



# Injury and Violence Prevention



## CHAPTER 15

### Lead Agency

Centers for Disease Control and Prevention

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# GOAL:

Reduce injuries, disabilities, and deaths due to unintentional injuries and violence.



The objectives in this chapter monitor progress in three major areas:

- **Injuries.** This area includes objectives that track deaths and nonfatal injuries caused by both accidents (unintentional) and violence such as traumatic brain injuries, poisoning, and suffocation. The availability of surveillance systems to track injury-related incidents and deaths are also monitored.
- **Unintentional injuries.** This area includes objectives that track deaths and nonfatal injuries caused by accidents such as motor vehicle-related injuries, falls, drownings, and residential fire deaths. Individual behaviors and State laws for unintentional injury prevention are also monitored.
- **Violence.** The objectives in this area track deaths and injuries from violent acts such as homicide, child maltreatment, and sexual assault.

All Healthy People tracking data quoted in this chapter, along with technical information and Operational Definitions for each objective, can be found in the Healthy People 2010 database, DATA2010, available from <http://wonder.cdc.gov/data2010/>.

More information about this Focus Area can be found in the following publications:

- *Healthy People 2010: Understanding and Improving Health*, available from <http://www.healthypeople.gov/2010/Document/tableofcontents.htm#under>.
- *Healthy People 2010 Midcourse Review*, available from <http://www.healthypeople.gov/2010/data/midcourse/html/default.htm#FocusAreas>.

## Highlights

- Substantial progress was achieved in objectives for this Focus Area during the past decade [1]. Seventy-four percent of the Injury and Violence Prevention objectives with data to monitor progress moved toward or exceeded their Healthy People 2010 targets (Figure 15-1). Statistically significant health disparities were observed among racial and ethnic populations, as well as by sex, education level, and geographic location (Figure 15-2), as highlighted below [2].

### Injuries

- The poisoning death rate (objective 15-8) increased 84.5% between 1999 and 2007, from 7.1 to 13.1 per 100,000 population (age adjusted), moving away from the Healthy People 2010 target of 1.5 per 100,000 population.
  - Among racial and ethnic groups, the Asian or Pacific Islander population had the lowest (best) rates of poisoning deaths: 1.6 deaths per 100,000 population (age adjusted) in 1999 and 2.5 in 2007. The Hispanic or Latino population had rates of 5.9 per 100,000 (age adjusted) in 1999 and 6.9 in 2007; the non-Hispanic black population had rates of 8.2 in 1999 and 10.6 in 2007; and the non-Hispanic white population had rates of 7.3 in 1999 and 15.8 in 2007.
  - In 2007, the rate for the Hispanic or Latino population was almost three times the best group rate (that for the Asian or Pacific Islander population); the rate for the non-Hispanic black population was more than four times the best group rate; and the rate for the non-Hispanic white population was almost six and a half times the best group rate [2].

- Between 1999 and 2007, the disparity in the poisoning death rate between the Hispanic or Latino population and the Asian or Pacific Islander population (group with the best rate) decreased 93 percentage points [3]; similarly, the disparity between the non-Hispanic black and the Asian or Pacific Islander population decreased 89 percentage points; and the disparity between the non-Hispanic white and the Asian or Pacific Islander population increased 176 percentage points.
- Among education groups, persons aged 25–64 with at least some college education had the lowest (best) poisoning death rate, 7.9 deaths per 100,000 population (age adjusted) in 2002. Persons with less than a high school education had a rate of 25.8 deaths per 100,000 population (age adjusted), almost three and a half times the best group rate (that for persons with at least some college education) [2]. High school graduates had a rate of 22.4 per 100,000 (age adjusted), almost three times the best group rate.

## Unintentional Injuries

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- The unintentional injury death rate (objective 15-13) increased 13.3% between 1999 and 2007, from 35.3 to 40.0 per 100,000 population (age adjusted), moving away from the Healthy People 2010 target of 17.1 per 100,000 population.
  - Among racial and ethnic groups, the Asian or Pacific Islander population had the lowest (best) rate of unintentional injury deaths, 17.0 per 100,000 population (age adjusted) in 2007. The American Indian or Alaska Native, non-Hispanic black, and non-Hispanic white populations had rates of 55.7, 37.6, and 43.0 deaths per 100,000 population (aged adjusted), respectively. The rate for the American Indian or Alaska Native population was almost three and a half times the best group rate (that for the Asian or Pacific Islander population); the rate for the non-Hispanic black population was more than twice the best group rate; and the rate for the non-Hispanic white population was about two and a half times the best rate [2].
  - Females had a lower (better) unintentional injury death rate than males, 25.8 deaths per 100,000 population (age adjusted) in 2007. The rate for males, 55.8 per 100,000 (age adjusted), was more than twice the rate for females [2].
  - Among education groups, persons aged 25–64 with at least some college education had the lowest (best) unintentional injury death rate, 18.3 deaths per 100,000 population (age adjusted) in 2002. Persons with less than a high school education had a rate of 61.0 per 100,000 (age
- Motor vehicle crash death rates varied by geographic area. In 2005–07, there were clusters of elevated rates in Appalachian West Virginia, Kentucky, and Tennessee, the Lower Mississippi Delta, and the Mountain West (Figure 15-3).
  - Motor vehicle crash death rates decreased, moving toward the 2010 targets. Motor vehicle crash deaths per 100,000 population (objective 15-15a) declined 6.1% between 1999 and 2007, from 14.7 to 13.8 (age adjusted), moving toward the target of 8.0. Motor vehicle crash deaths per 100 million vehicle miles travelled (objective 15-15b) declined 18.8% between 1998 and 2008, from 1.6 to 1.3, moving toward the target of 0.8.
  - The disparity patterns for motor vehicle crash death rates (objective 15-15a) were very similar to those for unintentional injury death rates, described above. Among racial and ethnic groups, the Asian or Pacific Islander population had the lowest (best) rate, 7.0 per 100,000 population (age adjusted). The American Indian or Alaska Native, non-Hispanic black, and non-Hispanic white populations had rates of 22.5, 14.1, and 14.2 per 100,000 (age adjusted) in 2007, respectively. The rate for the American Indian or Alaska Native population was more than three times the best group rate; the rates for the non-Hispanic black and non-Hispanic white populations were about twice the best group rate [2].
  - Females had a lower (better) motor vehicle crash death rate than males, 7.9 per 100,000 population (age adjusted) in 2007. The rate for males, 19.9 per 100,000 (age adjusted), was approximately two and a half times that for females [2].
  - Among education groups, persons aged 25–64 with at least some college education had the lowest (best) rate of motor vehicle crash deaths, 8.4 per 100,000 population (age adjusted) in 2002. High school graduates and persons with less than a high school education had rates of 22.3 and 26.0 per 100,000 (age adjusted), respectively. The rate for high school graduates was more than two and a half times the best group rate, whereas the rate for persons with less than a high school education was more than three times the best group rate [2].
- Motor vehicle death rates varied by geographic area. In 2005–07, there were clusters of higher rates in Kentucky, South Florida, and the Mountain West. Several areas met the Healthy People 2010 target (Figure 15-4).

adjusted), almost three and a half times the best group rate; whereas high school graduates had a rate of 50.0 per 100,000 (age adjusted), more than two and a half times the best rate [2].

- Unintentional injury death rates varied by geographic area. In 2005–07, there were clusters of elevated rates in Appalachian West Virginia, Kentucky, and Tennessee, the Lower Mississippi Delta, and the Mountain West (Figure 15-3).

- Motor vehicle crash death rates decreased, moving toward the 2010 targets. Motor vehicle crash deaths per 100,000 population (objective 15-15a) declined 6.1% between 1999 and 2007, from 14.7 to 13.8 (age adjusted), moving toward the target of 8.0. Motor vehicle crash deaths per 100 million vehicle miles travelled (objective 15-15b) declined 18.8% between 1998 and 2008, from 1.6 to 1.3, moving toward the target of 0.8.
- The disparity patterns for motor vehicle crash death rates (objective 15-15a) were very similar to those for unintentional injury death rates, described above. Among racial and ethnic groups, the Asian or Pacific Islander population had the lowest (best) rate, 7.0 per 100,000 population (age adjusted). The American Indian or Alaska Native, non-Hispanic black, and non-Hispanic white populations had rates of 22.5, 14.1, and 14.2 per 100,000 (age adjusted) in 2007, respectively. The rate for the American Indian or Alaska Native population was more than three times the best group rate; the rates for the non-Hispanic black and non-Hispanic white populations were about twice the best group rate [2].
- Females had a lower (better) motor vehicle crash death rate than males, 7.9 per 100,000 population (age adjusted) in 2007. The rate for males, 19.9 per 100,000 (age adjusted), was approximately two and a half times that for females [2].
- Among education groups, persons aged 25–64 with at least some college education had the lowest (best) rate of motor vehicle crash deaths, 8.4 per 100,000 population (age adjusted) in 2002. High school graduates and persons with less than a high school education had rates of 22.3 and 26.0 per 100,000 (age adjusted), respectively. The rate for high school graduates was more than two and a half times the best group rate, whereas the rate for persons with less than a high school education was more than three times the best group rate [2].

- Motor vehicle death rates varied by geographic area. In 2005–07, there were clusters of higher rates in Kentucky, South Florida, and the Mountain West. Several areas met the Healthy People 2010 target (Figure 15-4).

- The nonfatal motor vehicle crash-related injury rate (objective 15-17) declined 34.7% between 1998 and 2008, from 1,181 to 771 per 100,000 population, exceeding the 2010 target of 933 per 100,000.
- The use of safety belts (objective 15-19) increased 25.4% between 1999 and 2009, from 67% to 84%, moving toward the 2010 target of 89%. However, there was no improvement in the use of child restraints (objective 15-20). As in 2002, the baseline year for this objective, in 2009, 88% of children aged 7 years and under were properly restrained in child safety seats. The number of states that adopted graduated driver licensing laws (objective 15-22) increased from 23 states in 1999 to 50 states (including the District of Columbia) in 2009, moving toward the target of 51 (50 states and the District of Columbia).
- The residential fire death rate (objective 15-25) declined 10.0% between 1999 and 2007, from 1.0 to 0.9 per 100,000 population (age adjusted), moving toward the 2010 target of 0.2 per 100,000.
- The use of smoke alarms in residences also increased. The proportion of persons living in residences with functioning alarms on every floor (objective 15-26a) and the proportion of residences with functioning alarms on every floor (objective 15-26b) both increased 3.4% between 1998 and 2003, from 88% to 91% (age adjusted for objective 15-26a), moving toward the Healthy People 2010 targets of 100%.
- The death rate from unintentional falls (objective 15-27) increased 45.8% between 1999 and 2007, from 4.8 to 7.0 per 100,000 population (age adjusted), moving away from the 2010 target of 3.3 per 100,000.
  - Among racial and ethnic groups, the non-Hispanic black population had the lowest (best) rates of deaths from unintentional falls, 3.5 per 100,000 population (age adjusted) in both 1999 and 2007. The rates for the non-Hispanic white population were 5.0 per 100,000 (age adjusted) in 1999 and 7.6 in 2007. In 2007, the rate for the non-Hispanic white population was more than twice that of the non-Hispanic black population [2]. Between 1999 and 2007, the disparity between the non-Hispanic white and non-Hispanic black populations increased 74 percentage points [3].
  - Among education groups, persons aged 25–64 with at least some college education had the lowest (best) death rate from unintentional falls, 1.3 per 100,000 population (age adjusted) in 2002. The rates for high school graduates and persons with less than a high school education were 2.6 and 3.1 per 100,000 (age adjusted), respectively. The rate for high school graduates was twice the best group rate, whereas the rate for persons with less than a high school education was almost two and a half times the best group rate [2].
- Hospitalization rates for hip fractures among women and men aged 65 and over (objectives 15-28a and b) each decreased 22% between 1998 and 2007, from 1,055.8 to 823.5 per 100,000 population (age adjusted) for women and from 592.7 to 464.9 per 100,000 (age adjusted) for men. The hospitalization rate for women moved toward the 2010 target of 416.0 per 100,000, whereas the rate for men exceeded the target 474.0 per 100,000.

## Violence

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- The homicide rate did not change significantly over the decade. In 1999, the baseline year for this objective (15-32), the homicide rate was 6.0 per 100,000 population (age adjusted), compared with a rate of 6.1 in 2007 [1].
  - Among racial and ethnic groups, the Asian or Pacific Islander population had the lowest (best) rate of deaths from homicide, 2.3 per 100,000 population (age adjusted) in 2007. The rates for the American Indian or Alaska Native, Hispanic or Latino, and non-Hispanic black populations were 6.5, 6.9, and 21.8 per 100,000 (age adjusted), respectively. The rate for the American Indian or Alaska Native population was almost three times the best group rate; the rate for the Hispanic or Latino population was three times the best group rate; and the rate for the non-Hispanic black population was about nine and a half times the best group rate [2].
  - The non-Hispanic white population had the lowest (best) rate of deaths from homicide at baseline, 2.9 deaths per 100,000 (age adjusted) in 1999, whereas the Asian or Pacific Islander population had the best rate at the most recent data point, 2.3 per 100,000 (age adjusted) in 2007. The non-Hispanic black population had rates of 20.7 and 21.8 per 100,000 (age adjusted) in 1999 and 2007, respectively. Between 1999 and 2007, the disparity between the non-Hispanic black population and the group with the best rate (non-Hispanic white in 1999; Asian or Pacific Islander in 2007) increased 234 percentage points [3].
  - Females had a lower (better) homicide rate than males, 2.5 per 100,000 population (age adjusted) in 2007. The rate for males was 9.6 per 100,000 (age adjusted), nearly four times the rate for females [2].
  - Among education groups, persons aged 25–64 with at least some college education had the lowest (best) rate of deaths from homicide, 2.6 per 100,000 population (age adjusted). The rates for high school graduates and persons with less than a high school education were 10.5 and 16.0 per 100,000 (age adjusted), respectively. High school graduates had a rate that was approximately four times the best group rate; the rate for persons

with less than a high school education was more than six times the best group rate [2].

- Physical assault by intimate partners (objective 15-34) decreased 36.1% between 1998 and 2009, from 3.6 to 2.3 per 1,000 population aged 12 years and over, exceeding the 2010 target of 2.7 per 1,000 population.
- Rape or attempted rape (objective 15-35) declined 66.7% between 1998 and 2009, from 0.9 to 0.3 per 1,000 population aged 12 years and over, exceeding the 2010 target of 0.8 per 1,000 population.
- Sexual assault other than rape (objective 15-36) declined 66.7% between 1998 and 2009, from 0.6 to 0.2 per 1,000 population aged 12 years and over, exceeding the 2010 target of 0.4 per 1,000 population.
- Physical assaults (objective 15-37) declined 47.6% between 1998 and 2008, from 31.1 to 16.3 per 1,000 population aged 12 years and over, moving toward the 2010 target of 13.6 per 1,000 population.
- Physical fighting among students in grades 9–12 (objective 15-38) declined 13.9% between 1999 and 2009, from 36% to 31%, exceeding the 2010 target of 32%.

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## Summary of Progress

➤ Figure 15-1 presents a quantitative assessment of progress in achieving the Healthy People 2010 objectives for Injury and Violence Prevention [1]. Data to measure progress toward target attainment were available for 43 objectives. Of these:

- Eight objectives (15-12, 15-17, 15-28b, 15-33a, 15-34 through 15-36, and 15-38) met or exceeded their Healthy People 2010 targets.
- Twenty-four objectives moved toward their targets. A statistically significant difference between the baseline and the final data points was observed for eight of these objectives (15-15a, 15-19, 15-25, 15-26a and b, 15-28a, 15-29, and 15-37). No significant differences were observed for nine objectives (15-2, 15-3, 15-5, 15-7, 15-14, 15-18, 15-21, 15-30, and 15-39); and data to test the significance of the difference were unavailable for seven objectives (15-6, 15-10, 15-11, 15-15b, 15-16, 15-22, and 15-24).
- Two objectives (15-20 and 15-31a) showed no change.
- Nine objectives moved away from their targets. A statistically significant difference between the baseline and final data points was observed for six of these objectives (15-1, 15-8, 15-9, 15-13, 15-27, and 15-31b). No significant differences were

observed for two objectives (15-31c and 15-32); and data to test the significance of the difference were unavailable for one objective (15-33b).

- Three objectives (15-4 and 15-23a and b) had no follow-up data available to measure progress.
- Figure 15-2 displays health disparities in Injury and Violence Prevention from the best group rate for each characteristic at the most recent data point [2]. It also displays changes in disparities from baseline to the most recent data point [3].
  - Of the 14 objectives with statistically significant racial and ethnic health disparities of 10% or more, the Asian or Pacific Islander population had the unique best rate for five objectives (15-3, 15-8, 15-13, 15-15a, and 15-32). The non-Hispanic white population had the best rate for four objectives (15-4, 15-26a, 15-37, and 15-38) and the white population had the best rate for one objective (15-12). The Hispanic or Latino population had the unique best rate for two objectives (15-25 and 15-29). The non-Hispanic black population had the best rate for one objective (15-27). The Asian or Pacific Islander and Hispanic or Latino populations both had the best rate for one objective (15-9). The Asian population had the best rate for one objective (15-16) with racial and ethnic health disparities of 10% or more, but without available data to assess statistical significance.

- Females had the better group rate for all 16 of the objectives with statistically significant health disparities of 10% or more by sex (objectives 15-1, 15-3, 15-4, 15-8, 15-9, 15-12 through 15-14, 15-15a, 15-25, 15-27, 15-29, 15-32, and 15-37 through 15-39) and one objective with health disparities of 10% or more by sex that lacked data to assess statistical significance (objective 15-16). Males had the better rate for one objective with health disparities of 10% or more by sex that lacked data to assess statistical significance (objective 15-33a).
- Persons with at least some college education had the best rate for 10 of the 11 objectives with statistically significant health disparities of 10% or more by education level (objectives 15-3, 15-8, 15-9, 15-13, 15-15a, 15-25, 15-26a, 15-27, 15-29, and 15-32). High school graduates had the best rate for one objective (objective 15-4).
- Persons living in urban or metropolitan areas had the better rate for the one objective with statistically significant health disparities of 10% or more by geographic location (objective 15-29).
- Health disparities of 100% or more among racial and ethnic populations, by sex, and by education level were observed for a number of objectives in this Focus Area. Changes in disparities over time also were observed. Many of these disparities were discussed in the Highlights, above.

## Transition to Healthy People 2020

For Healthy People 2020, the focus of the Injury and Violence Prevention objectives has been expanded to include a broader range of types of injuries and violence and improved strategies for prevention, surveillance, and reducing the consequences of injuries. The Injury and Violence Prevention objectives primarily assess the rates of unintentional and violence-related injuries of varying severity, prevention including individual behaviors and State laws, and surveillance systems. See [HealthyPeople.gov](#) for a complete list of Healthy People 2020 topics and objectives.

The Healthy People 2020 Injury and Violence Prevention Topic Area objectives can be grouped into three sections:

- Injury prevention
- Unintentional injury prevention
- Violence prevention.

The differences between the Healthy People 2010 objectives and those included in Healthy People 2020 are summarized below:

- The Healthy People 2020 Injury and Violence Prevention Topic Area has a total of 65 objectives, nine of which are developmental, whereas the Healthy People 2010 Injury and Violence Prevention Focus Area had 46 objectives [4].
- Twenty-two Healthy People 2010 objectives were retained “as is” [5]. These include: nonfatal traumatic brain injury hospitalizations (objective 15-1); nonfatal spinal cord injury hospitalizations (objective 15-2); firearm-related deaths (objective 15-3); nonfatal firearm-related injuries (objective 15-5); unintentional injury deaths (objective 15-13); nonfatal unintentional injuries (objective 15-14); motor vehicle crash-related deaths per population (objective 15-15a); motor vehicle crash-related deaths per vehicle miles traveled (objective 15-15b); pedestrian deaths (objective 15-16); nonfatal motor vehicle crash-related injuries (objective 15-17); nonfatal pedestrian injuries (objective 15-18); safety belt use (objective 15-19); motorcycle helmet use (objective 15-21); States with bicycle helmet laws (objective 15-24); residential fire deaths (objective 15-25); unintentional drowning deaths (objective 15-29); schools requiring students to wear appropriate protective gear in physical education (objective 15-31a) and intramural activities or physical activity clubs (objective 15-31c); homicides (objective 15-32); physical assaults (objective 15-37); physical fighting among adolescents (objective 15-38); and weapon carrying by adolescents on school property (objective 15-39).

➤ Thirteen Healthy People 2010 objectives were modified to create 19 Healthy People 2020 objectives, five of which are developmental [4,6].

- The threshold for the developmental objective on state-level child fatality review for deaths due to external causes (objective 15-6) was decreased from 100% to 90% of such deaths.
- A more reliable data source was selected for nonfatal poisonings (objective 15-7).
- Deaths from suffocation (objective 15-9) was modified to create three Healthy People 2020 objectives to track only those that are unintentional among all persons, infants, and older adults (the age groups at highest risk).
- Emergency department and hospital discharge surveillance of ICD-9-CM external cause of injury codes (objectives 15-10 and 15-11) were modified to better assess how well states are performing.
- Emergency department visits for injuries (objective 15-12) was modified to eliminate the double counting of the more severe injuries that will be tracked by the new objectives for nonfatal injury hospitalizations and injury deaths.
- Child restraint use (objective 15-20) was modified to separately accommodate the four age-specific guidelines for types of child restraints.
- States with graduated driver licensing laws (objective 15-22) was modified to track those states with laws rated “good” based on the criteria set by the Insurance Institute for Highway Safety.
- Maltreatment of children (objective 15-33a) was modified to track only nonfatal maltreatment and avoid overlap with the child maltreatment fatalities objective (15-33b). The methodology for counting cases also was revised for both objectives.
- The data source for physical assault by intimate partners, rape or attempted rape, and sexual assault other than rape (objectives 15-34 through 15-36), was changed to enable the prevalence of such violence to be monitored within a health context rather than a crime context, allowing for greater disclosure. Sexual assault other than rape (objective 15-36) was divided into two Healthy People 2020 objectives to separately track abusive sexual contact other than rape or attempted rape and noncontact sexual abuse. The Healthy People 2020 data source is new and, therefore, these four objectives are developmental.

➤ Two Healthy People 2010 objectives were retained “as is” and also modified to create six Healthy People 2020 objectives [5,6]:

- Poisoning deaths among all ages (objective 15-8) was retained. This objective also was modified to create three other Healthy People 2020 objectives:

- 1) poisoning deaths among adults aged 35–54 (the age group at highest risk); and unintentional or undetermined poisoning deaths among 2) all persons and 3) adults aged 35–54.
- Deaths from unintentional falls (objective 15-27) was retained. This objective also was modified to track unintentional fall-related deaths among older adults aged 65 and over, the age group at highest risk.
  - Seven Healthy People 2010 objectives were archived [7]. Objectives tracking improper firearm storage in homes (objective 15-4), regular bicycle helmet use among children and adults (objectives 15-23a and b), persons living in residences with functional smoke alarms on every floor (objective 15-26a), and residences with functional smoke alarms on every floor (objective 15-26b) were archived due to the lack of an ongoing national data source. The objective regarding emergency department visits for dog bites (objective 15-30) was archived due to the low rate and lack of effective prevention programs. The objective on schools requiring students to wear appropriate protective gear in interscholastic sports (objective 15-31b) was archived because it was near the maximum achievement level.
- Two objectives that track hospitalizations for hip fractures among older adults (separately for females and males, objectives 15-28a and b) were moved from the Healthy People 2010 Injury and Violence Prevention Focus Area to the Healthy People 2020 Arthritis, Osteoporosis, and Chronic Back Topic Area.
- Eighteen new objectives, four of which are developmental, were added to the Healthy People 2020 Injury and Violence Prevention Topic Area:
- Eight new injury objectives include fatal injuries, hospitalizations visits for nonfatal injuries, fatal traumatic brain injuries, emergency department visits for nonfatal traumatic brain injuries, fatal spinal cord injuries, a developmental objective on state-level child fatality review for sudden and unexpected infant deaths, population with trauma care access, and land mass with trauma care access.
  - Two new unintentional injury objectives include pedalcyclist deaths and sports and recreation injuries.
  - Eight new violence objectives include nonfatal physical assault injuries, bullying among adolescents, nonfatal intentional self harm injuries, children's exposure to violence, three developmental objectives on types of intimate partner violence (sexual violence, psychological abuse, and stalking), and States with national violent death reporting systems.

[Appendix D](#), “A Crosswalk Between Objectives From Healthy People 2010 to Healthy People 2020,” summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

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## Data Considerations

Beginning in 2003, education data for mortality objectives 15-3, 15-8, 15-9, 15-13, 15-15a, 15-25, 15-27, 15-29, and 15-32 from the National Vital Statistics System were suppressed. The educational attainment item was changed in the new U.S. Standard Certificate of Death in 2003 to be consistent with the Census Bureau data and to improve the ability to identify specific types of educational degrees. Many states, however, are still using the 1989 version of the U.S. Standard Certificate of Death, which focuses on highest school grade completed. As a result, educational attainment data collected using the 2003 version are not comparable with data collected using the 1989 version [8].

In general, data on educational attainment are presented for persons aged 25 and over, consistent with guidance given by the Census Bureau. However, because of the requirements of the different data systems, the age groups used to calculate educational attainment for any specific objective may differ from the age groups used to report the data for other Healthy People 2010 objectives, as well as from select populations within the same objective. Therefore, the reader is urged to exercise caution in interpreting the data by educational attainment shown in the Health Disparities Table. See *Healthy People 2010: General Data Issues*, referenced below.

The age-adjusted rate of initial emergency department visits for injuries (objective 15-12) was significantly lower in 2007 (91 visits per 1,000 population) than in 2006 (108 visits per 1,000 population); see DATA2010. In contrast, a flat trend in the rate of initial emergency department visits for injuries was observed between 2001 and 2006 [9]. Some of the observed rate decrease from 2006 to 2007 may be related to a modification in the data collection instrument. In 2007, the checkbox for “initial visit for problem” under the “episode of care” item in the National Hospital Ambulatory Medical Care Survey patient record form was reinstated. This item was used in 1992 and 2001–04, but removed from the patient record in 2005. A proxy for initial visits was imputed in 2005–06. The item was restored in 2007. The percentage of unknown or blank responses was higher in 2007 than in 2001–04.

The rate of child maltreatment (objective 15-33a) was significantly lower in 2007–09 than in 2000–06, even though the rates were relatively stable during these

separate time periods. Between 2006 and 2007, the rate of victimization dropped from 12.1 to 10.6 per 1,000 children, a change of 12%. This decrease can be attributed to several factors including the increase in children who received an “other” disposition which is mostly used for low- or medium-risk cases, the decrease in the percentage of children who received a substantiated or indicated disposition, and the decrease in the number of children who received an investigation or assessment. It is not possible to tell whether this decrease indicates a trend until more data are collected [10].

Additional information on data issues is available from the following sources:

- All Healthy People 2010 tracking data can be found in the Healthy People 2010 database, DATA2010, available from <http://wonder.cdc.gov/data2010/>.
- Detailed information about the data and data sources used to support these objectives can be found in the Operational Definitions on the DATA 2010 website, available from <http://wonder.cdc.gov/data2010/focusod.htm>.
- More information on statistical issues related to Healthy People tracking and measurement can be found in the [Technical Appendix](#) and in *Healthy People 2010: General Data Issues*, which is available in the General Data Issues section of the NCHS Healthy People website under Healthy People 2010; see [http://www.cdc.gov/nchs/healthy\\_people/hp2010/hp2010\\_data\\_issues.htm](http://www.cdc.gov/nchs/healthy_people/hp2010/hp2010_data_issues.htm).

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## References and Notes

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1. Displayed in the Progress Chart (Figure 15-1), the percent of targeted change achieved expresses the difference between the baseline and the final value relative to the initial difference between the baseline and the Healthy People 2010 target. As such, it is a relative measure of progress toward attaining the Healthy People 2010 target. See the [Reader's Guide](#) for more information. When standard errors were available, the difference between the baseline and the final value was tested at the 0.05 level of significance. See the Figure 15-1 footnotes, as well as the [Technical Appendix](#), for more detail.
2. Information about disparities among select populations is shown in the Health Disparities Table (Figure 15-2). Disparity from the best group rate is defined as the percent difference between the best group rate and each of the other group rates for a characteristic. For example, racial and ethnic health disparities are measured as the percent difference between the best racial and ethnic group rate and each of the other racial and ethnic group rates. Similarly, disparities by sex are measured as the percent difference between the better group rate (e.g., female) and the rate for the other group (e.g., male). Some objectives are expressed in terms of favorable events or conditions that are to be increased, while others are expressed in terms of adverse events or conditions that are to be reduced. To facilitate comparison of health disparities across different objectives, disparity is measured only in terms of adverse events or conditions. For comparability across objectives, objectives that are expressed in terms of favorable events or conditions are re-expressed using the adverse event or condition for the purpose of computing disparity, but they are not otherwise restated or changed. For example, objective 1-1, to increase the proportion of persons with health insurance (e.g., 72% of the American Indian or Alaska Native population under age 65 had some form of health insurance in 2008), is expressed in terms of the percentage of persons without health insurance (e.g.,  $100\% - 72\% = 28\%$  of the American Indian or Alaska Native population under age 65 did not have any form of health insurance in 2008) when the disparity from the best group rate is calculated. See the [Reader's Guide](#) for more information. When standard errors were available, the difference between the best group rate and each of the other group rates was tested at the 0.05 level of significance. See the Figure 15-2 footnotes, as well as the [Technical Appendix](#), for more detail.
3. The change in disparity is estimated by subtracting the disparity at baseline from the disparity at the most recent data point and, therefore, is expressed in percentage points. See the [Reader's Guide](#) for more information. When standard errors were available, the change in disparity was tested at the 0.05 level of significance. See the Figure 15-2 footnotes, as well as the [Technical Appendix](#), for more detail.
4. To be included in Healthy People 2010, an objective must have a national data source that provides a baseline and at least one additional data point for tracking progress. Some objectives lacked baseline data at the time of their development but had a potential data source and were considered of sufficient national importance to be included in Healthy People. These are called “developmental” objectives. When data become available, a developmental objective is moved to measurable status and a Healthy People target can be set.
5. As of the Healthy People 2020 launch, Healthy People 2020 objectives that were retained “as is” from Healthy People 2010 had no change in the numerator or denominator definitions, the data source(s), or the data collection methodology. These include objectives that were developmental in Healthy People

- 2010 and are developmental in Healthy People 2020, and for which no numerator information is available.
6. As of the Healthy People 2020 launch, objectives that were modified from Healthy People 2010 had some change in the numerator or denominator definitions, the data source(s), or the data collection methodology. These include objectives that went from developmental in Healthy People 2010 to measurable in Healthy People 2020, or vice versa.
  7. Archived objectives had at least one data point in Healthy People 2010 but were not carried forward into Healthy People 2020.
  8. Xu JQ, Kochanek KD, Murphy SL, Tejada-Vera B. Deaths: Final data for 2007. National vital statistics reports; vol 58 no 19. Hyattsville, MD: National Center for Health Statistics. 2010. Available from [http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58\\_19.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_19.pdf).
  9. The presence of a monotonic increasing or decreasing trend in the underlying measure was tested with the nonparametric Mann-Kendall test; then the slope of a linear trend was estimated with the nonparametric Sen's method. See [Technical Appendix](#) for more information.
  10. Department of Health and Human Services (DHHS), Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. Child Maltreatment 2009. Washington, D.C.; 2010. Available from [http://www.acf.hhs.gov/programs/cb/stats\\_research/index.htm#can](http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#can).

## Comprehensive Summary of Objectives: Injury and Violence Prevention

Objective	Description	Data Source
15-1	Nonfatal traumatic brain injury hospitalizations (age adjusted, per 100,000 population)	National Hospital Discharge Survey (NHDS), CDC, NCHS.
15-2	Nonfatal spinal cord injury hospitalizations (age adjusted, per 100,000 population)	National Hospital Discharge Survey (NHDS), CDC, NCHS.
15-3	Firearm-related deaths (age adjusted, per 100,000 population)	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-4	Persons in homes with improperly stored firearms (loaded and unlocked) (age adjusted, 18+ years)	National Health Interview Survey (NHIS), CDC, NCHS.
15-5	Nonfatal firearm-related injuries (per 100,000 population)	National Electronic Injury Surveillance System (NEISS), Consumer Product Safety Commission (CPSC).
15-6	State-level child fatality review for deaths due to external causes ( $\leq 17$ years, no. states and D.C.)	Michigan Public Health Institute; National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-7	Emergency department visits for nonfatal poisonings (age adjusted, per 100,000 population)	National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
15-8	Deaths from poisoning (age adjusted, per 100,000 population)	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-9	Deaths from suffocation (age adjusted, per 100,000 population)	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-10	Emergency department routine collection of ICD-9-CM external causes of injury codes (no. states and D.C.)	External Cause of Injury Survey, American Public Health Association (APHA).
15-11	Hospital discharge mandated use of ICD-9-CM external causes of injury codes (no. states and D.C.)	External Cause of Injury Survey, American Public Health Association (APHA).
15-12	Initial emergency department visits for injuries (age adjusted, per 1,000 population)	National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
15-13	Deaths from unintentional injuries (age adjusted, per 100,000 population)	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-14	Nonfatal unintentional injuries (age adjusted, per 100,000 population)	National Electronic Injury Surveillance System—All Injury Program (NEISS-AIP), CDC, NCIPC; Consumer Product Safety Commission (CPSC).

## Comprehensive Summary of Objectives: Injury and Violence Prevention (continued)

Objective	Description	Data Source
15-15a	Deaths from motor vehicle crashes—Age adjusted, per 100,000 population	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-15b	Deaths from motor vehicle crashes—Per 100 million vehicle miles traveled	Fatality Analysis Reporting System (FARS), Department of Transportation (DOT).
15-16	Pedestrian deaths on public roads (per 100,000 population)	Fatality Analysis Reporting System (FARS), Department of Transportation (DOT).
15-17	Nonfatal motor vehicle crash-related injuries on public roads (per 100,000 population)	General Estimates System (GES), Department of Transportation (DOT).
15-18	Nonfatal pedestrian injuries on public roads (per 100,000 population)	General Estimates System (GES), Department of Transportation (DOT).
15-19	Safety belt use	National Occupant Protection Use Survey (NOPUS), Department of Transportation (DOT).
15-20	Child restraint use ( $\leq 7$ years)	National Occupant Protection Use Survey (NOPUS), Department of Transportation (DOT).
15-21	Motorcycle helmet use	National Occupant Protection Use Survey (NOPUS), Department of Transportation (DOT).
15-22	Graduated driver licensing laws (no. states and D.C.)	U.S. Licensing Systems for Young Drivers, Insurance Institute for Highway Safety.
15-23a	Regular bicycle helmet use—Children (1–15 years)	National Bike Helmet Use Survey, Consumer Product Safety Commission (CPSC).
15-23b	Regular bicycle helmet use—Adults (16+ years)	National Bike Helmet Use Survey, Consumer Product Safety Commission (CPSC).
15-24	Bicycle helmet laws for riders $< 15$ years (no. states and D.C.)	Bicycle Helmet Safety Institute.
15-25	Residential fire deaths (age adjusted, per 100,000 population)	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-26a	Functional smoke alarms in residences—Persons living in residences with alarms on every floor (age adjusted)	National Health Interview Survey (NHIS), CDC, NCHS.
15-26b	Functional smoke alarms in residences—Proportion of residences with alarms on every floor	National Health Interview Survey (NHIS), CDC, NCHS.
15-27	Deaths from unintentional falls (age adjusted, per 100,000 population)	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-28a	Hospitalizations for hip fractures (age adjusted per 100,000 standard population, 65+ years)—Females	National Hospital Discharge Survey (NHDS), CDC, NCHS.
15-28b	Hospitalizations for hip fractures (age adjusted, per 100,000 population, 65+ years)—Males	National Hospital Discharge Survey (NHDS), CDC, NCHS.
15-29	Unintentional drownings (age adjusted, per 100,000 population)	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-30	Emergency department visits for dog bite injuries (age adjusted, per 100,000 population)	National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
15-31a	Schools requiring students to wear appropriate protective gear—Physical education	School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.
15-31b	Schools requiring students to wear appropriate protective gear—Interscholastic sports	School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.
15-31c	Schools requiring students to wear appropriate protective gear—Intramural activities or physical activity clubs	School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

## Comprehensive Summary of Objectives: Injury and Violence Prevention (continued)

Objective	Description	Data Source
15-32	Homicides (age adjusted, per 100,000 population)	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
15-33a	Maltreatment of children (per 1,000 population, <18 years)	National Child Abuse and Neglect Data System (NCANDS), ACF.
15-33b	Child maltreatment fatalities (per 100,000 population, <18 years)	National Child Abuse and Neglect Data System (NCANDS), ACF.
15-34	Physical assault by intimate partners (per 1,000 population, 12+ years)	National Crime Victimization Survey (NCVS), Department of Justice (DOJ), Bureau of Justice Statistics (BJS).
15-35	Rape or attempted rape (per 1,000 population, 12+ years)	National Crime Victimization Survey (NCVS), Department of Justice (DOJ), Bureau of Justice Statistics (BJS).
15-36	Sexual assault other than rape (per 1,000 population, 12+ years)	National Crime Victimization Survey (NCVS), Department of Justice (DOJ), Bureau of Justice Statistics (BJS).
15-37	Physical assaults (per 1,000 population, 12+ years)	National Crime Victimization Survey (NCVS), Department of Justice (DOJ), Bureau of Justice Statistics (BJS).
15-38	Physical fighting among students (grades 9–12)	Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
15-38	Physical fighting among students (grades 9–12)	Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
15-39	Weapon carrying by students on school property (grades 9–12)	Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

Figure 15-1. Progress Toward Target Attainment for Focus Area 15: Injury and Violence Prevention

Objective	Percent of targeted change achieved <sup>2</sup> 0 25 50 75 100	2010 Target	Baseline (Year)	Final (Year)	Baseline vs. Final		
					Difference <sup>3</sup>	Statistically Significant <sup>4</sup>	Percent Change <sup>5</sup>
15-1. Nonfatal traumatic brain injury hospitalizations (age adjusted, per 100,000 population)		53.6	71.7 (1998)	85.6 (2007)	13.9	Yes	19.4%
15-2. Nonfatal spinal cord injury hospitalizations (age adjusted, per 100,000 population)	56.5%	2.6	4.9 (1998)	3.6 (2007)	-1.3	No	-26.5%
15-3. Firearm-related deaths (age adjusted, per 100,000 population)	1.5%	3.6	10.3 (1999)	10.2 (2007)	-0.1	No	-1.0%
15-5. Nonfatal firearm-related injuries (per 100,000 population)	20.0%	9.1	23.6 (1997)	20.7 (2007)	-2.9	No	-12.3%
15-6. State-level child fatality review for deaths due to external causes ( $\leq 17$ years, no. States and D.C.)	9.8%	51	10 (2000)	14 (2007)	4	Not tested	40.0%
15-7. Emergency department visits for nonfatal poisonings (age adjusted, per 100,000 population)	38.5%	288.6	343.6 (1997)	322.4 (2007)	-21.2	No	-6.2%
15-8. Deaths from poisoning (age adjusted, per 100,000 population)		1.5	7.1 (1999)	13.1 (2007)	6.0	Yes	84.5%
15-9. Deaths from suffocation (age adjusted, per 100,000 population)		3.3	4.2 (1999)	4.9 (2007)	0.7	Yes	16.7%
15-10. Emergency department routine collection of ICD-9-CM external causes of injury codes (no. States and D.C.)	35.9%	51	12 (1998)	26 (2007)	14	Not tested	116.7%
15-11. Hospital discharge mandated use of ICD-9-CM external causes of injury codes (no. States and D.C.)	11.1%	51	24 (1998)	27 (2007)	3	Not tested	12.5%
15-12. Initial emergency department visits for injuries (age adjusted, per 1,000 population)	Target met at baseline and exceeded at final	107	107 (2001)	91 (2007)	-16	Yes	-15.0%
15-13. Deaths from unintentional injuries (age adjusted, per 100,000 population)		17.1	35.3 (1999)	40.0 (2007)	4.7	Yes	13.3%
15-14. Nonfatal unintentional injuries (age adjusted, per 100,000 population)	71.4%	9,000.0	9,767.4 (2000)	9,219.3 (2008)	-548.1	No	-5.6%
15-15. Deaths from motor vehicle crashes							
a. Age adjusted, per 100,000 population	13.4%	8.0	14.7 (1999)	13.8 (2007)	-0.9	Yes	-6.1%
b. Per 100 million vehicle miles traveled	37.5%	0.8	1.6 (1998)	1.3 (2008)	-0.3	Not tested	-18.8%
15-16. Pedestrian deaths on public roads (per 100,000 population)	80.0%	1.4	1.9 (1998)	1.5 (2008)	-0.4	Not tested	-21.1%

Figure 15-1. Progress Toward Target Attainment for Focus Area 15: Injury and Violence Prevention (continued)

Objective	Percent of targeted change achieved <sup>2</sup>	2010 Target	Baseline (Year)	Final (Year)	Baseline vs. Final		
					Differ-ence <sup>3</sup>	Statistically Significant <sup>4</sup>	Percent Change <sup>5</sup>
15-17. Nonfatal motor vehicle crash-related injuries on public roads (per 100,000 population)	165.3% 	933	1,181 (1998)	771 (2008)	-410	Yes	-34.7%
15-18. Nonfatal pedestrian injuries on public roads (per 100,000 population)	42.9% 	19	26 (1998)	23 (2008)	-3	No	-11.5%
15-19. Safety belt use	77.3% 	89%	67% (1999)	84% (2009)	17	Yes	25.4%
15-20. Child restraint use ( $\leq 7$ years)	0.0% 	100%	88% (2002)	88% (2009)	0	No	0.0%
15-21. Motorcycle helmet use	90.0% 	68%	58% (2002)	67% (2009)	9	No	15.5%
15-22. Graduated driver licensing laws (no. States and D.C.)	96.4% 	51	23 (1999)	50 (2009)	27	Not tested	117.4%
15-24. Bicycle helmet laws for riders $< 15$ years (no. States and D.C.)	20.0% 	51	11 (1999)	19 (2009)	8	Not tested	72.7%
15-25. Residential fire deaths (age adjusted, per 100,000 population)	12.5% 	0.2	1.0 (1999)	0.9 (2007)	-0.1	Yes	-10.0%
15-26. Functional smoke alarms in residences							
a. Persons living in residences with alarms on every floor (age adjusted)	25.0% 	100%	88% (1998)	91% (2003)	3	Yes	3.4%
b. Proportion of residences with alarms on every floor	25.0% 	100%	88% (1998)	91% (2003)	3	Yes	3.4%
15-27. Deaths from unintentional falls (age adjusted, per 100,000 population)		3.3	4.8 (1999)	7.0 (2007)	2.2	Yes	45.8%
15-28. Hospitalizations for hip fractures (age adjusted, per 100,000 population, 65+ years)							
a. Females	36.3% 	416.0	1,055.8 (1998)	823.5 (2007)	-232.3	Yes	-22.0%
b. Males	107.7% 	474.0	592.7 (1998)	464.9 (2007)	-127.8	No	-21.6%
15-29. Unintentional drownings (age adjusted, per 100,000 population)	37.5% 	0.7	1.5 (1999)	1.2 (2007)	-0.3	Yes	-20.0%
15-30. Emergency department visits for dog bite injuries (age adjusted, per 100,000 population)	76.6% 	113.0	150.2 (1997)	121.7 (2007)	-28.5	No	-19.0%

Figure 15-1. Progress Toward Target Attainment for Focus Area 15: Injury and Violence Prevention (continued)

Objective	Percent of targeted change achieved <sup>2</sup>				Baseline vs. Final		
		2010 Target	Baseline (Year)	Final (Year)	Differ-ence <sup>3</sup>	Statistically Significant <sup>4</sup>	Percent Change <sup>5</sup>
15-31. Schools requiring students to wear appropriate protective gear							
a. Physical education	0.0%	85%	77% (2000)	77% (2006)	0	No	0.0%
b. Interscholastic sports		100%	98% (2000)	94% (2006)	-4	Yes	-4.1%
c. Intramural activities or physical activity clubs		97%	88% (2000)	86% (2006)	-2	No	-2.3%
15-32. Homicides (age adjusted, per 100,000 population)		2.8	6.0 (1999)	6.1 (2007)	0.1	No	1.7%
15-33a. Maltreatment of children (per 1,000 population, <18 years)		10.2	12.7 (1998)	10.1 (2009)	-2.6	Not tested	-20.5%
15-33b. Child maltreatment fatalities (per 100,000 population, <18 years)		1.5	1.7 (1998)	2.4 (2009)	0.7	Not tested	41.2%
15-34. Physical assault by intimate partners (per 1,000 population, 12+ years)		2.7	3.6 (1998)	2.3 (2009)	-1.3	Yes	-36.1%
15-35. Rape or attempted rape (per 1,000 population, 12+ years)		0.8	0.9 (1998)	0.3 (2009)	-0.6	Yes	-66.7%
15-36. Sexual assault other than rape (per 1,000 population, 12+ years)		0.4	0.6 (1998)	0.2 (2009)	-0.4	Yes	-66.7%
15-37. Physical assaults (per 1,000 population, 12+ years)		13.6	31.1 (1998)	16.3 (2008)	-14.8	Yes	-47.6%
15-38. Physical fighting among students (grades 9–12)		32%	36% (1999)	31% (2009)	-5	Yes	-13.9%
15-39. Weapon carrying by students on school property (grades 9–12)		4.9%	6.9% (1999)	5.6% (2009)	-1.3	No	-18.8%

#### NOTES

See the [Reader's Guide](#) for more information on how to read this figure. See DATA2010 at <http://wonder.cdc.gov/data2010> for all HealthyPeople 2010 tracking data. Tracking data are not available for objectives 15-4, 15-23a, and 15-23b.

#### FOOTNOTES

<sup>1</sup> Movement away from target is not quantified using the percent of targeted change achieved. See [Technical Appendix](#) for more information.

<sup>2</sup> Percent of targeted change achieved =  $\frac{\text{Final value} - \text{Baseline value}}{\text{Healthy People 2010 target} - \text{Baseline value}} \times 100$ .

<sup>3</sup> Difference = Final value – Baseline value. Differences between percents (%) are measured in percentage points.

<sup>4</sup> When estimates of variability are available, the statistical significance of the difference between the final value and the baseline value is assessed at the 0.05 level. See [Technical Appendix](#) for more information.

<sup>5</sup> Percent change =  $\frac{\text{Final value} - \text{Baseline value}}{\text{Baseline value}} \times 100$ .

Figure 15-1. Progress Toward Target Attainment for Focus Area 15: Injury and Violence Prevention (continued)

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DATA SOURCES

- 15-1-15-2. National Hospital Discharge Survey (NHDS), CDC, NCHS.
- 15-3. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-5. National Electronic Injury Surveillance System (NEISSL), Consumer Product Safety Commission (CPSC).
- 15-6. Michigan Public Health Institute; National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-7. National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
- 15-8-9. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-10-15-11. External Cause of Injury Survey, American Public Health Association (APHA).
- 15-12. National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
- 15-13. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-14. National Electronic Injury Surveillance System—All Injury Program (NEISSL-AIP); CDC, NCIPC; Consumer Product Safety Commission (CPSC).
- 15-15a. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-15b. Fatality Analysis Reporting System (FARS), Department of Transportation (DOT).
- 15-16. Fatality Analysis Reporting System (FARS), Department of Transportation (DOT).
- 15-17-15-18. General Estimates System (GES), Department of Transportation (DOT).
- 15-19-15-21. National Occupant Protection Use Survey (NOPUS), Department of Transportation (DOT).
- 15-22. U.S. Licensing Systems for Young Drivers, Insurance Institute for Highway Safety.
- 15-24. Bicycle Helmet Safety Institute.
- 15-25. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-26a-b. National Health Interview Survey (NHIS), CDC, NCHS.
- 15-27. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-28a-b. National Hospital Discharge Survey (NHDS), CDC, NCHS.
- 15-29. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-30. National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
- 15-31a-c. School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.
- 15-32. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-33a-b. National Child Abuse and Neglect Data System (NCANDS), ACF.
- 15-34-15-37. National Crime Victimization Survey (NCVS), Department of Justice (DOJ), Bureau of Justice Statistics (BJS).
- 15-38-15-39. Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

**Figure 15-2. Health Disparities Table for Focus Area 15: Injury and Violence Prevention**

Disparities from the best group rate for each characteristic at the most recent data point and changes in disparity from the baseline to the most recent data point.

Population-based objective	Race and Ethnicity						Sex	Education			Location		
	American Indian or Alaska Native	Asian	Native Hawaiian or Other Pacific Islander	Two or more races	Hispanic or Latino	Black, not Hispanic	White, not Hispanic	Female	Male	Less than high school	High school graduate	At least some college	Summary index
15-1. Nonfatal traumatic brain injury hospitalizations (age adjusted, per 100,000 population) (1998, 2007)*				i	B <sup>i</sup>		B						
15-2. Nonfatal spinal cord injury hospitalizations (age adjusted, per 100,000 population) (1998, 2007)*				i	i								
15-3. Firearm-related deaths (age adjusted, per 100,000 population) (1999, 2007) <sup>1*</sup>		B <sup>ii</sup>		↑	↑	↑	↑	B	↑	↑	B		↑
15-4. Persons in homes with improperly stored firearms (loaded and unlocked) (age adjusted, 18+ years) (1998)*	ii		b		B		B		B	B	B		
15-5. Nonfatal firearm-related injuries (per 100,000 population) (1997, 2007)*													
15-7. Emergency department visits for nonfatal poisonings (age adjusted, per 100,000 population) (1997, 2007)*			i	i									
15-8. Deaths from poisoning (age adjusted, per 100,000 population) (1999, 2007) <sup>1*</sup>		B <sup>ii</sup>		↓	↓	↑		B	↓	↑	B		↑
15-9. Deaths from suffocation (age adjusted, per 100,000 population) (1999, 2007) <sup>1*</sup>	↑	B <sup>ii,iii</sup>	B	↓	↑		↑	B		↑	B		↑
15-12. Initial emergency department visits for injuries (age adjusted, per 1,000 population) (2001, 2007)*				↑ <sup>i</sup>	B <sup>i</sup>		B		B				
15-13. Deaths from unintentional injuries (age adjusted, per 100,000 population) (1999, 2007) <sup>1*</sup>		B <sup>ii</sup>		↓	↑			B		↑	↑	B	↑
15-14. Nonfatal unintentional injuries (age adjusted, per 100,000 population) (2000, 2008)*								B					
15-15a. Deaths from motor vehicle crashes (age adjusted, per 100,000 population) (1999, 2007) <sup>1*</sup>		B <sup>ii</sup>			↑			B	↑	↑	↑	B	↑
15-16. Pedestrian deaths on public roads (per 100,000 population) (1998, 2008) <sup>2†</sup>	↑	B		↑	↑		↑	B					
15-17. Nonfatal motor vehicle crash-related injuries on public roads (per 100,000 population) (1998, 2008)*								B					
15-18. Nonfatal pedestrian injuries on public roads (per 100,000 population) (1998, 2008)*								B	iv				
15-25. Residential fire deaths (age adjusted, per 100,000 population) (1999, 2007) <sup>1*</sup>		b <sup>ii</sup>	B					B	↓	↑	↑	B	

Figure 15-2. Health Disparities Table for Focus Area 15: Injury and Violence Prevention (continued)

Population-based objective	Race and Ethnicity						Summary index	Sex	Education			Location		
	American Indian or Alaska Native	Asian	Native Hawaiian or Other Pacific Islander	Two or more races	Hispanic or Latino	Black, not Hispanic	White, not Hispanic		Female	Male	Less than high school	High school graduate	At least some college	
15-26a. Persons living in residences with functional smoke alarms on every floor (age adjusted) (1998, 2003) <sup>3*</sup>	b					B		B	B <sup>iii</sup>		↑	B	↑	Urban or metropolitan
15-27. Deaths from unintentional falls (age adjusted, per 100,000 population) (1999, 2007) <sup>1*</sup>		↓ <sup>ii</sup>		↑	B	↑		↑	B	↓		B		Rural or nonmetropolitan
15-28a. Hospitalizations for hip fractures—Females (age adjusted, per 100,000 population, 65+ years) (1998, 2007)*					i	i								
b. Hospitalizations for hip fractures—Males (age adjusted, per 100,000 population, 65+ years) (1998, 2007)*					i	i								
15-29. Unintentional drownings (age adjusted, per 100,000 population) (1999, 2007) <sup>1*</sup>		ii		B <sup>ii</sup>	↓			B	↓			B		B
15-30. Emergency department visits for dog bite injuries (age adjusted, per 100,000 population) (1997, 2007)*					i	i								
15-32. Homicides (age adjusted, per 100,000 population) (1999, 2007) <sup>1*</sup>		B <sup>ii,iii</sup>		↑	↑	↑		↑	B	↑		B		Urban or metropolitan
15-33a. Maltreatment of children (per 1,000 population, <18 years) (1998, 2009) <sup>†</sup>										B				
15-33b. Child maltreatment fatalities (per 100,000 population, <18 years) (1998, 2009) <sup>†</sup>									B					
15-34. Physical assault by intimate partners (per 1,000 population, 12+ years) (1998, 2009) <sup>4*</sup>														
15-35. Rape or attempted rape (per 1,000 population, 12+ years) (1998, 2009) <sup>4*</sup>					i	i								
15-36. Sexual assault other than rape (per 1,000 population, 12+ years) (1998, 2009) <sup>4,5*</sup>					i	i								
15-37. Physical assaults (per 1,000 population, 12+ years) (1998, 2008) <sup>4*</sup>				b		B		B	↓					
15-38. Physical fighting among students (grades 9–12) (1999, 2009)*								B	↓					
15-39. Weapon carrying by students on school property (grades 9–12) (1999, 2009)*				↓↓	b	B <sup>iii</sup>		B <sup>iii</sup>	IV					

Figure 15-2. Health Disparities Table for Focus Area 15: Injury and Violence Prevention (continued)

NOTES

See DATA2010 at <http://wonder.cdc.gov/data2010> for all Healthy People 2010 tracking data. Disparity data are either unavailable or not applicable for objectives 15-6, 15-10, 15-11, 15-15b, 15-19 through 15-22, 15-23a and b, 15-24, 15-26b, and 15-31a through c.

Years in parentheses represent the baseline and most recent data years (if available).

Disparity from the best group rate is defined as the percent difference between the best group rate and each of the other group rates for a characteristic (e.g., race and ethnicity). The summary index is the average of these percent differences for a characteristic. Change in disparity is estimated by subtracting the disparity at baseline from the disparity at the most recent data point. Change in the summary index is estimated by subtracting the summary index at baseline from the summary index at the most recent data point. See [Technical Appendix](#) for more information.

**LEGEND**

The “best” group rate at the most recent data point.	B	The group with the best rate for specified characteristic.	b	Most favorable group rate for specified characteristic, but reliability criterion not met.		Reliability criterion for best group rate not met, or data available for only one group.
<b>Percent difference from the best group rate</b>						
<b>Disparity from the best group rate</b> at the most recent data point.		Less than 10%, or difference not statistically significant (when estimates of variability are available).		10%–49%	50%–99%	100% or more
<b>Changes in disparity</b> over time are shown when:						
(a) disparities data are available at both baseline and most recent time points; (b) data are not for the group(s) indicated by “B” or “b” at either time point; and (c) the change is greater than or equal to 10 percentage points and statistically significant, or when the change is greater than or equal to 10 percentage points and estimates of variability were not available.		See <a href="#">Technical Appendix</a> .		↑ 10–49 points	↑↑ 50–99 points	↑↑↑ 100 points or more
<b>Increase</b> in disparity (percentage points)						
				↑ 10–49 points	↑↑ 50–99 points	↑↑↑ 100 points or more
<b>Decrease</b> in disparity (percentage points)						
				↓ 10–49 points	↓↓ 50–99 points	↓↓↓ 100 points or more
<b>Availability of Data</b>		Data not available.		Characteristic not selected for this objective.		

**FOOTNOTES**

\* Measures of variability were available. Thus, the variability of best group rates was assessed, and statistical significance was tested. Disparities of 10% or more are displayed when the differences from the best group rate are statistically significant at the 0.05 level. Changes in disparities over time are indicated by arrows when the changes are greater than or equal to 10 percentage points and are statistically significant at the 0.05 level. See [Technical Appendix](#).

† Measures of variability were not available. Thus, the variability of best group rates was not assessed, and statistical significance could not be tested. Nonetheless, disparities and changes in disparities over time are displayed according to their magnitude. See [Technical Appendix](#).

<sup>1</sup> Most recent data by education level are for 2002.

<sup>2</sup> Baseline data by race and ethnicity are for 2000.

<sup>3</sup> Baseline data by race and ethnicity are for 2003.

<sup>4</sup> Baseline data by race and ethnicity are for 2003.

<sup>5</sup> Most recent data by race and ethnicity are for 2008.

<sup>i</sup> Data include persons of Hispanic origin.

<sup>ii</sup> Data are for Asian or Pacific Islander.

<sup>iii</sup> The group with the best rate at the most recent data point is different from the group with the best rate at baseline. Both rates met the reliability criterion. See [Technical Appendix](#).

<sup>iv</sup> Reliability criterion for best group rate not met, or data available for only one group, at baseline. Change in disparity cannot be assessed. See [Technical Appendix](#).

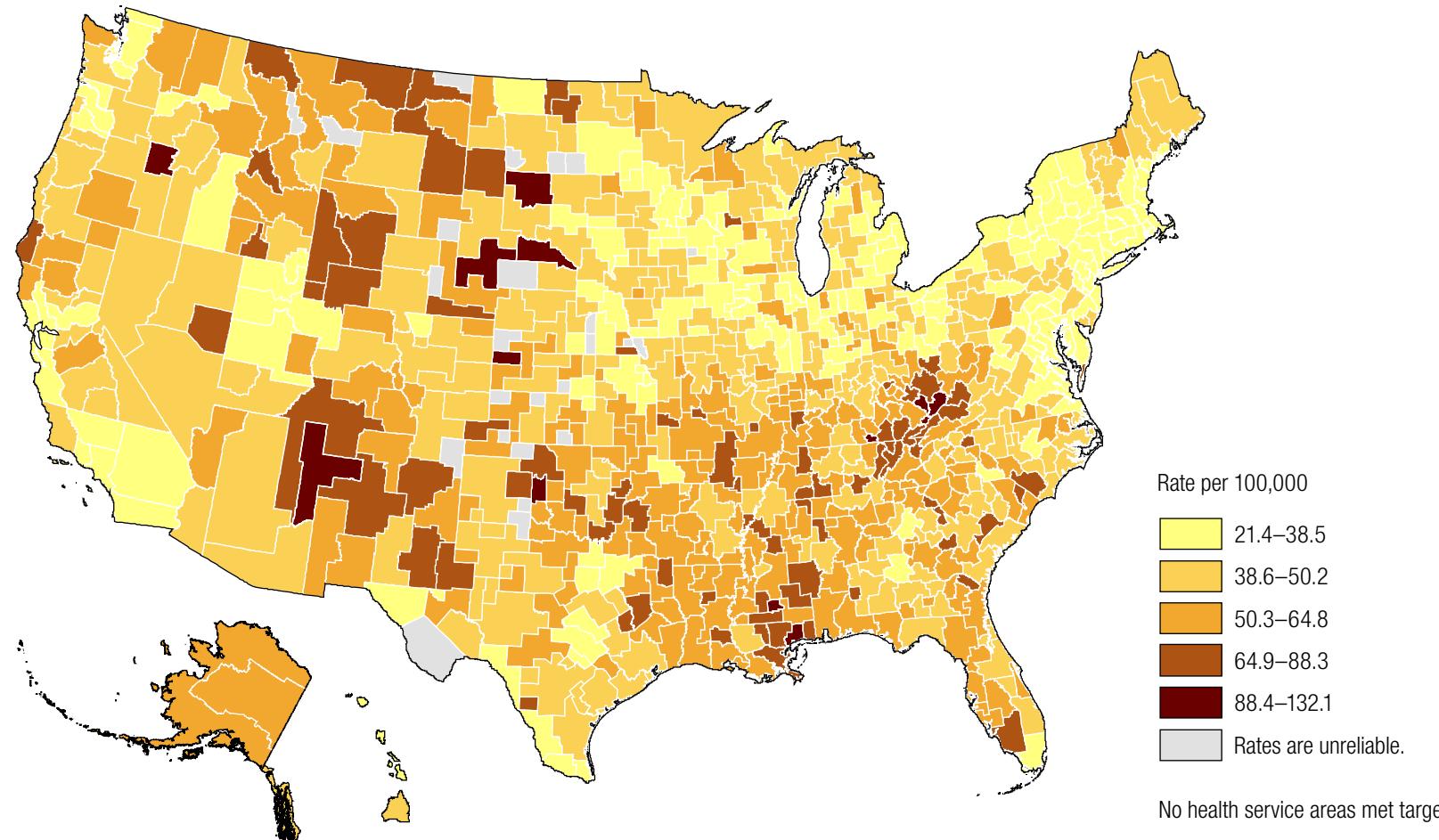
Figure 15-2. Health Disparities Table for Focus Area 15: Injury and Violence Prevention (continued)

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DATA SOURCES

- 15-1-15-2. National Hospital Discharge Survey (NHDS), CDC, NCHS.
- 15-3. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-4. National Health Interview Survey (NHIS), CDC, NCHS.
- 15-5. National Electronic Injury Surveillance System (NEISS), Consumer Product Safety Commission (CPSC).
- 15-7. National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
- 15-8-15-9. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-12. National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
- 15-13. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-14. National Electronic Injury Surveillance System—All Injury Program (NEISS-AIP): CDC, NCIPC; Consumer Product Safety Commission (CPSC).
- 15-15a. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-16. Fatality Analysis Reporting System (FARS), Department of Transportation (DOT).
- 15-17-15-18. General Estimates System (GES), Department of Transportation (DOT).
- 15-25. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-26a. National Health Interview Survey (NHIS), CDC, NCHS.
- 15-27. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-28a-b. National Hospital Discharge Survey (NHDS), CDC, NCHS.
- 15-29. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-30. National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.
- 15-32. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
- 15-33a-b. National Child Abuse and Neglect Data System (NCANDS), ACF.
- 15-34-15-37. National Crime Victimization Survey (NCVS), Department of Justice (DOJ), Bureau of Justice Statistics (BJS).
- 15-38-15-39. Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

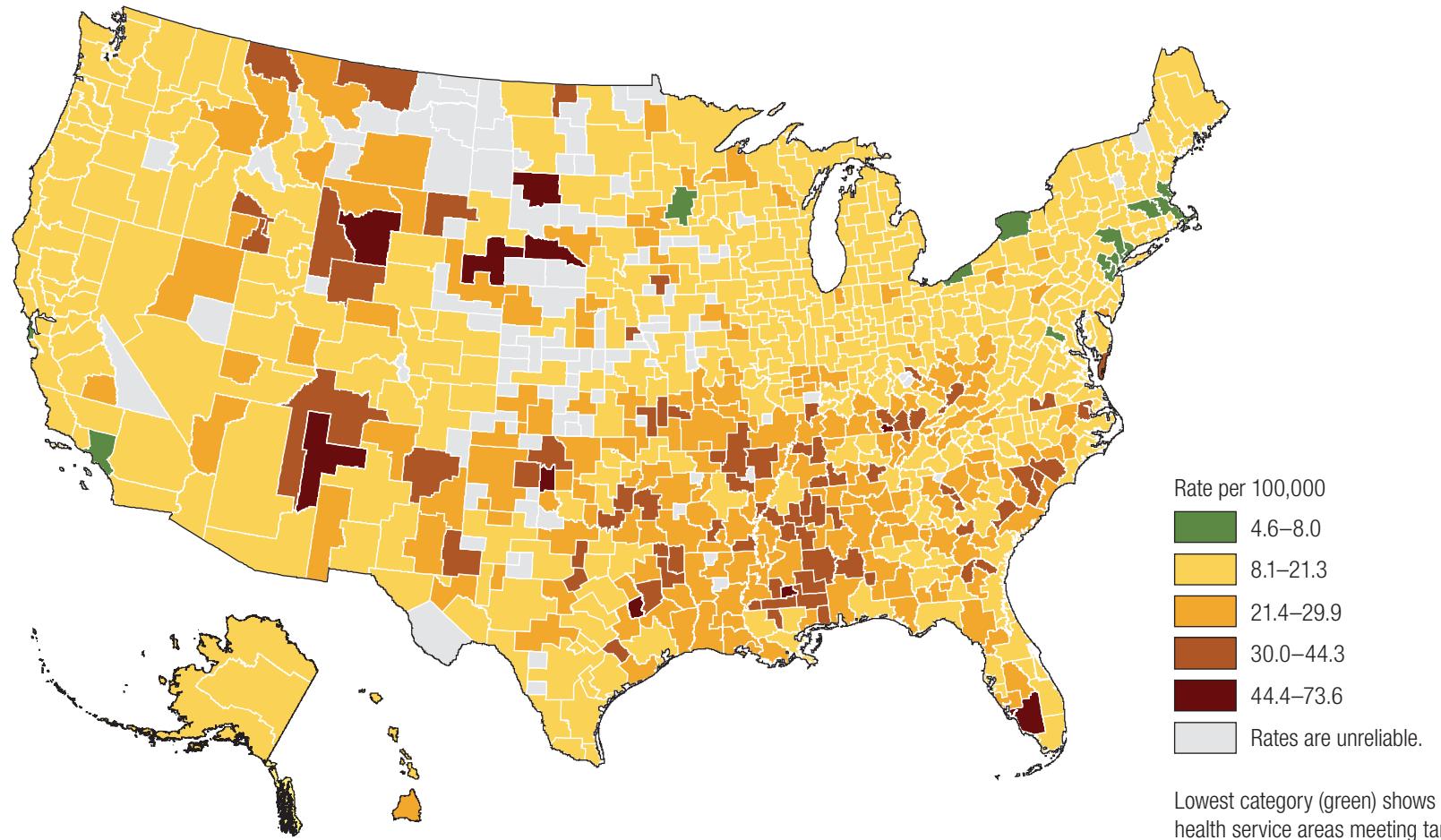
Figure 15-3. Deaths From Unintentional Injuries, 2005–07  
Healthy People 2010 objective 15-13 • Target = 17.1 per 100,000



NOTES: Data are for ICD-10 codes V01–X59 and Y85–Y86 reported as underlying cause. Rates are age adjusted to the 2000 standard population and are displayed by a Jenks classification for U.S. health service areas.

SOURCE: National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.

Figure 15-4. Deaths From Motor Vehicle Crashes, 2005–07  
*Healthy People 2010 objective 15-15a • Target = 8.0 per 100,000*



NOTES: Data are for ICD-10 codes V02–V04 (.1–.9), V09.2, V12–V14 (.3–.9), V19 (.4–.6), V20–V28 (.3–.9), V29 (.4–.9), V30–V39 (.4–.9), V40–V49 (.4–.9), V50–V59 (.4–.9), V60–V69 (.4–.9), V70–V79 (.4–.9), V80 (.3–.5), V81.1, V82.1, V83–V86 (.0–.3), V87 (.0–.8), and V89.2 reported as underlying cause.

Rates are age adjusted to the 2000 standard population and are displayed by modified Jenks classification for U.S. health service areas.

SOURCE: National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.