

# McLean County Illinois Project for Local Assessment of Need (IPLAN)

## Community Health Plan and Needs Assessment



prepared by

The McLean County Health Department,

in conjunction with

The Community Health Advisory Committee

June 2007

# The McLean County Community Health Plan (2007-2012)

# Executive Summary



Prepared by

The McLean County Health Department

And

The Community Health Advisory Committee

May 2007

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### **Executive Summary**

#### Purpose of the Community Health Plan

In July 2007, McLean County Health Department submitted its third 5-year community health plan (for 2007-2012) to the Illinois Department of Public Health (IDPH) as part of the Illinois Project for Local Assessment of Need (IPLAN) and as a required component of the certification process for local health departments. The purpose of the county-wide community health plan (CHP) is to improve the health of McLean County residents by developing partnerships to implement CHP strategies, encourage health awareness, and promote healthy lifestyle choices which can reduce the risk of death and disability and improve health.

For over fourteen years, the McLean County Health Department's Community Health Advisory Committee (Attachment #1) has worked to build partnerships among public and private health care providers, community agencies, health-related organizations, schools, businesses, the faith community and the media. It meets to study and understand the health status of the county, identify priority health problems, set goals and objectives, as well as to develop and implement strategies to address the health problems with the assistance of these community partners.

#### **Background and Forces of Change**

In the thirteen years since the McLean County Health Department's submission of its first IPLAN community health plan in 1994, many changes have taken place at local, state, and national levels:

- A. <u>IPLAN Data Set:</u> The Illinois Department of Health (IDPH) maintained IPLAN data set went from hard copy only with just a few years of data, to Internet accessible with approximately fourteen years of data for various jurisdictional levels across the state.
- B. <u>Healthy People 2010:</u> The 1994 and 1999 McLean County CHPs used the Healthy People 2000 goals. In January 2000, the U.S. Department of Health and Human Services released the Healthy People 2010 document, which modified many of the health objectives in use by the county during the 1999-2007 CHP period. The transition from Healthy People 2000 to Healthy People 2010 is addressed in the "Annual Progress Report for the McLean County Community Health Plan—July 2000 to June 2001", distributed in October 2001.

- C. <u>U.S. Census 2000:</u> The acquisition of new census data from 2000, revealed that the county population had grown by 14% since the 1990 census. In addition, results from 2 special census undertaken in Bloomington and Normal, revealed that the population of McLean County continues to grow and went from 150,433 in 2000 to approximately 165,700 by mid-decade.
- D. <u>ICD-9 Changes:</u> The International Classification of Diseases (ICD) went through a re-classification process. The ninth revision (ICD-9), with its 4,000 codes was in use from 1979-1998. Starting with 1999 deaths, the newest revision (ICD-10), with about 8,000 codes, has been in use. The modifications have resulted in changes in how deaths are categorized, resulting in increases in some health indicator categories and decreases in others. The federal government and the state have been trying to assist health planners and data analysts by publishing comparability ratios for selected causes of death.
- E. <u>Smoking Cessation Efforts:</u> Beginning with the dissemination of a report, developed by the CHP 1999 implementation task forces, entitled, "Addressing Tobacco's Leading Role in Disease and Death" (2001), the campaign to reduce use of tobacco products by youth and adults and to eliminate exposure to second-hand smoke in public places began in earnest. Five years later, a smoke-free ordinance in Bloomington and Normal (most notably in restaurants and bars) was successfully passed in their respective jurisdictions.
- F. <u>Collaborative Activities:</u> Many of the collaborative activities and information sharing channels initiated at the beginning of each of the previous CHPs (1994; 1999) remain intact and are now routine components of the public health system in McLean County.
- G. <u>BRFS</u>: Continued funding at the state level to carry on the conduct of county-specific behavioral risk factor surveys (BRFS) has now provided McLean County with four BRFS of McLean County adults (ages 18 and older), completed in 1997, 2002, 2004, and 2006. As of May 2007, the results of the 2006 BRFS were not yet available. These landline telephone surveys are commissioned and overseen by IDPH and are conducted by Northern Illinois University. Interpretations of BRFS data will need to be modified in coming years as the use of cell phones accelerates and the use of home landline phones decreases.
- H. <u>CHP Extension:</u> After the terrorist events of 9/11/01 and the subsequent anthrax attacks in the U.S. mail in October of 2001, bioterrorism preparedness funding was given to local health departments to improve public health emergency preparedness. The state acknowledged this new priority, as well as the demands it placed on local health departments, and decided to extend second-round CHPs across the state. For McLean County, this changed the CHP Round 2 coverage from 1999-2004 to 1999-2007. The expectation is that after submission of the McLean County Health

Department's Round 3 CHP (2007-2012), the 5-year interval for CHPs will again be enforced.

- I. State Health Improvement Plan (SHIP): In August 2004, Gov. Rod R. Blagojevich signed the SHIP Act (PA 93-0975), which required Illinois to develop a state health improvement plan every four years. The Illinois State Board of Health and a planning team unveiled the new SHIP in December 2006 (officially published in May 2007). In addition to six strategic issues, four key health concerns were identified: 1) decrease use of alcohol, tobacco and illegal drugs, and the misuse of legal drugs; 2) reduce the proportion of children and adolescents who are overweight or obese, and the proportion of adults who are obese; 3) improve the physical activity level of Illinois residents; and, 4) reduce violence and exposure to violence. Within the plan, strategies to be taken by each "sector" (partner)—most of which are represented on the McLean County Community Health Advisory Committee (CHAC)—are identified. How these strategies should be integrated at the local level will need to be pursued by the CHAC.
- J. Approval of New Community Health Planning Approaches: In 2006, local health departments were informed by IDPH that, in addition to IPLAN (APEX-PH), two other community health planning methods were approved for use in meeting the *Certified Local Health Department Code* requirements for an internal organizational capacity assessment, health needs assessment, and community health plan every five years. It was determined that the Mobilizing for Action Through Planning and Partnerships (MAPP) process fully met the criteria, and that the Healthy Communities process would meet the criteria if an organizational capacity assessment was also conducted. If either of these processes is used, a "request for approval of an equivalent process" must be submitted to IDPH. For McLean County's Round 4 CHP, due in 2012, a decision will need to be made regarding whether the IPLAN (APEX-PH) process will continue to be used or whether one of the two new options will be chosen.

Over the years, these changes have had to be incorporated into the CHAC's activities and the planning process for the new community health plan.

#### The New McLean County Community Health Plan (2007-2012)

As the previous community health plan (CHP), Round 2 for 1999-2007, neared its completion, preparations for McLean County's Round 3 CHP (2007-2012) began in the spring of 2006. Because the CHP is also used by local health departments to meet certification requirements in Illinois, as indicated in Section 600.410 Requirements for IPLAN or an Equivalent Planning Process, Title 77 (Public Health) of the *Illinois Administrative Code*, Chapter 1 (Department of Public Health), SubChapter H (Local Health Departments), Part 600 Certified Local Health Department Code, one of three state-approved methods had to be chosen for CHP development: 1) Assessment Protocol for Excellence in

Public Health (APEX-PH); 2) Mobilizing Action through Planning and Partnerships (MAPP); or, 3) Healthy Communities. Any method chosen must result in the production of three documents in order to meet certification requirements:

- 1. An Internal Organizational Capacity Assessment of the local health department
- 2. A Needs Assessment of health indicators
- 3. A Community Health Plan

In McLean County, the eight-step APEX-PH process has been the method used to develop the previous two CHPs and was chosen again to be used for the third CHP, due July 16, 2007. Appendix E of the APEX-PH manual contains a description of *The Hanlon Method for Prioritizing Health Problems*. This method, modified by APEX-PH from the process developed by J. J. Hanlon, has been used during the development of each CHP to prioritize the list of county health problems. It establishes priorities based on the size and seriousness of the problem as well as the effectiveness of the available interventions. Prioritization of the multiple health problems identified is necessary so that community resources can be directed appropriately. An overview of how McLean County proceeded through the eight steps of the APEX-PH process is provided in the "Overview of the Community Health Plan Process" document (Attachment #2).

#### Summary of Each Key Document

- 1. The Internal Organizational Capacity Assessment: The McLean County Health Department organizational capacity assessment was conducted from May of 2006 through June of 2006. Department heads chose to utilize the APEX-PH organizational capacity assessment worksheets as well as newly adopted Operational Definitions for a Functional Local Health Department worksheets to assess the health department. The APEX-PH process entailed the assessment of key indicators of organizational capacity by management staff, who then determined the perceived importance of each indicator. In addition, strengths and weaknesses were identified. This process yielded eleven major objectives. The assessment of the Operational Definitions for a Functional Local Health Department was conducted by the coordinators group and it yielded two major objectives. The final report, The McLean County Health Department Internal Capacity Assessment—IPLAN 2007 (July 2006), listed all the objectives to address weaknesses. The letter from the McLean County Board of Health accepting the internal organizational capacity assessment is located in Attachment #3a, and the discussion of the report findings with the Board of Health is documented on page two of the Board of Health meeting minutes for 3/7/07 (Attachment #3b).
- 2. The Needs Assessment of Health Indicators: Collection, review and analysis of McLean County health indicators and other health-related data occurred from May 2006 through January 2007. Many sources of county-specific data were utilized, including: 1) the IPLAN data set; 2) the Assessment 2005 report (published in August 2004) prepared for the Community Advocacy Network (CAN), which contained a community analysis, focus group report, key informant study and household survey; 3) BRFS survey data from

1997, 2002, and 2004; and, 4) the *Community Report Card for McLean County, Illinois (July 2004)*, produced by the McLean County Health Department All Our Kids: Early Childhood Network. On 12/5/06, the CHAC reviewed and discussed preliminary findings from the health indicator data assessment. Among the findings: McLean County's top 10 leading causes of death have varied little over the past ten years. The list of leading causes of death, using the most current available IPLAN data (2004), includes the following: diseases of the heart (27% of all deaths); cancer/malignant neoplasms (22%); coronary heart disease (19%); lung cancer (6%); cerebrovascular diseases (6%); accidents (5%); chronic lower respiratory diseases (5%); diabetes (3%); lymphatic and hematologic cancers (3%); and nephritis (2%). The analysis and subsequent decisions at the 1/16/07 CHAC meeting produced a list of 18 preliminary health concerns:

Access to Care: Dental Care	10)	Heart Disease
Access to Care: Undocumented People	11)	Infant Mortality
Acute/Binge Drinking	12)	Lead Poisoning
Cancer	13)	Low Birth Weight
Cerebrovascular Disease	14)	Perinatal Conditions
Child Abuse/Neglect	15)	Sexual Assault
Chlamydia	16)	Suicide (older adults)
Congenital Anomalies	17)	Unintentional Injuries
Diabetes	18)	Very Low Birth Weight
	Access to Care: Undocumented People Acute/Binge Drinking Cancer Cerebrovascular Disease Child Abuse/Neglect Chlamydia Congenital Anomalies	Access to Care: Undocumented People Acute/Binge Drinking Cancer 13) Cerebrovascular Disease 14) Child Abuse/Neglect 15) Chlamydia Congenital Anomalies 17)

These 18 preliminary health concerns were thoroughly discussed by the CHAC in order to reduce the list in preparation for the health problem prioritization process, the Hanlon Method, set for February 2007. Some of the health problems were combined into categories, and others were set aside. The final list of the county's top eight health problems was determined on January 16, 2007:

1)	Cancer	5)	Infant Mortality
2)	Cerebrovascular Disease	6)	<b>Intentional Injuries</b>
3)	Chlamydia	7)	Suicide (older adults)
4)	Heart Disease	8)	Unintentional Injuries

The list of eight health problems above was then used in February 2007 when the CHAC applied the Hanlon Method to the eight health problems to determine the county's top three health problem priorities. Among the eight, priority scores ranged from a low of 48 to a high of 210. The size and seriousness of 3 health concerns in particular, clearly rose to the top of the priority list:

#### **HEART DISEASE**

(Hanlon Priority Score = 210)

#### CEREBROVASCULAR DISEASE

(Hanlon Priority Score = 175)

#### **CANCER**

(Hanlon Priority Score = 168)

Effective interventions for all three of these health problems have been in use across the nation for many years. In addition, BRFS data for McLean County indicate that Healthy People 2010 objectives for adult residents are not met for many of the risk factors (such as cigarette smoking; obesity; high cholesterol; alcohol over-consumption) for heart disease, cerebrovascular disease, and cancer. These three health problems were then chosen as McLean County's top three health priorities and became the basis for the Round 3 McLean County Community Health Plan for 2007-2012.

3. The Round 3 McLean County Community Health Plan (CHP) for 2007-2012: The CHP, submitted to IDPH during the first week of July 2007, identifies the county's top 3 health problem priorities, the risk factors that contribute to them, and the effective intervention strategies that will be used to reduce their negative impact on the health status of the community. Mortality and morbidity data, as well as a risk factor analysis of McLean County's Behavioral Risk Factor Survey (BRFS) results, contributed to the choice of heart disease, cerebrovascular disease, and cancer as the 3 priority health problems to be addressed in the CHP for 2007-2012. This document consists of three key components for each health priority: 1) a narrative; 2) a "Health Priority Summary Worksheet"; and, 3) a "Direct/Indirect Contributing Factors" chart. In the fall of 2007, the CHAC will begin to form an implementation task force which will then move forward with community partners/stakeholders to address the interventions identified in the CHP.

#### **Summary**

To address the multiple challenges inherent in attempts to improve health outcomes in the three priority health problem areas, McLean County will need to maintain and expand its partnerships, continue to seek out alternative funding sources, focus on risk factor reduction, and utilize the most recent data available to influence: a) policy changes, b) choice of interventions; and, c) behavior/lifestyle changes in the community. The implementation task force and the on-going dedicated efforts of the Community Health Advisory Committee will continue to meet the challenge of improving the health of all residents in McLean County. Working together, the county will be healthier by the year 2012.

#### Resources

http://www.idph.state.il.us

http://app.idph.state.il.us (for the IPLAN Data Set)

http://app.idph.state.il.us/brfss (for BRFS Data Set)

http://www.mcleancountyil.gov/health

http://www.allianceforbuildingcommunity.org

http://www.iphionline.org

"Illinois State Health Improvement Plan", State Board of Health, May 2007

#### **Community Health Advisory Committee**

### Community Members 1/01/06 to 6/30/07

Lucinda Beier Bruce Boeck

Illinois State University Chestnut Health Systems

Michelle Brown Diana Cristy

American Red Cross of the Heartland BroMenn Regional Medical Center

Sharon Gatto Joe Gibson

OSF St. Joseph Medical Center Bloomington Township

Tamara Guy Sue Henkel

Prevent Child Abuse Illinois BroMenn Regional Medical Center

Lyn Hruska Cindy Kerber

American Red Cross of the Heartland Illinois Wesleyan University

Beth Kimmerling

Barb McLaughlin-Olson

McLean County Coroner's Office Heartland Community College

Michael Meece Terry Meismer United Way Katie's Kids

Jenny Messier Marion Micke

BroMenn Regional Medical Center Illinois State University

H. Catherine Miller James Williams
Heartland Community College Agrability Unlimited

### McLean County Health Department Staff CHAC Liaisons 2006 and 2007

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Heidi German Walt Howe Bob Keller Jackie Lanier

Karen Mayes Jan Morris (IPLAN Co-coordinator)

Maureen Sollars Jan Weber

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Additional Volunteer Assistance: Faith Givan (AmeriCorps); Pamela Solowski (IWU intern);

Megan Trainor (ISU intern).

### McLean County Community Health Plan (2007-2012)

# Overview of The Community Health Plan Process

#### **Introduction**

Current Application Due Date: July 16, 2007 Current Certificate Expiration Date: September 14, 2007

County-specific community health plans (CHPs) in Illinois are used by local health departments to guide local public health systems in addressing health concerns and to meet certification requirements in Illinois. As indicated in Section 600.410 Requirements for IPLAN or an Equivalent Planning Process, Title 77 (Public Health) of the *Illinois Administrative Code*, Chapter 1 (Department of Public Health), SubChapter H (Local Health Departments), Part 600 Certified Local Health Department Code, local health departments must petition to have a CHP development methodology approved by the state or else choose one of two state-approved methods for CHP development: 1) the Assessment Protocol for Excellence in Public Health (APEX-PH); or, 2) Mobilizing Action through Planning and Partnerships (MAPP). All methods must result in the production of three documents in order to meet certification requirements:

- 4. An Internal Capacity Assessment of the local health department
- 5. A Needs Assessment of health indicators
- 6. A Community Health Plan

In McLean County, the eight-step APEX-PH process has been the method used to develop the previous two CHPs and was chosen again to be used for the third CHP, due July 16, 2007. Provided below is an overview of how McLean County Health Department (MCHD) and its Community Health Advisory Committee (CHAC) applied the APEX-PH process to complete the three documents listed above to meet certification requirements.

#### <u>Process</u>

The McLean County Health Department began the development of its Illinois Project for Local Assessment of Needs (IPLAN) Community Health Plan during the spring of 2006 by initiating the community health needs assessment process. A core team of fourteen Health Department administrative and program staff began the process of identifying data sources and community

health problems in their respective areas of expertise. Three additional individuals were utilized at various points in the CHP development process: 1) an intern from Illinois State University (spring 2006); 2) an intern from Illinois Wesleyan University (fall of 2006); and, 3) an AmeriCorps volunteer assigned to the McLean County Health Department. In addition, the county's CHAC was asked to provide additional data and suggest other data sources for analysis. The department's co-coordinators for IPLAN assisted with moving the team and the CHAC through the eight steps of the APEX-PH process, which occurred over a thirteen-month period: from May 2006, when the needs assessment was initiated through June 2007, when the CHP received final approval by the McLean County Board of Health. The document was then provided via e-mail and hard copy to the Division of Health Policy of the Illinois Department of Public Health during the first week of July 2007 to meet the submission deadline of July 16, 2007.

#### **STEP #1:** Self-Assessing Organizational Capacity

The McLean County Health Department internal organizational capacity assessment was conducted from May of 2006 through June of 2006, with the assistance of a student intern from the Health Promotion Department at Illinois State University. Department heads chose to utilize the APEX-PH organizational capacity assessment worksheets as well as newly adopted Operational Definitions for a Functional Local Health Department worksheets to assess the health department. The APEX-PH process entailed the assessment of key indicators of organizational capacity by management staff, who then determined the perceived importance of each indicator. In addition, strengths and weaknesses were identified. This process yielded eleven major objectives. The assessment of the Operational Definitions for a Functional Local Health Department was conducted by the coordinators group and it yielded two major objectives. The final report, The McLean County Health Department Internal Capacity Assessment—IPLAN 2007 (July 2006), listed all the objectives to address weaknesses. The letter from the McLean County Board of Health accepting the internal organizational capacity assessment is located in Attachment #3a of the Executive Summary of the McLean County Community Health Plan for 2007-2012, and the discussion of the report findings with the Board of Health is documented on page two of the Board of Health meeting minutes for 3/7/07 (Attachment #3b of the Executive Summary).

#### STEP #2: Convening the Community Health Committee

The McLean County Approach to Community Health (McCATCH) governing board, established in 1989, had provided the community with an initial identification of county health problems through *McCATCH: The Final Report*, distributed in March 1993. Members of that board became the first members of the IPLAN Community Health Advisory Committee (CHAC), which held its initial meeting in August 1993. The CHAC has continued to meet three to four times per year since its inception, and meets more frequently during the 13-month interval needed for CHP preparation. Advisory Committee Bylaws permit 15 members, and 30-40

people from the community were members of the CHAC's three implementation task forces for the Round 2 CHP (1999-2004). The CHAC list of members during 2006/2007 is included as Attachment #1 of the Executive Summary of the CHP 2007-2012 document.

#### **STEP #3:** Analysis of the Health Data and Health Priorities

Collection, review and analysis of McLean County health indicators and other health-related data occurred from May 2006 through January 2007. Many sources of county-specific data were utilized, including: 1) the IPLAN data set; 2) the Assessment 2005 report (published in August 2004), prepared for the Community Advocacy Network (CAN), which contained a community analysis, focus group report, key informant study and household survey; 3) BRFS survey data from 1997, 2002, and 2004; and, 4) the Community Report Card for McLean County, Illinois (July 2004), produced by the McLean County Health Department All Our Kids: Early Childhood Network. On 12/5/06, the CHAC reviewed and discussed preliminary findings from the health indicator data assessment. Among the findings: McLean County's top 10 leading causes of death have varied little over the past ten years. The list of leading causes of death, using the most current available IPLAN data (2004), includes the following: diseases of the heart (27% of all deaths); cancer/malignant neoplasms (22%); coronary heart disease (19%); lung cancer (6%); cerebrovascular diseases (6%); accidents (5%); chronic lower respiratory diseases (5%); diabetes (3%); lymphatic and hematologic cancers (3%); and nephritis (2%). The analysis and subsequent decisions at the January 16, 2007, CHAC meeting produced the following list of 18 preliminary health concerns:

1)	Access to Care: Dental Care	10)	Heart Disease
2)	Access to Care: Undocumented People	11)	Infant Mortality
3)	Acute/Binge Drinking	12)	Lead Poisoning
4)	Cancer	13)	Low Birth Weight
5)	Cerebrovascular Disease	14)	Perinatal Conditions
6)	Child Abuse/Neglect	15)	Sexual Assault
7)	Chlamydia	16)	Suicide (older adults)
8)	Congenital Anomalies	17)	Unintentional Injuries
9)	Diabetes	18)	Very Low Birth Weight

These 18 preliminary health concerns were thoroughly discussed by the CHAC on January 16, 2007, in order to reduce the list in preparation for the health problem prioritization process, the Hanlon Method, set for February 21, 2007. Some of the health problems were combined into categories, and others were set aside. The final list of the county's top 8 health problems was determined on January 16, 2007:

1)	Cancer	5)	Infant Mortality
2)	Cerebrovascular Disease	6)	Intentional Injuries
3)	Chlamydia	7)	Suicide (older adults)
4)	Heart Disease	8)	Unintentional Injuries

#### <u>STEP #4:</u> Prioritize Community Health Problems

Appendix E of the APEX-PH manual contains a document describing *The Hanlon Method for Prioritizing Health Problems*. This method, modified by APEX-PH from the process developed by J. J. Hanlon, has been used during the development of each previous CHP to prioritize the list of county health problems. It establishes priorities based on the size and seriousness of the problem as well as the effectiveness of the available interventions. Prioritization of the multiple health problems identified is necessary so that community resources can be directed appropriately. Additional information for each of the eight health problems was provided in the document, *The Size of McLean County Health Problems—February 2007*, (Attachment A), which was essential as an aid in the analysis of two of the three Hanlon Method factors:

- 1) <u>the size of the problem:</u> with consideration given to the number of community residents **with** the problem, but with emphasis on the proportion of the population **at risk** for the disease or condition; and,
- 2) <u>the seriousness of the problem:</u> or the degree to which the problem causes death, hospitalization, disability, and economic loss; and, the degree to which this is an emergent problem or one where there is an urgency for intervention.

A third Hanlon Method factor was also utilized:

3) <u>the effectiveness of the intervention to address the health problem:</u> or, the degree to which an intervention is available to prevent the health problem.

The "PEARL Test" was then applied to the interventions for each health problem, evaluating the factors of Propriety, Economics, Acceptability, Resources, and Legality. All 8 health problems passed the PEARL Test and all interventions conceived by the CHAC were judged to be proper, economical, acceptable, legal and, to some degree, feasible given available resources. Among the eight, Hanlon priority scores ranged from a low of 48 to a high of 210. The size and seriousness of 3 health concerns in particular, clearly rose to the top of the priority list:

#### **HEART DISEASE**

(Hanlon Priority Score = 210)

#### CEREBROVASCULAR DISEASE

(Hanlon Priority Score = 175)

#### **CANCER**

(Hanlon Priority Score = 168)

Effective interventions for all three of these health problems have been in use across the nation for many years. Of special concern was the finding in the community health needs assessment that, although mortality rates may have decreased or fallen below the Healthy People 2010 target

for some components of these health concerns, Behavioral Risk Factor Survey (BRFS) data for McLean County indicate that Healthy People 2010 objectives for adult residents are not met for many of the risk factors (such as cigarette smoking; obesity; high cholesterol; alcohol overconsumption) for heart disease, cerebrovascular disease, and cancer. These three health problems, heart disease, cerebrovascular disease, and cancer, were then chosen as McLean County's top three health priorities and became the basis for the Round 3 McLean County Community Health Plan for 2007-2012.

#### Step #5: Conduct Detailed Analysis of Community Health Problems

Using APEX-PH, the detailed analysis of community health problems was completed by identifying the risk factors for those health problems and the direct and indirect contributing factors. In preparation for the March 15, 2007, CHAC meeting, Health Department staff and an AmeriCorps volunteer developed charts depicting the relationship of the direct and indirect contributing factors to each risk factor for the three priority health problems. At the CHAC meeting, these documents were reviewed and additions made to them. Intervention strategies were discussed, including the community resources and stakeholders available to implement them. In preparation for the April 24, 2007, meeting, a CHP "Health Priority Summary Worksheet", based on modified APEX-PH templates, were completed for each of the three health priorities. Each worksheet contained: a description of the health problem; list of risk factors and direct and indirect contributing factors; barriers to improvements; community stakeholders; community health improvement outcome goals and impact objectives (based primarily on Healthy People 2010); community health plan strategies/interventions; and, community health plan evaluation considerations. In these worksheets, the interventions identified at the March CHAC meeting were linked with the outcome and impact objectives for each health priority. At the April CHAC meeting, the intervention strategies were re-assessed to assure that they adequately addressed the impact objectives and a measurable direct or indirect contributing factor. In addition, community resources and funding options available to assist with implementation of interventions for each of the health problem priorities were reviewed and/or identified for pursuit by the implementation task force. The CHAC discussed CHP evaluation needs and agreed to pursue the discussion further in greater detail in subsequent meetings. Evaluation is a critical component of the CHP implementation process and the CHAC is responsible for the on-going monitoring and evaluation of the intervention strategies (process evaluation) and progress toward meeting impact and outcome objectives (outcome evaluation). A Community Program Logic Model (adapted from Measuring Program Outcomes: A Practical Approach) by the United Way (1996) will be reviewed as one possible framework for evaluation.

#### <u>Step #6:</u> Inventory Community Health Resources

In the process of developing the Community Health Plan, the McLean County Health Department stressed that the product is a *community* plan, not merely the province of the McLean County Health Department; therefore, community participation and ownership in the

CHP development *process* is an integral component of assuring the success of *implementation*. Stakeholders, local agencies or entities who, a) participated in Round 3 CHP development; b) expressed an interest in working on the Community Health Plan; and/or, c) will be asked to participate, are listed in each "Health Priority Summary Worksheet". Barriers to reducing indirect and direct contributing factors, including lack of some resources, are identified within the CHP. In addition, funding needs and possible sources were discussed and documented in the narrative pages of each health problem priority section of the CHP.

#### Step #7: Develop a Community Health Plan

At the conclusion of the April 24, 2007, CHAC meeting, a draft of the Community Health Plan was essentially completed. The three key components for each health priority were reviewed and approved by the CHAC: 1) a narrative; 2) a "Health Priority Summary Worksheet" containing objectives and intervention strategies; and, 3) a "Direct/Indirect Contributing Factors" chart. Intervention strategies appropriate for the community were re-assessed and stakeholders with an investment in achieving the identified outcome and impact objectives were identified and listed within the Community Health Plan.

The McLean County Community Health Plan document in its entirety follows the Executive Summary and the Community Health Needs Assessment in the bound document, *The McLean County IPLAN Community Health Plan and Needs Assessment (June 2007)*, submitted to IDPH during the first week of July 2007.

#### **Step #8:** Submit Recertification Application

For Round 3 community health plans, the Illinois Department of Public Health Division of Health Policy prefers that electronic versions of each county's community health plan be emailed to the Division prior to the plan due date. McLean County's Round 3 CHP due date is July 16, 2007. *The McLean County IPLAN Community Health Plan and Needs Assessment (June 2007)* was submitted via e-mail and hard copy during the first week of July to the Division of Health Policy at the Illinois Department of Public Health, in compliance with the *Illinois Administrative Code* in consideration of recertification requirements for local health departments promulgated by IDPH.

# McLean County Community Health Problems The Size of McLean County Health Problems February 2007

#### **Overview**

This document was developed to provide additional analysis of McLean County's eight areas of health concerns, identified in January 2007 from an initial list of eighteen health problems, by focusing on obtaining an estimate of the percent of the county population **at risk** for the health problem, and the percent of the population **with** the health problem. Review of this information assisted with the analysis of the size and seriousness of the health problem. It became instrumental during the application of the *Hanlon Method for Prioritization of Health Problems*, conducted in February 2007.

This document contains the following eight components, with each section headed by one of the eight health problems (listed alphabetically):

- 1. Health Problem: Cancer
  - Cancer (general)
  - Breast
  - Colorectal
  - Lung
  - Prostate
- 2. Health Problem: Cerebrovascular Disease
- 3. Health Problem: Chlamydia
- 4. Health Problem: Heart Disease
  - Heart Disease (general)
  - Coronary Heart Disease

#### 5. Health Problem: Infant Mortality

- Infant Mortality (general)
- Low Birth Weight and Very Low Birth Weight
- Congenital Anomalies
- 6. Health Problem: Intentional Injuries
  - Intentional Injuries (general)
  - Child Abuse and Neglect
  - Sexual Assault
  - Suicide (see separate listing)
- 7. Health Problem: Suicide
- 8. Health Problem: Unintentional Injuries
  - Unintentional Injuries (general)
  - Lead Poisoning
  - Motor Vehicle Accidents
  - Hip Fractures and Falls

#### McLean County Community Health Problems

#### The Size of McLean County Health Problems

February 2007

1. Health Problem: Cancer

A. **% Population at Risk:** 23% - 46% for males; 20% - 38% for females

◆ Incidence: Lifetime probability for males = **45.67%** 

Lifetime probability for females = 38.09%

◆ Mortality: Lifetime probability for males = 23.56%

Lifetime probability for females = 19.93%

♦ Behavioral Risk Factor Survey (BRFS) of 08/2004: (2004 pop. est. = 157,847)

21.2 % sedentary lifestyle = 33,463 (157,847 x .212)

20.7% obesity = 32,832 (157,847 x 0.207)

20.8% smoking = 32,832 (157,847 x 0.208)

48.5% consumed < 3 servings of fruits/vegetables per day =  $76,555 (157,847 \times 0.485)$ 

#### B. <u>% Population with this Health Problem:</u> 0.22% - 0.24%

♦ A total of 1,145 deaths from cancer (all types) occurred during the five year period of 2000-2004 in McLean County. The average is 229 per year (1,145/5 years = 229).

# Cancer Deaths (all types)
Identified in "Leading Causes of Mortality" (IPLAN Data Set)

	Malign ant Neo. (Total)	Lung / Bronc hus	Colo- Rect.	Breast Canc.	Prostate	Leuke mia	Other Malign ant Neo.	% w/ Health Prob.
2000	226	55	26	20	10	8	107	.23
2001	224	56	24	13	15	6	110	.22
2002	235	67	28	24	15	14	87	.24
2003	241	67	20	12	14	9	119	.23
2004	219	63	17	20	9	9	101	.22
Total	1145	308	115	98	63	46	524	

% with health problem column: # total cancer deaths in a year/total # deaths in that same year.

Sources: IPLAN Data Set 07/06; BRFS 08/04; Census Data and Estimates 2000-2004. U.S. National Cancer Institute (SEER) Database based on incidence and mortality data for the US from 2000 through 2002 (2/06) <a href="https://www.cancer.org/docroot/CRI">www.cancer.org/docroot/CRI</a>

#### **Health Problem:** Breast Cancer

A. <u>% Population at Risk:</u> 51.0% (all females)

14.0% (women age 65 and over at most risk)

- ♦ # of all females in McLean County = 81,096 (51% of the 2005 population of 159,013)
- ♦ Estimated 212,920 females cases diagnosed in 2006 and 40,970 women die per year in the U.S..
- ♦ Estimated 1720 males cases diagnosed in 2006, and 460 men die per year; of new cases identified, less than 1% are male.
- 1 in every 8 women will be diagnosed with breast cancer in their lifetime: **10137** (6.3%)
- ◆ Risk by age: by age 20: 1 in 1,985

229 30: 1 in 40: 1 in 68 50: 1 in 37 60: 1 in 26 70: 24 1 in Ever: 1 in 8

- lack Most at risk: 8,843 (age 65 and above)/63,198 (ages 15 and over) = 0.1399 x 100 +14%
- B. <u>% Population with the Health Problem:</u> 0.007% 0.018% (total population) 0.015% 0.036% (female population)
- ◆ From 1997-2004, a total of 147 deaths from breast cancer were reported in the IPLAN Data Set.
- ♦ # Deaths per year: Based on total female populations in 1990 and 2000 census

1997:  $16/67.526 \times 100\% =$ 0.024% 1998:  $24/67,526 \times 100\% =$ 0.036% 1999  $18/67.526 \times 100\% =$ 0.027%  $2000: 20/77,702 \times 100\% =$ 0.026% 2001:  $13/77,702 \times 100\% =$ 0.016% 2002:  $24/77,702 \times 100\% =$ 0.030% 2003:  $12/77,702 \times 100\% =$ 0.015% 2004: 20/77,702 x 100%= 0.026%

Sources: American Cancer Society Surveillance Research, 2006; IPLAN data set of 1/25/07; IPLAN Data set lists only female deaths.

#### **Health Problem:** Colorectal Cancer

A. % Population at Risk: 18% - 29%

(Most at risk: males and females age 50 and over)

- ◆ Colorectal cancer is the third most common cancer in both men and women. The risk of colon cancer increases with age; more than 90% of cases are diagnosed in individuals older than age 50.
- ◆ The cancer incidence rates have been decreasing since 1985, from 66 to 52 per 100,000 in 2002.
- ◆ McLean County adults age 50 and above: 18% to 29% of 2005 population x 159,013 = 28,622 to 46,114.
- ◆ From 2000 2004, a total of 115 deaths were reported in McLean County in the IPLAN Data Set

#### B. % Population with Health Problem: 0.01% - 0.02%

◆ From 2000 – 2004, a total of 115 deaths were reported in McLean County in the IPLAN Data Set. # Deaths per year:

2000: 26/150,433 x 100% = 0.02% 2001: 24/152,406 x 100% = 0.02% 2002: 28/155,233 x 100% = 0.02% 2003: 20/156,781 x 100% = 0.01% 2004: 17/157,847 x 100% = 0.01%

Sources: IPLAN Data Set; U.S. Census for 2000.

#### **Health Problem:** Lung Cancer

A. <u>% Population at Risk:</u> 20.8% (adults), 29% (adolescents)

 $\bullet$  Smoking: Adult smokers (BRFS 8/04): 20.8% (158,006 x 20.8) = 32,865

♦ Smoking: Adolescent smokers (2006): 14.0% (8th grade)

21.0% (10th grade)

29.0% (12th grade)

#### B. <u>% Population with the Health Problem:</u> 0.037% to 0.043%

- ♦ Illinois estimate: 7,290 new cases in 2006
- # new cases: not available by county; (see # deaths)
- ♦ Illinois estimate: 6,790 deaths in 2006
- # deaths from lung cancer 2000 2004: 308
- with health problem (deaths/pop. per year):

```
2000: 55/150,433 x 100% = 0.037%

2001: 56/152,406 x 100% = 0.037%

2002: 67/155,233 x 100% = 0.043%

2003: 67/156,781 x 100% = 0.043%

2004: 63/157,847 x 100% = 0.040%
```

#### Sources:

Behavioral Risk Factor Survey (BRFS) of 8/04 (N = 405); Heartland Coalition Youth Survey (2006); IPLAN data set of 02/06: "Leading Causes of Mortality" data; ACS Cancer Facts and Figures (2006).

#### Health Problem: Prostate Cancer

#### A. % Population at Risk: 7.9% - 27%

- ♦ # All males, all ages: 72,731
- ♦ # males ages 45-64 years in McLean County: 14,061 (19.3% of all males)
- ♦ # males ages 65 and over: 5,778 (7.9% of all males)
- ♦ Most at risk: more than 65% of all prostate cancer cases are diagnosed in men ages 65 and older.
- Estimate of total # males at most risk for prostate cancer (assume ages 45 and over): 19,839 (14,061 + 5,778 = 19,839; and, 19,839/72,731 = 27% of the male population)

#### B. % Population with Health Problem: 0.16% - 0.26%

- Prostate cancer is the leading cause of cancer death in adult males. More than 65% of all prostate cancer cases are diagnosed in men 65 and older.
- Sixty-three deaths were reported in McLean County between the years of 2000 and 2004
- # deaths based on the 2000 census population for males 65 and over:

```
2000: 10/5,778x 100% = 0.17%
2001: 15/5,778x 100% = 0.26%
2002: 15/5,778x 100% = 0.26%
2003: 14/5,778x 100% = 0.246%
2004: 9/5,778x 100% = 0.16%
```

Sources: IPLAN Data Set as of 07/06; American Cancer Society, 2006; U.S. Census 2000.

#### 2. Health Problem: Cerebrovascular Disease (Stroke)

#### A. **% Population at Risk:** 14.5 % - 22.4%

- Every year 700,000 people suffer a stroke.
- ◆ 700,000/281,000,000 (U.S. population in 2000) x 100 = 0.25% (of U.S. population experiences a stroke).
- ◆ Population of men at risk in McLean County over 25: 41,655(.25) = 10,414
- Population of women at risk in McLean County over 25: 45,486(.25) = 11,372
- ♦ Men at risk + Women at risk: 10,414 + 11,372 = 21,786/150,433 (population of McLean County in 2000) x 100 = 14.5%
- ◆ Lifestyle Risk Factors (from BRFS 2004) in adults ages 18 and above:

Hypertension: 22.4%

Diabetic: 3.6 %

Smoking (Smoking + former smoker)

20.8% + 20% = 40.8%

**Obesity: 20.7%** 

#### B. <u>% Population with the Health Problem:</u> 0.037% to 0.61%

◆ Cerebrovascular Disease mortality: (# of deaths/population x 100 = %)

1990	75/129,180	=	0.058%	1997	71/141699 =	0.050%
1991	55/131,800	=	0.042%	1998	70/143366 =	0.049%
1992	75/133,200	=	0.056%	1999	89/145477 =	0.061%
1993	80/135,600	=	0.059%	2000	83/150433 =	0.055%
1994	60/136,800	=	0.044%	2001	65/152406 =	0.043%
1995	73/138,900	=	0.053%	2002	60/155233 =	0.039%
1996	68/139,400	=	0.049%	2003	85/157847 =	0.054%
				2004	58/157847 =	0.037%

Sources:

IPLAN data set as of 2/2/2007: "Leading Causes of Mortality" 1990 - 2004); Heart Disease and Stroke update of 2005, published by the American Heart Association; The Internet Stroke Center Website at <a href="http://www.strokecenter.org/pat/stats.htm">http://www.strokecenter.org/pat/stats.htm</a>.

- 3. Health Problem: Chlamydia
- A. **% Population at risk:** 22.4% 80.1%
- $\bullet$  # people aged 15 24: (33656/150433) x 100 = **22.4%**
- $\bullet$  # people aged 25-44: (43896/150433) x100 = 29.2%
- $\bullet$  # people aged 45 or older: (43245/150433) x100 = 28.7%
- # people aged 15 44: (77552/150433) x 100 = 51.6%
- $\bullet$  # people aged 15 and over: (120797/150433) x 100 = **80.1%**
- $\bullet$  BRFS of 2002: **3.9%** of those surveyed answered "yes" to the question of whether or not they engaged in risky sexual activity. N = 6,054 (155,233 x 0.039 = 6,054)
- B. <u>% Population with this Health Problem:</u> 0.23% 0.33%
- Cases of Chlamydia:

1991	419/129,180	=	0.32%	1998	314/143366 =	0.22%
1992	419/131,800	=	0.31%	1999	483/145000 =	0.33%
1993	370/133,200	=	0.27%	2000	398/150433 =	0.26%
1994	391/135,600	=	0.29%	2001	340/152406 =	0.22%
1995	464/136,800	=	0.33%	2002	434/155233 =	0.28%
1996	336/138,900	=	0.24%	2003	482/156781 =	0.31%
1997	321/140,797	=	0.23%	2004	482/157847 =	0.31%

#### Sources:

McLean County Health Department Communicable Disease Section Reports -- in the MCHD 51st Annual Report (January 1, 1997 to December 31, 1997); IPLAN Data set as of 2/2/2007; Behavioral Risk Factor Survey of 2002 (of 401 persons aged 18 and older in McLean County).

- 4. Health Problem: Heart Disease
- A. **% Population at Risk:** 80.3% (Persons 15 and over)
- ♦ Lifestyle Risk Factors (2004 BRFS) in McLean County adults (ages 18 and over):
  - 22.4% hypertension (N = 35,357)9.5% sedentary lifestyle (N = 14,995)

20.7%	obesity	(N = 32,674)
20.8%	smoking	(N = 32,832)
3.6%	diabetes	(N = 5.682)

#### B. <u>% Population with the Health Problem:</u> 0.16% - 0.20%

- ♦ In McLean County, heart disease has been the leading cause of death every year from 1995 until 2004, accounting for 26% to 41% of adult deaths.
- ♦ Heart disease mortality: (#deaths per year/total population x 100%)

```
1999 288/145,477 x 100% = 0.20%

2000 298/150,433 x 100% = 0.20%

2001 290/152,406 x 100% = 0.19%

2002 252/155,233 x 100% = 0.16%

2003 264/156,781 x 100% = 0.17%

2004 271/157,847 x 100% = 0.17%
```

Source: IPLAN Data Set; U.S. Census 2000; BRFS of 2004.

#### **Health Problem:** Coronary Heart Disease

#### A. % Population at Risk: 80.3%

- ♦ Population age 15 years and above 80.3% (120,797 according to 2000 census)
- ◆ Lifestyle Risk Factors (2004 BRFS) in adults ages 18 and over:

22.4%	hypertension	(N = 35, 357)
9.5%	sedentary lifestyle	(N = 14,995)
20.7%	obesity	(N = 32,674)
20.8%	smoking	(N = 32,832)
3.6%	diabetes	(N = 5,682)

#### B. **% Population with the Health Problem:** 0.12% - 0.16%

• Coronary Heart Disease is the 2<sup>nd</sup> to 3<sup>rd</sup> leading cause of death from 1995 to 2004, accounting for 18% to 26% of all adult deaths.

#### CHD mortality:

```
1997
       233/141,699 \times 100\% =
                                     0.16%
1998
       206/143,366 x 100%
                                     0.14%
1999
       204/145,477 \times 100\% =
                                     0.14%
       215/150,433 \times 100\% =
2000
                                     0.14%
2001
       212/152,406 \times 100\% =
                                     0.14%
2002
       187/155,233 \times 100\% =
                                     0.12%
2003
       186/156,781 \times 100\% =
                                     0.12%
2004
       187/157,847 \times 100\% =
                                     0.12%
```

Sources: IPLAN Data Set; U.S. Census; 2004 BRFS.

#### 5. Health Problem: Infant Mortality

#### A. % Population at Risk: 1.3%-1.4% (of total population)

 $\bullet$  # and % of live births (1990 – 2004):

```
1990: 1817
               (1817 \text{ live births}/129,180 \text{ total population } x 100\% = 1.4\%)
1991: 1854
               (1854/131,800 \times 100\% = 1.4\%)
1992: 1801
               (1801/133,200 \times 100\% = 1.3\%)
1993: 1864
               (1864/135,600 \times 100\% = 1.4\%)
1994: 1898
               (1898/136,800 \times 100\% = 1.4\%)
1995: 1951
               (1951/138,900 \times 100\% = 1.4\%)
1996: 1857
               (1857/139,400 \times 100\% = 1.3\%)
1997: 1978
               (1978/141,699 \times 100\% = 1.4\%)
1998: 1921
               (1921/143,366 \times 100\% = 1.3\%)
1999: 1948
               (1948/145,477 \times 100\% = 1.3\%)
2000: 1990
               (1990/150,433 \times 100\% = 1.3\%)
2001: 2041
               (2041/152,406 \times 100\% = 1.3\%)
2002: 2100
               (2100/155,233 \times 100\% = 1.4\%)
2003: 2133
               (2133/156,781 \times 100\% = 1.4\%)
2004: 2215
               (2215/157,847 \times 100\% = 1.4\%)
```

#### B. <u>% Population with the Health Problem:</u> 0.003% - 0.016% (of total pop.)

• # and % infant deaths:

```
1990: 8 (8/129,180 x 100% = 0.0062%)

1991: 11 (11/131,800 x 100% = 0.0083%)

1992: 10 (10/133,200 x 100% = 0.0075%)

1993: 12 (12/135,600 x 100% = 0.0088%)

1994: 14 (14/136,800 x 100% = 0.0010%)

1995: 15 (15/138,900 x 100% = 0.011%)
```

```
1996: 15
               (15/139,400 \times 100\% = 0.011\%)
1997: 15
               (15/141,699 \times 100\% = 0.011\%)
1998: 19
               (19/143,366 \times 100\% = 0.013\%)
1999: 12
               (12/145,477 \times 100\% = 0.0082\%)
2000:
         6
               (6/150.433 \times 100\% = 0.0040\%)
2001: 18
               (18/152,406 \times 100\% = 0.012\%)
2002:
               (8/155,233 \times 100\% = 0.0052\%)
         8
2003: 25
               (25/156,781 \times 100\% = 0.016\%)
2004: 20
               (20/157,847 \times 100\% = 0.013\%)
2005: 12
               (12/159,013 \times 100\% = 0.0075\%)
2006:
        5
               (5/165,700 \times 100\% = 0.0030\%)
```

♦ Infant Mortality in McLean County: Total of 94 deaths (from 2000-2006)/10,479 live births (2000-2006)  $\times$  1,000 = 8.97 = 9 deaths/1000 live births

Sources: IPLAN data set as of January 2007; MCHD birth and death certificates.

Health Problem: Low Birthweight and Very Low Birthweight

#### A. % Population at Risk: 1.3%-1.4% (of total population)

# and % of live births (1990 - 2004): 1990: 1817 (1817 live births/129,180 total population x 100% = 1.4%)1991: 1854  $(1854/131.800 \times 100\% = 1.4\%)$ 1992: 1801  $(1801/133,200 \times 100\% = 1.3\%)$ 1993: 1864  $(1864/135,600 \times 100\% = 1.4\%)$ 1994: 1898  $(1898/136,800 \times 100\% = 1.4\%)$ 1995: 1951  $(1951/138,900 \times 100\% = 1.4\%)$ 1996: 1857  $(1857/139,400 \times 100\% = 1.3\%)$ 1997: 1978  $(1978/141,699 \times 100\% = 1.4\%)$ 1998: 1921  $(1921/143,366 \times 100\% = 1.3\%)$ 1999: 1948  $(1948/145,477 \times 100\% = 1.3\%)$ 2000: 1990  $(1990/150,433 \times 100\% = 1.3\%)$ 2001: 2041  $(2041/152,406 \times 100\% = 1.3\%)$ 2002: 2100  $(2100/155,233 \times 100\% = 1.4\%)$ 2003: 2133  $(2133/156,781 \times 100\% = 1.4\%)$ 2004: 2215  $(2215/157,847 \times 100\% = 1.4\%)$ 

- ♦ Approx. 1:8 infants is born premature in the U.S. (March of Dimes, 2006).
- ♦ 1999-2002: March of Dimes estimated that 10.8% 12.3% of live births in McLean County were preterm. (12% of the 2100 live births in 2002 = 252 preterm births).

- ♦ McLean County (1996 2006): In this eleven-year period, prematurity was the leading cause of infant mortality for 5 years, and the second leading cause of infant mortality for 4 years.
- B. <u>% Population with the Health Problem:</u>
  0.073% 0.12% (LBW in total pop.)
  6.3% 8.2% (LBW of total births)
  0.010% 0.026% (VLBW in total pop.)
  0.8% 1.65 (VLBW of total births)
- # and % low birthweight (LBW) births in total population: 0.073% 0.12% 1990: 94  $(94/129,180 \times 100\% = 0.073\%)$ 1991: 120  $(120/131.800 \times 100\% = 0.091\%)$ 1992: 99  $(99/133,200 \times 100\% = 0.074\%)$ 1993: 110  $(110/135,600 \times 100\% = 0.081\%)$ 1994: 121  $(121/136,800 \times 100\% = 0.088\%)$ 1995: 145  $(145/138,900 \times 100\% = 0.10\%)$ 1996:  $(141/139,400 \times 100\% = 0.10\%)$ 141 1997: 132  $(132/141,699 \times 100\% = 0.093\%)$ 1998: 132  $(132/143,366 \times 100\% = 0.092\%)$ 1999: 122  $(122/145,477 \times 100\% = 0.084\%)$ 2000: 126  $(126/150,433 \times 100\% = 0.084\%)$ 2001: 140  $(140/152,406 \times 100\% = 0.092\%)$ 2002: 139  $(139/155,233 \times 100\% = 0.090\%)$  $(164/156,781 \times 100\% = 0.11\%)$ 2003: 164 2004: 182  $(182/157,847 \times 100\% = 0.12\%)$ % LBW births out of total births (1997 - 2004): 6.3% - 8.2% 1997: 6.7% 2001: 6.9% 1998: 6.9% 2002: 6.6% 1999: 6.3% 2003: 7.7% 2000: 6.3% 2004: 8.2% # and % very low birthweight (VLBW) births in total pop.: 0.010% - 0.026% 1990: 19  $(19/129,180 \times 100\% = 0.015\%)$ 1991: 18  $(18/131.800 \times 100\% = 0.014\%)$ 1992: 16  $(16/133,200 \times 100\% = 0.012\%)$ 1993: 15  $(15/135,600 \times 100\% = 0.011\%)$ 1994: 35  $(35/136,800 \times 100\% = 0.026\%)$ 1995: 32  $(32/138,900 \times 100\% = 0.023\%)$ 1996: 30  $(30/139,400 \times 100\% = 0.022\%)$ 1997: 30  $(30/141,699 \times 100\% = 0.02\%)$ 1998: 24  $(24/143,366 \times 100\% = 0.017\%)$ 1999: 15  $(15/145.477 \times 100\% = 0.010\%)$

 $(15/150,433 \times 100\% = 0.01\%)$ 

2000: 15

```
2001: 28 (28/152,406 x 100% = 0.018%)
2002: 26 (26/155,233 x 100% = 0.017%)
2003: 34 (34/156,781 x 100% = 0.022%)
2004: 35 (35/157,847 x 100% = 0.022%)
```

♦ % VLBW births out of total births (1997-2004): 0.8% - 1.6%

```
      1997:
      1.5%
      2001:
      1.4%

      1998:
      1.2%
      2002:
      1.2%

      1999:
      0.8%
      2003:
      1.6%

      2000:
      0.8%
      2004:
      1.6%
```

Sources: IPLAN data set as of January 2007; March of Dimes web site at

www.marchofdimes.com/prematurity/21219.asp.

#### **Health Problem:** Congenital Anomalies

- A. **% Population at Risk:** 1.3% 1.4% (of total population)
- $\bullet$  # and % of live births (1990 2004):

```
1990: 1817
               (1817 \text{ live births}/129,180 \text{ total population } x 100\% = 1.4\%)
1991: 1854
               (1854/131,800 \times 100\% = 1.4\%)
1992: 1801
               (1801/133,200 \times 100\% = 1.3\%)
1993: 1864
               (1864/135,600 \times 100\% = 1.4\%)
1994: 1898
               (1898/136,800 \times 100\% = 1.4\%)
1995: 1951
               (1951/138,900 \times 100\% = 1.4\%)
1996: 1857
               (1857/139,400 \times 100\% = 1.3\%)
1997: 1978
               (1978/141,699 \times 100\% = 1.4\%)
1998: 1921
               (1921/143,366 \times 100\% = 1.3\%)
1999: 1948
               (1948/145,477 \times 100\% = 1.3\%)
               (1990/150,433 \times 100\% = 1.3\%)
2000: 1990
2001: 2041
               (2041/152,406 \times 100\% = 1.3\%)
2002: 2100
               (2100/155,233 \times 100\% = 1.4\%)
2003: 2133
               (2133/156,781 \times 100\% = 1.4\%)
               (2215/157,847 \times 100\% = 1.4\%)
2004: 2215
```

B. <u>% Population with the Health Problem:</u> 0.071% - 0.10% (% per year; cases of congenital anomalies)

0% - 63% (% of infant deaths each year due to cong. anomalies)

◆ Cases (average #/year using moving 5-year intervals): 99-130 cases/year

```
1989-1993:
                 99 cases/vr
                                (99/129,180 \text{ total } 1990 \text{ pop. } \times 100\% = 0.077\%)
1990-1994:
                106 cases
                                (106/129,180 \times 100\% = 0.082\%)
1991-1995:
                113 cases
                                (113/129.180 \times 100\% = 0.087\%)
1992-1996:
                123 cases
                                (123/129,180 \times 100\% = 0.095\%)
1993-1997:
                131 cases
                                (131/129,180 \times 100\% = 0.10\%)
1994-1998:
                                (130/129,180 \times 100\% = 0.10\%)
                130 cases
                                (124/129,180 \times 100\% = 0.096\%)
1995-1999:
                124 cases
1996-2000:
                115 cases
                                (115/150,433 \text{ total } 2000 \text{ pop. } \text{x } 100\% = 0.076\%)
1997-2001:
                112 cases
                                (112/150,433 \times 100\% = 0.075\%)
1998-2002:
                110 cases
                                (110/150,433 \times 100\% = 0.073\%)
1999-2003:
                106 cases
                                (106/150,433 \times 100\% = 0.071\%)
2000-2004:
                111 cases
                                (111/150,433 \times 100\% = 0.074\%)
```

- ◆ <u>Cases</u>: 1:33 babies in the U.S. are born each year with birth defects (approximately 120,000).
- ◆ 2002: March of Dimes reported that birth defects account for 1:5 infant deaths in IL.
- ◆ Deaths (% of infant deaths due to congenital anomalies): 0% 63%

```
1996:
            5 (5 deaths due to congenital anomalies/15 infant deaths in McLean
               County this year x 100\% = 33\%)
1997:
            7 (7/15 \times 100\% = 47\%)
1998:
            6 (6/19 \times 100\% = 32\%)
1999:
            3 (3/12 \times 100\% = 25\%)
2000:
            2 (2/6 \times 100\% = 33\%)
2001:
            6 (6/18 \times 100\% = 33\%)
2002:
            5 (5/8 \times 100\% = 63\%)
2003:
            6 (6/25 \times 100\% = 24\%)
2004:
            0 (0/20 \times 100\% = 0\%)
2005:
            4 (4/12 \times 100\% = 33\%)
            1 (1/5 \times 100\% = 20\%)
2006:
```

<u>Sources:</u> IPLAN data set as of February 2007; March of Dimes web site, www.marchofdimes.com/peristats.

#### 6. Health Problem: Intentional Injuries

- A. **% Population at Risk: 0.82% 43.5%**
- $\bullet$  # children aged 0-17 = 35,292 (35,292/150,433) x 100 = 23%
- ♦ An estimated 0.82% of the total population is at risk for child abuse or neglect.

- ◆ An estimated 10.6% 43.5% of the total population is at risk for sexual assault.
- ♦ An estimated 2.5% of the total population is at highest risk for suicide.

#### B. <u>% Population with the Health Problem:</u> 0.03% - 0.55%

- ◆ Child abuse/neglect: 0.30% 0.55% of the total population has been abused (per reports of "founded" child abuse cases only. Elder abuse cases are not included in this count).
- ♦ Sexual assault: 0.078% 0.16% per year (1990 1998) of the total population has experienced criminal sexual assault.
- ◆ Suicide: 0.03% 0.13% per year of the total population has committed suicide (1990 2004).
- ♦ Homicide: 1 to 6 deaths occur per year (1990 2004) in McLean County.

Sources: IPLAN Data Set; statistics taken from the following sections in this document: Child Abuse and Neglect, Sexual Assault, and Suicide.

#### Health Problem: Intentional Injuries: Child Abuse and Neglect

#### A. <u>% Population at Risk:</u> 0.82%

- $\bullet$  # children aged 0-17 = 35292 (35,292/150,433) x 100 = 23%
- ♦ In 60% to 75% of families in which the woman is battered, children are also battered: There were 105 domestic violence cases filed at the McLean County Sheriff's Department in 2006 and 1,697 cases filed with the Bloomington Police Department (1802 x 0.75 = 1,351 as a gross estimate of the # of abused children; 1,352/165,700 x 100% = 0.82%). In Normal there were 839 calls made that were domestic in nature.

#### B. % Population with the Health Problem: 0.30% - 0.55%

♦ # "founded" child abuse cases (only 1990-1997 available in IPLAN Data Set):

```
1990: 390
               (390/129,180 \times 100\% = 0.30\%)
1991: 504
               (504/131,800 \times 100\% = 0.38\%)
1992: 573
               (573/133,200 \times 100\% = 0.43\%)
1993: 623
               (623/135,600 \times 100\% = 0.46\%)
1994: 696
               (696/136,800 \times 100\% = 0.51\%)
               (762/138,900 \times 100\% = 0.55\%)
1995: 762
1996: 756
               (746/139,400)x 100\% = 0.54\%)
1997: 726
               (726/141699) \times 100\% = 0.51\%
```

#### Sources:

IPLAN data set of 2/2/07; U.S. Census Data; "Children Safe and Secure" document published by Texas Department of Family and Protective Services; 2006 Annual Report from McLean County Sheriff's Department; 2006 annual report from Bloomington Police Department; 2006 annual report from Normal Police Department.

#### **Health Problem:** Intentional Injuries: Sexual Assault

#### A. **% Population at Risk:** 10.6% - 43.5%

- lack Women ages 15 24 : 17,712  $(17,712/150,433 \times 100\% = 11.8\%)$
- $\bullet$  Women ages 25 44 : 22,080 (22,080/150,433 x 100% = 14.7%)
- lack Women ages 45 64 : 14,563 (14,564/150,433 x 100% = 9.7%)
- $\bullet$  Women ages 65 + : 8,843 (8,843/150,433 x 100% = 5.9%)
- $\bullet$  Total females ages 15 and above: 63,198 (63,198/150,433)x 100% = **43.5%**)
- 61% of female victims of sexual assaults are under age 18: N = 17,224
- 9.43% (almost 1 in 10) of sexual assaults are perpetrated against male victims.
- lack Males ages 15 24: 15,944 (10.6% of the total population)

#### B. <u>% Population with the Health Problem:</u> 0.078% - 0.16%

• # Criminal sexual assaults:

```
1990:
               (85/129,180 \times 100\% = 0.065\%)
        85
               (81/131,800 \text{ x } 100\% = 0.061\%)
1991:
        81
               (75/133,200 \times 100\% = 0.056\%)
1992:
        75
1993: 119
               (119/135,600 \times 100\% = 0.08\%)
1994: 126
               (126/136,800 \times 100\% = 0.092\%)
1995: 226
               (226/138,900 \times 100\% = 0.16\%)
1996: 168
               (168/139,400 \times 100\% = 0.12\%)
1997: 110
               (110/141,699 \times 100\% = 0.078\%)
1998: 103
               (103/143,366 \times 100\% = 0.072\%)
```

#### Sources:

IPLAN data set on 2/2/07; "The Public's Health Newsletter" published by the Los Angeles Department of Health Services - website:

http://www.ladhs.org/media/tph/TPH06/TPHApril-2006.pdf; National Crime Victimization survey 1996 published by Texas Department of Family and Protective Services.

#### 7. Health Problem: Suicide

- A. <u>% Population at Risk:</u> 0.012% 0.03% % Population aged 65 and over at Risk: 2.5%
- ♦ The number of suicides has ranged from 5 (in 1998 [0.03%]) to 17 (in 1993 [0.012%]) between the years of 1993 and 2004.

150,433(0.03) N = 4,513 150,433(0.012) N = 1,805

- According to the 2002 BRFS, 11.2% of the population had 8-30 days during which their mental health was not good.
- ♦ In McLean County, suicide rates are higher in adults ages 65 and above.
- According to the 2004 BRFS, 22.4% of the population surveyed had more than two days in the past month that they were depressed, sad, and/or blue.
- Assumption: there is an increased risk that those persons who are depressed, sad, and/or blue, and are in the age range of 65 and over, may commit suicide.
- $\bullet$  # of people aged 65 and over: 14,621 (14,621/150,433) x 100 = 9.7%

14,621(.224) N = 3,725 (number of population 65+ that is at risk)

(3,725/150,433) x100 = **2.5%** (age 65 and over population that is at risk)

#### B. <u>% Population with the Health Problem:</u> 0.003% - 0.013%

```
1990:
        8
                 (8/129,180 \times 100\% = 0.006\%
1991: 10
               (10/131.800 \times 100\% = 0.007\%
1993: 17
               (17/135,600 \times 100\% = 0.013\%)
1994:
                (7/136,800 \times 100\% = 0.005\%)
1995: 10
               (10/138,900 \times 100\% = 0.007\%
1996: 10
               (10/139,400) \times 100\% = 0.007\%
1997:
                 (6/141,699)x 100\% = 0.004\%
         6
1998:
         5
                 (5/143,366) \times 100\% = 0.003\%
1999: 13
               (13/145,477) \times 100\% = 0.009\%
2000:
                 (7/150,433) \times 100\% = 0.005\%
         7
2001:
               (14/152,406) \times 100\% = 0.009\%
        14
               (16/155,233) \times 100\% = 0.010\%
2002:
        16
               (13/156,781) \times 100\% = 0.008\%
2003:
        13
2004
        15
               (15/157,847) \times 100\% = 0.009\%
```

Sources: 2002 BRFS; 2004 BRFS; IPLAN Data set as of 2/2/07.

#### 8. Health Problem: Unintentional Injuries

#### A. <u>% Population at Risk:</u> 100%

#### **6.5%** - **10%** are at highest risk

```
# children < 1 year:
                                1,939
                                              (1,939/150,433 \times 100\% = 1.3\%)
# children aged 1-4 years
                                7,807
                                              (7,807/150,433 \times 100\% = 5.2\%)
# children aged 5-14 years:
                               19,890
                                              (19,890/150,433 \times 100\% = 13.2\%)
Total # children ages 0 - 14: 29,636
                                              (29,636/150,433 \times 100\% = 19.7\%)
\# aged 15 - 24 years
                              33,656
                                              (33,656/150,433 \times 100\% = 22.4\%)
# aged 65 and over:
                               14,621
                                              (13,453/150,433 \times 100\% = 9.7\%)
```

- ullet Emergency room visits due to falls are more common in children under age 5 (7,807 children under 1 year + 1,939 children ages 1 to 4 = 9,746; 6.5% of the total population) and adults age 65 and older (N = 14,621; 9.7% of the total population).
- ◆ Falls account for 70% of accidental deaths in individuals > 75 years of age and older.
- 60% of nursing home residents fall each year; one-third of the elderly living out in the community fall.
- ♦ More than 90% of hip fractures occur as a result of a fall.

#### B. % Population with the Health Problem: 0.019% - 0.033%

# deaths from unintentional injuries:

```
1990: 34
               (34/129,180 \times 100\% = 0.026\%)
1991: 30
               (30/131,800 \times 100\% = 0.023\%)
1992: 34
               (34/133,200 \times 100\% = 0.026\%)
1993: not in the 10 leading causes of death
1994: 35
               (35/136,800 \times 100\% = 0.026\%)
1995: 30
               (30/138,900 \times 100\% = 0.022\%)
1996: 29
               (29/139,400 \times 100\% = 0.021\%)
1997: 31
               (31/141,699 \times 100\% = 0.022\%)
1998: 46
               (46/143,366 \times 100\% = 0.032\%)
1999: 27
               (27/145,477 \times 100\% = 0.019\%)
2000: 34
               (34/150,433 \times 100\% = 0.023\%)
2001: 34
               (34/152,406 \times 100\% = 0.022\%)
2002: 41
               (41/155,233 \times 100\% = 0.026\%)
2003: 40
               (40/156,781 \times 100\% = 0.026\%)
2004: 52
               (52/157,847 \times 100\% = 0.033\%)
```

- ♦ # deaths from Motor Vehicle Accidents (MVA): 9 25/year (1990 2004)
- $\bullet$  # premature deaths (< age 65) from MVAs: 8 21/year (1990 2004)

Sources:

IPLAN data set as of December 2006; American Family Physician website article at www.aafp.org/afp/20000401/2159.html from American Family Physician, April 1, 2000.

#### **Health Problem: Unintentional Injuries: Lead Poisoning**

- A. **% Population at Risk:** 9.2% (of total population)
- highest risk: # McLean County children ages 0-6 = 13,763 $(13,763/150,433 \times 100\% = 9.15\%)$

#### B. % Population with the Health Problem:

```
0.23\% - 0.64\% (of children age 0 - 6, with BLL >10 mcg/dl)
0.008\% - 0.15\% (of total population, with BLL >15 mcg/dl)
0.0015\% - 0.045\% (of total population, with BLL >25 mcg/dl)
```

- Total # children with BLL > 10 mcg/dl (1999 2004): 0.23% - 0.64% 1999: 78  $(78/12,280 \text{ pop. children age 6 and under, } 1990 \times 100\% = 0.64\%)$ 2000: 80 (80/13,763 pop. children age 6 and under, 2000 x 100% = 0.58%)2001: 74  $(74/13,763 \times 100\% = 0.54\%)$ 2002: 60  $(60/13,763 \times 100\% = 0.44\%)$ 2003: 50  $(50/13,763 \times 100\% = 0.36\%)$ 2004: 32  $(32/13,763 \times 100\% = 0.23\%)$
- # children with blood lead level (BLL) > 15 mcg/dl: 0.008% - 0.15%

```
(197/129,180 \times 100\% = 0.15\%)
1990: 197
1992: 29
               (29/133,200 \times 100\% = 0.022\%)
```

1993: 38 
$$(38/135,600 \times 100\% = 0.028\%)$$

1996: 63 
$$(65/139,400 \times 100\% = 0.047\%)$$
  
1997: 70  $(70/141,699 \times 100\% = 0.05\%)$ 

1998: \*\*\*

1999: 70  $(70/145,477 \times 100\% = 0.048\%)$ 

2000: 74  $(74/150,433 \times 100\% = 0.049\%)$ 

2001: 62  $(62/152,406 \times 100\% = 0.041\%)$ 

2002: 56  $(56/155,233 \times 100\% = 0.036\%)$ 

2003: 44  $(44/156,781 \times 100\% = 0.03\%)$ 

2004: 25  $(25/157,847 \times 100\% = 0.016\%)$ 

```
# children with BLL > 25 \text{ mcg/dl}:
                                                      0.0015% - 0.045%
1990: 58
               (58/129,180 \times 100\% = 0.045\%)
1992: 11
               (11/133,200 \times 100\% = 0.0083\%)
1993: 10
               (10/135,600 \times 100\% = 0.074\%)
1994:
               (2/136,800 \times 100\% = 0.0015\%)
1995: 17
               (17/138,900 \times 100\% = 0.012\%)
1996:
               (8/139,400 \times 100\% = 0.0057\%)
        8
1997: 14
               (14/141,699 \times 100\% = 0.0099\%)
1998: ***
1999:
        8
               (8/145,477 \times 100\% = 0.0055\%)
2000:
        6
               (6/150,433 \times 100\% = 0.004\%)
               (12/152,406 \times 100\% = 0.0079\%)
2001: 12
2002:
               (4/155,233 \times 100\% = 0.0026\%)
        4
2003:
        6
               (6/156,781 \times 100\% = 0.0038\%)
2004:
        7
               (7/157,847 \times 100\% = 0.0044\%)
```

Source: IPLAN data set as of January 2007; IDPH Lead Program data; Census data.

Health Problem: Unintentional Injuries: Motor Vehicle Accidents

```
# children < 1 year:
                                               (1,939/150,433 \times 100\% = 1.3\%)
                                1,939
# children aged 1-4 years
                                7,807
                                              (7,807/150,433 \times 100\% = 5.2\%)
                                              (19,890/150,433 \times 100\% = 13.2\%)
# children aged 5-14 years:
                               19,890
Total # children ages 0 - 14: 29,636
                                              (29,636/150,433 \times 100\% = 19.7\%)
\# aged 15 - 24 years
                               33,656
                                              (33,656/150,433 \times 100\% = 22.4\%)
                                               (13,453/150,433 \times 100\% = 9.7\%)
# aged 65 and over:
                               14,621
```

- B. **% Population with the Health Problem: 0.006% 0.017%** (of total pop.)
- ♦ # deaths from Motor Vehicle Accidents (MVA): 9 25/year (1990 2004)
- $\bullet$  # premature deaths (< age 65) from MVAs: 8 21/year (1990 2004)
- # and % of deaths due to motor vehicle accidents:

```
1990: 15 (15/129,180 x 100% = 0.012%)
1991: 15 (15/131,800 x 100% = 0.011%)
1992: 16 (16/133,200 x 100% = 0.012%)
1993: 13 (13/135,600 x 100% = 0.010%)
```

```
1994: 23
               (23/136,800 \times 100\% = 0.017\%)
               (14/138,900 \times 100\% = 0.010\%)
1995: 14
1996: 17
               (17/139,400 \times 100\% = 0.012\%)
1997: 15
               (15/141,699 \times 100\% = 0.011\%)
1998: 18
               (18/143.366 \times 100\% = 0.013\%)
1999:
               (9/145,477 \times 100\% = 0.006\%)
2000: 13
               (13/150,433 \times 100\% = 0.0086\%)
2001: 16
               (16/152,406 \times 100\% = 0.011\%)
2002: 25
               (25/155,233 \times 100\% = 0.016\%)
2003: 17
               (17/156,781 \times 100\% = 0.011\%)
2004: 22
               (22/157,847 \times 100\% = 0.014\%)
```

Source: IPLAN data set as of January 2007; Census data.

**Health Problem:** Unintentional Injuries: Hip Fractures and Falls

### A. <a href="#">M. Population at Risk:</a> <a href="#">100%</a> <a href="#">6.5% - 9.7% are at highest risk</a>

```
# children < 1 year:
                                1,939
                                              (1,939/150,433 \times 100\% = 1.3\%)
# children aged 1-4 years
                                7,807
                                              (7,807/150,433 \times 100\% = 5.2\%)
# children aged 5-14 years:
                               19,890
                                              (19,890/150,433 \times 100\% = 13.2\%)
Total # children ages 0 - 14: 29,636
                                              (29,636/150,433 \times 100\% = 19.7\%)
                               33,656
\# aged 15 - 24 years
                                              (33,656/150,433 \times 100\% = 22.4\%)
# aged 65 and over:
                                              (13,453/150,433 \times 100\% = 9.7\%)
                               14,621
```

- ◆ Emergency room visits due to falls are more common <u>in children under age 5</u>: **6.5%** of population at risk for falls (7,807 children under 1 year + 1,939 children ages 1 to 4 = 9,746; 6.5% of the total population) <u>and adults age 65 and older</u> (N = 14,621; **9.7%** of the total population).
- ♦ More than 90% of hip fractures occur as a result of a fall.
- ◆ Falls account for 70% of accidental deaths in individuals > 75 years of age and older.
- 60% of nursing home residents fall each year; one-third of the elderly living out in the community fall.

#### B. % Population with the Health Problem: 0.00094% - 0.10%

- ◆ Falls account for 70% of accidental deaths in individuals > 75 years of age and older.
- ♦ # hip fractures at age 65 and older:

```
1990: 130
               (130/129,180 \times 100\% = 0.10\%)
1991: 127
               (127/131,800 \times 100\% = 0.096\%)
1992: 138
               (138/133,200 \times 100\% = 0.0010\%)
1993: 109
               (109/135,600 \times 100\% = 0.0008\%)
1994: 133
               (133/136,800 \times 100\% = 0.00097\%)
1995: 131
               (131/138,900 \times 100\% = 0.00094\%)
1996: 118
               (118/139,400 \times 100\% = 0.00085\%)
1997: 127
               (127/141,699 \times 100\% = 0.090\%)
1998: 144
               (144/143,366 \times 100\% = 0.10\%)
1999: 135
               (135/145,477 \times 100\% = 0.093\%)
2000: 108
               (108/150,433 \times 100\% = 0.072\%)
2001: 129
               (129/152,406 \times 100\% = 0.085\%)
```

#### Sources:

IPLAN data set as of December 2006; Census data; American Family Physician website article at <a href="www.aafp.org/afp/20000401/2159.html">www.aafp.org/afp/20000401/2159.html</a> from *American Family Physician*, April 1, 2000.

#### HANLON METHOD CHART

June 6, 2007

Tom Szpyrka IPLAN Administrator Illinois Department of Public Health Division of Health Policy 525 W. Jefferson Street, 2<sup>nd</sup> Floor Springfield, IL 62761

Dear Mr. Szpyrka:

At its meeting on Wednesday, June 6, 2007, the McLean County Board of Health reviewed and approved the *McLean County Community Health Plan and Needs Assessment* (2007-2012), prepared by the McLean County Health Department and the Community Health Advisory Committee, for submission to the Illinois Department of Public Health, Division of Health Policy, by July 16, 2007. At its meeting on Wednesday, March 7, 2007, the McLean County Board of Health reviewed the results of the McLean County Health Department *Internal Organizational Capacity Assessment*, conducted between May 2006 and June 2006, with the assistance of an Illinois State University Health Promotion Department intern. Please find attached a copy of the minutes of the March 17<sup>th</sup> meeting, documenting the discussion.

This letter confirms the McLean County Board of Health's adoption of the *McLean County Community Health Plan and Needs Assessment (2007-2012)* and the *Internal Organizational Capacity Assessment (2006)*, in fulfillment of the requirements identified in *Illinois Administrative* Code, Section 600.410 Requirements for IPLAN or an Equivalent Planning Process, Title 77 (Public Health), Chapter 1 (Department of Public Health), SubChapter H (Local Health Departments), Part 600 Certified Local Health Department Code.

Thank you for your attention.

Sincerely,

Dan Steadman, DDS President

cc: Robert Keller, Director

# MINUTES McLEAN COUNTY BOARD OF HEALTH REGULAR MEETING – MARCH 7, 2007

MEMBERS PRESENT: Steadman, Hon, Kerber, Moss, Powell, Tello, and Turley

MEMBERS ABSENT: Willey

STAFF PRESENT: Keller, Anderson, Howe, Mayes, and Voss

PUBLIC PRESENT: Mina Kasturi, UIC Student

CALL TO ORDER: Steadman called the Board of Health meeting to order at 5:42 p.m., with no corrections to the agenda.

MINUTES: Steadman requested approval for the minutes of February 7, 2007.

Moss/Kerber moved and seconded the approval for the minutes of February 7, 2007. Motion carried.

\$ 70.319.64

#### CONSENT AGENDA:

1. Bills to be Paid (End of 2006)

Health Department

Ticaitii Departiment	112 01	Ψ / 0,517.01
Dental Sealant	102-61	3,202.62
WIC	103-61	9,310.98
Preventive Health	105-61	3,938.49
Family Case Mngmt	106-61	19,608.36
AIDS/CD Program	107-61	4,709.63
2. Bills to be Paid (January	2007)	
Health Department	112-61	\$299,276.27
Dental Sealant	102-61	15,657.34
WIC	103-61	20,303.82
Preventive Health	105-61	7,080.82
Family Case Mngmt	106-61	51,424.96

112-61

107-61

Powell/Turley moved and seconded the approval of the Consent Agenda as printed. Motion carried.

11,133.50

COMMITTEE REPORTS: None

AIDS/CD Program

OLD BUSINESS: Keller requested approval for the FY08 West Nile virus protection grant, which is a CONTINUING GRANT, in the amount of \$36,220.70. The total award will be used to continue the department's larvicide program with governmental entities and conduct a WNV prevention effort through public information and marketing. The award runs April 1, 2007 through March 31, 2008. The amount of funding for each jurisdiction selected is based upon numbers of positive birds tested for WNV, the number of positive mosquito pools and the number of human cases. During 2006, the department had one bird test positive, several mosquito pools and three human cases.

Moss/Powell moved and seconded the approval for the FY08 West Nile virus protection grant, which is a CONTINUING GRANT in the amount of \$36,220.70. Motion carried.

Keller requested approval for the Ticket for a Cure budget amendment, Fund 0105, in the amount of \$32,000, which was submitted to the Illinois Department of Public Health during the late fall. The grant application was approved by the Board of Health in January. The award is for \$32,000 and will cover the time period March 1, 2007 through June 30, 2008. The budget amendment was submitted to the McLean County Board Finance Committee to effect an amendment to the current County budget in Fund 0105.

Kerber/Hon moved and seconded approval for the budget amendment, Fund 0105, Ticket for a Cure in the amount of \$32,000. Motion carried.

Keller noted that the FY08 Mental Health, Developmental Disabilities, and Substance Abuse Review Books were distributed during the 377 Board meeting.

5:47 p.m. Tello arrived.

Keller reviewed the department's internal organizational capacity assessment; which was included in the packet. The exercise was conducted during the summer of 2006 through the efforts of an Illinois State University health promotion intern. Management and coordinator level staff took part in the exercise. The internal organizational capacity assessment is a required prelude to completion of the department's community health needs assessment and community health plan. The department utilized both the Approach to Excellence in Public Health (APEXph) and the Operational Definitions for a Functional Local Health Department as assessment tools. Page 2 of the abstract outlines areas to consider for attention. Many of the identified weaknesses are tied to a lack of real time data and epidemiological capacity at the state level. The results of the operational definitions assessment were shared previously with the Board.

Included in the packet was a copy of the 2006 McLean County Wellness Program which was sent to the County Board Finance Committee. Keller noted that the 2007 wellness program is now underway. McLean County government employees are one out of eight pilot sites involved in the wellness program coordinated through the Health Department and Health Alliance. Each enrollee is required to complete a computerized health risk appraisal in order to receive \$500 rebate under the current health plan and if it is not completed will only receive

\$250. Keller reported that 90% of the Health Alliance enrollees completed the plan.

Steadman inquired about Health Alliance and the evaluation process. Keller remarked that the County had previously worked with the department on a unilateral basis. The data for the last seven years has shown progress. Since this is the first year for the Health Alliance project, no data are available. Participants will be eligible for incentives to participate and the goal is to keep insurance rates down and be proactive on employee health. Keller stated that the County being involved with Health Alliance is a win/win situation for both organizations.

NEW BUSINESS: None

DIRECTOR'S REPORT: Keller asked Howe to speak about the economic interest statements. Howe mentioned that Voss has the statements, fill them out and return by May 1<sup>st</sup> to the County Clerk's office. Voss will send any statements completed tonight over to the Clerk's office through the County's inter-office system.

Keller reported that at the April meeting he will bring for Board approval a grant in the amount of \$10,000 from NACo for Medical Reserve Corps (MRC) training and materials. Currently the department has 59 MRC volunteers which include nurses, doctors, pharmacists, etc.

STAFF REPORTS: Howe reported for the Animal Control program pointing out that the year-end numbers for 2006 are close to the numbers from 2005 in the quarterly report. However, Howe noted that the number of bite/rabies investigations were up from 444 in 2005 to 503 in 2006. He distributed a copy of a report prepared by Peggy Gibson, animal control coordinator, which showed data on rabies/bite investigations from 1998 through 2006. Howe indicated that the category bite investigation mean all follow-up activity on both bites and specimen preparation/submission. Howe noted that a substantial portion of the increased activity is related to bat activity and the submission of bat specimens for testing over the past couple of years.

Tello inquired if domestic animals can get rabies. Howe noted that they can anytime they may have an opportunity to come in contact with an infected animal. We are finding more cases of cats coming in contact with bats in residences. Therefore, domestic pets can encounter potentially rabid carriers even if they don't leave the confines of their dwellings due to potential of a rabid gaining entrance. Keller noted that this was thought to be the case several years ago in a home in Bloomington where preliminary tests showed that a house cat was positive for rabies and had not been outside the home.

Steadman inquired about bats inside a home and how to remove them. Howe stated that the animal control program will help remove bats from within living quarters of homes if there is a potential for human exposure. However, the program is not designed to substitute for licensed trappers and exterminators. When a live specimen can be obtained from a home the Health Department will submit it for testing based upon a potential exposure. The State encourages the testing of bats and skunks. Powell inquired if animal control would remove the bats. Howe responded, again, that when there is a potential for human exposure that the effort is made to remove a bat.

Tello inquired about who is more likely to come in contact with bats. Howe explained that children have a tendency to play and poke at bats. However, animals can also come in contact with them and bring disease to the family members.

Howe reported for the Administration Division noting that packet pages 10-21 contain the quarterly report. He explained that the revenues were up and that the expenses were down in all tax funds due to the fiscally conservative budget projection approaches used in the development process. Howe pointed out that all three Tax Funds ended the year revenue over expenses and added additional monies to their respective fund balances. The Health fund added \$270,097, TB \$13,248 and Persons with DD \$3,073.

Mayes reported for the Personal Health Services Division noting that the quarterly report was included on pages 23-28 in the packet. Mayes mentioned that the dental programs are going well, the first vacancy for the children's dentist is April 2<sup>nd</sup>, the hygienist is March 19<sup>th</sup>, and the adult dentist is March 23<sup>rd</sup>. Mayes also reported that there is an opening for a nurse in the family case management program.

Anderson noted that the Environmental Health quarterly report was contained on pages 30-33 in the packet. Anderson stated that the food program continues to grow this year and ended 2006 with a record 744 active food establishments. To-date, the division has 26 pending permit applications and reported that 12 large food establishments will be opening in the area during 2007.

Anderson reported that the private sewage numbers continue to decline due to slumping home sales and construction, noting that numbers for both the new systems and replacements fell. Anderson also mentioned that tanning facilities numbers are down. Anderson stated that the geothermal system registrations are up but with the price of electricity raising the payback won't be as quick.

BOARD ISSUES: Hon inquired about the number of food complaints being up for the quarter. Anderson explained that most complaints are from customers observing perceived violations or commenting on poor sanitation practices, such as lack of gloves. Several complaints are filed by disgruntled former employees.

ADJOURN: Kerber moved and the Board of Health meeting was adjourned at 6:23 p.m.

# The McLean County

# Community Health Needs Assessment



Prepared by

The McLean County Health Department

And

The Community Health Advisory Committee

From

May 2006 to January 2007

# Introduction To the McLean County

#### Community Health Needs Assessment

January 2007

#### Statement of Purpose

The purpose of the McLean County Community Health Needs Assessment process is to review and analyze county-specific health indicators with the Community Health Advisory Committee (CHAC) in a manner which will result in the identification of a list of health concerns and the determination of at least three priority health problems for which a county-specific Community Health Plan (CHP) will be developed, implemented, and evaluated.

The community health needs assessment is a critical component to the development process for the new CHP (2007-2012). It contains McLean County-specific health indicators that have been compared to state and national indicators, when available, and utilizes Healthy People 2010 objectives/targets to assess where improvements in health are most needed.

#### **Process**

To conduct the McLean County Health Needs Assessment, McLean County Health Department (MCHD) staff and Community Health Advisory Committee (CHAC) members collected and analyzed county-specific data from May 2006 through January 2007. Additional data were incorporated into the assessment as it became available, until January 2007, when final decisions about the county's key health concerns were being made by the CHAC. Examples of county-specific data sources utilized for the analysis include:

- 1. IPLAN Data Set (1990 2004).
- 2. MCHD statistics: from Communicable Disease, Environmental Health, Women Infants and Children (WIC), Family Case Management (FCM), and other Health Department services.
- 3. The McLean County Behavioral Risk Factor Survey (BRFS): commissioned by the Illinois Department of Public Health (IDPH) and conducted in October 1997, February 2002, and August 2004, by Northern Illinois University, via telephone survey, contacting approximately 400 adult (age 18 and over) county residents with each survey. An additional BRFS was conducted in 2006; however, results were not yet available.

- 4. The Assessment 2005: Community Analysis (August 2004): prepared for the McLean County Community Advocacy Network. This document is also known locally as "The CAN Report", which is distributed by the United Way.
- 5. The *Community Report Card for McLean County, IL (July 2004)*: prepared by the McLean County Health Department All Our Kids: Early Childhood Network.
- 6. Other Examples: U.S. census data from 2000; crime statistics from local police departments, IDPH maternal/child health statistics; MCHD IPLAN CHP (1999-2007) progress reports; and, the McLean County Health Department and McLean County 377 Board One- and Three-Year Plan for Mental Health, Developmental Disabilities and Substance Abuse Services for FY '06-FY'09 report.

Health Department staff presented a preliminary data analysis to the CHAC on December 5<sup>th</sup>, 2006, and identified preliminary areas of health concerns. Further input from the CHAC was solicited and additional data were obtained and analyzed. At a CHAC meeting on January 16, 2007, further discussion resulted in a list of 18 health concerns. These 18 preliminary health concerns were then reduced to a final list of the county's top 8 health problems. Results from these discussions are presented below.

#### Results

On December 5, 2006, the CHAC reviewed and discussed preliminary findings from the health indicator data assessment. Among the findings: McLean County's top 10 leading causes of death have varied little over the past ten years. The list of leading causes of death using the most current available data from the IPLAN Data Set (2004) includes the following: diseases of the heart (27% of all deaths); cancer/malignant neoplasms (22%); coronary heart disease (19%); lung cancer (6%); cerebrovascular diseases (6%); accidents (5%); chronic lower respiratory diseases (5%); diabetes (3%); lymphatic and hematologic cancer (3%); and nephritis (2%). The analysis and subsequent decisions at the 1/16/07 CHAC meeting produced a list of 18 preliminary health concerns:

1)	Access to Care: Dental Care	10)	Heart Disease
2)	Access to Care: Undocumented People	11)	Infant Mortality
3)	Acute/Binge Drinking	12)	Lead Poisoning
4)	Cancer	13)	Low Birth Weight
5)	Cerebrovascular Disease	14)	Perinatal Conditions
6)	Child Abuse/Neglect	15)	Sexual Assault
7)	Chlamydia	16)	Suicide (older adults)
8)	Congenital Anomalies	17)	Unintentional Injuries
9)	Diabetes	18)	Very Low Birth Weight

These 18 preliminary health concerns were thoroughly discussed by the CHAC in January 2007 in order to reduce the list in preparation for the health problem prioritization process, the *Hanlon Method for Prioritizing Health Problems*, occurring in February 2007. Some of the health problems were combined into categories, and others were set aside. The final list of the county's top 8 health problems was determined at the January 16, 2007, CHAC meeting:

1)	Cancer	5)	Infant Mortality
2)	Cerebrovascular Disease	6)	Intentional Injuries
3)	Chlamydia	7)	Suicide (older adults)
4)	Heart Disease	8)	<b>Unintentional Injuries</b>

To assist with choosing the top three health priorities for the county, each of the 8 problems listed above was described in the document, *McLean County Health Problems: The Size of the McLean County Health Problems—February 2007*, (Attachment "A", of the *Overview of the Community Health Plan Process* identified as Attachment #2 of the Executive Summary). This information was then used in February 2007 when the CHAC applied the *Hanlon Method for Prioritizing Health Problems* to determine the county's top three health problem priorities. The Hanlon Priority Scores indicated three key health problems:

#### 1. Heart Disease

(Hanlon Priority Score = 210)

#### 2. Cerebrovascular Disease

(Hanlon Priority Score = 175)

#### 3. Cancer

(Hanlon Priority Score = 168)

Effective interventions for all three of these health problems have been in use across the nation for many years. Of special concern was the finding that, although mortality rates may have decreased or fallen below the Healthy People 2010 target for some components of these health concerns, Behavioral Risk Factor Survey (BRFS) data for McLean County indicate that Healthy People 2010 objectives for adult residents are not met for many of the risk factors (such as cigarette smoking; obesity; high cholesterol; alcohol over-consumption) for heart disease, cerebrovascular disease, and cancer. These three health problems (heart disease, cerebrovascular disease, and cancer) were therefore chosen as McLean County's top three health priorities and became the basis for the Round 3 McLean County Community Health Plan for 2007-2012.

#### **Health Indicators Summary**

The information presented in the following "Health Indicators Summary" document includes data retrieved from many sources, not only the IPLAN data set. Behavioral Risk Factor Survey

(BRFS) data is primarily reported at the end of the "Chronic Disease Indicators" category. Each of the seven health indicator categories (listed below) contains bullet points of data highlights per indicator and a "Preliminary Identification of Health Problems" section:

demographics and socioeconomic characteristics
general health and access to care indicators
maternal and child health indicators
chronic disease indicators
infectious disease indicators
environmental health/occupational health/injury control indicators
sentinel events indicators

The format used in the "Health Indicator Summary" document provides easy access to key data findings for each health indicator and, during the community health needs assessment process, it provided a methodology for the initial identification of potential or actual areas of health concern.

#### McLean County Community Health Needs Assessment

# Health Indicators Summary January 2007

### **Health Indicator Categories**

A.	Demographic and Socioeconomic Indicators
В.	General Health and Access to Care Indicators

- C. Maternal and Child Health Indicators
- D. Chronic Disease Indicators
- E. Infectious Disease Indicators
- F. Environmental Health/Occupational Health/Injury Control Indicators
- G. Sentinel Events Indicators

#### McLean County Community Health Needs Assessment January 2007

#### A. Demographic and Socioeconomic Key Indicators

- 1. Population Growth/Population by Age and Gender
- 2. Race/Ethnicity Distribution
- 3. Population by Age and Gender/Dependency Indicators
- 4. Unemployment
- 5. Rural Population
- 6. Single Parent Households
- 7. Population 25+ Who Are Non-High School Graduates
- 8. Population in Poverty
- 9. Population Enrolled in Medicaid
- 10. Population Receiving Food Stamps
- 11. Population Uninsured (Ages 18 64)
- 12. Per Capita Personal Income

#### An analysis of demographic data reveals the following:

#### 1. Population growth/Population by Age and Gender

- The U.S has had an 11% population growth from 1990 to 2000.
- From 2000-2006 the population has increased an estimated 9%. A total of 20% in the past 15 years.
- McLean County has had a 14% population increase from 1990 to 2000, and a 5.3% estimated increase from 2000 to 2005.
- Illinois has had a 7% population increase from (1990-2000) and an estimated 2% from 2000 to 2005.
- McLean County had the thirteenth largest rate of population increase of Illinois' 102 counties between 1990 and 2000.
- A special census was conducted in Bloomington and Normal for 2006 directed by the Economic Development Council. Since the 2000 census, Bloomington has grown by 10,167 and Normal has grown by 5,100.
- When adding the B/N population to the 2000 county census (150,433) there is a significant increase (165,700). This does not include the other towns within McLean County. It also exceeds the estimate for the population in 2020.
- The percent of population living in rural areas has decreased between 1990 and 2000 in the county by 2.9%, increased in the state by 4.6% and decreased nationally by 3.8%.
- Estimated Population, McLean County
  - o 1999: 145,477
  - o 2000: 150,433 (U.S. Census 2000)
  - o 2001: 152,406
  - o 2002: 155,233
  - 0 2003: 156,781
  - 0 2004: 157,847
  - o 2005: 159,013
  - o 2006: 165,700 (estimate: adding special census for B/N to 2000 county census data)
- The estimated county population by 2020 is 199,140.
- Almost 10,000 students live in college dormitories or housing. The United Way Community Assessment of Need (CAN) Report of 2004 indicates that enrollment changes at the post-secondary institutions do not appear to be a significant factor in the county's growth.

**Table I** Population Growth between 1990 and 2000

Population Growth  1990 to 2000					
	<u>1990 Census</u>	2000 Census	%Change		
U.S.	248.7 million	281,421,906	11		
Illinois	11,430,602	12,419,293	7		
McLean Co.	129,180	150,433	14		

Source:

U.S. Census Bureau (census.gov/population/estimates/county) 2000. United Way Community Assessment of Need (CAN) Report, 2004.

Demographic Profile 2006, Economic Development Council.

#### 2. Race/Ethnicity Distribution

- In Illinois, life expectancy for blacks (71.7 years) is 5.7 years less than that for whites (77.4 years). The age gap between black and white in 1990 was 9 years.
- The greatest change seen in the county between the 1990 and the 2000 census occurred in the Hispanic population where the percent change was 55.5%. However, total percent of the population make-up of minority groups remains relatively small.
- Minority populations including Hispanic, Asian American and Pacific Islander have slowed since 1980-1990 except for the Black population which has increased more in 1990-2000 than in 1980-1990.
- As of 2005, 87% of the county population is white, 13% are non-white. The white population has decreased in comparison to the 2000 census; 89.2% white and 10.8% non-white.

**Table II** Race and Ethnicity make-up of McLean County

	Mc Lean County Race and Ethnicity from 1990 and 2000 Census Data					
	<u>1990 (%)</u>		2000 (%)	<u>)</u>	%Change	
Total Pop.	129,180		150,433		16.4	
White Black Hispanic	121,057 5,563 1,671	(93.7) (4.3) (1.3)	133,885 9,025 3,760	(6.2)	9.0 38.0 55.5	
Asian/Pac. Isl.	1,624	(1.26)	3,159	(2.1)	48.9	

Source:

U.S. Census Bureau; United Way Assessment 2005 (August 2004);

Demographic Profile 2006, Economic Development Council.

#### 3. Population by Age and Gender/Dependency Indicators:

- U.S. and Illinois trends in median age follow the same increasing pattern between 1990 and 2000 from 32.9 to 35.3 in the U.S. and 32.8 to 34.7 in Illinois.
- McLean County has followed the same trend; however, the median age for the county was somewhat younger (28.0 in 1990 to 30.0 in 2000) than the state and nation.
- In McLean County, the median age for blacks (22.9 years) was less than that for whites (32.1 years), and the total population (30.5 years).
- In 1990 the median age in McLean County was 28.8. For blacks: 22.0 and for whites: 29.4.
- There has been an increase in median age, from 28.8 to 30.0, for the total population of McLean County in 2000.
- The median age for 2005 determined by the demographic profile of 2006 conducted by the Economic Development Council, is 31 years.
- As of 2000, 23.5% of the county population is under age 18 (35,351) and 9.7% (14,592) is age 65 or older, representing a decrease in both dependency categories since 1997. Since the 1990 census, the percent population under 18 has remained about the same (2000: 22.2% female; 24.8% male). The percent population over the age of 65 has decreased slightly, by 0.7% since 1990 (2000: 11.4% female; 7.9% male).
- Gender: 51.6% of the county population is female (N=77,702 in 2000)
- Gender: 48.3% of the county population is male (N=72,731 in 2000)
- Age: 9.7% are 65+ years; 5.2% are 1-4 years; largest age group: 25-44 year olds (29.9%).

**Table III** Dependency Indicators

		<u>1990</u>			2000	
	<u>% &lt;18</u>	<u>% &gt;65</u>	Med. Age	<u>% &lt;18</u>	<u>%&gt;65</u>	Med. Age
U.S. Ill.	25.7 25.8	12.5 12.6	32.9 32.8	25.7 26.1	12.4 12.1	35.3 34.7
McL.		10.4	28.8	23.5	9.7	30.0

Source: U.S. Census Data 2000.

#### 4. Unemployment

- From 1998 to 2006 the unemployment rate has fluctuated within the county, state and nation. Unemployment rates increased in the state and nation in 2001 and have remained high. Within McLean County, the unemployment rate has slightly increased since 1998 and was its highest in 2004 at 4.5%.
- Unemployment rates for McLean County's black population has been consistently over two times higher than for the county's white population throughout the 1990-2003 period.

- The county unemployment rate has increased 37.3% from 2003 (2.9) to 2004 (4.5).
- In 2005, the unemployment began to decrease in the county (4.1) in 2005 (3.5) in 2006.

**Table IV** Unemployment Figures 1998-2006

			Unen	nployme	nt 1998	to 200	<u>6</u>		
	' <u>98</u>	· 99	' 00	' 01	<b>'02</b>	<b>'03</b>	<b>'04</b>	<b>'05</b>	<u>'06</u>
U.S.	4.5	2.2	4.0	4.4	5.9	6.0	5.5	5.1	4.7
Illinois	4.5	4.3	4.4	5.3	6.6	6.6	6.2	5.9	5.1
McLean Co.	1.9	2.2	2.5	2.4	2.7	2.9	4.5	4.1	3.5

**Table V** Unemployment Figures by Race (McLean County) 2003

<u>Unemploy</u>	
White	2.5%
Black	6.6%
Hispanic	4.2%

Sources: Demographic Profile 2006, Economic Development Council.

IPLAN Data Set.

United Way Assessment 2005 (August 2004). Illinois Department of Employment Security.

#### 5. Rural Population:

- The percentage of the population living in rural areas has decreased (between the 1990 and 2000 census) in McLean County and the U.S.
- Illinois has seen a significant increase in the rural population (29%).
- The rural population in McLean County from 1990 to 2000 is still decreasing by 2.8% but has slowed down compared to the decrease from 1980 to 1990 (-14.0%).

**Table VI** Percent of population living in rural areas

Percent Rural Population 1990 and 2000					
	<u>1990</u>	<u>2000</u>	% change		
McLean Co.	24.9	22.0	-2.8		
Illinois	15.4	20.0	29.0		
U.S.	24.8	21.0	-4.0		

Source: U.S. Census Bureau; the United Way Assessment 2005 (August 2004).

#### **6.** Single Parent Households

- Single parent households in the U.S. decreased from 10.2% in 1990 to 9.3% in 2000 compared to an increase from 1980 to 1990 (9.5%).
- Single parent households in the state of Illinois over the same time period decreased from 9.3% to 8.8%.
- Single parent households in McLean County actually rose from 6.9% in 1990 to 7.5% in 2000 compared to a decrease from 1980 to 1990 of 7.3%.
- Median household income (from the 2000 census, based on 1999 income) for single parent households headed by females was \$24,231 in McLean County, well below the median household income (total) of \$47,021.

**Table VII** Percent of Single Parent Households

Single Parent Households					
	<u>1990</u>	<u>2000</u>	% change		
McLean Co.	6.9	7.5	26.5		
Illinois	9.3	8.8	- 2.8		
U.S.	10.2	9.3	-5.2		

Source: U.S. Census Bureau; United Way Assessment 2005 (August 2004).

#### 7. Population over 25 who are not High School Graduates

- 19.6% of the U.S. population over 25 years old who did not graduate from high school in 2000. This number decreased from the 1990 census (24.8%).
- Similarly, in the state of Illinois in 2000, 18.6% of population over 25 years old who did not graduate from high school. This number decreased from the 1990 census (33.5%).
- McLean County followed the trends of the U.S. and Illinois. The percent of population over 25 who did not graduate from high school decreased from 15.4% in 1990 to 9.3% in 2000.
- In McLean County, the high school drop out rate from 1990-1997 (3.7%-5.8%) remained consistently lower than the Illinois rate (6.2%-7.3%).
- Race/ethnic comparisons: high school drop out rate ranges (1990-1997; not available for later years):
  - Black: 4.5% (1991) 16.4% (1994)
  - White: 3.6% (1992) 5.4% (1995)
  - Other: 1.6% (1992) 10.9% (1997)

Source: U.S. Census Bureau; IPLAN Data Set.

#### 8. Population Living at or Below 100% of Poverty

- The U.S. percent of population living at or below 100% of poverty has fallen from 13.1% in 1990 to 12.4% in 2000 compared to an increase from 1980 to 1990 (12.4% 13.1%).
- Illinois percent of population living in poverty has fallen from 11.9% in 1990 to 10.7% in 1990 compared to an in increases from 1980 to 1990 (11%-11.9%).
- McLean County had 11.9% of its population living in poverty in 1990 which decreased to 9.7% in 2000 compared to an increase from 1980-1990 (9.4%-10.8%).
- McLean County's black population lives in poverty at a rate 2.65 greater than for the white population.
- Between 1990 and 2000 there has been a decrease of 485 people in the county living below 100% of poverty.
- McLean County has 7.0% of its population under age 18 living in poverty.
- The United Way CAN Report of 2004 stated the cost of living in Bloomington/Normal is 3% above the national level.

**Table VIII** % Population living below 100% of poverty by Race - 2004

%Population Below 100% of poverty by Race-2004					
	<b>White</b>	<b>Black</b>	<u>Hispanic</u>		
U.S.	8.1	24.8	22.6		
Illinois	6.3	26.0	16.5		
McLean Co.	8.4	23.0	21.5		

**Table IX** % Population living below 100% of poverty 1990 and 2000

% Population Below 100% of Poverty by Race										
	<u>1990</u>	# people	<u>2000</u>	# people						
U.S.	13.1	32.6 million	12.0	33.9 million						
Illinois	11.9	1,326,731	10.7	1,291,958						
McLean Co.	10.8	13,973	9.7	13,488						

Source: US Census Bureau 2000, United Way Assessment 2005 (August 2004).

#### 9. Population Enrolled in Medicaid:

- Since 1994 to 2004, there has been a 45.1% increase of the number of persons receiving Medicaid in McLean County.
- In McLean County (2000) the percentage of blacks receiving Medicaid was 40.4% (18.7% in 1990) compared to 11.5% for whites (4.1% in 1990), and 12.1% (1.7% in 1990) for others.
- McLean County's rates have been consistently lower than the state's rates.

Source: United Way Assessment 2005 (August 2004); IPLAN Data Set.

**Table X** % Population Enrolled in Medicaid 1990-1995 and 1999-2002

% of Population receiving Medicaid 1990-1995 and 1999-2002													
	<u>'90</u>	<u>'91</u>	<u>'92</u>	<u>'93</u>	<u>'94</u>	<u>'95</u>	<u>'99</u>	<u>'00</u>	<u>'01</u>	<u>'02</u>			
McLean Co. Illinois	3.6 8.2	4.8 10.9	4.8 10.8	5.2 11.4	5.7 12.2	5.5 11.9	8.1 12.4	8.0 12.2	8.3 12.6	8.7 14.0			

Source: IPLAN Data Set (data not listed for 1996-1999).

#### 10. Population Receiving Food Stamps:

- In the 15 year period from 1990-2004, the percent of people receiving food stamps increased from 3.6% to 5.6%. Highest = 5.6% (2004); lowest = 3.5% (1999).
- In Illinois during the same time period (1990-2004), the rate ranged from 6.8% (1999-2001) to 10.1% (1994). 1990 = 8.8%; 2004 = 8.5%.

#### 11. Population Uninsured (Ages Between 18 and 64)

• For both McLean County and the Illinois population, the percentage of the population uninsured has been decreasing. However, the black population remains uninsured at a rate almost twice (or more) than that for whites (1988-1998 data).

Source: IPLAN Data Set (no data for 1999-2004).

# <u>Preliminary Identification of Health Problems Related to Demographic Indicators:</u>

- Economic disparities continue to exist among race/ethnic groups in McLean County:
  - o More minorities are Medicaid recipients (40.4% black; 11.5% white).
  - O Blacks and Hispanics live in poverty at a rate over 2 times greater than the white population (white = 8.4%; black = 23%; Hispanic = 21.5%).
  - o Median income for single parent households is only 51.5% that of county-wide median household income.
  - o Unemployment levels (2003): white = 2.5%; black = 6.6%; Hispanic = 4.2%.

- With a growth rate projection of 2.5% per year, will health resources match growth?
- Median age continues to rise the population ages, although a slight decrease has occurred in the growth of the > 65 year old group.
- Unemployment continues to rise: up 84% from the low in 1998.
- Poverty: in 10 years, the number of families living in poverty more than doubled.
- Median income was improving, but has now decreased below the 1997 level.

#### McLean County Community Health Needs Assessment January 2007

#### **B.** General Health and Access to Care Indicators

- 1. Mortality Rates
- 2. Leading Causes of Mortality
- 3. Life Expectancy at Birth
- 4. Years of Potential Life Lost (YPLL) at Age 65
- 5. Health Care Coverage
- 6. Oral Health Care Coverage

# An analysis of general health and access to care indicators reveals the following:

#### 1. Mortality Rates

- County mortality rates (total) are consistently lower than Illinois rates and US rates. From 1990-2002.
- There was a decrease of 9.5% (698.3/100,000 to 632.2/100,000).

#### 2. Leading Causes of Mortality

• For All and Whites: First = diseases of the heart (2004)

Second =malignant neoplasms
Third = coronary heart disease

Fourth = lung cancer

- For Blacks: Malignant neoplasms (cancer) and coronary heart disease shared second and third rank.
- The top 5 leading causes of death over the 15 year period of 1990-2004:
  - O Diseases of the heart (2004: 27% of deaths): ranked first for 14 years.
  - o Malignant neoplasms (2004: 22% of deaths): ranked 2<sup>nd</sup> for 8 years.
  - o Coronary heart disease (2004: 19% of deaths): ranked 3<sup>rd</sup> for 7 years.
  - o Cerebrovascular disease (2004: 6% of deaths): ranked 4<sup>th</sup> or 5<sup>th</sup> place for 11 years and shared 4<sup>th</sup> or 5<sup>th</sup> place ranking with lung cancer (4 years).
  - Others: chronic lower respiratory diseases, accidents/injuries, and lymphatic/hematological cancers caused 4% to 9% of deaths.

#### 3. Life Expectancy at Birth

- No current data available for McLean County.
- 2000 Illinois 76.7 years (all): 77.4 years (White): 71.7 years (Black) Note 5 year difference in life expectancy between blacks and whites. This data represents an improvement from the 1990 life expectancy data: 75.0 (all); 76.3 (white); and 67.3 (black).

#### 4. Years of Potential Life Lost (YPLL) at age 65

- Top causes of YPLL over the 15 year period from 1990-2004:
  - o Ranking of 1<sup>st</sup> or 2<sup>nd</sup> every year: unintentional injuries (non-motor vehicle accidents).
  - o Ranking 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup>: unintentional injuries, malignant neoplasms, perinatal conditions, motor vehicle accidents, heart disease, and suicide.
- 2003-2004: unintentional injuries and perinatal conditions ranked either 1<sup>st</sup> or 2<sup>nd</sup> each year.

• Between 1995-2002: malignant neoplasms ranked 1<sup>st</sup>, with the exception of 1998.

#### 5. Health Care Coverage (from the 2002 BRFS)

- BRFS Data: in response to the question, "do you have any kind of health care coverage?", Yes=92.7%; No=7.3%
- BRFS Data: in response to the question, "do you have a usual person as your health care provider?", Yes=82.9%; No=17.1%
- BRSF data: in response to the question, "have you avoided the doctor in the last 12 months due to cost?", Yes=6.8%; No=93.2%

#### 6. Oral Health Care Coverage

- United Way Survey participants noted high cost, lack of dentists accepting Medicaid and fear of pain as primary barriers to oral health care in the county.
- The United Way Community Assessment of Need Survey (2000) reported the "needed dental care" and "can't afford care" was the #1 problem.
- 2004 (reported in the *Assessment 2005 Household Survey*): Untreated dental problems affects at least 2.6% of all households (sample = 4,252 total household members). This study also provided a comparison at 5-year increments of responses to "Needed but couldn't afford dental care":

1995: 18.2%2000: 7.4%2005: 12.1%

Source: United Way Community Assessment of Need (CAN) 2000; Assessment 2005 Household Survey, United Way.

# <u>Preliminary Identification of Health Problems Related to General Health and Access to Care Indicators:</u>

- The leading causes of death in the county continue to be heart disease and cancer.
- Age-adjusted mortality rate (2000) for blacks is much higher and exceeds the Illinois and U.S. rates.
- IL: although improved since 1990, there remains a clear disparity in life expectancy between blacks and whites.
- Unintentional injuries, malignant neoplasms, and perinatal conditions consistently rank high as the major causes of YPPL.
- BRFS: % uninsured more than one year (or never) is high.
- Access to dental care, particularly for Medicaid-eligible adults, continues to be a problem.
- An increase in the percent of individuals avoiding physician access due to cost.

#### McLean County Community Health Needs Assessment January 2007

#### C. Maternal and Child Health Indicators

- 1. Live Births
- 2. Infant Mortality
- 3. Low Birth Weight and Very Low Birth Weight
- 4. Mothers Who Breastfeed Their Infants
- 5. Mothers Who Smoke
- 6. Mothers Who Drink
- 7. Prenatal Care Adequacy
- 8. Mothers Beginning Prenatal Care in 1<sup>st</sup> Trimester
- 9. Infants Positive for Cocaine
- 10. Leading Causes of Mortality (Children ages 1-4)
- 11. Percent Births to Teens
- 12. Child Abuse and Neglect
- 13. Congenital Anomalies
- 14. Hospitalizations for Dehydration and Asthma (in Children)
- 15. Medicaid Births
- 16. Method of Delivery
- 17. IDPA-Eligible Children Receiving EPSDT
- 18. Other

#### An Analysis of Maternal and Child Health Data Reveals the Following:

#### I. Live Births

- Ave. # births per year: 2013; range 1995-2004 = low of 1857 to high of 2215.
- Births per year have risen each year since 1998, births are rising at approximately the same percentage as the increase in population.
- According to the US Census Bureau, in 2004, approximately 89% of the county population is white, 7% black, and 3% Asian/Pacific Islander. Since 1998 the percentage of live births has more often been below 89% white, about 9% black, and 2-7% Asian/Pacific Islander. The percent of births to white women has decreased almost every year since 1998 and the percent of births to Asian/Pacific Islanders increased from 1.9% in 1998 to 7.4% in 2004.

#### 2. Infant Mortality Rate

- A steady increase in the rate has occurred, from 5.9/1000 to 8.1/1000 (1991-1996) and from 7.6/1000 to 11.7/1000 (1997-2003). (11.7/1000 was the highest in 2003)
- Current rate (2004) of 9/1000 remains above the HP 2010 objective of 4.5/1000.

#### 3. Low Birth Weight and Very Low Birth Weight

- County low birth weight percentages were consistently above the HP 2000/2010 objective of 5% of births, with the percentage for blacks at least twice (7.8%-13.6%) that for whites most years, 1990-1996. For all races, the LBW ranged from 5.2% 7.4%. County low birth weight percentages were consistently above the HP 2010 objective of 5% of births, with the percentage for blacks (5.3%-14.8%) higher than that for whites most years, 1997-2004. For all races, the LBW ranged from 5.2% 7.6%, 1990-1996 and 6.3-6.9% for all races 1997-2004.
- Very low birth weight percentages exceeded the HP 2010 objective of 1%, 1994-1996. Percentages ranged from 0.8% to 1.5%, 1997-2004. The HP20010 goal was met in 1999 and 2000 for all races, then rose again to 1.6% 2003 and 2004.

#### 4. Mothers Who Breastfeed Their Infants

- Breastfeeding rates in McLean County remain below HP2010 breastfeeding goals of 75% initiation, 50% at 6 months, and 25% at one year of age.
- McLean County Health Department, WIC Program mothers of infants, July 1 through June 30, 2006, initiation 66.5%, 6 months duration 25%, and 12 month duration 12.9%.
- BroMenn Regional Medical Center (BRMC), January 1 through August 30, 2006, 60% of infants born at the Center were exclusively breastfed. Source: Lucinda Gebhard, RNBSN, International Board Certified Lactation Consultant, BRMC.
- OSF St Joseph Medical Center (OSFSJMC), January 1, 2006 through October 1, 2006, 76% of the mothers of newborn infants initiated breastfeeding. Source: Melissa Musselman, Lactation Consultant, OSFSJMC.

#### 5. Mothers Who Smoke

- Over the ten-year period, 1995 2004, 13.7% of mothers who gave birth reported\* that they used tobacco products during pregnancy. This is a small improvement over the last IPLAN cycle. (HP 2010 objective 16-17c = 1%) \*reported by mother for birth certificate records.
- Broken down by race shows a steady increase in the percentage of black mothers who reported the use of tobacco products during pregnancy during the period 1996 2004. (1996 = 8.8%, 2003 = 20.4%) White women stayed within the range of 11.5% to 16.1%. \*reported by mother for birth certificate records.
- For pregnant adolescents: Data from the Pregnancy Risk Assessment Monitoring System (PRAMS) is available for the State of Illinois, but is not county-specific. The data show that, statewide, during the years 1998 through 2003 between 12% and 19% of pregnant adolescents (under age 20) smoked during the last three months of pregnancy.

#### 6. Mothers Who Drink Alcohol

- The percentage of women who reported\* drinking alcohol during pregnancy decreased from 3.5% to 0.6% during 1990-2003. Less than 25 women each year report drinking any alcohol during pregnancy. \*reported by mother for birth certificate records
- All populations were well below the HP2010 objective of 5%. However, according to data from PRAMS in 2003, 45.3% of women statewide drank alcohol in the three months before they became pregnant; 46.2% of women reported this behavior in 1998. This proportion was highest among women age 35 or older, White, and non-Hispanic women. In the 2003 survey, 5.2% of women reported drinking alcohol during the last three months of pregnancy. This statewide percentage is well above McLean County's 0.6% reporting.

#### 7. Kessner and Kotelchuck Index (Prenatal Care Adequacy)

- The percentage of pregnant women receiving an "adequate" amount of prenatal care (Kessner Index) increased 1990-1996, from 81.3% to a high of 87.6% in 1999, and then began falling to 83% in 2002 and increasing back to 86% in 2004.
- The percentage of pregnant women receiving an "inadequate" amount of prenatal care 1990-1996 decreased from 5% (1990) to 2.5% (1996) and then gradually increased back to 4.5% in 2000 and 5.2% in 2002 and 3.1% in 2004.
- The percentage of women beginning adequate prenatal care (care started by the 4<sup>th</sup> month) and receiving between 50-79% of the expected visits (Kotelchuck Index), averaged 42.4% for the years 1998 2002 compared to 44.7% for all of Illinois. The % ranged from 41.5% in 1998 to 43.3% in 2002. The % receiving inadequate care rose from 5.5% in 1998 to 7.0% in 2002.

#### 8. Mothers Beginning Prenatal Care in First Trimester

• The proportion of all women entering prenatal care in the first trimester increased from

- 89.3 in 1995 to 89.8% in 2004. The year that the HP2010 goal of 90% was met was 1999 with an overall rate of 90.7%.
- White and Asian/PI reached and slightly exceeded (1995-2004) the HP2010 goal of 90% with a 10 year average of Asian/PI 90.9% and White 90.5%.
- Blacks ranged from 79.5% to 71.7% (1995-2004), falling from 79.5% in 1995 to 74.4% in 2004 and remaining well below the Healthy People 2010 objective of 90%.
- The proportion of WIC and FCM program participants entering prenatal care in the 1<sup>st</sup> trimester remained steady at 57% to 62%, 2004 through July of 2006.

#### 9. Infants Positive for Cocaine

- Number: 17 cocaine births from 1995 to 2005 for Mclean County.
- Average per year = 1.4 in 1999 to 0.4 in 2005.
- HP 2010 goal = 0%.

#### 10. Leading Causes of Mortality (Children ages 1-4)

- From 1990-1996, 0-4 deaths per year occurred in children ages 1-4.
- Leading cause: mainly injuries (unintentional, motor vehicle accident injuries, fires/burns), then malignant neoplasms and congenital anomalies.
- From 1997-2001, 2-6 deaths per year occurred for children ages 1-4.
- Leading cause: mainly injuries (unintentional, motor vehicle accident injuries, fires/burns, firearms/homicide), then congenital anomalies and influenza/pneumonia.

#### 11. Percent Births to Teens

- For all adolescents ages 11 to 17 years, the number infants born to teen mothers have steadily decreased from a high of 72 infants (3.7% of all live births) in 1995 to a low of 38 in 2003 (1.8% of all live births). In 2004, there were 44 births to teens or 2.0% of all live births.
- There were 23 infants born to adolescents under age 15 years between 1995 and 2004 (average 2-3 infants each year).
- McLean County is well below the Healthy People 2010 goal of less than 4.3% of all births to adolescents under age 18 years old.

#### 12. Child Abuse and Neglect

- When compared to the state, the number of McLean County children identified as abused or neglected continues to be higher.
- The McLean County rate has fluctuated from 1997 through 2006, from a high of 24.6 per 1,000 children (1997) to a low of 12.0 per 1,000 children in 2002. The rate in fiscal year 2006 was 13.6 per 1,000 children while the rate for the state of Illinois was 7.6 per 1,000 children.

#### 13. Congenital Anomalies

- McLean County's 5-year averages are above Illinois rates, and decreased from 630.3/10,000 (1996-2000) to 530.6/10,000 (2000-2004).
- Illinois rate: 397.6/10,000 for 2000-2004.
- McLean County exceeded the state rate for the following: cardiovascular defects, genitourinary, musculoskeletal, alimentary tract, central nervous system, chromosomal, respiratory and blood disorder defects. Cardiovascular defects are the highest at a rate of 220.3 compared to the State rate of 105.4 for 1999- 2003.
- Internal study completed in 9/05 showed that infants born with cardiovascular defects ranked higher amongst other congenital anomalies in 2003-2004.
- Healthy People 2010 goal is for Spina Bifida only and states no more than 3/10,000 live births.

#### 14. Hospitalizations for Dehydration and Asthma in Children

- # children (ages 0-1) hosp. for dehydration: 22-38 (1990-1993), 6 in 1994, 8 in 1995, and 6 in 1996.
- # children (ages 1-4) hosp. for asthma: 106-120 (1990-1993), 65 in 1994, 61 in 1995, 43 in 1996.
- Unknown if decrease in hospitalizations is in part due to the opening of the free Community Care Clinic in the early 1990's.

#### 15. Medicaid Births

- No HP 2010 goal.
- Medicaid births in McLean County have varied yearly from 1997-2004, with the range being 430 to 701 births (22 to 32% of all births).
- Illinois rate of Medicaid births have varied yearly from 1997-2004, with the range being 50,796 to 67,050 births (28% to 37% of all births).

#### 16. Method of Delivery

- No HP 2010 goal.
- From 1997 to 2004 vaginal deliveries ranged from 84.4% to 77.3% for McLean County births
- From 1997 to 2004 caesarean birth deliveries ranged from 15.6% to 22.7% for McLean County births.
- McLean County caesarean deliveries were the highest (22.7%) for 2004.
- From 1997 to 2004 vaginal deliveries ranged from 87.0% to 81.3% for all Illinois births.
- From 1997 to 2001 caesarean deliveries ranged from 13.3% to 18.9% for all Illinois births.
- Illinois caesarean deliveries were the highest (19.7%) for 2001.

#### 17. IDPA – Eligible Children Receiving EPSDT

- No relevant data found on IPLAN or other web sites.
- Family Case Management program goal is that 80% of all Medicaid infants receive at least three EPSDTs during the first 12 months. The Department of Human Services (DHS) use EPSDT as a performance measurement.
- The average rate of EPSDT's for FCM infants in 2003 was 83.2%.
- The average rate of EPSDT's for FCM infants in 2004 was 89.1%.
- The average rate of EPSDT's for FCM infants in 2005 was 91.0%.
- The average rate of EPSDT's for FCM infants thus far in 2006 is 90.0%.

#### **18.** Other

- 2001 research reported by Cornerstone indicates that pregnant women have better birth outcomes, specifically a lower infant mortality rate, if they register and participate in *both* WIC and Family Case Management (FCM), rather than only one of the programs or neither.
- Lead Poisoning HP2010 objective for "0" children with 10mcg/dl or higher blood lead level has not been met.

#### <u>Preliminary Identification of Health Problems related to Maternal and Child</u> Health:

- A continued increase in infant mortality rates is noted; two-thirds of deaths remain related to prematurity and congenital anomaly, other causes vary.
- LBW percent above HP 2010 goal of 5%, consistently higher for Black infants.
- VLBW goal of 1% met in 1999 and 2000, not met in 2001 and 2002 with higher percent for White infants in 2001 and 2002.
- Prenatal Care, including entry in the 1st trimester and adequate number of prenatal care visits (Kessner Index) remains below HP 2010 objective of 90%.
- Breastfed infant rates are below HP2010 of 75%. Since breastfed infants are shown to have healthier outcomes, increasing the number of breastfed infants in McLean County would positively affect infant mortality and morbidity.
- Congenital anomaly/birth defect rates remain above Illinois rates and exceed the HP 2010 objective of 3.

- Lead Poisoning HP2010 objective for "0" children with 10mcg/dl or higher blood lead level has not been met.
- Women and infants eligible, yet not enrolled in WIC and FCM have poorer outcomes. Clear need to encourage both WIC and FCM enrollment to help reduce the infant mortality rate and improve early and adequate prenatal care.

#### McLean County Community Health Needs Assessment January 2007

#### **D.** Chronic Disease Health Indicators

- 1. Coronary Heart Disease/Heart Disease
- 2. Cerebrovascular Disease (Stroke)
- 3. Cirrhosis of the Liver
- 4. Breast Cancer
- 5. Lung Cancer
- 6. Colorectal Cancer
- 7. Cervical Cancer
- 8. Prostate Cancer
- 9. Childhood Cancers
- 10. Alcohol-Dependence Syndrome
- 11. Total Psychoses/Mental Health
- 12. Diabetes
- 13. Behavioral Risk Factors

#### An Analysis of Chronic Disease Data Reveals the Following:

#### 1. Coronary Heart Disease/Heart Disease

- Heart disease (HD) is the leading cause of death every year from 1995-2004, accounting for 26%-41% of adult deaths.
- In 2004, the crude mortality rate for HD was 171.68/100,000, which is slightly higher than the previous two years.
- Coronary Heart Disease (CHD), one category of heart disease, is the  $2^{nd} 3^{rd}$  leading cause of death from 1995 2004, accounting for 18%-26% of all adult deaths.
- CHD is the single largest killer of American males and females. In 2002, the overall CHD mortality rate was 170.8/100,000.
- Since 1995, the county's crude mortality rate from coronary heart disease has continued to experience an overall decrease from 178.5/100,000 in 1995 to 118.6/100,000 in 2004.
- The 2004 CHD crude mortality rate of 118.6/100,000 is below the *HP 2010* goal of 166.
- Illinois CHD crude rates have decreased from 239.3 in 1995 to 161.0 in 2004.
- From 1992 to 2002 the U.S. mortality rate from CHD declined 26.5%, but the actual number of deaths declined only 9.9%.
- The estimated average number of years of life lost due to a heart attack is 11.5.
- This year, an estimated 700,000 Americans will have a new coronary attack. About 500,000 will have a recurrent attack.
- According to a study of 52 countries, nine easily measurable and potentially modifiable
  risk factors account for 90% of the risk of an initial acute MI. These risk factors include:
  cigarette smoking, abnormal blood lipid levels, hypertension, diabetes, abdominal
  obesity, lack of physical activity, low daily fruit and vegetable consumption, alcohol
  over-consumption, and psychosocial index.
- *Healthy People 2010 Objective:* Reduce coronary heart disease deaths to no more than 166/100,000

#### 2. Cerebrovascular Disease (Stroke)

- Since 1995, crude mortality rates for cerebrovascular disease have fluctuated from as high as 60.9/100,000 in 1999 to as low as 36.8/100,000 in 2004. There has not been a consistent decline or increase.
- The 2004 crude mortality rate of 36.8 is below the *HP 2010* target of 48.
- The 2002 U.S. mortality rate for stroke was 56.2.
- Cerebrovascular disease accounted for 5.8% 8.2% of all adult deaths.
- Illinois age-adjusted rates have ranged from 28.1 in 1995 to 25.7 in 1998. Crude rates from Illinois have seen somewhat of a general decline from 63.5 in 1995 to 50.9 in 2004.
- Stroke accounted for more than 1 of every 15 deaths in the United States. Stroke ranks as number 3 among all causes of death, behind diseases of the heart and cancer.
- U.S. mortality rates were 54.2 for white males and 81.7 for black males; and 53.4 for white females and 71.8 for black females.

- Each year about 700,000 people experience a new or recurrent stroke. About 500,000 of these are first attacks, and 200,000 are recurrent attacks.
- African Americans have almost twice the risk of first-ever stroke compared to whites.
- Healthy People 2010 objective: Reduce stroke deaths to no more than 48/100,000.

### 3. Cirrhosis of the Liver

- The total number of deaths due to cirrhosis of the liver ranged from 8-12 during the period from 1995 to 2004.
- The crude rate was available for only 4 years (when cases numbered 10 or more).
- The crude rate for 2004 was 7.6, which is above the Healthy People 2010 goal of no more than 3/100,000.
- The Illinois crude mortality rate for cirrhosis has ranged from 10 in 1995 to 8.3 in 2004.
- In 2002, liver cirrhosis was the 12th leading cause of death in the United States, with a total of 27,794 deaths, 309 more than in 2001.
- The U.S. crude death rate from all cirrhosis increased by 1.0 percent from 2001 to 2002, whereas the rate from alcohol-related cirrhosis declined by 2.3 percent.
- Among all U.S. cirrhosis deaths in 2002, 43.6 percent were alcohol-related. The proportion of alcohol-related cirrhosis was highest (60.2 percent) among decedents aged 35 to 44.
- The age-adjusted death rate from all liver cirrhosis for males was consistently more than twice the rate for females, regardless of race.
- *Healthy People 2010 goal*: Reduce the number of deaths due to cirrhosis to no more than 3/100,000.

### 4. Breast Cancer

- The most recent breast cancer crude mortality rate available for McLean County (2000) is 25.7/100,000, above the Healthy People 2010 goal of 22.3/100,000. The crude mortality rate for Illinois during that same year was 32.2/100,000.
- The age adjusted incidence rate between 1998 and 2002 was 136.1 (463 cases) in McLean County compared to 132.9 in Illinois and 137.1 in the United States. The baseline rate ranged from 102.6-120.9 between 1986 and 1994.
- McLean County: the female breast cancer incidence rate was 140.3 per 100,000 or 486 cases between 1999 and 2003.
- In McLean County, the male breast cancer incidence rate was 1.4 per 100,000 or 3 cases between 1999 and 2003.
- The percent of breast cancer cases diagnosed as in situ breast cancer (Female) in McLean County from 1998 to 2002 was 18.0% (96 cases) compared to 18.3% in Illinois and 19.6% in the United States.
- BRFS: Mammogram (women > 40) use increased from 88.9 % in 1997 to 92.2% in 2002 and 95.2% in 2004.
- BRFS: The number of women performing BSE increased from 90.1 in 1997 to 92.9 % in 2002.

• *Healthy People 2010 Objective*: Reduce the breast cancer death rate to no more than 22.3 deaths per 100,000 females.

### 5. Lung Cancer

- The crude mortality rate for lung cancer ranged from 50.2 to 36.6 per 100,000 in McLean County between 1996 and 2004. The state crude mortality rate ranged from 54.2 to 58.4 per 100,000 in the same time frame. The state rates are consistently above the Healthy People 2010 Objective of 44.9 deaths per 100,000 population, but the County was only higher than that rate in 1996, 1997, and 1999.
- The incidence rate for lung and bronchus cancer in women was 50.3 or 179 per 100,000 population for years 1999 to 2003.
- The incidence rate for lung and bronchus cancer in men was 82.6 or 212 per 100,000 population for years 1999 to 2003.
- Females: The age-adjusted incidence rate for lung cancer was 50.9 per 100,000 in McLean County females between 1998 and 2002, compared to 55.8 per 100,000 in Illinois and 51.4 per 100,000 in the United States.
- Males: The age-adjusted incidence rate for lung cancer was 82.5 per 100,000 in McLean County males between 1998 and 2002, compared to 97.1 per 100,000 in Illinois and 82.1 per 100,000 in the United States.
- BRFS: Smokers: the proportion of smokers decreased from 26.8% in 1997 to 20.8% in 2004; but a slight increase from 19.7% ('02) to 20.8% ('04) was noted in the last two surveys of McLean County adults.
- BRFS: Non-Smokers: the proportion of non-smokers increased from 50% in 1997 to 59.2% in 2004.
- *Healthy People 2010 Objective*: Reduce the lung cancer death rate to no more than 44.9 deaths per 100,000 population.

### 6. Colorectal Cancer

- The crude mortality rate ranged from 10.8 to 19.2 per 100,000 in McLean County between 1996 and 2004 compared to 19.8 to 23.4 per 100,000 in Illinois. Local rates remained above the Healthy People 2010 goal of 13.9, with the exception of only 2 years (2003,2004) between 1996 and 2004. The county rate lowered to 10.8 in 2004, well below the HP2010 goal.
- Females: The age adjusted incidence rate for colorectal cancer was 47.9 per 100,000 in McLean County females between 1998 and 2002 compared to 51.0 per 100,000 in Illinois and 46.9 per 100,000 in the United States.
- Males: The age adjusted incidence rate for colorectal cancer was 70.9 per 100,000 in McLean County males between 1998 and 2002 compared to 72.1 per 100,000 in Illinois and 63.3 per 100,000 in the United States.
- BRFS: Only 31.1% had sigmoidoscopy or colonoscopy in1997; 53.5% in 2002; 59.9% in 2004 demonstrating a 92.60 % improvement from 1997 to 2004.
- *Healthy People 2010 Objective*: Reduce the colorectal cancer death rate to no more than 13.9 deaths per 100,000 population.

### 7. Cervical Cancer

- The number of cervical cancer deaths ranged from 0 to 4 per year: too few to calculate a rate in McLean County between 1996 and 2004.
- The cervical cancer incidence rate was 7.6% or 26 cases between 1999 and 2003.
- The percent diagnosed at late stage cervical cancer in McLean County from 1998 to 2002 was 22.7% (5 cases) compared to 44.0% in Illinois and 44.1% in the United States.
- The Illinois crude mortality rate ranged from 2.9 to 4.0 per 100,000.
- BRFS: The proportion of women obtaining Pap tests decreased from 96.1% in 1997 to 90.2% in 2004.
- *Healthy People 2010 Objective*: Reduce the death rate from cancer of the uterine cervix to no more than 2.0 deaths per 100,000 females.

### 8. Prostate Cancer

- Of the 259 prostate cancers diagnosed between 1998 and 2002, 76.8% were local stage prostate cancer compared to 84.3% of the 31,579 cases in Illinois.
- The prostate cancer incidence rate for males of McLean County, from 1999 to 2003 was 162.5 (419 cases).
- The number of prostate deaths ranged from 4 to 15 per year: too few to calculate a rate in McLean County between 1996 and 2004. Only in 2000 was a rate calculable in McLean County: of 13.7 per 100,000 men, compared to 23.1 per 100,000 in Illinois: both rates are below the Healthy People 2010 Objective of 28.8 per 100,000.
- The age adjusted incidence rate for prostate cancer was 142.8 per 100,000 in McLean County males between 1998 and 2002, compared to 162.4 per 100,000 in Illinois and 177.6 per 100,000 in the United States.
- BRFS: "Ever had PSA" (prostate-specific antigen test): increased from 56.8% in 1997 to 69% in 2004; "Never had PSA" decreased from 43.3% to 31%.
- BRFS: "Never had a testicular self-exam": remains in 51% 53%.
- *Healthy People 2010 Objective*: Reduce the prostate cancer death rate to no more than 28.8 deaths per 100,000 males.

### 9. Childhood Cancers

- There were only 4 childhood cancer deaths recorded in the IPLAN data between 1990 and 2004.
- Age-adjusted incidence rate for childhood cancers (5-year rolling averages): the 98-02 rate (representing 23 children) was 154.8/1,000,000, (age-adjusted to 2000 US standard) compared to a state rate of 143.4 and a US rate of 150.0. The rate range for the 5-year averages taken between 1994 and 2002, wasd from a low of 144.5 (1996-2000) to a high of 166.3 (1995-1999). There is no Healthy People 2010 goal for this indicator.

### 10. Alchohol-dependence Syndrome and Substance Abuse

- Alcohol dependence hospitalization rates (per 100,000): decrease noted in both age categories since 1990.
  - o Ages 15-44: 101.9 (2000); 148.1 (1990); IL = 57.7 (2000); 178.6 (1990); US = 129.
  - o Ages 45-64: 66.4 (2000); 229.3 (1990); IL = 73 (2000); 149.8 (1990); US = 117.
- Substance abuse: most common legal substance = alcohol (2000 estimate: 10,777 use it heavily); most common illegal substance = marijuana (est. 9,833 persons in 2000).
- BRFS: Percent at risk for acute/binge drinking: 20%-25%.

### 11. Total pychoses/Mental Health

- Children: 4.6% have a mental health disability (IL = 4.3%).
  - o SPICE (FY'05): 224 DD or disabled infants/toddlers were served.
  - o DHS: # days of care for children: 173 (FY '00); 455 (FY '03).
  - o Suicide rate: under the Healthy People 2010 goal of 1%.
- Suicide (1990-2004): suicide rate ranges from 7.2 (1995/1996) to 12.5 (1993). IL average = 10.7; US rate = 18.3; Healthy People 2010 goal for adults is 5/100,000.
- Suicides: range for the number per year: 5 (1998) to 17 (1993). In 2004 = 14.
- Suicides by age: the age group of 75+ has the highest rate, at 23.5. The next highest is the 45-54 age group, at 12.7.
- Total psychoses hospitalization rate (per 100,000):
  - o Ages 15-44: 234.7 (2000); 424.4 (1990); IL = 916.3 (2000); 554.8 (1990); US = 313
  - o Ages 45-64: 234.1 (2000); 553.3 (1990); IL = 800 (2000); 447.6 (1990)
  - o No Healthy People 2010 target.
- 2002 estimate for adults in McLean County: est. 4,937 (> or at age 55) have a mental health disorder. Leading causes: simple phobia (N=1820); severe cognitive impairment.
- Stress: 47.1% of adults report experiencing a moderate amount of stress (2005). Leading causes: financial concerns (36.8%); current job (35.1%); lack of free time (27.9%).
- BRFS: "days mental health not good" (8-30 days): 11.2% (2004), 6.9% (2002), 11.3% (19997).
- BRFS: "days in past months depressed, sad, blue" (> 2 days): 22.4% (2004), 19.6% (2002), not asked in 1997 BRFS.

### 12. Diabetes

- In 2004, the crude mortality rate for diabetes was 21.5/100,000, compared to the U.S. rate of 25.4/100,000 (2002), both of which were below the HP 2010 goal of 45/100,000.
- Diabetes hospitalization rates have continued to increase from 54/100,000 in 1995 to 90.1/100,000 in 2001.
- Illinois residents reporting that they are diabetic: 6.1% (2004).
- The 2002 U.S. mortality rate from diabetes was 25.4.

- The U.S. prevalence of diabetes increased by 8.2% from 2000 to 2001. Since 1990, the prevalence of those diagnosed with diabetes increased 61%.
- From two-thirds to three-fourths of people with diabetes die of some sort of heart or blood vessel disease.
- BRFS: The percentage of McLean County residents reporting they are diabetic is 3.6% (2004 BRFS), which is a slight increase from 3.3% in 2002.
- BRFS: (2002) Of the 3.3% who reported having been told they were diabetic, 44.7% were less than 50 years old. This question was not used in the 2004 BRFS.
- *Healthy People 2010 objectives:* Reduce diabetes to no more than 2.5/1,000 new cases per year; Prevalence of no more than 25/1,000; Reduce diabetes-related deaths to no more than 45/100,000.

### 13. Behavorial Risk Factors

• Tobacco use

HP 2010 Objective: Adult smokers: no more than 12% of adults will smoke.

HP 2010 Objective: Reduce the initiation of cigarette smoking by children and youth so

that no more than 16% have become regular cigarette smokers by

age 18.

- o McLean County (BRFS data 1997 2004):
  - 20.8% of adults report being a smoker (2004).
  - The number of smokers decreased from 26.8% to 20.8% from 1997-2004. The lowest rate (19.7%) during this period was noted in the 2002 BRFS.
  - Non-smokers increased from 50% to 59.2% from 1997-2004.
  - 30% of 12<sup>th</sup> graders report using tobacco in the past month; 17% of 10<sup>th</sup> graders report using tobacco in the past month (2004 Illinois Youth Survey).
  - The mean age of first tobacco use is 14 years (2004 Illinois Youth Survey).
- o Illinois (BRFS Data 2004):
  - 22.2% of adults report being a smoker.
  - 27% of 12<sup>th</sup> graders report using tobacco in the past month in 2004, compared to 34.7% in 2000; 17.7% of 10<sup>th</sup> graders report using tobacco in the past month in 2004, compared to 26.7% in 2000 (2004 Illinois Youth Survey).
- o U.S. (CDC):
  - Cigarette smoking remains the leading preventable cause of death in the United States, accounting for approximately 1 of every 5 deaths (438,000 people) each year.
  - An estimated, 20.9 percent of all adults (45.1 million people) smoke cigarettes in the United States.
  - 23 percent of high school students in the United States are current cigarette smokers, 23 percent of females and 22.9 percent of males.

■ Each day, approximately 3,900 young people between the ages of 12 and 17 years initiate cigarette smoking in the United States.<sup>3</sup> In this age group, each day an estimated 1,500 young people become daily cigarette smokers in this country.

### • Cholesterol

HP 2010 Objective: High Blood Cholesterol: no more than 17% of adults will have high blood cholesterol.

- o McLean County (BRFS data 1997-2004):
  - 28.8% (2004) of McLean County adults report being told their cholesterol was high; this is a decrease from the 1997 BRFS results (29.9%).
  - There has been a decrease in the percent of people who report having had their cholesterol checked in the previous one year period or less. A "yes" response to "Last cholesterol check within the past year" decreased from 88.3% ('02) to 62.4% ('04), a smaller percentage than the state.
- o Illinois (BRFS 2004):
  - Last cholesterol check within the past year: 86.5%.
  - 29.4% of adults report having high cholesterol (CDC, 2001).
- o U.S. (CDC):
  - An estimated 105 million Americans have a total cholesterol level of 200mg/dL or higher (30.9%), which is considered above optimal levels.
  - Over 80% of those who have high blood cholesterol do not have it under control.
  - A 10% decrease in total cholesterol levels may reduce the incidence of coronary heart disease by an estimated 30%.

### Blood Pressure

HP 2010 Objective: Hypertension under control: at least 50% of adults with hypertension will have it under control.

- o McLean County (BRFS data 1997-2004):
  - A "yes" response to "Told Blood Pressure (BP) high" increased from 16.4% (1997) to 22.4% (2004), below state rate.
  - 77.2% report taking meds for high BP (2002).
- o Illinois (BRFS 2004):
  - Told BP High: 25.9%.

- U.S. (Heart Disease & Stroke Statistics, 2005 update American Heart Association):
  - Nearly 1 in 3 adults has high blood pressure.
  - Of those with high blood pressure: 30% don't know it, 34% are on medication and have it under control, 25% are on medication but don't have it under control, and 11% are not on medication.

### • Sedentary Lifestyle & Nutrition

### HP 2010 Objectives:

- a) Reduce the proportion of adults who engage in no leisure-time physical activity. Target: no more than 20% of adults.
- b) Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day. Target: at least 30% of adults.
- c) Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion. Target: at least 35% of adolescents.
  - o McLean County (BRFS data 1997- 2004):
    - Sedentary lifestyle decreased from 25.8% to 9.5%.
    - Physical Activity: moderate levels: decreased from 41.4% ('97) to 35% ('04).
  - o Illinois (BRFS 2004 & CDC):
    - Adults reporting any exercise 75.1%.
    - 79.1% percentage of adults who reported eating fewer than five servings of fruits and vegetables per day 2002.
  - U.S. (Heart Disease & Stroke Statistics, 2005 update American Heart Association & CDC):
    - 38.6% of US adults report no leisure time physical activity.
    - The relative risk of coronary heart disease associated with physical inactivity ranges from 1.5 to 2.4, which is comparable to high blood cholesterol, high blood pressure or cigarette smoking.
    - Poor nutrition and lack of physical exercise are associated with at least 300,000 deaths each year in the United States.
    - 75.5% of adults reported eating fewer than five servings of fruits and vegetables per day (2002).

### Overweight/Obesity

### HP 2010 Objectives:

a) Reduce the proportion of children/adolescents who are overweight or obese. Target: no more than 5% of children/adolescents..

- b) Reduce the proportion of adults who are obese. Target: no more than 15% of adults.
- c) Increase the proportion of adults who are at a healthy weight. Target: at least 60% of adults.
  - o McLean County (BRFS data 1997-2004):
    - Obesity: The number of persons described as obese decreased from 30.6% in 1997 to 20.7% in 2004 (but, those overweight and not obese may have been included in the 1997 data. These two categories were treated separately by 2002).
    - Obesity: The number of persons described as obese increased from 15.4% ('02) to 20.7% ('04).
  - o Illinois (BRFS 2004):

• Overweight adults: 36.9%

• Obese adults: 22.1%

Adults reporting any exercise: 75.1%

- O U.S. (Heart Disease & Stroke Statistics, 2005 update American Heart Association):
  - Overweight and obesity together represent the No. 2 preventable cause of death in the United States. Nearly, seven out of ten U.S. adults are overweight and 3 out of ten are obese.
  - Each year an estimated 300,000 U.S. adults die of causes related to obesity.
  - An estimated 9,180,000 children and adolescents ages 6-19 are considered overweight or obese, based on the 95<sup>th</sup> percentile or higher of BMI values in the 2000 CDC growth chart for the U.S.
  - The age-adjusted prevalence of overweight (BMI of 25 or higher) increased from 55.9% in NHANES III (1988-94) to 65.1% in NHANES (1999-2002). The prevalence of obesity (BMI of 40 or higher) increased during this period from 22.9% to 30.4%.
  - Since 1991 the prevalence of those who are obese increased 75%.

### <u>Preliminary Identification of Health Problems Related to Chronic Disease</u> Indicators:

• Cancer: a leading cause of death: Colorectal Cancer Mortality rates have been consistently higher than the HP2010 Objective until 2003 and 2004; only 2 deaths in children 0 – 14 from Childhood cancers between 1998 and 2002, but the incidence rate exceeds the state rate and the Healthy People 2010 Objective. Percent diagnosed in situ breast cancer has increased from 14.6% (70 cases) in 1996 to 2000 to 18% (96 cases) from 1998 to 2002.

- Heart Disease/CHD: Leading cause of death every year since 1995; mortality rates have decreased since 1995; 2004 crude rate is below HP 2010 objective.
- Cerebrovascular Disease: One of the leading causes of death in 2004, but rates have fluctuated since 1995; 2004 crude rate is below the HP 2010 objective, but has not been consistently below that objective since 1995.
- Cirrhois of the Liver: 2004 crude rate of 7.6 is above the HP 2010 objective of 3/100,000.
- Diabetes: 2004 crude mortality rate is below the HP 2010 objective; 3.6% of residents report being diabetic; hospitalization rates have continued to increase.
- Chronic Disease risk factors: Most are well above HP 2010 objectives, including tobacco use, high blood cholesterol, high blood pressure, and obesity/overweight.
- The percent of children with a mental health disability is higher than the state rate.
- 20% of adults in McLean County (2004) are at risk for acute/binge drinking.
- 2000: Although rate decreases have been noted in both age categories since 1990, the alcohol dependence hospitalization rate (for ages 15-44) is well above the state rate.
- The suicide rate for adults is consistently higher (range = 7.2 12.5) than the Healthy People 2010 goal of 5.0. The age groups at highest risk appear to be the 75+ and the 45-54 year olds.
- BRFS data: 11.2% (N=13,386) reported 8-30 days of the past month were days when their mental health "was not good"; 22.4% (N=26,546) were sad, depressed or blue, for more than 2 days out of the past month.

### McLean County Community Health Needs Assessment January 2007

### **E.** Infectious Disease Health Indicators

- 1. Sexually Transmitted Diseases
- 2. Vaccine Preventable Diseases
- 3. Immunizations: Children
- 4. Immunizations: Adults
- 5. Infections by Foodborne and Other Pathogens
- 6. Tuberculosis

### **An Analysis of Infectious Disease Data Reveals the Following:**

### 1. Sexually Transmitted Diseases

- Note: McLean County statistics are based on when cases are reported, while IPLAN Data Set figures are based on the year diagnosed.
- Syphilis: 5-year average incidence rate (2001-2005) of 2.9/100,000 was well below Illinois and US 5-year average rates of 11.8 and 11.5 respectively but exceeded the HP 2010 goal of 0.2/100,000.
- Gonorrhea: 5-year average incidence rate (2001-2005) of 112.4/100,000 was below Illinois and US 5-year average rates of 174.8 and 118.6 respectively but exceeded the HP 2010 goal of 19/100,000.
- Chlamydia: 5-year average incidence rate (2001-2005) of 288.4/100,000 was below Illinois and US 5-year average rates of 376.0 and 303.4 respectively. No numeric HP 2010 goal was identified.
- Chlamydia among adolescents: Averaging the 5 years from 2001-2005, 35% of all cases reported in the county were comprised of adolescents, ages 15 to 19 years. This is a 5% decrease from 40% reported for the time period of 1990-1996.
- AIDS: 5-year average incidence rate (2001-2005) of 3.6/100,000 was well below Illinois and US 5-year average rates of 14.0 and 14.9 respectively. No numeric HP 2010 goal was identified.
- HIV: 3-year average incidence rate (2001-2005) of 7.8/100,000 was well below Illinois 3-year average rate of 19.5. No US rate is available and no numeric HP 2010 goal was identified.
- Hepatitis B: 5-year average incidence rate (2001-2005) of 7.1/100,000 was above Illinois and US 5-year average rates of 1.3 and 2.4 respectively and exceeded the HP 2010 goal of 3.8/100,000. McLean County data includes both acute and chronic case reports while Illinois and U.S. data reflects only acute cases.

### 2. Vaccine Preventable Diseases:

• # cases during the period 2001-2005:

Diphtheria, Tetanus, Haemophilus Meningitis, Measles, Polio, Rubella = 0 Pertussis = 47

- Mumps = 7
- Vaccine rates for private providers for infants and children only are available through the 2003 AOK grant of 3 county providers. Analysis of those numbers can be found below in discussion of Immunizations: Children.
- Pneumonia and influenza deaths accounted for 1.7% of county deaths in the 5-year period from 1999 through 2003.

### 3. Immunizations: Children

Preliminary identification of vaccination rates for infants and children by 36 months.

### (Special note to assist with data interpretation):

- Assessment of immunization rates is fluid and evolving. Clients move into and out of the county and into and out of programs.
- Vaccine recommendations change as more vaccines are licensed and as recommendations change.
- Control of vaccine-preventable diseases depends on maintaining high levels of immunization coverage.
- Vaccination coverage levels of 90 percent are, in general, sufficient to prevent circulation of viruses and bacteria-causing vaccine-preventable diseases.
- Healthy people 2010 recommend the achievement of 90% vaccination coverage for the 4-3-1-3-3 series.
- Vaccination coverage information can identify groups at risk for vaccine preventable diseases
- Immunization coverage among preschool children remains suboptimal in some areas and socio-demographic subgroups.
- Assessment of immunization coverage in children requires ongoing commitment and survey expertise.
- The National Immunization Survey utilizes sophisticated statistical and survey techniques to obtain the most-accurate results yet available. MCHD has participated in the National Immunization Survey with an average of 1 to 2 clients per year.
- Lack of a consolidated immunization record may lead to problems with determining individual immunization needs as well as measuring vaccination coverage of a clinician's practice or a community's population.
- Scattered immunization records compromise the ability of clinicians to determine the immunization status of their patients who received immunizations at other sites.
- Routinely assessing immunization coverage levels, implementing a recall system, and developing community-wide immunization registries are some strategies to reduce the problem of scattered immunization records.1

### **Data Sources**

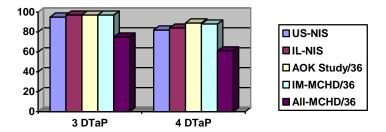
- MCHD immunization rates are collected annually by IDPH using Cornerstone reports.
- These reports analyze coverage rates for the 4-3-1-3-3 series (4 DTaP, 3 Polio, 1 MMR, 3 HIB, and 3 Hepatitis B).
- The instructions are to use data for all clients in a both a 24 and 36 month cohort not just active clients. The rationale given is that MCHD had responsibility for the clients care at one point in time. These numbers are lower due to the termination or moving of clients from various programs.
- National Immunization Survey (NIS) is reported at the following website http://www.cdc.gov/nip/coverage/NIS/02/toc-02.htm 2 MCHD has participated in the

 $<sup>1\</sup> The\ Impact\ of\ Record\ Scattering\ on\ the\ Measurement\ of\ Immunization\ Coverage\ Source:\ Pediatrics\ Vol.\ 107\ No.\ 1\ January\ 2001,\ pp.\ 91-96$ 

- NIS. MCHD averages 1 to 2 clients per year for the NIS study. Most of these clients no longer live in McLean County and are no longer active in MCHD programs and are not up to date for immunizations in MCHD records.
- AOK immunization private provider review for immunization series, 4:3:1:3:3 (4 DTaP, 3 Polio, 1 MMR, 3 HIB, 3 Hepatitis B) 3 for children born during from January 1, 2000 to December 31, 2000. 268 records were examined. The 4:3:3:1:3:3 rates for this cohort was 87%, just short of the 90% 2010 goal.

### McLean County Data (percents) Compared to U.S. and IL Data. Year 2000

	3 DTaP	4 DTaP	3 Polio	1 MMR	3 HIB	3 НерВ	4:3:1:3:3
US-NIS	95	82	90	92	93	90	78
IL-NIS	97	84	92	94	96	93	80
AOK	97	89	95	91	95	93	87
Study/36							
IM-MCHD/36	97	88	95	97	79	93	87
All-MCHD/36	75	61	71	71	51	68	58

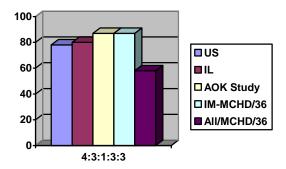


- Note rates for DTaP drop for *all practice and all localities* drop between 3<sup>rd</sup> (6 month shot) and 4<sup>th</sup> DTaP (15<sup>th</sup> month shot).
- Interventions could be directed to parents at the 6, 9, and 12 month visits.
- At MCHD special immunization education is done for WIC clients at the 6 week new baby visit.

IM coverage	4:3:1:3:3
US	78
IL	80
AOK Study	87
IM-MCHD/36	87
All/MCHD/36	58

<sup>2</sup> MMWR September 15, 2006/55 (36); 988-993 National, State and Urban Area Vaccination Coverage Among Children Aged 19-35 Months---United States.

<sup>3 (4</sup> DTaP; 3 IPV; 1 MMR; 3 HIB; 3 Hepatitis B) U:\PHS\MCH\AOK Network\Data collection\Immunization Study\Immunization Assess - data results -mes.doc



- Note local coverage rates better than NIS reported rates for the same birth cohort. AOK and IM-MCHD reflect rates of active clients in 3 private practices and for clients active in the MCHD immunization clinic. All MCHD immunization rates represent rates for clients who were active in all MCHD Cornerstone programs. These include WIC, FCM and Immunizations. None of the above rates reach the Healthy People 2010 goal of 90%.
- Note that rates represent the AOK birth cohort which is the 36 month cohort, not the 24 month cohort. 36 month cohorts are slightly higher than the 24 month cohort for all other measured.
- Healthy People 2010 recommend the achievement of 90% vaccination coverage for the 4-3-1-3-3 series.

### 4. Immunizations: Adults

• Adult immunization levels are difficult to obtain at the local level. Seasonal influenza vaccinations are the only routinely provided immunizations to the public (adults) by the McLean County Health Department.

### 5. Infections by Foodborne and Other Pathogens:

- Salmonella: the 5-year average incidence rate (2001-2005) of 13.5/100,000 matched the Illinois 5-year average rate, and was below the US 5-year average rate of 14.8, but it exceeded the HP 2010 goal of 6.8/100,000.
- Campylobactor: 5-year average incidence rate (2001-2005) of 8.7/100,000 was below the Illinois 5-year average rates of 10.3 and below the HP 2010 goal of 12.3/100,000. No US data rate available.
- Hepatitis A: 5-year (2001-2005) average # of cases/year is 1.4. Number of cases/year ranged from 0-4.
- Hepatitis C: The data collected for McLean County includes investigations of confirmed cases, both acute and chronic, while the Illinois and U.S. data includes only acute cases. This accounts for the much higher case rates shown for McLean County.
- Giardia: 5-year (2001-2005) average # of cases/year is 17. Number of cases/year ranged from 10-25.
- Shigella: 5-year (2001-2005) average # of cases/year is 4.2. Number of cases/year ranged from 0-15.

• West Nile Virus: McLean County saw its first human and equine cases in 2002. During 2005, there were 4 cases of WNV in the county, with 2 deaths. In 2006: out of 132 tested mosquito pools, 9 tested positive. There were 3 confirmed cases of WNV in humans in McLean County during 2006.

### 6. Tuberculosis

- The 5-year average case rate was 1.4/100,000.
- Number of cases 2001-2005 = 1-4/year.

### **Preliminary Identification of Health Problems Related to Infectious Diseases:**

- Chlamydia continues to be the STD with the highest prevalence in McLean County, though the case rate continues to be below the state and federal rates.
- The McLean County 4:3:3:1:3:3 rates (58% to 87%) for immunizations in childhood are under the Healthy People 2010 goal of 90%.
- Salmonella rates (13.5/100,000) exceeded the Healthy People 2010 goal of 6.8/100,000.

### McLean County Community Health Needs Assessment January 2007

### F. Environmental Health/Occupational Health/Injuries Health Indicators

- 1. Environmental Health
- 2. Occupational Injuries/Disease and Deaths
- 3. Injuries

## An Analysis of Environmental Health/Occupational Health/Injuries Data Reveals the Following:

### 1. Environmental Health

- Total pounds of toxic agents released (1990-1994 available only): ranged from a low of 402,293 lbs. (1990) to 2,730,916 (1992). Air releases only: 243,293 lbs. (1992) to 641,642 lbs. (1994). Healthy People 2010 target: reduce air toxic emissions to decrease risk of adverse health effects caused by airborne toxics. Target = 2.0 million tons.
- Days exceeding EPA ambient air pollution standards (1990-1995 only available in the IPLAN data set): 0 days.
- Number of NPL Hazardous Waste Sites (1990-1995): 0 sites.
- McLean County has 2 air monitoring locations, both in Normal, IL.
- Ozone: In 2004, 0 days were greater than 0.08 ppm (the EPA standard). This is an improvement from 2002, when 8 days were over 0.08 ppm. The Healthy People 2010 target: 0 days.
- Radon in McLean County (per the IEMA *Status Report for Radon in Illinois—2006* located at the IEMA website):
  - o U.S. EPA measurements (1987): 35% of tested homes
    - $(0\% \text{ were} \ge 2.0 \text{ pCi/L})$
  - o IDNS measurements (1990): 62% of tested homes
    - $(4\% \text{ were} \ge 2.0 \text{ pCi/L})$
  - o IEMA measurements (2002-2004): 49% of tested homes
    - $(2\% \text{ were} \ge 2.0 \text{ pCi/L})$
- Radon: The National Academy of Sciences and the Surgeon General estimate that as many as 21,000 lung cancer deaths annually in the U.S. may be the result of radon exposure.
- Radon: The Illinois Emergency Management Agency (recognized by the EPA as the lead agency in Illinois for radon-related activities) reported (in a press release dated 9/27/06) radon screening results from measurements in over 22,000 homes in Illinois.
  - o A higher percentage of homes tested had radon levels of 4.0 pCi/L and above (in comparison to 1992 data)
- 2006: out of 132 tested mosquito pools, 9 tested positive for West Nile Virus.

### 2. Occupational Injuries/Diseases and Deaths

- Statewide, occupational deaths decreased in 2005 (N = 194) to numbers near the record low of 190 in 2002, according to Illinois Department of Public Health's 14<sup>th</sup> annual "Census of Fatal Occupational Injuries".
- Of the occupational deaths in Illinois during 2005:
  - o 38% were caused by transportation accidents
  - o 17% were due to contact with objects or equipment
  - o 15% occurred during assaults and other violent acts
  - o 13% were the result of exposures to harmful substances

- Demographics from the 2005 statistics are very similar to those of 2002 through 2004:
  - o 91% were male
  - o the majority, 25%, were between the ages of 45 and 54
  - o 86% were white
- In McLean County, statistics from 1990 through 2002 indicate that no more than 5 cases per year of occupationally-acquired cancer have been documented. Range = 0 − 5 cases/year. Total # (1990 − 2002) = 29. It is not possible to calculate a rate due to the low number of cases per year.
- In McLean County, statistics from 1993 through 2005 indicate that no more than 5 occupational injuries per year resulted in a death. Range = 0 − 5 cases/year. Total # (1993 − 2005) = 30 documented. It is not possible to calculate a rate due to the low number of cases per year.

### Sources:

- 1. The website of the Illinois Department of Public Health and its links to the 2002 2004 data of the annual "Census of Fatal Occupational Injuries". This data is not presented by county.
- 2. The IPLAN Data Set for 1990 2002.

### 3. Injuries

- IPLAN Data from 1994 to 1998 separates injuries into two categories intentional and unintentional, starting in 1999 the data contains the category of accidents only.
- Through 1998, unintentional injuries has been consistently ranked as the 7th-8th leading cause of death in McLean County (3-4% of all deaths).
- Through 1998, intentional injuries did not rank in the top ten leading causes of death.
- From 1999 through 2003 accidents ranked as the 7th-8th leading cause of death (3-4% of all deaths).
- Although in 2004 accidents rose to the 6th leading cause of death at 5% of all deaths.
- Illinois has similar rankings to McLean County in unintentional injuries and accidents.
- Non-Fatal Hip Fracture Hospitalization Rates (Ages 65 & Up); for 10 years McLean County rates are above Illinois rates and are well above the HP 2010 objective.
- Non-Fatal Head Injury Hospitalization Rates are below the Illinois rates and below the HP 2010 objective.
- Non-Fatal Spinal Cord Injury Hospitalization Rates are so low that a rate cannot even be calculated.
- Sexual Assault rates in McLean County seemed to peak in 1994 and have slightly decreased through 1998. Even though McLean County rates have decreased they remain above the Illinois rate.
- When compared to the state, the number of McLean County children identified as abused or neglected continues to be higher.

- The McLean County rate has fluctuated from 1997 through 2006, from a high of 24.6 per 1,000 children (1997) to a low of 12.0 per 1,000 children in 2002. The rate in fiscal year 2006 was 13.6 per 1,000 children while the rate for the state of Illinois was 7.6 per 1,000 children.
- Lead Poisoning HP2010 objective for "0" children with 10mcg/dl or higher blood lead level has not been met.

### <u>Preliminary Identification of Health Problems Related to Environmental</u> Health/Occupational Health/Injuries:

- Radon present in 49% of McLean County homes remains a concern.
- Mortality from unintentional injuries ranks 1<sup>st</sup>-2<sup>nd</sup> in YPLL, and is the 7<sup>th</sup>-8<sup>th</sup> leading cause of death.
- The Healthy People 2010 objective for lead poisoning has not been met.
- Hip fracture hospitalization rates have remained above Illinois rates and the Healthy People 2010 goal for 10 years.
- Sexual assault rates remain above the Illinois rate.
- The child abuse/neglect rate is above the Illinois rate.

### McLean County Community Health Needs Assessment January 2007

### **G.** Sentinel Event Health Indicators

- 1. Infants Hospitalized for Dehydration (Ages 0 < 1 yr)
- 2. Children Hospitalized for Rheumatic Fever (Ages 1-17)
- 3. Children Hospitalized for Asthma (Ages 1 14)
- 4. Adults with Tuberculosis (Ages ≥18 years)
- 5. In Situ Cancer: Breast Cancer (5-yr averages)
- 6. In Situ Cancer: Cervical Cancer (5-yr averages)
- 7. Adults Hospitalized for Uncontrolled Hypertension

### **An Analysis of Sentinel Event Data Reveals the Following:**

### 1. Infants Hospitalized for Dehydration (Ages 0-<1 year)

- Significant decrease has been documented in the number of children hospitalized for dehydration between 1990 and 2001. 1990 = 38 cases; 2002 = 2 cases. Range: 2 to 38 (1990 2001); range during the period 1990 1993: 22-38 per year. After this 4 year period, the number of cases per year dropped to single digits.
- Unknown if decrease in hospitalizations is in part due to the opening of the free Community Care Clinic in the early 1990's.

### 2. Children Hospitalized for Rheumatic Fever (Ages 1-17)

• Number per year: 0-3 cases per year between 1990 – 2001. Only 3 years during this time period reported cases.

### 3. Children Hospitalized for Asthma (Ages 1-14)

- # children (ages 1-4) hosp. for asthma: 106-120 (1990-1993), 65 in 1994, 61 in 1995, 43 in 1996.
- # children (ages 1 to 14) hospitalized for asthma (1990-2001): ranged from a low of 43 (2000) to a high of 120 (1993). Most recent available: 2001, when 47 cases were reported.
- Unknown if decrease in hospitalizations is in part due to the opening of the free Community Care Clinic in the early 1990's.

### 4. Adults with Tuberculosis (Ages > 18 years)

- Number of cases per year: 0-3 during the time period of 1990-2001.
- The 5-year average case rate was 1.4/100,000.
- Number of cases 2001-2005 = 1-4/year.

### 5. In Situ Cancer: Breast Cancer (5-year averages)

- The percent of breast cancer cases diagnosed as in situ breast cancer (Female) in McLean County from 1998 to 2002 was 18.0% (96 cases) compared to 18.3% in Illinois and 19.6% in the United States.
- The 5-year average in-situ breast cancer rate has steadily increased, from a low of 9.9 (1987-1991) to a high of 28.7 (1998-2002).

### 6. In Situ Cancer: Cervical Cancer (5-year averages)

• Late detection of cervical cancer: only rate available during the interval from 1986-2002 is the 5-year average of 5.4, which was above the state rate of 4.8 and the U.S. rate of 4.1.

- BRFS: The proportion of women obtaining Pap tests decreased from 96.1% in 1997 to 90.2% in 2004.
- *Healthy People 2010 Objective*: Reduce the death rate from cancer of the uterine cervix to no more than 2.0 deaths per 100,000 females.

### 7. Adults Hospitalized for Uncontrolled Hypertension

• Number of cases per year from 1990-2001: 16 (1998) to 51 (1990).

### **Preliminary Identification of Health Problems Related to Sentinel Event Data:**

• The 5-year average in-situ breast cancer rate has steadily increased, from a low of 9.9 (1987-1991) to a high of 28.7 (1998-2002). This, however, may reflect improved screening capabilities and numbers of women attending screenings.

# The McLean County

# Community Health Plan



Prepared by

The McLean County Health Department

And

The Community Health Advisory Committee

From

May 2006 to June 2007

## Introduction To the McLean County

### Community Health Plan

(2007-2012)

Approved by the McLean County Board of Health on 6/06/07

### Statement of Purpose

The purpose of the county-wide community health plan (CHP) is to improve the health of McLean County residents by developing partnerships to implement CHP strategies, encourage health awareness, and promote healthy lifestyle choices which can reduce the risk of death and disability and improve health.

In Illinois, all local health departments must have a 5-year community health plan in place, 1) to provide direction for the jurisdiction as it addresses local health concerns, and 2) to meet certification requirements in Illinois, as indicated in Section 600.400 Public Health Practice Standards, Subpart D: Practice Standards of Title 77 of the Illinois Administrative Code, Chapter 1 (Department of Public Health), SubChapter H (Local Health Departments).

For over fourteen years, the McLean County Health Department's Community Health Advisory Committee (CHAC) has worked to build partnerships among public and private health care providers, community agencies, health-related organizations, schools, businesses, the faith community and the media. It meets to study and understand the health status of the county, identify priority health problems, set goals and objectives, and to develop and implement strategies to address the identified health problems with the assistance of these community partners.

### Community Health Plan Development Process

The community health plan identifies the county's top 3 health problem priorities, the risk factors that contribute to them, and the effective intervention strategies that will be used to reduce their negative impact on the health status of the community.

As the previous community health plan (Round 2 for 1999-2007) neared its completion, preparations for McLean County's Round 3 CHP (2007-2012) began in the spring of 2006. In McLean County, the eight-step APEX-PH process has been the method used to develop the previous two CHPs and it was chosen again to be used for the third CHP, due July 16, 2007. This method is used by the majority of health departments in Illinois. An overview of the APEX-PH process, applied to the development of the new McLean County CHP, is provided in the "Overview of the Community Health Plan Process" document (Attachment #2 of the Executive Summary).

A needs assessment was conducted from May 2006 to January 2007, where county-specific health indicators from the past 10 years of available data, if possible, were compared to state rates and the Healthy People 2010 targets. Illinois Department of Public Health (IDPH) Behavioral Risk Factor Survey (BRFS) data, obtained from telephone surveys conducted in 1997, 2002, and 2004 by Northern Illinois University, with approximately 400 McLean County adults contacted per survey through random selection and at a statistically significant level, was reviewed to assist with understanding the past and current magnitude of the health problems and to identify possible trends for the future.

After conducting a needs assessment and analyzing the available data, 18 health problems in McLean County were identified. After further discussion with the CHAC members, some of the health problems were combined into categories and others were set aside. The final list of 8 health problems included: cancer, cerebrovascular disease, chlamydia, heart disease, infant mortality, intentional injuries, suicide (older adults), and unintentional injuries. This list of 8 health problems was then used in February 2007 when the CHAC applied the *Hanlon Method for Prioritizing Health Problems* to determine the county's top 3 priority health problems. Appendix E of the APEX-PH manual contains a full description of the *Hanlon Method for Prioritizing Health Problems*. This method, modified by APEX-PH from the process developed by J. J. Hanlon, has been used during the development of each McLean County CHP to prioritize the list of county health problems. It establishes priorities based on the size and seriousness of the problem as well as the effectiveness of the available interventions. Prioritization of the multiple health problems identified is necessary so that community resources can be directed appropriately.

Additional information for each of the eight health problems was provided in the document, "The Size of McLean County Health Problems: February 2007" (Attachment A of the "Overview of the Community Health Plan Process" document, found as Attachment #2 of the Executive Summary for this CHP), which was essential as an aid in the analysis of two of the three Hanlon Method factors:

- 1. <u>the size of the health problem:</u> with consideration given to the number of community residents **with** the problem, but with emphasis on the proportion of the population **at risk** for the disease or condition; and,
- 2. <u>the seriousness of the health problem:</u> or the degree to which the problem causes death, hospitalization, disability, and economic loss; and, the degree to which this is an emergent problem or one where there is an urgency for intervention.

A third Hanlon Method factor was also utilized:

3. <u>the effectiveness of the intervention to address the health problem:</u> or, the degree to which an intervention is available to prevent the health problem.

The "PEARL Test" was then applied to the interventions for each health problem, evaluating the factors of **P**ropriety, **E**conomics, **A**cceptability, **R**esources, and **L**egality. All 8 health problems

passed the PEARL Test and all interventions conceived by the CHAC were judged to be proper, economical, acceptable, legal and, to some degree, feasible given available resources. Among the eight, Hanlon Method priority scores ranged from a low of 48 to a high of 210.

The size and seriousness of 3 health concerns in particular, clearly rose to the top of the Hanlon Method priority list:

### **HEART DISEASE**

(Priority Score = 210)

### CEREBROVASCULAR DISEASE

(Priority Score = 175)

### **CANCER**

(Priority Score = 168)

Effective interventions for all three of these health problems have been in use across the nation for many years. Of special concern was the finding in the McLean County Community Health Needs Assessment that, although mortality rates may have decreased or at least fallen below the Healthy People 2010 target for some components of these health concerns, BRFS data for McLean County indicate that Healthy People 2010 objectives for adult residents are not met for many of the risk factors (such as cigarette smoking; obesity; high cholesterol; alcohol overconsumption) for heart disease, cerebrovascular disease, and cancer. These three health problems were then chosen as McLean County's top three health priorities and became the basis for the Round 3 McLean County Community Health Plan for 2007-2012.

In the fall of 2007, the CHAC will begin to form an implementation task force which will then move forward with community partners to address the interventions identified in the McLean County Community Health Plan.

### The 3 Priority Health Problems

In March and April of 2007, the CHAC discussed various approaches to mitigate the impact of the 3 priority health problems (heart disease, cerebrovascular disease, and cancer) and the risk factors that contribute to them. The effectiveness of various intervention strategies was discussed and an assessment was made of the available and needed resources, including stakeholders and funding sources in the community. At the April CHAC meeting, additional questions were asked regarding the appropriateness of the intervention strategies (Do they adequately address the impact objectives? Does each strategy address a measurable direct or indirect contributing factor? What resources are available to implement the strategy?), prior to making final decisions about which ones to choose.

A draft of the McLean County Community Health Plan was provided to the McLean County Board of Health members, for their preliminary review, at the May  $2^{nd}$ , 2007, Board of Health

meeting. A copy was also submitted to the IPLAN Administrator at the Division of Health Policy of the Illinois Department of Public Health for a preliminary review. Final approval of the entire Community Health Needs Assessment and Community Health Plan document occurred at the McLean County Board of Health meeting on June 6<sup>th</sup>, 2007.

Most of the CHP outcome and impact objectives have been taken from the national Healthy People 2010 document and will be used to assist in the evaluation of CHP progress over the next 5 years. Evaluation to assess the CHP implementation process and the effectiveness of the intervention strategies, as well as progress towards meeting or exceeding the Healthy People 2010 targets, will occur on an annual basis. The CHAC is responsible for the monitoring and evaluation of the CHP.

The following pages provide additional information on the CHP by taking each of the three health priorities and providing: a description of the problem, a review of the behavioral risk factors impacting the problem, the rationale for choosing the health problem as a health priority, outcome and impact objectives, interventions, resources to implement the interventions, barriers to achieving health improvements, funding options, and a brief description of the evaluation and monitoring plan. Each health priority section is divided into 3 components:

- A Narrative
- A Health Priority Summary Worksheet
- A Direct and Indirect Contributing Factors Chart

The purpose of the McLean County Community Health Plan (2007-2012) is to improve the health of McLean County residents by developing partnerships to implement CHP strategies, encourage health awareness, and promote healthy lifestyle choices. The development of this five-year plan is the first step towards reducing the risk of death and disability in individuals and improving overall health in McLean County. The implementation task force, community partners and the on-going dedicated efforts of the Community Health Advisory Committee will continue to meet the challenge of improving the health of all residents of McLean County. Working together, the county will be healthier by the year 2012.

### Health Problem Priority:

### Heart Disease

### **Healthy People 2010 Outcome Objective**

12-1. Reduce coronary heart disease deaths.

Target: 1621 deaths per 100,000 population.

Baseline: 203² coronary heart disease deaths per 100,000 population in 1999² (age

adjusted to the year 2000 standard population).

Target setting method: 20 percent improvement.

Data source: National Vital Statistics System—Mortality (NVSS—M), CDC, NCHS.

<sup>1</sup> Target revised from 166 because of baseline revision after November 2000 publication.

<sup>2</sup> Baseline and baseline year revised from 208 and 1998 after November 2000 publication.

### **Description of the Health Problem**

The Centers for Disease Control and Prevention (CDC) has stated that chronic diseases, including heart disease, cancer, and cerebrovascular disease (stroke), are the leading causes of death in the United States. Each year, more than 1.7 million Americans die of a chronic disease, accounting for 7 out of every 10 deaths.

Heart disease is *the* leading cause of death in adults in the United States, Illinois, and McLean County. In the last 10 year period of available data for McLean County (1995-2004), heart disease remained the leading cause of death every year and it accounted for 26%-41% of deaths. In 2004, the most recent year for which local data is available, 27% of McLean County deaths were due to heart disease, resulting in a crude mortality rate (# deaths from heart disease/total population, x 100,000) of 171.68/100,000 population, a rate higher than the previous two years, but well below the peak rate of 274.4 in 1996.

Coronary heart disease (CHD) is a specific type of heart disease and is ranked as the single largest killer of American males and females. Each year, according to the American Heart Association (AHA), an estimated 700,000 people in the U.S. have a new coronary attack; 500,000 will have a recurrent attack. While there is no Healthy People 2010 target for heart disease, the target for CHD is 162 deaths/100,000. Although from 1992-2002, the U.S. mortality rate from CHD declined 26.5%, the actual number of deaths declined only 9.9%. The most recent crude mortality rate for CHD in Illinois is 161/100,000 (2004), accounting for 20% of the deaths in the state, and just meeting the Healthy People 2010 target.

In McLean County, CHD consistently ranked on its own as the second or third leading cause of death from 1995-2004, accounting for 18%-26% of county deaths each year. Since 1995, the crude mortality rate from CHD has continued to show an overall decrease, from 178.5/100,000 (1995) to 118.6/100,000 (2004); however, by 2004, CHD still caused 19% (N=187) of deaths. Of those deaths, 23% were considered "premature", occurring before the age of 65.

### **Behavioral Risk Factors**

The American Heart Association has estimated that the average number of years of life lost due to a heart attack is 11.50. Reducing the potential for a heart attack could be achieved in part by addressing some of the risk factors that place individuals at risk for cardiovascular disease. In 2005, the AHA reported findings from a study of 52 countries which identified nine easily measurable and potentially modifiable risk factors that account for 90% of the risk of an initial acute myocardial infarction (heart attack). These risk factors include: cigarette smoking, abnormal blood lipid levels, hypertension, diabetes, abdominal obesity, lack of physical activity, low daily fruit and vegetable consumption, and alcohol over-consumption. The McLean County-specific Behavioral Risk Factor Survey (BRFS) data (1997, 2002, 2004) of adults reveals that McLean County does not meet the HP 2010 objectives in many of these areas:

- 1) cigarette smoking:
  - McLean County BRFS: 20.8% of adults smoke (2004); 30% of 12<sup>th</sup> graders (2004 Youth Survey).
  - HP 2010 goal: no more than 12% of adults and 16% of children.
- 2) abnormal blood lipid levels:
  - McLean County BRFS: 28.8% have been told they have "high cholesterol" (2004).
  - HP 2010 goal: no more than 17% will have high cholesterol.
- 3) high blood pressure:
  - McLean County BRFS: 22.4% have been told they had high blood pressure (2004), and 77.2% said they were taking medications for high blood pressure (2002). The AHA estimates that, of those with hypertension, 34% are on medications and have it under control and 25% are on medications but do not have their hypertension under control.
  - HP 2010 goal: 50% of those with hypertension will have it under control.
- 4) diabetes:
  - McLean County BRFS: 3.6% have been told they were diabetic (2004).
  - HP 2010: (no comparable goal).
- 5) abdominal obesity:
  - McLean County BRFS: 35% are overweight (BMI between 25 and 29) and 20.7% are obese (BMI of 30 or above) (2004).
  - HP 2010: no more than 5% overweight and no more than 15% obese.

- 6) lack of physical activity: (HP 2010 goal met)
  - McLean County BRFS: 35% take part in moderate physical activity at least 5 times per week for 30 minutes each time (2004).
  - HP 2010 goal: at least 30%
- 7) fruit and vegetable consumption:
  - McLean County BRFS: 15.3% (2002) to 20.9% (2004) report consuming 5 or more servings of fruits and vegetables every day.
  - HP 2010: increase the proportion of persons aged 2 years and older who consume at least 2 daily servings of fruit and who consume at least 3 servings of vegetables, with at least one-third being dark green or orange vegetables.
- 8) alcohol over-consumption:
  - McLean County BRFS: 20.3% are at risk for acute/binge drinking (2004), and 8.7% are at risk of chronic drinking (2004).
  - HP 2010: reduce the proportion of persons engaging in binge drinking of alcoholic beverages to no more than 6%; reduce the proportion of adults who exceed guidelines for low risk drinking to no more than 50% of males and females.

This BRFS data indicates that McLean County residents will continue to be at risk for death and disability from the effects of cardiovascular disease if lifestyle modifications are not implemented soon and consistently over time.

### **Rationale for Choice as a Health Priority**

Heart disease, including coronary heart disease, was identified in the first IPLAN Community Health Plan (1994-1999) as well as the second (1999-2007) as a health priority and it now continues to be the leading cause of death in McLean County. During the health problem priority setting process, using the Hanlon Method, heart disease easily ranked first out of the 8 problems identified and achieved a score of 210 (cancer score = 168; cerebrovascular disease score = 175). Since 1994, considerable progress was made in reducing the coronary heart disease crude mortality rate to well below the HP 2010 objective; however, data from the Behavioral Risk Factor Surveys of McLean County in 1997, 2002, and 2004 indicate that the county population will continue to be at great risk for heart disease unless significant changes are made in health behavior and lifestyles. Research has shown that eliminating tobacco use, controlling hypertension and cholesterol levels, and maintaining a healthy weight all significantly reduce the risk of heart disease, including coronary heart disease. Therefore, addressing the modifiable risk factors for heart disease will assist with preventing further disability and death in McLean County residents.

### **Interventions to Address the Health Problem Priority**

The strategies developed by the Community Health Advisory Committee (CHAC) to reduce death and disability due to heart disease and coronary heart disease include activities in the following areas:

- 1. Provide health promotion opportunities through workplace wellness programs which promote weight reduction, regular exercise, a low-fat diet, and use of the ADA nutrition guidelines.
- 2. Increase access to screenings and community health activities that address risk factors.
- 3. Assist with the coordination and promotion of community-based health promotion and wellness activities that may include: health screenings, counseling sessions, weight reduction programs and education messages.
- 4. Health care providers will address risk factor patient education.
- 5. Provide access to smoking prevention education and smoking cessation activities in area schools and within the community.
- 6. Support the development of governmental, school and community policies that help to establish and maintain smoke-free environments.
- 7. Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.
- 8. Promote anti-tobacco campaigns, such as "Great American Smoke Out", and "World No Tobacco Day".
- 9. Increase community awareness of screenings for risk factors.
- 10. Promote free fitness activities.
- 11. Promote awareness of and access to early interventions (such as AEDs, the American Red Cross' "Family and Friends CPR Anytime" training, and symptom identification) and wellness programs.
- 12. Promote public awareness of the health hazards associated with obesity and promote positive policies and interventions in the community.
- 13. Assist schools with a) assessing overweight youth to determine a baseline for the county; and, b) promoting obesity reduction measures.
- 14. Provide access to alcohol abuse prevention education and alcohol cessation activities in area schools and at community events.
- 15. Support the development of governmental and school policies that help to establish and maintain alcohol-free environments for adolescents.
- 16. Establish a reliable means to assess hypertension status.

### **Community Resources to Implement Interventions**

Implementation plans from previous community health plans for McLean County included the establishment of task forces in each of the three health priority areas to implement the intervention strategies. Each task force consisted of many community representatives which met frequently throughout the community health plan period. Implementation of the current community health plan for 2007-2012 will build on the partnerships and networks that have been

previously established and will add additional members to strengthen the implementation effort and further improve coordination of activities. A complete list of community stakeholders is included in this document.

### **Barriers to Achieving Health Improvements**

Multiple barriers exist that will hinder efforts to reduce the incidence and prevalence of heart disease and coronary heart disease. Key areas include: socioeconomic factors, cultural norms, individual and family practices, limited access to resources, and a lack of personal funds to finance lifestyle changes, medications, or screening costs. In addition, the community health plan intervention strategies require time and effort from staff and volunteers from various organizations throughout McLean County who have other obligations and priorities to address.

### **Funding for Implementing Interventions**

After approval of the community health plan, the implementation task force(s) will further address funding options. Federal, state, and local resources will be pursued. Organizations may provide in-kind assistance and many of the intervention strategies fall within the mission of stakeholder agencies. It is anticipated that some grant funding may be made available during the 5-year community health plan period in the areas of obesity reduction, diabetes, and smoking cessation. Should funding become available, the Community Health Advisory Committee will discuss opportunities and encourage pursuit of funding by stakeholders.

### **Evaluation and Monitoring Plan**

The Community Health Advisory Committee (CHAC) is responsible for the on-going monitoring and evaluation of the McLean County Community Health Plan (CHP) to assess the implementation and effectiveness of the CHP intervention strategies (process evaluation) and progress toward meeting impact and outcome objectives (outcome evaluation). A key goal of evaluation efforts for this CHP is the identification and subsequent promotion of effective interventions that lead to a reduction in risk factor levels in McLean County.

Once the CHP has been approved by the state of Illinois (anticipated by fall 2007), a CHP implementation task force will be formed and evaluation approaches and activities will be addressed. With multiple stakeholders and programs under development or all ready in place, an on-going challenge will be the ability to acquire and pool evaluation results from various sources:

- a) To establish county-level baselines (such as the number of screenings currently offered; the percent of the adult population receiving screenings) if none currently exist; and,
- b) To reach agreement on which intervention functions should be measured as well as how and when measurement will occur.

Agreement on a logic model-type evaluation measurement process may provide:

- 1) A clearer understanding between stakeholders regarding which entities are responsible for capturing data for the CHP evaluation process;
- 2) Improved consistency in the type of data collected and methods used for evaluation data collection; and,
- 3) A framework for cooperative sharing of evaluation results.

The Community Program Logic Model and its 12-Step Community Program Evaluation Measurement Planning Process (adapted from Measuring Program Outcome: A Practical Approach, United Way, 1996) is one approach that will be considered by the CHAC, which will determine if this process is acceptable as an evaluation measurement tool for selected indicators.

At a minimum, monitoring and evaluation will occur on an annual basis and will be discussed with CHAC and implementation task force members. Methods will entail written analysis of progress made toward meeting strategies articulated in the CHP. In addition, goal congruent community initiatives will be captured as part of the evaluation process. Throughout the five-year period, the CHAC will receive verbal updates of task force activities and progress at each CHAC meeting and McLean County Health Department IPLAN liaison staff will provide a midterm progress report to the public.

The process of evaluation measurement will assist the CHAC with assessing whether CHP interventions are creating a positive impact in the community and if improvements or modifications are needed. Through evaluation, accountability is increased and a stronger commitment to improving the health of McLean County citizens will be communicated to its residents.

### **Health Priority Summary Worksheet: Heart Disease**

The following pages contain the McLean County Community Health Plan summary worksheet for heart disease, based on modifications of APEX-PH templates. The worksheet contains: a description of the health problem; list of risk factors and direct and indirect contributing factors; barriers to improvements; community stakeholders; community health improvement outcome goals and impact objectives; community health plan strategies/interventions linked to the goals and objectives; and, community health plan evaluation considerations. Following the worksheet is a chart linking direct and indirect contributing factors to risk factors for this health problem.

### Health Priority Summary Worksheet

### **Heart Disease**

### **Description of the Health Problem**

- Heart Disease has been the leading cause of death every year in McLean County since 1995.
- Heart disease is the first leading cause of mortality in McLean County, responsible for 26% to 41% of all deaths, and it is amenable to prevention methods.
- In 2004, McLean County's crude mortality rate from heart disease was 171.68/100,000. There is no Healthy People 2010 target for heart disease.
- The Hanlon Method for the prioritization of health problems ranked heart disease as McLean County's #1 problem. It was given a priority score of 210, and was given the highest score in two categories: size and seriousness of the problem.
- Coronary Heart Disease (CHD), a subcategory of heart disease, consistently ranked on its own as the 2<sup>nd</sup> or 3<sup>rd</sup> leading cause of death in McLean County, responsible for 18%-26% of deaths.
- In 2004, McLean County's crude mortality rate from coronary heart disease was 118.6/100,000 compared to the Illinois crude mortality rate of 161.0/100,000. The Healthy People 2010 target is 162/100,000.
- Behavioral Risk Factor Survey (BRFS) data indicates that many McLean County residents will face disability and death as a result of heart disease if lifestyle modifications are not made. This is indicated by recent BRFS data.
- BRFS data (3 surveys: 1997, 2002, 2004):
  - o 28.8% (2004) of McLean County adults reported being told their cholesterol was high compared to the 29.4% of Illinois residents that report the same. (Healthy People 2010 target: no more than 17%).
  - o In 2004, the proportion of people in McLean County that were told their blood pressure was high increased to 22.4% from 16.4% in 1997. In Illinois, 25.9% of residents have been told they had high blood pressure. In 2002 in McLean County, 77.2% said they were taking medications for high blood pressure. (Healthy People 2010 target: at least 50% of those with hypertension will have it under control).
  - o The percentage of McLean County residents reporting that they are diabetic is 3.6% compared to 6.1% of Illinois residents that report the same.
  - o 20.8% of McLean County adults report being a smoker compared to 22.2% of Illinois residents that report the same. 30% of 12<sup>th</sup> graders report smoking (2004 Youth Survey). (Healthy People 2010 target: no more than 12% of women and 16% of children).
  - Obesity (a BMI of 30 or above) in McLean County has increased from 15.4% (2002) to 20.7% (2004). The proportion of the population overweight (BMI between 25 and 29) in 2004 was 35%. (Healthy People 2010 target: no more than 5% overweight and no more than 15% obese).
  - o Fruit and vegetable consumption: 20.9% of adults report consuming 5 or more servings of fruits and vegetables every day (2004). (Healthy People 2010 target: increase the proportion of persons aged 2 years and older who consume at least 2 servings of fruit and 3 servings of vegetables per day).

O Alcohol over-consumption: 20.3% of adult residents are at risk for acute/binge drinking (2004), and 8.7% are at risk of chronic drinking (2004). (Healthy People 2010 targets: reduce the proportion of persons engaging in binge drinking to no more than 6%, and reduce the proportion of adults who exceed guidelines for low risk drinking to no more than 50%).

### **Risk Factors**

1. Diabetes

2. Obesity

3. Genetics/Heredity

4. Tobacco Addiction

5. Hypertension

6. Elevated Blood Cholesterol

7. Peripheral Vascular Disease (PVD)

8. Alcohol Over-consumption

### **Contributing Factors**

### **Direct Contributing Factors Among Identified Risk Factors:**

### 1. Diabetes

- Obesity
- Physical inactivity
- Genetics/Heredity

### 2. Obesity

- Poor eating habits
- Sedentary lifestyle

### 3. Genetics/Heredity

• Family history

### 4. Tobacco Addiction

- Addiction
- Lack of utilization of smoking cessation programs
- Cultural and Societal Norms

### 5. Hypertension

- Obesity
- Medication noncompliance
- Tobacco use
- Alcohol abuse
- Heredity/Genetics

### 6. Elevated Blood Cholesterol

- Obesity
- Poor diet
- Physical inactivity
- Genetics/Heredity

### 7. Peripheral Vascular Disease (PVD)

- Lack of early detection
- Lack of response to symptoms

### **Indirect Contributing Factors Among Identified Risk Factors**:

### 1. Diabetes

- Poor eating habits
- Sedentary lifestyle
- Lack of knowledge of good nutrition

### 2. Obesity

- Fast paced lifestyle
- Fast Food
- Poor meal planning
- Increased portion sizes
- Financial barriers
- Family norms and structure
- Lack of motivation
- Lack of priority

### 3. Genetics/Heredity

• Lack of knowledge of family history

### 4. Tobacco Addiction

- Lack of resources and workplace wellness opportunities
- Limited marketing among selected at risk populations
- Difficulty quitting
- Social environment
- Social influences
- Peer pressure/marketing

### 5. Hypertension

- Lack of resources
- Lack of knowledge
- Poor eating habits
- Sedentary lifestyle
- Lack of knowledge of good nutrition
- Addiction
- Denial of Addiction
- Lack of utilization of prevention methods/programs
- Lack of knowledge of family history

#### 6. Elevated Blood Cholesterol

- Poor Eating habits
- Sedentary lifestyle
- Lack of self-efficacy
- Cultural eating habits

- Large restaurant portions
- Increased caloric values
- Lack of affordable healthy options
- Lack of priority
- Lack of motivation
- Lack of knowledge of family history
- Lack of resources
- Lack of knowledge

#### **7. PVD**

- Poor access to regular medical care
- Economic factors
- Denial
- Lack of awareness

#### 8. Excessive Alcohol Intake

- Financial barriers to treatment
- Advertising targeted at youth and minorities
- Social environment
- Frequency of use
- Lack of utilization of treatment services

#### **Barriers**

- Socioeconomic Factors
- Cultural norms
- Poor Self-efficacy
- Limited access to resources
- Demographics

## **Community Stakeholders**

- American Heart Association
- American Red Cross of the Heartland
- Blue Cross/Community group (Diabetes Initiative)
- Child Care Resource and Referral Network (nutrition initiatives)
- Community nursing agencies
- ISU Health Sciences
- Diabetes educators
- Diabetes support groups (Free Living with Diabetes at OSF St. Joseph)
- Faith community/Parish Nurses

<sup>\*</sup> For more specific details on direct and indirect contributing factors for the various Risk Factors refer to CHD chart.

- Fitness centers
- Health Education departments from ISU and IWU
- Health insurance companies
- Healthy Cells magazine for central Illinois
- Heart Midwest
- Hospital programs: Women's Center, Wellness
- Illinois Heart and Lung
- McLean County Extension Office
- McLean County Health Department Health Ed Program and Wellness Program
- Media partners
- Mended Hearts support group
- Occupational health RNs
- PE teachers at area secondary schools
- RSVP (Retired Seniors Volunteer Program)
- School nurses
- Schools of nursing
- Weight loss centers
- Work wellness programs
- YMCA/YWCA

## **Community Health Improvement Outcome Goal**

• By the year 2012, maintain coronary heart disease deaths in McLean County at no more than the current baseline of 119/100,000 (2004). (Healthy People 2010 target: 162 deaths/100,000 population).

## **Community Health Improvement Impact Objectives**

#### 1. Diabetes

- <u>Impact Objective</u>-By the year 2012, reduce diabetes cases in McLean County to an incidence of no more than 2.5/1,000 people and a prevalence of no more than 25/1,000 people; reduce diabetes-related deaths in McLean County to no more than 34/100,000 people. (Healthy People 2010 targets)
- **Baseline**: 6.7% (1990), 3.6% (1997), 3.3% (2002) and 3.6% (2004) of adults in McLean County report themselves as diabetic.
  - o Intervention strategies
    - Increase community awareness of controllable risk factors.
    - Increase number of screenings for diabetes.

#### 2. Obesity

• <u>Impact Objective</u> -By the year 2012, reduce the proportion of children/adolescents in McLean County who are overweight to no more than 20%. (Healthy People 2010 target: 5%)

- <u>Impact Objective</u> -By the year 2012, reduce the proportion of adults in McLean County who are obese to no more than 15%. (Healthy People 2010 target)
- <u>Impact Objective</u> -By the year 2012, increase the proportion of adults in McLean County who are at a healthy weight to 60%.
- <u>Baseline</u>: 15.4% (2002) and 20.7% (2004) of adults in McLean County were obese (BMI of 30 or greater). 37.9% (2002) and 35% (2004) of adults in McLean County were overweight (BMI between 25 and 29). The baseline for McLean County children is to be determined.

#### o Intervention Strategies:

- Promote free physical fitness activities.
- Promote public awareness of the health hazards associated with obesity and promote positive policies and interventions in the community.
- Provide health promotion opportunities through workplace wellness programs which promote weight reduction, regular exercise, a low-fat diet, and use of the ADA nutrition guidelines.
- Increase access to screenings and community health activities that address risk factors.
- Assist with the coordination and promotion of community-health based health promotion and wellness activities that may include: health screenings, counseling sessions, weight reduction programs and education sessions.
- Assist schools with a) assessing overweight youth to determine a baseline for the county; and, b) promoting obesity reduction measures.

#### 3. Tobacco Addiction

- <u>Impact Objective</u> -By the year 2012, reduce cigarette smoking in McLean County to no more than 15% among people aged 18 and older. (Healthy People 2010 target: 12%)
- <u>Impact Objective</u> By the year 2012, reduce the initiation of cigarette smoking by children and youth so that no more than 16% have become regular cigarette smokers by age 18. (Healthy People 2010 target)
- <u>Baseline</u>: 24.4% (1990), 26.8% (1997), 19.7% (2002), and 20.8% (2004) of adults in McLean County were smokers; 30% of 12<sup>th</sup> graders report smoking.

#### Intervention Strategies:

- Provide access to smoking prevention education and smoking cessation activities in area schools and within the community.
- Support the development of governmental, school, and community policies that help to establish and maintain smoke-free environments.
- Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.
- Promote anti-tobacco campaigns, such as "Great American Smoke Out," and "World No Tobacco Day."

#### 4. Hypertension

- <u>Impact Objective</u> -By the year 2012, increase to at least 50% the proportion of McLean County residents with hypertension whose blood pressure is under control. (Healthy People 2010 target)
- **<u>Baseline</u>**: 16.4% (1997) to 22.4% (2004) of people aged 18 and older in McLean County have been told that their blood pressure is high.

#### o Intervention strategies:

- Increase access to screenings and community health activities that address risk factors.
- Increase the communication of controllable risk factors.
- Increase community awareness of screenings for controllable risk factors.
- Establish a reliable means to assess hypertension status.

#### 5. Elevated Blood Cholesterol

- <u>Impact Objective</u>-By the year 2012, reduce to no more than 20% the prevalence of elevated blood cholesterol levels among adults in McLean County. (Healthy People 2010 target: 17%)
- <u>Baseline</u>: 29.9% (1997) and 28.8% (2004) of adults in McLean County reported being told their cholesterol was high.

#### o <u>Intervention strategies:</u>

 Assist with the coordination and promotion of community-health based health promotion and wellness activities that may include: health screenings, counseling sessions, weight reduction programs and education sessions.

#### 6. Excessive Alcohol Use

- <u>Impact Objective</u> By the year 2012, reduce the proportion of persons engaging in binge drinking of alcoholic beverages to no more than 6%; reduce the proportion of adults who exceed guidelines for low drinking to no more than 50% of males and females. (Healthy People target)
- **Baseline:** 20.3% are at risk for acute/binge drinking (2004), and 8.7% are at risk of chronic drinking (2004).

#### o Intervention strategies:

- Provide access to alcohol abuse prevention education and alcohol cessation activities in area schools and at community events.
- Support the development of governmental and school policies that help to establish and maintain alcohol-free environments for adolescents.

#### 7. Physical Inactivity/Sedentary Lifestyle

- <u>Impact Objective</u> By the year 2012, increase the proportion of persons to >35% who take part in moderate physical activity at least 5 times per week for 30 minutes each time. (Healthy People target: 30%)
- <u>Baseline:</u> 35% of adults take part in moderate physical activity for at least 5 times per week (2004).

#### o Intervention strategies:

- Promote free fitness activities.
- Promote public awareness of health hazards associated with obesity and promote positive policies and interventions in the community.

## **Community Health Improvement Strategies/Interventions**

- Provide health promotion opportunities through workplace wellness programs which promote weight reduction, regular exercise, a low fat diet, and use of the ADA nutrition guidelines.
- Health care providers will address risk factor patient education.
- Provide access to smoking prevention education and smoking cessation activities in area schools and within the community.
- Support the development of governmental school and community policies that help to establish and maintain smoke-free environments.
- Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.
- Increase access to screenings and community health activities that address risk factors.
- Assist with the coordination and promotion of community-based health promotion and wellness
  activities that may include: health screenings, counseling sessions, weight reduction programs,
  and education messages.
- Promote public awareness of the health hazards associated with obesity and promote positive policies and interventions in the community.
- Promote anti-tobacco campaigns, such as "Great American Smoke Out," and "World No Tobacco Day."
- Increase community awareness of screenings for risk factors.
- Promote free physical fitness activities.
- Promote awareness of and access to early interventions (such as AEDs, the American Red Cross'
  "Family and Friends CPR Anytime" training, and symptom identification) and wellness
  programs.
- Assist schools with a) assessing overweight youth to determine a baseline for the county; and, b) promoting obesity reduction measures.
- Provide access to alcohol abuse prevention education and alcohol cessation activities in area schools and at community events.
- Support the development of governmental and school policies that help to establish and maintain alcohol-free environments for adolescents.
- Establish a reliable means to assess hypertension status.

## **Community Health Plan Evaluation and Monitoring**

The Community Health Advisory Committee (CHAC) is responsible for the on-going monitoring and evaluation of the McLean County Community Health Plan (CHP) to assess the implementation and effectiveness of the CHP intervention strategies (process evaluation) and progress toward meeting impact and outcome objectives (outcome evaluation). A key goal of evaluation efforts for this CHP is the identification and subsequent promotion of effective interventions that lead to a reduction in risk factor levels in McLean County.

Once the CHP has been approved by the state of Illinois (anticipated by fall 2007), a CHP implementation task force will be formed and evaluation approaches and activities will be addressed. With multiple stakeholders and programs under development or all ready in place, an on-going challenge will be the ability to acquire and pool evaluation results from various sources:

- a) To establish county-level baselines (such as the number of screenings currently offered; the percent of the adult population receiving screenings) if none currently exist; and,
- b) To reach agreement on which intervention functions should be measured as well as how and when measurement will occur.

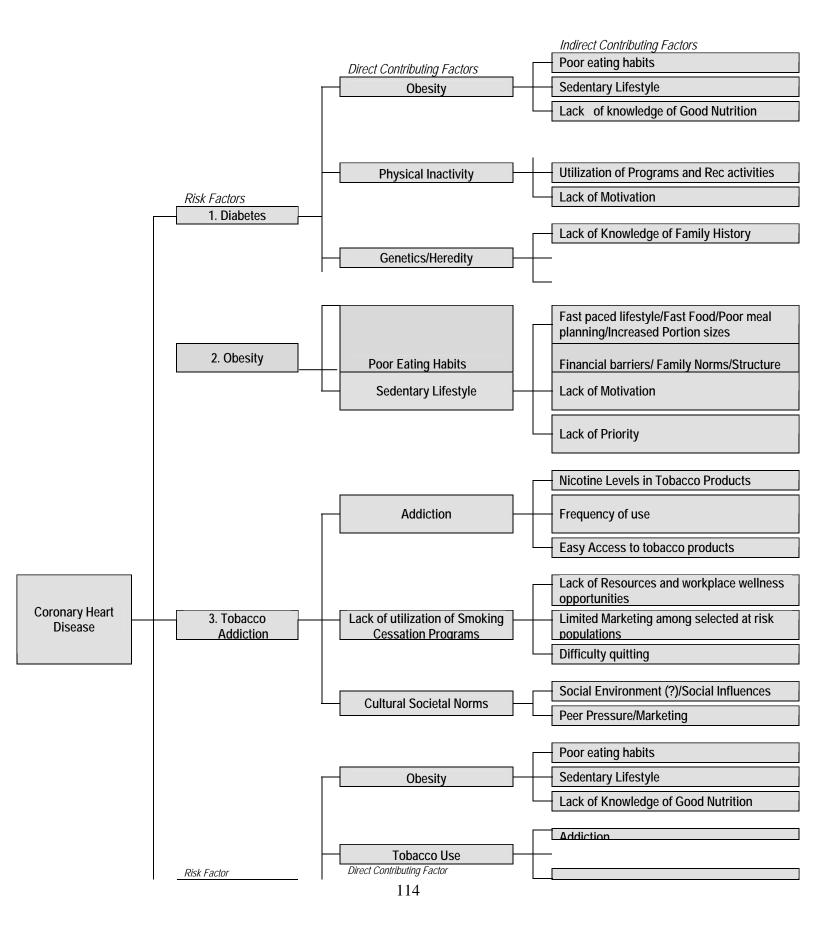
Agreement on a logic model-type evaluation measurement process may provide:

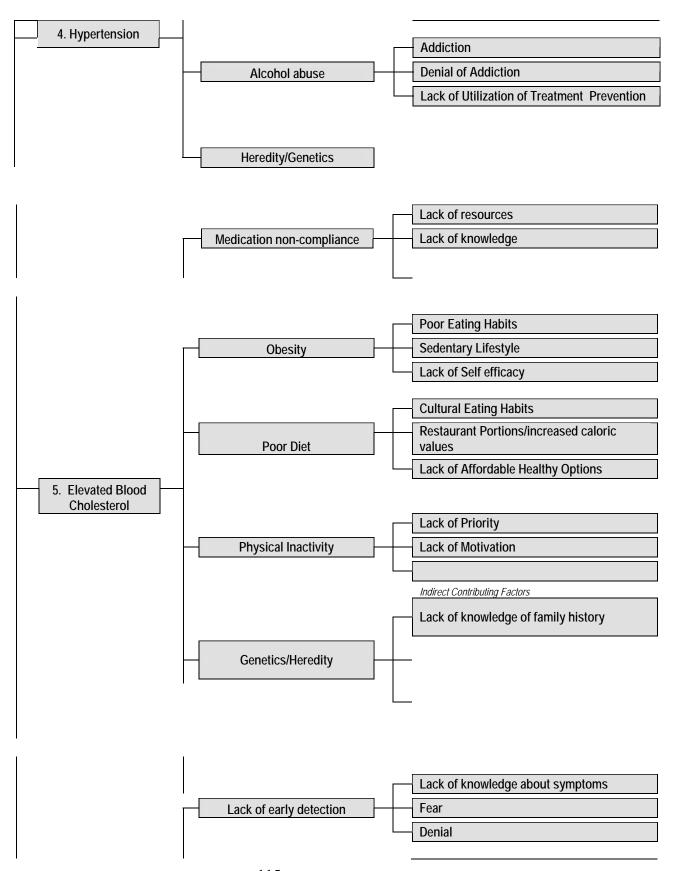
- 1) A clearer understanding between stakeholders regarding which entities are responsible for capturing data for the CHP evaluation process;
- 2) Improved consistency in the type of data collected and methods used for evaluation data collection; and,
- 3) A framework for cooperative sharing of evaluation results.

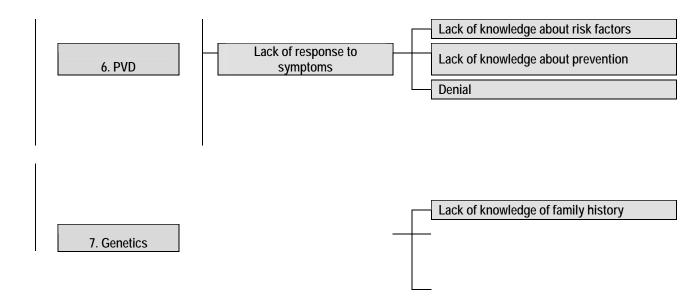
The Community Program Logic Model and its 12-Step Community Program Evaluation Measurement Planning Process (adapted from Measuring Program Outcome: A Practical Approach, United Way, 1996) is one approach that will be considered by the CHAC, which will determine if this process is acceptable as an evaluation measurement tool for selected indicators.

At a minimum, monitoring and evaluation will occur on an annual basis and will be discussed with CHAC and implementation task force members. Methods will entail written analysis of progress made toward meeting strategies articulated in the CHP. In addition, goal congruent community initiatives will be captured as part of the evaluation process. Throughout the five-year period, the CHAC will receive verbal updates of task force activities and progress at each CHAC meeting and McLean County Health Department IPLAN liaison staff will provide a mid-term progress report to the public.

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#### Health Problem Priority:

#### Cerebrovascular Disease

## **Healthy People 2010 Outcome Objective**

#### 12-7. Reduce stroke deaths.

Target: 50<sup>1</sup> deaths per 100,000 population.

**Baseline:** 62<sup>2</sup> deaths from stroke per 100,000 population occurred in 1999<sup>2</sup> (age adjusted to the year 2000 standard population).

Target setting method: 20 percent improvement.

Data source: National Vital Statistics System—Mortality (NVSS—M), CDC, NCHS.

- <sup>1</sup> Target revised from 48 because of baseline revision after November 2000 publication.
- <sup>2</sup> Baseline and baseline year revised from 60 and 1998 after November 2000 publication.

## **Description of the Health Problem**

The Centers for Disease Control and Prevention (CDC) has stated that chronic diseases, including heart disease, cancer, and cerebrovascular disease (stroke), are the leading causes of death in the United States. Each year, more than 1.7 million Americans die of a chronic disease, accounting for 7 out of every 10 deaths.

Cerebrovascular disease (CVD), the cause of stroke, ranks 3<sup>rd</sup> nationally, behind heart disease and cancer, as a leading cause of death. It accounts for more than 1 of every 15 deaths in the United States and is the leading cause of adult disability according to the National Stroke Association (NSA), and yet 80% of strokes are preventable. The American Heart Association (AHA) reports that each year 500,000 people in the U.S. experience a stroke for the first time; 200,000 will have a recurrent attack.

In McLean County during the 10 year period (1995-2004) of the most recent available data, CVD was the 3<sup>rd</sup> leading cause of death every year, except for 2002, and it accounted for 5.8%-8.2% of all deaths. In 2004, the most recent year for which local data is available, 6% (N=58) of McLean County deaths were due to cerebrovascular disease, resulting in a crude mortality rate (# deaths from CVD/total population, x 100,000) of 36.8/100,000 population. Between 1995 and 2004, the McLean County crude mortality rate for CVD has ranged from a high of 60.9/100,000 (1999) to a low of 36.8/100,000 (2004). There has not been a consistent decline or increase noted in the rate during this ten year period. The current mortality rate of 36.8 is well under the HP 2010 objective of 50 deaths/100,000; however, five of the last 10 years have produced a CVD crude mortality rate in excess of the HP 2010 goal, while the Illinois rate has decreased

from 63.5 (1995) to 50.9 (2004). During the health problem priority setting process, using the Hanlon Method, CVD ranked second out of the 8 problems identified.

When CVD mortality rates are compared at the national level, a disparity exists between whites and blacks. The U.S. mortality rates were 54.2 for white males compared to 81.7 for black males; and, 53.4 for white females and 71.8 for black females. In addition, the American Heart Association and National Stroke Association report that blacks have almost twice the risk of first-ever stroke compared to whites. In McLean County from 1995 to 2004, CVD has been responsible for 3%-14% of the deaths in blacks each year compared to 6%-9% in whites.

#### **Behavioral Risk Factors**

Reducing the potential for a first-ever stroke or stroke recurrence could be achieved in part by addressing some of the treatable diseases and lifestyle choices that place individuals at risk for cerebrovascular disease. The National Stroke Association promotes stroke and transient ischemic attack (TIA) risk reduction through: 1) surgery, 2) medical management, and 3) lifestyle modifications, such as controlling high blood pressure, hypertension, smoking, alcohol consumption, and weight. The NSA notes a Harvard University study which indicated that clot-caused stroke risk could be reduced by 30% by eating a healthy diet that included 5 daily servings of fruits and vegetables. The McLean County-specific Behavioral Risk Factor Survey (BRFS) data (1997, 2002, 2004) of adults reveals that McLean County does not meet the HP 2010 objectives in many of these lifestyle modification areas:

- 1) cigarette smoking:
  - McLean County BRFS: 20.8% of adults smoke (2004); 30% of 12<sup>th</sup> graders (2004 Youth Survey).
  - HP 2010 goal: no more than 12% of adults and 16% of children.
- 2) abnormal blood lipid levels:
  - McLean County BRFS: 28.8% have been told they have high cholesterol (2004).
  - HP 2010 goal: no more than 17% will have high cholesterol.
- 3) high blood pressure:
  - McLean County BRFS: 22.4% have been told they had high blood pressure (2004), and 77.2% said they were taking medications for high blood pressure (2002). The AHA estimates that, of those with hypertension, 34% are on medications and have it under control and 25% are on medications but do not have their hypertension under control.
  - HP 2010 goal: 50% of those with hypertension will have it under control.
- 4) diabetes:
  - McLean County BRFS: 3.6% have been told they were diabetic (2004).
  - HP 2010: (no comparable goal).

- 5) abdominal obesity:
  - McLean County BRFS: 35% are overweight (BMI between 25 and 29) and 20.7% are obese (BMI of 30 or over) (2004).
  - HP 2010: no more than 5% overweight and no more than 15% obese.
- 6) lack of physical activity: (Healthy People 2010 goal met)
  - McLean County BRFS: 35% take part in moderate physical activity at least 5 times per week for 30 minutes each time (2004).
  - HP 2010 goal: at least 30%
- 7) fruit and vegetable consumption:
  - McLean County BRFS: 15.3% (2002) to 20.9% (2004) report consuming 5 or more servings of fruits and vegetables every day.
  - HP 2010: increase the proportion of persons aged 2 years and older who consume at least 2 daily servings of fruit and who consume at least 3 servings of vegetables, with at least one-third being dark green or orange vegetables.
- 8) alcohol over-consumption:
  - McLean County BRFS: 20.3% are at risk for acute/binge drinking (2004), and 8.7% are at risk of chronic drinking (2004).
  - HP 2010: reduce the proportion of persons engaging in binge drinking of alcoholic beverages to no more than 6%; reduce the proportion of adults who exceed guidelines for low risk drinking to no more than 50% of males and females.

This BRFS data indicates that McLean County residents will continue to be at risk for death and disability from the effects of cerebrovascular disease if lifestyle modifications are not implemented soon and consistently over time.

## **Rationale for Choice as a Health Priority**

Although the current cerebrovascular disease crude mortality rate of 36.8/100,000 (2004) is below the HP 2010 goal of 50/100,000, the rate has only fallen below it five times in the past 10 years. In addition, the data from the Behavioral Risk Factor Surveys of McLean County in 1997, 2002, and 2004 indicate that many of the Healthy People 2010 goals which address the risk factors for CVD remain unmet, suggesting that the county population will continue to be at great risk for CVD unless significant changes are made in health behavior over the next five years to lower the risk for developing CVD or experiencing a recurrence of stroke. These factors contributed to CVD achieving a priority ranking of 2 during the health problem priority setting process using the Hanlon Method for prioritizing the county's top eight health problems. CVD achieved a Hanlon priority score of 175 (heart disease score = 210; cancer score = 168). This health problem also has research supporting health improvements with risk factor reduction: eliminating tobacco use, controlling hypertension and cholesterol levels, and maintaining a healthy weight all significantly reduce the risk of cerebrovascular disease; therefore, addressing the modifiable risk factors for CVD will assist with preventing further disability and death.

## **Interventions to Address the Health Problem Priority**

The strategies developed by the Community Health Advisory Committee (CHAC) to reduce death and disability due to cerebrovascular disease include activities in the following areas:

- 1. Increase access to screenings and community health activities that address risk factors.
- 2. Assist with the coordination and promotion of community-based health promotion and wellness activities that may include: health screenings, counseling sessions, weight reduction programs and education messages.
- 3. Health care providers will address risk factor patient education.
- 4. Provide access to smoking prevention education and smoking cessation activities in area schools and within the community.
- 5. Support the development of governmental, school and community policies that help to establish and maintain smoke-free environments.
- 6. Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.
- 7. Promote anti-tobacco campaigns, such as "Great American Smoke Out" and "World No Tobacco Day".
- 8. Increase community awareness of controllable risk factors (such as diabetes).
- 9. Increase community awareness of screenings for risk factors, including diabetes.
- 10. Promote free fitness activities.
- 11. Promote public awareness of the health hazards associated with obesity and promote positive policies and interventions in the community.
- 12. Provide access to alcohol abuse prevention education and alcohol cessation activities in area schools and at community events.
- 13. Support the development of governmental and school policies that help to establish and maintain alcohol-free environments for adolescents.

## **Community Resources to Implement Interventions**

Implementation plans from previous community health plans for McLean County included the establishment of task forces in each of the three health priority areas to implement the intervention strategies. Each task force consisted of many community representatives which met frequently throughout the community health plan period. Implementation of the current community health plan for 2007-2012 will build on the partnerships and networks that have been previously established and will add additional members to strengthen the implementation effort and further improve coordination of activities. A complete list of community stakeholders is included in this document.

## **Barriers to Achieving Health Improvements**

Multiple barriers exist that will hinder efforts to reduce the incidence and prevalence of cerebrovascular disease. Key areas include: socioeconomic factors, cultural norms, individual and family practices, limited access to resources, and a lack of personal funds to finance lifestyle

changes, medications, or screening costs. In addition, the community health plan intervention strategies require time and effort from staff and volunteers from various organizations throughout McLean County who have other obligations and priorities to address.

## **Funding for Implementing Interventions**

After approval of the community health plan, the implementation task force(s) will further address funding options. Federal, state, and local resources will be pursued. Organizations may provide in-kind assistance and many of the intervention strategies fall within the mission of stakeholder agencies. It is anticipated that some grant funding may be made available during the 5-year community health plan period in the areas of obesity reduction, diabetes, and smoking cessation. Should funding become available, the Community Health Advisory Committee will discuss opportunities and encourage stakeholders to pursue funding.

## **Evaluation and Monitoring Plan**

The Community Health Advisory Committee (CHAC) is responsible for the on-going monitoring and evaluation of the McLean County Community Health Plan (CHP) to assess the implementation and effectiveness of the CHP intervention strategies (process evaluation) and progress toward meeting impact and outcome objectives (outcome evaluation). A key goal of evaluation efforts for this CHP is the identification and subsequent promotion of effective interventions that lead to a reduction in risk factor levels in McLean County.

Once the CHP has been approved by the state of Illinois (anticipated by fall 2007), a CHP implementation task force will be formed and evaluation approaches and activities will be addressed. With multiple stakeholders and programs under development or all ready in place, an on-going challenge will be the ability to acquire and pool evaluation results from various sources:

- a) To establish county-level baselines (such as the number of screenings currently offered; the percent of the adult population receiving screenings) if none currently exist; and,
- b) To reach agreement on which intervention functions should be measured as well as how and when measurement will occur.

Agreement on a logic model-type evaluation measurement process may provide:

- 1) A clearer understanding between stakeholders regarding which entities are responsible for capturing data for the CHP evaluation process;
- 2) Improved consistency in the type of data collected and methods used for evaluation data collection; and,
- 3) A framework for cooperative sharing of evaluation results.

The Community Program Logic Model and its 12-Step Community Program Evaluation Measurement Planning Process (adapted from Measuring Program Outcome: A Practical Approach, United Way, 1996) is one approach that will be considered by the CHAC, which will determine if this process is acceptable as an evaluation measurement tool for selected indicators.

At a minimum, monitoring and evaluation will occur on an annual basis and will be discussed with CHAC and implementation task force members. Methods will entail written analysis of progress made toward meeting strategies articulated in the CHP. In addition, goal congruent community initiatives will be captured as part of the evaluation process. Throughout the five-year period, the CHAC will receive verbal updates of task force activities and progress at each CHAC meeting and McLean County Health Department IPLAN liaison staff will provide a midterm progress report to the public.

The process of evaluation measurement will assist the CHAC with assessing whether CHP interventions are creating a positive impact in the community and if improvements or modifications are needed. Through evaluation, accountability is increased and a stronger commitment to improving the health of McLean County citizens will be communicated to its residents.

## Health Priority Summary Worksheet: Cerebrovascular Disease

The following pages contain the McLean County Community Health Plan summary worksheet for cerebrovascular disease, based on modifications of APEX-PH templates. The worksheet contains: a description of the health problem; list of risk factors and direct and indirect contributing factors; barriers to improvements; community stakeholders; community health improvement outcome goals and impact objectives; community health plan strategies/interventions linked to the goals and objectives; and, community health plan evaluation considerations. Following the worksheet is a chart linking direct and indirect contributing factors to risk factors for this health problem.

## Health Priority Summary Worksheet

# Cerebrovascular Disease (Stroke)

## **Description of Health Problem**

- Cerebrovascular Disease is the second leading cause of mortality in McLean County and is amenable to prevention methods.
- The Hanlon Method for investigation of health problems ranked cerebrovascular disease as McLean County's #2 health problem with a Hanlon assessment score of 175.
- During the Hanlon Method prioritization process, cerebrovascular disease scored a 9 on a tenitem scale assessing the seriousness of this health concern.
- In 2004, McLean County's crude mortality rate from Cerebrovascular Disease was 36.8/100,000 compared to the Illinois crude mortality rate of 50.9/100,000.
- BRFS data indicates that many McLean County residents will face disability and death as a
  result of Cerebrovascular Disease if lifestyle modifications are not made. This is indicated by
  recent BRFS data.
- BRFS data (3 surveys: 1997, 2002, 2004):
  - o 28.8% (2004) of McLean County adults reported being told their cholesterol was high compared to the 29.4% of Illinois residents that report the same.
  - o In 2004, the number of people in McLean County that were told their blood pressure was high increased to 22.4% from 16.4% in 1997.
  - o The percentage of McLean County residents reporting that they are diabetic in 2004 is 3.6% compared to 6.1% of Illinois residents that report the same.
  - o 20.8% of McLean County adults report being a smoker compared to 22.2% of Illinois residents that report the same.
  - o 22.4% of McLean County residents were told they had High Blood Pressure compared to 25.9% of Illinois residents that were told the same.
  - Obesity in McLean County has increased from 15.4% (2002) to 20.7% (2004).
  - o The most common legal substance abused in McLean county is alcohol. Estimates in 2000 indicate that 10,077 use alcohol heavily.
  - o 20.8% (1997) adults aged 21 and older reported binge drinking; 6.1% (1997) report chronic drinking.
  - 25.3% (2002) and 20.3% (2004) of McLean County adults (aged 18 and older) are at risk of acute/binge drinking.
     8.7% (2002) of McLean County adults (aged 18 and over) are at risk of chronic drinking.

#### **Risk Factors**

- 1. Elevated Blood Cholesterol
- 2. Genetics/Heredity
- 3. Tobacco use/Exposure
- 4. Hypertension

- 5. Diabetes
- 6. Excessive Alcohol Intake
- 7. Peripheral Vascular Disease (PVD)
- 8. Atrial Fibrillation
- 9. Tobacco Use/Addiction

## **Contributing Factors**

#### **<u>Direct Contributing Factors Among Identified Risk Factors:</u>**

#### 1. Elevated Blood Cholesterol

- Obesity
- Poor diet
- Physical inactivity

## 2. Genetics/Heredity

• Family history

#### 3. Tobacco Addiction

- Addiction
- Poor utilization of smoking cessation programs
- Cultural/Societal norms

#### 4. Hypertension

- Obesity
- Medication noncompliance
- Tobacco use
- Alcohol abuse
- Heredity/Genetics

#### 5. Diabetes

- Obesity
- Genetics/Heredity
- Physical inactivity

#### 6. Excessive Alcohol Intake

- Cultural and Societal Norms
- Addiction
- Delay access to emergency services

## 7. Peripheral Vascular Disease (PVD)

- Delayed access to medical services
- Lack of awareness of symptoms
- Limited access to regular medical care

#### 8. Atrial Fibrillation

- Genetics/Heredity
- Unknown factors

#### 9. Excessive Alcohol Intake

- Addiction
- Cultural and societal norms

#### **Indirect Contributing Factors Among Identified Risk Factors**:

#### 1. Elevated Blood Cholesterol

- Poor Eating habits
- Sedentary lifestyle
- Lack of self-efficacy
- Cultural eating habits
- Large restaurant portions
- Increased caloric values
- Lack of affordable healthy options
- Lack of priority
- Lack of motivation
- Lack of knowledge of family history
- Lack of resources
- Lack of knowledge

#### 2. Genetics/Heredity

Lack of knowledge of family history

#### 3. Tobacco Addiction

- Lack of resources and workplace wellness opportunities
- Limited marketing among selected at risk populations
- Difficulty quitting
- Social environment
- Social influences
- Peer pressure/marketing

#### 4. Hypertension

- Lack of resources
- Lack of knowledge
- Poor eating habits
- Sedentary lifestyle
- Lack of knowledge of good nutrition
- Addiction
- Denial of Addiction
- Lack of utilization of prevention methods/programs
- Lack of knowledge of family history

#### 5. Diabetes

- Obesity
- Physical inactivity
- Genetics/Heredity

#### 6. Excessive Alcohol Intake

- Financial barriers to treatment
- Advertising targeted at youth and minorities
- Social environment
- Frequency of use

• Lack of utilization of treatment services

#### **7. PVD**

- Poor access to regular medical care
- Economic factors
- Denial

#### 8. Atrial Fibrillation

- Poor access to regular medical care
- Economic factors
- Denial
- Lack of awareness

#### 9. Excessive Alcohol Intake

- Financial barriers to treatment
- Advertising targeted at youth and minorities
- Social environment
- Frequency of use
- Lack of utilization of treatment services

\* For more specific details on direct and indirect contributing factors for the various Risk Factors refer to Cerebrovascular chart.

#### **Barriers**

- Socioeconomic Factors
- Cultural norms
- Poor Self-efficacy
- Limited access to resources
- Demographics

## **Community Stakeholders**

- AARP
- Area Agency on Aging)
- Best Practices in Employee Wellness group
- Carle Clinic
- Diabetes educators
- Diabetes support groups
- Emergency room managers and staff
- Healthy Cells magazine
- McLean County Extension Office
- McLean County Neurology
- Media partners
- Neurologists

- Neuroscience Foundation
- RSVP: Retired Senior Volunteer Program
- Senior citizen groups
- Show Bus (and Peace Meals sites)
- Stroke support groups

## **Community Health Improvement Outcome Goal**

• By the year 2012, reduce Cerebrovascular Disease deaths in McLean County to no more than 50/100,000 (Healthy People 2010 target).

## **Community Health Improvement Impact Objectives**

#### 1. Elevated Blood Cholesterol

- <u>Impact Objective</u> By the year 2012, reduce to no more than 20% the prevalence of elevated blood cholesterol levels among adults in McLean County.
- <u>Baseline</u>: 29.9% (1997) and 28.8% (2004) of adults in McLean County reported being told their cholesterol was high.

#### o Intervention strategies:

 Assist with the coordination and promotion of community-health based health promotion and wellness activities that may include: health screenings, counseling sessions, weight reduction programs and education sessions.

#### 2. Tobacco use/Exposure

- <u>Impact Objective</u> -By the year 2012, reduce cigarette smoking in McLean County to no more than 15% among people aged 18 and older.
- <u>Impact Objective</u> By the year 2012, reduce the initiation of cigarette smoking by children and youth so that no more than 16% have become regular cigarette smokers by age 18.
- <u>Baseline</u>: 24.4% (1990), 26.8% (1997), 19.7% (2002), and 20.8% (2004) of adults in McLean County were smokers.

#### o Intervention Strategies:

- Provide access to smoking prevention education and smoking cessation activities in area schools and within the community.
- Support the development of governmental, school, and community policies that help to establish and maintain smoke-free environments.
- Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.
- Promote anti-tobacco campaigns, such as "Great American Smoke Out," and "World No Tobacco Day."

#### 3. Hypertension

• <u>Impact Objective</u> -By the year 2012, increase to at least 50% the proportion of McLean County residents with hypertension whose blood pressure is under control.

• **<u>Baseline</u>**: 16.4% (1997) to 22.4% (2004) of people aged 18 and older in McLean County who have been told that their blood pressure is high.

#### o <u>Intervention strategies</u>:

- Increase access to screenings and community health activities that address risk factors.
- Increase community awareness of screenings for risk factors.
- Increase community awareness of controllable risk factors.

#### 4. Diabetes

- <u>Impact Objective</u> -By the year 2012, reduce diabetes to an incidence of no more than 2.5/1,000 people and a prevalence of no more than 25/1,000 people; reduce diabetes-related deaths to no more than 34/100,000 people.
- <u>Baseline</u>: 6.7% (1990), 3.6%(1997), 3.3% (2002), and 3.6% (2004) of McLean County residents report themselves as diabetic.

#### o Intervention strategies:

- Increase community awareness of controllable risk factors.
- Increase number of screenings for diabetes.

#### 5. Excessive Alcohol Intake

- <u>Impact Objective</u> -By the year 2012, reduce the proportion of persons engaging in binge drinking of alcoholic beverages to no more than 6%; reduce the proportion of adults who exceed guidelines for low risk drinking to no more than 50% of males and females.
- <u>Baseline</u>: 20.8% (1997) adults aged 21 and older reported binge drinking; 6.1% (1997) report chronic drinking. 25.3% (2002) and 20.3% (2004) of McLean County adults (aged 18 and older) are at risk of acute/binge drinking. 8.7% (2002) of McLean County adults (aged 18 and over) are at risk of chronic drinking.

#### Intervention strategies:

- Provide access to alcohol abuse prevention education and alcohol cessation activities in area schools and at community youth events.
- Support the development of governmental and school policies that help to establish and maintain alcohol-free environments for adolescents.
- Investigate social marketing campaigns and approaches to decrease alcohol intake in the community.
- Promote community awareness of the link between excessive alcohol consumption and disease.

#### 6. Tobacco Addiction

- <u>Impact Objective</u> -By the year 2012, reduce cigarette smoking in McLean County to no more than 15% among people aged 18 and older. (Healthy People 2010 target: 12%)
- <u>Impact Objective</u> By the year 2012, reduce the initiation of cigarette smoking by children and youth so that no more than 16% have become regular cigarette smokers by age 18. (Healthy People 2010 target)
- <u>Baseline</u>: 24.4% (1990), 26.8% (1997), 19.7% (2002), and 20.8% (2004) of adults in McLean County were smokers; 30% of 12<sup>th</sup> graders report smoking.

#### o <u>Intervention Strategies:</u>

- Provide access to smoking prevention education and smoking cessation activities in area schools and within the community.
- Support the development of governmental, school, and community policies that help to establish and maintain smoke-free environments.
- Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.
- Promote anti-tobacco campaigns, such as "Great American Smoke Out," and "World No Tobacco Day."

#### 7. Physical Inactivity/Sedentary Lifestyle

- <u>Impact Objective</u> By the year 2012, increase the proportion of persons to >35% who take part in moderate physical activity at least 5 times per week for 30 minutes each time. (Healthy People target: 30%)
- <u>Baseline:</u> 35% of adults take part in moderate physical activity for at least 5 times per week (2004).

#### o Intervention strategies:

- Promote free fitness activities.
- Promote public awareness of health hazards associated with obesity and promote positive policies and interventions in the community.
- Provide access to alcohol abuse prevention education and alcohol cessation activities in area schools and at community events.
- Support the development of governmental and school policies that help to establish and maintain alcohol-free environments for adolescents.

## **Community Health Improvement Strategies/Interventions**

- Increase access to screenings and community health activities that address risk factors.
- Assist with the coordination and promotion of community-based health promotion and wellness
  activities that may include: health screenings, counseling sessions, weight reduction programs,
  and education messages.
- Health care providers will address risk factor patient education.
- Provide access to smoking prevention education and smoking cessation activities in area schools and within the community.
- Support the development of governmental school and community policies that help to establish and maintain smoke-free environments.
- Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.
- Promote public awareness of the health hazards associated with obesity and promote positive policies and interventions on the community.
- Promote anti-tobacco campaigns, such as "Great American Smoke Out" and "World No Tobacco Day."

- Increase community awareness of controllable risk factors (such as diabetes).
- Increase community awareness of screenings for risk factors, including diabetes.
- Promote free physical fitness activities.
- Provide access to alcohol abuse prevention education and alcohol cessation activities in area schools and at community events.
- Support the development of governmental and school policies that help to establish and maintain alcohol-free environments for adolescents.

## **Community Health Plan Evaluation and Monitoring**

The Community Health Advisory Committee (CHAC) is responsible for the on-going monitoring and evaluation of the McLean County Community Health Plan (CHP) to assess the implementation and effectiveness of the CHP intervention strategies (process evaluation) and progress toward meeting impact and outcome objectives (outcome evaluation). A key goal of evaluation efforts for this CHP is the identification and subsequent promotion of effective interventions that lead to a reduction in risk factor levels in McLean County.

Once the CHP has been approved by the state of Illinois (anticipated by fall 2007), a CHP implementation task force will be formed and evaluation approaches and activities will be addressed. With multiple stakeholders and programs under development or all ready in place, an on-going challenge will be the ability to acquire and pool evaluation results from various sources:

- a) To establish county-level baselines (such as the number of screenings currently offered; the percent of the adult population receiving screenings) if none currently exist; and,
- b) To reach agreement on which intervention functions should be measured as well as how and when measurement will occur.

Agreement on a logic model-type evaluation measurement process may provide:

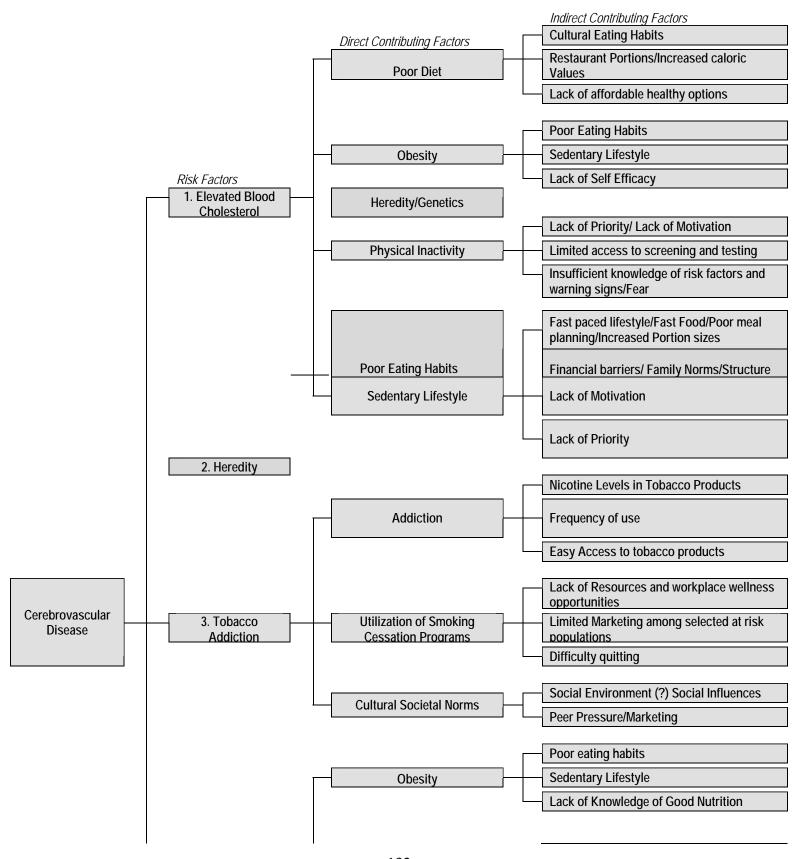
- 1) A clearer understanding between stakeholders regarding which entities are responsible for capturing data for the CHP evaluation process;
- 2) Improved consistency in the type of data collected and methods used for evaluation data collection; and,
- 3) A framework for cooperative sharing of evaluation results.

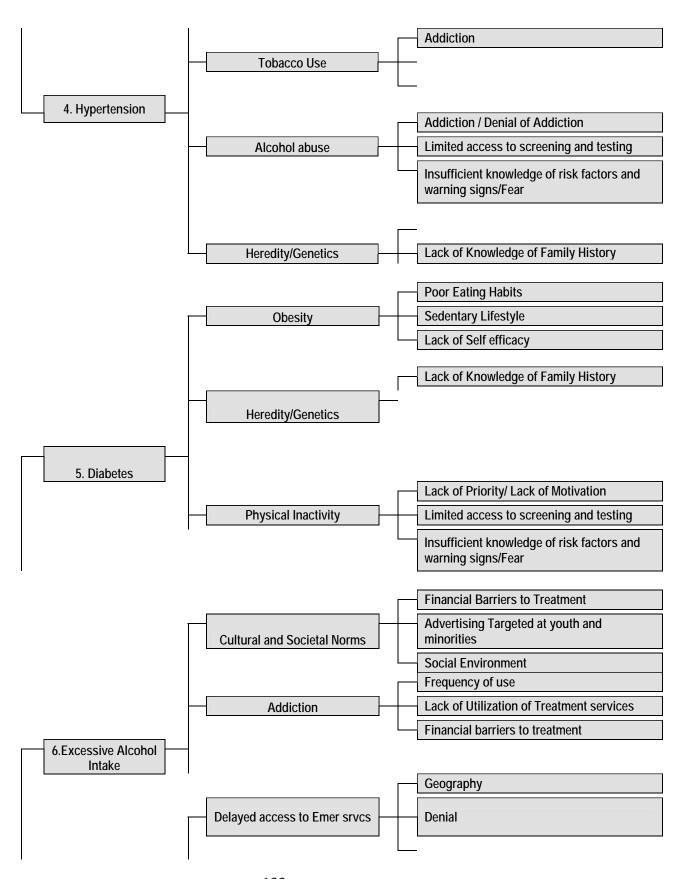
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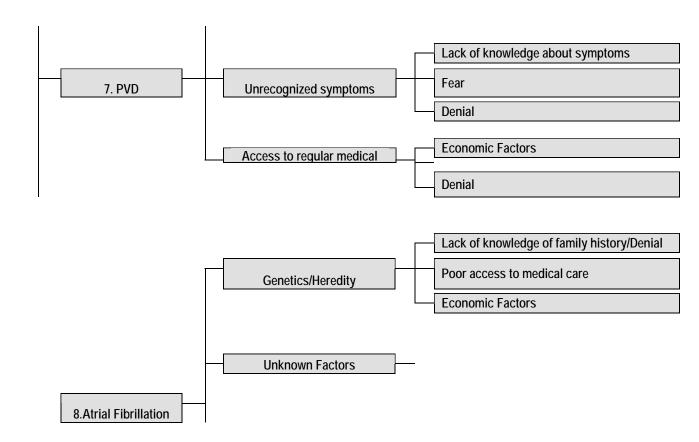
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toward meeting strategies articulated in the CHP. In addition, goal congruent community initiatives will be captured as part of the evaluation process. Throughout the five-year period, the CHAC will receive verbal updates of task force activities and progress at each CHAC meeting and McLean County Health Department IPLAN liaison staff will provide a mid-term progress report to the public.

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## Health Problem Priority: Cancer

## **Healthy People 2010 Outcome Objective**

#### Reduce the overall cancer death rate.

**Target:** 158.6<sup>1</sup> deaths per 100,000 population.

Baseline: 200.8<sup>2</sup> cancer deaths per 100,000 population occurred in 1999<sup>2</sup> (age

adjusted to the year 2000 standard population).

Target setting method: 21 percent improvement.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

<sup>1</sup> Target revised from 159.9 because of baseline revision after November 2000 publication.

## **Description of the Health Problem**

The Centers for Disease Control and Prevention (CDC) as clearly stated that chronic diseases, including heart disease, cancer, and cerebrovascular disease (stroke), are the leading causes of death in the United States. Each year, more than 1.7 million Americans die of a chronic disease, accounting for 7 out of every 10 deaths.

Malignant neoplasms (cancer) are responsible for one out of every four deaths in the United States and are the second leading cause of death nationwide. As 1.4 million new cases are diagnosed each year, with over 60,000 of these in Illinois, the American Cancer Society and the CDC report that over 560,000 Americans will die of cancer, more than 1,500 people per day. On an annual basis, Illinois estimates that there are 24,840 cancer deaths in the state each year (23%-24% of all deaths). Cancer is the second or third leading cause of death in both Illinois and McLean County.

In the last 10 year period of available data for McLean County (1995-2004), cancer was responsible for 22%-24% of all deaths, and ranked 1<sup>st</sup> in Years of Potential Life Lost (YPLL) for 7 of the 10 years. In 2004, the most recent year for which local data is available, 22% of McLean County deaths were due to malignant neoplasms, resulting in a crude mortality rate (# deaths from cancer/total population, x 100,000) of 138.74/100,000 population, a rate below the HP 2010 goal of 158.6/100,000. For 4 years (2001-2004), cancer was *the* leading cause of death among blacks in McLean County, accounting for 26%-31% of deaths.

<sup>&</sup>lt;sup>2</sup> Baseline and baseline year revised from 202.4 and 1998 after November 2000 publication.

Lung cancer: The crude mortality rate for lung cancer in McLean County ranged from 50.2 to 36.6 per 100,000 in the nine-year period from 1996 – 2004. Although this is below the state rate (54.2-58.4), it exceeded the HP 2010 objective of 44.9 for several years. Age-adjusted incidence rates vary greatly between men and women. For women, the rate was 50.9/100,000 for the 5-year period of 1998-2002; for men, the rate was 82.5/100,000. Both rates are lower than the state rates in each category. Healthy People 2010 objective: Reduce the lung cancer death rate to no more than 44.9 deaths per 100,000.

*Breast cancer:* The most recent breast cancer crude mortality rate (2002) for McLean County is 25.7/100,000, which is above the Healthy People 2010 goal of 22.3/100,000.

Colorectal cancer: The crude mortality rate ranged from 10.8 to 19.2/100,000 in McLean County between 1996 and 2004, compared to 19.8-23.4/100,000 in Illinois. Between 1990, when the rate was 31/100,000, and 2004, the McLean County rate remained above the HP 2010 goal of 13.9 with the exception of only two years (2003 and 2004).

Childhood cancers: The rate of 154.8/1,000,000 for the most recent 5-year average (1998-2002) is above both the state (143.4) and U.S. (150) rate. There is no Healthy People 2010 objective for this data category.

Other cancers include cervical, skin and prostate cancer. For most years, these two cancers caused too few deaths per year to calculate a rate.

#### **Behavioral Risk Factors**

The CDC states that it is possible to reduce the number of new cancer cases, and thereby decreasing cancer-related disability and deaths. Many risk factors for cancer have been identified and many are modifiable: cigarette smoking, high fat/low fiber diet, obesity, low daily fruit and vegetable consumption, alcohol over-consumption, lack of early detection and environmental exposures (such as sunlight, radon, and second-hand smoke). Making positive behavior changes and adopting a healthier lifestyle may significantly reduce cancer risk. The McLean County-specific Behavioral Risk Factor Survey (BRFS) data (1997, 2002, 2004) of adults reveals that McLean County does not meet the Healthy People 2010 objectives in many of these lifestyle modification areas:

- 1) cigarette smoking:
  - McLean County BRFS: 20.8% of adults smoke (2004); 30% of 12<sup>th</sup> graders (2004 Youth Survey).
  - HP 2010 goal: no more than 12% of adults and 16% of children.
- 2) abdominal obesity:
  - McLean County BRFS: 35% are overweight (BMI between 25 and 29) and 20.7% are obese (BMI of 30 and over) (2004).
  - HP 2010: no more than 5% overweight and no more than 15% obese.

- 3) lack of physical activity: (Healthy People goal met)
  - McLean County BRFS: 35% take part in moderate physical activity at least 5 times per week for 30 minutes each time (2004).
  - HP 2010 goal: at least 30%
- 4) fruit and vegetable consumption:
  - McLean County BRFS: 15.3% (2002) to 20.9% (2004) report consuming 5 or more servings of fruits and vegetables every day.
  - HP 2010: increase the proportion of persons aged 2 years and older who consume at least 2 daily servings of fruit and who consume at least 3 servings of vegetables, with at least one-third being dark green or orange vegetables.
- 5) lack of early detection:
  - McLean County BRFS: 59.9% of adults (age 50 and over) report ever having had a sigmoidoscopy or colonoscopy (2004); the proportion of women reporting that they had ever received a pap test decreased from 96.1% (1997) to 90.2% (2004); 53.8% of men never perform a testicular self-exam; the proportion of women reporting that they had received a mammogram after age 40 increased from 88.9% (1997) to 95.2% (2004).
  - HP 2010: (Healthy People 2010 does not have extensive screening objectives. The mammogram objective is: increase the proportion of women aged 40 and older who have received a mammogram within the preceding 2 years to no less than 70%).
- 6) alcohol over-consumption:
  - McLean County BRFS: 20.3% are at risk for acute/binge drinking (2004), and 8.7% are at risk of chronic drinking (2004).
  - HP 2010: reduce the proportion of persons engaging in binge drinking of alcoholic beverages to no more than 6%; reduce the proportion of adults who exceed guidelines for low risk drinking to no more than 50% of males and females.

This BRFS data indicates that McLean County residents will continue to be at risk for death and disability from the effects of cancer if lifestyle modifications are not implemented soon and consistently over time.

## **Rationale for Choice as a Health Priority**

Cancer continues to be the second or third leading cause of death in McLean County, responsible for 22%-24% of deaths each year, and it ranked 1<sup>st</sup> in Years of Potential Life Lost (YPLL) for 7 out of the last 10 years of available data. During the health problem priority setting process, using the Hanlon Method, cancer ranked third out of the 8 problems identified and achieved a score of 168 (heart disease score = 210; cerebrovascular disease score = 175). In addition, the data from the Behavioral Risk Factor Surveys of McLean County in 1997, 2002, and 2004 indicate that many of the Healthy People 2010 goals which address the risk factors for cancer

remain unmet, suggesting that the county population will continue to be at great risk for the development of disability and death due to cancer unless significant changes are made in health behavior over the next five years to lower cancer risk. Many of the cancer risk factors are modifiable, and addressing these in the community will contribute to a healthier McLean County.

## **Interventions to Address the Health Problem Priority**

The strategies developed by the Community Health Advisory Committee (CHAC) to reduce death and disability due to cancer include activities in the following areas:

- 1. Provide health promotion opportunities through workplace wellness programs which promote weight reduction, regular exercise, a low-fat diet, and use of the ADA nutrition guidelines.
- 2. Increase community awareness of risk factors.
- 3. Increase community awareness of screenings for risk factors.
- 4. Increase access to screenings and community health activities that address risk factors.
- 5. Promote free fitness activities.
- 6. Assist with the coordination and promotion of community-based health promotion and wellness activities that may include: health screenings, counseling sessions, weight reduction programs and education messages.
- 7. Health care providers will address risk factor patient education.
- 8. Provide access to smoking prevention education and smoking cessation activities in area schools and within the community.
- 9. Support the development of governmental, school and community policies that help to establish and maintain smoke-free environments.
- 10. Promote public awareness of the health hazards associated with obesity and promote positive policies and interventions on the community.
- 11. Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.
- 12. Promote anti-tobacco campaigns, such as "Great American Smoke Out", and "World No Tobacco Day".
- 13. Provide access to alcohol abuse prevention education and alcohol cessation activities in area schools and at community events.
- 14. Support the development of governmental and school policies that help to establish and maintain alcohol-free environments for adolescents.
- 15. Use social marketing techniques to promote early detection and prevention of cancer.
- 16. Participate with the Community Cancer Center to facilitate periodic cancer screenings.
- 17. Work with public and private grant programs to assure access to screenings and treatments.
- 18. Work with health care providers to promote age-appropriate screenings.
- 19. Promote awareness of environmental hazards.
- 20. Promote awareness of the need to know an individual's family cancer history.

## **Community Resources to Implement Interventions**

Implementation plans from previous community health plans for McLean County included the establishment of task forces in each of the health priority areas to implement the intervention strategies. Each task force consisted of many community representatives which met frequently throughout the community health plan period. Implementation of the current plan for 2007-2012 will build on the partnerships and networks that have been previously established and will add additional members to strengthen the implementation effort and further improve coordination of activities. A complete list of community stakeholders is included in this document.

## **Barriers to Achieving Health Improvements**

Multiple barriers exist that will hinder efforts to reduce the incidence and prevalence of all types of cancer. Key areas include: socioeconomic factors, cultural norms, individual and family practices, limited access to resources, and a lack of personal funds to finance lifestyle changes, medications, or screening costs. In addition, the community health plan intervention strategies require time and effort from staff and volunteers from various organizations throughout McLean County who have other obligations and priorities to address.

## **Funding for Implementing Interventions**

After approval of the community health plan, the implementation task force(s) will further address funding options. Federal, state, and local resources will be pursued. Organizations may provide in-kind assistance and many of the intervention strategies fall within the mission of stakeholder agencies. It is anticipated that some grant funding may be made available during the 5-year community health plan period in the areas of breast, colon and lung cancer, obesity reduction, and smoking cessation. Should funding become available, the Community Health Advisory Committee will discuss opportunities and encourage pursuit of funding by stakeholders.

## **Evaluation and Monitoring Plan**

The Community Health Advisory Committee (CHAC) is responsible for the on-going monitoring and evaluation of the McLean County Community Health Plan (CHP) to assess the implementation and effectiveness of the CHP intervention strategies (process evaluation) and progress toward meeting impact and outcome objectives (outcome evaluation). A key goal of evaluation efforts for this CHP is the identification and subsequent promotion of effective interventions that lead to a reduction in risk factor levels in McLean County.

Once the CHP has been approved by the state of Illinois (anticipated by fall 2007), a CHP implementation task force will be formed and evaluation approaches and activities will be addressed. With multiple stakeholders and programs under development or all ready in place, an on-going challenge will be the ability to acquire and pool evaluation results from various sources:

- a) To establish county-level baselines (such as the number of screenings currently offered; the percent of the adult population receiving screenings) if none currently exist; and,
- b) To reach agreement on which intervention functions should be measured as well as how and when measurement will occur.

Agreement on a logic model-type evaluation measurement process may provide:

- 1) A clearer understanding between stakeholders regarding which entities are responsible for capturing data for the CHP evaluation process;
- 2) Improved consistency in the type of data collected and methods used for evaluation data collection; and,
- 3) A framework for cooperative sharing of evaluation results.

The Community Program Logic Model and its 12-Step Community Program Evaluation Measurement Planning Process (adapted from Measuring Program Outcome: A Practical Approach, United Way, 1996) is one approach that will be considered by the CHAC, which will determine if this process is acceptable as an evaluation measurement tool for selected indicators.

At a minimum, monitoring and evaluation will occur on an annual basis and will be discussed with CHAC and implementation task force members. Methods will entail written analysis of progress made toward meeting strategies articulated in the CHP. In addition, goal congruent community initiatives will be captured as part of the evaluation process. Throughout the five-year period, the CHAC will receive verbal updates of task force activities and progress at each CHAC meeting and McLean County Health Department IPLAN liaison staff will provide a midterm progress report to the public.

The process of evaluation measurement will assist the CHAC with assessing whether CHP interventions are creating a positive impact in the community and if improvements or modifications are needed. Through evaluation, accountability is increased and a stronger commitment to improving the health of McLean County citizens will be communicated to its residents.

## **Health Priority Summary Worksheet: Cancer**

The following pages contain the McLean County Community Health Plan summary worksheet for cancer, based on modifications of APEX-PH templates. The worksheet contains: a description of the health problem; list of risk factors and direct and indirect contributing factors; barriers to improvements; community stakeholders; community health improvement outcome goals and impact objectives; community health plan strategies/interventions linked to the goals and objectives; and, community health plan evaluation considerations. Following the worksheet is a chart linking direct and indirect contributing factors to risk factors for this health problem.

## Health Priority Summary Worksheet

Cancer

(Includes: Breast, Lung, Colorectal, Cervical, and Prostate Cancer)

#### **Description of the Health Problem**

- Cancer is the third leading cause of death in McLean County and is amenable to prevention methods.
- The Hanlon method for investigation of health problems ranked Cancer as McLean County's #3 health problem, with a priority score of 168.
- During the Hanlon prioritization process, cancer scored a 10 on a ten-item scale assessing the seriousness of this health concern.

#### • Breast Cancer

- The crude mortality rate for breast cancer in McLean County in 2000 was 25.7/100,000. The state of Illinois reported a crude mortality during that time frame of 32.2/100,000.
- o The breast cancer age-adjusted incidence rate between 1998 and 2002 was 136.1/100,000 (463 cases) in McLean County. The state of Illinois reported an incidence of 132.9.
- O The breast cancer incidence rate in McLean County between 1990 and 2003 was 140.3/100,000 (486 cases). The male breast cancer incidence rate was 1.4/100,000 (3 cases) during the same time frame.
- O The percent of breast cancer cases diagnosed as in situ breast cancer (female) in McLean County from 1998 to 2002 was 18.0% (96 cases) compared to 18.3% in Illinois.

#### Lung Cancer

o The crude mortality rate for lung cancer ranged from 50.2 to 36.6 per 100,000 in McLean County in the 9 year period from 1996 to 2004. The state crude mortality rate ranged from 54.2 to 58.4 per 100,000 in the same time frame.

#### • Colorectal Cancer

 The colorectal cancer crude mortality rate ranged from 10.8 to 19.2 per 100,000 in McLean County between 1996 and 2004. The rate for Illinois was 19.8 to 23.4 per 100,000.

#### • Cervical Cancer

- o The cervical cancer incidence rate in McLean County was 7.6% (26 cases) between 1999 and 2003.
- o The percent diagnosed as late stage cervical cancer in McLean County from 1998 to 2002 was 22.7% (5 cases) compared to 44.0% in Illinois.

#### • Prostate Cancer

o The prostate cancer incidence rate for McLean County males from 1999 to 2003 was 172.5 (419 cases).

o The number of prostate deaths in McLean County ranged from 4 to 15 per year from 1996 - 2000. In 2000, a rate of 13.7 deaths per 100,000 was calculated. The Illinois rate was 23.1 per 100,000.

#### • BRFS data (3 surveys: 1997, 2002, 2004):

- o The percent of smokers in McLean County decreased from 26.8% in 1997 to 20.8% in 2004. The lowest smoking rate (19.7%) was noted in the BRFS of 2002.
- o The percent of women reporting that they had ever received a pap test decreased from 96.1% in 1997 to 90.2% in 2004.
- o 51% 53% of adult McLean County men never perform a testicular self exam (TSE).
- Obesity in McLean County has increased from 15.4% (2002) to 20.7% (2004).
- o The most common legal substance abused in McLean county is alcohol. Estimates in 2000 indicate that 10,077 use alcohol heavily.
- o 20.8% (1997) adults aged 21 and older reported binge drinking; 6.1% (1997) report chronic drinking.
- o 25.3% (2002) and 20.3% (2004) of McLean County adults (aged 18 and older) are at risk of acute/binge drinking. 8.7% (2002) of McLean County adults (aged 18 and over) are at risk of chronic drinking.

#### **Risk Factors**

1. Obesity

2. Heredity/Genetics

3. High Fat/Low Fiber Diet

4. Tobacco Exposure

**5. Excessive Alcohol Intake** 

6. Environmental Exposure

7. Pre-Cancerous Cell Changes

## **Contributing Factors**

#### **Direct Contributing Factors Among Identified Risk Factors:**

#### 1. Obesity

- Insufficient Exercise/Sedentary Lifestyle
- Poor eating habits
- Lack of understanding of good nutrition

#### 2. Genetics/Heredity

• Family history

#### 3. High Fat/Low Fiber Diet

- Lack of understanding of good nutrition
- Cultural eating patterns

#### 4. Tobacco use/Exposure

- Physical addiction
- Lack of utilization of smoking cessation programs
- Cultural/Societal norms

#### 5. Excessive alcohol intake

Cultural and Societal norms

Addiction

#### 6. Environmental Exposure

- Radon exposure
- Occupational exposure to toxic substances
- Secondhand smoke

#### 7. Pre-Cancerous Cell Changes

- Human Papilloma Virus
- Poor utilization of testing and screening services
- Lack of early detection

#### **Indirect Contributing Factors Among Identified Risk Factors:**

#### 1. Obesity

- Lack of utilization of exercise/recreation programs for selected populations
- Societal norms
- Financial barriers
- Fast paced lifestyle
- Fast food
- Poor meal planning
- Increased portion sizes

#### 2. Genetics/Heredity

• Lack of knowledge of family history

#### 3. High Fat/Low Fiber Diet

- Lack of utilization of resources for education
- Lack of culturally sensitive education/prevention services

#### 4. Tobacco use/Exposure

- Nicotine levels in tobacco products
- Frequency of use
- Easy access to tobacco products
- Geography/Transportation
- Lack of resources and workplace wellness opportunities
- Difficulty quitting
- Smoke free policies in workplace and local ordinances
- Peer Pressure/Marketing
- Family smoking habits
- Social Environment/Influences

#### 5. Excessive alcohol intake

- Financial barriers to treatment
- Advertising targeted at youth and minority populations
- Social Environment/Influences

#### 6. Environmental Exposure

- Lack of awareness of risk
- Limited access to testing

- Cultural barriers
- Lack of worksite education/Safety training
- Workplace policy limitations
- Insufficient smoke-free policies
- Development/Enforcement of smoke free policies; local ordinances
- Lack of workplace wellness opportunities

#### 7. Pre-Cancerous Cell Changes

- Lack of knowledge about risk factors and early warning signs.
- Fear/Denial
- Cultural barriers
- Financial barriers
- Distrust of healthcare services

#### **Barriers**

- Socioeconomic Factors
- Cultural norms
- Poor Self-efficacy
- Limited access to resources
- Demographics

## **Community Stakeholders**

- American Cancer Society
- American Lung Association
- Best Practices in Employee Wellness group
- Cancer Center (Nurse Navigator Program; Tumor Board)
- Dermatologists
- Fox and Hounds (wig bank)
- Gastroenterologists (Digestive Disease Consultants at BroMenn)
- Hospice (BroMenn and OSF St. Joseph)
- McLean County Extension Office
- McLean County Health Department (Health Education and Wellness programs)
- Media partners
- Oncologists (2 groups and the colon/rectal specialist at Carle Clinic)
- Peders Orthotics
- Planned Parenthood (Komen grant for breast models)
- Plastic Surgeons
- Radon Task Force
- Support groups

<sup>\*</sup> For more specific details on direct and indirect contributing factors for the various Risk Factors refer to Cancer chart.

## **Community Health Improvement Outcome Goals**

- By the year 2012, reduce the breast cancer death rate in McLean County to no more than 22.3 deaths per 100,000.
- By the year 2012, reduce the lung cancer death rate to no more than 44.9 deaths per 100,000 population.
- By the year 2012, reduce the colorectal cancer death rate to no more than 13.0 deaths per 100,000.
- By the year 2012, reduce the death rate from cancer of the uterine cervix to no more than 2.0 deaths per 100,000 females.
- By the year 2012, reduce the prostate cancer death rate to no more than 28.8 deaths per 100,000 males.

## **Community Health Improvement Impact Objectives**

#### 1. Obesity

- <u>Impact Objective</u> -By the year 2012, reduce the proportion of children/adolescents in McLean County who are overweight to no more than 20%.
- <u>Impact Objective</u> -By the year 2012, reduce the proportion of adults in McLean County who are obese to no more than 15%.
- <u>Impact Objective</u> -By the year 2012, increase the proportion of adults in McLean County who are at a healthy weight to 60%.
- <u>Baseline</u>: 15.4% (2002) and 20.7% (2004) of adults in McLean County were obese. 37.9% (2002) and 35% (2004) of adults in McLean County were overweight.

#### o Intervention Strategies:

- Promote free physical fitness activities.
- Promote public awareness of the health hazards associated with obesity and promote positive policies and interventions in the community.
- Provide health promotion opportunities through workplace wellness programs which promote weight reduction, regular exercise, a low-fat diet, and use of the ADA nutrition guidelines.
- Increase access to screenings and community health activities that address risk factors.
- Assist with the coordination and promotion of community-health based health promotion and wellness activities that may include: health screenings, counseling sessions, weight reduction programs and education sessions.

#### 2. High Fat/ Low Fiber Diet

• <u>Impact Objective</u> - By the year 2012, reduce dietary fat intake to an average of 30% of calories among people aged 2 and older. In addition, increase to at least 50% the proportion of people aged 2 and older who meet the Dietary guidelines' average daily goal of less than 10% of

- calories from saturated fat. (Healthy People 2010 target)
- <u>Impact Objective</u> By the year 2010, increase the proportion of persons aged 2 years and older who consume at least 2 daily servings of fruit and who consume at least 3 servings of vegetables, with at least one-third being dark green or orange vegetables. (Healthy People 2010 target)
- **Baseline**: 79.1% (2002) of adults reported eating fewer than five servings of fruits and vegetables per day. 75.8% (1997) of adults report eating less calories and fat; 42.3% (1997) report eating 3-5 servings of vegetables per day.

#### o **Intervention Strategies:**

- Provide health promotion opportunities through workplace wellness programs which promote weight reduction, regular exercise, a low-fat diet, and use of the ADA nutrition guidelines.
- Assist with the coordination and promotion of community-health based health promotion and wellness activities that may include: health screenings, counseling sessions, weight reduction programs and education sessions.

#### 3.Tobacco Use/Exposure

- <u>Impact Objective</u> -By the year 2012, reduce cigarette smoking in McLean County to no more than 15% among people aged 18 and older.
- <u>Impact Objective</u> By the year 2012, reduce the initiation of cigarette smoking by children and youth so that no more than 16% have become regular cigarette smokers by age 18.
- <u>Baseline</u>: 24.4% (1990), 26.8% (1997), 19.7% (2002), and 20.8% (2004) of adults in McLean County were smokers.

#### o <u>Intervention Strategies:</u>

- Provide access to smoking prevention education and smoking cessation activities in area schools and within the community
- Support the development of governmental, school, and community policies that help to establish and maintain smoke-free environments
- Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.
- Promote anti-tobacco campaigns, such as "Great American Smoke-Out," and "World No Tobacco Day."

#### 4. Excessive Alcohol Intake

- <u>Impact Objective</u> By the year 2012, reduce the proportion of persons engaging in binge drinking of alcoholic beverages to no more than 6%; reduce the proportion of adults who exceed guidelines for low risk drinking to no more than 50% of males and females.
- **Baseline**: 20.8% (1997) adults aged 21 and older reported binge drinking; 6.1% (1997) report chronic drinking. 25.3% (2002) and 20.3% (2004) of McLean County adults (aged 18 and older) are at risk of acute/binge drinking. 8.7% (2002) of McLean County adults (aged 18 and over) are at risk of chronic drinking.

#### o Intervention strategies:

Provide access to alcohol abuse prevention education and alcohol cessation activities in area schools and at community youth events.

- Support the development of governmental and school policies that help to establish and maintain alcohol-free environments for adolescents.
- Investigate social marketing campaigns and approaches to decrease alcohol intake in the community.
- Promote community awareness of the link between excessive alcohol consumption and disease.

#### 5. Environmental Exposure

- <u>Impact Objective</u>: By the year 2012, increase to at least 60% the proportion of people of all ages who limit sun exposure, use sunscreen and protective clothing when exposed to sunlight and avoid artificial sources of ultraviolet light.
- <u>Impact Objective</u>: By the year 2012, increase the number of individuals gaining access to screenings and early intervention services.
- **Baseline**: None available.

#### o **Intervention strategies**:

- Increase community awareness of screenings for risk factors.
- Increase access to screenings and community health activities and address risk factors
- Use social marketing techniques to promote early detection and prevention of cancer.
- Participate with the Community Cancer Center to facilitate periodic cancer screenings.
- Work with public and private grant programs to assure access to screenings and treatments.
- Promote awareness of environmental hazards.
- Promote awareness of the need to know an individual's family cancer history.

## **Community Health Improvement Strategies/Interventions**

- Provide health promotion opportunities through workplace wellness programs which promote weight reduction, regular exercise, a low-fat diet, and use of the ADA nutrition guidelines.
- Increase access to screenings and community health activities that address risk factors.
- Assist with the coordination and promotion of community-based health promotion and wellness
  activities that may include: health screenings, counseling sessions, weight reduction programs,
  and education messages.
- Health care providers will address risk factor patient education.
- Provide access to smoking prevention education and smoking cessation activities in area schools and within the community.
- Support the development of governmental school and community policies that help to establish and maintain smoke-free environments.
- Promote public awareness of the health hazards of second-hand smoke by promoting legislative action to create clean indoor air policies for all public places.

- Promote public awareness of the health hazards associated with obesity and promote positive policies and interventions on the community.
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- Increase community awareness of screenings for risk factors.
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## **Community Health Plan Evaluation and Monitoring**

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Once the CHP has been approved by the state of Illinois (anticipated by fall 2007), a CHP implementation task force will be formed and evaluation approaches and activities will be addressed. With multiple stakeholders and programs under development or all ready in place, an on-going challenge will be the ability to acquire and pool evaluation results from various sources:

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The process of evaluation measurement will assist the CHAC with assessing whether CHP interventions are creating a positive impact in the community and if improvements or modifications are needed. Through evaluation, accountability is increased and a stronger commitment to improving the health of McLean County citizens will be communicated to its residents.

