

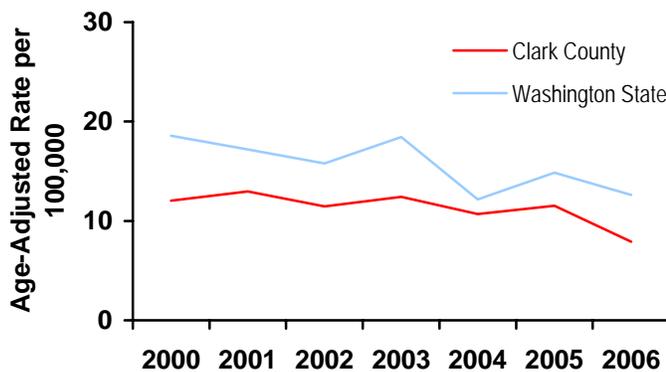


Influenza and Pneumonia Deaths Clark County & Washington State, 2000 through 2006

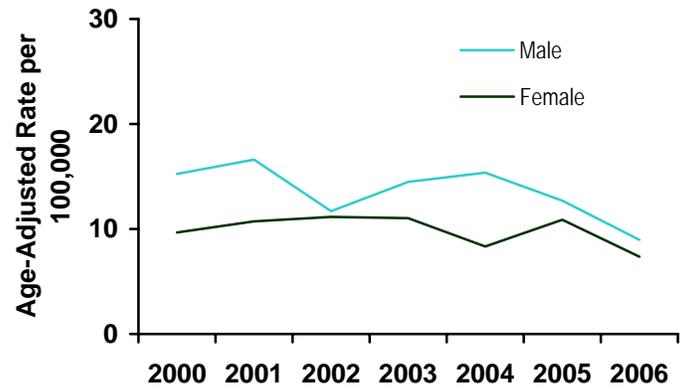
Why it Matters

Influenza is a contagious respiratory disease caused by influenza viruses.¹ Pneumonia is a respiratory disease characterized by inflammation of the lungs and is primarily caused by viruses, bacteria, or irritants.² Each year, approximately 226,000 people are hospitalized and 36,000 people die due to influenza; rates are highest among both infants and the elderly.³ This is further complicated by the fact that the population is aging, with the number of adults in Clark County aged 50 and over projected to increase by 61% between 2010 and 2030.⁴

**Influenza & Pneumonia Death Rate
Clark County & Washington State
2000 through 2006**



**Influenza & Pneumonia Death Rate
Clark County, by Gender
2000 through 2006**



Status

- In 2006, the influenza and pneumonia death rate was significantly lower for Clark County compared to Washington State, at 7.9 and 12.6 deaths per 100,000, respectively.^{5,6}
- In Clark County, the influenza and pneumonia death rate has not changed significantly since 2000.^{5,6}
- In Washington State, the influenza and pneumonia death rate decreased between 2003 and 2004 and has remained stable since then.^{5,6}

Status: Gender

- In Clark County in 2006, the combined influenza and pneumonia death rates among males and females were 9.0 and 7.4 per 100,000, respectively. These rates are not statistically different.^{5,6}
- The influenza and pneumonia death rate has not changed significantly for either males or females between 2000 and 2006.^{5,6}

What We Can Do

Vaccination is an effective strategy to reduce illness and death due to influenza and pneumococcal disease.³ The influenza vaccine should be administered annually, while the pneumococcal polysaccharide vaccine is typically effective after just one dose in a person's lifetime.^{7,8} Healthy People 2010 indicates a goal that 90% of adults aged 65 and older, 60% of high-risk adults aged 18-64, and 90% of adults in long-term care or a nursing home are vaccinated annually against influenza and have been vaccinated against pneumococcal disease at least once in their lifetime.⁹ Interventions include:³

- Implement standing orders for vaccination to allow non-physician medical personnel to prescribe or administer vaccinations.
- Implement client and provider reminder/recall to inform clients that they are due or overdue for a vaccination.
- Decrease out-of-pocket costs for patients.
- Assess and give feedback to providers on their performance in delivering vaccinations.
- Implement educational interventions.
- Focus on individuals who are recommended to receive an influenza vaccination, including children aged 6 months to 5 years, adults aged 50 years or older, pregnant women, and individuals with certain health conditions.⁷

Please see reverse side for technical notes and sources.





Data Tables

Year	Clark County			Washington State		
	Rate*	95% CI**	Number	Rate*	95% CI**	Number
2000	12.0	(8.2, 17.1)	31	18.6	(17.4, 19.8)	1,005
2001	13.0	(9.1, 18.0)	36	17.2	(16.1, 18.3)	960
2002	11.5	(7.9, 16.2)	33	15.8	(14.8, 16.9)	907
2003	12.4	(8.7, 17.2)	37	18.4	(17.4, 19.6)	1,082
2004	10.7	(7.4, 15.0)	34	12.2	(11.3, 13.1)	737
2005	11.5	(8.1, 16.0)	37	14.9	(13.9, 15.9)	926
2006	7.9	(5.2, 11.6)	27	12.6	(11.8, 13.5)	810

Year	Clark County					
	Rate*	95% CI**	Number	Rate*	95% CI**	Number
2000	15.2	(8.4, 25.8)	15	9.7	(5.5, 15.9)	16
2001	16.6	(9.5, 27.2)	17	10.7	(6.5, 17.0)	19
2002	11.7	(6.1, 20.6)	13	11.2	(6.8, 17.5)	20
2003	14.5	(8.3, 23.6)	17	11.0	(6.7, 17.3)	20
2004	15.4	(9.0, 24.7)	18	8.3	(4.7, 13.8)	16
2005	12.7	(7.2, 21.0)	16	10.9	(6.7, 16.9)	21
2006	9.0	(4.5, 16.1)	12	7.4	(4.1, 12.4)	15

* Rate per 100,000 deaths adjusted using the 2000 U.S. Standard Population.

** 95% Confidence Intervals around the death rate; if two confidence intervals overlap, there is generally no significant difference between the rates.

Technical Notes

- ICD-10 codes used: J10-J18.
- Deaths coded using ICD 10
- If the rate for any given year or group of years is significantly higher or lower than the HP 2010 goal (using 95% confidence intervals) the rate is described as significantly higher or lower than the goal. If the goal falls within the confidence interval, the rate is described as similar to the goal.

Sources

(1) Centers for Disease Control and Prevention. (2008). Seasonal Flu. Retrieved May 19, 2008. Website <http://www.cdc.gov/flu>. (2) Medline, U.S. National Library of Medicine and National Institutes of Health. (2008). Pneumonia. Retrieved May 19, 2008. Website <http://www.nlm.nih.gov/medlineplus/pneumonia.html>. (3) Washington State Department of Health. Health of Washington State. Olympia, WA, 2007 Dec [2008 May 19]. Available from <http://www.doh.wa.gov/HWS/HWS2007.htm>. (4) U.S Bureau of the Census, County Population Estimates by Demographic Characteristics - Age, Sex, Race, and Hispanic Origin; updated annually for states and counties. <http://www.census.gov/popest/counties/asrh/>. 2000 Census of Population and Housing for places; updated every 10 years. <http://factfinder.census.gov>. (5) Vital Registration System, Annual Statistics Files, Deaths 2000-2006. [Data file]. Olympia, WA: Washington State Department of Health, Center for Health Statistics. (6) Public Health Seattle & King County, Epidemiology, Planning and Evaluation. (1991-2008). VistaPHw 7.3.0.4, 5-14-2008 [Computer software for public health assessment]. Seattle, WA. (7) Fiore, AE; Shay, DK; Broder, K; Iskander, JK; Uyeki, TM; Mootrey, G; Bresee, JS; Cox, NJ. (2008). Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2008. MMWR, 57(Early Release);1-60. (8) Pneumococcal polysaccharide vaccine statement. Centers for Disease Control and Prevention. 7/29/97. Available online at <http://www.nlm.nih.gov/medlineplus/pneumonia.html>. Accessed 7/24/08. (9) U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000 Goal 14-29: Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease to: 90% among noninstitutionalized adults aged 65 years and older, 60% among noninstitutionalized high-risk adults aged 18 to 64 years, and 90% among institutionalized adults (persons in long-term or nursing homes).

