Trends in Adolescent Health in the United States--2004

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Prepared for:
In the United States youth 15-24 years of age represent 13.9% of the population.
**Young Adult vs. Adolescent Population by Race/Ethnicity, 2000**

**Young Adults (20-24)**
- White, non-Hispanic: 61.1%
- Black, non-Hispanic: 13.5%
- AmIndian/AlaskaNative, non-Hispanic: 4.4%
- Asian/PacIslander, non-Hispanic: 2.1%
- Latino: 18.0%
- Other: 0.8%

**Adolescents (10-19)**
- White, non-Hispanic: 62.9%
- Black, non-Hispanic: 15.6%
- AmIndian/AlaskaNative, non-Hispanic: 3.6%
- Asian/PacIslander, non-Hispanic: 1.0%
- Latino: 14.5%
- Other: 2.4%

Source: US Census, 2002
Poverty by Race/Ethnicity Among Adolescents 10-17 Years of Age: United States, 2003

All adolescents

- All races
- White
- Black
- Hispanic

Percent

0 20 40 60 80 100

Poor
Near Poor
Mortality in Adolescence
Teen Death Rates (2002-3) (per 100,000 ages 15-19)

- Asian/Pacific Islander: 37 per 100,000
- Hispanic/Latino: 65 per 100,000
- Non-Hispanic White: 66 per 100,000
- Black/African American: 82 per 100,000
- AI/AN: 91 per 100,000
Seventy-five percent of all deaths in the second decade are from injuries — vehicular injuries, homicide, suicide

- 47% at age 10
- 81% at age 18
While motor vehicle deaths are the primary cause of teen deaths, mortality fell 38% between 1980-1992.

Why?
Structural Changes that have Impacted Juvenile Automotive Fatality Rates

- Graded licenses limiting night-time driving
- Limitation of number of passengers for new drivers
- Mandatory seatbelt laws
- Improved roads
  - Breakaway lights;
  - Improved road dividers-wider lines with raised reflectors
  - Improved barriers
Weapon Related Violence

Percentage of Firearm-Related Deaths per 100,000 Juveniles ages 0-14

- **Spain**
- **Northern Ireland**
- **England & Wales**
- **Sweden**
- **Belgium**
- **Canada**
- **Italy**
- **Switzerland**
- **Germany**
- **Norway**
- **Australia**
- **Austria**
- **France**
- **Israel**
- **Finland**
- **United States**

**Suicide** vs **Homicide**
Youth Violence

The United States has a higher firearm mortality rate among children and youth than the other 25 industrialized nations of the world.
3.4 million teens are victims annually.

This represents a significant decline over the past decade.

Weapon carrying has declined by one-third.

- In 2003, 6.1% of students reported carrying a gun to school in the preceding 30 days, compared to 11.8% in 1993.

Trend unknown for students who have ever been physically forced to have sexual intercourse when they did not want to:

- In 2003, 6.1% of males and 11.9% of females, according to YRBS.
Suicide

- One third of all firearm deaths are from suicide;
- According to the YRBS, in 2003, 16.9% of youth contemplated suicide and 16.5% said that they made a suicide plan.
Suicidal Ideation Among Students in Grades 9-12 by Sex, Race/Ethnicity, 2003

**Female**
- White, non-Hispanic: Seriously Considered Suicide 21.2%, Suicide Attempt 14.7%
- Hispanic: Seriously Considered Suicide 23.4%

**Male**
- White, non-Hispanic: Seriously Considered Suicide 12.0%, Suicide Attempt 10.3%
- Hispanic: Seriously Considered Suicide 12.9%
Leading Causes of Death: Adolescents vs. Young Adults, 2001

Adolescents (Ages 10-19)
- Motor Vehicle Accidents: 34.1%
- Other Unintentional Injuries: 22.8%
- Other: 13.0%
- Suicide: 12.1%
- Homicide: 10.8%
- Malignant Neoplasms: 7.2%

Young Adults (Ages 20-24)
- Motor Vehicle Accidents: 28.9%
- Other Unintentional Injuries: 22.5%
- Other: 18.2%
- Suicide: 12.6%
- Homicide: 5.2%
- Malignant Neoplasms: 12.6%

Source: NCIPC, 2004
Morbidity in Adolescence
Drugs, Alcohol, and Tobacco

Students in grades 8, 10, 12 who reported being substance free in the last 30 days, 1991-2003

- 71% Grade 8, Girls
- 68% Grade 8, Boys
- 54% Grade 10, Girls
- 50% Grade 10, Boys
- 45% Grade 12, Girls
- 37% Grade 12, Boys
What’s Driving This Trend of Lower Substance Use?

- Tobacco Use?
- Alcohol Use?
- Drug Use?
Percent of Students Who Smoked Cigarettes on One or More of the Past 30 Days

Source: YRBS
Cigarette Smoking Among Students in Grades 9-12 (21.9 %)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Female</th>
<th>Male</th>
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</thead>
<tbody>
<tr>
<td>9th</td>
<td></td>
<td></td>
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<tr>
<td>11th</td>
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<td>10th</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12th</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Female**
  - 9th grade
  - 11th grade
- **Male**
  - 10th grade
  - 12th grade

- **Frequent Smoker**
- **Current Smoker**

*Percent:* 0, 20, 40, 60, 80
Smokeless Tobacco

The use of smokeless tobacco declined about 25% among youth in the 1990s.

- In 2003, 6.7% of students used smokeless tobacco at least once in the past 30 days.
Percent of Students Who Had at Least One Drink of Alcohol During the Past 30 Days

Source: YRBS
### Percent of Students Who Used Marijuana One or More Times During the Past 30 Days

**Source:** YRBS
Percent of Students Who Took Steroid Pills or Shots with a Doctor’s Prescription One or More Times During Their Life

Source: YRBS
In 2003, 11.1% of students reported ever using ecstasy

- 10.4% of females
- 11.6% of males

Source: YRBS
Decline of Teen Birth Rate (15-19) by Race between 1991 and 2004

- Non-Hispanic Whites: ↓ 38.2%
- Non-Hispanic Blacks: ↓ 47.0%
- American Indian: ↓ 37.6%
- Asian/Pacific Islander: ↓ 36.3%
- Latino/Hispanic: ↓ 21.0%

Hispanic rate increased from 82.3 to 82.6 in 2004

Source: National Center for Health Statistics
Sexual Intercourse
There has been a decline in the percent of teens reporting having had sexual intercourse

Trends in Contraceptive Use at First Sex Among Females Ages 15-19

The graph illustrates the trends in contraceptive use among females aged 15-19 from 1988 to 2002. The x-axis represents the percentage of females using contraceptives, while the y-axis represents the years 1988, 1998, and 2002. The data points show a decrease in contraceptive use over time for both boys and girls.
Trends in adolescent sexual behavior

- Condom use has increased: 50% of boys and 25% of girls say they use them all the time;
- Behavior change has been greater among adolescent males than females;
- Birth rates for <15 y.o. is at the lowest point since 1969.
However… more U.S. adolescents become pregnant than in nearly every other industrialized country

- African American 57%
- Latino 51%
- White 25%
Sexually transmitted diseases

Nearly half of all STDs (48%) occur in youth 15 to 24 years of age
### Incidence of STDs among youth

- Human papillomavirus: 4.6 million
- Trichomoniasis: 1.9 million
- Chlamydia: 1.5 million
- Genital herpes: 640,000
- Gonorrhea: 431,000
- HIV: 15,000
- Syphilis: 8,200
Selected Trends

- Unintentional Injury
- Violence
- Pregnancy Outcomes
- Suicide

- Alcohol Use
- Tobacco Use
- Illicit drug Use
- STDs

Arrows denote trends in prevalence over past decade
New Adolescent Health Concerns

- **Obesity**
- **Asthma**

Arrows denote trends in prevalence over past decade.
Prevalence (%) of Obesity, NHANES

Obesity defined as > 95th percentile of sex-specific BMI growth charts
And the prevalence of overweight is higher…

◆ 30.3% of children (6-11)
◆ 30.4 % of adolescents (12-19)
◆ The rates are higher for some groups:
  ◆ Non-Hispanic Blacks 40.4%
  ◆ Mexican Americans 43.8%
  ◆ Non-Hispanic Whites 26.5%

Source: NHANES

Overweight defined as >85th percentile BMI on sex-specific growth chartes
Citations

- Source: BRFSS, CDC.
Obesity Trends Among U.S. Adults between 1985 and 2004

Definitions:

- Obesity: having a very high amount of body fat in relation to lean body mass, or Body Mass Index (BMI) of 30 or higher.
- Body Mass Index (BMI): a measure of an adult’s weight in relation to his or her height, specifically the adult’s weight in kilograms divided by the square of his or her height in meters.
Obesity Trends Among U.S. Adults between 1985 and 2004

Source of the data:

- The data shown in these maps were collected through CDC’s Behavioral Risk Factor Surveillance System (BRFSS). Each year, state health departments use standard procedures to collect data through a series of monthly telephone interviews with U.S. adults.

- Prevalence estimates generated for the maps may vary slightly from those generated for the states by BRFSS (http://aps.nccd.cdc.gov/brfss) as slightly different analytic methods are used.
During the past 20 years there has been a dramatic increase in obesity in the United States. In 1985 only a few states were participating in CDC's BRFSS and providing obesity data. In 1991, four states had obesity prevalence rates of 15-19 percent and no states had rates at or above 20 percent.

In 2004, 7 states had obesity prevalence rates of 15–19 percent; 33 states had rates of 20–24 percent; and 9 states had rates more than 25 percent (no data for one state).
Obesity Trends* Among U.S. Adults

BRFSS, 1986

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 1988

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)

No Data <10% 10%–14%
Obesity Trends* Among U.S. Adults

BRFSS, 1990

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults
BRFSS, 1992
(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 1994

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 1996

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 1998

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 2000

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 2002

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 2004

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” person)
Prevalence of Self-Reported Asthma (1980-1995) or an Episode of Asthma or Asthma Attack (199)

Source: National Health Interview Survey
Note change in definition between 1995 and 1999
Youth & the Healthcare System

- Systems of Care
- Healthcare Utilization
- Insurance
Systems of Care Issues

- No identified health care provider
- No identified organizational structure for care
- High users of non-traditional sources of care
- Rights and responsibilities change after age 18
- Insurance system highly dependent upon SES and/or college-enrollment status

Source: Commonwealth, 2003
Healthcare Utilization

Among young people the leading reasons for utilization:

For **males** are trauma-related disorders, mental health disorders, asthma/respiratory conditions and skin disorders

For **females** are pregnancy-related/live birth & reproductive health, trauma-related disorders, asthma/respiratory conditions and mental health disorders

Source: MEPS, 2001
Insurance

- One third of all uninsured are young adults (ages 19-29)
- Rates of uninsured have increased and are projected to continue increasing for our young adult population

Source: Commonwealth, 2003
Percent Uninsured by Age Group and Length of Time Uninsured, 2000

Source: Commonwealth, 2003
<table>
<thead>
<tr>
<th>Percent Uninsured</th>
<th>Children 18 and Under</th>
<th>Young Adults Ages 19-29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>12%</td>
<td>28%</td>
</tr>
<tr>
<td>&lt; 100% FPL</td>
<td>22%</td>
<td>52%</td>
</tr>
<tr>
<td>100%-199% FPL</td>
<td>17%</td>
<td>39%</td>
</tr>
<tr>
<td>≥ 200% FPL</td>
<td>7%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: Commonwealth, 2003: FPL=Federal Poverty Level
Health Access Problem Due to Cost by Insurance Status, Ages 19-29, 2001

Source: Commonwealth, 2003
Shifting Models/Shifting Approaches

Knowledge
(just know)

Teen
Shifting Models/Shifting Approaches

Knowledge (just know)

Peer Influence (peer education)

Teen
Shifting Models/Shifting Approaches

- Knowledge (just know)
- Peer Influence (peer education)
- Risk Behaviors Linked (comprehensive strategy)
Shifting Models/Shifting Approaches

Knowledge (just know)

Peer Influence (peer education)

Risk Behaviors Linked (comprehensive strategy)

Teen

Resistance Skills (just say no)
Shifting Models/Shifting Approaches

Teen

Knowledge (just know)

Peer Influence (peer education)

Risk Behaviors Linked (comprehensive strategy)

Environmental Factors (mentorship)

Resistance Skills (just say no)
What reduces risk?

- **Strong families** -- family connectedness;
- **Connectedness to school** -- teachers who have high expectations coupled with support;
- **Youth participation** -- “mattering”;
- **Economic opportunities** -- and the skills to realize those opportunities.