

Healthy Princeton



Public Health Promotion Plan

**Princeton Regional Health Department
One Monument Drive
Princeton, NJ 08542
www.princetontwp.org/health.cfm
(609) 497-7608**



**Developed by Marcie Tyson – Health Educator
Reviewed and approved by David Henry – Health Officer
June 2009**



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MISSION

The Princeton Regional Health Commission is committed to the protection, maintenance, and improvement of the health of its residents and the public health of its communities at large.

The Health Department fulfills this commitment by providing environmental health hazard control, disease prevention and education, and health promotion services to the people of Princeton Borough and Princeton Township.

INTRODUCTION

The Health Department developed *Healthy Princeton* a public health promotion plan as part of an on-going process of community health assessment, planning, provision and evaluation of services. *Healthy Princeton* is a long-term plan that will be reviewed periodically and revised when necessary. *Healthy Princeton* sets up a series of public health goals, objectives and activities as indicators of progress to promote and improve the health and well-being of Princeton Borough and Prince Township residents.

PURPOSE

Healthy Princeton was developed as a comprehensive public health promotion plan to address major public health issues. *Healthy Princeton* is based on the ten essential public health activities; U.S. Centers for Disease Control and Prevention (CDC) and used in context of the central goals of Healthy New Jersey 2010, A Health Agenda for the first Decade of the New Millennium. Healthy New Jersey 2010 provides supporting data on multiple health objectives for *Healthy Princeton*.

DESCRIPTION OF AGENCY

The Princeton Regional Health Department is an independent public health department that provides services to Princeton Borough and Princeton Township, working in cooperation with other health agencies and public health departments in Mercer County to provide the required public health services. The Princeton Regional Health Department provides public health activities in compliance with the New Jersey Statute, 26:3A 3-10, which requires that each municipality within the State shall provide a program of public health services as mandated in New Jersey's Public Health Practice Standards, promulgated by the New Jersey Public Health Council and adopted into regulation in January 2003. The Practice Standards are the determined "best practices" health services that health departments in New Jersey must provide to the residents in their service area.

THE PLANNING PROCESS

The Princeton Regional Health Department and the municipalities it serves have diverse populations regarding age, nationality, culture, education and income levels that require the provision of equally diverse public health service strategies. *Healthy Princeton* does not address every issue in the community, but it does address the major health concerns.

As the make-up of the communities change and more data becomes available, the public health service requirements of the community will change and the efforts of the Health Department will be refocused.

DEVELOPMENT OF MEASURABLE INDICATORS

Based on trend data, current scientific knowledge and available resources, the projected goals and objectives represent a challenging but achievable level of activities and services. *Healthy Princeton* takes into consideration the issue of health disparities between racial, ethnic, gender and age groups. *Healthy Princeton* attempts to address equal access to comprehensive, culturally competent, community-based health care systems that are committed to serving the needs of the individual and promoting community health.

HEALTHY PRINCETON

Healthy Princeton is a comprehensive public health promotion plan that focuses on wellness in homes, schools, communities and workplaces. *Healthy Princeton* addresses modifiable risk factors for the leading causes of death, disability and reduced quality of life issues. *Healthy Princeton* incorporates prevention activities into existing health department services and programs. The augmentation of existing health department services with additional health promotion activities is within the health department's authority, jurisdiction and ability, which increases the likelihood of success for the implementation, continuity, and evaluation of the activities.

Although the Healthy New Jersey 2010 goals and objectives serve as the framework for *Healthy Princeton* plan, it is not possible to address all the 2010 categories due to manpower and financial limitations. The *Healthy Princeton* plan addresses the following categories from Healthy New Jersey 2010:

- Alcohol and Other Drugs
- Cancer
- Cardiovascular Disease - Heart Disease and Stroke
- Diabetes
- Sexually Transmitted Diseases, including HIV/AIDS
- Infectious Diseases and Immunizations
- Injury Prevention
- Maternal and Infant Health
- Nutrition and Weight Control

- Physical Activity – Fitness
- Tobacco Use
- Violence/Suicide

To address these goals and objectives, this plan is divided into thirteen leading health indicators with goals and objectives. The first section (Health Indicators I – V) addresses the prevention/reduction of specific chronic diseases that are the leading cause of death and disability in the community. The second section (Health Indicators VI – XII) addresses primary prevention health behaviors and activities that help reduce chronic and communicable diseases, injury prevention and improve the overall quality of life.

In addition, a section in emergency response preparedness (Health Indicator XIII) is included to reflect an important area of public health activity that emerged after NJ Healthy People 2010 was developed.

CHRONIC DISEASE PREVENTION

Chronic diseases are the leading cause of death in New Jersey and this plan addresses secondary prevention actions for several of these diseases.

Chronic diseases - such as cardiovascular disease, cancer, diabetes - are the leading causes of death and disability in the United States. These diseases account for nearly 6 of every 10 deaths and affect the quality of life of millions of Americans. Other chronic diseases such as asthma and osteoporosis are also major contributors to disability, decreased quality of life, and death.

Although chronic diseases are among the most common and costly health problems, they are also among the most preventable or manageable. Adopting healthy behaviors such as eating nutritious foods, maintaining physical activity throughout life, and avoiding tobacco, drug and alcohol abuse and obtaining appropriate disease screenings can help prevent, control or reduce the devastating effects of these diseases.

Thirty years of research shows that measures such as encouraging healthier lifestyles and increasing early detection and intervention can 1) prevent chronic diseases for those who are healthy and 2) improve the health of people who experience these conditions. For example, people who improve their nutrition, increase physical activity and stop smoking rapidly and substantially reduce their risk for a multitude of chronic diseases, including cardiovascular disease, cancer, and diabetes.

Though numerous studies suggest people can play a major role in managing their chronic diseases, they aren't getting much help. Most patients have one hour of direct contact with the health care system per year, which is not enough to build partnerships with physicians or even understand a complicated disease management regime. Non-medical factors such as education, health literacy, income and community environments have significant effects on how patients manage, or fail to manage, their diseases and can affect how well patients adhere to their prescribed therapies.

Public health education programs and services can help address the knowledge and education gap regarding chronic disease prevention, health maintenance, and disease management for community members. Public health departments can also advocate for the development and changes necessary to make communities more conducive to making healthy choices, e.g. increased walking paths to encourage residents being more physically active.

CARDIOVASCULAR and CEREBROVASCULAR DISEASES (CVD)

It is estimated that nationally one in three people has some form of cardiovascular or cerebrovascular disease. Nearly 2,400 Americans die of CVD each day, an average of one death every 37 seconds. CVD claims about as many lives each year as cancer, chronic lower respiratory diseases, accidents and diabetes combined.

Coronary Heart Disease (including heart attack) caused one in every five deaths in the US (2004). An estimated 600,000 new heart attacks, and 320,000 recurrent attacks, occur each year - this means about every 26 seconds, an American will have a coronary event (heart attack), and about every minute someone will die from one. Approximately 38 percent of those who have a coronary event will die from it.

Cerebrovascular disease, or stroke, is the third leading cause of death in the nation. A stroke occurs when blood vessels carrying oxygen and nutrients to the brain burst or become occluded by a blood clot. Each year, about 780,000 people experience a new or recurrent stroke - every 40 seconds someone in the United States has a stroke. When considered separately from other forms of CVD, stroke ranks No. 3 among all causes of death, behind diseases of the heart and cancer, killing more than 150,000 Americans each year - every three to four minutes someone dies of a stroke. High blood pressure (hypertension) is the most important risk factor for stroke. People over the age of 55 and African Americans tend to be at the highest risk.

Progress has been made in reducing cardiovascular and cerebrovascular death rates. This reduction is attributable to changes in behaviors as well as advances in medical and surgical treatment of the disease. There are both modifiable and non-modifiable characteristics that increase the risk of cardiovascular and cerebrovascular diseases.

Non-modifiable risk factors include age, gender, and family history. Modifiable risk factors are, by definition, open to change through adoption of healthy behaviors and/or medical treatment. Modifiable risk factors include high blood pressure, high blood cholesterol, weight, sedentary lifestyle, cigarette smoking, nutrition (eating foods high in saturated fats and cholesterol and not eating fruits, vegetables and high fiber foods) and stress. Approximately 37 percent of adults reported having two or more of six risk factors for heart disease and stroke (high blood pressure, high cholesterol, diabetes, current smoking, physical inactivity, and obesity).

Cardiovascular and cerebrovascular diseases are largely preventable and/or manageable through healthy lifestyle behaviors. The following healthy lifestyle behaviors can reduce morbidity and mortality, and improve general quality of life:

- Maintain a healthy weight
- Exercise for at least 30 minutes to one hour every day
- Do not smoke
- Treat high blood pressure
- Keep blood cholesterol levels within established guidelines
- Avoid environmental tobacco smoke

- Eat at least five servings of both fruits and vegetables every day
- Reduce fat intake to 20-25 percent of daily calories
- Do not abuse drugs (prescription, over the counter or illegal)
- Manage stress appropriately
- Get recommended health screenings and tests

HEALTH INDICATOR I: Reduce illness, disability, and death related to cardiovascular and cerebrovascular disease.

GOALS	OBJECTIVES
1. Reduce the incidence of cardiovascular disease.	1. Provide education that promotes: <ul style="list-style-type: none"> • Maintaining healthy lifestyle behaviors. • Increasing awareness of the risk for cardiovascular disease. • Monitoring and maintaining proper blood pressure, cholesterol and triglyceride levels. • Increasing the number of people that recognize the signs and symptoms of heart attack, and the need for emergency medical treatment. • Increasing the number of people who are trained to provide CPR and use defibrillators. (see primary health behaviors, starting on page 14)
2. Reduce the incidence of cerebrovascular disease.	2a. Increase awareness of the risk factors for cerebrovascular disease. 2b. Maintain healthy lifestyle behaviors. 2c. Increases the number of people that recognize the signs and symptoms of a stroke or brain attack, and the need for emergency medical treatment.
3. Increase the number of adults screened for modifiable risk factors.	3. Increase awareness of the need for screening for blood pressure, cholesterol, blood glucose and triglyceride levels.

CANCER

In 2009, the American Cancer Society estimates that 1,479,350 people in the United States will be diagnosed with cancer, and 562,340 will die of cancer. In New Jersey, an estimated 47,920 people will be diagnosed with cancer, and 16,480 will die of cancer in 2009. Cancer is a group of more than 100 different diseases, each with their own set of risk factors. There are risk factors that can not be modified such as age, gender, race, personal and family medical histories. Other risk factors are modifiable, and are related to lifestyle choices, environmental or occupational exposure.

The most consistent finding is the strong association between tobacco use and cancers of many sites. Tobacco is the single largest preventable cause of disease and premature death in the United States. Hundreds of epidemiologic studies have confirmed this association. Additional modifiable cancer risk factors include alcohol consumption (associated with increased risk of oral, esophageal, breast, and possibly other cancers), physical inactivity (associated with increased risk of colon, breast, and possibly other cancers), and obesity (associated with colon, breast, endometrial, and possibly other cancers).

Other lifestyle and environmental factors known to affect cancer risk (either beneficially or detrimentally) include certain sexual and reproductive practices, the use of estrogens, exposure to ionizing radiation and ultraviolet radiation, certain occupational and chemical exposures, and infectious agents.

Estimates of the premature deaths that could have been avoided through screening and early detection vary from 3 percent to 35 percent. Beyond the potential for avoiding premature death, screening may reduce cancer morbidity since treatment for earlier stage (localized) cancers is often less aggressive than for more advanced (invasive or metastasized) cancers.

HEALTH INDICATOR II: Reduce illness, disability, and death related to cancer.

GOALS	OBJECTIVES
1. Reduce the incidence of cancer.	1. Provide and promote awareness of modifiable risk factors: <ul style="list-style-type: none"> • Tobacco use • Alcohol use • Diet and overweight/obesity • Sun exposure • Lack of physical activity • Some bacterial and viral infections (see primary health behaviors, starting on page 14)
2. Promote early detection measures.	2a. Promote age and sex appropriate screening. 2b. Increase awareness of recommended, age-appropriate screening schedules.

DIABETES

A total of 23.6 million adults and children (eight percent of the population) have diabetes. Only 17.9 million (76 %) have been diagnosed – 5.7 million do not even know they have diabetes. An additional 57 million people have pre-diabetes. In 2005, diabetes was the fifth leading cause of death in the United States.

Diabetes is associated with long term complications that affect almost every part of the body. The disease often leads heart and blood vessel disease, stroke and nerve damage. People with diabetes are also two to four times more likely than people without diabetes to develop heart disease. Diabetes is the main cause of kidney failure, limb amputation, and new onset blindness in American adults. Uncontrolled diabetes can complicate pregnancy, and birth defects are more common in babies born to women with diabetes.

Diabetes is a metabolic disorder. Diabetes develops when the pancreas does not produce enough, or properly use, insulin. Insulin is a hormone that is needed to convert sugar, starches and other food into energy used for daily life. As a result, very high levels of sugar (glucose) remain in the bloodstream, which can eventually damage the blood vessels in a diabetic's body. Without energy to function some of the early symptoms of diabetes can appear, such as weakness, increased appetite and weight loss.

There are two types of diabetes. Type 1 or *insulin dependent* diabetes requires daily insulin injections. Type 1 diabetes develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make insulin.

Type 2 or *non-insulin dependent* diabetes, which accounts for 90-95% of all diabetics, usually develops in adulthood and rarely requires insulin injections. While type 2 diabetes is still rare in children and adolescents, it is being diagnosed more frequently, particularly in the American Indians, African Americans, and Hispanic populations. As the majority of all diabetics are type 2, their diabetes can usually be controlled by diet and weight management.

Type 2 diabetes is associated with older age, obesity, family history of diabetes, previous history of gestational diabetes, physical inactivity, and ethnicity. Being overweight is a primary risk factor for type 2 diabetes. The more fatty tissue you have, the more resistant your cells become to insulin. About 80 percent of people with type 2 diabetes are overweight.

Gestational diabetes develops only during pregnancy. Like type 2 diabetes, it occurs more often in African Americans, American Indians, Hispanic Americans, and among women with a family history of diabetes. Women who have had gestational diabetes have a 20 to 50 percent chance of developing type 2 diabetes within 5 to 10 years.

Risk factors for developing type 2 diabetes include:

- being overweight
- being 45 years old or older
- having a parent, or sibling with diabetes
- being African American, American Indian, Asian American, Hispanic American/Latino, or Pacific Islander

- having had gestational diabetes or giving birth to at least one baby weighing more than 9 pounds
- having blood pressure 140/90 or higher
- having a HDL cholesterol 35 or lower, or triglyceride level 250 or higher
- being inactive, or exercising fewer than three times a week

The results of the Diabetes Prevention Program (National Institute of Diabetes and Digestive and Kidney Diseases) have demonstrated that weight loss and regular exercise can prevent or delay type 2 diabetes. Keeping blood glucose within normal limits will prevent or delay diabetes problems. For most people, the target blood glucose is between 90 and 130 before a meal and less than 180 an hour or 2 after the start of a meal.

HEALTH INDICATOR III: Reduce illness, disability, and death related to diabetes.

GOALS	OBJECTIVES
1. Reduce the incidence of diabetes.	1a. Maintain healthy behaviors (see primary health behaviors, starting on page 14). 1b. Increase awareness of the risk factors for diabetes. 1c. Monitor and maintain healthy glucose, blood pressure, cholesterol and triglyceride levels.
2. Reduce the incidence of gestational diabetes.	2a. Monitor blood glucose levels of pregnant women. 2b. Increase awareness of gestational diabetes and its risks.
3. Reduce complications attributed to diabetes.	3. Maintain target blood glucose levels.

ASTHMA

Asthma is a chronic inflammatory disease of the airways associated with a narrowing of the airway passages, bronchial hyper-responsiveness, and reversible airway obstruction. It is characterized by recurrent episodes of wheezing, breathlessness, chest tightness, and cough.

Approximately 34.1 Americans have been diagnosed with asthma during their lifetime – nine million are children under age 18. Asthma is a serious and growing health problem. More than 11 million people in the US had an asthma attack in the last year. The number of people with asthma increased by 75 percent between 1980 and 1994. Asthma prevalence and deaths are greater for African Americans and Puerto Rican Hispanics than for Whites. Asthma is one of the most common causes of chronic illness in children.

Environmental and occupational factors contribute to illness and disability from asthma. Decreases in lung function and a worsening of asthma have been associated with exposure to allergens, indoor pollutants (e.g. tobacco smoke), and ambient air pollutants (e.g. ozone, sulfur dioxide, nitrogen dioxide, acid aerosols, and particulate matter). Approximately 25 percent of children in the United States live in areas that exceed the Federal Government's standard for ozone. Occupational factors cause or trigger asthma episodes in 5 to 30 percent of adults with the disease. Environmental factors are associated with upper respiratory infections that contribute to illness and disability in children and adults.

Some environmental risk factors that have been shown to be associated with asthma development and/or exacerbation include:

- Exposure to air pollutants such as ozone, particulate matter, sulfur dioxide, nitrogen dioxide, diesel particulates, traffic related pollution, building products, and combustion byproducts.
- Exposure to all allergens produced by dust mites, cockroaches, fungi and dampness, and animal dander.
- Exposure to environmental tobacco smoke.
- Viral infection, such as colds and influenza.
- Adults with asthma are at high risk of developing complications after contracting the influenza virus, yet most adults with asthma do not receive an annual flu vaccination.

HEALTH INDICATOR IV: Reduce illness, disability, and death related to asthma.

GOALS	OBJECTIVES
1. Reduce the incidence of asthma and asthma attacks.	1a. Maintain healthy behaviors, including compliance with preventive and/or treatment regimes. 1b. Raise awareness that asthma is a serious chronic disease.
2. Control environmental triggers.	2a. Increase awareness of asthma triggers in the environment. 2b. Encourage behaviors that reduce exposure to, or eliminate, environmental asthma triggers.
3. Reduce the high risk of developing complications after contracting influenza.	3a. Encourage influenza vaccination for people with asthma. 3b. Provide education about the complications of asthma and influenza co-infection.

OSTEOPOROSIS

According to National Institute of Health, osteoporosis does not need to be an inevitable consequence of aging. While it is the most prevalent bone disease, it is also largely a preventable disease. Osteoporosis is characterized by a reduction in bone mass that leads to deteriorated and fragile bones.

The major health consequence of osteoporosis is an increased risk of fractures. In older adults, a fracture is not a benign event. Approximately one in two women and one in four men over age 50 will have an osteoporosis related fracture in their remaining lifetime. According to estimated figures, osteoporosis was responsible for more than 2 million fractures in 2005, with hip fractures having the greatest morbidity and socioeconomic impact. About 24 percent of older adults who suffer a hip fracture die within a year of that fracture, and about 20 percent of individuals with a hip fracture require long-term care.

In the United States, 10 million individuals are estimated to already have osteoporosis, and almost 34 million more are estimated to have low bone mass, placing them at increased risk for osteoporosis. Risk factors for osteoporosis include:

- Female
- Small, thin frame (underweight)
- Caucasian or Asian
- Family history of osteoporosis
- Postmenopausal (age)
- Early or surgically-induced menopause (before age 45)
- Excessive thyroid medication or high doses of cortisone-like drugs for asthma, arthritis or cancer
- Diet low in dairy or other calcium rich foods
- Physically inactive
- Smoke cigarettes
- Drink alcohol in excess

According to U.S. Surgeon General Richard H. Carmona,

"The good news is that you are never too old or too young to improve your bone health. With healthy nutrition, physical activity every day, and regular medical check-ups and screenings, Americans of all ages can have strong bones and live longer, healthier lives. Likewise, if it's diagnosed in time, osteoporosis can be treated with new drugs that help prevent bone loss and rebuild bone before life-threatening fractures occur."

Modifiable risk factors identified that increase the chance of hip fracture include:

- Poor visual acuity
- Weight loss after age 25
- More than two cups of coffee a day
- Not walking for exercise
- Being on one's feet less than 4 hours a day
- The use of certain medications

HEALTH INDICATOR V: Reduce illness and disability related to osteoporosis.

GOALS	OBJECTIVES
1. Reduce the incidence of osteoporosis.	1a. Encourage healthy behaviors such as: <ul style="list-style-type: none"> • Getting the daily recommended amounts of calcium and vitamin D • Engaging in regular weight bearing exercise • Avoiding smoking and excessive alcohol consumption • Maintaining a healthy weight 1b. Encourage older adults to discuss screening for osteoporosis with their health care provider. (see primary health behaviors, starting on page 14)
2. Encourage bone building in children and teens.	2. Educate adolescents on the need for healthy diets to prevent osteoporosis, including: <ul style="list-style-type: none"> • Adequate (1,000 mg/day) calcium intake • Regular weight bearing exercise
3. Minimize the risks of falls for older adults.	3a. Provide and promote education on fall prevention strategies for older adults, such as: <ul style="list-style-type: none"> • Reducing hazards that might cause tripping • Improving lighting • Encouraging regular vision tests • Improving balance and coordination through regular exercise 3b. Encourage periodic reviews of current medications.

PRIMARY PREVENTION BEHAVIORS AND ACTIVITIES

NJ Healthy People 2010 identified primary prevention health behaviors and activities as high-priority public health issues. Primary prevention behaviors and activities identify changes that cut across and improve several health issues simultaneously. The primary prevention behaviors and activities addressed in this plan are:

- Physical activity
- Nutrition and weight control
- Tobacco use
- Substance abuse
- Responsible sexual behavior
- Injury prevention
- Immunizations

These activities take into account that one contributing factor or one important behavior change can affect several health issues. The degree to which these activities are engaged in is an indicator of the overall health of a community.

An example of this approach is collaboration among those who want to increase the amount of physical activity individuals do and/or promote weight loss to reach a healthy weight. It affects several chronic diseases (cancer, cardiovascular disease, and diabetes) as well as injury prevention. Another cross-cutting action idea is combining education for parents with a "healthy home" program that addresses injury prevention, nutrition, and the impact of environmental tobacco smoke on children and other family members.

According to Healthy NJ 2010, healthy behaviors that are important for adults include maintaining a healthy diet and weight, physical activity, moderation in the use of alcohol, and abstinence from tobacco and other addictive substances. In short, the primary prevention activities work simultaneously to improve many aspects of health.

HEALTH INDICATOR VI: Improve health, fitness, and quality of life through daily physical activity.

Maintenance of a physically active lifestyle is recognized in public health as one of the essential features of a healthy life. In 2002, a CDC study found that 75 percent of adults had done some type of physical activity including running, calisthenics, golf, gardening and walking. Although this is an improvement from a 1989 study that showed a rate of 68 percent who were physically active, this increase is not enough. Few people meet the Institute of Medicine (IOM) recommendations of being physically active for thirty minutes to an hour a day.

Lack of physical activity has been identified as a risk factor for coronary heart disease, colon cancer, non-insulin dependent diabetes, hypertension, osteoporosis, obesity, and symptoms of depression and anxiety, among other health problems. Research has demonstrated that virtually all individuals will benefit from regular physical activity. A Surgeon General's report on physical activity and health concluded that moderate physical activity can reduce substantially the risk of developing or dying from heart disease, diabetes, colon cancer, and high blood pressure. On average, physically active people outlive those who are inactive.

The role of physical activity in preventing coronary heart disease (CHD) is of particular importance, given that CHD is the leading cause of death and disability in the United States. Physically inactive people are almost twice as likely to develop CHD as persons who engage in regular physical activity.

Regular physical activity is especially important for people who have joint or bone problems and has been shown to improve muscle function, cardiovascular function, and physical performance. People with osteoporosis or osteopenia, chronic conditions affecting nearly 44 million people in the United States, may respond positively to regular physical activity, particularly weight bearing activities, such as walking.

For people who are inactive, even small increases in physical activity are associated with measurable health benefits. In addition, moderate physical activity is more readily adopted and maintained than vigorous physical activity. Only a relatively small proportion of adults report that they participate regularly in vigorous physical activity, and there has not been any measurable change in this percentage since it was first estimated for New Jerseyans in the early 1990s from Behavioral Risk Factor Surveillance System (BRFSS).

As research continues to illustrate the links between physical activity and selected health outcomes, people will be able to choose physical activity patterns optimally suited to individual preferences, health risks, and physiologic benefits.

GOALS	OBJECTIVES
<p>1. Increase the proportion of adults who engage regularly in moderate physical activity for 30 to 60 minutes per day.</p>	<p>1. Provide and promote education that regular physical activity:</p> <ul style="list-style-type: none"> • Reduces the risk of dying prematurely from heart disease • Reduces the risk of developing diabetes • Reduces the risk of developing high blood pressure • Reduces the risk of developing colon cancer • Helps control weight • Reduces stress
<p>2. Increase the proportion of adults who perform physical activities that enhance and maintain muscular strength, endurance and flexibility.</p>	<p>2a. Provide and promote education to increase public awareness that physical activity will help build and maintain healthy bones, muscles and joints.</p> <p>2b. Provide and promote education that such physical activity will help older adults become stronger and better able to move about without falling.</p>
<p>3. Increase the proportion of children who engage in daily physical activity for 30 to 60 minutes per day.</p>	<p>3. Promote education to increase awareness of the need to:</p> <ul style="list-style-type: none"> • Provide quality physical education daily in all school grades (K-12) and daycare centers • Reduce time spent watching television, sitting at the computer, playing video games and in other similar sedentary behaviors • Build physical activity into regular routines and playtime for children and their families

HEALTH INDICATOR VII: Promote health and reduce chronic diseases associated with nutrition and weight control.

In 1995, the U.S. Departments of Agriculture (USDA) and Health and Human Services (HHS) in their report on *Dietary Guidelines for Americans* noted,

“... to stay healthy, one should eat a variety of foods; maintain or improve one’s weight by balancing food intake with physical activity; choose a diet that is plentiful in grain products, vegetables, and, fruits, moderate in salt, sodium, and sugars, and low in fat, particularly saturated fat, and cholesterol; and moderate consumption of alcoholic beverages.”

According to the CDC, dietary factors are linked to four of the ten leading causes of death: coronary heart disease, some types of cancers, stroke and type 2 diabetes. Dietary factors also are associated with osteoporosis, the major underlying cause of bone fractures in elderly persons and postmenopausal women.

Nutrition education and services are also a critical component of improved health outcomes for many other diseases and conditions including obesity, gastrointestinal and hepatic disease, renal disease, cancer, HIV/AIDS, pressure ulcers, burns and trauma, eating disorders, and prenatal care.

A change from a once nutrient-deficient diet to the present day diet with excesses and imbalances in some food components has resulted in an increase in the number of persons classified as overweight. This situation is exacerbated by the sedentary lifestyle of a growing percentage of the population. With the recent change in definition of overweight, half of the United States adult population is now considered overweight. Persons who are overweight or obese are at increased risk for high blood pressure, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and some types of cancer. The health outcomes related to these diseases, however, often can be improved through weight loss or, at a minimum, no further weight gain.

In New Jersey, there has been little noticeable improvement in the proportion of adults eating at least five servings of fruits and vegetables per day. In 1996 through 1999 only 27 percent of the population reported consuming five servings per day. While New Jersey’s record is somewhat better than the national average of 22 percent, it is still alarmingly low.

GOALS	OBJECTIVES
1. Decrease the incidence of obesity.	1. Promote healthier food choices, including: <ul style="list-style-type: none"> • Eat less overall calories • Eat smaller portion sizes • Reduce total fat in the diet to less than 20 percent • Reduce the number of meals eaten at fast food restaurants • Switch snack food choices from high fat and/or refined sugar chips, cookies and candy to lower fat and/or naturally sweetened fresh fruit, vegetables and yogurt • Reduce the amount of soda consumed
2. Educate all parents about the benefits of breast-feeding, early childhood healthy nutrition and family physical activity and fitness.	2. Provide and promote education of the benefits of breastfeeding, healthy nutrition and exercise: <ul style="list-style-type: none"> • Breastfed infants gain some immunity from infectious disease, lower food allergies and less colic and may be less likely to later become overweight • Healthy nutrition early in childhood helps prevent obesity and provides nutrients necessary for optimal growth and development • Families that engage in physical activity and fitness together help establish lifelong healthy habits that help prevent obesity, many chronic diseases, depression and improve the overall quality of life
3. Reduce the incidence of chronic diseases due to modifiable lifestyle choices.	3. Provide and promote education that proper nutrition and weight control: <ul style="list-style-type: none"> • Reduces the risk of dying prematurely from heart disease and stroke • Reduces the risk of developing diabetes • Reduces the risk of developing high blood pressure • Reduces the risk of developing colon cancer • Helps control and reduce weight
4. Increase the consumption of healthy foods and decrease the consumption of high fat and processed foods.	4. Individuals should consume at least 5 servings of fruits and vegetables daily, increase their consumption of whole grain foods and decrease their consumption of fat, meats, fast foods and processed foods.

HEALTH INDICATOR VIII: Reduce illness, disability, and death related to tobacco use and exposure to secondhand smoke.

Approximately 19.8% of U.S. adults (43.4 million people) are current cigarette smokers. Among adult smokers, 70% report that they want to quit completely,¹³ and more than 40% try to quit each year. Each day, about 1,100 persons younger than 18 years of age begin smoking on a daily basis.

Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964. Yet cigarette smoking is still the most preventable cause of cancer in the United States.

It causes several different kinds of cancer (lung, larynx, esophagus, pharynx, mouth, and bladder), as well as heart disease and chronic lung disease. Cigarette smoking also contributes to cancer of the pancreas, kidney, and cervix. Smoking during pregnancy causes spontaneous abortions, low birth weight, and sudden infant death syndrome and may be associated with mental retardation and birth defects such as oral clefts.

There are no safe forms of tobacco use. Cigar smoking increases the risk of several cancers, including cancer of the lung, oral cavity (lip, tongue, mouth, throat), esophagus (the tube connecting the mouth to the stomach), and larynx (voice box). Inhaling cigar smoke appears to be linked to death from cancer of the pancreas and bladder as well. Spit tobacco causes a number of serious oral health problems, including cancer of the mouth and gum, periodontitis, and tooth loss.

Since 1990 the percent of adults who smoke cigarettes has declined only slightly. In 2001, 25 percent of men and 21 percent of women were smokers. Cigarette smoking by adults is inversely associated with educational attainment: adults with less than a high school education were nearly three times as likely to smoke as were those with a college degree.

There is also a high risk of serious health effects with exposure to environmental tobacco smoke (or secondhand smoke). It contributes to respiratory illness, cardiovascular and cerebrovascular diseases, and some cancers. Researchers have identified more than 4,000 chemicals in tobacco smoke and of these, at least 60 cause cancer in humans and animals. Each year, an estimated 3,000 nonsmokers die of lung cancer, and 150,000 to 300,000 infants and children under age 18 months experience lower respiratory tract infections because of exposure to secondhand smoke. Asthma and other respiratory conditions often are triggered or worsened by tobacco smoke.

Studies also have found that secondhand smoke exposure causes heart disease among adults. Data reported from a study of the U.S. population aged 4 years and older indicated that among non-tobacco users, 88 percent had detectable levels of serum cotinine, a biological marker for exposure to secondhand smoke.

Data from a 1996 study indicated that 22 percent of U.S. children under age 18 years (approximately 15 million children and adolescents) were exposed to secondhand smoke in their homes. Environmental tobacco smoke disproportionately affects children. Their lungs are not completely developed and exposure early in life can have a permanent effect on their health. Children exposed to tobacco smoke have more bronchitis, asthma, ear and upper respiratory infections. Another study concluded that secondhand smoke exposure worsens asthma, leading to 500,000 visits to physicians by children each year.

Decreasing or eliminating exposure to second hand smoke may prevent a percentage of respiratory diseases in children. Unfortunately, children usually can not leave an environment where people smoke. Nineteen million children in the U.S. live in homes where a resident smokes daily. Sixteen percent of nonsmokers with children said they allowed other residents or visitors to smoke in the home. The American Academy of Pediatrics has recommended that parents be informed about the health hazards of secondhand smoke and provide guidance on smoking cessation.

GOALS	OBJECTIVES
1. Increase the percentage of women who abstain from using any tobacco product during pregnancy.	1. Provide and promote education that use of tobacco during pregnancy is associated with low birth weight, spontaneous abortion, and sudden infant death syndrome.
2. Reduce the proportion of children who are regularly exposed to tobacco smoke at home.	2a. Provide and promote education to parents on the risks of second hand smoke exposure. 2b. Encourage parents to prohibit smoking in the home.
3. Reduce the number of persons using tobacco products.	3a. Provide and promote education on smoking cessation and available resources. 3b. Provide and promote education to prevent initiation of tobacco use.

HEALTH INDICATOR IX: Reduce substance abuse to promote and protect the health, safety, and quality of life for all, especially children.

Substance abuse and its related problems are among society's most pervasive health and social concerns. Each year, approximately 100,000 deaths in the United States are related to alcohol consumption. Although there has been a long term drop in overall use, many people in the United States still use illicit drugs. In 1998, there were 13.6 million current users of any illicit drug, representing 6.2 percent of the total population. Marijuana is the most commonly used illicit drug, and with 60 percent of users abusing marijuana only.

Illegal use of drugs is associated with serious consequences including injury, illness, disability, and death as well as crime, domestic violence, and lost workplace productivity. Drug abuse is linked to risky behaviors like needle sharing and unsafe sex which increases the likelihood of acquiring HIV/AIDS, hepatitis and many other infectious diseases. The full extent of the effects of prenatal drug exposure on a child is not known, however studies show that various drugs of abuse may result in premature birth, miscarriage, low birth weight, and a variety of behavioral and cognitive problems.

Researchers have found a connection between the abuse of most drugs and adverse cardiovascular effects, ranging from abnormal heart rate to heart attacks. The risk for high blood pressure, heart rhythm irregularities, heart muscle disorders and stroke are all increased by long term heavy drinking. It also increases the risk of developing certain forms of cancer, especially of the esophagus, mouth, throat, and larynx. Heavy alcohol use also increases risk for cirrhosis and other liver disorders and worsens the outcome for patients with hepatitis C. Drinking also may increase the risk for developing cancer of the colon, the rectum and breast.

Drug abuse can lead to respiratory problems. Smoking cigarettes and marijuana can cause bronchitis, emphysema and lung cancer. The use of some drugs may also cause breathing to slow, block air from entering the lungs or exacerbate asthma symptoms. Drugs that can affect the respiratory system include cocaine, GHB, heroin, methamphetamines, inhalants, ketamine, marijuana, nicotine, PCP, and prescription opiates.

GOALS	OBJECTIVES
1. Increase the percentage of women who abstain from alcohol and drug use during pregnancy.	1. Promote awareness of the risk of Fetal Alcohol Syndrome, premature delivery and possible embro/fetal damage as a result of alcohol and drug consumption.
2. Increase the proportion of adults and adolescents who understand the risks associated with substance abuse.	2. Promote education to inform residents of the correlation between drug use and disease, specifically cardiovascular and cancer risks. a. Educate community about the correlation between substance abuse and domestic and child abuse and violence.
3. Assess and reduce the prevalence of substance abuse among persons aged 65 and older.	2. Provide and promote education to increase awareness of alcohol abuse, medication management (over the counter and prescription), and other substance abuse topics of concern to older adults.

HEALTH INDICATOR X: Decrease unintended pregnancies, Sexually Transmitted Diseases and HIV infection by promoting responsible sexual behaviors.

Unintended pregnancies and sexually transmitted diseases (STDs), including infection with the human immunodeficiency virus (HIV) that causes AIDS, can result from unprotected sexual behaviors. Educational and behavioral interventions should focus on and impact exposure, transmission prevention, and duration factors. These strategies help persons abstain from sexual intercourse, delay initiation of intercourse, reduce the number of sexual partners, and increase the use of effective physical barriers, such as condoms.

Abstinence is the only method of complete protection. Condoms, if used correctly and consistently, can help prevent both unintended pregnancy and STDs.

In the past six years there has been both an increase in abstinence among all youth and an increase in condom use among those young people who are sexually active. Research has shown clearly that the most effective school based programs are comprehensive ones that include a focus on abstinence *and* condom use. Abstaining from sexual intercourse offers maximum protection to adolescents who are generally poorly prepared to deal with the physical and psychological consequences of HIV infection, other STDs, and pregnancy. Condom use in sexually active adults has remained steady at approximately 25 percent.

Sexually transmitted diseases are common in the United States, with an estimated 15 million new cases of STDs reported each year. Almost 4 million of the new cases of STDs each year occur in adolescents. Women generally suffer more serious STD complications than men, including pelvic inflammatory disease, ectopic pregnancy, infertility, chronic pelvic pain, and cervical cancer from the human papilloma virus.

Compelling worldwide evidence indicates that the presence of other STDs increases the likelihood of both transmitting and acquiring HIV infection. Studies have repeatedly demonstrated that when other STDs are present, HIV transmission is at least two to five times higher than when other STDs are not present. In addition, when other STDs are present, an individual's susceptibility to HIV infection is increased, and the likelihood of a dually infected person (having HIV infection and another STD) infecting other people with HIV is increased. Conversely, effective STD treatment can slow the spread of HIV at the individual and community levels.

GOALS	OBJECTIVES
1. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.	1. Provide and promote awareness that such behaviors: <ul style="list-style-type: none"> • Reduces the risk of HIV infection • Reduces the risk of STDs • Reduces the risk of unintended pregnancy
2. Increase the proportion of sexually active persons who use condoms.	2. Promote awareness that condom usage: <ul style="list-style-type: none"> • Reduces the risks of HIV infection • Reduces the risk of STDs • Reduces the risk of unintended pregnancy
3. Reduce the incidence of unintended adolescent pregnancy.	3. Provide and promote education to increase awareness among adolescents of family planning concepts including: <ul style="list-style-type: none"> • Role of abstinence • Available methods of family planning and the advantages/disadvantages of each method • Active decision-making skills
4. Reduce the incidence of STDs and HIV infection.	4. Provide and promote education addressing STD and HIV prevention measures.

HEALTH INDICATOR XI: Reduce injuries, disabilities, and deaths due to unintentional injuries and violence.

The risk of injury is so great that most persons sustain a significant injury at some time during their lives. This widespread human damage often is taken for granted in the erroneous belief that injuries happen by chance and are the result of unpreventable “accidents”. Most unintentional injuries are not “accidents”, or random, uncontrollable acts of fate, but are predictable and preventable.

- More persons aged one to 34 years die as a result of unintentional injuries than any other cause of death.
- Across all ages, 121,599 persons died in 2006 as a result of unintentional injuries.
 - 27,531 were due to unintentional poisoning deaths
 - 43,664 were due to motor vehicle traffic deaths
 - 20,823 were due to unintentional fall deaths

To reduce the number and severity of injuries, prevention activities must address the specific type of injury - poisons, motor vehicles, neglect, falls and violence.

POISONS

Most of New Jersey’s counties exceed the national poisoning rate. Children are at significantly greater risk from poisoning death and exposure than adults because children are more likely to ingest potentially harmful chemicals. In 1996, more than 1.1 million unintentional poisonings were reported among children aged 5 years and under. Among these children, 60 percent of poisoning exposures came from non-pharmaceutical products such as cosmetics, cleaning substances, plants, foreign bodies, toys, pesticides, and art supplies; 40 percent resulted from ingesting pharmaceuticals. Approximately 90 percent of all poison exposures occur at a residence.

Childhood lead poisoning is one of the most common pediatric health problems in the United States today, despite the fact that it is preventable. Children are exposed to lead from different sources, such as paint, dust, soil, ethnic foods and herbal remedies. While lead has been banned from paint in New Jersey since 1978, older housing stock is likely to have lead based paint. Lead is most hazardous to children under the age of six, affecting their rapidly developing nervous systems. Even low levels of lead in a child’s blood can cause brain damage, mental retardation, behavior problems and developmental delays, anemia, liver and kidney damage, and other physical and mental problems. New Jersey law requires that all children be screened for lead poisoning at 12 and 24 months or at least once by 6 years of age if not previously tested.

MOTOR VEHICLES

Motor vehicle crashes remain a major public health problem, and are the leading cause of death for persons in the United States aged 5 to 29 years. Safety belts, when worn correctly, are the most effective way for occupants to reduce the risk of death and serious injury in a motor vehicle crash on public roads. As of December 1998, the national safety belt use rate was 69 percent.

Proper use of child car seats as well as the addition of passenger air bags has helped reduce the rate of child vehicular injuries. But there is still a persistent problem of incorrect use of child restraints and safety belts. The National Highway Traffic Safety Administration recommends the following guidelines for the restraint of children traveling in motor vehicles:

- **REAR FACING SEATS** in the back seat from birth to at least 1 year old and at least 20 pounds.
- **FORWARD-FACING TODDLER SEATS** in the back seat from age 1 and 20 pounds to about age 4 and 40 pounds.
- **BOOSTER SEATS** in the back seat from about age 4 to at least age 8, unless 4'9" tall.
- **SAFETY BELTS** at age 8 and older or taller than 4'9". All children age 12 and under should ride in the back seat.

New Jersey's new law requiring helmets for all bicyclists and skateboarders under the age of 17 will further reduce the risk of related head injuries. Previous bicycle helmets usage had already reduce the risk of bicycle-related head injury by 85 percent and saved direct medical and other costs.

CHILD NEGLECT AND/OR ABUSE

In 2002, an estimated 1,400 child fatalities were reported as caused by an injury resulting from abuse or neglect. This translates to a rate of 1.98 children per 100,000 children in the general population. Recent studies have estimated as many as 50 to 60 percent of deaths resulting from abuse or neglect are not recorded. While the exact number of children affected is uncertain, child injuries and fatalities due to abuse and neglect remain a serious problem in the United States.

Fatalities disproportionately affect young children and are most often caused by one or both of the child's parents. Research indicates that very young children (ages 3 and younger) are the most frequent victims of child fatalities. This population of children is the most vulnerable for many reasons, including their dependency, small size, and inability to defend themselves. One fact of great concern is that the perpetrators are, by definition, individuals responsible for the care and supervision of their victims. In 2002, one or both parents were involved in 79 percent of child abuse or neglect fatalities.

FALLS

Falls are the leading cause of injury deaths among adults aged 65 years and older, and are the most common cause of injuries and hospital admissions for trauma among elderly persons. The most serious fall-related injury is hip fracture. Approximately 212,000 hip fractures occur each year in the United States among adults aged 65 years and older.

Although osteoporosis increases the risk of fractures, most hip fractures result from falls. Factors that contribute to falls include difficulties in gait and balance, neurological and musculoskeletal disabilities, medication side effects, dementia, and visual impairment. Additionally, environmental hazards such as slippery surfaces, uneven floors, poor lighting on stairs, loose rugs, unstable furniture, lack of grab bars in bathrooms, and objects on floors can increase the risk of falls.

SUICIDE

Suicide was the ninth leading cause of death in the United States in 1996 and the third leading killer of young persons between age 15 and 24 years. In addition to mental and substance abuse disorders, risk factors include prior suicide attempt, stressful life events, and access to lethal suicide methods.

There is increasing awareness and concern in the public health sector regarding the impact of stress, its prevention and treatment, and the need for enhanced coping skills. Stress is experienced in varying degrees of severity by all persons, and provides a clear demonstration of the mind-body interaction. Coping skills, acquired throughout the lifespan, are positive adaptations that affect the ability to manage stressful events and reduce the risk of adverse outcomes.

GOALS	OBJECTIVES
1. Reduce incidence of fatal and non-fatal poisonings.	1. Provide and promote education to increase: <ul style="list-style-type: none"> • Parental awareness on poison prevention • Awareness of poison prevention among school-age children
2. Reduce incidence of and screening for, lead poisoning among children under the age of six years.	2a. Encourage parents to follow lead screening guidelines. 2b. Provide education to increase awareness of the risk factors, and risk reduction strategies, for lead poisoning.
3. Reduce deaths and injuries attributable to vehicular accidents.	3a. Encourage and promote the proper use of car safety restraints. 3b. Promote the use of bicycle helmets for all persons under the age of 17 years.
4. Reduce the incidence of child abuse and neglect.	4. Provide and promote educational and support programs for the parent population in stress management, parenting skills, and substance abuse prevention.
5. Reduce the incidence of injuries from falls among older adults ages 65 and older.	5. Provide and promote education on role of the following in the risk of falls: <ul style="list-style-type: none"> • Vision • Medication side effects • Physical inactivity • Muscle weakness • Poor health • Environmental factors
6. Reduce deaths and injuries among adolescents and young adults attributable to accidents and suicide.	6. Provide and promote education in the following areas: <ol style="list-style-type: none"> a. Accident prevention and injury control b. Stress management c. Role of substance use/abuse

HEALTH INDICATOR XII: Prevent disease, disability, and death from infectious diseases, including vaccine-preventable diseases.

Vaccines protect more than the vaccinated individual. They also protect society. When vaccination levels in a community are high, the few who cannot be vaccinated—such as young children and persons with contraindications to vaccination—often are indirectly protected because of group, or “herd”, immunity. Vaccination coverage levels of 90 percent are, in general, sufficient to prevent an outbreak of vaccine preventable diseases (VPDs). Maintenance of high vaccination coverage levels in early childhood is the best way to prevent the spread of VPDs in childhood and to provide the foundation for controlling VPDs among adults.

In the United States, most VPDs occur among adults. Pneumococcal disease and influenza account for more than 36,000 deaths annually, most of which occur in elderly persons. Vaccination rates among persons aged 65 years and older continued to increase over the last decade. Influenza vaccine coverage rates increased 33 percent in 1989 to 64 percent in 1998, and pneumococcal vaccine coverage rates increased 15 percent to 46 percent. Despite these increases, coverage rates for certain racial and ethnic groups, i.e. Hispanics and African Americans, lags behind the immunization rates for non-Hispanic whites.

Adults should get a booster shot for tetanus, diphtheria and pertussis every ten years.

An annual influenza vaccination is now required for children six months through 59 months of age attending any childcare center or pre-school facility on or after September 1, 2008, and shall annually receive at least one dose of influenza vaccine between September 1 and December 31 of each year.

FACTS ON CHILDHOOD IMMUNIZATIONS

Many serious childhood infectious diseases are highly contagious but can be prevented by immunizations (or shots). With just a few visits to a health care provider, children can be protected against many diseases. Immunizations are important to ensure every baby’s health today and in the future.

Chickenpox (Varicella) causes a rash, itching, tiredness and fever. It can lead to pneumonia, brain infection or death.

Diphtheria, Tetanus, Pertussis, (DTaP and Tdap)

- Diphtheria can cause the throat and/or windpipe to become blocked and then the child cannot breathe.
- Tetanus causes serious, painful spasms of all muscles, and can lead to “locking” of the jaw so a person cannot open their mouth, swallow or breathe, it can lead to death.
- Pertussis (whooping cough) causes severe spells of coughing and noisy (whooping) intake of breath. It makes it hard to eat, drink and breathe and can lead to pneumonia, seizure, brain damage and death.

Haemophilus influenza, Type b (HIB) disease causes bacterial meningitis, which can cause brain damage or death. It can cause pneumonia, infections of the blood, joints, bones and heart.

Hepatitis A (HepA) causes liver damage and can lead to liver cancer or death. HepA is a food or water borne disease. HepA is spread from person to person by putting anything in the mouth that has been contaminated with the stool (feces) of a person with HepA.

Hepatitis B (HBV) causes liver damage and can lead to liver cancer or death. Many infants infected will become carriers and continue to be infectious to others for the rest of their life.

Human Papilloma Virus (HPV) genital infection is a sexually transmitted disease (STD). Some of these viruses are called “high-risk” types, and may cause abnormal Pap tests. They may also lead to cancer of the cervix, vulva, vagina, anus, or penis. Others are called “low-risk” types, and may cause mild Pap test abnormalities or genital warts.

Influenza (“the flu”) symptoms include fever, chills, stiffness, cough, headache, fatigue, muscle aches, sore throat and fever.

Measles, Mumps and Rubella (MMR)

- Measles symptoms include a rash, fever and cough and can lead to complications including deafness, bronchitis, and brain damage.
- Mumps cause painful swollen glands under the jaw and can result in loss of hearing.
- Rubella (German measles) is usually mild, but it is dangerous for a pregnant woman because it can cause birth defects in the unborn child.

Meningococcal disease (MCV4) is a serious bacterial disease which causes infection of the fluid surrounding the brain, the spinal cord or the blood. Anyone can get meningococcal disease. But it is most common in infants less than one year of age

Pneumococcal Pneumonia (PCV) is a bacterial infection that may cause fever, vomiting, convulsions, coughing, difficulty breathing and can lead to serious illness and death.

Polio (IPV) is caused by a virus that attacks the central nervous system and can cause paralysis and death.

Rotavirus (Rota) is a virus that causes sever diarrhea, mostly in babies and young children. It is often accompanied by vomiting and fever. Children get rotavirus by being around other children who are already infected.

CHILDHOOD VACCINATION SCHEDULE

required by the New Jersey Department of Health and Senior Services
as of January 1, 2008 is as follows:

- **Birth - 1 month**
HepB
- **2 months old**
TaP - Hib - IPV - HepB - PCV - Rotovirus
- **4 months old**
DTaP - Hib - IPV - PCV - Rotovirus
- **6 months old**
DTaP - Hib - HepB - PCV - Rotovirus
Annual Influenza
- **12 - 15 months old**
Hib - IPV - MMR - Varicella
PCV – HepA
- **15 - 18 months old**
DTaP – HepA - Annual Influenza
- **4 to 6 years old**
DTaP -IPV - MMR – Varicella - Annual Influenza
- **11 - 12 years old**
Tdap - MCV4 – Annual Influenza - HPV (recommended)

Additional vaccine-specific information is available from the
Immunization Action Coalition at www.immunize.org

GOALS	OBJECTIVES
<p>1. Achieve and maintain effective vaccination coverage levels ≥ 90 percent for universally recommended vaccines among infants, young children, adolescents and adults.</p>	<p>1a. Provide and promote education to increase awareness on the safety and benefits of vaccines for children and adolescents.</p> <p>1b. Provide information on the recommended vaccination schedule for infants, young children and adolescents.</p>
<p>2. Increase the proportion of adults who are vaccinated annually against influenza and ever-vaccinated against pneumococcal disease.</p>	<p>2. Provide and promote education to increase awareness of the benefits, safety, and availability of vaccines.</p>
<p>3. Increase hepatitis B vaccine coverage among high-risk groups.</p>	<p>3a. Encourage vaccination of high risk groups:</p> <ul style="list-style-type: none"> • Dialysis patient • Men who have sex with men • Persons with a history of STDs or multiple sex partners • IV drug users <p>3b. Provide bloodborne pathogen training and education programs for employees who are exposed, or potentially exposed, to blood in the workplace.</p>
<p>4. Increase the use and development of interventions known to prevent hepatitis C.</p>	<p>4. Provide and promote education to increase awareness of how to prevent the transmission of hepatitis C.</p>
<p>5. Increase the number of people infected with hepatitis C that are aware of how to best manage their disease.</p>	<p>5. Provide and promote education to increase awareness of people infected with hepatitis C about lifestyle choices, e.g. behaviors and medications, that can damage the liver.</p>

HEALTH INDICATOR XII: Emergency Response and Preparedness

Emergency response readiness requires local health departments and other health related agencies to be prepared to respond to both natural or accidental events and intentional threats.

Natural emergency events include: infectious disease outbreaks or epidemics (influenza, Avian influenza, H1N1 influenza, SARS, pertussis, meningitis and drug resistant TB), antibiotic resistant pathogens outbreaks such as Community Acquired Methicillin-Resistant *Staphylococcus Aureus*, (CA-MRSA), emerging infections, flooding, storms, power outages, accidental fires and explosions.

Intentional emergency events include terrorist attacks or threats that use: bioterrorism agents (anthrax, smallpox, tularemia, plagues, influenza, emerging infections), toxic chemicals (ricin, sarin, acids and bases), botulism, and/or radiation exposures, intentional power outages, fire and explosions.

The prospect of “Deliberate Epidemics” caused by biological attacks on civilians, the historically documented vulnerabilities of human beings to large-scale disease outbreaks and the possibility of a terrorist attack requires that the public health system and medical care organizations maintain an effective level of emergency response and preparedness.

To promote community support and cooperation the public health system must provide accurate and continuous education and outreach programs to community members about emergency response and preparedness. The education programs should include helping community members to become familiar with emergency response plans (community, schools and organizational), New Jersey’s homeland security efforts and plans and what families and individuals should do in case of a natural emergency or intentional attack.

GOALS	OBJECTIVES
<p>1. Increase the number of community members that are aware of what individuals and families can do to prepare for most emergencies – natural, accidental and intentional.</p>	<p>1. Provide and promote community education regarding the basic steps individuals and families should take to be prepared for most emergencies that can occur, including:</p> <ul style="list-style-type: none"> • Encourage each individual and family to maintain an emergency supply kit for the home and all vehicles • Encourage individuals and families to have, and be familiar with, an Emergency Plan • Increase the number of residents that are familiar with local emergency phone numbers, radio stations, and emergency locations.
<p>2. Increase the number of the residents that are aware of and familiar with the Princeton's Emergency Response and Pandemic Influenza Preparedness Plans.</p>	<p>2. Provide educational programs and services through direct community programs, mailings, municipal web site and local TV stations regarding the Emergency Response and Pandemic Influenza Preparedness Plans.</p>
<p>3. Improve Princeton Borough and Princeton Township's ability to be prepared to deal with the immediate and long term mental health issues that can result from community emergency situations.</p>	<p>3. Provide and promote education on mental health issues that can occur as a result of community emergencies.</p> <ul style="list-style-type: none"> • Increase awareness of signs and symptoms of potential mental health issues that may develop as a result of an emergency situation • Increase the number of residents that are aware of who to call and where to go for support and mental health services • Improve communication and coordination between local health department and regional mental health services to be prepared to provide support and mental health services when an emergency does occur • Provide long term follow up with residents to assure they are getting the necessary support and mental health services
<p>4. Develop emergency plans that respond to the unique needs of vulnerable populations such as children, the elderly, non-ambulatory and disabled people.</p>	<p>4a. Identify strategies, tools and resources to address and respond to people with special needs such as children, the elderly, non-ambulatory and disabled.</p> <p>4b. Develop a list of residents that will require special services during an emergency.</p>

APPENDIX A

Related Objectives from Healthy New Jersey 2010

3B 8. Objective (Developmental): Reduce the percentage of initial inspections of retail food establishments where deficiencies are noted.

3B 7. Objective: To increase the proportion of mothers who breastfeed their babies at hospital discharge to at least **75.0 percent**.

3B 8. Objective: To increase the proportion of breastfeeding women whose infants are breastfed exclusively at hospital discharge to **90.0 percent**.

3B 9a. Objective: Increase the percentage of women who abstain from alcohol during pregnancy to: **95.0 percent for all mothers of newborns**.

3B 9b. Objective: Increase the percentage of women who abstain from any tobacco product during pregnancy to: **89.0 percent for all mothers of newborns**.

3B 11. Objective: Increase the percentage of two year old children receiving DTaP, polio, MMR, Hib and hepatitis B vaccines, separately and as part of the 4-3-1 series, to **90.0 percent**.

3B13. Objective: Reduce the number of cases of indigenous measles to **zero**.

3B 14. Objective (Developmental): Increase the percentage of children screened for lead poisoning by two years of age to **85.0 percent**.

3C 3. Objective: Reduce the percentage of middle school students who have used cigarettes in the past 30 days to: **10.0 percent for all middle school students**.

3C 4. Objective: Reduce the percentage of public high school students who say they are currently smoking to: **26.0 percent for all high school students**.

3C 5. Objective: Decrease the percentage of middle school students who have used alcohol in the past 30 days to: **20.0 percent for all middle school students**.

3C 6. Objective: Decrease the percentage of middle school students who have used marijuana in the past 30 days to 5.0.

3C 7. Objective: Decrease the percentage of middle school students who have used inhalants in the past 30 days to: **2.0 percent for all middle school students**.

3C 8. Objective: Decrease the percentage of public high school sophomores, juniors and seniors who have used the following substances in the past 30 days to:

- 37.0 percent for alcohol**
- 11.0 percent for marijuana**
- 2.0 percent for cocaine**
- 3.8 percent for inhalants**

3C 9a. Objective: Reduce the total number of births per 1,000 females aged 10 through 14 to: **0.5 for all females 10-14 years.**

3C 9b. Objective: Reduce the total number of births per 1,000 females aged 15 through 17 to: **18.2 for all females 15-17 years.**

3C 9c. Objective: Reduce the total number of births per 1,000 females aged 18 through 19 to: **40.0 for all females 18-19 years.**

3C 10. Objective: Reduce the death rate from homicide among 15 through 19 year old males per 100,000 population to: **12.0 for all males 15-19 years.**

3D 1. Objective: Increase the percentage of persons aged 18 and over eating at least five daily servings of fruits and vegetables (including legumes) to **35.0 percent.**

3D 2. Objective: Reduce the percentage of persons aged 18 and over who are overweight but not obese to: **27.6 percent for all adults.**

3D 3. Objective: Reduce the percentage of persons aged 18 and over who are obese to: **12.0 percent for all adults.**

3D 4. Objective: Increase the percentage of persons aged 18 and over who participated in frequent, leisure time physical activity during the past month to **42.5 percent.**

3D 5. Objective: Reduce homicide deaths among 20 through 34 year olds per 100,000 population to: **6.2 for all 20-34 year olds.**

3E 4. Objective (Developmental): Increase hepatitis B vaccination levels among New Jersey public employees at occupational risk of infection through exposure to blood to **90 percent.**

3E 5. Objective (Developmental): Reduce the incidence of work-related musculoskeletal injuries experienced by employed older workers diagnosed with osteoporosis by **50 percent.**

3F 1a. Objective: Reduce the age-adjusted death rate from motor vehicle-related injuries per 100,000 standard population to **8.0.**

3F 1b. Objective: Reduce the death rate from motor vehicle-related injuries per 100,000 population among high risk groups to **13.5.**

3F 2. Objective: Increase the percentage of persons 18 and over who use seat belts in automobiles to **85 percent.**

3F 4. Objective: Reduce the death rate per 100,000 population from falls of persons aged 65 and over to:

12.0 for persons aged 65-84 years

105.0 for persons aged 85+ years

3F 5. Objective: Reduce the incidence rate of traumatic brain injuries per 100,000 population to: **100.0 for the total population, age-adjusted.**

3G 4. Objective: Increase the percentage of persons aged 65 and over who have received influenza vaccinations in the previous 12 months to:

70.0 percent for non-institutionalized persons

80.0 percent for institutionalized persons

3G 5. Objective (Developmental): Reduce the statewide incidence of falls per 100 person years in long-term care facilities to **3.7**.

3G 8. Objective: Reduce the annual hospitalization rate for hip fractures among older adults (65 and over) per 100,000 population.

4A 1a. Objective: Reduce the age-adjusted death rate from coronary heart disease per 100,000 standard population to **71.8**.

4A 1b. Objective: Reduce the death rate from coronary heart disease among persons 45 through 64 years of age per 100,000 population to **92.3**.

4A 1c. Objective: Reduce the death rate from coronary heart disease among persons 65 years of age and over per 100,000 population to **1,044.5**.

4A 2a. Objective: Reduce the age-adjusted death rate from cerebrovascular diseases per 100,000 standard population to **17.0**.

4A 2b. Objective: Reduce the death rate from cerebrovascular diseases among persons 45 through 64 years of age per 100,000 population to **19.0**.

4A 2c. Objective: Reduce the death rate from cerebrovascular diseases among persons 65 years of age and over per 100,000 population to **300.0**.

4A 3. Objective: Increase the percentage of persons aged 18 and over who have had their blood cholesterol checked by a health professional within the past five years to **82.0 percent**.

4B 1. Objective: Reduce the age-adjusted death rate from diabetes per 100,000 standard population to: **10.0 for the total population**.

4B 2. Objective: Reduce the age-adjusted death rate from cardiovascular disease in people with diabetes per 100,000 standard population to: **8.5 for the total population**.

4C 1. Objective: Reduce the age-adjusted death rate from female breast cancer per 100,000 female population to: **17.0 for all females (age-adjusted)**.

4C 2. Objective: Increase the percentage of females aged 40 and over who received a clinical breast examination and a mammogram within the past two years to: **75.0 percent for all females 40+**.

4C 4. Objective: Reduce the age-adjusted death rate from cervical cancer per 100,000 standard population to: **1.0 for all females (age-adjusted)**.

4C 5. Objective: Increase the percentage of women aged 18 and over with intact cervix uteri who had a Pap test within the past two years to: **75.0 percent for females 65+**.

4C 7. Objective: Reduce the age-adjusted death rate of males from prostate cancer per 100,000 standard population to: **10.0 for total males.**

4C 8. Objective: Reduce the age-adjusted death rate from colorectal cancer per 100,000 standard population to: **10.0 for the total population (age-adjusted).**

4C 9. Objective: Reduce the age-adjusted incidence rate of cancer of the rectum and rectosigmoid per 100,000 standard population to: **13.2 for the total population**

4C 11. Objective: Reduce the age-adjusted death rate from lung cancer per 100,000 standard population to: **28.5 for the total population (age-adjusted).**

4C 13. Objective: Reduce the percentage of oral cancer diagnosed in the late (regional and distant) stages of disease to:

40.0 percent for all males

35.0 percent for all females

4D 1. Objective: Increase the percentage of the HIV infected population who know that they are infected by HIV to **75.0 percent.**

4D 2. Objective: Reduce the incidence of HIV disease among females aged 15 through 44 years per 100,000 population to: **20.1 for all females.**

4D 3. Objective: Reduce the incidence of HIV disease among males aged 15 through 44 years per 100,000 population to: **45.7 for all males.**

4D 4. Objective: Reduce the rate per 100,000 population of newly diagnosed HIV infections among persons at least 50 years of age to: **7.8 for all those 50 years old or more.**

4D 5. Objective: Reduce the incidence of HIV disease among adolescents/young adults aged 13 through 24 per 100,000 population to **6.6.**

4D 6. Objective: Reduce the percentage of HIV-positive readings in mothers of newborns to **0.10 percent.**

4D 7. Objective: Reduce the incidence per 100,000 population of AIDS among New Jersey residents to: **14.6 for total population.**

4D 8. Objective: Reduce the death rate from HIV infection per 100,000 population to: **5.0 for the total population (age-adjusted).**

4E 2. Objective: Reduce the death rate from suicide per 100,000 population to: **4.8 for all males 15-19.**

4F 1. Objective: Reduce the age-adjusted drug-related death rate per 100,000 standard population to: **8.0 for the total population.**

4F 2. Objective: Reduce the estimated age-adjusted tobacco-related death rate per 100,000 standard population to: **73.4 for the total population.**

4F 3. Objective: Reduce the death rate per 100,000 population estimated to be due to alcohol-related causes to: **32.7 for the total population.**

4F 4. Objective: Reduce the death rate due to alcohol-related motor vehicle injuries per 100,000 population to: **1.7 for the total population (age-adjusted).**

4F 5. Objective: Reduce the prevalence of cigarette smoking among the population aged 18 and over to:

15.0 percent for adults > 18 years

8.0 percent for adults > 65 years

4F 6. Objective: Decrease the percentage of persons aged 18 years and older who consumed five or more alcoholic drinks per occasion, one or more times during the past month, to: **10.6 percent for all adults.**

4G 1. Objective: Reduce the age-adjusted death rate from asthma per 1,000,000 standard population to: **9.0 for the total population.**

4G 3. Objective: Reduce the annual asthma hospital admission rate per 100,000 children under age five to: **340.0 for all children under age five.**

4H 1. Objective: Reduce the tuberculosis incidence rate per 100,000 population to: **2.4 for the total population.**

4H 2. Objective: Increase the percentage of tuberculosis patients who complete curative therapy within 12 months to **90.0 percent.**

4H 3. Objective: Reduce the incidence of Lyme disease per 100,000 population to **6.5.**

4I 1. Objective: Reduce the rate of chlamydia trachomatis infections among females aged 15 through 19 to **950** per 100,000.

4I 2. Objective: Reduce the prevalence of chlamydia trachomatis infections among persons 15 through 24 years old to: 3.0 percent for persons attending STD clinics and **12.0 percent for persons attending Family Planning clinics.**

4I 3. Objective: Reduce the incidence of gonorrhea per 100,000 population to: **30.0 for the total population.**

4I 4. Objective: Reduce the incidence of primary and secondary syphilis per 100,000 population to: **0.5 for the total population.**

4I 5. Objective: Reduce the incidence of congenital syphilis per 100,000 live births to: **25.0 for the total population.**

APPENDIX B

Cardiovascular Screening Guidelines

The US Preventive Services Task Force recommends that men and women 18 years and older should be screened for high blood pressure (hypertension) at least every two years. Diagnosing high blood pressure is based on the average of two or more readings taken at each of two or more visits after the initial screening.

BLOOD PRESSURE

	SYSTOLIC (mm Hg)		DIASTOLIC (mm Hg)
NORMAL	less than 120	and	less than 80
PRE-HYPERTENSION	120-139	or	80-89
HIGH: Stage 1	140-159	or	90-99
HIGH: Stage 2	160 or higher	or	100 or higher

The National Cholesterol Education Program (part of the National Heart, Lung, and Blood Institute) recommends that men and women 20 years and older should undergo cholesterol screening every 5 years. Blood samples should be obtained after fasting and should be tested for total cholesterol, LDL cholesterol, HDL cholesterol, and triglycerides.

CHOLESTEROL

TOTAL BLOOD CHOLESTEROL

Desirable	Less than 200 mg/dL
Borderline high risk	200-239 mg/dL
High risk	240 mg/dL and over

LDL CHOLESTEROL

Optimal	Less than 100 mg/dL
Near/above Optimal	100-129 mg/dL
Borderline High	130-159 mg/dL
High	160-189 mg/dL
Very High	190 mg/dL and above

HDL CHOLESTEROL

Heart disease risk is inversely associated with HDL level: the higher the HDL the lower your risk for heart disease. Low HDL cholesterol is considered to be 40 mg/dL or below.

In the average man, HDL cholesterol levels range from 40 to 50 mg/dL. In the average woman, HDL cholesterol levels range from 50 to 60 mg/dL.

CHOLESTEROL RATIO

Total blood cholesterol is the most common measurement of blood cholesterol. It's the number you normally receive as a screening test result. Knowing your total blood cholesterol level is an important first step in determining your risk for heart disease. However, a critical second step is knowing your HDL or "good" cholesterol level.

Some physicians and cholesterol technicians use the ratio of total cholesterol to HDL cholesterol in place of the total blood cholesterol. The American Heart Association recommends that the absolute numbers for total blood cholesterol and HDL cholesterol levels be used. They're more useful to the physician than the cholesterol ratio in determining the appropriate treatment for patients.

The ratio is obtained by dividing the HDL cholesterol level into the total cholesterol. For example, if a person has a total cholesterol of 200 mg/dL and an HDL cholesterol level of 50 mg/dL, the ratio would be stated as 4:1. The HEALTH INDICATOR is to keep the ratio below 5:1; the optimum ratio is 3.5:1.

TRIGLYCERIDES

Triglycerides are a form of fat carried through the bloodstream. Most of your body's fat is in the form of triglycerides stored in fat tissue. Only a small portion of your triglycerides is found in the bloodstream.

Normal	Less than 150 mg/dL
Borderline-high	150-199 mg/dL
High	200-499 mg/dL
Very high	500 mg/dL or higher

APPENDIX C

Cancer Screening Guidelines (American Cancer Society)

The following cancer screening guidelines are recommended for those people at average risk for cancer who are without any symptoms (asymptomatic). People who are at moderate to high risk due to known risk factors should talk with a doctor about a different screening schedule. Individuals with any signs or symptoms should contact their health care provider.

CANCER-RELATED CHECKUP

For people having periodic health examinations, a cancer-related checkup should include health counseling and age appropriate screening. Have a cancer-related checkup every 3 years in the 20s and 30s, every years age 40 and older.

BREAST CANCER

- Yearly mammograms starting at age 40
- Clinical breast exams should be part of a periodic health exam, about every three years for women in their 20s and 30s and every year for women 40 and over
- Breast self-exam starting in their 20s

COLON AND RECTAL CANCER

Beginning at age 50, both men and women at average risk for developing colorectal cancer should follow one of these five testing schedules:

- Yearly fecal occult blood
- Flexible sigmoidoscopy every 5 years
- Fecal occult blood + flexible sigmoidoscopy every 5 years

Of these three options, the ACS prefers fecal occult blood + flexible sigmoidoscopy every 5 years

- Colonoscopy every 10 years
- Double-contrast barium enema every 5-10 years

CERVICAL CANCER

- All women should begin cervical cancer screening when they begin having vaginal intercourse, or at age 21. Screening should be done every year with the regular Pap test or every 2 years using the newer liquid-based Pap test.
- Beginning at age 30, women who have had 3 normal Pap test results in a row may get screened every 2 to 3 years.
- Women 70 years of age or older who have had 3 or more normal Pap tests in a row and no abnormal Pap test results in the last 10 years may choose to stop having cervical cancer screening in consultation with their health care provider.
- The Center for Disease Control (CDC) now recommends that the vaccine designed to protect against human papillomavirus virus (HPV) be routinely given to girls when they are 11-12 years old. The Advisory Committee on Immunization Practices (ACIP) recommendation also allows for vaccination of girls beginning at nine years old as well as vaccination of girls and women 13-26 years old. HPV is the leading cause of cervical cancer in women.

According to the ACIP's recommendation, three doses of the new vaccine should be routinely given to girls when they are 11 or 12 years old. The advisory committee, however, noted that the vaccination series can be started as early as nine years old at the discretion of the physician or health care provider. The recommendation includes girls and women 13-26 years old because they will benefit from getting the vaccine. The vaccine should be administered before onset of sexual activity (i.e., before women are exposed to the viruses), but females who are already sexually active should still be vaccinated.

PROSTATE CANCER

Both the prostate-specific antigen (PSA) blood test and digital rectal examination (DRE) should be offered annually, beginning at age 50.

Prostate cancer prevention

Prostate cancer can sometimes be associated with known risk factors for the disease. Many risk factors are modifiable though not all can be avoided.

- **Age:** The risk of developing prostate cancer increases as a man gets older.
- **Diet and Lifestyle:** The effect of diet on prostate cancer risk is currently under study. A diet high in fat, especially animal fat, may be associated with an increased risk of prostate cancer. More studies are needed to determine if a low-fat diet with more fruits and vegetables helps prevent prostate cancer.

Studies show that a diet high in dairy products and calcium may be linked to an increased risk of prostate cancer, although the increase may be small.

- **Race:** The risk of prostate cancer is dramatically higher among blacks, intermediate among whites, and lowest among native Japanese. However, this increase in risk may be due to other factors associated with race. Studies have shown a link between levels of testosterone and prostate cancer risk, with black men having the highest levels.

APPENDIX D

Diabetes Screening Guidelines (American Diabetes Association - ADA)

Currently, the ADA recommends that all adults aged 45 years and older, particularly in those who are overweight (BMI >25), be considered for diabetes screening by their health care provider every 3 years.

In addition, the ADA recommends that all persons <45 years of age who are overweight (BMI>25) with any one of the following risk factors be screened for diabetes:

- Habitually physically inactive
- High-density lipoprotein (HDL) cholesterol < 35 mg/dl and/or triglyceride level > 250 mg/dl
- First-degree relative with diabetes
- Polycystic ovary syndrome (PCOS) or any other clinical conditions associated with insulin resistance, e.g. acanthosis nigricans
- Member of high-risk ethnic population (e.g. African American, Latino, Native American, Asian American, Pacific Islander)
- Impaired glucose tolerance (IGT) or impaired fasting glucose (IFG) on previous testing
- Delivered a baby weighing >9lbs. or have been diagnosed with gestational diabetes
- History of vascular disease
- Hypertensive (blood pressure \geq 140/90 mmHG)

A Fasting Plasma Glucose Test (FPG) or an Oral Glucose Tolerance Test (OGTT) can be used to determine whether or not a patient has pre-diabetes or diabetes. While either test can be used to diagnose pre-diabetes or diabetes, the ADA recommends the FPG because it is easier, faster, and less expensive to perform.

With the FPG test, a fasting blood glucose level:

- Less than 100 mg/dl Normal
- Between 100 - 125 mg/dl Pre-diabetes (blood glucose levels are higher than normal but not high enough for a diagnosis of type 2 diabetes)
- 126 mg/dl or higher Diabetes

HEALTH INDICATOR I:
Reduce illness, disability, and death related to cardiovascular and cerebrovascular disease.

GOALS	OBJECTIVES
1. Reduce the incidence of cardiovascular disease.	1. Provide education that promotes: <ul style="list-style-type: none"> • Maintaining healthy lifestyle behaviors. • Increasing awareness of the risk for cardiovascular disease. • Monitoring and maintaining proper blood pressure, cholesterol and triglyceride levels. • Increasing the number of people that recognize the signs and symptoms of heart attack, and the need for emergency medical treatment. • Increasing the number of people who are trained to provide CPR and use defibrillators. •
2. Reduce the incidence of cerebrovascular disease.	2a. Increase awareness of the risk factors for cerebrovascular disease. 2b. Maintain healthy lifestyle behaviors. 2c. Increases the number of people that recognize the signs and symptoms of a stroke or brain attack, and the need for emergency medical treatment.
3. Increase the number of adults screened for modifiable risk factors.	3. Increase awareness of the need for screening for blood pressure, cholesterol, blood glucose and triglyceride levels.

HEALTH INDICATOR II:
Reduce illness, disability, and death related to cancer.

GOALS	OBJECTIVES
1. Reduce the incidence of cancer.	1. Provide and promote awareness of modifiable risk factors: <ul style="list-style-type: none"> • Tobacco use • Alcohol use • Diet and overweight/obesity • Sun exposure • Lack of physical activity • Some bacterial and viral infections
2. Promote early detection measures.	2a. Promote age and sex appropriate screening. 2b. Increase awareness of recommended, age-appropriate screening schedules.

HEALTH INDICATOR III:
Reduce illness, disability, and death related to diabetes.

GOALS	OBJECTIVES
1. Reduce the incidence of diabetes.	1a. Maintain healthy behaviors (see primary health behaviors, starting on page 13). 1b. Increase awareness of the risk factors for diabetes. 1c. Monitor and maintain healthy glucose, blood pressure, cholesterol and triglyceride levels.
2. Reduce the incidence of gestational diabetes.	2a. Monitor blood glucose levels of pregnant women. 2b. Increase awareness of gestational diabetes and its risks.
3. Reduce complications attributed to diabetes.	3. Maintain target blood glucose levels.

HEALTH INDICATOR IV:
Reduce illness, disability, and death related to asthma.

GOALS	OBJECTIVES
1. Reduce the incidence of asthma and asthma attacks.	1a. Maintain healthy behaviors, including compliance with preventive and/or treatment regimes. 1b. Raise awareness that asthma is a serious chronic disease.
2. Control environmental triggers.	2a. Increase awareness of asthma triggers in the environment. 2b. Encourage behaviors that reduce exposure to, or eliminate, environmental asthma triggers.
3. Reduce the high risk of developing complications after contracting influenza.	3a. Encourage influenza vaccination for people with asthma. 3b. Provide education about the complications of asthma and influenza co-infection.

**HEALTH INDICATOR V:
Reduce illness and disability related to osteoporosis.**

GOALS	OBJECTIVES
1. Reduce the incidence of osteoporosis.	1a. Encourage healthy behaviors such as: <ul style="list-style-type: none"> • Getting the daily recommended amounts of calcium and vitamin D • Engaging in regular weight bearing exercise • Avoiding smoking and excessive alcohol consumption • Maintaining a healthy weight 1b. Encourage older adults to discuss screening for osteoporosis with their health care provider.
2. Encourage bone building in children and teens.	2. Educate adolescents on the need for healthy diets to prevent osteoporosis, including: <ul style="list-style-type: none"> • Adequate (1,000 mg/day) calcium intake • Regular weight bearing exercise
3. Minimize the risks of falls for older adults.	3a. Provide and promote education on fall prevention strategies for older adults, such as: <ul style="list-style-type: none"> • Reducing hazards that might cause tripping • Improving lighting • Encouraging regular vision tests • Improving balance and coordination through regular exercise 3b. Encourage periodic reviews of current medications.

HEALTH INDICATOR VI:
Improve health, fitness, and quality of life through daily physical activity.

GOALS	OBJECTIVES
1. Increase the proportion of adults who engage regularly in moderate physical activity for 30 to 60 minutes per day.	3. Provide and promote education that regular physical activity: <ul style="list-style-type: none"> • Reduces the risk of dying prematurely from heart disease • Reduces the risk of developing diabetes • Reduces the risk of developing high blood pressure • Reduces the risk of developing colon cancer • Helps control weight • Reduces stress
2. Increase the proportion of adults who perform physical activities that enhance and maintain muscular strength, endurance and flexibility.	2a. Provide and promote education to increase public awareness that physical activity will help build and maintain healthy bones, muscles and joints. 2b. Provide and promote education that such physical activity will help older adults become stronger and better able to move about without falling.
3. Increase the proportion of children who engage in daily physical activity for 30 to 60 minutes per day.	3. Promote education to increase awareness of the need to: <ul style="list-style-type: none"> • Provide quality physical education daily in all school grades (K-12) and daycare centers • Reduce time spent watching television, sitting at the computer, playing video games and in other similar sedentary behaviors • Build physical activity into regular routines and playtime for children and their families

**HEALTH INDICATOR VII:
Promote health and reduce chronic diseases associated with
nutrition and weight control.**

GOALS	OBJECTIVES
1. Decrease the incidence of obesity.	<p>3. Promote healthier food choices, including:</p> <ul style="list-style-type: none"> • Eat less overall calories • Eat smaller portion sizes • Reduce total fat in the diet to less than 20 percent • Reduce the number of meals eaten at fast food restaurants • Switch snack food choices from high fat and/or refined sugar chips, cookies and candy to lower fat and/or naturally sweetened fresh fruit, vegetables and yogurt • Reduce the amount of soda consumed
2. Educate all parents about the benefits of breast-feeding, early childhood healthy nutrition and family physical activity and fitness.	<p>2. Provide and promote education of the benefits of breastfeeding, healthy nutrition and exercise:</p> <ul style="list-style-type: none"> • Breastfed infants gain some immunity from infectious disease, lower food allergies and less colic and may be less likely to later become overweight • Healthy nutrition early in childhood helps prevent obesity and provides nutrients necessary for optimal growth and development • Families that engage in physical activity and fitness together help establish lifelong healthy habits that help prevent obesity, many chronic diseases, depression and improve the overall quality of life
3. Reduce the incidence of chronic diseases due to modifiable lifestyle choices.	<p>3. Provide and promote education that proper nutrition and weight control:</p> <ul style="list-style-type: none"> • Reduces the risk of dying prematurely from heart disease and stroke • Reduces the risk of developing diabetes • Reduces the risk of developing high blood pressure • Reduces the risk of developing colon cancer • Helps control and reduce weight
4. Increase the consumption of healthy foods and decrease the consumption of high fat and processed foods.	<p>5. Individuals should consume at least 5 servings of fruits and vegetables daily, increase their consumption of whole grain foods and decrease their consumption of fat, meats, fast foods and processed foods.</p>

HEALTH INDICATOR VIII:
 Reduce illness, disability, and death related to tobacco use and exposure to secondhand smoke.

GOALS	OBJECTIVES
1. Increase the percentage of women who abstain from using any tobacco product during pregnancy.	1. Provide and promote education that use of tobacco during pregnancy is associated with low birth weight, spontaneous abortion, and sudden infant death syndrome.
2. Reduce the proportion of children who are regularly exposed to tobacco smoke at home.	2a. Provide and promote education to parents on the risks of second hand smoke exposure. 2b. Encourage parents to prohibit smoking in the home.
3. Reduce the number of persons using tobacco products.	3a. Provide and promote education on smoking cessation and available resources. 3b. Provide and promote education to prevent initiation of tobacco use.

HEALTH INDICATOR IX:
 Reduce substance abuse to promote and protect the health, safety, and quality of life for all, especially children.

GOALS	OBJECTIVES
1. Increase the percentage of women who abstain from alcohol and drug use during pregnancy.	1. Promote awareness of the risk of Fetal Alcohol Syndrome, premature delivery and possible embro/fetal damage as a result of alcohol and drug consumption.
2. Increase the proportion of adults and adolescents who understand the risks associated with substance abuse.	2. Promote education to inform residents of the correlation between drug use and disease, specifically cardiovascular and cancer risks. a. Educate community about the correlation between substance abuse and domestic and child abuse and violence.
3. Assess and reduce the prevalence of substance abuse among persons aged 65 and older.	4. Provide and promote education to increase awareness of alcohol abuse, medication management (over the counter and prescription), and other substance abuse topics of concern to older adults.

HEALTH INDICATOR X:
Decrease unintended pregnancies, Sexually Transmitted Diseases and HIV infection by promoting responsible sexual behaviors.

GOALS	OBJECTIVES
1. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.	1. Provide and promote awareness that such behaviors: <ul style="list-style-type: none"> • Reduces the risk of HIV infection • Reduces the risk of STDs • Reduces the risk of unintended pregnancy
2. Increase the proportion of sexually active persons who use condoms.	2. Promote awareness that condom usage: <ul style="list-style-type: none"> • Reduces the risks of HIV infection • Reduces the risk of STDs • Reduces the risk of unintended pregnancy
3. Reduce the incidence of unintended adolescent pregnancy.	3. Provide and promote education to increase awareness among adolescents of family planning concepts including: <ul style="list-style-type: none"> • Role of abstinence • Available methods of family planning and the advantages/disadvantages of each method • Active decision-making skills
4. Reduce the incidence of STDs and HIV infection.	4. Provide and promote education addressing STD and HIV prevention measures.

HEALTH INDICATOR XI:

Reduce injuries, disabilities, and deaths due to unintentional injuries and violence.

GOALS	OBJECTIVES
1. Reduce incidence of fatal and non-fatal poisonings.	1. Provide and promote education to increase: <ul style="list-style-type: none"> • Parental awareness on poison prevention • Awareness of poison prevention among school-age children
2. Reduce incidence of and screening for, lead poisoning among children under the age of six years.	2a. Encourage parents to follow lead screening guidelines. 2b. Provide education to increase awareness of the risk factors, and risk reduction strategies, for lead poisoning.
3. Reduce deaths and injuries attributable to vehicular accidents.	3a. Encourage and promote the proper use of car safety restraints. 3b. Promote the use of bicycle helmets for all persons under the age of 17 years.
4. Reduce the incidence of child abuse and neglect.	4. Provide and promote educational and support programs for the parent population in stress management, parenting skills, and substance abuse prevention.
5. Reduce the incidence of injuries from falls among older adults ages 65 and older.	5. Provide and promote education on role of the following in the risk of falls: <ul style="list-style-type: none"> • Vision • Medication side effects • Physical inactivity • Muscle weakness • Poor health • Environmental factors
6. Reduce deaths and injuries among adolescents and young adults attributable to accidents and suicide.	6. Provide and promote education in the following areas: <ul style="list-style-type: none"> a. Accident prevention and injury control b. Stress management c. Role of substance use/abuse

HEALTH INDICATOR XII:
Prevent disease, disability, and death from infectious diseases,
including vaccine-preventable diseases.

GOALS	OBJECTIVES
1. Achieve and maintain effective vaccination coverage levels ≥ 90 percent for universally recommended vaccines among infants, young children, adolescents and adults.	1a. Provide and promote education to increase awareness on the safety and benefits of vaccines for children and adolescents. 1b. Provide information on the recommended vaccination schedule for infants, young children and adolescents.
2. Increase the proportion of adults who are vaccinated annually against influenza and ever-vaccinated against pneumococcal disease.	2. Provide and promote education to increase awareness of the benefits, safety, and availability of vaccines.
3. Increase hepatitis B vaccine coverage among high-risk groups.	3a. Encourage vaccination of high risk groups: <ul style="list-style-type: none"> • Dialysis patient • Men who have sex with men • Persons with a history of STDs or multiple sex partners • IV drug users 3b. Provide bloodborne pathogen training and education programs for employees who are exposed, or potentially exposed, to blood in the workplace.
4. Increase the use and development of interventions known to prevent hepatitis C.	4. Provide and promote education to increase awareness of how to prevent the transmission of hepatitis C.
5. Increase the number of people infected with hepatitis C that are aware of how to best manage their disease.	5. Provide and promote education to increase awareness of people infected with hepatitis C about lifestyle choices, e.g. behaviors and medications, that can damage the liver.

HEALTH INDICATOR XIII: Emergency Response and Preparedness

GOALS	OBJECTIVES
1. Increase the number of community members that are aware of what individuals and families can do to prepare for most emergencies – natural, accidental and intentional.	<p>1. Provide and promote community education regarding the basic steps individuals and families should take to be prepared for most emergencies that can occur, including:</p> <ul style="list-style-type: none"> • Encourage each individual and family to maintain an emergency supply kit for the home and all vehicles • Encourage individuals and families to have, and be familiar with, an Emergency Plan • Increase the number of residents that are familiar with local emergency phone numbers, radio stations, and emergency locations.
4. Increase the number of the residents that are aware of and familiar with the Princeton's Emergency Response and Pandemic Influenza Preparedness Plans.	2. Provide educational programs and services through direct community programs, mailings, municipal web site and local TV stations regarding the Emergency Response and Pandemic Influenza Preparedness Plans.
3. Improve Princeton Borough and Princeton Township's ability to be prepared to deal with the immediate and long term mental health issues that can result from community emergency situations.	<p>3. Provide and promote education on mental health issues that can occur as a result of community emergencies.</p> <ul style="list-style-type: none"> • Increase awareness of signs and symptoms of potential mental health issues that may develop as a result of an emergency situation • Increase the number of residents that are aware of who to call and where to go for support and mental health services • Improve communication and coordination between local health department and regional mental health services to be prepared to provide support and mental health services when an emergency does occur • Provide long term follow up with residents to assure they are getting the necessary support and mental health services
4. Develop emergency plans that respond to the unique needs of vulnerable populations such as children, the elderly, non-ambulatory and disabled people.	<p>4a. Identify strategies, tools and resources to address and respond to people with special needs such as children, the elderly, non-ambulatory and disabled.</p> <p>4b. Develop a list of residents that will require special services during an emergency.</p>