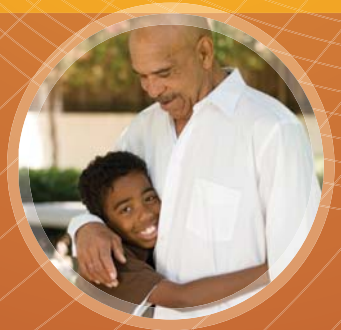
# Accomplishments & Challenges 2007



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Maryland Department of Health & Mental Hygiene

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MARYLAND

**Family Health Administration Accomplishments & Challenges 2007**
is a publication of the Maryland Department of Health and Mental Hygiene.

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# TABLE OF CONTENTS

**Introduction** ..... 1

**Pregnant Women, Women of Childbearing Age & Infants**
- Reducing Infant Mortality ..... 3
- Reducing Unintended Pregnancy ..... 7
- Promoting Prenatal Care ..... 9
- Promoting Folic Acid Awareness ..... 11
- Reducing Fetal Alcohol Spectrum Disorders ..... 12
- Reducing Maternal Mortality ..... 14
- Encouraging Breastfeeding Initiation & Duration ..... 15

**Childhood & Adolescence**
- Preventing Child Death ..... 19
- Managing & Preventing Asthma ..... 21
- Preventing Lead Poisoning ..... 23
- Preventing Overweight & Obesity ..... 24
- Promoting Oral Health ..... 26
- Preventing Adolescent Pregnancy ..... 27
- Preventing Tobacco Use & Encouraging Cessation ..... 28

**Adults & Seniors**
- Promoting Cardiovascular Health ..... 31
- Managing & Reducing Diabetes ..... 33
- Preventing Overweight & Obesity ..... 35
- Assisting Victims of Rape/Sexual Assault ..... 36
- Preventing Tobacco Use & Encouraging Cessation ..... 38
- Managing Arthritis ..... 40
- Collecting Information About & Providing Services for Cancer Patients ..... 41

**Improving Health Care Access** ..... 47

**For More Information** ..... 52

**Index of Figures** ..... 54

**Glossary of Acronyms** ..... 56

**References** ..... 58

**Family Health Administration Organizational Chart** ..... 60

# INTRODUCTION

This report is an update of the Family Health Administration's Accomplishments & Challenges 2005, which presented the Administration's efforts to meet its objectives in improving health across the life span of Maryland residents. The Family Health Administration's mission is to protect, promote, and improve the health and well-being of all Marylanders and their families through community-based public health efforts, giving special attention to at-risk and vulnerable populations.

The report presents the objectives the Family Health Administration has set for improving broad health status indicators such as access to health care, infant mortality, oral health, teenage pregnancy, childhood lead poisoning, cancer, and chronic disease. Other top priorities include promoting health behaviors such as smoking cessation, improved nutrition, and physical activity. Accomplishments & Challenges 2007 provides an updated overview of these public health issues, along with the many achievements of the administration's programs and initiatives. The issues are represented by health indicators that reflect the well being of Maryland families and the growth and development of Maryland's youngest residents. Charts and graphs illustrate the impact these issues have on the health of Maryland residents and document the progress that has been made to improve health status.

This report is organized into three sections: **Pregnant Women, Women of Childbearing Age & Infants**; **Childhood & Adolescence**; and **Adults & Seniors**. Each of these groups has unique health issues, which are addressed by the coordinated efforts of the Family Health Administration programs. The major issues are defined for each group, followed by the work being done by the administration to address them. The most recent data available are presented in the form of charts, graphs, percentages, and raw numbers to demonstrate the health problems facing Marylanders, compare Maryland with the nation, and measure the improvement—and in a few cases, the worsening—of public health issues.

The Family Health Administration continues to focus on improving measurements of health status to ensure that the work underway has a positive effect on the life of Maryland residents. For example, beginning in 2005, the Behavioral Risk Factor Surveillance System surveyed approximately 4,000 additional Maryland residents, increasing both the accuracy and breadth of information available on risk factors, chronic disease, and health care access. Only through vigorous program evaluation and surveillance of health status can we be assured that the efforts to resolve problems are successful. The accomplishments documented in this publication provide evidence that while we have made progress in addressing Maryland's public health needs, much work remains to be done.

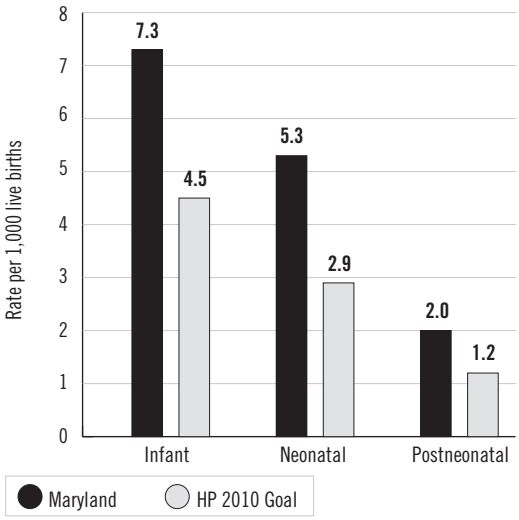
# Pregnant Women, Women *of* Childbearing Age & Infants

In 2005, 74,880 infants were born in Maryland. The Family Health Administration has a number of programs that focus on ensuring that babies are born healthy and have the support needed for healthy growth and development. This section includes descriptions of the health issues among women of childbearing age (ages 15 to 45), pregnant women and infants, and the population-specific initiatives supported by the Family Health Administration.

## REDUCING INFANT MORTALITY

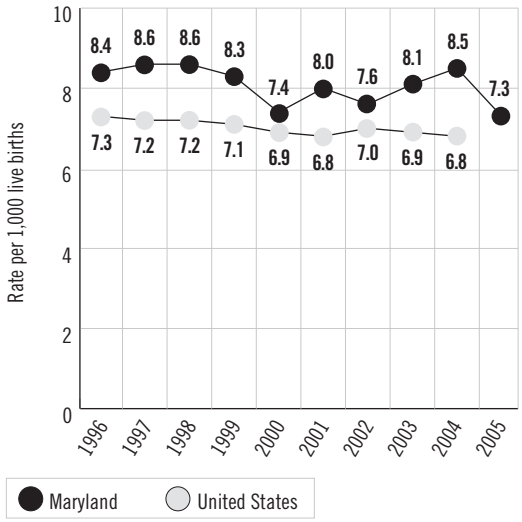
Infant mortality, the rate of infant deaths per 1,000 live births, is often used as a health indicator, but it is also recognized as a measure of the quality of life in a community. Maryland's infant mortality rate has historically been higher than the national rate and the Healthy People (HP) 2010 goal of 4.5 deaths per 1,000 live births (Figure 1). Each year in Maryland, approximately 600 infants die before reaching their first birthdays. Infant mortality declined significantly over the past 50 years and reached a record low of 7.4 deaths per 1,000 live births in 2000. The infant mortality rate was 7.3 per 1,000 live births in 2005, over 14 percent lower than the 2004 rate of 8.5 (Figure 2).

**FIGURE 1** — Infant Mortality Rates, Maryland, 2005



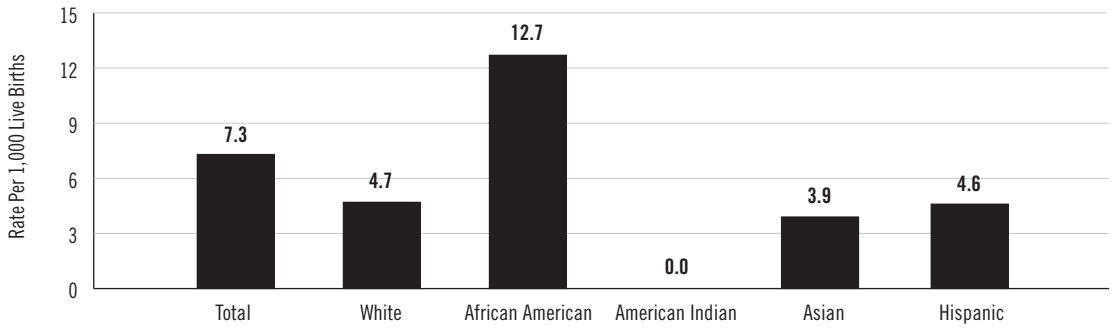

**Source:** 2005 Vital Statistics Annual Report, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

**FIGURE 2** — Infant Mortality Rate, Maryland and the US, 1996-2005




**Source:** 2005 Vital Statistics Annual Report, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

**FIGURE 3** — Infant Mortality by Race and Hispanic Origin,* Maryland, 2005




**Source:** 2005 Vital Statistics Annual Report, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

**Persons of Hispanic origin may be any race*

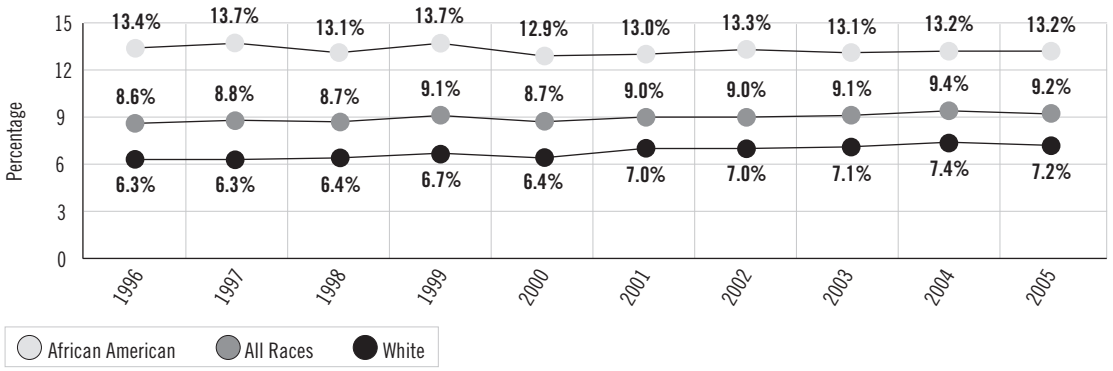
As Figure 3 illustrates, infant mortality disparities by race and ethnicity continue to be a major concern. African American infants are two to three times more likely to die within the first year of life as are white infants in Maryland.

The leading causes of infant deaths also vary by race. In 2005, the leading causes of death for African American infants were premature birth and low birth weight (27.2 percent), maternal complications of pregnancy (12.0 percent), and congenital abnormalities (11.0 percent). For white infants, the leading causes were premature and low birth weight (20.0 percent), congenital malformations (20.0 percent), and Sudden Infant Death Syndrome (SIDS) (10.2 percent).

Premature birth and low birth weight are the leading causes of infant deaths in Maryland. According to 2005 data from the Maryland Vital Statistics Administration, more than 11 percent of infants were born prematurely (less than 37 weeks gestation). This figure was 9.9 percent for whites, 14.3 percent for African Americans and 9.7 percent for Hispanics. Premature infants are more likely to die within the first year of life than full term infants and are also more likely to be born at low birth weights, defined as weighing less than 2,500 grams, putting them at risk for numerous medical conditions. In 2005, 9.2 percent of Maryland infants were born at low birth weights. Risk factors associated with premature birth and low birth weight include medical conditions and complications, as well as behavioral or social factors.

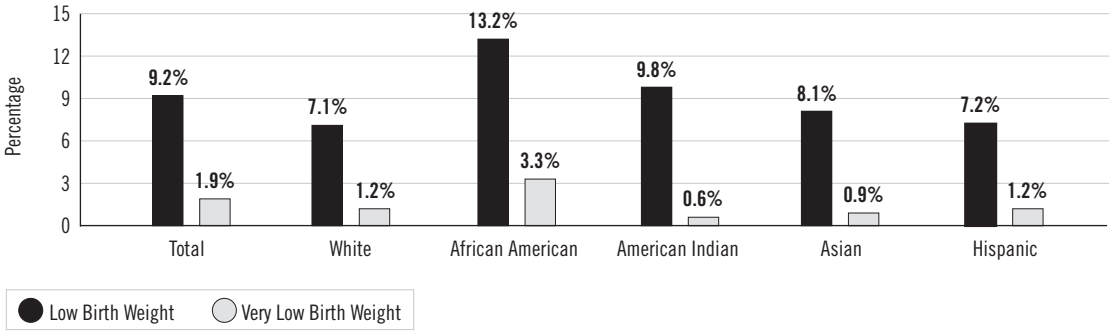
During the preconception and interconception phases, medical and social changes can be made in a family's life to improve the likelihood of a positive pregnancy outcome by addressing known risk factors, such as pregnancy planning, pre-pregnancy weight, and health behaviors. For example, smoking is a high-risk behavior that contributes to preterm and low birth weight births. According to the Maryland BRFSS, in 2006, 14.8 percent of

**FIGURE 4** — Percentage of Low Birth Weight Infants, by Race, Maryland, 1996-2005




**Source:** 2005 Vital Statistics Annual Report, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

**FIGURE 5** — Percentage of Low Birth Weight (LBW) and Very Low Birth Weight Infants (VBLW), by Race and Hispanic Origin,* Maryland, 2005




**Source:** 2005 Vital Statistics Annual Report, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

**Persons of Hispanic origin may be any race*

women of childbearing age reported smoking, and 2005 Pregnancy Risk Assessment Monitoring System (PRAMS) data show that 10 percent of pregnant women smoked during the last three months of pregnancy.

The low birth weight rate for African Americans has been consistently higher than those for whites and all races during the time period of 1996 through 2005 (Figure 4). The largest proportion of low birth weight infants were African American, followed by American Indian, Asian, white, and Hispanic (Figure 5).

The Maryland Vital Statistics Administration reports that deaths from SIDS declined significantly in Maryland over the past decade. Sleep position is a risk factor for SIDS, and

infants should be placed on their backs to sleep. In 2005, SIDS was the third-leading cause of death for Maryland infants. The 2005 Maryland PRAMS Report indicates that 65 percent of infants were most often placed on their backs to sleep. The HP 2010 goal is for 70 percent of infants to be placed on their back to sleep. African American infants (23.8 percent) were twice as likely as white infants (11.9 percent) to be placed inappropriately on their stomachs to sleep.

## What Is the Family Health Administration Doing?

The Family Health Administration has a number of programs designed to reduce the risks of premature birth, low birth weight, and infant mortality, including:

- The Babies Born Healthy Program has initiated and expanded services for Maryland's women, mothers, and infants to improve birth outcomes, with a strong emphasis on preconception health. Services are provided within four phases: preconception/interconception, prenatal, neonatal safety, and post neonatal.
  - In collaboration with the Maryland Family Planning and Reproductive Health Program, Babies Born Healthy is reducing unintended pregnancy through creating new service entry points, strengthening the family planning infrastructure, and enhancing clinical services.
  - In collaboration with the University of Maryland, Department of OB/GYN, Babies Born Healthy is increasing access to high-risk prenatal care services through a telemedicine program that supports and educates local obstetricians to care for high risk patients within their community.
  - In collaboration with the Maryland Patient Safety Center, Babies Born Healthy is improving the safety and quality of obstetric and neonatal care provided in hospitals throughout Maryland.
  - In collaboration with Baby Leadership in Action Program in Baltimore City, Babies Born Healthy is encouraging safe sleep practices through parent and health care provider education.
- The Center for Health Promotion, Education and Tobacco Use Prevention provides smoking cessation training to health professionals to ensure they possess the state-of-the-art counseling skills needed to help pregnant smokers quit. The Smoking Cessation in Pregnancy program is a low-intensity, nurse-driven intervention for patients receiving prenatal care from one of Maryland's local health departments or Medicaid Managed Care Organization providers.
- In 2005, the Maryland Women, Infants, and Children (WIC) Program provided healthy supplemental food and nutrition counseling to approximately 14,000 pregnant women each month. WIC services have been shown to contribute to longer pregnancies, decreased premature births and low-weight infants, and decreased fetal and infant deaths.

- The Center for Maternal and Child Health has established Fetal and Infant Mortality Review (FIMR) teams in every jurisdiction to conduct in-depth case reviews to look for methods of decreasing future infant deaths, and to identify systems changes that if implemented could prevent future deaths. Through partnerships with professional and community organizations, the FIMR process includes review of medical records, interviews of mothers, analysis of findings, and facilitation of system changes.

- The Center for Maternal and Child Health supports PRAMS, a population-based risk factor surveillance system designed to identify and monitor selected maternal behaviors that occur before and during pregnancy, to identify problems incurred during pregnancy, and develop strategies to address them.

- The Center for Maternal and Child Health has a lead role in convening a State Perinatal Clinical Advisory Committee, a multidisciplinary committee representing 16 Maryland professional organizations, to review and periodically update Maryland Perinatal System Standards, which serve as a set of voluntary standards for Maryland hospitals that provide obstetrical and neonatal services.

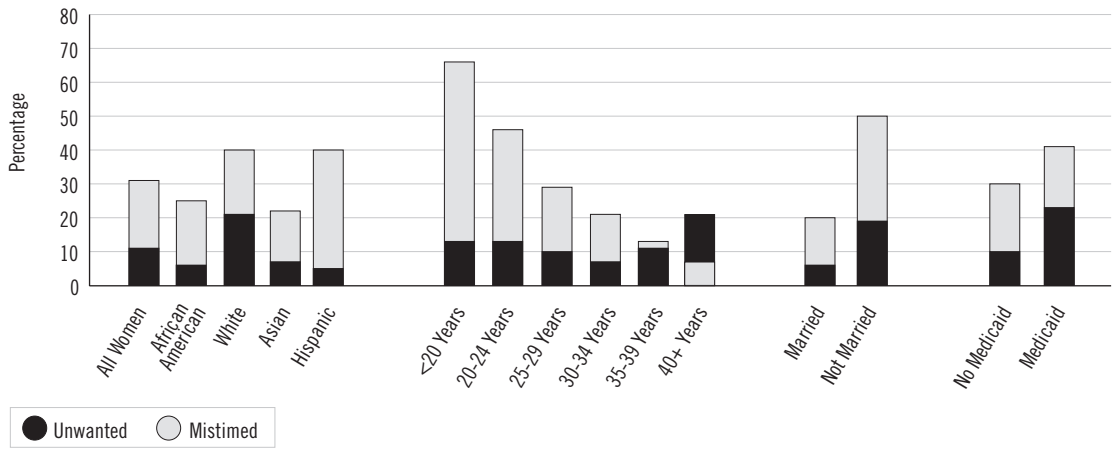
- The Newborn Bloodspot Screening Program, administered by the Office of Genetics and Children with Special Health Care Needs, identifies and follows up on newborn infants with any one of 35 rare and serious disorders of body chemistry. All Maryland infants receive screening, and the Office of Genetics and Children with Special Health Care Needs provides follow-up for infants, which includes counseling, health education, and family support to affected families.

- Funds administered by the Center for Maternal and Child Health support the University of Maryland's Center for Infant and Child Loss in its work to reduce deaths due to SIDS.

## REDUCING UNINTENDED PREGNANCY

Approximately two in five (42 percent) pregnancies in Maryland are unintended according to PRAMS survey results for 2001-2005. An unintended pregnancy is defined as one that is mistimed (31 percent) or unwanted (11 percent). Minority women, adolescents, and unmarried women were the most likely to report having an unintended pregnancy (Figure 6).

**FIGURE 6** — Percentage of Women with Unwanted and Mistimed Pregnancies by Maternal Age, Race/Ethnicity, Marital and Medicaid Status, Maryland, 2001-2005




**Source:** Maryland PRAMS 2001-2005, Center for Maternal and Child Health, Family Health Administration, Maryland Department of Health and Mental Hygiene

Unintended pregnancies can have serious consequences for women and their infants. Maryland PRAMS data from 2001-2005 showed that mothers with mistimed and unwanted pregnancies are less likely to take a multivitamin, receive early prenatal care, stop smoking, breastfeed, and place their infants to sleep on their backs. They are more likely to experience postpartum depression, be victims of intimate partner violence, and deliver low birth weight infants than mothers with intended pregnancies.

## What is the Family Health Administration Doing?

Reducing unintended pregnancy is a primary goal of the Maryland Family Planning and Reproductive Health Program administered by the Center for Maternal and Child Health. The Program offers comprehensive family planning, preconception health, teen pregnancy prevention, colposcopy, and preventive services to more than 79,000 clients annually at more than 80 sites statewide. Services include preconception health counseling; health education; screening and treatment for sexually transmitted infections; breast and cervical cancer screening; contraceptive services; and referrals for primary health, mental health, and social services.

- The Program provides comprehensive reproductive health and contraceptive services to Marylanders in need of subsidized family planning services, with special attention to those who are uninsured and with incomes under 250 percent of the Federal Poverty Level. An estimated 243,000 Maryland women are in need of publicly subsidized family planning services.

- For every $1 spent on contraceptive services, $3 is saved in reduced Medicaid

and welfare expenditures over the two years that follow.

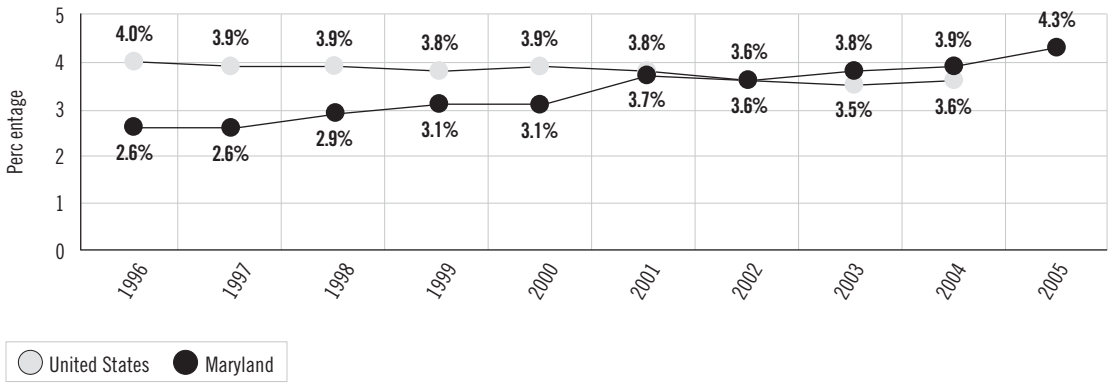
- Family planning is a leading strategy in reducing low birth weight births and related fetal and infant mortality through improved wellness of women prior to pregnancy.
- More than 50 percent of the sexually transmitted disease testing in Maryland is performed at the Maryland Family Planning and Reproductive Health Program clinics.
- Through the Babies Born Healthy Program, the Center for Maternal and Child Health and Office of Women, Infants and Children (MCH-WIC) Collaborative is providing reproductive health and family planning services for WIC families through WIC clinics. Integrating public health services reduces barriers for women's health care.

## PROMOTING PRENATAL CARE

Standard pregnancy care includes prenatal care, where women receive education about healthy behaviors, are monitored for potential complications, and are observed for healthy pregnancy progression. Early and adequate care during pregnancy is important for the health of both mothers and their infants and results in better health outcomes. Every $1 invested in prenatal care will save $3 in future health care costs.

According to Vital Statistics birth certificate data, an increasing percentage of women in Maryland are receiving late (after the 27th week gestation) or no prenatal care. Nationally, the percentage of women with late or no prenatal care has declined to less than four percent while the percentage of women in Maryland with late or no prenatal care has increased continually since 1997, to 4.3 percent or 3,329 women annually (Figure 7).

**FIGURE 7** — Percentage of Women with Late or No Prenatal Care, Maryland and the US, 1996-2005




**Source:** 2005 Vital Statistics Annual Report, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

Maryland PRAMS survey respondents gave the following reasons for not receiving early prenatal care: could not get an earlier appointment (34.5 percent) or doctor would not start care earlier (22.6 percent), did not have insurance or enough money (29.1 percent), did not have Medicaid card (21.7 percent), and wanted to keep pregnancy secret (21.1 percent). Hispanic women (46.2 percent), women less than 20 years old (50.5 percent), and women with less than a high school education (53.3 percent) were more likely to report receiving care that began later than the first trimester.

## What Is the Family Health Administration Doing?

- The Center for Maternal and Child Health supports a statewide Maternal and Child Health Hotline (1-800-456-8900) administered by the Maryland Medicaid Program that refers women to prenatal care services statewide;

- The Maryland Family Planning and Reproductive Health Program offers preconception health counseling services that encourage use of prenatal care services early in pregnancy. Women seen in family planning clinics who test positive for pregnancy are referred to a prenatal care provider;

- The Center for Maternal and Child Health supports morbidity and mortality reviews, which are reviews of individual cases of fetal or infant death to identify needs, and opportunities for change in community systems that will prevent future fetal or infant deaths, including identifying and removing barriers to accessing prenatal care;

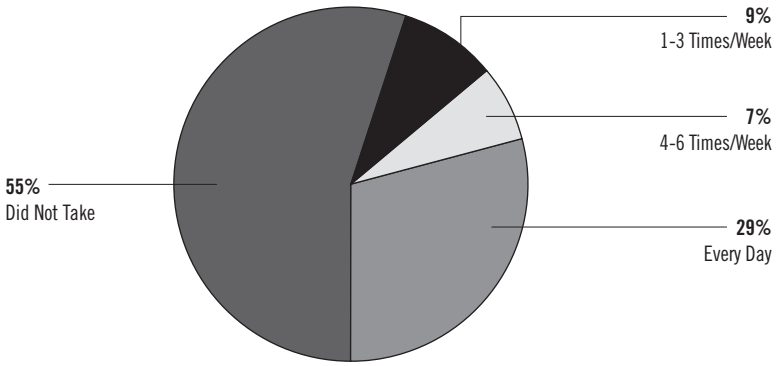
- To support local obstetricians, the Babies Born Healthy Program is partnering with the University of Maryland, Department of OB/GYN to support the Maryland Advanced Perinatal Support System. The expansion of this successful pilot program, which uses telemedicine to provide high-risk obstetric care to women in rural areas of the State, supports obstetricians willing to accept high-risk patients, allowing patients to receive medical services in their communities; and

- The Office for Genetics and Children with Special Health Care Needs provides funding for the Genetics Centers at Johns Hopkins University and Children's National Medical Center to provide genetic services, including prenatal counseling, at their centers and 13 outreach clinics.

## PROMOTING FOLIC ACID AWARENESS

Folic acid promotion is an important public health strategy for preventing neural tube defects (NTDs) in newborns. NTDs are serious birth defects that occur because the neural tube in the embryo does not close properly to form the brain and spinal cord, resulting in infants born with Spina bifida or Anencephaly. Folic acid, a B vitamin, reduces the risk for NTD-affected pregnancy by 50 to 70 percent when taken one month before conception and throughout early months of pregnancy. Folic acid is found in most multivitamins and certain foods, including orange juice and green leafy vegetables. As Figure 8 indicates, fewer than one in three Maryland women reported taking a multivitamin daily in the month before conception.

**FIGURE 8** — Distribution of Mothers By Frequency of Multivitamin Use in the Month Before Pregnancy, Maryland, 2005




**Source:** Maryland PRAMS 2005, Center for Maternal and Child Health, Family Health Administration, Maryland Department of Health and Mental Hygiene

### What Is the Family Health Administration Doing?

- The Maryland WIC Program, in partnership with the Center for Maternal and Child Health, began a pilot project in 2007 in three Maryland jurisdictions, Charles and Baltimore Counties and Baltimore City, to provide folic acid supplements to postpartum women. Postpartum WIC participants are referred to a local Maternal and Child Health Program, which provides supplements to women at no charge;
- The Maryland Folic Acid Council, with support from the Center for Maternal and Child Health and the Maryland WIC Program, promotes folic acid awareness through the development of folic acid display boards for health professionals to use at health fairs and workshops statewide;
- The Maryland WIC Program provides folic acid education to WIC participants as part of counseling provided to postpartum and breastfeeding women who are about to complete their participation

in WIC, encouraging them to establish healthy diet and lifestyle habits prior to future pregnancies;

- In 2005, WIC developed a postpartum nutrition brochure, "Health Tips for New Moms." The brochure includes information on why it is important for women of childbearing age to eat foods containing folic acid each day;

- The food packages provided by WIC to pregnant and postpartum women include fortified cereals and 100 percent fruit juice, peanut butter, dried beans, and peas high in folic acid. The Program's Web site, *www.mdwic.org*, also includes information on folic acid specific for mothers-to-be, new mothers, and breastfeeding mothers;

- The Maryland Family Planning Program provides preconception care, including education about the importance of folic acid, to 79,000 clients each year; and

- The Office for Genetics and Children with Special Health Care Needs sends information about the effects of folic acid in reducing the recurrence of neural tube defects to mothers who have had a pregnancy affected by a neural tube defect.

## REDUCING FETAL ALCOHOL SPECTRUM DISORDERS

Alcohol use during pregnancy is considered the leading cause of preventable birth defects and mental retardation in the United States. Fetal Alcohol Spectrum Disorders (FASD) encompasses the range of adverse effects that can result from prenatal alcohol exposure. The most severe of these disorders is Fetal Alcohol Syndrome (FAS), which is caused by women drinking during pregnancy and is characterized by abnormal facial features, growth retardation, and central nervous system problems. The consequences of FASD and FAS are life-long and can include severe problems with learning, developmental disabilities, mental health problems, difficulties in school, inability to live independently, and substance abuse.

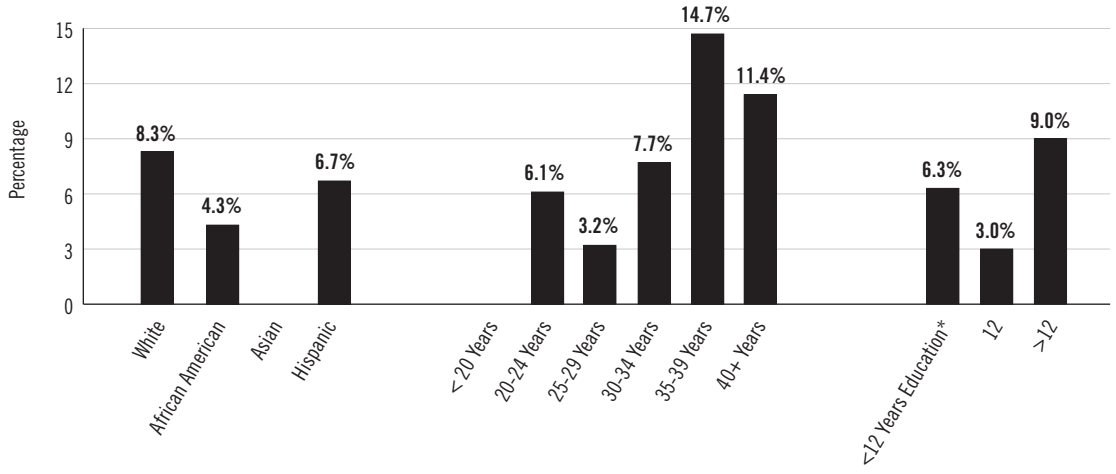
The Centers for Disease Control and Prevention (CDC) estimates the incidence of FAS to be in the range of three to 22 cases per 1,000 live births. Women of childbearing age who are binge or frequent drinkers are at highest risk for having an alcohol-affected pregnancy. According to 2006 Maryland Behavioral Risk Factor Surveillance System (BRFSS) data, more

than 10 percent of women of childbearing age (ages 18-49) reported binge drinking (five or more drinks in one setting) within the past month. The Maryland PRAMS Report indicates that in 2005, 6.5 percent of respondents reported alcohol use during the last three months of pregnancy. Figure 9 shows the distribution of Maryland mothers who drank alcohol during the last trimester of pregnancy by race, age, and years of education in 2005.

## What Is the Family Health Administration Doing?

- The Center for Maternal and Child Health provided leadership and staffing for the FASD Coalition convened by the Department of Health and Mental Hygiene (DHMH) in July 2004 to develop public health recommendations for addressing FASD in Maryland. The recommendations, issued by the workgroup in a final report, released in October 2005, include establishing a broader statewide coalition, identifying a State FASD coordinator at DHMH, and seeking public and private resources to conduct a public awareness campaign.
- The Center for Maternal and Child Health hosted the Maryland State Fetal Alcohol Spectrum Disorders (FASD) conference in September 2007 at University of Maryland University College to provide education for the prevention of FASD, as well as increase awareness of the resources and interventions available for children and adults with FASD. Grand rounds also have been conducted to increase awareness of the importance of screening and referring for drug abuse and treatment.

**FIGURE 9** — Percentage of Mothers Who Reported Any Alcohol Use in the Last Three Months of Pregnancy, by Race and Ethnicity, Age, and Years of Education, Maryland, 2005




**Source:** Maryland PRAMS 2005, Center for Maternal and Child Health, Family Health Administration, Maryland Department of Health and Mental Hygiene

**Note:** *Percentages are not reported if the number of respondents was less than five*

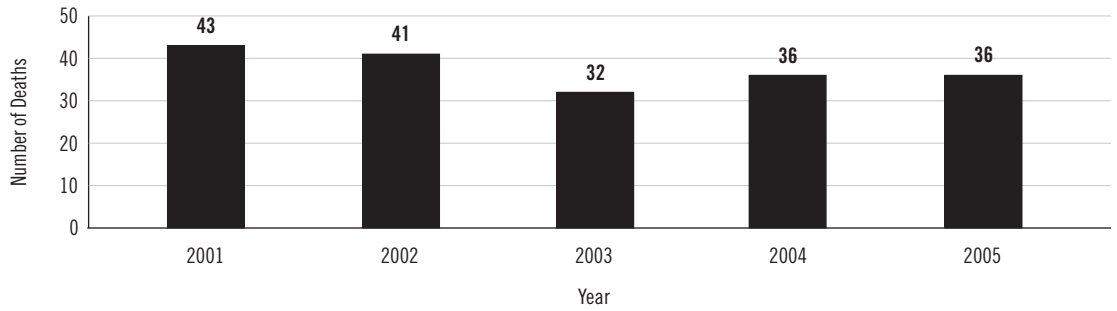
## REDUCING MATERNAL MORTALITY

Maternal mortality is often the result of complications of pregnancy and childbirth. The maternal mortality ratio (the number of maternal deaths per 100,000 live births) for Maryland has shown no improvement in recent years. For 1999-2003, the maternal mortality ratio was 16.3 per 100,000 live births, higher than the US rate of 10.1 per 100,000 live births for the same time period and substantially higher than the Healthy People 2010 goal of 3.3 per 100,000 live births. The leading causes of maternal death in Maryland are cardiovascular disorders, homicide, substance abuse, and injury/accident.

In the United States, African American women have a maternal mortality ratio nearly five times greater than that for white women. The difference between African American and white women is smaller in Maryland because African American women have a lower mortality than the United States average, and white women have a higher rate of death in Maryland than in the United States overall.

In Maryland, the number of pregnancy-associated deaths, tracked by the Maternal Mortality Review Program, averaged 38 deaths per year between 2001 and 2005 (Figure 10).

**FIGURE 10** — Pregnancy-Associated Maternal Deaths, Maryland, 2001-2005




**Source:** State of Maryland Maternal Mortality Review Program, 2006 Annual Report, Center for Maternal and Child Health, Family Health Administration, Maryland Department of Health and Mental Hygiene

**Preliminary data*

### What Is the Family Health Administration Doing?

✤ The Center for Maternal and Child Health, in cooperation with the Vital Statistics Administration and MedChi, the State's medical society, annually performs a review of maternal deaths in Maryland. This legislatively mandated review process has led to enhanced surveillance of pregnancy associated deaths in Maryland, the addition of

pregnancy status on the death certificate, and the development of educational materials for patients and providers.

- The Center for Maternal and Child Health publishes and distributes a brochure "About Postpartum Depression" to healthcare providers and new mothers to provide information about symptoms, risk factors, causes and several resources for treatment.

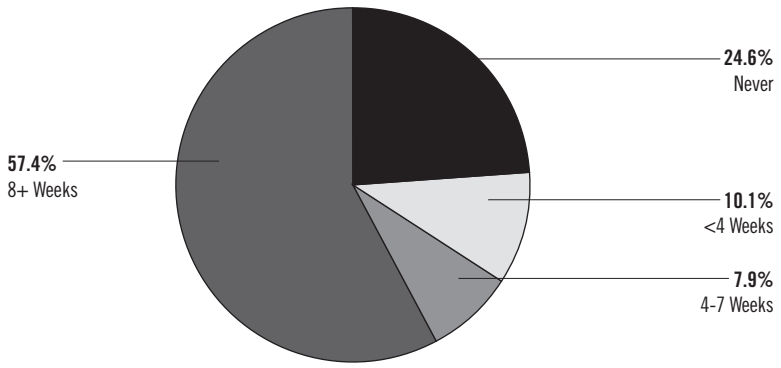
- In 2005, the WIC Program developed a postpartum nutrition brochure, Health Tips for New Moms, which includes information on recognizing the signs of postpartum depression and where to seek help.

## ENCOURAGING BREASTFEEDING INITIATION & DURATION

Breast milk is the optimal form of nutrition for infants. Breastfeeding promotion is a low-cost public health intervention that protects the health of infants and mothers and provides long-term benefits to families and the community, such as the transfer of maternal immunities, enhancement of the infant-maternal bond, and providing all of the nutrition a baby needs for the first six months of life. Breastfed infants have fewer ear infections and allergies and are less likely to become overweight as adults. According to the 2005 Maryland PRAMS Report, more than half of the mothers reported that their infants were breastfed for eight weeks or longer while one quarter of the respondents never breastfed (Figure 11).

Breastfeeding initiation rates among new mothers in Maryland have increased steadily over the past decade, rising from 48 percent in 1991 to 76 percent in 2005 according to the

**FIGURE 11** — Distribution of Mothers by Length of Time Infant Was Breastfed, Maryland, 2005

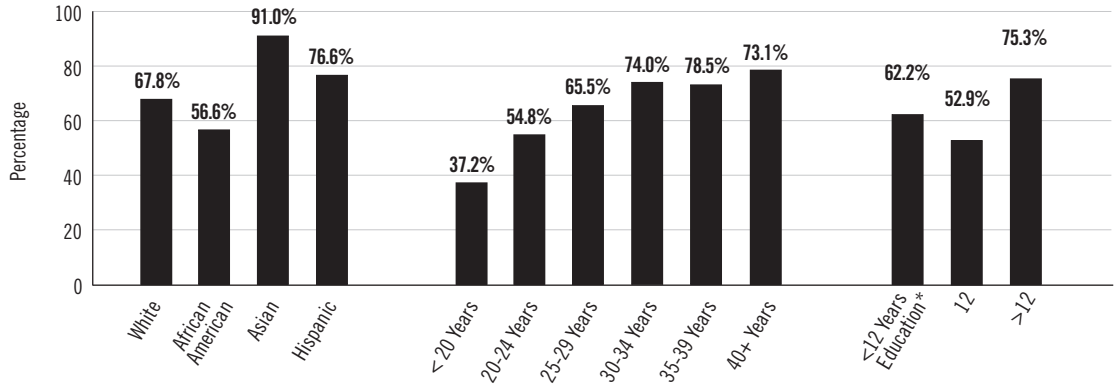



**Source:** Maryland PRAMS 2005, Center for Maternal and Child Health, Family Health Administration, Maryland Department of Health and Mental Hygiene

CDC National Immunization Survey. This meets the HP 2010 goal that 75 percent of new mothers breastfeed. Data from the survey also indicate that 41 percent of Maryland mothers continue to breastfeed at six months and 18.9 percent at one year, less than the HP 2010 goals that 50 percent continue to breastfeed at six months and 25 percent breastfeed at one year. That survey further finds that 38.3 percent are exclusively breastfeeding at three months and 14.7 percent at one year.

According to PRAMS data, African American women in Maryland are significantly less likely to breastfeed than Asian, Hispanic, or white women, as are women less than 20 years of age and women without a high school education (Figure 12). Breastfeeding rates among those served by WIC have made significant gains (from 13 percent in 1991 to 54.7 percent in April 2007), yet remain lower than the rates in the general population.

**FIGURE 12** — Percentage of Mothers Who Reported Breastfeeding for Four or More Weeks, by Race/Ethnicity, Age, and Years of Education*, Maryland, 2005




**Source:** Maryland PRAMS 2005, Center for Maternal and Child Health, Family Health Administration, Maryland Department of Health and Mental Hygiene

** Includes only mothers age 20 and above*

## What Is the Family Health Administration Doing?

- The Center for Maternal and Child Health is launching the Breastfeeding Friendly Work Place Initiative to promote employers that make breastfeeding accessible for mothers returning to work. Work sites will be awarded certification for meeting basic criteria.
- The Maryland Breastfeeding Coalition, established in 2002 and supported administratively by the Center for Maternal and Child Health and the Maryland WIC program, promotes breastfeeding initiation and increasing breastfeeding duration rates. Breastfeeding advocates from professional, academic, and community organizations and the

general public are welcome to join the Coalition, which supports:

– A professional Speakers' Bureau for breastfeeding topics has been developed and offered to hospital providers;

– A web site for Maryland Breastfeeding information (*www.marylandbreastfeeding.org*) is available on the Center for Maternal and Child Health Web Site with information including completed coalition projects, Maryland breastfeeding statistics, breastfeeding support information, and links to the Maryland WIC Program and other resources;

– Printing and distribution of the Maryland Breastfeeding Resource Handbook, which was initially developed by the Johns Hopkins School of Nursing (a coalition member) and revised most recently by the University of Maryland School of Nursing (also a coalition member);

– Development of a step-by-step breastfeeding brochure, available on the Maryland Breastfeeding information web site; and

– Development of the Maryland Breastfeeding Promotion Employer's Tool Kit to encourage and assist employers in supporting their employees who wish to breastfeed upon return from maternity leave.

✤ The Maryland WIC Program provides information about and promotes breastfeeding to every prenatal

participant and assisted participants who were breastfeeding to enhance changes for a successful breastfeeding experience. All staff received breastfeeding training at seven local WIC agencies, and the State WIC agency employ International Board Certified Lactation Consultants.

✤ The Maryland WIC Program continues to receive funding from the United States Department of Agriculture for the standardization and expansion of its breastfeeding peer counselor program. Currently eight local WIC agencies, covering 11 Maryland counties and Baltimore City, employ breastfeeding peer counselors. One peer counselor program is collaborating with a hospital to extend breastfeeding support beyond the WIC community.

✤ August has been designated as Breastfeeding Month in Maryland since 1995, with the Family Health Administration supporting activities to increase public awareness of the benefits of breastfeeding.

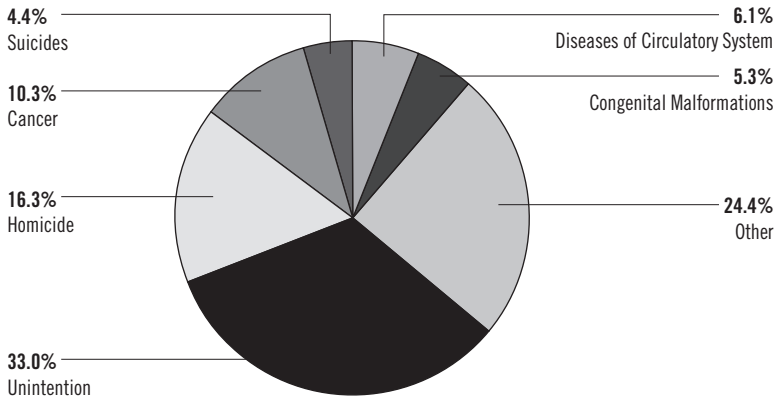
# Childhood & Adolescence

Through programs that address critical public health concerns such as unintentional injuries, asthma prevention, and lead poisoning prevention, the Family Health Administration works to ensure that the approximately 1.8 million Maryland children and adolescents make a healthy transition into adulthood.

## PREVENTING CHILD DEATH

In 2005, the leading cause of all deaths for children between one and 17 years of age in Maryland was unintentional injuries (33 percent), such as motor vehicle crashes (Figure 13). Between 2002 and 2004, 237 children between the ages of one and 17 years in Maryland died in motor vehicle accidents. National Highway Traffic Safety Administration and the SAFE KIDS Worldwide data show that when child safety restraints are used consistently and correctly in passenger vehicles, the risk of death is reduced by 71 percent for infants and 54 percent for children ages one to four years. Also, the need for hospitalization is reduced by 69 percent (children ages one to four years), and minor injuries are reduced by 50 percent. According to Maryland Kids in Safety Seats data, child safety restraint misuse in Maryland averaged approximately 74 percent in fiscal year 2007. In addition, child restraint observational studies conducted in 2004 revealed that 33 percent of children (ages one to seven years) observed were riding in the wrong restraint type for

**FIGURE 13** — Distribution of Deaths by Cause, Children 1-17 Years Old, Maryland, 2002-2004



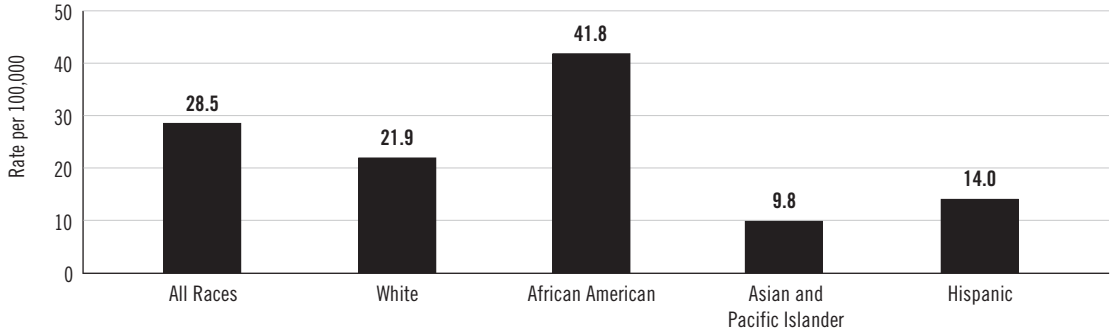

**Source:** Child Death Report, 2005, Center for Maternal and Child, Family Health Administration, Maryland Department of Health and Mental Hygiene

age and size. The most prominent misuses were children turned forward too soon based on current best practice recommendations (19 percent) and children who should have been in booster seats who were inappropriately restrained (43 percent).

Other leading causes of death for children between one and 17 years of age include homicide, cancer, and birth defects. The child mortality rate decreased by 23 percent between 1994 and 2003 (33.2/1000 in 1994 compared to 25.6/1000 in 2003) with children ages one to four years having the largest decrease in death rates.

Data indicate that child deaths in Maryland vary by race and gender. As Figure 14 shows, in 2004, the death rate for African American children between ages one and 17 years was 41.8 deaths per 100,000 population, almost twice as high as the death rate of white children within the same age range (21.9 deaths per 100,000 population). Male children between ages one and 17 years had a higher death rate with 36.0 deaths per 100,000 population compared to females in the same age range with 20.3 deaths per 100,000 population.

**FIGURE 14** — Death Rates (1-17 years old), by Race and Ethnicty, Maryland, 2004




**Source:** Child Death Report 2005, Center for Maternal and Child Health, Maryland Department of Health and Mental Hygiene

**Persons of Hispanic origin may be any race*

## What Is the Family Health Administration Doing?

The prevention of child and adolescent fatalities is a cooperative effort of programs within the Family Health Administration. For example:

- In order to better understand the issues involving child and adolescent mortality, the Center for Maternal and Child Health provides support to State and local child fatality review teams.
- In response to the number of child deaths due to abuse and neglect, the Center for Maternal and Child Health is establishing a Center for Excellence with the University of Maryland to train

pediatricians and develop a resource center for pediatricians to assist in the identification of children who have been neglected or abused.

- The Center for Preventive Health Services awards small grants to local health departments in Maryland to increase their capacity to plan and deliver targeted prevention programs based on local needs and also trains and educates local health department staff in injury prevention and program implementation and evaluation.

- The Center for Health Promotion, Education, and Tobacco Use Prevention operates the Kids In Safety Seats (KISS) Program, funded by the State Highway Administration, to reduce the number of needless injuries and deaths by educating the public on child passenger safety. In fiscal year 2007, KISS participated in 31 child safety seat checkup events across Maryland.

- Newborn screening and long-term follow-up care for children and adolescents, administered by the Office for Genetics and Children with Special Health Care Needs, identifies sickle cell disease, once a significant cause of mortality in adolescence. The Office funds a transition clinic at Johns Hopkins University for adolescents with sickle cell disease and subsidizes the State designated metabolic treatment centers.

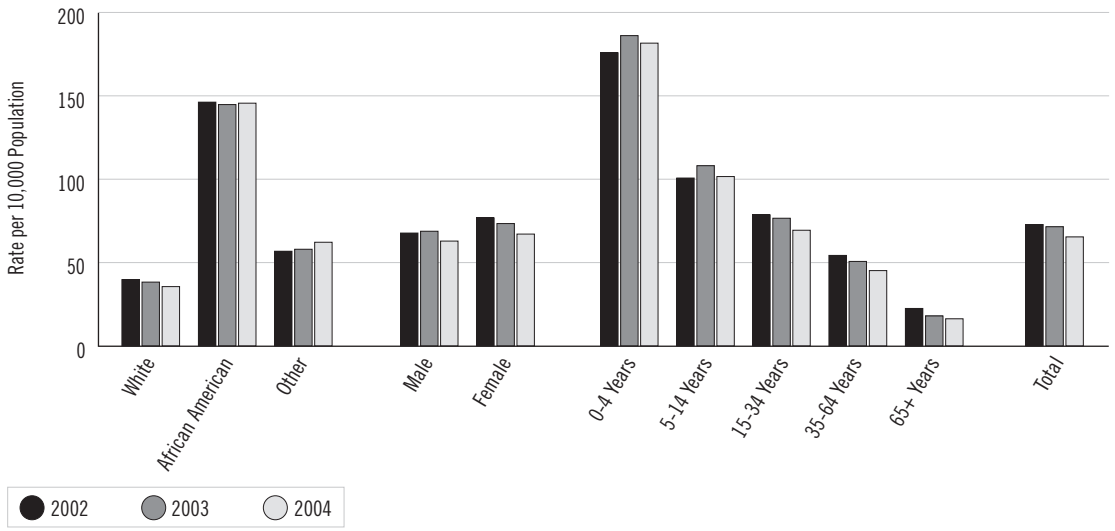
- Children's Medical Services, administered by the Office for Genetics and Children with Special Health Care Needs, provides specialty care for low-income children with chronic disorders.

## PREVENTING & MANAGING ASTHMA

The Center for Maternal and Child Health estimates that 151,000 Maryland children have a history of asthma. Asthma morbidity and mortality are often preventable through proper asthma management, including avoidance of asthma triggers and adherence to pharmaceutical treatment regimes. Emergency department visits and hospitalizations often represent cases of asthma mismanagement and may be avoidable with appropriate preventive and therapeutic care. Maryland emergency departments asthma visit rates were

consistently highest for children less than five years of age at 176 visits per 10,000 population. Racial disparities exist among people with asthma, as demonstrated by the higher prevalence rates, as well as higher rates of emergency department visits and hospitalizations due to asthma experienced by African Americans as compared to whites. African Americans and children four years of age and younger have the highest rates of asthma-related emergency department visits (Figure 15).

**FIGURE 15** — Asthma Emergency Department Rates, by Race, Sex, and Age, Maryland, 2002-2004




**Source:** Asthma in Maryland 2005, Center for Maternal and Child Health, Family Health Administration, Maryland Department of Health and Mental Hygiene

## What Is the Family Health Administration Doing?

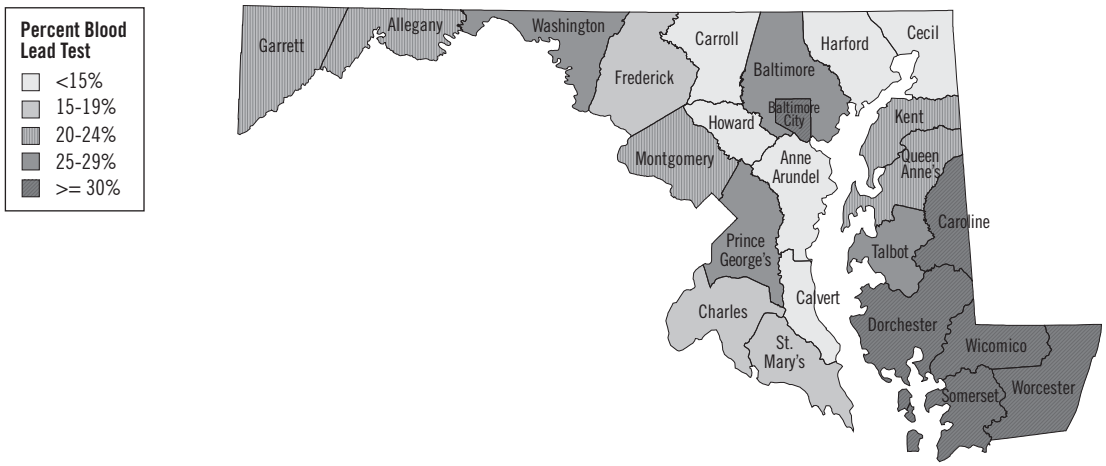
The Maryland Asthma Control Program seeks to: (1) decrease the prevalence of asthma and the occurrence of its complications in Maryland, and (2) to decrease disparity in health outcomes related to asthma in all parts of the State. To achieve these goals, Maryland Asthma Control Program activities include:

- Educating people with asthma and their caregivers (e.g., school personnel and childcare providers) about steps to control asthma;
- Increasing awareness of the National Heart, Lung, and Blood Institute's Guidelines for Proper Asthma Management among health care providers;
- Improving systems of care to ensure coordinated care for asthmatic patients; and
- Enhancing the understanding of asthma in Maryland through a comprehensive surveillance system.

## PREVENTING LEAD POISONING

Exposure to lead generally comes from contact with chipped and peeling lead-based paint. Continued exposure in children has been linked to long lasting neurological damage, learning disabilities, shortened attention span, behavioral problems, growth delays in young children, and lowered IQ. The number of children with elevated blood lead levels has decreased by 82 percent in Maryland over the past seven years, with a 70 percent increase in the number of children tested over the past five years. Children younger than six years of age, especially between one and two years of age, are at the greatest risk for lead poisoning because they put their hands or other lead-contaminated objects into their mouths. In addition, African American children of low-income families, and those who live in older homes, are affected disproportionately by lead. A total of 102,974 (22.2 percent) of children 0-72 months were tested for lead exposure in 2006 statewide. The highest testing rates for children in this age group were found in Caroline County (35.1 percent), followed by Baltimore City (33.5 percent), Somerset County (31.8 percent), and Washington County (31.1 percent).

Percent of Children 0-72 Months Tested for Lead in 2006 by Jurisdiction




**Source:** Maryland Department of the Environment, Lead Poisoning Prevention Program, Childhood Lead Registry

### What Is the Family Health Administration Doing?

The mission of the Maryland Childhood Lead Screening Program, administered through the Center for Maternal and Child Health in collaboration with the Maryland Department of the Environment and others, is to reduce lead exposure in children under the age of six by

promoting lead testing and raising lead awareness in communities.

This is accomplished by:

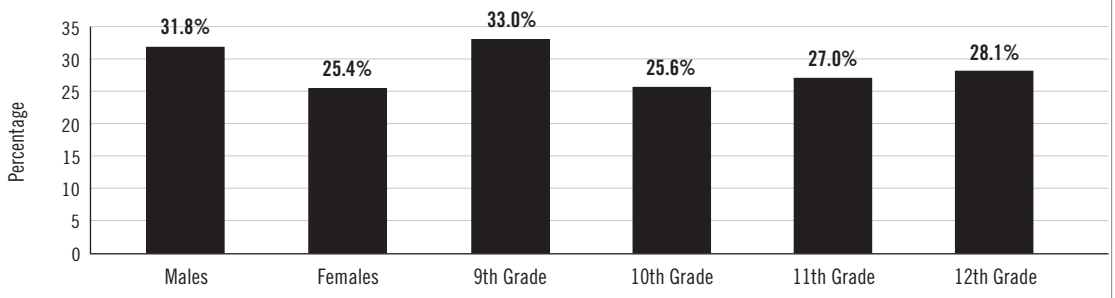
- ✤ Educating parents, teachers, and child care providers about lead exposure;
- ✤ Increasing the screening and testing for lead poisoning among children;
- ✤ Providing case management services for children who are identified as having lead poisoning;
- ✤ Collaborating with local health departments, Maryland Department of the Environment, and community-based organizations; and
- ✤ Targeting efforts towards children most at risk for lead exposure.

## PREVENTING OVERWEIGHT & OBESITY

Results from the 1999-2002 National Health and Nutrition Examination Survey (NHANES), conducted by the CDC using measured heights and weights, indicate that an estimated 16 percent of children and adolescents ages six through 19 years are overweight. This represents a 45 percent increase in the overweight estimate of 11 percent obtained from NHANES III (1988-94). Overweight adolescents have a 70 percent chance of becoming overweight or obese adults. This increases to 80 percent if one or more parent is overweight or obese. Risk factors for heart disease, such as high cholesterol and high blood pressure, occur with increased frequency in overweight children and adolescents as compared to children with a healthy weight. Overweight and obesity are closely linked to Type II diabetes. Type II diabetes, previously considered an adult disease, has increased dramatically in children and adolescents.

Maryland data on this critical health risk is limited. Currently, only data from the first year (2005) of the Youth Risk Behavior Surveillance System (YRBSS) is available, with the results showing that 29 percent of Maryland high school students reported a BMI indicating overweight or risk for overweight. In addition, more male (32 percent) than female (25 percent) students reported a BMI in this range, but the difference is not statistically significant. Despite this, far fewer male (22 percent) than female students (33 percent) described themselves as overweight. Finally, prevalence of overweight and risk of overweight varied somewhat by grade level, though this difference was not significant (Figure 16).

**FIGURE 16** — Percentage of Students Who Were Overweight or At Risk For Becoming Overweight, By Gender and Grade, Maryland, 2005




**Source:** Youth Risk Behavior Survey, Centers for Disease Control and Prevention, US Department of Health and Human Services

## What Is the Family Health Administration Doing?

Activities to address childhood obesity reflect the collaborative effort of several Family Health Administration programs: WIC, the Center for Maternal and Child Health, the Center for Preventive Health Services, the Office for Genetics and Children with Special Health Care Needs, and the Center for Health Promotion, Education, and Tobacco Use Prevention. Activities include:

- Developing recommendations to address childhood overweight and obesity in the Maryland Nutrition and Physical Activity Plan (2006);
- Increasing awareness among health care providers of the increase and impacts of childhood obesity;
- Initiating screening and data collection for overweight and obesity as an integral service in school-based health centers;
- Encouraging physical activity through creative programs such as We Can!, an after-school program that encourages physical activity and healthy eating;
- Funding a transition clinic at Johns Hopkins University for adolescents with diabetes, which is closely linked with overweight and obesity;
- Developing educational materials such as the WIC "Help Me Be Healthy" series, which helps caregivers encourage children to enjoy meals and physical activity and develop independence in choosing healthy foods, feeding themselves, and keeping healthy;
- Encouraging healthy eating and physical activity early in life by providing caregivers with resources such as children's books and DVDs with themes related to healthy eating and physical activity during WIC nutrition education sessions; and
- Promoting and supporting breastfeeding, which is linked to lower rates of overweight and obesity, through WIC breastfeeding peer counselor programs.

## PROMOTING ORAL HEALTH

Oral health is an integral and significant component of overall health. The medical consequences of poor oral health include infection, pain, and impaired eating ability, all of which can lead to poor nutritional status and poor overall health. Poor oral health can also lead to speech difficulties, unpleasant appearance that affects self-esteem, and an inability to concentrate due to pain; these factors impact children's readiness to learn and be productive in school. Since dental disease occurs frequently and treatment is more expensive than prevention, educating parents and children has a health and economic basis.

### What Is the Family Health Administration Doing?

The Office of Oral Health is responsible for developing community-based and school-based preventive treatment and educational and outreach programs for oral health through local health department programs. For example:

- In fiscal year 2006, 15 local health departments provided clinical oral health services through funding from the Office of Oral Health. Clinical oral health services consisted of clinical dental services for children, pregnant women, and adults; school-based dental sealants; and fluoride rinse programs.

- Local health department programs provided clinical dental services for 6,950 children in fiscal year 2006, a 50 percent increase from fiscal year 2005. The clinical dental services provided to children included comprehensive preventive and restorative services.

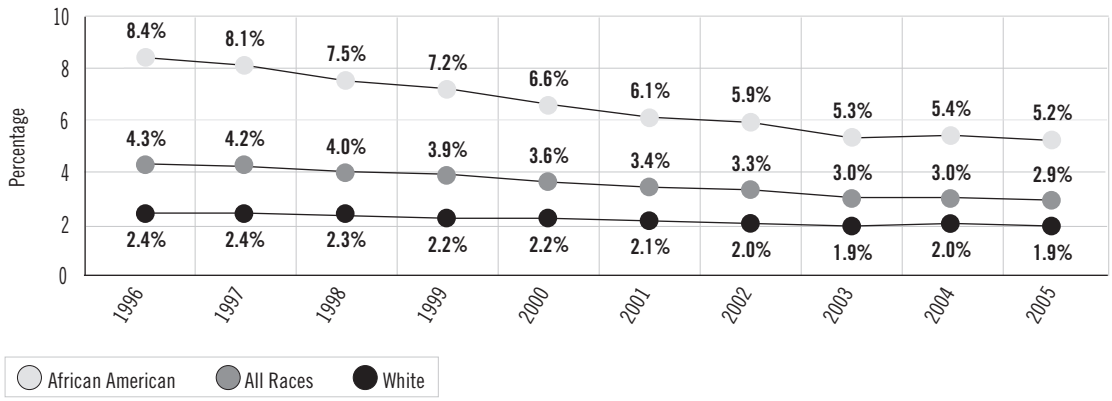
- Between fiscal year 2002 and fiscal year 2006, children receiving sealants from a school-based sealant program increased 43 percent, from 2,000 in fiscal year 2002 to 2,868 in fiscal year 2006. The majority of school-based sealant programs target second grade children since the first permanent molars have erupted by this age.

- Children participating in fluoride rinse programs increased 153 percent between fiscal year 2003 and fiscal year 2006, from 3,900 in fiscal year 2003 to 9,844 in fiscal year 2006. Local health departments partnered with schools and community programs to provide this service to elementary school-aged children.

## PREVENTING ADOLESCENT PREGNANCY

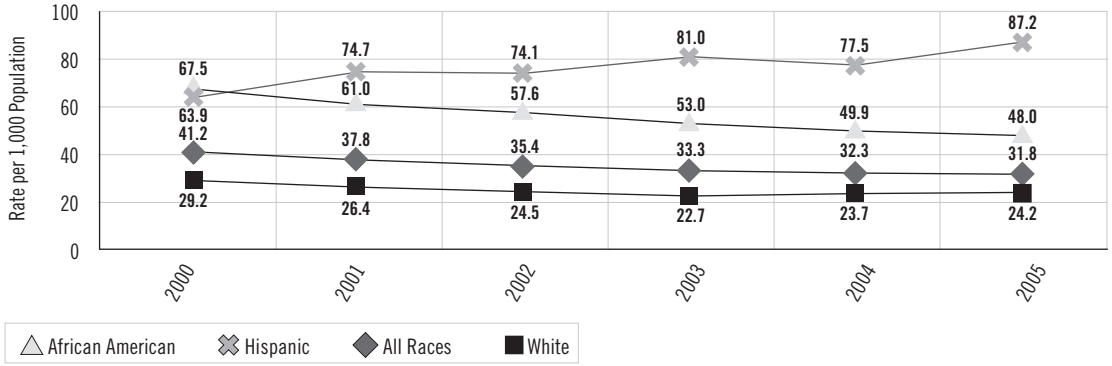
From 1996 to 2005, teen birth rates (births to adolescents less than 20 years of age) in Maryland have been declining steadily, reaching a low of 31.8 births per 1,000 adolescent women in 2005 (figures 17 and 18). The largest decline occurred among African American adolescents at 28.9 percent, then white, non-Hispanic adolescents at 17.1 percent. The teen birth rate among Hispanic adolescents, however, increased by 36.5 percent from 2000 to 2005. In 2000, the Hispanic teen birth rate was almost equal to the African American teen birth rate, but by 2005, the Hispanic teen birth rate was 1.5 times greater than the African American birth rate.

**FIGURE 17** — Percentage of Births to Adolsecents Under the Age of 18, by Race, Maryland 1996-2005




**Source:** 2005 Vital Statistics Annual Report, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

**FIGURE 18** — Birth Rates for Adolescents, Ages 15-19, by Race and Hispanic Origin*, Maryland, 2000-2005




**Source:** 2005 Vital Statistics Annual Report, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

**Persons of Hispanic origin may be of any race*

Between 2000 and 2004, there were 140 deaths among infants born to mothers less than 18 years of age, which is an infant mortality rate of 11.7 per 1,000 live births. The infant mortality rate was significantly higher for African American mothers than white mothers. Teen mothers are also more likely to have premature and low birth weight infants.

In Maryland, the public cost of teen births is $195 million with $130 million (66 percent) being paid by State and local funds in 2004. Specifically, $44 million was spent on public health services for mothers and children in 2004. Teen mothers are less likely to finish high school than their peers, which may contribute to their increased likelihood of needing public assistance. Furthermore, the children of teen mothers are more likely to do worse in school than children of older mothers.

### What Is the Family Health Administration Doing?

- The Healthy Teens and Young Adults Program (HTYA), which addresses the reproductive and life skills needs of high-risk adolescents, provides prevention services to 7,000 high-risk young men and women. The Program extends special services to teens and young adults who face social, cultural, institutional, and financial barriers to care. Those services include educational support, community awareness, clinical services, teen advisory groups, and parental involvement for male and female participants.

- The Babies Born Healthy Program is partnering with Montgomery County to expand the HTYA model for the Latina community.

- The Maryland State Family Planning Program, administered by the Center for Maternal and Child Health, works to prevent pregnancies among adolescents by:

  – Serving 26,000 adolescents each year (one-third of the family planning clients); and

  – Offering comprehensive clinic services, health education, and counseling regarding sexual decision-making, prevention of sexual coercion, abstinence, contraception, and encouraging parental involvement.

## PREVENTING TOBACCO USE & ENCOURAGING CESSATION

About 13,000 of Maryland's youth become regular smokers each year. Many factors interact to encourage smoking among youth, including smoking by peers and family members, tobacco industry advertising, promotion, and easy availability of cigarettes. Of those Maryland youth alive today, an estimated 351,000 will become regular smokers, with 112,300 (32 percent) dying prematurely as a result of smoking. As children progress through school, the percentage who become established smokers, defined as having smoked 100 or more cigarettes (5 packs or more) in a lifetime, increases significantly.

According to the 2005 Maryland YRBSS, 11.3 percent of ninth grade students reported they had smoked cigarettes on one or more of the past 30 days compared to 20.6 percent of twelfth grade students. The YRBSS also showed that the prevalence of youth tobacco use in Maryland is higher among white females (22.4 percent) than African American females (16.0 percent) and higher among white males (20.5 percent) than African American males (11.9 percent).

## What Is the Family Health Administration Doing?

Maryland is a front-runner in the fight against youth tobacco use and currently has several programs to address the issue of under-aged tobacco use. The Center for Health Promotion, Education, and Tobacco Use Prevention funds Maryland school systems to provide curriculum-based tobacco use prevention in middle schools as part of their comprehensive school health program:

- SASS (Students Against Starting Smoking) is a collaboration between the Center for Health Promotion, Education, and Tobacco Use Prevention and the Maryland State Department of Education. SASS Clubs, which have been active in Maryland middle schools since 1993, include peer leadership and advocacy training on tobacco control, promote tobacco-free lifestyles, and advocate for smoke-free environments. During fiscal year 2007, there were 14 SASS Clubs with 396 student participants. Each year the SASS conference attracts at least 250 students and adult advisors.

- Students Together Organizing Prevention Strategies (S.T.O.P.S.) brings individual college campus tobacco control coalitions together to form the statewide S.T.O.P.S coalition. Campus coalitions work to educate their peers about the dangers of tobacco use and second-hand smoke, strengthen tobacco policies on campus, and provide information for cessation. The college coalitions are strongly promoting the Maryland Tobacco Quitline throughout their campuses;

- Teens Rejecting Abusive Smoking Habits (T.R.A.S.H.), is a community-based initiative that brings individual youth groups together to form the statewide T.R.A.S.H coalition to develop and implement innovative and exciting programs in community settings, to encourage activities that will prevent their peers from using tobacco, and to assist those who want to quit. The coalition is led by a statewide Youth Advisory Board that focuses on youth leadership and empowerment. For more information, visit the T.R.A.S.H Web site, *www.marylandtrash.com*; and

- The Body Sense Teen Intervention is a smoking cessation intervention for teenagers. The Center provides training to health care providers to assure they possess the state-of-the-art counseling skills needed to help teens quit smoking. The Center has developed a colorful, youth-oriented newsletter titled "Body Sense" that explores smoking in relation to topics of interest to girls. Providers distribute the Body Sense newsletter in conjunction with motivational counseling to encourage behavior change among teen patients who smoke.

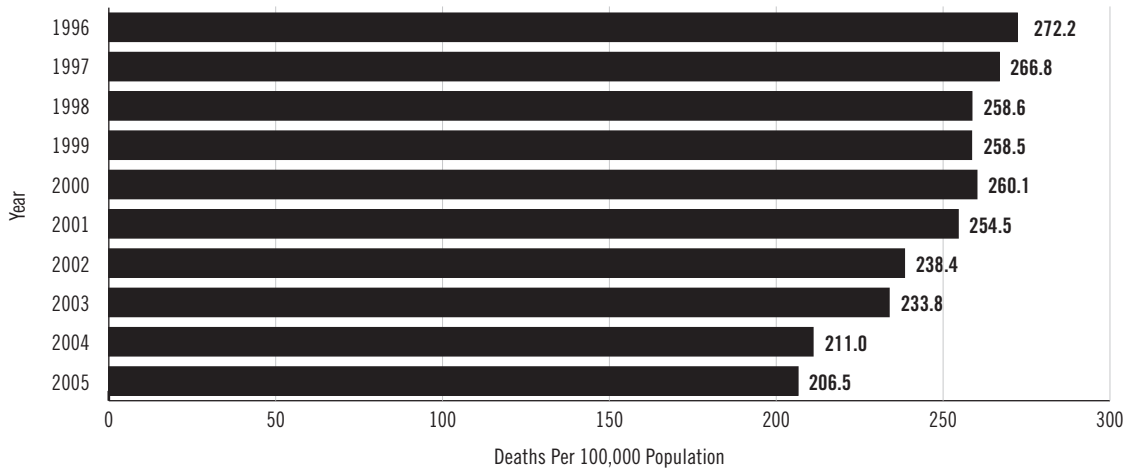
# Adults & Seniors

Adults and seniors make up the largest percentage of Maryland's population, with 25 to 54 year-olds comprising approximately 47 percent, and people age 55 and older comprising approximately 20 percent. The Family Health Administration's efforts in chronic disease prevention and health promotion focus on improving health status and encouraging the healthy behavior of Maryland's older residents. Activities to promote healthy lifestyles are designed to increase physical activity and decrease overweight, obesity, and cardiovascular diseases; to encourage tobacco use cessation; to reduce mortality from cancer through screening programs and targeted medical services; and to educate adults and seniors through community workshops on arthritis and osteoporosis.

## PROMOTING CARDIOVASCULAR HEALTH

In 2005, cardiovascular diseases were the leading cause of death in Maryland, comprising 26.4 percent of total deaths, with an age-adjusted mortality rate of 206.5 per 100,000 population. Cardiovascular diseases ranked first in causes of death in adults 65 years and older and second among adults between 45 and 64 years. However, as Figure 19 illustrates, the age-adjusted rates for deaths caused by heart diseases have decreased steadily since 1996. The rate of premature death from heart disease (before age 65) is

**FIGURE 19** — Age-Adjusted Death Rates for Diseases of the Heart, Maryland, 1996-2005




**Source:** Maryland Vital Statistics Annual Report, 2005, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

**Note:** *Age-adjusted to US Census 2000 population*

twice as high in African American men as white men, and three times as high in African American women as white women.

Cardiovascular disease is largely preventable through reduction and control of known risk factors. People with three or more of the risk factors listed below are almost four times as likely to die from cardiovascular disease as a person with no risk factors:

- Lack of physical activity;
- Unhealthy eating;
- Smoking;
- High blood pressure;
- High blood cholesterol; and
- Diabetes.

## What Is the Family Health Administration Doing?

Cardiovascular health is a priority for the Family Health Administration and falls under the responsibilities of the Center for Preventive Health Services, which provides funding to all 24 jurisdictions in Maryland to support local programs that will lead to reduction in cardiovascular disease.

Using HP 2010 objectives specific to coronary heart disease, diabetes, and blood pressure control, each jurisdiction designs outcome-based programs that will be most effective for their communities. Fiscal Year 2007 highlights included the following programs:

- Screenings for high blood pressure in African American churches, worksites, low-income housing areas, and other community settings. These programs include referrals to medical care and risk reduction classes and activities.

- Promoting physical activity at all age levels through group education sessions and walking challenges in workplaces, recreation centers, African American churches, schools, and other community settings.

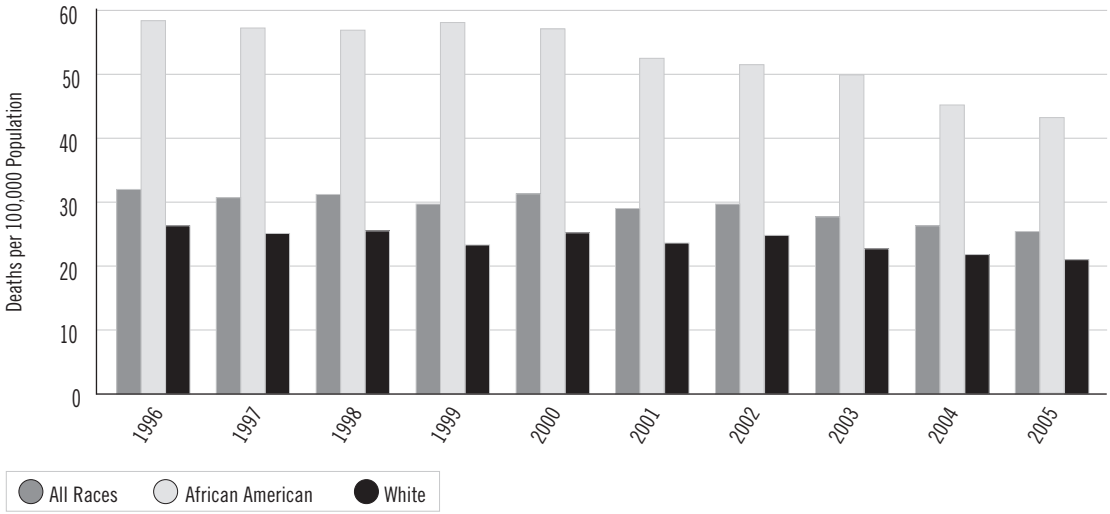
- Promoting healthier eating at all age levels in community settings using information such as fruit and vegetable consumption, the DASH diet, and the 2005 Dietary Guidelines for America.

## MANAGING & REDUCING DIABETES

Approximately 18 million people in the United States, or 6.2 percent of the population, have diabetes. However, according to the CDC, while an estimated 13 million people have been diagnosed, 5.2 million people (over one-third) are unaware that they have the disease. According to 2006 BRFSS data, an estimated 334,000 or 7.9 percent of Maryland adults had diagnosed diabetes. Another 143,000 are estimated to have undiagnosed diabetes.

As Figure 20 indicates, since 1999, there have been decreases in deaths caused by diabetes but the rate of death due to diabetes for African Americans is still two times that of whites and all races. In terms of diabetes prevalence, according to the CDC 11.4 percent of all non-Hispanic African Americans aged 20 years or older have diabetes as compared to just 8.4 percent of all non-Hispanic whites aged twenty years or older. Unfortunately, this national trend is reflected in Maryland; according to the BRFSS, diabetes was diagnosed in 7.0 percent of the population between 2000 and 2004 with prevalence highest among males (7.3 percent) and African Americans (9.5 percent) (Figure 21). African Americans with diabetes are twice as likely to develop complications, such as blindness and amputation, and are four times more likely to develop kidney failure than diabetic whites. Statewide, from 2000-2004, diabetes was most prevalent in Somerset County (11.7 percent), followed by Worcester County (10.3 percent) and Dorchester County (10.1 percent). During this time period, Charles County and Howard County had the lowest diabetes prevalence (4.3 percent), followed by Montgomery County (5.2 percent).

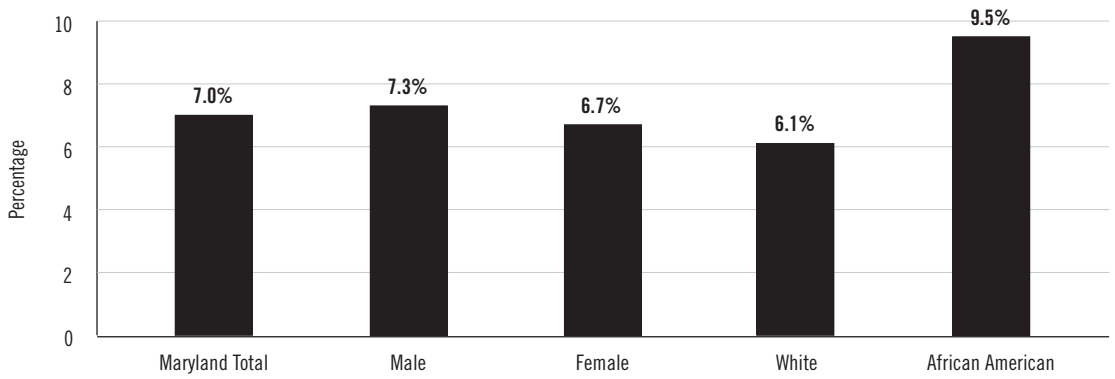
**FIGURE 20** — Age-Adjusted Death Rates for Diabetes, by Race, Maryland, 1996-2005




**Source:** Vital Statistics Annual Report, 2005, Vital Statistics Administration, Maryland Department of Health and Mental Hygiene

**Note:** *Age-adjusted to the projected 2000 US population*

**FIGURE 21** — Prevalence of Diagnosed Diabetes, Five Year Average, Maryland, 2000-2004




**Source:** Maryland Behavioral Risk Factor Surveillance System, Center for Preventive Health Services, Family Health Administration, Maryland Department of Health and Mental Hygiene

## What Is the Family Health Administration Doing?

The Center for Preventive Health Services addresses diabetes prevention and control as follows:

- Collaborating with other organizations and individuals to increase awareness of the seriousness of diabetes and plans and implements annual awareness activities with measurable outcomes for "Diabetes Month" (November 2007) and plans are in place for "Diabetes 'Alert' Month" (March 2008).

- Awarding seven implementation grants in 2007 to community-based coalitions to conduct activities designed to increase the number of people with diabetes who receive recommended care in order to prevent or delay the onset of diabetes complications, especially among disparate populations.

- Disseminating information monthly through a communications network to inform decision-making among more than 300 diabetes stakeholders. Mailings span a variety of related topics including patient education tools and materials, updates on diabetes management, and continuing education opportunities.

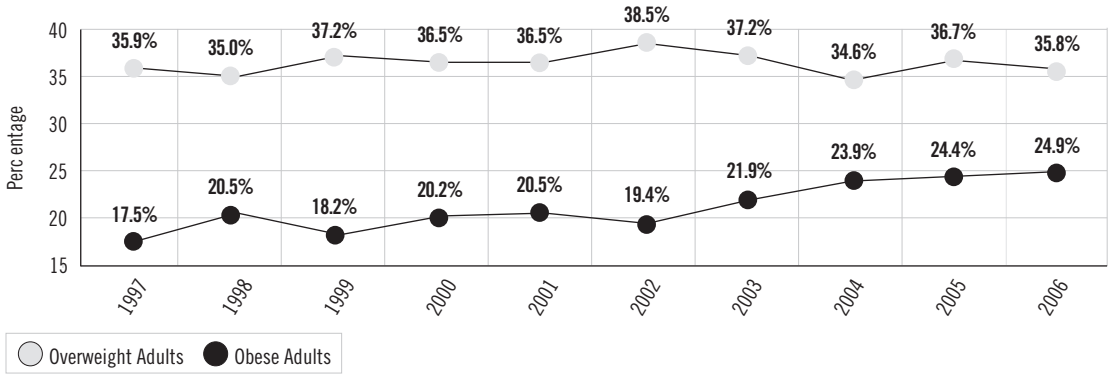
- Partnering with health care professionals to improve the delivery of care to those with diabetes for better health outcomes. Funds are used to develop educational programs to enhance the skills of providers in the medical management of diabetes.

- Consulting and participating with the Maryland Coalition to Control Diabetes. This group of stakeholders has come together to identify gaps in diabetes care services and has developed a strategic plan with specific goals and objectives to eliminate the disparities in health outcomes among the citizens of Maryland.

## PREVENTING OVERWEIGHT & OBESITY

In 2006, according to the Maryland BRFSS, 35.8 percent of Maryland adults were overweight and 24.9 percent were obese. As in the United States, the percentage of the Maryland adult population who are obese has been steadily increasing between 1997 and 2006, rising from 17.5 to 24.9 percent (Figure 22). In 2006, 46.6 percent of Maryland adults were in the normal weight range, far below the HP 2010 goal of 60 percent. Statewide, in 16 of the 24 Maryland jurisdictions, 25 percent or more of the adult populations were considered obese.

**FIGURE 22** — Prevalence of Overweight and Obese Adults, Maryland, 1997-2006




**Source:** Maryland Behavioral Risk Factor Surveillance System, Center for Preventive Health Services, Family Health Administration, Maryland Department of Health and Mental Hygiene

In 2006, African American adults in Maryland had the largest portion (35.5 percent) of adults classified as obese. Altogether, more than two-thirds of African American adults in Maryland are at risk for problems associated with being overweight, such as heart disease, stroke, diabetes, and some cancers.

### What Is the Family Health Administration Doing?

The Center for Preventive Health Services published the Maryland Nutrition and Physical Activity Plan in 2006, and is now monitoring and evaluating associated activities.

Intermediate goals of the Plan address communities, schools, worksites, and the healthcare environment, with strategies accomplished through partnerships with local health departments and their community partners, businesses, non-profit agencies, academic, and medical organizations and State agencies. Activities include:

- Six local health departments conducted 19 worksite wellness interventions across the State during fiscal year 2007;

- In fiscal year 2007, a one-day symposium was held to highlight programs and interventions being conducted by partners addressing obesity prevention across the State; and

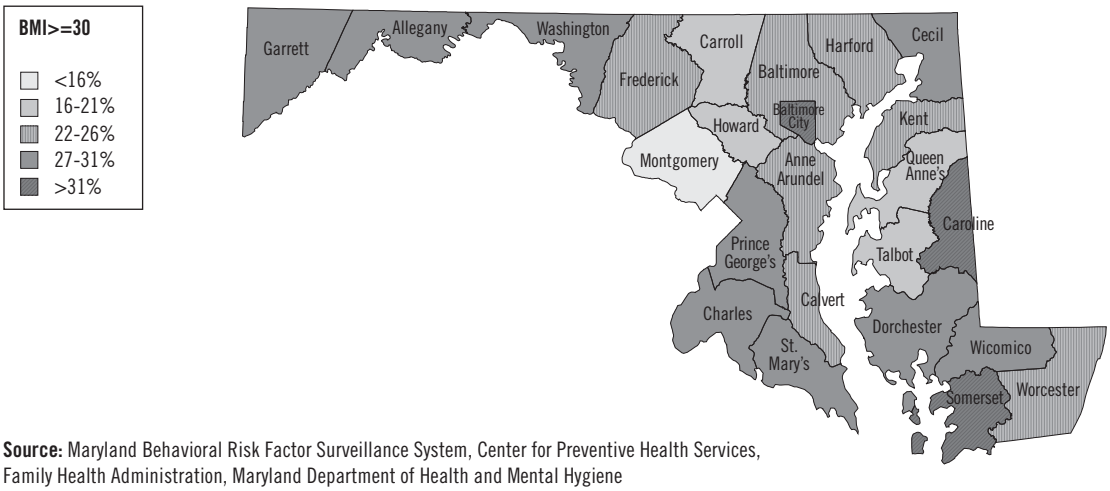
- During fiscal year 2008, seven local health departments are conducting worksite wellness activities in their communities.

The Center for Preventive Health Services partners with the Maryland State Advisory Council on Physical Fitness on two major projects:

- The Council hosts an annual "Excellence Awards" Program that honors individuals and organizations who work to increase physical activity across the lifespan of Maryland citizens. In fiscal year 2007, the Maryland Department of Housing and Community Development received an award for a worksite employee wellness program, and the Towson University/ Baltimore County Senior Fitness Center received an award for encouraging fitness in older adults.

- The Council is an integral partner of the "Healthy Active Maryland" conference series that debuted in June 2007. The Council participates on the planning committee, hosts breakout sessions, and provides leadership.

Obesity Status Among Adults, Maryland, 2006




**Source:** Maryland Behavioral Risk Factor Surveillance System, Center for Preventive Health Services, Family Health Administration, Maryland Department of Health and Mental Hygiene

## ASSISTING VICTIMS OF RAPE/SEXUAL ASSAULT

According to the National Women's Study and the National Violence Against Women Survey, approximately 13.4 percent of adult women in the United States have been victims of completed forcible rape at some point during their lifetimes. These studies also found that

the risk of having ever been raped was related to a woman's current age, her race/ethnicity, and the region of the nation she currently lives in. Both studies also found that the majority of rapes these adult women had experienced occurred when they were under the age of 18.

Approximately 12.5 percent of adult women, an estimated 260,000, in Maryland have been victims of one or more completed forcible rapes during their lifetime. The Uniform Crime Report, issued by the FBI, indicates that in 2006, 1,178 forcible rapes were reported in Maryland at a rate of 21.0 per 100,000 inhabitants, in which 1,047 were categorized as 'forced' and 131 were categorized as 'attempted.'

## What Is the Family Health Administration Doing?

The Center for Health Promotion, Education and Tobacco Use Prevention in the Family Health Administration has created the Rape and Sexual Assault Prevention Program to reduce the statewide incidence of these injuries. Program activities include:

- Supporting and funding 18 rape recovery centers to provide education and awareness services administered throughout the community. Rape recovery centers provide educational seminars, hotlines, training programs, print materials, and other resources to increase awareness about rape and sexual assault in the community;

- Funding the Maryland Coalition Against Sexual Assault, Inc. (MCASA), which functions as the umbrella organization for rape recovery centers throughout the State, advocating for improved victim services and victims' rights through education, program assistance, and legislation on a statewide level;

- Funding Maryland's first statewide rape and sexual assault prevention media campaign, which began in October 2006. The first phase of the campaign had three major goals: 1) to increase awareness about and sensitivity towards issues surrounding rape and sexual assault; 2) to dispel common misconceptions about sexual violence; and 3) to publicize services available with public service announcements, billboard advertisements, print media, and posters with key campaign messages. According to figures released by the Rape, Abuse and Incest National Network, calls to Maryland's rape recovery centers increased by 57 percent from October through December when the majority of the ads aired, as compared to the same time period during the previous year. Phase two of the campaign, launched in April 2007 to coincide with National Sexual Assault Awareness month, specifically targeted to men and focused on getting men involved in the effort to end sexual violence against women;

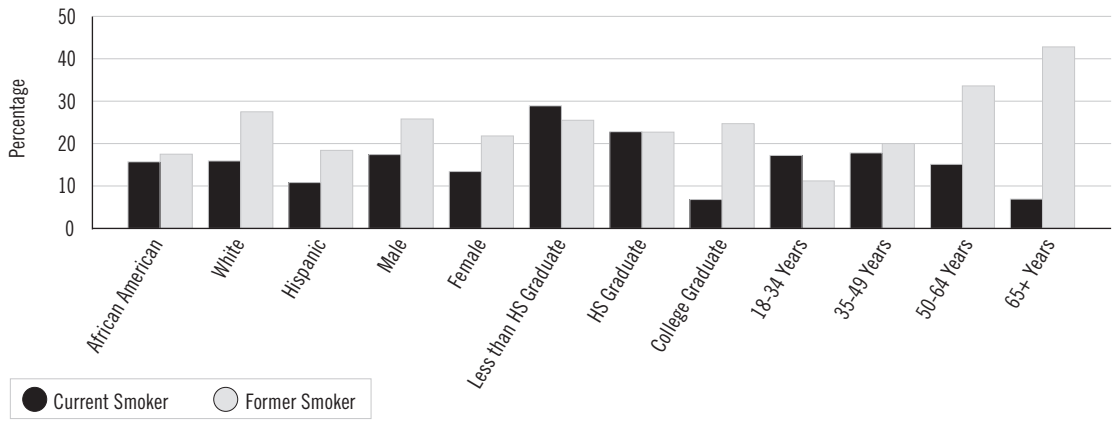
- Sponsored, in conjunction with the Greater Baltimore Medical Center, a panel discussion, "Masculinity and Sexual Violence: How Men Can Play a Key Role In Preventing Rape and Sexual Assault" to commemorate April as National Sexual Assault Awareness month; and

- Educating and training professionals in strategies designed to prevent sexual violence.

## PREVENTING TOBACCO USE & ENCOURAGING CESSATION

According to the Maryland BRFSS, current use of tobacco products by Maryland adults (ages 18 and older) declined from 21.9 percent in 2002 to 17.7 percent in 2006. The largest successes between 2002 and 2006 were with cigarette smoking and within low-income populations (Figure 23). More than 75 percent of Maryland adult smokers indicate that they would like to quit at some point, with 37.9 percent indicating that they wanted to quit smoking within the next 30 days, and 10.1 percent reporting that they had quit smoking during the preceding year.

**FIGURE 23** — Smoking Status, by Race and Hispanic Origin, Gender, Years of Education, and Age, Maryland, 2000-2004




**Source:** Maryland Behavioral Risk Factor Surveillance System, Center for Preventive Health Services, Family Health Administration, Maryland Department of Health and Mental Hygiene

**Note:** *Includes adults ages 18 and above*

### What Is the Family Health Administration Doing?

Through programs within the Center for Health Promotion, Education, and Tobacco Use Prevention and activities stemming from the Cigarette Restitution Fund, the Family Health Administration remains a leader in efforts to advance toward the ideal of a smoke-free Maryland. Examples of such programs include:

- The "Smoking Stops Here" campaign has focused on promoting the Maryland Tobacco Quitline (1-800-QUIT-NOW) over the past year. Media efforts have included community advertising, web site development, community events, partnerships, and promotions, and focus group testing of new themes, logos, and messages.

- The Smoking Stops Here Web site, *www.SmokingStopsHere.com*, is the primary medium for motivating interest and announcing the availability of services, testimonials, a calendar and database of local events, a community

forum for local health department coordinators to share information, and a "Click to Call" icon that links users to a live phone call from a quit coach;

- The Center for Health Promotion, Education, and Tobacco Use Prevention is working with local sports teams to display billboards in stadiums and use radio announcements, video boards, and other venues to promote the Maryland Tobacco Quitline during games and other events at their stadiums. Current partnerships are with the Aberdeen Ironbirds, the Baltimore Blast, the Bowie Baysox, the Delmarva Shorebirds, and the Frederick Keys;

- The Maryland Resource Center for Quitting Use and Initiation of Tobacco (MDQuit) was established in June 2006 by the Center for Health Promotion, Education, and Tobacco Use Prevention at the University of Maryland, Baltimore County. MDQuit is dedicated to assisting providers and programs in reducing tobacco use among Maryland residents. MDQuit's primary goals are to link professionals and providers to State tobacco initiatives, to provide evidence-based, effective resources to local programs, to create and support an extensive and collaborative network of tobacco prevention and cessation professionals, and to provide a forum for sharing best practices throughout Maryland. In January 2006, the Center for Health Promotion, Education, and Tobacco Use Prevention held the first Annual Best Practices Conference through MDQuit, bringing together 80 individuals from across the State. For more information, visit *www.MDQuit.org*;

- The Tobacco Related Disparities Project administered by the Center for Health Promotion, Education, and Tobacco Use Prevention is committed to a smoke-free environment and the elimination of tobacco-related disparities among population groups. With a one-year grant from the Centers for Disease Control and Prevention (CDC), the Center for Health Promotion, Education, and Tobacco Use Prevention has convened a workgroup with 18 ethnically diverse members to engage in strategic planning that will craft strategies and provide recommendations for effectively reaching populations that disproportionately suffer from tobacco-related illnesses and diseases;

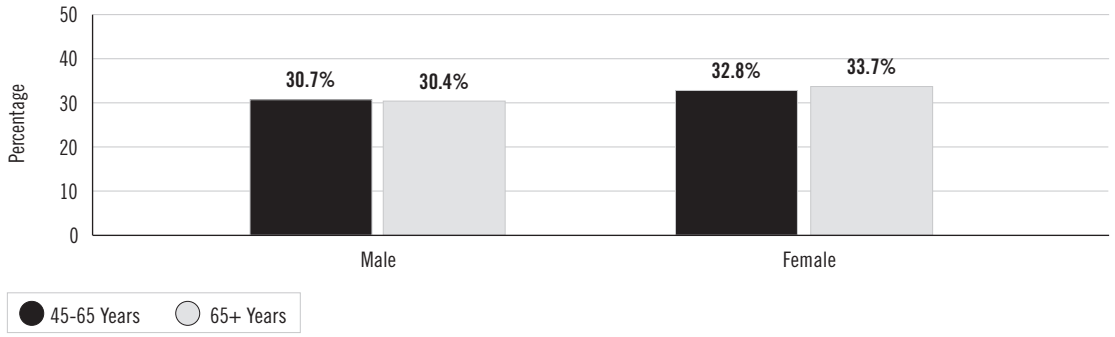
- The second "Strengthening Maryland Tobacco Control through Faith-Based Partnerships" conference was held in June 2007 and was attended by 111 local health department staff and community organizers. In addition, the Center for Health Promotion, Education, and Tobacco Use Prevention has funded organizations in Anne Arundel, Charles, Frederick, Somerset, and Washington Counties and Baltimore City to conduct faith-based tobacco use prevention and cessation programs across the State; and

- The Center for Health Promotion, Education, and Tobacco Use Prevention established and continues to support the Legal Resource Center at the University of Maryland School of Law to provide technical legal assistance to State and local officials, local health departments and community coalitions, and individuals dealing with tobacco-related legal issues.

## MANAGING ARTHRITIS

Arthritis, a broad term that encompasses more than 100 different diseases, is the number one cause of disability in the United States. Arthritis is a highly prevalent disease in Maryland, with an estimated 1.1 million (28 percent) of Maryland adults with a doctor diagnosis of arthritis and approximately 518,000 (13 percent) additional adults with chronic joint symptoms that could possibly be undiagnosed arthritis. According to the 2005 Maryland BRFSS, 88.0 percent of Maryland women and 84.8 percent of men age 65 years and older had seen a health professional for joint symptoms. About 21 percent of adults with arthritis or chronic joint symptoms have limitation of work for pay due to their condition. In addition, 30.4 percent of Maryland women age 65 years and older and 33.7 percent of men age 65 years and older had limited activities because of joint symptoms (Figure 24). The CDC estimated that arthritis and other rheumatic conditions cost Maryland a total of $2.5 billion in 2003, with $1.5 billion in direct costs and $1 billion in indirect costs.

**FIGURE 24** — Percentage of Adults with Limited Activities Due to Joint Symptoms, Maryland, 2005




**Source:** Maryland Behavioral Risk Factor Surveillance System, Center for Preventive Health Services, Family Health Administration, Maryland Department of Health and Mental Hygiene

### What Is the Family Health Administration Doing?

In order to reduce the burden of arthritis, the Maryland Arthritis Project, based in the Center for Health Promotion, Education, and Tobacco Use Prevention, supports the following:

- Media campaign activities to promote physical activity in people with arthritis. Posters were placed in bus shelters in the metropolitan Baltimore area in July and August 2006. In June 2007, 122 posters (61 in Spanish and 62 in English) were placed inside and outside of Metro buses and at 6 Metro station platforms;
- Radio spots in both Spanish and English were aired in the metropolitan Baltimore area in May and June 2007;

- With Towson University Department of Occupational Therapy, promotion of awareness of worksite ergonomics among furniture company workers and development of a brochure highlighting the ergonomic ways to prevent injuries in the workplace.

- Training to individuals who will teach the Arthritis Foundation's evidence-based self-help classes. In fiscal year 2007, 20 leaders were trained and taught people how to manage their arthritis;

- Funding to local agencies such as local health departments and area agencies on aging to conduct arthritis self-help classes for people with arthritis. In fiscal year 2007, eight agencies received mini-grants reaching over 1,000 people with arthritis;

- Community workshops on arthritis to provide information on available programs and services. In fiscal year 2007, 25 educational workshops were conducted in local communities;

- Collection and analysis of arthritis data for Maryland, which is used for planning, implementation, and evaluation of arthritis activities;

- Dissemination of arthritis educational materials to the public through local health departments, senior centers, providers, local businesses, and partnering agencies. In fiscal year 2007, more than 11,000 pieces of educational materials were distributed to the public;

- Development of a statewide plan that details possible solutions aimed at reducing the burden of arthritis; and

- Provision of resources to health care professionals to educate patients and their families.

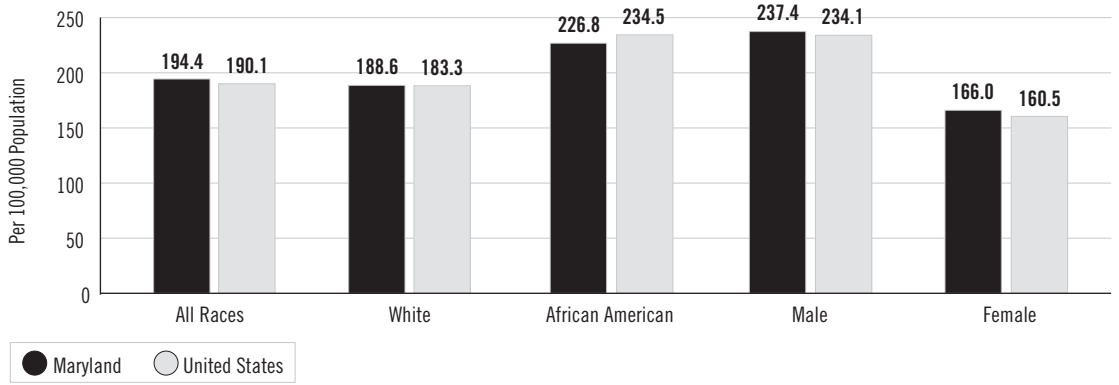
## COLLECTING INFORMATION ABOUT & PROVIDING SERVICE FOR CANCER PATIENTS

Cancer is the second leading cause of death among all age groups in Maryland, accounting for 23 percent of all deaths in the State. Among persons younger than 85 years of age, cancer is the leading cause of death in Maryland. In 2003, 10,292 Marylanders died of cancer. Maryland's age-adjusted cancer mortality rate for that year was 194.4 per 100,000 persons, which is significantly higher than the U.S. cancer mortality rate of 190.1 during the same year.

In 2003, Maryland white residents had cancer mortality rates nearly identical to U.S. white rates. In contrast, Maryland's African Americans experienced a lower cancer mortality rate than occurs among African Americans nationally. (Figure 25).

Eighteen of the 24 jurisdictions in Maryland had cancer mortality rates that were higher than U.S. rates for the time period 1999-2003. These jurisdictions include Allegany, Anne Arundel, Baltimore City, Baltimore, Calvert, Caroline, Carroll, Cecil, Charles, Dorchester, Harford, Prince George's, Queen Anne's, Somerset, St. Mary's, Washington, Wicomico, and Worcester Counties.

**FIGURE 25** — Age-Adjusted Cancer Mortality Rate, by Race and Gender, Maryland and the United States, 2003




**Source:** CDC Wonder, 2003; SEER data, National Cancer Institute, 2003, Center for Cancer Surveillance and Control, Maryland Department of Health and Mental Hygiene

**Note:** *Age-adjusted to the US Census 2000 population*

Four cancers accounted for 51.9 percent of all cancer deaths in Maryland in 2003, according to CDC Wonder. Lung cancer accounted for 29.0 percent, followed by colorectal cancer (9.9 percent), breast cancer (7.9 percent), and prostate cancer (5.2 percent). Details are provided below:

- According to the National Cancer Institute's Surveillance Epidemiology and End Results (SEER), Maryland had the 18th highest lung cancer mortality rate among the states and the District of Columbia for the period 1999-2003. Cigarette smoking has been established as the primary cause of lung cancer, and tobacco smoking is estimated to cause 90 percent of lung cancer in males and 78 percent of lung cancer in females. Smoking avoidance and cessation would result in decreased mortality from primary lung cancers. A 30-50 percent reduction in lung cancer mortality has been noted after 10 years of smoking cessation. Environmental tobacco smoke raises the risk of lung cancer by 12-19 percent among never-smokers exposed at work and by 20 percent and 30 percent among never-smoking women

and men, respectively, exposed at home. Other risk factors for lung cancer include asbestos and radon exposure. The most effective public health intervention to reduce lung cancer mortality is tobacco use prevention and tobacco use cessation.

- Maryland had the 13th highest colorectal cancer mortality rate among the states and the District of Columbia for the period 1999-2003, according to SEER. Screening for colorectal cancer has been shown to reduce mortality from colorectal cancer. Several screening methods are used to screen for colorectal cancer, including fecal occult blood stool tests, flexible sigmoidoscopy, colonoscopy, and double contrast barium enema. Colonoscopy with removal of adenomas may also reduce the risk of developing colorectal cancer by removing pre-cancerous lesions. In 2006, according to the Maryland Cancer Survey (MCS), 69.0 percent of Maryland adults age 50 years and older reported having ever had a sigmoidoscopy or colonoscopy, and 32.0 percent of Maryland adults age 50 years and older reported having a blood stool test within the preceding two years, to screen for colon cancer.

- Maryland women ranked 5th highest in female breast cancer mortality among the states and the District of Columbia for the period 1999-2003, according to SEER. Although white women have higher breast cancer incidence rates, African American women have higher breast cancer mortality rates. Breast cancer screening with mammography significantly reduces mortality from breast cancer; evidence that screening with mammography reduces breast cancer mortality is strongest for women 50 to 69 years of age. In 2006, according to MCS, 83.0 percent of Maryland women 40 years and older reported receiving a mammogram within the previous two years.

- Maryland had the 13th highest prostate cancer mortality rate among the states and the District of Columbia for the period 1999-2003, according to SEER. African American men have higher prostate cancer incidence and mortality rates than white men. Prostate cancer can be detected early through the use of a blood test measuring the level of prostate specific antigen (PSA) and through a digital rectal exam. In 2006, 57.0 percent of Maryland men 50 years of age and older reported that they have had a PSA test in the past year, according to MCS.

## What Is the Family Health Administration Doing?

Extensive efforts are under way to reduce the burden of cancer on the State, coordinated by the Center for Cancer Surveillance and Control through the following major programs:

✤ The Maryland Cancer Registry (MCR) collects, maintains, and reports data on new cancer cases in Maryland. The MCR serves as a resource for research and decision-making in cancer prevention and control throughout the State. The Cancer Surveillance Unit conducts cancer surveys, collects and analyzes a wide

variety of cancer data for use in cancer planning and evaluation, and prepares the Annual Cigarette Restitution Fund Cancer Report.

✤ The State Council on Cancer Control is a body appointed by the Governor that recommends cancer control policies for the State. The Council meets four times a year and hosts an annual Statewide Cancer Conference.

✤ The Maryland Comprehensive Cancer Control Plan was published in April 2004 and has been used by public and private organizations, state and local governments, and individuals as a guidebook for statewide goals, objectives and strategies intended to ease the burden of cancer in Maryland. Activities have included publishing an evaluation of the planning phase of the Plan and holding public health forums on cervical cancer vaccines (August 2006) and workforce and cultural diversity (April 2007).

✤ The Breast and Cervical Cancer Screening Program is a statewide Program that provides mammograms, clinical breast examinations, and Pap smears to low-income, uninsured Maryland residents in each jurisdiction of the State through local health departments and community hospitals. This Program is operated with both federal and State funds. More than 15,500 women are served in this Program each year.

✤ The Breast and Cervical Cancer Diagnosis and Treatment Program reimburses participating providers for breast and cervical cancer diagnostic and treatment services provided to eligible low-income, uninsured Maryland residents who are not eligible for Medical Assistance. This Program serves approximately 4,200 persons annually.

✤ The Cigarette Restitution Fund Cancer Local Public Health Program provides grant awards to local health departments in 23 jurisdictions and to the University of Maryland and Johns Hopkins University in Baltimore City for cancer education, screening, and treatment services. Each program works on one or more of the following targeted cancers: colorectal, prostate, breast, cervical, oral, melanoma, or lung cancer. In fiscal year 2007, this Program screened 1,907 people for colorectal cancer, 404 for oral cancer, 606 for prostate cancer, 146 for skin cancer, 1,210 for breast cancer, and 565 for cervical cancer.

✤ The Center for Cancer Surveillance and Control awards Cigarette Restitution Fund Cancer Research Grants to the

University of Maryland and Johns Hopkins for the purpose of funding cancer research that can be translated for use by medical providers and the public. Awards are made for cancer research grants at each institution and for a Maryland Statewide Health Network grant and Tobacco-Related Diseases research grant at the University of Maryland.

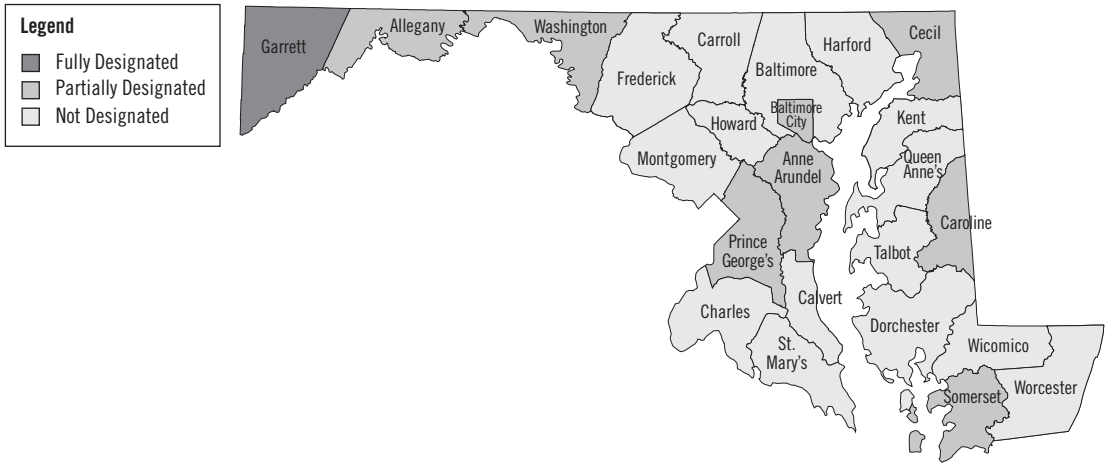
✤ The Maryland Cancer Fund was created by State legislation so that Marylanders could donate money in their annual tax returns for cancer research, prevention, and treatment. The Center for Cancer Surveillance and Control administer this fund and will award grants in fiscal year 2008.

✤ The Center for Cancer Surveillance and Control applied for and received a cooperative agreement from the CDC for a Colorectal Cancer Demonstration Screening Program in Baltimore City. In this Program, five community-based hospitals in Baltimore City, including Johns Hopkins Hospital, Harbor Hospital, Sinai, St. Agnes, and Union Memorial Hospital will receive grants to provide colorectal cancer outreach, screening and case management services for low-income, uninsured Baltimore City residents. The project had a 9-month start-up period and during the first full year of screening, 175 people received services.

# Improving Health Care Access

Access to care, defined by the Institute of Medicine as "the timely use of personal health services to achieve the best possible health outcomes," is a critical factor in increasing quality and years of healthy life and eliminating health disparities. Each office within the Family Health Administration works to address access to care.

Primary Care Health Professional Shortage Areas, Maryland, Fiscal Year 2007

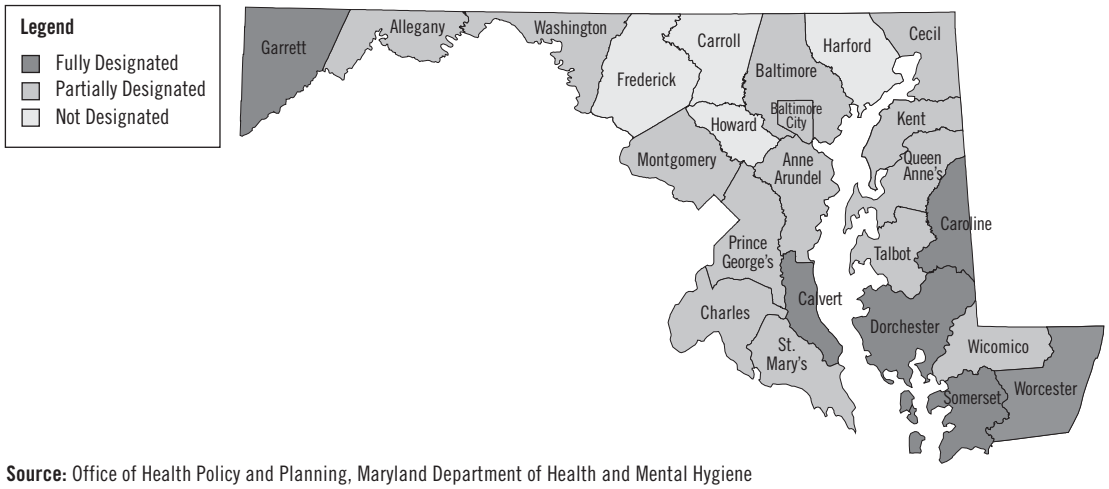



**Source:** Office of Health Policy and Planning, Maryland Department of Health and Mental Hygiene

The federal government categorizes geographic areas and populations that experience limited access to care due to a shortage of health care providers, and that are in need of additional healthcare resources, into two types: Health Professional Shortage Areas (HPSAs) for primary care, dental, and mental health services, and Medically Underserved Areas (MUAs) for primary care. Areas and populations that qualify for these federal designations are eligible for a range of resources, including Federally Qualified Health Centers (FQHCs) and the assignment of health professionals through the Loan Assistance Repayment Program (LARP), National Health Service Corps, and the J-1 Visa Waiver.

FQHCs are health centers that have been approved by the government for a program to provide low-cost health care and may be in a variety of settings such as a community health center, tribal health clinic, migrant health service, or health center for the homeless.

Medically Underserved Areas, Maryland, Fiscal Year 2007

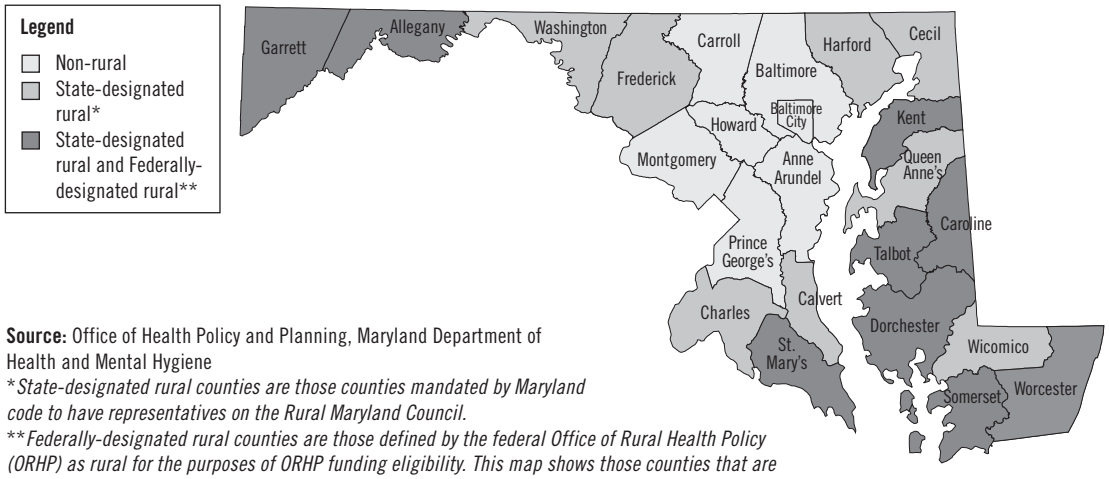



**Source:** Office of Health Policy and Planning, Maryland Department of Health and Mental Hygiene

Within Maryland, there are more than 75 FQHC sites, most located in areas with underserved populations.

Health care access varies geographically across the State. Residents of rural areas often face problems accessing even the most basic primary care services, including distance to health care providers, limited availability of health care providers, the ability to self-pay, and migrant/non-legal status. Refer to the map below of Maryland's rural areas by State and federal designation.

Rural Areas by State and Federal Designation, Maryland, 2007




**Source:** Office of Health Policy and Planning, Maryland Department of Health and Mental Hygiene

**State-designated rural counties are those counties mandated by Maryland code to have representatives on the Rural Maryland Council.*

***Federally-designated rural counties are those defined by the federal Office of Rural Health Policy (ORHP) as rural for the purposes of ORHP funding eligibility. This map shows those counties that are entirely rural, except for Somerset, where five out of the seven census tracts are rural*

## What is the Family Health Administration Doing?

✤ In order to provide for the medically underserved, the Primary Care Organization (PCO) within the Office of Health Policy and Planning works in conjunction with the federal government to identify HPSAs and MUAs. In fiscal year 2007, the office:

- Analyzed 27 areas for HPSA designations and worked with the federal government to establish four new HPSA designations, renew 15 designations, and increase the score of 1 HPSA designee (a higher score improves competitive status for resources);

- Collaborated with the Maryland Higher Education Commission to award LARP funds to 10 primary care physicians practicing in FQHCs, Community Health Centers, and Maryland Qualified Health Centers in underserved areas across the State;

- Worked with the National Health Service Corps to place ten primary care providers and one psychiatrist in FQHCs, Community Health Centers, and MQHCs in federally designated HPSAs across the State;

- Worked with the federal government to award 20 foreign national physicians J-1 Visa Waivers in exchange for a three-year commitment by each physician to render services in underserved areas; and

- Worked with several communities around the State to facilitate needs assessments and grant renewals, and to address technical and other needs for assistance.

✤ The State Office of Rural Health's (SORH) goal is to improve health care in rural communities. This goal is achieved through several activities, including: (1) collecting and disseminating information within the State; (2) coordinating rural health interests and activities across the State; (3) providing technical assistance to attract more federal, state, and foundation funding for rural communities; and (4) fostering networks among rural healthcare organizations. The SORH primarily serves the eight Maryland counties designated as rural by the federal Health Resources and Services Administration, but also works with the 18 counties, indicated on the map above, designated as rural in the Annotated Code of Maryland. Activities supported by SORH include:

- Establishment of a statewide Steering Committee to guide development of a State Rural Health Plan. The *Maryland*

*Rural Health Plan*, completed in June 2007, provides information on the status of rural health, identifies barriers that limit access to care, and provides recommendations for improving the delivery of health care to rural residents.

– Promotion of recruitment and retention of health care professionals in rural areas primarily through participating in the National Rural Recruitment and Retention Network, which allows health care providers to view job openings in rural Maryland online. In fiscal year 2007, 40 job openings were viewed more than 1,000 times by health care providers on 3R Net.

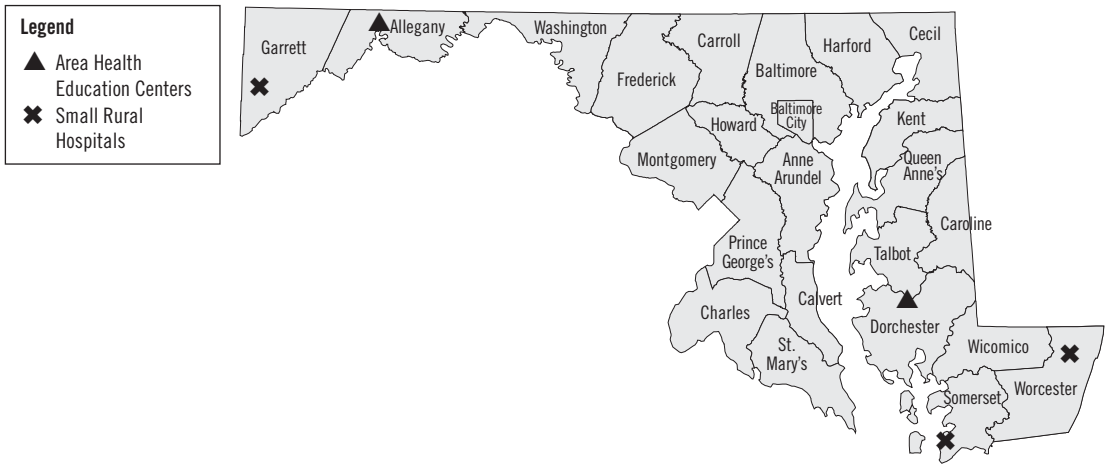
– Provision of technical assistance to rural communities and other State agencies throughout Maryland on a range of topics, including rural health funding, data, planning, policy, and Health Professional Shortage Area/Medically Underserved Area designations.

– Serving as an information clearinghouse for rural health news, updates, reports, and announcements. Principal sources of information come from the SORH's local and national partners, including the Office of Rural Health Policy, Health Resources and Services Administration; the Rural Assistance Center; the National Rural Health Association; and the National Organization of State Offices of Rural Health.

– Providing support of rural Area Health Education Centers (AHECs) in Western Maryland and on the Eastern Shore. AHECs are academic-community partnerships that provide training opportunities for health professionals and health professional students in underserved areas of the State.

– In fiscal year 2007, Small Rural Hospital Improvement Program (SHIP) grant funding was awarded to three Maryland hospitals: Edward W. McCready Memorial Hospital in Somerset County, Garrett County Memorial Hospital in Garrett County, and Atlantic General Hospital in Worcester County. The SHIP Program provides federal funds to rural hospitals with fewer than 50 beds to pay for costs related to the implementation of the prospective payment system, to comply with provisions of HIPAA, and to reduce medical errors and support quality improvement.

Small Rural Hospital Improvement Program Hospitals and Rural Area Health Education Centers, Maryland, 2007




**Source:** Office of Health Policy and Planning, Maryland Department of Health and Mental Hygiene

# FOR MORE INFORMATION

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# INDEX OF FIGURES

**Figure 1:** Infant Mortality Rates, Maryland, 2005 . . . . . .3
**Figure 2:** Infant Mortality Rate, Maryland and the US, 1996-2005 . . . . . .3
**Figure 3:** Infant Mortality by Race and Hispanic Origin,* Maryland, 2005 . . . . . .4
**Figure 4:** Percentage of Low Birth Weight Infants, by Race, Maryland, 1996-2005 . . . . . .5
**Figure 5:** Percentage of Low Birth Weight (LBW) and Very Low Birth Weight Infants (VBLW), by Race and Hispanic Origin*, Maryland, 2005 . . . . . .5
**Figure 6:** Percentage of Women with Unwanted and Mistimed Pregnancies by Maternal Age, Race/Ethnicity, Marital and Medicaid Status, Maryland, 2001-2005 . . . . . .8
**Figure 7**: Percentage of Women with Late or No Prenatal Care, Maryland and the US, 1996-2005 . . . . . .9
**Figure 8:** Distribution of Mothers By Frequency of Multivitamin Use in the Month Before Pregnancy, Maryland, 2005 . . . . . .11
**Figure 9:** Percentage of Mothers Who Reported Any Alcohol Use in the Last Three Months of Pregnancy, by Race and Ethnicity, Age, and Years of Education, Maryland, 2005 . . . . . .13
**Figure 10:** Pregnancy-Associated Maternal Deaths, Maryland, 2001-2005 . . . . . .15
**Figure 11:** Distribution of Mothers by Length of Time Infant Was Breastfed, Maryland, 2005 . . . . . .15
**Figure 12:** Percentage of Mothers Who Reported Breastfeeding for Four or More Weeks, by Race/Ethnicity, Age, and Years of Education,* Maryland, 2005 . . . . . .16
**Figure 13:** Distribution of Deaths by Cause, Children 1-17 Years Old, Maryland, 2002-2004 . . . . . .19
**Figure 14:** Death Rates (1-17 years old), by Race and Ethnicty, Maryland, 2004 . . . . . .20
**Figure 15:** Asthma Emergency Department Rates, by Race, Sex, and Age, Maryland, 2002-2004 . . . . . .22
**(Map)** Percent of Children 0-72 Months Tested for Lead in 2006 by Jurisdiction . . . . .23
**Figure 16:** Percentage of Students Who Were Overweight or At Risk For Becoming Overweight, By Gender and Grade, Maryland, 2005 . . . . . .25
**Figure 17:** Percentage of Births to Adolsecents Under the Age of 18, by Race, Maryland 1996-2005 . . . . . .25
**Figure 18:** Birth Rates for Adolescents, Ages 15-19, by Race and Hispanic Origin,* Maryland, 2000-2005 . . . . . .25
**Figure 19:** Age-Adjusted Death Rates for Diseases of the Heart, Maryland, 1996-2005 . . . . . .31

**Figure 20:** Age-Adjusted Death Rates for Diabetes, by Race, Maryland, 1996-2005 . . . . . .33

**Figure 21:** Prevalence of Diagnosed Diabetes, Five Year Average, Maryland, 2000-2004 . . . . . .34

**Figure 22:** Prevalence of Overweight and Obese Adults, Maryland, 1997-2006 . . . . . .35

**(Map)** Obesity Status Among Adults, Maryland, 2006 . . . . . .36

**Figure 23:** Smoking Status, by Race and Hispanic Origin, Gender, Years of Education, and Age, Maryland, 2000-2004 . . . . . .38

**Figure 24:** Percentage of Adults with Limited Activities Due to Joint Symptoms, Maryland, 2005 . . . . . .40

**Figure 25:** Age-Adjusted Cancer Mortality Rate, by Race and Gender, Maryland and the United States, 2003 . . . . . .42

**(Map)** Primary Care Health Professional Shortage Areas, Maryland, Fiscal Year 2007 . . . . . .47

**(Map)** Medically Underserved Areas, Maryland, Fiscal Year 2007 . . . . . .48

**(Map)** Rural Areas by State and Federal Designation, Maryland, 2007 . . . . . .48

**(Map)** Small Rural Hospital Improvement Program Hospitals and Rural Area Health Education Centers, Maryland, 2007 . . . . . .51

# GLOSSARY OF ACRONYMS

**AHEC:** Area Health Education Center

**BMI:** Body Mass Index

**BRFSS:** Behavioral Risk Factor Surveillance System

**CCSC:** Center for Cancer Surveillance and Control

**CDC:** Centers for Disease Control and Prevention

**CHPETUP:** Center for Health Promotion, Education, and Tobacco Use Prevention

**CMCH:** Center for Maternal and Child Health

**CPHS:** Center for Preventive Health Services

**DHMH:** Department of Health and Mental Hygiene

**FAS:** Fetal Alcohol Syndrome

**FASD:** Fetal Alcohol Spectrum Disorders

**FIMR:** Fetal and Infant Mortality Review

**FQHC:** Federally Qualified Health Center

**HPSA:** Health Professional Shortage Area

**HP:** Healthy People

**HYTA:** Healthy Teens and Young Adults Program

**KISS:** Kids in Safety Seats

**LARP:** Loan Assistance Repayment Program

**MCASA:** Maryland Coalition Against Sexual Assault

**MCH:** Maternal and Child Health

**MCS:** Maryland Cancer Survey

**MCR:** Maryland Cancer Registry

**MUA:** Medically Underserved Area

**NHANES:** National Health and NutritionExamination Survey

**NTD:** Neural Tubal Defects

**OGCSHCN:** Office for Genetics and Children with Special Health Care Needs

**ORHP:** Office of Rural Health Policy

**PCO:** Primary Care Office

**PRAMS:** Pregnancy Risk Assessment Monitoring System

**PSA:** Prostate Specific Antigen

**SASS:** Students Against Starting Smoking

**SEER:** Surveillance Epidemiology and End Results

**SHIP:** Small Rural Hospital Improvement Program

**SIDS:** Sudden Infant Death Syndrome

**SORH:** State Office of Rural Health

**S.T.O.P.S.:** Students Together Organizing Prevention Strategies

**T.R.A.S.H.:** Teens Rejecting Abusive Smoking Habits

**WIC:** Women, Infants, and Children Program

**YRBSS:** Youth Risk Behavior Surveillance System

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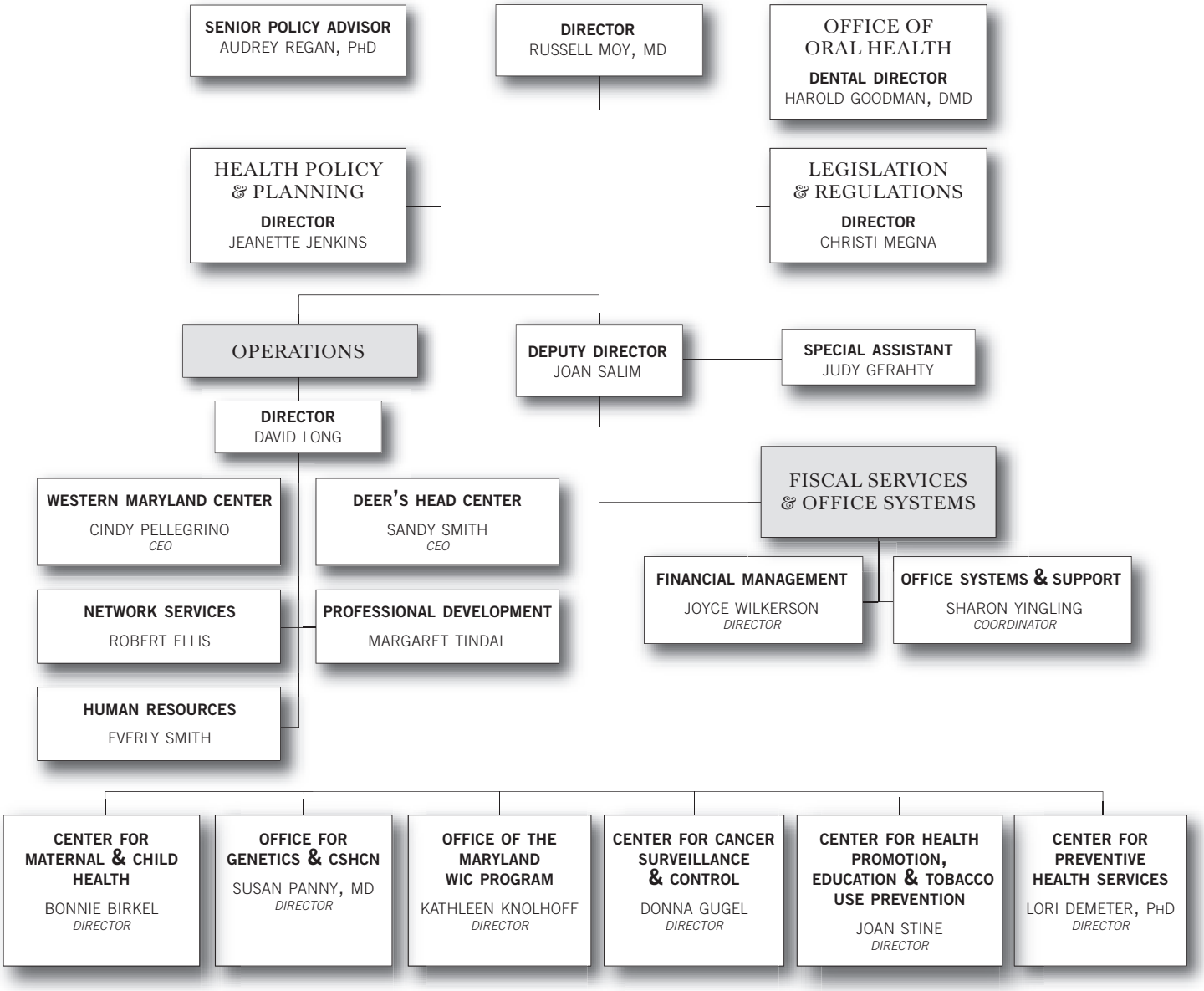
# MARYLAND DEPARTMENT OF HEALTH & MENTAL HYGIENE

## Family Health Administration



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