PRIORITY HEALTH CONCERN

PREVALENCE OF RESPIRATORY DISEASE
Asthma and chronic obstructive pulmonary disease (COPD) are among the ten leading chronic respiratory conditions causing restricted activity. These respiratory diseases, as well as others, equate a significant public health burden in the U.S.; increasing to the point where they are now the third most common cause of death.

In Knox County, respiratory disease accounts for over 10% of all resident deaths. They are one of the most frequent reasons for hospitalization, and the primary diagnosis for 6.4% of Knox County long-term care facility residents. Additionally, breathing difficulty emergencies are responsible for 9% of all ambulance calls within the County.

Respiratory diseases account for over 10% of Knox County resident deaths.

Chronic obstructive pulmonary disease (COPD) refers to a group of slowly progressive diseases characterized by airflow blockage and the gradual loss of lung function. In the United States, the term COPD includes emphysema, chronic bronchitis, in some cases asthma and/or a combination of these conditions.

An estimated 10 million adults in the U.S. are diagnosed as having COPD; however, national health survey data suggests as many as 24 million adults have evidence of impaired lung function, indicating that chronic obstructive lung disease is largely under-diagnosed. These large numbers, even undiagnosed, result in direct and indirect health care costs which exceeded $32.1 billion dollars during 2002.

For Knox County residents the most frequent, non-birth related, reason for hospitalization is COPD. The age-adjusted death rate for chronic obstructive pulmonary disease during 2002 was 50.2 per 100,000 population; this is significantly higher than the rate ten years earlier of 30.1 per 100,000 population. The 2002 State of Illinois age-adjusted death rate for chronic obstructive pulmonary disease was 39.2 per 100,000; notably lower than the Knox County rate.

The crude death rates for other respiratory illnesses in Knox County confirm an identical trend. In 2002 death rate for pneumonia/influenza was 58.3 per 100,000 population, more than double the 1992 level of 26.6 per 100,000.

Medical data and research indicates that early detection of COPD may alter its course and progression. The diagnosis of chronic obstructive pulmonary disease is confirmed through the presence of airway obstruction identified during testing with spirometry. At this time there is no known cure for COPD; subsequently, any treatment is by and large supportive and designed to relieve symptoms and improve the quality of life for those diagnosed.
Asthma is one of this Country's most common chronic conditions. It is defined as an inflammatory disorder of the body's airways. In predisposed individuals, the inflammation causes recurrent episodes of wheezing, breathlessness, chest tightness, and cough, particularly at night and early morning.

Asthma can be managed, and its effects often reversed, though healthy lifestyle changes, as well as other actions, including:
- Following a medical management plan;
- Proper use of asthma medications; and
- Avoiding contact with environmental asthma triggers.

These episodes are regularly associated with widespread, but erratic, airflow obstruction that is often reversible, either as a result of medical treatment or occasionally spontaneously. The resulting inflammation may additionally produce the existence of bronchial hyperresponsiveness to a variety of stimuli, which are often referred to as asthma triggers.

In 2003, the Centers for Disease Control and Prevention estimated that 29.8 million people in the U.S. had been diagnosed with asthma during their lifetime; 19.8 million are currently diagnosed. 11.0 million individuals experienced an asthma attack in the previous year.

In 2002, in the U.S., asthma accounted for:
- 12.7 million doctor visits;
- 1.2 million hospital outpatient visits;
- 1.9 million Emergency Department visits;
- 484,000 hospitalizations; and
- 4,261 deaths.

IDPH reports that the asthma rate is rising more rapidly in pre-school aged children than in any other age group. It is the leading cause for pediatric Emergency Department visits and school absenteeism in the U.S.

An estimated 3,017; or one of every ten Knox County adults suffers from asthma. Additionally, 15.2% of all households with children aged 5-17 years report at least one child in the home with asthma. Along with bronchitis, it is the second leading cause of hospitalization among residents of that age group. During 2004, asthma and bronchitis accounted for 935 Emergency Department visits by Knox County residents; in 2005 that number grew to 1,063.

Healthy People 2010 calls for successfully reaching the goal of “promoting respiratory health through better prevention, detection, treatment, and education efforts.”

The Healthy People 2010 objectives for respiratory diseases include:
- A reduction in deaths from chronic obstructive pulmonary disease (COPD) among adults (baseline: 119 per 100,000 population).
- A reduction in asthma deaths (Baseline: 2.1 per 1,000,000 children under five years, 3.3 per 1,000,000 children five to 14 years, 5 per 1,000,000 adolescents and adults 15 to 34 years, 17.8 per 1,000,000 adults 35 to 64 years, 86.3 per 1,000,000 adults 65 years and older);
- A reduction in hospitalizations for asthma (Baseline: 45.6 per 10,000 children under five, 12.5 per 10,000 children and adults 5 to 64, 17.7 per 10,000 adults 65 years and older);
- A reduction in Emergency Department visits for asthma (baseline: 150 per 10,000 children under the age of five years, 71.1 per 10,000 children and adults aged 5 to 64 years of age, 29.5 per 10,000 adults aged 65 years and older);
- A reduction in tobacco use by adults aged 18 years and older (baseline: 24%); and
- A reduction in the proportion of nonsmokers exposed to environmental tobacco smoke (ETS) (baseline: 65%).
**PRIORITY HEALTH CONCERN**

**RESPIRATORY DISEASE**

**RISK FACTORS**

Of the risk factors effecting respiratory disease, tobacco use is by far the key factor in the development and progression of chronic obstructive pulmonary disease in Knox County. However, for asthma, exposure to air pollutants in the home and workplace, including environmental tobacco smoke and respiratory infections are additional and significant factors. Inadequate or non-existing medical care and disease management, as well as improper prescription medication usage, also exacerbate and contribute to the prevalence of respiratory disease in Knox County residents.

Tobacco smoke exposure, whether intentional or passive, harms an individual's lungs impeding their ability to fight infection effectively, which causes injury to lung tissue. This tissue injury leads to COPD, emphysema, asthma and other respiratory diseases.

Tobacco use causes approximately 440,000 premature deaths and 90% of the deaths from COPD in the United States each year. Behavioral Risk Factor Survey (BRFS) data for 2004 indicates 22.6% of Knox County residents smoke cigarettes; 56.7% of those tobacco users began smoking prior to the age of 18.

**Direct & Indirect Contributing Factors**

Other factors that may directly or indirectly contribute to the prevalence of respiratory diseases include the accessibility and availability of appropriate medical care, which may result in improper disease management and prescription drug use, as well as inadequate financial resources for health care and medical supplies.

Additionally, asthma triggers and indoor and outdoor air quality all impact the respiratory health of individuals; especially children and adults diagnosed with asthma. Knowledge regarding the identification of asthma triggers, as well as appropriate actions to reduce exposure to poor quality air and identified asthma triggers are essential to reducing the effects of respiratory disease.

“Triggers” for asthma sufferers often include one or several of the following:

- Respiratory infections and colds;
- Allergic reactions to allergens such as pollens, animal dander, feathers, dust, food, and cockroaches;
- Vigorous exercise;
- Exposure to cold air or a sudden change in temperature;
- Excitement or stress; and
- Second-hand smoke.

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

Additionally, environmental exposures which affect air quality are respiratory disease contributors. Furthermore, exposure to second-hand smoke is not just annoying. It is an environmental health hazard; scientifically proven to cause lung cancer, heart disease, and serious respiratory illness resulting in thousands of deaths each year nationwide. Environmental tobacco smoke (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; it contains in excess of 4,000 chemicals and 69 known carcinogens.

Finally, inadequate medical attention; which may result from improper disease management, a lack of brief screenings performed by physicians, improper prescription drug use, or cost of, and access to care issues contributes significantly to the local prevalence of respiratory diseases, specifically asthma.
Exposure to second-hand smoke causes serious respiratory harm to children and adults. The American Lung Association estimates that 200,000 to one million asthmatic children have their condition worsened by passive exposure to tobacco smoke. Additionally, passive exposure causes an estimated 150,000 to 300,000 cases of lower respiratory tract infections in children under the age of 18 months; resulting in 7,500 to 15,000 hospitalizations annually.

Additionally of primary importance in the prevention and treatment of respiratory diseases are indirect contributing factors related to tobacco use. These factors, such as a limited access to tobacco cessation programs for Knox County residents, the effects of tobacco related marketing and peer pressure on tobacco use, and an individual’s physical addiction to tobacco, are integral in fighting respiratory disease and exacerbation in both the tobacco user and those individuals exposed to environmental tobacco smoke (ETS).

**COMMUNITY HEALTH IMPROVEMENT GOAL**

In order to reduce the mortality rate from respiratory disease among Knox County residents, the Citizens Workgroup proposes the following community health improvement goal:

- **By the year 2020, reduce the rate of deaths from respiratory disease in Knox County adults to no more than 35 per 100,000 population.**

  Baseline: (Knox County Community Analysis 2005: Centers for Disease Control and Preventions, National Center for Health Statistics) Knox County death rate for chronic obstructive pulmonary diseases during 2002: 71.0 per 100,000 population. State of Illinois death rate for chronic obstructive pulmonary diseases during 2002: 38.4 per 100,000 population. United States death rate for chronic obstructive pulmonary diseases during 2002: 43.5 per 100,000 population.

Healthy People 2010: Reduce deaths from chronic obstructive pulmonary disease (COPD) among adults. Target: 60 deaths per 100,000 population; Baseline: 119 deaths from COPD per 100,000 population in 1998.

Healthy People 2010: Reduce asthma deaths. Target: 1 per 1,000,000 children under the age of five years, 1 per 1,000,000 children aged five to 14 years, 2 per 1,000,000 adolescents and adults aged 15 to 34 years, 9 per 1,000,000 adults aged 35 to 64 years, 60 per 1,000,000 adults aged 65 years and older; Baseline: 2.1 per 1,000,000 children under the age of five years, 3.3 per 1,000,000 children aged five to 14 years, 5 per 1,000,000 adolescents and adults aged 15 to 34 years, 17.8 per 1,000,000 adults aged 35 to 64 years, 86.3 per 1,000,000 adults aged 65 years and older.

**COMMUNITY HEALTH IMPROVEMENT OBJECTIVES**

The Healthy Communities Citizens Workgroup and Project Partners have established the following community health improvement objectives in order to impact the community health improvement goal of reducing the prevalence of respiratory disease:

- **By the year 2016, reduce the rate of bronchitis and asthma related hospitalizations of children aged 0-17 years to no more than 8 per 10,000 population.**

  Baseline: (Knox County Community Analysis 2005: Illinois Hospital Association) Knox County number of bronchitis and asthma related hospitalizations of children aged 0-17 for
2004: 13.9 per 10,000 population. State of Illinois number of bronchitis and asthma related hospitalizations of children aged 0-17 for 2004: 8.4 per 10,000 population.

Healthy People 2010: Reduce hospitalizations for asthma. Target: 25 per 10,000 children under the age of five years, 7.7 per 10,000 children and adults aged 5 to 64 years of age, 11 per 10,000 adults aged 65 years and older; Baseline: 45.6 per 10,000 children under the age of five years, 12.5 per 10,000 children and adults aged 5 to 64 years of age, 17.7 per 10,000 adults aged 65 years and older.

• By the year 2016, reduce the rate of bronchitis and asthma related Emergency Department visits to no more than 100 per 10,000 population.

Baseline: (Knox County Hospital Data 2004, 2005; Galesburg Cottage Hospital, OSF St. Mary Medical Center)
Knox County number of bronchitis and asthma related Emergency Department visits by diagnosis for 2005: 199.4 per 10,000 population; for 2004: 173.8 per 10,000 population.

Healthy People 2010: Reduce hospital Emergency Department visits for asthma. Target: 80 per 10,000 children under the age of five years, 50 per 10,000 children and adults aged 5 to 64 years of age, 15 per 10,000 adults aged 65 years and older; Baseline: 150 per 10,000 children under the age of five years, 71.1 per 10,000 children and adults aged 5 to 64 years of age, 29.5 per 10,000 adults aged 65 years and older.

• By the year 2016, reduce the rate of hospitalizations for Chronic Obstructive Pulmonary Disease (COPD) to no more than 45.4 per 10,000 population.

Baseline: (Knox County Community Analysis 2005: Illinois Hospital Association)
Knox County number of hospitalizations for Chronic Obstructive Pulmonary Disease (COPD) during 2004: 61.4 per 10,000 population. State of Illinois number of hospitalizations for Chronic Obstructive Pulmonary Disease (COPD) during 2004: 19.8 per 10,000 population.

Healthy People 2010: Reduce deaths from chronic obstructive pulmonary disease (COPD) among adults. Target: 60 deaths per 100,000 population; Baseline: 119 deaths from COPD per 100,000 population in 1998.

• 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 nonsmokers 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, 1988-94.

COMMUNITY HEALTH IMPROVEMENT STRATEGIES

Prevention of respiratory disease through promotion and education regarding tobacco cessation, appropriate health care, medical management, and prescription medication usage, and controlling exposure to environmental air hazards are strategies essential to reducing the prevalence of respiratory disease. Health improvement strategies are intended to reduce the occurrence of respiratory disease, as well as improve quality of life for affected individuals. They include:

► Intensive asthma education and proactive case management services for Knox County asthmatics.

► Comprehensive indoor air quality public education and marketing campaign that includes environmental triggers and indoor air quality testing.

► Support to Knox County physicians in recommending patient participation in asthma case management initiatives.

► Transition campaign in collaboration with County schools and local colleges, to provide education and case management to students with asthma.

► 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 promotes 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.

IMPLEMENTATION & CORRECTIVE ACTIONS

The prevention and reduction of risk factors as well as the design, implementation, and evaluation of strategies to impact direct and indirect contributing factors for respiratory disease are major strategies in lowering the
occurrence of respiratory diseases. However, specific actions identified by the Citizens Workgroup which are intended to affect those factors at base level include the following:

► **Provide comprehensive asthma education and case management for Knox County asthmatics**, focusing on controlling asthma and reversing its effects; how allergies and environmental triggers affect an asthmatic and proper prescription drug usage.

► **Initiate an education and marketing campaign** which focuses on indoor air quality, as well as allergies and environmental triggers; and includes an indoor air quality testing component.

► **Partner with Knox College, and Carl Sandburg College** to offer a “transition campaign” to provide education and case management support to students entering college with asthma; particularly the effects of lifestyle choices and proper prescription drug use.

► **Partner with Knox County school districts** to offer an “Asthma at School” campaign which provides education and case management support to students who have asthma and their parents; particularly use of an “Asthma Action Plan” at school and proper prescription drug use.

► **Establish a resource which provides support to Knox County physicians in recommending asthma case management and education for their patients with asthma.**

► **Institute a collaborative relationship with Knox County physicians for the provision of asthma case management and education to patients with asthma; particularly Emergency Department referral.**

► **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.**

It is essential that any effective asthma education and management programs operate collaboratively with local physician offices to encourage patients to maintain an ongoing
course of treatment for their disease and provide proper resources. Maintaining a proper course of treatment benefits the individual and their family by affording them a higher quality of life, as well as reducing the necessity for emergent care. These programs will include education pertaining to the identification, management, and in some cases removal, of asthma triggers, especially in the home, managing disease through the adoption of proactive plans to manage and even reverse the effects of asthma, as well as the importance of utilizing prescribed medications correctly and visiting your physician regularly.

A key part of this education effort would be community-wide social marketing campaigns. These campaign would be executed via print media, billboards, radio, television, and other venues. They will be designed to be comprehensive and promote healthy lifestyle choices, smoking deterrence and cessation, the dangers of environmental tobacco smoke and benefits of its elimination, as well as focusing on the identification, management, and elimination of environmental triggers for asthma. All portions of the campaign will be an integral and ongoing component of programming designed to reduce the prevalence of respiratory disease.

Additionally, Citizens Workgroup members felt it was essential to provide assistance to asthmatic individuals and their families during vulnerable or stressful periods of their lives. Specifically, this involved school age children, as well as those individuals making a transition into a more independent lifestyle when entering college. It was felt that medical management support and education would assist these individuals in effectively making these transitions while maintaining control of their disease, thus avoiding exacerbation of an already stressful, and costly, period in their lives.

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 the public's "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 respiratory disease. 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, the current programs 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 for Knox County.

Also of primary importance is the deterrence of the 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 individual concerns related to smoking cessation. Examples of individual concerns would include weight gain, failure, smoking spouses, etc. These would include real life stories from former smokers residing 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 to encourage them to educate patients regarding health concerns related to tobacco use and recommend to their patients that they quit.

A 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 the development of respiratory diseases and an overriding asthma trigger for individuals diagnosed with asthma. This would be an integral factor in any enduring tobacco use reduction effort in Knox County.

**Barriers**

Barriers to health care or health interventions play a significant role in addressing the prevalence of respiratory diseases. Issues such as patient and/or parent apathy, procrastination, denial of risks, and a clear understanding of long-term benefits or consequences must be addressed through activities and programs to prevent respiratory disease.

Additional, 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 presents a different set of barriers to care. This choice inherently include barriers such as a lack of motivation or willingness to change the behavior, a lack of knowledge regarding consequences, a perceived or real lack of time or resources, and confronting accepted social norms, which include public perceptions about the lifestyle choice and the risks and benefits associated with it.

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 respiratory disease in Knox County.

**Community Resources**

Any effort to promote healthy lungs, quality breathing, and smoke-free communities must involve efforts from multiple public health system partners within the community. The following agencies and organizations would be proposed
to participate in the coordination and implementation of programs and activities to impact the prevalence of respiratory disease:

» Health Care Providers
» Hospitals
» Physician Offices
» Knox County Health Department
» Schools
» Faith Community
» YMCA
» American Lung Association
» Illinois Department of Public Health
» University of Illinois Extension
» Colleges
» Civic and Business Groups
» Labor Unions
» Human Service Organizations
» Clubs and Organizations
» Galesburg Area Chamber of Commerce
» Local Media Outlets
» Pharmacies
» Senior Citizen Meal Sites.

**Funding**

Funding for health educators and public health nurses, as well as other expenditures such as travel reimbursement, health education materials, screening services and supplies, data collection, and advertising costs will be required. Possible sources of funding include grants to local agencies from the State of Illinois, the Federal Government, and other public or private entities. Knox County public health system partners will work collaboratively to complete the identified strategies. Through collaboration public health system partners are able to provide service to a greater number of Knox County residents and avoid the 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: Asthma Education and Screening Community Health Education and Promotion Program.**

**PURPOSE**

The purpose of this program is to provide asthma health education as well as opportunities for individuals and their families to access asthma screening.

Fundamental to any disease control program is the accurate communication of the nature of agents that causes or exacerbates the disease, since this knowledge empowers individuals to make educated choices regarding the reduction of their exposure to those agents. As such, health education will be provided to the community providing individuals the tools necessary to take control of their overall health and well-being through the adoption of proactive lifestyle choices to control asthma.

Another component of the Asthma Education and Screening Community Health Education and Promotion Program will be a social marketing campaign which focuses on adopting healthy lifestyle choices which aid in controlling asthma, what asthma triggers are, and taking active measures to take control of asthma. Health promotion will be accomplished through use of the media and marketing resources.

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**

Asthma screening providers and health educators involved in the Asthma Education and Screening Community Health Education and Promotion Program, recipients 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 screening recipients, activity logs, and demographic data. All will be completed anonymously in accordance with HIPAA Privacy Standard provisions. Additionally, data may include program evaluations completed by recipients, pre-and post-test results, program inputs and outcomes, as well as community feedback which may be received from the local health care community.

Asthma education and screening promotion data will be qualitative data outlining program 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 determined to be successful if the number of individuals screened for asthma increases, and the education program results in recipients taking active steps to manage their asthma.

The length of Community Health Improvement Plan goals allows for monitoring of indicators identified in the Community Health Improvement Plan; such as, asthma related hospital Emergency Department use, asthma related hospitalizations, and days an individual has gone without asthma symptoms. Progress made toward achieving these identified objectives will reflect positively on measures taken to educate and screen for asthma.

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

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 respiratory 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 Asthma Community Health Education, Screening, and Case Management Program in the Knox County Health Department Annual Report.

PROGRAM #2: Indoor Air Quality for Knox County community health education, testing, and promotion program.

PURPOSE

The purpose of this program is to provide education regarding the importance of having clean indoor air, how unclean air affects your breathing and your health, conditions which are exacerbated by unclean air, and how to test your air.

Another component of the Indoor Air Quality for Knox County Community Health Education, Testing, and Promotion Program will be a social marketing campaign which focuses on primarily the promotion of clean indoor air and what it means for the health and well-being of Knox County citizens. Health promotion activities will be accomplished through use of the media and marketing resources.

KEY PROGRAM STAKEHOLDERS

Program providers and their staff who are involved in the Indoor Air Quality for Knox County Program, program recipients 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 log of the number of Program recipients, demographic data, and some recipient feedback activities. Additional data would be collected regarding clean indoor air testing performed by Knox County residents.

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

**PROGRAM EVALUATION**

The Program will be successful if the Indoor Air Quality for Knox County Community Health Education, Testing, and Promotion Program provides Knox County residents with accurate information regarding the importance of clean indoor air. Additional program impact would be evaluated according to the number of individuals who have performed indoor air quality testing.

The Program is also intended 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 decrease tolerance levels concerning second-hand smoke in public places, aiding in legislative efforts to establish a ban prohibiting smoking in indoor public places for incorporated and unincorporated areas of Knox County.

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 respiratory 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: Students with Asthma Lifestyle Transitions Program**

To provide case management and education for young adults entering college, assisting them in controlling asthma during stress and lifestyle changes.

**PURPOSE**

The purpose of the Students with Asthma Lifestyle Transitions Program is to aid individuals diagnosed with asthma, who are entering college in actively controlling their disease while transitioning to life away from home. The program is intended to provide case management and education about the importance of controlling asthma triggers, using prescription medication appropriately, and reducing unhealthy lifestyle choices which may exacerbate asthma in young adults.

Secondarily, the Program will involve an active partnership between community public health system partners in order to provide education and case management programs and ensure that non-duplication of services is accomplished.

**KEY PROGRAM STAKEHOLDERS**

Local physicians, college staff, program providers and their staff, program recipients and their families, Knox County Health Department staff, and individuals and entities to whom the evaluation results will be provided.

**DATA**

Asthma Lifestyle Transitions Program data will be collected by keeping a log of Program participants. Demographic data may also be collected, as well as information pertaining to the status of the participant’s health care condition. All 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 Students with Asthma Lifestyle Transitions 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 asthma through controlling their specific asthma triggers, using prescription medication appropriately, and maintaining healthy lifestyle choices.

Additionally, any reduction in asthma related hospital Emergency Department use by college students, asthma related hospitalizations, and days that a young adult has gone without asthma symptoms will illustrate positive impacts of the Program.

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 respiratory 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 participating college staff and other key community stakeholders by distributing results of the Students with Asthma Lifestyle Transitions Program in written format. Other tabulated results may be shared in the Knox County Health Department Annual Report.

**Program #4: Asthma at School education and case management program for students with asthma and their families to assist in asthma management through healthy lifestyle choices and developing Asthma Action Plans.**

**Purpose**

The purpose of the Asthma at School Program is to aid students diagnosed with asthma, and their families, entering school in taking an active role in controlling their disease. The program is intended to provide case management and education about the importance of controlling asthma triggers, using prescription medication appropriately, and reducing unhealthy lifestyle choices which may exacerbate asthma in young children. The Program is also intended to provide assistance in the development of an Asthma Action Plan for students with asthma to have on file with their school.

Secondarily, the Program will involve an active partnership between community public health system partners in order to provide education and case management programs and ensure that non-duplication of services is accomplished.

**Key Program Stakeholders**

Local physicians, school staff, program providers and their staff, program recipients and their families, Knox County Health Department staff, and individuals and entities to whom the evaluation results will be provided.

**Data**

Asthma at School Program data will be collected by keeping a log of Program participants. Demographic data may also be collected, as well as information pertaining to the
status of the participant’s health care condition. All 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 Asthma at School Program will be deemed successful if program recipients realize the positive effects of having an Asthma Action Plan, and maintaining a proper course of treatment, and take action to manage asthma through controlling their specific asthma triggers, using prescription medication appropriately, and maintaining healthy lifestyle choices.

Additionally, any reduction in asthma related hospital Emergency Department use by children, asthma related hospitalizations, and days that a child has gone without asthma symptoms will illustrate positive impacts of the Program.

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 respiratory 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 participating school staff and other key community stakeholders by distributing results of the Asthma at School Program in written format. Other tabulated results may be shared in the Knox County Health Department Annual Report.

**PROGRAM #5: Collaborative Health Care Community Asthma Management Program provided in cooperation with local physician offices with the intent of keeping individuals diagnosed with asthma in a proper case management program.**

**PURPOSE**

The purpose of this program is to insure that asthma education and case management services are available to individuals diagnosed with asthma and their families. The Collaborative Health Care Community Asthma Management Program will be offered cooperatively with local physician offices and is intended to promote education about asthma, asthma “triggers,” as well as lifestyle changes which effect asthma. The program will also offer case management support and assistance in preparing Asthma Action Plans.

Additionally, the Program will also provide support to local physicians in recommending the asthma management program to their patients. Assistance will be made available in the form of up-to-date educational programs, written educational materials, and assistance in preparing an Asthma Action Plan.

Secondarily, the Collaborative Health Care Community Asthma Management 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 Collaborative Health Care Community Asthma Management Program, clients of the Program and their families, Knox County Health Department staff, hospital Emergency Department staff, schools, and individuals and entities to whom the evaluation results will be provided.

DATA

Data will be collected through a confidential running tally of participants and demographic information. All program data will be kept confidential where applicable in accordance with HIPAA Privacy Standard provisions.

As part of programming, participants may be monitored according to indicators identified in the Community Health Improvement Plan; such as, asthma related hospital Emergency Department use, asthma related hospitalizations, and days individuals have gone without asthma symptoms.

PROGRAM EVALUATION

The Collaborative Health Care Community Asthma Management Program will be deemed successful if recipients referred to the Program realize the positive effects of maintaining a proper course of treatment, and take action to manage asthma through controlling their specific asthma triggers, using prescription medication appropriately, and maintaining healthy lifestyle choices.

And although the Community Health Improvement Plan strategy does not identify a specific goal for this Program information will be collected relevant to related objectives which call for the reduction of asthma related hospitalizations for children aged 0-17 years to no more than 8 per 10,000 population and hospital Emergency Department visits to no more than 65 per 10,000 population. Therefore, success toward reducing these numbers toward identified goals will aid in program evaluation.

Program accomplishments will also be measured against the successfulness of the collaborative relationships between Knox County Public Health System partners, since a secondary purpose 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 respiratory 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 Health Care Community Asthma Management Program in the Knox County Health Department Annual Report. Additional evaluation information will be made available to physicians participating in programming.

PROGRAM #6: 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
respiratory 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 #7: “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 which 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 respiratory 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 #8: 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 successfulness 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 respiratory diseases 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.
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 decrease 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 that non-duplication of services is accomplished.

**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 and at times a running tally of recipient response.

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 respiratory diseases 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 physicians and other key community stakeholders by distributing results of the Tobacco Cessation Proponent Program. Additionally, statistical numbers served will be contained in the Knox County Health Department Annual Report.
WORKSHEETS

PREVALENCE OF RESPIRATORY DISEASE
### HEALTH PROBLEM:
Prevalence of Respiratory Disease

### RISK FACTOR(S):
- Tobacco Use
- Environment
- Inadequate Medical Attention and/or Medication

### CONTRIBUTING FACTORS (direct & indirect):
- Physical Addiction to Tobacco
- Tobacco Related Marketing and Peer Pressure
- Limited Availability of Tobacco Cessation Programs
- Limited Support for Tobacco Cessation Programs
- Primary Care Practices – Brief Screenings
- Second-Hand Smoke Exposure
- Outdoor Air Quality
- Indoor Air Quality
- Asthma Triggers
- Accessibility and Availability to Medical Care
- Inadequate Financial Resources

### RESOURCES FOR PROGRAMMING:
- Health care providers
- Physician offices
- Local health department
- Schools
- 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
- Chamber of Commerce
- Local media outlets
- Pharmacies
- Meal sites

### BARRIERS:
- Patient and/or Parent Apathy
- Limited Financial Resources
- Lack of Motivation and/or Willingness
- Absent Case Management Education/Skills
- Lack of Community Support of Clean Air Legislation
- Limited Understanding of Long-Term Benefits
- Lack of Enforcement of Regulations
- Limited Transportation Resources
- Lack of Knowledge

### COMMUNITY HEALTH IMPROVEMENT GOAL(S):
- By the year 2020, reduce the rate of deaths from respiratory disease in Knox County adults to no more than 35 per 100,000 population.

### COMMUNITY HEALTH IMPROVEMENT OBJECTIVE(S):
- By the year 2016 reduce the rate of bronchitis and asthma related hospitalizations of children aged 0-17 to no more than 8 per 10,000 population.
- By the year 2016 reduce the rate of bronchitis and asthma related Emergency Department visits to no more than 100 per 10,000 population.
- By the year 2016, increase the number of Knox County adults reporting that they have not had asthma symptoms in the last thirty days by 5%.
- By the year 2016 reduce the rate hospitalizations for COPD to no more than 45.4 per 10,000 population.
- Reduce tobacco use, in any form, 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(S):
- Comprehensive indoor air quality public education and marketing campaign that includes environmental triggers and indoor air quality testing.
- Intensive asthma education and proactive case management services for Knox County asthmatics.
- Support to Knox County physicians in recommending patient participation in asthma case management initiatives.
- Transition campaign in collaboration with County schools and local colleges, to provide education and case management to students with asthma.
- 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 promotes 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.
DESCRIPTION OF THE HEALTH PROBLEM, RISK FACTORS, AND CONTRIBUTING FACTORS:
- Respiratory diseases accounted for over 10% of Knox County resident deaths during 2002; they include pneumonia, COPD, emphysema, bronchitis, and asthma. Deaths due to respiratory disease have been increasing and are the third most common cause of death in the U.S.
- The proportion of Knox County adults who smoke is just over one in five (22.6%); this matched the State of Illinois level.
- Knox County age-adjusted 2002 death rate for COPD was 50.2/100,000 population (1992 rate 30.1/100,000 population) (State of Illinois rate 39.2/100,000 population). COPD is the most common, non birth-related, cause of hospitalization, followed by pneumonia.
- Knox County crude rate for pneumonia and influenza, 58.3, is double the 1992 level of 26.6.
- One in ten Knox County adults suffers from asthma; it affects 8.1% of household members. It, along with bronchitis, is the second leading cause of hospitalization among Knox County 5-17 year olds.
- An estimated 3,043 Knox County residents have chronic bronchitis, with an additional 3,017 suffering from asthma.
- Of Knox County deaths during 1999-2001, COPD and pneumonia/flu each accounted for 145 lost years of life.

CORRECTIVE ACTIONS to reduce the level of the indirect contributing factors:
• Provide comprehensive asthma education and case management for Knox County asthmatics, focusing on controlling asthma and reversing its effects; how allergies and environmental triggers affect an asthmatic and proper prescription drug usage.
• Initiate an education and marketing campaign which focuses on indoor air quality, as well as allergies and environmental triggers; and includes an indoor air quality testing component.
• Partner with Knox College, and Carl Sandburg College to offer a “transition campaign” to provide education and case management support to students entering college with asthma; particularly the effects of lifestyle choices and proper prescription drug use.
• Partner with Knox County school districts to offer an “Asthma at School” campaign which provides education and case management support to students who have asthma and their parents; particularly use of an “Asthma Action Plan” at school and proper prescription drug use.
• Establish a resource which provides support to Knox County physicians in recommending asthma case management and education for their patients with asthma.
• Institute a collaborative relationship with Knox County physicians for the provision of asthma case management and education to patients with asthma; particularly Emergency Department referral.
• 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 providers</th>
<th>Schools/Colleges</th>
<th>Meal sites</th>
<th>Illinois Department of Public Health</th>
<th>Civic and business groups</th>
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</thead>
<tbody>
<tr>
<td>Local media outlets</td>
<td>Pharmacies</td>
<td>YMCA</td>
<td>University of Illinois Extension</td>
<td>Human service orgs</td>
</tr>
<tr>
<td>Local health dept</td>
<td>Faith community</td>
<td>Labor unions</td>
<td>American Lung Association</td>
<td>Clubs and organizations</td>
</tr>
</tbody>
</table>
2006 Knox County Community Health Plan

Evaluation Plan

Programs
1. Asthma Education and Screening Community Health Education and Promotion Program
2. Indoor Air Quality for Knox County
3. Students With Asthma Lifestyle Transitions Program
4. Asthma At School
5. Collaborative Health Care Community Asthma Management Program
6. Knox County Rural Tobacco Cessation Campaign
7. Tobacco Cessation: Successful Quitters Testimonial Marketing Campaign
8. Tobacco Cessation Proponent Program
9. Tobacco Cessation Health Education and Promotion

Purpose
The purpose of the proposed programming is to promote and provide support for healthy lifestyle choices related to respiratory diseases, the adoption of preventative health care behaviors, as well as active measures to control and reduce the effects of asthma.

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 respiratory 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 respiratory 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 Goal

By the year 2020, reduce the rate of deaths from respiratory diseases in Knox County adults to no more than 35 per 100,000 population.

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

Knox County death rate for chronic obstructive pulmonary diseases during 2002: 71.0 per 100,000 population. State of Illinois death rate for chronic obstructive pulmonary diseases during 2002: 38.4 per 100,000 population. United States death rate for chronic obstructive pulmonary diseases during 2002: 43.5 per 100,000 population.

Healthy People 2010: Reduce deaths from chronic obstructive pulmonary disease (COPD) among adults. Target: 60 deaths per 100,000 population; Baseline: 119 deaths from COPD per 100,000 population in 1998.
Healthy People 2010: Reduce asthma deaths. Target: 1 per 1,000,000 children under the age of five years, 1 per 1,000,000 children aged five to 14 years, 2 per 1,000,000 adolescents and adults aged 15 to 34 years, 9 per 1,000,000 adults aged 35 to 64 years, 60 per 1,000,000 adults aged 65 years and older; Baseline: 2.1 per 1,000,000 children under the age of five years, 3.3 per 1,000,000 children aged five to 14 years, 5 per 1,000,000 adolescents and adults aged 15 to 34 years, 17.8 per 1,000,000 adults aged 35 to 64 years, 86.3 per 1,000,000 adults aged 65 years and older.

Community Health Improvement Objectives

By the year 2016 reduce the rate of bronchitis and asthma related hospitalizations of children aged 0-17 to no more than 8 per 10,000 population.

Baseline: (Knox County Community Analysis 2005: Illinois Hospital Association)
Knox County number of bronchitis and asthma related hospitalizations of children aged 0-17 for 2004: 13.9 per 10,000 population. State of Illinois number of bronchitis and asthma related hospitalizations of children aged 0-17 for 2004: 8.4 per 10,000 population.

Healthy People 2010: Reduce hospitalizations for asthma. Target: 25 per 10,000 children under the age of five years, 7.7 per 10,000 children and adults aged 5 to 64 years of age, 11 per 10,000 adults aged 65 years and older; Baseline: 45.6 per 10,000 children under the age of five years, 12.5 per 10,000 children and adults aged 5 to 64 years of age, 17.7 per 10,000 adults aged 65 years and older.

By the year 2016 reduce the rate of bronchitis and asthma related Emergency Department visits to no more than 100 per 10,000 population.

Baseline: (Knox County Hospital Data 2004, 2005; Galesburg Cottage Hospital, OSF St. Mary Medical Center)
Knox County number of bronchitis and asthma related Emergency Department visits by diagnosis for 2005: 199.4 per 10,000 population; for 2004: 173.8 per 10,000 population.

Healthy People 2010: Reduce hospital Emergency Department visits for asthma. Target: 80 per 10,000 children under the age of five years, 50 per 10,000 children and adults aged 5 to 64 years of age, 15 per 10,000 adults aged 65 years and older; Baseline: 150 per 10,000 children under the age of five years, 71.1 per 10,000 children and adults aged 5 to 64 years of age, 29.5 per 10,000 adults aged 65 years and older.

By the year 2016, increase the number of Knox County adults reporting that they have not had asthma symptoms in the last thirty days by 5%.

Percentage of Knox County adults who self-reported in 2004 IBRFS that they have not had asthma symptoms in the past 30 days: 87.7%. Percentage of Illinois adults who self-reported in 2004 IBRFS that they have not had asthma symptoms in the past 30 days: 87.9%.

Healthy People 2010: Reduce hospitalizations for asthma. Target: 25 per 10,000 children under the age of five years, 7.7 per 10,000 children and adults aged 5 to 64 years of age; Baseline: 45.6 per 10,000 children under the age of five years, 12.5 per 10,000 children and adults aged 5 to 64 years of age.

By the year 2016 reduce the rate hospitalizations for COPD to no more than 45.4 per 10,000 population.

Baseline: (Knox County Community Analysis 2005: Illinois Hospital Association)
Knox County number of hospitalizations for Chronic Obstructive Pulmonary Disease (COPD) during 2004: 61.4 per 10,000 population. State of Illinois number of hospitalizations for Chronic Obstructive Pulmonary Disease (COPD) during 2004: 19.8 per 10,000 population.

Healthy People 2010: Reduce deaths from chronic obstructive pulmonary disease (COPD) among adults. Target: 60 deaths per 100,000 population; Baseline: 119 deaths from COPD per 100,000 population in 1998.
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%; 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.

Community Health Improvement Strategies:

- Comprehensive indoor air quality public education and marketing campaign that includes environmental triggers and indoor air quality testing.
- Intensive asthma education and proactive case management services for Knox County asthmatics.
- Support to Knox County physicians in recommending patient participation in asthma case management initiatives.
- Transition campaign in collaboration with County schools and local colleges, to provide education and case management to students with asthma.
- 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 promotes 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.