



# Occupational Safety and Health >

## CHAPTER 20

### Lead Agency

Centers for Disease Control and Prevention

### Contents

Goal .....	20-3
Highlights .....	20-3
Summary of Progress .....	20-3
Transition to Healthy People 2020 .....	20-4
Data Considerations.....	20-5
Notes.....	20-5
Comprehensive Summary of Objectives.....	20-6
Progress Chart.....	20-8
Health Disparities Table.....	20-10



# GOAL:

Promote the health and safety of people at work through prevention and early intervention.



The objectives in this chapter track work-related deaths, injuries, and selected health conditions, including hearing loss, elevated blood lead levels, and worksite stress reduction.

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>.

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## Highlights

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- › Substantial progress was achieved for objectives in this Focus Area during the past decade [1]. Almost two-thirds (64%) of the Occupational Safety and Health objectives achieved their Healthy People 2010 targets. Only three objectives (20-1d through e, and 20-9) did not make progress toward the 2010 targets (Figure 20-1). Health disparities among racial and ethnic groups and by sex were observed for one objective (Figure 20-2) [2].
- › Work-related injury deaths among workers aged 16 years and over in all industries (objective 20-1a) declined 26.7% between 1998 and 2009, from 4.5 to 3.3 deaths per 100,000 workers, moving toward the 2010 target of 3.2 deaths per 100,000 workers. Work-related injury deaths among workers aged 16 years and over in mining (objective 20-1b) declined 46.2%

between 1998 and 2009, from 23.6 to 12.7 per 100,000, exceeding the 2010 target of 16.5. Similarly, work-related injury deaths among workers aged 16 years and over in construction (objective 20-1c) declined 33.1%, from 14.5 to 9.7 per 100,000, exceeding the target of 10.1.

- Female workers had a lower (better) rate of work-related injury deaths in all industries than male workers, 0.6 deaths per 100,000 in 2009. The rate for male workers, 5.5 deaths per 100,000, was more than nine times the rate for female workers [2].
- › Work-related injuries per 100 full-time workers declined for all industry groups (objectives 20-2a through g), exceeding the 2010 targets. Work-related injuries in all industries (objective 20-2a) declined 45.2% between 1998 and 2009, from 6.2 to 3.4 injuries per 100 full-time workers, exceeding the 2010 target of 4.3. Similar results were observed for individual industry sectors (e.g., construction, health services). Statistically significant downward trends in injuries were observed between the baseline (1997 or 1998) and 2009 for all industry sectors [3].
- › Work-related homicides among workers aged 16 years and over (objective 20-5) declined 20% between 1998 and 2006, from 0.5 to 0.4 per 100,000 workers, meeting the 2010 target of 0.4. Work-related assaults among workers aged 16 years and over (objective 20-6) declined 66.4% between 1998 and 2009, from 1.10 to 0.37 per 100 workers, exceeding the 2010 target of 0.78.

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## Summary of Progress

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Figure 20-1 presents a quantitative assessment of progress in achieving the Healthy People 2010 objectives for Occupational Safety and Health [1]. Data to measure progress toward target attainment were available for 22 objectives. Of these:

- Fourteen objectives (20-1b and c, 20-2a through g, 20-3, 20-5, 20-6, 20-8, and 20-11) met or exceeded their Healthy People 2010 targets.
  - Five objectives moved toward their targets. A statistically significant difference between the baseline and the final data points was observed for one of these objectives (20-7). Data to test the significance of the difference were unavailable for four objectives (20-1a, 20-2h, 20-4, and 20-10).
  - Three objectives (20-1d, 20-1e, and 20-9) moved away from their targets, but data to test the significance of the difference between the baseline and the final data points were unavailable for these objectives.
- › Figure 20-2 displays health disparities in Occupational Safety and Health 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 [4]. Data on health disparities were only available for objective 20-1a, work-related injury deaths for all industries:
- The non-Hispanic black population had a lower rate of work-related injury deaths than the Hispanic or Latino or the non-Hispanic white populations.
  - Females had a lower rate of work-related injury deaths than males.

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## Transition to Healthy People 2020

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The Healthy People 2020 Occupational Safety and Health Topic Area consists of fewer objectives than those included in Healthy People 2010. See [HealthyPeople.gov](http://HealthyPeople.gov) for a complete list of Healthy People 2020 topics and objectives.

The Healthy People 2020 objectives can be grouped into several sections:

- › Work-related fatalities
- › Work-related injuries
- › Objectives that target specific occupational hazards.

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

- › The Healthy People 2020 Occupational Safety and Health Topic Area has 16 objectives, whereas the Healthy People 2010 Focus Area had 22 objectives.
- › Eleven Healthy People 2010 objectives were retained “as is” [5].

- The titles of two of the five objectives addressing reduced deaths from work-related injuries were modified. ‘Reduce deaths from work-related injury—Transportation’ (objective 20-1d) was changed to ‘—Transportation and warehousing’; and ‘Reduce deaths from work-related injury—Agriculture, forestry, and fishing’ (objective 20-1e) was changed to ‘—Agriculture, forestry, fishing, and hunting’.
  - Reduce the rate of injury and illness cases involving days away from work due to overexertion or repetitive motion (objective 20-3).
  - Reduce pneumoconiosis deaths (objective 20-4).
  - Reduce deaths from work-related homicides (objective 20-5).
  - Reduce the proportion of persons who have elevated blood lead concentrations from work exposures (objective 20-7).
  - Reduce occupational skin diseases or disorders among full-time workers (objective 20-8).
  - Reduce new cases of work-related, noise-induced hearing loss (objective 20-11).
- › Ten Healthy People 2010 objectives were modified [6].
- Objectives for nonfatal work-related injuries were reduced to a single objective tracking all industries (objectives 20-2a through 20-2g).
  - The targeted population for adolescent workers was expanded from age 15–17 years to age 15–19 years (objective 20-2h).
  - The objective to reduce work-related assaults will be tracked with a new data source (objective 20-6).
  - The objective to increase the proportion of employees who have access to workplace programs that prevent or reduce employee stress will be tracked with a new data source (objective 20-9).
- › Seven Healthy People 2010 objectives were archived [7]. Nonfatal work-related injury rates by specific industry sector were not substantially different than the overall rate. Existing data sources for needle stick injuries were not adequate to accurately track the objective because there is no single national sharps injury surveillance system. Another limitation is underreporting of injuries. It is estimated that approximately one half of exposures are reported, with reporting rates varying by occupational group.
- › Reduce nonfatal work-related injuries:
- Construction (objective 20-2b)
  - Health services (objective 20-2c)
  - Agriculture, forestry, and fishing (objective 20-2d)

- Transportation (objective 20-2e)
- Mining (objective 20-2f)
- Manufacturing (objective 20-2g).
- Reduce occupational needle stick injuries among hospital-based health care workers (objective 20-10).

- › One new objective was added to track work-related injuries treated in emergency departments.

[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

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A number of objectives in this Focus Area are tracked through the data sources maintained by the Bureau of Labor Statistics. Work-related injury deaths (objective 20-1) are monitored through the Census of Fatal Occupational Injuries and nonfatal injuries and illnesses are tracked through the Survey of Occupational Injuries and Illnesses. Over the past decade, industry data from these two sources were classified according to several different classification systems. From 1998 to 2002, data were classified using the 1987 Standard Industrial Classification (SIC) Manual. Data from 2003 to 2008 were classified using the 2002 North American Industry Classification System (NAICS). Industry data after 2008 are classified using the 2007 NAICS. The substantial differences between the SIC and NAICS result in breaks in series. From 1998 to 2005 rates were employment-based, whereas from 2006 to 2009 rates were hours-based. Effective January 1, 2002, the Occupational Safety and Health Administration (OSHA) revised its requirements for recording occupational injuries and illnesses. Due to the changes in classification systems and the revised OSHA reporting requirements, users are urged to use caution when examining trend data for the past decade.

Education and income are the primary measures of socioeconomic status in Healthy People 2010. Most data systems used in Healthy People 2010 define income as a family’s income before taxes. To facilitate comparisons among groups and over time, while adjusting for family size and for inflation, Healthy People 2010 categorizes income using the poverty thresholds developed by the Census Bureau. Thus, the three categories of family income that are primarily used are:

- › Poor—below the Federal poverty level
- › Near poor—100% to 199% of the Federal poverty level
- › Middle/high income—200% or more of the Federal poverty level.

These categories may be overridden by considerations specific to the data system, in which case they are modified as appropriate. See *Healthy People 2010: General Data Issues*, referenced below.

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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## Notes

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1. Displayed in the Progress Chart (Figure 20-1), 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 20-1 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 20-2). 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 20-2 footnotes, as well as the [Technical Appendix](#), for more detail.

3. 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.

4. 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 20-2 footnotes, as well as the [Technical Appendix](#), for more detail.
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.

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## Comprehensive Summary of Objectives: Occupational Safety and Health

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Objective	Description	Data Source
20-1a	Work-related injury deaths—All industries (per 100,000 workers, 16+ years)	Census of Fatal Occupational Injuries (CFOI), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-1b	Work-related injury deaths—Mining (per 100,000 workers, 16+ years)	Census of Fatal Occupational Injuries (CFOI), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-1c	Work-related injury deaths—Construction (per 100,000 workers, 16+ years)	Census of Fatal Occupational Injuries (CFOI), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-1d	Work-related injury deaths—Transportation (per 100,000 workers, 16+ years)	Census of Fatal Occupational Injuries (CFOI), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-1e	Work-related injury deaths—Agriculture, forestry, and fishing (per 100,000 workers, 16+ years)	Census of Fatal Occupational Injuries (CFOI), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-2a	Work-related injuries—All industries (per 100 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-2b	Work-related injuries—Construction (per 100 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).

## Comprehensive Summary of Objectives: Occupational Safety and Health (continued)

Objective	Description	Data Source
20-2c	Work-related injuries—Health services (per 100 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-2d	Work-related injuries—Agricultural, forestry, and fishing (per 100 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-2e	Work-related injuries—Transportation (per 100 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-2f	Work-related injuries—Mining (per 100 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-2g	Work-related injuries—Manufacturing (per 100 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-2h	Work-related injuries among adolescent workers (per 100 full-time workers, 15–17 years)	National Electronic Injury Surveillance System (NEISS); Consumer Product Safety Commission (CPSC); CDC, NIOSH.
20-3	Overexertion or repetitive motion injuries (per 100,000 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-4	Pneumoconiosis deaths (number, 15+ years)	National Occupational Respiratory Mortality System (NORMS), CDC, NIOSH.
20-5	Work-related homicides (per 100,000 workers, 16+ years)	Census of Fatal Occupational Injuries (CFOI), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-6	Work-related assaults (per 100 workers, 16+ years)	National Crime Victimization Survey (NCVS), Department of Justice (DOJ), Bureau of Justice Statistics (BJS).
20-7	Elevated blood lead levels— $\geq 25$ $\mu\text{g}/\text{dL}$ (per 100,000 employed, 16+ years)	Adult Blood Lead Epidemiology and Surveillance Program (ABLES), CDC, NIOSH.
20-8	Occupational skin diseases or disorders (per 100,000 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
20-9	Worksite stress reduction programs—Worksites with 50+ employees	National Survey of Worksite Health Promotion Activities (NSWHP), Association for Worksite Health Promotion (AWHP), and OPHS, ODPHP.
20-10	Needlestick injuries among hospital-based health care workers (thousands)	National Surveillance System for Hospital Health Care Workers (NaSH), CDC, NCPDCID; Exposure Prevention Information Network (EPINet), International Health Care Worker Safety Center, University of Virginia.
20-11	Noise-induced hearing loss, work-related (per 10,000 full-time workers)	Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).

Figure 20-1. Progress Toward Target Attainment for Focus Area 20: Occupational Safety and Health

LEGEND		 Moved away from target <sup>1</sup>	 Moved toward target	 Met or exceeded target								
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>		
20-1. Work-related injury deaths (per 100,000 workers, 16+ years)												
a. All industries	92.3%					3.2	4.5 (1998)	3.3 (2009)	-1.2	Not tested	-26.7%	
b. Mining	153.5%					16.5	23.6 (1998)	12.7 (2009)	-10.9	Not tested	-46.2%	
c. Construction	109.1%					10.1	14.5 (1998)	9.7 (2009)	-4.8	Not tested	-33.1%	
d. Transportation						8.3	11.8 (1998)	12.1 (2009)	0.3	Not tested	2.5%	
e. Agriculture, forestry, and fishing						16.3	23.3 (1998)	26.0 (2009)	2.7	Not tested	11.6%	
20-2. Work-related injuries (per 100 full-time workers)												
a. All industries	147.4%					4.3	6.2 (1998)	3.4 (2009)	-2.8	Yes	-45.2%	
b. Construction	173.1%					6.1	8.7 (1998)	4.2 (2009)	-4.5	Yes	-51.7%	
c. Health services	120.8%					5.5	7.9 (1997)	5.0 (2009)	-2.9	Not tested	-36.7%	
d. Agricultural, forestry, and fishing	108.7%					5.3	7.6 (1998)	5.1 (2009)	-2.5	Yes	-32.9%	
e. Transportation	120.8%					5.5	7.9 (1997)	5.0 (2009)	-2.9	Not tested	-36.7%	
f. Mining	171.4%					3.3	4.7 (1998)	2.3 (2009)	-2.4	Yes	-51.1%	
g. Manufacturing	184.0%					6.0	8.5 (1998)	3.9 (2009)	-4.6	Yes	-54.1%	
20-2h. Work-related injuries among adolescent workers (per 100 full-time workers, 15–17 years)	78.6%					3.5	4.9 (1998)	3.8 (2008)	-1.1	Not tested	-22.4%	
20-3. Overexertion or repetitive motion injuries (per 100,000 full-time workers)	116.0%					338	675 (1997)	284 (2009)	-391	Not tested	-57.9%	
20-4. Pneumoconiosis deaths (number, 15+ years)	71.4%					1,900	2,928 (1997)	2,194 (2007)	-734	Not tested	-25.1%	
20-5. Work-related homicides (per 100,000 workers, 16+ years)	100.0%					0.4	0.5 (1998)	0.4 (2006)	-0.1	Not tested	-20.0%	
20-6. Work-related assaults (per 100 workers, 16+ years)	228.1%					0.78	1.10 (1998)	0.37 (2009)	-0.73	Not tested	-66.4%	

Figure 20-1. Progress Toward Target Attainment for Focus Area 20: Occupational Safety and Health (continued)

Objective	Percent of targeted change achieved <sup>2</sup>	2010 Target	Baseline (Year)	Final (Year)	Baseline vs. Final		
					Difference <sup>3</sup>	Statistically Significant <sup>4</sup>	Percent Change <sup>5</sup>
20-7. Elevated blood lead levels—≥25 µg/dL (per 100,000 employed, 16+ years)	47.9%	0.0	12.1 (1998)	6.3 (2009)	-5.8	Yes	-47.9%
20-8. Occupational skin diseases or disorders (per 100,000 full-time workers)	145.0%	47	67 (1997)	38 (2009)	-29	Not tested	-43.3%
20-9. Worksite stress reduction programs—Worksites with 50+ employees	15%	50%	37% (1992)	25% (2004)	-12	Not tested	-32.4%
20-10. Needlestick injuries among hospital-based health care workers (thousands)	60.0%	269	384 (1998)	315 (2000)	-69	Not tested	-18.0%
20-11. Noise-induced hearing loss, work-related (per 10,000 full-time workers)	100.0%	2.2	3.2 (2004)	2.2 (2009)	-1.0	Yes	-31.3%

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.

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 =  $\frac{\text{Final value} - \text{Baseline value}}{\text{Baseline value}} \times 100$ .

DATA SOURCES

- 20-1a–e. Census of Fatal Occupational Injuries (CFOI), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
- 20-2a–g. Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
- 20-2h. National Electronic Injury Surveillance System (NEISS): Consumer Product Safety Commission (CPSC); CDC, NIOSH.
- 20-3. Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
- 20-4. National Occupational Respiratory Mortality System (NORMS), CDC, NIOSH.
- 20-5. Census of Fatal Occupational Injuries (CFOI), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
- 20-6. National Crime Victimization Survey (NCVS), Department of Justice (DOJ), Bureau of Justice Statistics (BJS).
- 20-7. Adult Blood Lead Epidemiology and Surveillance Program (ABLES), CDC, NIOSH.
- 20-8. Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
- 20-9. National Survey of Worksite Health Promotion Activities (NSWHP), Association for Worksite Health Promotion (AWHP), and OPHS, ODPHP.
- 20-10. National Surveillance System for Hospital Health Care Workers (NaSH), CDC, NCPDCID; Exposure Prevention Information Network (EPINet), International Health Care Worker Safety Center, University of Virginia.
- 20-11. Survey of Occupational Injuries and Illnesses (SOII), Department of Labor (DOL), Bureau of Labor Statistics (BLS).

Figure 20-2. Health Disparities Table for Focus Area 20: Occupational Safety and Health

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		Income				Disability	
	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	Summary index	Female	Male	Poor	Near poor	Middle/high income	Summary index	Persons with disabilities	Persons without disabilities
20-1a. Work-related injury deaths—All industries (per 100,000 workers, 16+ years) (1998, 2009) <sup>1†</sup>					↓	B		↓	B	↓						
20-2h. Work-related injuries among adolescent workers (per 100 full-time workers, 15–17 years) (1998, 2008) <sup>‡</sup>																
20-6. Work-related assaults (per 100 workers, 16+ years) (1998, 2009) <sup>1,2*</sup>																

**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 20-1b through e, 20-2a through g, 20-3 through 20-5, and 20-7 through 20-11.

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.		The group with the best rate for specified characteristic.	
		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.
Percent difference from the best group rate			
Disparity from the best group rate 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
Changes in disparity 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> .	Increase in disparity (percentage points)		
		10–49 points	
			50–99 points
			100 points or more
	Decrease in disparity (percentage points)		
		10–49 points	
			50–99 points
			100 points or more
Availability of Data			
		Data not available.	
			Characteristic not selected for this objective.

Figure 20-2. Health Disparities Table for Focus Area 20: Occupational Safety and Health (continued)

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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](#).
- \* Measures of variability were available only for the most recent data. Thus, the variability of best group rates was assessed only for the most recent data, and statistical significance was tested only for the most recent data. 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 displayed according to their magnitude, since measures of variability were not available at baseline and therefore statistical significance of changes in disparity could not be tested. See [Technical Appendix](#).
- <sup>1</sup> Baseline data by race and ethnicity are for 2000.
- <sup>2</sup> Baseline data by sex are for 2000.

DATA SOURCES

- 20-1a. Census of Fatal Occupational Injuries (CFOI), Department of Labor (DOL), Bureau of Labor Statistics (BLS).
- 20-2h. National Electronic Injury Surveillance System (NEISS): Consumer Product Safety Commission (CPSC); CDC, NIOSH.
- 20-6. National Crime Victimization Survey (NCVS), Department of Justice (DOJ), Bureau of Justice Statistics (BJS).

