INTRODUCTION

Adolescence and young adulthood are periods of critical development and transition. From the onset of puberty, to the time they enter adulthood in their early 20s, young people undergo major physical, cognitive, and psychosocial changes. These changes have important implications for health. As young people become increasingly independent, they face significant choices in areas such as driving habits, substance use, sexuality, physical activity, diet, and use of health care services. These choices are shaped by individual, family, social environments, and other contextual factors.

This transition differs for young men and women—a difference with implications for efforts to improve young people’s health. Many policies and programs—which range in focus from reproductive health to health research—have addressed women in general and young women in particular. Federal policymakers and other stakeholders are increasingly aware of the importance of young men’s health and well-being. For example, many states have established offices on men’s health or issued reports on men’s health. Congress is considering establishing an Office of Men’s Health (U.S. Congress, 2005).

This brief highlights priority health issues for adolescent and young adult males. National health priorities for adolescents and young adults have been identified through the Healthy People 2010 Initiative, with a national panel identifying 21 Healthy People 2010 objectives as critical for these populations. These 21 Critical Health Objectives represent national expert consensus about the most important health areas affecting youth (CDC et al., 2004).

After describing the demographics and social context for adolescent and young adult males, we review data on mortality, unintentional injury, violence, substance use, mental health, reproductive health, overweight, and health care access and utilization. We identify key gender and racial/ethnic disparities.

GROWING UP: FAMILIES, SCHOOL AND SOCIAL CONTEXTS

Demographics

The adolescent and young adult population is more racially and ethnically diverse than the overall population and is growing increasingly so. In 2000, Whites comprised 62.4% of the population ages 10–24; Hispanics, 16.3%; Blacks, 13.8%; Asians/Pacific Islanders, 4%; and American Indians/Alaskan Natives, 1.4% (U.S. Census Bureau, 2005a). The proportion of young White people is expected to decline, while the percentage of young Hispanic and Asian populations will increase considerably (U.S. Census Bureau, 2000 & 2005a).

Adolescent Contexts

The social and family contexts in which adolescents come of age have changed over the last two decades. In 2002, a little over half of adolescents (54%) lived in the suburbs, an increase from 47% in 1990 (U.S. Census Bureau, 1992; U.S. Census Bureau, 2005b; Fields, 2003). Another 27% of youths lived in the central city and 19% lived in rural areas. White and Asian/Pacific Islander youth

1 Unless otherwise defined Adolescents = ages 10–19; Young Adults = ages 20–24. Please refer to Notes at the end for definitions of populations, indicators and terms used in this report.
are more likely to live in the suburbs, while Black youths are more likely to live in urban settings (Fields, 2003). In 2004, over one in seven (15.1%) adolescents ages 12–17 lived in poverty (U.S. Census Bureau, 2005c).

Almost all adolescents live with their families. Between 1995 and 2003, the percentage of 12–17 year-olds living with both parents decreased from 73% to 67% (Bryson, 1996; Fields, 2004). White and Asian/Pacific Islander youth are most likely, and Black youths least likely, to live with both parents. Over 95% of adolescents live with at least one parent (Fields, 2004). A very small proportion of adolescents live in alternative settings such as foster care and juvenile residential placement. While males and females are equally likely to be in foster care, males are three to seven times as likely to be in juvenile justice residential placement (DHHS, 2004; Sickmund et al., 2004).

Young Adult Contexts

The vast majority of adolescents ages 14–17 (96%) and two-thirds of 18–19 year-olds (66%) are enrolled in school (Snyder et al., 2004). As adolescents leave high school, pathways to adulthood diverge. These pathways—such as patterns of post-secondary education, work force participation, marriage, and family formation—vary by gender. Compared to young women, young men* are:

- less likely to have received a college or more advanced degree (24.8% vs. 31.5%);
- more likely to live with at least one parent** (26.5% vs. 19.0%);
- more likely to be employed full-time (82.5% vs. 64.2%);
- less likely to be married (29.7% vs. 40.9%) or have children (31.9% vs. 48.2%); and
- more likely to be incarcerated*** (3.6% vs. 0.2%); Black males have especially high incarceration rates (12.5% vs. 4.1% of Hispanics and 1.5% of Whites) (Brown et al., 2003).

For male and female young adults, experiences also differ by factors such as race/ethnicity. Some of the larger disparities include:

- only a tenth of Hispanic young adults have a Bachelor’s degree, compared to a third of Whites;
- more than two in five young adult Hispanics (41.7%) are married, compared to 22.3% of Blacks (Brown et al., 2003).

YOUNG MEN’S HEALTH: THE CRITICAL ISSUES

This section reviews critical health issues for young men. Overall, the health of young men is improving in many areas. One important exception is the increase in overweight and obesity—a problem for both genders. Despite generally encouraging trends, young men continue to fare much worse than young women in many areas.

Mortality

Trends in mortality are improving. Rates for males ages 10–24 have decreased over the past two decades and are now near all-time lows since data collection for that age range began in 1979 (CDC, 2005a). The 2002 mortality rate (per 100,000) for 15–24 year-old males (116.8) is the lowest on record since 1900 (NCHS, 2005). However, large disparities remain between young men and women. This disparity worsens as patterns of post-secondary education, work force participation, marriage, and family formation—vary by gender.

Gender disparities and differences in young people’s mortality rates exist for the three main causes of death—motor vehicle accidents, homicide and suicide—and are largest for suicide (See Figure 2). Among young males, there are large racial/ethnic disparities. Young Black men have the highest mortality rates, followed by American Indians/Alaskan Natives, Hispanics, Whites and Asians. Higher homicide rates account for the high mortality among Blacks, while higher rates of suicide and fatal motor vehicle accidents account for the high mortality among American Indians/Alaskan Natives (See Figure 3) (NCIPC, 2005).
Unintentional Injuries

Young males are disproportionally affected by unintentional injury, compared to young females. While unintentional injuries (UIs) represent the leading cause of mortality for young men and women alike, males have much higher death rates than females (See Figure 2) (NCIPC, 2005).

Unintentional injury death rates peak in late adolescence and early adulthood. The rate (per 100,000) is highest among males ages 18–19 (65.5), followed closely by males ages 20–24 (61.9). After the young adult years, the UI rate decreases throughout the life span until age 70 when the rate increases again. Among young adult men (ages 20–24), disparities remain, with rates highest for American Indians/Alaskan Natives (67.3). While disparate rates are of continuing concern, the encouraging news is that UI death rates for males ages 10–24 have decreased significantly over the past two decades, from 66.7 in 1980 to 39.2 in 2002 (NCIPC, 2005).

Motor vehicle accidents (MVAs) play a large role in UI mortality, accounting for 68.4% of all UI deaths among males ages 10–24 (NCIPC, 2005). Adolescent males are more likely than females to engage in behaviors that place them at risk for MVAs. Among high school students, males have a higher prevalence of driving after drinking and “rarely or never” using safety belts. Racial/ethnic differences for these two behaviors are fairly small. Overall trends are positive, with the prevalence of these two behaviors having decreased since 1991 for both males and females (YRBSS, 2005).

As injury represents a leading cause of death and disproportionately affects males, these findings suggest the need for injury prevention efforts that place special emphasis on young men’s risk taking behavior. Graduated driver licensing is a promising strategy that has been adopted by 47 states and D.C., and has helped decrease MVA fatality among young males and females (IIHS, 2004).

Violence

Violence disproportionately affects the lives of young men, especially Blacks. Violence increases in the late teen years, peaks in the young adult years and then declines throughout the lifespan (NCIPC, 2005). The homicide rate (per 100,000) for U.S. males ranks among the highest in the industrialized world. Among U.S. males ages 10–29 the rate (17.9, in 1998) is markedly higher than the rates in other developed countries (e.g., Canada, 2.5, 1997; Australia, 2.2, 1998; and United Kingdom, 1.4, 1999) (WHO, 2002).

Males ages 10–24 are over five times more likely to die of homicide than same-age females (See Figure 2). The homicide rate (per 100,000) is highest for young adult males ages 20–24 (27.5) and decreases throughout the lifespan. Black males ages 10–24 have a homicide rate almost four times higher than the overall rate for all same-age males (55.8 vs. 14.5); they account for over half (56%) of all male homicides in this age group. Homicide rates peak among young adult Black males at a rate of 119.2, a figure over ten times that of all non-Black males in that age group (11.3). However, it is worth noting that homicide rates for young males have decreased significantly from the peaks of the early 1990s. Black males (ages 10–24) experienced the steepest decline, falling 51% from the 1993 peak of 114.3 to 55.8 in 2002 (NCIPC, 2005).

Overall, males are more likely to be victims of violent crimes than females. Victimization rates for violence, robbery and assault are higher among males ages 12–24 than among same-age females. Victimization rates for
rape/sexual assault are an important exception to this pattern, with females having higher rates (BJS, 2005).

Less severe, but more frequent, are markers of violence among high school students, such as fighting and weapon carrying. Male students are more likely than female students to be in physical fights. Two in five males report being in at least one physical fight in the past year, compared to one in four female students. This figure is higher for Black male students (45.6%), compared to Hispanic (42.6%) and White (40.5%) students. Over one quarter of male students report carrying a weapon and one tenth report carrying a gun in the past 30 days; these figures are four and seven times the rate for female students, respectively (See Figure 4). Racial/ethnic differences for these two behaviors are fairly small. Fewer male high school students are engaging in violent behaviors, compared to the early 1990s: in 1991, 50.2% reported past-year fighting and 40.6% reported weapon carrying in the past 30 days (YRBSS, 2005).

While the decline in violence among young men is welcome news, violence remains a major health concern. Although the causes are complex, research has identified promising practices to decrease violence among young people (DHHS, 2001; Mann et al., 1998).

Substance Use

Substance use and abuse among young people have long been health concerns, with national trends being monitored since 1975 (Johnston et al., 2005). Alcohol plays an important role in motor vehicle fatalities. Overall, adolescent males and females report fairly similar levels of tobacco, alcohol and illicit drug use. Substance use rises and peaks in the early adult years for both males and females, but is higher for males (See Figure 5). Generally, American Indians/Alaskan Natives and Whites report the highest levels of substance use (SAMHSA, 2004a).

Generally, recent levels of substance use for adolescent and young adult young males and females are well below the record-high peaks of the late 1970s and early 1980s. Rates of substance use among high school students increased in the mid-1990s and have remained stable or decreased since 1997. Among young adults ages 19–24, trends in the 1990s are more mixed:

- smoking levels have remained stable;
- marijuana and illicit drug use has increased slightly; and
- alcohol use decreased until 1996 and has remained stable since, although recent binge drinking has increased among young adults since the early 1990s (Johnston et al., 2004).

Tobacco

Tobacco use is the leading cause of premature death in the U.S. and has negative consequences for adult health (CDC, 2005b). Most current adult smokers began smoking as adolescents. Among adolescents ages 12–17 in 2003, about one in eight reported recent cigarette smoking. This figure rises for young adults ages 18–25, and is higher among males than females (See Figure 5) (SAMHSA, 2004a). Among young adult males, 56.1% of American Indians/Alaskan Natives and 48% of Whites reported recent use (SAMHSA, 2005).
Alcohol

Among adolescents ages 12–17, about one in six recently had any alcohol; about one in ten reports binge drinking in the past month; and less than 3% report heavy drinking. As alcohol use increases in young adulthood (ages 18–25), rates for males increase dramatically, creating large gender disparities: more than half of males (51.6%) report binge drinking, compared to a third of females (32.2%). One in five young adult men report heavy drinking, compared to less than one in ten women (See Figure 5) (SAMHSA, 2004a). Rates were highest among White males, with 58.2% reporting binge drinking and 26.2% reporting heavy alcohol use (SAMHSA, 2005).

Illicit Drug Use

About one in ten male and female adolescents ages 12–17 report recent illicit drug use. Adolescent males report a slightly higher rate of recent marijuana than their female peers (8.8% vs. 7.1%) (SAMHSA, 2005). Relatively few males report recent use of steroids (2.1% of 12th grade males) (Johnston et al., 2005). Illicit drug use increases in young adulthood (ages 18–25), with males reporting higher rates than females (24.0% vs. 16.5%) (See Figure 5) (SAMHSA, 2004a). Among young adult males, recent marijuana use is highest among American Indians/Alaskan Natives (32.4%), followed by Whites (23.3%) and Blacks (21.9%) (SAMHSA, 2005).

Among adolescents (ages 12–17), current illicit drug use is more common among smokers and heavy alcohol users. Nearly half (48.4%) of current smokers report current illicit drug use, compared to 6.1% of non-smokers. Nearly two thirds (64.5%) of adolescents who report current heavy alcohol use are current users of illicit drugs, compared to 5.1% of nondrinkers (SAMHSA, 2004a).

Smaller percentages of young men and women report dependence on or abuse of alcohol and illicit drugs. In adolescence, males and females report similar levels of dependence on or abuse of alcohol or an illicit drug (8.7% vs. 9.1%). Rates of dependence or abuse peak in young adulthood: more than one in four (26.3%) young men ages 18–25 report dependence or abuse and 15.7% of same-age young women report likewise. Rates decline for both men and women after age 25, although the gender disparity remains. American Indians/Alaskan Natives have the highest prevalence among all racial/ethnic groups (SAMHSA 2004b).

These figures highlight the need to address the steep rise in substance use among young adult men, particularly American Indians/Alaskan Natives and Whites. Addressing substance use, particularly high levels of use, forms a critical component of promoting mental health.

MENTAL HEALTH

Mental health issues have received increased attention, due in part to the 1999 Surgeon General’s Report on Mental Health and the President’s New Freedom Commission on Mental Health (DHHS, 1999; DHHS, 2003). Given that three quarters of mental health disorders have their onset by age 24, mental health is a critical health issue for young men and women (Kessler et al., 2005).

Suicide & Suicide Attempts

Young males have a higher suicide rate (per 100,000) than females (see Figure 2), a gap that widens from a factor of three in early adolescence to almost seven in young adulthood. Among young males ages 10–24, American Indians/Alaskan Natives and Whites have the highest suicide rates. Suicide rates have fallen sharply for males ages 10–24 after peaking in the early 1990s (NCIPC, 2005). Suicide attempts are much more common among female high school students than their male peers (11.5% vs. 5.4%) (YRBSS, 2005).

Mental Health Disorders

Adolescents and young adults experience a range of mental health disorders, including substance abuse and dependence problems discussed previously. More males than females ages 10–24 report outpatient visits for mental health disorders (1.9 million vs. 1.6 million in 2002) (MEPS, 2005).

Depression is one of the most widely studied conditions, due in part to its wide prevalence and link to suicide. Most data indicate that depression is more prevalent among adolescent and young adult females than males. One national study of high school students found that 12.6% of females met criteria for moderate or severe depression, compared to 5.9% of males (Rushton et al., 2002). Another national survey of high school students found that more than one third of females (35.5%) “[have ever felt] so sad and hopeless every day for two weeks in a row” that they couldn’t do some of their usual activities, compared to 21.9% of males (YRBSS, 2005).

Clearly, depression is a serious issue for young women. These data also show that one in seventeen male high school students is depressed and one in five experiences sadness and hopelessness that interferes with their lives (Rushton...
et al., 2002; YRBSS, 2005). The higher rate of suicide among males also suggests the wide prevalence of depression.

Much public attention has focused on learning disorders, particularly attention deficit and hyperactivity disorder (ADHD). National data indicate that adolescent males (ages 12–17) are almost three times as likely as same-age females to have ADHD (12.1% vs. 4.3%) and more likely to have a learning disability (12.8% vs. 7.1%) (Dey & Bloom, 2005). Learning disabilities are associated with a range of negative outcomes including increased violent behavior, juvenile delinquency, and suicide attempts (Quinn et al., 2000; Blum et al., 2001; Svetaz et al., 2000).

Young adult females ages 18–25 are more likely than males to have a diagnosable serious mental illness (SMI)6 (17% vs. 10.3%). Racial/ethnic disparities in SMI prevalence are fairly small. Among young adults (ages 18–25) with SMI, 35% received mental health treatment or counseling (SAMHSA, 2004a).

These data indicate that mental health problems affect many young males and females and that problems often go untreated. The problems young people face are varied and complex, and can interfere with a range of functions, such as learning and engaging in daily activities.

REPRODUCTIVE HEALTH

Most young men and women become sexually active in the adolescent and young adult years (Abma et al., 2004; AGI, 2002). On average, men spend about 10 years being single and sexually active, from shortly before their 17th birthday to shortly before their 27th birthday (AGI, 2002). Although most public policy and attention has focused on women, there has also been some focus on the reproductive health needs of men (AGI, 2002; Sonenstein, 2000).

Male high school students report sexual activity at an earlier age than females. Black students report the earliest initiation of sexual intercourse. Among male 9th graders, nearly two thirds of Blacks (66.5%) report being sexually experienced, compared to 42% of Hispanics and 27% of Whites. Differences by gender and race/ethnicity decrease by 12th grade (See Figure 6). Over the past decade, the percentage of high school students who are sexually experienced has declined for males, females and all racial/ethnic groups (YRBSS, 2005).

Many adolescents and young adults report protecting themselves from sexually transmitted infections (STIs), although large percentages report risky behaviors.

Among high school students, males are more likely than females to report that condoms were used during last sexual intercourse (in the past three months) (68.8% vs. 57.4% in 2003); these figures have improved over the last decade, increasing from 54.5% for males and 38% for females since 1991 (YRBSS, 2005).

Male high school students are more likely than females to report having sexual intercourse with four or more partners during the past year (17.5% vs. 11.2%, 2003 data). Black male students are the most likely to report this behavior. The prevalence of this behavior has decreased among high school males, from 23.4% in 1991 (YRBSS, 2005). Among sexually active adolescent males ages 18–19, 73.3% had unprotected sex during the past year and 20.3% had 3 or more partners; for single, sexually active males ages 22–26, these figures rise to 76.4% and 33.6%, respectively (Ku et al., 2002).

The prevalence of many STIs peaks in late adolescence and young adulthood for both males and females (See Figure 7). Large disparities exist by race/ethnicity, with Blacks, especially Black females, disproportionately affected by STIs. Among males ages 15–19, the chlamydia rate for Blacks is 3 to 17 times the rate of same-age males in other racial/ethnic groups (CDC, 2005c). In 2002, Black males comprised a third (32.2%) of new HIV/AIDS cases among young adults ages 20–24 and Black females comprised another 25% (CDC, 2004). Overall, trends in gonorrhea and syphilis rates are encouraging with the rates having decreased significantly over the past decade. By contrast, chlamydia rates have increased among young males and females since the 1990s. This trend may represent an increased application of more sensitive tests and better reporting as well as an actual increase in rates (CDC, 2005c; CDC, 1997; CDC, 1994).
OVERWEIGHT

The dramatic increase in overweight and obesity is a significant national health problem, affecting men and women of all ages, including adolescents and young adults. The prevalence of overweight among adolescents ages 12–19 has tripled in the last 25 years, from 5% in the 1976–1980 data collection period to 16% in the 1999–2002 period (NCHS, 2004; Hedley et al., 2004). These increases have serious implications for adult health, as the likelihood of an overweight adolescent becoming an obese adult is between 70% and 80% (Serdula et al., 1993; Guo & Chumlea, 1999; Guo et al., 2002).

Overall, male and female adolescents have similar rates of overweight (16.7% vs. 15.4%). While there is little gender disparity among White adolescents, who have the lowest overweight rates, there are large gender differences for Blacks and Mexican-Americans. Among Blacks, males are less likely to be overweight than females (18.7% vs. 23.6%) and among Mexican-Americans, males fare worse (24.7% vs. 19.9%) (Hedley et al., 2004). The obesity rates among young adults (ages 24–26) are similar by gender (16.8% for males vs. 17.2% for females) (Brown et al., 2003).

PHYSICAL ACTIVITY

Physical activity is higher among male high school students than female students: 12th grade males are more likely than females to report vigorous physical activity (66.1% vs. 45.5%); males ages 24–26 are more likely to participate in leisure-time physical activity than same-age females (48.1% vs. 33.2%) (YRBSS, 2005; Brown et al., 2003).

HEALTHCARE ACCESS & UTILIZATION

Over the past two decades, adolescents’ access to health care, as measured by insurance status, has improved modestly for both males and females. The overall percentage of 10–18 year-olds without insurance decreased from 14.1% in 1995 to 12.2% in 2002, mostly due to expansions in publicly funded insurance that offset large declines in private insurance (Newacheck et al., 2004).

By contrast, young adults have the highest uninsurance rates of any age group 0–64. As adolescents transition to young adulthood, they become ineligible for their parents’ health coverage and the public insurance that covers adolescents (Collins et al., 2005). Risk of being uninsured is greater among certain groups of young adults including: the poor; Hispanics; and non-full-time students (Collins et al., 2005; Callahan & Cooper, 2004). Males are somewhat more likely to lack insurance than females (33% vs. 27%) (Callahan & Cooper, 2005). This difference may be due in part to Medicaid coverage of poor-families, which are disproportionately headed by young single women with children (Quinn et al., 2000).

Lack of insurance affects access to health care. Compared to their insured peers, uninsured young adults are more likely to report: foregoing needed care; not filling a prescription because of cost; not having spoken to a health professional in the past 12 months; and having no usual source of care. Young adult males are much more likely than females to report no contact with a health professional (35.1% vs. 12.8%) and no usual source of care (36.3% vs. 19.9%). Females are slightly more likely to report not filling a prescription (9.0% vs. 5.7%). Males and females report similar rates of foregoing care (11.1% vs. 12.6%) (Callahan & Cooper, 2005).

Strategies for improving access to healthcare for young adults include: increasing the cut-off age of parental insurance from 19 to 23; increasing public coverage (SCHIP, Medicaid) for those who are unemployed; and targeting college-health plans to provide more services to more part- and full-time students (Collins et al., 2005).

Overall, young females use health care services at greater rates than young males, largely due to their reproductive health needs. Excluding reproductive health services, data from 2002 show that males and females ages 10–24 generally use health care services for the same conditions. Major disparities include: more males reporting visits for trauma-related disorders (3 million vs. 2.3 million) and more females reporting visits for bronchitis/upper respiratory infections (3.9 million vs. 2.9 million). Similarly, for trauma-related disorders, more males than females...
report emergency room visits (2.2 million vs. 1.4 million); hospital stays (155,000 vs. 42,000); and use of prescribed medicines (1.7 million vs. 1.3 million) (MEPS, 2005).

Many young males and females face barriers to access to oral health care services. Overall, almost one in five (18.6%) adolescents (ages 12–17) did not visit a dentist and 7.3% had an unmet dental need during the past year (Dey & Bloom, 2005).

CONCLUSION

This brief offers a perspective on young men’s health, by outlining important health issues and identifying areas of major concern. On the positive side, trends are moving in a healthy direction in many areas, including mortality, violence, injury, substance use, and reproductive health.

However, the data here also highlight many concerns:

- Large disparities between young men and women persist in many areas.
- The increase in obesity and overweight warrants major concern for men and women alike.
- Young Black men are still disproportionately affected by violence.
- Substance use rates are very high among young adult men, especially Whites and American Indians/Alaskan Natives.
- Available data indicate that a sizable portion of young men and women face mental health problems.
- Young adults, both male and female, face challenges securing insurance.
- Young men have less access to care.

While available data allows us to highlight the critical health issues for young males, limited data are available on specific populations, such as Asians/Pacific Islanders, youths with disabilities, gay youth or young males in or transitioning out of the foster care or justice systems. Understanding and serving special populations, especially those at greatest risk of health problems, will improve the health of adolescent and young adult males.

The disparities and other concerns identified in this brief point to the need to incorporate gender in clinical and public health research and programs that address the health needs of adolescents and young adults. Existing efforts to incorporate gender can provide guidance for future initiatives. One such effort synthesizes research on gender and development as part of its examination of risky behaviors. The document offers recommendations for incorporating healthy development into adolescent health programs and includes separate considerations for males and females, in addition to general program recommendations (Breinbauer & Maddaleno, 2005).

The health profile presented here also suggests that health initiatives focusing on men (e.g., Community Voices, 2005) should adopt a lifespan approach. The prevalence of many problems—including homicide, unintentional injury and substance use—are highest among young men in late adolescence and early adulthood. Initiatives to improve men’s health should include components tailored to the needs of adolescent and young adult males. Integrating a lifespan approach with gender considerations can lead to health programs that better meet the needs of all adolescents and young adults.
Introduction:

Age definitions (when not otherwise defined):
- Adolescents = ages 10–19
- Young Adults = ages 20–24

Demographics:
- All racial/ethnic groups presented are non-Hispanic (NCIPC, 2005)
- Poverty is defined as below 100% of the Federal Poverty Level, most recently set at $19,307 for a family of 4 in 2004 (U.S. Census Bureau, 2005c)

Unintentional Injury:
- There are three stages to a graduated system, and beginners must remain in each of the first two stages for set minimum time periods: the first is a supervised learner’s period, lasting a minimum of 6 months in optimal systems; then an intermediate licensing phase that permits unsupervised driving only in less risky situations; and finally a full-privilege license becomes available when conditions of the first two stages have been met (IIHS, 2004)

Substance Use:
- All “recent” substance use refers to use in the past month (Johnston et al., 2005; SAMHSA, 2004a)
- Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used non-medically (Johnston et al., 2004; SAMHSA, 2004a)
- Binge alcohol use = drinking five or more drinks on the same occasion at least one day in past month (Johnston et al., 2004; SAMHSA, 2004a)
- Heavy alcohol use = drinking five or more drinks on the same occasion on five or more days in past month (heavy users are also binge users) (Johnston et al., 2004; SAMHSA, 2004a)

Mental Health:
- Serious mental illness (SMI): Individuals are classified as having SMI if at some time during the past 12 months they had a diagnosable mental, behavioral, or emotional disorder that met Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for a disorder and resulted in a functional impairment that substantially interfered with or limited one or more major life activities (SAMHSA, 2004a)

Reproductive Health:
- Although more males engage in sexual risky behaviors, the prevalence of STIs is higher among females. The higher STI rates among females may be attributed to either larger reporting of symptoms in females or less male screening/testing for STIs (CDC, 2005c)

Overweight:
- Overweight in adolescence is defined as >95 percentile of the Body Mass Index (BMI) for age and gender. There is no clinical guideline for “obese” in childhood or adolescence. Overweight in adults is defined as BMI between 25–30; obese in adults is BMI > 30 (Hedley et al., 2004)

Physical Activity:
- Vigorous physical activity is 20 or more minutes of exercise/physical activity that makes you sweat or breathe hard on 3 or more days during the past week (YRBSS, 2005)
- Leisure-time physical activity is defined as moderate activity at least 5 times per week for at least 30 minutes each time or vigorous activity at least 3 times per week for at least 20 minutes each time (Brown et al., 2003)

Healthcare Access & Utilization:
- Uninsurance is defined as no public or private coverage for any health care needs (Collins et al., 2005)
REFERENCES


Centers for Disease Control & Prevention, National Center for Chronic Disease Prevention & Health Promotion, Division of Adolescent & School Health; Health Resources & Services Administration, Maternal and Child Health Bureau, Office of Adolescent Health; National Adolescent Health Information Center, University of California, San Francisco [CDC, HRSA & NAHIC]. (2004). Improving the Health of Adolescents and Young Adults: A Guide for States and Communities. Atlanta, GA: Authors. [Available online at (10/05): http://nahic.ucsf.edu/2010guide]


