



*Title V Maternal and Child Health Block Grant*

*Handbook on Arizona Priorities, 2006-2010*

*July 2009*

## ***Introduction***

### **About the Bureau of Women's and Children's Health.....**

The Bureau of Women's and Children's Health (BWCH) resides within the Division of Public Health Services of the Arizona Department of Health Services. The Bureau of Women's and Children's Health is the lead state agency for maternal and child health in Arizona.

The Bureau of Women's and Children's Health:

- Employs approximately 50 dedicated staff
- Administers 20 different programs
- Has 4 major programmatic areas: Office of Women's Health; Office of Children's Health; Office of Oral Health; and Injury Prevention & Child Fatality Section; and supported by an Office of Assessment & Evaluation and a Business & Finance Section
- Administers and monitors about 200 contracts with agencies throughout Arizona
- Manages over \$20 million in funding annually

### **About the BWCH Goals and Priorities for 2006-2010.....**

Three **overarching goals** guide the work of the Bureau of Women's and Children's Health:

- Reduce mortality and morbidity among women and children
- Eliminate health disparities in health outcomes and access to services
- Increase access to health care

Every five years, states are required by the Title V Maternal Child Health Block Grant to conduct a needs assessment of maternal and child health issues. Arizona conducted its most recent five-year needs assessment in 2005. The process included gathering and analyzing data on various maternal and child health issues, gathering input from partners, setting priorities, and defining performance measures.

The **priorities** resulting from the needs assessment are:

- Reduce teen pregnancy and increase access to reproductive health services
- Reduce obesity and overweight among women and children
- Reduce preventable infant mortality
- Reduce the rate of injuries, both intentional and unintentional
- Increase access to prenatal care among medically underserved women
- Improve the oral health of children, especially among high risk populations
- Integrate mental health with general health care

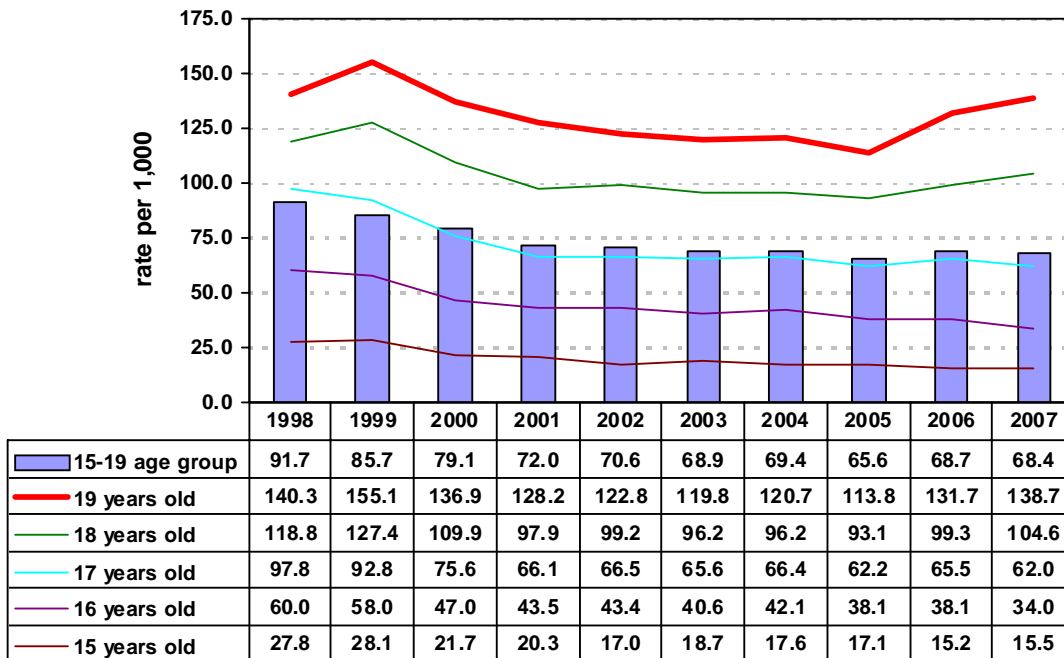
***This report summarizes data related to each priority area and highlights some of the actions taken by the Bureau since 2006 to address the priorities.***

## Measuring progress in priority areas

### **1. Reduce teen pregnancy and increase women's access to reproductive health services.**

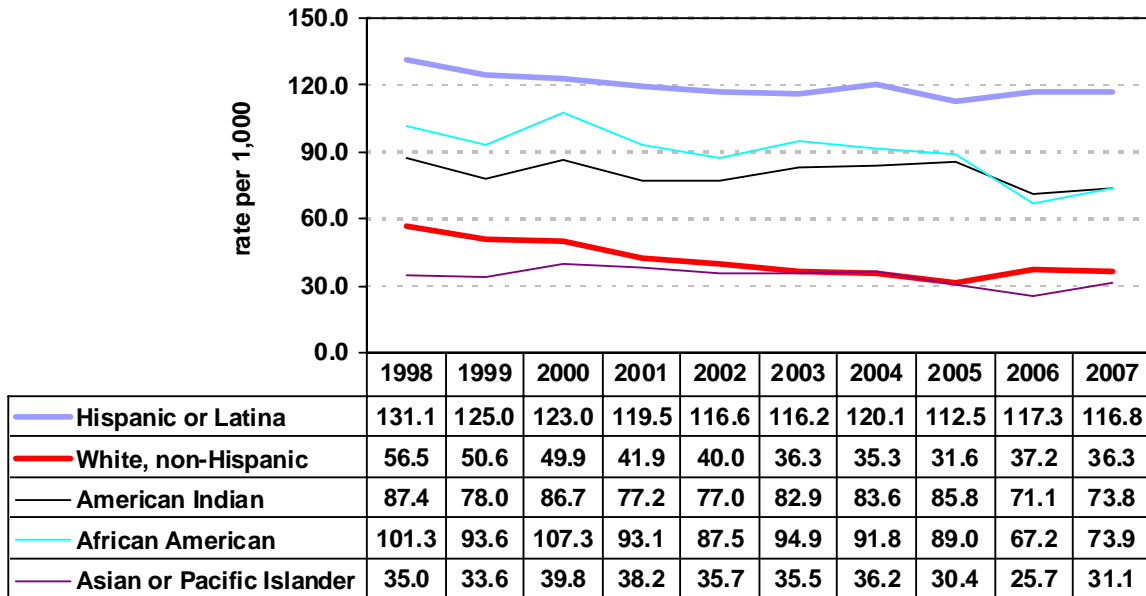
Although the teenage pregnancy rate for 15 -19 year olds in Arizona has declined 25 percent since over the past decade, in recent years the rate has stabilized at approximately 68 pregnancies per 1,000 females. Younger adolescents aged 15 to 17 years old experienced a decline in pregnancy rates nearly every year from 1998 to 2007, while older teens aged 18 to 19 years old witnessed a significant increase in rates in four of the past five years (**Figure 1**).

**Figure 1. Teenage Pregnancy by Age  
Arizona 1998-2007**



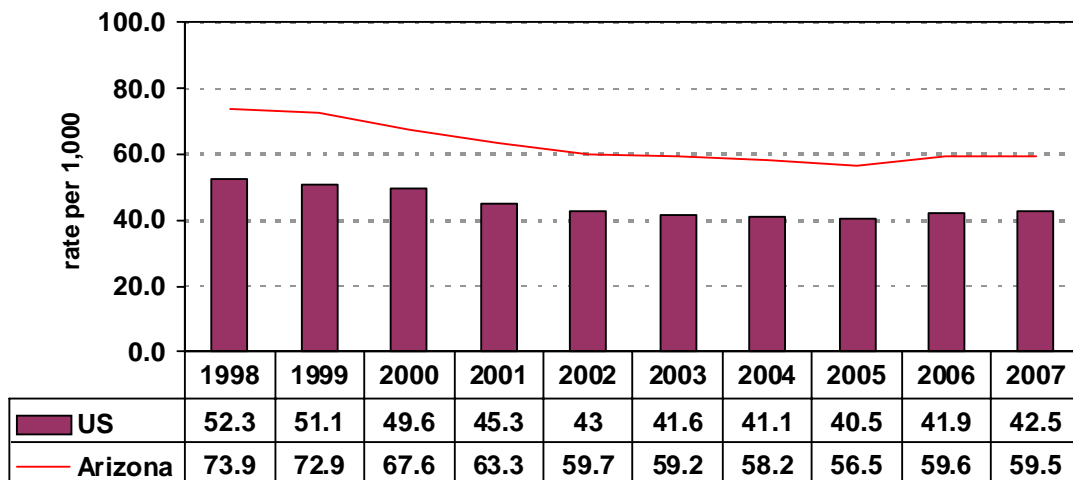
Despite falling from 67.1 per 1,000 to 55.3 per 1,000 females, pregnancy rates for Hispanics or Latinas remained significantly higher than for other race/ethnic groups (**Figure 2**).

**Figure 2. Teen Pregnancy by Race & Ethnicity  
Arizona 1998-2007**



Arizona's teen birth rate has declined 19.5 percent from 1998 to 2007, but it remains significantly higher than the national rate of 41.9 percent (**Figure 3**).

**Figure 3. Birth Rate per 1,000 Females age 15-19  
Arizona and U.S. 1998-2007**



According to the Guttmacher Institute "Contraception Counts" (2006), Arizona ranked 32nd among the 50 states and the District of Columbia in contraception service availability, 14<sup>th</sup> in laws and policies that facilitate access to services and information, and 38<sup>th</sup> in public funding to support the delivery of publicly supported contraceptive services and supplies. In 2005 more than 630,000 women in Arizona were in need of contraceptive services, and one-half of these women have incomes below 250 percent of the federal poverty level or are sexually active teenagers. Family planning clinics in Arizona served 30 percent of all women in need of publicly supported contraceptive services and 31 percent of teenagers in need.

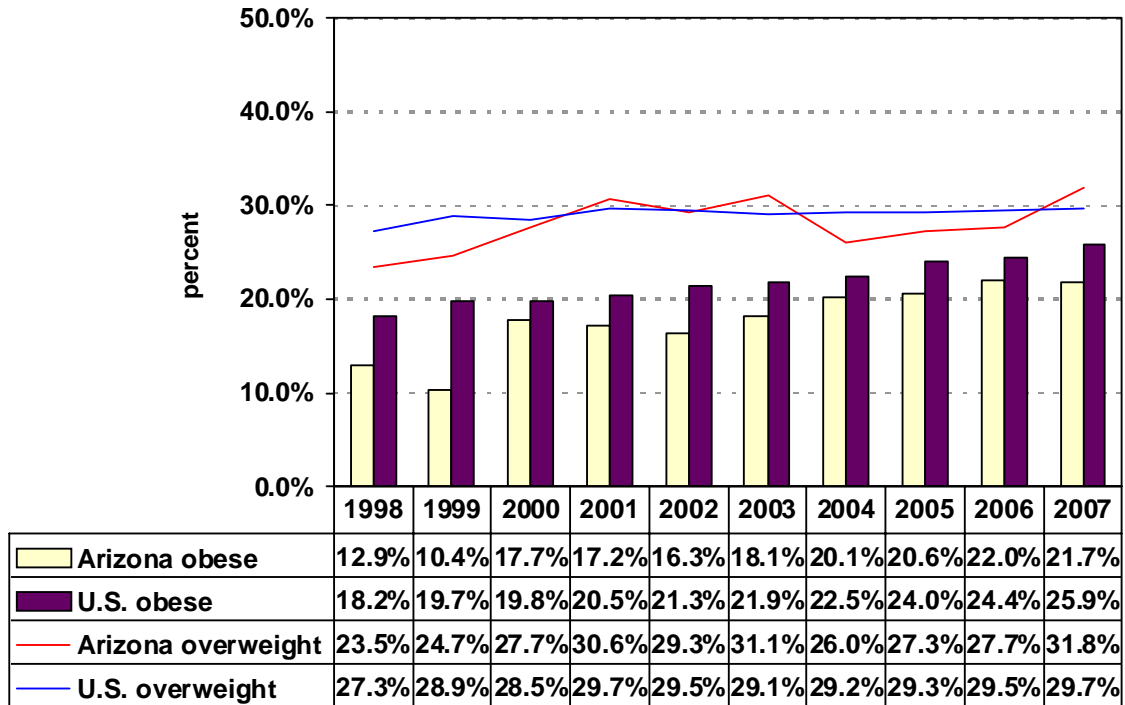
***Highlights of Progress toward addressing ADHS Priority #1:***

- Lottery dollars have been used since 2007 to fund teen pregnancy prevention programs through county health departments and tribal communities. Projects target high risk youth, such as those in the juvenile justice system, using youth development and parent education strategies. Funding cuts in 2008 ended a number of projects.
- Arizona's Abstinence Education Program provided approximately 20,000 students per year with classroom education and/or youth development activities. Projects also provide parent education. Funding cuts in 2008 substantially reduced the size the program.
- The Title V funded family planning program expanded to Gila County and to all Maricopa Integrated Health Systems health center sites.
- ADHS worked in collaboration with Department of Education to develop a youth advisory board to provide input on strategies for teen pregnancy and sexually transmitted disease prevention.

## 2. Reduce obesity and overweight among women and children.

In the past ten years the proportion of adult women in Arizona who had a calculated BMI (Body Mass Index) indicating that they were overweight increased from 23.5 percent to 31.8 percent, a greater increase than was found among women nationally during the same time period. The proportion of women in Arizona who were obese increased steadily from 12.9 percent to 21.7 percent. Although remaining lower than the national estimate, increases in the prevalence of obesity among women in Arizona reflected the national trend over the last decade (**Figure 4**).

**Figure 4. Overweight and Obesity among Adult Females  
Arizona and U.S. 1998-2006**

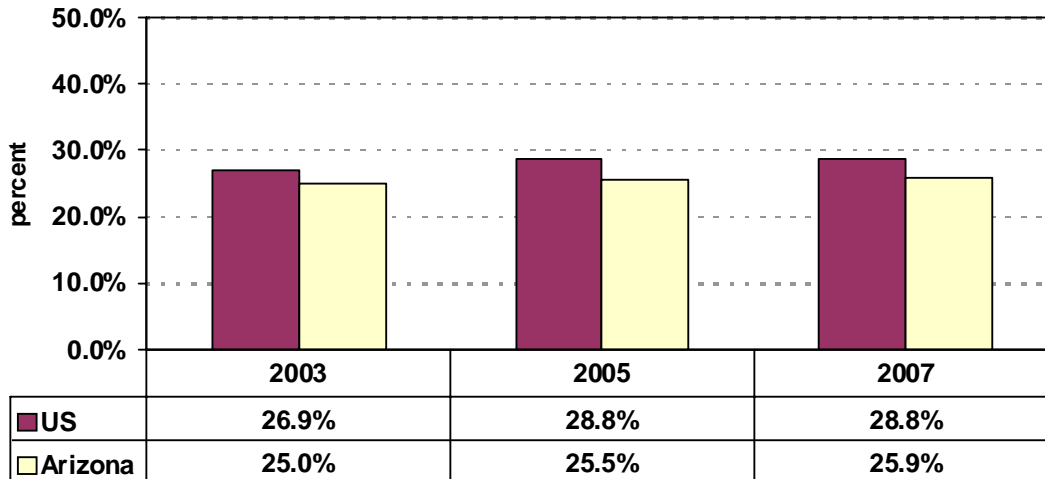


Hispanic and non-White women were more likely to be obese than non-Hispanic and White women. Obesity is also associated with poverty. In 2007 women in Arizona earning less than \$15,000 per year were more likely to be obese compared to women with higher incomes.



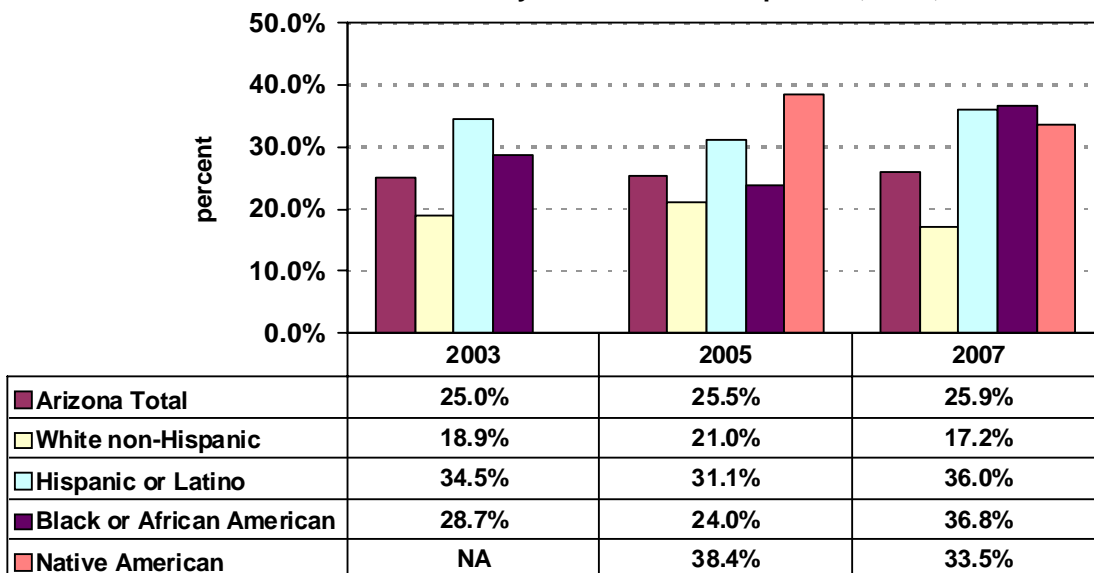
Overall, Arizona ranked 25<sup>th</sup> of 50 states for the percentage of overweight or obese children in 2003. The prevalence of high school aged students in Arizona who reported being overweight or obese remained lower than the national percentage from 2003 to 2007 (**Figure 5**).

**Figure 5. Percent of Students Reporting Overweight or Obese  
Arizona and U.S. 2003, 2005, 2007**



However, disparities in overweight and obesity increased among racial/ethnic groups in Arizona. The prevalence of Black/African-American and Hispanic high school students who reported being overweight or obese increased from 28.7 and 34.5 percent in 2003, to 36.8 and 36.0 percent respectively in 2007. For Native American students the prevalence decreased from 38.4 percent in 2005 to 33.5 percent in 2007. However, the prevalence of overweight and obesity among White, non-Hispanic students remained lower than all other groups (**Figure 6**).

**Figure 6. Percent of Students Reporting Overweight or Obese  
Arizona by Race/Ethnic Groups 2003, 2005, 2007**



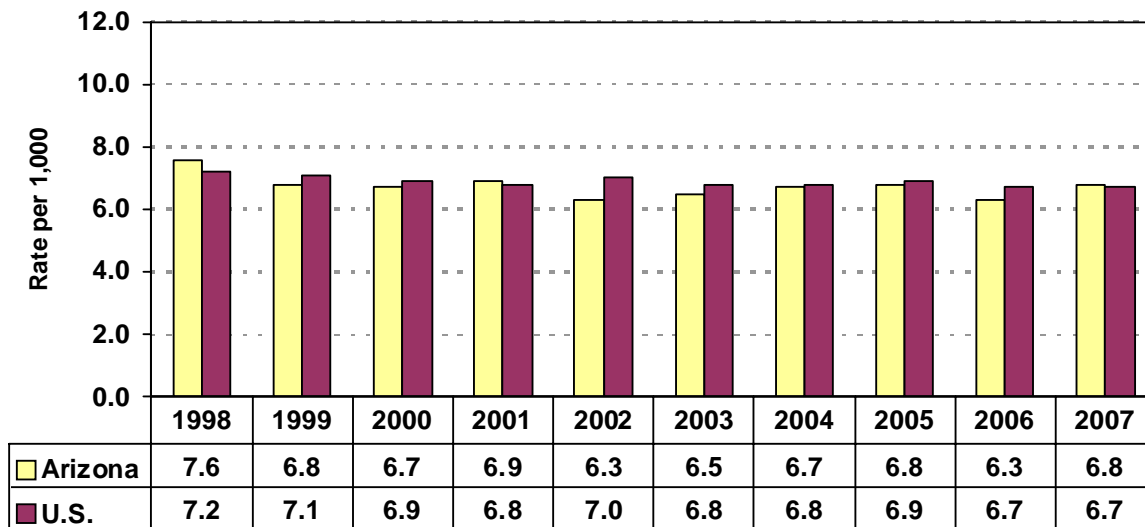
**Highlights of Progress toward addressing ADHS Priority #2:**

- Using Title V funding, Community Health Grants were awarded in 2006 to address Title V priority areas. Five projects address obesity prevention with women and/or children. Strategies include providing classes on nutrition and physical activity, education of physicians, and raising community awareness. Projects are funded through 2010.
- ADHS uses Title V funding to help support statewide activities for Women's Health Week and the work of the Governor's Commission on Women's & Children's Health. The Governor's Commission developed and is working on implementing an action plan specific to obesity prevention.
- ADHS has an active Wellness Council that organizes daily physical activity for employees as well as health checks and educational brown bags. BWCH staff implemented an office weight loss competition program, encouraged healthy snacks and physical activity breaks during meetings, and conducted stretch breaks.

**3. Reduce preventable infant mortality.**

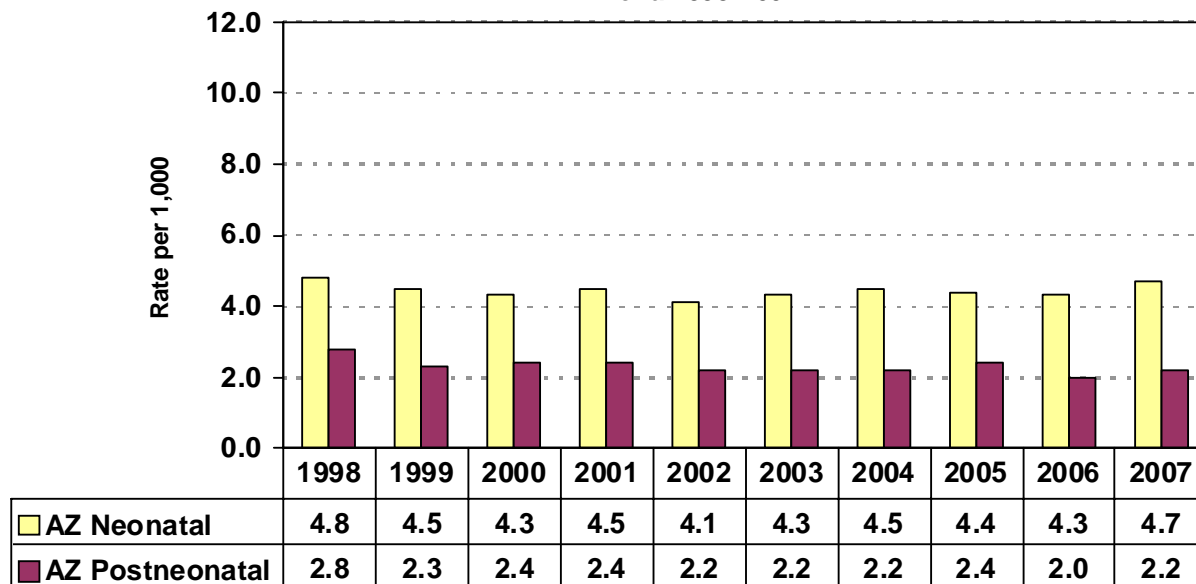
Even though Arizona's infant mortality rate declined from 7.6 in 1998 to 6.8 per 1,000 live births in 2007, the rate does not meet the *Healthy People 2010* goal of 4.5 per 1,000 live births. In addition, the infant mortality rate in Arizona remained unchanged over most of the decade with the only significant reduction occurring between 1998 and 1999 (**Figure 7**).

**Figure 7. Infant Deaths per 1,000 Live Births  
Arizona and the U.S. 1998-2007**



The majority of infant mortality occurred in the neonatal period (**Figure 8**) which is strongly associated with preterm birth.

**Figure 8. Neonatal and Postneonatal Death Rate  
Arizona 1998-2007**



The Arizona Child Fatality review program determined that 9 percent of all neonatal infant deaths and 38 percent of all post-neonatal deaths prior to one-year of age were preventable in 2007. This represents an increase in preventable deaths compared to 2005 (the first year when all child fatalities were reviewed) when 6 percent of neonatal and 30 percent of post-neonatal deaths were preventable.

Using the 2003-2005 delivery cohort the Perinatal Periods of Risk Analysis found that 29 percent of all fetoinfant deaths were considered “excess deaths” when compared to the reference group (non-Hispanic, white women with 13 or more years of education and at least 20 years of age at delivery). This resulted in a rate of 2.3 excess deaths per 1,000 live births and fetal deaths. African Americans had the highest excess fetoinfant mortality rate of all racial/ethnic groups (8.1 excess deaths per 1,000 live births and fetal deaths). Women under the age of 20 and women age 36 and older had the highest rate of excess fetoinfant mortality (4.4 excess deaths per 1,000 live births and fetal deaths) compared to women aged 20-35 years.



### ***Highlights of Progress toward addressing ADHS Priority #3:***

- ADHS BWCH has been working on a preconception health initiative. Current programs have integrated preconception health as part of their programs. BWCH obtained a federal First Time Motherhood grant to develop preconception health messaging targeting African American women in Arizona.
- The Newborn Screening panel was expanded to 29 disorders, including hearing screening.
- The Health Start Program uses a lay health worker model to assist pregnancy women in high risk communities to have health babies. An evaluation of Health Start showed that babies born to Health Start participants had longer gestation and greater birth weights than non-participants.
- The 2007 Child Fatality Review Report included recommendations supporting implementation of the CDC recommendations for preconception health as well as safe sleeping strategies.
- The ADHS Injury Prevention & Child Fatality Section held a Safe Sleep Symposium in May 2009, and is working with partners to enhance strategies for safe sleeping.
- Preterm or sick newborns born at the appropriate level of care have better outcomes. The High Risk Perinatal Program ensures the immediate transport of women in imminent risk of preterm delivery to the appropriate level of perinatal care, or if delivery has occurred, the immediate transport of the critically ill newborn to the appropriate level of NICU.

## ***4. Reduce the rate of injuries, both unintentional and intentional.***

### ***Unintentional Injuries***

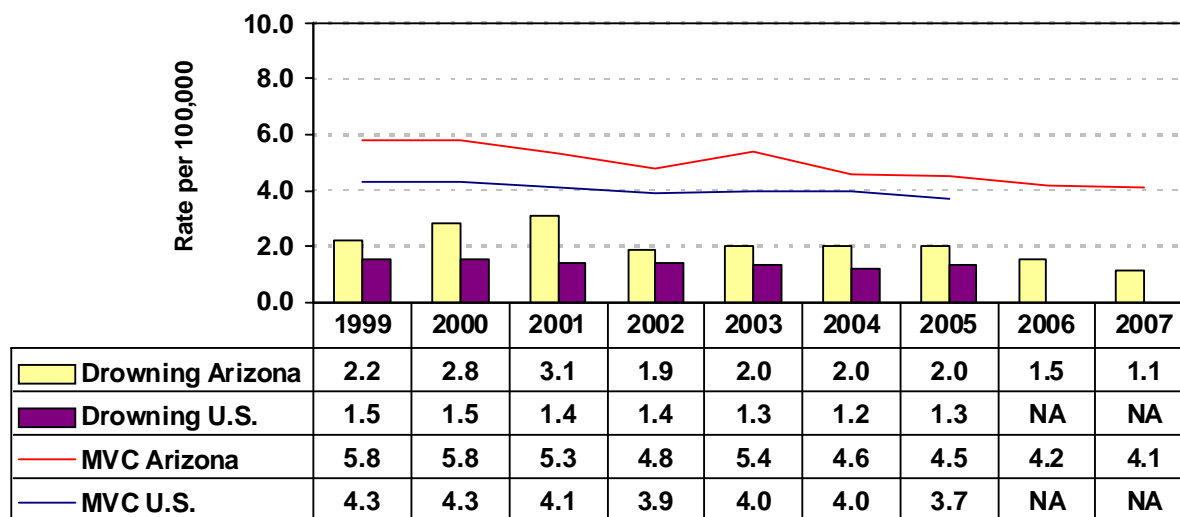
In 2007, unintentional injury was the leading cause of death for 1-44 year old Arizona residents. While commonly called “accidents”, unintentional injuries are often predictable. Safety efforts may prevent the injury event from occurring or reduce the severity of the injury.

The rate of emergency department visits for all injuries among children aged 1 through 14 years in Arizona has declined 5.5 percent, from 74.8 per 1,000 in 2004 to 70.7 per 1,000 in 2007. Arizona’s rate was substantially lower than the national rate of all injuries among this age group (105.9 per 1,000 in 2007). The rate of non-fatal injuries due to motor vehicle crashes among youth 15 through 24 years in Arizona has declined from 240.8 per 100,000 in 2004 to 211.2 per 100,000 in 2006. National data is not comparable across this measure.



Death rates from unintentional injuries among children aged 1 through 14 years old in Arizona have declined 42.5 percent, from 12.7 per 100,000 in 1998 to 7.3 per 100,000 in 2007. Driving the reduction has been declines in the death rate due to motor vehicle crashes from 6.5 to 4.1 per 100,000, and drowning from 3.4 to 1.1 per 100,000 during the past ten years (Figure 9).

**Figure 9. Death Rate per 100,000 Children 1 through 14 Years Old from Motor Vehicle Crashes and Drowning Arizona & U.S. 1999-2007**



These rates are comparable to latest available national rates of death from motor vehicle crashes (3.65) and drowning (1.32) in 2005.

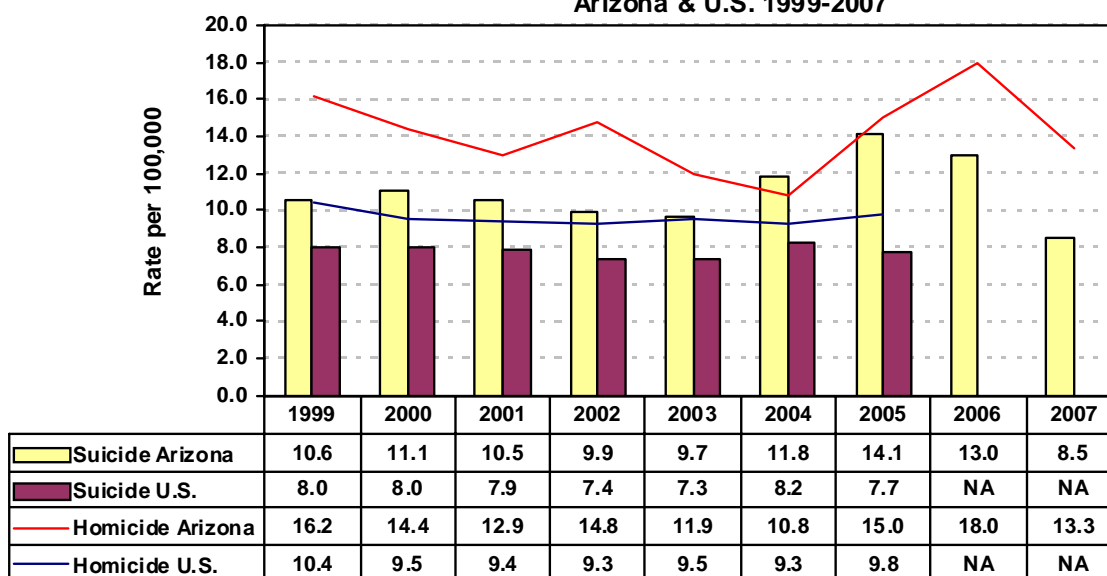
For youth 15 through 19 years old, the rate of death from unintentional injuries has not declined consistently across time. Even though the death rate of unintentional injury fell from 39.9 to 36.4 per 100,000 from 1998 to 2007, rates varied from year to year, thus providing no evidence of a consistent trend. Arizona's unintentional injury death rate for adolescents remained higher than the U.S. rate of 31.5 per 100,000 in 2005. The rates of intentional injury related deaths in Arizona showed more consistent declines among adolescents.

## Intentional Injuries

Violence is a leading cause of mortality and morbidity in the United States. Approximately 50,000 deaths and 2.2 million injuries annually require medical attention. Violence-related injuries are defined as those that result from the intentional use of physical force or power against oneself, another person, or a group or community and encompass injuries that result from acts of interpersonal violence such as homicide, child maltreatment, youth violence, intimate partner violence, domestic violence and other types of assaults. It also includes acts of self-directed violence such as suicide, suicide attempts, and self-mutilation.<sup>1</sup>

The rate of suicide fell from 10.6 to 8.5 per 100,000, and the rate of homicide dropped from 14.4 to 13.3 per 100,000 during the past decade (**Figure 10**).

**Figure 10. Death Rate per 100,000 Children 15 through 19 Years Old from Suicide and Homicide Arizona & U.S. 1999-2007**



Both rates for youth in Arizona were higher than the national rates of suicide (7.7 per 100,000) and homicide (9.8 per 100,000) according to the most recent data available (2005).

While there is reliable data on suicide and homicides, data on domestic violence and sexual assault specifically rape is sparse and limited. According to the FBI's *Crime in the United States, 2006: Uniform Crime Reports*, the state had a total of 1941 rapes reported to law enforcement (63.0 per 100,000 females<sup>2</sup>). This represented a 6.8 percent decline in the rate of reported forcible rapes of females in 2006 compared with 2005 (67.6 per 100,000 females). Total arrests were made for 208 individuals 2006, and of those arrested, 27 (13 percent) were males under 18 years of age.\*\* According to the Arizona Department of Public Safety, *Crime in Arizona*

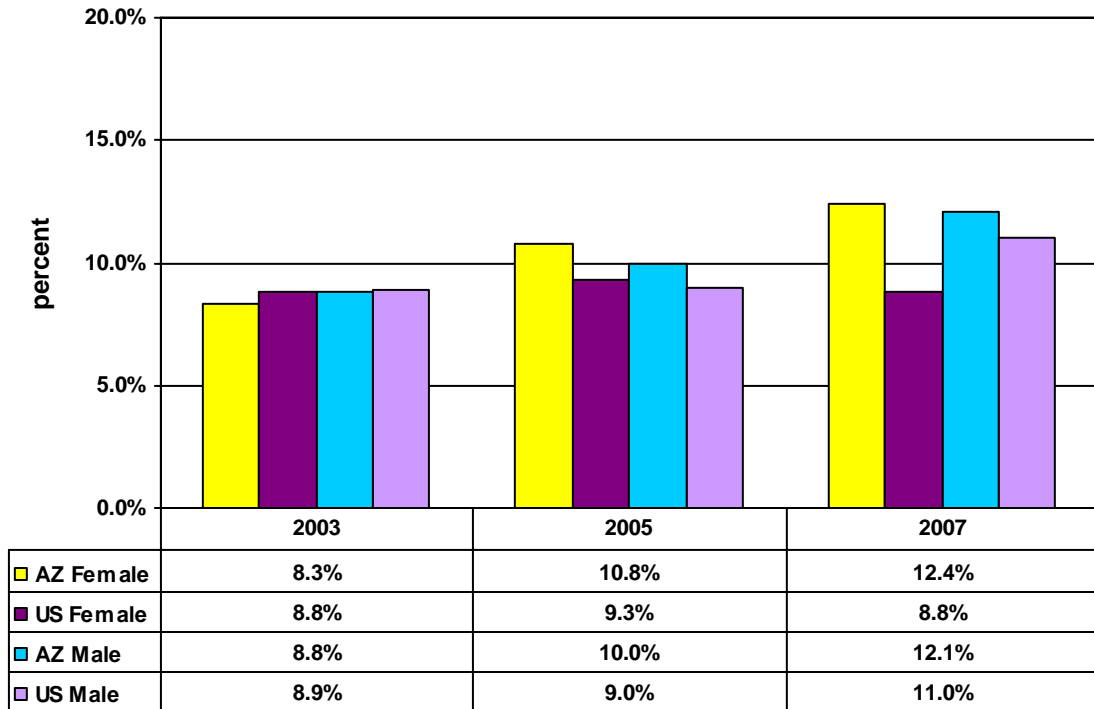
<sup>1</sup>Corso, P.S., Mercy, J.A., Simon, T.R., Finkelstein, E.A., & Miller, T.R. (2007). Medical Costs and Productivity Losses Due to Interpersonal and Self-Directed Violence in the United States. *American Journal of Preventive Medicine*, 32(6), 474-482.

<sup>2</sup>Rates of forcible rape for the female population by state were not provided in the FBI report. Therefore, the denominators used to calculate the rates for forcible rape of females in Arizona were derived from the "Vintage" year population estimate of females living in Arizona on July 1, 2006 and July 1, 2005.

2006, the majority of reports to Arizona law enforcement were for “completed rape” (87%) rather than “attempted rape” (13%).

Arizona’s Youth Risk Behavior Survey provides some information about the frequency of violence experienced by young people.

**Figure . Percent of Students Who Reported being Hit, Slapped, or Physically Hurt on Purpose by Their Boyfriend or Girlfriend during the Last 12 Months**



From 2003 through 2007, the percentage of both female and male high school students in Arizona who reported being the victim of dating violence increased more rapidly than the percentage reported nationally. By 2007 female Arizona high school students were significantly more likely than their national peers to report having been the victim of dating violence.

#### ***Highlights of Progress toward addressing ADHS Priority #4:***

- Injury Prevention Program conducts monthly certification classes for car seat safety.
- “Battle of the Belt”, promoting seat belt usage among high school students, has been successfully piloted for two years. The model will be ready for statewide dissemination in 2009.
- ADHS held three annual Injury Prevention Symposiums on topics of impacting policy, how injuries affect workplace, and safe sleep among infants.
- Current BWCH programs that do home visiting incorporate home safety inspections.
- Using Title V funding, Community Health Grants were awarded in 2006 to address Title V priority areas, including injury prevention. Community grants are implementing strategies targeting injury areas such as car seat safety, teen driving, and dating violence.
- ADHS domestic violence program funded the airing of a “From Boys to Men” public service announcement promoting non-violence among men.
- The domestic violence program expanded services to children who witness domestic violence. Services include therapy, crisis intervention, abuse prevention, and self-esteem.
- The ADHS Sexual Violence Prevention and Education Program produced and aired public service announcements regarding date rape and drug-facilitated rape.
- ADHS worked with partners to develop a statewide sexual violence prevention plan.

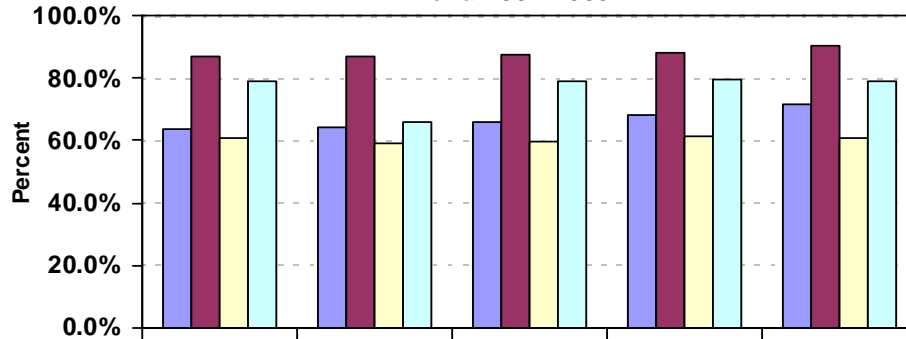
#### ***5. Increase access to prenatal care among the underserved.***

Since 2004, approximately half of the federally underserved primary care areas (HIPSA's) in Arizona had fewer than 75 percent of women entering prenatal care during their first trimester.

Throughout Arizona, 77.7 percent of infants are born to women receiving prenatal care during the first trimester, well below the *Healthy People 2010* target of 90 percent. The percent of infants born to women on Medicaid who received prenatal care during the first trimester has increased from 63.9 percent in 2002 to 71.8 percent in 2006, slightly narrowing the disparity with the non-Medicaid population (90.2 percent).

Since 2002, no improvement has been made in the percent of pregnant women with adequate prenatal care (observed to expected prenatal visits greater than or equal to 80%). The disparity on the Kotelchuck Index between Medicaid and non-Medicaid populations remained consistent throughout the decade (**Figure 11**).

**Figure 11. Percent of Pregnant Women with 1st Trimester Care and Early and Adequate Prenatal Care  
Arizona 2002-2006**



	2002	2003	2004	2005	2006
1st Trimester w/Medicaid	63.9%	64.3%	65.8%	68.4%	71.8%
1st Trimester non-Medicaid	86.9%	87.1%	87.4%	88.0%	90.2%
Early/Adequate w/Medicaid	60.6%	58.9%	59.7%	61.4%	61.0%
Early/Adequate non-Medicaid	78.9%	65.9%	79.2%	79.7%	79.2%

**Highlights of Progress toward addressing ADHS Priority #5:**

- Baby Arizona works to link pregnant women with providers early in their pregnancy. BWCH received funding from March of Dimes to promote Baby Arizona. New marketing materials will be available in summer of 2009. AHCCCS established a Baby Arizona website: [www.babyarizona.gov](http://www.babyarizona.gov). AHCCCS has incorporated on-line training for providers to become Baby Arizona providers.
- ADHS Pregnancy & Breastfeeding/Baby Arizona Hotline (1-800-833-4642) pre-screens pregnant women for eligibility into AHCCCS and makes referrals to Baby Arizona providers. If a woman is not eligible for AHCCCS, the Hotline refers them to providers in their area who offer prenatal care for a slide fee. Hotline staff refer callers to a variety of community services to help them meet their needs.
- BWCH programs Health Start and County Prenatal Block Grant work to get high risk pregnant women into prenatal care. Programs provide education and supportive services to pregnant women. In 2008, Health Start provided services to 2,180 pregnant or postpartum women, and provided over 11,000 visits. The County Prenatal Block Grant provided nearly 4,000 pregnant women with a range of prenatal services and classes focusing on early prenatal care, smoking, nutrition and exercise, oral health, labor and delivery, and premature births.

## 6. Improve oral health of children, especially among high-risk populations.

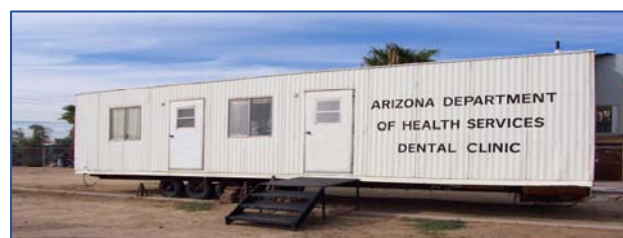
The percent of Medicaid enrollees age 1 through 18 years who received at least one preventive dental service within the last year fell from 42.6 percent in 2004 to 34.0 percent in 2007. The Arizona Department of Health Services, Office of Oral Health, Arizona School Dental Survey (1999-2003) found nearly 60 of children 6-8 years old had experienced tooth decay. This was greater than the *Healthy People 2010* goal of 42 percent. Children in Arizona who attended schools with a large proportion of free and reduced lunch participation (FRL) had a higher prevalence of tooth decay. The prevalence rate was nearly one and a half times higher among lower SES children (49.0 percent compared to 37.0 percent). Decay experience for all races was above the *Healthy People 2010* target of 42.0 percent. Native Americans (83.0 percent) and children of Hispanic ethnicity (68.0 percent) had the greatest burden of tooth decay.

Not all children in Arizona had equal access to dental treatment. According to the Survey, nearly one out of every two children (47.0 percent) without dental insurance needed dental treatment and nearly three out of ten children on government or private dental insurance needed treatment in Arizona. All children, either covered by private or government insurance and children without dental insurance exceeded the *Healthy People 2010* objective of 21.0 percent for untreated decay.



### **Highlights of Progress toward addressing ADHS Priority #6:**

- The Office of Oral Health launched a first dental visit by age 1 campaign, including expansion of the website [www.azsmiles.org](http://www.azsmiles.org)
- The Dental Sealant Program has screened approximately 10,000 children each year and provide about 8,000 children with dental sealants.
- The Office of Oral Health has piloted four teledentistry sites to improve access to oral health in underserved areas.
- An oral health module was developed and incorporated into Train the Trainer training for child care providers.
- The Office of Oral Health provides ongoing education to health care providers on recognition of early childhood caries, preventive services and appropriate referral.
- The Office of Oral Health provides technical assistance to public and private organizations, professional schools and associations and Arizona regulatory agencies.

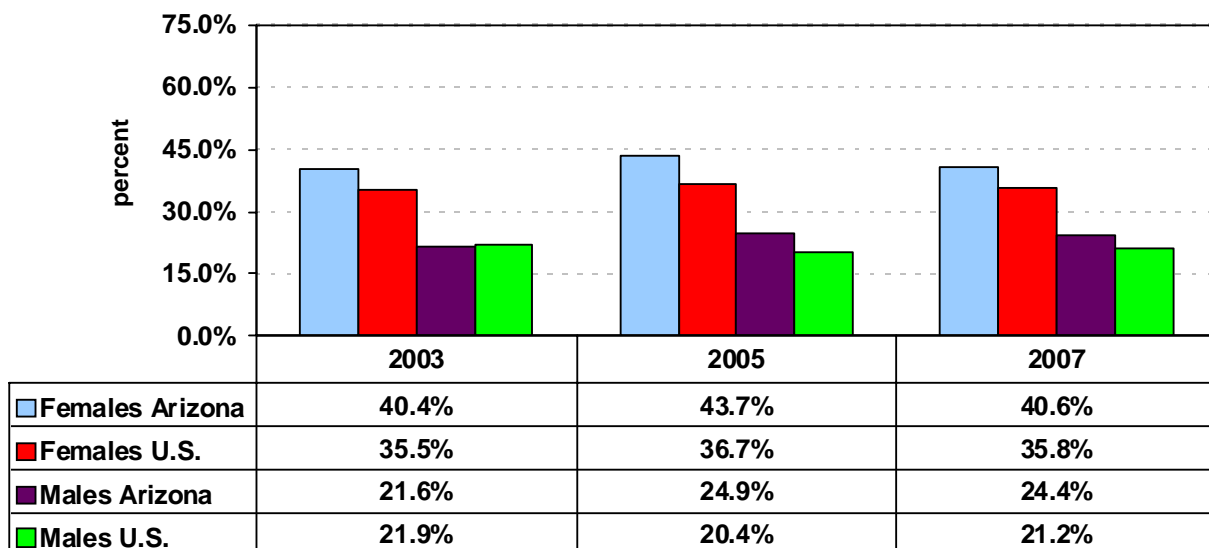


## 7. Integrate Mental Health with General Health Care.

In 2007, the percentage of Arizona Bureau of Women’s and Children’s Health programs that reported screening for behavioral health issues was 37.5 percent. From 2003 through 2007 the percentage of adult women in Arizona reporting fourteen or more mentally unhealthy days (frequent mental distress) was 11 percent. This proportion was similar the proportion nationwide (12 percent). Women 18 to 24 years in Arizona old were more likely than any other age group to report frequent mental distress (14.4 percent), while Native-American/Alaskan Native females were significantly more likely to report mental distress (18.6 percent) than were White non-Hispanic females (9.3 percent).

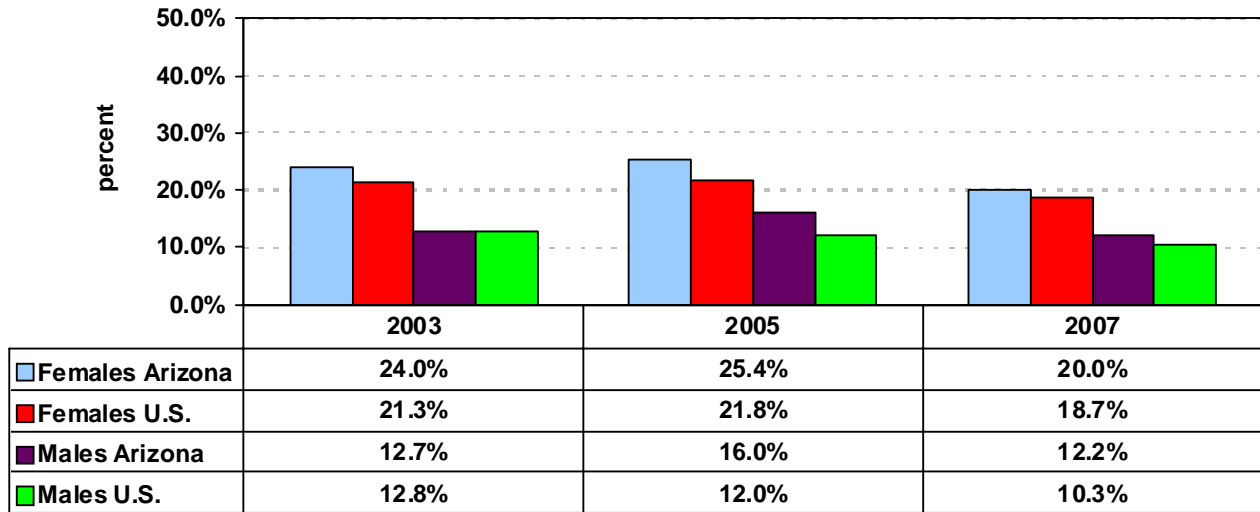
Among high school aged students in Arizona in 2007, females (40.6 percent) were significantly more likely compared to males (24.4 percent) to report feeling so sad or hopeless almost every day for two or more weeks in a row that they stopped doing some usual activities during the past year (**Figures 12**).

**Figure 12. Percentage of Students Feeling Sad or Hopeless  
Arizona 2003, 2005, 2007**



Female students (20 percent) were also significantly more likely to seriously consider attempting suicide during the past year compared to male students (12.2 percent) (**Figure 13**). These proportions for both female and male students in Arizona were slightly greater than found among their peers nationally.

**Figure 13. Percentage of Serious Considered Attempting Suicide  
Arizona 2003, 2005, 2007**



***Highlights of Progress toward addressing ADHS Priority #7:***

- BWCH is implementing a Fetal Alcohol Spectrum Disorders grant that incorporates screening, brief intervention, and referral for alcohol abuse among pregnant women within the Health Start program. In the last fiscal year, the project screened 287 pregnant women for alcohol. Out of those, 70 women screened positive for alcohol use and were provided a brief intervention.
- The High Risk Perinatal Program (HRPP) began requiring screening for post-partum depression of mothers of the infants enrolled in the HRPP. These mothers had babies who were either premature or critically ill at birth. The screening occurs in the home after baby is discharged and is conducted by Community Health Nurses. The Health Start Program also incorporates some post-partum depression screening.
- Some Title V Community Health Grants included classes on stress reduction and suicide prevention. Through the County Prenatal Block Grant, some counties provided education about alcohol use as well as conducted screening for post-partum depression.
- BWCH was awarded the federal Project LAUNCH grant, which targets child wellness among 0-8 year olds in a south Phoenix neighborhood. One of the primary goals of the project is to prevent behavioral health problems in children. This will be addressed by four evidence based parenting/child wellness programs which will be implemented in the area.