



## Healthy People 2030: Health Disparities Feature

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**Background**

# What is Healthy People?

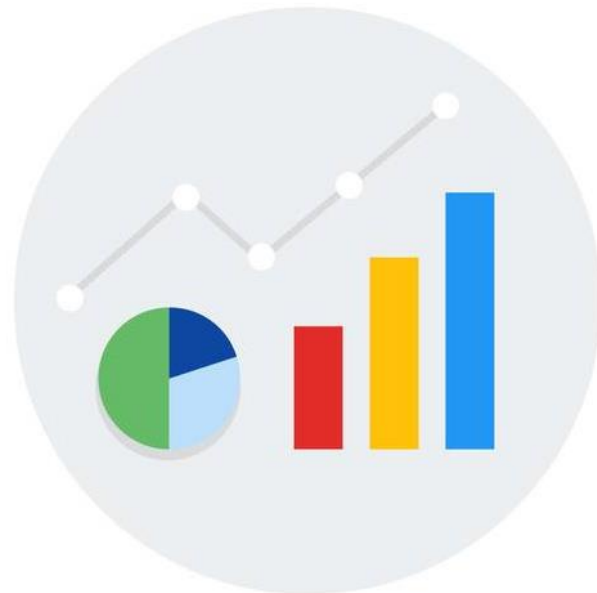
- Provides a strategic framework for a **national prevention agenda** that communicates a vision for improving health and achieving health equity
- Identifies science-based, **measurable objectives with targets** to be achieved by the end of the decade
- Requires tracking of **data-driven outcomes** to monitor progress and to motivate, guide, and focus action
- Offers model for international, state, and local **program planning**

HEALTHY PEOPLE  
The Surgeon General's Report On  
Health Promotion And Disease Prevention



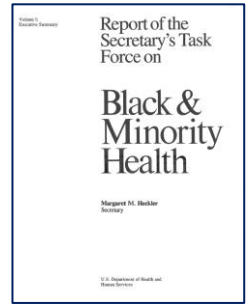
# Role of NCHS within Healthy People

- Statistical methods and measure development
- Healthy People databases
- Analysis and presentation of data
- Expertise and technical assistance



# History

- **1985:** HHS Report of the Secretary's Task Force on Black & Minority Health (Heckler Report)
- **Healthy People Overarching Goals:**
  - **HP2000:** Reduce health disparities
  - **HP2010:** Eliminate health disparities
  - **HP2020:** Achieve health equity, eliminate disparities, and improve the health of all groups
  - **HP2030:** Eliminate health disparities, achieve health equity, and attain health literacy to improve the health and well-being of all



**Measurement**

# Healthy People 2030 Data Template

## Total

### Sex

- Male
- Female

### Race/Ethnicity

- American Indian/Alaska Native only
- Asian only
- Native Hawaiian/Pacific Islander only
- Black or African American only
- White only
- 2 or more races
- Hispanic or Latino
- Not Hispanic or Latino
  - American Indian/Alaska Native only, not Hispanic or Latino
  - Asian only, not Hispanic or Latino
  - Native Hawaiian/Pacific Islander only, not Hispanic or Latino
  - Black only, not Hispanic or Latino
  - White only, not Hispanic or Latino
  - 2 or more races not Hispanic or Latino

### Age

[Standard groups by data system]

## Educational Attainment

- < High school
- High school
- Some college or Associates degree
- 4-year college degree or more

## Family Income (percent poverty threshold)

- <100
- 100-199
- 200-399
- >=400

## Health Insurance Status

- Insured
  - Private
  - Public
- Uninsured

## Geographic Location or Region

- Metropolitan
- Nonmetropolitan

## Marital Status

- Married/Cohabiting partner
- Divorced or Separated/Widowed
- Never married

## Country of Birth

- US
- Outside US

## Veteran Status

- Veteran
- Non-Veteran

## Disability Status

- People with disabilities
- People without disabilities

## Sexual Orientation

- Straight
  - Straight, Male
  - Straight, Female
- Gay/Lesbian
  - Gay, Male
  - Gay/Lesbian, Female
- Bisexual
  - Bisexual, Male
  - Bisexual, Female

## Gender Identity

[Standard groups by data system]

### Notes:

- If data are not collected, analyzed, or available (or need to be suppressed) for a particular demographic group by a data source, the demographic label will still be shown and a symbol or acronym will be displayed to indicate the reason data are not shown.
- With justification by the workgroup and approval by NCHS, additional population categories and subcategories may be included on a case-by-case basis.

# Disparities: Evolution of Measurement

|                          | HP2000   | HP2010   | HP2020   | HP2030   |
|--------------------------|--|--|--|--|
| <b>Overarching Goal</b>  | Reduce health disparities  | Eliminate health disparities   | Achieve health equity, eliminate disparities, and improve the health of all groups   | Eliminate health disparities, achieve health equity, and attain health literacy to improve the health and well-being of all  |
| <b>Disparity Targets</b> | Separate targets were set designed to narrow the gap with the total population   | No separate disparities targets, but use of “better than the best” target-setting method   | No separate disparities targets, but we do consider progress by population group   | No separate disparities targets, but we do consider progress by population group   |
| <b>Measurement</b>       | <p><u>Absolute disparity:</u><br/>Not assessed</p> <p><u>Relative disparity:</u><br/>Not assessed</p> <p><u>Change in disparity over time:</u> ratio of percent change for reference group to percent change for group of interest</p> <p><u>Reference point:</u><br/>Total population</p> | <p><u>Absolute disparity:</u><br/>Not assessed</p> <p><u>Relative disparity:</u><br/>1. Percentage difference<br/>2. Index of disparity</p> <p><u>Change in disparity over time:</u> absolute difference for measures above</p> <p><u>Reference point:</u><br/>Most favorable group rate</p> | <p><u>Absolute disparity:</u><br/>1. Maximal rate difference</p> <p><u>Relative disparity:</u><br/>2. Rate ratio<br/>3. Maximal rate ratio<br/>4. Summary rate ratio</p> <p><u>Change in disparity over time:</u> absolute and relative difference for maximal and summary rate ratio</p> <p><u>Reference point:</u><br/>Most favorable group rate</p> | <p><u>Absolute disparity:</u><br/>1. Rate difference*<br/>2. Maximal rate difference<br/>3. Summary rate difference*</p> <p><u>Relative disparity:</u><br/>4. Rate ratio<br/>5. Maximal rate ratio<br/>6. Summary rate ratio</p> <p><u>Change in disparity over time:</u> absolute and relative difference for measures above</p> <p><u>Reference point:</u><br/>Most favorable group rate</p> |



# Absolute vs. Relative Measures

- Absolute disparity: simple difference between two rates (also referred to as the rate difference or absolute difference)
  - Absolute disparities may be easier to visualize than relative disparities.
  - Example: The **maximal rate difference** is the difference between the highest and the lowest group rates.
- Relative disparity: disparity measured relative to the group with the best rate
  - Examples include the percent difference between rates or the ratio between rates.
  - Relative disparities are unit-free and can be used to compare objectives with different units of measure.
  - Example: The **maximal rate ratio** is the ratio of the highest to the lowest group rates.

# Between-Group Measures

- Between-group measures consider disparities between exactly two group rates. For Healthy People purposes, the group rates used are:
  - $R_f$  = rate for the most favorable group (reference point)
  - $R_g$  = rate for a group of interest
- Examples
  - Absolute: The **rate difference** is the absolute value of the simple difference:  $|R_f - R_g|$
  - Relative: The **rate ratio** is defined as:
    - $\frac{R_f}{R_g}$ , if an increase is desired
    - $\frac{R_g}{R_f}$ , if a decrease is desired

# Overall (Across-Group) Measures

- Overall (across-group) measures consider the data across multiple group rates, although their calculation may or may not incorporate more than two group rates.
- Examples
  - Given
    - $R_f$  = rate for the most favorable group (reference point)
    - $R_a$  = the average of the rates for all other groups
    - Absolute: The **summary rate difference** is  $|R_f - R_a|$
    - Relative: The **summary rate ratio** is  $\frac{R_f}{R_a}$ , if an increase is desired; or  $\frac{R_a}{R_f}$ , if a decrease is desired.
      - When there are only two groups, these measures reduce to the maximal rate difference and maximal rate ratio, respectively.
  - The **maximal rate difference** and **maximal rate ratio** are also examples of overall (across-group) disparities measures that incorporate the smallest and largest rates in their calculation.

**Demonstration**

[Home](#) > [Objectives and Data](#) > [About Disparities Data](#)

## About Disparities Data

Healthy People 2030 includes health disparities data for population-based core objectives with available demographic group data. Health disparities are differences in health that are closely linked to [social determinants of health](#).

Addressing health disparities is key to achieving [health equity](#) and realizing the Healthy People vision of improving the health and well-being of all.

### How to use disparities data

Watch this video to learn how to interact with Healthy People 2030 objective data, including disparities data.



### How we calculate disparities data

Healthy People 2030 assesses disparities data for population-based core objectives with available demographic group data for a given time point. The following are key concepts in the assessment of disparities:

- [Highest rate \( \$R\_{max}\$ \)](#)
- [Lowest rate \( \$R\_{min}\$ \)](#)

# Data

- Objective Overview
- Data
- Data Methodology and Measurement
- Evidence-Based Resources

Add to Custom List

Status: Improving + [Learn more about our data release schedule](#)



Most Recent Data:  
**146.6** cancer deaths  
per 100,000  
population (2021) \*



Target:  
**122.7** per 100,000 \*



Desired Direction:  
**Decrease desired**



Baseline:  
**149.1** cancer deaths per 100,000 population occurred in 2018 \*

\* Age adjusted to the year 2000 standard population.

Data Chart

Data Table

Download C-01 data [CSV]

### Demographic Group

- Total
- Total
- Age group
- Country of birth
- Disability status
- Educational attainment
- Family income
- Gender identity
- Geographic location
- Health insurance status
- Marital status
- Race/Ethnicity**
- Sex
- Sexual orientation
- Veteran status
- All groups

are only available for some selections.

Show standard error (SE) Confidence interval (CI) not available

[How to interact with this table](#) i

## Demographic Group

Race/Ethnicity

## From (year)

2018

## To (year)

2021

Show Data

Reset all

 Show disparities data

Disparities data are only available for some selections.

 Show confidence interval (CI) Show standard error (SE)[How to interact with this table](#)

**Highest and lowest rates for Overall cancer deaths: Disparities by Race/Ethnicity, 2018-2021\***  
 (cancer deaths per 100,000 population)

 Decrease desired[How we calculate disparities data](#)



| Year                 | Highest rate  | Lowest rate<br>Reference rate                   | Maximal rate ratio |
|----------------------|---|---|--------------------|
| <a href="#">2018</a> | 175.9<br>Black or African American only, not Hispanic or Latino | 69.8<br>2 or more races, not Hispanic or Latino | ÷ 2.520            |
| <a href="#">2019</a> | 173.1<br>Black or African American only, not Hispanic or Latino | 67.9<br>2 or more races, not Hispanic or Latino | ÷ 2.550            |

## Overall cancer deaths: Disparities by Race/Ethnicity, 2021\*

(cancer deaths per 100,000 population)

 Decrease desired

[How we calculate disparities data](#) 

| Demographic Group  | 2021  | Rate ratio  |
|--|--|--|
| Black or African American only, not Hispanic or Latino                 | 167.4<br><b>Highest rate</b>   | ÷ 2.485  |
| White only, not Hispanic or Latino                                     | 153.7  | ÷ 2.283  |
| Native Hawaiian or Other Pacific Islander only, not Hispanic or Latino | 144.6  | ÷ 2.148  |
| American Indian or Alaska Native only, not Hispanic or Latino          | 124.9  | ÷ 1.854  |
| Hispanic or Latino   | 105.1  | ÷ 1.561  |
| Asian only, not Hispanic or Latino                                     | 92.9   | ÷ 1.379  |
| 2 or more races, not Hispanic or Latino                                | 67.3<br><b>Lowest rate</b><br>Reference rate   | ÷ 1.000  |

Data Sources: [National Vital Statistics System - Mortality \(NVSS-M\)](#); [CDC/NCHS](#); [Population Estimates, Census](#)



2021



#### Summary measures of health disparities by Race and Ethnicity (age adjusted) — 2021

- Persons of 2 or more races, not Hispanic or Latino had the lowest group rate for this objective, 67.3 per 100,000 population.
- Black or African American only, not Hispanic or Latino persons had the highest group rate for this objective, 167.4 per 100,000 population.
- The difference between the highest and lowest group rates was 100.0 per 100,000 population (maximal rate difference).
- The highest group rate was 2.485 times the lowest group rate (maximal rate ratio).
- The average rate for all other race and ethnicity populations (131.4 per 100,000 population), excluding the lowest (summary rate ratio) was 1.952 times the lowest group rate.

#### Detailed measures of health disparities by Race and Ethnicity (age adjusted) — 2021

- The rate for Asian only, not Hispanic or Latino persons was 1.379 times the lowest group rate.
- The rate for Hispanic or Latino persons was 1.561 times the lowest group rate.
- The rate for American Indian or Alaska Native only, not Hispanic or Latino persons was 1.854 times the lowest group rate.
- The rate for Native Hawaiian or Other Pacific Islander only, not Hispanic or Latino persons was 2.148 times the lowest group rate.
- The rate for White only, not Hispanic or Latino persons was 2.283 times the lowest group rate.
- The rate for Black or African American only, not Hispanic or Latino persons was 2.485 times the lowest group rate.

#### Notes:

The target for this objective is 122.7 per 100,000 population. Unless otherwise noted, each measurable objective has a single target for all population groups. More information can be found on the [Target Setting](#) landing page.

'Rate' as used in the text refers to the value of a rate, percentage, proportion, or other quantitative measure for which disparities for a given Healthy People 2030 objective are assessed.

**Conclusion**

# Next Steps and Takeaways

- As there is no single gold standard in health disparities measurement, considering multiple measures can provide a fuller context of health disparities.
- A forthcoming NCHS Series 2 report will document HP2030 disparities measures and expand further on their strengths and limitations.
- The HP2030 disparities feature provides a starting point for health disparities data and content for HP2030 objectives. Future enhancements:
  - increased functionality
  - additional measures
  - disparities charts

# References

## Websites:

- Healthy People 2030 (Main): <https://health.gov/healthypeople>
  - Healthy People 2030 (Disparities): <https://health.gov/healthypeople/objectives-and-data/about-disparities-data>
- NCHS Healthy People: [http://www.cdc.gov/nchs/healthy\\_people.htm](http://www.cdc.gov/nchs/healthy_people.htm)
- Health Disparities Calculator (NCI): <https://seer.cancer.gov/hdcalc/>

## Manuscripts:

- Braveman P. Health disparities and health equity: concepts and measurement. *Annu Rev Public Health*. 2006;27:167-194. <https://doi.org/10.1146/annurev.publhealth.27.021405.102103>
- Harper et al. Implicit value judgments in the measurement of health inequalities. *Milbank Q*. 2010;88(1):4–29. <https://doi.org/10.1111/j.1468-0009.2010.00587.x>
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- Keppel K, Pamuk E, Lynch J, et al. Methodological issues in measuring health disparities. *National Center for Health Statistics. Vital Health Stat 2(141)*. 2005. [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_141.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_141.pdf)
- Penman-Aguilar A, Talih M, Huang D, et al. Measurement of health disparities, health inequities, and social determinants of health to support the advancement of health equity. *J Public Health Management Practice*. 2016; 22(1 Supp):S33-S42. <https://doi.org/10.1097/phh.0000000000000373>
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# Thank You!

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