



THE COLLABORATIVE ON HEALTH AND THE ENVIRONMENT - WASHINGTON



RESEARCH AND INFORMATION WORKING GROUP

CARDIOVASCULAR DISEASE

FACT SHEETS ON HEALTH AND ENVIRONMENT IN WASHINGTON

INTRODUCTION

According to the American Heart Association, particles in the air are a risk factor for cardiovascular disease.¹

Cardiovascular disease includes coronary heart disease, stroke, high blood pressure and other diseases that affect the heart and circulatory system.

PROPORTION OF CARDIOVASCULAR DISEASE DUE TO ENVIRONMENTAL CONTAMINANTS

The World Health Organization has estimated that 16% of cardiovascular disease is due to the environment, corresponding to 2.5 million deaths a year globally.²

CARDIOVASCULAR DISEASE IN WASHINGTON STATE

- Heart disease and stroke—the two most common forms of cardiovascular disease—are the first and third leading causes of death in Washington state. More than 16,000 Washingtonians died from cardiovascular disease in 2002; this is 36% of all deaths.³
- The average annual death rate for heart disease in Washington state from 1996 to 2000 was 432 per 100,000. The average annual stroke-related death rate from 1991 to 1998 was 134 per 100,000 population.⁴
- From 1996 to 2000, counties with the highest death rates for heart disease (420-527 deaths per 100,000) were Adams, Cowlitz, Lewis, Pacific, Thurston and Wahkiakum. Counties with the highest stroke death rates (146-153 deaths) included Adams, Columbia, Franklin, Garfield, Pacific, Wahkiakum and Walla Walla.⁵
- Approximately 1,400 people in Washington state die each year from cardiopulmonary diseases associated with air particulates.⁶
- Cardiovascular disease due to air pollutants in Washington state costs between \$564.3 and \$592.8 million (in 2004 dollars) annually.⁷

COMPARING WASHINGTON STATE NATIONALLY

- Washington state's rate of heart disease is lower than the national average, but the rate for stroke is higher.⁸
- The table below shows that the death rate from heart disease in Washington is less than the national rate, and that the death rate from stroke is higher.

| Race/Ethnicity | WA State <i>Heart Disease</i> Death Rate | National <i>Heart Disease</i> Death Rate | WA State <i>Stroke</i> Death Rate | National <i>Stroke</i> Death Rate |
|-------------------------------------|--|--|---|---|
| All Races/Ethnicities | 432 | 536 | 134 | 121 |
| American Indian/ Alaskan Natives | 402 | 352 | 145 | 79 |
| Asian & Pacific Islanders | 266 | 302 | 124 | 105 |
| Blacks | 492 | 662 | 173 | 173 |
| Hispanics | 210 | 348 | 77 | 79 |
| Whites | 436 | 529 | 133 | 117 |

Rates are per 100,000. Data was gathered from 1991 to 1998 and from 1996 to 2001.⁹

- In 2001, Washington state's cardiovascular disease death rate was 290.3 per 100,000 population, ranking 16th lowest in the US. The national average cardiovascular disease death rate was 328.1.¹⁰
- Washington ranked 17th lowest in heart disease death rates in 2001, but ranked 45th lowest in stroke death rates that year.¹¹

SOURCES

- 1 <http://www.americanheart.org/presenter.jhtml?identifier=3022282>
- 2 http://www.who.int/quantifying_ehimpacts/publications/preventingdisease/en/index.html
- 3 http://www.doh.wa.gov/cfh/heart_stroke/publications/hdsp_burden.pdf
- 4 [http://apps.nccd.cdc.gov/giscvh/\(qzmz5ifjrevez0f45vzuzk3uui\)/default.aspx](http://apps.nccd.cdc.gov/giscvh/(qzmz5ifjrevez0f45vzuzk3uui)/default.aspx)
- 5 [http://apps.nccd.cdc.gov/giscvh/\(qzmz5ifjrevez0f45vzuzk3uui\)/default.aspx](http://apps.nccd.cdc.gov/giscvh/(qzmz5ifjrevez0f45vzuzk3uui)/default.aspx)
- 6 <http://www.nrdc.org/air/pollution/bt/WA.asp>
- 7 http://www.nwpublichealth.org/docs/nph/f2005/web_ex_davies_f2005.pdf
- 8 [http://apps.nccd.cdc.gov/giscvh/\(qzmz5ifjrevez0f45vzuzk3uui\)/default.aspx](http://apps.nccd.cdc.gov/giscvh/(qzmz5ifjrevez0f45vzuzk3uui)/default.aspx)
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- 10 <http://www.americanheart.org/presenter.jhtml?identifier=3008771>
- 11 <http://www.cdc.gov/epo/shp/pdf/SHP2003.pdf>