

MATERNAL MORTALITY

Maternal mortality, or death due to maternal causes, includes deaths due to causes related to or aggravated by pregnancy or pregnancy management, and excludes deaths occurring more than 42 days after the end of the pregnancy and deaths of pregnant women due to external causes (such as injury).¹ The rate of maternal mortality in the United States declined dramatically over the last century; however, this trend has reversed somewhat in the last several decades and racial and ethnic disparities persist.²

In 2007, the latest year for which data are available, the maternal mortality rate was 12.7 deaths per 100,000 live births, compared to a low of 6.6 per 100,000 in 1987. This represents

a total of 548 women who died due to maternal causes in 2007. Some of this increase observed over the past decades may be due to changes in the coding and classification of maternal deaths.

The maternal mortality rate among non-Hispanic Black women was approximately 2.7 times the rate for non-Hispanic White women (28.4 versus 10.5 per 100,000), while the maternal mortality rate among Hispanic women was 8.9 deaths per 100,000 live births.

Causes of maternal death are classified as direct, indirect, or unspecified. Some of the most common direct causes are complications related to the puerperium, or period immediately after delivery (2.2 per 100,000), eclampsia and pre-eclampsia (1.5 per 100,000), hemorrhage of preg-

nancy, childbirth, and placenta previa (0.9 per 100,000), and pregnancy with abortive outcome (0.7 per 100,000). Indirect causes occurred at a rate of 3.1 per 100,000, and comprised deaths from pre-existing conditions complicated by pregnancy. The rate of maternal deaths from unspecified causes was 0.5 per 100,000.

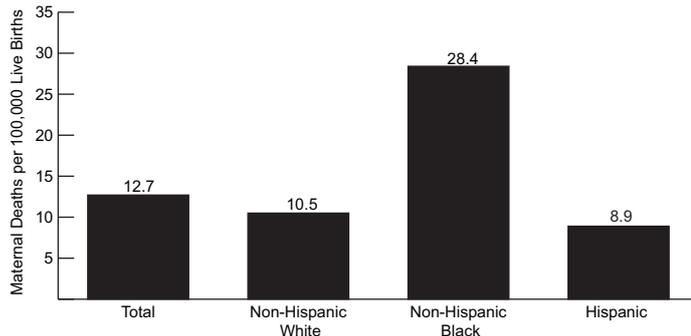
For more information on maternal morbidity, please see *Women's Health USA 2011* available at: <http://www.mchb.hrsa.gov/publications/index.html>.

1 Xu J, Kochanek K, Murphy S, Tejada-Vera B. *Deaths: Final data for 2007. National vital statistics reports; vol 58, no 19. Hyattsville, MD: National Center for Health Statistics. May 2010.*

2 Chang J, Elam-Evans LD, Berg CJ et al. *Pregnancy-Related Mortality Surveillance --- United States, 1991—1999. MMWR. 2003; 52(SS02);1-8.4*

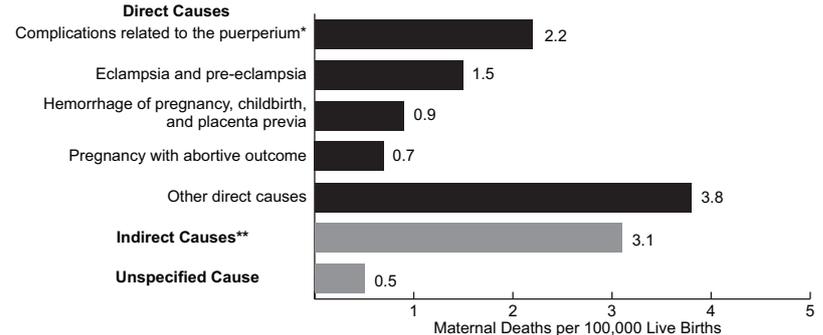
Maternal Mortality Rates, by Race/Ethnicity, 2007

Source (II.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



Leading Causes of Maternal Mortality, 2007

Source (II.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*Deaths occurring in the period immediately after delivery. **Deaths from pre-existing conditions complicated by pregnancy.



HEALTH STATUS - CHILDREN



VACCINE-PREVENTABLE DISEASES

The number of reported cases of vaccine-preventable diseases among children has generally decreased over the past several decades. In 2008, there were no reported cases of diphtheria, polio, or smallpox in the United States, and no cases of tetanus among children under 5 years of age. There were 5 cases of rubella (German measles) among children aged 0-4 years.

From 2007 to 2008, the number of reported cases of hepatitis A, mumps, and meningococcal disease decreased among children under 5 years of age. The overall incidence of hepatitis A began dropping dramatically once routine vaccination for children living in high-risk areas was recommended beginning in 1996. Furthermore, in 2005, the Centers for Disease Control and Prevention (CDC) instituted the recommendation that all children be immunized for hepatitis A starting at 1 year of age. The latter recommendation was made because two-thirds of cases were occurring in States where the vaccine was not currently recommended. With regard to pertussis (or whooping cough), the number of cases among children aged 0-4 years increased from 2,746 in 2007 to 3,468 in 2008. According to the CDC, pertussis occurs cyclically and decreases

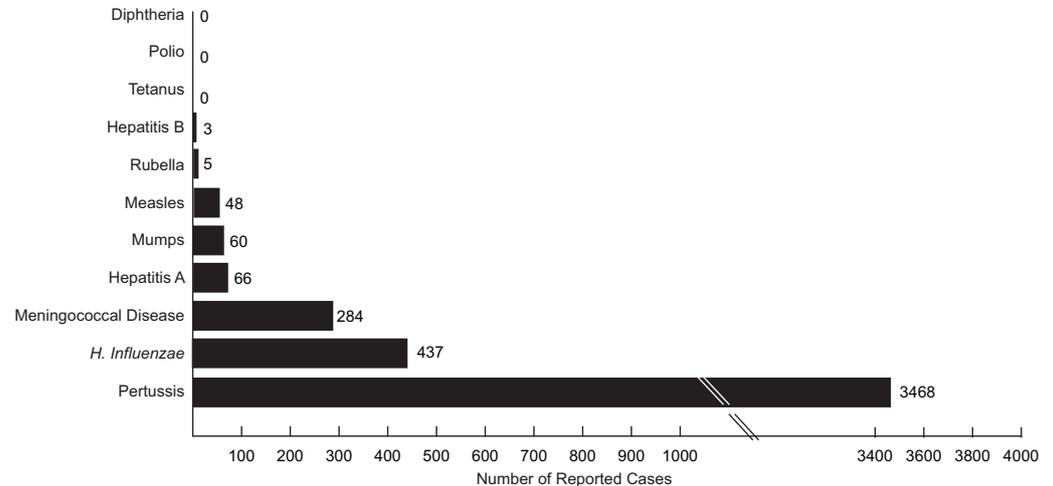
in the incidence of the disease may not be due to increases in immunization rates. The highest reported rate occurred among infants under 6 months of age, a population that is too young to be fully vaccinated. In 2006, the United States experienced a multi-state outbreak of mumps, primarily in Midwestern states. In the following two years, the number of reported cases returned to usual levels; however, beginning in July 2009, another outbreak was documented primarily in New York and New Jersey.¹ Reported cases of

hepatitis B and *H. influenzae* remained relatively unchanged from 2007 to 2008.

¹ Centers for Disease Control and Prevention. *Mumps Outbreaks*. Available at: <http://www.cdc.gov/mumps/outbreaks.html#b>. Accessed March 2011.

Reported Cases of Selected Vaccine-Preventable Diseases Among Children Aged 0-4 Years, 2008

Source (II.6): Centers for Disease Control and Prevention, National Notifiable Diseases Surveillance System



PEDIATRIC HIV AND AIDS

Human immunodeficiency virus (HIV) is a disease that destroys cells that are critical to a healthy immune system. Acquired immunodeficiency syndrome (AIDS) is diagnosed when HIV has weakened the immune system enough that the body has difficulty fighting disease and infections. In 2009, an estimated 166 children younger than 13 years of age were diagnosed with HIV, and 13 were reported to have AIDS. Racial and ethnic minorities are disproportionately affected by HIV. In 2009, non-Hispanic Black children accounted for over three-quarters of diagnosed cases, but represented only

15 percent of the total U.S. population in this age group.

The number of pediatric AIDS cases has declined substantially since 1992, when an estimated 911 cases were reported. A major factor in this decline is the increasing use of antiretroviral therapy before, during, and after pregnancy to reduce perinatal transmission of HIV and the promotion of universal prenatal HIV testing. Perinatal transmission accounts for 91 percent of all AIDS cases among children in the United States. Antiretroviral therapy during pregnancy can reduce the transmission rate to

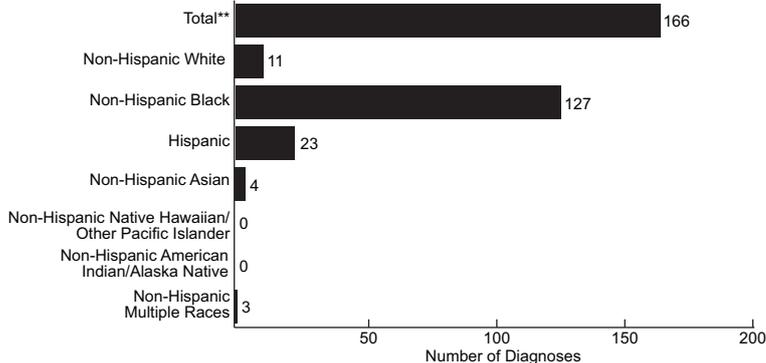
2 percent or less, while without treatment the transmission rate is 25 percent.¹

At the end of 2008, 660,062 adults and adolescents and 3,022 children under age 13 years were living with HIV while 479,161 adults and adolescents, and 707 children under age 13 years were living with AIDS. Of the 1,108,611 AIDS cases cumulatively diagnosed through 2009, 9,448 were among children under age 13 years (data not shown).

¹ Centers for Disease Control and Prevention. *One Test Two Lives*. Available at: <http://www.cdc.gov/hiv/topics/perinatal/1test2lives/default.htm>. Accessed April 2011.

Estimated Numbers of Diagnoses of HIV Infection* Reported in Children Under Age 13, by Race/Ethnicity, 2009

Source (II.7): Centers for Disease Control and Prevention, HIV/AIDS Surveillance System

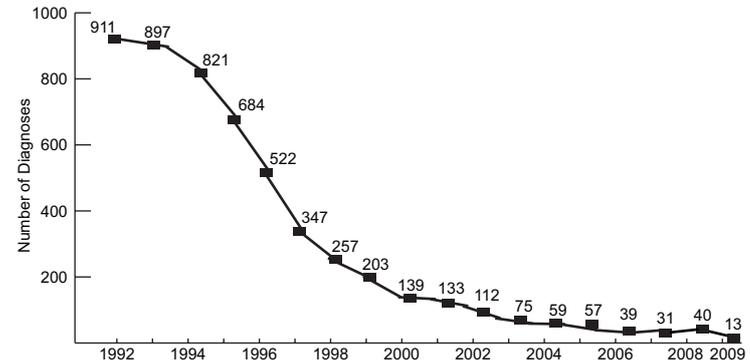


*Includes persons with a diagnosis of HIV infection regardless of stage of disease at the time of diagnosis.

**The total was estimated independently of values for each subpopulation; therefore, the sum of all races/ethnicities does not equal the overall total.

Estimated Numbers of AIDS Diagnoses in Children Under Age 13, by Year of Diagnosis, 1992–2009

Source (II.7): Centers for Disease Control and Prevention, HIV/AIDS Surveillance System



HOSPITALIZATION

In 2009, there were over 3.1 million hospital discharges among people aged 1–21 years, equaling 3.6 hospital discharges per 100 children, adolescents and young adults. While injuries are the leading cause of death among this age group, they were not the most common cause of hospitalization. In 2009, diseases of the respiratory system, including asthma and pneumonia, were the most common causes of hospitalization among children aged 1–4 and 5–9 years. Among children aged 1–4 years, diseases of the respiratory system accounted for nearly 40 percent of discharges; the same was true for about one-quarter of 5–9 year-olds. Mental disorders were the most common cause of hospitalization among children aged 10–14 years (22.5 percent of discharges) and the second most common cause among adolescents aged 15–19 years (15.7 percent of discharges) and young adults aged 20–21 years (8.4 percent). Among adolescents aged 15–19 years and young adults aged 20–21 years, labor and delivery (among females) was the most common cause of hospitalization resulting 49.6 and 62.3 percent of discharges, respectively.

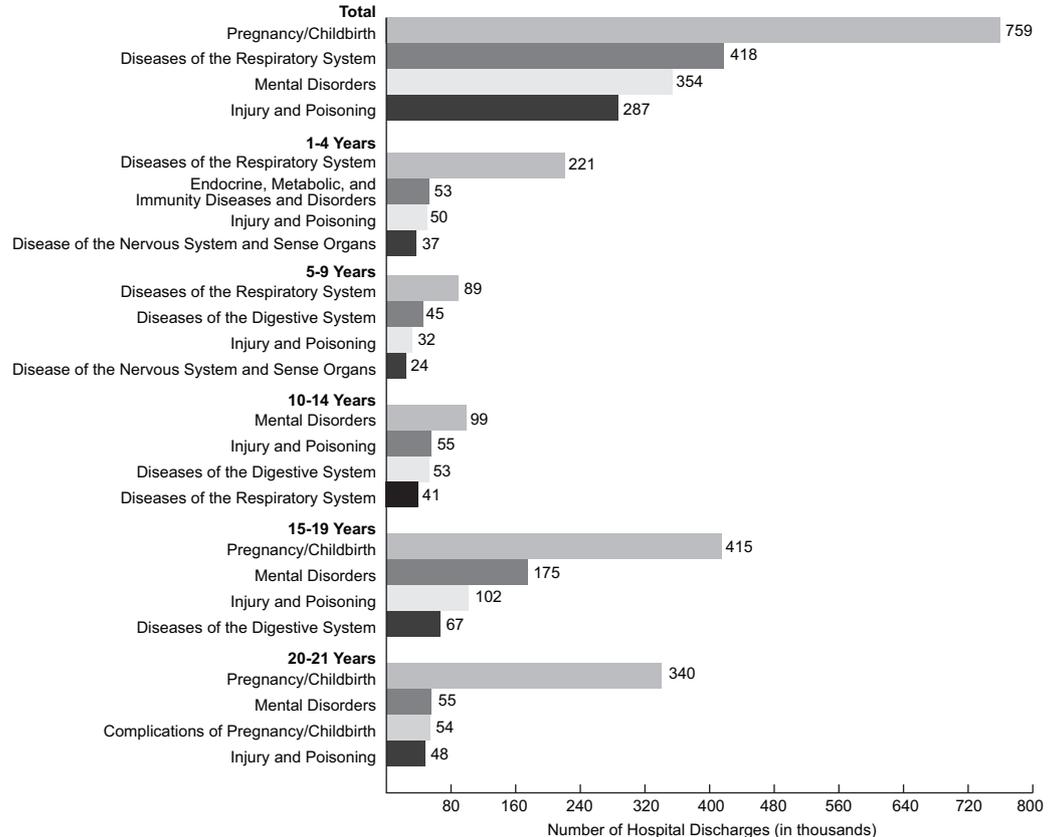
Between 1990 and 2009, overall hospital discharge rates for children aged 1–14 years did not change significantly. However, there was a change in the rates for some of the most common individual categories of discharges: the rate of discharges for diseases of the respiratory

system increased by 19.6 percent between 1990 and 2009, while discharges related to injury and

poisoning decreased by 31.5 percent during the same period.

Major Causes of Hospitalization, by Age Group, 2009

Source (II.8): Centers for Disease Control and Prevention, National Hospital Discharge Survey



CHRONIC HEALTH CONDITIONS

In 2007, the parents of 22.3 percent of children reported that their child had one or more of 16 chronic physical or mental health conditions. The five most commonly reported conditions were asthma, learning disabilities, attention deficit or attention deficit hyperactivity disorder (ADD/ADHD), speech problems, and oppositional defiant or conduct disorder. The least commonly reported conditions addressed in the survey were brain injury or concussion and Tourette syndrome.

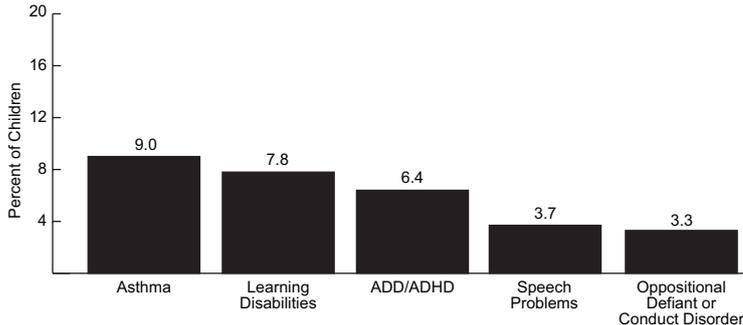
The proportion of children with one or more conditions varied by race/ethnicity. Nearly 30

percent of non-Hispanic Black children had one or more chronic conditions while the same was true for 18.3 percent of Hispanic children and 22.5 percent of non-Hispanic White children. The proportion of children with chronic conditions was also greater among those living in households with incomes less than 100 percent or between 100-199 percent of the Federal poverty level (\$20,650 for a family of four in 2007), with 27.0 and 24.2 percent of poor and near-poor children, respectively, having at least one reported condition compared to 18.9 percent of children living in families with incomes of 400 percent or more of the Federal poverty level (data not shown).

Among children with at least one of these 16 health conditions, 47.8 percent were reported to have one or more moderate or severe conditions. Of the 9.0 percent of children with asthma, the majority (71.3 percent) had parents who reported the condition to be mild, while 23.1 percent had a condition reported to be moderate and 5.6 percent had a condition reported to be severe. Parent-reported severity of asthma varied by race/ethnicity: 10.3 percent of non-Hispanic Black children were severely affected by their asthma, followed by 6.5 percent of Hispanic children and 3.1 percent of non-Hispanic White children.

Five Most Common Chronic Conditions* Among Children Aged 0-17 Years, 2007

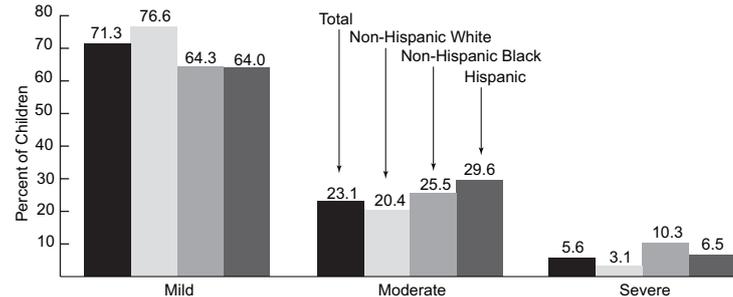
Source (II.2): Health Resources and Services Administration, Maternal and Child Health Bureau and Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Children's Health



*Based on parent-report that a doctor or other health care provider ever told them that their child had a particular condition.

Children Aged 0-17 Years with Asthma, by Condition Severity* and Race/Ethnicity, 2007

Source (II.2): Health Resources and Services Administration, Maternal and Child Health Bureau and Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Children's Health



*Based on parent-report.

ABUSE AND NEGLECT

State child protective services (CPS) agencies received approximately 3.3 million referrals, involving an estimated 6.0 million children, alleging abuse or neglect in 2009. More than 58.3 percent of these reports were made by professionals, including teachers, police officers, lawyers, and social services staff. Nonprofessionals, including parents, neighbors, friends, other relatives, and anonymous reporters made 28.1 percent of the reports; other and unknown sources submitted the remainder of reports (13.6 percent; data not shown).

CPS investigations determined that an estimated 702,000 individual children were victims of abuse or neglect in 2009, equaling a victimiza-

tion rate of 9.3 per 1,000 children in the population (data not shown). Neglect was the most common type of maltreatment (experienced by 78.3 percent of victims), followed by physical abuse (17.8 percent), sexual abuse (9.5 percent), psychological maltreatment (7.6 percent), and medical neglect (2.4 percent). About 10 percent of victims experienced other types of maltreatment including abandonment, threats of harm, or congenital drug addiction. A child may have suffered from multiple forms of maltreatment and was counted once for each maltreatment type.

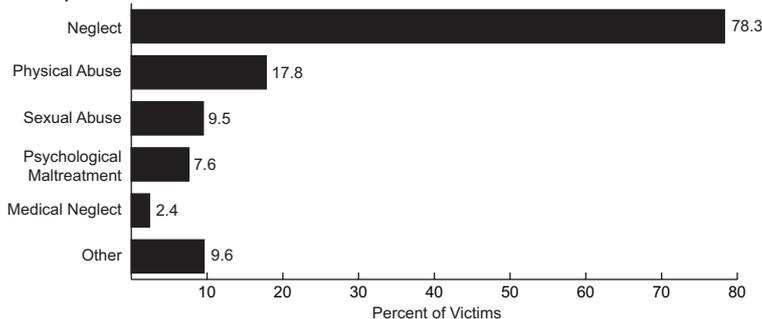
In 2009, children aged 0-3 years accounted for 33.4 percent of all victims. Approximately one-quarter of victims were between the ages of 4 and

7 years, 18.8 percent were aged 8-11 years, 17.8 percent were aged 12-15 years, and 6.3 percent were aged 16-17 years. Victimization was split between the sexes with males accounting for 48.2 percent and females accounting for 51.1 percent (the remainder were unknown; data not shown).

Overall, 80.9 percent of perpetrators of abuse or neglect were parents of the victim (either alone or in conjunction with another person). Additional categories of perpetrators included other relatives (6.3 percent), unmarried partners of parents (4.3 percent), and professionals such as childcare workers and residential facility staff (0.8 percent). Other types of perpetrators included foster parents, friends and neighbors, and legal guardians (data not shown).

Abuse and Neglect Among Children Under Age 18, by Type of Maltreatment,* 2009

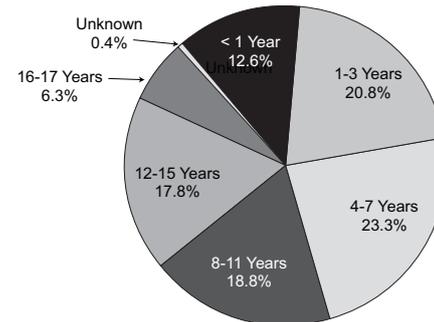
Source (II.9): Administration for Children and Families, National Child Abuse and Neglect Data System



*A child may have suffered from multiple forms of maltreatment and was counted once for each maltreatment type.

Child Abuse and Neglect Victims, by Age, 2009

Source (II.9): Administration for Children and Families, National Child Abuse and Neglect Data System



CHILD MORTALITY

According to preliminary data in 2009, 10,076 children aged 1-14 years died of various causes, which was a decrease of 335 cases since the previous year. The overall mortality rate among children aged 1-4 years was 26.1 per 100,000 children in that age group, and the rate among children aged 5-14 years was 13.9 per 100,000.

Unintentional injury continued to be the leading cause of death among children in both age groups, accounting for 32.5 percent of all deaths among 1- to 4-year-olds and 29.6 percent of deaths among 5- to 14-year-olds. Among children aged 1-4 years, congenital anomalies (or birth defects) were the second most common cause of death (10.9 percent of deaths), while among children aged 5-14 years, cancer was the second leading cause of death (15.9 percent of deaths).

Between 1970 and 2008, the leading causes of child mortality shifted. The percentage of deaths due to homicide increased from 2 to 9 percent among 1- to 4-year-olds and from 2 to 6 percent among 5- to 14-year-olds. Conversely, the proportion of deaths due to pneumonia and influenza declined from 9 to 3 percent among 1- to 4-year-olds and from 4 to 2 percent among 5- to 14-year-olds during the same time period (data not shown).¹

In 2009, mortality rates were higher among males than females in both age groups. Among

children aged 1-4 years, the mortality rate for males was 28.8 per 100,000 compared to 23.4 per 100,000 among females of the same age; rates among 5- to 14-year-old children were 15.6 per 100,000 and 12.1 per 100,000 for males and females, respectively (data not shown). There are also racial/ethnic disparities in child mortality, with non-Hispanic Black children experiencing higher mortality rates than children of other racial/ethnic groups. Among children aged 1-4 years, the rate was 41.2 per 100,000 for non-Hispanic Blacks, compared to rates of 23.2 and 23.9 per 100,000 for Hispanics and non-His-

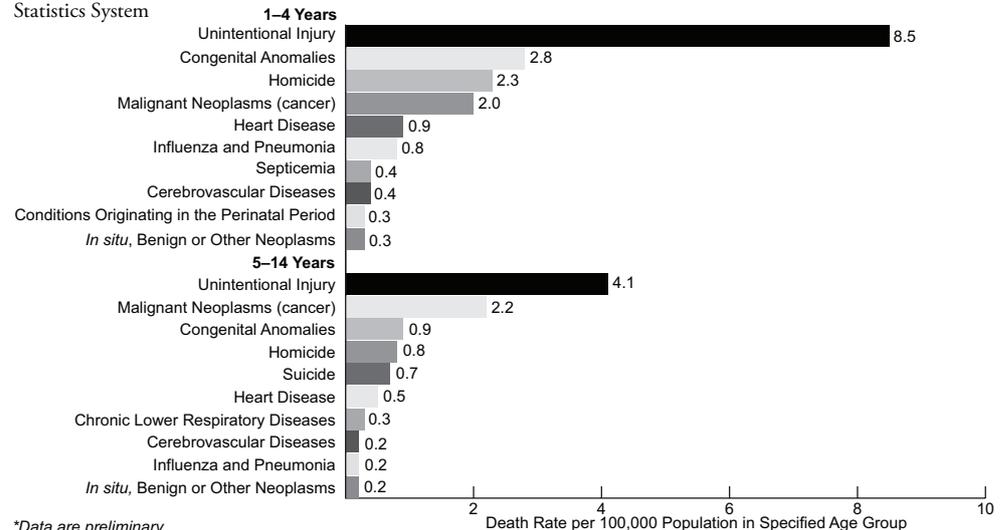
panic Whites, respectively. Among children aged 5-14 years, rates were 21.0 per 100,000 for non-Hispanic Blacks, 13.1 per 100,000 for Hispanics, 12.2 for non-Hispanic Whites, 10.9 for Asian or Pacific Islanders,² and 20.2 for American Indian/Alaskan Native children (data not shown).

1 Singh GK. Child Mortality in the United States, 1935-2007: Large Racial and Socioeconomic Disparities Have Persisted Over Time. A 75th Anniversary Publication. Health Resources and Services Administration, Maternal and Child Health Bureau. Rockville, MD: US Department of Health and Human Services; 2010.

2 Separate estimates for Asians and Native Hawaiian or Other Pacific Islanders not available.

Leading Causes of Death Among Children Aged 1-14 Years, 2009*

Source (II.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*Data are preliminary.