Mental Health and Mental Disorders

CHAPTER 18

Co-Lead Agencies

National Institutes of Health
Substance Abuse and Mental Health Services Administration

Contents

GOAL:

Improve mental health and ensure access to appropriate, quality, mental health services.

The objectives in this chapter monitor a broad range of mental health disorders, behaviors, and problems, as well as the availability of a variety of community-based and other treatment programs for persons in need of mental health services.

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]. All but one of the 11 Mental Health and Mental Disorders objectives with data to measure progress moved toward or achieved their Healthy People 2010 targets (Figure 18-1). However, health disparities persisted among racial and ethnic populations, as well as by sex and education level [2]. As discussed below, health disparities of 50% or more were observed for a number of objectives (Figure 18-2).
- The suicide rate (objective 18-1) increased 7.6% between 1999 and 2007, from 10.5 to 11.3 per 100,000 population (age adjusted), moving away from the 2010 target of 4.8 per 100,000. Disparities were observed for a number of population groups, for example:
  - Among racial and ethnic groups, the non-Hispanic black population had the lowest (best) suicide rate, 5.1 per 100,000 population (age adjusted) in 2007. The rates for the American Indian or Alaska Native and the non-Hispanic white populations were 11.5 and 13.5 per 100,000 (age adjusted), respectively. The rate for the American Indian or Alaska Native population was almost two and a half times the best group rate (that for the non-Hispanic black population), whereas the non-Hispanic white rate was more than two and a half times the best group rate [2].
    - The non-Hispanic white population had suicide rates of 12.0 per 100,000 population (age adjusted) in 1999 and 13.5 in 2007, whereas the non-Hispanic black population had rates of 5.7 in 1999 and 5.1 in 2007. The disparity between the non-Hispanic white and non-Hispanic black populations increased 54 percentage points between 1999 and 2007 [3].
  - Females had a lower (better) suicide rate than males, 4.7 per 100,000 population (age adjusted) in 2007. The rate for males was 18.4 per 100,000 (age adjusted), almost four times the rate for females [2].
    - Males had suicide rates of 17.8 per 100,000 population (age adjusted) in 1999 and 18.4 in 2007, whereas females had rates of 4.0 in 1999 and 4.7 in 2007. The disparity between males and females declined 53 percentage points between 1999 and 2007 [3].
  - Among education groups, persons with at least some college education had the lowest (best) suicide rate, 9.9 per 100,000 population (age adjusted) in 2002, whereas high school graduates had a rate of 18.4 per 100,000 (age adjusted), almost twice the best group rate [2].
- Suicide rates varied by geographic region. In 2005–07, the suicide rate was generally higher in the western U.S. than in the rest of the country (Figure 18-3).

- Suicide attempts by students in grades 9–12 that required medical attention (objective 18-2) decreased 26.9% between 1999 and 2009, from 2.6% to 1.9%, moving toward the 2010 target of 1.0%.

- Six objectives exceeded their 2010 targets:
  - The proportion of homeless adults aged 18 and over with mental health problems who received mental health services (objective 18-3) increased 85.2% between 2000 and 2009, from 27% to 50%, exceeding the target of 30%.
  - The proportion of adolescents (students in grades 9–12) who engaged in disordered eating to control their weight (objective 18-5) declined 26.3% between 2001 and 2009, from 19% to 14%, exceeding the target of 16%. Disparities were observed for some population groups, for example:
    - Boys had a lower (better) rate of disordered eating than girls, 10% in 2009, whereas girls had a rate of 19%, almost twice the rate for boys.
  - The proportion of primary care facilities that provided mental health treatment (objective 18-6) increased 12.9% between 2000 and 2009, from 62% to 70%, exceeding the target of 68%.
  - The proportion of children aged 4–17 years with mental health problems who received treatment (objective 18-7) increased 15.0% between 2000 and 2008, from 60% to 69%, exceeding the target of 67%.
  - The proportion of juvenile residential facilities that screened new admissions for mental health problems (objective 18-8) increased 16.0% between 2000 and 2006, from 50% to 58%, exceeding the target of 55%.
  - The proportion of counties served by community-based jail diversion programs for adults with serious mental illness (objective 18-11) more than doubled between 2004 and 2010, from 6.9% to 14.1%, exceeding the target of 7.6%.

- Racial and ethnic health disparities were observed in the treatment of adults for serious mental illness, depression, and schizophrenia (objectives 18-9a through c).
  - Non-Hispanic white adults aged 18 and over had the highest (best) rate of treatment for serious mental illness (objective 18-9a), 68% in 2002, whereas Hispanic or Latino and non-Hispanic black adults had rates of 45% and 51%, respectively. When expressed as persons *not receiving treatment*, the rate for Hispanic or Latino adults was more than one and a half times the rate that for non-Hispanic white adults [2]. The rate for non-Hispanic black adults was about one and a half times the non-Hispanic white rate.
  - Non-Hispanic white adults also had the highest (best) rate of treatment for depression (objective 18-9b), 63% in 2002, whereas Hispanic or Latino and non-Hispanic black adults had rates of 42% and 43%, respectively. When expressed as persons *not receiving treatment*, the rate for Hispanic or Latino adults was more than one and a half times the rate that for non-Hispanic white adults, whereas the rate for non-Hispanic black adults was about one and a half times the non-Hispanic white rate [2].
  - Similarly, non-Hispanic white adults had the highest (best) rate of treatment for schizophrenia (objective 18-9c), 63% in 2002, whereas Hispanic or Latino and non-Hispanic black adults had rates of 42% and 41%, respectively. When expressed as persons *not receiving treatment*, the rates for both groups (Hispanic or Latino and non-Hispanic black adults) were more than one and a half times the rate for non-Hispanic white adults [2].

- Males had a higher (better) employment rate than females for persons with serious mental illness (objective 18-4), 60% vs. 46% in 2002. When expressed as persons with serious mental illness who were *unemployed*, the rate for females was almost one and a half times that for males [2].

Summary of Progress

- Figure 18-1 presents a quantitative assessment of progress in achieving the Healthy People 2010 objectives for Mental Health and Mental Disorders [1]. Data to measure progress toward target attainment were available for 11 objectives. Of these:
  - Six objectives (18-3, 18-5 through 18-8, 18-11) exceeded their Healthy People 2010 targets.
  - Four objectives moved toward their targets. A statistically significant difference between the baseline and the final data points was observed for one of these objectives (18-2). Data to test the significance of the difference were unavailable for the other three objectives (18-12 through 18-14).
  - One objective moved away from the 2010 target. A statistically significant difference between the baseline and final data points was observed for this objective (18-1).

- Six objectives had no follow-up data available to measure progress (objectives 18-4, 18-9a through d, and 18-10).

- Figure 18-2 displays health disparities in Mental Health and Mental Disorders 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].

- Five objectives had statistically significant racial and ethnic health disparities of 10% or more (objectives 18-1, 18-5, and 18-9a, b, and d), and one objective had racial and ethnic health disparities of 10% or more but lacked data to assess statistical significance (objective 18-9c). Of these six objectives, the non-Hispanic white population had the best rate for five objectives (18-5, and 18-9a through d), and the non-Hispanic black population had the best rate for one objective (18-1).
  - Health disparities of 50% to 99% between the non-Hispanic white (best rate) population and the other racial and ethnic populations with data (the Hispanic or Latino and the non-Hispanic black populations) were observed for three treatment-related objectives: the proportion of adults with mental disorders who received treatment for serious mental illness (objective 18-9a), depression (objective 18-9b), and schizophrenia (objective 18-9c); see Highlights, above.
- Females had better rates than males for three of the five objectives with statistically significant health disparities of 10% or more by sex (objectives 18-1, and 18-9a and b). Males had better rates for the remaining two objectives (18-4, 18-5). Females also had a better rate of treatment for schizophrenia (objective 18-9c), the one objective with health disparities of 10% or more by sex that lacked data to assess statistical significance.
- Four objectives had statistically significant health disparities of 10% or more by education level (objectives 18-1, 18-4, and 18-9a and d), and one objective (18-9c) had health disparities of 10% or more by education level but lacked data to assess statistical significance. Persons with at least some college education had the best rates for three of these five objectives (18-1, 18-4, and 18-9d). High school graduates had the best rates for two objectives (18-9a and c).
- The disparities for objective 18-1, suicide, were discussed in the Highlights, above.

Transition to Healthy People 2020

The focus of the Mental Health and Mental Disorders Healthy People 2020 Topic Area continues to include the broad range of objectives presented in Healthy People 2010. Two objectives were added to the Topic Area, as noted below. See HealthyPeople.gov for a complete list of Healthy People 2020 topics and objectives.

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

- The Healthy People 2020 Mental Health and Mental Disorders Topic Area has a total of 15 objectives, whereas the Healthy People 2010 Mental Health and Mental Disorders Focus Area had 17 objectives.
- Seven Healthy People 2010 objectives (18-1 through 18-3, 18-5 through 18-8) were retained "as is" [4].
- Three Healthy People 2010 objectives were modified [5]. Data sources had not been available for objectives addressing adults with mental health problems who received treatment (objectives 18-9a and b), adults with co-occurring substance abuse and mental health problems who received treatment (objective 18-10), and adults with serious mental illness who were employed (objective 18-4). These objectives have been modified and will be tracked through the National Survey on Drug Use and Health.
- Two treatment objectives were archived due to lack of data: adults with generalized anxiety disorder who receive treatment (objective 18-9d), and adults with schizophrenia who received treatment (objective 18-9c) [6]. Four additional objectives were archived due to policy considerations: community-based jail diversion programs for adults with serious mental illness (objective 18-11); state tracking of consumer satisfaction with mental health services (objective 18-12); state mental health plans addressing cultural competence (objective 18-13); and state mental health plans addressing care of elderly persons (objective 18-14).
- Two new objectives were added to the Healthy People 2020 Topic Area. These objectives address:
  - The proportion of persons who experience a major depressive episode
  - Depression screening by primary care providers.

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.

Data Considerations

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.

Beginning in 2003, education data for mortality objective 18-1 (suicide) from the National Vital Statistics System have been 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 [7].

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.

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.

References and Notes

1. Displayed in the Progress Chart (Figure 18-1), 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 18-1 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 18-2). 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 18-2 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 18-2 footnotes, as well as the Technical Appendix, for more detail.

4. 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.

5. 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.

6. Archived objectives had at least one data point in Healthy People 2010 but were not carried forward into Healthy People 2020.

7. 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.

Comprehensive Summary of Objectives: Mental Health and Mental Disorders

Objective	Description	Data Source
18-1	Suicide (age adjusted, per 100,000 population)	National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
18-2	Suicide attempts by students that required medical attention (grades 9–12)	Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
18-3	Homeless adults with mental health problems who receive mental health services (18+ years)	Projects for Assistance in Transition from Homelessness (PATH) Annual Application, SAMHSA.
18-4	Employment of persons with serious mental illness (SMI) (18+ years)	National Comorbidity Survey—Replication (NCS-R), NIH, NIMH.
18-5	Students engaging in disordered eating (grades 9–12)	Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
18-6	Primary care facilities that provide mental health treatment	Uniform Data System (UDS), HRSA.
18-7	Treatment for children with mental health problems (4–17 years)	National Health Interview Survey (NHIS), CDC, NCHS.
18-8	Juvenile residential facilities that screen admissions for mental health problems	Juvenile Residential Facility Census (JRFC), National Center for Juvenile Justice.
18-9a	Treatment for adults with serious mental illness (SMI) (18+ years)	National Comorbidity Survey—Replication (NCS-R), NIH, NIMH.
18-9b	Treatment for adults with depression (18+ years)	National Comorbidity Survey—Replication (NCS-R), NIH, NIMH.
18-9c	Treatment for adults with schizophrenia (18+ years)	Epidemiologic Catchment Area (ECA) Program, NIH, NIMH.
18-9d	Treatment for adults with generalized anxiety disorder (18+ years)	National Comorbidity Survey—Replication (NCS-R), NIH, NIMH.
18-10	Treatment for co-occurring substance abuse and mental disorders (18+ years)	National Comorbidity Survey—Replication (NCS-R), NIH, NIMH.
18-11	Community-based jail diversion programs for adults with serious mental illness (SMI)	Mental Health Courts Survey (MHCS), SAMHSA.
18-12	State tracking of consumer satisfaction with mental health services (no. States and D.C.)	Uniform Reporting System (URS), SAMHSA.
18-13	State mental health plans addressing cultural competence (no. States and D.C.)	State Mental Health Agency Profiling System, National Association of State Mental Health Program Directors, National Research Institute; SAMHSA, CMHS.
18-14	State mental health plans addressing care of elderly persons (no. States and D.C.)	State Mental Health Agency Profiling System, National Association of State Mental Health Program Directors, National Research Institute; SAMHSA, CMHS.

Figure 18-1. Progress Toward Target Attainment for Focus Area 18: Mental Health and Mental Disorders

LEGEND — Moved away from target[1] | Moved toward target | Met or exceeded target

	Objective	Percent of targeted change achieved[2] (0 25 50 75 100)	2010 Target	Baseline (Year)	Final (Year)	Baseline vs. Final: Difference[3]	Statistically Significant[4]	Percent Change[5]
18-1.	Suicide (age adjusted, per 100,000 population)		4.8	10.5 (1999)	11.3 (2007)	0.8	Yes	7.6%
18-2.	Suicide attempts by students that required medical attention (grades 9–12)	43.8%	1.0%	2.6% (1999)	1.9% (2009)	-0.7	Yes	-26.9%
18-3.	Homeless adults with mental health problems who receive mental health services (18+ years)	766.7%	30%	27% (2000)	50% (2009)	23	Not tested	85.2%
18-5.	Students engaging in disordered eating (grades 9–12)	166.7%	16%	19% (2001)	14% (2009)	-5	Yes	-26.3%
18-6.	Primary care facilities that provide mental health treatment	133.3%	68%	62% (2000)	70% (2009)	8	Not tested	12.9%
18-7.	Treatment for children with mental health problems (4–17 years)	128.6%	67%	60% (2001)	69% (2008)	9	Yes	15.0%
18-8.	Juvenile residential facilities that screen admissions for mental health problems	160.0%	55%	50% (2000)	58% (2006)	8	Not tested	16.0%
18-11.	Community-based jail diversion programs for adults with serious mental illness (SMI)	1,028.6%	7.6%	6.9% (2004)	14.1% (2010)	7.2	Not tested	104.3%
18-12.	State tracking of consumer satisfaction with mental health services (no. States and D.C.)	94.1%	51	34 (2002)	50 (2009)	16	Not tested	47.1%
18-13.	State mental health plans addressing cultural competence (no. States and D.C.)	33.3%	32	29 (2004)	30 (2009)	1	Not tested	3.4%
18-14.	State mental health plans addressing care of elderly persons (no. States and D.C.)	12.1%	51	18 (2001)	22 (2009)	4	Not tested	22.2%

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 18-4, 18-9a through d, and 18-10.

FOOTNOTES

[1] Movement away from target is not quantified using the percent of targeted change achieved. See Technical Appendix for more information.

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

[3] Difference = Final value – Baseline value. Differences between percents (%) are measured in percentage points.

[4] 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.

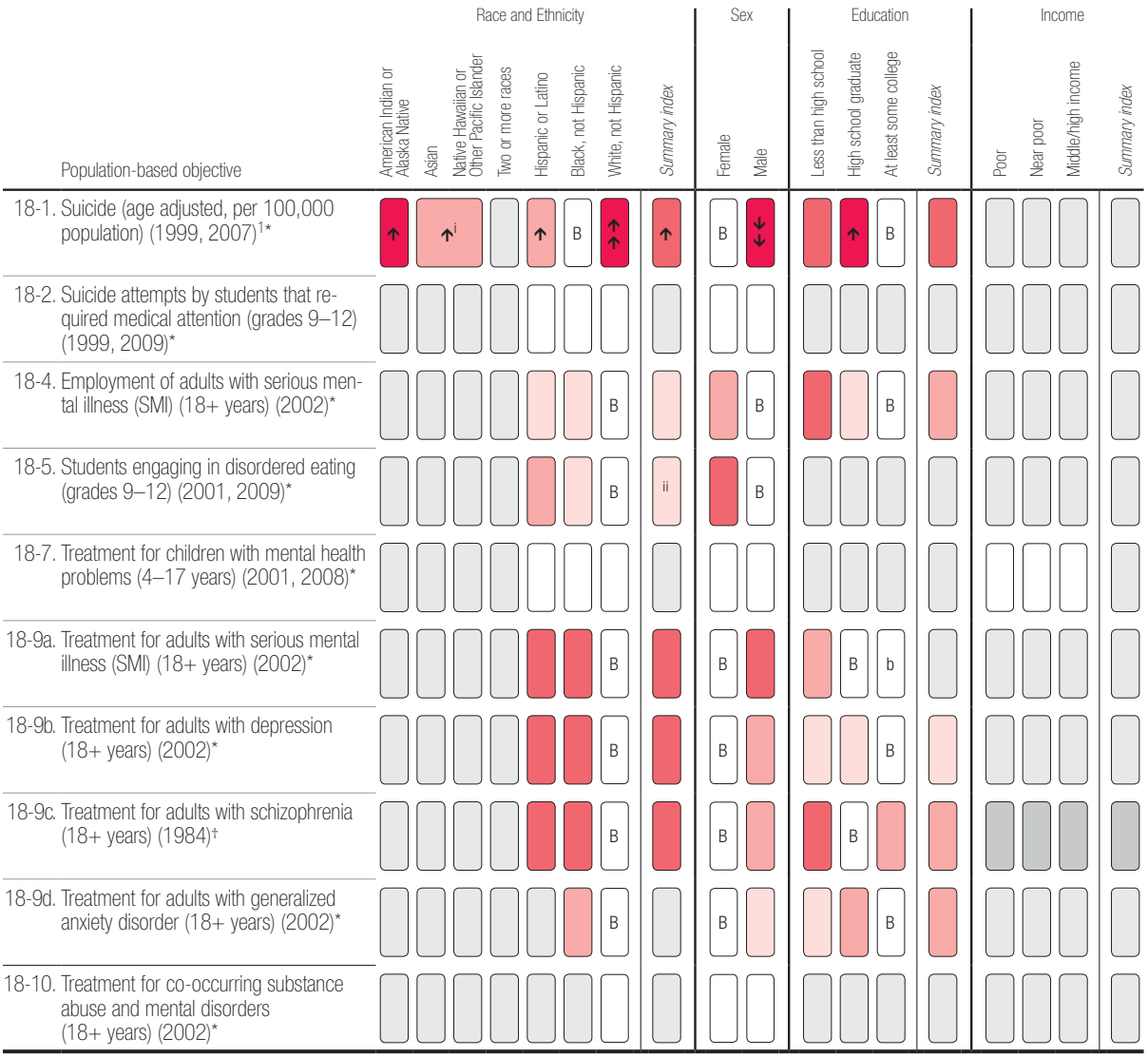
[5] $$\text{Percent change} = \frac{\text{Final value} - \text{Baseline value}}{\text{Baseline value}} \times 100.$$

DATA SOURCES

18-1. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
18-2. Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
18-3. Projects for Assistance in Transition from Homelessness (PATH) Annual Application, SAMHSA.
18-5. Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
18-6. Uniform Data System (UDS), HRSA.
18-7. National Health Interview Survey (NHIS), CDC, NCHS.
18-8. Juvenile Residential Facility Census (JRFC), National Center for Juvenile Justice.
18-11. Mental Health Courts Survey (MHCS), SAMHSA.
18-12. Uniform Reporting System (URS), SAMHSA.
18-13–18-14. State Mental Health Agency Profiling System, National Association of State Mental Health Program Directors, National Research Institute; SAMHSA, CMHS.

Figure 18-2. Health Disparities Table for Focus Area 18: Mental Health and Mental Disorders

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.



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 18-3, 18-6, 18-8, and 18-11 through 18-14.

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.

Figure 18-2. Health Disparities Table for Focus Area 18: Mental Health and Mental Disorders (continued)

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.

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 Technical Appendix.

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.

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.

[1] Most recent data by education level are for 2002.

[i] Data are for Asian or Pacific Islander.

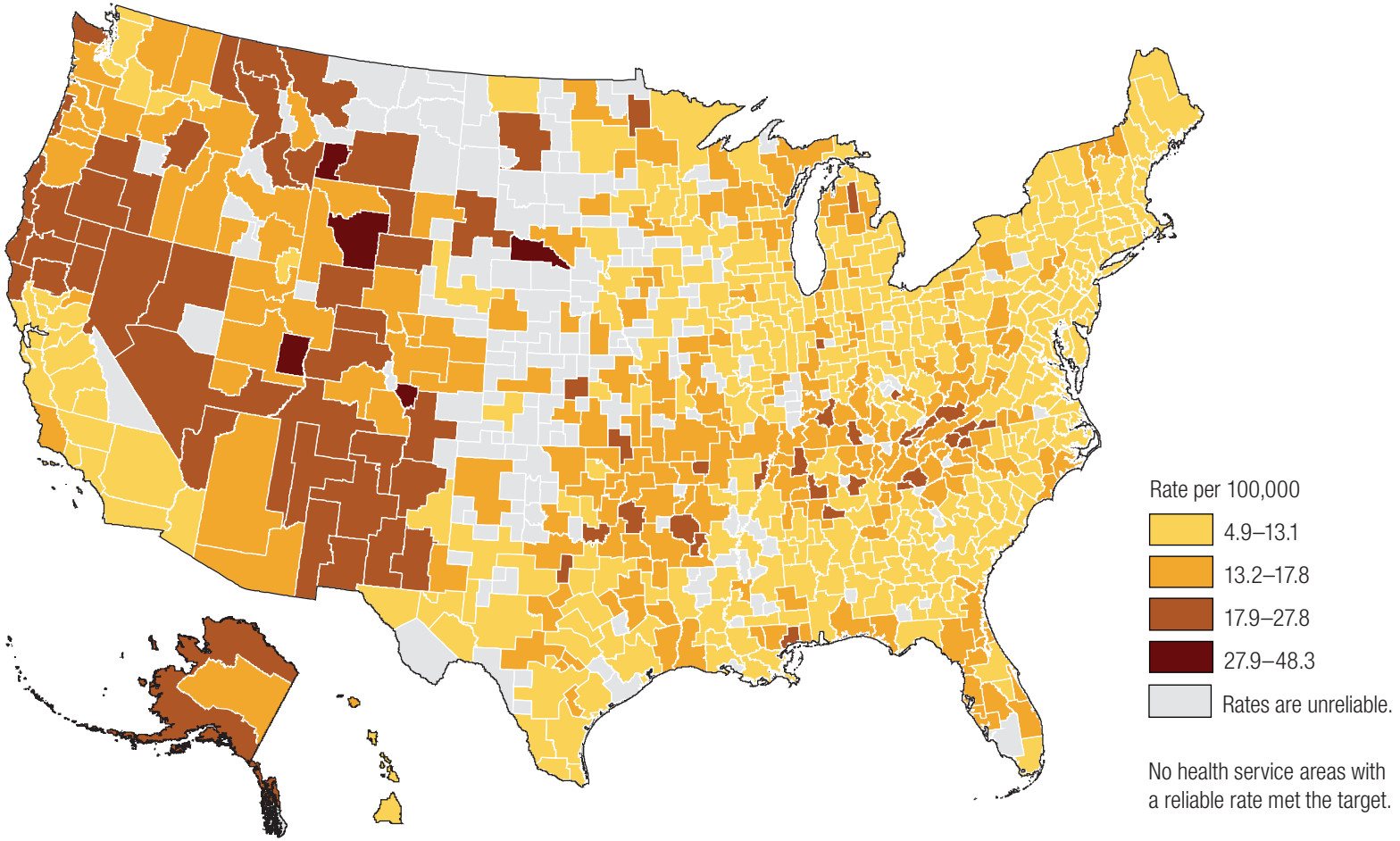
[ii] Change in the summary index cannot be assessed. See Technical Appendix.

DATA SOURCES

18-1. National Vital Statistics System—Mortality (NVSS-M), CDC, NCHS.
18-2. Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
18-4. National Comorbidity Survey—Replication (NCS-R), NIH, NIMH.
18-5. Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
18-7. National Health Interview Survey (NHIS), CDC, NCHS.
18-9a–b. National Comorbidity Survey—Replication (NCS-R), NIH, NIMH.
18-9c. Epidemiologic Catchment Area (ECA) Program, NIH, NIMH.
18-9d. National Comorbidity Survey—Replication (NCS-R), NIH, NIMH.
18-10. National Comorbidity Survey—Replication (NCS-R), NIH, NIMH.

Figure 18-3. Suicide, 2005–07

Healthy People 2010 objective 18-1 • Target = 4.8 per 100,000



NOTES: Data are for ICD-10 codes *U03, X60–X84, and Y87.0 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.