Homicide

Definition: All deaths due to injuries inflicted by another person with the intent to injure or kill by any means. Deaths from 1980–1998 include all records with an ICD 9 code including E960-E969, E979. Homicides for 1999–2005 include those with an ICD 10 code of X85-Y09 or Y87.1.

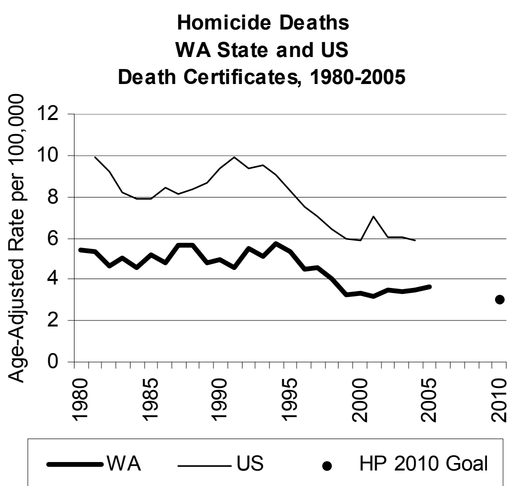
Summary

Two hundred thirty two people were murdered in Washington State in 2005 (age-adjusted death rate: 4 per 100,000). Homicide rates declined significantly between 1995 and 2000 but have leveled off since then. Young men, women in violent relationships, blacks, and American Indians and Alaska Natives are more likely to be victims of homicide than other people.

Homicide is the most extreme outcome of interpersonal violence. Targeted interventions to reduce homicide focus on preventing violence among children, youth, and intimate partners.

Time Trends

Washington's age-adjusted homicide rate in 2005 was 4 per 100,000. Homicide rates declined from 1995 to 2000 and have remained stable since 2000.



National homicide rates are substantially higher than Washington's. National rates have declined since the peak in 1993 and have remained stable since 2000.

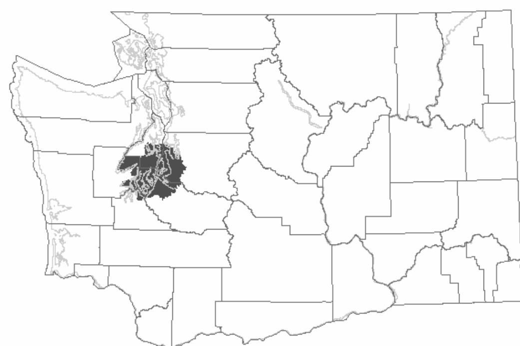
Year 2010 Goals

The national *Healthy People 2010* goal for homicide is an age-adjusted rate no higher than 3 per 100,000. If the rates continue to be stagnant, Washington will not meet this goal.

Geographic Variation

In 33 Washington counties, there were fewer than 20 homicide deaths from 2003–2005. Rates for these counties fluctuate even when combining three years of data. Among counties with stable homicide rates, Yakima and Pierce counties had rates significantly higher than the state rate.

Homicides
Regional Variation
Death Certificates, 2001-2005



Shading shows areas with high relative risk for homicides

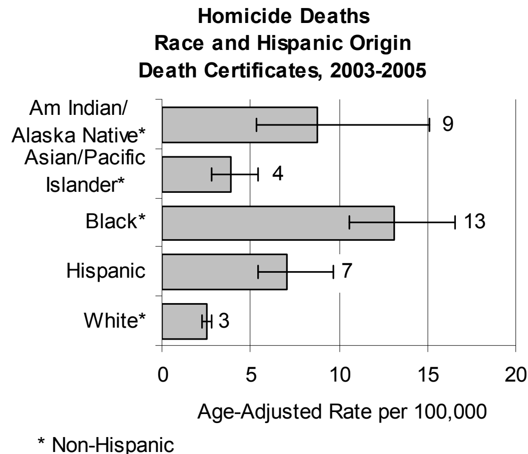
Analysis of the variation in homicide rates by census tract groupings for 2001–2005 shows that people living in parts of the South Puget Sound region were about twice as likely to be murdered as other Washington residents.

Age and Gender

In 2003–2005, nearly a third of homicide victims were younger than 25, and nearly three-fourths were male. Homicide rates were highest among males 15–24 years old. For females, homicide rates were highest among those ages 25–34. Women ages 55–64, females and males younger than age 15, and men and women age 65 and older had fewer than 20 deaths. Death rates for these groups fluctuate even when combining three years of data, and the following chart does not include them.

Race and Hispanic Origin

In Washington, age-adjusted homicide rates for blacks and American Indians and Alaska Natives are at least three times higher than the rate for white non-Hispanics. The homicide rate for people of Hispanic origin is more than twice the rate for white non-Hispanics. Homicide rates for whites and Asian and Pacific Islanders are comparable.



* Non-Hispanic

Individual and neighborhood race and social and economic characteristics are important determinants of homicide rates.[1] But the higher homicide rate among blacks either disappears or is greatly reduced after adjusting for social and economic factors.[2,3]

Income and Education

In Washington in 2003–2005, the age-adjusted homicide rate among people with a high school education or less was nine times that of people who had completed at least four years of college. More information on the relationship between homicide, education, and poverty is shown in The *Health of Washington State 2004 Supplement.*[4]

Other Measures of Impact and Burden

Years of potential life lost. Homicide costs many years of potential life because these deaths are concentrated in young people. In Washington, homicide is the third leading cause of death among young people ages 15–24, following unintentional injury and suicide.

Non-fatal injuries. Nationally, for every homicide death, there are 91 nonfatal assault-related injuries seen in emergency departments.[5] In Washington, the ratio of hospitalized assaults to homicide deaths is about 7 to 1.

Family and social impacts. Homicide has a powerful impact on surviving family members and other loved ones, more so than the loss of a loved one due to another type of death. Homicide survivors experience many difficulties, some similar to those associated with post-traumatic stress disorder (PTSD). In some cases, other conditions can develop along with PTSD such as depression, anxiety disorders, and drug and alcohol dependence.[6] Those who experience PTSD have prolonged and more complicated grieving periods.[7] Survivors often experience secondary victimization characterized by rejection, unrealistic expectations, and recognition of life changes by family and friends. The negative psychological and physical effects often lead to increased use of primary care services.[8]

Children and adolescent survivors are also at risk of developing PTSD, which can negatively affect their growth and development.[9] In cases of domestic homicide, surviving children may also be living with other family members or foster families.

Risk and Protective Factors

Homicide is the most extreme outcome of interpersonal violence. It is the result of a complex relationship between individual, family, cultural, and community factors.

Factors that predispose a person to interpersonal violence and homicide, either as victim or perpetrator include:[10,11]

- Male belief in physical prowess and toughness
- Thrill-seeking
- Underdeveloped verbal and conflict resolution skills
- History of child abuse
- Neurological and psychological disorders
- History of intimate partner violence including victimization or perpetration.

Individuals who engage in violence at an early age often behave violently as adults.[11] Families who engage in conflict and abuse, practice excessively severe or inconsistent punishment, do not set clear expectations for behavior, or fail to monitor their children contribute to violent tendencies and behaviors in children.[11] Having friends who engage in violent behaviors creates the "norm" that violence is acceptable.[11]

Communities with high rates of mobility have increased crime rates.[11] Transience creates a lack of connection to community. Communities characterized by lack of resources, jobs, and tax bases and with deteriorating infrastructures often experience increases in drug dealing, violence, and homicide. Income inequality is strongly linked with homicide. The rate of growth of the Gross Domestic Product (GDP) is negatively associated with the homicide rate.[11]

Drug and alcohol consumption are associated with all types of homicides except those involving children. About half of all victims and perpetrators consume alcohol before a homicide.[10] Alcohol and drug use can contribute to homicide by reducing inhibitions against aggression and encouraging high-risk behaviors.

Access to firearms is a risk factor for homicide.[12] In 2005, 61% of Washington's homicides involved firearms. The presence of a gun in the house puts an abused woman at risk to be killed.[13]

Intervention Strategies

Homicide is a public health and criminal justice issue. Strategies to reduce homicide include targeted interventions to prevent violence among children, intimate partners, and youth.[14] Policies and programs aimed at curbing violence might also reduce homicide.

Nurse home visiting can reduce child abuse by about 40%. Although the model program involved home visits for only two years, the effect 15 years later holds. (Fifteen years is the longest period for which home visiting effects have been evaluated.)[15]

Promising interventions for intimate partner violence include advocacy and shelters for battered women[16] and school-based programs for preventing dating violence.[17] In addition, adoption of more aggressive arrest policies is related to fewer deaths of unmarried intimates.[18]

Effective strategies to reduce youth violence include programs that clarify norms about behaviors, comprehensive instructional programs that focus on a range of social competency skills, behavior modification interventions, and comprehensive family interventions with parent training in family management.[14]

Local collaborations between law enforcement and community agencies can be successful in reducing youth homicide, Effective interventions are guided by a thorough assessment of the characteristics of local homicides and focus on individuals and groups who have a high risk of involvement in guns, drugs, and violence.[19,20]

Firearm laws have been identified as high-priority interventions for violence prevention. But the Task Force on Community Preventive Services found insufficient evidence to determine the effectiveness of firearm laws on violent outcomes.[21] Further high-quality research is required to establish the relationship.

Primary care physicians are in a unique position to help homicide survivors cope with their loss, although training on homicide survivorship is lacking for health care providers. Primary health caregivers should be trained on the prevalence and impact of homicide survivorship, screening tools and methods, empathy and listening skills, and the importance of survivor networks and appropriate referrals.[8] Washington State covers therapy for homicide survivors under the crime victim compensation funds, although these funds have declined since the program's inception in 1972.

See Related Chapters: Youth Violence, Domestic Violence, Child Abuse and Neglect, Drug Abuse and Dependence, and Alcohol Abuse and Dependence.

Data Sources (For additional detail, see Appendix B.)

Washington State Death Certificate Data: Washington State Department of Health, Vital Registration System Annual Statistical Files, Deaths 1980–2005, released December 2006.

Washington Hospitalization Data: Dataset compiled by the Washington State Department of Health, Center for Health Statistics from the Washington Comprehensive Hospitalization Abstract System, Oregon Hospital Discharge data, and Veterans Hospital Administration datasets, December 2006.

National data: National Center for Injury Prevention and Control, National Centers for Health Statistics. Web-based Injury Statistics Query and Reporting System (WISQARS) www.cdc.gov/ncipc/wisqars.

For More Information

Department of Health Injury and Violence Prevention Program, 360-236-2855 http://www.doh.wa.gov/hsqa/emstrauma/injury/

U.S. Centers for Disease Control and Prevention – Division of Violence Prevention—Fact Sheet on Youth Violence: http://www.cdc.gov/ncipc/factsheets/yvfacts.htm

The Prevention Institute: www.preventioninstitute.org/home.html.

Families & Friends of Violent Crime Victims: www.fnfvcv.org

Endnotes

[1] Cubbin, C., LeClere, F. B., & Smith, G. S. (2000). Socioeconomic status and injury mortality: individual and neighbourhood determinants. *Journal of Epidemiology and Community Health*, *54*, 517-524.

[2] Cubbin, C., LeClere, F. B., & Smith, G. S. (2000). Socioeconomic status and the occurrence of fatal and nonfatal injury in the United States. *American Journal of Public Health*, *90*(1), 70-77.

[3] Reiss, A. J. Jr., & Roth, J. A. (Eds.). (1993). *Understanding and Preventing Violence.* Washington, DC: National Academy Press. Sponsored by the National Research Council.

[4] Washington State Department of Health. (2004). Homicide chapter, *The Health of Washington State 2004 Supplement*. Olympia, WA. Retrieved January 2, 2007 from http://www.doh.wa.gov/HWS/HWS2004supp.htm

[5] U.S. Centers for Disease Control and Prevention, National Centers for Injury Prevention and Control. (2007). *Web-based Injury Statistics Query and Reporting System (WISQARS)*. Retrieved January 3, 2007 from www.cdc.gov/ncipc/wisqars.

[6] Asaro, M. R. (2001). Working with adult homicide survivors, Part I: impact and sequelae of murder. *Perspectives in Psychiatric Care*, *37*(3), 95-101.

[7] Vessier-Batchen, M., & Douglas, D. (2006). Coping and complicated grief in survivors of homicide and suicide decedents. *Journal of Forensic Nursing*, *2*(1), 25-32.

[8] Hertz, M. F., Prothrow-Stith, D., & Chery, C. (2005). Homicide survivors: research and practical implications. *American Journal of Preventive Medicine*, *29*, 288-295.

[9] Vigil, G. J., & Clements, P. T. (2003). Child and adolescent homicide survivors. Complicated grief and altered worldviews. *Journal of Psychosocial Nursing*, *41*(1), 30-39.

[10] Blumstein, A., & Wallman, J. (Eds.) (2000). *The Crime Drop in America.* Cambridge, MA: Cambridge University Press.

[11] Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano R. (Eds.). (2002). *World report of violence and health*. Geneva: World Health Organization.

[12] Dahlberg, L. L., Ikeda, R. M., & Kresnow, M. (2004). Guns in the Home and Risk of a Violent Death in the Home: Findings from a National Study. *American Journal of Epidemiology*, *160*(10), 929-936.

[13] Campbell, J. C., Webster, D., Koziol-McLain, J., Block, C., Campbell, D., Curry, M. A., et al. (2003). Risk factors for femicide in abusive relationships: results from a multisite case control study. *American Journal of Public Health*, *93*(7), 1089-1097.

[14] Doll, L. S., Bonzo, S. E., Mercy, J. A., & Sleet, D. A. (Eds.). (2006). *Handbook of Injury and Violence Prevention*. New York, NY: Springer.

[15] Eckenrode, J., Ganzel, B., Henderson, C. R., Smith, E., Olds, D. L., Powers, J., et al. (2000). Preventing child abuse and neglect with a program of nurse home visitation: The limiting effects of domestic violence. *Journal of the American Medical Association*, *284*, 1385-1391.

[16] Bybee, D., & Sullivan, C. M. (2005). Predicting re-victimization of battered women 3 years after exiting a shelter program. *American Journal of Community Psychology*, *36*, 85-96.

[17] Whitaker, D. J., Baker, C. K., & Arias, I. (2006). Interventions to prevent intimate partner violence. In L. Doll, S. Bonzo, J. Mercy, & D. Sleet (Eds.). *Handbook of injury and violence prevention* (pp. 203-221). New York, NY: Springer.

[18] Dugan, L., Nagin, D., & Rosenfeld, R. (2003). Exposure Reduction or Retaliation? The Effects of Domestic Violence Resources on Intimate Partner Homicide. *Law & Society Review*, *37*(1), 169-198.

[19] Braga, A. A., Kennedy, D. M., Waring, E. J., & Piehl, A. M. (2001). Problem-oriented policing, deterrence, and youth violence: An evaluation of Boston's operation ceasefire. *Journal of Research in Crime and Delinquency*, *38*, 195-226.

[20] White, M. D., Fyfe, J., Campbell, S. P., & Goldkamp, J. S. (2003). The police role in preventing homicide: Considering the impact of problem-oriented policing on the prevalence of murder. *Journal of Research in Crime and Delinquency*, *40*, 194-225.

[21] U. S. Centers for Disease Control and Prevention. (2003). First Reports Evaluating the Effectiveness of Strategies for Preventing Violence: Firearms Laws. Findings from the Task Force on Community Preventive Services. *Morbidity and Mortality Weekly Report*, *52*(RR14), 11-20.