PRIORITY HEALTH CONCERN

INCIDENCE OF CARDIOVASCULAR DISEASE

Knox County Community Health Improvement Plan
A Product of the Knox County Healthy Communities Project
2005-2006
According to the Centers for Disease Control and Prevention (CDC), heart disease and stroke, the principle components of cardiovascular disease, are the first and third leading causes of death in the United States, and accounts for nearly 40% of all deaths. Heart disease is a major cause of disability and a significant contributor to rising health care costs in the U.S. About 70 million, one-fourth of all Americans, have some form of heart disease, and are responsible for more than 6 million hospitalizations each year. In 2003, heart disease and stroke cost the United States an estimated $351 billion in health care expenses and lost productivity from death and disability.

**Coronary heart disease is the leading cause of death for Knox County residents.**

During 2002, the most recent data available, coronary heart disease was the leading cause of death for Knox County residents. It accounted for 198 of 798 deaths. When death rates are examined, Knox County reveals a much higher rate of death from cardiovascular disease than the state or the nation. For 2002, the Knox County crude death rate for heart disease was 360.5 per 100,000 population, higher than the Illinois and U.S. rates of 244.9 and 241.3 per 100,000 population consecutively. During 2004, heart failure and shock was one of the leading non-delivery related hospitalization reasons and represented $3.4 million in charges for local residents. Additionally, aside from developmental disabilities, circulatory system disorders constitute the most common reason for long-term care facility admission; it is the primary diagnosis for 14.1% of facility residents.

Healthy People 2010 calls for successfully reaching the goal of “improving cardiovascular health and quality of life through the prevention, detection, and treatment of risk factors; early identification and treatment of heart attacks and strokes; and prevention of recurrent cardiovascular events.”

**The Healthy People 2010 objectives for cardiovascular disease include:**

- A reduction in coronary heart disease deaths to 166 deaths per 100,000 population *(baseline: 208 coronary heart disease deaths per 100,000 population)*;
- A reduction in deaths from stroke to 48 deaths per 100,000 population *(baseline: 60 stroke deaths per 100,000 population)*;
- A reduction in the proportion of adults with high blood pressure to 16% of adults aged 20 years and older *(baseline: 28%)*;
- A reduction in the proportion of adults with high total blood cholesterol levels to 17% of adults aged 20 years and older *(baseline: 21%)*; and
- An increase in the proportion of adults, aged 18 years and older, who have had their blood cholesterol checked within the preceding 5 years to 80% *(baseline: 67%)*.

**RISK FACTORS**

Much of the burden related to heart disease is largely preventable and can be eliminated through the reduction of major risk factors. Medical data and research indicates that controlling high blood pressure and high blood cholesterol, as well as eliminating tobacco use, reduces an individual’s risk of developing heart disease.
High cholesterol is an important risk factor, which contributes to the development of cardiovascular disease in individuals. According to the 2004 Knox County Behavioral Risk Factor Survey data, 29.6% of respondents (3 in 10 Knox County adults) have high blood cholesterol levels, which is comparable to the State of Illinois level of 29.2%. Cholesterol build-up in the arteries is the most common cause of heart disease and stroke, often occurring so slowly that individuals may not even be aware of the risk. There is evidence, which supports that the lowering of cholesterol levels, particularly LDL, which is associated with the buildup of excess cholesterol on the walls of the arteries, reduces the risk of heart disease death among persons either with or without heart disease.

Lifestyle changes, which prevent or lower high blood cholesterol include:
✓ Eating a healthy diet;
✓ Increasing physical activity; and
✓ Reducing excess body weight.

Hypertension, or high blood pressure, is another risk factor, which contributes to the incidence of cardiovascular disease. High blood pressure increases the workload of the heart and blood vessels and if left untreated for long periods of time can cause the heart to enlarge and weaken possibly leading to heart disease, stroke, kidney problems, and even blindness. The Illinois Department of Public Health reports that about 50 million, or one in four, American adults are affected by hypertension. During 2005, $60 billion in health care costs in the U.S. were attributed to high blood pressure. Based on 2004 Knox County Behavioral Risk Factor Survey data, almost one-fourth (23.4%) of Knox County adults suffer from high blood pressure. At risk for developing hypertension are persons who are overweight, those with a family history of the disease, or who smoke. An average reduction of just 12-13 mm Hg in systolic blood pressure over four years of follow-up is associated with a 25% reduction in total cardiovascular disease deaths.

Lifestyle changes, which prevent and reduce high blood pressure include:
✓ Increasing aerobic physical activity;
✓ Maintaining a healthy body weight;
✓ Limiting alcohol consumption;
✓ Reducing salt and sodium intake; and
✓ Eating a healthy diet.

Tobacco use is another primary risk factor for cardiovascular disease; it is the single most preventable cause of death and disease. It causes approximately 440,000 premature deaths in the United States each year. According to the Illinois Department of Public Health, almost 18% of Illinois deaths are caused by smoking. Smoking leads to reduced blood flow in the arteries causing atherosclerosis, or hardening and narrowing of the arteries. The Centers for Disease Control and Prevention report that an individual is four times more likely to die from heart disease if they smoke. The risk of death from heart disease among smokers is increased by early initiation of smoking and long-term
exposure to smoking. Behavioral Risk Factor Survey (BRFS) data for 2004 indicates that 22.6% of Knox County residents smoke cigarettes, and 8.1% use smokeless tobacco. 56.7% of Knox County tobacco users began smoking prior 18 years of age.

Tobacco use is the single most preventable cause of death and disease causing almost 18% of all Illinois deaths.

Furthermore, exposure to environmental tobacco smoke (ETS) is a proven health hazard. ETS is a combination of smoke exhaled by the smoker and the smoke that comes from the burning end of a cigarette, cigar, or pipe. Nonsmokers exposed to environmental tobacco smoke (ETS) have been shown to have a 30% increase in the risk of cardiovascular disease than nonsmokers who are not exposed to ETS. It is estimated that 37,000 heart disease deaths per year are attributed to exposure to second hand smoke.

Direct & Indirect Contributing Factors

Other factors that directly or indirectly contribute to the incidence of cardiovascular disease include poor eating habits, heredity, obesity, and a sedentary lifestyle. 2004 BRFS self-reported data for Knox County indicates that 30.1% of adults reported that they are overweight, and 21.5% reported that they are obese. The same survey reveals that only 52.5% of Knox County residents believe that they “get enough exercise;” and only 31.7% indicate that they meet the moderate activity standard of exercising five times per week for at least thirty minutes.

Additionally, insufficient medical attention or medication, inadequate financial resources, and stress play major roles in the development of cardiovascular disease. Research indicates a direct relationship between an individual’s level of stress and the development of cardiovascular disease. Stress is caused by multiple factors, including a change of conditions in an individual’s life, family problems, and other socioeconomic concerns. Information obtained during the 2005/2006 Healthy Communities Project Household Survey indicates that six out of every ten residents have either a “moderate” amount or a “great deal” of stress in their life. Stress is also considered a risk factor as it may lead to or exacerbate cigarette smoking and overeating.

Community Health Improvement Goals

In order to reduce the mortality rate from cardiovascular disease among Knox County residents, the following community health improvement goals are proposed:

- By the year 2020, reduce the rate of deaths from cardiovascular disease in Knox County adults to no more than 245 per 100,000 population.

Baseline: (Knox County Community Analysis 2005: Centers for Disease Control and Prevention, National Center for Health Statistics)

Knox County cardiovascular disease crude death rate for 2002: 360.5 per 100,000 population. State of Illinois cardiovascular disease crude death rate for 2002: 244.9 per 100,000 population. United States cardiovascular disease crude death rate for 2002: 241.3 per 100,000 population.

Healthy People 2010: Reduce coronary heart disease deaths. Target: 166 deaths per 100,000 population; Baseline: 208 coronary heart disease deaths per 100,000 population in 1998.
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• By the year 2016, reduce the prevalence of cardiovascular disease in Knox County adults to no more than 360 per 100,000 population.

Baseline: (Knox County Community Analysis 2005: Illinois Hospital Association)
The number of Knox County hospitalizations for heart failure and shock during 2004 was 517 per 100,000 population. The number of State of Illinois hospitalizations for heart failure and shock during 2004 was 366 per 100,000 population.

Healthy People 2010: Reduce hospitalizations of older adults with congestive heart failure as the principle diagnosis. Target: Adults aged 65 to 74 years 6.5 per 100,000 population, adults aged 75-84 years 13.5 per 100,000 population, adults aged 85 years and older 26.5 per 100,000 population; Baseline: Adults aged 65 to 74 years 13.2 per 100,000 population, adults aged 75 -84 years 26.7 per 100,000 population, adults aged 85 years and older 52.7 per 100,000 population.

COMMUNITY HEALTH IMPROVEMENT OBJECTIVES

The Healthy Communities Citizens Workgroup and Project Partners have established the following community health improvement objectives in an effort to influence the community health improvement goals for cardiovascular disease.

• Reduce the proportion of Knox County adults with high total blood cholesterol levels to 25% or less by the year 2016.

Percentage of Knox County adults who self-reported in 2004 IBRFS that they have been told that they have high blood cholesterol 29.6%. Percentage of Illinois adults who self-reported in 2004 IBRFS that they have been told that they have high blood cholesterol 34.1%.

Healthy People 2010: Reduce the proportion of adults with high total blood cholesterol levels. Target: 17%; Baseline: 21% of adults aged 20 years and older had total blood cholesterol levels of 240 mg/dL or greater in 1988-1994.

• Reduce the proportion of Knox County adults with high blood pressure to 15% or less by the year 2016.

Percentage of Knox County adults who self-reported in 2004 IBRFS that they have been told that they have high blood pressure 23.4%. Percentage of Illinois adults who self-reported in 2004 IBRFS that they have been told that they have high blood pressure 25.9%.

Healthy People 2010: Reduce the proportion of adults with high blood pressure. Target: 16%; Baseline: 28% of adults aged 20 years and older had high blood pressure in 1988-1994.

• Reduce tobacco use by Knox County adults 2% by the year 2011; and 5% by the year 2016.

Percentage of Knox County adults who self-reported in 2004 IBRFS that they are a smoker 22.67%. Percentage of Knox County smokers and former smokers who self-reported in 2004 IBRFS that they smoke every day 35.1%; smoke some days 11.6%. Percentage of Illinois adults who self-reported in 2004 IBRFS that they are a smoker 23.6%.

Healthy People 2010: Reduce tobacco use by adults aged 18 years and older. Target: 12% - Cigarette Smoking; Baseline: 24% of adults aged 18 years and older reported that they smoked cigarettes in 1998.

- Reduce the proportion of Knox County non-smokers who are exposed to environmental tobacco smoke in indoor public places in Knox County 80% by the year 2011, and 100% by the year 2016; as is consistent with County and municipal regulations.

Baseline: (Healthy People 2010) 65% of nonsmokers aged 4 years and older had a serum cotinine level above 0.10 ng/mL in 1988-94.

Healthy People 2010: Reduce the proportion of nonsmokers exposed to environmental tobacco smoke. Target: 45%; Baseline: 65% of nonsmokers aged 4 years and older had a serum cotinine level above 0.10 ng/mL in 1988-94.

COMMUNITY HEALTH IMPROVEMENT STRATEGIES

In order to reduce the incidence of cardiovascular disease in Knox County intervention strategies have been developed to address malleable risk factors whose reduction will lead to a decrease in the occurrence of cardiovascular disease in the County.

Primary prevention of cardiovascular disease through lifestyle intervention programs which promote heart-healthy behaviors is a key strategy for reducing the prevalence of cardiovascular disease in Knox County. Intervention strategies intended to affect the occurrence of cardiovascular disease include:

- Chronic disease case management programs in collaboration with the physician offices to promote proper course of treatment.
- Community education and marketing plan which focuses chronic disease screening, management, and prevention.
- Collaborative community screening effort for Knox County residents to increase the number of Knox County adults who have their blood pressure and cholesterol checked as medically recommended.
- Provide healthy lifestyle choices education for Knox County adults and children that focuses on prevention and early screening of chronic disease.
- Collaborate with Knox County physicians to recommend and provide support in tobacco cessation for their patients.
- Provide community programming regarding the effects of tobacco use and second-hand smoke.
- Marketing programs to change public attitudes about tobacco use, and promote smoking cessation through the immediate and long-term benefits of cessation.
- Assure availability of tobacco cessation programs to Knox County residents.
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► Work with appropriate local governments to establish a ban which prohibits smoking in indoor public places for incorporated and unincorporated areas of Knox County.

IMPLEMENTATION & CORRECTIVE ACTIONS

The prevention and reduction of risk factors is the major strategy in lowering the occurrence of cardiovascular disease. Knox County public health system partners will collaborate to institute corrective actions promoting heart-healthy behaviors and implementing strategies to reduce the prevalence of cardiovascular disease in Knox County residents. Identified corrective actions intended to compliment developed intervention strategies to reduce cardiovascular disease include the following:

► Through the collaborative community screening effort, increase the number of Knox County adults who have had their blood pressure checked within the preceding two years, by a minimum of 10% by screening a minimum of 1000 adults, aged 30-65 years, a year for each of the next five years (2006 – 2011).

► Through the collaborative community screening effort, increase the number of Knox County adults who have had their blood cholesterol checked within the preceding five years, by a minimum of 10% by screening a minimum of 1000 adults, aged 30-65 years, a year for each of the next five years (2006 – 2011).

► Develop community comprehensive healthy lifestyle choices education for Knox County adults and children, which focused on prevention of chronic disease and early screening for chronic disease.

► Provide the comprehensive healthy lifestyle choices education to a minimum of 1000 individuals a year for each of the next five years (2006 – 2011).

► Initiate a chronic disease management programs in collaboration with the physician offices in order to keep patients diagnosed with diabetes, hypertension, and high cholesterol on a course of treatment.

► Provide chronic disease education which concentrates on screening result interpretation, the positive effects of a proper course of treatment, and management of chronic disease with healthy lifestyle changes, diet and exercise.

► Institute a chronic disease prevention marketing campaign which focuses on the positive effects of a proper course of treatment and management with healthy lifestyle changes, diet and exercise.

► Ensure availability of tobacco cessation programs, implementing a rural outreach tobacco cessation campaign for Knox County.

► Implement a “Successful Quitters” testimonial marketing campaign addressing individual concerns related to tobacco cessation.

► Establish a resource which provides support to Knox County physicians in recommending tobacco cessation to their patients.

► Comprehensive community programming providing education concerning the effects of tobacco use and second-hand smoke.

► Implement marketing efforts to alter public “acceptability” of tobacco use, and encourages smoking cessation through education of the immediate and long-term benefits of quitting smoking.
Investigate via the Tobacco Task Force of the Knox County Substance Abuse Prevention Coalition. The feasibility of adding a program that prepares youth to quit smoking, such as Alternative to Suspension, offered by the Health Department, as an option for Teen Court’s mandatory programming which may be required of youths who have been identified during preliminary interviews as tobacco users.

Investigate the expansion of programming that prepares youth to quit smoking, such as Alternative to Suspension, offered by the Health Department, to include youth who are caught in schools smoking or who are identified as smokers through other evaluations/screenings, such as those done by Bridgeway during a drug assessment.

The risk for cardiovascular disease reduces significantly for individuals who adopt healthy behaviors such as a healthy diet, exercise, and maintaining a proper weight. Education and marketing programming will not only focus on the importance of early screening and how screening results are interpreted; but, the proper prevention of chronic disease through healthy lifestyle choices. These health education and screening opportunities will be offered by area public health system agencies via on-site and outreach clinics, health fairs, worksites, as well as other venues.

Chronic disease management programs will operate collaboratively with local physician offices to encourage patients to maintain a course of treatment for their disease. Maintaining a proper course of treatment benefits the individual by affording them a higher quality of life, as well as reducing the occurrence of emergency care. These programs will include education pertaining to managing disease through the adoption of healthy lifestyle choices, teaching skills such as lowering blood pressure and blood cholesterol levels through diet and exercise, as well as the importance of taking prescribed medications correctly and visiting your physician regularly.

With regard to tobacco use, the Healthy Communities Project Citizens Workgroup strongly felt that any strategies to reduce tobacco use by Knox County residents should initially include the development of community programming which provides comprehensive education and marketing regarding the effects of tobacco use and second-hand smoke, as well as strong efforts to reduce public “acceptability” of tobacco use. The Group felt that these issues and their impact are the precursor to any individual making a permanent decision to quit using tobacco.

Smoking cessation immediately begins to reduce the risk of mortality from cardiovascular disease and heart attack. Therefore all efforts promoting smoking cessation will include intense marketing and education about the immediate and long-term benefits of quitting smoking. Knox County public health system partners, including the Health Department, area hospitals and other agencies, will continue to promote and offer smoking cessation through programs such as “Freedom from Smoking,” “NOT- Not on Tobacco,” and “Make Yours A Fresh Start Family.” During these programs, participants learn the skills necessary to eliminate their dependence and quit using tobacco. It is anticipated that, in order to be more successful, programming must be reviewed for effectiveness and revised to reflect population demographics and tobacco use trends. As part of these efforts, Citizens Workgroup members are proposing the implementation of a rural outreach smoking cessation campaign to remove certain barriers to care and provide individuals residing in rural
Knox County smoking cessation opportunities closer to their homes.

According to the National Heart, Lung, and Blood Institute, people who smoke are six times more likely to suffer a heart attack than nonsmokers. Additionally, smokers often suffer from a major coronary health concern at a younger age than nonsmokers.

Also of primary importance is the deterrence of tobacco use initiation. Subsequently, the continuing provision of tobacco education programs for Knox County youth such as “Smoke Free That’s Me,” the “Smoke-Free Home Pledge,” and “The Monster Cigarette which stress deterrence and the dangers of second-hand smoke, will continue to be provided on a regular basis. Additionally, the Knox County Health Department will continue to promote the Illinois Smoke-Free Restaurant Recognition program, which recognizes and supports local restaurants that chose to provide a smoke-free environment to their patrons by posting the names of these establishments on both the Knox County Health Department and Illinois Department of Public Health web-sites.

Another improvement strategy, the implementation of the “Successful Quitters” testimonial marketing campaign, would encourage tobacco cessation through publication of success stories which address personal individual concerns related to smoking cessation. Examples of such individual concerns would include weight gain, failure, smoking spouses, etc. These real life stories would be compiled from former smokers who reside in Knox County. Also, to garner additional support of smoking cessation efforts, educational materials and smoking cessation classes, would be made available to Knox County physicians in order to encourage them to educate patients regarding health concerns related to tobacco use and recommend to their patients that they quit.

It is estimated that 37,000 heart disease deaths each year are attributed to “passive smoking” or exposure to environmental tobacco smoke (ETS).

The Knox County Smokefree Indoor Air Coalition will be formed in cooperation with the Knox County Tobacco Coalition in order to advocate support for the adoption of a ban on smoking in indoor public places for incorporated and unincorporated areas of Knox County. This action would ban smoking in all public places in Knox County, thus reducing the exposure of Knox County residents to environmental tobacco smoke, a known risk factor for cardiovascular disease, and would be the foundation supporting any enduring tobacco use reduction effort in Knox County.

Finally, social marketing campaigns will be executed via print media, billboards, radio, television, and other venues. These campaigns will be designed to be all-encompassing and will promote healthy lifestyle choices, smoking deterrence and cessation, the dangers of environmental tobacco smoke, prevention of and early screening for chronic disease, as well as chronic disease management. All portions of the campaign will be an integral and ongoing component of programming designed to reduce the prevalence of cardiovascular disease in Knox County.

Barriers

Barriers to health care or health education and promotion play a significant role in addressing the prevalence of cardiovascular disease. Issues such as patient apathy, procrastination, denial of
risks, and an absence of a clear understanding of long-term benefits or consequences must be addressed through activities and programs to prevent heart disease. Additionally, other, more tangible barriers may include patient concerns regarding transportation, limited financial resources, or other access to primary and preventative health care concerns.

Lifestyle choices such as tobacco use, poor nutrition, and sedentary lifestyle present a different set of barriers to health care. These lifestyle choices inherently include internal barriers such as a lack of motivation or willingness to change the behavior, a lack of knowledge regarding negative consequences, a perceived or real lack of time or resources, and confronting accepted social norms, which may include public perceptions about lifestyle choices and/or the risks and benefits associated with those choices.

Finally, legal barriers specific to certain lifestyle choices, such as tobacco use, include concerns such as a lack of enforcement of existing regulations, and garnering community support in favor of clean air legislation. All of these different types of barriers must be taken into consideration when developing activities and programs to impact the incidence of cardiovascular disease in Knox County.

COMMUNITY RESOURCES

Promoting heart-healthy and stroke-free communities involves efforts from all sectors of the community. The following agencies and organizations will be encouraged to participate in the coordination and implementation of programs and activities to impact the incidence of cardiovascular disease in Knox County:

» Health Care Providers
» Physician Offices
» Knox County Health Department

» Schools
» Chamber of Commerce
» Faith Community
» YMCA
» American Heart Association
» Illinois Department of Public Health
» University of Illinois Extension
» Colleges
» Civic and Business Groups
» Labor Unions
» Human Service Organizations
» Clubs and Organizations
» Local Media Outlets
» Pharmacies

FUNDING

Funding for health educators, public health nurses, and administrative staff, as well as other expenditures such as travel reimbursement, health education materials, screening services and supplies, data collection, and advertising costs will be mandatory in the implementation of successful programming. Plausible sources of funding include grants to local agencies from the State of Illinois, the Federal Government, and other public or private entities, including some local resources.

Additionally, Knox County public health system partners will work collaboratively in providing support to complete identified health improvement strategies and corrective actions. Collaboration among these health care partners within the community is vital to ensuring the health and well-being of Knox County residents. Through this collaboration, public health system partners are able to provide service to a greater number of Knox County residents and avoid costly and inefficient duplication of services.
EVALUATION

Effective program evaluation plays an essential role in public health programming. It includes the development of clear plans, inclusive partnerships, and systematic feedback that allows learning and ongoing improvement to occur. Each program, as part of the Knox County Community Health Improvement Plan, must conduct routine, practical evaluations that provide information for management and stakeholders, and improve program effectiveness. Program evaluation data will be reviewed every six months by Health Department staff monitoring programs, and annually by key stakeholder groups.

A program is simplistic terminology used to describe the object of the evaluation, and can be any organized public health action. Within this Community Health Improvement Plan, evaluation will be routinely tied to all identified corrective actions which address priority health concerns. Emphasis will be placed on the evaluation processes being practical, ongoing, and involving key community stakeholders. It will be utilized to justify the value of a program; answering questions related to program “merit” or quality, “worth” or cost-effectiveness, and “significance” or importance.

Additionally, Citizens Workgroup members acknowledge that stakeholders will be involved in the Community Health Improvement Plan evaluations. When key stakeholders are not engaged in the evaluation process, an evaluation may not address important elements of a program’s goals, objectives, and strategies. Therefore, evaluation findings might be criticized or ignored. Program evaluation will include stakeholders who are involved in program operations, those served or affected by the program, and the primary users of the evaluation.

Each program evaluation outlined as part of this Plan will include a brief program description; including what the program is intended to accomplish. Key program stakeholders will be identified, as well as how and when data will be gathered and the program evaluated. Finally, each evaluation description will identify how often and with whom program evaluation results will be shared, as well as the means for distribution.

Program evaluation data and results will be maintained by Knox County Health Department staff and kept on file for public use. Any substantial changes to Programs identified by the Knox County Community Health Improvement Plan will be noted therein.

PROGRAM #1: Collaborative Community Chronic Disease County-Wide Screening Program to increase the number of Knox County adults who have their blood pressure and blood cholesterol checked appropriately.

PURPOSE

The purpose of this program is to institute habitual screening process behavior in individuals and their families, as well as ensuring that screening results are meaningful to individuals participating in the Program. Early screening will lead to early detection; thus, increasing the chances of management of chronic disease through healthy lifestyle choices and changes in behaviors. Also, an understanding of what screening results mean will lead to a better understanding by participants of how they can take control of their health and well-being.

Finally, the Program encourages collaboration among community public health system members to ensure that a greater number and
scope of individuals are being reached and that non-duplication of services is accomplished.

**KEY PROGRAM STAKEHOLDERS**

Screening providers and their staff who are involved in the Community Chronic Disease Screening Program, clients of the Program and their families, Knox County Health Department staff, and individuals and entities to whom the evaluation results will be provided.

**DATA**

Data will be collected through a confidential running tally of participants completed anonymously where applicable in accordance with HIPAA Privacy Standard provisions. The Community Health Improvement Plan strategy identifies an increase in the number of Knox County adults screened by 10% through screening a minimum of 1000 adults, aged 30-65 years, a year for each of the next five years (2006 – 2011). This ending result would be 5,000 new Knox County adults being screened for hypertension and high blood cholesterol by the end of the year 2011.

**PROGRAM EVALUATION**

The program will be successful if the number of Knox County adults screened, aged 30-65 years, increases each year for each of the next five years. Additionally, the length of Community Health Improvement Plan goals allows for measurement of repeat screenings according to accepted standards, as well as any medical provider recommendations.

Program accomplishments will also be measured against the successfulness of the collaborative relationships between Knox County Public Health System partners. A secondary purposes of this Program is to foster communication and working relationships.

Evaluation and collaboration data will also be utilized to justify the value of a program to the community, as well as its contribution to reducing the prevalence of cardiovascular disease in Knox County. Process evaluation questions which are related to the quality of the program, its cost-effectiveness, and importance to the community will all be examined by key stakeholders of the Program.

**RESULTS**

Program evaluation results will be shared and distributed with key community stakeholders by publishing tabulated results of this Collaborative Community Chronic Disease County-Wide Screening Program in the Knox County Health Department Annual Report.

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**PROGRAM #2: Healthy Choices and Lifestyles Health Education and Promotion Program to increase Knox County adults who receive public health education related to healthy lifestyle choices and prevention and management of chronic disease.**

**PURPOSE**

The purpose of this program is to expose individuals and their families to health education information concerning the importance of developing habitual healthy lifestyle choices which may prevent or delay the onset of chronic disease. Health education will be provided regarding early screening for chronic disease, what screening results mean, the management of disease through healthy lifestyle choices and changes in behaviors, and how individuals can take control of their overall health and well-being.

Another component of the Healthy Choices and Lifestyles Health Education and Promotion Program will be a social marketing campaign which focuses on primarily the same subject matter, prevention and early screening for chronic diseases, what screening results mean,
the positive effects of a proper course of treatment, and chronic disease management with healthy lifestyle changes, diet and exercise. However, health promotion will be accomplished through use of the media and marketing resources. Suggestions were made by Citizens Workgroup members to use members of the public health system and health care community, such as physicians, as public proponents of these measures.

Secondarily, the Healthy Choices and Lifestyles Health Education and Promotion Program encourages collaboration between community public health system members to ensure that a greater number and scope of individuals are being reached and that non-duplication of services is accomplished.

**KEY PROGRAM STAKEHOLDERS**

Program providers and their staff who are involved in the Healthy Choices and Lifestyles Health Education and Promotion Program, program recipients, community members and their families, Knox County Health Department staff, and individuals and entities to whom the evaluation results will be provided.

**DATA**

Health education data will be collected through a confidential tally of the number of Program recipients. The strategy contained in the Community Health Improvement Plan identifies the provision of comprehensive this education program to a minimum of 1000 individuals a year for each of the next five years (2006 – 2011). This would total an additional 5,000 individuals receiving Healthy Choices and Lifestyles Health Education by the year 2011.

Health promotion data will be qualitative data outlining activities completed and at times a running tally of recipient response. The Community Health Improvement Plan strategy does not identify a specific goal for this portion of the Program; however, these activities would be monitored and amended if necessary during regular Program evaluation.

**PROGRAM EVALUATION**

The program will be successful if comprehensive Healthy Choices and Lifestyles Health Education is provided to a minimum of 1000 individuals a year for each of the next five years (2006 – 2011); or an additional 5,000 individuals by the year 2011. Additionally, the length of Community Health Improvement Plan goals will allow for measurement of an increase in chronic disease screening and for conclusions to be drawn as to any relationship between the increase and the Healthy Choices and Lifestyles Health Education and Promotion Program.

Data will also be utilized to justify the value of a program to the community, as well as its contribution to reducing the prevalence of cardiovascular disease in Knox County. Process evaluation questions which are related to the quality of the program, its cost-effectiveness, and importance to the community will all be examined by key stakeholders of the Program.

**RESULTS**

Program evaluation results will be shared with and distributed to key community stakeholders through publication in the Knox County Health Department Annual Report.

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**PROGRAM #3: Chronic Disease Management Program** provided in cooperation with local physician’s offices with the intent of keeping patients diagnosed with chronic diseases, such as diabetes, hypertension, and high cholesterol on a course of treatment.
PURPOSE
The purpose of the program is to ensure that education and case management services are available to individuals diagnosed with chronic disease and their families.

The Chronic Disease Management Program will be offered cooperatively with local physician offices and will promote education and case management services which support the positive effects of maintaining a proper course of treatment; including proper medication when required, and encouraging disease management via healthy lifestyle choices; including, healthy diet and proper exercise.

Secondarily, the Program will involve active alliance between community public health system partners in order to ensure a greater number and broader scope of individuals are able to participate in case management programs and that non-duplication of services is accomplished.

KEY PROGRAM STAKEHOLDERS
Local physicians, program providers and their staff who are involved in the Chronic Disease Management Program, program recipients and their families, Knox County Health Department staff, and individuals and entities to whom the evaluation results will be provided.

DATA
Chronic Disease Management Program data will be collected confidentially by keeping a running tally of Program participants. Data collection will be completed anonymously when applicable in accordance with HIPAA Privacy Standard provisions. The Community Health Improvement Plan identifies changes in behavior as positive outcomes to this program, as such, participants will be monitored for these positive outcomes, and results recorded.

Community Health Improvement Plan strategies do not identify specific goals for this Program; however, these case management program activities will be monitored and amended if necessary during Program evaluation.

PROGRAM EVALUATION
The Chronic Disease Management Program will be deemed successful if program recipients realize the positive effects of maintaining a proper course of treatment, and take action to manage their disease through healthy lifestyle choices; including proper diet and exercise.

Program accomplishments will also be measured against the successfulness of the collaborative relationships amongst participating Knox County Public Health System partners. This secondary purpose of the Program will foster and expand communication and working relationships between System entities.

Collected statistics will also be utilized to justify the value of the program to recipients and the health care community, as well as its contribution to reducing the prevalence of cardiovascular disease in Knox County. Process evaluation questions related to the quality of the program, its cost-effectiveness, and importance to the community will additionally be examined during evaluation by key stakeholders.

RESULTS
Program evaluation results will be reviewed and provided annually to local physicians and other key community stakeholders by distributing results of the Chronic Disease Management Program in written format.
PROGRAM #4: Knox County Rural Tobacco Cessation Campaign will provide tobacco cessation programs in rural areas of Knox County, in an effort to remove barriers to care and ensure access to cessation programs for all County residents.

PURPOSE
The purpose of this program is to reduce tobacco use by Knox County residents through participation in tobacco cessation programming. The Rural Tobacco Cessation Campaign is intended to reduce or remove transportation barriers associated with the outlying areas of the County by offering rurally located smoking cessation classes.

KEY PROGRAM STAKEHOLDERS
Health care providers and their staff, program participants, community members, Knox County Health Department staff, and individuals and entities to which evaluation results are provided.

DATA
Rural Tobacco Cessation Campaign statistics will consist of the collection of confidential data about program participants, as well as a running tally of the number of participants and how many successfully complete the Program and those who remain tobacco-free. Additionally information collected will identify reasons behind an individual's decision to become tobacco-free, as well as any concerns which may have contributed to the success or failure of that individual becoming smoke-free.

The Community Health Improvement Plan identifies objectives calling for the reduction of tobacco use by Knox County adults 2% by the year 2011; and 5% by the year 2016, as well as reduction of the number of nonsmokers who are exposed to environmental tobacco smoke in indoor public places in Knox County. As such, data will be collected and examined pertinent to these goals, in addition to Program evaluation information.

PROGRAM EVALUATION
The Rural Tobacco Cessation Campaign will be considered successful if it accomplishes the identified goal of reducing transportation barriers for individuals seeking tobacco cessation programs who reside in outlying areas of Knox County resulting in an increase in the number of participants from these areas. Additionally, the length of Community Health Improvement Plan goals will allow for data collection to identify if rural classes have a positive impact on the overall number of residents who discontinue tobacco use.

Data collected will also be utilized to justify the value of a program to the rural community, the Knox County community as a whole, as well as its contribution to reducing the prevalence of cardiovascular disease in Knox County. Process evaluation questions related to the quality of the cessation program, its cost-effectiveness, and importance to the community will all be examined by key stakeholders in addition to the general numbers of participants.

RESULTS
Results will be shared with key community stakeholders through publication of evaluation findings specific to the Rural Tobacco Cessation Campaign. In addition, numeric participant tallies will be included in the Health Department Annual Report.

PROGRAM #5: “Tobacco Cessation: Successful Quitters” testimonial marketing campaign which will market tobacco cessation.
PURPOSE
The purpose of the Tobacco Cessation Successful Quitters testimonial marketing campaign is to encourage tobacco cessation by individuals through marketing efforts which address individual concerns related to tobacco cessation. The testimonial campaign would entail “success quitters” providing public statements, through various media outlets, both written and verbal, about how they quit using tobacco, what their personal concerns were when they quit using, and what tools they used to overcome those concerns.

The Citizens Workgroup strongly felt that current tobacco users would be inspired by these stories and relate to the common, but very personal, concerns and fears expressed by the “successful quitters.” The end result would be that these individuals would realize that these issues can be overcome.

The desired effect of this Program is primarily the reduction of tobacco use by individuals in Knox County; however, secondarily an increase in individuals who quit using tobacco may also have an affect on public opinion regarding tobacco use; subsequently, assisting legislative efforts to establish a ban prohibiting smoking in indoor public places for incorporated and unincorporated areas of Knox County.

KEY PROGRAM STAKEHOLDERS
Media resources, tobacco cessation program providers, community members and their families, Knox County Health Department staff, health care providers, and individuals and entities to whom the evaluation results will be provided.

DATA
Health promotion data is qualitative in nature and will include identifying activities for the “Successful Quitters” campaign which have been completed, and when available record of public response to the campaign. Additionally, information concerning motivation and exposure to media influence will be collected when participants enroll in tobacco cessation programs and can be used to identify any positive influence of the Campaign.

The Community Health Improvement Plan strategy does not identify a specific goal for this portion of the Program other than identifying objectives which call for the reduction of tobacco use by Knox County adults 2% by the year 2011; and 5% by the year 2016, as well as reduction of the number of nonsmokers who are exposed to environmental tobacco smoke in indoor public places in Knox County, as such, Program will be collected relevant to these goals.

PROGRAM EVALUATION
The program will be determined successful if it is determined that the Tobacco Cessation “Successful Quitters” testimonial marketing campaign has successfully influenced individuals to participate in tobacco cessation programs.

Public response will be used to justify the value of a program to the community, as well as its contribution to reducing the prevalence of cardiovascular disease in Knox County. Process evaluation questions which are related to the quality of the program, its cost-effectiveness, and importance to the community will all be examined by key stakeholders of the Program.

RESULTS
Program evaluation results will be reviewed by and distributed to key community stakeholders by publishing any evaluation results associated with the Tobacco Cessation “Successful Quitters” testimonial marketing campaign. Additional success stories may be published in the Knox County Health Department Annual Report if applicable.
PROGRAM #6: A Tobacco Cessation Proponent Program providing support to Knox County physicians in recommending tobacco cessation to their patients.

PURPOSE

The purpose of this program is to provide support to local physicians in recommending tobacco cessation to their patients. Assistance will be available in the form of up-to-date educational programs, written educational materials, and the availability of tobacco cessation programs.

The Tobacco Cessation Proponent Program will be offered to local physicians and their staff and will promote both the long-term and short-term positive health effects of tobacco cessation, particularly as it relates to cardiovascular health.

Finally, the Tobacco Cessation Proponent Program will encourage collaboration among public health system partners to ensure that a greater number and scope of individuals are being reached and that non-duplication of services is accomplished.

KEY PROGRAM STAKEHOLDERS

Physician offices which are involved in the Tobacco Cessation Proponent Program, tobacco cessation program providers and their staff, cessation program participants and their families, Knox County Health Department staff, and individuals and entities to whom the evaluation results will be provided.

DATA

Tobacco Cessation Proponent Program data will be collected and a running tally of Program recipients and physician usage maintained. Information recorded will include physician use of the program, including referrals and use of educational resources, the number of individuals referred by their physician, and the number of individuals completing tobacco cessation programming. These positive outcomes and results will be recorded in a confidential manner.

The Community Health Improvement Plan strategy does not identify a specific goal for this portion of the Program other than identifying objectives which call for the reduction of tobacco use by Knox County adults 2% by the year 2011; and 5% by the year 2016, as well as reduction of the number of nonsmokers who are exposed to environmental tobacco smoke in indoor public places in Knox County. As such, data will be collected and examined pertinent to these goals, in addition to Program evaluation information. Additionally, however, these education and promotion activities would be monitored and amended if necessary during regular Program evaluation.

PROGRAM EVALUATION

The Tobacco Cessation Proponent Program will be determined successful if the number of individuals completing tobacco cessation programs increase, the number of referrals from physician offices increase, as do the numbers of individuals who remain smoke-free.

Program accomplishments will also be measured against the successfullness of the collaborative relationship among Knox County Public Health System partners. One of the secondary purposes of Tobacco Cessation Proponent Program is to foster communication and the efficient use of community resources.

Data will also be utilized to justify the value of a program to individuals and the health care community, as well as its contribution to reducing the prevalence of cardiovascular disease in Knox County. Process evaluation questions which are related to the quality of the program, its cost-effectiveness, and importance to the community
will all be examined by key stakeholders of the Program.

RESULTS

Program evaluation results will be reviewed and provided annually to local physicians and other key community stakeholders by distributing results of the Tobacco Cessation Proponent Program in written format.

**PROGRAM #7: Tobacco Cessation Health Education and Promotion Program which will provide programming to individuals and the Knox County community regarding the effects of tobacco use and second-hand smoke.**

**PURPOSE**

The purpose of the Tobacco Cessation Health Education and Promotion Program is to provide information regarding the effects of tobacco use and second-hand smoke on the health of the individual, their families, and the community as a whole. Health education and promotion efforts are additionally intended to reduce public acceptability of tobacco use and tolerance levels concerning second-hand smoke in public places.

The primary desired effect is the reduction of tobacco use; however, secondarily a change in public opinion regarding tobacco use would allow for legislative efforts to establish a ban prohibiting smoking in indoor public places for incorporated and unincorporated areas of Knox County.

Additionally, Tobacco Cessation Health Education and Promotion Program efforts will collaborate between community public health system members to ensure that a greater number and scope of individuals are being reached and there is non-duplication of services.

**KEY PROGRAM STAKEHOLDERS**

Program providers and their staff who are involved in the Tobacco Cessation Health Education and Promotion Program, program recipients and their families, community members and their families, Health care providers, school districts, Knox County Health Department staff, city, County, and municipal officials, and individuals and entities to whom the evaluation results will be provided.

**DATA**

Tobacco Cessation Health Education and Promotion Program statistics will be collected through a confidential tally of the number of Program recipients. Tobacco education and cessation promotion data will be qualitative data outlining activities completed.

The Health Plan strategy does not identify a specific goal for this portion of the Program; but, does identify objectives for a reduction in tobacco use by Knox County adults 2% by the year 2011; and 5% by the year 2016, and a reduction in nonsmokers who are exposed to environmental tobacco smoke in indoor public places in Knox County. Data will be collected and examined pertinent to these goals as well as Program evaluation information.

Additionally, these education and promotion activities will be monitored and amended if necessary during regular Program evaluation.

**PROGRAM EVALUATION**

The Tobacco Cessation Health Education and Promotion Program will be determined successful if there is a marked increase in tobacco cessation program participation by Knox County residents. Additionally, the length of Community Health Improvement Plan goals allows for a determination of any relationship between an increase in individual tobacco
cessation efforts and any Education and Promotion activities.

Additionally, progress toward establishing a ban prohibiting smoking in indoor public places for incorporated and unincorporated areas of Knox County would be an indicator of successfully influencing public opinion concerning tobacco use. This would include any indication that public opinions about tobacco use are changing and any suggestion that tolerance levels for second-hand smoke are decreasing.

Data will also be utilized to justify the value of a program to the Knox County community, as well as its contribution to reducing the prevalence of cardiovascular disease in Knox County. Process evaluation questions which are related to the quality of the program, its cost-effectiveness, and importance to the community will be examined by key stakeholders.

RESULTS

Program evaluation results will be reviewed and provided annually to local key community stakeholders by distributing results of the Tobacco Cessation Proponent Program within the Knox County Health Department Annual Report.
WORKSHEETS
INCIDENCE OF CARDIOVASCULAR DISEASE
# 2006 Knox County Community Health Plan

## HEALTH PROBLEM:
Incidence of Cardiovascular Disease

## RISK FACTOR(S):
- Tobacco Use
- High Cholesterol
- Hypertension

## CONTRIBUTING FACTORS (direct & indirect):
- Primary Care Practices – Brief Screenings
- Poor Eating Habits and Obesity
- Heredity
- Sedentary Lifestyle
- Physical Addiction to Tobacco
- Tobacco Related Marketing and Peer Pressure
- Limited Availability of Tobacco Cessation Programs
- Limited Support for Tobacco Cessation Programs
- Insufficient Medical Attention/Medication
- Inadequate Financial Resources
- Stress

## RESOURCES FOR PROGRAMMING:
- Health care providers
- Physician offices
- Local health department
- Schools and Colleges
- Faith community
- YMCA
- American Heart Association
- Illinois Department of Public Health, University of Illinois Extension
- Civic and business groups
- Labor unions
- Human service organizations
- Clubs and organizations
- Chamber of Commerce
- Local media outlets
- Pharmacies
- Meal sites

## BARRIERS:
- Patient Apathy/Procrastination/Denial of Risks
- Financial Resources
- Lack of Motivation and/or Willingness
- Lack of Understanding of Long-Term Benefits
- Lack of Transportation
- Lack of Knowledge
- Lack of Time/Resources
- Public Perceptions about Risks/Benefits
- Access to Primary and Preventative Health Care
- Accepted Social Norms
- Community Support of Clean Air Legislation
- Lack of Enforcement of Regulations

## COMMUNITY HEALTH IMPROVEMENT GOAL(S):
- By the year 2020, reduce the rate of deaths from cardiovascular disease in Knox County adults to no more than 245 per 100,000 population.
- By the year 2016, reduce the prevalence of cardiovascular disease in Knox County adults to no more than 360 per 100,000 population.

## COMMUNITY HEALTH IMPROVEMENT OBJECTIVE(S):
- Reduce the proportion Knox County of adults with high total blood cholesterol levels to 25% or less by the year 2016.
- Reduce the proportion of Knox County adults with high blood pressure to 15% or less by the year 2016.
- Reduce tobacco use by Knox County adults 2% by the year 2011; and 5% by the year 2016.
- Reduce the proportion of Knox County nonsmokers who are exposed to environmental tobacco smoke in public places in Knox County 80% by the year 2011, and 100% by the year 2016; as is consistent with County and municipal regulations.

## COMMUNITY HEALTH IMPROVEMENT STRATEGIES:
- Chronic disease case management programs in collaboration with the physician offices to promote proper course of treatment.
- Community education and marketing plan which focuses chronic disease screening, management, and prevention.
- Maintain a collaborative community screening effort for Knox County residents to increase the number of Knox County adults who have their blood pressure and cholesterol checked as medically recommended.
- Provide healthy lifestyle choices education for Knox County adults and children that focuses on prevention and early screening of chronic disease.
- Collaborate with Knox County physicians to recommend and provide support in tobacco cessation for their patients.
- Provide community programming regarding the effects of tobacco use and second-hand smoke.
- Marketing programs to change public attitudes about tobacco use, and promote smoking cessation through the immediate and long-term benefits of cessation.
- Assure availability of tobacco cessation programs to Knox County residents.
- Work with appropriate local governments to establish a ban which prohibits smoking in indoor public places for incorporated and unincorporated areas of Knox County.
2006 Knox County Community Health Plan

DESCRIPTION OF THE HEALTH PROBLEM, RISK FACTORS, AND CONTRIBUTING FACTORS:

• Heart disease was the leading cause of death for Knox County residents during 2002; accounting for 198 of the total 798 deaths.
• The 2002 rate of heart disease for Knox County was 360.5; compared with 2002 State of Illinois rate 244.9; and U.S. rate 241.3.
• Based on BRFS results, almost one-fourth (23.4%) of Knox County adults suffer from high blood pressure.
• One in three Knox County adults (29.6%) has high cholesterol.
• Cardiovascular problems accounted for 1,036 (17.2%) of the 6,018 ambulance calls responded to in Knox County in 2001.
• Based on BRFS data, 22.6% of Knox County residents are smoke cigarettes; 8.1% use smokeless tobacco.
• 56.7% of Knox County tobacco users began smoking prior to 18 years of age.
• Hypertension is the second leading chronic condition among Knox County residents, affecting an estimated 7,450 persons.
• Other leading chronic conditions among Knox County residents include heart disease (5,283) and diabetes (2,016).
• One in six household members is reported to have high cholesterol; one in eleven members is reported to be obese.

CORRECTIVE ACTIONS to reduce the level of the indirect contributing factors:

• Through the collaborative community screening effort, increase the number of Knox County adults who have had their blood pressure checked within the preceding two years, by a minimum of 10% by screening a minimum of 1000 adults, aged 30-65 years, a year for each of the next five years (2006 – 2011).
• Through the collaborative community screening effort, increase the number of Knox County adults who have had their blood cholesterol checked within the preceding five years, by a minimum of 10% by screening a minimum of 1000 adults, aged 30-65 years, a year for each of the next five years (2006 – 2011).
• Develop community comprehensive healthy lifestyle choices education for Knox County adults and children, which focused on prevention of chronic disease and early screening for chronic disease.
• Provide the comprehensive healthy lifestyle choices education to a minimum of 1000 individuals a year for each of the next five years (2006 – 2011).
• Initiate a chronic disease management programs in collaboration with the physicians’ offices in order to keep patients diagnosed with diabetes, hypertension, and high cholesterol on a course of treatment.
• Provide chronic disease education which concentrates on screening result interpretation, the positive effects of a proper course of treatment, and management of chronic disease with healthy lifestyle changes, diet and exercise.
• Institute a chronic disease prevention marketing campaign which focuses on the positive effects of a proper course of treatment and management with healthy lifestyle changes, diet and exercise.
• Ensure availability of tobacco cessation programs, implementing a rural outreach tobacco cessation campaign for Knox County.
• Implement a “Successful Quitters” testimonial marketing campaign addressing individual concerns related to tobacco cessation.
• Establish a resource which provides support to Knox County physicians in recommending tobacco cessation to their patients.
• Comprehensive community programming providing education concerning the effects of tobacco use and second-hand smoke.
• Implement marketing efforts to alter public “acceptability” of tobacco use, and encourages smoking cessation through education of the immediate and long-term benefits of quitting smoking.
• Investigate via the Tobacco Task Force of the Knox County Substance Abuse Prevention Coalition. The feasibility of adding a program that prepares youth to quit smoking, such as Alternative to Suspension, offered by the Health Department, as an option for Teen Court’s mandatory programming which may be required of youths who have been identified during preliminary interviews as tobacco users.
• Investigate the expansion of programming that prepares youth to quit smoking, such as Alternative to Suspension, offered by the Health Department, to include youth who are caught in schools smoking or who are identified as smokers through other evaluations/screenings, such as those done by Bridgeway during a drug assessment.

PROPOSED COMMUNITY ORGANIZATION(S) to provide and coordinate the activities:

<table>
<thead>
<tr>
<th>Health care</th>
<th>American Heart Association</th>
<th>University of Illinois Extension</th>
<th>YMCA</th>
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<tbody>
<tr>
<td>Physician offices</td>
<td>Local media outlets</td>
<td>Faith community</td>
<td>Schools</td>
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<tr>
<td>Colleges</td>
<td>Local health department</td>
<td>Clubs and organizations</td>
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Evaluation Plan

Programs
1. Collaborative Community Chronic Disease County-wide Screening Program
2. Healthy Choices and Lifestyles Health Education and Promotion Program
3. Chronic Disease Management Program
4. Knox County Rural Tobacco Cessation Campaign
5. Tobacco Cessation: Successful Quitters Testimonial Marketing Campaign
6. Tobacco Cessation Proponent Program
7. Tobacco Cessation Health Education and Promotion

Purpose
The purpose of the proposed programming is to promote and provide support for heart healthy lifestyle choices and the adoption of preventative health care behaviors; including the early and timely screening for chronic disease.

Key Stakeholders
Program providers and their staff, Knox County Health Department staff, program recipients, participants, and their families, individuals who will utilize the evaluation information, Board of Health, task force members, and members of the public health system.

Data
Data for evaluation of all programs will be collected according to HIPAA Privacy Rule Standards, and may include any or all of the following dependent upon programming evaluation and justification needs: recipient and participant data, activity logs, organizational records, client records, observatory information, completed questionnaires, participant and recipient interviews, case studies, monitoring of inputs and outcomes, service utilization data, qualitative and quantitative data, demographic data, and process evaluation data.

Program Evaluation
The costs and benefits, or the value, of the program to the community will always be considered in evaluation of a program; including, its contribution in reducing the prevalence of cardiovascular disease in the Knox County community. Additionally, data will be used to determine the quality and worth of the program, as well as its significance in addressing the priority health concern of cardiovascular disease.

Information Distribution
Program evaluation information will be shared annually with key community stakeholders. In some instances this will include written reports distributed to program providers, task force members, or other key stakeholders. Some program information will be shared via publication in the Knox County Health Department Annual Report.

Community Health Improvement Goals

By the year 2020, reduce the rate of deaths from cardiovascular disease to no more than 245 per 100,000 population.

Baseline: (Knox County Community Analysis 2005: Centers for Disease Control and Preventions, National Center for Health Statistics)
Knox County cardiovascular disease crude death rate for 2002: 360.5 per 100,000 population. State of Illinois cardiovascular disease crude death rate for 2002: 244.9 per 100,000 population. United States cardiovascular disease crude death rate for 2002: 241.3 per 100,000 population.
Healthy People 2010: Reduce coronary heart disease deaths. Target: 166 deaths per 100,000 population; Baseline: 208 coronary heart disease deaths per 100,000 population in 1998.
By the year 2016, reduce the prevalence of cardiovascular disease in Knox County adults to no more than 360 per 100,000 population.

Baseline: (Knox County Community Analysis 2005: Illinois Hospital Association)
The number of Knox County hospitalizations for heart failure and shock during 2004 was 517 per 100,000 population.
The number of State of Illinois hospitalizations for heart failure and shock during 2004 was 366 per 100,000 population.
Healthy People 2010: Reduce hospitalizations of older adults with congestive heart failure as the principle diagnosis.
Target: Adults aged 65 to 74 years 6.5 per 100,000 population, adults aged 75-84 years 13.5 per 100,000 population, adults aged 85 years and older 26.5 per 100,000 population; Baseline: Adults aged 65 to 74 years 13.2 per 100,000 population, adults aged 75-84 years 26.7 per 100,000 population, adults aged 85 years and older 52.7 per 100,000 population.

Community Health Improvement Objectives

Reduce the proportion Knox County of adults with high total blood cholesterol levels to 25% or less by the year 2016.

Percentage of Knox County adults who self-reported in 2004 IBRFS that they have been told that they have high blood cholesterol 29.6%. Percentage of Illinois adults who self-reported in 2004 IBRFS that they have been told that they have high blood cholesterol 34.1%.
Healthy People 2010: Reduce the proportion of adults with high total blood cholesterol levels. Target: 17%; Baseline: 21% of adults aged 20 years and older had total blood cholesterol levels of 240 mg/dL or greater in 1988-1994.

Reduce the proportion of Knox County adults with high blood pressure to 15% or less by the year 2016.

Percentage of Knox County adults who self-reported in 2004 IBRFS that they have been told that they have high blood pressure 23.4%. Percentage of Illinois adults who self-reported in 2004 IBRFS that they have been told that they have high blood pressure 25.9%.
Healthy People 2010: Reduce the proportion of adults with high blood pressure. Target: 16%; Baseline: 28% of adults aged 20 years and older had high blood pressure in 1988-1994.

Reduce tobacco use by Knox County adults 2% by the year 2011; and 5% by the year 2016.

Percentage of Knox County smokers and former smokers who self-reported in 2004 IBRFS that they smoke every day 35.1%; smoke some days 11.6%. Percentage of Illinois adults who self-reported in 2004 IBRFS that they are a smoker 23.6%.
Healthy People 2010: Reduce tobacco use by adults aged 18 years and older. Target: 12% - Cigarette Smoking; Baseline: 24% of adults aged 18 years and older reported that they smoked cigarettes in 1998.

Reduce the proportion of Knox County nonsmokers who are exposed to environmental tobacco smoke in public places in Knox County 80% by the year 2011, and 100% by the year 2016; as is consistent with County and municipal regulations.

Baseline: (Healthy People 2010)
65% of nonsmokers aged 4 years and older had a serum cotinine level above 0.10 ng/mL in 1988-94.
Healthy People 2010: Reduce the proportion of nonsmokers exposed to environmental tobacco smoke. Target: 45%; Baseline: 65% of nonsmokers aged 4 years and older had a serum cotinine level above 0.10 ng/mL in 1988-94.
2006 Knox County Community Health Plan

Community Health Improvement Strategies

• Chronic disease case management programs in collaboration with the physician offices to promote proper course of treatment.
• Community education and marketing plan which focuses chronic disease screening, management, and prevention.
• Maintain a collaborative community screening effort for Knox County residents to increase the number of Knox County adults who have their blood pressure and cholesterol checked as medically recommended.
• Provide healthy lifestyle choices education for Knox County adults and children that focuses on prevention and early screening of chronic disease.
• Collaborate with Knox County physicians to recommend and provide support in tobacco cessation for their patients.
• Provide community programming regarding the effects of tobacco use and second-hand smoke.
• Marketing programs to change public attitudes about tobacco use, and promote smoking cessation through the immediate and long-term benefits of cessation.
• Assure availability of tobacco cessation programs to Knox County residents.
• Work with appropriate local governments to establish a ban which prohibits smoking in indoor public places for incorporated and unincorporated areas of Knox County.