, and the prevalence of adolescents participating in sexual activity at younger ages, receiving the HPV vaccinations is the most effective preventive method for many health problems, short of abstinence. The Committee’s desire is to protect the Iroquois County’s younger population through vaccination, not just for the immediate future, but for many years. The utilization of HPV vaccines could potentially prevent cervical cancer cases from vaccinated girls who are now 12 years old or younger over the course of their lifetimes. (Source: Accelerating HPV Vaccine Uptake: Urgency for Action to Prevent Cancer; A Report to the President of the United States from The President’s Cancer Panel 2012-2013) The goal in selecting this health priority is to protect future generations of Iroquois County residents of many potential health problems through a series of HPV vaccinations.

This uptake effort certainly extends beyond Iroquois County. There is a tremendous effort to increase the uptake of HPV vaccines for both girls and boys. The efforts extend to the State of Illinois, the United States and even to around the world. To quote the *President’s Cancer Panel Annual Report 2012-2013*, “By supporting HPV vaccination as an urgent national and global health priority, the U.S. National Cancer Program has an unprecedented opportunity to contribute to prevention millions of avoidable cancers and other conditions in men and women worldwide.”

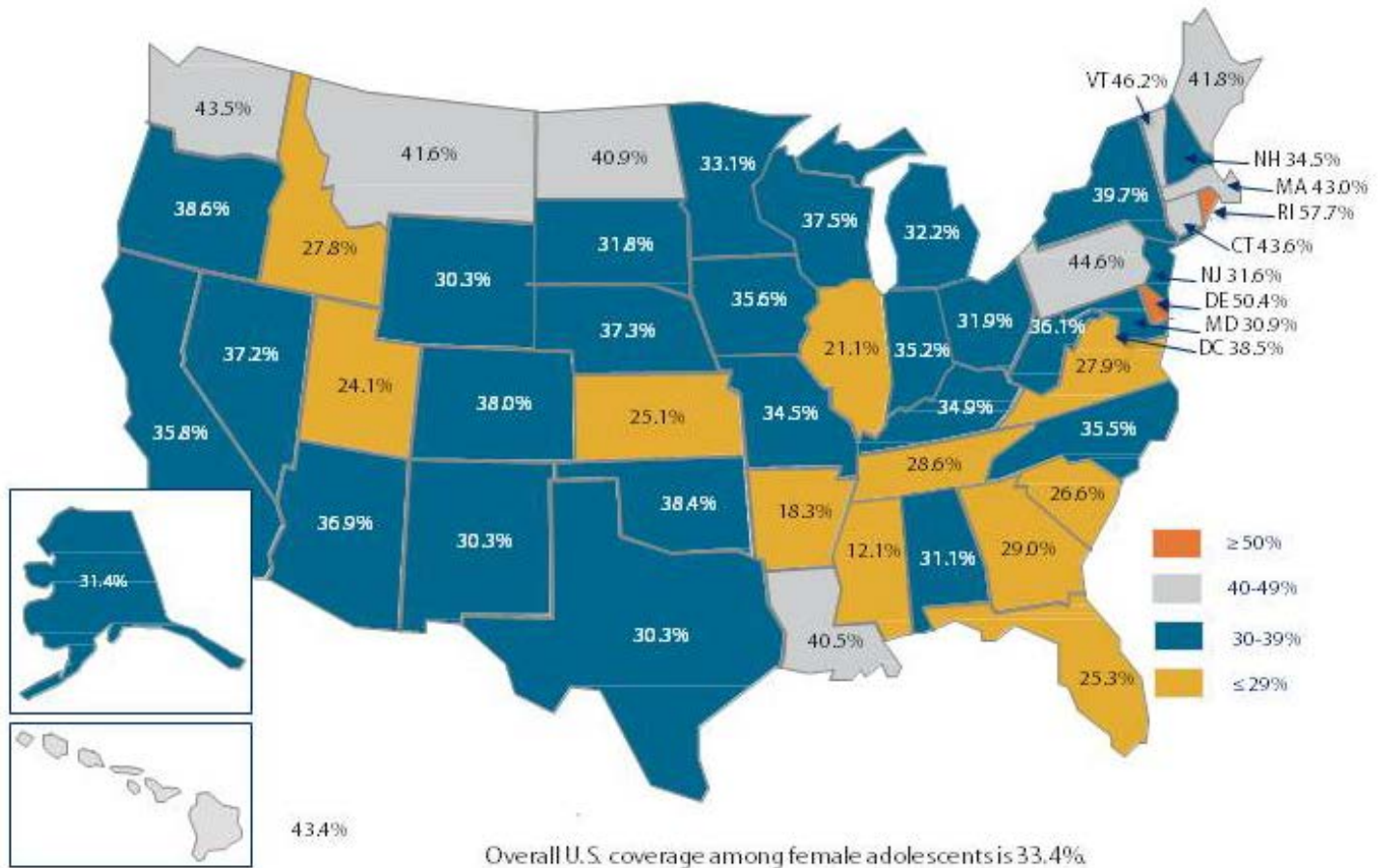
In 2012, the estimated vaccination rates for girls ages 13 – 17 completing the HPV series in Illinois was 21.1 percent. (See pictograph below.) Immunization rates for U.S. boys are even lower than girls. Less than 7 percent of boys ages 13 – 17 completed the series in 2012. *Healthy People 2020* goal is for 80 percent of 13 – 15 year-old girls to be fully vaccinated against HPV. The Iroquois County goal is by 2017, that 25 percent of eligible county residents 11 – 18 years will receive a full regimen of HPV vaccine.

The following table demonstrates the total number of 11 – 18 year olds in Iroquois County:

Age	Both	Male	Female
11 Years	413	211	202
12 Years	404	218	186
13 Years	410	209	201
14 Years	472	261	211
15 Years	443	230	213
16 Years	488	240	248
17 Years	448	241	207
18 Years	401	206	195
TOTAL	3,479	1,813	1,663

Source: U.S. Census Bureau, 2010; QT-P2 Single Years of Age and Sex: 2010Census. Summary File 1, Table PCT12.

**Figure 5**  
**Percentage of 13- to 17-Year-Old Girls Completing HPV Vaccine Series, U.S., 2012**



Source: Centers for Disease Control and Prevention. National and state vaccination coverage among adolescents aged 13-17 years—United States, 2012. MMWR. 2013 Aug 30;62(34):685-93. Data from National Immunization Survey-Teen (NIS-Teen) among female adolescents (N = 9,058) born between January 6, 1994, and February 18, 2000. Gardasil® or Cervarix® may have been received; more than the recommended three doses may have been received.

### Human Papillomavirus (HPV) Is a Real Disease

HPV is a common infection and cause of many health maladies including malignant and non-malignant diseases. The President’s Cancer Panel Annual Report 2012-2013 states that “nearly 80 million people in the United States-1 in 4 are infected with at least one strain of over 100 HPV agents.” There are approximately 26,000 HPV-attributable cancers annually in the United States. Many of these diseases are assumed to be vaccine preventable. According to a recent U.S. Department of Health and Human Services (DHHS), Centers for Disease Control and Prevention (CDC) report more than 21,000 of these diseases are vaccine preventable. While the vast majority of the cancers are cervical in nature, there is an increasing number of anal and oropharyngeal in both females and males. This same report states that there are substantial racial and ethnic disparities involved in the acquisition and diagnosing of HPV infections and associated maladies.

While the malignant-HPV diseases are the most alarming, there are many non-malignant diseases that are associated with HPV. Some of the most prominent health-related problems are genital HPV infections. These diseases are the most common sexually transmitted infections (STI). There are more than 40 types of HPV that can infect the genital areas of males and females. These HPV types also infect the mouth and throat.

While in many cases HPV clears before it causes any health problems, many people who are infected with HPV do not know they have it. There is no certain way to tell who will develop health problems from HPV and how serious those problems may become, including but not limited to cancer and genital warts.

#### Who is at Risk?

Anyone who is having or has ever had sexual contact can get HPV. HPV is so common that nearly all sexually-active men and women will get HPV at some point in their lives; according to a recent article published by the National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention, Division of STD Prevention, CDC, and DHHS.

#### Related Cancers That May be Caused by HPV

- Cervical Cancers
- Vulvae Cancers
- Vaginal Cancers
- Penile Cancers
- Oropharyngeal Cancers
- Anal Cancers in Men and Women

#### HPV Prevention

The American Academy of Family Practice (AAFP) strongly recommends that it is important to vaccinate against HPV. The AAFP urges primary care clinicians nationwide to talk with parents of young adolescents and encourage them of the efficacy and safety of the HPV vaccine. It is recommended that children, boys and girls, ages 11-18 be vaccinated with the three (3) dose HPV regimen. Yet, according to a July 26, 2013 article in Morbidity and Mortality Weekly Report, only about one-third of teenage girls ages 13-17 had received all three vaccine doses in 2012. The article goes to state, "It's astonishing that despite a remarkable effectiveness record, only around a third of U.S. adolescent girls complete HPV vaccination," according to AAFP President Reid Blackwelder, M.D., of Kingsport, TN. He goes on to say that "...countries like Rwanda are immunizing more than four out of five adolescent girls. We have to do better in the U.S." "Finally, some parents may not understand why the vaccine – which, after all, protects against sexually transmitted infections – should be given to their 11 – or 12 – year old child. You can remind them that, as with other vaccines, it's critical that their child receive the vaccine *before* he or she becomes infected." (Source: *Strong Recommendation to Vaccinate Against HPV Is Key to Boosting Uptake*; American Association of Family Physicians (AAFP) News; <http://www.aafp.org/news/health-of-the-public/20140212hpv-vaccltr.html>)



### The Vaccine is Safe.

HPV vaccine has been meticulously studied in both girls and boys. Since 2006, about 57 million doses have been distributed in the United States alone, and the vaccine has not been associated with any long-term side effects. As with other immunizations, most side effects are mild, consisting mainly of pain or redness in the arm in which the vaccine is given. These effects subside quickly.

### The Vaccine is Effective.

Extensive clinical trials have shown HPV vaccine to be extremely effective in boys and girls. Studies in the United States and other countries where the vaccine is used demonstrate significant reductions in the incidence of infections caused by HPV types targeted by the vaccine.

### The Vaccine is Important.

Simply put, HPV vaccine prevents cancer. In girls, it represents the single best defense against cervical cancer, and it is a key tool in preventing anal and oropharyngeal cancers in both men and women. To maximize the vaccine's benefits, it's essential to administer the complete three-dose series.

### Statistics Relevant to HPV Health-Related Issues

- Genital Warts. About 360,000 persons in the U.S. get genital warts each year
- Recurrent Respiratory Papillomatosis (RRP). A condition in which warts grow in the throat. RRP can occur in children (juvenile-onset) and adults (adults-onset). These growths can block the airway, causing a hoarse voice or trouble breathing
- Cervical Cancer. 99.7% of cervical cancer is caused by HPV
- Cancers of the vulva, vagina, penis, anus and oropharynx may be HPV related

### Impact of HPV Vaccines

- 70% of cervical cancers are potentially preventable
- Increasing the 3-dose HPV vaccination coverage to 80% of those aged 12 and younger is estimated to prevent 53,000 cases of cervical cancer
- 90% of non-cervical HPV associated cancers are potentially preventable
- 30-70% of Cervical Pap test abnormalities are potentially preventable
- 90% of genital warts are preventable by quadrivalent vaccine

### Reasons for Not Being Vaccinated

#### Parents Report:

- 19% "vaccine not needed"
- 14% "doctor did not recommend the vaccine"
- 13% "concerns about the safety of the vaccine"
- 13% "didn't know about the vaccine"
- 10% "daughter or son is not sexually active and therefore does not need the vaccine"

Providers Report:

- Hesitance to discuss the vaccine if parents express mixed or negative opinions about the vaccine
- More likely to strongly recommend the vaccine to older adolescents than to 11 and 12 year olds
- Financial barriers related to the vaccine's cost and reimbursement issues

Goals Recommended by the *President's Cancer Panel* for HPV Vaccinations:

Goal 1: Reduce Missed Clinical Opportunities to Recommend and Administer HPV Vaccines

- CDC should develop, test, disseminate, and evaluate the impact of integrated, comprehensive communications strategies for physicians and other relevant health professionals
- Providers should strongly encourage HPV vaccination of age-eligible males and females whenever other vaccines are administered
- Healthcare organizations and practices should use electronic health records (EHRs) and immunization information systems (IIS), to avoid missed opportunities for HPV vaccination
- Healthcare payers should reimburse providers adequately for HPV vaccines and for vaccine administration and services
- Existing HEDIS quality measure for HPV vaccination of adolescent females should be expanded to include males
- Create a Healthy People 2020 HPV vaccination goal for males

Goal 2: Increase Parents', Caregivers', and Adolescents' Acceptance of HPV Vaccines

- CDC should develop, test, and collaborate with partner organizations to deploy integrated, comprehensive communication strategies directed at parents and other caregivers, and also at adolescents

Goal 3: Maximize Access to HPV Vaccination Services

- Promote and facilitate HPV vaccination in venues outside the medical home
- States should enact laws and implement policies that allow pharmacists to administer vaccines to adolescents, including younger adolescents
- Overcome remaining barriers to paying for HPV vaccines, including payment for vaccines provided outside the medical home and by out-of-network or nonphysician providers

# Health Problem Worksheet

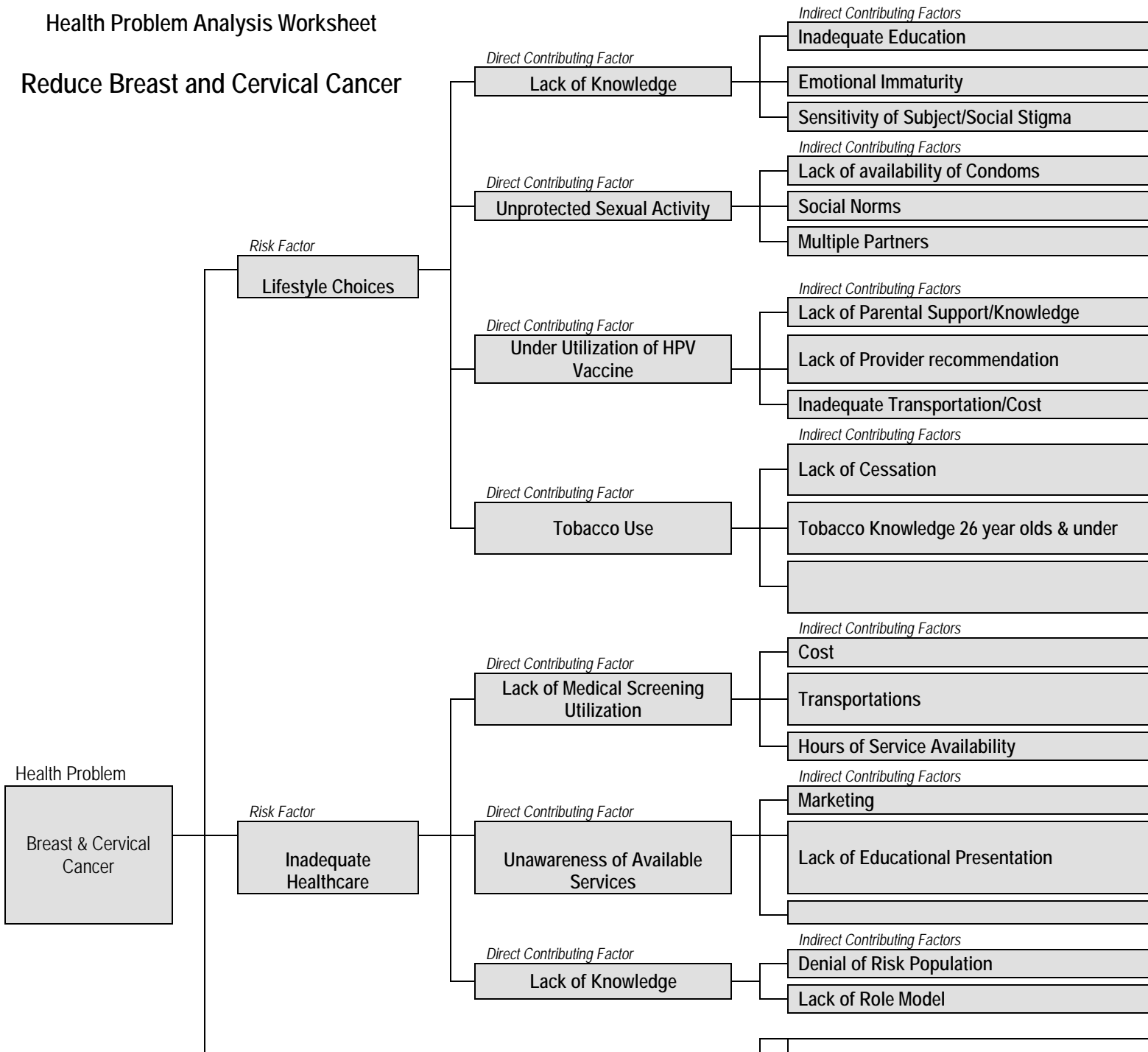
## Reduce Breast and Cervical Cancer

<p><b>Health Problem:</b> Reduce Breast and Cervical Cancer</p>	<p><b>Outcome Objectives:</b> By 2019, reduce the county death rate due to breast and cervical cancer by 5%.</p>
<p><b>Risk Factors:</b></p> <ul style="list-style-type: none"> <li>• Lifestyle Choices that include, but are not limited to, overall lack of knowledge and education; unprotected sexual activity; lack of preventive medical screening; lack of utilization of the HPV vaccine.</li> <li>• Inadequate Health Care including limited health care for lower income individuals; limited access to HPV vaccines; limited access preventive screenings; lack of provider recommendation for vaccines and screenings, and cost for vaccines and medical care/screenings.</li> </ul>	<p><b>Impact Objectives:</b></p> <ul style="list-style-type: none"> <li>• By 2018, increase by 10% the participants receiving mammogram screenings at Iroquois Memorial Hospital.</li> <li>• By 2017, Increase by 5% the participants receiving mammogram screenings at Iroquois Memorial Hospital.</li> <li>• By 2017, 25% of all eligible county residents ages 11-18 will have received the full regimen of HPV vaccine.</li> </ul>
<p><b>Contributing Factors (Direct/Indirect):</b></p> <ul style="list-style-type: none"> <li>• Lack of knowledge/education</li> <li>• Lack of utilization of HPV vaccine</li> <li>• Lack of utilization of medical screenings</li> <li>• Denial of at-risk population</li> <li>• Unprotected sexual activity</li> <li>• Tobacco use</li> <li>• Lack of convenience of services</li> <li>• Lack of transportation</li> <li>• Cost of vaccine and screenings</li> <li>• Lack of role models/parental support</li> </ul>	<p><b>Proven Intervention Strategies:</b></p> <ul style="list-style-type: none"> <li>• Offer HPV vaccines at multiple clinic locations including schools and additional county sites.</li> <li>• Implement &amp; provide six (6) HVP educational presentations in county schools.</li> <li>• Provide two (2) HPV educational presentations to parents and community members.</li> <li>• As HPV vaccine efficacy rates are 99%, HPV vaccine education programs will be offered in schools, to local medical service providers and parents of children who are eligible.</li> <li>• HPV vaccine clinics will be offered during extended hours and at multiple locations.</li> <li>• HPV vaccine costs will be reduced or eliminated for individuals who are unable to afford vaccine administration costs.</li> <li>• Partner with local medical service providers to increase MD recommendations and referrals for HPV vaccine and screenings for breast and cervical cancer.</li> <li>• Increase referrals to the Illinois Breast and Cervical Cancer Prevention Program by increasing awareness of the program via multimedia resources and community outreach.</li> </ul>

<b>Resources Available:</b> <ul style="list-style-type: none"><li>• Local health department</li><li>• Local physicians/health care providers</li><li>• Illinois Breast and Cervical Cancer Program</li><li>• Local Hospital</li><li>• American Cancer Society</li><li>• Local school systems</li><li>• Mental Health</li></ul>	<b>Barriers:</b> <ul style="list-style-type: none"><li>• Limited access to medical care for low income adults and children</li><li>• Limited knowledge of risk</li><li>• Transportation</li><li>• Convenient hours</li><li>• Perceived threats to confidentiality</li><li>• Community views/values in relation to HPV</li><li>• Funding &amp; Economics</li></ul>
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# Health Problem Analysis Worksheet

## Reduce Breast and Cervical Cancer





**Outcome and Impact Objectives – Reduce Breast and Cervical Cancer**  
Outcome and Impact Objectives based on Healthy People 2020 Objectives (CDC, 2012)

**Outcome Objective 1.1:**

By 2019, reduce the county death rate due to breast and cervical cancer by 5%.

Healthy People 2020: C-3 Reduce the female breast cancer death rate

Healthy People 2020: C-4 Reduce the death rate from cancer of the uterine cervix

Target: Reduce Breast Cancer death count by 7; Reduce the Cervix Cancer death county by 1.

Baseline: 2007-2011: Breast invasive cancer incidence 138 and cervix invasive cancer incidence 6.

Target Setting Method: reduce death rate by 5%

Data Source: IDPH, Illinois State Cancer Registry

**Impact Objective 1.1.1:**

By 2018, increase by 10% the participants receiving mammogram screenings at Iroquois Memorial Hospital.

Healthy People 2020: C-17 Increase the proportion of women who receive a breast cancer screening based on the most recent guidelines

Target: Provide 59 screenings per year by 2019

Baseline: 54 screenings were provided in 2013

Target Setting Method: 10% increase in mammogram screenings

Data Source: Iroquois Memorial Hospital Radiology Department

**Impact Objective 1.1.2:**

By 2017, increase by 5% the participants receiving mammogram screenings at Iroquois Memorial Hospital.

Healthy People 2020: C-17 Increase the proportion of women who receive a breast cancer screening based on the most recent guidelines

Target: Provide 57 screenings per year by 2017

Baseline: 54 screenings were provided in 2013

Target Setting Method: 5% increase in mammogram screenings

Data Source: Iroquois Memorial Hospital Radiology Department

**Impact Objective 1.1:3:**

By 2017, 25% of all eligible county residents ages 11-18 will have received the full regimen of HPV vaccine.

Healthy People 2020: C-17 Increase the proportion of women who receive a breast cancer screening based on the most recent guidelines

Target: Provide HPV vaccination series to 873 children ages 11-18 by 2019

Baseline: 3,491 Iroquois County children are ages 11-18

Target Setting Method: 25% of all children will be vaccinated

Data Source: Accelerating HPV Vaccine Uptake: Urgency for Action to Prevent Cancer; A Report to the President of the United States from The President's Cancer Panel 2012-2013; CDC; U.S. Census Bureau, 2010; AccdSchool Health Nurses;

## Intervention Strategies/Community Partnerships

The Iroquois County Public Health Department (ICPHD) will provide, at least six (6) Sexually Transmitted Disease / HPV educational presentations within the seven (7) county school districts. There will be no charge for this service. The students and staff will be provided factual, measurable data from national, state and local resources. The presentations will include instruction and collateral material.

Educational information provided will include disease specific information that encompasses the following:

- Identification
- Infectious agents
- Diagnosis
- Occurrence
- Susceptibility
- Modes of transmission
- Communicability
- Preventative measures
- Methods of control
- Factors for consideration

A primary focus of education will be the encouragement of the HVP quadrivalent vaccination. Staff and students will be given vaccine information that includes:

- Vaccination efficacy
- Vaccine safety
- Dosage and route of administration
- Vaccine schedule
- Side effects
- Cost
- Availability

The Iroquois County Public Health Department will engage local primary care providers to partner with ICPHD in efforts to promote HPV vaccination for both girls and boys. With a goal of decreasing the incidence of HPV and HPV related conditions in Iroquois County residents through strong recommendation of the HPV quadrivalent vaccine to all eligible clients, as well as their parents or guardians.

ICPHD will contact at least ninety percent (90%) of all health care providers within the county to establish a specific method of education for the staff of the primary care physician or health care providers. This provider education may be made in the following formats:

- Face to face visits to the primary care facilities
- Presentations during Medical Staff meetings at the local hospital
- Telephone conference calls
- Emails
- Document mailings

ICPHD will host at least two (2) parent educational programs within Iroquois County during evening hours or on weekends to ensure that parents and community members have the appropriate information to make an informed decision regarding HPV vaccination. This open forum will allow parents and guardians to obtain factual and measurable data of HPV infection rates and complications; discuss vaccine protocol; and seek appropriate answers to questions. Parental support will increase vaccine utilization.

ICPHD outreach efforts will engage and educate community members through a variety of social media outlets including:

- Local newspapers, using Press Releases
- Local radio stations via interviews of ICPHD staff
- Iroquois County Website
- Facebook
- Flyers and Handouts

Utilization increase of HPV vaccine will be obtained by offering extended hours of vaccination to include evenings and weekends. Multiple clinic sites will also enable those who have transportation issues an opportunity for vaccinations in their residential areas by utilization of multiple county sites including schools and community centers.

Costs associated with HPV vaccine will be reduced or eliminated for individuals who are unable to afford vaccine administration costs. An important factor for consideration is that the county financial impact of future costs of medical care for those who develop cancer or other chronic health conditions related to HPV infection will be much greater than the county financial cost of vaccination.

Iroquois County Public Health Department will continue to provide services through the Illinois Breast and Cervical Cancer Prevention Program (IBCCP). IBCCP provides free breast screenings (mammograms) to eligible women 40 through 64 years of age and cervical cancer screenings (pap tests) to eligible women ages 35 through 64. The breast screening visit includes:

- Clinical office visit
- Breast Examination
- Instructions on self-breast exams
- Screening mammogram

If needed, other services such as diagnostic mammogram, ultrasound, breast biopsy and surgical consult are also provided free through the program.

The screening for cervical cancer includes:

- Clinical office visit
- Pelvic examination
- Pap smear

Other services such as colposcopy, surgical consult, and endocervical curettage are also provided at no charge if deemed necessary. To be eligible for the program, the Iroquois County resident must be without medical insurance or under-insured and cannot be on Medicare Part B or Medicaid. ICPHD will increase referrals to the IBCCP by increasing awareness of the program via multimedia resources and numerous community outreach efforts similar to those listed for HPV education.

Iroquois County Public Health Department will develop a collaborative partnership with Iroquois Memorial Hospital (IMH) to promote mammogram screenings for all women of Iroquois County who are age 40 and over. The collaboration includes efforts to organize evening events for women who are encouraged to come with friends for an evening of social gathering and camaraderie, healthy foods and entertainment while waiting for breast mammography. ICPHD will focus efforts of increasing mammography by 5% in 2017 and 10% in 2019 in Iroquois County women by promoting an evening of fun with necessary health screenings.

# Reduce Obesity in Preschool Children Ages 2 – 5

## Supportive Data

### Reduce Obesity in Preschool Children-Ages 2 – 5

As mentioned in the Executive Summary, Iroquois County’s obesity rate is 32% as of 2014. This rate is higher than Illinois’ at 28% and the “Top U.S. Performers” at 25%. The Committee decided to begin with children at a very young age in order to “change the cycle”; and, therefore, transform the community and cultural norms.

As discussed in the Chronic Diseases section, Iroquois County had a program combating obesity in the County’s youth and was recognized for success. The program focused on the health benefits of improving nutrition and promoting healthy lifestyles. From May of 2004 to November, 2009, the percentage of students in grades K-5 with a BMI (Body Mass Index) of 25 or above was reduced from 13.1 %. With the success of working with grades K-5 the Committee agreed to start even younger and decided on preschoolers age 2-5. Many of the statistics listed below state some very important and somewhat disturbing facts about being overweight or obese and the many problems that accompany this problem. Protecting Iroquois County children from this health and social problems is the goal.

The following table demonstrates the number of 2-5 year olds in Iroquois County:

Age	Both	Male	Female
2 Years	345	169	176
3 Years	302	149	153
4 Years	360	178	182
5 Years	369	197	172
TOTAL	1,376	693	683

Source: U.S. Census Bureau, 2010; QT-P2 Single Years of Age and Sex: 2010Census. Summary File 1, Table PCT12.

The following data was obtained from two (2) Unit 9 Preschool classes in Watseka, Illinois. Body Mass Index (BMI) measurements were performed on 17 preschoolers in one class and 19 preschoolers in another class. The scale for normal in the measurement method utilized is a BMI <25. All 36 of the children measured were within normal range. The results are as follows:

Body Mass Index Range	Number of Children
13.00 – 13.99	1
14.00 – 14.99	0
15.00 – 15.99	10
16.00 – 16.99	11
17.00 – 17.99	8
18.00 – 18.99	2
19.00 – 19.99	1
20.00 – 20.99	2
21.00 – 21.99	1
TOTAL	36



### General Childhood Obesity Information

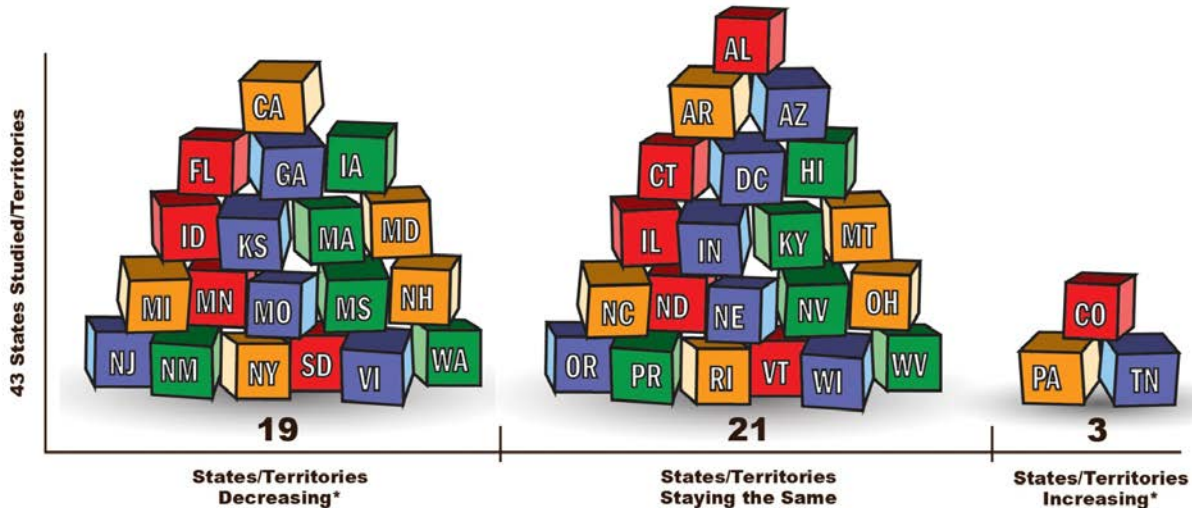
Prevalence of childhood obesity in the United States remains high. The obesity rate among the nation’s young people, aged 2-19, has not changed significantly since 2003-2004 and remains at 17%. However, among 2-5 years old, obesity has declined based on CDC’s National Health and Nutrition Examination Survey (NHANES) data. (Source: JAMA, article.aspx=1832542) Obesity is defined as body mass index (BMI) at or above the 95<sup>th</sup> percentile of the sex-specific CDC BMI-for-age-growth charts. The following facts relate to childhood obesity in the United States:

- Approximately 12.5 million of children and adolescents aged 2-19 years are obese.
- Prevalence of obesity among children aged 2-5 years decreased significantly from 13.9% in 2003-2004 to 8.4% in 2011-2012.
- Significant racial and age disparities in obesity prevalence among children and adolescents.
  - Hispanics-22.4%
  - Non-Hispanic Blacks-20.2%
  - Non-Hispanic Whites-14.1%
  - Non-Hispanic Asians-8.6%
- Obesity and extreme obesity among U.S. low-income, preschool-aged children went down for the first time in recent years according to a CDC study.
  - Obesity decreased from 15.21% to 14.94% from 2003-2010.
  - Extreme obesity decreased among all racial groups except American Indians/Alaska Natives. The greatest decrease was among 2 year olds and Asian/Pacific Islander children.



The graph below shows that among the 43 states and territories studied in the Pediatric Nutrition Surveillance Report in 2011, 19 states and territories are showing decreases in obesity rates among low-income preschoolers, while 21 states and territories are showing no change in obesity rates, and three (3) states are showing increases in obesity rates. However, as depicted, Illinois did not show a decrease

### Obesity rates among low-income preschoolers decreased in many states



SOURCE: CDC Vital Signs, August, 2013. [www.cdc.gov/vitalsigns](http://www.cdc.gov/vitalsigns). Pediatric Nutrition Surveillance System, 2008-2011. \*Represents statistically significant annual decrease or increase in obesity. To learn more about how childhood obesity is measured, see <http://www.cdc.gov/obesity/childhood/basics.html>.

Source: CDC Vital Signs, August 2013, [www.cdc.gov/vitalsigns](http://www.cdc.gov/vitalsigns), Pediatric Nutrition Surveillance system, 2008-2011. \* Represents statistically significant annual decrease or increase in obesity. To learn more about how childhood obesity is measured, see <http://www.cdc.gov/obesity/childhood/basics.html>.

According to the 2009 Pediatric Nutrition Surveillance System (PedNSS) data, nearly one-third of the 3.7 million low-income children aged two to four years surveyed were obese or overweight, and 541,000 were obese. (Source: [www.cdc.gov/obesity/childhood/lowincome.html](http://www.cdc.gov/obesity/childhood/lowincome.html)) The short-term problems

**5x**  
Children who are overweight or obese as preschoolers are 5 times as likely as normal-weight children to be overweight or obese as adults.

**VitalSigns**  
www.cdc.gov/vitalsigns

are many beginning with the increase of juvenile diabetes in the United States. However, children who are overweight or obese as preschoolers are 5 times more likely to be overweight or obese as adults. Therefore, many long-term health care problems are associated with childhood obesity. Some of the more prominent problems are:

- High blood pressure
- High cholesterol
- Type 2 diabetes
- Cardiovascular diseases

The number of U.S. people in poverty is the largest number in the 51 years in which poverty estimates have been published. Low income families generally have less access to healthy food choices and opportunities for physical exercise. Rural and predominantly minority communities are also more prone to obesity since they do not always have access to nearby retail stores that provide healthy, affordable foods. Due to the lack of green space, parks and recreation centers are also barriers to leisure time physical activity. As the case of Iroquois County, more families are turning to public health programs, such as the Special Supplemental Nutritional Program for Women, Infants and Children Program (WIC), to meet the needs of their children younger than 5 years.

- 1 of 7 low-income, preschool-aged children is obese.
- 37.4% of counties with at least 100 records in the PedNSS have childhood obesity rates exceeding 15%.
- 5.5% of those counties have childhood obesity rates exceeding 20%

The following information was published in *Science Daily* "Childhood obesity comes with an estimated price tag of \$19,000 per child"; April 7, 2014; Source: Duke University

Childhood obesity comes with an estimated price tag of \$19,000 per child when comparing lifetime medical costs to those of a normal weight child, according to an analysis led by researchers at the Duke Global Health Institute and Duke-NUS Graduate Medical School in Singapore. When multiplied by the number of obese 10-year-olds in the United States, lifetime medical costs for this age alone reach roughly \$14 billion. An alternative estimate, which takes into account the possibility of normal weight children gaining weight in adulthood, reduces the cost to \$12,900 per obese child. The findings appear online April 7, 2014, in the journal *Pediatrics*. "Reducing childhood obesity is a public health priority that has substantial health and economic benefits," said lead author Eric Andrew Finkelstein, Ph.D., M.H.A. "These estimates provide the financial consequences of inaction and the potential medical savings from obesity prevention efforts that successfully reduce or delay obesity onset."

The following information provides the poverty rates for children under 18 in Iroquois County:  
Poverty Rates for Related Children Under Age 18, Selected Counties

Location	Data Type	1989	1999	2011*
Illinois	Percent	16.8%	14.0%	19.6%
Iroquois	Percent	11.4%	11.8%	17.3%

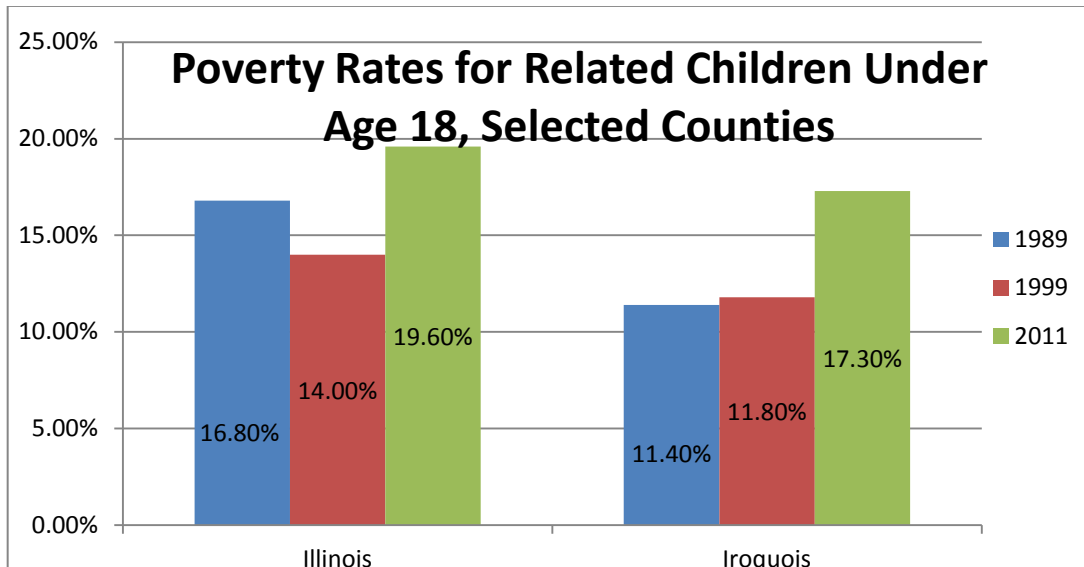
**DEFINITIONS & SOURCES**

**Definitions:** \* Estimates from three-year pooled data (2009-2011)

**Data Source:** Sources: U.S. Census Bureau, Decennial Census, 1990 and 2000; American Community Survey, 2009-2011.

Data Provided by: [Voices for Illinois Children](#)

Childhood obesity rates are higher for children in poverty or in low-income homes. The following graph is based on the previous table.



#### Combating Childhood Obesity

Increasing Physical Activity by doing the following:

- Use the CDC's State Indicator Report on Physical Activity, 2010, to determine your community's needs.
- Access national guidelines at [CDC.gov/physical activity/everyone/guidelines/child](http://CDC.gov/physical activity/everyone/guidelines/child)

#### Increasing Fruit and Vegetable Consumption

- Priority strategies include starting or expanding *Farm to Where You Are* programs
- Use *CDC's State Indicator Report on Fruits and Vegetables*, to identify your community needs
- Learn more about the WIC food package revisions that improves retail access to farmers' markets

#### Reducing Energy Dense Food and Sugar Consumption

- Priority strategies include ensuring that regulations and policies at all levels promote healthier foods and beverages in places where young children eat

#### Breastfeeding Initiation and Duration

- Priority strategies include developing state coalitions to support breastfeeding and implementing supports in maternity care and work site settings.
- WIC Program expansion of breastfeeding peer counseling services.

#### Decreasing Television Viewing

- Priority strategies include establishing policies to limit TV viewing in childcare settings.
- Apply television and screen-time standards recommended by the *American Academy of Pediatrics*.

Health Problem Worksheet

Reduce Obesity in Preschool Children Ages 2 – 5

<p><b>Health Problem:</b> Reduce Obesity in Preschool Children Ages 2- 5</p>	<p><b>Outcome Objectives:</b> By 2019, reduce the number of children, ages 2 -5 that are enrolled in preschool and/or WIC, with a BMI of 25 or greater by 2.5%.</p>
<p><b>Risk Factors:</b></p> <ul style="list-style-type: none"> <li>• Inactivity is one of the greatest risks associated with childhood obesity and normal childhood development; preschoolers, including children with special needs, should be provided with 120 minutes or more of active play time every day, both indoor and outdoor ;</li> <li>• Poor nutrition accounts for many childhood obesity problems; not enough fresh fruits and vegetables; too many sugary treats and drinks, too many fatty foods, including fried foods that have little or no nutritional value</li> </ul>	<p><b>Impact Objectives:</b></p> <ul style="list-style-type: none"> <li>• By 2015, assess each preschool programs active play schedule and provide play and/or sports equipment to three (3) preschools each year in order to encourage and enhance physical activity</li> </ul>
<p><b>Contributing Factors (Direct/Indirect):</b></p> <ul style="list-style-type: none"> <li>• Lack of Parental knowledge/education</li> <li>• Social norms</li> <li>• Misleading labeling</li> <li>• Lack of facilities</li> <li>• Low motivation</li> <li>• Seasonal pricing of fresh fruits and vegetables</li> <li>• Transportation</li> <li>• Social stigma</li> <li>• Socio economic status</li> </ul>	<p><b>Proven Intervention Strategies:</b></p> <ul style="list-style-type: none"> <li>• Develop &amp; provide at least one (1) educational workshop for preschool providers to include strategies to increase physical activity and improve childhood nutrition.</li> <li>• Implement a partnership with the local library for educational programs for ages 2-5.</li> <li>• Initiate food &amp; activity day partnering with Park Districts.</li> <li>• Increase educational programs for parents and children</li> <li>• Educational campaign with child care providers</li> <li>• Collaborate with community resources such as food pantries</li> <li>• Educational campaign with community resources</li> <li>• Collect BMI data on children 2-5 years enrolled in preschool/WIC/FCM</li> </ul>

**Resources Available:**

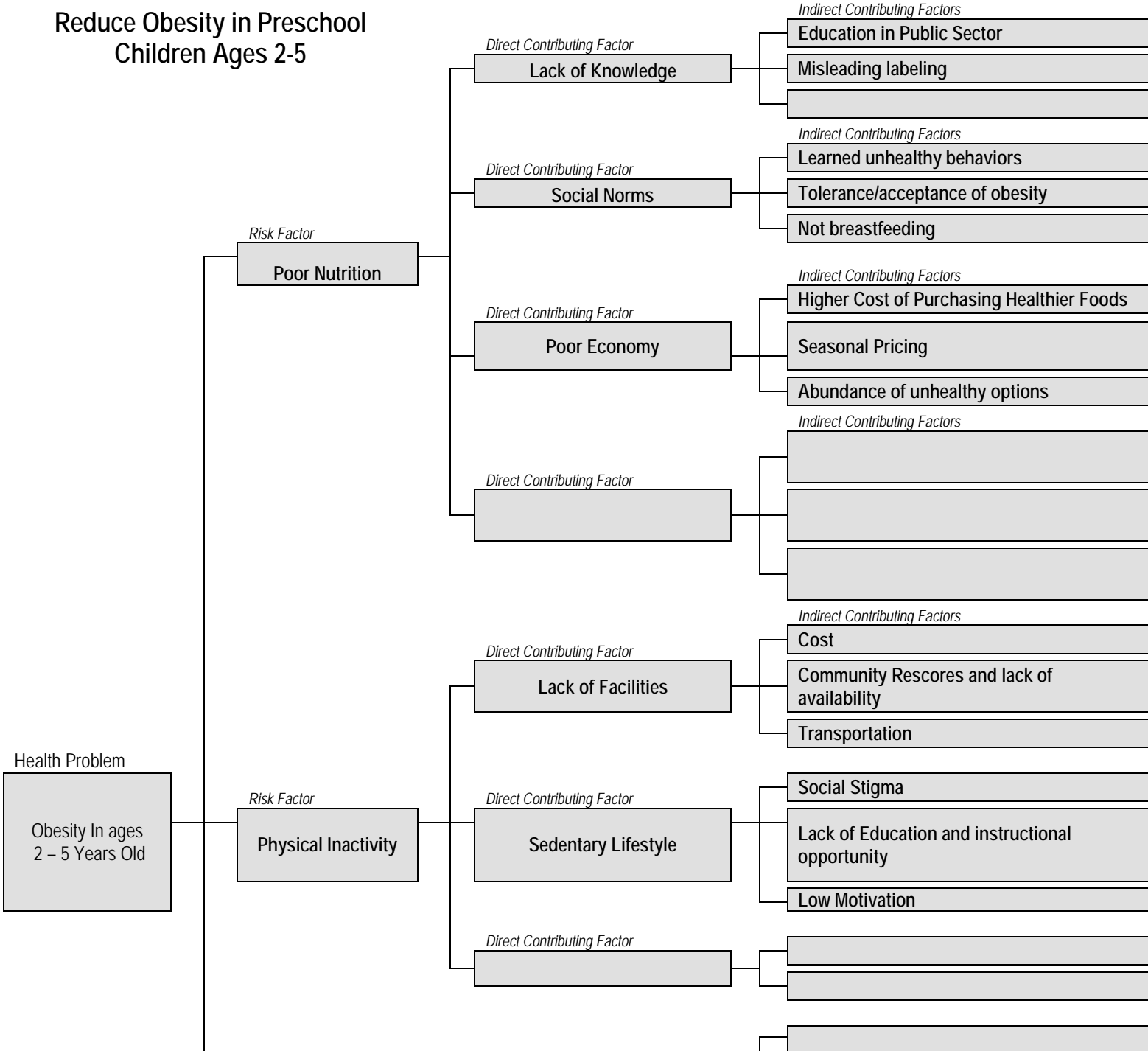
- Local Health Department
- Local Physicians/Health Care Providers
- Local Hospital
- Local School Systems
- Early Childhood/Preschool Facilities
- Local Park District
- Local Libraries
- Extension Office

**Barriers:**

- Financial constraints of parents
- No indoor exercise facilities
- No parent/child activity programs
- Not breastfeeding

# Health Problem Analysis Worksheet

## Reduce Obesity in Preschool Children Ages 2-5



## Outcome and Impact Objectives – Reduce Obesity in Preschool Children Ages 2 – 5

Outcome and Impact Objectives based on Healthy People 2020 Objectives (CDC, 2012)

### **Outcome Objective 2.1:**

By 2019, reduce the number of children, ages 2 -5 who are enrolled in WIC, with a BMI of 25 or greater by 2.5%.

Healthy People 2020: NWS-10.1 Reduce the proportion of children aged 2 to 5 years who are considered obese

Target: To be determined

Baseline: WIC enrollees; As of March, 2014 – FIPHD Iroquois County total WIC participants = 465; WIC participants ages 2 -5 = TBD

Target Setting Method: To decrease percentage of children with BMI of 25 or greater by 2.5%

Data Source: Ford-Iroquois Public Health Department; Cornerstone

### **Impact Objective 2.1.1:**

By 2015, assess each preschool programs active play schedule and provide play and/or sports equipment to three (3) preschools each year in order to encourage and enhance physical activity.

Healthy People 2020: NWS-11.1 Prevent inappropriate weight gain in children aged 2 to 5 years

Target: Annually, three (3) preschools

Baseline: Zero (0) in 2014

Target Setting Method: Assess each Iroquois County Preschool program's activity schedule and play and/or sports equipment and provide equipment to enhance physical activity

Data Source: Iroquois County Community Unit School District #9; Illinois State Board of Education (ISBE);

## Intervention Strategies/Community Partnerships

The Public Health Department will conduct a BMI measurement screening on all 2-5 year old WIC participants. Additional BMI screenings will be conducted in December and May of each school year in participating preschool class in the County.

The proposed Iroquois County Public Health Department will provide, at no cost to the recipient, play and/or sports equipment to three (3) preschools each year in order to enhance play time. Preschoolers should have at least 120 minutes of play time, both indoors and outdoors, daily. This equipment will encourage preschoolers to play, be physically active and have fun. These behaviors are healthy and key to maintaining normal weight, healthy weight and BMI.

The proposed Iroquois County Public Health Department will provide, at no cost, at least one (1) educational workshop for Iroquois County preschool provider. The preschool staff will be provided with factual, measurable data regarding childhood obesity from national, state and local resources verbally and in writing. Educational information will include obesity in children ages 2-5 facts that encompass and address the following:

### 1. Poor Nutrition

- Lack of knowledge
- Misleading labeling of food products
- Learned unhealthy behaviors
- Tolerance/acceptance of obesity
- Not breastfeeding
- Abundance of unhealthy options
- Higher costs of purchasing healthy foods
- Seasonal pricing

### 2. Physical Inactivity

- Lack of available community resources
- Cost of activities
- Transportation to activities
- Low motivation
- Factors for consideration

The primary focus of education will be the encouragement of appropriate nutrition and importance of regular physical activity. Staff and students will be given strategic information that includes:

- Healthy food choices
- Food Guide Pyramid
- “My Plate” education
- Instruction on how to read food labels appropriately
- Motivation for behavior change and unhealthy food habits
- Encouragement for breastfeeding with younger siblings
- Eligible enrollment in WIC



The Iroquois County Public Health Department will continue to promote the Maternal Child Health Programs including Women, Infants and Children (WIC) Program. The WIC program is a supplemental food program designed to insure that pregnant or nursing women, infants and children up to age five (5) are supplied with food products and education which will contribute to a healthy and nutritional diet. Iroquois County residents that qualify for WIC must:

- Live within Iroquois County
- Meet with WIC income guidelines
- Have a nutritional or health need

WIC will be subcontracted with Iroquois Memorial Hospital (IMH) to provide services to Iroquois County residents meeting the above criteria. A partnership with IMH will help to increase the number of participants in the WIC program. Beginning on July 1, 2014, WIC staff members will visit the Obstetrical department at IMH daily or as notified to enroll clients before they leave the hospital after childbirth. Increased WIC referrals from local physicians is expected as ICPHD will contact at least ninety percent (90%) of all health care providers within the county to establish a specific method of education for the staff of the primary care physician or health care providers. This provider education may be conducted in one or more of the following formats:

- Face to face visits to the primary care facilities
- Presentations during Medical Staff meetings at the local hospital
- Telephone conference calls
- Emails
- Document mailings

Body Mass Index (BMI) data will be collected by ICPHD or IMH nursing staff on all children enrolled in the WIC program. Education, both verbal and in writing, regarding BMI data and obesity prevention will be provided for all adults caring for the children enrolled in WIC program. BMI data will be analyzed by ICPHD and IMH staff. Our goal is to reduce the number of children, ages 2-5 that are enrolled, with a BMI of 25 or greater by 2.5% by 2019. ICPHD will also host at least two (2) parent educational programs within Iroquois County during to ensure that parents and community members have the appropriate information regarding the WIC Program. This open forum will allow parents and guardians to obtain needed information and seek appropriate answers to questions.

ICPHD obesity prevention outreach and campaign efforts will engage and educate community members through a variety of social media outlets including:

- Local newspapers, using Press Releases
- Local radio stations via interviews of ICPHD staff
- Iroquois County Website
- Facebook
- Flyers and Handouts

Iroquois County Public Health Department will establish a collaborative partnership with the University of Illinois Cooperative Extension and Park Districts within Iroquois County to provide educational activities for children that include appropriate nutrition and physical activity. ICPHD and the University of Illinois Cooperative Extension will offer at least two (2) presentations and programs to children participating in the After School Program as well as Summer Camps. Education shall include:

- Healthy food choices
- The Food Guide Pyramid
- My Plate education
- Physical activity importance

Iroquois County Public Health Department will partner with local community libraries to develop educational programs for children ages 2-5. Several of the local libraries have monthly specific Toddler Time and Preschool programs for children who are 2-5 years of age. Children must be accompanied by an adult. ICPHD will offer to present and/or partner with local libraries to establish evidence based educational nutrition and physical activity programs that will engage children 2-5 years old.

Iroquois County Public Health Department will engage local preschools in efforts to combat obesity in children ages 2-5. These efforts will closely mimic the Coordinated School Health Grant Program efforts currently being implemented in local schools by health department staff who have successfully implemented changes. The changes resulted in significant reduction of BMIs in children K-5 with a BMI of 25 or greater from 13.1% to 6.6%... Adaptations for education, programs and policies will be age appropriate. Although preschool children do not eat lunch while at preschool, snacks are provided. A primary focus of education with preschools will be based on choosing healthy snacks as well as physical activity. Body Mass Index (BMI) data will be collected by ICPHD nursing staff on children enrolled in preschools participating in the obesity prevention campaign. BMI data will be collected on each child in participating preschools in November and May of each school year. The data obtained for each child will be provided to parents along with written educational materials regarding BMI results and the impact on the child's health. By 2019, ICPHD will reduce the number of 2-5 year old children enrolled in participating preschools with a BMI of 25 or greater by 2.5%.

# Reduce Tobacco Use

## Supportive Data

### Reduce Tobacco Use

As discussed briefly in the Executive Summary, Iroquois County has a higher percentage of adults that smoke than Illinois and Illinois has a higher percentage than the U.S. Based on BRFSS data dated 2007-2009, 24.9 percent (5,632) of Iroquois County residents smoke cigarettes. The ages of individuals are as follows: 18-24: not recorded; 25-44: 26.1% (1,905); 45-64: 24.4% (1,869); and 65+: 13.6% (731). The Committee decided to focus first on adolescents to prevent initiation of tobacco use. Then, focus on cessation opportunities for adults, reducing the number of locations exposed to Environmental Tobacco Smoke (ETS), and education and counseling opportunities for current tobacco users.

The goal is that by keeping adolescents from initiating tobacco use, the chronic illnesses that are initiated or that are exacerbated by tobacco use will be significantly reduced, or perhaps be non-existent for the non-smokers of tomorrow. The goal is to also assist and help current Iroquois County smokers become non-smokers and see a future with Iroquois County adult non-smokers that have never smoked.

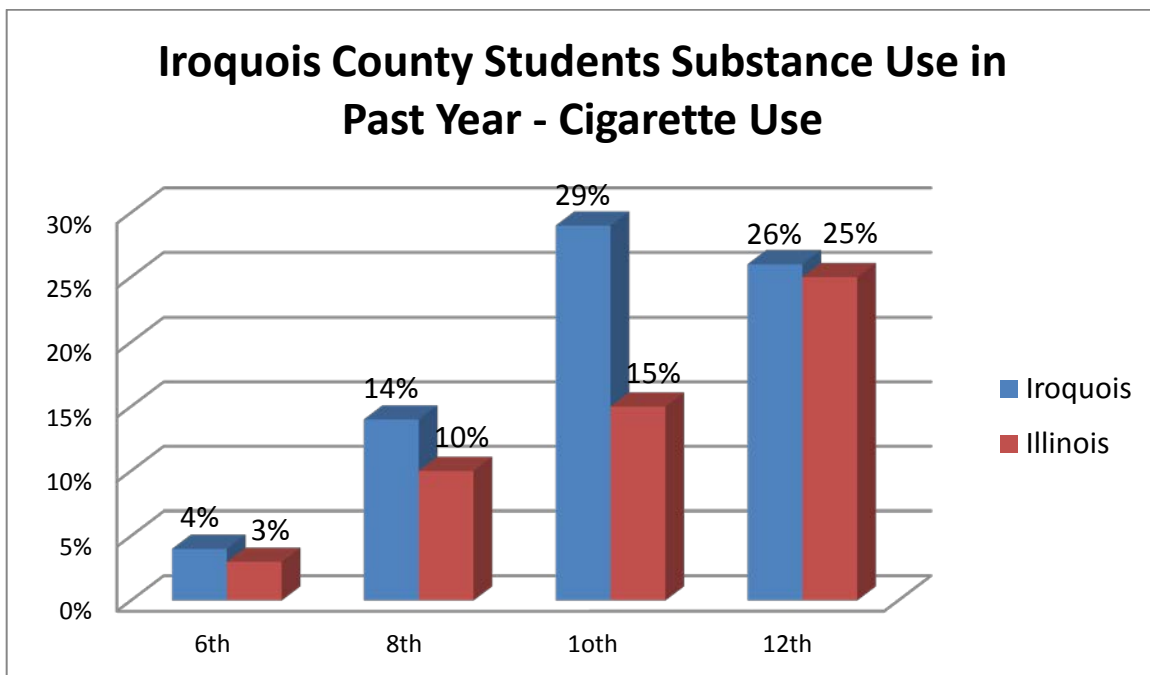
The following is data extrapolated from the Illinois Youth Survey 2012 conducted in Spring of 2012, by the *University of Illinois Center for Prevention Research and Development* and included the following for Iroquois County: seven (7) elementary and middle schools and six (6) high schools surveyed. With students surveyed as follows:

Grade	Students	Enrolled	Percent
6 <sup>th</sup> grade	312	343	91%
8 <sup>th</sup> grade	308	345	89%
10 grade	268	369	73%
<u>12 grade</u>	<u>269</u>	<u>335</u>	<u>80%</u>
Total	1,157	1,392	83%

The following is data extrapolated from the Illinois Youth Survey 2012 regarding the age Iroquois adolescents ever smoked a cigarette, even one puff.

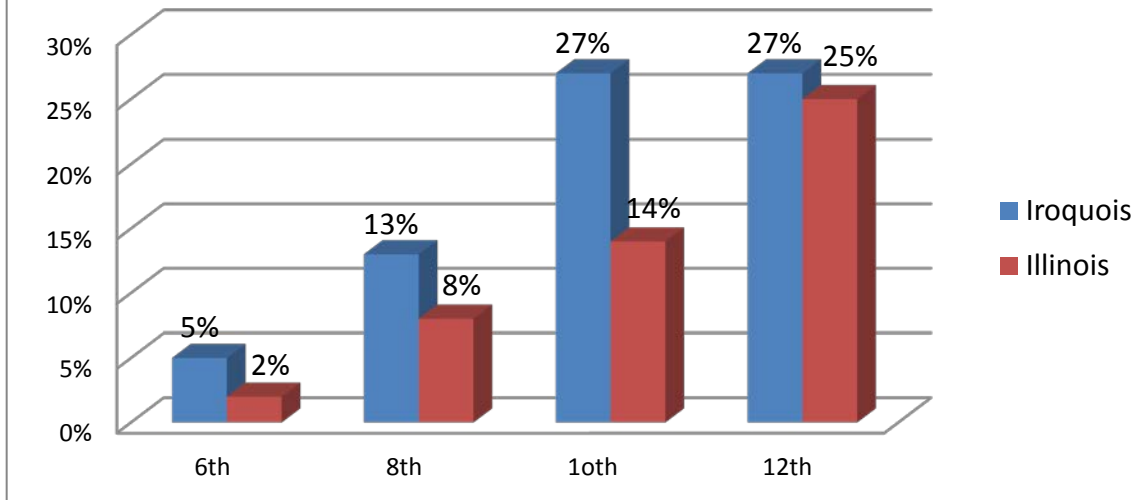
Iroquois Students											
Survey Question: How old were you when you first:											
Smoked a cigarette, even just a puff											
	Never have	10 or younger	11	12	13	14	15	16	17	18 or older	Total
8 <sup>th</sup>	73%	7%	4%	4%	8%	3%	0%	0%	0%	0%	100%
10 <sup>th</sup>	56%	7%	5%	5%	6%	7%	13%	0%	0%	0%	100%
12 <sup>th</sup>	52%	7%	3%	4%	3%	8%	8%	6%	7%	2%	100%
Used any other tobacco product (e.g., chewing tobacco or cigars)											
8 <sup>th</sup>	88%	3%	1%	2%	3%	2%	0%	0%	0%	0%	100%
10 <sup>th</sup>	70%	2%	3%	2%	3%	7%	10%	3%	0%	0%	100%
12 <sup>th</sup>	69%	2%	3%	2%	1%	6%	5%	5%	5%	2%	100%

The following charts compare Iroquois County students with students throughout the State of Illinois. This information indicates there are more Iroquois County students smoking than other students in the state, both in the past year and in the past 30 days.



Illinois Youth Survey 2012; Data for Illinois is 2010;

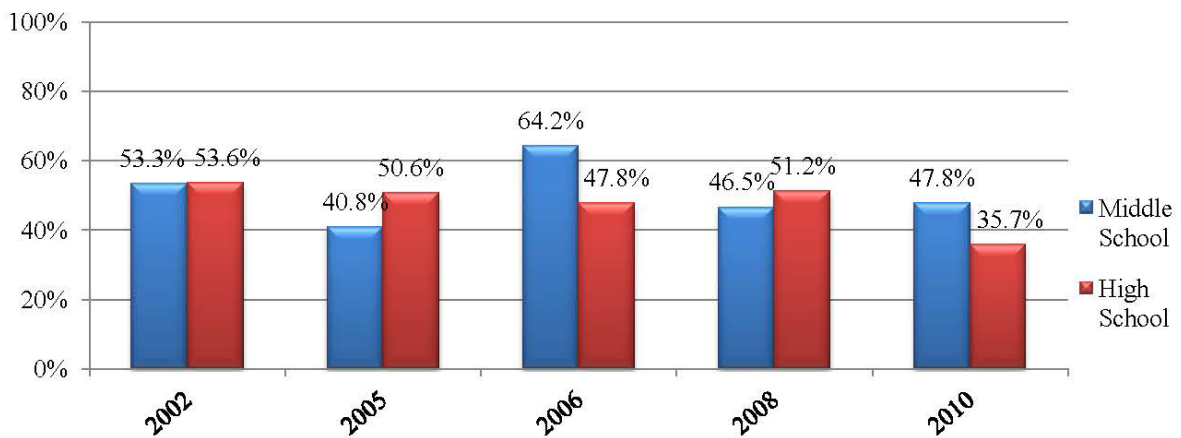
## Iroquois County Students Substance Use in the Past 30 Days - Cigarette Use



Illinois Youth Survey 2012; Data for Illinois is 2010;

The Illinois Youth Survey did not ask whether or not students wanted to quit smoking. The following data was extracted from *The Burden of Tobacco in Illinois 2013*. There is a significant number of middle school students who would like to quit smoking (47.8%) and 35.7% of high school students want to quit.

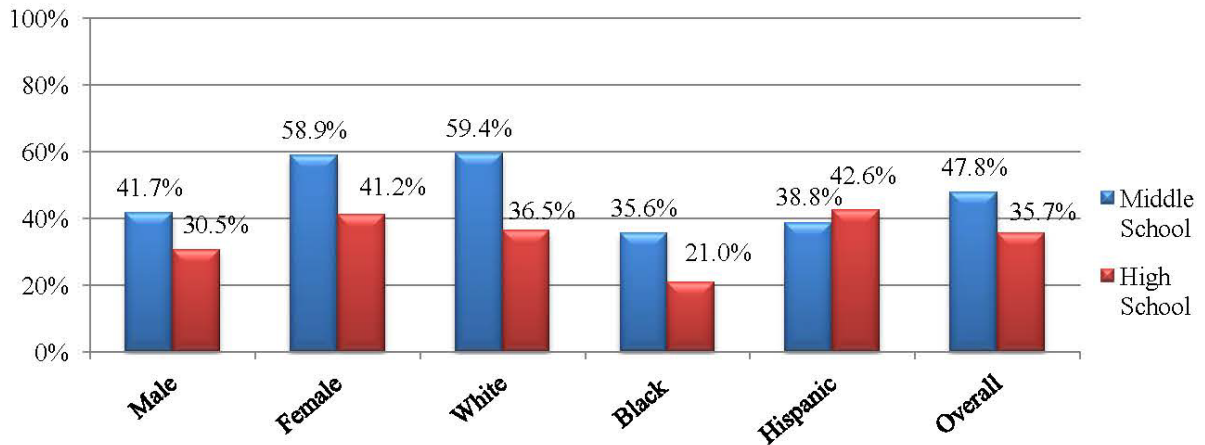
**Figure 40. Current Illinois Youth Smokers Who Want to Quit Smoking, 2002-2010**



Source: Illinois Youth Tobacco Survey (YTS)

The following is youth smokers who want to quit by select demographics.

**Figure 41. Current Illinois Youth Smokers Who Want to Quit Smoking by Select Demographics, 2010**



Source: Illinois Youth Tobacco Survey (YTS)

The following table demonstrates the total number of 11 – 18 year olds in Iroquois County:

Age	Both	Male	Female
11 Years	413	211	202
12 Years	404	218	186
13 Years	410	209	201
14 Years	472	261	211
15 Years	443	230	213
16 Years	488	240	248
17 Years	448	241	207
18 Years	401	206	195
<b>TOTAL</b>	<b>3,479</b>	<b>1,813</b>	<b>1,663</b>

Source: U.S. Census Bureau, 2010; QT-P2 Single Years of Age and Sex: 2010Census. Summary File 1, Table PCT12.

After the Surgeon General’s 1964 report that concluded that smoking did indeed cause cancer, nearly 50 years later, tobacco use is still the largest cause of preventable death, disease and disability in the United States.

According to the Illinois Department of Public Health in 2010, 19.3 percent of U.S. adults were current cigarette smokers and the highest smoking prevalence was in the Midwest (21.8%). (Source: CDC Vital Signs: Current Cigarette Smoking Among Adults Aged ≥ 18 Years --- United States, 2005--2010. Morbidity and Mortality Weekly Report 60. 35 (2011): 1207-12) According to this same report in the United States, tobacco use is responsible for the following:

Approximately 443,000 deaths per year;  
30 percent of all cancer deaths;  
33 percent of all deaths from cardiovascular disease;  
80 percent of deaths from chronic obstructive pulmonary disease (COPD);

There is obviously a serious health care dilemma related to tobacco use. Secondary but just as important health care issues are the problems related to secondhand smoke. Thousands of nonsmokers die each year because of lung cancer related to secondhand smoke. As the article goes on to state, “there is no risk-free level of exposure to smoke.”

While the prevalence of smoking among adults have continued to decrease over the past years the Healthy People 2020 goal of 12% is far from being reached. The gap between males and female smokers has narrowed with more women smoking than in the past. There is a higher prevalence of smokers that demonstrates disparities between socio-economic classes with lower income, minorities and lower education individuals that are now smoking.

While it has been determined that maternal cigarette smoking during pregnancy increases the risk for pregnancy complications, such as placental previa, placental abruption, and premature rupture of the membrane; and poor pregnancy outcomes, such as preterm delivery, restricted fetal growth, and sudden infant death syndrome (SIDS), moms continue to smoke. Smoking during pregnancy resulted in an estimated 776 infant deaths in the United States annually during 2000—2004. (Source: CDC Trends in Smoking Before, During, and After Pregnancy --- Pregnancy Risk Assessment Monitoring System (PRAMS), United States, 31 Sites, 2000—2005. Morbidity and Mortality Weekly Report 58.SS-4 (2009) : 1-31.)

Another group of smokers that is very concerning and has met with challenges are young adults. Initiation of smoking for most smokers begins in youth or young adulthood. Nearly 90 percent of smokers started smoking by age 18 and 99 percent of smokers had started by age 26. Every day, 3,800 young people under the age of 18 smokes their first cigarette and 1,000 become daily smokers. For every tobacco related death, at least two youth or young adults become regular smokers.(Source: United States. Department of Health and Human Services. Preventing Tobacco Use among Youth and Young Adults: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012.)

Even though there are well-publicized anti-smoking campaigns, there seem to be social, environmental and personal risk factors that may influence young adults to smoke. Some of those influences include the following:

- Low socio-economic status;
- Use and approval of peers and siblings;
- Exposure to smoking in movies;
- Lack of skills to resist influences to smoking;
- Smoking by parents or guardians and/or lack of parental support;
- Involvement; accessibility, availability, and price of tobacco products; a perception that tobacco use is the norm;
- Low levels of academic achievement;

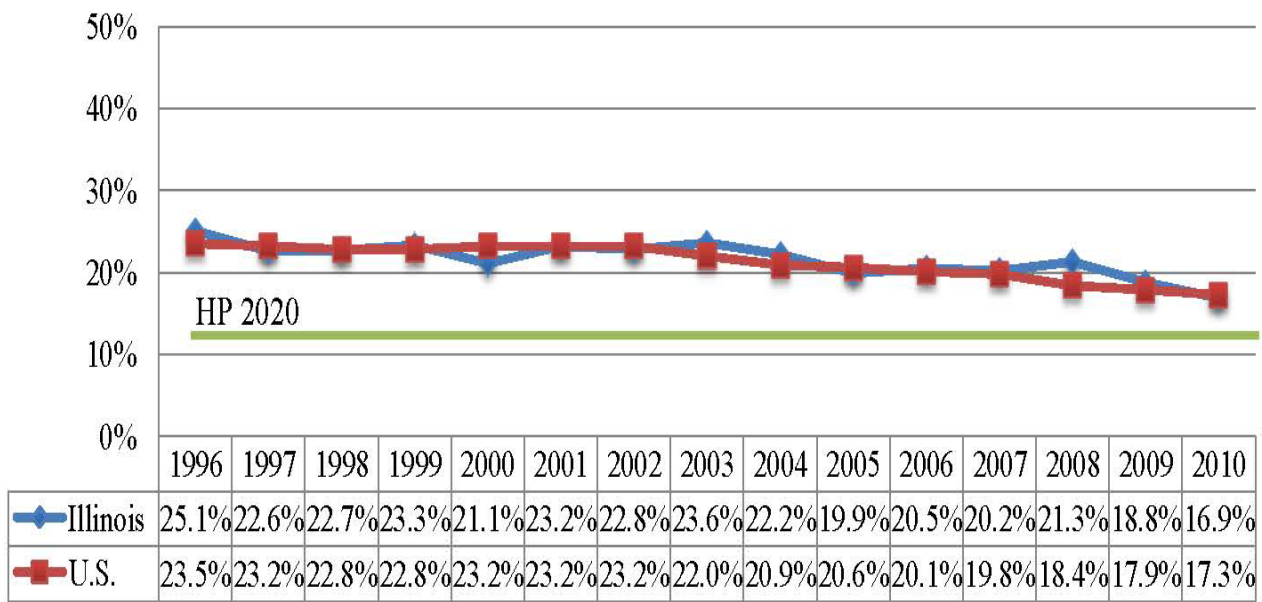


- Low self-image or self-esteem;
- Exposure to tobacco advertising;
- Aggressive behavior

(Source: US. Department of Health and Human Services. Preventing Tobacco Use among Youth and Young Adults: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012.)

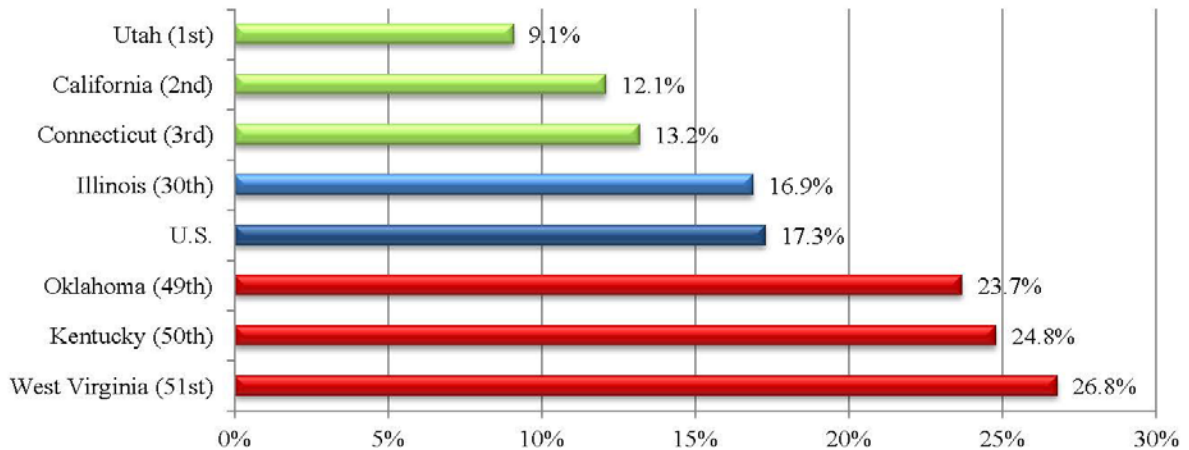
The following is data related to adult smoking prevalence in Illinois including the Healthy People 2020 goal; and Illinois smokers compared to other states;

**Figure 1. Adult Smoking Prevalence in Illinois, 1996-2010**



Source: Behavioral Risk Factor Surveillance System (BRFSS), CDC

**Figure 2. Adult Smoking Prevalence Rates of Selected States, 2010**



Source: Behavioral Risk Factor Surveillance System (BRFSS), CDC

The following table provides information regarding the number of cigarettes smoked daily by Illinois smokers:

**Table 1. Number of Cigarettes Smoked Per Day by Adult Smokers, Illinois, 2011**

Number of Cigarettes Smoked Per Day	%
< 15 cigarettes	46.6%
15-25 cigarettes	44.1%
> 25 cigarettes	9.3%
<b>Mean number of cigarettes smoked per day</b>	16

Source: Illinois Adult Tobacco Survey (ATS)

According to a 2010 report; “A Report of the Surgeon General: *How Tobacco Smoke Causes Disease*,” tobacco smoke is a toxic mix of more than 7,000 chemicals. Many of these chemicals are poison and cause body tissue damage when inhaled. Over time the damage caused by smoking leads to disease. As previously noted, smoking impairs the lungs, but not only the lungs but smoking can cause cancer almost anywhere in the body. See below the areas of the body that researchers have identified that develop cancers due to smoking:

- Mouth, nose and throat, esophagus, bladder
- are cut in half
- Larynx
- Trachea
- Lungs (Primary and Secondary, due to secondhand smoke)
- Stomach
- Pancreas
- Kidneys and Ureters
- Cervix
- Bone Marrow and Blood

There is promising news related to smokers that quit.

- Within 5 years of quitting smoking, the chances of mouth, nose and throat, esophagus, bladder cancer
- Ten years after quitting smoking the risk for dying from lung cancer is cut in half (50%)
- And, If everyone in the United States chose to be a smoke-free, non-smokers, then, cancer deaths in the United States would be cut by one-third (33.3%).

Other diseases related to smoking include:

- Aneurysms
- Stroke
- Heart attack
- Emphysema
- Chronic bronchitis
- Pneumonia
- Other COPD diseases
- Interference with the functioning of fallopian tubes
- Damage to DNA in the sperm
- Smoking during pregnancy
- Premature delivery
- Low birth weight
- Stillbirth
- Sudden infant death syndrome (SIDS)
- Infections for children
- Type 2 diabetes

Regarding diabetes, smokers with diabetes have a higher risk for serious complications, including heart and kidney disease; amputation; retinopathy (eye disease causing blindness); and peripheral neuropathy (nerve damage).

Diabetics who quit smoking have better control over their blood sugar levels

### **Smokeless Tobacco**

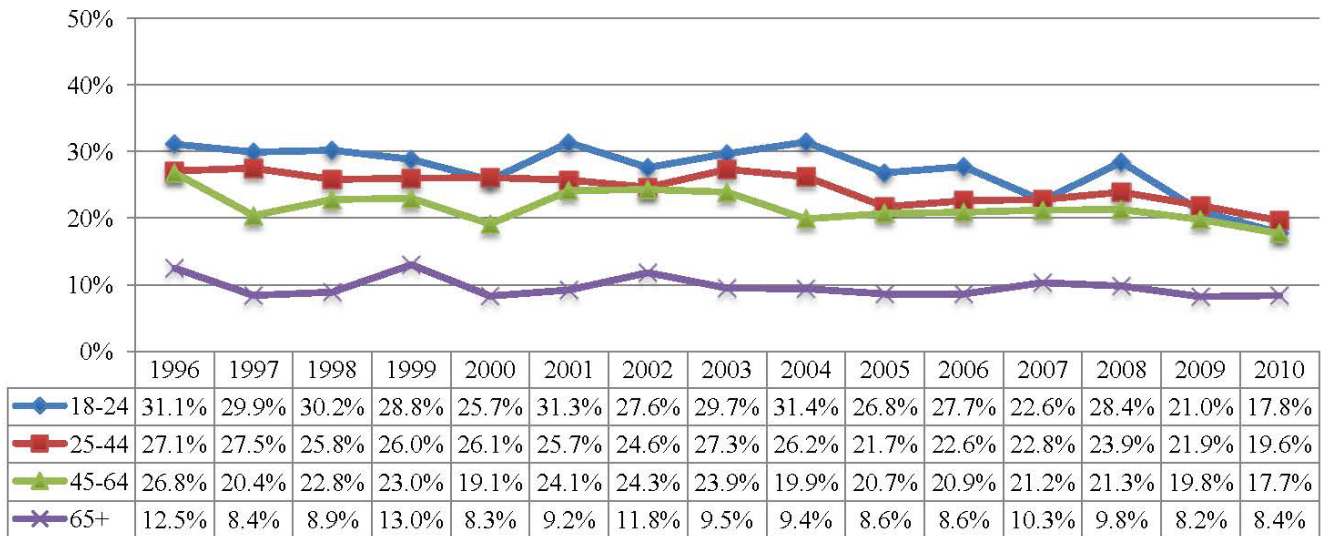
Smokeless tobacco is not a safe alternative to smoking cigarettes. Smokeless tobacco contains 28 cancer-causing agents (carcinogens) and is a known cause of human cancer. Smokeless tobacco use increases the risk of developing oral cavity cancer, esophageal cancer and pancreatic cancer. Smokeless tobacco use also may cause other diseases, such as heart disease, gum disease, and oral lesions. Smokeless tobacco use during pregnancy increases the risks for preeclampsia (i.e., a condition that may include high blood pressure, fluid retention, and swelling), premature birth, and low birth weight. Smokeless tobacco use by men causes reduced sperm count and abnormal sperm cells. (Source: National Cancer Institute. Smokeless Tobacco and Cancer. National Cancer Institute, 2010.)

### **Addiction to Tobacco**

Nicotine is a highly addictive drug that is present in all tobacco products. Breaking the “nicotine habit” is much more difficult to quit, than most understand. Many times even when a tobacco user wants to quit, it takes them more than one try to quit. While nicotine is not a regulated drug, the addictive effects are similar to heroin or cocaine, in that the brain causes the user to crave more and more nicotine. Tobacco use addiction can be both mental and physical. While the tobacco companies have long known that their products are addictive, because of the nicotine concentration they are producing products that deliver more nicotine and deliver it quicker to the brain. There are also additives and other chemicals added to tobacco that makes them more addictive. Teens are also more sensitive to nicotine and do not know how powerful nicotine is and how easy it is to become addicted.

The following chart shows adult smokers by age and for the purposes of our health indicator, the 18-24 year old smokers are of most interest. The data is encouraging in that since 2006 there were two (2) years of decline, then an increase in 2008, then two (2) more years of decrease.

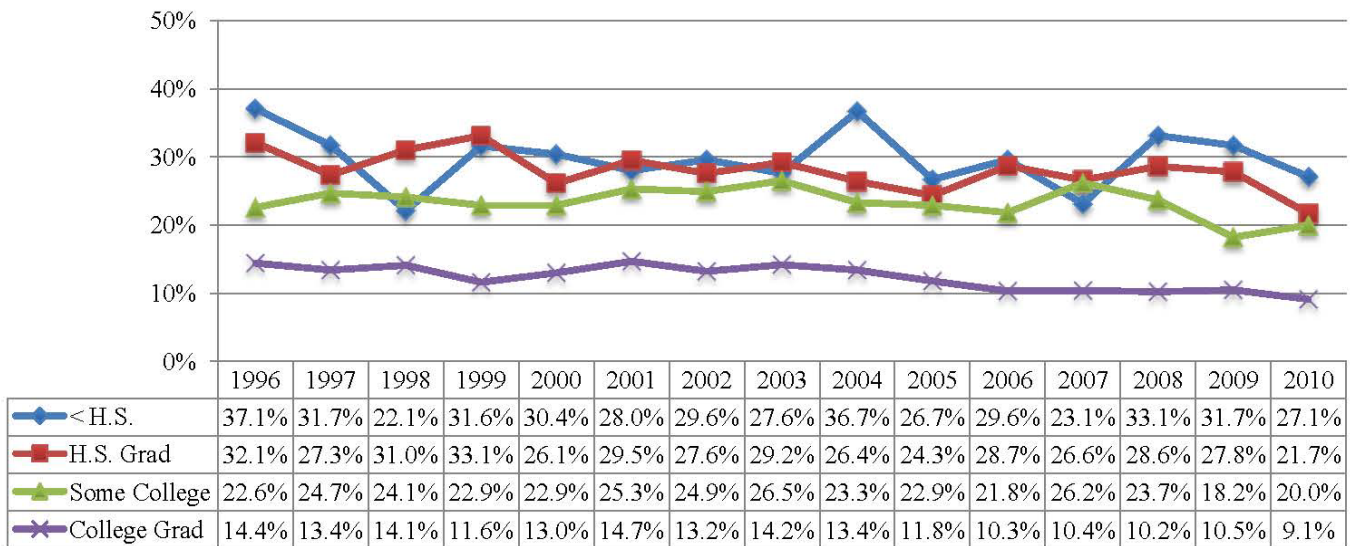
**Figure 6. Adult Smoking Prevalence in Illinois by Age, 1996 - 2010**



Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

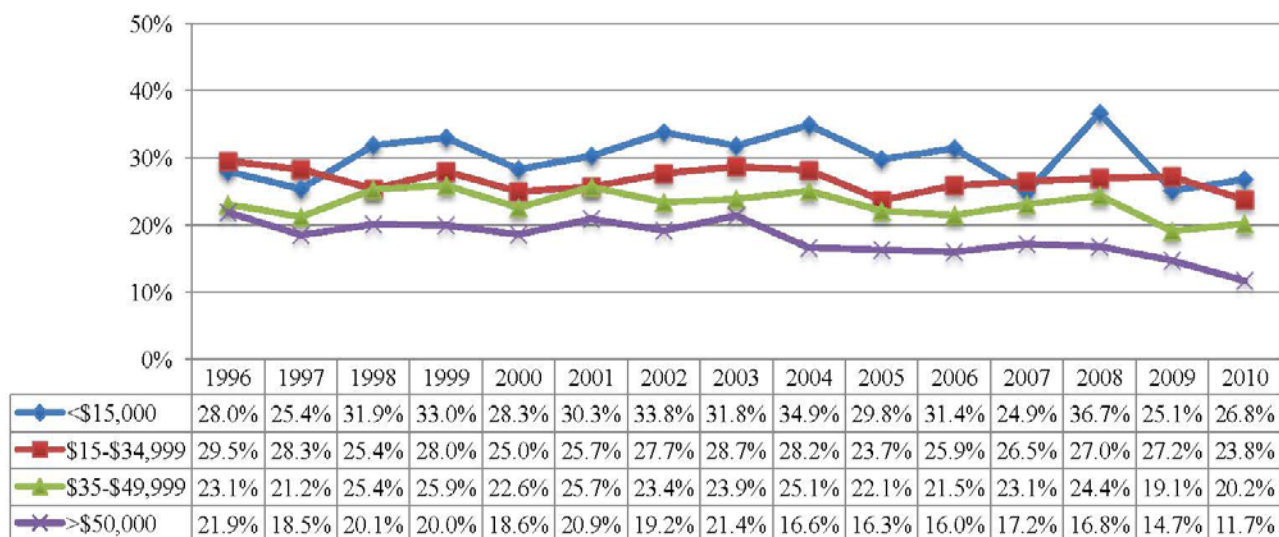
As previously stated, there is a higher prevalence of smokers that demonstrates disparities between socio-economic classes with lower income, minorities and lower education individuals that are now smoking. The following two (2) graphs demonstrate that disparity in education level and income:

**Figure 9. Adult Smoking Prevalence in Illinois by Education Level, 1996 – 2010**



Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

**Figure 10. Adult Smoking Prevalence in Illinois by Income Level, 1996 - 2010**



Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

Excerpt: FDA NEWS RELEASE Feb. 4, 2014

(<http://www.fda.gov/newsevents/newsroom/pressannouncements/ucm384049.htm>)

**FDA launches its first national public education campaign to prevent, reduce youth tobacco use**

The U.S. Food and Drug Administration today announced the launch of a national public education campaign to prevent youth tobacco use and reduce the number of kids ages 12 to 17 who become regular smokers. “The Real Cost” campaign is the FDA’s first of several planned tobacco education campaigns using the new authority granted under the Family Smoking Prevention and Tobacco Control Act, signed into law by President Obama in 2009.

Tobacco use remains the leading preventable cause of disease, disability and death in the United States, causing more than 480,000 deaths each year. Each day, more than 3,200 youth under age 18 in the United States try their first cigarette and more than 700 kids under age 18 become daily smokers.

As part of Department of Health and Human Services Secretary Kathleen Sebelius’ call to make the next generation tobacco free, “The Real Cost” campaign targets the 10 million young people ages 12-17 who have never smoked a cigarette but are open to it and youth who are already experimenting with cigarettes and are at risk of becoming regular smokers.

“We know that early intervention is critical, with almost nine out of every ten regular adult smokers picking up their first cigarette by age 18,” said FDA Commissioner Margaret A. Hamburg, M.D. “Today marks a historic moment as we launch the FDA’s first-ever national education campaign to prevent tobacco use among our nation’s youth, and we bring to life the real costs that are of the most concern to young people.”

The following data has been extrapolated from the Illinois Quitline in 2012 and 2013. A note of interest is that this “help-aid” will not be effective for 18 year olds and under and virtually ineffective for young adults under age 25. The additional data is fairly aligned with other data sources.

Illinois Tobacco Quitline Data 2012 – 2013 for Iroquois County											
Data Subject	1 <sup>st</sup> QTR 2012	2 <sup>nd</sup> QTR 2012	3 <sup>rd</sup> QTR 2012	4 <sup>th</sup> QTR 2012	TOTAL 2012	1 <sup>st</sup> QTR 2013	2 <sup>nd</sup> QTR 2013	3 <sup>rd</sup> QTR 2013	4 <sup>th</sup> QTR 2013	TOTAL 2013	TOTAL 2012- 2013
Total Calles	35	20	18	10	83	30	24	30	38	122	205
New Callers	15	6	6	4	31	18	8	7	15	48	79
Total Calls	*	*	32	30	62	61	57	70	202	390	452
Currently Pregnant											
Currently Pregnant	1	4	1	0	6	1	2	0	2	5	11
WIC Participant											
WIC Participant	0	0	3	1	4	2	0	1	0	3	7
Children in home-under 5 years (ETS)											
Children in home-under 5 years (ETS)	4	3	3	1	11	5	1	4	0	10	21
Age of Caller											
18 and under	0	0	0	0	0	0	0	0	0	0	0
19-24	0	0	0	0	0	2	1	3	0	6	6
25-44	14	8	4	3	29	3	3	5	15	26	55
45-65	17	11	11	5	44	17	12	13	14	56	100
65 and over	5	2	2	1	10	6	8	9	9	32	42
Unknown	0	0	1	1	2	2	0	0	0	2	4
Type of Tobacco Used											
Cigarettes	28	16	15	6	65	28	24	25	38	115	180
Other	4	2	1	0	7	0	0	1	0	1	8
Education of Caller											
Less than high school	2	1	1	1	5	5	5	4	8	22	27
High school graduate	19	12	11	2	44	15	12	12	18	57	101
Some college	6	3	2	3	14	7	6	9	10	32	46
College graduate	5	2	2	0	9	1	1	1	2	5	14
Unknown	4	3	0	0	7	0	0	0	0	0	7
Disease Status of Caller											
Asthma	5	3	1	0	9	3	3	2	3	11	20
Cancer (other than lung)	0	0	2	0	2	1	2	4	4	11	13
Lung Cancer	0	0	0	0	0	0	1	1	1	3	3
Diabetes	0	0	0	0	0	4	3	1	2	10	10
Heart Disease & Stroke	2	2	2	1	7	3	5	1	10	19	26
High Blood Pressure	*	*	7	3	10	14	6	7	11	38	48
COPD	11	21	5	1	38	5	9	9	4	27	65
Multiple Diseases	4	2	4	0	10	8	7	3	10	28	38
Source: Illinois Department of Public Health/Illinois Tobacco Quitline											

## Reduce Tobacco Use

<p><b>Health Problem:</b></p> <p>Reduce Tobacco Use</p>	<p><b>Outcome Objectives:</b></p> <ul style="list-style-type: none"> <li>• By 2019, reduce the initiation of tobacco use in adolescents grades 6-12 by 2%</li> </ul>
<p><b>Risk Factors:</b></p> <ul style="list-style-type: none"> <li>• Youth yielding to cultural and familial influences, in addition to peer pressure to initiate or try tobacco</li> <li>• Environmental Tobacco Smoke (ETS) exposure and awareness of just how detrimental the exposure is to a person's health</li> <li>• Failed Cessation – adults that have attempted cessation and need education, access to program(s), access to assistance, education regarding help-aids, and encouragement to stop tobacco use</li> </ul>	<p><b>Impact Objectives:</b></p> <ul style="list-style-type: none"> <li>• By 2015, increase adult cessation by partnering with Iroquois Memorial Hospital (IMH) to conduct two (2) intervention programs per year in order to reduce the number of adolescents exposed to Environmental Tobacco Smoke (ETS) (secondhand smoke).</li> </ul>
<p><b>Contributing Factors (Direct/Indirect):</b></p> <ul style="list-style-type: none"> <li>• Peer pressure</li> <li>• Cultural/familial influences</li> <li>• Chemical addiction</li> <li>• Stress</li> <li>• Chew affiliated with Sports/Agricultural-farming</li> <li>• Immediate gratification</li> <li>• Inability to access cessation programs</li> <li>• Inadequate knowledge/cessation resources</li> <li>• Easy access to tobacco products</li> </ul>	<p><b>Proven Intervention Strategies:</b></p> <ul style="list-style-type: none"> <li>• Increase tobacco education presentations within the county schools by three (3) per year.</li> <li>• Increase the number of county residents who utilize the Illinois Tobacco Quitline by 3% through referrals.</li> <li>• Increase tobacco cessation counseling in health care settings.</li> <li>• Provide education on public and private resources for cessation</li> <li>• Engage medical community in promotion of cessation programs</li> <li>• Provide education in public and private settings regarding negative health effects of tobacco use</li> <li>• Engage local law officials</li> <li>• Work with the local media</li> </ul>

**Resources Available:**

- Local Health Department
- Local Mental Health Department
- Local School Systems
- Local Physicians/Health Care Providers
- Local Hospital
- Illinois Tobacco Quit-line
- American Cancer Society
- 4-H/Youth Groups
- Churches

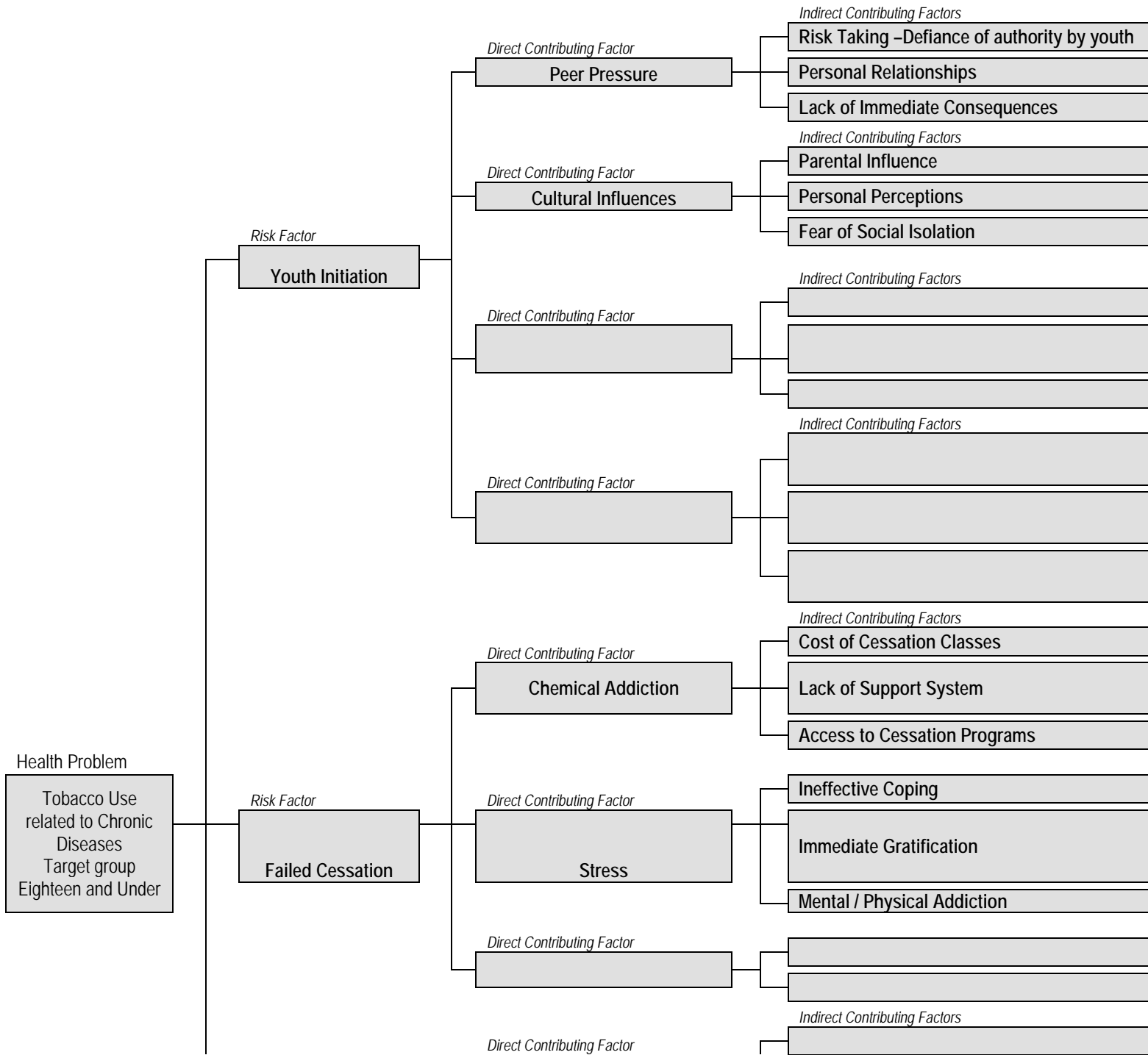
**Barriers:**

- Financial barriers for participants
- Available time for education
- Transportation for cessation services
- Cost of outreach
- Emotional immaturity



# Health Problem Analysis Worksheet

## Reduce Tobacco Use



## Outcome and Impact Objectives – Reduce Tobacco Use

Outcome and Impact Objectives based on Healthy People 2020 Objectives (CDC, 2012)

### **Outcome Objective 3.1:**

By 2019, reduce the initiation of tobacco use in adolescents grades 6-12 by 2%

Healthy People 2020: TU 3.1 Reduce the initiation of the use of tobacco products among children and adolescents aged 12 to 17 years

Target: Reduce percent of adolescents and young adults initiation of tobacco

Baseline: 17% of tobacco users begin before the age of 14

Target Setting Method: 2% reduction

Data Source: Illinois Youth Survey, 2012; U.S. Census Bureau, 2010;

### **Impact Objective 3.1.1:**

By 2015, increase adult cessation by partnering with Iroquois Memorial Hospital (IMH) to two (2) intervention programs per year in order to reduce the number of adolescents exposed to Environmental Tobacco Smoke (ETS) (secondhand smoke).

Healthy People 2020: TU 4 Increase smoking cessation attempts by adult smokers

Target: Provide cessation counseling to all adult smokers with children

Baseline: Partner to provide intervention programs

Target Setting Method: Provide support and resources to assist in cessation

Data Source: Iroquois Memorial Hospital; American Cancer Society

## Intervention Strategies/Community Partnerships

The Iroquois County Public Health Department (ICPHD) will continue to support the Smoke-Free Illinois Act. Enacted on January 1, 2008, the Smoke-Free Illinois Act (SFIA) prohibits smoking in enclosed public places of employment and within 15 feet of entrances, exits, windows that open and ventilation intakes. Illinois was the 13<sup>th</sup> state to have a comprehensive smoke-free law prohibiting smoking in workplaces, restaurants, bars, theaters, museums, schools and other public places. Complaint investigations will be assessed by the Iroquois County Public Health Department's Environmental Health Division.

The proposed Iroquois County Public Health Department will engage local primary care providers to partner with the public health department in efforts to decrease the incidence of tobacco-related disparities in Iroquois County residents through promotion of the Illinois Tobacco Quitline: 1-866-QUIT-YES. The Illinois Tobacco Quitline, in coordination with the Illinois Department of Public Health and the American Lung Association of Illinois, assists individuals with counseling, smoking cessation and replacement therapies. The Quitline is staffed by registered nurses, respiratory therapists and tobacco addiction specialists. Almost sixty percent (60%) of Quitline callers quit smoking. ICPHD will contact at least seventy percent (70%) of all health care providers within the county to establish a specific method of education for the promotion of the Illinois Tobacco Quitline for the staff of the primary care physician or health care providers. Provider education will assist in increasing referrals to clients who smoke. This provider education may be made in the following formats:

- Face to face visits to the primary care facilities
- Presentations during Medical Staff meetings at the local hospital
- Telephone conference calls
- Emails
- Document mailings

ICPHD outreach efforts for promotion of the Illinois Tobacco Quitline will engage and educate community members through a variety of social media outlets including:

- Local newspapers, using Press Releases
- Local radio stations via interviews of ICPHD staff
- Iroquois County Website
- Facebook
- Billboards
- Flyers, handouts and brochures

The proposed Iroquois County Public Health Department is committed to reducing the incidence of youth tobacco use. ICPHD recognizes that 99% of all tobacco users began before the age of 26; therefore tobacco prevention efforts need to begin with school age children. ICPHD, in coordination with the American Cancer Society, will provide at minimum three (3) tobacco prevention education programs per year to Iroquois County youth within the Iroquois County schools. Tobacco prevention education programs will include, but are not limited to:

- Tobacco national, state and local statistical information
- Peer pressure
- Addiction
- Glamorization in the media
- Consequences of tobacco use
- Financial impact
- Cessation

The proposed Iroquois County Public Health Department will, partner with with Iroquois Memorial Hospital, provide two (2) intervention programs per year in order to reduce the number of tobacco users; and, therefore, reduce the number of adolescents exposed to Environmental Tobacco Smoke (ETS) (secondhand smoke).

## Sources

The Illinois Project for Local Assessment of Needs; IPLAN; A workbook for Local Public Health Department Administrators, IPLAN Leaders and Community Participants; Illinois Department of Public Health (IDPH).

Illinois State Health Improvement Plan (SHIP) 2010; IDPH.

Robert Wood Johnson Foundation; County Health Rankings and Roadmaps; Iroquois County: 2011, 2012, 2013, and 2014.

Table DP-1. Profile of General Demographic Characteristics: 2000; U.S. Census Bureau, Census 2000.

Table DP-1. Profile of General Population and Housing Characteristics: 2010, U.S. Census Bureau, 2010 Census.

[http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_DP\\_DPDP1](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1)

U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing Unit Estimates, County Business Patterns, Non-employer Statistics.

Table DP-2. Profile of General Demographic Characteristics: 2000; U.S. Census Bureau, Census 2000.

Table S1501. EDUCATIONAL ATTAINMENT, 2008-2012 American Community Survey 5-Year Estimates, U.S. Census Bureau, American FactFinder.

Illinois Department of Employment Security (IDES), Local Employment Dynamics; May 2012

U.S. Department of Labor: Bureau of Labor Statistics; March 23, 2014; FRED;  
<http://research.stlouisfed.org/fred2/series/ILIROQ5URN>

Table S1501. EDUCATIONAL ATTAINMENT; 2008-2012 American Community Survey 5-Year Estimates; U.S. Census Bureau; American FactFinder

Table S1701. POVERTY STATUS IN THE PAST 12 MONTHS, 2008-2012 American Community Survey 5-Year Estimates, U.S. Census Bureau, American FactFinder

Child Poverty in the United States 2009 and 2010: Selected Race Groups and Hispanic Origin, *American Community Survey Briefs*, Issued November 2011.

U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE) Program, Dec. 2013  
Table S2701. HEALTH INSURANCE COVERAGE STATUS, 2010-2012 American Community Survey 3-Year Estimates, U.S. Census Bureau, American FactFinder.

Illinois Department of Public Health, Illinois Center for Health Statistics, Behavioral Risk Factor Surveillance System

Data Source: Illinois Department of Healthcare and Family Services.

<http://datacenter.kidscount.org/data/tables/6079-enrollment-of-children-in-medical-assistance-programs-by-county-2005-to-2011?loc=15&loct=5#detailed/5/2227/true/867,133,38,35,18/any/12745>

Data Provided by: [Voices for Illinois Children](#)

National Alliance on Mental Illness Facts and Numbers released March 2013  
Illinois Mental Health 2013 – 2018 Strategic Plan

National Institute for Mental Health; Data courtesy of World Health Organization (WHO)  
<http://www.nimh.nih.gov/statistics/index.shtml>

Illinois Youth Survey 2012; *University of Illinois Center for Prevention Research and Development*

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# Appendix A

**TITLE:** Illinois Project for Local Assessment of Needs (IPLAN) Community Coordinator / Executive Assistant

**REPORTS TO:** Public Health Administrator

## **QUALIFICATIONS**

1. Has a bachelor's degree in Public Health Administration, Nursing, Social Work, or Family-Consumer Sciences.
2. Requires at least two (2) years in public health, child-family services or related experience.
3. Must be adept at public speaking and have excellent writing skills.
4. Must have ability to communicate effectively with consumers, governmental entities, health care providers and other community partners/resources.
5. Must have good working knowledge of Word, Excel, PowerPoint, and Publisher.
6. Must have some knowledge or previous experience in marketing.
7. Must be able to work extended hours, whenever required.
8. Possesses and maintains good physical stamina and mental health
9. Must be a licensed driver with automobile that is insured and is in good working order.

## **SUMMARY OF JOB DESCRIPTION**

The IPLAN Community Coordinator (IPCC) is primarily responsible for coordinating community health services for the purpose of meeting the goals as outlined and defined in the county IPLAN as filed with the Illinois Department of Public Health. The IPCC will meet with individuals and/or organizations that have an interest in furthering the cause of community health issues as delineated in the IPLAN. The IPCC will facilitate media dissemination of information necessary to inform the consumer and general public as to plans, accomplishments and strategies to implement the IPLAN's goals. The IPCC will work closely with governmental entities regarding budgeting, funding resources; including but not limited to governmental grants, private grants, contracts and other funding sources. The IPCC will write or cause to be written strategic plans, grant applications, and other documents necessary to fulfill the goals outlined in the IPLAN. Supervises the communication patterns and marketing of health information thru data channels such as but not limited to social and professional medical media. Monitors and designs social media efforts to allow for co-branding the messages with other IPLAN partners.

## **RESPONSIBILITIES AND DUTIES**

1. Processes routine lists, reports and forms related to program specific requirements.
2. Enters data in the different computer social marketing formats accurately and in a timely manner.
3. Responsible for scheduling and recording of all social marketing for the IPLAN information and for its partners.
4. Assists in the preparation of monthly, quarterly, and annual reports as needed.
5. Organizes and maintains complete and accurate communication utilization records to assess target market penetration and impact objectives.
6. Communicates with public health administrator regarding assignments.
7. Performs other duties as required or assigned.

The above statements are only meant to be a representative summary of the major duties and responsibilities performed by the IPCC. The IPCC may be requested to perform job related tasks other than those stated in this description.

## **WORKING CONDITIONS**

1. General office environment.
2. Possible exposure to infectious diseases.
3. In and out of automobile.

## **CONTINUING EDUCATION REQUIREMENTS**

Agency personnel are expected to participate in appropriate continuing education as may be requested and/or required by their immediate supervisor. All agency personnel must attend mandatory educational programs.