



Health Disparities Calculator

<http://seer.cancer.gov/hdcalc/>

Overview

The Health Disparities Calculator (HD*Calc) is designed to generate multiple summary measures to evaluate and monitor health disparities. The HD*Calc statistical software can be used either as an extension of SEER*Stat—allowing users to import Surveillance, Epidemiology, and End Results (SEER) data—or with other population-based health data, including data from the National Health Interview Survey (NHIS), California Health Interview Survey (CHIS), Tobacco Use Supplement to the Current Population Survey (TUS-CPS), and National Health and Nutrition Examination Survey (NHANES).

HD*Calc can be used to produce 11 summary measures of disparity. Cancer rates and other data categorized by disparity groups such as race/ethnicity, socioeconomic status (SES), and geographic area can be used with HD*Calc to generate output that can be presented in both tabular and graphic formats. HD*Calc program users are able to specify a range of conditions and formats.

HD*Calc can be used to apply the measures of health disparities described in the NCI monograph, *Methods for Measuring Cancer Disparities: A Review Using Data Relevant to Healthy People 2010 Cancer-Related Objectives* (NCI, 2005; <http://seer.cancer.gov/publications/disparities>). This monograph evaluates major

issues that may affect the choice of summary measures of disparity, and it is recommended for those who are unfamiliar with the measures available in HD*Calc.

For those interested in a comparative look at measures of health disparities, the monograph *Selected Comparisons of Measures of Health Disparities: A Review Using Databases Relevant to Healthy People 2010 Cancer-Related Objectives* (NCI, 2007; <http://seer.cancer.gov/publications/disparities2>) uses case studies to analyze the performance and appropriateness of various health disparity measures.

These monographs are recommended to anyone involved in health disparities research.

Use HD*Calc to:

- Quickly and accurately compare different measures of disparities by race/ethnicity, SES, and geographic area;
- Evaluate multiple summary measures for monitoring and presenting health disparities;
- Graphically explore underlying trends in data; and
- Easily export tables and graphs.

HD*Calc Tutorials

Exercises on the following topics are available at <http://seer.cancer.gov/hdcalc/tutorials>:

- Preparing SEER cancer incidence data using SEER*Stat (<http://seer.cancer.gov/seerstat>);
- Importing the data into HD*Calc for analysis;
- Using data that did not come from SEER*Stat to calculate health disparities in HD*Calc.

The tutorials demonstrate how to measure health disparities:

- By race using SEER incidence data.
- By SES group using SEER incidence data.
- By race using SEER incidence data showing a 3-year moving average.
- By income level using CHIS colorectal cancer screening data.

References

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Harper S, Lynch J, Meersman, SC, Breen N, Davis WW, Reichman ME. Trends in area-socioeconomic and race-ethnic disparities in breast cancer incidence, stage at diagnosis, screening, mortality, and survival among women ages 50 years and over (1987-2005). *Cancer Epidemiol Biomarkers Prev.* 2009; 18(1):121-31. (<http://cebp.aacrjournals.org/cgi/content/abstract/18/1/121>)

Harper S, King NB, Meersman SC, Reichman ME, Breen N, Lynch J. Implicit value judgments in the measurement of health inequalities. *Milbank Q.* 2010 Mar;88(1):4-29.

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