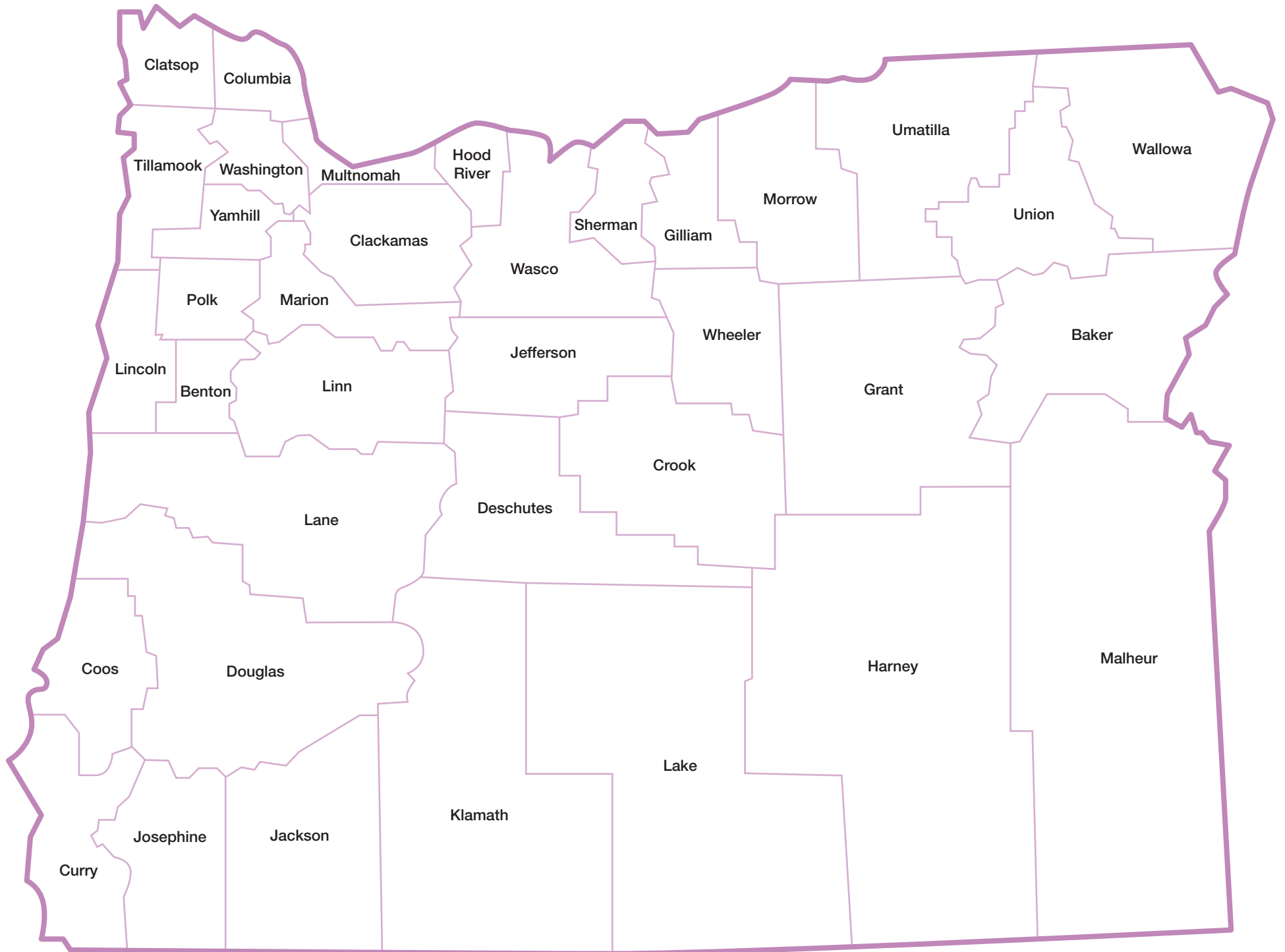

Oregon
Vital Statistics
Annual Report
2004
Vol. 2





Clatsop

Columbia

Tillamook

Washington

Multnomah

Hood River

Umatilla

Wallowa

Yamhill

Clackamas

Sherman

Gilliam

Morrow

Union

Polk

Marion

Wasco

Wheeler

Jefferson

Baker

Lincoln

Benton

Linn

Grant

Crook

Lane

Deschutes

Coos

Douglas

Harney

Malheur

Lake

Curry

Josephine

Jackson

Klamath

Preface

PREFACE

“What’s past is prologue...”

Sometimes the best way to determine what direction to take is to look at where we are and back at where we have been. This is as true in matters of public health as it is in navigation. And in today’s complex society, careful planning is becoming more important than ever before.

Each year, the Oregon Department of Human Services’ Center for Health Statistics publishes the Oregon Vital Statistics Annual Report, an analytical look at the health of Oregon as measured by the health of its citizens. By this means, policy makers and health care professionals have a source of important knowledge that can be used to form bases for action and benchmarks for assessing progress.

STRUCTURE OF THE REPORT

To improve ease of use and timeliness, the Vital Statistics Annual Report is issued in two volumes.

Volume 1 presents data on births, abortions, and teen pregnancy.

Volume 2 presents data on deaths (all ages), perinatal deaths and youth suicide attempts.

The only marriage and divorce data published in the report are statewide occurrences and rates. Information by county and by month of occurrence is available, as are a variety of year-to-date preliminary data on deaths, births, abortions, and teen pregnancy, at the Center for Health Statistics (CHS) web page: <http://www.ohd.hr.state.or.us/chs/welcome.htm>. Additional data is available in the form of simple cross-tabulations. For information on availability or to request data, call the Center for Health Statistics.

Comprehensive information on communicable diseases can be obtained by contacting the DHS Office of Disease Prevention and Epidemiology.

The more significant demographic and public health issues are discussed in the narrative sections that open each chapter. These narratives are accompanied by charts, graphs, and sidebar tables. Readers can research their own areas of interest by using the data in the many tables at the end of each section. You can also refer to other CHS reports for more detail on the specific issues summarized in this report. Recent publications are listed on the back inside cover of this report.

A COOPERATIVE EFFORT

The presentation of data in this report is the final stage of a long, ongoing process that begins with the prompt, accurate recording of vital events. This registration system ensures that the

information is collected, kept secure, and made available to individuals and their families when needed for documentation. Tabulation and analysis of the data by the Oregon Center for Health Statistics provide useful information about the health and social changes occurring in Oregon.

Vital Statistics has been called “the eyes and ears of public health,” and is, in fact, the only organized system of health records covering the entire population. The collection of data is a highly cooperative effort that depends on the participation of a great many people throughout the state.

The Providers of Services

Those who provide the services associated with vital events are the first participants in the collection system.

The birth attendant completes both the legal document and the confidential statistical section of the birth certificate. For deaths, the funeral director or person who first assumes responsibility for the body files the death or fetal death certificate. A physician completes the medical portion of these death certificates, except in cases of found bodies and unnatural deaths, which are certified by the medical examiner. Hospital medical records personnel help to ensure that all certificates are complete and accurate.

These service providers then file the completed certificates with the county registrars in the county where the event occurred.

Abortions and adolescent suicide attempts are treated differently. The providers of induced abortions file the completed statistical reports (which contain no identifying information) directly with the state registrar. Adolescent suicide attempts (again, without identifying information) are reported by the hospitals who treated youth who made the attempts.

County Officials

County registrars play an important role by further assuring the completeness and accuracy of birth, death, and fetal death registration. They check the certificates against other sources of information to make certain no events are missed. County registrars also follow up any incomplete items before sending the certificates to the state registrar at the Center for Health Statistics.

Center for Health Statistics

At the state level, the staff of the Center for Health Statistics perform additional checks for completeness and accuracy. A field representative makes contact with providers and county registrars. Clerical staff send correspondence seeking additional information on such matters as causes of death, birthweight, and tobacco use. Microfilmmers store certificates so that certified copies can be made. Coders and data entry personnel turn the collected information into computerized data, which are then retrieved by programmers, analyzed by researchers, and made available for demographic and public health needs.

Other States

This report does not overlook events relating to Oregon residents that occurred in another state. The Centers for Health Statistics in each U.S. state and Canadian province have agreed to forward copies of birth, death, and fetal death certificates to the state where the person usually resided. A cooperative agreement also exists for reports on induced termination of pregnancy; however, some states collect no resident information on these reports and, therefore, cannot participate in the exchange. As Oregon is the only state with an adolescent suicide attempt data system, we receive no reports of resident youth who attempted suicide outside of Oregon.

Among all these participants, it is clear there is no single recorder. The many hundreds of people throughout Oregon who record the major life events of our citizens have all played important roles in preparing this report. It could not have been achieved without them.

METHODOLOGICAL CHANGES

Beginning in 1999, significant changes occurred in the classification of cause of death data and the tabulation of youth suicide attempt data. See the Technical Notes for detailed information.

Cause of Death Classification

Beginning in 1999, and for the first time in twenty years, a new revision of the International Classification of Disease (ICD) became the standard nosological manual. This tenth revision (ICD-10) incorporates new rules for selecting the underlying cause of death as well as new, and often more detailed, cause of death codes. Changes have also been made in the structure of the leading causes of death, most notably the addition of new categories. As a consequence of these changes, the data for 1999 are not directly comparable to previously published data.

Youth Suicide Attempts

Unlike previous years, suicide ideators (persons who threatened to commit suicide but made no physical act) are not included in the total number of attempts, but are shown in a separate table. Had they been included in the total, the count would have been 785, a new high.

Quick Reference: Volume 2

Summary of Oregon Vital Events, 1999

Population	3,300,800	Population increased 33,250 or 1.0 percent over 1998.
Deaths Number Rate	Residents 29,356 8.9	Number of deaths increased by 10. Rate decreased by 1.1 percent.
Infant Deaths Number Rate	Residents 261 5.8	Number of infant deaths increased by 15. Rate increased by 7.4 percent.
Neonatal Deaths Number Rate	Residents 191 4.2	Number of neonatal deaths increased by 48. Rate increased by 31.3 percent.
Maternal Deaths Number Ratio	Residents 3 6.6	Oregon's average maternal death rate for 1995-1999 (6.8) was slightly lower than the U.S. rate for 1994-1998 (7.7).

Crude death rates are per 1,000 population; infant and neonatal death rates per 1,000 live resident births; maternal death ratio per 100,000 live resident births.

TABLE 5-1. Deaths, Maternal Deaths, Infant Deaths, Neonatal Deaths, and Fetal Deaths, U.S., 1945-1999

Year	Deaths		Maternal Deaths		Infant Deaths		Neonatal Deaths		Fetal Deaths	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Ratio
1945	1,401,719	10.6	5,668	207.2	104,684	38.3	66,593	24.3	65,513	23.9
1946	1,395,617	10.0	5,153	156.7	111,063	33.8	79,079	24.0	74,849	22.8
1947	1,445,370	10.1	4,978	134.5	119,173	32.2	84,296	22.8	77,917	21.1
1948	1,444,337	9.9	4,122	116.6	113,169	32.0	78,426	22.2	72,838	20.6
1949	1,443,607	9.7	3,216	90.3	111,531	31.3	76,326	21.4	70,584	19.8
1950	1,452,454	9.6	2,960	83.3	103,825	29.2	72,855	20.5	68,262	19.2
1951	1,482,099	9.7	2,812	75.0	106,702	28.4	75,192	20.0	70,569	18.8
1952	1,496,838	9.6	2,610	67.8	109,413	28.4	76,253	19.8	70,447	18.3
1953	1,517,541	9.6	2,385	61.1	108,405	27.8	76,332	19.6	69,393	17.8
1954	1,481,091	9.2	2,105	52.4	106,791	26.6	76,724	19.1	70,109	17.5
1955	1,528,717	9.3	1,901	47.0	106,903	26.4	77,351	19.1	69,153	17.1
1956	1,564,476	9.4	1,702	40.9	108,183	26.0	78,659	18.9	68,659	16.5
1957	1,633,128	9.6	1,746	41.0	112,094	26.3	81,088	19.1	69,561	16.3
1958	1,647,886	9.5	1,581	37.6	113,789	27.1	81,798	19.5	69,355	16.5
1959	1,656,814	9.4	1,588	37.4	112,008	26.4	80,778	19.0	68,613	16.2
1960	1,711,982	9.5	1,579	37.1	110,873	26.0	79,733	18.7	68,480	16.1
1961	1,701,522	9.3	1,573	36.9	107,956	25.3	78,482	18.4	68,767	16.1
1962	1,756,720	9.5	1,465	35.2	105,479	25.3	76,346	18.3	66,421	15.9
1963	1,813,549	9.6	1,466	35.8	103,390	25.2	74,648	18.2	64,640	15.8
1964	1,798,051	9.4	1,343	33.3	99,783	24.8	72,026	17.9	65,931	16.4
1965	1,828,136	9.4	1,189	31.6	92,866	24.7	66,419	17.7	60,859	16.2
1966	1,863,149	9.5	1,049	29.1	85,516	23.7	61,941	17.2	56,637	15.7
1967	1,851,323	9.4	987	28.0	79,028	22.4	58,127	16.5	54,934	15.6
1968	1,930,082	9.7	859	24.5	76,263	21.8	56,456	16.1	55,293	15.8
1969	1,921,990	9.5	801	22.2	75,073	20.9	56,085	15.6	50,749	14.1
1970	1,921,031	9.5	803	21.5	74,667	20.0	56,279	15.1	52,961	14.2
1971	1,927,542	9.3	668	18.8	67,981	19.1	50,496	14.2	47,818	13.4
1972	1,963,944	9.4	612	18.8	60,182	18.5	44,432	13.6	41,380	12.7
1973	1,973,003	9.3	477	15.2	55,581	17.7	40,664	13.0	38,309	12.2
1974	1,934,388	9.1	462	14.6	52,776	16.7	38,738	12.3	36,281	11.5
1975	1,892,879	8.8	403	12.8	50,525	16.1	36,416	11.6	33,796	10.7
1976	1,909,440	8.8	390	12.3	48,265	15.2	34,587	10.9	33,111	10.5
1977	1,899,597	8.6	373	11.2	46,975	14.1	32,860	9.9	33,052	9.9
1978	1,927,788	8.7	321	9.6	45,945	13.8	31,618	9.5	32,301	9.7
1979	1,913,841	8.5	336	9.6	45,665	13.1	30,980	8.9	32,969	9.4
1980	1,989,841	8.8	334	9.2	45,526	12.6	30,618	8.5	33,353	9.2
1981	1,977,981	8.6	309	8.5	43,305	11.9	28,000	7.8	32,596	9.0
1982	1,974,797	8.5	292	7.9	42,401	11.5	28,000	7.6	32,694	8.9
1983	2,019,201	8.6	290	8.0	40,627	11.2	26,507	7.3	30,752	8.5
1984	2,039,369	8.6	285	7.8	39,580	10.8	25,691	7.0	30,099	8.2

TABLE 5-1. Deaths, Maternal Deaths, Infant Deaths, Neonatal Deaths, and Fetal Deaths, U.S., 1945-1999 (Continued)

Year	Deaths		Maternal Deaths		Infant Deaths		Neonatal Deaths		Fetal Deaths	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Ratio
1985	2,086,440	8.7	295	7.8	40,030	10.6	26,179	7.0	29,661	7.9
1986	2,105,361	8.7	272	7.2	38,891	10.4	25,212	6.7	28,972	7.7
1987	2,123,323	8.7	251	6.6	38,380	10.0	24,940	6.5	29,349	7.7
1988	2,167,999	8.8	330	8.4	38,910	10.0	24,690	6.3	29,442	7.5
1989	2,150,466	8.7	320	7.9	39,655	9.8	24,800	6.2	30,469	7.5
1990	2,148,463	8.6	343	8.2	38,351	9.2	23,920	5.8	31,386	7.5
1991	2,169,518	8.6	323	7.9	36,766	8.9	22,978	5.6	30,160	7.3
1992	2,175,613	8.5	318	7.8	34,628	8.5	21,849	5.4	30,256	7.4
1993	2,268,553	8.8	302	7.5	33,466	8.4	21,174	5.3	28,766	7.2
1994	2,278,994	8.8	328	8.3	31,710	8.0	20,250	5.1	27,937	7.1
1995	2,312,132	8.8	277	7.1	29,583	7.6	19,155	4.9	27,294	7.0
1996	2,314,690	8.7	294	7.6	28,487	7.3	18,572	4.8	27,069	7.0
1997	2,314,245	8.7	327	8.4	28,045	7.2	18,524	4.8	26,486	6.8
1998	2,338,070	8.7	281	7.1	28,496	7.2	18,832	4.8	26,729	6.7
1999*	2,391,399	8.8	391	9.9	27,937	7.1	18,728	4.7	**	**

Rate per 1,000 population for deaths.

Rate per 100,000 live births for maternal deaths.

Rate per 1,000 live births for infant and neonatal deaths.

Ratio per 1,000 live births for fetal deaths.

Sources: Vital Statistics of the United States, vols. 1-3, lists historical data. Recent data are available from the National Center for Health Statistics (NCHS) web site (<http://www.cdc.gov/nchs/nvss.htm>). Fetal death data for 1998-99 are from Joyce Martin, NCHS (personal communication).

* Preliminary data.

** Not available.

TABLE 5-2. Deaths, Maternal Deaths, Infant Deaths, Neonatal Deaths and Fetal Deaths, Oregon, 1908-1999

Year	Deaths		Maternal Deaths ¹		Infant Deaths		Neonatal Deaths		Fetal Deaths	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Ratio
1908	4,970	8.0	59	709.0	676	81.2	-	-	-	-
1909	5,470	8.4	70	808.7	756	80.7	-	-	-	-
1910	6,089	9.0	91	991.7	733	79.9	-	-	-	-
1911	6,360	9.2	91	951.7	753	78.7	-	-	-	-
1912	5,898	8.4	63	563.1	653	58.6	-	-	-	-
1913	6,714	9.4	60	543.8	684	61.9	-	-	-	-
1914	6,446	8.9	72	619.4	577	49.6	-	-	-	-
1915	6,718	9.1	74	605.0	583	47.6	-	-	-	-
1916	7,107	9.5	88	679.0	725	55.9	-	-	-	-
1917	7,349	9.7	87	661.7	837	63.6	-	-	-	-
1918	9,842	12.8	106	797.3	907	68.2	-	-	-	-
1919	8,881	11.4	101	740.6	845	61.9	-	-	-	-
1920	9,186	11.6	112	749.0	927	61.9	-	-	-	-
1921	8,324	10.2	117	749.7	791	50.6	-	-	-	-
1922	9,381	11.3	115	762.2	886	58.7	-	-	-	-
1923	8,983	10.6	103	687.0	853	56.9	-	-	-	-
1924	9,511	11.1	94	594.3	834	52.7	-	-	-	-
1925	9,596	10.9	95	609.8	787	50.5	-	-	-	-
1926	9,885	11.1	85	569.4	769	51.5	-	-	-	-
1927	10,222	11.2	91	621.7	693	47.3	-	-	-	-
1928	10,493	11.3	86	607.4	651	46.0	-	-	410	29.0
1929	10,680	11.3	75	566.3	633	47.7	-	-	415	31.4
1930	10,544	11.0	81	601.2	671	49.8	-	-	390	28.9
1931	10,245	10.6	61	461.2	578	43.7	-	-	360	27.2
1932	10,272	10.5	64	498.2	530	41.3	-	-	322	25.1
1933	10,450	10.5	64	523.4	493	40.3	-	-	329	26.9
1934	10,539	10.5	79	604.4	519	39.7	-	-	320	24.5
1935	11,429	11.2	72	547.8	537	40.8	-	-	300	22.8
1936	12,434	12.0	77	545.4	626	44.3	409	29.0	300	21.5
1937	12,369	11.8	56	361.4	649	41.9	415	26.8	340	22.4
1938	11,777	11.1	53	324.5	631	38.6	418	25.6	353	21.6
1939	11,779	11.0	43	257.1	580	34.7	381	22.8	322	19.3
1940	12,329	11.3	45	256.8	592	33.2	413	23.6	365	20.8
1941	12,123	10.9	43	228.9	589	30.7	397	20.9	333	17.7
1942	12,520	10.9	37	166.0	669	30.0	456	20.4	362	16.2
1943	13,440	11.5	37	145.8	776	30.6	466	18.4	-	-
1944	12,580	10.3	41	147.9	706	30.1	504	21.5	454	19.4
1945	12,325	10.0	29	124.3	660	28.3	473	20.3	402	17.2
1946	12,828	9.5	28	94.7	803	27.2	594	20.1	515	17.4
1947	13,460	9.5	35	96.7	896	24.8	645	17.8	562	15.5
1948	13,872	9.4	15	42.9	892	25.5	671	19.2	508	14.5
1949	13,698	9.1	20	57.0	862	24.6	661	18.9	488	13.9
1950	13,888	9.1	22	61.1	816	22.7	627	17.4	493	13.7
1951	14,489	9.2	5	13.4	883	23.7	637	17.1	498	13.3
1952	14,438	9.0	11	27.7	951	23.9	696	17.5	500	12.6
1953	14,598	8.9	15	37.6	938	23.5	680	17.1	524	13.1
1954	14,665	8.8	9	23.3	868	22.5	632	16.4	512	13.3

TABLE 5-2. Deaths, Maternal Deaths, Infant Deaths, Neonatal Deaths and Fetal Deaths, Oregon, 1908-1999 (Continued)

Year	Deaths		Maternal Deaths ¹		Infant Deaths		Neonatal Deaths		Fetal Deaths	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Ratio
1955	15,303	9.1	8	20.7	934	24.1	681	17.6	497	12.8
1956	15,328	8.8	11	28.6	887	23.1	645	16.8	504	13.1
1957	15,633	9.0	8	21.1	828	21.9	587	15.5	499	13.2
1958	15,449	8.9	6	16.5	844	23.3	597	16.4	448	12.3
1959	16,699	9.4	9	24.6	927	25.3	664	18.1	469	12.8
1960	16,787	9.5	14	36.5	891	23.2	635	16.6	493	12.9
1961	16,885	9.3	8	21.3	861	23.0	604	16.1	454	16.1
1962	17,221	9.4	7	18.9	811	21.9	554	15.0	461	12.5
1963	18,017	9.7	7	20.1	747	21.4	551	15.8	410	11.8
1964	18,138	9.5	4	11.9	754	22.5	532	15.9	402	12.0
1965	18,133	9.2	1	3.0	696	21.1	477	14.5	421	12.8
1966	18,979	9.5	3	9.2	697	21.5	506	15.6	387	11.9
1967	18,908	9.4	4	12.7	616	19.6	436	13.9	395	12.6
1968	19,017	9.3	3	9.3	637	19.8	460	14.3	365	11.4
1969	19,548	9.4	4	11.8	592	17.5	410	12.1	194	*
1970	19,530	9.3	5	14.1	555	15.7	381	10.8	486	13.7
1971	20,087	9.4	5	15.0	615	18.4	416	12.5	408	12.2
1972	20,216	9.3	5	16.0	528	16.9	359	11.5	391	12.5
1973	20,881	9.4	1	3.2	466	15.1	329	10.6	312	10.1
1974	20,320	9.0	3	9.2	488	15.0	330	10.2	266	8.2
1975	20,142	8.8	3	9.0	502	15.1	330	9.9	284	8.5
1976	20,459	8.7	0	0.0	444	12.7	277	8.0	280	8.0
1977	20,457	8.5	5	13.3	453	12.1	293	7.8	283	7.6
1978	20,870	8.4	2	5.1	502	12.9	299	7.7	302	7.8
1979	21,024	8.3	1	2.4	450	10.8	276	6.6	307	7.4
1980	21,756	8.3	1	2.3	521	12.1	303	7.0	294	6.8
1981	21,798	8.2	3	7.0	466	10.8	299	7.0	298	6.9
1982	21,594	8.1	8	19.5	433	10.6	253	6.2	253	6.2
1983	22,361	8.5	6	15.0	385	9.6	215	5.4	268	6.7
1984	23,101	8.7	5	10.1	388	9.8	190	4.8	257	6.5
1985	23,824	8.9	4	10.1	387	9.8	211	5.3	237	6.0
1986	23,328	8.8	4	10.3	368	9.5	183	4.7	268	6.9
1987	24,181	9.0	2	5.2	402	10.4	213	5.5	222	5.7
1988	24,557	9.0	3	7.5	339	8.5	181	4.5	235	5.9
1989	24,679	8.8	4	9.7	364	8.8	205	5.0	230	5.6
1990	25,073	8.8	3	7.0	354	8.3	182	4.2	262	6.1
1991	24,935	8.5	3	7.0	307	7.2	172	4.0	261	6.1
1992	25,714	8.6	3	7.2	297	7.1	158	3.8	243	5.8
1993	27,596	9.1	7	16.8	297	7.1	154	3.7	204	4.9
1994	27,361	8.9	4	9.6	295	7.1	164	3.9	224	5.4
1995	28,190	9.0	0	0.0	262	6.1	137	3.2	237	5.5
1996	28,900	9.1	2	4.6	244	5.6	145	3.3	251	5.8
1997	28,750	8.9	5	11.4	256	5.8	157	3.6	235	5.4
1998	29,346	9.0	5	11.1	246	5.4	143	3.2	208 ²	4.6 ²
1999	29,356	8.9	3	6.6	261	5.8	191	4.2	212	4.7

- Data not available.

* Incomplete total.

Rate per 1,000 population for deaths.

¹ Rate per 100,000 live births for maternal deaths.

Rate per 1,000 live births for infant and neonatal deaths.

Ratio per 1,000 live births for fetal deaths.

² The definition of fetal death changed effective in 1998 data reporting.

TABLE 5-3. Deaths, Infant Deaths, Neonatal Deaths, and Fetal Deaths, by County of Residence, Oregon, 1999

County of Residence	Deaths		Infant Deaths		Neonatal Deaths		Fetal Deaths	
	Number	Rate ¹	Number	Rate ²	Number	Rate ²	Number	Ratio ³
Total	29,356	8.9	261	5.8	191	4.2	212	4.7
Baker	208	§12.5	-	-	-	-	1	5.9
Benton	456	§5.9	7	8.5	6	7.3	2	2.4
Clackamas	2,449	§7.5	16	3.9	9	2.2	16	3.7
Clatsop	379	§10.9	3	8.0	1	2.7	1	2.7
Columbia	371	8.7	3	5.3	1	1.8	1	1.8
Coos	841	§13.7	9	13.9	7	10.8	2	3.1
Crook	170	10.1	3	13.9	2	9.3	-	-
Curry	332	§15.1	-	-	-	-	1	7.1
Deschutes	840	§7.9	8	6.1	8	6.1	4	3.0
Douglas	1,168	§11.6	9	8.0	7	6.3	5	4.5
Gilliam	18	8.6	-	-	-	-	-	-
Grant	92	§11.5	1	12.8	1	12.8	2	25.6
Harney	82	10.8	-	-	-	-	-	-
Hood River	162	8.2	4	11.8	4	11.8	2	5.9
Jackson	1,804	§10.3	10	4.8	7	3.4	10	4.8
Jefferson	155	8.8	2	6.7	1	3.4	1	3.4
Josephine	963	§13.1	4	4.8	2	2.4	-	-
Klamath	668	§10.7	6	7.4	3	3.7	4	4.9
Lake	90	§12.2	1	15.2	1	15.2	-	-
Lane	2,821	8.9	24	6.4	17	4.5	19	5.1
Lincoln	543	§12.5	5	11.8	4	9.5	7	16.5
Linn	1,006	§9.8	10	6.9	7	4.8	5	3.4
Malheur	245	8.0	4	8.0	4	8.0	5	10.0
Marion	2,436	8.9	26	5.7	21	4.6	20	4.4
Morrow	76	8.0	2	11.1	2	11.1	-	-
Multnomah	5,690	8.8	46	5.0	34	3.7	45	4.9
Polk	509	8.5	3	4.6	3	4.6	2	3.1
Sherman	20	10.5	-	-	-	-	-	-
Tillamook	306	§12.7	2	9.3	1	4.7	3	14.0
Umatilla	599	8.8	4	3.5	2	1.8	7	6.2
Union	248	10.1	-	-	-	-	2	6.4
Wallowa	84	§11.7	1	16.9	1	16.9	-	-
Wasco	294	§13.0	3	10.6	1	3.5	2	7.1
Washington	2,535	§6.3	39	5.5	28	3.9	38	5.4
Wheeler	19	11.9	-	-	-	-	-	-
Yamhill	677	§8.1	6	4.8	6	4.8	5	4.0

- Quantity is zero.

1 Rates per 1,000 population for deaths.

2 Rate per 1,000 live births for infant and neonatal deaths.

3 Ratio per 1,000 live births for fetal death.

§ Rate is significantly different than state rate.

NOTE: Infant deaths occur in the first year of life. Neonatal deaths occur within the first 27 days of life. Fetal deaths include fetuses whose birthweight was 350 grams or more or if birthweight was unknown, gestational age was 20 weeks or more.

TABLE 5-4. Oregon Benchmarks Measured by Health Division Databases

Ref. No.	Oregon Benchmarks	Unit of Measure (Per)	Year	Indicators	
				Current	Year 2000 Goal
43	Teen pregnancy rate	1,000 females age 10-17	1999	15.9	15.0
44	Percentage of babies whose mothers received early prenatal care (beginning in the first trimester)	100 live births	1999	80.9	90.0
45	Infant mortality rate	1,000 live births	1999	5.8	6.0
46	Percentage of two-year olds who are adequately immunized	percent	1999	73.0	90.0
47	Annual percentage of new HIV cases with an early diagnosis (before symptoms occur)	% of positive cases	1999	73.6	85.0
48	Percentage of adults who do not currently smoke tobacco	percent	1999	79.0	81.0
49	Premature mortality: Years of potential life lost before age 70	1,000 population age 0-69	1999	52.7	57.4
50	Percentage of adults whose self-perceived health status is very good or excellent	percent	1999	57.0	65.0
52a	Percentage of pregnant women who abstain from using alcohol	percent	1999	98.1	98.0
52b	Percentage of pregnant women who abstain from using tobacco	percent	1999	85.5	85.0
66	Percentage of students who carry weapons	percent	1999	14.0	15.0
71	Percentage of Oregonians served by public drinking water systems that meet health-based standards	percent	1999	90.0	75.0

NOTE: The Oregon Benchmarks were reduced from 259 to 92 as part of the state's updated strategic plan Oregon Shines II: Updating Oregon's Strategic Plan, A Report to the People of Oregon, January 21, 1997. Oregon Health Division databases are used to measure 11 Benchmarks.

Oregon Benchmarks measured by Health Division Databases Achieving the Oregon Shines Vision: The 1999 Benchmark Performance Report to the Legislative Assembly. Oregon Progress Board, March 1999.

- 43 Source: Birth Certificate Statistical File and Abortion Statistical File. Pregnancy rates are the sum of resident live births and induced abortions divided by the estimated population.* Spontaneous abortions and fetal deaths are not included. Pregnancy rates include live births to Oregon residents and abortions for Oregon residents regardless of where the abortion was performed. Out of state abortions for Oregon residents may be under-reported because some states where Oregon residents go to have abortions do not report the patient's state of residence.
- 44 Source: Birth Certificate Statistical File. Resident live births to women who have prenatal care visits beginning in the first trimester divided by the total number of resident live births, excluding missing and unknown values.
- 45 Source: Death Certificate Statistical File and Birth Statistical File. Infants who die within one year of birth divided by the number of resident live births during the same calendar year.
- 46 Source: National Immunization Survey, CDC. (Prior to 1996, source: Baby Shot Survey, Immunization Program, Center for Child and Family Health.)
- 47 Source: HIV Program, Center for Disease Prevention and Epidemiology. Persons diagnosed with asymptomatic HIV disease divided by the total number of persons diagnosed with HIV during the calendar year.
- 48 Source: Behavioral Risk Factor Surveillance System (BRFSS). Adults (≥ 18 years of age) who report that they do not now smoke cigarettes divided by the total number of survey respondents.
- 49 Source: Death Certificate Statistical File. Years of potential life lost (YPLL) quantifies premature mortality occurring in younger age groups by measuring the number of years between age at death and age 70. This composite figure first calculates the age-specific YPLL for each of 7 age groupings 0-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, and 65-69 by taking the midpoint for each age group, subtracting from 70, and multiplying by the number of deaths in each age group. The resulting number for each age group is then divided by the age-specific population and standardized (weighted) to an age-homogeneous hypothetical population of 1,000 people per every 10-year age group. Standardizing permits valid comparisons over time. The weighted numbers are summed across ages, then divided by seven (seven 10-year age groups).
- 50 Source: Behavioral Risk Factor Surveillance System (BRFSS). Adults (≥ 18 years of age) who report that their general health is very good or excellent divided by the total number of survey respondents.
- 56a Source: Birth Certificate Statistical File. Resident live births whose mothers reported not using alcohol during pregnancy divided by the total number of resident live births, excluding missing and unknown values.
- 56b Source: Birth Certificate Statistical File. Resident live births whose mothers reported not using tobacco during pregnancy divided by the total number of resident live births, excluding missing and unknown values.
- 66 Source: Youth Risk Behavior Survey. Survey respondents in grades 9-12 who report carrying a weapon (such as a knife, gun, or club) within 30 days of the survey divided by the total survey respondents.
- 71 Source: Safe Water System, Drinking Water Program, Center for Environment and Health Systems.

* All population estimates are from the *Population Estimates for Oregon*, published annually by the Center for Population Research and Census, School of Urban and Public Affairs, Portland State University.

Mortality

During 1999, Oregon's death rate changed little from the preceding year, decreasing 1.0 percent to 889.4 per 100,000 population, down from 898.1. For the past seven years the rate has fluctuated between 888 and 909 per 100,000 population. [Table 6-3]. During 1999, 29,356 Oregonians died, 10 more than the previous year.

Between 1998 and 1999, the sex-specific death rates increased for females but decreased for males. Their death rates were 893.3 and 885.3, respectively. [Table 6-2]. This was the first such occurrence of the female rate exceeding the male rate during at least the past 70 years and is consistent with a long-term trend of increasing death rates for females. A generation earlier, the rate for males was 26.5 percent higher; by 1999, the female rate exceeded the male rate by 0.9 percent. However, the increase is largely due to the changing population distribution by age rather than health status. Females still have lower age-specific death rates.

Age-sex-specific death rates fell to record lows for several age groups, particularly among residents ages 15-64 years old. [Figure 6-1]. Increases were recorded for younger and older groups. [Table 6-1]. Since 1940, the median age at death has usually increased by two years per decade. [Figure 6-2]. During 1999, the median age of Oregonians at death was 78 years, 81 for females and 75 for males. On average, an Oregonian died every 18 minutes during 1999.

Unlike previous years' reports, there is no comparison to national data for 1999 since age-adjusted death rates were not available at press time.

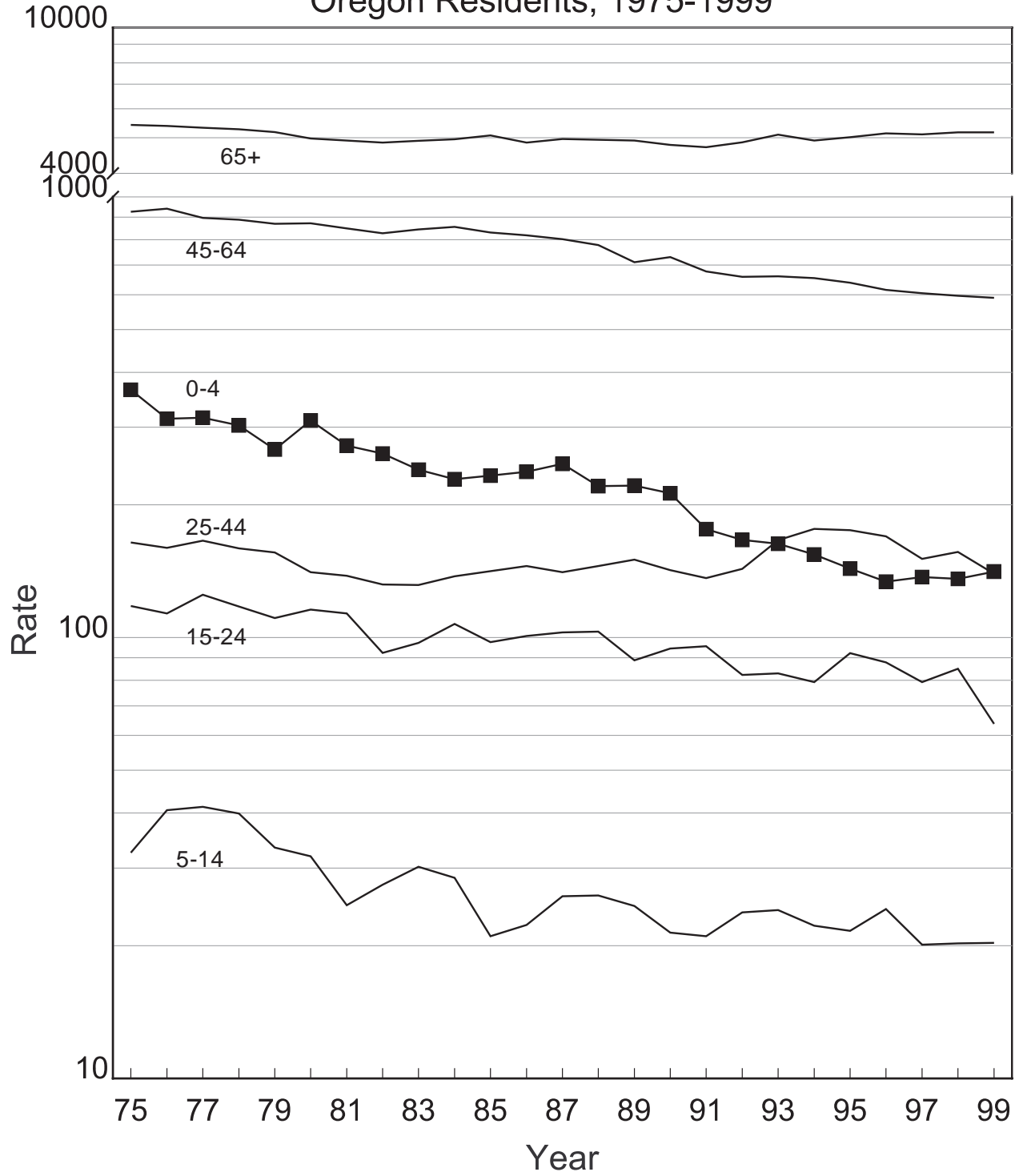
For the first time in 70 years the female death rate exceeded that for males.

The oldest Oregonian to die in 1999 was a 117 year old man who was born in Siberia.

Introducing ICD-10

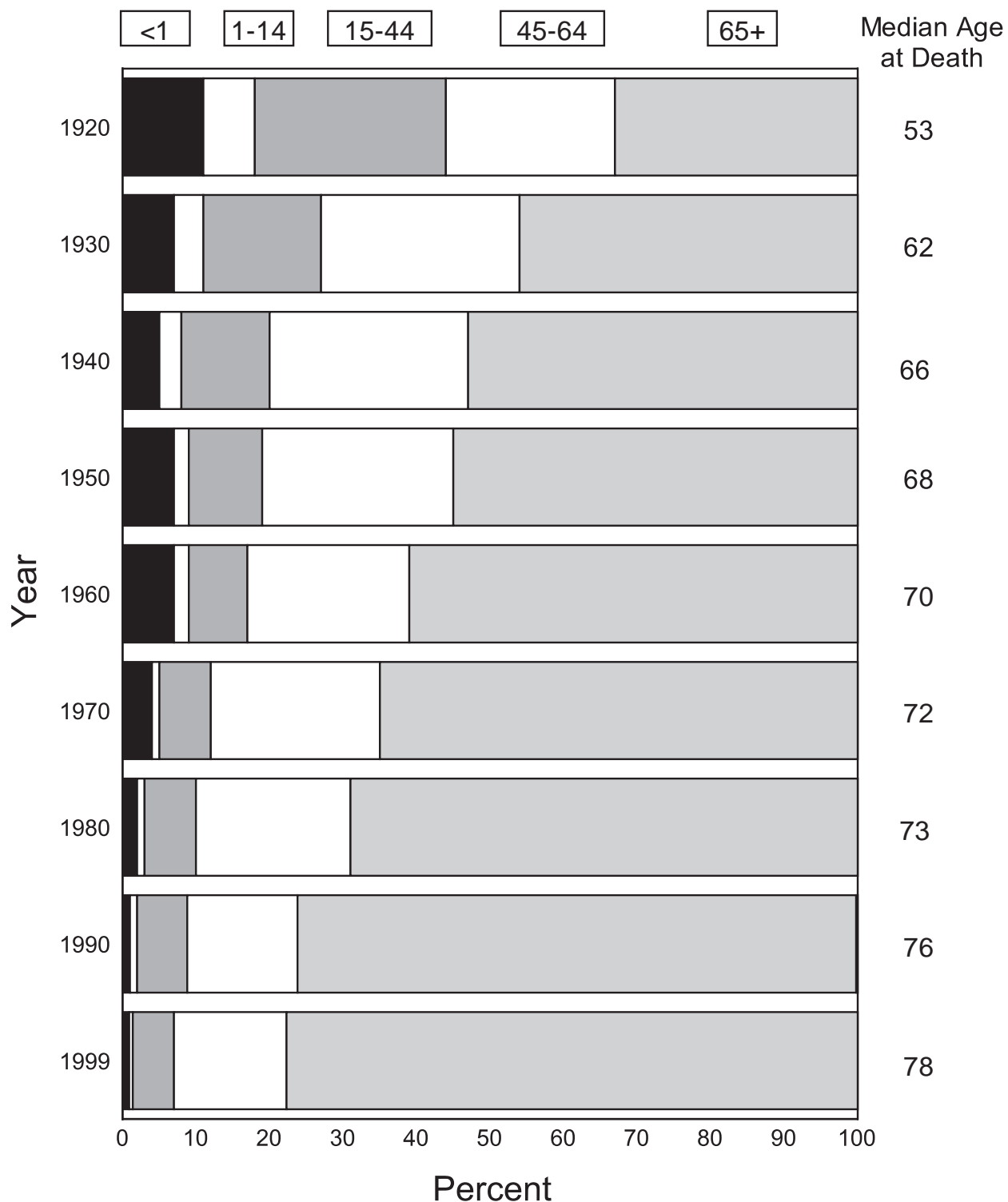
Beginning in 1999, and for the first time in twenty years, a new revision of the International Classification of Disease (ICD) became the standard nosological manual. This tenth revision (ICD-10) incorporates new rules for selecting the underlying cause of death as well as new, and often more detailed, cause of death codes. Changes have also been made in the structure of the leading causes of death, most notably the addition of new categories (e.g., Aortic Aneurysm). As a consequence of these changes, the data for 1999 are not directly comparable to previously published data. Most of the leading causes of death discussed here are not greatly affected by the use of the new manual with the exception of "Influenza and Pneumonia" where the number of deaths attributed to this cause declined substantially (30%). For further information, please see Appendix B (Technical Notes -- Methodology).

Figure 6-1.
Age-Specific Death Rates,
Oregon Residents, 1975-1999



Rates per 100,000 population.

Figure 6-2.
 Proportion of Deaths by Selected Age Groups,
 Oregon Residents, 1920-1999



Heart disease is the leading killer of Oregonians.

HEART DISEASE

Heart disease¹ continued to be the leading cause of death in Oregon, accounting for one of every four resident deaths (7,252 out of 29,356). [Table 6-6]. As with many causes of death, the heart disease mortality rate was higher among males than females. In 1999, the male rate was 6.7 percent higher than the female rate, a much smaller difference than was seen a generation or two ago. Although the leading cause of death for Oregonians as a whole, by age group it ranks first only among persons 75 or older. The median age for heart disease was 81 years, the highest ever recorded. [Table 6-13 and Figure 6-4].

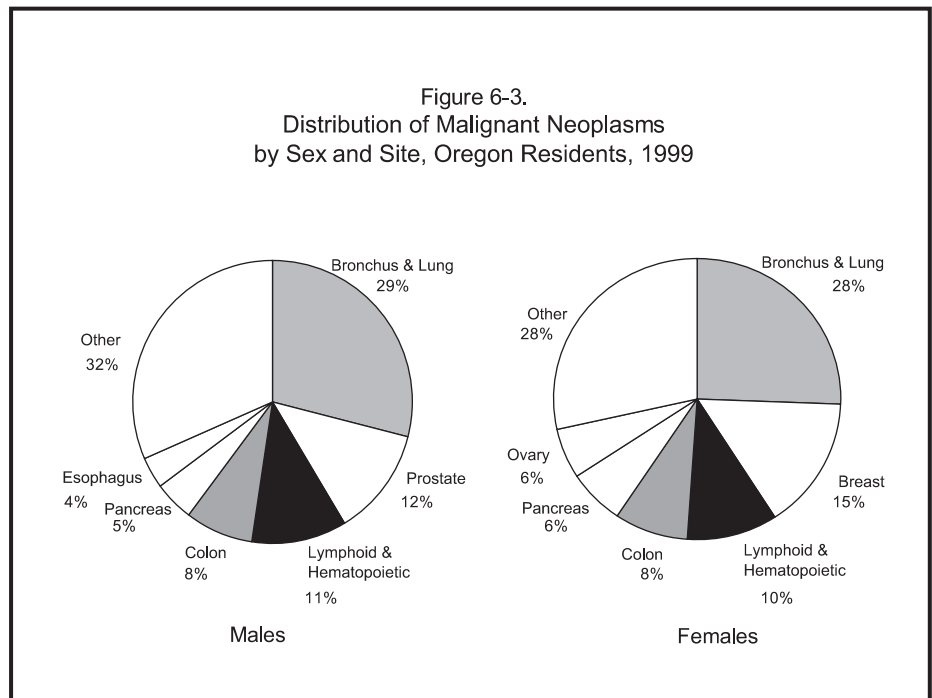
The heart disease category includes a number of conditions. [Table 6-6]. Most common, and accounting for the majority of heart disease deaths, are myocardial infarctions, coronary occlusions, coronary thromboses, and coronary heart disease. The infarctions, occlusions, and thromboses are acute, often terminal events, while coronary heart disease is a chronic condition.

Although the leading cause of death, heart disease ranked third in years of potential life lost (13,390) after unintentional injuries and cancer. [Table 6-11]. On average, an Oregonian died of heart disease every 72 minutes.

CANCER

Nearly seven thousand Oregonians succumbed to cancer during 1999. During the last half of the 20th Century, the discrepancy in death rates between males and females has narrowed considerably. By 1999 the male death rate was just 9.9 percent higher than the female rate; nonetheless, cancer death rates among elderly males

Figure 6-3.
Distribution of Malignant Neoplasms
by Sex and Site, Oregon Residents, 1999



were far higher than among elderly females. [Table 6-7f and 6-7m]. Although ranking second after heart disease, cancer is the leading killer of Oregonians ages 35 through 74. [Table 6-4]. During 1999 the median age at death for the 6,904 cancer patients increased to 74, a new high.

The decades-long upward trend² in cancer mortality was driven principally by an increasing number of lung cancer deaths, a cause that would be rare in the absence of smoking. [Figure 6-3]. The lungs were the most common site of cancer for both sexes, with lung cancer deaths becoming increasingly prevalent among women during recent decades. In 1970, there were 4.5 lung cancer fatalities among men for every female death. By 1999 the ratio declined to 1.1 to 1.0.

Malignant neoplasms accounted for more years of potential life lost (21,254) than any other cause, except unintentional injuries. [Table 6-11]. Every 76 minutes, on average, cancer claimed the life of an Oregonian.

CEREBROVASCULAR DISEASE

With 2,817 deaths, cerebrovascular disease was the third leading cause of death among Oregonians and claimed females far more often than males (105.1 per 100,000 population vs. 65.1). Among residents 85 or older it is the second leading cause of death. Although females have the highest overall death rate, males 55-84 years old had higher death rates than similarly-aged females. The median age at death was 83 years. [Table 6-13].

Sudden circulatory crises such as strokes, cerebral thromboses, and hemorrhages are common acute forms of these diseases; cerebral arteriosclerosis is a chronic form.

Lung cancer is the most common fatal cancer for both men and women.

LUNG CANCER DEATH RATES			
YEAR	TOTAL	MALE	FEMALE
1970	33.5	56.4	11.4
1975	41.2	65.9	17.7
1980	48.3	69.9	27.4
1985	56.2	76.0	37.2
1990	64.3	81.2	48.1
1995	62.5	69.5	55.7
1999	53.4	53.6	53.1

Rates per 100,000 population.

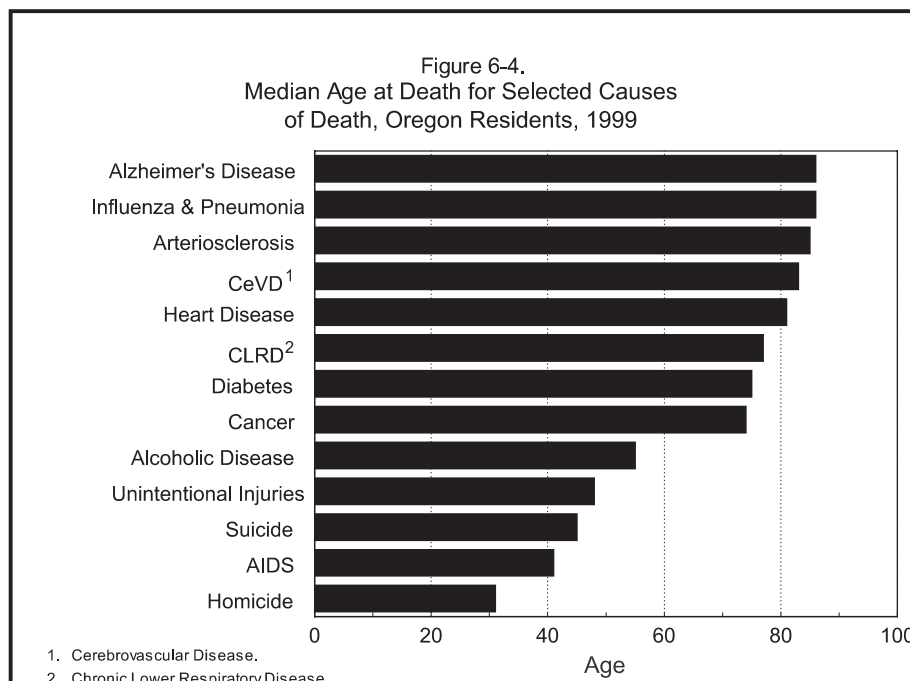
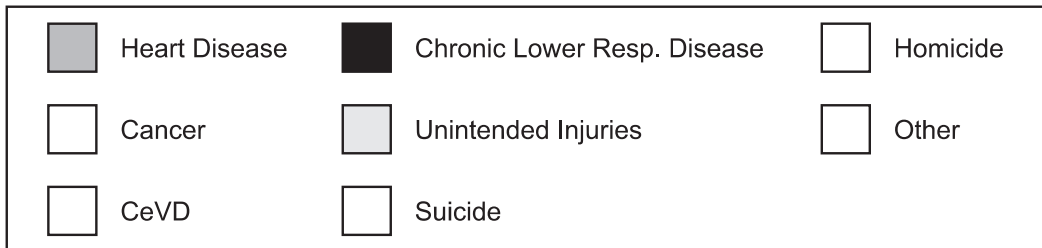
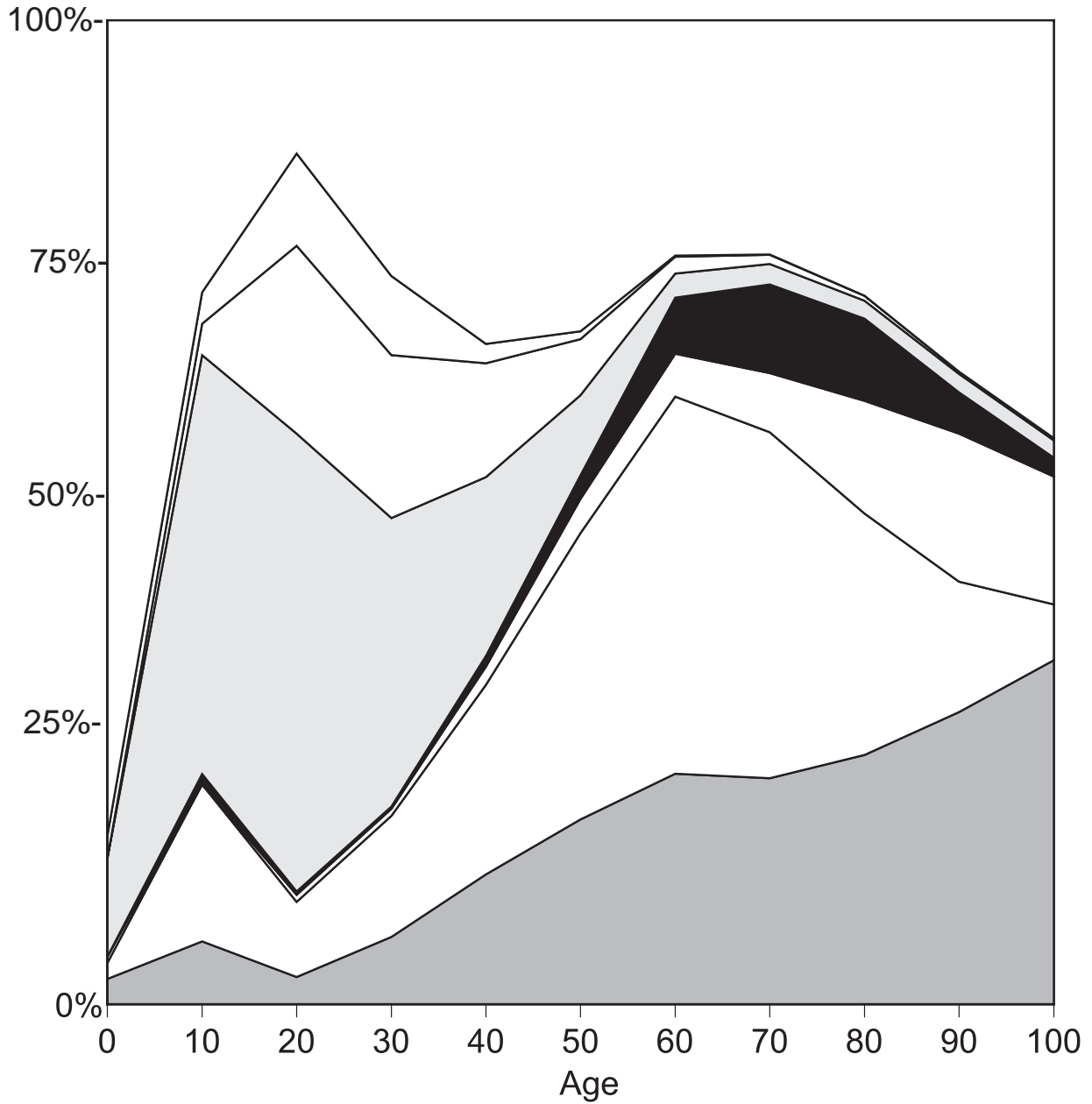


Figure 6-5.
 Percentage of Deaths by Cause and Age,
 Oregon Residents, 1999



Although the third leading cause of death, cerebrovascular disease ranked tenth in the number of years of potential life lost (2,226), a consequence of the older ages of the decedents (compared to relatively younger ages at death for many other causes). An Oregonian died from cerebrovascular disease every 3.1 hours.

CLRD

Chronic lower respiratory disease (CLRD) has become an increasingly common killer of Oregonians over the past several decades, and during 1999 claimed 1,762 residents; it was the fourth leading cause of death. (CLRD was formerly classified as chronic obstructive pulmonary disease.)³ Until recently, males were far more likely to succumb to this cause than females. A generation ago, males were twice as likely to die from CLRD, but by 1999 there was essentially no difference in death rates between the genders (53.6 for males vs. 53.1 for females). CLRD ranked as the third leading cause of death among residents 55-74 years-old. [Table 6-4]. The median age at death was 77.

The vast majority of CLRD deaths are caused by tobacco use with the sharp rise in deaths among women reflecting their increased smoking prevalence during recent decades. No other cause, except lung cancer, has a higher proportion of deaths linked to tobacco use than does CLRD; at least eight in 10 CLRD deaths were associated with tobacco use. [Table 6-18].

The group of allied conditions categorized as CLRD includes four principal diseases: chronic and unspecified bronchitis, emphysema, asthma, and chronic airways obstruction.

Although the fourth most common cause of death, chronic lower respiratory disease ranked 11th in the number of years of potential life lost (YPLL). An Oregonian died from CLRD every 5.0 hours, on average. Most of these deaths were preventable.

UNINTENTIONAL INJURIES

During 1999, 1,144 Oregonians died from unintentional injuries⁴, making them the fifth leading cause of death. With a rate of 45.0 per 100,000 population, males were nearly twice as likely to die in this manner than were females (24.5). [Table 6-2]. Although this category ranked fifth overall in the number of deaths, it was the leading cause of death for Oregonians ages 1-34. The median age at death increased by four years (over the previous year) to 48, a record high.

Transportation-related injuries accounted for the bulk of unintentional injury deaths with about half of the decedents 15-44 years old. Falls, the second most common type of fatal unintentional injury, claimed 183 Oregonians. (ICD-10 no longer includes unspecified fractures in the fall category; they are now placed in a residual category.² Hence the number of deaths attributed to falls is substantially lower using ICD-10.) Sixty-two percent of fall victims were 75 or older. Poisonings and inanimate mechanical forces were

In the past, males were much more likely to die from CLRD than were females, but in 1999, both were about equally likely to succumb to this cause.

Unintentional injuries were the leading cause of years of potential life lost.

Most unintentional poisoning deaths were overdoses of illicit drugs.

the third and fourth most common causes of unintentional injury deaths. [Table 6-23]. Summer is the season of greatest risk, with more residents dying from unintentional injuries during July than any other month. [Table 6-8]. During 1999, 66 fatal unintentional injuries were sustained in the workplace.

More years of potential life were lost (21,710) from unintentional injuries than from any other cause. [Table 6-11]. Cancer ranked a close second and heart disease a distant third. An Oregonian died as a consequence of an unintentional injury every 7.7 hours.

Alzheimer's disease is the fifth leading cause of death among women.

ALZHEIMER'S DISEASE

Mirroring the aging of Oregonians has been the seemingly inexorable rise in Alzheimer's disease deaths. During 1999, the tangles and plaques characteristic of this disease led to the deaths of 868 Oregonians, making it the sixth leading cause of death. As in past years, women were about twice as likely as men to die from Alzheimer's disease (35.5 per 100,000 vs. 16.9). Alzheimer's was the fifth leading cause of death among women but ninth among men. [Table 6-2]. This devastating disorder takes years to claim its victims' lives; 19 in 20 of the deaths occurred after the decedent's 75th birthday. [Table 6-6]. No leading cause had a higher median age at death (86) than did Alzheimer's disease. [Table 6-13].

Concomitant with the high median age at death was a minimal number (39) of years of potential life lost. Every 10.1 hours, this disease claimed an Oregonian.

For further information on Alzheimer's disease in Oregon, see *Oregon Health Trends, Number 52*. Because of differences between the state and the nation in leading cause of death categorization, the comparability ratios published by the National Center for Health Statistics should *not* be applied to Oregon data (unless only ICD-9 code 331.0 is used). Please see Appendix B for further information.

DIABETES MELLITUS

With 855 deaths during 1999, diabetes was the seventh leading cause of mortality among Oregonians. Both males and females were about equally likely to die from diabetes. Among the various chronic diseases that lead to death, diabetes had one of the lowest median ages at death (75). [Table 6-13].

Residents lost 2,441 years of potential life as a consequence of diabetes, making it the ninth leading cause of YPLL. An Oregonian died of diabetes every 10.2 hours in 1999.

Women were 24 percent more likely than males to die from influenza and pneumonia.

INFLUENZA AND PNEUMONIA

The eighth leading cause of death, influenza and pneumonia, more often claims females than males; during 1999, their death rates were 22.9 and 18.5, respectively. This is the fifth leading cause of death among Oregonians 85 or older.

At 86, the median age at death set a record high during 1999. Influenza and pneumonia accounted for 768 years of potential life lost, ranking 15th among the causes of death. A resident died from these causes every 12.8 hours, on average.

Because of a substantial change in the manner of coding influenza and pneumonia deaths in ICD-10, the 1999 death rate should not be compared to previous years' without applying the ICD-10/ICD-9 comparability ratio. (See Appendix B.)

SUICIDE

During 1999, 499 Oregonians died by suicide. (Note that residents choosing the "Death with Dignity" option [Measure 16] are not counted here; they are included in the appropriate disease categories.) Overall, suicide ranked ninth among the leading causes of death but seventh for males compared to fifteenth for females; their death rates were 25.3 per 100,000 and 5.2, respectively. Even more striking, is the difference in rates between the elderly; males 85 or older were ten times more likely to die by suicide than were their female counterparts. [Tables 6-7f and 6-7m]. Females most often die from suicide during middle age. Suicide is the second leading cause of death of Oregonians ages 15-34. [Table 6-4].

The youngest Oregonian to commit suicide was a 13-year-old boy (who shot himself with a long gun) and oldest a 98-year-old man (who shot himself with a handgun). Firearms were the most frequently chosen method (63.1%) of completed suicide, followed by hanging/suffocation (15.2%) and poisoning (15.0%). The method varied within different age and sex cohorts, however. [Table 6-30].

The median age at death was 45. Suicide was the fourth leading cause of YPLL (9,807 years) following unintentional injuries, cancer, and heart disease. [Table 6-11]. Every 17.6 hours an Oregonian died from suicide.

ALCOHOL-INDUCED

Alcoholism (including related disorders) and alcohol poisonings⁵ claimed 304 Oregonians during 1999, making it the tenth leading cause of death. The death rate was 9.2 per 100,000 population. Fatal alcohol abuse occurred more than three times as often among males as among females; their death rates were 14.4 and 4.2, respectively. [Table 6-2]. Alcoholism ranked as the fifth leading cause of death for 35-54 year-olds. [Table 6-4]. For more than a decade, Oregonians have been dying at younger ages from this cause; in 1999, the median age at death was 55, the lowest ever recorded.

This category is comprised of alcohol-related disorders from multiple organ systems with alcoholic liver disease accounting for the majority (60.2%). If intentional and unintentional injury deaths where alcohol was a factor (e.g., motor vehicle crashes) were

Males were five times more likely to die by suicide than were females.

One half of all alcoholism deaths occurred by age 55, the youngest age ever recorded.

included in this category, the count would be substantially higher. (The role, if any, of alcohol in injury deaths is rarely reported on death certificates.)

Alcoholism was the eighth leading cause of years of potential life lost (3,142). Every 1.2 days an Oregonian succumbed to this cause.

PARKINSON'S DISEASE

Ranking twelfth during 1999, Parkinson's disease claimed 256 Oregon residents; the death rate was 7.8 per 100,000 population. Men more often die from this disease than do women and in 1999 they were about half-again as likely to do so. Their death rate was 9.3 compared to 6.2 for women. [Table 6-2]. A small number of middle-aged residents died from Parkinson's disease, but eight in ten of the deaths occurred to residents 75 or older. [Table 6-6]. The median age of death was 83.

Because most deaths were among the elderly, very few (41) years of potential life were lost by Oregonians due to this disease. [Table 6-12]. The 256 deaths represent the loss of an Oregonian every 1.4 days. For additional information, see *Oregon Health Trends*, Number 52.

ARTERIOSCLEROSIS

During the past several decades, a declining number of deaths have been attributed to arteriosclerosis. It was the 16th leading cause of death in 1999, claiming 198 Oregonians. Women have long been more likely to die from this cause; their 1999 death rate was 6.9, compared to 5.0 for men. [Table 6-2]. Nearly nine in ten of the deaths (87.4%) occurred among those 75 or older. The median age at death was 85, one of the oldest among the leading causes. Note, the number of deaths attributed to arteriosclerosis do not include all deaths relating to this cause, since many have been classified under more specific manifestations of cardiac and cerebral disease.

Because most deaths attributed to arteriosclerosis do not occur until age 85 or older, the number of years of potential life lost are typically very small; in fact in 1999, there were none at all. Oregon residents died from arteriosclerosis every 1.8 days, on average.

HOMICIDE

Homicide was the 21st leading cause of death during 1999; 109 Oregonians were murdered, or 3.3 per 100,000 population. (Unlike ICD-9, deaths resulting from legal intervention are no longer included in this category; see Table 6-30 for the number of deaths attributable to the actions of law enforcement officers.) Males were twice as likely to be murdered as were females (4.4 vs. 2.2). Even the youngest Oregonians were at risk. Ten children who had not yet reached their fifteenth birthday were murdered during 1999; in fact, the death rate for infants was the highest by age group (based on a relatively small number of events). [Table 6-7t]. The median age at death was 31 years.

The arteriosclerosis death rate fell to another record low.

The homicide rate for males was twice that for females.

Firearms were used in most (53.2%) homicides; handguns predominated. [Tables 6-29 and 6-30]. Sharp objects (e.g., knives) and strangulation/hanging were the second and third most commonly used methods, respectively.

Homicide was the seventh leading cause of years of potential life lost by Oregonians, accounting for 3,724 years. On average, a state resident was murdered every 3.3 days.

HIV DISEASE

HIV disease (AIDS) led to the deaths of 73 Oregonians, or 2.2 per 100,000 population. Most (66 or 90.4%) of the decedents during 1999 were males, but seven were females. [Table 6-6]. Age-specific death rates were highest among 35- to 45-year-olds. Moreover, the median age at death increased to 41 years, a likely consequence of the powerful AIDS drug cocktails, including protease inhibitors and anti-retroviral medications, that are now available.

A declining number of deaths from this cause as well as increased survival times has resulted in a diminishing number (1,700) of years potential life lost. HIV disease claimed an Oregonian every five days.

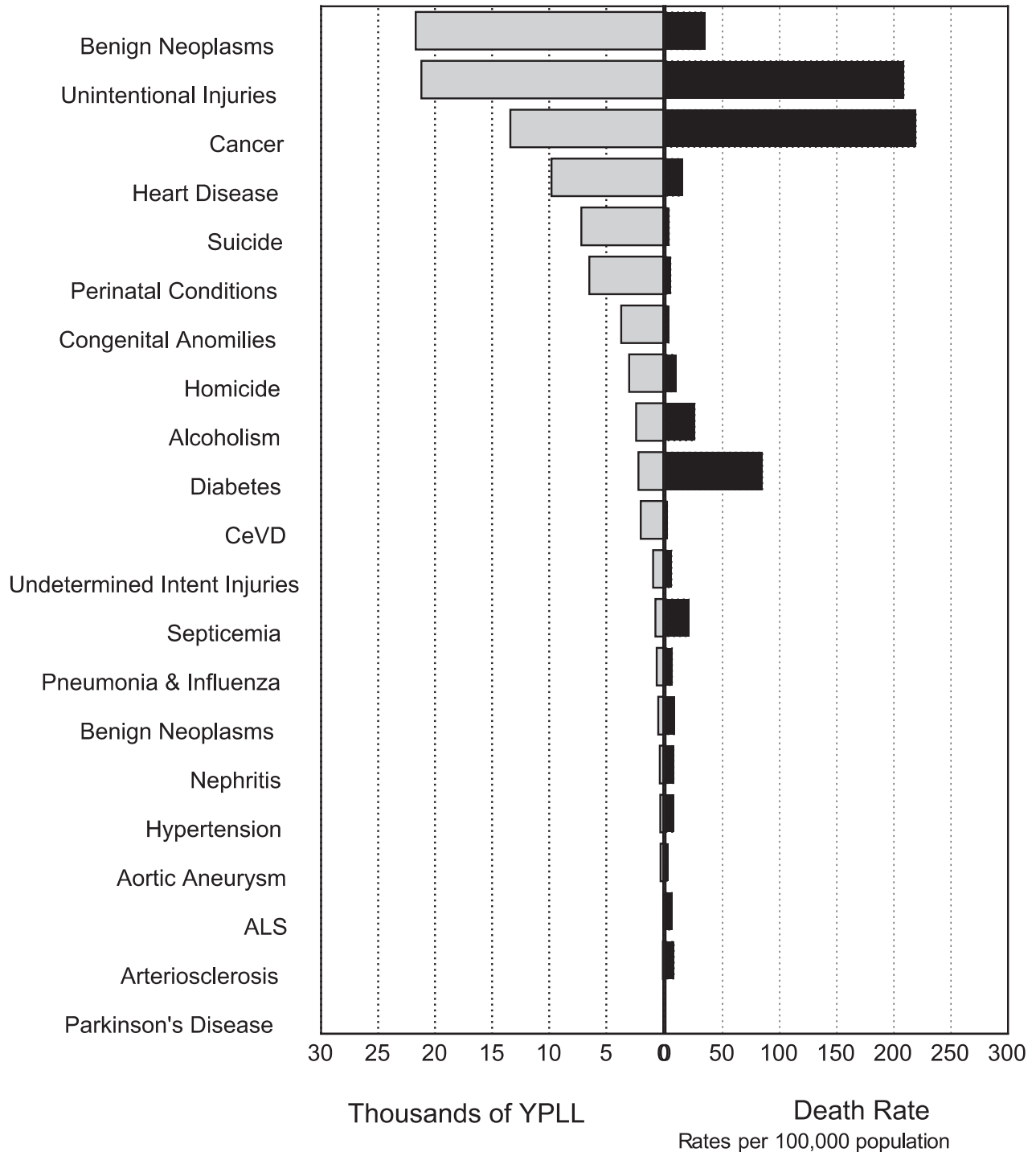
This category is more inclusive than it was prior to 1999; please see Appendix B.

The AIDS death rate was highest among persons ages 35-44.

Years of Potential Life Lost

Mortality rates alone do not show the full impact upon society of certain causes of death. The deaths of young people are a greater "cost" to society than deaths of older people in terms of years of potential life lost (YPLL). The YPLL yardstick quantifies premature mortality occurring in younger age groups by measuring the number of years between age at death and a set standard. With the standard set at 65 years, for example, a death at age 21 results in 44 years lost. The numbers of YPLL for all decedents are then totaled. Figure 6-6 shows the disparity between death rates and the years of potential life lost. (In all references to YPLL in this report, the standard is 65 years unless otherwise noted.)

Figure 6-6.
 Leading Causes of Years of Potential Life Lost
 Before Age 65 and Corresponding Death Rates,
 Oregon Residents, 1999



ENDNOTES

1. Unlike deaths occurring prior to 1999, those resulting from alcoholic cardiomyopathy are counted in both the heart disease and alcoholic disease categories.
2. Readers wishing to compare 1999 death rates (and/or number of deaths) to prior years' should use the comparability ratios described in Appendix B.
3. Please see Appendix B, for a discussion of the effects of the implementation of the tenth revision of the International Classification of Disease on this cause.
4. Unintentional injuries is preferred to the term accidents (ICD-10 V00-X59, Y85-Y86) among health professionals.
5. This cause includes both a complex of natural and acute poisoning deaths unlike previous years' data which excluded the latter. Beginning with 1999 data the following causes are included: alcoholic mental/behavioral disorders, degeneration of the nervous system, polyneuropathy, cardiomyopathy, gastritis, liver disease, maternal care for damage to fetus from alcohol, fetus or newborn affected by maternal alcohol use, alcohol in the blood, acute unintentional alcohol poisoning, acute suicidal alcohol poisoning, and acute alcohol poisoning of undetermined manner. The ICD-10 codes are F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15, respectively.

TABLE 6-1.
Age-specific Death Rates by Sex, Oregon Residents,
1940, 1950, 1960, 1970, 1980, 1990-1999

Year and Sex	Total	Age Groups					
		0-4	5-14	15-24	25-44	45-64	65+
1940 Deaths	1,131.4	953.9	116.6	199.1	317.7	1,322.7	7,154.3
Male	1,336.2	1,122.6	140.5	267.4	374.5	1,650.8	7,831.0
Female	912.7	788.1	91.9	130.4	258.2	944.7	6,395.2
1950 Deaths	912.9	588.1	61.7	148.2	242.0	1,105.7	5,836.7
Male	1,097.2	459.9	74.1	226.0	317.4	1,411.4	6,619.2
Female	722.6	515.6	48.7	73.0	166.0	711.9	5,025.0
1960 Deaths	949.1	566.3	42.5	107.0	210.5	1,053.1	5,796.9
Male	1,141.2	640.3	53.3	158.4	273.3	1,420.3	6,854.2
Female	758.9	489.7	31.2	58.3	149.9	679.0	4,838.8
1970 Deaths	933.8	411.4	42.9	134.4	184.4	1,015.1	5,617.3
Male	1,107.6	437.8	56.5	198.9	241.7	1,375.4	6,893.0
Female	767.2	383.9	28.7	74.4	128.7	670.2	4,607.6
1980 Deaths	826.4	310.7	31.9	115.8	140.8	870.8	4,977.2
Male	931.8	333.9	36.9	167.8	193.4	1,157.4	6,013.3
Female	724.1	286.1	26.7	63.6	87.5	602.9	4,209.3
1990 Deaths	880.7	212.6	21.4	94.5	142.2	730.3	4,784.6
Male	935.6	234.0	21.6	138.1	203.6	934.1	5,617.0
Female	827.8	190.1	21.3	49.1	80.9	553.8	4,202.8
1991 Deaths	851.0	176.3	21.0	95.6	136.4	677.3	4,710.8
Male	901.7	204.0	23.6	142.0	195.5	843.0	5,450.2
Female	802.1	147.4	18.2	47.2	77.2	517.6	4,215.1
1992 Deaths	863.2	166.6	23.8	82.3	143.3	658.2	4,862.4
Male	895.6	198.1	26.7	118.3	202.6	792.5	5,486.6
Female	831.7	133.2	20.9	44.6	84.0	528.1	4,407.2
1993 Deaths	908.4	163.2	24.1	82.9	166.4	660.7	5,104.8
Male	952.6	184.1	29.6	126.0	235.7	811.1	5,789.9
Female	865.5	141.2	18.4	37.7	97.0	514.9	4,602.7
1994 Deaths	887.8	154.4	22.2	79.3	176.4	654.1	4,916.9
Male	915.1	180.4	27.9	113.0	253.9	784.4	5,453.1
Female	861.3	126.9	16.3	44.0	99.2	527.1	4,525.0
1995 Deaths	900.1	143.4	21.6	92.2	175.3	638.4	5,018.8
Male	925.0	147.1	23.1	127.6	249.9	777.3	5,549.9
Female	875.8	139.4	20.2	55.0	100.6	503.0	4,629.1
1996 Deaths	908.5	134.0	24.2	87.9	169.7	615.4	5,143.2
Male	937.8	148.5	23.8	131.2	240.6	752.9	5,746.5
Female	880.1	118.8	24.6	42.4	98.8	481.2	4,703.9
1997 Deaths	893.7	137.2	20.1	79.3	150.8	604.2	5,111.7
Male	899.8	158.4	22.4	112.6	202.9	719.2	5,585.9
Female	887.7	113.5	17.7	44.3	98.7	491.9	4,764.2
1998 Deaths	898.1	135.9	20.2	84.9	156.5	596.1	5,172.4
Male	905.0	150.1	23.3	121.4	211.3	724.4	5,585.0
Female	891.4	121.1	17.0	46.1	101.1	470.6	4,864.5
1999 Deaths	889.4	141.2	20.3	63.7	139.6	590.0	5,178.1
Male	885.3	152.3	24.4	90.9	188.7	723.6	5,471.2
Female	893.3	129.4	16.0	35.0	90.3	459.7	4,957.4

All rates per 100,000 population within specific age groups.

Table 6-2. Leading Causes of Death by Rank Order for Resident Males and Females, Oregon, 1999

Males				
Rank	Cause of Death	Number	Rate	Percent
All Causes		14,430	885.3	100.0
1	Heart Disease*	3,695	226.7	25.6
2	Cancer	3,572	219.2	24.8
3	Cerebrovascular Disease	1,061	65.1	7.4
4	Chronic Lower Respiratory Disease	874	53.6	6.1
5	Unintentional Injuries	734	45.0	5.1
6	Diabetes Mellitus	416	25.5	2.9
7	Suicide	412	25.3	2.9
8	Pneumonia and Influenza	302	18.5	2.1
9	Alzheimer's Disease	275	16.9	1.9
10	Alcohol-induced Deaths*	234	14.4	1.6
11	Parkinson's Disease	152	9.3	1.1
12	Aortic Aneurysm	145	8.9	1.0
13	Nephritis, Nephrosis, etc	118	7.2	0.8
14	Arteriosclerosis	82	5.0	0.6
14	Congenital Anomalies	82	5.0	0.6
16	Hypertension	81	5.0	0.6
17	Pneumonitis Due to Solids/Liquids	77	4.7	0.5
18	Homicide	72	4.4	0.5
18	Septicemia	72	4.4	0.5
20	AIDS	66	4.0	0.5
Females				
Rank	Cause of Death	Number	Rate	Percent
All Causes		14,926	893.3	100.0
1	Heart Disease*	3,549	212.4	23.8
2	Cancer	3,332	199.4	22.3
3	Cerebrovascular Disease	1,756	105.1	11.8
4	Chronic Lower Respiratory Disease	888	53.1	5.9
5	Alzheimer's Disease	593	35.5	4.0
6	Diabetes Mellitus	439	26.3	2.9
7	Unintentional Injuries	410	24.5	2.7
8	Pneumonia and Influenza	382	22.9	2.6
9	Hypertension	165	9.9	1.1
10	Nephritis, Nephrosis, etc	118	7.2	1.0
11	Arteriosclerosis	116	6.9	0.8
11	Septicemia	116	6.9	0.8
13	Parkinson's Disease	104	6.2	0.7
14	Aortic Aneurysm	95	5.7	0.6
15	Suicide	87	5.2	0.6
16	Pneumonitis Due to Solids/Liquids	76	4.5	0.5
17	Congenital Anomalies	74	4.4	0.5
18	Alcohol-induced Deaths*	70	4.2	0.5
19	Perinatal Conditions	51	3.1	0.3
20	Peptic Ulcer	43	2.6	0.3

* Alcoholic cardiomyopathy is included in both the "Alcohol-induced Deaths" and "Heart Disease" categories.

**TABLE 6-3. Selected Leading Causes of Death with Rates,
Oregon Residents, 1979-1999**

Year	Total	Major Cardiovascular Disease			Malignant Neoplasms	Chronic Lower Respiratory Disease	Pneumonia and Influenza	Diabetes Mellitus
		Diseases of the Heart ¹	Cerebrovascular Diseases	Arteriosclerosis				
Number of Deaths								
1979	21,024	7,329	2,041	444	4,608	728	608	285
1980	21,756	7,659	2,021	486	4,625	829	704	297
1981	21,798	7,639	1,986	509	4,839	856	609	303
1982	21,594	7,601	1,901	482	4,859	912	609	297
1983	22,361	7,910	2,021	470	4,943	971	634	329
1984	23,101	8,010	1,919	431	5,387	957	725	343
1985	23,824	8,192	2,000	432	5,410	1,097	838	317
1986	23,328	7,788	1,926	417	5,272	1,090	742	328
1987	24,181	7,936	1,958	440	5,594	1,233	743	395
1988	24,557	7,662	2,010	378	5,801	1,203	900	439
1989	24,679	7,482	2,006	355	5,819	1,272	924	450
1990	25,073	7,482	1,912	332	6,056	1,304	966	483
1991	24,935	7,139	2,004	307	6,268	1,353	791	540
1992	25,714	7,255	2,138	314	6,362	1,273	841	575
1993	27,596	7,652	2,202	341	6,622	1,595	1,014	642
1994	27,361	7,417	2,394	300	6,599	1,469	885	662
1995	28,190	7,529	2,483	298	6,824	1,460	899	705
1996	28,900	7,676	2,632	256	6,784	1,676	946	739
1997	28,750	7,500	2,582	237	6,790	1,648	909	816
1998	29,346	7,276	2,636	228	7,007	1,638	1,010	870
1999	29,356	7,252	2,817	198	6,904	1,762	684	855
Rates								
1979	826.4	288.1	80.2	17.5	181.1	28.6	23.9	11.2
1980	826.2	290.9	76.8	18.5	175.7	31.5	26.7	11.3
1981	819.3	287.1	74.6	19.1	181.9	32.2	22.9	11.4
1982	813.0	286.2	71.6	18.1	182.9	34.3	22.9	11.2
1983	848.6	300.2	76.7	17.8	187.6	36.9	24.1	12.5
1984	868.5	301.1	72.1	16.2	202.5	36.0	27.3	12.9
1985	890.4	306.2	74.7	16.1	202.2	41.0	31.3	11.8
1986	877.2	292.8	72.4	15.7	198.2	41.0	27.9	12.3
1987	898.9	295.0	72.8	16.4	208.0	45.8	27.6	14.7
1988	895.9	279.5	73.3	13.8	211.6	43.9	32.8	16.0
1989	884.2	268.1	71.9	12.7	208.5	45.6	33.1	16.1
1990	880.7	262.8	67.2	11.7	212.7	45.8	33.9	17.0
1991	851.0	243.7	68.4	10.5	213.9	46.2	27.0	18.4
1992	863.2	243.8	71.8	10.5	213.6	42.7	28.2	19.3
1993	908.4	251.9	72.5	11.2	218.0	52.5	33.4	21.1
1994	887.8	240.7	77.7	9.7	214.1	47.7	28.7	21.5
1995	900.1	240.4	79.3	9.5	217.9	46.6	28.7	22.5
1996	908.5	241.3	82.7	8.0	213.3	52.7	29.7	23.2
1997	893.7	233.1	80.3	7.4	211.1	51.2	28.3	25.4
1998	898.1	222.7	80.7	7.0	214.4	50.1	30.9	26.6
1999	889.4	219.7	85.3	6.0	209.1	53.4	20.7	25.9

¹ Excludes alcoholic cardiomyopathy prior to 1999.

All rates per 100,000 population.

**TABLE 6-3. Selected Leading Causes of Death with Rates,
Oregon Residents, 1979-1999 (Continued)**

Year	Alcohol-induced Deaths ²	Alzheimer's Disease	Parkinson's Disease	Acquired Immune Deficiency Syndrome	External Causes			
					Unintentional Injuries	Suicide	Homicide ³	Firearms (Any Manner)
Number of Deaths								
1979	368	15	55	-	1,367	351	108	320
1980	358	28	78	-	1,319	388	141	354
1981	385	30	81	-	1,285	398	117	337
1982	308	61	67	-	1,064	396	145	338
1983	337	114	75	2	1,156	417	110	352
1984	343	154	99	6	1,185	423	127	360
1985	308	200	104	24	1,207	417	118	325
1986	325	245	102	70	1,184	450	181	383
1987	311	309	111	78	1,185	400	157	348
1988	330	344	131	114	1,190	461	143	375
1989	334	355	130	135	1,151	459	142	391
1990	334	386	147	190	1,115	456	106	382
1991	306	462	144	224	1,013	460	126	363
1992	320	488	139	249	1,032	492	154	420
1993	363	550	169	305	1,185	472	142	392
1994	352	599	193	330	1,187	525	180	447
1995	358	688	232	333	1,293	526	154	439
1996	419	740	236	223	1,295	533	143	430
1997	382	718	214	93	1,281	538	125	428
1998	380	806	275	71	1,337	569	134	441
1999	304	868	256	73	1,144	499	109	391
Rates								
1979	14.5	0.6	2.2	0.0	53.7	13.8	4.2	12.6
1980	13.6	1.1	3.0	0.0	50.1	14.7	5.4	13.4
1981	14.5	1.1	3.0	0.0	48.3	15.0	4.4	12.7
1982	11.6	2.3	2.5	0.0	40.1	14.9	5.5	12.7
1983	12.8	4.3	2.8	0.1	43.9	15.8	4.2	13.4
1984	12.9	5.8	3.7	0.2	44.5	15.9	4.8	13.5
1985	11.5	7.5	3.9	0.9	45.1	15.6	4.4	12.1
1986	12.2	9.2	3.8	2.6	44.5	16.9	6.8	14.4
1987	11.6	11.5	4.1	2.9	44.1	14.9	5.8	12.9
1988	12.0	12.6	4.8	4.2	43.4	16.8	5.2	13.7
1989	12.0	12.7	4.7	4.8	41.2	16.4	5.1	14.0
1990	11.7	13.6	5.2	6.7	39.2	16.0	3.7	13.4
1991	10.4	15.8	4.9	7.6	34.6	15.7	4.3	12.4
1992	10.7	16.4	4.7	8.4	34.6	16.5	5.2	14.1
1993	11.9	18.1	5.6	10.0	39.0	15.5	4.7	12.9
1994	11.4	19.4	6.3	10.7	38.5	17.0	5.8	14.5
1995	11.4	22.0	7.4	10.6	41.3	16.8	4.9	14.0
1996	13.2	23.3	7.4	7.0	40.7	16.8	4.5	13.5
1997	11.9	22.3	6.6	2.9	39.8	16.7	3.9	13.3
1998	12.1	24.7	8.4	2.2	40.9	17.4	4.1	13.5
1999	9.2	26.3	7.8	2.2	34.7	15.1	3.3	11.8

- Quantity is zero.

² Includes the alcohol-linked disorders represented by ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65 and Y15.

³ Included legal intervention in prior years. Data shown now exclude legal intervention.

TABLE 6-4. The Five Principal Causes of Death by Age, Oregon Residents, 1999

Cause of Death	Both Sexes		Rate ¹	
	Number	Percent	Male	Female
All Ages				
All Causes	29,356	100.0	885.3	893.3
1 Heart Disease	7,252	24.7	227.2	212.4
2 Malignant Neoplasms	6,904	23.5	219.2	199.4
3 Cerebrovascular Disease	2,817	9.6	65.1	105.1
4 Chronic Lower Respiratory Disease	1,762	6.0	53.6	53.1
5 Unintentional Injuries	1,144	3.9	45.0	24.5
Under 1 Year²				
All Causes	261	100.0	611.0	542.1
1 Perinatal Conditions	112	42.9	262.5	232.3
2 Congenital Malformations, etc.	78	29.9	176.4	168.5
3 SIDS	26	10.0	68.8	45.6
4 Unintentional Injuries	11	4.2	30.1	18.2
5 Heart Disease	7	2.7	17.2	13.7
1-4 Years				
All Causes	49	100.0	32.6	23.4
1 Unintentional Injuries	20	40.8	11.3	11.7
2 Congenital Anomalies	6	12.2	4.5	2.3
3 Malignant Neoplasms	5	10.2	2.3	3.5
4 Homicide	3	6.1	2.3	1.2
5 Septicemia	2	4.1	1.1	1.2
5-14 Years				
All Causes	94	100.0	24.4	16.0
1 Unintentional Injuries	40	42.6	12.2	4.9
2 Malignant Neoplasms	15	16.0	3.8	2.7
3 Heart Disease	6	6.4	0.8	1.8
4 Suicide	3	3.2	1.3	0.0
4 Homicide	3	3.2	0.4	0.9
15-24 Years				
All Causes	288	100.0	90.9	35.0
1 Unintentional Injuries	134	46.5	44.4	14.1
2 Suicide	55	19.1	20.7	3.2
3 Homicide	27	9.4	8.2	3.6
4 Malignant Neoplasms	22	7.6	6.5	3.2
5 Heart Disease	8	2.8	2.2	1.4
25-34 Years				
All Causes	423	100.0	142.2	55.3
1 Unintentional Injuries	124	29.3	44.9	13.0
2 Suicide	70	16.5	29.0	3.7
3 Malignant Neoplasms	52	12.3	15.0	9.3
4 Homicide	34	8.0	9.4	6.5
5 Heart Disease	29	6.9	9.4	4.2

¹ Rates per 100,000 population except where noted.² Rates per 100,000 live births.

**TABLE 6-4. The Five Principal Causes of Death by Age, Oregon Residents, 1999
(Continued)**

Cause of Death	Both Sexes		Rate ¹	
	Number	Percent	Male	Female
35-44 Years				
All Causes	924	100.0	225.6	118.5
1 Malignant Neoplasms	178	19.3	33.0	33.4
2 Unintentional Injuries	168	18.2	45.3	17.3
3 Heart Disease	122	13.2	33.4	12.0
4 Suicide	107	11.6	29.7	10.1
5 Alcoholic Disease	39	4.2	8.9	5.6
45-54 Years				
All Causes	1,848	100.0	498.5	284.7
1 Malignant Neoplasms	538	29.1	116.5	111.6
2 Heart Disease	347	18.8	108.4	38.6
3 Unintentional Injuries	151	8.2	49.1	14.9
4 Suicide	105	5.7	33.9	10.6
5 Alcoholic Disease	99	5.4	33.5	8.5
55-64 Years				
All Causes	2,639	100.0	1,105.2	735.9
1 Malignant Neoplasms	1012	38.3	368.2	334.1
2 Heart Disease	621	23.5	309.3	127.2
3 Chronic Lower Respiratory Disease	150	5.7	51.7	52.2
4 Cerebrovascular Disease	115	4.4	45.9	34.2
5 Diabetes Mellitus	109	4.1	44.5	31.5
65-74 Years				
All Causes	5,190	100.0	2,786.1	1,884.2
1 Malignant Neoplasms	1,824	35.1	924.2	709.1
2 Heart Disease	1,197	23.1	733.8	356.6
3 Chronic Lower Respiratory Disease	468	9.0	232.7	185.7
4 Cerebrovascular Disease	312	6.0	153.9	124.9
5 Diabetes Mellitus	215	4.1	102.9	88.7
75-84 Years				
All Causes	9,052	100.0	6,717.3	4,813.2
1 Heart Disease	2,294	25.3	1,804.6	1,145.0
2 Malignant Neoplasms	2,220	24.5	1,729.7	1,120.3
3 Cerebrovascular Disease	1,037	11.5	656.9	633.7
4 Chronic Lower Respiratory Disease	757	8.4	576.1	392.1
5 Alzheimer's Disease	320	3.5	185.2	208.4
85+ Years				
All Causes	8,588	100.0	16,679.2	15,505.0
1 Heart Disease	2,620	30.5	5,206.1	4,674.7
2 Cerebrovascular Disease	1,265	14.7	2,012.1	2,493.9
3 Malignant Neoplasms	1,038	12.1	2,876.9	1,467.5
4 Alzheimer's Disease	501	5.8	709.1	1,029.1
5 Pneumonia and Influenza	373	4.3	726.4	672.5

¹ Rates per 100,000 population except where noted.

Table 6-5. Deaths by Marital Status, Sex, and Age, Oregon Residents, 1999

Marital Status and Sex	Total	Age at Death							
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Total	29,356	404	132	156	187	236	378	546	811
Male	14,430	229	93	118	140	164	255	353	546
Female	14,926	175	39	38	47	72	123	193	265
Single	2,276	404	131	133	118	112	123	135	160
Male	1,481	229	92	104	91	92	101	102	130
Female	795	175	39	29	27	20	22	33	30
Married	12,034	–	1	18	51	80	141	229	374
Male	8,118	–	1	12	38	43	86	138	231
Female	3,916	–	–	6	13	37	55	91	143
Widowed	11,017	–	–	–	–	2	5	12	13
Male	2,676	–	–	–	–	–	3	5	5
Female	8,341	–	–	–	–	2	2	7	8
Divorced	3,942	–	–	4	18	39	105	164	250
Male	2,082	–	–	1	11	26	62	103	169
Female	1,860	–	–	3	7	13	43	61	81
Not Stated	87	–	–	1	–	3	4	6	14
Male	73	–	–	1	–	3	3	5	11
Female	14	–	–	–	–	–	1	1	3

Marital Status and Sex	Age at Death								
	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90+
Total	1,037	1,153	1,486	2,046	3,144	4,304	4,748	4,434	4,154
Male	631	688	852	1,163	1,734	2,236	2,335	1,740	1,153
Female	406	465	634	883	1,410	2,068	2,413	2,694	3,001
Single	103	66	68	92	112	128	142	119	130
Male	77	42	43	65	81	89	76	39	28
Female	26	24	25	27	31	39	66	80	102
Married	577	662	861	1,218	1,680	2,193	2,000	1,331	618
Male	337	407	523	782	1,127	1,494	1,459	974	466
Female	240	255	338	436	553	699	541	357	152
Widowed	41	63	169	323	799	1,490	2,187	2,730	3,183
Male	12	21	46	79	229	412	606	651	607
Female	29	42	123	244	570	1,078	1,581	2,079	2,576
Divorced	309	351	383	402	545	484	416	251	221
Male	199	209	235	226	290	234	192	74	51
Female	110	142	148	176	255	250	224	177	170
Not Stated	7	11	5	11	8	9	3	3	2
Male	6	9	5	11	7	7	2	2	1
Female	1	2	–	–	1	2	1	1	1

– Quantity is 0.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	29,356	261	49	94	288	423	924	1,848	2,639	5,190	9,052	8,588
Male	14,430	142	29	58	211	304	608	1,177	1,540	2,897	4,571	2,893
Female	14,926	119	20	36	77	119	316	671	1,099	2,293	4,481	5,695
Infections & Parasitic Disease (A00-B99)	429	4	2	1	5	23	55	76	39	61	77	86
Male	237	2	1	–	1	21	45	57	29	27	26	28
Female	192	2	1	1	4	2	10	19	10	34	51	58
Tuberculosis (A16-A19)	2	–	–	–	–	–	–	–	–	1	–	1
Male	–	–	–	–	–	–	–	–	–	–	–	–
Female	2	–	–	–	–	–	–	–	–	1	–	1
Meningococcal infection (A39)	6	1	–	–	2	–	1	1	–	–	1	–
Male	2	1	–	–	–	–	1	–	–	–	–	–
Female	4	–	–	–	2	–	–	1	–	–	1	–
Septicemia (A40-A41)	188	2	2	1	2	3	6	15	18	36	51	52
Male	72	1	1	–	–	2	4	7	12	15	15	15
Female	116	1	1	1	2	1	2	8	6	21	36	37
Creutzfeldt-Jacob disease (A81.0)	6	–	–	–	–	–	1	1	2	2	–	–
Male	3	–	–	–	–	–	1	–	1	1	–	–
Female	3	–	–	–	–	–	–	1	1	1	–	–
Viral hepatitis (B15-B19)	45	–	–	–	–	1	10	18	5	4	7	–
Male	37	–	–	–	–	1	9	15	5	4	3	–
Female	8	–	–	–	–	–	1	3	–	–	4	–
HIV/AIDS (B20-B24) ²	73	–	–	–	–	17	29	22	3	1	1	–
Male	66	–	–	–	–	17	24	21	3	–	1	–
Female	7	–	–	–	–	–	5	1	–	1	–	–
Malignant Neoplasms (C00-C97)	6,904	–	5	15	22	52	178	538	1,012	1,824	2,220	1,038
Male	3,572	–	2	9	15	32	89	275	513	961	1,177	499
Female	3,332	–	3	6	7	20	89	263	499	863	1,043	539
Lip, oral cavity & pharynx (C00-C14)	103	–	–	–	–	–	4	17	18	22	28	14
Male	70	–	–	–	–	–	4	14	14	16	15	7
Female	33	–	–	–	–	–	–	3	4	6	13	7
Digestive Organs (C15-26)	1,543	–	1	–	–	5	27	123	222	405	493	267
Male	830	–	–	–	–	5	20	87	135	241	238	104
Female	713	–	1	–	–	–	7	36	87	164	255	163
Esophagus (C15)	166	–	–	–	–	–	2	13	38	43	53	17
Male	127	–	–	–	–	–	2	12	30	36	36	11
Female	39	–	–	–	–	–	–	1	8	7	17	6

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Stomach (C16)	137	—	—	—	—	—	5	11	21	35	42	23
Male	93	—	—	—	—	—	4	8	13	27	28	13
Female	44	—	—	—	—	—	1	3	8	8	14	10
Colon, rectum & anus (C18-C21)	687	—	—	—	—	4	14	46	96	162	225	140
Male	349	—	—	—	—	4	10	30	55	91	102	57
Female	338	—	—	—	—	—	4	16	41	71	123	83
Colon (C18)	557	—	—	—	—	3	11	36	71	132	186	118
Male	281	—	—	—	—	3	8	25	39	68	86	52
Female	276	—	—	—	—	—	3	11	32	64	100	66
Liver & intrahepatic bile ducts (C22)	105	—	1	—	—	1	3	20	11	33	24	12
Male	64	—	—	—	—	1	2	17	6	25	10	3
Female	41	—	1	—	—	—	1	3	5	8	14	9
Pancreas (C25)	378	—	—	—	—	—	2	27	53	110	132	54
Male	165	—	—	—	—	—	1	17	29	52	55	11
Female	213	—	—	—	—	—	1	10	24	58	77	43
Respiratory, intrathoracic organs (C30-39)	1,932	—	—	—	—	3	19	118	344	647	630	171
Male	1,066	—	—	—	—	1	14	67	177	347	373	87
Female	866	—	—	—	—	2	5	51	167	300	257	84
Larynx (C32)	30	—	—	—	—	—	—	—	4	14	10	2
Male	27	—	—	—	—	—	—	—	4	13	9	1
Female	3	—	—	—	—	—	—	—	—	1	1	1
Trachea, bronchus & lung (C33-C34)	1,887	—	—	—	—	2	19	116	339	627	617	167
Male	1,035	—	—	—	—	1	14	65	173	333	363	86
Female	852	—	—	—	—	1	5	51	166	294	254	81
Bronchus & lung (C34)	1,886	—	—	—	—	2	19	116	338	627	617	167
Male	1,034	—	—	—	—	1	14	65	172	333	363	86
Female	852	—	—	—	—	1	5	51	166	294	254	81
Skin (C43-44)	128	—	—	—	1	6	14	26	20	23	30	8
Male	85	—	—	—	—	5	7	20	13	16	20	4
Female	43	—	—	—	1	1	7	6	7	7	10	4
Melanoma of skin (C43)	110	—	—	—	1	6	13	25	18	17	25	5
Male	71	—	—	—	—	5	7	19	11	11	17	1
Female	39	—	—	—	1	1	6	6	7	6	8	4
Mesothelioma (C45)	30	—	—	—	—	—	—	3	2	9	9	7
Male	26	—	—	—	—	—	—	2	1	8	8	7
Female	4	—	—	—	—	—	—	1	1	1	1	—

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Breast (C50)	513	—	—	—	—	1	39	70	83	121	132	67
Male	3	—	—	—	—	—	—	1	—	1	1	—
Female	510	—	—	—	—	1	39	69	83	120	131	67
Female genital organs (C51-58)	313	—	—	—	2	3	16	39	53	73	88	39
Male	—	—	—	—	—	—	—	—	—	—	—	—
Female	313	—	—	—	2	3	16	39	53	73	88	39
Cervix uteri (C53)	36	—	—	—	1	2	7	6	9	6	4	1
Male	—	—	—	—	—	—	—	—	—	—	—	—
Female	36	—	—	—	1	2	7	6	9	6	4	1
Corpus uteri (C54-C55) ³	70	—	—	—	—	—	1	4	9	16	27	13
Male	—	—	—	—	—	—	—	—	—	—	—	—
Female	70	—	—	—	—	—	1	4	9	16	27	13
Ovary (C56)	192	—	—	—	1	1	8	27	35	47	52	21
Male	—	—	—	—	—	—	—	—	—	—	—	—
Female	192	—	—	—	1	1	8	27	35	47	52	21
Male genital organs (C60-C63)	451	—	—	1	2	1	4	5	19	85	191	143
Male	451	—	—	1	2	1	4	5	19	85	191	143
Female	—	—	—	—	—	—	—	—	—	—	—	—
Prostate (C61)	445	—	—	—	1	—	3	4	19	85	190	143
Male	445	—	—	—	1	—	3	4	19	85	190	143
Female	—	—	—	—	—	—	—	—	—	—	—	—
Kidney & renal pelvis (C64-C65)	133	—	—	—	—	—	6	16	24	31	40	16
Male	91	—	—	—	—	—	4	13	17	19	31	7
Female	42	—	—	—	—	—	2	3	7	12	9	9
Bladder (C67)	169	—	—	—	—	—	2	4	20	33	70	40
Male	119	—	—	—	—	—	1	3	11	27	53	24
Female	50	—	—	—	—	—	1	1	9	6	17	16
Brain, etc. (C70-C72) ⁴	155	—	1	7	3	10	13	23	26	37	26	9
Male	96	—	1	4	3	7	10	13	16	24	15	3
Female	59	—	—	3	—	3	3	10	10	13	11	6
Thyroid/endocrine gland (C73-C75)	32	—	—	1	—	1	1	4	8	5	7	5
Male	13	—	—	1	—	—	1	3	3	3	1	1
Female	19	—	—	—	—	1	—	1	5	2	6	4
Lymphoid & hematopoietic (C81-C96)	734	—	2	4	9	14	16	44	89	164	263	129
Male	393	—	1	2	8	7	13	23	58	101	123	57
Female	341	—	1	2	1	7	3	21	31	63	140	72

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Hodgkin's disease (C81)	15	—	—	—	3	1	1	1	2	4	3	—
Male	11	—	—	—	3	1	1	1	2	1	2	—
Female	4	—	—	—	—	—	—	—	—	3	1	—
Non-Hodgkin's lymphoma (C82-C85)	312	—	—	—	4	5	9	27	40	60	114	53
Male	161	—	—	—	3	3	9	13	27	38	48	20
Female	151	—	—	—	1	2	—	14	13	22	66	33
Leukemia (C91-C95)	250	—	2	4	2	7	4	10	28	55	88	50
Male	127	—	1	2	2	3	2	5	16	34	43	19
Female	123	—	1	2	—	4	2	5	12	21	45	31
Lymphoid leukemia (C91)	97	—	2	3	1	3	2	1	9	19	38	19
Male	51	—	1	1	1	1	1	1	8	9	19	9
Female	46	—	1	2	—	2	1	—	1	10	19	10
Myeloid leukemia (C92)	111	—	—	—	1	2	2	8	16	27	35	20
Male	56	—	—	—	1	1	1	3	5	19	21	5
Female	55	—	—	—	—	1	1	5	11	8	14	15
Multiple myeloma (C88,C90) ⁵	156	—	—	—	—	1	2	6	19	45	57	26
Male	94	—	—	—	—	—	1	4	13	28	30	18
Female	62	—	—	—	—	1	1	2	6	17	27	8
Neoplasm not specif. as malign. (D00-D48) ⁶	200	1	—	4	—	—	5	8	17	38	65	62
Male	88	1	—	3	—	—	3	5	8	24	32	12
Female	112	—	—	1	—	—	2	3	9	14	33	50
Diseases of the Blood (D50-89)⁷	95	1	1	2	1	1	2	7	8	13	31	28
Male	40	—	1	—	—	—	1	2	5	10	15	6
Female	55	1	—	2	1	1	1	5	3	3	16	22
Anemias (D50-D64)	53	1	—	1	—	—	1	3	5	4	14	24
Male	19	—	—	—	—	—	—	1	4	3	6	5
Female	34	1	—	1	—	—	1	2	1	1	8	19
Endocrine & Nutritional Dis. (E00-E88)⁸	1,153	1	1	4	3	18	27	100	136	256	343	264
Male	547	1	—	4	—	7	14	62	80	127	164	88
Female	606	—	1	—	3	11	13	38	56	129	179	176
Diabetes mellitus (E10-E14)	855	—	—	—	1	12	18	66	109	215	262	172
Male	416	—	—	—	—	3	9	38	62	107	130	67
Female	439	—	—	—	1	9	9	28	47	108	132	105
Nutritional deficiencies (E40-E64)	60	—	—	—	—	—	1	1	2	5	16	35
Male	18	—	—	—	—	—	—	—	2	1	5	10
Female	42	—	—	—	—	—	1	1	—	4	11	25

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Malnutrition (E40-E46)	48	—	—	—	—	—	1	1	1	4	15	26
Male	16	—	—	—	—	—	—	—	1	1	5	9
Female	32	—	—	—	—	—	1	1	—	3	10	17
Mental Disorders (F01-F99)⁹	812	—	—	—	3	18	70	64	35	59	187	376
Male	359	—	—	—	3	14	50	52	29	40	87	84
Female	453	—	—	—	—	4	20	12	6	19	100	292
Organic dementia (F01, F03)	517	—	—	—	—	—	—	—	3	33	141	340
Male	156	—	—	—	—	—	—	—	3	20	59	74
Female	361	—	—	—	—	—	—	—	—	13	82	266
Due to alcohol (F10)	109	—	—	—	—	4	13	28	24	20	17	3
Male	88	—	—	—	—	4	7	22	21	15	16	3
Female	21	—	—	—	—	—	6	6	3	5	1	—
Due to psychoactive substance (F11-F19)	119	—	—	—	3	13	55	33	6	2	6	1
Male	92	—	—	—	3	10	42	29	4	1	3	—
Female	27	—	—	—	—	3	13	4	2	1	3	1
Alcohol-induced deaths ^{10,11}	304	—	—	—	—	6	40	99	74	51	29	5
Male	234	—	—	—	—	5	25	79	55	40	27	3
Female	70	—	—	—	—	1	15	20	19	11	2	2
Nervous System Dis. (G00-G99)	1,453	3	4	5	6	5	20	56	59	146	514	635
Male	586	1	4	2	5	2	12	29	33	78	236	184
Female	867	2	—	3	1	3	8	27	26	68	278	451
Meningitis (G00, G03)	12	—	—	1	—	—	1	1	3	2	3	1
Male	3	—	—	—	—	—	—	1	1	—	1	—
Female	9	—	—	1	—	—	1	—	2	2	2	1
Amyotrophic lateral sclerosis (G12.2)	75	—	—	—	—	—	3	9	15	24	22	2
Male	33	—	—	—	—	—	2	6	5	11	9	—
Female	42	—	—	—	—	—	1	3	10	13	13	2
Parkinson's disease (G20-G21)	256	—	—	—	—	—	—	2	5	35	120	94
Male	152	—	—	—	—	—	—	1	4	23	75	49
Female	104	—	—	—	—	—	—	1	1	12	45	45
Alzheimer's disease (G30)	868	—	—	—	—	—	—	1	6	40	320	501
Male	275	—	—	—	—	—	—	—	4	22	126	123
Female	593	—	—	—	—	—	—	1	2	18	194	378
Epilepsy (G40-G41)	11	—	—	1	2	—	5	1	—	1	—	1
Male	8	—	—	1	2	—	3	1	—	1	—	—
Female	3	—	—	—	—	—	2	—	—	—	—	1

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Circulatory System Diseases (I00-I99)	10,901	8	2	6	11	36	146	430	791	1,639	3,642	4,190
Male	5,135	4	1	2	7	23	102	300	526	990	1,839	1,341
Female	5,766	4	1	4	4	13	44	130	265	649	1,803	2,849
Major cardiovascular diseases (I00-I78)	10,859	8	2	6	10	34	146	429	787	1,633	3,627	4,177
Male	5,118	4	1	2	6	23	102	299	525	986	1,833	1,337
Female	5,741	4	1	4	4	11	44	130	262	647	1,794	2,840
Heart disease (I00-I09, I11, I13, I20-I51)	7,252	7	1	6	8	29	122	347	621	1,197	2,294	2,620
Male	3,703	4	1	2	5	20	90	256	431	763	1,228	903
Female	3,549	3	—	4	3	9	32	91	190	434	1,066	1,717
Rheumatic heart diseases (I00-I09) ¹²	73	—	—	—	—	—	—	2	10	13	28	20
Male	23	—	—	—	—	—	—	1	4	6	9	3
Female	50	—	—	—	—	—	—	1	6	7	19	17
Hypertensive heart disease (I11)	182	—	—	—	—	2	8	5	10	23	47	87
Male	61	—	—	—	—	2	5	5	4	10	20	15
Female	121	—	—	—	—	—	3	—	6	13	27	72
Hypertensive heart & renal dis. (I13)	41	—	—	—	—	1	—	3	1	5	15	16
Male	18	—	—	—	—	1	—	2	1	1	5	8
Female	23	—	—	—	—	—	—	1	—	4	10	8
Ischemic heart diseases (I20-I25)	4,950	—	—	—	1	14	71	246	468	882	1,645	1,623
Male	2,761	—	—	—	1	11	60	197	355	595	920	622
Female	2,189	—	—	—	—	3	11	49	113	287	725	1,001
Myocardial infarction (I21-I22)	1,715	—	—	—	1	6	19	87	181	344	599	478
Male	971	—	—	—	1	4	13	66	135	228	327	197
Female	744	—	—	—	—	2	6	21	46	116	272	281
Other acute ischemic hrt. dis. (I24)	9	—	—	—	—	—	—	1	3	—	3	2
Male	5	—	—	—	—	—	—	1	2	—	2	—
Female	4	—	—	—	—	—	—	—	1	—	1	2
Chronic isch. heart dis. (I20, I25)	3,226	—	—	—	—	8	52	158	284	538	1,043	1,143
Male	1,785	—	—	—	—	7	47	130	218	367	591	425
Female	1,441	—	—	—	—	1	5	28	66	171	452	718
Atheroscler. cardiovascular dis. ¹³	477	—	—	—	—	3	8	23	36	63	154	190
Male	236	—	—	—	—	3	8	18	31	42	73	61
Female	241	—	—	—	—	—	—	5	5	21	81	129
Other chr. ischemic heart dis. ¹⁴	2,749	—	—	—	—	5	44	135	248	475	889	953
Male	1,549	—	—	—	—	4	39	112	187	325	518	364
Female	1,200	—	—	—	—	1	5	23	61	150	371	589

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Heart failure (I50)	746	—	—	1	—	—	1	14	19	67	203	441
Male	275	—	—	—	—	—	—	5	8	37	97	128
Female	471	—	—	1	—	—	1	9	11	30	106	313
Congestive heart failure (I50.0)	711	—	—	1	—	—	1	11	18	65	194	421
Male	262	—	—	—	—	—	—	4	8	35	93	122
Female	449	—	—	1	—	—	1	7	10	30	101	299
Left ventricular heart failure (I50.1)	3	—	—	—	—	—	—	2	—	1	—	—
Male	2	—	—	—	—	—	—	1	—	1	—	—
Female	1	—	—	—	—	—	—	1	—	—	—	—
Heart failure, unspecified (I50.9)	32	—	—	—	—	—	—	1	1	1	9	20
Male	11	—	—	—	—	—	—	—	—	1	4	6
Female	21	—	—	—	—	—	—	1	1	—	5	14
Hypertension & hyp. renal dis. (I10, I12)	246	—	—	—	—	1	3	10	13	34	90	95
Male	81	—	—	—	—	1	2	7	6	10	34	21
Female	165	—	—	—	—	—	1	3	7	24	56	74
Cerebrovascular diseases (I60-I69)	2,817	1	1	—	2	3	17	64	115	312	1,037	1,265
Male	1,061	—	—	—	1	1	8	31	64	160	447	349
Female	1,756	1	1	—	1	2	9	33	51	152	590	916
Subarachnoid hemorrhage (I60)	71	—	—	—	—	1	5	18	14	12	16	5
Male	21	—	—	—	—	—	1	6	5	3	4	2
Female	50	—	—	—	—	1	4	12	9	9	12	3
Intracerebral hemorrhage (I61-I62) ¹⁵	336	—	—	—	1	1	3	27	34	67	119	84
Male	155	—	—	—	1	1	2	14	24	35	48	30
Female	181	—	—	—	—	—	1	13	10	32	71	54
Cerebral infarction (I63)	219	—	—	—	1	—	3	2	7	32	81	93
Male	87	—	—	—	—	—	2	—	3	17	43	22
Female	132	—	—	—	1	—	1	2	4	15	38	71
Stroke (type not specified) (I64)	1,447	—	—	—	—	1	5	13	39	150	533	706
Male	528	—	—	—	—	—	2	8	19	81	227	191
Female	919	—	—	—	—	1	3	5	20	69	306	515
Atherosclerosis (I70)	198	—	—	—	—	—	—	3	6	16	70	103
Male	82	—	—	—	—	—	—	2	4	7	37	32
Female	116	—	—	—	—	—	—	1	2	9	33	71
Aortic aneurysm & dissection (I71)	240	—	—	—	—	1	4	3	21	59	99	53
Male	145	—	—	—	—	1	2	2	13	36	72	19
Female	95	—	—	—	—	—	2	1	8	23	27	34

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups											
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	
Diseases of arteries (I72-I78) ¹⁶	105	—	—	—	—	—	—	—	2	11	14	37	41
Male	45	—	—	—	—	—	—	—	1	7	9	15	13
Female	60	—	—	—	—	—	—	—	1	4	5	22	28
Respiratory System Diseases (J00-J99)	2,878	3	1	3	3	7	24	74	207	607	1,100	849	
Male	1,399	1	1	1	1	3	8	40	103	322	581	338	
Female	1,479	2	—	2	2	4	16	34	104	285	519	511	
Influenza & pneumonia (J10-J18)	684	1	—	1	1	2	6	17	19	72	192	373	
Male	302	—	—	1	1	1	2	13	9	40	109	126	
Female	382	1	—	—	—	1	4	4	10	32	83	247	
Influenza (J10-J11)	14	—	—	—	—	—	—	—	—	3	5	6	
Male	5	—	—	—	—	—	—	—	—	—	2	3	
Female	9	—	—	—	—	—	—	—	—	3	3	3	
Pneumonia (J12-J18)	670	1	—	1	1	2	6	17	19	69	187	367	
Male	297	—	—	1	1	1	2	13	9	40	107	123	
Female	373	1	—	—	—	1	4	4	10	29	80	244	
Other acute lower resp. infect'ns (J20-J22)	6	—	—	—	—	—	—	—	—	1	3	2	
Male	2	—	—	—	—	—	—	—	—	—	1	1	
Female	4	—	—	—	—	—	—	—	—	1	2	1	
Acute bronchitis (J20-J21) ¹⁷	5	—	—	—	—	—	—	—	—	1	3	1	
Male	2	—	—	—	—	—	—	—	—	—	1	1	
Female	3	—	—	—	—	—	—	—	—	1	2	—	
Chronic lower respiratory dis. (J40-J47) ¹⁸	1,762	—	—	1	1	1	10	44	150	468	757	330	
Male	874	—	—	—	—	—	5	19	72	242	392	144	
Female	888	—	—	1	1	1	5	25	78	226	365	186	
Bronchitis, chronic & unspec. (J40-J42)	11	—	—	—	—	—	1	—	—	4	2	4	
Male	4	—	—	—	—	—	1	—	—	1	1	1	
Female	7	—	—	—	—	—	—	—	—	3	1	3	
Emphysema (J43)	295	—	—	—	—	—	2	4	34	89	125	41	
Male	156	—	—	—	—	—	1	3	16	49	72	15	
Female	139	—	—	—	—	—	1	1	18	40	53	26	
Asthma (J45-J46)	78	—	—	1	1	—	4	10	13	8	25	16	
Male	22	—	—	—	—	—	2	2	4	1	8	5	
Female	56	—	—	1	1	—	2	8	9	7	17	11	
Other CLRD (J44, J47)	1,378	—	—	—	—	1	3	30	103	367	605	269	
Male	692	—	—	—	—	—	1	14	52	191	311	123	
Female	686	—	—	—	—	1	2	16	51	176	294	146	

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Pneumoconioses (J60-J66, J68) ¹⁹	17	—	—	—	—	—	—	—	2	3	5	7
Male	15	—	—	—	—	—	—	—	2	3	5	5
Female	2	—	—	—	—	—	—	—	—	—	—	2
Pneumonitis due to solids & liquids (J69)	153	—	—	—	—	1	3	1	8	22	42	76
Male	77	—	—	—	—	—	—	1	5	13	22	36
Female	76	—	—	—	—	1	3	—	3	9	20	40
Digestive System Diseases (K00-K92)	977	1	2	1	2	5	36	132	106	171	263	258
Male	462	—	2	1	2	4	23	95	63	84	112	76
Female	515	1	—	—	—	1	13	37	43	87	151	182
Peptic ulcer (K25-K28)	69	—	—	—	—	—	—	5	5	6	22	31
Male	26	—	—	—	—	—	—	1	3	4	8	10
Female	43	—	—	—	—	—	—	4	2	2	14	21
Diseases of the appendix (K35-K38)	4	1	—	—	—	—	—	—	—	2	—	1
Male	1	—	—	—	—	—	—	—	—	—	—	1
Female	3	1	—	—	—	—	—	—	—	2	—	—
Hernia (K40-K46)	21	—	—	—	—	—	—	—	1	1	9	10
Male	7	—	—	—	—	—	—	—	1	—	2	4
Female	14	—	—	—	—	—	—	—	—	1	7	6
Chronic liver disease (K70, K73-K74) ²⁰	304	—	—	—	—	2	30	96	63	58	42	13
Male	199	—	—	—	—	1	20	76	39	36	23	4
Female	105	—	—	—	—	1	10	20	24	22	19	9
Alcoholic liver disease (K70) ²¹	183	—	—	—	—	2	26	69	47	26	11	2
Male	134	—	—	—	—	1	17	55	31	20	10	—
Female	49	—	—	—	—	1	9	14	16	6	1	2
Cholelithiasis (K80-K82) ²²	39	—	—	—	—	—	—	1	1	9	11	17
Male	17	—	—	—	—	—	—	1	—	5	4	7
Female	22	—	—	—	—	—	—	—	1	4	7	10
Diseases of the Skin (L00-L98)²³	37	—	—	—	1	—	1	1	4	8	4	18
Male	18	—	—	—	—	—	1	—	1	7	2	7
Female	19	—	—	—	1	—	—	1	3	1	2	11
Musculoskeletal Disease (M00-M99)²⁴	214	—	—	2	—	—	3	13	15	25	65	91
Male	67	—	—	—	—	—	2	6	4	9	23	23
Female	147	—	—	2	—	—	1	7	11	16	42	68
Genitourinary System Dis. (N00-N99)	423	2	—	—	1	2	4	17	17	55	149	176
Male	157	—	—	—	—	1	2	9	5	22	64	54
Female	266	2	—	—	1	1	2	8	12	33	85	122

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Nephritis (N00-N07, N17-N19, N25-N27) ²⁵	260	1	—	—	1	1	3	13	11	39	95	96
Male	118	—	—	—	—	—	1	7	4	20	47	39
Female	142	1	—	—	1	1	2	6	7	19	48	57
Acute nephrotic syndr. (N00-N01, N04) ²⁶	7	—	—	—	—	—	—	1	1	3	2	—
Male	2	—	—	—	—	—	—	1	—	1	—	—
Female	5	—	—	—	—	—	—	—	1	2	2	—
Chr. nephritis (N02-N03, N05-N07, N26) ²⁷	5	—	—	—	—	1	—	—	—	2	1	1
Male	2	—	—	—	—	—	—	—	—	1	—	1
Female	3	—	—	—	—	1	—	—	—	1	1	—
Renal failure (N17-N19)	248	1	—	—	1	—	3	12	10	34	92	95
Male	114	—	—	—	—	—	1	6	4	18	47	38
Female	134	1	—	—	1	—	2	6	6	16	45	57
Kidney infect'ns (N10-N12, N13.6, N15.1)	16	—	—	—	—	—	—	1	1	1	4	9
Male	6	—	—	—	—	—	—	1	—	—	3	2
Female	10	—	—	—	—	—	—	—	1	1	1	7
Urinary tract infection (N39.0)	122	—	—	—	—	1	—	2	3	12	45	59
Male	22	—	—	—	—	1	—	—	1	1	12	7
Female	100	—	—	—	—	—	—	2	2	11	33	52
Hyperplasia of prostate (N40)	3	—	—	—	—	—	—	—	—	—	—	3
Male	3	—	—	—	—	—	—	—	—	—	—	3
Female	—	—	—	—	—	—	—	—	—	—	—	—
Female pelvic inflam. dis. (N70-N76) ²⁸	1	—	—	—	—	—	—	—	1	—	—	—
Male	—	—	—	—	—	—	—	—	—	—	—	—
Female	1	—	—	—	—	—	—	—	1	—	—	—
Pregnancy & Childbirth (O00-O99)²⁹	3	—	—	—	1	1	1	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—	—	—	—
Female	3	—	—	—	1	1	1	—	—	—	—	—
Perinatal Conditions (P00-P96)	112	112	—	—	—	—	—	—	—	—	—	—
Male	61	61	—	—	—	—	—	—	—	—	—	—
Female	51	51	—	—	—	—	—	—	—	—	—	—
Congenital Malformations (Q00-Q99)³⁰	156	78	6	3	4	7	8	14	8	9	12	7
Male	82	41	4	2	1	5	7	6	4	7	4	1
Female	74	37	2	1	3	2	1	8	4	2	8	6
Malformation of the heart (Q20-Q24)	45	17	1	—	1	5	3	4	4	3	3	4

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Malformation of the heart (Q20-Q24)												
Male	23	7	1	–	1	4	3	3	1	1	1	1
Female	22	10	–	–	–	1	–	1	3	2	2	3
Other malf. of the circul. sys. (Q25-Q28)	9	1	–	1	1	–	1	2	1	–	2	–
Male	5	–	–	1	–	–	1	1	1	–	1	–
Female	4	1	–	–	1	–	–	1	–	–	1	–
Malf. of the respiratory system (Q30-Q34)	27	26	–	–	–	1	–	–	–	–	–	–
Male	16	16	–	–	–	–	–	–	–	–	–	–
Female	11	10	–	–	–	1	–	–	–	–	–	–
Symptoms & Signs (R00-R99)³¹	743	30	1	–	4	10	22	30	67	108	150	321
Male	335	20	–	–	3	6	14	21	46	65	81	79
Female	408	10	1	–	1	4	8	9	21	43	69	242
Senility (R54)	77	–	–	–	–	–	–	–	–	–	12	65
Male	21	–	–	–	–	–	–	–	–	–	6	15
Female	56	–	–	–	–	–	–	–	–	–	6	50
Sudden infant death syndrome (R95)	26	26	–	–	–	–	–	–	–	–	–	–
Male	16	16	–	–	–	–	–	–	–	–	–	–
Female	10	10	–	–	–	–	–	–	–	–	–	–
External Causes of Death (V01-Y89)	1,865	17	24	48	221	238	322	288	118	171	229	189
Male	1,284	10	13	34	173	186	235	218	91	124	127	73
Female	581	7	11	14	48	52	87	70	27	47	102	116
Accidents (V01-X59, Y85-Y86)	1,144	11	20	40	134	124	168	151	65	107	164	160
Male	734	7	10	29	103	96	122	116	45	71	81	54
Female	410	4	10	11	31	28	46	35	20	36	83	106
Transport accidents (V01-V99, Y85)	491	3	6	23	102	56	84	79	34	54	42	8
Male	326	2	3	15	73	41	58	60	17	32	20	5
Female	165	1	3	8	29	15	26	19	17	22	22	3
Motor vehicle acc. (Many codes) ³²	436	3	5	18	98	53	68	64	29	49	41	8
Male	283	2	3	12	70	39	46	47	12	28	19	5
Female	153	1	2	6	28	14	22	17	17	21	22	3
Water transport accidents (V90-V94)	14	–	–	2	2	1	4	3	2	–	–	–
Male	13	–	–	2	2	1	3	3	2	–	–	–
Female	1	–	–	–	–	–	1	–	–	–	–	–
Air transport accidents (V95-V97)	18	–	–	–	2	–	4	6	2	4	–	–
Male	17	–	–	–	1	–	4	6	2	4	–	–
Female	1	–	–	–	1	–	–	–	–	–	–	–

See footnotes at end of table.

Table 6-6. Number of Deaths from Selected Causes by Age and Sex, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Total	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Nontransport accidents (W00-X59,Y86)	653	8	14	17	32	68	84	72	31	53	122	152
Male	408	5	7	14	30	55	64	56	28	39	61	49
Female	245	3	7	3	2	13	20	16	3	14	61	103
Falls (W00-W19)	183	1	2	1	—	7	9	17	11	21	46	68
Male	103	—	1	1	—	6	8	14	9	16	24	24
Female	80	1	1	—	—	1	1	3	2	5	22	44
Firearms (W32-W34)	8	—	1	2	5	—	—	—	—	—	—	—
Male	8	—	1	2	5	—	—	—	—	—	—	—
Female	—	—	—	—	—	—	—	—	—	—	—	—
Drowning & submersion (W65-W74)	46	—	6	3	9	7	5	8	4	1	1	2
Male	39	—	4	2	9	7	4	6	4	1	1	1
Female	7	—	2	1	—	—	1	2	—	—	—	1
Exposure to smoke & fire (X00-X09)	30	2	2	5	1	2	5	1	—	3	6	3
Male	16	2	1	4	1	1	3	—	—	2	2	—
Female	14	—	1	1	—	1	2	1	—	1	4	3
Poisoning (X40-X49) ³³	145	1	—	—	8	42	55	27	4	3	4	1
Male	109	1	—	—	7	33	39	20	4	2	2	1
Female	36	—	—	—	1	9	16	7	—	1	2	—
Suicide (X60-X84, Y87.0)	499	—	—	3	55	70	107	105	45	50	46	18
Male	412	—	—	3	48	62	80	80	40	43	41	15
Female	87	—	—	—	7	8	27	25	5	7	5	3
Homicide (X85-Y09, Y87.1)	109	4	3	3	27	34	18	15	3	1	—	1
Male	72	2	2	1	19	20	13	11	3	1	—	—
Female	37	2	1	2	8	14	5	4	—	—	—	1
Legal intervention (Y35, Y89.0)	8	—	—	—	1	2	4	—	1	—	—	—
Male	8	—	—	—	1	2	4	—	1	—	—	—
Female	—	—	—	—	—	—	—	—	—	—	—	—
Undeterm. intent (Y10-Y34, Y87.2, Y89.9)	58	2	1	2	4	8	24	12	1	1	2	1
Male	36	1	1	1	2	6	15	8	1	1	—	—
Female	22	1	—	1	2	2	9	4	—	—	2	1
War and its sequelae (Y36, Y89.1)	2	—	—	—	—	—	—	1	—	1	—	—
Male	2	—	—	—	—	—	—	1	—	1	—	—
Female	—	—	—	—	—	—	—	—	—	—	—	—
Medical care complications (Y40-Y84, Y88)	45	—	—	—	—	—	1	4	3	11	17	9
Male	20	—	—	—	—	—	1	2	1	7	5	4
Female	25	—	—	—	—	—	—	2	2	4	12	5

¹ International Statistical Classification of Diseases and Related Health Problems, Tenth Revision. Geneva: World Health Organization, 1992.

- 2 Human immunodeficiency virus/Acquired immune deficiency syndrome.
- 3 Including uterus, part unspecified.
- 4 Including meninges and other parts of the central nervous system.
- 5 Including immunoproliferative neoplasms.
- 6 Including in situ neoplasms, benign neoplasms, and neoplasms of uncertain or unknown behavior.
- 7 Including diseases of the blood forming-organs and disorders involving the immune mechanism.
- 8 Including metabolic diseases.
- 9 Including behavioral disorders.
- 10 Including: alcoholic mental/behavioral disorders, degeneration of nervous sys., polyneuropathy, cardiomyopathy, gastritis, liver disease, maternal care for damage to fetus from alcohol, fetus/newborn affected by maternal alcohol use, alcohol in the blood, accidental poisoning by alcohol, intentional self-poisoning, and poisoning of undetermined intent.
- 11 The ICD-10 codes for the above categories are F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. respectively.
- 12 Including acute rheumatic fever.
- 13 The ICD-10 code is I25.0.
- 14 This includes angina, arteriosclerotic heart disease, coronary heart disease, and related disorders.The ICD-10 codes are I20, I25.1-I25.9.
- 15 Including other intracranial hemorrhages.
- 16 Including diseases of the arterioles and capillaries.
- 17 Including acute bronchiolitis.
- 18 Formerly chronic obstructive pulmonary disease (COPD).
- 19 Including respiratory conditions due to inhalation of chemicals, gases, fumes and vapors.
- 20 Including liver cirrhosis.
- 21 All alcoholic disease deaths are combined into one category, 'Combined alcoholic dis.,' located under Mental Disorders
- 22 Including other diseases of the gallbladder.
- 23 Including subcutaneous tissues.
- 24 Including connective tissue.
- 25 Including nephrotic syndrome and nephrosis.
- 26 Including acute and rapidly progressive nephritic and nephrotic syndrome.
- 27 Including chronic glomerulonephritis, nephritis and nephritis not specified as acute or chronic, and renal sclerosis unspecified.
- 28 Inflammatory diseases of female pelvic organs.
- 29 Including the puerperium.
- 30 including congenital deformations and chromosomal abnormalities.
- 31 Including abnormal clinical and laboratory findings not elsewhere classified.
- 32 Including the following ICD-10 codes: V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6,V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2.
- 33 Including exposure to noxious substances.
- Quantity is 0.

TABLE 6-7t. Total Death Rates for Selected Causes by Age, Oregon Residents, 1999

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	889.4	577.5	28.1	20.3	63.7	98.6	172.4	391.7	914.2	2,299.8	5,617.3	15,881.6
Infections & Parasitic Disease (A00-B99)	13.0	8.9	1.1	0.2	1.1	5.4	10.3	16.1	13.5	27.0	47.8	159.0
Tuberculosis (A16-A19)	0.1	—	—	—	—	—	—	—	—	0.4	—	1.8
Meningococcal infection (A39)	0.2	2.2	—	—	0.4	—	0.2	0.2	—	—	0.6	—
Septicemia (A40-A41)	5.7	4.4	1.1	0.2	0.4	0.7	1.1	3.2	6.2	16.0	31.6	96.2
Creutzfeldt-Jacob disease (A81.0)	0.2	—	—	—	—	—	0.2	0.2	0.7	0.9	—	—
Viral hepatitis (B15-B19)	1.4	—	—	—	—	0.2	1.9	3.8	1.7	1.8	4.3	—
HIV/AIDS (B20-B24) ³	2.2	—	—	—	—	4.0	5.4	4.7	1.0	0.4	0.6	—
Malignant Neoplasms (C00-C97)	209.2	—	2.9	3.2	4.9	12.1	33.2	114.0	350.6	808.2	1,377.6	1,919.6
Lip, oral cavity & pharynx (C00-C14)	3.1	—	—	—	—	—	0.7	3.6	6.2	9.7	17.4	25.9
Digestive organs (C15-26)	46.7	—	0.6	—	—	1.2	5.0	26.1	76.9	179.5	305.9	493.8
Esophagus (C15)	5.0	—	—	—	—	—	0.4	2.8	13.2	19.1	32.9	31.4
Stomach (C16)	4.2	—	—	—	—	—	0.9	2.3	7.3	15.5	26.1	42.5
Colon, rectum & anus (C18-C21)	20.8	—	—	—	—	0.9	2.6	9.7	33.3	71.8	139.6	258.9
Colon (C18)	16.9	—	—	—	—	0.7	2.1	7.6	24.6	58.5	115.4	218.2
Liver & intrahepatic bile ducts (C22)	3.2	—	0.6	—	—	0.2	0.6	4.2	3.8	14.6	14.9	22.2
Pancreas (C25)	11.5	—	—	—	—	—	0.4	5.7	18.4	48.7	81.9	99.9
Respiratory, intrathoracic organs (C30-39) ..	58.5	—	—	—	—	0.7	3.5	25.0	119.2	286.7	390.9	316.2
Larynx (C32)	0.9	—	—	—	—	—	—	—	1.4	6.2	6.2	3.7
Trachea, bronchus & lung (C33-C34)	57.2	—	—	—	—	0.5	3.5	24.6	117.4	277.8	382.9	308.8
Bronchus & lung (C34)	57.1	—	—	—	—	0.5	3.5	24.6	117.1	277.8	382.9	308.8
Skin (C43-44)	3.9	—	—	—	0.2	1.4	2.6	5.5	6.9	10.2	18.6	14.8
Melanoma of skin (C43)	3.3	—	—	—	0.2	1.4	2.4	5.3	6.2	7.5	15.5	9.2
Mesothelioma (C45)	0.9	—	—	—	—	—	—	0.6	0.7	4.0	5.6	12.9
Breast (C50)	15.5	—	—	—	—	0.2	7.3	14.8	28.8	53.6	81.9	123.9
Female genital organs (C51-58)	9.5	—	—	—	0.4	0.7	3.0	8.3	18.4	32.3	54.6	72.1
Cervix uteri (C53)	1.1	—	—	—	0.2	0.5	1.3	1.3	3.1	2.7	2.5	1.8
Corpus uteri (C54-C55) ⁴	2.1	—	—	—	—	—	0.2	0.8	3.1	7.1	16.8	24.0
Ovary (C56)	5.8	—	—	—	0.2	0.2	1.5	5.7	12.1	20.8	32.3	38.8
Male genital organs (C60-C63)	13.7	—	—	0.2	0.4	0.2	0.7	1.1	6.6	37.7	118.5	264.4
Prostate (C61)	13.5	—	—	—	0.2	—	0.6	0.8	6.6	37.7	117.9	264.4
Kidney & renal pelvis (C64-C65)	4.0	—	—	—	—	—	1.1	3.4	8.3	13.7	24.8	29.6
Bladder (C67)	5.1	—	—	—	—	—	0.4	0.8	6.9	14.6	43.4	74.0

See footnotes at end of table.

TABLE 6-7t. Total Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Brain, etc. (C70-C72) ⁵	4.7	—	0.6	1.5	0.7	2.3	2.4	4.9	9.0	16.4	16.1	16.6
Thyroid/endocrine gland (C73-C75)	1.0	—	—	0.2	—	0.2	0.2	0.8	2.8	2.2	4.3	9.2
Lymphoid & hematopoietic (C81-C96)	22.2	—	1.1	0.9	2.0	3.3	3.0	9.3	30.8	72.7	163.2	238.6
Hodgkin's disease (C81)	0.5	—	—	—	0.7	0.2	0.2	0.2	0.7	1.8	1.9	—
Non-Hodgkin's lymphoma (C82-C85)	9.5	—	—	—	0.9	1.2	1.7	5.7	13.9	26.6	70.7	98.0
Leukemia (C91-C95)	7.6	—	1.1	0.9	0.4	1.6	0.7	2.1	9.7	24.4	54.6	92.5
Lymphoid leukemia (C91)	2.9	—	1.1	0.6	0.2	0.7	0.4	0.2	3.1	8.4	23.6	35.1
Myeloid leukemia (C92)	3.4	—	—	—	0.2	0.5	0.4	1.7	5.5	12.0	21.7	37.0
Multiple myeloma (C88,C90) ⁶	4.7	—	—	—	—	0.2	0.4	1.3	6.6	19.9	35.4	48.1
Neoplasm not specif. as malign. (D00-D48) ⁷	6.1	2.2	—	0.9	—	—	0.9	1.7	5.9	16.8	40.3	114.7
Diseases of the Blood (D50-89)⁸	2.9	2.2	0.6	0.4	0.2	0.2	0.4	1.5	2.8	5.8	19.2	51.8
Anemias (D50-D64)	1.6	2.2	—	0.2	—	—	0.2	0.6	1.7	1.8	8.7	44.4
Endocrine & Nutritional Dis. (E00-E88)⁹	34.9	2.2	0.6	0.9	0.7	4.2	5.0	21.2	47.1	113.4	212.9	488.2
Diabetes mellitus (E10-E14)	25.9	—	—	—	0.2	2.8	3.4	14.0	37.8	95.3	162.6	318.1
Nutritional deficiencies (E40-E64)	1.8	—	—	—	—	—	0.2	0.2	0.7	2.2	9.9	64.7
Malnutrition (E40-E46)	1.5	—	—	—	—	—	0.2	0.2	0.3	1.8	9.3	48.1
Mental Disorders (F01-F99)¹⁰	24.6	—	—	—	0.7	4.2	13.1	13.6	12.1	26.1	116.0	695.3
Organic dementia (F01, F03)	15.7	—	—	—	—	—	—	—	1.0	14.6	87.5	628.8
Due to alcohol (F10)	3.3	—	—	—	—	0.9	2.4	5.9	8.3	8.9	10.5	5.5
Due to psychoactive substance (F11-F19)	3.6	—	—	—	0.7	3.0	10.3	7.0	2.1	0.9	3.7	1.8
Alcohol-induced deaths ^{11,12}	9.2	—	—	—	—	1.4	7.5	21.0	25.6	22.6	18.0	9.2
Nervous System Dis. (G00-G99)	44.0	6.6	2.3	1.1	1.3	1.2	3.7	11.9	20.4	64.7	319.0	1,174.3
Meningitis (G00, G03)	0.4	—	—	0.2	—	—	0.2	0.2	1.0	0.9	1.9	1.8
Amyotrophic lateral sclerosis (G12.2)	2.3	—	—	—	—	—	0.6	1.9	5.2	10.6	13.7	3.7
Parkinson's disease (G20-G21)	7.8	—	—	—	—	—	—	0.4	1.7	15.5	74.5	173.8
Alzheimer's disease (G30)	26.3	—	—	—	—	—	—	0.2	2.1	17.7	198.6	926.5
Epilepsy (G40-G41)	0.3	—	—	0.2	0.4	—	0.9	0.2	—	0.4	—	1.8
Circulatory System Diseases (I00-I99)	330.3	17.7	1.1	1.3	2.4	8.4	27.2	91.1	274.0	726.3	2,260.1	7,748.5
Major cardiovascular diseases (I00-I78)	329.0	17.7	1.1	1.3	2.2	7.9	27.2	90.9	272.6	723.6	2,250.8	7,724.5
Heart disease (I00-I09, I11, I13, I20-I51)	219.7	15.5	0.6	1.3	1.8	6.8	22.8	73.5	215.1	530.4	1,423.6	4,845.1
Rheumatic heart diseases (I00-I09) ¹³	2.2	—	—	—	—	—	—	0.4	3.5	5.8	17.4	37.0
Hypertensive heart disease (I11)	5.5	—	—	—	—	0.5	1.5	1.1	3.5	10.2	29.2	160.9
Hypertensive heart & renal dis. (I13) ..	1.2	—	—	—	—	0.2	—	0.6	0.3	2.2	9.3	29.6
Ischemic heart diseases (I20-I25)	150.0	—	—	—	0.2	3.3	13.2	52.1	162.1	390.8	1,020.8	3,001.4

See footnotes at end of table.

TABLE 6-7t. Total Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Myocardial infarction (I21-I22)	52.0	—	—	—	0.2	1.4	3.5	18.4	62.7	152.4	371.7	884.0
Other acute ischemic hrt. dis. (I24) ..	0.3	—	—	—	—	—	—	0.2	1.0	—	1.9	3.7
Chronic isch. heart dis. (I20, I25)	97.7	—	—	—	—	1.9	9.7	33.5	98.4	238.4	647.2	2,113.7
Atheroscler. cardiovascular dis. ¹⁴	14.5	—	—	—	—	0.7	1.5	4.9	12.5	27.9	95.6	351.4
Other chr. ischemic heart dis. ¹⁵ ...	83.3	—	—	—	—	1.2	8.2	28.6	85.9	210.5	551.7	1,762.4
Heart failure (I50)	22.6	—	—	0.2	—	—	0.2	3.0	6.6	29.7	126.0	815.5
Congestive heart failure (I50.0)	21.5	—	—	0.2	—	—	0.2	2.3	6.2	28.8	120.4	778.5
Left ventricular heart failure (I50.1)	0.1	—	—	—	—	—	—	0.4	—	0.4	—	—
Heart failure, unspecified (I50.9)	1.0	—	—	—	—	—	—	0.2	0.3	0.4	5.6	37.0
Hypertension & hyp. renal dis. (I10, I12)	7.5	—	—	—	—	0.2	0.6	2.1	4.5	15.1	55.8	175.7
Cerebrovascular diseases (I60-I69)	85.3	2.2	0.6	—	0.4	0.7	3.2	13.6	39.8	138.3	643.5	2,339.3
Subarachnoid hemorrhage (I60)	2.2	—	—	—	—	0.2	0.9	3.8	4.8	5.3	9.9	9.2
Intracerebral hemorrhage (I61-I62) ¹⁶	10.2	—	—	—	0.2	0.2	0.6	5.7	11.8	29.7	73.8	155.3
Cerebral infarction (I63)	6.6	—	—	—	0.2	—	0.6	0.4	2.4	14.2	50.3	172.0
Stroke (type not specified) (I64)	43.8	—	—	—	—	0.2	0.9	2.8	13.5	66.5	330.8	1,305.6
Atherosclerosis (I70)	6.0	—	—	—	—	—	—	0.6	2.1	7.1	43.4	190.5
Aortic aneurysm & dissection (I71)	7.3	—	—	—	—	0.2	0.7	0.6	7.3	26.1	61.4	98.0
Diseases of arteries (I72-I78) ¹⁷	3.2	—	—	—	—	—	—	0.4	3.8	6.2	23.0	75.8
Respiratory System Diseases (J00-J99)	87.2	6.6	0.6	0.6	0.7	1.6	4.5	15.7	71.7	269.0	682.6	1,570.0
Influenza & pneumonia (J10-J18)	20.7	2.2	—	0.2	0.2	0.5	1.1	3.6	6.6	31.9	119.1	689.8
Influenza (J10-J11)	0.4	—	—	—	—	—	—	—	—	1.3	3.1	11.1
Pneumonia (J12-J18)	20.3	2.2	—	0.2	0.2	0.5	1.1	3.6	6.6	30.6	116.0	678.7
Other acute lower resp. infect'ns (J20-J22)	0.2	—	—	—	—	—	—	—	—	0.4	1.9	3.7
Acute bronchitis (J20-J21) ¹⁸	0.2	—	—	—	—	—	—	—	—	0.4	1.9	1.8
Chronic lower respiratory dis. (J40-J47) ¹⁹ ..	53.4	—	—	0.2	0.2	0.2	1.9	9.3	52.0	207.4	469.8	610.3
Bronchitis, chronic & unspec. (J40-J42)	0.3	—	—	—	—	—	0.2	—	—	1.8	1.2	7.4
Emphysema (J43)	8.9	—	—	—	—	—	0.4	0.8	11.8	39.4	77.6	75.8
Asthma (J45-J46)	2.4	—	—	0.2	0.2	—	0.7	2.1	4.5	3.5	15.5	29.6
Other CLRD (J44, J47)	41.7	—	—	—	—	0.2	0.6	6.4	35.7	162.6	375.4	497.5
Pneumoconioses (J60-J66, J68) ²⁰	0.5	—	—	—	—	—	—	—	0.7	1.3	3.1	12.9
Pneumonitis due to solids & liquids (J69) ...	4.6	—	—	—	—	0.2	0.6	0.2	2.8	9.7	26.1	140.5
Digestive System Diseases (K00-K92)	29.6	2.2	1.1	0.2	0.4	1.2	6.7	28.0	36.7	75.8	163.2	477.1
Peptic ulcer (K25-K28)	2.1	—	—	—	—	—	—	1.1	1.7	2.7	13.7	57.3
Diseases of the appendix (K35-K38)	0.1	2.2	—	—	—	—	—	—	—	0.9	—	1.8

See footnotes at end of table.

TABLE 6-7t. Total Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Hernia (K40-K46)	0.6	—	—	—	—	—	—	—	0.3	0.4	5.6	18.5
Chronic liver disease (K70, K73-K74) ²¹	9.2	—	—	—	—	0.5	5.6	20.3	21.8	25.7	26.1	24.0
Alcoholic liver disease (K70) ²²	5.5	—	—	—	—	0.5	4.9	14.6	16.3	11.5	6.8	3.7
Cholelithiasis (K80-K82) ²³	1.2	—	—	—	—	—	—	0.2	0.3	4.0	6.8	31.4
Diseases of the Skin (L00-L98)²⁴	1.1	—	—	—	0.2	—	0.2	0.2	1.4	3.5	2.5	33.3
Musculoskeletal Disease (M00-M99)²⁵	6.5	—	—	0.4	—	—	0.6	2.8	5.2	11.1	40.3	168.3
Genitourinary System Dis. (N00-N99)	12.8	4.4	—	—	0.2	0.5	0.7	3.6	5.9	24.4	92.5	325.5
Nephritis (N00-N07, N17-N19, N25-N27) ²⁶	7.9	2.2	—	—	0.2	0.2	0.6	2.8	3.8	17.3	59.0	177.5
Acute nephrotic syndr. (N00-N01, N04) ²⁷ ..	0.2	—	—	—	—	—	—	0.2	0.3	1.3	1.2	—
Chr. nephritis (N02-N03, N05-N07, N26) ²⁸ ..	0.2	—	—	—	—	0.2	—	—	—	0.9	0.6	1.8
Renal failure (N17-N19)	7.5	2.2	—	—	0.2	—	0.6	2.5	3.5	15.1	57.1	175.7
Kidney infect'ns (N10-N12, N13.6, N15.1) ..	0.5	—	—	—	—	—	—	0.2	0.3	0.4	2.5	16.6
Urinary tract infection (N39.0)	3.7	—	—	—	—	0.2	—	0.4	1.0	5.3	27.9	109.1
Hyperplasia of prostate (N40)	0.1	—	—	—	—	—	—	—	—	—	—	5.5
Female pelvic inflam. dis. (N70-N76) ²⁹	>0	—	—	—	—	—	—	—	0.3	—	—	—
Pregnancy & Childbirth (O00-O99)³⁰	0.1	—	—	—	0.2	0.2	0.2	—	—	—	—	—
Perinatal Conditions (P00-P96)	3.4	247.8	—	—	—	—	—	—	—	—	—	—
Congenital Malformations (Q00-Q99)³¹ ..	4.7	172.6	3.4	0.6	0.9	1.6	1.5	3.0	2.8	4.0	7.4	12.9
Malformation of the heart (Q20-Q24)	1.4	37.6	0.6	—	0.2	1.2	0.6	0.8	1.4	1.3	1.9	7.4
Other malf. of the circul. sys. (Q25-Q28)	0.3	2.2	—	0.2	0.2	—	0.2	0.4	0.3	—	1.2	—
Malf. of the respiratory system (Q30-Q34) ..	0.8	57.5	—	—	—	0.2	—	—	—	—	—	—
Symptoms & Signs (R00-R99)³²	22.5	66.4	0.6	—	0.9	2.3	4.1	6.4	23.2	47.9	93.1	593.6
Senility (R54)	2.3	—	—	—	—	—	—	—	—	—	7.4	120.2
Sudden infant death syndrome (R95)	0.8	57.5	—	—	—	—	—	—	—	—	—	—
External Causes of Death (V01-Y89)	56.5	37.6	13.8	10.4	48.9	55.5	60.1	61.0	40.9	75.8	142.1	349.5
Accidents (V01-X59, Y85-Y86)	34.7	24.3	11.5	8.6	29.6	28.9	31.3	32.0	22.5	47.4	101.8	295.9
Transport accidents (V01-V99, Y85)	14.9	6.6	3.4	5.0	22.6	13.1	15.7	16.7	11.8	23.9	26.1	14.8
Motor vehicle acc. (Many codes) ³³	13.2	6.6	2.9	3.9	21.7	12.4	12.7	13.6	10.0	21.7	25.4	14.8
Water transport accidents (V90-V94)	0.4	—	—	0.4	0.4	0.2	0.7	0.6	0.7	—	—	—
Air transport accidents (V95-V97)	0.5	—	—	—	0.4	—	0.7	1.3	0.7	1.8	—	—
Nontransport accidents (W00-X59, Y86) ..	19.8	17.7	8.0	3.7	7.1	15.9	15.7	15.3	10.7	23.5	75.7	281.1
Falls (W00-W19)	5.5	2.2	1.1	0.2	—	1.6	1.7	3.6	3.8	9.3	28.5	125.8
Firearms (W32-W34)	0.2	—	0.6	0.4	1.1	—	—	—	—	—	—	—
Drowning & submersion (W65-W74) ..	1.4	—	3.4	0.6	2.0	1.6	0.9	1.7	1.4	0.4	0.6	3.7

See footnotes at end of table.

TABLE 6-7t. Total Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Exposure to smoke & fire (X00-X09) ..	0.9	4.4	1.1	1.1	0.2	0.5	0.9	0.2	—	1.3	3.7	5.5
Poisoning (X40-X49) ³⁴	4.4	2.2	—	—	1.8	9.8	10.3	5.7	1.4	1.3	2.5	1.8
Suicide (X60-X84, Y87.0)	15.1	—	—	0.6	12.2	16.3	20.0	22.3	15.6	22.2	28.5	33.3
Homicide (X85-Y09, Y87.1)	3.3	8.9	1.7	0.6	6.0	7.9	3.4	3.2	1.0	0.4	—	1.8
Legal intervention (Y35, Y89.0)	0.2	—	—	—	0.2	0.5	0.7	—	0.3	—	—	—
Undeterm. intent (Y10-Y34, Y87.2, Y89.9)	1.8	4.4	0.6	0.4	0.9	1.9	4.5	2.5	0.3	0.4	1.2	1.8
War and its sequelae (Y36, Y89.1)	0.1	—	—	—	—	—	—	0.2	—	0.4	—	—
Medical care complica'ns (Y40-Y84, Y88) ..	1.4	—	—	—	—	—	0.2	0.8	1.0	4.9	10.5	16.6

- 1 International Statistical Classification of Diseases and Related Health Problems, Tenth Revision. Geneva: World Health Organization, 1992.
- 2 Rates per 100,000 population.
- 3 Human immunodeficiency virus/Acquired immune deficiency syndrome.
- 4 Including uterus, part unspecified.
- 5 Including meninges and other parts of the central nervous system.
- 6 Including immunoproliferative neoplasms.
- 7 Including in situ neoplasms, benign neoplasms, and neoplasms of uncertain or unknown behavior.
- 8 Including diseases of the blood forming-organs and disorders involving the immune mechanism.
- 9 Including metabolic diseases.
- 10 Including behavioral disorders.
- 11 Including: alcoholic mental/behavioral disorders, degeneration of nervous system, polyneuropathy, cardiomyopathy, gastritis, liver disease, maternal care for damage to fetus from alcohol, fetus/newborn affected by maternal alcohol use, alcohol in the blood, accidental poisoning by alcohol, intentional self-poisoning, and poisoning of undetermined intent.
- 12 The ICD-10 codes for the above categories are F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15, respectively.
- 13 Including acute rheumatic fever.
- 14 The ICD-10 code is I25.0.
- 15 This includes angina, arteriosclerotic heart disease, coronary heart disease, and related disorders. The ICD-10 codes are I20, I25.1-I25.9.
- 16 Including other intracranial hemorrhages.
- 17 Including diseases of the arterioles and capillaries.
- 18 Including acute bronchiolitis.
- 19 Formerly chronic obstructive pulmonary disease (COPD).
- 20 Including respiratory conditions due to inhalation of chemicals, gases, fumes and vapors.
- 21 Including liver cirrhosis.
- 22 All alcoholic disease deaths are combined into one category, 'Combined alcoholic dis.,' located under Mental Disorders
- 23 Including other diseases of the gallbladder.
- 24 Including subcutaneous tissues.
- 25 Including connective tissue.
- 26 Including nephrotic syndrome and nephrosis.
- 27 Including acute and rapidly progressive nephritic and nephrotic syndrome.
- 28 Including chronic glomerulonephritis, nephritis and nephritis not specified as acute or chronic, and renal sclerosis unspecified.

- 29 Inflammatory diseases of female pelvic organs.
- 30 Including the puerperium.
- 31 including congenital deformations and chromosomal abnormalities.
- 32 Including abnormal clinical and laboratory findings not elsewhere classified.
- 33 Including the following ICD-10 codes: V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2.
- 34 Including exposure to noxious substances.
- >0 Value too small to display.
 - Quantity is 0.

TABLE 6-7m. Male Death Rates for Selected Causes by Age, Oregon Residents, 1999

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	885.3	611.0	32.6	24.4	90.9	142.2	225.6	498.5	1,105.2	2,786.1	6,717.3	16,679.2
Infections & Parasitic Disease (A00-B99)	14.5	8.6	1.1	–	0.4	9.8	16.7	24.1	20.8	26.0	38.2	161.4
Tuberculosis (A16-A19)	–	–	–	–	–	–	–	–	–	–	–	–
Meningococcal infection (A39)	0.1	4.3	–	–	–	–	0.4	–	–	–	–	–
Septicemia (A40-A41)	4.4	4.3	1.1	–	–	0.9	1.5	3.0	8.6	14.4	22.0	86.5
Creutzfeldt-Jacob disease (A81.0)	0.2	–	–	–	–	–	0.4	–	0.7	1.0	–	–
Viral hepatitis (B15-B19)	2.3	–	–	–	–	0.5	3.3	6.4	3.6	3.8	4.4	–
HIV/AIDS (B20-B24) ³	4.0	–	–	–	–	7.9	8.9	8.9	2.2	–	1.5	–
Malignant Neoplasms (C00-C97)	219.2	–	2.3	3.8	6.5	15.0	33.0	116.5	368.2	924.2	1,729.7	2,876.9
Lip, oral cavity & pharynx (C00-C14)	4.3	–	–	–	–	–	1.5	5.9	10.0	15.4	22.0	40.4
Digestive organs (C15-26)	50.9	–	–	–	–	2.3	7.4	36.8	96.9	231.8	349.8	599.6
Esophagus (C15)	7.8	–	–	–	–	–	0.7	5.1	21.5	34.6	52.9	63.4
Stomach (C16)	5.7	–	–	–	–	–	1.5	3.4	9.3	26.0	41.1	74.9
Colon, rectum & anus (C18-C21)	21.4	–	–	–	–	1.9	3.7	12.7	39.5	87.5	149.9	328.6
Colon (C18)	17.2	–	–	–	–	1.4	3.0	10.6	28.0	65.4	126.4	299.8
Liver & intrahepatic bile ducts (C22)	3.9	–	–	–	–	0.5	0.7	7.2	4.3	24.0	14.7	17.3
Pancreas (C25)	10.1	–	–	–	–	–	0.4	7.2	20.8	50.0	80.8	63.4
Respiratory, intrathoracic organs (C30-39) ..	65.4	–	–	–	–	0.5	5.2	28.4	127.0	333.7	548.1	501.6
Larynx (C32)	1.7	–	–	–	–	–	–	–	2.9	12.5	13.2	5.8
Trachea, bronchus & lung (C33-C34)	63.5	–	–	–	–	0.5	5.2	27.5	124.2	320.3	533.4	495.8
Bronchus & lung (C34)	63.4	–	–	–	–	0.5	5.2	27.5	123.4	320.3	533.4	495.8
Skin (C43-44)	5.2	–	–	–	–	2.3	2.6	8.5	9.3	15.4	29.4	23.1
Melanoma of skin (C43)	4.4	–	–	–	–	2.3	2.6	8.0	7.9	10.6	25.0	5.8
Mesothelioma (C45)	1.6	–	–	–	–	–	–	0.8	0.7	7.7	11.8	40.4
Breast (C50)	0.2	–	–	–	–	–	–	0.4	–	1.0	1.5	–
Female genital organs (C51-58)	–	–	–	–	–	–	–	–	–	–	–	–
Cervix uteri (C53)	–	–	–	–	–	–	–	–	–	–	–	–
Corpus uteri (C54-C55) ⁴	–	–	–	–	–	–	–	–	–	–	–	–
Ovary (C56)	–	–	–	–	–	–	–	–	–	–	–	–
Male genital organs (C60-C63)	27.7	–	–	0.4	0.9	0.5	1.5	2.1	13.6	81.7	280.7	824.4
Prostate (C61)	27.3	–	–	–	0.4	–	1.1	1.7	13.6	81.7	279.2	824.4
Kidney & renal pelvis (C64-C65)	5.6	–	–	–	–	–	1.5	5.5	12.2	18.3	45.6	40.4
Bladder (C67)	7.3	–	–	–	–	–	0.4	1.3	7.9	26.0	77.9	138.4

See footnotes at end of table.

TABLE 6-7m. Male Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Brain, etc. (C70-C72) ⁵	5.9	—	1.1	1.7	1.3	3.3	3.7	5.5	11.5	23.1	22.0	17.3
Thyroid/endocrine gland (C73-C75)	0.8	—	—	0.4	—	—	0.4	1.3	2.2	2.9	1.5	5.8
Lymphoid & hematopoietic (C81-C96)	24.1	—	1.1	0.8	3.4	3.3	4.8	9.7	41.6	97.1	180.8	328.6
Hodgkin's disease (C81)	0.7	—	—	—	1.3	0.5	0.4	0.4	1.4	1.0	2.9	—
Non-Hodgkin's lymphoma (C82-C85)	9.9	—	—	—	1.3	1.4	3.3	5.5	19.4	36.5	70.5	115.3
Leukemia (C91-C95)	7.8	—	1.1	0.8	0.9	1.4	0.7	2.1	11.5	32.7	63.2	109.5
Lymphoid leukemia (C91)	3.1	—	1.1	0.4	0.4	0.5	0.4	0.4	5.7	8.7	27.9	51.9
Myeloid leukemia (C92)	3.4	—	—	—	0.4	0.5	0.4	1.3	3.6	18.3	30.9	28.8
Multiple myeloma (C88,C90) ⁶	5.8	—	—	—	—	—	0.4	1.7	9.3	26.9	44.1	103.8
Neoplasm not specif. as malig. (D00-D48) ⁷	5.4	4.3	—	1.3	—	—	1.1	2.1	5.7	23.1	47.0	69.2
Diseases of the Blood (D50-89)⁸	2.5	—	1.1	—	—	—	0.4	0.8	3.6	9.6	22.0	34.6
Anemias (D50-D64)	1.2	—	—	—	—	—	—	0.4	2.9	2.9	8.8	28.8
Endocrine & Nutritional Dis. (E00-E88)⁹	33.6	4.3	—	1.7	—	3.3	5.2	26.3	57.4	122.1	241.0	507.4
Diabetes mellitus (E10-E14)	25.5	—	—	—	—	1.4	3.3	16.1	44.5	102.9	191.0	386.3
Nutritional deficiencies (E40-E64)	1.1	—	—	—	—	—	—	—	1.4	1.0	7.3	57.7
Malnutrition (E40-E46)	1.0	—	—	—	—	—	—	—	0.7	1.0	7.3	51.9
Mental Disorders (F01-F99)¹⁰	22.0	—	—	—	1.3	6.5	18.6	22.0	20.8	38.5	127.9	484.3
Organic dementia (F01, F03)	9.6	—	—	—	—	—	—	—	2.2	19.2	86.7	426.6
Due to alcohol (F10)	5.4	—	—	—	—	1.9	2.6	9.3	15.1	14.4	23.5	17.3
Due to psychoactive substance (F11-F19)	5.6	—	—	—	1.3	4.7	15.6	12.3	2.9	1.0	4.4	—
Alcohol-induced deaths ^{11,12}	14.4	—	—	—	—	2.3	9.3	33.5	39.5	38.5	39.7	17.3
Nervous System Dis. (G00-G99)	36.0	4.3	4.5	0.8	2.2	0.9	4.5	12.3	23.7	75.0	346.8	1,060.8
Meningitis (G00, G03)	0.2	—	—	—	—	—	—	0.4	0.7	—	1.5	—
Amyotrophic lateral sclerosis (G12.2)	2.0	—	—	—	—	—	0.7	2.5	3.6	10.6	13.2	—
Parkinson's disease (G20-G21)	9.3	—	—	—	—	—	—	0.4	2.9	22.1	110.2	282.5
Alzheimer's disease (G30)	16.9	—	—	—	—	—	—	—	2.9	21.2	185.2	709.1
Epilepsy (G40-G41)	0.5	—	—	0.4	0.9	—	1.1	0.4	—	1.0	—	—
Circulatory System Diseases (I00-I99)	315.1	17.2	1.1	0.8	3.0	10.8	37.9	127.0	377.5	952.1	2,702.5	7,731.3
Major cardiovascular diseases (I00-I78)	314.0	17.2	1.1	0.8	2.6	10.8	37.9	126.6	376.8	948.3	2,693.7	7,708.3
Heart disease (I00-I09, I11, I13, I20-I51)	227.2	17.2	1.1	0.8	2.2	9.4	33.4	108.4	309.3	733.8	1,804.6	5,206.1
Rheumatic heart diseases (I00-I09) ¹³	1.4	—	—	—	—	—	—	0.4	2.9	5.8	13.2	17.3
Hypertensive heart disease (I11)	3.7	—	—	—	—	0.9	1.9	2.1	2.9	9.6	29.4	86.5
Hypertensive heart & renal dis. (I13) ..	1.1	—	—	—	—	0.5	—	0.8	0.7	1.0	7.3	46.1
Ischemic heart diseases (I20-I25)	169.4	—	—	—	0.4	5.1	22.3	83.4	254.8	572.2	1,352.0	3,586.0

See footnotes at end of table.

TABLE 6-7m. Male Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Myocardial infarction (I21-I22)	59.6	—	—	—	0.4	1.9	4.8	28.0	96.9	219.3	480.5	1,135.8
Other acute ischemic hrt. dis. (I24) ..	0.3	—	—	—	—	—	—	0.4	1.4	—	2.9	—
Chronic isch. heart dis. (I20, I25)	109.5	—	—	—	—	3.3	17.4	55.1	156.4	353.0	868.5	2,450.3
Atheroscler. cardiovascular dis. ¹⁴	14.5	—	—	—	—	1.4	3.0	7.6	22.2	40.4	107.3	351.7
Other chr. ischemic heart dis. ¹⁵ ...	95.0	—	—	—	—	1.9	14.5	47.4	134.2	312.6	761.2	2,098.6
Heart failure (I50)	16.9	—	—	—	—	—	—	2.1	5.7	35.6	142.5	738.0
Congestive heart failure (I50.0)	16.1	—	—	—	—	—	—	1.7	5.7	33.7	136.7	703.4
Left ventricular heart failure (I50.1)	0.1	—	—	—	—	—	—	0.4	—	1.0	—	—
Heart failure, unspecified (I50.9)	0.7	—	—	—	—	—	—	—	—	1.0	5.9	34.6
Hypertension & hyp. renal dis. (I10, I12)	5.0	—	—	—	—	0.5	0.7	3.0	4.3	9.6	50.0	121.1
Cerebrovascular diseases (I60-I69)	65.1	—	—	—	0.4	0.5	3.0	13.1	45.9	153.9	656.9	2,012.1
Subarachnoid hemorrhage (I60)	1.3	—	—	—	—	—	0.4	2.5	3.6	2.9	5.9	11.5
Intracerebral hemorrhage (I61-I62) ¹⁶	9.5	—	—	—	0.4	0.5	0.7	5.9	17.2	33.7	70.5	173.0
Cerebral infarction (I63)	5.3	—	—	—	—	—	0.7	—	2.2	16.3	63.2	126.8
Stroke (type not specified) (I64)	32.4	—	—	—	—	—	0.7	3.4	13.6	77.9	333.6	1,101.2
Atherosclerosis (I70)	5.0	—	—	—	—	—	—	0.8	2.9	6.7	54.4	184.5
Aortic aneurysm & dissection (I71)	8.9	—	—	—	—	0.5	0.7	0.8	9.3	34.6	105.8	109.5
Diseases of arteries (I72-I78) ¹⁷	2.8	—	—	—	—	—	—	0.4	5.0	8.7	22.0	74.9
Respiratory System Diseases (J00-J99)	85.8	4.3	1.1	0.4	0.4	1.4	3.0	16.9	73.9	309.7	853.8	1,948.7
Influenza & pneumonia (J10-J18)	18.5	—	—	0.4	0.4	0.5	0.7	5.5	6.5	38.5	160.2	726.4
Influenza (J10-J11)	0.3	—	—	—	—	—	—	—	—	—	2.9	17.3
Pneumonia (J12-J18)	18.2	—	—	0.4	0.4	0.5	0.7	5.5	6.5	38.5	157.2	709.1
Other acute lower resp. infect'ns (J20-J22)	0.1	—	—	—	—	—	—	—	—	—	1.5	5.8
Acute bronchitis (J20-J21) ¹⁸	0.1	—	—	—	—	—	—	—	—	—	1.5	5.8
Chronic lower respiratory dis. (J40-J47) ¹⁹ ..	53.6	—	—	—	—	—	1.9	8.0	51.7	232.7	576.1	830.2
Bronchitis, chronic & unspec. (J40-J42)	0.2	—	—	—	—	—	0.4	—	—	1.0	1.5	5.8
Emphysema (J43)	9.6	—	—	—	—	—	0.4	1.3	11.5	47.1	105.8	86.5
Asthma (J45-J46)	1.3	—	—	—	—	—	0.7	0.8	2.9	1.0	11.8	28.8
Other CLRD (J44, J47)	42.5	—	—	—	—	—	0.4	5.9	37.3	183.7	457.0	709.1
Pneumoconioses (J60-J66, J68) ²⁰	0.9	—	—	—	—	—	—	—	1.4	2.9	7.3	28.8
Pneumonitis due to solids & liquids (J69) ...	4.7	—	—	—	—	—	—	0.4	3.6	12.5	32.3	207.6
Digestive System Diseases (K00-K92)	28.3	—	2.3	0.4	0.9	1.9	8.5	40.2	45.2	80.8	164.6	438.2
Peptic ulcer (K25-K28)	1.6	—	—	—	—	—	—	0.4	2.2	3.8	11.8	57.7
Diseases of the appendix (K35-K38)	0.1	—	—	—	—	—	—	—	—	—	—	5.8

See footnotes at end of table.

TABLE 6-7m. Male Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Hernia (K40-K46)	0.4	—	—	—	—	—	—	—	0.7	—	2.9	23.1
Chronic liver disease (K70, K73-K74) ²¹	12.2	—	—	—	—	0.5	7.4	32.2	28.0	34.6	33.8	23.1
Alcoholic liver disease (K70) ²²	8.2	—	—	—	—	0.5	6.3	23.3	22.2	19.2	14.7	—
Cholelithiasis (K80-K82) ²³	1.0	—	—	—	—	—	—	0.4	—	4.8	5.9	40.4
Diseases of the Skin (L00-L98)²⁴	1.1	—	—	—	—	—	0.4	—	0.7	6.7	2.9	40.4
Musculoskeletal Disease (M00-M99)²⁵	4.1	—	—	—	—	—	0.7	2.5	2.9	8.7	33.8	132.6
Genitourinary System Dis. (N00-N99)	9.6	—	—	—	—	0.5	0.7	3.8	3.6	21.2	94.1	311.3
Nephritis (N00-N07, N17-N19, N25-N27) ²⁶	7.2	—	—	—	—	—	0.4	3.0	2.9	19.2	69.1	224.8
Acute nephrotic syndr. (N00-N01, N04) ²⁷ ..	0.1	—	—	—	—	—	—	0.4	—	1.0	—	—
Chr. nephritis (N02-N03, N05-N07, N26) ²⁸ ..	0.1	—	—	—	—	—	—	—	—	1.0	—	5.8
Renal failure (N17-N19)	7.0	—	—	—	—	—	0.4	2.5	2.9	17.3	69.1	219.1
Kidney infect'ns (N10-N12, N13.6, N15.1) ..	0.4	—	—	—	—	—	—	0.4	—	—	4.4	11.5
Urinary tract infection (N39.0)	1.3	—	—	—	—	0.5	—	—	0.7	1.0	17.6	40.4
Hyperplasia of prostate (N40)	0.2	—	—	—	—	—	—	—	—	—	—	17.3
Female pelvic inflam. dis. (N70-N76) ²⁹	—	—	—	—	—	—	—	—	—	—	—	—
Pregnancy & Childbirth (O00-O99)³⁰	—	—	—	—	—	—	—	—	—	—	—	—
Perinatal Conditions (P00-P96)	3.7	262.5	—	—	—	—	—	—	—	—	—	—
Congenital Malformations (Q00-Q99)³¹ ..	5.0	176.4	4.5	0.8	0.4	2.3	2.6	2.5	2.9	6.7	5.9	5.8
Malformation of the heart (Q20-Q24)	1.4	30.1	1.1	—	0.4	1.9	1.1	1.3	0.7	1.0	1.5	5.8
Other malf. of the circul. sys. (Q25-Q28)	0.3	—	—	0.4	—	—	0.4	0.4	0.7	—	1.5	—
Malf. of the respiratory system (Q30-Q34) ..	1.0	68.8	—	—	—	—	—	—	—	—	—	—
Symptoms & Signs (R00-R99)³²	20.6	86.1	—	—	1.3	2.8	5.2	8.9	33.0	62.5	119.0	455.5
Senility (R54)	1.3	—	—	—	—	—	—	—	—	—	8.8	86.5
Sudden infant death syndrome (R95)	1.0	68.8	—	—	—	—	—	—	—	—	—	—
External Causes of Death (V01-Y89)	78.8	43.0	14.6	14.3	74.5	87.0	87.2	92.3	65.3	119.3	186.6	420.9
Accidents (V01-X59, Y85-Y86)	45.0	30.1	11.3	12.2	44.4	44.9	45.3	49.1	32.3	68.3	119.0	311.3
Transport accidents (V01-V99, Y85)	20.0	8.6	3.4	6.3	31.4	19.2	21.5	25.4	12.2	30.8	29.4	28.8
Motor vehicle acc. (Many codes) ³³	17.4	8.6	3.4	5.1	30.1	18.2	17.1	19.9	8.6	26.9	27.9	28.8
Water transport accidents (V90-V94)	0.8	—	—	0.8	0.9	0.5	1.1	1.3	1.4	—	—	—
Air transport accidents (V95-V97)	1.0	—	—	—	0.4	—	1.5	2.5	1.4	3.8	—	—
Nontransport accidents (W00-X59, Y86) ..	25.0	21.5	7.9	5.9	12.9	25.7	23.8	23.7	20.1	37.5	89.6	282.5
Falls (W00-W19)	6.3	—	1.1	0.4	—	2.8	3.0	5.9	6.5	15.4	35.3	138.4
Firearms (W32-W34)	0.5	—	1.1	0.8	2.2	—	—	—	—	—	—	—
Drowning & submersion (W65-W74) ..	2.4	—	4.5	0.8	3.9	3.3	1.5	2.5	2.9	1.0	1.5	5.8

See footnotes at end of table.

TABLE 6-7m. Male Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Exposure to smoke & fire (X00-X09) ..	1.0	8.6	1.1	1.7	0.4	0.5	1.1	—	—	1.9	2.9	—
Poisoning (X40-X49) ³⁴	6.7	4.3	—	—	3.0	15.4	14.5	8.5	2.9	1.9	2.9	5.8
Suicide (X60-X84, Y87.0)	25.3	—	—	1.3	20.7	29.0	29.7	33.9	28.7	41.4	60.3	86.5
Homicide (X85-Y09, Y87.1)	4.4	8.6	2.3	0.4	8.2	9.4	4.8	4.7	2.2	1.0	—	—
Legal intervention (Y35, Y89.0)	0.5	—	—	—	0.4	0.9	1.5	—	0.7	—	—	—
Undeterm. intent (Y10-Y34, Y87.2, Y89.9)	2.2	4.3	1.1	0.4	0.9	2.8	5.6	3.4	0.7	1.0	—	—
War and its sequelae (Y36, Y89.1)	0.1	—	—	—	—	—	—	0.4	—	1.0	—	—
Medical care complica'ns (Y40-Y84, Y88) ..	1.2	—	—	—	—	—	0.4	0.8	0.7	6.7	7.3	23.1

- 1 International Statistical Classification of Diseases and Related Health Problems, Tenth Revision. Geneva: World Health Organization, 1992.
- 2 Rates per 100,000 population.
- 3 Human immunodeficiency virus/Acquired immune deficiency syndrome.
- 4 Including uterus, part unspecified.
- 5 Including meninges and other parts of the central nervous system.
- 6 Including immunoproliferative neoplasms.
- 7 Including in situ neoplasms, benign neoplasms, and neoplasms of uncertain or unknown behavior.
- 8 Including diseases of the blood forming-organs and disorders involving the immune mechanism.
- 9 Including metabolic diseases.
- 10 Including behavioral disorders.
- 11 Including: alcoholic mental/behavioral disorders, degeneration of nervous system, polyneuropathy, cardiomyopathy, gastritis, liver disease, maternal care for damage to fetus from alcohol, fetus/newborn affected by maternal alcohol use, alcohol in the blood, accidental poisoning by alcohol, intentional self-poisoning, and poisoning of undetermined intent.
- 12 The ICD-10 codes for the above categories are F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15, respectively.
- 13 Including acute rheumatic fever.
- 14 The ICD-10 code is I25.0.
- 15 This includes angina, arteriosclerotic heart disease, coronary heart disease, and related disorders. The ICD-10 codes are I20, I25.1-I25.9.
- 16 Including other intracranial hemorrhages.
- 17 Including diseases of the arterioles and capillaries.
- 18 Including acute bronchiolitis.
- 19 Formerly chronic obstructive pulmonary disease (COPD).
- 20 Including respiratory conditions due to inhalation of chemicals, gases, fumes and vapors.
- 21 Including liver cirrhosis.
- 22 All alcoholic disease deaths are combined into one category, 'Combined alcoholic dis.,' located under Mental Disorders
- 23 Including other diseases of the gallbladder.
- 24 Including subcutaneous tissues.
- 25 Including connective tissue.
- 26 Including nephrotic syndrome and nephrosis.
- 27 Including acute and rapidly progressive nephritic and nephrotic syndrome.
- 28 Including chronic glomerulonephritis, nephritis and nephritis not specified as acute or chronic, and renal sclerosis unspecified.

- 29 Inflammatory diseases of female pelvic organs.
- 30 Including the puerperium.
- 31 including congenital deformations and chromosomal abnormalities.
- 32 Including abnormal clinical and laboratory findings not elsewhere classified.
- 33 Including the following ICD-10 codes: V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2.
- 34 Including exposure to noxious substances.
 - Quantity is 0.

TABLE 6-7f. Female Death Rates for Selected Causes by Age, Oregon Residents, 1999

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	893.3	542.1	23.4	16.0	35.0	55.3	118.5	284.7	735.9	1,884.2	4,813.2	15,505.0
Infections & Parasitic Disease (A00-B99)	11.5	9.1	1.2	0.4	1.8	0.9	3.8	8.1	6.7	27.9	54.8	157.9
Tuberculosis (A16-A19)	0.1	-	-	-	-	-	-	-	-	0.8	-	2.7
Meningococcal infection (A39)	0.2	-	-	-	0.9	-	-	0.4	-	-	1.1	-
Septicemia (A40-A41)	6.9	4.6	1.2	0.4	0.9	0.5	0.8	3.4	4.0	17.3	38.7	100.7
Creutzfeldt-Jacob disease (A81.0)	0.2	-	-	-	-	-	-	0.4	0.7	0.8	-	-
Viral hepatitis (B15-B19)	0.5	-	-	-	-	-	0.4	1.3	-	-	4.3	-
HIV/AIDS (B20-B24) ³	0.4	-	-	-	-	-	1.9	0.4	-	0.8	-	-
Malignant Neoplasms (C00-C97)	199.4	-	3.5	2.7	3.2	9.3	33.4	111.6	334.1	709.1	1,120.3	1,467.5
Lip, oral cavity & pharynx (C00-C14)	2.0	-	-	-	-	-	-	1.3	2.7	4.9	14.0	19.1
Digestive organs (C15-26)	42.7	-	1.2	-	-	-	2.6	15.3	58.3	134.8	273.9	443.8
Esophagus (C15)	2.3	-	-	-	-	-	-	0.4	5.4	5.8	18.3	16.3
Stomach (C16)	2.6	-	-	-	-	-	0.4	1.3	5.4	6.6	15.0	27.2
Colon, rectum & anus (C18-C21)	20.2	-	-	-	-	-	1.5	6.8	27.5	58.3	132.1	226.0
Colon (C18)	16.5	-	-	-	-	-	1.1	4.7	21.4	52.6	107.4	179.7
Liver & intrahepatic bile ducts (C22)	2.5	-	1.2	-	-	-	0.4	1.3	3.3	6.6	15.0	24.5
Pancreas (C25)	12.7	-	-	-	-	-	0.4	4.2	16.1	47.7	82.7	117.1
Respiratory, intrathoracic organs (C30-39) ..	51.8	-	-	-	-	0.9	1.9	21.6	111.8	246.5	276.1	228.7
Larynx (C32)	0.2	-	-	-	-	-	-	-	-	0.8	1.1	2.7
Trachea, bronchus & lung (C33-C34)	51.0	-	-	-	-	0.5	1.9	21.6	111.2	241.6	272.8	220.5
Bronchus & lung (C34)	51.0	-	-	-	-	0.5	1.9	21.6	111.2	241.6	272.8	220.5
Skin (C43-44)	2.6	-	-	-	0.5	0.5	2.6	2.5	4.7	5.8	10.7	10.9
Melanoma of skin (C43)	2.3	-	-	-	0.5	0.5	2.3	2.5	4.7	4.9	8.6	10.9
Mesothelioma (C45)	0.2	-	-	-	-	-	-	0.4	0.7	0.8	1.1	-
Breast (C50)	30.5	-	-	-	-	0.5	14.6	29.3	55.6	98.6	140.7	182.4
Female genital organs (C51-58)	18.7	-	-	-	0.9	1.4	6.0	16.5	35.5	60.0	94.5	106.2
Cervix uteri (C53)	2.2	-	-	-	0.5	0.9	2.6	2.5	6.0	4.9	4.3	2.7
Corpus uteri (C54-C55) ⁴	4.2	-	-	-	-	-	0.4	1.7	6.0	13.1	29.0	35.4
Ovary (C56)	11.5	-	-	-	0.5	0.5	3.0	11.5	23.4	38.6	55.9	57.2
Male genital organs (C60-C63)	-	-	-	-	-	-	-	-	-	-	-	-
Prostate (C61)	-	-	-	-	-	-	-	-	-	-	-	-
Kidney & renal pelvis (C64-C65)	2.5	-	-	-	-	-	0.8	1.3	4.7	9.9	9.7	24.5
Bladder (C67)	3.0	-	-	-	-	-	0.4	0.4	6.0	4.9	18.3	43.6

See footnotes at end of table.

TABLE 6-7f. Female Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Brain, etc. (C70-C72) ⁵	3.5	—	—	1.3	—	1.4	1.1	4.2	6.7	10.7	11.8	16.3
Thyroid/endocrine gland (C73-C75)	1.1	—	—	—	—	0.5	—	0.4	3.3	1.6	6.4	10.9
Lymphoid & hematopoietic (C81-C96)	20.4	—	1.2	0.9	0.5	3.3	1.1	8.9	20.8	51.8	150.4	196.0
Hodgkin's disease (C81)	0.2	—	—	—	—	—	—	—	—	2.5	1.1	—
Non-Hodgkin's lymphoma (C82-C85)	9.0	—	—	—	0.5	0.9	—	5.9	8.7	18.1	70.9	89.8
Leukemia (C91-C95)	7.4	—	1.2	0.9	—	1.9	0.8	2.1	8.0	17.3	48.3	84.4
Lymphoid leukemia (C91)	2.8	—	1.2	0.9	—	0.9	0.4	—	0.7	8.2	20.4	27.2
Myeloid leukemia (C92)	3.3	—	—	—	—	0.5	0.4	2.1	7.4	6.6	15.0	40.8
Multiple myeloma (C88,C90) ⁶	3.7	—	—	—	—	0.5	0.4	0.8	4.0	14.0	29.0	21.8
Neoplasm not specif. as malign. (D00-D48) ⁷	6.7	—	—	0.4	—	—	0.8	1.3	6.0	11.5	35.4	136.1
Diseases of the Blood (D50-89)⁸	3.3	4.6	—	0.9	0.5	0.5	0.4	2.1	2.0	2.5	17.2	59.9
Anemias (D50-D64)	2.0	4.6	—	0.4	—	—	0.4	0.8	0.7	0.8	8.6	51.7
Endocrine & Nutritional Dis. (E00-E88)⁹	36.3	—	1.2	—	1.4	5.1	4.9	16.1	37.5	106.0	192.3	479.2
Diabetes mellitus (E10-E14)	26.3	—	—	—	0.5	4.2	3.4	11.9	31.5	88.7	141.8	285.9
Nutritional deficiencies (E40-E64)	2.5	—	—	—	—	—	0.4	0.4	—	3.3	11.8	68.1
Malnutrition (E40-E46)	1.9	—	—	—	—	—	0.4	0.4	—	2.5	10.7	46.3
Mental Disorders (F01-F99)¹⁰	27.1	—	—	—	—	1.9	7.5	5.1	4.0	15.6	107.4	795.0
Organic dementia (F01, F03)	21.6	—	—	—	—	—	—	—	—	10.7	88.1	724.2
Due to alcohol (F10)	1.3	—	—	—	—	—	2.3	2.5	2.0	4.1	1.1	—
Due to psychoactive substance (F11-F19)	1.6	—	—	—	—	1.4	4.9	1.7	1.3	0.8	3.2	2.7
Alcohol-induced deaths ^{11,12}	4.2	—	—	—	—	0.5	5.6	8.5	12.7	9.0	2.1	5.4
Nervous System Dis. (G00-G99)	51.9	9.1	—	1.3	0.5	1.4	3.0	11.5	17.4	55.9	298.6	1,227.9
Meningitis (G00, G03)	0.5	—	—	0.4	—	—	0.4	—	1.3	1.6	2.1	2.7
Amyotrophic lateral sclerosis (G12.2)	2.5	—	—	—	—	—	0.4	1.3	6.7	10.7	14.0	5.4
Parkinson's disease (G20-G21)	6.2	—	—	—	—	—	—	0.4	0.7	9.9	48.3	122.5
Alzheimer's disease (G30)	35.5	—	—	—	—	—	—	0.4	1.3	14.8	208.4	1,029.1
Epilepsy (G40-G41)	0.2	—	—	—	—	—	0.8	—	—	—	—	2.7
Circulatory System Diseases (I00-I99)	345.1	18.2	1.2	1.8	1.8	6.0	16.5	55.2	177.4	533.3	1,936.7	7,756.6
Major cardiovascular diseases (I00-I78)	343.6	18.2	1.2	1.8	1.8	5.1	16.5	55.2	175.4	531.7	1,927.0	7,732.1
Heart disease (I00-I09, I11, I13, I20-I51)	212.4	13.7	—	1.8	1.4	4.2	12.0	38.6	127.2	356.6	1,145.0	4,674.7
Rheumatic heart diseases (I00-I09) ¹³	3.0	—	—	—	—	—	—	0.4	4.0	5.8	20.4	46.3
Hypertensive heart disease (I11)	7.2	—	—	—	—	—	1.1	—	4.0	10.7	29.0	196.0
Hypertensive heart & renal dis. (I13) ..	1.4	—	—	—	—	—	—	0.4	—	3.3	10.7	21.8
Ischemic heart diseases (I20-I25)	131.0	—	—	—	—	1.4	4.1	20.8	75.7	235.8	778.7	2,725.3

Mortality

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See footnotes at end of table.

TABLE 6-7f. Female Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Myocardial infarction (I21-I22)	44.5	—	—	—	—	0.9	2.3	8.9	30.8	95.3	292.2	765.0
Other acute ischemic hrt. dis. (I24) ..	0.2	—	—	—	—	—	—	—	0.7	—	1.1	5.4
Chronic isch. heart dis. (I20, I25)	86.2	—	—	—	—	0.5	1.9	11.9	44.2	140.5	485.5	1,954.8
Atheroscler. cardiovascular dis. ¹⁴	14.4	—	—	—	—	—	—	2.1	3.3	17.3	87.0	351.2
Other chr. ischemic heart dis. ¹⁵ ...	71.8	—	—	—	—	0.5	1.9	9.8	40.8	123.3	398.5	1,603.6
Heart failure (I50)	28.2	—	—	0.4	—	—	0.4	3.8	7.4	24.7	113.9	852.2
Congestive heart failure (I50.0)	26.9	—	—	0.4	—	—	0.4	3.0	6.7	24.7	108.5	814.0
Left ventricular heart failure (I50.1)	0.1	—	—	—	—	—	—	0.4	—	—	—	—
Heart failure, unspecified (I50.9)	1.3	—	—	—	—	—	—	0.4	0.7	—	5.4	38.1
Hypertension & hyp. renal dis. (I10, I12)	9.9	—	—	—	—	—	0.4	1.3	4.7	19.7	60.2	201.5
Cerebrovascular diseases (I60-I69)	105.1	4.6	1.2	—	0.5	0.9	3.4	14.0	34.2	124.9	633.7	2,493.9
Subarachnoid hemorrhage (I60)	3.0	—	—	—	—	0.5	1.5	5.1	6.0	7.4	12.9	8.2
Intracerebral hemorrhage (I61-I62) ¹⁶	10.8	—	—	—	—	—	0.4	5.5	6.7	26.3	76.3	147.0
Cerebral infarction (I63)	7.9	—	—	—	0.5	—	0.4	0.8	2.7	12.3	40.8	193.3
Stroke (type not specified) (I64)	55.0	—	—	—	—	0.5	1.1	2.1	13.4	56.7	328.7	1,402.1
Atherosclerosis (I70)	6.9	—	—	—	—	—	—	0.4	1.3	7.4	35.4	193.3
Aortic aneurysm & dissection (I71)	5.7	—	—	—	—	—	0.8	0.4	5.4	18.9	29.0	92.6
Diseases of arteries (I72-I78) ¹⁷	3.6	—	—	—	—	—	—	0.4	2.7	4.1	23.6	76.2
Respiratory System Diseases (J00-J99)	88.5	9.1	—	0.9	0.9	1.9	6.0	14.4	69.6	234.2	557.5	1,391.2
Influenza & pneumonia (J10-J18)	22.9	4.6	—	—	—	0.5	1.5	1.7	6.7	26.3	89.2	672.5
Influenza (J10-J11)	0.5	—	—	—	—	—	—	—	—	2.5	3.2	8.2
Pneumonia (J12-J18)	22.3	4.6	—	—	—	0.5	1.5	1.7	6.7	23.8	85.9	664.3
Other acute lower resp. infect'ns (J20-J22)	0.2	—	—	—	—	—	—	—	—	0.8	2.1	2.7
Acute bronchitis (J20-J21) ¹⁸	0.2	—	—	—	—	—	—	—	—	0.8	2.1	—
Chronic lower respiratory dis. (J40-J47) ¹⁹ ..	53.1	—	—	0.4	0.5	0.5	1.9	10.6	52.2	185.7	392.1	506.4
Bronchitis, chronic & unspec. (J40-J42)	0.4	—	—	—	—	—	—	—	—	2.5	1.1	8.2
Emphysema (J43)	8.3	—	—	—	—	—	0.4	0.4	12.1	32.9	56.9	70.8
Asthma (J45-J46)	3.4	—	—	0.4	0.5	—	0.8	3.4	6.0	5.8	18.3	29.9
Other CLRD (J44, J47)	41.1	—	—	—	—	0.5	0.8	6.8	34.2	144.6	315.8	397.5
Pneumoconioses (J60-J66, J68) ²⁰	0.1	—	—	—	—	—	—	—	—	—	—	5.4
Pneumonitis due to solids & liquids (J69) ...	4.5	—	—	—	—	0.5	1.1	—	2.0	7.4	21.5	108.9
Digestive System Diseases (K00-K92)	30.8	4.6	—	—	—	0.5	4.9	15.7	28.8	71.5	162.2	495.5
Peptic ulcer (K25-K28)	2.6	—	—	—	—	—	—	1.7	1.3	1.6	15.0	57.2
Diseases of the appendix (K35-K38)	0.2	4.6	—	—	—	—	—	—	—	1.6	—	—

See footnotes at end of table.

TABLE 6-7f. Female Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Hernia (K40-K46)	0.8	—	—	—	—	—	—	—	—	0.8	7.5	16.3
Chronic liver disease (K70, K73-K74) ²¹	6.3	—	—	—	—	0.5	3.8	8.5	16.1	18.1	20.4	24.5
Alcoholic liver disease (K70) ²²	2.9	—	—	—	—	0.5	3.4	5.9	10.7	4.9	1.1	5.4
Cholelithiasis (K80-K82) ²³	1.3	—	—	—	—	—	—	—	0.7	3.3	7.5	27.2
Diseases of the Skin (L00-L98)²⁴	1.1	—	—	—	0.5	—	—	0.4	2.0	0.8	2.1	29.9
Musculoskeletal Disease (M00-M99)²⁵	8.8	—	—	0.9	—	—	0.4	3.0	7.4	13.1	45.1	185.1
Genitourinary System Dis. (N00-N99)	15.9	9.1	—	—	0.5	0.5	0.8	3.4	8.0	27.1	91.3	332.2
Nephritis (N00-N07, N17-N19, N25-N27) ²⁶	8.5	4.6	—	—	0.5	0.5	0.8	2.5	4.7	15.6	51.6	155.2
Acute nephrotic syndr. (N00-N01, N04) ²⁷ ..	0.3	—	—	—	—	—	—	—	0.7	1.6	2.1	—
Chr. nephritis (N02-N03, N05-N07, N26) ²⁸ ..	0.2	—	—	—	—	0.5	—	—	—	0.8	1.1	—
Renal failure (N17-N19)	8.0	4.6	—	—	0.5	—	0.8	2.5	4.0	13.1	48.3	155.2
Kidney infect'ns (N10-N12, N13.6, N15.1) ..	0.6	—	—	—	—	—	—	—	0.7	0.8	1.1	19.1
Urinary tract infection (N59.0)	6.0	—	—	—	—	—	—	0.8	1.3	9.0	35.4	141.6
Hyperplasia of prostate (N40)	—	—	—	—	—	—	—	—	—	—	—	—
Female pelvic inflam. dis. (N70-N76) ²⁹	0.1	—	—	—	—	—	—	—	0.7	—	—	—
Pregnancy & Childbirth (O00-O99)³⁰	0.2	—	—	—	0.5	0.5	0.4	—	—	—	—	—
Perinatal Conditions (P00-P96)	3.1	232.3	—	—	—	—	—	—	—	—	—	—
Congenital Malformations (Q00-Q99)³¹ ..	4.4	168.5	2.3	0.4	1.4	0.9	0.4	3.4	2.7	1.6	8.6	16.3
Malformation of the heart (Q20-Q24)	1.3	45.6	—	—	—	0.5	—	0.4	2.0	1.6	2.1	8.2
Other malf. of the circul. sys. (Q25-Q28)	0.2	4.6	—	—	0.5	—	—	0.4	—	—	1.1	—
Malf. of the respiratory system (Q30-Q34) ..	0.7	45.6	—	—	—	0.5	—	—	—	—	—	—
Symptoms & Signs (R00-R99)³²	24.4	45.6	1.2	—	0.5	1.9	3.0	3.8	14.1	35.3	74.1	658.9
Senility (R54)	3.4	—	—	—	—	—	—	—	—	—	6.4	136.1
Sudden infant death syndrome (R95)	0.6	45.6	—	—	—	—	—	—	—	—	—	—
External Causes of Death (V01-Y89)	34.8	31.9	12.9	6.2	21.8	24.2	32.6	29.7	18.1	38.6	109.6	315.8
Accidents (V01-X59, Y85-Y86)	24.5	18.2	11.7	4.9	14.1	13.0	17.3	14.9	13.4	29.6	89.2	288.6
Transport accidents (V01-V99, Y85)	9.9	4.6	3.5	3.6	13.2	7.0	9.8	8.1	11.4	18.1	23.6	8.2
Motor vehicle acc. (Many codes) ³³	9.2	4.6	2.3	2.7	12.7	6.5	8.3	7.2	11.4	17.3	23.6	8.2
Water transport accidents (V90-V94)	0.1	—	—	—	—	—	0.4	—	—	—	—	—
Air transport accidents (V95-V97)	0.1	—	—	—	0.5	—	—	—	—	—	—	—
Nontransport accidents (W00-X59, Y86)	14.7	13.7	8.2	1.3	0.9	6.0	7.5	6.8	2.0	11.5	65.5	280.4
Falls (W00-W19)	4.8	4.6	1.2	—	—	0.5	0.4	1.3	1.3	4.1	23.6	119.8
Firearms (W32-W34)	—	—	—	—	—	—	—	—	—	—	—	—
Drowning & submersion (W65-W74) ..	0.4	—	2.3	0.4	—	—	0.4	0.8	—	—	—	2.7

See footnotes at end of table.

TABLE 6-7f. Female Death Rates for Selected Causes by Age, Oregon Residents, 1999 — Continued

Causes of Death (and their ICD-10 codes) ¹	Rate ²	Age Groups										
		< 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Exposure to smoke & fire (X00-X09) ..	0.8	—	1.2	0.4	—	0.5	0.8	0.4	—	0.8	4.3	8.2
Poisoning (X40-X49) ³⁴	2.2	—	—	—	0.5	4.2	6.0	3.0	—	0.8	2.1	—
Suicide (X60-X84, Y87.0)	5.2	—	—	—	3.2	3.7	10.1	10.6	3.3	5.8	5.4	8.2
Homicide (X85-Y09, Y87.1)	2.2	9.1	1.2	0.9	3.6	6.5	1.9	1.7	—	—	—	2.7
Legal intervention (Y35, Y89.0)	—	—	—	—	—	—	—	—	—	—	—	—
Undeterm. intent (Y10-Y34, Y87.2, Y89.9)	1.3	4.6	—	0.4	0.9	0.9	3.4	1.7	—	—	2.1	2.7
War and its sequelae (Y36, Y89.1)	—	—	—	—	—	—	—	—	—	—	—	—
Medical care complica'ns (Y40-Y84, Y88) ..	1.5	—	—	—	—	—	—	0.8	1.3	3.3	12.9	13.6

1 International Statistical Classification of Diseases and Related Health Problems, Tenth Revision. Geneva: World Health Organization, 1992.

2 Rates per 100,000 population.

3 Human immunodeficiency virus/Acquired immune deficiency syndrome.

4 Including uterus, part unspecified.

5 Including meninges and other parts of the central nervous system.

6 Including immunoproliferative neoplasms.

7 Including in situ neoplasms, benign neoplasms, and neoplasms of uncertain or unknown behavior.

8 Including diseases of the blood forming-organs and disorders involving the immune mechanism.

9 Including metabolic diseases.

10 Including behavioral disorders.

11 Including: alcoholic mental/behavioral disorders, degeneration of nervous system, polyneuropathy, cardiomyopathy, gastritis, liver disease, maternal care for damage to fetus from alcohol, fetus/newborn affected by maternal alcohol use, alcohol in the blood, accidental poisoning by alcohol, intentional self-poisoning, and poisoning of undetermined intent.

12 The ICD-10 codes for the above categories are F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15, respectively.

13 Including acute rheumatic fever.

14 The ICD-10 code is I25.0.

15 This includes angina, arteriosclerotic heart disease, coronary heart disease, and related disorders. The ICD-10 codes are I20, I25.1-I25.9.

16 Including other intracranial hemorrhages.

17 Including diseases of the arterioles and capillaries.

18 Including acute bronchiolitis.

19 Formerly chronic obstructive pulmonary disease (COPD).

20 Including respiratory conditions due to inhalation of chemicals, gases, fumes and vapors.

21 Including liver cirrhosis.

22 All alcoholic disease deaths are combined into one category, 'Combined alcoholic dis.,' located under Mental Disorders

23 Including other diseases of the gallbladder.

24 Including subcutaneous tissues.

25 Including connective tissue.

26 Including nephrotic syndrome and nephrosis.

27 Including acute and rapidly progressive nephritic and nephrotic syndrome.

28 Including chronic glomerulonephritis, nephritis and nephritis not specified as acute or chronic, and renal sclerosis unspecified.

- 29 Inflammatory diseases of female pelvic organs.
- 30 Including the puerperium.
- 31 including congenital deformations and chromosomal abnormalities.
- 32 Including abnormal clinical and laboratory findings not elsewhere classified.
- 33 Including the following ICD-10 codes: V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2.
- 34 Including exposure to noxious substances.
 - Quantity is 0.

TABLE 6-8. Number of Deaths by Cause and Month of Death, Oregon Residents, 1999

Cause of Death	Total	Month of Death											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total	29,356	2,634	2,661	2,754	2,541	2,429	2,283	2,260	2,244	2,240	2,378	2,385	2,547
Diseases of the Heart	7,252	692	680	675	657	589	556	526	553	539	553	582	650
Malignant Neoplasms	6,904	594	535	635	555	537	562	573	561	586	607	587	572
Cerebrovascular Disease	2,817	249	242	261	268	245	236	217	205	217	209	218	250
Chronic Lower Respiratory Disease ..	1,762	174	195	188	164	155	129	117	115	122	122	129	152
Unintended Injuries	1,144	118	90	108	77	92	86	125	102	86	80	87	93
Alzheimer's Disease	868	84	90	81	88	64	63	69	61	56	60	81	71
Diabetes Mellitus	855	74	85	74	75	75	63	69	63	72	71	68	66
Influenza & Pneumonia	684	65	97	78	83	44	39	25	29	41	60	53	70
Suicide	499	44	44	47	39	44	38	43	46	32	46	36	40
Alcohol-induced ¹	304	29	25	32	22	21	23	25	20	31	27	26	23
Nephritis, Nephrotic Syndrome, etc. ..	260	26	26	19	21	23	17	18	20	20	20	17	33
Parkinson's Disease	256	24	25	24	17	27	15	15	21	12	23	20	33
Hypertension & Renal Hypertension	246	20	28	22	21	26	21	12	18	15	28	19	16
Aortic Aneurysm	240	17	23	26	13	22	21	19	18	16	28	15	22
Neoplasms Not Known to be Malig. ..	200	13	15	15	12	18	19	30	17	9	17	16	19
Arteriosclerosis	198	14	19	19	13	27	12	14	17	13	13	16	21
Septicemia	188	16	14	22	21	22	9	11	15	14	10	17	17
Congenital Malformations	156	11	14	16	18	16	10	15	7	15	9	15	10
Pneumonitis Due to Solids & Liquids	153	10	17	15	17	13	12	9	9	13	13	13	12
Perinatal Conditions	112	2	18	5	7	14	14	8	11	9	13	7	4
Homicide	109	10	8	7	12	10	5	12	16	7	9	9	4
Amyotrophic Lateral Sclerosis	75	5	6	6	8	15	8	6	3	3	8	4	3
AIDS	73	3	7	6	2	9	7	4	8	7	2	9	9
All Other Causes	4,010	341	359	374	333	321	318	299	309	306	351	341	358

¹ Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease resulting in double counts and the failure of column totals to correspond to the sum of row counts in some cases.

TABLE 6-9. Deaths by Age, Race, and Ethnicity, Oregon Residents, 1999

Race & Ethnicity	Total	Age at Death								
		<1	1-4	5-14	15-19	20-24	25-29	30-34	35-39	40-44
All Races	29,356	261	49	94	132	156	187	236	378	546
Hispanic	417	46	2	8	15	27	21	15	16	20
Non-Hispanic	28,925	215	47	86	117	129	166	219	361	526
Not Stated ¹	14	—	—	—	—	—	—	2	1	—
White	28,445	237	47	91	119	140	169	216	348	509
Hispanic	406	44	2	8	14	27	21	15	16	19
Non-Hispanic	28,028	193	45	83	105	113	148	200	331	490
African American	371	6	—	1	6	5	7	7	11	19
Hispanic	3	1	—	—	—	—	—	—	—	1
Non-Hispanic	368	5	—	1	6	5	7	7	11	18
Indian	226	9	1	1	3	8	6	7	11	13
Hispanic	3	—	—	—	—	—	—	—	—	—
Non-Hispanic	223	9	1	1	3	8	6	7	11	13
Chinese	66	—	—	—	1	—	1	1	3	2
Japanese	60	—	—	—	—	—	—	—	—	1
Other Asian & Pac. Is.	180	9	1	1	3	3	4	4	5	2
Hispanic	4	1	—	—	1	—	—	—	—	—
Non-Hispanic	176	8	1	1	2	3	4	4	5	2
Other Races & Unk. ²	8	—	—	—	—	—	—	1	—	—
Hispanic	1	—	—	—	—	—	—	—	—	—
Non-Hispanic	4	—	—	—	—	—	—	—	—	—

Race & Ethnicity	Age at Death								
	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
All Races	811	1,037	1,153	1,486	2,046	3,144	4,304	4,748	8,588
Hispanic	26	19	16	29	27	27	30	21	52
Non-Hispanic	783	1,018	1,137	1,453	2,018	3,117	4,272	4,727	8,534
Not Stated ¹	2	—	—	4	1	—	2	—	2
White	762	985	1,096	1,429	1,958	3,031	4,202	4,656	8,450
Hispanic	26	16	15	27	27	27	29	21	52
Non-Hispanic	735	969	1,081	1,398	1,930	3,004	4,172	4,635	8,396
African American	24	26	24	18	35	40	41	40	61
Hispanic	—	1	—	—	—	—	—	—	—
Non-Hispanic	24	25	24	18	35	40	41	40	61
Indian	12	11	16	24	28	29	14	14	19
Hispanic	—	2	—	1	—	—	—	—	—
Non-Hispanic	12	9	16	23	28	29	14	14	19
Chinese	—	3	4	1	7	9	13	6	15
Japanese	—	1	1	—	6	7	13	17	14
Other Asian & Pac. Is.	12	10	11	14	11	28	20	15	27
Hispanic	—	—	—	1	—	—	1	—	—
Non-Hispanic	12	10	11	13	11	28	19	15	27
Other Races & Unk. ²	1	1	1	—	1	—	1	—	2
Hispanic	—	—	1	—	—	—	—	—	—
Non-Hispanic	—	1	—	—	1	—	—	—	2

¹ Ethnicity not reported. These cases are included in totals for racial categories only.

² Includes Hawaiians, Filipinos, Burmese, Pakistanis and others.

— Quantity is 0.

TABLE 6-10. Deaths by Cause, Race, and Ethnicity, Oregon Residents, 1999

Selected Causes of Death	Total	White	Black	Am. Indian	Chi-nese	Japa-nese	Other Asian ¹	Other & NS	His-panic ²
Total	29,356	28,445	371	226	66	60	180	8	417
Infections & parasitic disease	429	398	12	11	1	2	5	—	9
Septicemia	188	182	3	2	—	1	—	—	3
Viral hepatitis	45	37	1	4	1	—	2	—	—
HIV disease	73	65	5	3	—	—	—	—	2
Malignant neoplasms	6,904	6,679	79	53	19	15	56	3	70
Colon	557	541	7	1	—	3	5	—	2
Pancreas	378	362	6	3	3	1	3	—	7
Bronchus & lung	1,886	1,823	22	19	7	3	12	—	12
Skin	128	126	—	1	—	1	—	—	1
Breast	513	498	5	2	1	1	4	2	3
Prostate	445	438	5	1	1	—	—	—	4
Kidney & renal pelvis	133	123	3	3	—	3	1	—	—
Bladder	169	166	1	1	—	—	1	—	1
Lymphatic	734	707	10	7	—	—	10	—	12
Non-Hodgkin's lymphoma	312	300	4	3	—	—	5	—	6
Leukemia	250	244	1	1	—	—	4	—	4
Benign & uncertain neoplasms	200	198	1	—	—	—	1	—	1
Diabetes mellitus	855	802	27	16	2	2	6	—	13
Organic dementia	517	511	3	1	1	—	1	—	1
Parkinson's disease	256	250	3	—	1	1	—	1	—
Alzheimer's disease	868	856	9	2	—	—	1	—	3
Alcoholic disease ³	303	291	3	8	—	—	1	—	11
Diseases of circulatory system	10,901	10,602	135	55	27	23	58	1	106
Hypertension & hyper. renal dis.	246	237	8	1	—	—	—	—	4
Diseases of heart	7,252	7,055	90	41	17	14	35	—	74
Ischemic heart disease	4,950	4,811	56	32	13	12	26	—	53
Myocardial infarction	1,715	1,664	22	8	5	5	11	—	15
Cerebrovascular disease	2,817	2,738	32	9	8	7	22	1	22
Subarachnoid hemorrhage	71	69	—	1	—	—	1	—	1
Intracerebral hemorrhage	336	310	9	4	3	2	7	1	5
Cerebral infarction	219	213	4	—	1	—	1	—	2
Stroke of unspecified type	1,447	1,414	15	3	2	4	9	—	9
Aortic aneurysm	240	236	2	—	1	1	—	—	3
Influenza & pneumonia	684	664	6	6	2	2	4	—	4
Chronic lower respiratory disease ..	1,762	1,735	12	9	1	2	3	—	11
Diseases of the digestive system ...	977	943	8	16	4	1	5	—	19
Diseases of the genitourinary sys. ..	423	403	9	2	—	1	8	—	6
Nephritis, nephrosis, etc.	260	242	8	1	—	1	8	—	4
Perinatal conditions	112	104	2	5	—	—	1	—	26
Congenital malformations	156	146	4	1	—	—	5	—	14
Sudden infant death syndrome	26	21	—	3	—	—	2	—	—
Unintentional injuries	1,144	1,098	11	19	2	4	9	1	48
Suicide	499	479	9	5	2	—	4	—	19
Homicide	109	90	13	2	1	—	2	1	18
Undetermined intent	58	54	2	1	—	—	1	—	3

¹ Including Pacific Islanders.

² Decedents of Hispanic ethnicity may belong to any race. See table 6-9.

³ Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3 and R78.0. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

TABLE 6-11. Years of Potential Life Lost before Age 65 from the Leading Causes of Death, by Year, Oregon Residents, 1985-1999

Year	Total	Unintentional Injury	Cancer	Heart Disease ¹	Suicide	Perinatal Conditions	Congenital Anomalies	Homicide ²	Alcohol-induced Deaths ³
1985	118,035	30,221	18,735	12,480	8,792	8,763	8,019	3,393	2,334
1986	119,185	29,922	17,928	12,309	9,447	7,710	6,897	5,369	2,559
1987	120,949	30,110	18,723	12,736	8,203	10,387	7,257	4,827	2,412
1988	119,533	29,720	18,838	12,256	9,745	8,309	6,402	4,038	2,433
1989	116,878	26,633	17,924	11,489	9,714	10,989	6,149	4,047	2,985
1990	117,310	26,397	19,097	10,260	9,609	7,586	6,602	3,505	2,647
1991	113,112	23,842	19,215	11,005	9,801	6,291	6,710	4,152	2,582
1992	114,350	21,758	18,655	10,670	10,492	7,069	6,220	4,973	2,845
1993	123,280	25,797	19,747	12,169	9,772	5,391	7,125	4,475	3,334
1994	126,313	25,604	21,242	11,189	11,467	6,809	5,848	5,568	3,491
1995	128,177	28,912	20,505	12,226	12,029	4,932	5,394	5,139	3,856
1996	126,458	28,627	21,610	12,764	11,304	6,155	5,238	4,884	4,086
1997	120,508	27,322	21,233	12,748	10,937	6,596	5,867	4,081	3,783
1998	122,992	27,500	22,356	12,404	11,771	5,128	6,310	4,224	4,011
1999	117,350	21,710	21,254	13,390	9,807	7,276	6,523	3,724	3,142

Year	Diabetes	Cerebrovascular Disease	Chronic Lower Respiratory Disease	Acquired Immune Deficiency Syndrome	Sudden Infant Death Syndrome	Undetermined External Cause	Pneumonia and Influenza	Aortic Aneurysm	Epilepsy
1985	1,287	1,960	1,342	271	6,907	1,672	768	283	390
1986	1,038	1,540	1,438	825	7,805	1,925	955	406	214
1987	1,224	1,794	1,126	2,135	7,420	1,783	784	298	258
1988	1,631	1,783	1,197	3,076	6,387	1,176	1,220	240	334
1989	1,171	1,533	1,467	3,304	5,999	1,606	1,070	529	240
1990	1,181	1,770	1,341	4,778	7,098	1,427	1,494	404	280
1991	1,388	1,801	1,309	5,796	5,484	1,112	900	428	248
1992	1,916	2,087	1,213	6,479	5,423	1,706	1,224	575	261
1993	1,594	2,399	1,424	7,884	5,873	1,746	1,469	373	427
1994	1,890	2,799	1,309	8,419	4,064	1,747	1,434	515	406
1995	1,811	2,052	1,509	8,214	4,906	2,021	901	595	281
1996	2,019	2,277	1,625	5,559	3,033	2,265	1,115	368	258
1997	2,036	2,432	1,660	2,286	2,323	1,413	1,313	483	399
1998	2,447	2,520	1,392	1,668	2,903	1,342	1,177	435	320
1999	2,441	2,226	1,720	1,700	1,679	1,596	768	291	282

¹ Includes alcoholic cardiomyopathy.

² Excludes legal intervention.

³ Includes the alcohol-linked disorders represented by ICD-10 codes F10, G31.2, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15.

TABLE 6-12. Years of Potential Life Lost by Cause and Sex, Oregon Residents, 1999

Selected Causes of Death	Before Age 65			Before Age 75			Before Age 85		
	Total	M	F	Total	M	F	Total	M	F
Total	117,350	75,475	41,875	223,007	132,046	90,961	390,650	226,772	163,878
Infections & parasitic disease ...	4,288	3,208	1,080	6,713	4,889	1,824	9,823	6,880	2,943
Septicemia	975	474	500	1,644	818	826	2,771	1,327	1,444
Viral Hepatitis	620	544	76	989	873	116	1,423	1,235	188
HIV disease	1,700	1,565	135	2,420	2,215	205	3,148	2,873	275
Malignant neoplasms	21,254	11,215	10,039	49,280	25,540	23,740	98,607	51,321	47,286
Colon	1,234	871	363	3,046	1,935	1,111	6,580	3,850	2,730
Pancreas	681	416	265	2,177	1,174	1,003	4,878	2,538	2,340
Bronchus & lung	3,761	2,071	1,690	11,969	6,422	5,547	26,692	14,481	12,211
Skin	1,083	707	376	1,842	1,221	621	2,924	1,932	992
Breast	2,554	17	2,537	5,256	29	5,227	9,160	52	9,108
Cervical	420	-	420	707	-	707	1,036	-	1,036
Uterine	126	-	126	331	-	331	786	-	786
Ovarian	855	-	855	1,823	-	1,823	3,285	-	3,285
Prostate	242	242	-	898	898	-	3,040	3,040	-
Kidney & renal pelvis	505	379	126	1,196	865	331	2,199	1,571	628
Bladder	207	130	77	626	415	211	1,607	1,130	477
Brain	1,768	1,205	563	2,776	1,853	923	4,146	2,725	1,421
Lymphatic	2,745	1,770	975	5,254	3,349	1,905	10,250	6,214	4,036
Benign & uncertain neoplasms	624	425	199	1,296	736	560	2,402	1,357	1,045
Diabetes mellitus	2,441	1,246	1,195	5,616	2,915	2,701	11,237	5,830	5,407
Organic dementia	16	16	0	1,410	189	1,221	2,558	750	1,808
Amyotrophic lateral sclerosis	266	155	111	652	343	309	1,279	614	665
Parkinson's disease	41	23	18	247	160	87	1,225	784	441
Alzheimer's disease	39	10	29	1,001	198	803	3,122	1,097	2,025
Epilepsy	291	245	46	382	316	66	482	396	86
Alcohol-induced deaths ¹	3,142	2,315	827	5,645	4,200	1,445	8,529	6,410	2,119
Diseases of circulatory system	16,517	11,190	5,326	47,322	27,005	20,317	97,702	56,226	41,476
Hypertension	320	224	96	719	428	291	1,800	841	959
Heart disease	13,390	9,577	3,813	36,790	22,497	14,293	72,799	44,786	28,013
Cerebrovascular disease	2,226	1,052	1,174	7,472	2,966	4,506	17,918	7,832	10,086
Arteriosclerosis	0	0	-	0	0	-	6	6	-
Aortic aneurysm	282	181	101	863	546	317	2,293	1,483	810
Influenza & pneumonia	768	437	330	2,903	1,005	1,898	5,251	2,264	2,987
Chronic lower respiratory dis. ...	1,720	743	977	5,951	2,741	3,210	16,862	8,248	8,614
Digestive system disease	3,982	2,764	1,218	8,161	5,221	2,940	14,160	8,599	5,561
Genitourinary system disease ..	662	229	434	1,688	718	970	3,466	1,442	2,024
Nephritis, nephrosis etc.	458	141	318	1,135	424	711	2,358	989	1,369
Perinatal conditions	7,276	3,962	3,314	7,393	4,071	3,322	8,513	4,681	3,832
Congenital malformations	6,523	3,545	2,977	7,198	3,957	3,241	8,644	4,751	3,893
Sudden infant death syndrome	1,679	1,033	646	1,787	1,089	698	2,047	1,249	798
Unintentional injuries	21,710	15,942	5,767	29,486	21,650	7,836	38,613	28,086	10,527
Suicide	9,807	8,052	1,755	13,915	11,391	2,524	18,529	15,179	3,350
Homicide	3,724	2,409	1,315	4,790	3,122	1,668	5,870	3,842	2,028
Undetermined intent	1,596	1,003	594	2,121	1,347	774	2,681	1,707	974

¹ Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

Note: A zero indicates no deaths occurred before the base age, while a dash indicates no deaths of any kind.

TABLE 6-13. Median Age at Death by Year and Cause, Oregon Residents, 1985-1999

Year	All Causes	Heart Disease ¹	Cancer	Cerebrovascular Disease	Chronic Lower Respiratory Disease	Unintentional Injury	Alzheimer's Disease	Diabetes
1985	75	78	71	81	74	36	82	73
1986	75	78	71	82	74	38	81	74
1987	75	78	71	82	74	37	83	72
1988	75	78	71	82	75	37	83	74
1989	76	79	72	81	75	41	83	74
1990	76	79	72	82	75	40	84	74
1991	76	79	72	82	75	40	84	75
1992	76	79	72	82	75	45	84	74
1993	77	80	72	82	76	43	85	75
1994	77	80	72	82	76	44	85	75
1995	77	80	73	83	76	42	85	75
1996	77	81	73	83	77	43	85	75
1997	78	80	73	83	77	44	86	75
1998	78	80	73	83	77	44	86	76
1999	78	81	74	83	77	48	86	75

Year	Pneumonia and Influenza	Suicide	Alcohol-induced Deaths ^{1,2}	Parkinson's Disease	Arteriosclerosis	Homicide ³	HIV Disease	External Causes of Undetermined Intent
1985	85	43	62	79	86	35	34	35
1986	84	42	61	81	86	33	35	32
1987	84	43	60	79	85	32	35	30
1988	84	42	62	82	86	32	35	35
1989	85	42	61	81	86	36	39	34
1990	85	42	61	82	85	29	38	37
1991	83	42	61	81	86	30	38	38
1992	84	42	60	82	84	32	38	38
1993	85	43	59	83	84	32	38	33
1994	84	42	58	81	86	32	38	37
1995	84	41	56	82	84	31	40	38
1996	84	42	58	82	86	30	39	37
1997	85	45	57	82	85	34	41	40
1998	85	44	56	83	85	31	40	42
1999	86	45	55	83	85	31	41	39

¹ Alcoholic cardiomyopathy is included in the categories "Heart Disease" and "Alcoholic Disease."

² Includes ICD-10 codes F10, G31.2, G62.1, 142.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15.

³ Excludes legal intervention deaths.

TABLE 6-14. Selected Causes of Death among Infants, Children and Adolescents, by Age, Oregon Residents Less Than 20 Years Old, 1999

Manner and Cause of Death	Total	Age Groups								
		0-17	1-17	13-19	<1	1-4	5-9	10-14	15-17	18-19
Total	536	469	208	161	261	49	41	53	65	67
Total Natural Causes	352	329	85	51	244	25	22	24	14	23
Perinatal Conditions	112	112	—	—	112	—	—	—	—	—
Congenital Anomalies	89	89	11	2	78	6	1	2	2	—
Cancer	31	23	23	17	—	5	6	9	3	8
SIDS	26	26	—	—	26	—	—	—	—	—
Heart Disease	19	16	9	8	7	1	3	3	2	3
Cerebral Palsy	5	5	4	1	1	2	1	—	1	—
Cerebrovascular Dis.	3	2	1	1	1	1	—	—	—	1
Pneumonia & Influenza	2	2	1	1	1	—	—	1	—	—
Other	65	54	36	21	18	10	11	9	6	11
Total External Causes ¹ ..	184	140	123	110	17	24	19	29	51	44
Unintentional Injuries	130	106	95	69	11	20	17	23	35	24
Motor Vehicle Crash ...	71	54	51	49	3	5	6	12	28	17
Drowning ²	18	17	17	9	—	6	2	3	6	1
Fires	9	9	7	1	2	2	3	2	—	—
Suffocation	5	5	2	—	3	2	—	—	—	—
Gunshot Wound	4	3	3	3	—	1	—	2	—	1
Poisoning	4	1	—	3	1	—	—	—	—	3
Medications	2	—	—	2	—	—	—	—	—	2
Falls	4	4	3	—	1	2	—	1	—	—
Other	15	13	12	4	1	2	6	3	1	2
Suicide	29	15	15	29	—	—	—	3	12	14
Gunshot Wound	21	8	8	21	—	—	—	2	6	13
Hanging, etc.	5	4	4	5	—	—	—	—	4	1
Poisoning	—	—	—	—	—	—	—	—	—	—
Medications	—	—	—	—	—	—	—	—	—	—
Other	3	3	3	3	—	—	—	1	2	—
Homicide	18	13	9	9	4	3	1	2	3	5
Gunshot Wound	8	4	4	7	—	—	—	2	2	4
Child Abuse/Neglect ³	4	4	2	—	2	2	—	—	—	—
Strangulation, etc.	3	3	3	1	—	1	1	—	1	—
Other	3	2	—	1	2	—	—	—	—	1
Undetermined Intent	7	6	4	3	2	1	1	1	1	1
Strangulation, etc.	2	2	1	—	1	—	1	—	—	—
Gunshot Wound	1	1	1	1	—	—	—	1	—	—
Drowning	1	1	1	1	—	—	—	—	1	—
Other	3	2	1	1	1	1	—	—	—	1
Gunshot (Any Manner)	34	16	16	32	—	1	—	7	8	18
Drug Overdose ⁴	4	—	—	4	—	—	—	—	—	4
Alcohol Overdose ⁴	—	—	—	—	—	—	—	—	—	—

¹ Included in the external cause total, but not shown as a subset, are deaths resulting from complications of medical and surgical care (Y40-Y84, Y88); therefore, the sums of the subsets under external causes may not equal the total shown.

² Includes both drownings that involved watercraft (ICD-10: V90, V92) as well as those that did not (ICD-10: W65-W74).

³ Abuse and neglect deaths are under-reported on death certificates.

⁴ Includes overdoses which occurred by any manner, as well as deaths, when present, resulting from substance abuse by mothers during pregnancy.

— Quantity is 0.

TABLE 6-15. Deaths Due to Alcohol or Drugs by Sex, Age, Race/Ethnicity, and Educational Attainment, Oregon Residents, 1999

Demographic Characteristics	Total		Chronic Alcoholic Liver Disease		Other Alcoholic Disorders		Opioid Abuse		Other Drug Abuse		Unintended Injuries		Suicides		Undetermined Intent	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total	629	100	183	100	120	100	25	100	82	100	135	100	48	100	36	100
Sex																
Male	468	74	134	73	99	82	21	84	66	80	101	75	27	56	20	56
Female	161	26	49	27	21	18	4	16	16	20	34	25	21	44	16	44
Age																
18-19	4	1	—	—	—	—	—	—	2	2	2	1	—	—	—	—
20-24	7	1	—	—	—	—	—	—	1	1	3	2	2	4	1	3
25-34	69	11	2	1	4	3	4	16	9	11	41	30	7	15	2	6
35-44	182	29	26	14	13	11	14	56	41	50	55	41	15	31	18	50
45-54	186	30	69	38	30	25	6	24	27	33	25	19	19	40	10	28
55-64	84	13	47	26	27	22	—	—	2	2	4	3	3	6	1	3
65-74	55	9	26	14	25	21	1	4	—	—	1	1	1	2	1	3
75-84	35	6	11	6	18	15	—	—	—	—	3	2	1	2	2	6
85+	7	1	2	1	3	2	—	—	—	—	1	1	—	—	1	3
Race/Ethnicity																
White	591	94	173	95	118	98	22	88	70	85	129	96	46	96	33	92
African American	14	2	2	1	1	1	2	8	7	9	1	1	—	—	1	3
Indian	17	3	7	4	1	1	1	4	4	5	2	1	1	2	1	3
Chinese & Japanese	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asian & Pac. Isl. ...	5	1	1	1	—	—	—	—	—	—	2	1	1	2	1	3
Other & N.S.	2	<0.5	—	—	—	—	—	—	1	1	1	1	—	—	—	—
Hispanic	24	4	8	4	3	2	4	16	4	5	4	3	1	2	—	—
Years of Education																
<9	24	4	10	5	8	7	1	4	1	1	4	3	—	—	—	—
9-11	109	17	32	17	14	12	6	24	16	20	30	22	8	17	3	8
12	292	46	87	48	58	48	8	32	47	57	61	45	18	38	13	36
13-15	121	19	34	19	25	21	4	16	11	13	24	18	10	21	13	36
16	37	6	9	5	9	8	1	4	4	5	6	4	4	8	4	11
17+	21	3	8	4	4	3	—	—	—	—	4	3	4	8	1	3
Not Stated	25	4	3	2	2	2	5	20	3	4	6	4	4	8	2	6

Note: Please read the footnote on the facing page (Table 6-16).

TABLE 6-16. Deaths Due to Alcohol or Drugs by County of Residence, Oregon, 1999

County of Residence	Total		Chronic Alcoholic Liver Disease		Other Alcohol-induced		Opioid Abuse		Other Drug Abuse		Unintended Injuries		Suicides		Undetermined Intent	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total	629	100	183	100	120	100	25	100	82	100	135	100	48	100	36	100
Baker	2	<0.5	1	1	1	1	—	—	—	—	—	—	—	—	—	—
Benton	7	1	1	1	2	2	—	—	—	—	2	1	2	4	—	—
Clackamas	46	7	16	9	8	7	—	—	7	9	10	7	1	2	4	11
Clatsop	14	2	3	2	2	2	—	—	3	4	5	4	1	2	—	—
Columbia	4	1	1	1	1	1	1	4	—	—	—	—	—	—	1	3
Coos	8	1	4	2	3	2	—	—	—	—	1	1	—	—	—	—
Crook	1	<0.5	—	—	1	1	—	—	—	—	—	—	—	—	—	—
Curry	6	1	1	1	5	4	—	—	—	—	—	—	—	—	—	—
Deschutes	12	2	4	2	3	2	1	4	1	1	—	—	3	6	—	—
Douglas	22	3	10	5	9	8	—	—	—	—	1	1	1	2	1	3
Hood River	2	<0.5	1	1	—	—	1	4	—	—	—	—	—	—	—	—
Jackson	35	6	15	8	5	4	1	4	1	1	5	4	7	15	1	3
Jefferson	1	<0.5	—	—	—	—	—	—	—	—	1	1	—	—	—	—
Josephine	15	2	6	3	5	4	—	—	—	—	3	2	1	2	—	—
Klamath	12	2	6	3	4	3	—	—	—	—	2	1	—	—	—	—
Lake	1	<0.5	—	—	—	—	—	—	—	—	1	1	—	—	—	—
Lane	70	11	19	10	8	7	—	—	—	—	27	20	5	10	11	31
Lincoln	16	3	6	3	3	2	—	—	1	1	2	1	3	6	1	3
Linn	13	2	7	4	2	2	—	—	1	1	3	2	—	—	—	—
Malheur	4	1	2	1	1	1	—	—	—	—	—	—	—	—	1	3
Marion	31	5	10	5	5	4	—	—	8	10	6	4	1	2	1	3
Morrow	3	<0.5	1	1	2	2	—	—	—	—	—	—	—	—	—	—
Multnomah	227	36	42	23	34	28	20	80	56	68	50	37	16	33	9	25
Polk	6	1	4	2	1	1	—	—	1	1	—	—	—	—	—	—
Tillamook	4	1	2	1	1	1	—	—	—	—	—	—	1	2	—	—
Umatilla	12	2	5	3	6	5	—	—	—	—	—	—	1	2	—	—
Union	6	1	2	1	—	—	—	—	—	—	2	1	—	—	2	6
Wallowa	1	<0.5	—	—	1	1	—	—	—	—	—	—	—	—	—	—
Wasco	4	1	2	1	—	—	—	—	1	1	—	—	1	2	—	—
Washington	37	6	9	5	7	6	1	4	2	2	12	9	3	6	3	8
Yamhill	7	1	3	2	—	—	—	—	—	—	2	1	1	2	1	3

Note: "Other Alcohol-induced Deaths" includes conditions represented by the following ICD-10 codes: F10, G 31.2, G62.1, I42.6, K29.2, O35.4, P04.3, and R78.0. Non-suicide drug overdoses are included in "Opioid Abuse" and "Other Drug Abuse" if the decedent was reported to be a chronic drug abuser or in "Unintentional Injuries" or "Undetermined Intent," if not so indicated. "Other Drug Abuse" includes F11.0-F16.9 and F18.0-F19.9. Deaths due to tobacco use are not included here; see Table 6-19. Only age groups or counties with at least one alcohol/drug death are shown. Hispanics may be of any race. A dash indicates the quantity is 0.

**TABLE 6-17. Tobacco-linked Deaths by Sex, Age, and Education,
Oregon Residents, 1999**

Sex, Age, and Education	Total	Linked		Not Linked		Unknown	
		Number	Percent	Number	Percent	Number	Percent
Both Sexes							
Total	29,356	6,522	22.2	15,924	54.2	6,910	23.5
< 1 ¹	261	3	1.1	224	85.8	34	13.0
1-24	431	4	0.9	384	89.1	43	10.0
25-34	423	10	2.4	351	83.0	62	14.7
35-44	924	61	6.6	640	69.3	223	24.1
45-54	1,848	410	22.2	1,019	55.1	419	22.7
55-64	2,639	925	35.1	1,098	41.6	616	23.3
65-74	5,190	1,911	36.8	2,070	39.9	1,209	23.3
75-84	9,052	2,336	25.8	4,512	49.8	2,204	24.3
85-94	7,281	822	11.3	4,649	63.9	1,810	24.9
95+	1,307	40	3.1	977	74.8	290	22.2
Male							
Total	14,430	3,878	26.9	6,880	47.7	3,672	25.4
< 1 ¹	142	2	1.4	127	89.4	13	9.2
1-24	298	2	0.7	263	88.3	33	11.1
25-34	304	9	3.0	252	82.9	43	14.1
35-44	608	36	5.9	423	69.6	149	24.5
45-54	1,177	277	23.5	621	52.8	279	23.7
55-64	1,540	555	36.0	578	37.5	407	26.4
65-74	2,897	1,112	38.4	1,044	36.0	741	25.6
75-84	4,571	1,407	30.8	1,941	42.5	1,223	26.8
85-94	2,610	462	17.7	1,445	55.4	703	26.9
95+	283	16	5.7	186	65.7	81	28.6
Female							
Total	14,926	2,644	17.7	9,044	60.6	3,238	21.7
< 1 ¹	119	1	0.8	97	81.5	21	17.6
1-24	133	2	1.5	121	91.0	10	7.5
25-34	119	1	0.8	99	83.2	19	16.0
35-44	316	25	7.9	217	68.7	74	23.4
45-54	671	133	19.8	398	59.3	140	20.9
55-64	1,099	370	33.7	520	47.3	209	19.0
65-74	2,293	799	34.8	1,026	44.7	468	20.4
75-84	4,481	929	20.7	2,571	57.4	981	21.9
85-94	4,671	360	7.7	3,204	68.6	1,107	23.7
95+	1,024	24	2.3	791	77.2	209	20.4
Years of Education							
<9	4,728	957	20.2	2,647	56.0	1,124	23.8
9-11	3,355	894	26.6	1,673	49.9	788	23.5
12	12,181	2,948	24.2	6,299	51.7	2,934	24.1
13-15	4,885	1,004	20.6	2,770	56.7	1,111	22.7
16	2,284	377	16.5	1,385	60.6	522	22.9
17+	1,475	245	16.6	924	62.6	306	20.7
Not Stated	448	97	21.7	226	50.4	125	27.9

¹ The number of infant deaths due to exposure to tobacco combustion products is underreported. Based on a multiple logistic regression model that included 20 health and demographic variables, an estimated 11.2 percent of infant deaths were attributable to maternal smoking during pregnancy.

TABLE 6-18. Tobacco-linked Deaths by Cause of Death, Oregon Residents, 1999

Selected Causes of Death (and their ICD-10 codes)	Total	Linked		Not Linked		Unknown	
		Number	Percent	Number	Percent	Number	Percent
Total	29,356	6,522	22.2	15,924	54.2	6,910	23.5
Infections & parasitic disease (A00-B99)	429	45	10.5	278	64.8	106	24.7
Septicemia (A40-A41)	188	21	11.2	108	57.4	59	31.4
Viral Hepatitis (B15-B19)	45	3	6.7	28	62.2	14	31.1
HIV disease (B20-B24)	73	7	9.6	45	61.6	21	28.8
Malignant neoplasms (C00-C97)	6,904	2,099	30.4	3,578	51.8	1,227	17.8
Colon (C18)	557	24	4.3	432	77.6	101	18.1
Pancreas (C25)	378	39	10.3	268	70.9	71	18.8
Bronchus & lung (C34)	1,886	1,528	81.0	134	7.1	224	11.9
Skin (C43-44)	128	5	3.9	105	82.0	18	14.1
Breast (C50)	513	21	4.1	415	80.9	77	15.0
Cervical (C53)	36	6	16.7	23	63.9	7	19.4
Uterine (C54)	33	—	—	31	93.9	2	6.1
Ovarian (C56)	192	4	2.1	169	88.0	19	9.9
Prostate (C61)	445	26	5.8	315	70.8	104	23.4
Kidney & renal pelvis (C64-C65)	133	15	11.3	85	63.9	33	24.8
Bladder (C67)	169	47	27.8	71	42.0	51	30.2
Brain (C70-C72)	155	5	3.2	120	77.4	30	19.4
Lymphatic (C81-C96)	734	40	5.4	577	78.6	117	15.9
Non-Hodgkin's lymphoma (C82-C85)	312	15	4.8	251	80.4	46	14.7
Leukemia (C91-C95)	250	15	6.0	187	74.8	48	19.2
Benign & uncertain neoplasms (D00-D48)	200	12	6.0	138	69.0	50	25.0
Diabetes mellitus (E10-E14)	855	161	18.8	468	54.7	226	26.4
Organic dementia (F01, F03)	517	24	4.6	333	64.4	160	30.9
Parkinson's disease (G20-G21)	256	6	2.3	188	73.4	62	24.2
Alzheimer's disease (G30)	868	24	2.8	619	71.3	225	25.9
Alcohol-induced deaths ¹	304	74	24.3	149	49.0	81	26.6
Diseases of circulatory system (I00-I99)	10,901	2,207	20.2	5,562	51.0	3,132	28.7
Hypertension & hyperten. renal dis. (I10, I12)	246	39	15.9	148	60.2	59	24.0
Diseases of heart (I00-I09, I11, I13, I20-I51)	7,252	1,718	23.7	3,467	47.8	2,067	28.5
Ischemic heart disease (I20-I25)	4,950	1,353	27.3	2,182	44.1	1,415	28.6
Myocardial infarction (I21-I22)	1,715	502	29.3	749	43.7	464	27.1
Cerebrovascular disease (I60-I69)	2,817	311	11.0	1,688	59.9	818	29.0
Subarachnoid hemorrhage (I60)	71	6	8.5	35	49.3	30	42.3
Intracerebral hemorrhage, etc. (I61-I62) ...	336	25	7.4	193	57.4	118	35.1
Cerebral infarction (I63)	219	32	14.6	127	58.0	60	27.4
Stroke of unspecified type (I64)	1,447	178	12.3	870	60.1	399	27.6
Aortic aneurysm (I71)	240	67	27.9	87	36.2	86	35.8
Influenza & pneumonia (J10-J18)	684	65	9.5	455	66.5	164	24.0
Chronic lower respiratory dis. (J40-J47)	1,762	1,381	78.4	146	8.3	235	13.3
Diseases of the digestive system (K00-K92)	977	131	13.4	625	64.0	221	22.6
Diseases of the genitourinary sys. (N00-N99) ..	423	43	10.2	274	64.8	106	25.1
Nephritis (N00-N07, N17-N19, N25-N27)	260	31	11.9	165	63.5	64	24.6
Perinatal conditions (P00-P96)	112	1	0.9	91	81.2	20	17.9
Congenital malformations (Q00-Q99)	156	5	3.2	121	77.6	30	19.2
Sudden infant death syndrome (R95)	26	1	3.8	24	92.3	1	3.8
Unintentional injuries (V01-X59, Y85-Y86)	1,144	38	3.3	938	82.0	168	14.7
Suicide (X60-X84, Y87.0)	499	4	0.8	463	92.8	32	6.4
Homicide (X85-Y09, Y87.1)	109	2	1.8	101	92.7	6	5.5

¹ Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

TABLE 6-19. Tobacco-linked Deaths by County of Residence, Oregon, 1999

County of Residence	Total	Linked		Not Linked		Unknown	
		Number	Percent	Number	Percent	Number	Percent
Total	29,356	6,522	22.2	15,924	54.2	6,910	23.5
Baker	208	40	19.2	113	54.3	55	26.4
Benton	456	103	22.6	291	63.8	62	13.6
Clackamas	2,449	481	19.6	1,398	57.1	570	23.3
Clatsop	379	82	21.6	182	48.0	115	30.3
Columbia	371	103	27.8	186	50.1	82	22.1
Coos	841	236	28.1	424	50.4	181	21.5
Crook	170	38	22.4	94	55.3	38	22.4
Curry	332	77	23.2	129	38.9	126	38.0
Deschutes	840	192	22.9	397	47.3	251	29.9
Douglas	1,168	305	26.1	562	48.1	301	25.8
Gilliam	18	6	33.3	7	38.9	5	27.8
Grant	92	24	26.1	55	59.8	13	14.1
Harney	82	24	29.3	33	40.2	25	30.5
Hood River	162	32	19.8	95	58.6	35	21.6
Jackson	1,804	387	21.5	825	45.7	592	32.8
Jefferson	155	28	18.1	77	49.7	50	32.3
Josephine	963	225	23.4	510	53.0	228	23.7
Klamath	668	183	27.4	305	45.7	180	26.9
Lake	90	24	26.7	40	44.4	26	28.9
Lane	2,821	622	22.0	1,431	50.7	768	27.2
Lincoln	543	140	25.8	236	43.5	167	30.8
Linn	1,006	244	24.3	543	54.0	219	21.8
Malheur	245	32	13.1	94	38.4	119	48.6
Marion	2,436	494	20.3	1,449	59.5	493	20.2
Morrow	76	21	27.6	39	51.3	16	21.1
Multnomah	5,690	1,214	21.3	3,256	57.2	1,220	21.4
Polk	509	98	19.3	299	58.7	112	22.0
Sherman	20	7	35.0	8	40.0	5	25.0
Tillamook	306	90	29.4	166	54.2	50	16.3
Umatilla	599	156	26.0	309	51.6	134	22.4
Union	248	60	24.2	137	55.2	51	20.6
Wallowa	84	23	27.4	48	57.1	13	15.5
Wasco	294	75	25.5	164	55.8	55	18.7
Washington	2,535	492	19.4	1,579	62.3	464	18.3
Wheeler	19	4	21.1	10	52.6	5	26.3
Yamhill	677	160	23.6	433	64.0	84	12.4

Note: The Oregon death certificate asks 'Did tobacco use contribute to death?' followed by four checkboxes: 'Yes,' 'No,' 'Probably,' and 'Unknown.' The linked category includes deaths listed as 'Yes' or 'Probably.'

TABLE 6-20. Number of Injury Deaths and Crude Death Rate¹ by Mechanism and Intent, Oregon Residents, 1999

Mechanism	Total External		Unintentional		Suicide		Homicide		Undetermined		Legal Intervention ²	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
											Total	Rate
Total	1,865	56.5	1,144	34.7	499	15.1	109	3.3	58	1.8	10	0.3
Cut/pierce	29	0.9	1	<.05	8	0.2	19	0.6	1	<.05	-	-
Drowning	66	2.0	58	1.8	3	0.1	-	-	5	0.2	-	-
Falls	190	5.8	183	5.5	6	0.2	-	-	1	<.05	-	-
Fire, hot object or substance	36	1.1	31	0.9	3	0.1	1	<.05	1	<.05	-	-
Fire	35	1.1	30	0.9	3	0.1	1	<.05	1	<.05	-	-
Firearm	391	11.8	8	0.2	315	9.5	58	1.8	3	0.1	7	0.2
Machinery	14	0.4	14	0.4	-	-	-	-	-	-	-	-
All Transportation	478	14.5	473	14.3	3	0.1	1	<.05	1	<.05	-	-
Motor vehicle traffic	409	12.4	409	12.4	-	-	-	-	-	-	-	-
Occupant ³	184	5.6	184	5.6	-	-	-	-	-	-	-	-
Driver ⁴	105	3.2	105	3.2	-	-	-	-	-	-	-	-
Passenger ⁴	47	1.4	47	1.4	-	-	-	-	-	-	-	-
Motorcyclist ⁵	20	0.6	20	0.6	-	-	-	-	-	-	-	-
Pedal cyclist ⁵	4	0.1	4	0.1	-	-	-	-	-	-	-	-
Pedestrian	44	1.3	44	1.3	-	-	-	-	-	-	-	-
Other & unspecified traffic	157	4.8	157	4.8	-	-	-	-	-	-	-	-
Pedal, other	1	<.05	1	<.05	-	-	-	-	-	-	-	-
Pedestrian, other	14	0.4	14	0.4	-	-	-	-	-	-	-	-
Other land transport accident	29	0.9	29	0.9	-	-	-	-	-	-	-	-
Other transport	20	0.6	20	0.6	-	-	-	-	-	-	-	-
Natural/environmental	20	0.6	20	0.6	-	-	-	-	-	-	-	-
Poisoning	257	7.8	145	4.4	75	2.3	1	<.05	36	1.1	-	-
Struck by or against	22	0.7	18	0.5	-	-	4	0.1	-	-	-	-
Suffocation	129	3.9	42	1.3	76	2.3	8	0.2	3	0.1	-	-
Other and unspecified	188	5.7	151	4.6	10	0.3	17	0.5	7	0.2	3	0.1
Adverse effects in medical care	45	1.4	-	-	-	-	-	-	-	-	-	-

¹ Rate per 100,000 population.

² Including late effects of injuries sustained in war.

³ Excluding persons traveling by motorcycle and pedalcycle.

⁴ The sum of decedents who were drivers and passengers is less than the number shown in the occupant category because the passenger status was not stated in all cases.

⁵ Includes both drivers and passengers.

- Quantity = 0.

TABLE 6-21. Number of Injury Deaths According to Intent and Mechanism of Injury by Age, Oregon Residents, 1999

Intent by Mechanism	Total	Age Groups												
		< 1	1-4	5-9	10-14	15-17	18-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
Total External	1,865	17	24	19	29	51	44	126	238	322	288	118	171	418
Cut/pierce	29	—	—	—	—	—	2	7	11	4	2	2	1	—
Drowning	66	—	6	2	3	7	1	3	9	13	12	6	1	3
Falls	190	1	3	—	1	—	—	2	10	9	18	11	21	114
Fire, hot object or substance	36	2	2	3	2	1	—	1	3	8	2	—	3	9
Fire	35	2	2	3	2	1	—	1	3	7	2	—	3	9
Firearm	391	—	1	—	7	8	18	36	53	77	62	32	43	54
Machinery	14	—	1	—	—	—	—	2	1	1	1	3	3	2
All Transportation	478	3	6	8	13	29	18	55	58	79	75	31	54	49
Motor vehicle traffic	409	3	5	5	10	24	15	52	51	64	60	28	45	47
Other land transport acc.	44	—	1	3	3	4	2	1	4	9	9	1	5	2
Other transport	20	—	—	—	—	—	1	2	1	4	6	2	4	—
Natural/environmental	20	—	—	1	—	—	—	—	—	2	1	1	3	12
Poisoning	257	1	—	—	—	—	3	10	54	93	65	11	8	12
Struck by or against	22	—	—	1	1	1	—	3	5	2	7	—	1	1
Suffocation	129	4	3	2	—	5	1	4	23	19	25	9	9	25
Other and unspecified	188	6	2	2	2	—	1	3	11	14	14	9	13	111
Adverse effects in medical care	45	—	—	—	—	—	—	—	—	1	4	3	11	26
Unintentional	1,144	11	20	17	23	35	24	75	124	168	151	65	107	324
Cut/pierce	1	—	—	—	—	—	1	—	—	—	—	—	—	—
Drowning	58	—	6	2	3	6	1	3	7	9	11	6	1	3
Falls	183	1	2	—	1	—	—	—	7	9	17	11	21	114
Fire, hot object or substance	31	2	2	3	2	—	—	1	2	6	1	—	3	9
Fire	30	2	2	3	2	—	—	1	2	5	1	—	3	9
Firearm	8	—	1	—	2	—	1	4	—	—	—	—	—	—
Machinery	14	—	1	—	—	—	—	2	1	1	1	3	3	2
All Transportation	473	3	6	8	13	28	18	55	56	77	75	31	54	49
Motor vehicle traffic	409	3	5	5	10	24	15	52	51	64	60	28	45	47
Other land transport acc.	44	—	1	3	3	4	2	1	4	9	9	1	5	2
Other transport	20	—	—	—	—	—	1	2	1	4	6	2	4	—
Natural/environmental	20	—	—	1	—	—	—	—	—	2	1	1	3	12
Poisoning	145	1	—	—	—	—	3	5	42	55	27	4	3	5
Struck by or against	18	—	—	1	1	1	—	2	4	1	7	—	1	—
Suffocation	42	3	2	—	—	—	—	1	1	2	4	2	7	20
Other and unspecified	151	1	—	2	1	—	—	2	4	6	7	7	11	110

See footnotes at end of table.

TABLE 6-21. Number of Injury Deaths According to Intent and Mechanism of Injury by Age, Oregon Residents, 1999 — Continued

Intent by Mechanism	Total	Age Groups												
		< 1	1-4	5-9	10-14	15-17	18-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
Suicide	499	—	—	—	3	12	14	29	70	107	105	45	50	64
Cut/pierce	8	—	—	—	—	—	—	—	3	2	1	1	1	—
Drowning	3	—	—	—	—	—	—	—	—	2	1	—	—	—
Falls	6	—	—	—	—	—	—	2	3	—	1	—	—	—
Fire, hot object or substance	3	—	—	—	—	1	—	—	1	1	—	—	—	—
Fire	3	—	—	—	—	1	—	—	1	1	—	—	—	—
Firearm	315	—	—	—	2	6	13	20	34	63	52	29	42	54
All Transportation	3	—	—	—	—	1	—	—	—	2	—	—	—	—
Poisoning	75	—	—	—	—	—	—	3	10	20	28	6	4	4
Suffocation	76	—	—	—	—	4	1	3	17	16	21	7	2	5
Other and unspecified	10	—	—	—	1	—	—	1	2	1	1	2	1	1
Homicide	109	4	3	1	2	3	5	19	34	18	15	3	1	1
Cut/pierce	19	—	—	—	—	—	—	1	7	7	1	1	—	—
Fire, hot object or substance	1	—	—	—	—	—	—	—	—	1	—	—	—	—
Fire	1	—	—	—	—	—	—	—	—	1	—	—	—	—
Firearm	58	—	—	—	2	2	4	10	16	11	10	2	1	—
All Transportation	1	—	—	—	—	—	—	—	1	—	—	—	—	—
Poisoning	1	—	—	—	—	—	—	1	—	—	—	—	—	—
Struck by or against	4	—	—	—	—	—	—	1	1	1	—	—	—	1
Suffocation	8	—	1	1	—	1	—	—	5	—	—	—	—	—
Other and unspecified	17	4	2	—	—	—	—	—	4	3	4	—	—	—
Undetermined	58	2	1	1	1	1	1	2	8	24	12	1	1	3
Cut/pierce	1	—	—	—	—	—	—	—	1	—	—	—	—	—
Drowning	5	—	—	—	—	1	—	—	2	2	—	—	—	—
Falls	1	—	1	—	—	—	—	—	—	—	—	—	—	—
Fire, hot object or substance	1	—	—	—	—	—	—	—	—	—	1	—	—	—
Fire	1	—	—	—	—	—	—	—	—	—	1	—	—	—
Firearm	3	—	—	—	1	—	—	1	1	—	—	—	—	—
All Transportation	1	—	—	—	—	—	—	—	1	—	—	—	—	—
Poisoning	36	—	—	—	—	—	—	1	2	18	10	1	1	3
Suffocation	3	1	—	1	—	—	—	—	—	1	—	—	—	—
Other and unspecified	7	1	—	—	—	—	1	—	1	3	1	—	—	—
Legal Intervention	10	—	—	—	—	—	—	1	2	4	1	1	1	—
Firearm	7	—	—	—	—	—	—	1	2	3	—	1	—	—
Other and unspecified	3	—	—	—	—	—	—	—	—	1	1	—	1	—

— Quantity = 0.

TABLE 6-22. Injury Death Rates¹ by Intent and Mechanism, Oregon Residents, 1999

Intent by Mechanism	Total	Rate	Age Groups												
			< 1	1-4	5-9	10-14	15-17	18-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
Total External	1,865	56.5	37.6	13.8	8.4	12.3	34.5	46.2	60.2	55.5	60.1	61.0	40.9	75.8	194.2
Cut/pierce	29	0.9	–	–	–	–	–	2.1	3.3	2.6	0.7	0.4	0.7	0.4	–
Drowning	66	2.0	–	3.4	0.9	1.3	4.7	1.0	1.4	2.1	2.4	2.5	2.1	0.4	1.4
Falls	190	5.8	2.2	1.7	–	0.4	–	–	1.0	2.3	1.7	3.8	3.8	9.3	53.0
Fire, hot object or substance	36	1.1	4.4	1.1	1.3	0.8	0.7	–	0.5	0.7	1.5	0.4	–	1.3	4.2
Fire	35	1.1	4.4	1.1	1.3	0.8	0.7	–	0.5	0.7	1.3	0.4	–	1.3	4.2
Firearm	391	11.8	–	0.6	–	3.0	5.4	18.9	17.2	12.4	14.4	13.1	11.1	19.1	25.1
Machinery	14	0.4	–	0.6	–	–	–	–	1.0	0.2	0.2	0.2	1.0	1.3	0.9
All Transportation	478	14.5	6.6	3.4	3.5	5.5	19.6	18.9	26.3	13.5	14.7	15.9	10.7	23.9	22.8
Motor vehicle traffic	409	12.4	6.6	2.9	2.2	4.2	16.3	15.7	24.8	11.9	11.9	12.7	9.7	19.9	21.8
Other land transport acc.	44	1.3	–	0.6	1.3	1.3	2.7	2.1	0.5	0.9	1.7	1.9	0.3	2.2	0.9
Other transport	20	0.6	–	–	–	–	–	1.0	1.0	0.2	0.7	1.3	0.7	1.8	–
Natural/environmental	20	0.6	–	–	0.4	–	–	–	–	–	0.4	0.2	0.3	1.3	5.6
Poisoning	257	7.8	2.2	–	–	–	–	3.1	4.8	12.6	17.3	13.8	3.8	3.5	5.6
Struck by or against	22	0.7	–	–	0.4	0.4	0.7	–	1.4	1.2	0.4	1.5	–	0.4	0.5
Suffocation	129	3.9	8.9	1.7	0.9	–	3.4	1.0	1.9	5.4	3.5	5.3	3.1	4.0	11.6
Other and unspecified	188	5.7	13.3	1.1	0.9	0.8	–	1.0	1.4	2.6	2.6	3.0	3.1	5.8	51.6
Adverse effects in medical care ..	45	1.4	–	–	–	–	–	–	–	–	0.2	0.8	1.0	4.9	12.1
Unintentional	1,144	34.7	24.3	11.5	7.5	9.8	23.7	25.2	35.8	28.9	31.3	32.0	22.5	47.4	150.5
Cut/pierce	1	<.05	–	–	–	–	–	1.0	–	–	–	–	–	–	–
Drowning	58	1.8	–	3.4	0.9	1.3	4.1	1.0	1.4	1.6	1.7	2.3	2.1	0.4	1.4
Falls	183	5.5	2.2	1.1	–	0.4	–	–	–	1.6	1.7	3.6	3.8	9.3	53.0
Fire, hot object or substance	31	0.9	4.4	1.1	1.3	0.8	–	–	0.5	0.5	1.1	0.2	–	1.3	4.2
Fire	30	0.9	4.4	1.1	1.3	0.8	–	–	0.5	0.5	0.9	0.2	–	1.3	4.2
Firearm	8	0.2	–	0.6	–	0.8	–	1.0	1.9	–	–	–	–	–	–
Machinery	14	0.4	–	0.6	–	–	–	–	1.0	0.2	0.2	0.2	1.0	1.3	0.9
All Transportation	473	14.3	6.6	3.4	3.5	5.5	19.0	18.9	26.3	13.1	14.4	15.9	10.7	23.9	22.8
Motor vehicle traffic	409	12.4	6.6	2.9	2.2	4.2	16.3	15.7	24.8	11.9	11.9	12.7	9.7	19.9	21.8
Other land transport acc.	44	1.3	–	0.6	1.3	1.3	2.7	2.1	0.5	0.9	1.7	1.9	0.3	2.2	0.9
Other transport	20	0.6	–	–	–	–	–	1.0	1.0	0.2	0.7	1.3	0.7	1.8	–
Natural/environmental	20	0.6	–	–	0.4	–	–	–	–	–	0.4	0.2	0.3	1.3	5.6
Poisoning	145	4.4	2.2	–	–	–	–	3.1	2.4	9.8	10.3	5.7	1.4	1.3	2.3
Struck by or against	18	0.5	–	–	0.4	0.4	0.7	–	1.0	0.9	0.2	1.5	–	0.4	–
Suffocation	42	1.3	6.6	1.1	–	–	–	–	0.5	0.2	0.4	0.8	0.7	3.1	9.3
Other and unspecified	151	4.6	2.2	–	0.9	0.4	–	–	1.0	0.9	1.1	1.5	2.4	4.9	51.1

See footnotes at end of table.

TABLE 6-22. Injury Death Rates¹ by Intent and Mechanism, Oregon Residents, 1999 — Continued

Intent by Mechanism	Total	Rate	Age Groups												
			< 1	1-4	5-9	10-14	15-17	18-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
Suicide	499	15.1	—	—	—	1.3	8.1	14.7	13.9	16.3	20.0	22.3	15.6	22.2	29.7
Cut/pierce	8	0.2	—	—	—	—	—	—	—	0.7	0.4	0.2	0.3	0.4	—
Drowning	3	0.1	—	—	—	—	—	—	—	—	0.4	0.2	—	—	—
Falls	6	0.2	—	—	—	—	—	—	1.0	0.7	—	0.2	—	—	—
Fire, hot object or substance	3	0.1	—	—	—	—	0.7	—	—	0.2	0.2	—	—	—	—
Fire	3	0.1	—	—	—	—	0.7	—	—	0.2	0.2	—	—	—	—
Firearm	315	9.5	—	—	—	0.8	4.1	13.6	9.6	7.9	11.8	11.0	10.0	18.6	25.1
All Transportation	3	0.1	—	—	—	—	0.7	—	—	—	0.4	—	—	—	—
Poisoning	75	2.3	—	—	—	—	—	—	1.4	2.3	3.7	5.9	2.1	1.8	1.9
Suffocation	76	2.3	—	—	—	—	2.7	1.0	1.4	4.0	3.0	4.5	2.4	0.9	2.3
Other and unspecified	10	0.3	—	—	—	0.4	—	—	0.5	0.5	0.2	0.2	0.7	0.4	0.5
Homicide	109	3.3	8.9	1.7	0.4	0.8	2.0	5.2	9.1	7.9	3.4	3.2	1.0	0.4	0.5
Cut/pierce	19	0.6	—	—	—	—	—	—	1.0	3.3	1.6	0.4	0.2	0.3	—
Fire, hot object or substance	1	<.05	—	—	—	—	—	—	—	—	—	0.2	—	—	—
Fire	1	<.05	—	—	—	—	—	—	—	—	—	0.2	—	—	—
Firearm	58	1.8	—	—	—	0.8	1.4	4.2	4.8	3.7	2.1	2.1	0.7	0.4	—
All Transportation	1	<.05	—	—	—	—	—	—	—	0.2	—	—	—	—	—
Poisoning	1	<.05	—	—	—	—	—	—	0.5	—	—	—	—	—	—
Struck by or against	4	0.1	—	—	—	—	—	—	0.5	0.2	0.2	—	—	—	0.5
Suffocation	8	0.2	—	0.6	0.4	—	0.7	—	—	1.2	—	—	—	—	—
Other and unspecified	17	0.5	8.9	1.1	—	—	—	—	—	0.9	0.6	0.8	—	—	—
Undetermined	58	1.8	4.4	0.6	0.4	0.4	0.7	1.0	1.0	1.9	4.5	2.5	0.3	0.4	1.4
Cut/pierce	1	<.05	—	—	—	—	—	—	—	0.2	—	—	—	—	—
Drowning	5	0.2	—	—	—	—	0.7	—	—	0.5	0.4	—	—	—	—
Falls	1	<.05	—	0.6	—	—	—	—	—	—	—	—	—	—	—
Fire, hot object or substance	1	<.05	—	—	—	—	—	—	—	—	—	0.2	—	—	—
Fire	1	<.05	—	—	—	—	—	—	—	—	—	0.2	—	—	—
Firearm	3	0.1	—	—	—	0.4	—	—	0.5	0.2	—	—	—	—	—
All Transportation	1	<.05	—	—	—	—	—	—	—	0.2	—	—	—	—	—
Poisoning	36	1.1	—	—	—	—	—	—	0.5	0.5	3.4	2.1	0.3	0.4	1.4
Suffocation	3	0.1	2.2	—	0.4	—	—	—	—	—	0.2	—	—	—	—
Other and unspecified	7	0.2	2.2	—	—	—	—	1.0	—	0.2	0.6	0.2	—	—	—
Legal Intervention	10	0.3	—	—	—	—	—	—	0.5	0.5	0.7	0.2	0.3	0.4	—
Firearm	7	0.2	—	—	—	—	—	—	0.5	0.5	0.6	—	0.3	—	—
Other and unspecified	3	0.1	—	—	—	—	—	—	—	—	0.2	0.2	—	0.4	—

¹ Rate per 100,000 population.
 — Quantity = 0.

TABLE 6-23. Unintentional Deaths by Type or Source of Injury, Age Groups, and Sex, Oregon Residents, 1999

Type or Source of Unintentional Injury	Total	Sex		Age Groups									
		M	F	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	1,144	734	410	31	40	134	124	168	151	65	107	164	160
Transportation ¹	491	326	165	9	23	102	56	84	79	34	54	42	8
Motor vehicle	434	281	153	8	18	97	52	68	64	29	49	41	8
Water transport	14	13	1	—	2	2	1	4	3	2	—	—	—
Air transport	18	17	1	—	—	2	—	4	6	2	4	—	—
Rail transport	8	8	—	—	1	1	1	4	1	—	—	—	—
Poisoning	145	109	36	1	—	8	42	55	27	4	3	4	1
Gas	9	7	2	1	—	3	1	—	1	—	2	1	—
Drugs and medications	134	100	34	—	—	5	41	54	25	4	1	3	1
Suffocation or obstruction	42	23	19	5	—	1	1	2	4	2	7	8	12
Food	4	2	2	—	—	—	—	—	—	—	2	2	—
Gastric contents	5	3	2	—	—	—	—	—	2	1	1	—	1
Other substance/object ²	20	8	12	1	—	—	—	—	—	1	3	6	9
In bed	3	2	1	3	—	—	—	—	—	—	—	—	—
Cave-in, falling earth, etc.	1	1	—	—	—	—	1	—	—	—	—	—	—
Low oxygen environment	2	2	—	—	—	—	—	—	1	—	1	—	—
Hanging/strangulation	2	2	—	—	—	1	—	—	1	—	—	—	—
Inanimate mechanical forces ...	47	42	5	3	5	11	4	2	9	6	5	1	1
Struck by falling object ³	13	11	2	—	2	1	2	1	6	—	1	—	—
Struck by other object	3	3	—	—	—	1	1	—	1	—	—	—	—
Caught between objects	6	5	1	1	1	1	—	—	1	2	—	—	—
Agricultural machinery	6	6	—	—	—	1	—	—	—	2	1	1	1
Other machinery	8	6	2	1	—	1	1	1	1	1	2	—	—
Firearms	8	8	—	1	2	5	—	—	—	—	—	—	—
Miscellaneous	406	225	181	13	12	12	19	25	30	17	37	105	136
Falls	183	103	80	3	1	—	7	9	17	11	21	46	68
Animal bite/envenomation	1	1	—	—	1	—	—	—	—	—	—	—	—
Drowning and submersion	46	39	7	6	3	9	7	5	8	4	1	1	2
Electric current	5	5	—	—	1	1	—	2	1	—	—	—	—
Fire, flames and smoke	30	16	14	4	5	1	2	5	1	—	3	6	3
Excessive natural heat	3	2	1	—	—	—	—	1	—	—	2	—	—
Excessive natural cold	10	4	6	—	—	—	—	—	—	—	1	7	2

¹ Subsets are based on the victims mode of transport, if known.

² Inhalation and ingestion of objects/substances, other than food or gastric contents, causing obstruction of respiratory tract.

³ Includes thrown and projected objects.

— Quantity is 0.

TABLE 6-24. Fatal Falls by Type or Source, Age Groups, and Sex, Oregon Residents, 1999

Type or Source of Fall	Total	Sex		Age Groups									
		M	F	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	183	103	80	3	1	—	7	9	17	11	21	46	68
On same level	50	24	26	—	—	—	—	1	4	3	8	15	19
Involving ice and snow	—	—	—	—	—	—	—	—	—	—	—	—	—
From slipping or tripping	27	11	16	—	—	—	—	—	2	2	5	6	12
Collision with another person ¹	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	23	13	10	—	—	—	—	1	2	1	3	9	7
With skis, skates, skateboards	1	1	—	—	—	—	1	—	—	—	—	—	—
While carried by another	—	—	—	—	—	—	—	—	—	—	—	—	—
Involving wheelchair	2	2	—	—	—	—	—	—	—	—	2	—	—
Involving bed	7	4	3	2	—	—	—	—	—	—	1	1	3
Involving chair	2	1	1	—	—	—	—	—	—	—	—	1	1
Involving other furniture	2	2	—	—	—	—	—	1	—	—	1	—	—
Involving playground equipment	—	—	—	—	—	—	—	—	—	—	—	—	—
On and from stairs and steps	14	8	6	—	—	—	1	—	3	1	2	4	3
On and from ladder	12	12	—	—	—	—	—	2	2	2	1	2	3
On and from scaffolding	—	—	—	—	—	—	—	—	—	—	—	—	—
From building or structure ²	7	5	2	—	—	—	1	—	2	—	—	3	1
From tree	3	3	—	—	1	—	—	—	—	1	1	—	—
From cliff	4	4	—	—	—	—	1	1	1	1	—	—	—
While diving/jumping into water ³	1	1	—	—	—	—	—	1	—	—	—	—	—
Other multilevel fall ⁴	3	2	1	—	—	—	1	—	—	—	—	1	1
Unspecified fall	75	34	41	1	—	—	2	3	5	3	5	19	37

¹ Includes pushing by another person.

² Includes fall from, out of, or through building or structure.

³ Causing an injury other than drowning or submersion.

⁴ Includes falls from or into quarry, tank, dock, haystack, well, etc.

— Quantity is 0.

TABLE 6-25. Decedent's Mode of Travel by Collision Type for Land Transport-related Deaths Occurring in Oregon, 1999¹

Victim Was Traveling by	Total	In Collision with or Involved in									
		Pedes- trian or Animal ²	Pedal Cycle	Motor Cycle ³	Car, Van, Pickup	Heavy Transport Vehicle ⁴	Railway Train ⁵	Other Nonmotor Vehicle ⁶	Fixed Object	Non- collision	Other and N.S.
Total	477	—	—	1	119	17	10	—	41	54	235
Foot	66	—	—	1	40	4	7	—	—	—	14
Pedal Cycle	5	—	—	—	3	—	—	—	1	—	1
Motorcycle ³	23	—	—	—	10	—	1	—	4	4	4
Car	150	—	—	—	60	9	1	—	27	33	20
Pickup or Van	42	—	—	—	6	4	1	—	9	14	8
Heavy Transport Vehicle ..	3	—	—	—	—	—	—	—	—	1	2
Bus/Coach	—	—	—	—	—	—	—	—	—	—	—
Animal-drawn Vehicle ⁷	3	—	—	—	—	*	—	—	—	2	1
Railway Train or Vehicle ...	—	*	*	*	—	*	—	*	—	—	—
Streetcar	—	*	*	*	—	*	—	*	—	—	—
Industr./Constr. Vehicle	—	*	*	*	*	*	*	*	*	*	—
Agricultural Vehicle	6	*	*	*	*	*	*	*	*	*	6
All-terrain Vehicle	8	*	*	*	*	*	*	*	*	*	8
Unspecified Vehicle	171	*	*	*	*	*	*	*	*	*	171

1 This table includes all motor vehicle land transport deaths regardless of whether or not they resulted from traffic accidents.

2 Excludes collisions with animal-drawn vehicles or animals being ridden.

3 Includes three-wheeled motor vehicles such as motorized tricycles; excludes motor vehicles designed primarily for off-road use.

4 Includes buses and coaches.

5 Includes streetcars.

6 Includes animal-drawn vehicles, animals being ridden, streetcars, etc.

7 Includes animals being ridden.

— Quantity is 0.

* ICD-10 does not distinguish whether the injury resulted from a collision (and the other object involved) or noncollision event.

TABLE 6-26. Occupant and Traffic Status by Age and Sex for Fatalities Resulting from Motorcycle, Automobile, and Pickup Truck/Van Accidents, Oregon Occurrence Deaths, 1999

Mode of Transport, Traffic Status & Passenger Status ¹	Total	Sex		Age Groups									
		M	F	<16	16-17	18-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
Total	477	308	169	34	25	16	50	59	86	76	32	51	48
Motorcycle	23	20	3	-	-	-	3	5	7	6	1	1	-
Driver, nontraffic	1	1	-	-	-	-	-	1	-	-	-	-	-
Passenger, nontraffic	-	-	-	-	-	-	-	-	-	-	-	-	-
Unspecified, nontraffic	-	-	-	-	-	-	-	-	-	-	-	-	-
While boarding or a lighting	-	-	-	-	-	-	-	-	-	-	-	-	-
Driver, traffic	11	11	-	-	-	-	2	3	4	1	-	1	-
Passenger, traffic	2	-	2	-	-	-	-	-	1	1	-	-	-
Unspecified, traffic	9	8	1	-	-	-	1	1	2	4	1	-	-
Car	150	92	58	10	7	9	21	15	21	19	12	18	18
Driver, nontraffic	1	-	1	-	-	-	-	-	-	-	-	1	-
Passenger, nontraffic	-	-	-	-	-	-	-	-	-	-	-	-	-
Person on outside, nontraffic ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Unspecified, nontraffic	-	-	-	-	-	-	-	-	-	-	-	-	-
While boarding or alighting	-	-	-	-	-	-	-	-	-	-	-	-	-
Driver, traffic	78	51	27	-	4	5	8	10	9	13	5	13	11
Passenger, traffic	42	20	22	7	3	2	10	1	6	3	2	2	6
Person on outside, traffic	-	-	-	-	-	-	-	-	-	-	-	-	-
Unspecified, traffic	29	21	8	3	-	2	3	4	6	3	5	2	1
Pickup Truck or Van	42	31	11	2	2	-	5	5	13	8	2	3	2
Driver, nontraffic	1	1	-	-	-	-	-	1	-	-	-	-	-
Passenger, nontraffic	2	1	1	-	1	-	-	-	1	-	-	-	-
Person on outside, nontraffic ..	1	1	-	-	-	-	-	-	1	-	-	-	-
Unspecified, nontraffic	-	-	-	-	-	-	-	-	-	-	-	-	-
While boarding or alighting	-	-	-	-	-	-	-	-	-	-	-	-	-
Driver, traffic	24	19	5	-	1	-	-	2	9	5	2	3	2
Passenger, traffic	11	6	5	1	-	-	5	1	1	3	-	-	-
Person on outside, traffic	-	-	-	-	-	-	-	-	-	-	-	-	-
Unspecified, traffic	3	3	-	1	-	-	-	1	1	-	-	-	-

¹ Only the most common types of motorized land transport vehicle-related fatalities are shown by category; all others are included in the total. See Table 6-25 for other categories.

- Quantity is 0.

TABLE 6-27. Traffic¹ Accidents by Victim's Mode of Transport, Sex, and Age, Oregon Occurrence Deaths, 1999

Mode of Transport & Leading Accident Types	Total	Sex		Age Groups									
		M	F	<16	16-17	18-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
Total	431	276	155	27	23	15	50	55	75	65	30	46	45
Pedestrian	53	31	22	5	2	–	6	9	7	4	6	9	5
Struck by Car, Van, P/U	38	24	14	3	2	–	4	4	4	3	6	8	4
Struck by Heavy Vehicle	4	2	2	–	–	–	1	1	1	–	–	–	1
Pedal Cycle	4	4	–	–	–	–	–	–	2	2	–	–	–
Motorcycle	22	19	3	–	–	–	3	4	7	6	1	1	–
Collided with Car, Van, P/U	10	9	1	–	–	–	1	1	5	2	–	1	–
Collided with Heavy Vehicle	–	–	–	–	–	–	–	–	–	–	–	–	–
Collided with Fixed Object	3	3	–	–	–	–	1	–	1	1	–	–	–
Non-collision	4	3	1	–	–	–	–	1	1	2	–	–	–
Car	149	92	57	10	7	9	21	15	21	19	12	17	18
Collided with Car, Van, P/U	59	29	30	5	3	2	5	3	7	8	4	9	13
Collided with Heavy Vehicle	9	4	5	1	–	1	1	–	2	1	1	1	1
Collided with Fixed Object	27	20	7	3	1	2	7	5	4	1	–	2	2
Non-collision	33	21	12	–	3	2	2	6	5	6	5	4	–
Pickup or Van	38	28	10	2	1	–	5	4	11	8	2	3	2
Collided with Car, Van, P/U	6	3	3	1	–	–	–	2	1	1	–	1	–
Collided with Heavy Vehicle	4	3	1	–	–	–	1	–	1	2	–	–	–
Collided with Fixed Object	7	7	–	–	–	–	–	–	2	2	2	1	–
Non-collision	13	9	4	–	1	–	2	1	4	2	–	1	2
Heavy Transport Vehicle	2	2	–	–	–	–	–	–	–	2	–	–	–
Bus	–	–	–	–	–	–	–	–	–	–	–	–	–
Animal-drawn Vehicle ²	–	–	–	–	–	–	–	–	–	–	–	–	–
Railway Train or Vehicle	–	–	–	–	–	–	–	–	–	–	–	–	–
Streetcar	–	–	–	–	–	–	–	–	–	–	–	–	–
Other and Unspecified	163	100	63	10	13	6	15	23	27	24	9	16	20

¹ Unlike tables 6-25 and 6-26 (which include all transport accidents), this table includes only those occurring in traffic.

² Includes animals being ridden.

– Quantity is 0.

Table 6-28. Unintentional Deaths Due to Drowning Occurring in Oregon, by Sex, Age, County of Injury, and Circumstances of Drowning, 1999

Demographic Characteristics	Total	Boating	Bathtub & Hot Tub	Swimming Pool	While in Natural Water	Fall into Natural Water	Other & Unspec.
Total	60	13	5	1	22	7	12
Sex							
Male	53	12	4	1	21	5	10
Female	7	1	1	—	1	2	2
Age							
1-4	7	—	1	1	2	2	1
5-14	5	2	—	—	2	1	—
15-17	6	1	—	—	4	—	1
18-19	1	—	—	—	—	—	1
20-24	1	—	—	—	1	—	—
25-34	7	—	—	—	5	—	2
35-44	13	5	2	—	4	1	1
45-54	11	3	1	—	1	2	4
55-64	5	2	1	—	—	—	2
65-74	2	—	—	—	2	—	—
75+	2	—	—	—	1	1	—
County							
Baker	1	—	—	—	—	—	1
Benton	1	—	—	1	—	—	—
Clackamas	5	1	—	—	4	—	—
Clatsop	4	3	—	—	1	—	—
Coos	1	—	—	—	—	1	—
Crook	1	—	—	—	—	—	1
Curry	1	—	—	—	—	—	1
Deschutes	3	—	—	—	2	—	1
Douglas	1	1	—	—	—	—	—
Harney	1	—	—	—	—	—	1
Jackson	3	1	—	—	1	1	—
Josephine	4	2	—	—	1	1	—
Klamath	1	—	—	—	1	—	—
Lane	9	1	1	—	6	1	—
Lincoln	2	1	—	—	1	—	—
Linn	2	1	—	—	—	1	—
Marion	1	—	—	—	1	—	—
Multnomah	6	—	3	—	2	—	1
Polk	1	—	—	—	—	—	1
Tillamook	3	1	—	—	1	—	1
Umatilla	2	—	—	—	—	1	1
Union	1	1	—	—	—	—	—
Wallowa	1	—	—	—	—	—	1
Wasco	1	—	—	—	1	—	—
Washington	1	—	1	—	—	—	—
Yamhill	3	—	—	—	—	1	2

— Quantity is 0.

Note: Boating includes all unintentional drownings resulting from water transport mishaps but not deaths resulting from voluntarily jumping from a boat. Only counties and age groups with at least one drowning death are shown.

TABLE 6-29. Deaths Due to Firearms by Manner, Sex, Age, Race/Ethnicity, County of Residence, and Weapon Type, Oregon Residents, 1999

Characteristics	Total	Unintended Injuries		Suicide		Homicide		Legal Interven. ¹		Undeterm. Manner	
		M	F	M	F	M	F	M	F	M	F
Total	391	8	-	276	39	42	16	7	-	3	-
Age											
<1	-	-	-	-	-	-	-	-	-	-	-
1-4	1	1	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-	-	-
10-14	7	2	-	2	-	1	1	-	-	1	-
15-17	8	-	-	6	-	2	-	-	-	-	-
18-19	18	1	-	12	1	4	-	-	-	-	-
20-21	15	2	-	6	2	4	-	1	-	-	-
22-24	21	2	-	11	1	4	2	-	-	1	-
25-34	53	-	-	31	3	10	6	2	-	1	-
35-44	77	-	-	49	14	7	4	3	-	-	-
45-54	62	-	-	43	9	7	3	-	-	-	-
55-64	32	-	-	29	-	2	-	1	-	-	-
65-74	43	-	-	37	5	1	-	-	-	-	-
75-84	41	-	-	38	3	-	-	-	-	-	-
85+	13	-	-	12	1	-	-	-	-	-	-
Race/Ethnicity											
White	366	7	-	265	38	31	15	7	-	3	-
African American	18	-	-	7	1	10	-	-	-	-	-
Indian	5	1	-	4	-	-	-	-	-	-	-
Other	2	-	-	-	-	1	1	-	-	-	-
Hispanic ²	16	-	-	7	1	6	-	2	-	-	-
County of Residence											
Baker	4	-	-	2	1	1	-	-	-	-	-
Benton	4	-	-	2	1	-	-	1	-	-	-
Clackamas	27	-	-	23	1	2	1	-	-	-	-
Clatsop	1	-	-	1	-	-	-	-	-	-	-
Columbia	10	-	-	7	1	1	-	1	-	-	-
Coos	7	-	-	7	-	-	-	-	-	-	-
Crook	3	-	-	3	-	-	-	-	-	-	-
Curry	8	-	-	8	-	-	-	-	-	-	-
Deschutes	13	1	-	9	1	1	1	-	-	-	-
Douglas	18	2	-	10	4	1	1	-	-	-	-
Gilliam	2	-	-	2	-	-	-	-	-	-	-

See footnotes at end of table.

TABLE 6-29. Deaths Due to Firearms by Manner, Sex, Age, Race/Ethnicity, County of Residence, and Weapon Type, Oregon Residents, 1999 — Continued

Characteristics	Total	Unintended Injuries		Suicide		Homicide		Legal Interven. ¹		Undeterm. Manner	
		M	F	M	F	M	F	M	F	M	F
County of Residence											
Grant	1	—	—	1	—	—	—	—	—	—	—
Harney	3	—	—	2	1	—	—	—	—	—	—
Hood River	4	—	—	2	1	—	—	1	—	—	—
Jackson	19	—	—	15	2	1	1	—	—	—	—
Jefferson	2	—	—	2	—	—	—	—	—	—	—
Josephine	12	—	—	8	3	1	—	—	—	—	—
Klamath	10	1	—	8	1	—	—	—	—	—	—
Lake	4	—	—	3	—	—	—	—	—	1	—
Lane	35	2	—	21	6	5	—	1	—	—	—
Lincoln	5	—	—	4	1	—	—	—	—	—	—
Linn	12	—	—	10	1	1	—	—	—	—	—
Malheur	4	—	—	4	—	—	—	—	—	—	—
Marion	34	1	—	24	3	3	2	—	—	1	—
Morrow	1	—	—	1	—	—	—	—	—	—	—
Multnomah	74	—	—	48	5	16	5	—	—	—	—
Polk	6	—	—	5	—	—	1	—	—	—	—
Sherman	1	—	—	1	—	—	—	—	—	—	—
Tillamook	6	—	—	4	—	2	—	—	—	—	—
Umatilla	10	—	—	5	—	4	1	—	—	—	—
Union	4	—	—	4	—	—	—	—	—	—	—
Wallowa	1	—	—	1	—	—	—	—	—	—	—
Wasco	4	—	—	2	1	—	—	1	—	—	—
Washington	35	—	—	23	5	2	2	2	—	1	—
Wheeler	—	—	—	—	—	—	—	—	—	—	—
Yamhill	7	1	—	4	—	1	1	—	—	—	—
Weapon Type											
Handgun	223	6	—	167	31	11	7	—	—	1	—
Long Gun ³	110	1	—	88	4	12	4	—	—	1	—
Other & N.S.	58	1	—	21	4	19	5	7	—	1	—

¹ Legal intervention is the intentional or unintentional death of a person resulting from the actions of a law enforcement agent.

² Hispanics may be of any race. Therefore, Hispanics are included in the race totals (e.g., White, Indian); most are white. The category 'Hispanic' sums Hispanic decedents in all race categories.

³ ICD-10, unlike ICD-9, does not distinguish between rifles, shotguns, and military (assault) weapons.

— Quantity is 0.

TABLE 6-30. Deaths from Suicide, Homicide, Legal Intervention, and External Causes Undetermined Whether Unintentionally or Purposely Inflicted, by Age, Sex, and Method, Oregon Residents, 1999

Manner and Method of Death ¹	Total	All Ages		< 15		15-24		25-34		35-44		45-54		55-64		65-74		75-84		85+	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
		Suicide	499	412	87	3	-	48	7	62	8	80	27	80	25	40	5	43	7	41	5
All Poisoning	75	47	28	-	-	3	-	6	4	11	9	18	10	4	2	3	1	-	1	2	1
Medications	48	27	21	-	-	2	-	5	2	7	8	10	9	3	-	-	1	-	1	-	-
Other Substances	27	20	7	-	-	1	-	1	2	4	1	8	1	1	2	3	-	-	-	2	1
Hanging/Suffocation	76	66	10	-	-	5	3	16	1	16	-	18	3	5	2	2	-	3	-	1	1
Drowning	3	1	2	-	-	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
All Firearms ²	315	276	39	2	-	35	4	31	3	49	14	43	9	29	-	37	5	38	3	12	1
Handguns	198	167	31	1	-	15	3	18	3	30	10	23	6	18	-	24	5	29	3	9	1
Long Guns	92	88	4	1	-	19	1	11	-	17	3	16	-	8	-	7	-	7	-	2	-
Fire, Flames, Smoke	3	3	-	-	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-
Sharp Object	8	6	2	-	-	-	-	3	-	1	1	-	1	1	-	1	-	-	-	-	-
Jumping from High Place ...	6	6	-	-	-	2	-	3	-	-	-	1	-	-	-	-	-	-	-	-	-
Homicide	109	72	37	5	5	19	8	20	14	13	5	11	4	3	-	1	-	-	-	-	1
Strangulation & Hanging	8	1	7	1	1	-	1	-	5	-	-	-	-	-	-	-	-	-	-	-	-
Drowning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Firearms ²	58	42	16	1	1	14	2	10	6	7	4	7	3	2	-	1	-	-	-	-	-
Handguns	18	11	7	-	-	4	1	3	1	2	3	2	2	-	-	-	-	-	-	-	-
Long Guns	16	12	4	1	-	3	-	1	4	4	-	2	-	1	-	-	-	-	-	-	-
Sharp Object	19	13	6	-	-	4	4	5	2	2	-	1	-	1	-	-	-	-	-	-	-
Blunt Object	3	1	2	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Bodily Force	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Neglect & Maltreatment	4	1	3	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal Intervention	8	8	-	-	-	1	-	2	-	4	-	-	-	1	-	-	-	-	-	-	-
Firearms	7	7	-	-	-	1	-	2	-	3	-	-	-	1	-	-	-	-	-	-	-
Undetermined Manner	58	36	22	3	2	2	2	6	2	15	9	8	4	1	-	1	-	-	2	-	1
All Poisoning	36	20	16	-	-	-	1	1	1	11	7	6	4	1	-	1	-	-	2	-	1
Medications	36	20	16	-	-	-	1	1	1	11	7	6	4	1	-	1	-	-	2	-	1
Other Substances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drowning	5	2	3	-	-	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-
Firearms ²	3	3	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Handguns	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Long Guns	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ 'Other' and 'Unknown' subcategories are not shown but are included in the totals.
² ICD-10, unlike ICD-9, does not distinguish between rifles, shotguns, and military (assault) weapons.
 - Quantity is 0.

TABLE 6-31. Fatal Overdoses and Poisonings by Manner, Type, Age Groups, and Sex, Oregon Residents, 1999

Manner and Type of Substance	Total	Sex		Age Groups									
		M	F	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	257	176	81	1	–	13	54	93	65	11	8	7	5
Unintentional overdoses/poisoning	145	109	36	1	–	8	42	55	27	4	3	4	1
Nonopioid analgesics, antipyretics, etc.	–	–	–	–	–	–	–	–	–	–	–	–	–
Psychotropic, sedative-hypnotic drugs	8	7	1	–	–	1	2	5	–	–	–	–	–
Narcotics and hallucinogens	93	72	21	–	–	2	29	36	23	3	–	–	–
Others acting on autonomic nervous sys.	–	–	–	–	–	–	–	–	–	–	–	–	–
Other and unspecified drugs ¹	33	21	12	–	–	2	10	13	2	1	1	3	1
Alcohol	1	1	–	–	–	–	–	1	–	–	–	–	–
Organic solvents & halogenated HC	1	1	–	–	–	1	–	–	–	–	–	–	–
Carbon monoxide & other gases	8	6	2	1	–	2	1	–	1	–	2	1	–
Pesticides	–	–	–	–	–	–	–	–	–	–	–	–	–
Other chemicals & substances	1	1	–	–	–	–	–	–	1	–	–	–	–
Intentional self-poisoning	75	47	28	–	–	3	10	20	28	6	4	1	3
Nonopioid analgesics, antipyretics, etc.	4	2	2	–	–	–	1	1	1	1	–	–	–
Psychotropic, sedative-hypnotic drugs	23	14	9	–	–	2	3	9	6	2	–	1	–
Narcotics and hallucinogens	4	1	3	–	–	–	–	–	4	–	–	–	–
Others acting on autonomic nervous sys.	–	–	–	–	–	–	–	–	–	–	–	–	–
Other and unspecified drugs ¹	17	10	7	–	–	–	3	5	8	–	1	–	–
Alcohol	–	–	–	–	–	–	–	–	–	–	–	–	–
Organic solvents & halogenated HC	2	2	–	–	–	–	–	1	–	–	1	–	–
Carbon monoxide & other gases	24	17	7	–	–	1	3	4	8	3	2	–	3
Pesticides	1	1	–	–	–	–	–	–	1	–	–	–	–
Other chemicals & substances	–	–	–	–	–	–	–	–	–	–	–	–	–
Assault by poisoning	1	–	1	–	–	1	–	–	–	–	–	–	–
Undetermined intent	36	20	16	–	–	1	2	18	10	1	1	2	1
Nonopioid analgesics, antipyretics, etc.	1	–	1	–	–	–	–	–	–	–	–	1	–
Psychotropic, sedative-hypnotic drugs	3	2	1	–	–	–	–	2	–	1	–	–	–
Narcotics and hallucinogens	19	9	10	–	–	1	2	9	5	–	–	1	1
Others acting on autonomic nervous sys.	–	–	–	–	–	–	–	–	–	–	–	–	–
Other and unspecified drugs ¹	13	9	4	–	–	–	–	7	5	–	1	–	–
Alcohol	–	–	–	–	–	–	–	–	–	–	–	–	–
Organic solvents & halogenated HC	–	–	–	–	–	–	–	–	–	–	–	–	–
Carbon monoxide & other gases	–	–	–	–	–	–	–	–	–	–	–	–	–
Pesticides	–	–	–	–	–	–	–	–	–	–	–	–	–
Other chemicals & substances	–	–	–	–	–	–	–	–	–	–	–	–	–

¹ Includes deaths resulting from poisoning from substances in multiple categories.
 – Quantity is 0.

TABLE 6-32. Leading Causes of Death by County of Residence, Oregon, 1999

County of Residence	Total	Diseases of the Heart	Malignant Neoplasms	Cerebrovascular Disease	Chronic Lower Respiratory Disease ²	Unintended Injuries	Alzheimer's Disease	Diabetes Mellitus	Pneumonia & Influenza	Suicide	Alcohol-induced Deaths ³
Total	29,356	7,252	6,903	2,817	1,762	1,144	868	855	684	499	304
Rate¹	889.4	219.7	209.1	85.3	53.4	34.7	26.3	25.9	20.7	15.1	9.2
Baker	208	66	42	16	15	11	2	3	8	4	2
Benton	456	113	123	41	25	15	23	10	12	6	3
Clackamas	2,449	629	626	227	120	94	81	64	83	35	24
Clatsop	379	111	95	28	22	18	5	10	6	4	5
Columbia	371	80	118	24	29	9	13	13	10	9	2
Coos	841	229	213	62	57	27	35	29	10	11	7
Crook	170	53	43	11	12	5	3	4	3	3	1
Curry	332	105	72	25	18	6	11	10	3	9	6
Deschutes	840	209	204	79	63	39	14	22	17	17	7
Douglas	1,168	318	271	73	90	52	25	42	24	21	19
Gilliam	18	3	4	2	3	-	2	-	1	2	-
Grant	92	24	23	6	11	6	1	1	2	1	-
Harney	82	21	19	6	5	2	1	3	4	4	-
Hood River	162	32	38	11	11	3	6	8	2	3	1
Jackson	1,804	453	418	191	119	73	74	37	34	35	20
Jefferson	155	48	27	11	4	17	2	4	6	2	-
Josephine	963	278	231	73	73	35	22	19	17	17	11
Klamath	668	174	155	66	53	23	15	20	14	11	10
Lake	90	27	19	6	4	4	1	3	-	3	-
Lane	2,821	644	663	286	156	124	91	85	63	45	27
Lincoln	543	116	139	49	38	24	14	17	10	9	9
Linn	1,006	238	243	115	70	40	23	30	18	15	9
Malheur	245	66	53	22	11	11	8	5	6	4	3
Marion	2,436	579	578	354	115	78	44	58	61	38	15
Morrow	76	17	15	5	6	4	2	2	3	2	3
Multnomah	5,690	1,338	1,250	511	313	224	183	201	126	104	77
Polk	509	138	103	76	24	11	9	10	4	7	5
Sherman	20	7	3	3	2	1	-	1	-	1	-
Tillamook	306	73	75	28	32	7	3	5	11	6	3
Umatilla	599	125	158	39	35	26	16	22	21	8	11
Union	248	61	50	21	21	8	5	8	8	4	2
Walla Walla	84	24	20	5	6	4	1	3	2	2	1
Wasco	294	85	62	22	26	13	12	6	7	4	2
Washington	2,535	599	583	250	141	100	91	78	63	47	16
Wheeler	19	5	4	3	-	-	1	2	-	-	-
Yamhill	677	164	163	70	32	30	29	20	25	6	3

- Quantity is zero.

NOTE: Beginning in 1999, the tenth revision of the International Classification of Disease (ICD-10) became the standard nosological manual. Most of the leading causes of death are not greatly affected by the use of the new manual (and accompanying rules governing the selection of the underlying cause of death) with the exception of "Pneumonia and Influenza" where the number of deaths attributed to this cause declined substantially. Some categories have been deleted, such as "Other Diseases of the Arteries" (which was replaced with "Aortic Aneurysm") and others added, such as "Pneumonitis Due to Solids/Liquids." Comparison ratios and other information relating to the changes in disease classification are discussed in greater detail in Appendix B.

¹ Rates per 100,000 population.

² The ICD-9 leading cause of death category Chronic Obstructive Pulmonary Disease has been renamed Chronic Lower Respiratory Disease.

³ "Alcohol-induced Deaths," includes the following ICD-10 codes: F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15.

**TABLE 6-32. Leading Causes of Death by County of Residence, Oregon, 1999
(Continued)**

County of Residence	Nephritis, Nephrotic Syndrome, and Nephrosis	Parkinson's Disease	Hypertension and Renal Hypertension	Aortic Aneurysm	Benign and Other Neoplasms Not Known to be Malignant	Arteriosclerosis	Septicemia	Congenital Anomalies	Pneumonitis Due to Solids/liquids	Perinatal Conditions	Homicide	Amyotrophic Lateral Sclerosis
Total	260	256	246	240	200	198	188	156	153	112	109	75
Rate¹	7.9	7.8	7.5	7.3	6.1	6.0	5.7	4.7	4.6	3.4	3.3	2.3
Baker	3	-	2	1	-	2	1	2	1	-	2	1
Benton	3	4	3	3	2	1	-	5	1	2	1	-
Clackamas	23	25	20	13	20	16	15	13	19	3	5	4
Clatsop	4	3	1	4	3	3	-	1	5	1	2	1
Columbia	3	1	4	2	2	3	1	2	1	-	1	-
Coos	8	7	11	7	4	8	8	6	2	4	1	2
Crook	1	3	-	-	-	11	-	2	-	1	-	1
Curry	1	3	6	7	3	3	2	1	-	-	-	1
Deschutes	11	6	7	11	12	5	7	4	2	5	4	3
Douglas	13	9	11	11	7	7	13	7	5	4	4	3
Gilliam	-	-	-	-	-	-	-	-	-	-	-	-
Grant	1	1	1	1	-	-	-	-	2	1	-	-
Harney	-	1	-	1	-	-	1	-	1	-	-	-
Hood River	4	1	2	1	-	6	4	4	-	1	-	-
Jackson	10	16	13	11	16	5	4	10	14	5	5	3
Jefferson	2	-	2	1	-	1	1	-	-	1	2	-
Josephine	7	7	12	3	5	5	6	2	2	2	3	1
Klamath	1	8	6	2	5	1	3	2	1	2	1	2
Lake	1	-	-	2	1	1	-	1	1	1	1	-
Lane	26	35	20	27	18	16	17	12	4	12	6	5
Lincoln	5	1	4	5	2	8	4	6	3	2	1	2
Linn	11	8	13	9	3	5	7	7	4	6	4	3
Malheur	5	-	1	3	2	1	-	2	1	1	1	2
Marion	22	21	17	23	13	11	18	15	14	11	5	4
Morrow	-	-	-	-	1	-	4	2	1	1	-	-
Multnomah	52	56	47	45	38	35	37	28	37	20	39	20
Polk	3	6	10	6	9	2	4	1	6	3	2	-
Sherman	-	-	-	-	-	-	-	-	-	-	-	-
Tillamook	1	3	4	3	1	2	1	-	2	1	3	2
Umatilla	4	1	6	4	4	3	3	3	3	3	5	-
Union	6	-	2	5	2	-	-	-	3	-	-	-
Wallowa	3	-	-	-	-	1	-	1	1	-	-	-
Wasco	3	3	-	-	2	2	2	1	1	-	-	-
Washington	18	22	19	28	19	30	22	13	12	17	9	13
Wheeler	-	-	-	-	1	-	-	-	-	-	-	-
Yamhill	5	5	2	1	5	4	3	3	4	2	2	2

- Quantity is zero.

¹ Rates per 100,000 population.

TABLE 6-33. Deaths by Age, Sex, and County of Residence, Oregon, 1999

County of Residence	Total	Total		< 1		1-4		5-14		15-24	
		M	F	M	F	M	F	M	F	M	F
Total	29,356	14,430	14,926	142	119	29	20	58	36	211	77
Baker	208	104	104	-	-	-	1	-	1	4	-
Benton	456	209	247	5	2	-	1	1	1	-	-
Clackamas	2,449	1,161	1,288	11	5	3	3	6	-	18	6
Clatsop	379	184	195	2	1	-	-	1	1	2	3
Columbia	371	184	187	1	2	-	-	-	-	2	-
Coos	841	414	427	6	3	1	-	4	1	3	2
Crook	170	100	70	3	-	-	-	-	-	-	1
Curry	332	182	150	-	-	1	-	1	-	1	-
Deschutes	840	433	407	4	4	3	1	4	-	3	6
Douglas	1,168	619	549	6	3	1	-	3	1	11	3
Gilliam	18	14	4	-	-	-	-	-	-	1	-
Grant	92	43	49	-	1	-	-	-	-	2	-
Harney	82	46	36	-	-	-	-	1	-	2	1
Hood River	162	74	88	2	2	-	-	-	-	1	2
Jackson	1,804	898	906	7	3	3	4	1	1	9	7
Jefferson	155	94	61	1	1	-	1	-	-	7	1
Josephine	963	485	478	-	4	-	-	2	2	3	1
Klamath	668	367	301	2	4	-	-	-	2	4	-
Lake	90	53	37	-	1	1	-	1	-	-	1
Lane	2,821	1,372	1,449	16	8	3	2	4	3	19	6
Lincoln	543	286	257	3	2	1	-	3	-	4	-
Linn	1,006	480	526	7	3	1	1	1	1	5	2
Malheur	245	107	138	2	2	-	1	1	1	3	2
Marion	2,436	1,180	1,256	16	10	2	-	5	5	25	5
Morrow	76	39	37	2	-	-	-	-	-	1	2
Multnomah	5,690	2,778	2,912	20	26	5	3	10	7	30	15
Polk	509	239	270	1	2	-	-	-	1	5	-
Sherman	20	17	3	-	-	-	-	-	-	-	-
Tillamook	306	179	127	1	1	-	1	-	-	5	-
Umatilla	599	330	269	1	3	1	-	-	2	6	1
Union	248	109	139	-	-	-	-	2	-	1	-
Wallowa	84	43	41	-	1	-	-	-	-	-	-
Wasco	294	137	157	2	1	-	-	-	-	4	-
Washington	2,535	1,142	1,393	19	20	1	1	4	3	21	8
Wheeler	19	14	5	-	-	-	-	-	-	-	-
Yamhill	677	314	363	2	4	2	-	3	3	9	2

-Quantity is zero.

TABLE 6-33. Deaths by Age, Sex, and County of Residence, Oregon, 1999 (Continued)

County of Residence	25-34		35-44		45-54		55-64		65-74		75+	
	M	F	M	F	M	F	M	F	M	F	M	F
Total	304	119	608	316	1,177	671	1,540	1,099	2,897	2,293	7,464	10,176
Baker	-	-	3	-	8	3	15	5	20	16	54	78
Benton	7	1	2	7	11	11	24	12	32	32	127	180
Clackamas	23	10	45	23	95	67	140	104	231	168	589	902
Clatsop	3	1	6	5	9	4	22	12	49	34	90	134
Columbia	4	1	8	4	18	7	28	18	32	38	91	117
Coos	1	1	10	7	28	23	52	40	87	88	222	262
Crook	2	-	2	1	3	5	15	5	30	10	45	48
Curry	-	2	7	1	9	5	12	9	59	35	92	98
Deschutes	12	3	14	11	34	18	44	31	91	72	224	261
Douglas	8	4	16	11	46	18	64	62	138	110	326	337
Gilliam	1	-	-	-	-	-	-	1	3	1	9	2
Grant	-	-	2	-	3	-	4	5	9	10	23	33
Harney	-	-	-	1	2	1	5	2	15	6	21	25
Hood River	1	-	4	1	1	4	14	6	13	13	38	60
Jackson	4	6	32	19	69	42	89	67	210	146	474	611
Jefferson	2	1	5	3	7	4	10	5	19	8	43	37
Josephine	7	3	16	7	34	17	59	34	93	74	271	336
Klamath	3	3	9	8	29	12	58	25	78	53	184	194
Lake	1	-	1	1	3	2	11	3	14	4	21	25
Lane	36	12	57	36	116	74	125	97	262	211	734	1,000
Lincoln	4	2	14	5	25	21	27	22	55	57	150	148
Linn	10	1	16	17	38	20	61	39	75	82	266	360
Malheur	2	1	5	1	6	4	9	7	22	23	57	96
Marion	24	11	59	18	95	54	108	82	224	182	622	889
Morrow	1	1	1	1	4	4	6	4	5	4	19	21
Multnomah	86	25	186	80	296	127	297	194	528	419	1,320	2,016
Polk	2	4	6	5	15	10	19	19	49	34	142	195
Sherman	-	-	-	-	1	-	1	1	7	-	8	2
Tillamook	2	1	5	-	13	3	18	13	42	30	93	78
Umatilla	8	5	10	4	28	14	41	31	65	39	170	170
Union	2	-	3	4	4	5	8	5	26	14	63	111
Wallowa	-	-	1	-	2	-	3	2	13	6	24	32
Wasco	-	-	5	2	9	7	8	13	22	20	87	114
Washington	43	18	50	27	93	71	117	101	220	196	574	948
Wheeler	-	-	-	-	1	-	-	-	5	1	8	4
Yamhill	5	2	8	6	22	14	26	23	54	57	183	252

-Quantity is zero.

TABLE 6-34. Years of Potential Life Lost Before Age 65 by Cause and County of Residence, Oregon, 1999

County of Residence	Total	Unint Injur	Cancer	Heart	Sui-side	Peri-natal Cond	Cong Anom	Hom-icide	Alcohol Induc ¹	Dia-betes	CeVD
Total	117,350	21,710	21,254	13,390	9,807	7,276	6,523	3,724	3,142	2,441	2,226
Baker	631	160	96	97	48	0	69	53	11	8	0
Benton	1,645	156	419	104	119	130	195	18	32	0	70
Clackamas	9,539	1,842	2,132	1,164	722	195	596	216	293	255	154
Clatsop	1,344	435	159	132	103	65	0	103	12	0	5
Columbia	1,378	162	404	145	146	0	73	13	18	13	0
Coos	2,874	574	551	335	67	260	167	63	87	65	36
Crook	579	164	102	77	38	65	89	0	12	0	8
Curry	697	153	130	156	103	0	0	0	45	0	0
Deschutes	3,739	856	699	544	299	325	257	119	109	37	31
Douglas	4,200	1,056	525	506	429	260	255	104	207	79	58
Gilliam	83	0	0	0	81	0	0	0	0	0	0
Grant	294	61	64	49	45	65	0	0	0	0	0
Harney	292	74	33	15	144	0	0	0	0	16	5
Hood River	751	120	119	43	59	65	195	0	6	6	15
Jackson	5,967	1,346	994	854	560	325	82	103	210	57	214
Jefferson	1,122	576	121	88	52	65	0	98	0	3	2
Josephine	2,793	507	657	366	245	130	98	83	89	65	21
Klamath	2,351	308	513	327	159	130	79	14	82	18	182
Lake	469	78	49	13	11	65	5	43	0	3	13
Lane	11,321	2,686	2,032	919	909	779	427	197	264	241	290
Lincoln	2,356	470	371	218	124	130	294	35	85	112	46
Linn	3,777	554	713	431	250	389	283	128	127	38	52
Malheur	1,157	267	93	85	99	65	130	34	55	15	0
Marion	10,081	1,602	1,986	1,161	850	715	724	182	123	213	207
Morrow	551	95	62	28	46	65	102	0	56	3	18
Multnomah	25,905	3,749	4,222	2,985	2,104	1,299	1,166	1,368	843	655	425
Polk	1,510	196	286	282	140	195	38	54	48	4	23
Sherman	15	0	0	2	12	0	0	0	0	1	0
Tillamook	1,081	185	191	82	150	65	0	65	18	17	8
Umatilla	2,522	488	519	261	134	194	96	187	65	68	29
Union	632	177	129	17	24	0	0	0	24	55	34
Wallowa	139	0	5	27	41	0	65	0	0	0	1
Wasco	888	117	157	132	124	0	65	0	14	1	18
Washington	11,933	1,864	2,046	1,494	1,220	1,104	777	344	198	324	218
Wheeler	12	0	0	0	0	0	0	0	0	0	0
Yamhill	2,719	630	675	251	150	130	195	100	9	69	43

¹ Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, Y15. Alcoholic cardiomyopathy is included in both this category and heartprogram to disease.

Note: A "0" indicates either no deaths occurred before the base age, or no deaths of any kind.

Abbreviations: Unint Injur = Unintentional Injuries; Cancer = Malignant Neoplasms; Perinatal Cond = Perinatal Conditions; Cong Anom = Congenital Anomalies; Alcohol Induc = Alcohol-induced deaths, CeVD = Cerebrovascular Disease.

TABLE 6-34. Years of Potential Life Lost Before Age 65 by Cause and County of Residence, Oregon, 1999 — Continued

County of Residence	Undet Intent	Septi-cemia	Flu & Pneu-monia	Be-nign Neopl	Ne-phritis	Hyper-tension	Aortic Aneu-rysm	ALS	Arterio-scler-osis	Parkin-son's Dis
Total	1,596	975	768	624	458	320	282	266	68	41
Baker	0	0	0	0	0	3	0	0	0	0
Benton	31	0	0	0	0	0	0	0	0	0
Clackamas	166	94	101	55	52	20	12	6	20	4
Clatsop	0	0	0	10	0	2	22	15	0	0
Columbia	22	0	0	0	0	0	0	0	12	0
Coos	0	69	26	0	0	12	7	22	0	0
Crook	0	0	0	0	11	0	0	1	4	0
Curry	0	11	0	0	0	0	0	0	0	0
Deschutes	0	49	9	37	0	0	19	4	0	0
Douglas	111	57	8	28	5	25	0	17	0	0
Gilliam	0	0	2	0	0	0	0	0	0	0
Grant	0	0	0	0	0	0	0	0	0	0
Harney	0	0	0	0	0	0	0	0	0	3
Hood River	0	0	0	0	30	0	0	0	0	0
Jackson	14	23	12	46	14	63	19	3	0	15
Jefferson	0	0	0	0	0	0	0	0	0	0
Josephine	33	12	55	0	24	0	2	0	0	0
Klamath	0	15	12	0	0	0	0	7	0	0
Lake	51	0	0	6	20	0	0	0	1	0
Lane	347	129	162	84	43	4	56	38	0	0
Lincoln	29	69	0	0	0	28	0	2	17	0
Linn	0	29	6	0	58	39	0	40	0	0
Malheur	36	0	17	53	0	0	0	24	0	0
Marion	92	67	84	91	50	35	23	37	0	0
Morrow	0	9	0	0	0	0	0	0	0	0
Multnomah	448	161	149	91	65	69	77	27	8	0
Polk	0	0	0	18	0	5	0	0	0	14
Sherman	0	0	0	0	0	0	0	0	0	0
Tillamook	0	0	20	0	0	0	0	0	0	4
Umatilla	0	0	9	17	0	4	5	0	0	0
Union	40	0	0	0	0	0	0	0	0	0
Wallowa	0	0	0	0	0	0	0	0	0	0
Wasco	0	0	0	0	0	0	0	0	0	0
Washington	158	182	80	72	86	11	40	18	6	1
Wheeler	0	0	0	0	0	0	0	0	0	0
Yamhill	18	0	16	16	0	0	0	5	0	0

Note: A "0" indicates either no deaths occurred before the base age, or no deaths of any kind.

Abbreviations: Undet Intent = Injuries of Undetermined Intent;

Benign Neopl = Benign, In Situ, and Neoplasms of Uncertain Behavior; Nephritis = Nephritis, Nephrosis, etc.;

Hypertension = Hypertension with/without Renal Disease; ALS = Amyotrophic Lateral Sclerosis.

TABLE 6-35. Median Age at Death by Sex and County of Residence, Oregon, 1999

County of Residence	Total		Male		Female	
	Number	Median	Number	Median	Number	Median
Total	29,356	78	14,430	75	14,926	81
Baker	208	80	104	76	104	83
Benton	456	79	209	78	247	82
Clackamas	2,449	78	1,161	75	1,288	81
Clatsop	379	78	184	74	195	82
Columbia	371	76	184	74	187	79
Coos	841	77	414	76	427	78
Crook	170	77	100	73	70	82
Curry	332	77	182	75	150	80
Deschutes	840	77	433	75	407	80
Douglas	1,168	77	619	75	549	78
Gilliam	18	77	14	78	4	73
Grant	92	80	43	78	49	80
Harney	82	77	46	74	36	82
Hood River	162	80	74	76	88	82
Jackson	1,804	78	898	75	906	80
Jefferson	155	75	94	73	61	78
Josephine	963	79	485	77	478	81
Klamath	668	77	367	75	301	79
Lake	90	77	53	73	37	82
Lane	2,821	78	1,372	76	1,449	81
Lincoln	543	76	286	75	257	77
Linn	1,006	79	480	77	526	80
Malheur	245	78	107	76	138	81
Marion	2,436	79	1,180	76	1,256	82
Morrow	76	76	39	74	37	79
Multnomah	5,690	78	2,778	74	2,912	81
Polk	509	80	239	77	270	83
Sherman	20	75	17	73	3	78
Tillamook	306	77	179	75	127	80
Umatilla	599	77	330	75	269	80
Union	248	82	109	78	139	85
Wallowa	84	80	43	75	41	81
Wasco	294	80	137	78	157	83
Washington	2,535	78	1,142	75	1,393	81
Wheeler	19	82	14	81	5	92
Yamhill	677	80	314	78	363	82

TABLE 6-36. Deaths by Race, Ethnicity, and County of Residence, Oregon, 1999

County of Residence	Total	White	Black	Am. Indian	Chi- nese	Japa- nese	Other Asian ¹	Other & NS	His- panic ²
Total	29,356	28,445	371	226	66	60	180	8	417
Baker	208	207	—	1	—	—	—	—	3
Benton	456	446	2	—	3	2	3	—	4
Clackamas	2,449	2,411	9	8	8	3	10	—	24
Clatsop	379	379	—	—	—	—	—	—	1
Columbia	371	365	1	5	—	—	—	—	2
Coos	841	831	—	6	—	1	2	1	6
Crook	170	169	1	—	—	—	—	—	1
Curry	332	330	—	2	—	—	—	—	1
Deschutes	840	835	—	4	—	—	1	—	3
Douglas	1,168	1,152	1	11	—	—	4	—	8
Gilliam	18	18	—	—	—	—	—	—	—
Grant	92	91	—	—	—	—	1	—	1
Harney	82	80	—	2	—	—	—	—	2
Hood River	162	155	—	1	—	5	1	—	8
Jackson	1,804	1,785	4	8	1	2	4	—	21
Jefferson	155	130	—	25	—	—	—	—	4
Josephine	963	953	2	5	1	1	1	—	13
Klamath	668	646	4	17	—	—	1	—	13
Lake	90	89	—	1	—	—	—	—	3
Lane	2,821	2,786	9	16	1	2	4	3	18
Lincoln	543	534	—	8	—	1	—	—	1
Linn	1,006	996	1	6	—	—	3	—	3
Malheur	245	234	2	2	—	5	2	—	26
Marion	2,436	2,396	9	18	1	2	10	—	61
Morrow	76	75	—	1	—	—	—	—	5
Multnomah	5,690	5,187	312	35	35	32	85	4	85
Polk	509	501	—	5	—	1	2	—	6
Sherman	20	20	—	—	—	—	—	—	—
Tillamook	306	305	—	1	—	—	—	—	1
Umatilla	599	582	1	13	1	—	2	—	24
Union	248	246	2	—	—	—	—	—	1
Wallowa	84	83	—	1	—	—	—	—	—
Wasco	294	285	—	8	1	—	—	—	2
Washington	2,535	2,458	11	10	13	3	40	—	62
Wheeler	19	19	—	—	—	—	—	—	—
Yamhill	677	666	—	6	1	—	4	—	4

¹ Including Pacific Islanders.

² Decedents of Hispanic ethnicity may belong to any race; most are white. See table 6-9.

— Quantity is 0.

TABLE 6-37. Selected Causes of Death for Portland, Eugene, and Salem, Oregon Residents, 1999

Selected Causes of Death (and their ICD-10 codes)	State No.	State Rate ¹	Portland		Eugene		Salem	
			No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	29,356	889.4	4,765	929.9	1,159	849.1	1,417	1101.9
Infections & parasitic disease (A00-B99)	429	13.0	112	21.9	12	8.8	28	21.8
Septicemia (A40-A41)	188	5.7	33	6.4	7	5.1	11	8.6
Viral Hepatitis (B15-B19)	45	1.4	17	3.3	1	0.7	2	1.6
HIV disease (B20-B24)	73	2.2	31	6.1	1	0.7	6	4.7
Malignant neoplasms (C00-C97)	6,904	209.2	1,028	200.6	257	188.3	320	248.8
Colon (C18)	557	16.9	77	15.0	17	12.5	30	23.3
Pancreas (C25)	378	11.5	59	11.5	15	11.0	19	14.8
Bronchus & lung (C34)	1,886	57.1	286	55.8	64	46.9	85	66.1
Skin (C43-44)	128	3.9	15	2.9	6	4.4	4	3.1
Breast (C50)	513	15.5	76	14.8	25	18.3	21	16.3
Cervical (C53)	36	1.1	5	1.0	2	1.5	5	3.9
Uterine (C54-C55)	70	2.1	14	2.7	4	2.9	6	4.7
Ovarian (C56)	192	5.8	19	3.7	4	2.9	9	7.0
Prostate (C61)	445	13.5	47	9.2	18	13.2	15	11.7
Kidney & renal pelvis (C64-C65)	133	4.0	24	4.7	9	6.6	8	6.2
Bladder (C67)	169	5.1	23	4.5	7	5.1	3	2.3
Brain (C70-C72)	155	4.7	20	3.9	7	5.1	5	3.9
Lymphatic (C81-C96)	734	22.2	122	23.8	29	21.2	38	29.6
Non-Hodgkin's lymphoma (C82-C85)	312	9.5	53	10.3	13	9.5	22	17.1
Leukemia (C91-C95)	250	7.6	40	7.8	4	2.9	7	5.4
Benign & uncertain neoplasms (D00-D48)	200	6.1	30	5.9	9	6.6	9	7.0
Diabetes mellitus (E10-E14)	855	25.9	177	34.5	37	27.1	40	31.1
Organic dementia (F01, F03)	517	15.7	98	19.1	24	17.6	24	18.7
Parkinson's disease (G20-G21)	256	7.8	45	8.8	16	11.7	9	7.0
Alzheimer's disease (G30)	868	26.3	149	29.1	33	24.2	24	18.7
Alcohol-induced deaths ²	304	9.2	68	13.3	8	5.9	8	6.2
Diseases of circulatory system (I00-I99)	10,901	330.3	1,694	330.6	401	293.8	581	451.8
Hypertension/hyperten. renal dis. (I10, I12)	246	7.5	37	7.2	11	8.1	12	9.3
Heart Disease (I00-I09, I11, I13, I20-I51) ...	7,252	219.7	1,139	222.3	258	189.0	327	254.3
Ischemic heart disease (I20-I25)	4,950	150.0	758	147.9	160	117.2	192	149.3
Myocardial infarction (I21-I22)	1,715	52.0	257	50.2	50	36.6	78	60.7
Cerebrovascular disease (I60-I69)	2,817	85.3	425	82.9	107	78.4	218	169.5
Subarachnoid hemorrhage (I60)	71	2.2	8	1.6	5	3.7	4	3.1
Intracerebral hemorrhage, etc. (I61-I62)	336	10.2	61	11.9	22	16.1	19	14.8
Cerebral infarction (I63)	219	6.6	47	9.2	5	3.7	13	10.1
Stroke of unspecified type (I64)	1,447	43.8	223	43.5	51	37.4	62	48.2
Aortic aneurysm (I71)	240	7.3	41	8.0	11	8.1	17	13.2
Influenza & pneumonia (J10-J18)	684	20.7	106	20.7	30	22.0	27	21.0
Chronic lower respiratory diseases (J40-J47)	1,762	53.4	262	51.1	58	42.5	73	56.8
Diseases of the digestive system (K00-K92) ..	977	29.6	182	35.5	32	23.4	47	36.5
Diseases of the genitourinary sys. (N00-N99)	423	12.8	71	13.9	19	13.9	24	18.7
Nephritis (N00-N07, N17-N19, N25-N27) ...	260	7.9	45	8.8	12	8.8	14	10.9
Perinatal conditions (P00-P96)	112	3.4	17	3.3	6	4.4	8	6.2
Congenital malformations (Q00-Q99)	156	4.7	21	4.1	6	4.4	7	5.4
Sudden infant death syndrome (R95)	26	0.8	4	0.8	1	0.7	3	2.3
Unintentional injuries (V01-X59, Y85-Y86)	1,144	34.7	183	35.7	51	37.4	44	34.2
Suicide (X60-X84, Y87.0)	499	15.1	84	16.4	22	16.1	24	18.7
Homicide (X85-Y09, Y87.1)	109	3.3	36	7.0	4	2.9	3	2.3
Undetermined intent (Y10-Y34, Y87.2, Y89.9)	58	1.8	15	2.9	5	3.7	2	1.6

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

Table 6-38. Selected Causes of Death by County, Oregon Residents, 1999

Selected Causes of Death (and their ICD-10 codes)	Baker		Benton		Clackamas		Clatsop	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	208	1245.5	456	591.4	2,449	749.3	379	1090.6
Infections & parasitic disease (A00-B99)	2	12.0	2	2.6	33	10.1	2	5.8
Septicemia (A40-A41)	1	6.0	—	—	15	4.6	—	—
Viral Hepatitis (B15-B19)	1	6.0	1	1.3	3	0.9	1	2.9
HIV disease (B20-B24)	—	—	1	1.3	2	0.6	—	—
Malignant neoplasms (C00-C97)	43	257.5	123	159.5	626	191.5	95	273.4
Colon (C18)	2	12.0	10	13.0	56	17.1	9	25.9
Pancreas (C25)	2	12.0	8	10.4	31	9.5	7	20.1
Bronchus & lung (C34)	11	65.9	34	44.1	169	51.7	32	92.1
Skin (C43-44)	—	—	1	1.3	19	5.8	1	2.9
Breast (C50)	4	24.0	10	13.0	35	10.7	7	20.1
Cervical (C53)	—	—	1	1.3	—	—	—	—
Uterine (C54)	—	—	—	—	4	1.2	1	2.9
Ovarian (C56)	1	6.0	5	6.5	16	4.9	5	14.4
Prostate (C61)	3	18.0	9	11.7	38	11.6	8	23.0
Kidney & renal pelvis (C64-C65)	2	12.0	2	2.6	7	2.1	1	2.9
Bladder (C67)	—	—	—	—	15	4.6	2	5.8
Brain (C70-C72)	—	—	5	6.5	16	4.9	1	2.9
Lymphatic (C81-C96)	1	6.0	14	18.2	78	23.9	5	14.4
Non-Hodgkin's lymphoma (C82-C85)	1	6.0	6	7.8	30	9.2	2	5.8
Leukemia (C91-C95)	—	—	6	7.8	30	9.2	1	2.9
Benign & uncertain neoplasms (D00-D48)	—	—	2	2.6	20	6.1	3	8.6
Diabetes mellitus (E10-E14)	3	18.0	10	13.0	64	19.6	10	28.8
Organic dementia (F01, F03)	2	12.0	3	3.9	45	13.8	4	11.5
Parkinson's disease (G20-G21)	—	—	4	5.2	25	7.6	3	8.6
Alzheimer's disease (G30)	2	12.0	23	29.8	81	24.8	5	14.4
Alcohol-induced deaths ²	2	12.0	3	3.9	24	7.3	5	14.4
Diseases of circulatory system (I00-I99)	88	526.9	163	211.4	918	280.9	147	423.0
Hypertension/hyperten. renal dis. (I10, I12)	2	12.0	3	3.9	20	6.1	1	2.9
Heart Disease (I00-I09, I11, I13, I20-I51)	66	395.2	113	146.6	629	192.4	111	319.4
Ischemic heart disease (I20-I25)	52	311.4	80	103.8	447	136.8	82	236.0
Myocardial infarction (I21-I22)	21	125.7	30	38.9	134	41.0	27	77.7
Cerebrovascular disease (I60-I69)	16	95.8	41	53.2	227	69.5	28	80.6
Subarachnoid hemorrhage (I60)	—	—	—	—	7	2.1	—	—
Intracerebral hemorrhage, etc. (I61-I62)	2	12.0	3	3.9	25	7.6	3	8.6
Cerebral infarction (I63)	—	—	1	1.3	14	4.3	—	—
Stroke of unspecified type (I64)	6	35.9	17	22.0	128	39.2	15	43.2
Aortic aneurysm (I71)	1	6.0	3	3.9	13	4.0	4	11.5
Influenza & pneumonia (J10-J18)	8	47.9	12	15.6	83	25.4	6	17.3
Chronic lower respiratory diseases (J40-J47)	15	89.8	25	32.4	120	36.7	22	63.3
Diseases of the digestive system (K00-K92)	4	24.0	18	23.3	67	20.5	24	69.1
Diseases of the genitourinary sys. (N00-N99)	3	18.0	8	10.4	34	10.4	5	14.4
Nephritis (N00-N07, N17-N19, N25-N27)	3	18.0	3	3.9	23	7.0	4	11.5
Perinatal conditions (P00-P96)	—	—	2	2.6	3	0.9	1	2.9
Congenital malformations (Q00-Q99)	2	12.0	5	6.5	13	4.0	1	2.9
Sudden infant death syndrome (R95)	—	—	—	—	1	0.3	1	2.9
Unintentional injuries (V01-X59, Y85-Y86)	11	65.9	15	19.5	94	28.8	18	51.8
Suicide (X60-X84, Y87.0)	4	24.0	6	7.8	35	10.7	4	11.5
Homicide (X85-Y09, Y87.1)	2	12.0	1	1.3	5	1.5	2	5.8
Undetermined intent (Y10-Y34, Y87.2)	—	—	1	1.3	5	1.5	—	—

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

Table 6-38. Selected Causes of Death by County, Oregon Residents, 1999 — Continued

Selected Causes of Death (and their ICD-10 codes)	Columbia		Coos		Crook		Curry	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	371	869.9	841	1370.8	170	1011.9	332	1505.7
Infections & parasitic disease (A00-B99)	3	7.0	13	21.2	1	6.0	3	13.6
Septicemia (A40-A41)	1	2.3	8	13.0	—	—	2	9.1
Viral Hepatitis (B15-B19)	—	—	1	1.6	—	—	—	—
HIV disease (B20-B24)	1	2.3	1	1.6	—	—	—	—
Malignant neoplasms (C00-C97)	118	276.7	213	347.2	43	256.0	72	326.5
Colon (C18)	6	14.1	16	26.1	7	41.7	7	31.7
Pancreas (C25)	5	11.7	11	17.9	3	17.9	4	18.1
Bronchus & lung (C34)	39	91.4	67	109.2	8	47.6	24	108.8
Skin (C43-44)	2	4.7	4	6.5	—	—	—	—
Breast (C50)	4	9.4	17	27.7	3	17.9	6	27.2
Cervical (C53)	1	2.3	2	3.3	1	6.0	—	—
Uterine (C54)	—	—	—	—	1	6.0	—	—
Ovarian (C56)	3	7.0	5	8.1	2	11.9	—	—
Prostate (C61)	4	9.4	12	19.6	3	17.9	2	9.1
Kidney & renal pelvis (C64-C65)	5	11.7	4	6.5	—	—	1	4.5
Bladder (C67)	1	2.3	6	9.8	1	6.0	4	18.1
Brain (C70-C72)	2	4.7	4	6.5	—	—	—	—
Lymphatic (C81-C96)	14	32.8	11	17.9	5	29.8	4	18.1
Non-Hodgkin's lymphoma (C82-C85)	8	18.8	2	3.3	1	6.0	4	18.1
Leukemia (C91-C95)	4	9.4	7	11.4	3	17.9	—	—
Benign & uncertain neoplasms (D00-D48)	2	4.7	4	6.5	—	—	3	13.6
Diabetes mellitus (E10-E14)	13	30.5	29	47.3	4	23.8	10	45.4
Organic dementia (F01, F03)	4	9.4	15	24.4	—	—	4	18.1
Parkinson's disease (G20-G21)	1	2.3	7	11.4	3	17.9	3	13.6
Alzheimer's disease (G30)	13	30.5	35	57.0	3	17.9	11	49.9
Alcohol-induced deaths ²	2	4.7	7	11.4	1	6.0	6	27.2
Diseases of circulatory system (I00-I99)	114	267.3	323	526.5	76	452.4	148	671.2
Hypertension/hyperten. renal dis. (I10, I12)	4	9.4	11	17.9	—	—	6	27.2
Heart Disease (I00-I09, I11, I13, I20-I51)	80	187.6	229	373.3	53	315.5	105	476.2
Ischemic heart disease (I20-I25)	53	124.3	153	249.4	40	238.1	85	385.5
Myocardial infarction (I21-I22)	16	37.5	42	68.5	9	53.6	30	136.1
Cerebrovascular disease (I60-I69)	24	56.3	62	101.1	11	65.5	25	113.4
Subarachnoid hemorrhage (I60)	—	—	1	1.6	—	—	—	—
Intracerebral hemorrhage, etc. (I61-I62)	3	7.0	6	9.8	1	6.0	—	—
Cerebral infarction (I63)	1	2.3	4	6.5	3	17.9	4	18.1
Stroke of unspecified type (I64)	18	42.2	39	63.6	4	23.8	18	81.6
Aortic aneurysm (I71)	2	4.7	7	11.4	—	—	7	31.7
Influenza & pneumonia (J10-J18)	10	23.4	10	16.3	3	17.9	3	13.6
Chronic lower respiratory diseases (J40-J47)	29	68.0	57	92.9	12	71.4	18	81.6
Diseases of the digestive system (K00-K92)	9	21.1	21	34.2	2	11.9	11	49.9
Diseases of the genitourinary sys. (N00-N99)	5	11.7	14	22.8	2	11.9	3	13.6
Nephritis (N00-N07, N17-N19, N25-N27)	3	7.0	8	13.0	1	6.0	1	4.5
Perinatal conditions (P00-P96)	—	—	4	6.5	1	6.0	—	—
Congenital malformations (Q00-Q99)	2	4.7	6	9.8	2	11.9	1	4.5
Sudden infant death syndrome (R95)	2	4.7	1	1.6	—	—	—	—
Unintentional injuries (V01-X59, Y85-Y86)	9	21.1	27	44.0	5	29.8	6	27.2
Suicide (X60-X84, Y87.0)	9	21.1	11	17.9	3	17.9	9	40.8
Homicide (X85-Y09, Y87.1)	1	2.3	1	1.6	—	—	—	—
Undetermined intent (Y10-Y34, Y87.2)	1	2.3	—	—	—	—	—	—

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

Table 6-38. Selected Causes of Death by County, Oregon Residents, 1999 — Continued

Selected Causes of Death (and their ICD-10 codes)	Deschutes		Douglas		Gilliam		Grant	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	840	787.3	1,168	1158.2	18	857.1	92	1150.0
Infections & parasitic disease (A00-B99)	13	12.2	23	22.8	—	—	—	—
Septicemia (A40-A41)	7	6.6	13	12.9	—	—	—	—
Viral Hepatitis (B15-B19)	1	0.9	2	2.0	—	—	—	—
HIV disease (B20-B24)	2	1.9	3	3.0	—	—	—	—
Malignant neoplasms (C00-C97)	204	191.2	271	268.7	4	190.5	23	287.5
Colon (C18)	14	13.1	19	18.8	1	47.6	4	50.0
Pancreas (C25)	8	7.5	15	14.9	1	47.6	—	—
Bronchus & lung (C34)	55	51.5	92	91.2	—	—	5	62.5
Skin (C43-44)	5	4.7	3	3.0	—	—	1	12.5
Breast (C50)	17	15.9	12	11.9	—	—	1	12.5
Cervical (C53)	—	—	2	2.0	—	—	—	—
Uterine (C54)	2	1.9	—	—	—	—	—	—
Ovarian (C56)	7	6.6	9	8.9	—	—	1	12.5
Prostate (C61)	11	10.3	22	21.8	—	—	1	12.5
Kidney & renal pelvis (C64-C65)	3	2.8	5	5.0	—	—	1	12.5
Bladder (C67)	6	5.6	10	9.9	—	—	2	25.0
Brain (C70-C72)	9	8.4	4	4.0	—	—	1	12.5
Lymphatic (C81-C96)	20	18.7	25	24.8	2	95.2	2	25.0
Non-Hodgkin's lymphoma (C82-C85)	5	4.7	11	10.9	1	47.6	2	25.0
Leukemia (C91-C95)	9	8.4	10	9.9	1	47.6	—	—
Benign & uncertain neoplasms (D00-D48)	12	11.2	7	6.9	—	—	—	—
Diabetes mellitus (E10-E14)	22	20.6	42	41.6	—	—	1	12.5
Organic dementia (F01, F03)	13	12.2	17	16.9	—	—	—	—
Parkinson's disease (G20-G21)	6	5.6	9	8.9	—	—	1	12.5
Alzheimer's disease (G30)	14	13.1	25	24.8	2	95.2	1	12.5
Alcohol-induced deaths ²	7	6.6	19	18.8	—	—	—	—
Diseases of circulatory system (I00-I99)	316	296.2	423	419.4	5	238.1	34	425.0
Hypertension/hyperten. renal dis. (I10, I12)	7	6.6	11	10.9	—	—	1	12.5
Heart Disease (I00-I09, I11, I13, I20-I51)	209	195.9	318	315.3	3	142.9	24	300.0
Ischemic heart disease (I20-I25)	142	133.1	228	226.1	2	95.2	15	187.5
Myocardial infarction (I21-I22)	43	40.3	69	68.4	1	47.6	9	112.5
Cerebrovascular disease (I60-I69)	79	74.0	73	72.4	2	95.2	6	75.0
Subarachnoid hemorrhage (I60)	3	2.8	—	—	—	—	—	—
Intracerebral hemorrhage, etc. (I61-I62)	8	7.5	7	6.9	—	—	—	—
Cerebral infarction (I63)	4	3.7	8	7.9	—	—	—	—
Stroke of unspecified type (I64)	44	41.2	45	44.6	1	47.6	6	75.0
Aortic aneurysm (I71)	11	10.3	11	10.9	—	—	1	12.5
Influenza & pneumonia (J10-J18)	17	15.9	24	23.8	1	47.6	2	25.0
Chronic lower respiratory diseases (J40-J47)	63	59.0	90	89.2	3	142.9	11	137.5
Diseases of the digestive system (K00-K92)	25	23.4	39	38.7	—	—	1	12.5
Diseases of the genitourinary sys. (N00-N99)	19	17.8	21	20.8	1	47.6	3	37.5
Nephritis (N00-N07, N17-N19, N25-N27)	11	10.3	13	12.9	—	—	1	12.5
Perinatal conditions (P00-P96)	5	4.7	4	4.0	—	—	1	12.5
Congenital malformations (Q00-Q99)	4	3.7	7	6.9	—	—	—	—
Sudden infant death syndrome (R95)	—	—	1	1.0	—	—	—	—
Unintentional injuries (V01-X59, Y85-Y86)	39	36.6	52	51.6	—	—	6	75.0
Suicide (X60-X84, Y87.0)	17	15.9	21	20.8	2	95.2	1	12.5
Homicide (X85-Y09, Y87.1)	4	3.7	4	4.0	—	—	—	—
Undetermined intent (Y10-Y34, Y87.2)	—	—	4	4.0	—	—	—	—

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

Table 6-38. Selected Causes of Death by County, Oregon Residents, 1999 — Continued

Selected Causes of Death (and their ICD-10 codes)	Harney		Hood River		Jackson		Jefferson	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	82	1078.9	162	822.3	1,804	1033.5	155	878.2
Infections & parasitic disease (A00-B99)	1	13.2	4	20.3	14	8.0	2	11.3
Septicemia (A40-A41)	1	13.2	4	20.3	4	2.3	1	5.7
Viral Hepatitis (B15-B19)	—	—	—	—	3	1.7	—	—
HIV disease (B20-B24)	—	—	—	—	4	2.3	—	—
Malignant neoplasms (C00-C97)	19	250.0	38	192.9	418	239.5	27	153.0
Colon (C18)	1	13.2	5	25.4	30	17.2	2	11.3
Pancreas (C25)	4	52.6	—	—	20	11.5	2	11.3
Bronchus & lung (C34)	4	52.6	7	35.5	111	63.6	4	22.7
Skin (C43-44)	—	—	—	—	13	7.4	—	—
Breast (C50)	2	26.3	7	35.5	35	20.1	1	5.7
Cervical (C53)	—	—	—	—	2	1.1	—	—
Uterine (C54)	—	—	—	—	1	0.6	—	—
Ovarian (C56)	—	—	4	20.3	14	8.0	2	11.3
Prostate (C61)	2	26.3	3	15.2	37	21.2	3	17.0
Kidney & renal pelvis (C64-C65)	1	13.2	—	—	6	3.4	1	5.7
Bladder (C67)	—	—	—	—	15	8.6	1	5.7
Brain (C70-C72)	—	—	1	5.1	10	5.7	1	5.7
Lymphatic (C81-C96)	3	39.5	3	15.2	43	24.6	4	22.7
Non-Hodgkin's lymphoma (C82-C85)	1	13.2	2	10.2	13	7.4	1	5.7
Leukemia (C91-C95)	2	26.3	1	5.1	14	8.0	1	5.7
Benign & uncertain neoplasms (D00-D48)	—	—	—	—	16	9.2	—	—
Diabetes mellitus (E10-E14)	3	39.5	8	40.6	37	21.2	4	22.7
Organic dementia (F01, F03)	3	39.5	3	15.2	52	29.8	3	17.0
Parkinson's disease (G20-G21)	1	13.2	1	5.1	16	9.2	—	—
Alzheimer's disease (G30)	1	13.2	6	30.5	74	42.4	2	11.3
Alcohol-induced deaths ²	—	—	1	5.1	20	11.5	—	—
Diseases of circulatory system (I00-I99)	28	368.4	53	269.0	683	391.3	65	368.3
Hypertension/hyperten. renal dis. (I10, I12)	—	—	2	10.2	13	7.4	2	11.3
Heart Disease (I00-I09, I11, I13, I20-I51) ...	21	276.3	32	162.4	453	259.5	48	272.0
Ischemic heart disease (I20-I25)	11	144.7	20	101.5	311	178.2	38	215.3
Myocardial infarction (I21-I22)	6	78.9	7	35.5	81	46.4	10	56.7
Cerebrovascular disease (I60-I69)	6	78.9	11	55.8	191	109.4	11	62.3
Subarachnoid hemorrhage (I60)	—	—	1	5.1	2	1.1	—	—
Intracerebral hemorrhage, etc. (I61-I62)	—	—	1	5.1	24	13.7	1	5.7
Cerebral infarction (I63)	—	—	1	5.1	19	10.9	1	5.7
Stroke of unspecified type (I64)	5	65.8	7	35.5	111	63.6	4	22.7
Aortic aneurysm (I71)	1	13.2	1	5.1	11	6.3	1	5.7
Influenza & pneumonia (J10-J18)	4	52.6	2	10.2	34	19.5	6	34.0
Chronic lower respiratory diseases (J40-J47)	5	65.8	11	55.8	119	68.2	4	22.7
Diseases of the digestive system (K00-K92) ..	3	39.5	5	25.4	51	29.2	8	45.3
Diseases of the genitourinary sys. (N00-N99) ..	—	—	5	25.4	20	11.5	2	11.3
Nephritis (N00-N07, N17-N19, N25-N27)	—	—	4	20.3	10	5.7	2	11.3
Perinatal conditions (P00-P96)	—	—	1	5.1	5	2.9	1	5.7
Congenital malformations (Q00-Q99)	—	—	4	20.3	10	5.7	—	—
Sudden infant death syndrome (R95)	—	—	—	—	—	—	—	—
Unintentional injuries (V01-X59, Y85-Y86)	2	26.3	3	15.2	73	41.8	17	96.3
Suicide (X60-X84, Y87.0)	4	52.6	3	15.2	35	20.1	2	11.3
Homicide (X85-Y09, Y87.1)	—	—	—	—	5	2.9	2	11.3
Undetermined intent (Y10-Y34, Y87.2)	—	—	—	—	1	0.6	—	—

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

Table 6-38. Selected Causes of Death by County, Oregon Residents, 1999 — Continued

Selected Causes of Death (and their ICD-10 codes)	Josephine		Klamath		Lake		Lane	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	963	1312.0	668	1072.2	90	1216.2	2,821	893.6
Infections & parasitic disease (A00-B99)	9	12.3	6	9.6	2	27.0	30	9.5
Septicemia (A40-A41)	6	8.2	3	4.8	—	—	17	5.4
Viral Hepatitis (B15-B19)	1	1.4	—	—	—	—	4	1.3
HIV disease (B20-B24)	1	1.4	1	1.6	—	—	1	0.3
Malignant neoplasms (C00-C97)	231	314.7	155	248.8	19	256.8	663	210.0
Colon (C18)	18	24.5	9	14.4	1	13.5	39	12.4
Pancreas (C25)	12	16.3	13	20.9	—	—	39	12.4
Bronchus & lung (C34)	64	87.2	46	73.8	4	54.1	179	56.7
Skin (C43-44)	5	6.8	5	8.0	—	—	11	3.5
Breast (C50)	15	20.4	10	16.1	5	67.6	57	18.1
Cervical (C53)	3	4.1	—	—	—	—	5	1.6
Uterine (C54)	—	—	—	—	—	—	4	1.3
Ovarian (C56)	5	6.8	3	4.8	—	—	20	6.3
Prostate (C61)	15	20.4	8	12.8	1	13.5	44	13.9
Kidney & renal pelvis (C64-C65)	5	6.8	1	1.6	—	—	25	7.9
Bladder (C67)	5	6.8	3	4.8	1	13.5	20	6.3
Brain (C70-C72)	7	9.5	8	12.8	1	13.5	13	4.1
Lymphatic (C81-C96)	26	35.4	13	20.9	2	27.0	69	21.9
Non-Hodgkin's lymphoma (C82-C85)	16	21.8	7	11.2	1	13.5	25	7.9
Leukemia (C91-C95)	5	6.8	4	6.4	—	—	21	6.7
Benign & uncertain neoplasms (D00-D48)	5	6.8	5	8.0	1	13.5	18	5.7
Diabetes mellitus (E10-E14)	19	25.9	20	32.1	3	40.5	85	26.9
Organic dementia (F01, F03)	23	31.3	6	9.6	2	27.0	54	17.1
Parkinson's disease (G20-G21)	7	9.5	8	12.8	—	—	35	11.1
Alzheimer's disease (G30)	22	30.0	15	24.1	1	13.5	91	28.8
Alcohol-induced deaths ²	11	15.0	10	16.1	—	—	27	8.6
Diseases of circulatory system (I00-I99)	376	512.3	252	404.5	36	486.5	1,011	320.2
Hypertension/hyperten. renal dis. (I10, I12)	12	16.3	6	9.6	—	—	20	6.3
Heart Disease (I00-I09, I11, I13, I20-I51)	278	378.7	174	279.3	27	364.9	644	204.0
Ischemic heart disease (I20-I25)	215	292.9	126	202.2	22	297.3	408	129.2
Myocardial infarction (I21-I22)	62	84.5	68	109.1	12	162.2	134	42.4
Cerebrovascular disease (I60-I69)	73	99.5	66	105.9	6	81.1	286	90.6
Subarachnoid hemorrhage (I60)	2	2.7	3	4.8	1	13.5	20	6.3
Intracerebral hemorrhage, etc. (I61-I62)	10	13.6	10	16.1	1	13.5	49	15.5
Cerebral infarction (I63)	4	5.4	3	4.8	—	—	12	3.8
Stroke of unspecified type (I64)	42	57.2	36	57.8	4	54.1	144	45.6
Aortic aneurysm (I71)	3	4.1	2	3.2	2	27.0	27	8.6
Influenza & pneumonia (J10-J18)	17	23.2	14	22.5	—	—	63	20.0
Chronic lower respiratory diseases (J40-J47)	73	99.5	53	85.1	4	54.1	156	49.4
Diseases of the digestive system (K00-K92)	34	46.3	22	35.3	4	54.1	92	29.1
Diseases of the genitourinary sys. (N00-N99)	10	13.6	3	4.8	1	13.5	40	12.7
Nephritis (N00-N07, N17-N19, N25-N27)	7	9.5	1	1.6	1	13.5	26	8.2
Perinatal conditions (P00-P96)	2	2.7	2	3.2	1	13.5	12	3.8
Congenital malformations (Q00-Q99)	2	2.7	2	3.2	1	13.5	12	3.8
Sudden infant death syndrome (R95)	—	—	2	3.2	—	—	2	0.6
Unintentional injuries (V01-X59, Y85-Y86)	35	47.7	23	36.9	4	54.1	124	39.3
Suicide (X60-X84, Y87.0)	17	23.2	11	17.7	3	40.5	45	14.3
Homicide (X85-Y09, Y87.1)	3	4.1	1	1.6	1	13.5	6	1.9
Undetermined intent (Y10-Y34, Y87.2)	1	1.4	—	—	1	13.5	13	4.1

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

Table 6-38. Selected Causes of Death by County, Oregon Residents, 1999 — Continued

Selected Causes of Death (and their ICD-10 codes)	Lincoln		Linn		Malheur		Marion	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	543	1252.6	1,006	976.7	245	798.0	2,436	885.0
Infections & parasitic disease (A00-B99)	10	23.1	14	13.6	—	—	40	14.5
Septicemia (A40-A41)	4	9.2	7	6.8	—	—	18	6.5
Viral Hepatitis (B15-B19)	—	—	2	1.9	—	—	2	0.7
HIV disease (B20-B24)	1	2.3	1	1.0	—	—	9	3.3
Malignant neoplasms (C00-C97)	139	320.6	243	235.9	53	172.6	578	210.0
Colon (C18)	12	27.7	19	18.4	3	9.8	54	19.6
Pancreas (C25)	7	16.1	10	9.7	3	9.8	34	12.4
Bronchus & lung (C34)	34	78.4	65	63.1	13	42.3	156	56.7
Skin (C43-44)	6	13.8	4	3.9	1	3.3	10	3.6
Breast (C50)	6	13.8	20	19.4	4	13.0	45	16.3
Cervical (C53)	—	—	—	—	—	—	6	2.2
Uterine (C54)	—	—	2	1.9	—	—	3	1.1
Ovarian (C56)	2	4.6	6	5.8	2	6.5	16	5.8
Prostate (C61)	17	39.2	19	18.4	3	9.8	27	9.8
Kidney & renal pelvis (C64-C65)	3	6.9	1	1.0	—	—	15	5.4
Bladder (C67)	1	2.3	12	11.7	1	3.3	8	2.9
Brain (C70-C72)	8	18.5	3	2.9	—	—	15	5.4
Lymphatic (C81-C96)	14	32.3	27	26.2	7	22.8	64	23.3
Non-Hodgkin's lymphoma (C82-C85)	6	13.8	13	12.6	3	9.8	30	10.9
Leukemia (C91-C95)	5	11.5	7	6.8	2	6.5	22	8.0
Benign & uncertain neoplasms (D00-D48)	2	4.6	3	2.9	2	6.5	13	4.7
Diabetes mellitus (E10-E14)	17	39.2	30	29.1	5	16.3	58	21.1
Organic dementia (F01, F03)	5	11.5	14	13.6	3	9.8	43	15.6
Parkinson's disease (G20-G21)	1	2.3	8	7.8	—	—	21	7.6
Alzheimer's disease (G30)	14	32.3	23	22.3	8	26.1	44	16.0
Alcohol-induced deaths ²	9	20.8	9	8.7	3	9.8	15	5.4
Diseases of circulatory system (I00-I99)	184	424.5	382	370.9	94	306.2	992	360.4
Hypertension/hyperten. renal dis. (I10, I12)	4	9.2	13	12.6	1	3.3	17	6.2
Heart Disease (I00-I09, I11, I13, I20-I51)	116	267.6	238	231.1	66	215.0	579	210.4
Ischemic heart disease (I20-I25)	77	177.6	158	153.4	49	159.6	370	134.4
Myocardial infarction (I21-I22)	32	73.8	72	69.9	22	71.7	163	59.2
Cerebrovascular disease (I60-I69)	49	113.0	115	111.7	22	71.7	354	128.6
Subarachnoid hemorrhage (I60)	2	4.6	5	4.9	1	3.3	5	1.8
Intracerebral hemorrhage, etc. (I61-I62)	4	9.2	9	8.7	2	6.5	34	12.4
Cerebral infarction (I63)	4	9.2	9	8.7	1	3.3	30	10.9
Stroke of unspecified type (I64)	26	60.0	63	61.2	13	42.3	105	38.1
Aortic aneurysm (I71)	5	11.5	9	8.7	3	9.8	23	8.4
Influenza & pneumonia (J10-J18)	10	23.1	18	17.5	6	19.5	61	22.2
Chronic lower respiratory diseases (J40-J47)	38	87.7	70	68.0	11	35.8	115	41.8
Diseases of the digestive system (K00-K92)	22	50.7	26	25.2	8	26.1	85	30.9
Diseases of the genitourinary sys. (N00-N99)	7	16.1	13	12.6	8	26.1	37	13.4
Nephritis (N00-N07, N17-N19, N25-N27)	5	11.5	11	10.7	5	16.3	22	8.0
Perinatal conditions (P00-P96)	2	4.6	6	5.8	1	3.3	11	4.0
Congenital malformations (Q00-Q99)	6	13.8	7	6.8	2	6.5	15	5.4
Sudden infant death syndrome (R95)	—	—	—	—	—	—	4	1.5
Unintentional injuries (V01-X59, Y85-Y86)	24	55.4	40	38.8	11	35.8	78	28.3
Suicide (X60-X84, Y87.0)	9	20.8	15	14.6	4	13.0	38	13.8
Homicide (X85-Y09, Y87.1)	1	2.3	4	3.9	1	3.3	5	1.8
Undetermined intent (Y10-Y34, Y87.2)	1	2.3	—	—	1	3.3	4	1.5

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

Table 6-38. Selected Causes of Death by County, Oregon Residents, 1999 — Continued

Selected Causes of Death (and their ICD-10 codes)	Morrow		Multnomah		Polk		Sherman	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	76	795.8	5,690	879.6	509	846.9	20	1052.6
Infections & parasitic disease (A00-B99)	4	41.9	129	19.9	10	16.6	—	—
Septicemia (A40-A41)	4	41.9	37	5.7	4	6.7	—	—
Viral Hepatitis (B15-B19)	—	—	17	2.6	—	—	—	—
HIV disease (B20-B24)	—	—	36	5.6	2	3.3	—	—
Malignant neoplasms (C00-C97)	15	157.1	1,250	193.2	103	171.4	3	157.9
Colon (C18)	2	20.9	95	14.7	10	16.6	—	—
Pancreas (C25)	2	20.9	79	12.2	3	5.0	—	—
Bronchus & lung (C34)	2	20.9	342	52.9	28	46.6	1	52.6
Skin (C43-44)	1	10.5	16	2.5	3	5.0	—	—
Breast (C50)	1	10.5	97	15.0	4	6.7	—	—
Cervical (C53)	—	—	8	1.2	1	1.7	—	—
Uterine (C54)	—	—	11	1.7	1	1.7	—	—
Ovarian (C56)	—	—	21	3.2	3	5.0	—	—
Prostate (C61)	1	10.5	58	9.0	12	20.0	1	52.6
Kidney & renal pelvis (C64-C65)	—	—	26	4.0	—	—	—	—
Bladder (C67)	—	—	25	3.9	1	1.7	—	—
Brain (C70-C72)	—	—	27	4.2	1	1.7	—	—
Lymphatic (C81-C96)	3	31.4	145	22.4	11	18.3	—	—
Non-Hodgkin's lymphoma (C82-C85)	1	10.5	62	9.6	6	10.0	—	—
Leukemia (C91-C95)	1	10.5	52	8.0	3	5.0	—	—
Benign & uncertain neoplasms (D00-D48)	1	10.5	38	5.9	9	15.0	—	—
Diabetes mellitus (E10-E14)	2	20.9	201	31.1	10	16.6	1	52.6
Organic dementia (F01, F03)	—	—	117	18.1	4	6.7	1	52.6
Parkinson's disease (G20-G21)	—	—	56	8.7	6	10.0	—	—
Alzheimer's disease (G30)	2	20.9	183	28.3	9	15.0	—	—
Alcohol-induced deaths ²	3	31.4	77	11.9	5	8.3	—	—
Diseases of circulatory system (I00-I99)	22	230.4	2,004	309.8	236	392.7	10	526.3
Hypertension/hyperten. renal dis. (I10, I12)	—	—	47	7.3	10	16.6	—	—
Heart Disease (I00-I09, I11, I13, I20-I51)	17	178.0	1,338	206.8	138	229.6	7	368.4
Ischemic heart disease (I20-I25)	8	83.8	896	138.5	98	163.1	6	315.8
Myocardial infarction (I21-I22)	4	41.9	305	47.2	30	49.9	2	105.3
Cerebrovascular disease (I60-I69)	5	52.4	511	79.0	76	126.5	3	157.9
Subarachnoid hemorrhage (I60)	1	10.5	9	1.4	2	3.3	—	—
Intracerebral hemorrhage, etc. (I61-I62)	1	10.5	71	11.0	5	8.3	1	52.6
Cerebral infarction (I63)	—	—	51	7.9	6	10.0	—	—
Stroke of unspecified type (I64)	1	10.5	275	42.5	16	26.6	2	105.3
Aortic aneurysm (I71)	—	—	45	7.0	6	10.0	—	—
Influenza & pneumonia (J10-J18)	3	31.4	126	19.5	4	6.7	—	—
Chronic lower respiratory diseases (J40-J47)	6	62.8	313	48.4	24	39.9	2	105.3
Diseases of the digestive system (K00-K92)	3	31.4	213	32.9	23	38.3	1	52.6
Diseases of the genitourinary sys. (N00-N99)	1	10.5	87	13.4	6	10.0	—	—
Nephritis (N00-N07, N17-N19, N25-N27)	—	—	52	8.0	3	5.0	—	—
Perinatal conditions (P00-P96)	1	10.5	20	3.1	3	5.0	—	—
Congenital malformations (Q00-Q99)	2	20.9	28	4.3	1	1.7	—	—
Sudden infant death syndrome (R95)	—	—	5	0.8	—	—	—	—
Unintentional injuries (V01-X59, Y85-Y86)	4	41.9	224	34.6	11	18.3	1	52.6
Suicide (X60-X84, Y87.0)	2	20.9	104	16.1	7	11.6	1	52.6
Homicide (X85-Y09, Y87.1)	—	—	39	6.0	2	3.3	—	—
Undetermined intent (Y10-Y34, Y87.2)	—	—	17	2.6	—	—	—	—

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

Table 6-38. Selected Causes of Death by County, Oregon Residents, 1999 — Continued

Selected Causes of Death (and their ICD-10 codes)	Tillamook		Umatilla		Union		Wallowa	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	306	1269.7	599	880.9	248	1012.2	84	1166.7
Infections & parasitic disease (A00-B99)	3	12.4	7	10.3	1	4.1	—	—
Septicemia (A40-A41)	1	4.1	3	4.4	—	—	—	—
Viral Hepatitis (B15-B19)	—	—	1	1.5	—	—	—	—
HIV disease (B20-B24)	1	4.1	1	1.5	1	4.1	—	—
Malignant neoplasms (C00-C97)	75	311.2	158	232.4	50	204.1	20	277.8
Colon (C18)	8	33.2	15	22.1	7	28.6	—	—
Pancreas (C25)	4	16.6	9	13.2	—	—	2	27.8
Bronchus & lung (C34)	26	107.9	45	66.2	10	40.8	5	69.4
Skin (C43-44)	2	8.3	4	5.9	2	8.2	—	—
Breast (C50)	3	12.4	11	16.2	8	32.7	2	27.8
Cervical (C53)	—	—	—	—	—	—	—	—
Uterine (C54)	—	—	—	—	1	4.1	—	—
Ovarian (C56)	3	12.4	4	5.9	—	—	—	—
Prostate (C61)	7	29.0	14	20.6	4	16.3	1	13.9
Kidney & renal pelvis (C64-C65)	2	8.3	2	2.9	—	—	1	13.9
Bladder (C67)	3	12.4	3	4.4	1	4.1	1	13.9
Brain (C70-C72)	—	—	1	1.5	—	—	—	—
Lymphatic (C81-C96)	7	29.0	14	20.6	6	24.5	1	13.9
Non-Hodgkin's lymphoma (C82-C85)	3	12.4	6	8.8	2	8.2	—	—
Leukemia (C91-C95)	3	12.4	6	8.8	2	8.2	—	—
Benign & uncertain neoplasms (D00-D48)	1	4.1	4	5.9	2	8.2	—	—
Diabetes mellitus (E10-E14)	5	20.7	22	32.4	8	32.7	3	41.7
Organic dementia (F01, F03)	4	16.6	4	5.9	1	4.1	1	13.9
Parkinson's disease (G20-G21)	3	12.4	1	1.5	—	—	—	—
Alzheimer's disease (G30)	3	12.4	16	23.5	5	20.4	1	13.9
Alcohol-induced deaths ²	3	12.4	11	16.2	2	8.2	1	13.9
Diseases of circulatory system (I00-I99)	113	468.9	178	261.8	92	375.5	30	416.7
Hypertension/hyperten. renal dis. (I10, I12)	4	16.6	6	8.8	2	8.2	—	—
Heart Disease (I00-I09, I11, I13, I20-I51) ...	73	302.9	125	183.8	61	249.0	24	333.3
Ischemic heart disease (I20-I25)	56	232.4	92	135.3	43	175.5	20	277.8
Myocardial infarction (I21-I22)	15	62.2	50	73.5	8	32.7	1	13.9
Cerebrovascular disease (I60-I69)	28	116.2	39	57.4	21	85.7	5	69.4
Subarachnoid hemorrhage (I60)	1	4.1	—	—	—	—	1	13.9
Intracerebral hemorrhage, etc. (I61-I62)	4	16.6	7	10.3	3	12.2	2	27.8
Cerebral infarction (I63)	—	—	2	2.9	—	—	—	—
Stroke of unspecified type (I64)	17	70.5	23	33.8	16	65.3	2	27.8
Aortic aneurysm (I71)	3	12.4	4	5.9	5	20.4	—	—
Influenza & pneumonia (J10-J18)	11	45.6	21	30.9	8	32.7	2	27.8
Chronic lower respiratory diseases (J40-J47)	32	132.8	35	51.5	21	85.7	6	83.3
Diseases of the digestive system (K00-K92) ..	11	45.6	28	41.2	11	44.9	2	27.8
Diseases of the genitourinary sys. (N00-N99) ..	2	8.3	8	11.8	6	24.5	3	41.7
Nephritis (N00-N07, N17-N19, N25-N27)	1	4.1	4	5.9	6	24.5	3	41.7
Perinatal conditions (P00-P96)	1	4.1	3	4.4	—	—	—	—
Congenital malformations (Q00-Q99)	—	—	3	4.4	—	—	1	13.9
Sudden infant death syndrome (R95)	1	4.1	1	1.5	—	—	—	—
Unintentional injuries (V01-X59, Y85-Y86)	7	29.0	26	38.2	8	32.7	4	55.6
Suicide (X60-X84, Y87.0)	6	24.9	8	11.8	4	16.3	2	27.8
Homicide (X85-Y09, Y87.1)	3	12.4	5	7.4	—	—	—	—
Undetermined intent (Y10-Y34, Y87.2)	—	—	—	—	2	8.2	—	—

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

Table 6-38. Selected Causes of Death by County, Oregon Residents, 1999 — Continued

Selected Causes of Death (and their ICD-10 codes)	Wasco		Washington		Wheeler		Yamhill	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Total	294	1298.0	2,535	626.3	19	1187.5	677	814.7
Infections & parasitic disease (A00-B99)	4	17.7	35	8.6	—	—	9	10.8
Septicemia (A40-A41)	2	8.8	22	5.4	—	—	3	3.6
Viral Hepatitis (B15-B19)	—	—	2	0.5	—	—	3	3.6
HIV disease (B20-B24)	—	—	4	1.0	—	—	—	—
Malignant neoplasms (C00-C97)	62	273.7	583	144.0	4	250.0	163	196.1
Colon (C18)	4	17.7	58	14.3	—	—	14	16.8
Pancreas (C25)	2	8.8	31	7.7	—	—	7	8.4
Bronchus & lung (C34)	16	70.6	145	35.8	1	62.5	42	50.5
Skin (C43-44)	1	4.4	7	1.7	—	—	1	1.2
Breast (C50)	2	8.8	48	11.9	—	—	14	16.8
Cervical (C53)	—	—	2	0.5	—	—	2	2.4
Uterine (C54)	—	—	2	0.5	—	—	—	—
Ovarian (C56)	4	17.7	22	5.4	—	—	7	8.4
Prostate (C61)	3	13.2	36	8.9	—	—	16	19.3
Kidney & renal pelvis (C64-C65)	1	4.4	12	3.0	—	—	—	—
Bladder (C67)	—	—	12	3.0	—	—	9	10.8
Brain (C70-C72)	1	4.4	13	3.2	—	—	3	3.6
Lymphatic (C81-C96)	9	39.7	68	16.8	2	125.0	12	14.4
Non-Hodgkin's lymphoma (C82-C85)	4	17.7	32	7.9	—	—	5	6.0
Leukemia (C91-C95)	3	13.2	20	4.9	—	—	5	6.0
Benign & uncertain neoplasms (D00-D48)	2	8.8	19	4.7	1	62.5	5	6.0
Diabetes mellitus (E10-E14)	6	26.5	78	19.3	2	125.0	20	24.1
Organic dementia (F01, F03)	5	22.1	52	12.8	—	—	10	12.0
Parkinson's disease (G20-G21)	3	13.2	22	5.4	—	—	5	6.0
Alzheimer's disease (G30)	12	53.0	91	22.5	1	62.5	29	34.9
Alcohol-induced deaths ²	2	8.8	16	4.0	—	—	3	3.6
Diseases of circulatory system (I00-I99)	110	485.7	940	232.2	8	500.0	247	297.2
Hypertension/hyperten. renal dis. (I10, I12)	—	—	19	4.7	—	—	2	2.4
Heart Disease (I00-I09, I11, I13, I20-I51)	85	375.3	599	148.0	5	312.5	164	197.4
Ischemic heart disease (I20-I25)	56	247.2	391	96.6	1	62.5	99	119.1
Myocardial infarction (I21-I22)	13	57.4	149	36.8	—	—	38	45.7
Cerebrovascular disease (I60-I69)	22	97.1	250	61.8	3	187.5	70	84.2
Subarachnoid hemorrhage (I60)	—	—	3	0.7	—	—	1	1.2
Intracerebral hemorrhage, etc. (I61-I62)	3	13.2	27	6.7	1	62.5	8	9.6
Cerebral infarction (I63)	2	8.8	22	5.4	—	—	13	15.6
Stroke of unspecified type (I64)	16	70.6	141	34.8	2	125.0	35	42.1
Aortic aneurysm (I71)	—	—	28	6.9	—	—	1	1.2
Influenza & pneumonia (J10-J18)	7	30.9	63	15.6	—	—	25	30.1
Chronic lower respiratory diseases (J40-J47)	26	114.8	141	34.8	—	—	32	38.5
Diseases of the digestive system (K00-K92)	12	53.0	67	16.6	1	62.5	24	28.9
Diseases of the genitourinary sys. (N00-N99)	4	17.7	30	7.4	—	—	12	14.4
Nephritis (N00-N07, N17-N19, N25-N27)	3	13.2	18	4.4	—	—	5	6.0
Perinatal conditions (P00-P96)	—	—	17	4.2	—	—	2	2.4
Congenital malformations (Q00-Q99)	1	4.4	13	3.2	—	—	3	3.6
Sudden infant death syndrome (R95)	1	4.4	4	1.0	—	—	—	—
Unintentional injuries (V01-X59, Y85-Y86)	13	57.4	100	24.7	—	—	30	36.1
Suicide (X60-X84, Y87.0)	4	17.7	47	11.6	—	—	6	7.2
Homicide (X85-Y09, Y87.1)	—	—	9	2.2	—	—	2	2.4
Undetermined intent (Y10-Y34, Y87.2)	—	—	5	1.2	—	—	1	1.2

¹ Rate per 100,000 population.

² Includes ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, O35.4, P04.3, R78.0, X45, X65, and Y15. Alcoholic cardiomyopathy is included in both this category and heart disease.

— Quantity is 0.

TABLE 6-39. All Deaths and Medical Examiner's Cases by County of Occurrence, Autopsy Status, and Manner of Death, Oregon, 1999

County of Occurrence and Manner of Death	Total Deaths	Total Deaths Autopsied	% of Total Deaths Autopsied	M.E. Cases	M.E. Cases Autopsied	% of M.E. Cases Autopsied
Total	29,423	1,583	5.4	3,168	944	29.8
Baker	176	9	5.1	33	7	21.2
Benton	506	19	3.8	34	12	35.3
Clackamas	2,319	118	5.1	193	67	34.7
Clatsop	315	13	4.1	45	10	22.2
Columbia	208	6	2.9	34	5	14.7
Coos	827	19	2.3	80	12	15.0
Crook	145	4	2.8	21	2	9.5
Curry	234	6	2.6	33	6	18.2
Deschutes	908	22	2.4	114	16	14.0
Douglas	1,124	55	4.9	129	29	22.5
Gilliam	8	—	—	2	—	—
Grant	87	4	4.6	15	3	20.0
Harney	75	1	1.3	15	1	6.7
Hood River	162	4	2.5	20	4	20.0
Jackson	1,855	55	3.0	167	38	22.8
Jefferson	131	3	2.3	32	3	9.4
Josephine	915	38	4.2	93	32	34.4
Klamath	680	43	6.3	92	39	42.4
Lake	68	5	7.4	13	5	38.5
Lane	2,902	181	6.2	284	137	48.2
Lincoln	446	15	3.4	74	11	14.9
Linn	880	35	4.0	84	24	28.6
Malheur	271	9	3.3	30	9	30.0
Marion	2,459	115	4.7	173	86	49.7
Morrow	44	1	2.3	12	1	8.3
Multnomah	6,749	564	8.4	871	258	29.6
Polk	333	11	3.3	31	9	29.0
Sherman	10	—	—	3	—	—
Tillamook	268	9	3.4	42	7	16.7
Umatilla	496	33	6.7	72	23	31.9
Union	234	4	1.7	26	3	11.5
Wallowa	75	3	4.0	12	3	25.0
Wasco	351	15	4.3	30	7	23.3
Washington	2,509	142	5.7	213	63	29.6
Wheeler	8	—	—	—	—	—
Yamhill	645	22	3.4	46	12	26.1
Manner of Death						
Natural	27,503	1,061	3.9	1,524	437	28.7
Unintentional	1,188	300	25.3	961	290	30.2
Suicide	507	63	12.4	505	63	12.5
Homicide	108	99	91.7	107	99	92.5
Undetermined	62	46	74.2	61	46	75.4
Legal Intervention/War	10	8	80.0	9	8	88.9
Medical Care Complication	45	6	13.3	1	1	100.0

— Quantity is 0.

TABLE 6-40. Deaths Occurring in Oregon by Disposal of Remains and County of Residence, 1999

County of Residence	Total		Burial		Cremation		Mausoleum		Removal ¹		Other	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total Deaths ...	29,423	100	10,693	36	15,947	54	1,151	4	1,485	5	147	>0
Baker	188	100	95	51	80	43	—	—	13	7	—	—
Benton	444	100	142	32	268	60	11	2	19	4	4	1
Clackamas	2,391	100	872	36	1,264	53	145	6	94	4	16	1
Clatsop	363	100	114	31	230	63	4	1	10	3	5	1
Columbia	291	100	126	43	143	49	11	4	9	3	2	1
Coos	833	100	260	31	534	64	7	1	32	4	—	—
Crook	165	100	68	41	86	52	1	1	10	6	—	—
Curry	283	100	60	21	213	75	3	1	6	2	1	>0
Deschutes	815	100	261	32	499	61	22	3	31	4	2	>0
Douglas	1,150	100	418	36	669	58	12	1	48	4	3	>0
Gilliam	18	100	7	39	11	61	—	—	—	—	—	—
Grant	90	100	43	48	47	52	—	—	—	—	—	—
Harney	80	100	48	60	31	39	1	1	—	—	—	—
Hood River	158	100	71	45	73	46	1	1	13	8	—	—
Jackson	1,780	100	556	31	1,094	61	53	3	73	4	4	>0
Jefferson	154	100	84	55	62	40	1	1	7	5	—	—
Josephine	937	100	257	27	616	66	14	1	50	5	—	—
Klamath	648	100	240	37	366	56	12	2	30	5	—	—
Lake	88	100	40	45	46	52	—	—	1	1	1	1
Lane	2,777	100	900	32	1,674	60	92	3	99	4	12	>0
Lincoln	522	100	130	25	372	71	6	1	13	2	1	>0
Linn	999	100	466	47	473	47	28	3	27	3	5	1
Malheur	199	100	97	49	58	29	—	—	43	22	1	1
Marion	2,405	100	988	41	1,202	50	96	4	99	4	20	1
Morrow	68	100	37	54	28	41	—	—	2	3	1	1
Multnomah	5,571	100	2,083	37	2,872	52	384	7	194	3	38	1
Polk	502	100	207	41	252	50	22	4	16	3	5	1
Sherman	18	100	10	56	8	44	—	—	—	—	—	—
Tillamook	298	100	110	37	174	58	11	4	3	1	—	—
Umatilla	497	100	250	50	180	36	4	1	63	13	—	—
Union	222	100	127	57	68	31	6	3	20	9	1	>0
Wallowa	77	100	41	53	4	5	—	—	32	42	—	—
Wasco	291	100	131	45	134	46	8	3	16	5	2	1
Washington	2,486	100	864	35	1,334	54	141	6	130	5	17	1
Wheeler	19	100	8	42	9	47	—	—	2	11	—	—
Yamhill	671	100	278	41	319	48	47	7	26	4	1	>0
Out-of-state	925	100	204	22	454	49	8	1	254	27	5	1

¹ Out-of-state.
 >0 Value too small to display.
 — Quantity is 0.

**TABLE 6-41. Unintentional Injury Deaths for Selected Causes,
by County of Residence, Oregon, 1999**

County of Residence	Total	Motor Vehicle	Falls	Poison - Drugs ¹	Poison - Other ²	Drowning	Water Transport ³	Fire
Total	1,144	436	183	134	11	46	14	30
Baker	11	1	4	—	—	1	—	3
Benton	15	4	4	2	—	—	—	—
Clackamas	94	38	7	10	4	4	—	1
Clatsop	18	8	4	5	—	—	—	—
Columbia	9	4	3	—	—	—	—	—
Coos	27	12	3	1	1	2	1	—
Crook	5	2	1	—	1	—	—	—
Curry	6	3	1	—	—	1	—	—
Deschutes	39	13	6	—	—	4	—	2
Douglas	52	31	4	1	—	—	1	2
Gilliam	—	—	—	—	—	—	—	—
Grant	6	2	2	—	—	—	—	—
Harney	2	1	—	—	—	1	—	—
Hood River	3	3	—	—	—	—	—	—
Jackson	73	30	11	5	—	2	3	6
Jefferson	17	13	—	1	—	—	—	—
Josephine	35	14	6	3	—	2	—	—
Klamath	23	10	5	2	—	1	—	1
Lake	4	2	—	1	—	—	—	—
Lane	124	43	15	27	1	7	—	1
Lincoln	24	9	2	2	—	1	1	—
Linn	40	16	7	3	1	—	2	1
Malheur	11	6	2	—	—	—	—	—
Marion	78	25	13	6	1	3	—	4
Morrow	4	2	—	—	—	—	—	—
Multnomah	224	61	47	49	1	7	2	3
Polk	11	5	2	—	—	1	—	—
Sherman	1	—	—	—	—	—	—	1
Tillamook	7	4	1	—	—	—	—	—
Umatilla	26	14	3	—	—	3	1	—
Union	8	—	3	2	—	—	1	1
Wallowa	4	3	—	—	—	—	—	1
Wasco	13	7	1	—	1	—	—	—
Washington	100	36	23	12	—	4	1	3
Wheeler	—	—	—	—	—	—	—	—
Yamhill	30	14	3	2	—	2	1	—

¹ Includes overdoses from all drugs/medications; ICD-10 codes do not permit the distinction between illicit and licit drugs.

² Includes poisonings by substances other than drugs, such as carbon monoxide and alcohol.

³ Includes both drownings and other mishaps, but not voluntarily jumping from a watercraft.

— Quantity is 0.

**TABLE 6-42. Unintentional Injury Deaths for Selected Causes,
by County of Occurrence, Oregon, 1999**

County of Occurrence	Total	Motor Vehicle	Falls	Poison - Drugs ¹	Poison - Other ²	Drowning	Water Transport ³	Fire
Total	1,188	453	186	141	9	49	17	31
Baker	14	5	4	—	—	1	—	3
Benton	14	4	4	1	—	—	1	—
Clackamas	75	22	10	12	2	4	1	1
Clatsop	19	6	1	5	—	1	3	—
Columbia	8	4	—	—	—	—	—	—
Coos	25	11	3	—	1	1	1	—
Crook	4	1	1	—	1	—	—	—
Curry	7	3	1	—	—	2	—	—
Deschutes	41	16	6	—	—	4	—	2
Douglas	50	27	4	1	—	—	1	2
Gilliam	1	1	—	—	—	—	—	—
Grant	6	3	2	—	—	—	—	—
Harney	3	2	—	—	—	1	—	—
Hood River	6	2	2	—	—	—	1	—
Jackson	67	29	10	5	—	—	2	4
Jefferson	18	16	—	1	—	—	—	—
Josephine	30	11	4	3	—	2	1	—
Klamath	29	13	5	2	—	1	—	1
Lake	1	1	—	—	—	—	—	—
Lane	143	51	18	29	1	8	1	1
Lincoln	16	6	—	2	—	1	2	—
Linn	35	11	7	3	1	1	1	1
Malheur	12	5	1	—	—	—	—	—
Marion	64	24	14	5	1	1	—	2
Morrow	5	4	—	—	—	—	—	—
Multnomah	324	109	71	62	1	10	1	9
Polk	11	7	—	1	—	1	—	—
Sherman	1	—	—	—	—	—	—	1
Tillamook	12	6	2	—	—	2	—	—
Umatilla	29	14	3	—	—	2	—	—
Union	11	4	—	2	—	—	1	1
Wallowa	6	2	—	—	—	1	—	1
Wasco	16	9	—	—	1	1	—	—
Washington	59	17	12	5	—	1	—	2
Wheeler	—	—	—	—	—	—	—	—
Yamhill	26	7	1	2	—	3	—	—

¹ Includes overdoses from all drugs/medications; ICD-10 codes do not permit the distinction between illicit and licit drugs.

² Includes poisonings by substances other than drugs, such as carbon monoxide and alcohol.

³ Includes both drownings and other mishaps, but not voluntarily jumping from a watercraft.

— Quantity is 0.

TABLE 6-43. Selected Causes of Death for the Residents of Oregon's Largest Cities, 1999

City of Residence	Population	Total Deaths	Selected Causes of Death									
			Heart	Cancr	CVD	CLRD	Un Inj	Alz	Dia	Pne	Sui	Alc
Total	3,000,800	29,356	7,252	6,904	2,817	1,762	1,144	868	855	684	499	303
Albany	40,010	373	94	91	39	29	12	11	9	8	5	2
Ashland	19,490	156	33	37	17	10	12	6	4	4	4	1
Beaverton	68,010	590	129	122	67	30	26	29	21	18	8	5
Bend	50,650	382	94	85	40	32	14	5	10	7	5	2
Canby	12,595	112	34	31	7	5	7	2	—	2	—	—
Coos Bay	15,630	238	61	54	25	14	5	11	6	5	2	2
Corvallis	50,880	314	77	79	33	14	10	18	8	8	4	2
Dallas	12,870	158	45	21	31	6	3	4	3	1	1	1
Eugene	136,490	1,159	258	257	107	58	51	33	37	30	22	8
Forest Grove ..	16,275	189	60	29	22	12	5	11	7	2	2	1
Gladstone	11,695	127	27	33	10	4	5	5	3	8	1	2
Grants Pass ...	20,935	349	106	66	27	22	11	12	8	10	5	8
Gresham	85,435	696	152	170	61	37	22	28	21	13	12	9
Hermiston	12,165	126	26	32	7	6	5	4	4	2	1	2
Hillsboro	69,670	323	74	70	30	29	10	6	10	5	11	3
Keizer	30,260	210	44	57	28	9	1	3	5	3	3	3
Klamath Falls ..	19,060	215	56	47	16	16	9	9	8	4	2	5
La Grande	12,885	157	41	26	10	14	4	3	4	5	1	—
Lake Oswego	34,110	212	54	62	23	9	4	5	5	6	3	2
Lebanon	12,610	188	39	42	24	14	6	3	9	4	—	1
Mcminnville	24,420	281	61	65	30	18	10	14	9	10	3	—
Medford	59,990	738	191	148	78	46	19	42	12	15	17	10
Milwaukie	20,075	484	125	119	39	20	15	16	11	17	7	5
Newberg	17,650	137	36	35	16	2	2	3	4	7	2	1
Oregon City	23,405	264	73	51	29	15	6	5	7	18	2	2
Pendleton	17,175	163	29	38	13	7	6	6	5	8	3	2
Portland	512,395	4,765	1,139	1,028	425	262	183	149	177	106	84	67
Redmond	12,810	128	32	33	15	8	8	4	3	5	2	2
Roseburg	20,490	342	99	71	19	22	18	11	11	9	5	4
Salem	128,595	1,417	327	320	218	73	44	24	40	27	24	8
Springfield	52,945	498	122	118	42	30	20	17	9	9	8	4
The Dalles	11,880	205	58	43	20	18	9	11	3	5	2	2
Tigard	37,670	353	72	94	40	18	17	12	9	6	11	3
Troutdale	14,175	47	7	8	5	4	5	2	1	2	1	—
Tualatin	21,345	91	20	26	7	5	2	2	1	5	1	—
West Linn	22,835	112	23	37	9	4	6	5	—	5	4	1
Wilsonville	12,985	73	22	16	7	2	1	4	2	1	—	2
Woodburn	16,850	223	69	54	30	8	4	8	3	11	4	2

— Quantity Is 0.

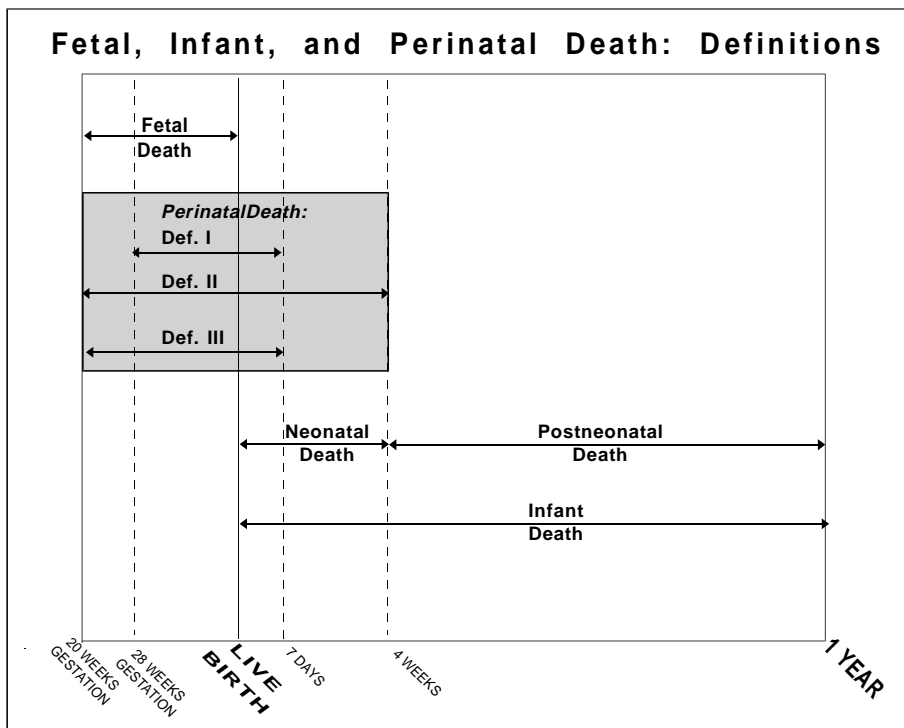
Abbreviations: Heart = Heart Disease; Cancr = Cancer; CVD = Cerebrovascular Disease;
 CLRD = Chronic Lower Respiratory Disease; Un Inj = Unintentional Injuries; Pne = Pneumonia and Influenza;
 Dia = Diabetes Mellitus; Alz = Alzheimer's Disease; Sui = Suicide; Alc = Alcoholism and Related Disorders.

Fetal and Infant Mortality

INTRODUCTION

This report presents fetal and infant mortality data. Infant deaths are deaths that occur within one year of birth. Fetal deaths included in this report are of fetuses whose birth weight was at least 350 grams or, if birth weight was unknown, 20 weeks gestation or more. This is a change from previous years when reported fetal deaths included only deaths occurring after 20 weeks gestation so fetal mortality data for 1999 is not directly comparable to previous years' data. Although fetal and infant deaths are useful in statistically describing deaths within a given time frame, their fundamental purpose is to assist in discovering and evaluating preventive strategies to improve infant health. As an aid to understanding and monitoring health trends, this report divides fetal and infant deaths into five categories, which overlap and are not necessarily mutually exclusive: (1) fetal deaths, (2) perinatal deaths, (3) infant deaths, (4) neonatal deaths and (5) postneonatal deaths, as defined by the National Center for Health Statistics (see diagram).

This report analyzes the above categories using these three databases: (1) fetal deaths, (2) infant deaths and (3) births. National publications covering the subject may use one or any combination of these databases. As a result, death rates often vary slightly depending on which cohort was used as the source of the statistical data. Throughout this report, some tables display rates and ratios based on small numbers of events. Rates and ratios based on fewer than five events are unreliable; therefore, use great caution in inferring causal relationships based solely on the data contained in these tables.



DEFINITIONS AND METHODOLOGY

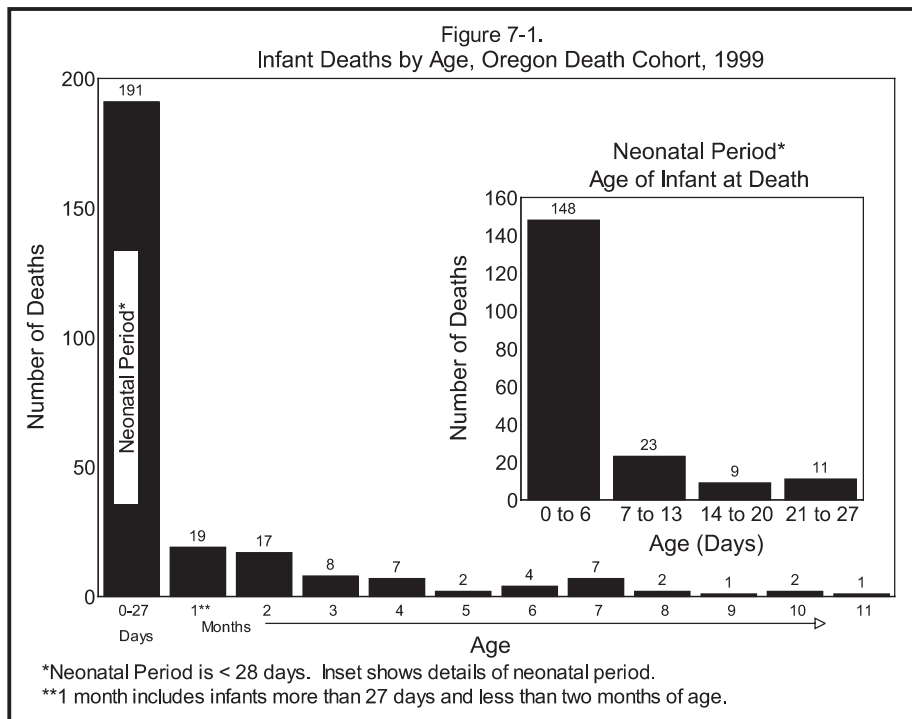
Before analyzing fetal and infant death data, it is necessary to define their different components.

- **Fetal deaths** are those that occur to fetuses whose birth weight is at least 350 grams or, if birth weight was unknown, after 20 weeks gestation, in which the developing fetus dies either in utero or upon delivery. They are classified as “early” (20-27 weeks gestation) or “late” (28 weeks gestation or more), and Oregon public health and safety laws require that they be reported.¹
- **Infant deaths** are those that occur during a child’s first year (i.e., measured from birth through 364 days). Infant deaths include both neonatal and postneonatal deaths.

Neonatal deaths occur during the first 27 days of life. Neonatal deaths may be “early” (under 7 days) or “late” (7-27 days).

Postneonatal deaths occur from day 28 through day 364 after birth.

- **Perinatal deaths-definition I** includes fetal deaths at 28 weeks gestation or more, and infant deaths of less than 7 days.
- **Perinatal deaths-definition II** includes fetal deaths at 20 weeks gestation or more and deaths of infants less than 28 days.
- **Perinatal deaths-definition III** includes fetal deaths at 20 weeks gestation or more and deaths of infants less than 7 days.
- The **death cohort** for infant death includes all infant deaths that occurred in any given calendar year, regardless of birth year. In this report, the death cohort consists of those infants who died in 1999.



- The **birth cohort** for matched infant death includes all infants born in the same calendar year who die within one year of their birth. In this report, the birth cohort consists of those infants who were born in 1998, and died in either 1998 or 1999.

USE OF THE 1999 DEATH COHORT

This report uses data from the 1999 death cohort as the basis for analyzing infant deaths without maternal or birth characteristics, a standard demographic and health-status monitoring technique that yields the most timely and current information. Consistent longitudinal or historical data can be found more easily at national and local levels with a death cohort because its use does not involve matching corresponding birth records.

Infant characteristics at the time of death are derived from death certificates. The characteristics of most interest are age at death, county of residence at death and underlying cause of death. Total age-specific and cause-specific mortality ratios are computed by dividing the number of infant deaths in a calendar year by the number of births in the same calendar year.

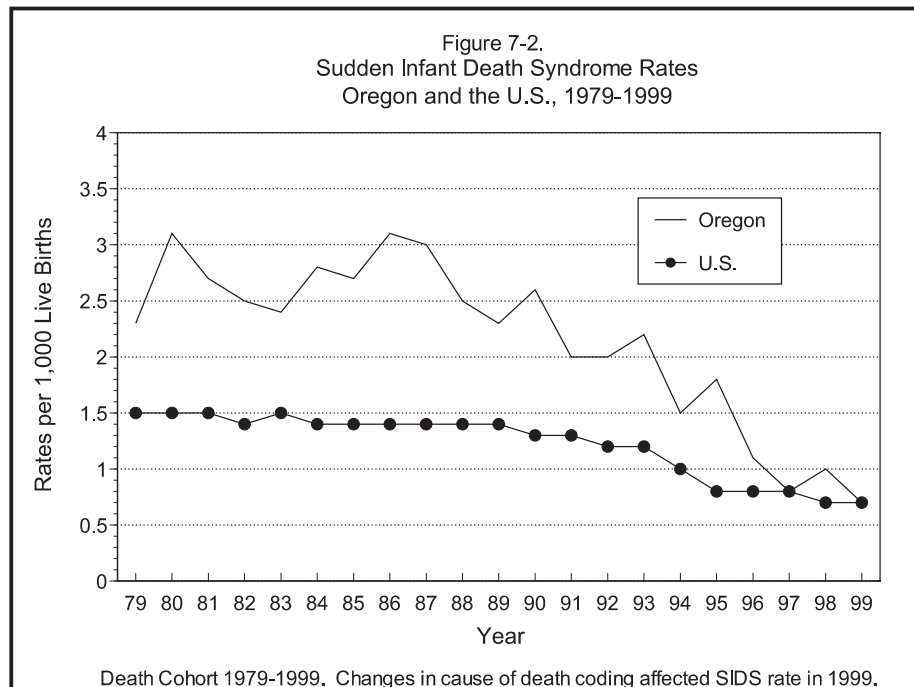
INFANT DEATH: BASIC FACTS

Here are the basic statistics on infant deaths in Oregon during 1999:

- 261 infants under age one died.
- The infant death rate was 5.8 deaths per 1,000 births, an increase of 7.4% from the previous year. The increase was not statistically significant.

***During 1999,
261 infants under
age one died.***

Figure 7-2.
Sudden Infant Death Syndrome Rates
Oregon and the U.S., 1979-1999



There were 26 SIDS deaths in 1999

- Oregon’s 1999 infant death rate is 18.3 percent lower than the 1999 U.S. rate of 7.1 per 1,000 births.² [Table 5-1].
- As in previous years, most infants who died during 1999 were less than 28 days old. [Figure 7-1]. More than three out of four (77.5%) of these neonatal deaths occurred within the first week of life.

Sudden Infant Death Syndrome

Sudden Infant Death Syndrome (SIDS) is the sudden and unexpected death of an apparently healthy infant under one year of age usually during the postneonatal period. Historically, Oregon’s SIDS rate has been higher than the national rate and SIDS has been the leading cause of death among Oregon infants. [Figure 7-2].

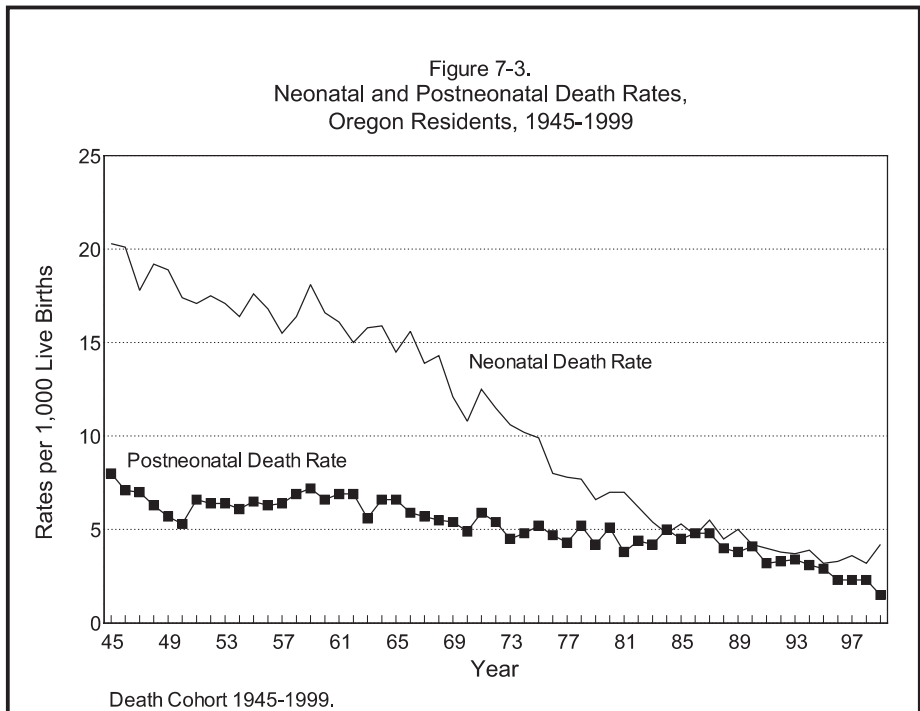
The number of SIDS deaths decreased from 45 deaths in 1998 to 26 in 1999, despite changes in cause of death coding that was expected to slightly increase (by 3.6%) deaths attributed to SIDS.³ In 1999, SIDS accounted for 10.0 percent of the state’s total infant deaths and 30.0 percent of all postneonatal deaths. The 1999 Oregon SIDS death rate was 0.6 deaths per 1,000 live births, a 40 percent decrease from the 1998 rate of 1.0. The SIDS rate for 1999 is the lowest Oregon has recorded since the Health Division began tracking SIDS rates in 1979. [Figure 7-2].

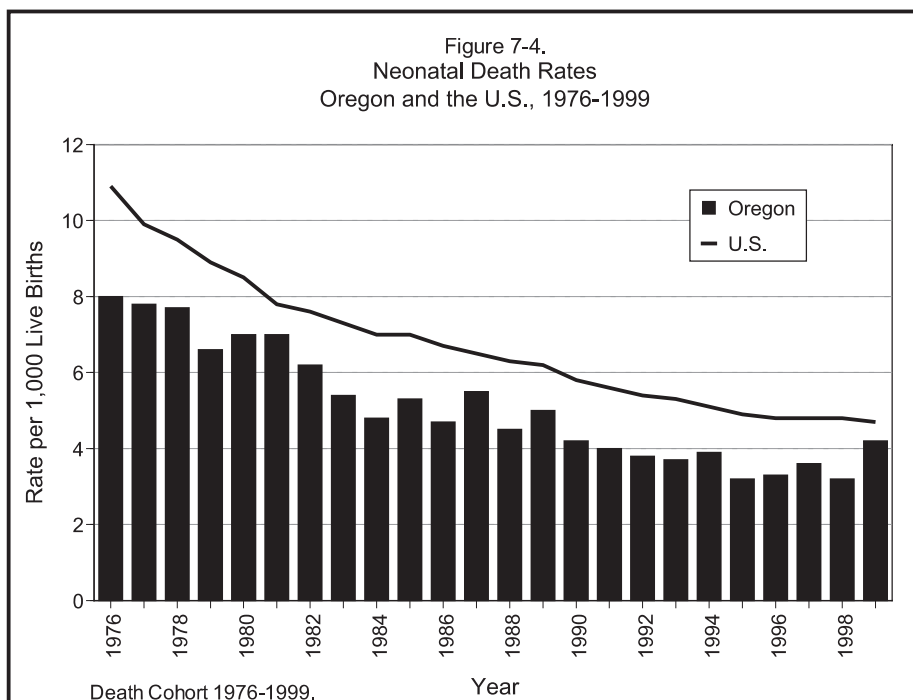
The 1999 rate of SIDS deaths in Oregon was slightly lower than the U.S. rate (0.7 per 1,000 live births). [Figure 7-2]. Nationally, SIDS was responsible for 2,583 deaths in 1999 making it the third leading cause of infant mortality.²

Neonatal Deaths Due to Respiratory Distress Syndrome			
YEAR	NUMBER	PERCENT*	RATE **
1989	32	15.6	77.6
1990	12	6.7	28.0
1991	9	5.2	21.2
1992	7	4.1	16.7
1993	7	4.5	16.8
1994	10	6.1	23.9
1995	4	2.9	9.4
1996	5	3.4	11.5
1997	2	1.3	4.6
1998	8	5.6	17.7
1999	7	3.1	13.3

- Quantity is zero.
 * Percent of neonatal deaths due to RDS.
 ** Per 100,000 live births.

Figure 7-3.
 Neonatal and Postneonatal Death Rates,
 Oregon Residents, 1945-1999





NEONATAL DEATH

Neonatal and postneonatal death rates have been declining since 1945, when the neonatal death rate was 20.0 per 1,000 births and the postneonatal death rate was 8.0 per 1,000 births. In 1999, the neonatal death rate was 4.2 per 1,000 births and the postneonatal death rate was 1.5 per 1,000 births. [Figure 7-3, Table 7-1].

In 1999, 191 infants died during the neonatal period, a 33.6 percent increase from the 143 deaths that occurred in 1998. Oregon's neonatal death rate has consistently been below that of the U.S. [Figure 7-4]. The 1999 rate is 10.6 percent lower than the national rate of 4.7. [Tables 5-1 and 5-2]. As in previous years congenital anomalies were responsible for more neonatal deaths (35.6%) than any other cause. [Table 7-2]. In the last decade the number of neonatal deaths due to Respiratory Distress Syndrome (RDS) decreased from 32 in 1989 to 6 in 1999. [Table 7-2].

POSTNEONATAL DEATH

In 1999, 70 infants died during the postneonatal period, representing 26.8 percent of all infant deaths. The postneonatal death rate (1.5 per 1,000 live births) is Oregon's lowest recorded rate. [Figure 7-3]. No Oregon county had a rate that was statistically significantly different from the state rate. [Table 7-1]. Oregon's postneonatal death rate has typically been higher than the U.S. rate; however, in 1999 for the second year the state rate was lower than that of the U.S. (2.3 per 1,000 live births).

FETAL DEATH

In 1999, there were 212 Oregon resident fetal deaths, representing a 2.2 percent increase in the fetal death ratio from the preceding year (4.7 in 1999 versus 4.6 in 1998) (see sidebar). Fetal deaths were first reported to the Health Division in 1928, when the ratio was 29.0 for every 1,000 live births. Since then the ratio has followed a general downward trend, and has remained under 6.0 since 1992. [Figure 7-5].

Oregon’s fetal death ratio has been typically lower than the U.S. ratio. In 1999, Oregon’s rate was 31 percent lower than the most recent published rate for the U.S. (4.7 vs 6.8). [Table 5-1].

FETAL DEATH RATIOS PER 1,000 LIVE BIRTHS BY MOTHER'S AGE					
AGE	YEAR				
	1999	1998	1997	1996	1995
TOTAL	4.7	4.6	5.3	5.8	5.5
15-44	4.7	4.5	5.3	5.7	5.5
15-19	4.4	5.2	5.8	6.7	6.4
20-24	5.1	4.6	6.0	5.9	5.4
25-29	4.4	4.3	4.0	4.3	4.8
30-34	5.0	4.6	4.4	5.7	4.8
35-39	3.1	3.7	7.3	6.9	7.1
40-44	6.9	7.4	10.6	8.3	13.0

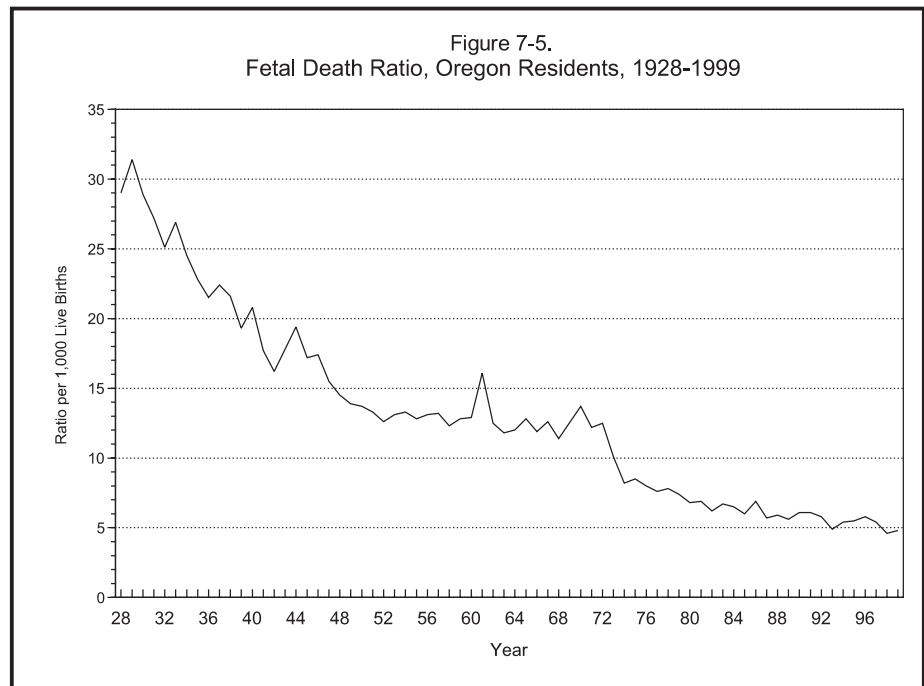
Cause of Death

Causes of Oregon’s 212 fetal deaths in 1999 are shown in Table 7-4. The most frequently reported cause of fetal death in 1999 (83 deaths) was “complications of the placenta, cord and membranes”. “Fetal death of unspecified cause” was the second highest cause of death (39 deaths). Congenital anomalies was third with 25 deaths. These three causes of death represented 69.7 percent of all 1999 Oregon fetal deaths. Exact comparisons to previous years cannot be made due to the change from ICD-9 to ICD-10 codes, but specific frequencies of reported causes of death in 1999 are not dissimilar to previous years.

USE OF THE 1998 BIRTH COHORT

Methodology

Infant and perinatal death statistics can also be determined by use of a birth cohort, with all rates and ratios based on the number



of births and fetal deaths that occurred in 1998. Because birth cohorts contain infants who die within their first year of life, some die during the following calendar year, thus requiring the inclusion of 1999 data in the report on the 1998 birth cohort. For illustration, of the 237 deaths to infants born in 1998, 210 died in calendar year 1998 and 27 died in the calendar year 1999; only the 27 infants who died during 1999 are represented in the 1999 death cohort.

The Center for Health Statistics has produced tables containing infant and perinatal death data from the birth, fetal death, and matched infant death files. These birth cohort tables display data for infant and perinatal deaths according to several maternal risk factors and low birthweight. Additionally, this report presents neonatal and postneonatal deaths that were matched to their corresponding birth. Thus, a birth occurring at the end of December 1998 may have a matched postneonatal death that occurred up to one year later, at the end of December 1999.

Use of a birth cohort from a matched birth and death file allows analysis of characteristics of an infant's mother during pregnancy and delivery. The characteristics of interest are mother's marital status, age, ethnicity, race, education, start of prenatal care, tobacco use, and alcohol use. The characteristics of the infant that are derived from the birth certificate and fetal death certificate include birthweight, gestational age, and county of residence at time of birth.

Small Numbers

Because of the small numbers of events in some of the risk-factor categories, this report uses three-year groupings of the risk characteristics to improve statistical reliability. Single-year tables displaying risk factors are also included for comparison with statistics of prior years, but the analysis of risk factors and maternal characteristics are done using only the three-year tables.

Perinatal Deaths

Beginning with data for 1979 the National Center for Health Statistics (NCHS) started publishing statistics for three perinatal definitions: Perinatal definition I, Perinatal definition II, and Perinatal definition III.⁴ Beginning with the birth cohort data for 1991 the Oregon Center for Health Statistics added statistics to the annual report to include the NCHS perinatal definitions. Based on feedback from Oregon physicians, Perinatal definition III was found not to be useful and was subsequently dropped from these tables. This report focuses on neonatal deaths because the relationships among the independent variables are similar to those of Perinatal definition I and postneonatal deaths. (Please refer to page 7-2 for definitions). Perinatal death statistics are included within tables 7-13 through 7-16 to assist in data comparability.

Birthweight has long been a predictor of survival.

NEONATAL DEATHS: 1996-1998 BIRTH COHORT

The mothers of infants who died during the neonatal period had various characteristics that may have affected the outcome of their pregnancies. These include marital status, age, ethnicity and race, education, prenatal care, tobacco use, and alcohol use. [Table 7-16].

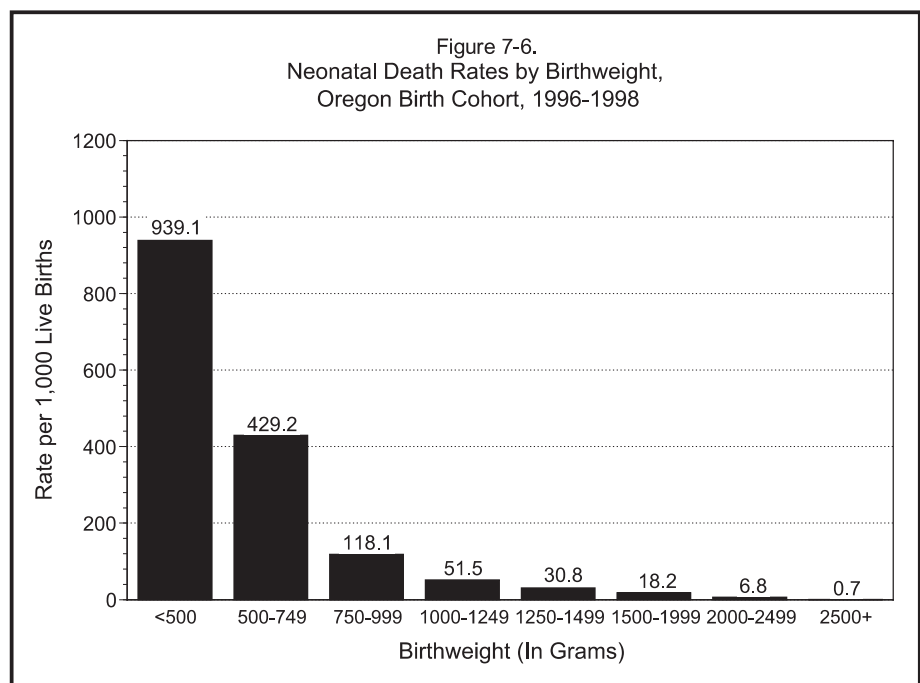
Birthweight

The birthweight of an infant has long been a predictor of subsequent survival. An increase in birthweight is correlated with a decrease in the risk of neonatal death. For the period 1996-1998 the neonatal death rate generally decreased by one-half or more for each subsequent 250- to 500-gram increase in weight for infants weighing less than 3000 grams at birth. [Table 7-12]. Nearly all the infants weighing less than 500 grams died. The death rate for infants weighing less than 500 grams was 939.1 per 1,000 live births, decreasing to 0.7 per 1,000 live births for infants weighing more than 2,500 grams. [Figure 7-6].

Many of the same behavioral, social and medical conditions associated with higher rates of infant deaths are also associated with lower birthweights. Some conditions are highly associated with one another and have confounding or mitigating effects on each other. This report does not try to account for or hold all these variables constant in relation to each other. Instead, it presents a simple descriptive analysis.

Maternal Characteristics

Though most women reported being married at the time of birth, the neonatal death rate was statistically significantly higher for unmarried women (6.7 versus 1.8 per 1,000). [Table 7-18]. Both



women with a high school diploma or GED (4.1 per 1,000) and women without a high school diploma or GED (4.0) had a statistically significantly higher neonatal death rate than women with some college (2.1). [Table 7-18]. The neonatal death rate for infants of African American mothers (4.8 per 1,000) and Hispanic mothers (4.4) were higher than the neonatal death rate for infants of White mothers (3.0) but the difference was not statistically significant. [Table 7-18].

Prenatal Care

Women who received any prenatal care had a statistically significantly lower neonatal death rate than women who received no prenatal care (3.1 versus 31.3 per 1,000). Among women who received prenatal care, those who began care in the first or second trimester displayed higher death rates (3.0 and 3.7 per 1,000 births, respectively), than those receiving care beginning in the third trimester (1.7 per 1,000), probably due to the effect of gestational age. [Table 7-18].

Tobacco/Alcohol Use

Among women who had infants die during the neonatal period, 20 percent reported using tobacco during their pregnancy. The infants of these women had a higher neonatal death rate compared to those women who did not use tobacco (3.8 versus 3.0 per 1,000). Less than two percent (1.6%) of the mothers whose infants died during the neonatal period reported using alcohol during their pregnancy. There may be under-reporting of alcohol and tobacco use, thereby lowering the neonatal death rates for this category by eliminating high-risk people from the analysis.

POSTNEONATAL DEATHS: 1996-1998 BIRTH COHORT

Higher postneonatal death rates were found among the children of mothers who were unwed, under age 20, received no prenatal care or prenatal care in the third trimester, without a high school diploma or GED, or used tobacco during pregnancy. The children of African Americans also had higher rates of postneonatal mortality. These higher rates were all statistically significant. [Table 7-18].

REFERENCES

- 1 Prior to November 10, 1998, fetal deaths occurring at 20 weeks of gestation or more were reported. Effective November 10, 1998, the Oregon Legislature amended ORS 432.333 to read, "Each fetal death of 350 grams or more, or, if weight is unknown, of 20 completed weeks gestation or more, calculated from the date last normal menstrual period began to the date of delivery, that occurs in this state shall be reported within 5 days after delivery to the county registrar of the county in which the fetal death occurred or to the Center for Health Statistics or as otherwise directed by the Center for Health Statistics."
- 2 Kochanek, MA, Smith, BL, Anderson, RN. Deaths: Preliminary Data for 1999. National Vital Statistics Reports; vol 49 no 3, supp. Hyattsville, Maryland: National Center for Health Statistics. 2001.
- 3 Anderson, R.N., Minino, A.M., Hoyert, D.L., Rosenberg, H.M. Comparability of Cause of Death Between ICD-9 and ICD-10: Preliminary Estimates. National Vital Statistics Reports; Vol.49 No. 2. Hyattsville, Maryland: National Center for Health Statistics. 2001.
- 4 Hoyert, D.L. "Perinatal Mortality in the United States:1985-91." U.S. Department of Health and Human Services, Public Health Services, Centers for Disease Control and Prevention, National Center for Health Statistics, 20 (26) August 1995.

TABLE 7-1.
Infant Deaths by Age and County of Residence, Oregon, 1999

County of Residence	Total Infant Deaths ¹	Infant Death Rate ²	Neonatal Deaths ³ (Age < 28 Days)				Neonatal Rate ²	Post-Neonatal Deaths ⁴	Post-Neonatal Rate ²
			Total Neonatal	< 1 Day	1-6 Days	7-27 Days			
Total	261	5.8	191	113	35	43	4.2	70	1.5
Baker	-	-	-	-	-	-	-	-	-
Benton	7	8.5	6	3	1	2	7.3	1	1.2
Clackamas	16	3.9	9	6	-	3	2.2	7	1.7
Clatsop	3	8.0	1	1	-	-	2.7	2	5.3
Columbia	3	5.3	1	-	-	1	1.8	2	3.5
Coos	9	13.9	7	4	2	1	10.8	2	3.1
Crook	3	13.9	2	1	-	1	9.3	1	4.6
Curry	-	-	-	-	-	-	-	-	-
Deschutes	8	6.1	8	4	3	1	6.1	-	-
Douglas	9	8.0	7	3	3	1	6.3	2	1.8
Gilliam	-	-	-	-	-	-	-	-	-
Grant	1	12.8	1	1	-	-	12.8	-	-
Harney	-	-	-	-	-	-	-	-	-
Hood River	4	11.8	4	4	-	-	11.8	-	-
Jackson	10	4.8	7	4	1	2	3.4	3	1.4
Jefferson	2	6.7	1	1	-	-	3.4	1	3.4
Josephine	4	4.8	2	2	-	-	2.4	2	2.4
Klamath	6	7.4	3	2	1	-	3.7	3	3.7
Lake	1	15.2	1	-	-	1	15.2	-	-
Lane	24	6.4	17	10	3	4	4.5	7	1.9
Lincoln	5	11.8	4	3	1	-	9.5	1	2.4
Linn	10	6.9	7	2	2	3	4.8	3	2.1
Malheur	4	8.0	4	4	-	-	8.0	-	-
Marion	26	5.7	21	9	4	8	4.6	5	1.1
Morrow	2	11.1	2	1	1	-	11.1	-	-
Multnomah	46	5.0	34	21	7	6	3.7	12	1.3
Polk	3	4.6	3	2	-	1	4.6	-	-
Sherman	-	-	-	-	-	-	-	-	-
Tillamook	2	9.3	1	-	-	1	4.7	1	4.7
Umatilla	4	3.5	2	1	-	1	1.8	2	1.8
Union	-	-	-	-	-	-	-	-	-
Wallowa	1	16.9	1	1	-	-	16.9	-	-
Wasco	3	10.6	1	-	-	1	3.5	2	7.1
Washington	39	5.5	28	18	5	5	3.9	11	1.5
Wheeler	-	-	-	-	-	-	-	-	-
Yamhill	6	4.8	6	5	1	-	4.8	-	-

- Quantity is zero.

1. Infant death is the death of a child prior to its first birthday.

2. Rates per 1,000 live births.

3. Neonatal Deaths occur during the first 27 days of life.

4. Postneonatal Deaths occur from day 28 through 364 after birth.

No rates were statistically significantly different from the state rate.

WARNING: Rates based on fewer than five events are unreliable.

TABLE 7-2. Infant Deaths by Cause and Age, Oregon Residents, Death Cohort 1999

Selected Causes of Death (and their ICD-10 codes)	Age Groups					
	Total Infant Deaths	Under 1 Day	1-6 Days	7-27 Days	All Neo- nates	Post- Neo- nates
Total	261	113	35	43	191	70
Rate	5.8	2.5	0.8	1.0	4.2	1.5
Infections & parasitic disease (A00-B99)	4	1	—	—	1	3
Meningococcal infection (A39)	1	—	—	—	—	1
Septicaemia (A40-A41)	2	—	—	—	—	2
Neoplasms of Uncertain or Unknown Behavior (D43)	1	—	1	—	1	—
Diseases of the Blood & Blood-Forming Organs & Disorders Involving the Immune Mechanism (D50-89) ..	1	1	—	—	1	—
Endocrine, Nutritional, & Metabolic Disease (E00-E88)	1	—	—	—	—	1
Diseases of the Nervous System (G00-G99)	3	—	—	—	—	3
Diseases of the Circulatory System (I00-I99)	8	1	1	2	4	4
Diseases of the heart (I00-I09, I11, I13, I20-I51)	7	1	1	2	4	3
Diseases of the Respiratory System (J00-J99)	3	—	1	—	1	2
Diseases of the Digestive System (K00-K92)	1	—	—	—	—	1
Diseases of the Genitourinary System (N00-N99)	2	1	—	—	1	1
Certain Conditions Originating in the Perinatal Period (P00-P96)	112	73	16	18	107	5
Fetus & newborn affected by maternal factors (P00-P04)	28	28	—	—	28	—
Gestation & fetal growth (P05-P08)	29	23	4	2	29	—
Intrauterine hypoxia & asphyxia (P20-P21)	9	3	3	2	8	1
Respiratory Distress (P22)	7	2	3	1	6	1
Congenital pneumonia (P23)	3	1	—	2	3	—
Other respiratory (P24-P28)	2	1	1	—	2	—
Bacterial sepsis of newborn (P36)	3	2	—	1	3	—
Haemorrhagic disorders of newborn (P50-61)	4	1	1	2	4	—
Congenital Malformations, Deformations & Chromosomal Abnormalities (Q00-Q99)	78	36	14	18	68	10
Malformation of the heart (Q20-Q24)	17	—	3	8	11	6
Down's syndrome & other chromosomal (Q90-Q99)	11	4	5	2	11	—
Symptoms, Signs Not Elsewhere Classified (R00-R99)	30	—	2	4	6	24
Sudden infant death syndrome (R95)	26	—	1	4	5	21
External Causes of Death (V01-Y89)	17	—	—	1	1	16
Accidents (V01-X59, Y85-Y86)	11	—	—	—	—	11
Transport accidents (V01-V99, Y85)	3	—	—	—	—	3
Nontransport accidents (W00-X59, Y86)	8	—	—	—	—	8
Falls (W00-W19)	1	—	—	—	—	1
Exposure to smoke, fire & flames (X00-X09)	2	—	—	—	—	2
Poisoning & exposure to noxious substances (X40-X49)	1	—	—	—	—	1
Assault (homicide) (X85-Y09, Y87.1)	4	—	—	—	—	4
Events of undetermined intent (Y10-Y34, Y87.2, Y89.9)	2	—	—	1	1	1

— Quantity is 0.

Neonates are infants in the first 27 days of life. Postneonates are 28 days up to one year of age.

Rates per 1,000 live births.

TABLE 7-3. Fetal Deaths by Age of Mother and County of Residence, Oregon, 1999

County of Residence	Total	Age of Mother								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	212	—	24	62	56	47	14	7	—	2
Ratio to Births ¹ ...	4.7	—	4.2	5.1	4.4	5.0	2.8	6.9	—	--
Baker	1	—	—	—	1	—	—	—	—	—
Benton	2	—	1	—	1	—	—	—	—	—
Clackamas	16	—	1	5	3	7	—	—	—	—
Clatsop	1	—	—	—	—	—	1	—	—	—
Columbia	1	—	—	—	—	—	1	—	—	—
Coos	2	—	—	—	—	2	—	—	—	—
Crook	—	—	—	—	—	—	—	—	—	—
Curry	1	—	—	—	—	1	—	—	—	—
Deschutes	4	—	1	—	2	—	—	1	—	—
Douglas	5	—	—	1	2	2	—	—	—	—
Gilliam	—	—	—	—	—	—	—	—	—	—
Grant	2	—	1	1	—	—	—	—	—	—
Harney	—	—	—	—	—	—	—	—	—	—
Hood River	2	—	—	—	—	1	1	—	—	—
Jackson	10	—	1	2	4	2	1	—	—	—
Jefferson	1	—	—	1	—	—	—	—	—	—
Josephine	—	—	—	—	—	—	—	—	—	—
Klamath	4	—	1	2	1	—	—	—	—	—
Lake	—	—	—	—	—	—	—	—	—	—
Lane	19	—	2	6	4	4	3	—	—	—
Lincoln	7	—	1	4	—	1	1	—	—	—
Linn	5	—	2	—	2	—	—	1	—	—
Malheur	5	—	—	1	3	1	—	—	—	—
Marion	20	—	1	6	6	4	2	1	—	—
Morrow	—	—	—	—	—	—	—	—	—	—
Multnomah	45	—	7	12	11	11	2	2	—	—
Polk	2	—	—	2	—	—	—	—	—	—
Sherman	—	—	—	—	—	—	—	—	—	—
Tillamook	3	—	1	2	—	—	—	—	—	—
Umatilla	7	—	1	2	3	—	—	1	—	—
Union	2	—	—	—	1	1	—	—	—	—
Wallowa	—	—	—	—	—	—	—	—	—	—
Wasco	2	—	—	—	1	1	—	—	—	—
Washington	38	—	2	13	9	9	2	1	—	2
Wheeler	—	—	—	—	—	—	—	—	—	—
Yamhill	5	—	1	2	2	—	—	—	—	—

¹ Ratios per 1,000 live births.

— Quantity is zero.

* Rates are not calculated for fewer than five events.

TABLE 7-4. Fetal Deaths by Weeks of Gestation and Cause of Death, Oregon, 1999

Selected Causes of Death (and their ICD-10 codes)	Total	Weeks of Gestation									
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+	
Total	212	1	50	38	24	36	13	29	8	13	
Certain conditions originating in the perinatal period (P00-P96)	185	1	41	33	22	30	13	25	8	12	
Due to maternal conditions unrelated to present pregnancy (P00)	10	-	2	4	2	1	-	-	-	1	
Due to maternal complications of pregnancy (P01)	18	-	9	6	1	-	1	-	-	1	
Due to complications of placenta, cord and membranes (P02) ..	83	1	15	11	8	18	7	10	5	8	
Due to other complications of labor and delivery (P03)	2	-	1	-	-	-	-	-	1	-	
Due to noxious influences transmitted via placenta (P04)	1	-	-	-	-	1	-	-	-	-	
Slow fetal growth and fetal malnutrition (P05)	1	-	-	-	1	-	-	-	-	-	
Disorders related to short gestation and low birth weight, not elsewhere classified (P07)	8	-	8	-	-	-	-	-	-	-	
Intrauterine hypoxia and birth asphyxia (P20-P21)	5	-	-	-	-	-	1	3	1	-	
Fetal hemorrhage (P50-P54)	1	-	-	-	-	-	-	-	1	-	
Hemolytic disease of fetus (P55-P56)	2	-	1	1	-	-	-	-	-	-	
Transitory endocrine and metabolic disorders specific to fetus (P70-P74)	3	-	-	-	-	-	-	1	-	-	
Digestive system disorders of fetus (P76-P78)	2	-	2	-	-	-	-	-	-	-	
Other conditions originating in the perinatal period (P80-P96) ..	44	-	3	11	9	8	3	8	-	2	
Fetal death of unspecified cause (P95)	39	-	3	9	7	8	2	8	-	2	
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	25	-	8	5	2	5	-	4	-	1	
Of the nervous system (Q00-Q07)	4	-	1	1	1	-	-	1	-	-	
Anencephaly and similar malformations (Q00)	3	-	1	1	-	-	-	1	-	-	
Congenital hydrocephalus (Q03)	1	-	-	-	1	-	-	-	-	-	
Of the heart (Q20-Q24)	1	-	-	-	-	1	-	-	-	-	
Of the lung (Q33)	1	-	-	-	-	1	-	-	-	-	
Of the urinary system (Q60-Q64)	2	-	1	1	-	-	-	-	-	-	
Of musculoskeletal system, limbs and integument (Q65-Q85) ..	4	-	-	1	-	-	-	2	-	1	
Other congenital malformations (Q86-Q89)	5	-	4	1	-	-	-	-	-	-	
Chromosomal abnormalities, not elsewhere classified (Q90-Q99)	8	-	2	1	1	3	-	1	-	-	
Down's syndrome (Q90)	2	-	-	-	-	2	-	-	-	-	
Edward's syndrome (Q91.0-Q91.3)	2	-	1	-	1	-	-	-	-	-	

- Quantity is zero
 NOTE: Calculated gestation from reported date of last menses. If calculated gestation is unknown, the clinical estimate of gestation is used.

TABLE 7-5. Fetal Deaths by Weeks of Gestation and Age of Mother, Oregon, 1999

Age of Mother	Total	Weeks of Gestation									
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+	N.S.
Total	212	1	50	38	24	36	13	29	8	13	-
<15	-	-	-	-	-	-	-	-	-	-	-
15-19	24	1	10	2	1	4	1	2	-	3	-
20-24	62	-	14	17	8	11	3	6	-	3	-
25-29	56	-	11	4	8	11	4	10	3	5	-
30-34	47	-	11	11	6	5	3	10	1	-	-
35-39	14	-	3	3	-	3	1	1	2	1	-
40-44	7	-	1	-	-	2	1	-	2	1	-
45+	-	-	-	-	-	-	-	-	-	-	-
N.S.	2	-	-	1	1	-	-	-	-	-	-

- Quantity is zero

NOTE: Calculated gestation from reported date of last menses. If calculated gestation is unknown, the clinical estimate of gestation is used.

TABLE 7-6. Births by Weeks of Gestation and Weight, Oregon Residents, 1998

Birthweight (In Grams)	Total	Weeks of Gestation									
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+	N.S.
Total	45,228	5	50	111	334	1,599	1,267	17,031	11,550	13,240	41
349 and less	16	3	12	-	1	-	-	-	-	-	-
350-499	24	-	14	7	2	-	1	-	-	-	-
499 and less	40	3	26	7	3	-	1	-	-	-	-
500-749	64	1	13	31	9	5	-	1	1	2	1
750-999	85	-	2	35	42	4	1	-	-	1	-
1000-1249	91	-	1	14	49	20	1	5	-	-	1
1250-1499	127	-	-	3	58	53	3	9	1	-	-
1500-1999	495	-	-	2	69	289	43	68	6	16	2
2000-2499	1,526	-	3	4	23	430	245	625	93	101	2
<2500	2,428	4	45	96	253	801	294	708	101	120	6
2500-2999	6,035	-	1	6	24	355	425	3,195	1,047	978	4
3000-3499	16,104	-	4	6	30	265	355	6,895	4,257	4,276	16
3500-3999	14,762	1	-	3	24	132	150	4,710	4,436	5,300	6
4000-4499	4,928	-	-	-	3	39	36	1,279	1,462	2,102	7
4500+	969	-	-	-	-	7	7	244	247	464	-
Unknown	2	-	-	-	-	-	-	-	-	-	2

- Quantity is zero

NOTE: Calculated gestation from reported date of last menses. If calculated gestation is unknown, the clinical estimate of gestation is used.

TABLE 7-7. Fetal Deaths by Weeks of Gestation and Weight, Oregon Residents, 1998

Birthweight (In Grams)	Total	Weeks of Gestation									
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+	N.S.
Total	208	3	42	27	42	23	6	39	12	14	-
350-499	35	2	25	6	2	-	-	-	-	-	-
500-749	34	-	14	15	3	-	-	1	-	1	-
750-999	21	-	2	5	12	2	-	-	-	-	-
1000-1249	14	-	-	1	9	4	-	-	-	-	-
1250-1499	9	-	-	-	7	-	1	-	-	1	-
1500-1999	29	1	1	-	6	12	1	7	-	1	-
2000-2499	15	-	-	-	2	4	3	3	-	3	-
<2500	157	3	42	27	41	22	5	11	-	6	-
2500-2999	20	-	-	-	1	-	-	13	4	2	-
3000-3499	14	-	-	-	-	-	1	8	3	2	-
3500-3999	6	-	-	-	-	-	-	2	3	1	-
4000-4499	6	-	-	-	-	1	-	4	-	1	-
4500+	4	-	-	-	-	-	-	1	1	2	-
Unknown	1	-	-	-	-	-	-	-	1	-	-

- Quantity is zero

NOTE: Calculated gestation from reported date of last menses. If calculated gestation is unknown, the clinical estimate of gestation is used.

TABLE 7-8. Early Neonatal Deaths by Weeks of Gestation and Weight, Oregon Residents, Birth Cohort 1998

Birthweight (In Grams)	Total	Weeks of Gestation									
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+	N.S.
Total	113	4	37	22	14	13	4	8	4	6	1
000-349	16	3	12	-	1	-	-	-	-	-	-
350-499	19	-	14	3	1	-	1	-	-	-	-
<500	35	3	26	3	2	-	1	-	-	-	-
500-749	27	1	10	13	2	-	-	-	-	-	1
750-999	6	-	-	4	1	-	-	-	-	1	-
1000-1249	5	-	1	1	1	2	-	-	-	-	-
1250-1499	5	-	-	-	2	3	-	-	-	-	-
1500-1999	8	-	-	-	5	3	-	-	-	-	-
2000-2499	13	-	-	1	1	3	3	3	2	-	-
<2500	99	4	37	22	14	11	4	3	2	1	1
2500-2999	3	-	-	-	-	2	-	1	-	-	-
3000-3499	4	-	-	-	-	-	-	2	1	1	-
3500-3999	4	-	-	-	-	-	-	1	-	3	-
4000-4499	3	-	-	-	-	-	-	1	1	1	-
4500-4999	-	-	-	-	-	-	-	-	-	-	-
Unknown	-	-	-	-	-	-	-	-	-	-	-

- Quantity is zero

Early neonatal death is defined as less than 7 days old.

NOTE: Calculated gestation from reported date of last menses. If calculated gestation is unknown, the clinical estimate of gestation is used.

TABLE 7-9. Late Neonatal Deaths by Weeks of Gestation and Weight, Oregon Residents, Birth Cohort 1998

Birthweight (In Grams)	Total	Weeks of Gestation									
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+	N.S.
Total	29	-	-	5	4	1	1	9	5	4	-
001-349	-	-	-	-	-	-	-	-	-	-	-
350-499	1	-	-	1	-	-	-	-	-	-	-
<500	1	-	-	1	-	-	-	-	-	-	-
500-749	1	-	-	1	-	-	-	-	-	-	-
750-999	4	-	-	2	2	-	-	-	-	-	-
1000-1249	2	-	-	1	1	-	-	-	-	-	-
1250-1499	-	-	-	-	-	-	-	-	-	-	-
1500-1999	3	-	-	-	1	1	-	-	1	-	-
2000-2499	4	-	-	-	-	-	-	4	-	-	-
<2500	15	-	-	5	4	1	-	4	1	-	-
2500-2999	4	-	-	-	-	-	-	3	-	1	-
3000-3499	8	-	-	-	-	-	1	2	4	1	-
3500-3999	1	-	-	-	-	-	-	-	-	1	-
4000-4499	1	-	-	-	-	-	-	-	-	1	-
4500-4999	-	-	-	-	-	-	-	-	-	-	-
Unknown	-	-	-	-	-	-	-	-	-	-	-

- Quantity is zero
 Late neonatal death is defined as death at 7 to 27 days old.
 NOTE: Calculated gestation from reported date of last menses. If calculated gestation is unknown, the clinical estimate of gestation is used.

TABLE 7-10. Postneonatal Deaths by Weeks of Gestation and Weight, Oregon Residents, Birth Cohort 1998

Birthweight (In Grams)	Total	Weeks of Gestation									
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+	N.S.
Total	95	-	1	3	2	6	3	29	20	28	3
001-349	-	-	-	-	-	-	-	-	-	-	-
350-499	1	-	-	1	-	-	-	-	-	-	-
<500	1	-	-	1	-	-	-	-	-	-	-
500-749	1	-	-	1	-	-	-	-	-	-	-
750-999	1	-	-	1	-	-	-	-	-	-	-
1000-1249	-	-	-	-	-	-	-	-	-	-	-
1250-1499	-	-	-	-	-	-	-	-	-	-	-
1500-1999	6	-	-	-	-	3	2	1	-	-	-
2000-2499	7	-	1	-	1	1	-	3	-	1	-
<2500	16	-	1	3	1	4	2	4	-	1	-
2500-2999	19	-	-	-	-	-	-	10	3	6	-
3000-3499	29	-	-	-	-	-	1	9	10	8	1
3500-3999	23	-	-	-	1	2	-	4	6	10	-
4000-4499	4	-	-	-	-	-	-	1	-	3	-
4500-4999	1	-	-	-	-	-	-	-	1	-	-
Unknown	3	-	-	-	-	-	-	1	-	-	2

- Quantity is zero
 NOTE: Calculated gestation from reported date of last menses. If calculated gestation is unknown, the clinical estimate of gestation is used.

**TABLE 7-11. Neonatal Deaths by
Birthweight, Oregon Residents,
Birth Cohort 1998**

Birthweight (In Grams)	Deaths	Rate
Total	142	3.1
001-349	16	1000.0
350-499	20	833.3
<500	36	900.0
500-749	28	437.5
750-999	10	117.6
1000-1249	7	76.9
1250-1499	5	39.4
1500-1999	11	22.2
2000-2499	17	11.1
<2500	114	47.0
2500-2999	7	1.2
3000-3499	12	0.7
3500-3999	5	0.3
4000-4499	4	0.8
4500-4999	—	—
2500+	28	0.7

— Quantity is zero or rate is based on less than five events.
Rate per 1,000 live births.

TABLE 7-12. Neonatal Deaths by Birthweight, Oregon Residents, Birth Cohort 1996-98

Birthweight (In Grams)	Deaths	Rate
Total	437	3.1
001-349	47	1000.0
350-499	61	897.1
<500	108	939.1
500-749	94	429.2
750-999	28	118.1
1000-1249	14	51.5
1250-1499	11	30.8
1500-1999	26	18.2
2000-2499	31	6.8
<2500	312	47.0
2500-2999	39	2.2
3000-3499	40	0.8
3500-3999	30	0.7
4000-4499	12	0.8
4500-4999	2	0.7
2500+	123	0.7

Rate per 1,000 live births.

TABLE 7-13. Perinatal Death Rates by County of Residence, Oregon Residents, Birth Cohort 1998

County of Residence	Perinatal I ¹			Perinatal II ²			Neonatal ³	
	No.	Ratio	Rate	No.	Ratio	Rate	No.	Rate
Total	247	5.5	5.4	345	7.6	7.6	140	3.1
Baker	2	-	-	3	-	-	-	-
Benton	6	7.4	7.4	6	7.4	7.4	3	-
Clackamas	21	5.0	5.0	27	6.5	6.5	14	3.4
Clatsop	-	-	-	1	-	-	-	-
Columbia	3	-	-	5	9.3	9.3	2	-
Coos	2	-	-	2	-	-	1	-
Crook	3	-	-	3	-	-	1	-
Curry	-	-	-	-	-	-	-	-
Deschutes	11	8.0	8.0	18	13.1	13.0	7	5.1
Douglas	5	4.4	4.4	5	4.4	4.4	4	-
Gilliam	-	-	-	-	-	-	-	-
Grant	-	-	-	1	-	-	1	-
Harney	-	-	-	1	-	-	1	-
Hood River	-	-	-	-	-	-	-	-
Jackson	14	6.6	6.6	21	9.9	9.8	9	4.2
Jefferson	4	-	-	5	16.6	16.4	2	-
Josephine	8	9.8	9.8	10	12.3	12.2	5	6.1
Klamath	3	-	-	6	7.0	7.0	3	-
Lake	-	-	-	-	-	-	-	-
Lane	30	8.0	7.9	37	9.8	9.8	18	4.8
Lincoln	4	-	-	9	21.2	20.9	2	-
Linn	9	6.1	6.0	14	9.4	9.4	4	-
Malheur	2	-	-	5	9.3	9.3	3	-
Marion	26	5.7	5.7	39	8.6	8.5	8	1.8
Morrow	-	-	-	-	-	-	-	-
Multnomah	48	5.2	5.1	70	7.5	7.5	22	2.4
Polk	3	-	-	3	-	-	-	-
Sherman	-	-	-	-	-	-	-	-
Tillamook	1	-	-	2	-	-	2	-
Umatilla	6	5.9	5.8	7	6.8	6.8	4	-
Union	3	-	-	3	-	-	-	-
Wallowa	1	-	-	1	-	-	1	-
Wasco	2	-	-	3	-	-	2	-
Washington	24	3.5	3.5	31	4.5	4.5	17	2.5
Wheeler	-	-	-	-	-	-	-	-
Yamhill	6	5.2	5.2	7	6.0	6.0	4	-

- Quantity is zero, or number of events is less than five for ratios and rates.

¹ Perinatal Definition I, generally used for international comparisons, includes fetal deaths at 28 weeks of gestation or more, and infant deaths of less than 7 days.

² Perinatal Definition II, includes fetal deaths at 20 weeks of gestation or more, and infant deaths of less than 28 days.

³ Neonatal deaths, includes infant deaths of less than 28 days.

TABLE 7-14. Perinatal Death Rates by County of Residence, Oregon Residents, Birth Cohort 1996-1998

County of Residence	Perinatal I ¹			Perinatal II ²			Neonatal ³	
	No.	Ratio	Rate	No.	Ratio	Rate	No.	Rate
Total	785	5.9	5.9	1,077	8.1	8.1	434	3.3
Baker	3	-	-	5	9.5	9.4	-	-
Benton	17	6.8	6.8	21	8.4	8.4	10	4.0
Clackamas	71	5.8	5.8	98	8.0	7.9	47	3.8
Clatsop	2	-	-	5	4.1	4.1	1	-
Columbia	6	3.9	3.9	8	5.1	5.1	4	-
Coos	10	5.2	5.1	13	6.7	6.7	5	2.6
Crook	4	-	-	6	8.9	8.9	2	-
Curry	4	-	-	5	10.2	10.1	2	-
Deschutes	24	6.0	6.0	39	9.8	9.7	13	3.3
Douglas	30	8.9	8.9	32	9.5	9.4	16	4.7
Gilliam	-	-	-	-	-	-	-	-
Grant	2	-	-	3	-	-	2	-
Hamey	2	-	-	3	-	-	1	-
Hood River	4	-	-	5	5.6	5.6	1	-
Jackson	39	6.2	6.2	56	8.9	8.9	26	4.1
Jefferson	7	7.4	7.4	10	10.6	10.6	4	-
Josephine	15	6.4	6.3	24	10.2	10.1	8	3.4
Klamath	25	10.0	10.0	31	12.4	12.4	14	5.6
Lake	1	-	-	1	-	-	1	-
Lane	77	7.0	7.0	97	8.8	8.8	46	4.2
Lincoln	7	5.3	5.3	13	9.9	9.8	3	-
Linn	23	5.3	5.3	32	7.4	7.4	11	2.5
Malheur	12	8.0	8.0	17	11.4	11.3	8	5.4
Marion	75	5.6	5.6	113	8.4	8.4	45	3.4
Morrow	-	-	-	1	-	-	1	-
Multnomah	161	5.9	5.8	219	8.0	7.9	75	2.7
Polk	13	6.2	6.2	18	8.6	8.6	5	2.4
Sherman	1	-	-	1	-	-	-	-
Tillamook	4	-	-	7	9.9	9.8	2	-
Umatilla	18	5.9	5.9	24	7.9	7.8	13	4.3
Union	6	6.9	6.8	9	10.3	10.2	1	-
Wallowa	2	-	-	3	-	-	2	-
Wasco	7	7.8	7.8	11	12.3	12.2	5	5.6
Washington	93	4.7	4.7	120	6.1	6.1	48	2.4
Wheeler	-	-	-	-	-	-	-	-
Yamhill	20	6.0	6.0	27	8.2	8.1	12	3.6

- Quantity is zero, or number of events is less than five for ratios and rates.

¹ Perinatal Definition I, generally used for international comparisons, includes fetal deaths at 28 weeks of gestation or more, and infant deaths of less than 7 days.

² Perinatal Definition II, includes fetal deaths at 20 weeks of gestation or more, and infant deaths of less than 28 days.

³ Neonatal deaths, includes infant deaths of less than 28 days.

TABLE 7-15. Perinatal Death Rates by Mother's Risk Factors, Oregon Residents, Birth Cohort 1998

Risk Factor	Perinatal I ¹			Perinatal II ²			Neonatal ³	
	No.	Ratio	Rate	No.	Ratio	Rate	No.	Rate
Total	247	5.5	5.4	345	7.6	7.6	140	3.1
Marital Status								
Married	132	4.2	4.1	182	5.7	5.7	62	2.0
Unmarried	115	8.5	8.5	163	12.1	12.0	78	5.8
Age of Mother								
10-14	2	-	-	3	-	-	3	-
15-19	37	6.6	6.6	56	10.1	10.0	28	5.0
20-24	71	6.0	6.0	91	7.7	7.6	37	3.1
25-29	62	4.8	4.8	93	7.2	7.2	39	3.0
30-34	48	5.2	5.1	60	6.4	6.4	17	1.8
35-39	18	3.9	3.9	27	5.9	5.9	10	2.2
40-44	7	7.4	7.4	11	11.7	11.6	5	5.3
45+	1	-	-	1	-	-	-	-
Mother's Ethnicity/Race								
White (non-Hispanic)	183	5.2	5.2	251	7.2	7.1	102	2.9
Hispanic (all races)	44	6.8	6.7	58	8.9	8.9	23	3.5
African American	10	10.5	10.5	16	16.9	16.7	5	5.3
Indian	2	-	-	7	10.0	10.0	3	-
Other nonwhite	7	3.6	3.6	11	5.7	5.7	6	3.1
Mother's Education								
8th grade or less	18	6.7	6.7	27	10.0	10.0	9	3.3
Some HS	45	7.0	7.0	60	9.4	9.3	24	3.7
HS diploma / GED	99	6.4	6.4	138	8.9	8.9	63	4.1
More than HS	69	3.5	3.5	96	4.9	4.9	37	1.9
Start of Prenatal Care								
1st trimester	164	4.5	4.5	245	6.8	6.8	102	2.8
2nd trimester	52	7.2	7.2	61	8.5	8.4	28	3.9
3rd trimester	8	5.8	5.8	8	5.8	5.8	1	-
no care	23	46.8	45.5	31	63.1	60.4	9	18.3
Tobacco Use								
Yes	53	7.7	7.7	68	9.9	9.9	28	4.1
No	185	4.9	4.8	265	7.0	6.9	107	2.8
Alcohol Use								
Yes	3	-	-	5	6.8	6.8	1	-
No	236	5.4	5.4	329	7.5	7.5	135	3.1
Multiple Birth								
Yes	23	18.2	18.0	31	24.5	24.2	12	9.5
No	224	5.1	5.1	314	7.1	7.1	128	2.9

Rate per 1,000 live births.

*Unless specified, racial categories do not include Hispanic ethnicity.

NOTE: Because of unreported items, the sum of all categories may not equal the total.

- Quantity is zero, or number of events is less than five for ratios and rates.

¹ Perinatal Definition I, generally used for international comparisons, includes fetal deaths at 28 weeks of gestation or more, and infant deaths of less than 7 days.² Perinatal Definition II, includes fetal deaths at 20 weeks of gestation or more, and infant deaths of less than 28 days.³ Neonatal deaths, includes infant deaths of less than 28 days.

TABLE 7-16. Perinatal Death Rates by Mother's Risk Factors, Oregon Residents, Birth Cohort, 1996-1998

Risk Factor	Perinatal I ¹			Perinatal II ²			Neonatal ³	
	No.	Ratio	Rate	No.	Ratio	Rate	No.	Rate
Total	785	5.9	5.9	1,077	8.1	8.1	434	3.3
Marital Status								
Married	422	4.5	4.5	569	6.1	6.1	173	1.8
Unmarried	363	9.3	9.3	508	13.0	12.9	261	6.7
Age of Mother								
10-14	6	20.7	20.5	10	34.5	33.9	5	17.2
15-19	119	7.2	7.2	166	10.0	10.0	81	4.9
20-24	216	6.3	6.2	285	8.3	8.2	104	3.0
25-29	188	5.0	5.0	269	7.1	7.1	122	3.2
30-34	140	5.1	5.1	191	6.9	6.9	66	2.4
35-39	82	6.2	6.2	112	8.5	8.5	40	3.0
40-44	26	9.5	9.5	33	12.1	12.0	12	4.4
45+	5	41.7	40.7	6	50.0	48.4	2	-
Mother's Ethnicity/Race								
White (non-Hispanic)	581	5.6	5.5	801	7.7	7.6	313	3.0
Hispanic (all races)	138	7.8	7.7	179	10.1	10.0	79	4.4
African American	29	10.6	10.5	42	15.4	15.2	13	4.8
Indian	6	3.0	3.0	13	6.4	6.4	5	2.5
Other nonwhite	26	4.8	4.8	35	6.4	6.4	21	3.9
Mother's Education								
8th grade or less	62	7.8	7.7	84	10.5	10.4	32	4.0
Some HS	135	7.0	7.0	185	9.7	9.6	77	4.0
HS diploma / GED	295	6.5	6.5	402	8.9	8.8	185	4.1
More than HS	226	3.9	3.9	323	5.6	5.6	121	2.1
Start of Prenatal Care								
1st trimester	545	5.1	5.1	775	7.3	7.3	321	3.0
2nd trimester	150	7.2	7.1	186	8.9	8.9	77	3.7
3rd trimester	22	5.4	5.4	25	6.2	6.1	7	1.7
no care	68	48.8	47.5	91	65.3	62.5	29	20.8
Tobacco Use								
Yes	171	7.9	7.9	228	10.5	10.5	83	3.8
No	579	5.3	5.2	810	7.3	7.3	330	3.0
Alcohol Use								
Yes	20	8.3	8.2	28	11.6	11.5	7	2.9
No	728	5.7	5.7	1007	7.9	7.8	404	3.2
Multiple Birth								
Yes	82	23.8	23.6	116	33.6	33.1	57	16.5
No	703	5.4	5.4	961	7.4	7.4	377	2.9

Rate per 1,000 live births.

*Unless specified, racial categories do not include Hispanic ethnicity.

NOTE: Because of unreported items, the sum of all categories may not equal the total.

- Quantity is zero, or number of events is less than five for ratios and rates.

¹ Perinatal Definition I, generally used for international comparisons, includes fetal deaths at 28 weeks of gestation or more, and infant deaths of less than 7 days.² Perinatal Definition II, includes fetal deaths at 20 weeks of gestation or more, and infant deaths of less than 28 days.³ Neonatal deaths, includes infant deaths of less than 28 days.

TABLE 7-17. Neonatal, Postneonatal and Infant Death Rates by Mother's Risk Factors, Oregon Residents, Birth Cohort 1998

Risk Factor	Neonatal ¹ Deaths		Postneonatal ² Deaths		Infant ³ Deaths	
	Number	Rate	Number	Rate	Number	Rate
Total	140	3.1	96	2.1	236	5.2
Marital Status						
Married	62	2.0	39	1.2	101	3.2
Unmarried	78	5.8	57	4.2	135	10.0
Age of Mother						
10-14	3	-	1	-	4	-
15-19	28	5.0	20	3.6	48	8.6
20-24	37	3.1	29	2.4	66	5.6
25-29	39	3.0	19	1.5	58	4.5
30-34	17	1.8	16	1.7	33	3.5
35-39	10	2.2	9	2.0	19	4.2
40-44	5	5.3	2	-	7	7.4
45+	-	-	-	-	-	-
Mother's Ethnicity/Race						
White (non-Hispanic)	102	2.9	71	2.0	173	4.9
Hispanic (all races)	23	3.5	12	1.8	35	5.4
African American	5	5.3	3	-	8	8.4
Indian	3	-	6	8.6	9	12.9
Other nonwhite	6	3.1	4	-	10	5.2
Mother's Education						
8th grade or less	9	3.3	11	4.1	20	7.4
Some HS	24	3.7	25	3.9	49	7.6
HS diploma / GED	63	4.1	25	1.6	88	5.7
More than HS	37	1.9	32	1.6	69	3.5
Start of Prenatal Care						
1st trimester	102	2.8	68	1.9	170	4.7
2nd trimester	28	3.9	18	2.5	46	6.4
3rd trimester	1	-	7	5.1	8	5.8
no care	9	18.3	3	-	12	24.4
Tobacco Use						
Yes	28	4.1	28	4.1	56	8.2
No	107	2.8	67	1.8	174	4.6
Alcohol Use						
Yes	1	-	3	-	4	-
No	135	3.1	91	2.1	226	5.2
Multiple Birth						
Yes	12	9.5	5	4.0	17	13.5
No	128	2.9	91	2.1	219	5.0

Rate per 1,000 live births.

*Unless specified, racial categories do not include Hispanic ethnicity.

NOTE: Because of unreported items, the sum of all categories may not equal the total.

- Quantity is zero, or rate is based on less than 5 events.

¹ Neonatal deaths, include infant deaths at 28 or fewer days of age.² Postneonatal Deaths, include infant deaths after 28 days, but before age 1.³ Infant deaths, include neonatal and postneonatal deaths up to age 1.

TABLE 7-18. Neonatal, Postneonatal and Infant Death Rates by Mother's Risk Factors, Oregon Residents, Birth Cohort 1996-1998

Risk Factor	Neonatal ¹ Deaths		Postneonatal ² Deaths		Infant ³ Deaths	
	Number	Rate	Number	Rate	Number	Rate
Total	434	3.3	284	2.1	718	5.4
Marital Status						
Married	173	1.8	132	1.4	305	3.3
Unmarried	261	6.7	152	3.9	413	10.6
Mother's Age						
10-14	5	17.2	2	-	7	24.1
15-19	81	4.9	73	4.4	154	9.3
20-24	104	3.0	79	2.3	183	5.3
25-29	122	3.2	55	1.5	177	4.7
30-34	66	2.4	45	1.6	111	4.0
35-39	40	3.0	24	1.8	64	4.9
40-44	12	4.4	6	2.2	18	6.6
45+	2	-	-	-	2	-
Mother's Ethnicity/Race						
White (non-Hispanic)	313	3.0	219	2.1	532	5.1
Hispanic (all races)	79	4.4	31	1.7	110	6.2
African American	13	4.8	14	5.1	27	9.9
Indian	5	2.5	9	4.4	14	6.9
Other nonwhite	21	3.9	9	1.7	30	5.5
Mother's Education						
8th grade or less	32	4.0	25	3.1	57	7.1
Some HS	77	4.0	70	3.7	147	7.7
HS diploma / GED	185	4.1	91	2.0	276	6.1
More than HS	121	2.1	89	1.6	210	3.7
Start of Prenatal Care						
1st trimester	321	3.0	190	1.8	511	4.8
2nd trimester	77	3.7	70	3.3	147	7.0
3rd trimester	7	1.7	18	4.4	25	6.2
no care	29	20.8	6	4.3	35	25.1
Tobacco Use						
Yes	83	3.8	96	4.4	179	8.3
No	330	3.0	187	1.7	517	4.7
Alcohol Use						
Yes	7	2.9	11	4.5	18	7.4
No	404	3.2	268	2.1	672	5.3
Multiple Birth						
Yes	57	16.5	12	3.5	69	20.0
No	377	2.9	272	2.1	649	5.0

Rate per 1,000 live births.

*Unless specified, racial categories do not include Hispanic ethnicity.

NOTE: Because of unreported items, the sum of all categories may not equal the total.

- Quantity is zero, or rate is based on less than 5 events.

¹ Neonatal deaths, include infant deaths at 28 or fewer days of age.² Postneonatal Deaths, include infant deaths after 28 days, but before age 1.³ Infant deaths, include neonatal and postneonatal deaths up to age 1.

Youth Suicide Attempts

INTRODUCTION

Youth suicide has been a persistent problem among the state's youth. During 1999, 738 suicide attempts were reported among Oregon youth 17 and younger, or about two per day. (See Suicide Attempt Trends, below for changes in methodology.)

The Oregon system identifies only attempts by youth with injuries severe enough to require emergency care at a hospital; consequently the number of events reported must be considered a minimum. The Technical Notes section in Appendix B describes the methodology and limitations of the data.

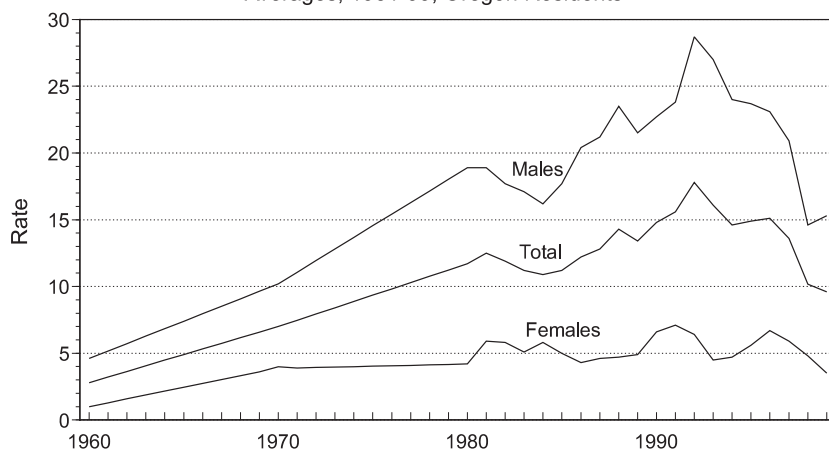
The proportion of youth described with a specified characteristic is based on only those cases with known values; that is, attempts in the "not stated" categories are excluded before the percentages are calculated. In most cases, this makes relatively little difference in the calculated percentages.

The suicide rate for Oregonians ages 15-19 has fallen to a level not seen since the 1970s.

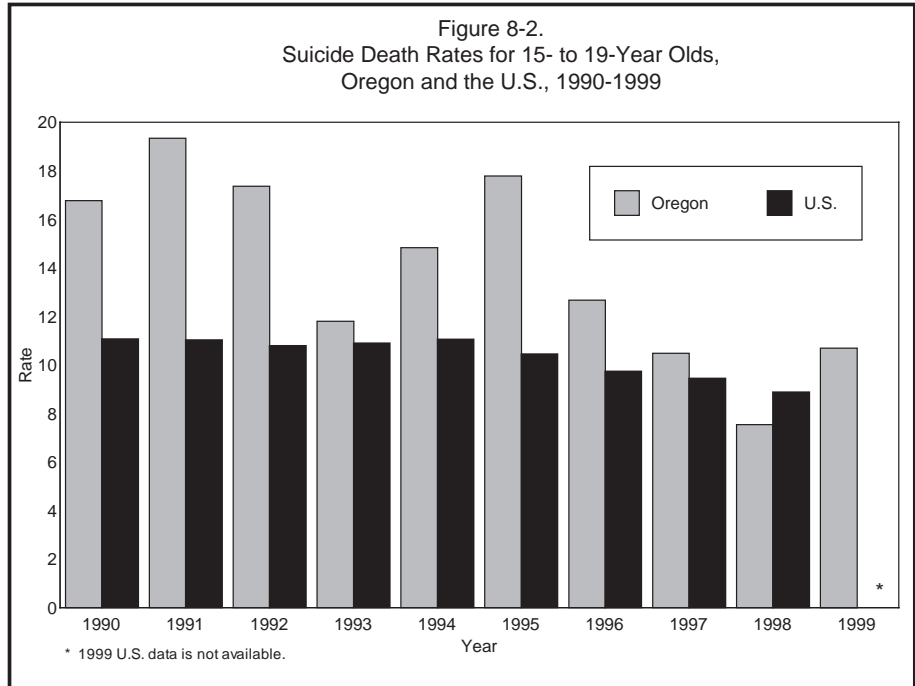
SUICIDE DEATH TRENDS

During the 1960s, '70s, and '80s, the suicide death rate rose dramatically, especially among males. [Figure 8-1]. Most of the 1990s were, however, characterized by a declining three-year moving average. At the cusp of the new millennium the number of youth suicides increased for the first time since 1995; in 1999, 29 youth age 19 and younger died by suicide compared to 26 in 1998.

Figure 8-1.
Suicide Rates for 15- to 19-Year-Olds, 1959-61,
1969-71, 1979-81, and Three-Year Moving
Averages, 1981-99, Oregon Residents



Note: Because population data by age and sex are not available for the 1960s and 1970s, rates for these years, other than those based on decennial census data, have been interpolated. Therefore, variations within 10-year periods prior to 1980 are not apparent. Rates are per 100,000 population for the groups at risk.



Percentage of 1999 attempts with guns that were fatal: 80.

During 1997-1999, Oregonians 15-19 years old were 3.4 times more likely to die by suicide than were their counterparts during 1959-1961. The suicide death rate among males increased over that time from 4.6 to 15.3 per 100,000; among females, it increased from 1.0 to 3.5. For both sexes combined, the rate increased from 2.8 to 9.6.

Oregon's youth suicide rate has historically been higher than the nation's. [Figure 8-2].

While most suicide deaths occur at home, some youth who are transported to ERs will die in the hospital. The risk of death is increased by the lethality of the method, the degree of injury that is self-inflicted, the time elapsed between injury and treatment, and access to medical care.

Number of Attempts by Year and Sex			
Year	Total	Male	Female
1988	648	110	535
1989	624	120	499
1990	526	118	406
1991	577	124	453
1992	685	141	544
1993	723	113	610
1994	773	187	586
1995	753	150	603
1996	778	163	615
1997	736	151	585
1998	761	190	571
1999*	738	180	558

Attempters of unknown sex are included in the total.
* Excludes suicide ideators.

SUICIDE ATTEMPT TRENDS

The Oregon suicide reporting system identifies only those suicide attempts among youth 17 or younger who sought care at a hospital and for whom a report was filed. Because reporting by hospital can vary from year-to-year, caution should be used when interpreting youth suicide attempt rates over time, particularly by county. See the Technical Notes section in Appendix B for additional information on methodology.

GENDER

Girls were far more likely to attempt suicide than were boys; three-fourths (75.6%) of all attempts were by young females. [Table 8-2].

AGE

The youngest reported suicide attempt occurred in a six year old male. He reported family discord and rape/sexual abuse. Fifty-two attempts by preteens were reported. [Table 8-2]. Attempts by 13- to 14-year-olds numbered 196 and those by 15- to 17-year-olds totaled 490. As in years past, 15- to 17-year-olds accounted for two-thirds (66.4%) of the total suicide attempts. [Figure 8-3].

RACE

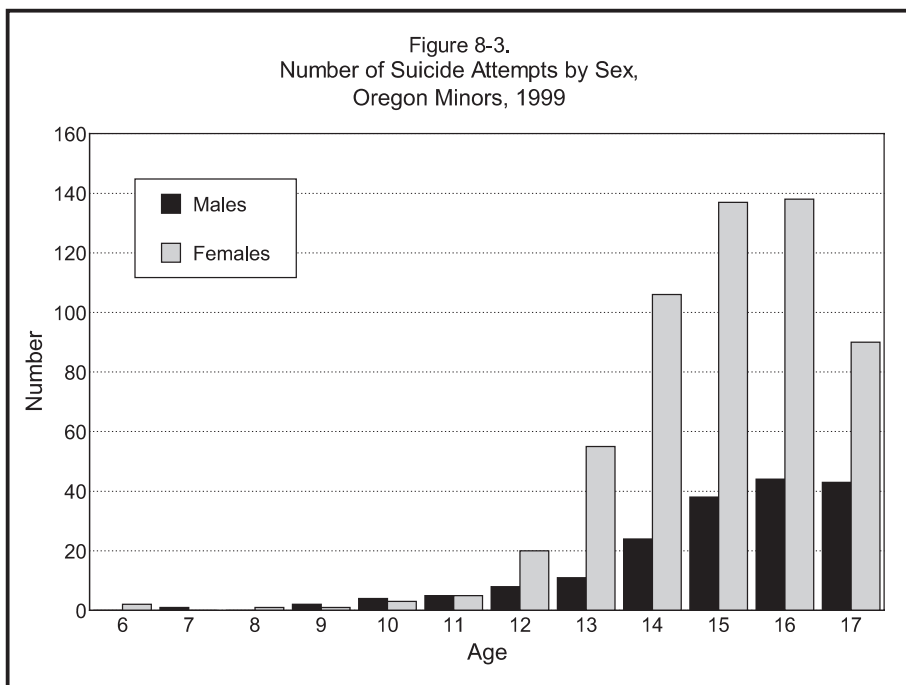
The number of suicide attempts by race/ethnicity are shown in the sidebar to the right. Reflecting the racial/ethnic composition of the state, most attempters were white.

HOUSEHOLD SITUATION

Among youth who were reported to have attempted suicide, the largest group (35.9%) lived with both parents. Ranking second were youth living with their mother only (28.9%) while 11.6 percent lived with a parent and stepparent. [Table 8-3]. Attempts involving youth living under government supervision (e.g., in an institution or foster home) accounted for 8.9 percent of all attempts. These youth more often cited three or more reasons for their attempt, 36.7 percent did so versus 20.6 percent of attempters overall. The former were also most likely to have made prior attempts.

The youngest youth for whom a suicide attempt was reported was a six year old boy who experienced family discord and had been sexually abused.

Number of Attempts		
Race	1999	1998
White	622	683
African American	21	15
Indian	7	15
Chinese	0	0
Japanese	0	0
Hawaiian	0	0
Filipino	1	0
Other Asian and Pacific Islanders	11	14
Hispanic	38	20
Not Stated	38	14



GEOGRAPHIC DISTRIBUTION

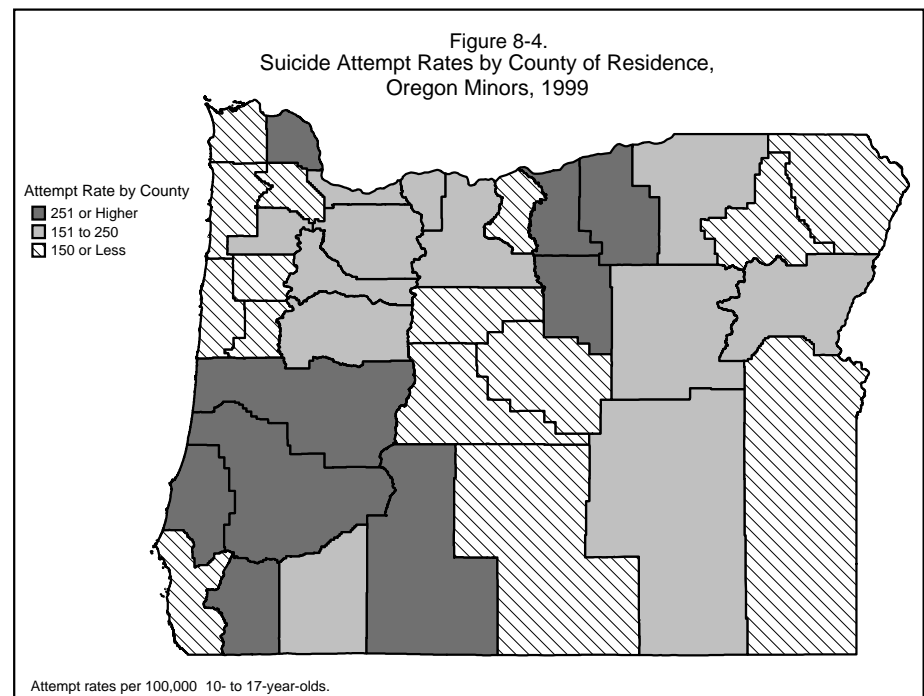
While the suicide attempt rate for the state was 192.4 per 100,000 (10- to 17-year-olds), the rates for individual counties varied widely. [Figure 8-4]. During 1999, among counties with 10 or more attempts, the three highest rates were reported from Douglas (394.6) Columbia (302.4), and Coos (298.0) counties. [Table 8-4]. No attempts were reported for adolescents in three counties: Curry, Jefferson, and Sherman. Table 8-15 lists the number of reports by hospital since reporting became mandatory in 1988. The *Oregon Health Trends* (No. 57) article "Youth Suicide: Results from the 1999 YRBS" lists multi-year suicide death rates by county. It is available on the web at: <http://www.ohd.hr.state.or.us/chs/oht.htm>.

PLACE OF ATTEMPT

Most (80.2%) of the attempts were made in the adolescent's own home while an additional 3.9 percent were made in another's home. [Table 8-5]. Schools were the site of just 3.5 percent of the attempts.

MONTH AND DATE OF ATTEMPT

As in past years, the summer school vacation months continued to be the season of lowest risk, and spring the season of greatest risk; 22.2 percent of the suicide attempts occurred from June through August, but half-again as many suicide attempts were reported during March through May (30.4%). About 24 percent of the attempts occurred during



each of the two remaining quarters. By weekday, Mondays, as usual, posed the greatest risk (16.8% of all attempts) and Saturdays the least (10.3%). For further information on temporal trends, see *Suicide and Suicidal Thoughts*, also published by this office.

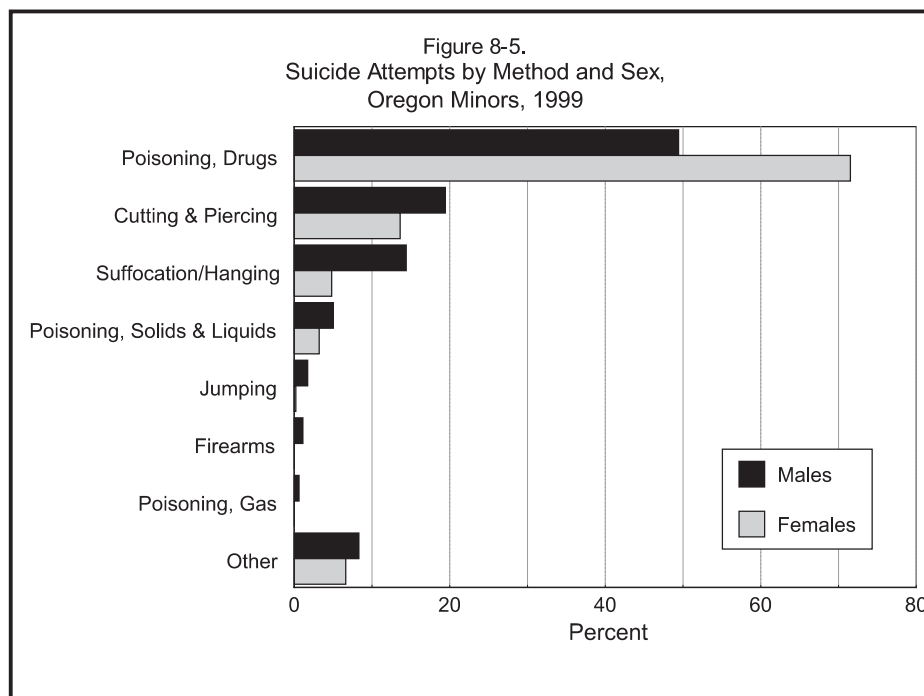
PAST ATTEMPTS

Almost as many suicide attempts were by youths who reported past attempts as were by those who had not (44.8% vs. 55.2%). There was little overall difference by gender, except that males were more likely to have made at least two prior attempts. [Table 8-6]. Because a single adolescent may make multiple attempts during any one year, it should be remembered that references to the number or proportion of attempts with a given characteristic may be influenced by repeated attempts of a single individual.

METHOD

Adolescents used many methods in their attempts, but ingestion of drugs accounted for the majority (66.1%). Girls were especially likely to use this method; 71.5 percent did so compared to 49.4 percent of boys. [Figure 8-5]. Two-fifths (42.2%) of the 488 drug-related cases involved analgesics; aspirin and acetaminophen were most commonly used. (The latter is of particular concern because many adolescents are unaware of its potential long-term toxic effects and lethality.) Most of the other attempts involving drugs were with combinations of drugs or of drugs with alcohol. Cutting and piercing

Suicide attempts occurred most often during the spring.



Six of every ten attempts were made with drugs.

injuries were the second most common method of attempt, accounting for 15.0 percent of the cases; nearly all of these were lacerations of the wrists. The third single most common method was suffocation and hanging (7.2%). The category "other" in Table 8-7 includes mostly attempts by multiple methods; the majority involved poisoning, usually with drugs, combined with lacerations of the wrists. Uncommon methods, such as jumping from a man-made structure and stepping in front of a moving motor vehicle, are also included here.

Table 8-8 shows that youth making repeat attempts are more likely to use more violent methods (although not necessarily more lethal methods). While the percentage of attempts resulting from medication overdoses declined from 76.0 percent for those with no previous attempts to 52.4 percent of those with a prior attempt, attempts by suffocation and hanging increased from 5.5 percent to 10.8 percent and attempts by cutting and piercing increased from 7.8 percent to 22.4 percent.

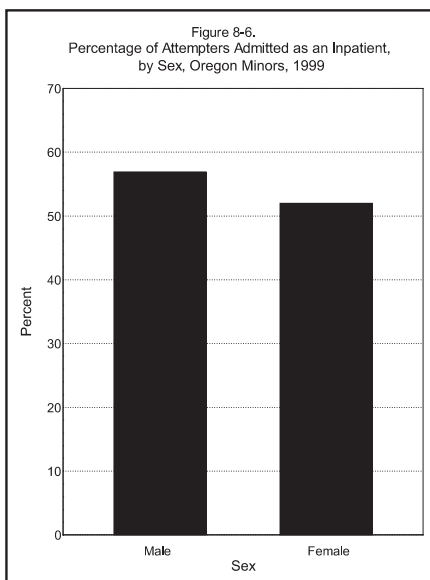
ADMISSION STATUS

More than one-half (52.8%) of youth treated in a hospital for an attempt were admitted as an inpatient. [Table 8-9]. Males were marginally more likely to be admitted as inpatients, 55.4 percent vs. 52.0 percent of females. [Figure 8-6]. And, contrary to commonly held belief, preteens were more likely to inflict injuries that required hospitalization than were their older counterparts, although in some cases it may be the circumstances leading to the attempt rather than the nature of the injuries themselves that led to inpatient admission.

Certain methods were more likely than others to result in hospitalization. Among the categories involving a single action (and with at least 10 events), attempts by suffocation and hanging were about three times more likely to lead to hospital admission than to treatment on an outpatient basis. [Table 8-10]. (Deaths resulting from gunshot injuries usually occur at the injury site, not in the hospital.) Attempts by "other" methods (most commonly both poisoning and lacerations of the wrists) were a little over twice as likely to result in admission as an inpatient.

RECENT PERSONAL EVENTS

A suicide attempt may be triggered by a variety of personal crises. [Figure 8-7]. The report form allows one or more events leading to the attempt to be recorded. For example one 16-year-old girl reported family discord, physical abuse, and rape/sexual abuse as well as other reasons.



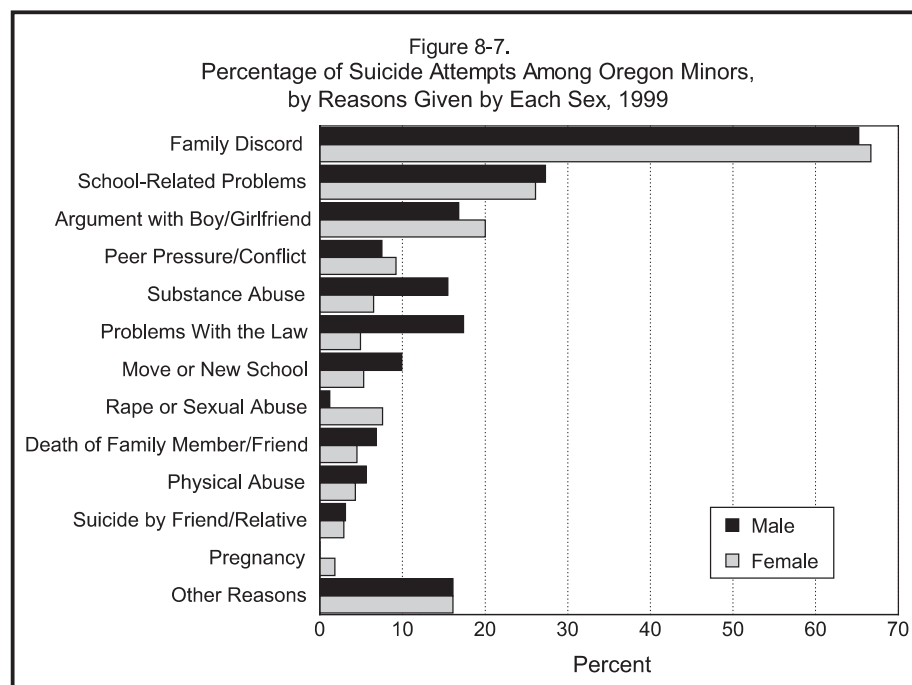
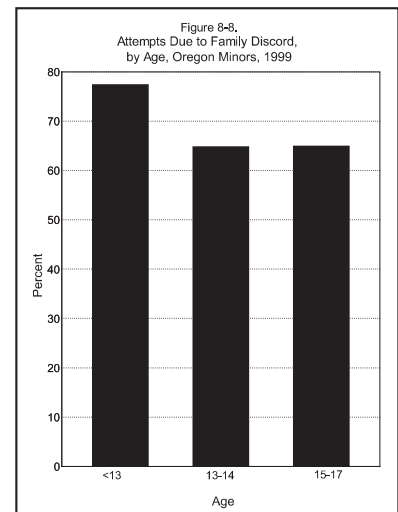
Lack of social support is a common thread among adolescents who attempt suicide, especially among those who cite multiple reasons. Only about one in three of these youth lived with both natural parents. The most commonly reported reasons follow in order by frequency:

Family discord was the most common factor associated with a suicide attempt. Nearly two-thirds (66.3%) of Oregon minors reported discord as a precipitating event. [Table 8-11]. There was little difference by gender, but family discord was mentioned most often by the youngest youth. [Figure 8-8].

School-related problems (e.g., performance, truancy) were cited by 26.4 percent of youth treated for a suicide attempt. Boys were marginally more likely to report school-related problems than were females, 27.3 percent vs. 26.1 percent. Although these problems were previously most common among preteens, during 1999 no clear trend was apparent.

An argument or breakup with a boyfriend or girlfriend was the third most common reason given for a suicide attempt and was more common, although not greatly so, among girls (20.0% vs. 16.8% for boys). While only infrequently cited by preteens (one in 25 attempts), it was far more common among 15- to 17-year-olds (one in four attempts).

Peer pressure/conflict, ranking fourth, was cited by 8.8 percent of attempters. At 9.2 percent, females were more likely to identify this as a reason for their attempt than were males (7.5%). Older youth were least likely to report peer pressure. It was also one of the two reasons least likely to be associated with previous attempts. [Table 8-12].



Family discord was the most frequently cited reason for suicide attempts.

Substance abuse was the fifth most commonly cited reason and was listed on 8.6 percent of the attempt reports. It was reported more than twice as often by males than females (15.5% vs. 6.5%). Unlike peer pressure, it was mentioned least often by preteens and most often among 15- to 17-year-olds. The youth who mentioned substance abuse during evaluation were second only to those mentioning physical abuse in their likelihood of being admitted as an inpatient; 86.0 percent were versus 53.8 percent of all youth who made attempts. [Table 8-13].

Problems with the law were reported by 7.9 percent of all youth, with males three times more likely to report this reason than were females (17.4% vs. 4.9%). There was little difference by age group.

A move or attendance at a new school was given as a reason by 6.4 percent of youth who were reported to have made attempts. Males were nearly twice as likely as females to give this reason (9.9% vs. 5.3%) while preteens mentioned this almost twice as often as did 15- to 17-year-olds (10.2% vs. 5.7%).

Rape or sexual abuse was a factor in 6.1 percent of attempts overall, but in 7.6 percent of female attempts compared to just 1.2 percent of male attempts. It was most commonly reported by 15- to 17-year-olds.

The death of a family member or friend was associated with 5.1 percent of attempts, and was more common among males than females (6.8% vs. 4.5%). There was no clear trend by age group.

Physical abuse was reported in fewer than one in twenty attempts (4.6%). Males were more likely than females to report this (5.6% vs. 4.3%). By age, preteens were more likely to report physical abuse than were 15 to 17-year-olds (8.2% vs. 3.2%). Adolescents giving this reason were most likely to have made prior attempts (75.0% vs. 44.4% overall) and nearly all children reporting physical abuse were admitted for inpatient care, 93.5 percent versus 53.8 percent of all attempts.

Suicidal behavior by a friend or relative was associated with about one in 33 (3.0%) of all adolescent suicide attempts. It was most common among preteens. Adolescents who reported that a friend or relative attempted or completed suicide were least likely to have made prior attempts; 33.3 percent had made prior attempts compared to 44.4 percent of all attempts.

Pregnancy was rarely associated with reported attempts; it was listed in just 1.3 percent of attempts by females with the frequency greatest among 15- to 17-year-olds.

Other risk factors were noted, including parental drug abuse, gang involvement, employment problems, illness of family members or self, abandonment, and eviction.

Same-sex sexual orientation is generally accepted as a related underlying cause of teen suicide. The issue is difficult to study under the current reporting system because of a lack of comparison data. Moreover, even if information on sexual orientation were requested on the reporting form, its validity would be highly questionable given the environment in which the information is usually collected; a substantial portion of teens would be unlikely to respond accurately. Nevertheless, the risk is one that health care providers must consider.

Youth reporting physical abuse were most likely to have made prior attempts and most likely to be admitted as an inpatient.

DATA SUMMARY

- Suicide attempts were reported more often for females than males.
- The number of reported attempts peaked for youth ages 15-16.
- Most attempts occurred in the youth's own home.
- Attempts were reported most often during the spring months and on Mondays.
- The majority of attempts were made with drugs and other substances.
- Youth who attempted suicide were about equally likely to be treated and released as to be admitted as an inpatient.
- Most youth reported that family discord was a factor in their attempt.

**TABLE A-1.
Population Distribution by Age and Sex, Oregon, 1950, 1960, 1970, 1975, 1980, 1985, 1990-1999**

Year and Sex	Total	Age Groups															
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
1950	1,521,341	163,915	131,596	108,140	96,738	105,070	117,706	116,800	117,361	105,575	93,228	86,118	77,843	68,230	54,455	37,095	41,471
M	772,776	83,614	67,244	55,528	47,652	51,469	57,940	57,930	59,391	54,452	48,574	44,802	40,426	36,027	28,498	19,085	20,144
F	748,565	80,301	64,352	52,612	49,086	53,601	59,766	58,870	57,970	51,123	44,654	41,316	37,417	32,203	25,957	18,010	21,327
1960	1,768,675	185,403	189,333	170,768	131,315	95,773	96,636	107,999	118,152	116,218	114,074	101,313	87,606	74,007	65,908	52,734	61,436
M	879,929	94,330	96,553	87,191	64,463	46,011	47,318	52,924	57,451	57,832	57,574	52,052	43,615	37,003	32,257	25,175	28,180
F	888,746	91,073	92,780	83,577	66,852	49,762	49,318	55,075	60,701	58,386	56,500	49,261	43,991	37,004	33,651	27,559	33,256
1970	2,091,385	164,060	194,345	211,284	203,362	162,638	138,978	115,599	107,832	117,950	124,395	118,996	110,739	94,408	75,601	60,321	90,877
M	1,023,952	83,836	99,274	107,664	100,952	75,549	68,827	57,764	52,738	57,790	60,407	58,563	54,576	45,809	35,886	26,956	37,361
F	1,067,433	80,224	95,071	103,620	102,410	87,089	70,151	57,835	55,094	60,160	63,988	60,433	56,163	48,599	39,715	33,365	53,516
1975	2,292,734	166,930	176,125	211,149	224,538	222,013	180,346	152,553	122,891	114,611	120,938	125,783	117,631	106,710	86,844	66,077	97,597
M	1,120,178	85,331	89,859	107,668	114,204	108,866	84,271	76,482	61,305	55,959	58,944	60,547	56,993	51,149	40,571	29,622	38,407
F	1,172,556	81,599	86,266	103,481	110,334	113,146	96,075	76,071	61,586	58,652	61,994	65,236	60,638	55,561	46,273	36,455	59,190
1980	2,632,663	197,951	189,293	202,546	225,814	237,788	253,472	227,565	170,694	133,101	119,249	124,344	129,886	117,676	105,165	79,367	118,752
M	1,296,355	101,815	96,965	103,594	114,690	117,800	126,867	115,071	86,047	67,073	58,948	60,356	62,001	56,031	49,287	35,404	44,406
F	1,336,308	96,136	92,328	98,952	111,124	119,988	126,605	112,494	84,647	66,028	60,301	63,988	67,885	61,645	55,878	43,963	74,346
1985	2,675,800	198,995	195,271	184,845	197,808	215,641	227,827	243,741	222,457	165,140	128,521	112,530	115,551	118,327	113,657	93,372	142,117
M	1,313,949	101,338	100,344	94,619	101,111	109,413	112,518	121,577	112,168	83,090	64,509	55,332	55,429	55,393	52,316	41,694	53,098
F	1,361,851	97,657	94,927	90,226	96,697	106,228	115,309	122,164	110,289	82,050	64,012	57,198	60,122	62,934	61,341	51,678	89,019
1990	2,847,000	203,678	205,765	199,955	190,781	199,581	221,902	233,898	249,986	223,597	166,333	128,276	112,111	112,679	120,405	99,641	178,413
M	1,396,242	104,769	106,052	102,738	97,540	101,520	112,129	115,287	124,674	112,602	83,400	63,928	54,393	52,976	54,892	43,473	65,870
F	1,450,758	98,909	99,713	97,217	93,241	98,061	109,773	118,611	125,312	110,995	82,933	64,348	57,718	59,703	65,513	56,168	112,543
1991	2,930,000	213,789	216,325	213,018	191,353	197,708	208,392	242,260	256,348	241,789	173,728	136,221	115,980	119,464	122,668	104,389	176,568
M	1,440,221	109,314	111,143	109,057	98,310	100,273	105,635	120,453	127,437	121,245	87,254	67,836	56,314	56,341	56,351	46,435	66,823
F	1,489,779	104,475	105,182	103,961	93,043	97,435	102,757	121,807	128,911	120,544	86,474	68,385	59,666	63,123	66,317	57,954	109,745

TABLE A-1.
Population Distribution by Age and Sex, Oregon, 1950, 1960, 1970, 1975, 1980, 1985, 1990-1999 (Continued)

Year and Sex	Total	Age Groups															
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
1992	2,979,000	217,940	217,090	214,983	195,858	203,918	205,434	239,514	258,908	244,961	194,079	144,574	118,598	116,262	121,730	108,014	177,137
M	1,466,610	112,089	111,233	110,140	100,794	103,741	104,300	119,323	128,677	122,474	97,351	72,091	57,903	54,932	55,914	48,097	67,551
F	1,512,390	105,851	105,857	104,843	95,064	100,177	101,134	120,191	130,231	122,487	96,728	72,483	60,695	61,330	65,816	59,917	109,586
1993	3,038,000	224,939	216,116	218,756	203,348	209,199	204,576	238,809	260,400	251,059	205,319	152,790	120,968	115,116	121,313	111,552	183,740
M	1,495,551	115,151	110,546	112,259	104,204	106,918	104,012	119,252	129,191	125,233	102,879	76,383	59,035	54,266	55,988	49,604	70,630
F	1,542,449	109,788	105,570	106,497	99,144	102,281	100,564	119,557	131,209	125,826	102,440	76,407	61,933	60,850	65,325	61,948	113,110
1994	3,082,000	228,650	218,658	222,394	209,032	214,579	203,053	233,132	257,033	256,634	216,758	160,859	124,151	112,391	120,767	113,874	190,035
M	1,516,836	117,546	111,748	114,132	106,906	109,861	102,570	116,584	127,635	127,477	108,569	80,459	60,835	53,182	56,075	50,587	72,668
F	1,565,164	111,104	106,910	108,262	102,126	104,718	100,481	116,548	129,398	129,157	108,189	80,400	63,316	59,209	64,692	62,287	117,367
1995	3,132,000	231,584	225,513	222,660	213,595	208,322	199,568	232,116	258,273	264,101	232,380	170,663	129,959	113,424	121,428	113,812	194,602
M	1,543,133	118,939	115,314	114,532	109,361	106,964	101,281	116,723	128,027	130,894	116,149	85,147	64,015	53,857	56,309	50,528	75,093
F	1,588,867	112,645	110,199	108,128	104,234	101,358	98,287	115,393	130,246	133,207	116,231	85,516	65,944	59,567	65,119	63,284	119,509
1996	3,181,000	233,523	227,533	223,118	221,021	210,106	204,872	226,069	258,725	266,757	248,215	175,889	137,004	114,195	120,260	113,338	200,375
M	1,566,932	119,872	116,490	114,560	112,700	108,335	103,960	114,107	128,330	132,074	123,879	87,740	67,582	54,443	55,793	50,378	76,689
F	1,614,068	113,651	111,043	108,558	108,321	101,771	100,912	111,962	130,395	134,683	124,336	88,149	69,422	59,752	64,467	62,960	123,686
1997	3,217,000	231,023	229,318	223,940	229,066	216,134	206,595	219,687	255,281	269,136	249,316	192,710	142,154	115,901	118,342	113,382	205,015
M	1,585,778	118,672	117,666	114,812	117,278	110,995	104,822	110,989	126,785	133,109	124,192	96,123	70,037	55,565	54,885	50,545	79,303
F	1,631,222	112,351	111,652	109,128	111,788	105,139	101,773	108,698	128,496	136,027	125,124	96,587	72,117	60,336	63,457	62,837	125,712
1998	3,267,550	216,270	225,755	233,772	238,498	205,409	208,599	227,758	264,229	278,458	254,656	201,902	149,998	123,399	117,429	110,808	210,610
M	1,616,250	110,610	115,817	120,141	123,211	105,811	105,501	113,540	132,531	140,697	128,089	100,799	72,906	59,060	54,968	49,739	82,830
F	1,651,300	105,660	109,938	113,631	115,287	99,598	103,098	114,218	131,698	137,761	126,567	101,103	77,092	64,339	62,461	61,069	127,780
1999	3,300,800	219,527	226,789	235,796	243,007	209,296	206,740	222,194	259,743	276,330	259,973	211,826	160,646	128,037	115,151	110,524	215,221
M	1,629,897	112,126	116,290	121,080	125,200	107,042	103,662	110,184	129,946	139,523	130,560	105,568	78,041	61,304	53,926	50,053	85,393
F	1,670,903	107,401	110,499	114,716	117,807	102,255	103,077	112,010	129,797	136,807	129,413	106,258	82,606	66,733	61,225	60,471	129,828

Source: 1950, 1960, 1970, 1980, and 1990 data are U.S. Census. All other years' data are estimates provided by Center for Population Research and Census, Portland State University.

TABLE A-2.
Population Estimates for Oregon and Its Counties by Age and Sex: July 1, 1999

County	Both Sexes																		
	All Ages	0-4	5-9	10-14	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
Total	3,300,800	219,527	226,789	235,796	147,686	95,321	209,296	206,740	222,194	259,743	276,330	259,973	211,826	160,646	128,037	115,151	110,524	96,205	119,016
Baker	16,700	869	1,196	1,277	753	364	658	805	953	1,162	1,124	1,313	1,277	1,077	832	687	759	671	923
Benton	77,100	4,095	4,671	4,852	3,070	4,528	10,479	5,263	5,306	6,026	5,853	5,359	4,200	3,129	2,259	2,202	2,009	1,616	2,185
Clackamas	326,850	20,359	22,639	24,911	15,910	8,590	17,211	17,957	21,284	26,483	31,129	30,689	23,553	16,259	11,741	10,477	9,323	8,020	10,316
Clatsop	34,750	2,026	2,390	2,537	1,629	939	1,874	1,936	2,168	2,646	2,741	2,629	2,362	1,831	1,544	1,374	1,400	1,243	1,481
Columbia	42,650	2,445	3,103	3,704	2,249	1,132	2,029	2,203	2,665	3,232	3,803	3,793	3,109	2,191	1,624	1,402	1,434	1,202	1,328
Coos	61,350	3,206	3,995	4,305	2,742	1,397	2,814	3,106	3,469	4,111	4,493	4,716	4,495	3,650	3,050	3,234	3,014	2,607	2,950
Crook	16,800	1,107	1,191	1,265	853	425	878	861	968	1,138	1,292	1,227	1,146	931	791	718	745	633	629
Curry	22,050	845	1,224	1,349	788	347	699	899	1,009	1,354	1,517	1,555	1,517	1,394	1,587	1,823	1,620	1,294	1,228
Deschutes	106,700	6,480	7,380	7,913	4,862	2,694	5,245	5,809	7,092	9,019	9,529	8,776	7,313	5,582	4,769	4,206	3,874	3,076	3,081
Douglas	100,850	5,652	6,749	7,529	4,888	2,687	4,791	5,069	5,693	6,783	7,548	7,609	6,990	5,870	4,674	5,023	4,771	4,086	4,437
Gilliam	2,100	83	179	183	79	49	56	100	144	141	156	129	161	144	122	101	86	90	95
Grant	8,000	468	561	605	386	190	315	404	478	597	620	637	618	475	386	310	323	274	353
Hamey	7,600	413	539	599	386	161	312	400	484	548	561	633	619	459	345	303	272	246	318
Hood River	19,700	1,495	1,480	1,530	958	519	1,047	1,267	1,503	1,549	1,473	1,432	1,216	924	742	644	664	569	686
Jackson	174,550	10,538	11,546	12,374	7,890	4,762	9,453	9,119	10,081	12,762	14,396	14,088	11,579	9,194	7,743	7,716	7,382	6,476	7,452
Jefferson	17,650	1,502	1,447	1,364	854	425	1,055	1,187	1,068	1,152	1,211	1,103	1,086	845	704	786	708	632	520
Josephine	73,400	4,027	4,634	5,081	3,289	1,614	3,077	3,246	3,825	4,726	5,757	6,099	5,119	4,380	3,797	3,988	3,840	3,244	3,655
Klamath	62,300	4,181	4,275	4,666	3,062	1,944	3,778	3,394	3,588	4,300	4,840	4,619	4,133	3,495	2,723	2,605	2,370	2,023	2,304
Lake	7,400	387	519	605	374	132	285	352	464	522	549	557	587	430	372	331	347	252	335
Lane	315,700	18,505	20,584	21,689	13,466	11,082	25,045	19,495	20,062	25,014	26,470	24,476	19,862	14,694	11,638	11,547	11,031	9,335	11,704
Lincoln	43,350	2,193	2,774	2,838	1,683	791	1,722	1,971	2,442	3,293	3,415	3,230	2,913	2,686	2,491	2,650	2,425	1,916	1,918
Linn	103,000	7,067	7,270	7,605	4,954	2,959	5,944	5,954	6,190	7,177	7,922	8,208	7,060	5,270	4,230	3,979	3,920	3,374	3,918
Malheur	30,700	2,487	2,562	2,650	1,771	974	1,594	1,688	1,715	1,914	2,054	2,084	1,898	1,594	1,350	1,094	1,146	944	1,183
Marion	275,250	21,929	20,300	20,499	12,958	8,175	17,846	17,965	18,480	20,419	21,422	20,416	16,823	12,991	9,943	8,394	8,441	7,616	10,634
Morrow	9,550	758	883	915	571	233	425	470	607	664	652	627	622	509	384	304	325	309	291
Multnomah	646,850	45,615	40,983	40,385	24,767	18,573	47,164	49,626	50,882	56,983	56,639	49,092	38,222	28,914	24,059	18,168	17,930	16,448	22,400
Polk	60,100	3,426	4,353	4,738	2,780	2,176	4,386	3,084	3,418	4,338	4,742	4,421	3,707	2,998	2,286	2,368	2,323	2,038	2,519
Sherman	1,900	88	130	151	100	32	43	87	130	129	157	111	126	127	125	106	108	76	73
Tillamook	24,100	1,180	1,498	1,694	981	475	890	1,095	1,291	1,624	1,717	1,744	1,649	1,575	1,580	1,457	1,394	1,124	1,133
Umatilla	68,000	4,912	5,254	5,387	3,487	2,108	4,325	4,376	4,418	4,834	5,052	4,830	4,384	3,268	2,660	2,258	2,202	1,875	2,368
Union	24,500	1,473	1,739	2,011	1,255	862	1,669	1,202	1,386	1,772	1,896	1,849	1,584	1,257	908	803	898	837	1,097
Wallowa	7,200	313	518	572	334	134	256	333	403	576	499	567	515	451	365	341	332	289	402
Wasco	22,650	1,482	1,598	1,782	1,097	520	948	1,106	1,293	1,580	1,766	1,718	1,524	1,158	988	1,014	969	955	1,151
Washington	404,750	32,366	29,801	29,233	18,262	10,347	25,567	29,950	31,676	34,773	36,727	33,152	24,744	16,924	12,159	10,117	9,422	8,431	11,100
Wheeler	1,600	71	88	101	71	35	52	61	59	95	115	138	140	124	102	99	94	70	83
Yamhill	83,100	5,480	6,735	6,897	4,128	2,947	5,365	4,901	5,497	6,308	6,493	6,344	4,972	3,848	2,965	2,522	2,621	2,314	2,763

Source: Center for Population Research and Census, Portland State University.

TABLE A-2.
Population Estimates for Oregon and Its Counties by Age and Sex: July 1, 1999 (Continued)

County	Male																		
	All Ages	0-4	5-9	10-14	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
Total	1,629,897	112,126	116,290	121,080	76,153	49,047	107,042	103,662	110,184	129,946	139,523	130,560	105,568	78,041	61,304	53,926	50,053	41,975	43,418
Baker	8,392	434	615	707	396	191	357	421	471	610	559	669	666	508	421	321	374	307	364
Benton	38,983	2,145	2,428	2,485	1,587	2,342	5,848	2,810	2,631	2,978	3,008	2,664	2,075	1,526	1,077	1,035	928	684	733
Clackamas	161,384	10,349	11,629	12,825	8,279	4,470	8,878	8,837	10,308	12,952	15,383	15,617	11,915	8,095	5,720	4,917	4,182	3,451	3,576
Clatsop	17,305	1,055	1,268	1,338	820	473	996	1,013	1,079	1,311	1,421	1,348	1,178	891	721	647	627	565	554
Columbia	21,508	1,238	1,610	1,917	1,158	583	1,050	1,100	1,296	1,608	1,937	1,992	1,640	1,125	801	674	671	549	561
Coos	30,451	1,692	2,052	2,202	1,429	728	1,463	1,541	1,708	2,016	2,258	2,378	2,194	1,809	1,497	1,618	1,486	1,182	1,198
Crook	8,500	570	631	681	465	232	444	422	488	565	675	632	603	418	409	344	343	305	271
Curry	10,958	430	637	660	396	174	343	460	485	712	739	741	745	655	800	946	825	661	550
Deschutes	53,399	3,345	3,807	4,075	2,654	1,471	2,719	2,813	3,388	4,493	4,897	4,269	3,662	2,742	2,374	2,036	1,925	1,476	1,254
Douglas	50,076	2,922	3,410	3,874	2,583	1,420	2,421	2,462	2,788	3,381	3,801	3,830	3,495	2,844	2,319	2,478	2,279	1,917	1,851
Gilliam	1,049	38	100	93	45	28	29	49	66	75	80	55	76	77	57	58	40	42	41
Grant	4,052	232	285	323	185	91	178	202	233	314	319	337	301	253	193	161	156	138	150
Harney	3,847	215	288	291	193	80	156	207	234	289	283	325	326	234	171	148	145	132	130
Hood River	10,146	767	718	746	538	292	566	688	821	864	799	770	620	460	363	303	314	265	253
Jackson	85,540	5,319	5,897	6,357	3,980	2,402	4,803	4,498	4,862	6,188	7,278	6,989	5,724	4,538	3,738	3,726	3,499	2,935	2,807
Jefferson	8,899	746	729	701	439	218	546	614	554	610	636	566	515	389	330	420	354	306	228
Josephine	35,852	2,071	2,408	2,653	1,737	853	1,538	1,558	1,849	2,245	2,813	3,001	2,449	2,110	1,840	1,894	1,841	1,494	1,498
Klamath	31,497	2,096	2,216	2,471	1,634	1,037	2,062	1,711	1,786	2,105	2,497	2,369	2,133	1,682	1,354	1,298	1,159	953	932
Lake	3,736	188	271	308	196	69	143	184	230	270	281	284	312	199	186	183	166	127	140
Lane	154,188	9,427	10,449	11,102	6,755	5,559	12,680	9,750	9,712	12,156	13,318	12,129	9,998	7,041	5,511	5,293	4,950	4,079	4,280
Lincoln	20,979	1,116	1,403	1,418	846	398	869	948	1,181	1,636	1,715	1,544	1,379	1,229	1,173	1,276	1,167	864	818
Linn	50,972	3,578	3,779	3,952	2,546	1,521	3,081	2,948	3,070	3,615	3,935	4,136	3,486	2,583	2,047	1,859	1,792	1,524	1,522
Malheur	15,212	1,208	1,299	1,357	929	511	801	858	906	933	1,049	1,052	933	762	656	526	555	447	430
Marion	136,679	11,245	10,369	10,477	6,804	4,292	9,362	9,452	9,564	10,517	10,965	10,091	8,254	6,219	4,556	3,819	3,675	3,237	3,779
Morrow	4,862	372	446	522	292	119	219	232	316	340	353	316	312	245	209	143	164	144	117
Multnomah	316,656	23,423	20,937	20,624	12,453	9,338	23,447	24,871	25,530	29,179	28,972	24,760	18,866	13,862	11,304	8,028	7,440	6,525	7,095
Polk	29,183	1,749	2,272	2,428	1,416	1,108	2,149	1,507	1,633	2,125	2,393	2,178	1,823	1,426	1,083	1,040	1,048	857	948
Sherman	980	43	72	83	56	18	23	48	70	66	80	59	59	60	67	54	56	38	30
Tillamook	11,900	620	772	873	519	251	461	555	644	826	857	905	741	721	778	729	658	490	501
Umatilla	34,578	2,515	2,721	2,795	1,846	1,116	2,401	2,408	2,348	2,480	2,603	2,442	2,210	1,586	1,268	1,063	1,023	835	919
Union	12,133	763	916	1,051	618	424	880	579	636	909	965	923	801	625	452	400	395	391	405
Wallowa	3,604	146	257	306	168	67	135	168	196	311	260	283	272	223	171	181	159	134	166
Wasco	11,047	732	807	946	559	265	475	525	618	799	864	860	822	530	445	503	438	431	427
Washington	198,663	16,533	15,274	14,892	9,439	5,348	12,675	14,702	15,615	17,194	18,089	16,682	12,315	8,398	5,735	4,571	3,979	3,403	3,820
Wheeler	812	33	44	46	44	21	28	31	23	44	55	72	65	66	54	47	61	32	46
Yamhill	41,874	2,770	3,475	3,503	2,152	1,536	2,816	2,487	2,843	3,230	3,388	3,291	2,601	1,909	1,424	1,188	1,182	1,054	1,025

Source: Center for Population Research and Census, Portland State University.

**TABLE A-2.
Population Estimates for Oregon and Its Counties by Age and Sex: July 1, 1999 (Continued)**

County	Female																		
	All Ages	0-4	5-9	10-14	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
OREGON	1,670,903	107,401	110,499	114,716	71,532	46,275	102,255	103,077	112,010	129,797	136,807	129,413	106,258	82,606	66,733	61,225	60,471	54,230	75,598
Baker	8,308	435	581	570	357	173	301	385	482	552	565	644	611	569	411	366	385	364	558
Benton	38,117	1,949	2,243	2,367	1,482	2,186	4,630	2,453	2,675	3,048	2,845	2,695	2,125	1,604	1,182	1,167	1,081	932	1,452
Clackamas	165,466	10,010	11,009	12,086	7,630	4,120	8,333	9,120	10,975	13,532	15,746	15,072	11,638	8,163	6,020	5,560	5,140	4,570	6,740
Clatsop	17,445	971	1,122	1,200	809	466	878	922	1,089	1,335	1,320	1,282	1,184	940	823	727	774	678	916
Columbia	21,142	1,207	1,494	1,786	1,091	549	979	1,104	1,370	1,624	1,866	1,801	1,470	1,066	823	728	764	653	768
Coos	30,899	1,513	1,942	2,103	1,313	669	1,351	1,565	1,761	2,095	2,235	2,338	2,301	1,841	1,552	1,616	1,528	1,425	1,751
Crook	8,300	537	560	584	388	193	435	439	480	573	618	595	543	512	382	374	402	328	358
Curry	11,092	415	587	689	392	173	356	439	524	642	778	814	772	739	787	877	795	633	678
Deschutes	53,301	3,136	3,573	3,838	2,208	1,223	2,526	2,995	3,704	4,526	4,633	4,507	3,651	2,840	2,396	2,170	1,949	1,600	1,827
Douglas	50,774	2,730	3,339	3,656	2,305	1,267	2,370	2,607	2,905	3,402	3,747	3,779	3,495	3,026	2,355	2,545	2,492	2,169	2,586
Gilliam	1,051	45	78	90	34	21	27	51	78	66	76	75	86	67	65	43	46	48	54
Grant	3,948	235	275	282	201	99	137	202	246	283	301	300	317	222	193	149	167	136	202
Harney	3,753	198	250	307	193	81	156	192	249	259	278	309	293	225	174	156	128	114	189
Hood River	9,554	728	762	783	420	228	481	579	683	685	674	662	597	464	380	340	351	304	432
Jackson	89,010	5,218	5,649	6,017	3,910	2,360	4,650	4,620	5,218	6,574	7,118	7,099	5,855	4,656	4,006	3,991	3,883	3,541	4,645
Jefferson	8,751	757	719	663	415	207	510	573	514	542	576	537	571	456	374	366	354	327	292
Josephine	37,548	1,956	2,226	2,428	1,552	762	1,538	1,689	1,977	2,481	2,944	3,098	2,671	2,269	1,957	2,094	1,998	1,750	2,156
Klamath	30,803	2,085	2,058	2,196	1,428	907	1,716	1,683	1,802	2,195	2,343	2,250	1,999	1,813	1,368	1,307	1,211	1,070	1,372
Lake	3,664	200	249	297	178	63	142	167	235	253	268	273	275	231	185	148	181	125	195
Lane	161,512	9,078	10,135	10,587	6,711	5,523	12,365	9,745	10,350	12,858	13,151	12,347	9,864	7,653	6,127	6,255	6,081	5,256	7,425
Lincoln	22,371	1,077	1,371	1,420	837	393	853	1,023	1,261	1,656	1,700	1,687	1,533	1,457	1,318	1,375	1,258	1,052	1,101
Linn	52,028	3,490	3,491	3,653	2,408	1,438	2,863	3,006	3,120	3,561	3,987	4,072	3,573	2,687	2,184	2,120	2,128	1,850	2,396
Malheur	15,488	1,279	1,263	1,293	842	463	793	830	808	981	1,004	1,032	964	832	694	568	591	497	754
Marion	138,571	10,684	9,932	10,022	6,154	3,883	8,484	8,513	8,916	9,901	10,458	10,324	8,569	6,772	5,387	4,575	4,767	4,379	6,854
Morrow	4,689	387	437	393	279	114	206	238	291	324	299	311	310	264	175	161	161	165	175
Multnomah	330,194	22,192	20,046	19,761	12,315	9,235	23,717	24,755	25,351	27,804	27,667	24,332	19,355	15,052	12,755	10,139	10,490	9,924	15,305
Polk	30,917	1,677	2,081	2,310	1,364	1,068	2,237	1,577	1,785	2,213	2,349	2,243	1,884	1,573	1,203	1,328	1,274	1,181	1,570
Sherman	920	45	59	68	44	14	21	39	61	63	76	52	67	67	58	51	52	38	43
Tillamook	12,200	560	726	821	462	224	428	540	648	798	861	840	908	854	802	727	736	634	632
Umatilla	33,422	2,397	2,534	2,592	1,641	992	1,924	1,968	2,071	2,354	2,449	2,387	2,174	1,682	1,393	1,196	1,179	1,040	1,449
Union	12,367	711	823	960	638	438	789	623	749	863	931	926	783	633	456	404	504	446	692
Wallowa	3,596	166	261	266	165	66	121	164	207	265	240	283	243	228	194	160	173	155	237
Wasco	11,603	750	791	836	538	255	473	581	674	781	902	858	701	628	543	511	531	524	725
Washington	206,087	15,833	14,527	14,341	8,823	4,999	12,892	15,248	16,061	17,578	18,638	16,470	12,429	8,527	6,424	5,546	5,443	5,028	7,280
Wheeler	788	38	44	55	27	13	25	31	36	51	60	65	75	57	48	53	33	38	39
Yamhill	41,226	2,710	3,261	3,394	1,977	1,411	2,549	2,413	2,655	3,078	3,105	3,053	2,371	1,939	1,541	1,334	1,439	1,259	1,737

Source: Center for Population Research and Census, Portland State University.

TABLE A-3.
Population Projections for Oregon, 2000-2025

Numbers in Thousands

Year	Sex	Total	Age 0-4	Age 5-17	Age 18-24	Age 25-64	Age 65+
2000	Total	3,397	211	599	318	1,798	471
	Female	1,723	103	292	156	903	269
	Male	1,674	108	307	162	895	202
2005	Total	3,613	219	602	331	1,939	522
	Female	1,833	107	293	163	975	295
	Male	1,780	112	309	168	964	227
2015	Total	3,992	238	613	334	2,066	741
	Female	2,024	116	298	166	1,042	402
	Male	1,968	122	315	218	1,024	339
2025	Total	4,349	246	661	334	2,054	1,054
	Female	2,202	120	322	165	1,039	556
	Male	2,147	126	339	169	1,015	498

SOURCE: Summary file, "Population Projections for States by Age, Sex, Race, Hispanic

Origin: 1995 to 2025", Listing #47

<http://www.census.gov/population/www/projections/stproj.html>

Appendix B: Technical Notes – Definitions

BIRTHS

Apgar Score is a numerical expression of the condition of a newborn shortly after birth. It is the sum of points accumulated upon assessment of the heart rate, respiratory effort, muscle tone, reflex irritability, and color. The highest possible score is ten. A low Apgar score (seven or less) measured five minutes after birth indicates the infant is at increased risk of morbidity and mortality.

Births to Unmarried Mothers Ratio is the number of births to unmarried mothers per 1,000 live births. Ratios differ from rates.

Crude Birth Rate is the number of live births per 1,000 total population.

Live Birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such a separation, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered live born.¹

Low Birthweight Infant is a live born infant with a birthweight less than 5 pounds, 8 ounces (2,500 grams) as reported on the birth certificate.

DEATHS

Crude Death Rate is the number of deaths per 1,000 or 100,000 total population.

Fetal Death is death prior to the complete expulsion or extraction from its mother of a product of conception of at least 20 weeks gestation, except where such expulsion results from a therapeutic abortion; the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

Fetal Death Ratio is the number of fetal deaths per 1,000 live births. Ratios differ from rates.

Infant Death is the death of a child prior to its first birthday.

Infant Death Rate is the number of infant deaths per 1,000 live births.

Maternal Death Rate is the number of female deaths attributed to childbirth or to complications of pregnancy or the puerperium, per 100,000 live births.

Neonatal Death is the death of a child within the first 27 days of life.

Neonatal Death Rate is the number of neonatal deaths per 1,000 live births.

Postneonatal Death is the death of a child after 27 days of life and before its first birthday.

Postneonatal Death Rate is the number of postneonatal deaths per 1,000 live births.

Perinatal Death is the death of a fetus after 20 weeks gestation or the death of a live-born infant prior to the 28th day of life. Other medical literature may include different time periods.

Perinatal Death Ratio is the number of perinatal deaths per 1,000 total live births. Ratios differ from rates.

MEDICAL PERSONNEL — ABBREVIATIONS USED IN TABLES

C.N.M. — certified nurse midwife.

D.C. — doctor of chiropractic medicine.

D.O. — doctor of osteopathic medicine.

L.D.E.M. — licensed direct entry midwife.

M.D. — medical doctor.

N.D. — naturopathic doctor.

R.N. — registered nurse.

ENDNOTES

- 1 *Vital Statistics of the United States*, 1982, vol. 1, section 4, page 1. U.S. Department of Health and Human Services, Public Health Service, National Center for Health Statistics, Maryland, 1986.

Technical Notes — Methodology

"That, sir, is the good of counting; it brings everything to a certainty, which before floated in the mind indefinitely."

—Samuel Johnson

MORTALITY

Comparability Between ICD-9 and ICD-10 Codes

The *International Classification of Diseases* (ICD) codes are periodically revised to reflect progress in the identification of diseases.¹ This practice began in 1900 and occurs every 10 to 20 years. Each of these revisions has produced some breaks in the comparability of cause of death statistics.

ICD-10 has many changes from ICD-9, including: considerably greater detail for some causes (and less detail for others); shifts of inclusion in terms and titles from one category, section, or chapter to another; regrouping of diseases; new titles and sections; and modifications in coding rules. As a result, serious breaks occur in comparability for a number of causes of death. Measures of this discontinuity are essential to the interpretation of mortality trends. Comparability ratios between ICD-9 and ICD-10 have been computed for this purpose (please see the following table). Note that data tables showing cause of death information for years prior to 1999 are based on the original ICD-9 codes and have not been adjusted using comparability ratios.

Studies of the comparability between revisions of the ICD have been carried out and published since at least the fifth revision. Comparability studies, also called bridge-coding studies, involve the dual classification of a single year of mortality data, that is classifying the underlying cause of death on mortality records by the new revision and the previous revision. The key element of the comparability study is the comparability ratio, which is derived from the dual classification. It is calculated by dividing the number of deaths for a selected cause of death classified by the new revision by the number of deaths classified to the most nearly comparable cause of death using the previous revision (in this case the number of deaths identified as being attributable to a particular cause using ICD-10 codes and rules divided by the number of deaths attributed to the same cause using ICD-9 codes and rules). The resulting ratio represents the net effect of the new revision on statistics for this cause and can be used as a factor to adjust previously calculated mortality statistics.

A comparability ratio of 1.00 indicates that the same number of deaths was assigned to a particular cause or combination of causes, regardless of the revision used. A ratio showing perfect correspondence (1.00) between the two revisions does not necessarily indicate that the cause was unaffected by changes in classification and coding procedures but merely that there was no net change.

A ratio less than 1.00 results from a decrease in assignments of death to a cause in ICD-10 compared with ICD-9. A ratio of more

than 1.00 results from an increase in assignments of deaths to a cause in ICD-10 compared to the corresponding ICD-9 cause.

In regard to the magnitude of coding effects produced by rule changes, that of Rule 3 is among the most prominent. This rule is used to determine the direct sequels of causes. It states "If the conditions selected by the general principle or by Rule I or by Rule 2 is obviously a direct consequence of another reported condition, whether in Part I or Part II [of the medical certification portion of the death certificate], select this primary condition." The cause of death most affected by Rule 3 is pneumonia, which is often the consequence of another condition or injury. In ICD-10 the applicability of Rule 3 to pneumonia is broader than in ICD-9, so pneumonia is considered a consequence of a much wider range of conditions. As a result, pneumonia is much less likely to be selected as the underlying cause of death under ICD-10 than under ICD-9.

The following describes selected leading causes of death affected by changes in classification and underlying cause of death rules.

Heart Disease. The comparability ratio (CR) for this cause is 0.9858, indicating a nearly 1.5 percent net decrease in the allocation of heart disease as the underlying cause of death when using the ICD-10 classification scheme. The net decrease is a result primarily of shifts away from heart disease to other causes of death due to Rule A; under this rule, certain disorders are considered ill-defined and not reflecting the true underlying cause of death. Cardiac arrest is one such disorder. Thus, it is ignored in the selection of underlying cause of death if another more specific cause is listed on the death certificate.

Malignant Neoplasms. The CR for cancer is 1.0068, indicating considerable comparability in numbers and rates between revisions. Nevertheless, a substantial number of deaths are classified under malignant neoplasms in ICD-10 that were not classified as such under ICD-9. Most of these were classified as pneumonia in ICD-9 and were affected by the change in Rule 3 (described above). In ICD-10, the applicability of Rule 3 to pneumonia is broader than in ICD-9; that is, pneumonia is considered a consequence of a much wider range of conditions. As a result, pneumonia is much less likely to be selected as the underlying cause of death under ICD-10 than under ICD-9. In addition, some deaths shifted out of the malignant neoplasm category due to the revision. Most of these are classified in ICD-10 as HIV or, *in situ* neoplasms, benign neoplasms, and neoplasms of uncertain or unknown behavior.

Nearly all of the specified malignant neoplasm categories show some shifts of deaths into and out of the specified category. For example, because of changes in the rule governing the selection of the primary site, deaths involving cancer of the trachea, bronchus, and lung are a little less likely to be attributed to this cause. (The comparability ratio is 0.9837.) This occurred because ICD-10, in contrast to ICD-9, classifies malignant neoplasms of the lung as secondary to many other cancers. Further, when classifying deaths according to ICD-10, unlike ICD-9, selection of the primary site is not determined by order of entry on the death certificate. Thus, when

two primary sites from different organ systems are listed, the deaths are classified to C97, the category for independent (primary) multiple sites.

Alzheimer's Disease. The CR published in the previously described NCHS publication should not be applied to Oregon data. Unlike the nation, deaths assigned to this category have included both Alzheimer's disease (ICD-9 331.0) and presenile dementia (ICD-9 290.1). A study of deaths coded to ICD-9 290.1 showed that 99 out of 100 were attributable to Alzheimer's dementia and that physicians were using the terms "Alzheimer's disease" and "Alzheimer's dementia" essentially interchangeably. To provide a more realistic measure of the impact of Alzheimer's disease, both diseases were included in Oregon's "Alzheimer's Disease" category. ICD-10 eliminated the separate category for "Alzheimer's dementia"; just one code (G30) is present in the current revision.

Unintentional Injuries. With a comparability ratio of 1.0303, deaths were slightly more likely to be attributed to unintentional injuries than previously. Virtually all of this increase involves shifts from natural causes in ICD-9 to unintentional injuries in ICD-10. Most of these deaths were classified as pneumonia or cardiac arrest in ICD-9 but were coded to unintentional injuries as a consequence of the changes in Rule 3 and Rule A, respectively. The CR for the largest subset in this group, motor vehicles, is 0.9754, but the specific category with the largest difference (CR = 0.8409) is falls. This 16 percent decrease is the result of the change in the classification of unspecified fractures. In ICD-9, if the term "fracture" was listed on the death certificate without mention of an external cause, the death was classified to "Fracture, cause unspecified" (E887) within the greater "Accidental Falls" (E880-888) category. In ICD-10, a fall is not assumed to be responsible for an unspecified fracture, and the death is classified to "Exposure to Unspecified Factor," (X59), which is classified as an unintentional injury, but in a residual category, not a fall.

Intentional Self-Harm. This category (i.e., suicide) has a comparability ratio of 0.9962. The slight decline may have resulted from records pending amendment that were unable to be identified at the time of the study. Some changes in coding categories have resulted in less specific data. For example, the type of firearm used in suicide (and all other external cause categories) is no longer distinguished other than handgun vs. long gun; previously, rifles, shotguns, and military (assault) weapons were categorized individually. Further, suffocation suicides involving plastic bags are no longer identified (The number of deaths in this category was typically about the same as the number resulting from cutting and piercing injuries).

Assault. Like suicide, this category (i.e., homicide) showed little difference between ICD-9 and ICD-10 coding; the comparability ratio was 0.9983. The reader is cautioned that this CR is applicable only to prior years' categories based on ICD-9 codes E960-E969. Under the ICD-9 classification, legal intervention (E970-E979) deaths were included in the leading cause of death category "Homicide."

They no longer are. Further, NCHS has not published a comparability ratio for legal intervention deaths because the figure calculated did not meet standards of reliability or precision.

Super MICAR

Beginning in 1993, the underlying cause of death was determined by using Super MICAR, software distributed by the National Center for Health Statistics. In the past, the underlying cause of death was determined by a nosologist using information provided on death certificates by physicians. Super MICAR applies a set of algorithms to all the causes listed on a death certificate to arrive at the underlying cause of death.

This software is being used because the number of deaths among Oregonians has increased substantially during recent years, but has not been accompanied by an increase in staff. Consequently, data availability became increasingly untimely during recent years. Instituting the Super MICAR system is resulting in more timely data.

An advantage of the Super Micar system is that all causes recorded on the death certificate are now included in the data file. We will be able to report, for example, not only the number of Oregonians who died from Alzheimer's Disease but the number of Oregonians who had the disease at the time of their death (provided it was mentioned on the certificate).

Age-adjusted Rates

The death rates in this report are not age-adjusted. (However, age- and sex-specific death rates are presented in addition to crude death rates.) Age-adjusted death rates permit the comparison of populations with disparate age structures as if the populations had similar distributions. Age-adjusted rates should be used when comparing subsets (e.g., counties and races). See the formulas section of this Appendix for instructions on calculating age-adjusted rates. Rates may also be computed on-line at the federal Centers for Disease Control (CDC) site <http://wonder.cdc.gov>.

We ordinarily publish age-adjusted death rates for the U.S. and Oregon (by cause) in this report, but 1999 data were unavailable from the CDC at the time of publication.

Tobacco-linked Deaths

The number of Oregonians whose deaths were linked to tobacco use are presented in the mortality section. However, the number is artificially low. This is because the role of tobacco, if any, is not routinely noted on the death certificates of Oregonians who died out-of-state. (The footnotes in the tables describe the question on the Oregon death certificate regarding tobacco use.) The potential for undercount is greatest for Oregon residents who live in counties bordering other states. A more detailed discussion can be found in *Tobacco and Oregon: A Legacy of Illness and Death*, published in 1992.

YOUTH SUICIDE ATTEMPTS

Unlike previous years, youth who threatened to commit suicide but made no physical act are not included in the total number of attempts, but are shown in a separate table (Table 8-14). Previously they had been identified in the method of attempt tables. Had they been included in the total, the count would have been 785, a new high.

Data in the youth suicide attempts section were compiled from teen suicide attempt reports and death certifications files with the Oregon Department of Human Services' Center for Health Statistics. Attempt rates are age-specific and are expressed per 100,000 of the population at risk per year. The Center for Population Research and Census was the source of the population data. Methods of attempts are classified according to the International Classification of Diseases (ICD). The name of the attempter is not recorded on attempts reported to the Center for Health Statistics.

Several problems are apparent with the data. The first is that the total number of attempts reported is low. Because Oregon is the only state to require that adolescent suicide attempts be reported, when Oregon adolescents attempt suicide in another state, the event is not reported. More significantly, although required by law, the data suggest that not all hospitals are fully cooperating with the program. It is uncertain whether reporting hospitals are using the same criteria in determining whether the patient attempted suicide. Finally, a few data items are poorly reported.

ENDNOTE

1. This description is drawn from *National Vital Statistics Report*, Vol. 49, No. 2, June 26, 2001, which includes additional detail not included here. The document is available online at:
<http://www.cdc.gov/nchs/products/pubs/pubd/nvsr/49/49-pre.htm>

Technical Notes — Step-by-Step Instructions

"Through and through the world is infested with quantity: To talk sense is to talk quantities. It is no use saying the nation is large—How large? It is no use saying that radium is scarce—How scarce? You cannot evade quantity. You may fly to poetry and music, and quantity and number will face you in your rhythms and your octaves."

—Alfred North Whitehead

Data users are diverse, including public health officials evaluating a program by using death data, demographers projecting school enrollments with birth data, and business people deciding to open a formal-wear shop based on marriage data. Many of these users

DEATHS
INFANT DEATHS
NEONATAL DEATHS
POSTNEONATAL DEATHS
FETAL DEATHS
LOW BIRTH WEIGHT
INFANTS
PREGNANCIES
INDUCED ABORTIONS
MARRIAGES
ANNULMENTS
DIVORCES

have a thorough knowledge of statistics. But others find the entire subject-matter confusing and intimidating. For either group, a misunderstanding of what vital statistics mean can lead to wrong conclusions. Therefore, this section is included to provide an overview of how to use vital statistics. It is addressed to the person looking at vital events for the first time, but the experienced user may also find a review helpful.

STEP 1: FINDING THE CORRECT NUMBER

The first step is to determine how many of a particular vital event took place during the year. This involves asking two questions:

Which event or events are appropriate?

This may not be as simple as it sounds. For one thing, examining more than one type of event may be required. For example, someone concerned with teenage pregnancies will have to consider the number of induced abortions as well as the number of births which occur among teens. Taken together, they provide a useful measure of the number of pregnancies.¹

Deciding which events to use is important since sometimes the choice of one event over another can easily lead to different conclusions. To determine which events are appropriate, read the "Technical Notes: Definitions" section. The narratives also contain useful examples.

Who should be counted?

If you are a hospital planner who is deciding to expand or contract delivery services, you want to count the number of births which *occurred* in your area, regardless of where the parents live. If you are projecting school enrollment, you want to count only how many children will potentially be *residing* in your area. Fortunately, vital events are usually reported so that both of these data needs can be met.

Occurrence data:

The event (the death, birth, marriage, etc.) actually took place in the geographic region indicated (either Oregon or a particular county). The person participating in the event may have lived in Podunk, New York.

Residence data:

The person involved in the event lived in the geographic region mentioned, but the event itself may have taken place anywhere in the United States or Canada. In other words, a resident of Marion County who died in an accident while on vacation in Michigan has been added to the Marion County resident death figure.

When in doubt about which type of data to use, resident figures are usually the best choice. Most birth and death data are published by residence, which means that comparisons with other states or the United States as a whole will be easier. Exceptions to this rule are listed in the individual sections.

Once the right event has been determined, and the choice between occurrence and residence data has been made, the statistician can find the correct figures in the table(s) in this book. If the needed table is not listed, contact the Center for Health Statistics for more information.

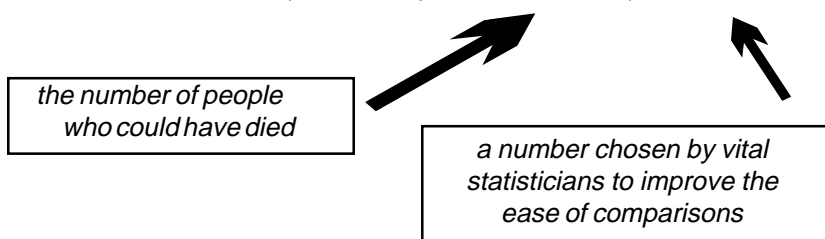
STEP 2: MAKING THE NUMBER MEANINGFUL WITH RATES AND RATIOS

In many instances simply knowing the number of events is not sufficient. For example, we know more people died in Multnomah County than in Wheeler County, because Multnomah County has a much larger population. But what is the *likelihood* of dying in each county?

In order to answer this question, statisticians calculate rates. This means that the number of events which occurred is compared to the population for which that event *could* have occurred, and the figure is then standardized to some number (such as 1,000 or 100,000) for convenience.

Here is an example:

$$\text{CRUDE DEATH RATE} = (\text{DEATHS}/\text{POPULATION}) \times 1,000$$



The more specifically a statistician can define the “population at risk” (the denominator or bottom part of the formula), the more meaningful the rate is. For example, the *crude birth rate*, which compares the number of births to the population, is not nearly as informative as the *fertility rate*, which uses only the number of women of childbearing age (15-44) for comparative purposes. The fertility rate is not distorted by changes in the number of men or pre-pubescent or post-menopausal women in the population. (The turn of the century notion that only *married* women between the age of 15 and 44 would be considered at risk of pregnancy has been abandoned for obvious reasons.)

Unfortunately we do not always have the correct denominator for the equation. In these situations a substitute is used. For example, how many people are at risk of getting divorced? The number of married people is only available for census years. As a substitute, the crude divorce rate is calculated using the total population regardless of marital status. In other situations, the event is simply compared to another related number. For instance, the abortion ratio compares the number of abortions to the number of births. This is easier and more accurate than trying to determine the true denominator, which is the total number of pregnant women.

When calculating rates and ratios, great care must be taken to make certain that the appropriate time periods, geographical boundaries, and populations are used.

STEP 3: COMPARING TWO OR MORE NUMBERS

Numbers are more meaningful when they are converted into rates and ratios. But problems can arise when rates or ratios are compared for different geographical areas, different time periods, or different categories such as men versus women.

Chance variation

Statisticians expect a certain amount of chance variation and have methods to take this into account. The *confidence interval* uses the number of cases and their distributions to determine what

the rate “really is.” For example, a statistician will say, “We are 95% sure that the *true* infant death rate for Oregon in 1986 was 9.47 ± 0.97 ; that is, it lies somewhere between 8.50 and 10.44.” If two rates have overlapping confidence intervals, then the difference between them may be due to this chance variation. In other words the difference is not *statistically significant*.

When comparing rates and ratios, differences should be tested for *statistical significance*. Formulas are listed in the next section of this chapter.

Small numbers

Chance variation is a common problem when the numbers being used to calculate rates are extremely small. Large swings often occur in the rates which do not reflect real changes. Consider Tillamook County’s infant mortality rates for a five-year period.

TILLAMOOK COUNTY			
YEAR	BIRTHS	INFANT DEATHS	INFANT DEATH RATES
1981	324	5	15.4
1982	318	2	6.3
1983	306	4	13.1
1984	264	1	3.8
1985	266	3	11.3
1981-1985	1,478	15	10.1

The overall rate of 10.1 is quite close to the state rate for the same time period (10.2). Yet, for some years the rate is four times as high as the rate of other years simply because four additional infants died. Public health officials would waste a good deal of energy reacting to these annual rates.

Many rates based on small numbers are published in this book because readers demand them. But, anyone preparing to make important decisions based on these rates should be wary. Consider this rule of thumb: a rate based on 20 cases has a 95% confidence interval about as wide as the rate itself (i.e., the interval for a rate of 50 is between 25 and 75). Even large differences between two rates based on 20 cases or less are probably not statistically significant.

If 20 is too few, how many cases are sufficient to say that a true difference exists? Unfortunately, we have no easy rules for this. To be safe, the vital statistician should always try to combine several years of data or consolidate geographical areas. Confidence intervals should be calculated, and differences should be tested for statistical significance.

Changes in measurement

Another problem is that the numbers being compared have not always been based on the same type of measurement. Definitions, population estimates, certificates, and coding procedures change from time to time as the need arises. This can create “artificial” differences and can disguise “real” differences. The cause-of-death item provides an excellent example in comparability:

During the late 1970s, approximately 80 to 85 people died each year due to hypertensive disease.	Rate = 3.3 per 100,000 population
In 1979, 250 people died from this cause.	Rate = 9.8 per 100,000 population

It appears that the incidence of hypertensive disease increased. But actually, a new coding scheme resulted in more deaths being coded as due to hypertensive disease.

Taking age, sex, and race into account

Mr. G.C. Whipple noted in 1923 that, “We might find that the death rate of bank presidents was higher than that of newsboys; but this would not be because of different occupations, but because of different ages.” We expect older people to die at a higher rate than younger people. We also expect people in their twenties to have more babies than the very young or the very old. Sex and race, as well as age, can affect rates drastically.

When comparing two places or two points in time, it is necessary to take these influencing characteristics into account. Here is an example:

The crude death rate increased between 1950 and 1960 from 9.1 to 9.5 deaths per 1,000 population. But, an examination of the death rates for each age group indicates that all these rates decreased. This apparent contradiction is explained by the fact that in 1960 a larger proportion of the population was older. Because the risk of death is

	1950	1960
Crude Death Rate	9.1	9.5
Age-Specific Death Rates		
0-4	5.9	5.7
5-14	0.6	0.4
15-24	1.5	1.1
25-44	2.4	2.1
45-64	11.1	10.6
65+	58.4	56.8

higher in older persons, the crude death rate increased.

Before comparing two places or two time periods, always compare the population characteristics first. If discrepancies are noted in any relevant variables, then the rates should be adjusted or standardized in order to make the comparisons free of differences in the structure of the populations. The formulas for doing this are listed in the following section.

STEP 4: ANALYZING THE DATA

The first three steps have been fairly mechanical:

- (1) = Choose the correct events and the correct group to determine the number of events which took place for the geographical areas and time periods.
- (2) = Calculate the rates.
- (3) = Compare these rates to determine if the differences are statistically significant.

NOW the vital statistician must begin to ask the difficult questions. If we find that two rates are statistically significantly different, how can we find out *why* they are different? If the differences which we expected did not prove to be significant, is there another item which perhaps is masking an actual difference? Frequently, the statistician has to refine the research question and begin all over again.

Consider the researcher who asks, "Since 1985, has chronic lower respiratory disease posed a greater risk to Oregonians?" If the researcher looked at the overall rate, the answer would be "yes," but closer examination reveals that the death rate for males has declined. It is among women that the rate has moved sharply upward, reflecting their increased smoking prevalence during recent decades. This gender dichotomy would need to be addressed in a study of CLRD fatalities.

Help

Several sources of help are available. Many of the widely used rates and ratios are presented in the Quick Reference section, and narratives and figures are included throughout the book to illustrate changes. And finally, the staff of the Center for Health Statistics are available for data users who need assistance.

ENDNOTES

- 1 A more complete and accurate estimate of pregnancies based on outcomes would include: (1) births; (2) fetal deaths (stillbirths); (3) induced abortions; and (4) spontaneous abortions (miscarriages). However, fetal deaths occur in less than one percent of all pregnancies and are relatively constant in relation to births (see the *Fetal and Infant Mortality* chapter in Volume 2) and the number of miscarriages which occur is not available in vital records (perhaps 10 percent of all pregnancies). Thus, a measure which excludes these outcomes provides an adequate indicator of the number of pregnancies.

Technical Notes — Formulas

GENERAL:

$$\text{PERCENT CHANGE} = \frac{\text{New Data} - \text{Old Data}}{\text{Old Data}} \times 100$$

$$\text{Birth rate, Oregon, 1993} = 13.7$$

$$\text{Birth rate, Oregon, 1994} = 13.6$$

$$\text{Percent change} = \frac{13.6 - 13.7}{13.7} \times 100 = -0.7\%$$

PREGNANCY:

$$1. \text{ (CRUDE) BIRTH RATE} = \frac{\text{Resident Births}}{\text{Population}} \times 1,000$$

$$\text{Oregon, 1994,} = \frac{41,832}{3,082,800} \times 1,000 = 13.6$$

$$2. \text{ AGE-SPECIFIC BIRTH RATE} = \frac{\text{Resident Births To Mothers in Age Category}}{\text{Female Population in Age Category}} \times 1,000$$

$$\text{Oregon, 1994, Age 20-24} = \frac{10,999}{104,718} \times 1,000 = 105.0$$

$$3. \text{ FERTILITY RATE} = \frac{\text{Resident Births to Mothers Aged 15-44}}{\text{Female Population Aged 15-44}} \times 1,000$$

NOTE: Some publications use the following:
$$\frac{\text{All Resident Births}}{\text{Female Population Aged 15-44}}$$

$$\text{Oregon, 1994} = \frac{41,659}{682,428} \times 1,000 = 61.0$$

$$4. \text{ TOTAL FERTILITY RATE} = \text{The Sum of Age-Specific Birth Rates in 5-Year Categories between 15 and 44} \times 5$$

$$\text{Oregon, 1994} = 5 (51.3 + 105.0 + 115.4 + 78.5 + 30.2 + 6.0) = 1,932.0$$

$$5. \text{ FETAL DEATH RATIO} = \frac{\text{Resident Fetal Deaths (20+ Weeks Gestation)}}{\text{Resident Live Births}} \times 1,000$$

$$\text{Oregon, 1994, Residents} = \frac{224}{41,832} \times 1,000 = 5.4$$

$$\text{FETAL DEATH RATE} = \frac{\text{Resident Fetal Deaths (20+ Weeks Gestation)}}{\text{Resident Live Births} + \text{Resident Fetal Deaths}} \times 1,000$$

$$\text{Oregon, 1994, Residents} = \frac{224}{43,591 + 224} \times 1,000 = 5.1$$

$$\text{PERINATAL DEATH RATE} = \frac{\text{Resident Neonatal Deaths} + \text{Resident Fetal Deaths (20+ Weeks Gestation)}}{\text{Resident Live Births} + \text{Resident Fetal Deaths}} \times 1,000$$

$$\text{Oregon, 1994, Residents} = \frac{148 + 203}{41,566 + 203} \times 1,000 = 8.4$$

Note: Publications vary in the gestation cutoff for fetal deaths. In addition, some measures employ birthweight in place of gestational age. Fetal and perinatal death rates are based on 1993 year of birth.

$$6. \text{ ABORTION RATIO} = \frac{\text{Resident Abortions}}{\text{Resident Births}} \times 1,000 \text{ or } \frac{\text{Occurrence Abortions}}{\text{Occurrence Births}} \times 1,000$$

$$\text{Oregon, 1994, Occurrence} = \frac{13,391}{43,591} \times 1,000 = 307.2$$

$$7. \text{ ABORTION RATE} = \frac{\text{Resident Abortions or Occurrence Abortions}}{\text{Female Resident Population Aged 15-44}} \times 1,000$$

$$\begin{aligned} \text{Oregon 1994, Occurrence} \\ \text{with total adjusted} \\ \text{for not stated ages} \end{aligned} = \frac{13,300}{682,428} \times 1,000 = 19.5$$

DEATHS:

$$8. \text{ (CRUDE) DEATH RATE } \frac{\text{Resident Deaths}}{\text{Population}} \times 1,000$$

$$\text{Oregon, 1994} \quad \frac{27,361}{3,082,000} \times 1,000 \quad 8.9$$

$$9. \text{ INFANT DEATH RATE } \frac{\text{Resident Infant Deaths}}{\text{Resident Births}} \times 1,000$$

$$\text{Oregon, 1994} \quad \frac{295}{41,832} \times 1,000 \quad 7.1$$

$$10. \text{ NEONATAL DEATH RATE } \frac{\text{Resident Neonatal Deaths}}{\text{Resident Births}} \times 1,000$$

$$\text{Oregon, 1994} \quad \frac{164}{41,832} \times 1,000 \quad 3.9$$

$$11. \text{ POSTNEONATAL DEATH RATE } \frac{\text{Resident Postneonatal Deaths}}{\text{Resident Births}} \times 1,000$$

$$\text{Oregon, 1994} \quad \frac{131}{41,832} \times 1,000 \quad 3.1$$

$$12. \text{ CAUSE SPECIFIC DEATH RATE } \frac{\text{Resident Deaths Due to Specific Cause}}{\text{Population}} \times 100,000$$

$$\text{Oregon, 1994, Heart Disease} \quad \frac{7,417}{3,082,000} \times 100,000 \quad 240.7$$

$$13. \text{ AGE AND SEX SPECIFIC DEATH RATE } \frac{\text{Resident Deaths in Age Sex Category}}{\text{Population in Age Sex Population}} \times 1,000$$

$$\text{Oregon, 1994, Males Aged 5-14} \quad \frac{63}{225,880} \times 100,000 \quad 27.9$$

MARRIAGE AND DIVORCE:

$$14. \text{ MARRIAGE RATE} = \frac{\text{Marriages}}{\text{Population}} \times 1,000$$

$$\text{Oregon, 1994} = \frac{25,194}{3,082,000} \times 1,000 = 8.2$$

$$15. \text{ DIVORCE RATE} = \frac{\text{Divorces}}{\text{Population}} \times 1,000$$

$$\text{Oregon, 1994} = \frac{15,844}{3,082,000} \times 1,000 = 5.1$$

Beginning with 1998 data, the following methodology is being used for calculating confidence intervals and statistical significance. This explanation is paraphrased from "*Public Health Data: Our Silent Partner*", a training manual from the Public Health Practice Program Office of the National Center for Health Statistics.¹

CALCULATING CONFIDENCE INTERVALS FOR RATES:

Confidence limits for rates based on less than 100 events

When the number of events in the numerator is less than 100, the confidence interval for a rate can be estimated using the two formulas which follow and the values in Table B-1.

Lower limit = R x L

Upper Limit = R x U

where:

R = the rate

L = the value in Table B-1 that corresponds to the number N in the numerator of the rate

U = the value in Table B-1 that corresponds to the number N in the numerator of the rate

Example: Confidence limits for rates based on less than 100 events

In Baker County, the teen pregnancy rate for 10- to 17-year-old teens in 1998 was 13.0 per thousand, based on 12 live births in the numerator. Using Table B-1:

Lower limit = 13.0 x 0.51671 = 6.7

Upper limit = 13.0 x 1.7468 = 22.7

This means that the chances are 95 out of 100 that the pregnancy rate in Baker County for teens 10-17 lies between 6.7 and 22.7 per 1,000. So if there were 100 counties like Baker County, the teen pregnancy rate would be expected to lie between 6.7 and 22.7 per 1,000 in 95 of these counties.

TABLE B-1.
 Values of L and U for calculating 95% confidence limits for the numbers of events
 and rates when the number of events is less than 100.

N	L	U	N	L	U	N	L	U
1	0.02532	5.57164	34	0.69253	1.3974	67	0.77499	1.26996
2	0.1211	3.61234	35	0.69654	1.39076	68	0.77654	1.26774
3	0.20622	2.92242	36	0.70039	1.38442	69	0.77806	1.26556
4	0.27247	2.5604	37	0.70409	1.37837	70	0.77955	1.26344
5	0.3247	2.33367	38	0.70766	1.37258	71	0.78101	1.26136
6	0.36698	2.17658	39	0.7111	1.36703	72	0.78244	1.25933
7	0.40205	2.06038	40	0.71441	1.36172	73	0.78384	1.25735
8	0.43173	1.9704	41	0.71762	1.35661	74	0.78522	1.25541
9	0.45726	1.89831	42	0.72071	1.35171	75	0.78656	1.25351
10	0.47954	1.83904	43	0.7237	1.34699	76	0.78789	1.25165
11	0.4992	1.78928	44	0.7266	1.34245	77	0.78918	1.24983
12	0.51671	1.7468	45	0.72941	1.33808	78	0.79046	1.24805
13	0.53246	1.71003	46	0.73213	1.33386	79	0.79171	1.2463
14	0.54671	1.67783	47	0.73476	1.32979	80	0.79294	1.24459
15	0.55969	1.64935	48	0.73732	1.32585	81	0.79414	1.24291
16	0.57159	1.62394	49	0.73981	1.32205	82	0.79533	1.24126
17	0.58254	1.6011	50	0.74222	1.31838	83	0.79649	1.23965
18	0.59266	1.58043	51	0.74457	1.31482	84	0.79764	1.23807
19	0.60207	1.56162	52	0.74685	1.31137	85	0.79876	1.23652
20	0.61083	1.54442	53	0.74907	1.30802	86	0.79987	1.23499
21	0.61902	1.52861	54	0.75123	1.30478	87	0.80096	1.2335
22	0.62669	1.51401	55	0.75334	1.30164	88	0.80203	1.23203
23	0.63391	1.50049	56	0.75539	1.29858	89	0.80308	1.23059
24	0.64072	1.48792	57	0.75739	1.29562	90	0.80412	1.22917
25	0.64715	1.4762	58	0.75934	1.29273	91	0.80514	1.22778
26	0.65323	1.46523	59	0.76125	1.28993	92	0.80614	1.22641
27	0.65901	1.45495	60	0.76311	1.2872	93	0.80713	1.22507
28	0.66449	1.44528	61	0.76492	1.28454	94	0.8081	1.22375
29	0.66972	1.43617	62	0.76669	1.28195	95	0.80906	1.22245
30	0.6747	1.42756	63	0.76843	1.27943	96	0.81	1.22117
31	0.67945	1.41942	64	0.77012	1.27698	97	0.81093	1.21992
32	0.684	1.4117	65	0.77178	1.27458	98	0.81185	1.21868
33	0.68835	1.40437	66	0.7734	1.27225	99	0.81275	1.21746

Confidence limits for rates based on 100 or more events

In this case, use the following formula for the rate R based on the number of events N:

$$\text{Lower Limit} = R - [1.96 \times R / \sqrt{N}]$$

$$\text{Upper Limit} = R + [1.96 \times R / \sqrt{N}]$$

where:

R = the rate (birth rate, mortality rate, teen pregnancy rate, etc.)

N = the number of events (births, deaths, teen pregnancy, etc.)

Example: Confidence limits for rates based on 100 or more events

In Jackson County, the teen pregnancy rate for teens 10-17 was 13.7 in 1998 based on 143 pregnancies. Therefore, the confidence interval would be:

$$\begin{aligned} \text{Lower Limit} &= 13.7 - [1.96 \times (13.7 / \sqrt{143})] \\ &= 13.7 - [1.96 \times (13.7 / 11.96)] \\ &= 13.7 - [1.96 \times 1.15] \\ &= 13.7 - 2.25 \\ &= 11.5 \end{aligned}$$

$$\begin{aligned} \text{Upper Limit} &= 13.7 + [1.96 \times (13.7 / \sqrt{143})] \\ &= 13.7 + [1.96 \times (13.7 / 11.96)] \\ &= 13.7 + [1.96 \times 1.15] \\ &= 13.7 + 2.25 \\ &= 16.0 \end{aligned}$$

So if there were 100 counties like Jackson County with similar populations, the teen pregnancy rate would be expected to lie between 11.5 and 16.0 per 1,000 in 95 of these counties.

DETERMINING STATISTICAL SIGNIFICANCE FOR RATES:

If the difference between two rates would occur due to random variability less than 5 times out of 100, then we say that the difference is statistically significant at the 95% level. Otherwise the difference is not statistically significant.

Computing statistical significance when at least one of the rates is based on fewer than 100 events

To compare two rates, when one or both rates are based on fewer than 100 events, compute the confidence intervals for both rates. If the intervals overlap, the difference is not statistically significant.

Example: comparing rates when one is based on fewer than 100 events

Baker County teen pregnancy rate for age 10-17

Lower limit = 6.7

Upper limit = 22.7

Jackson County teen pregnancy rate for age 10-17

Lower limit = 11.5

Upper limit = 16.0

The confidence intervals overlap - the interval for Jackson County is entirely within the range of the interval for Baker County. Therefore, the difference between the teen pregnancy rate for age 10-17 in Baker County and the rate for Jackson County is not statistically significant.

Computing statistical significance when both rates are based on 100 or more events

When both rates are based on 100 or more events, calculate the difference between the two rates by subtracting the lower rate from the higher rate. The difference is considered statistically significant if it exceeds 1.96 times the standard error for the difference between the two rates.

$$1.96 \sqrt{\frac{R_1^2}{N_1} + \frac{R_2^2}{N_2}}$$

where:

R_1 = the first rate

R_2 = the second rate

N_1 = the first number

N_2 = the second number

If the difference is greater than the statistic, the difference would occur by chance less than 5 times out of 100. The difference is statistically significant at the 95 percent confidence level.

If the difference is less than the statistic, the difference might occur by chance more than 5 times out of 100. The difference is not statistically significant at the 95 percent confidence level.

Example: comparing rates when both are based on 100 or more events

The teen pregnancy rate for Oregon teens age 10-17 in 1997 was 18.0 and the comparable rate for 1998 was 17.2. Both rates are based on more than 100 pregnancies (3,197 in 1997 and 3,176 in 1998). The difference between the rates is $18.0 - 17.2 = 0.8$. The statistic is calculated as follows:

$$1.96 \sqrt{\frac{18.0^2}{3,197} + \frac{17.2^2}{3,176}}$$

$$1.96 \sqrt{\left(\frac{324}{3,197} + \frac{295.84}{3,176}\right)}$$

$$1.96 \sqrt{(0.101 + 0.093)}$$

$$1.96 \sqrt{0.194}$$

$$= 1.96 \times .44$$

$$= 0.86$$

The difference between the rates (0.8) is less than this statistic (0.9). Therefore, the difference is not statistically significant. A difference of 0.8 between these two rates might occur by chance more than 5 times out of 100.

CALCULATING RATES ADJUSTED FOR SEX/AGE/RACE:

When comparing rates and ratios, the influences of sex, age, and race differences in the populations must be taken into account. Comparing many different age-sex-race specific rates can be cumbersome. The following techniques are used by vital statisticians to summarize these rates into one number.

The *direct adjusted rate* applies each of the specific rates for a particular population (such as a county or an HSA) to a standard population distribution (such as the state).

The *standard mortality ratio* compares the number of deaths for a particular population (such as a county or an HSA) to the number of deaths which would be expected if some standard set of rates (such as the state or the U.S. rates) had occurred.

Each of these techniques has its advantages and disadvantages. The easiest to calculate is the direct adjusted rate. The following example shows how to adjust a county's death rate for sex so that it may be compared to the state rate.

$$\frac{\left[\frac{\text{county male deaths}}{\text{county male population}} \times \text{state male population} \right] + \left[\frac{\text{county female deaths}}{\text{county female population}} \times \text{state female population} \right]}{\text{TOTAL STATE POPULATION}} \times 1,000$$

The same logic can be used to adjust for age and/or race.

Table 1. Estimated comparability ratios for 113 selected causes of death

List number	Cause of death ¹	Number of deaths allocated according to		Estimated comparability ratio	Standard error	Relative standard error	95 percent confidence limits	
		ICD-10 ²	ICD-9 ²				Lower	Upper
001	Salmonella infections	30	37	0.8108	0.0644	7.9	0.6846	0.9370
002	Shigellosis and amebiasis	*	*	*	*	*	*	*
003	Certain other intestinal infections	*	*	*	*	*	*	*
004	Tuberculosis	653	764	0.8547	0.0172	2	0.8209	0.8885
005	Respiratory tuberculosis	518	572	0.9056	0.0201	2.2	0.8662	0.9450
006	Other tuberculosis	135	192	0.7031	0.0407	5.8	0.6233	0.7830
007	Whooping cough	*	*	*	*	*	*	*
008	Scarlet fever and erysipelas	*	*	*	*	*	*	*
009	Meningococcal infection	221	222	0.9955	0.0149	1.5	0.9663	1.0247
010	Septicemia	21,258	17,791	1.1949	0.0042	0.3	1.1867	1.2030
011	Syphilis	21	33	0.6364	0.1184	18.6	0.4043	0.8685
012	Acute poliomyelitis	*	*	*	*	*	*	*
013	Arthropod-borne viral encephalitis	*	*	*	*	*	*	*
014	Measles	*	*	*	*	*	*	*
015	Viral hepatitis	1,123	1,346	0.8343	0.0120	1.4	0.8109	0.8578
016	Human immunodeficiency virus (HIV) disease	25,089	23,586	1.0637	0.0018	0.2	1.0601	1.0673
017	Malaria	*	*	*	*	*	*	*
018	Other and unspecified infectious and parasitic diseases and their sequelae	2,865	2,607	1.0990	0.0154	1.4	1.0688	1.1291
019	Malignant neoplasms	464,688	461,544	1.0068	0.0002	0.0	1.0064	1.0072
020	Malignant neoplasms of lip, oral cavity and pharynx	5,927	6,172	0.9603	0.0040	0.4	0.9525	0.9681
021	Malignant neoplasm of esophagus	9,596	9,630	0.9965	0.0020	0.2	0.9926	1.0003
022	Malignant neoplasm of stomach	11,480	11,408	1.0063	0.0019	0.2	1.0025	1.0101
023	Malignant neoplasms of colon, rectum and anus	48,583	48,619	0.9993	0.0009	0.1	0.9975	1.0010
024	Malignant neoplasms of liver and intrahepatic bile ducts	9,732	10,102	0.9634	0.0023	0.2	0.9588	0.9679
025	Malignant neoplasm of pancreas	24,313	24,361	0.9980	0.0009	0.1	0.9963	0.9997
026	Malignant neoplasm of larynx	3,209	3,194	1.0047	0.0053	0.5	0.9943	1.0150
027	Malignant neoplasms of trachea, bronchus and lung	131,750	133,936	0.9837	0.0005	0.1	0.9827	0.9846
028	Malignant melanoma of skin	5,941	6,139	0.9677	0.0032	0.3	0.9614	0.9741
029	Malignant neoplasm of breast	38,102	37,891	1.0056	0.0010	0.1	1.0036	1.0075
030	Malignant neoplasm of cervix uteri	3,753	3,802	0.9871	0.0034	0.3	0.9805	0.9938
031	Malignant neoplasms of corpus uteri and uterus, part unspecified	5,318	5,183	1.0260	0.0040	0.4	1.0182	1.0339
032	Malignant neoplasm of ovary	11,292	11,344	0.9954	0.0016	0.2	0.9923	0.9985
033	Malignant neoplasm of prostate	30,672	30,267	1.0134	0.0015	0.1	1.0105	1.0162
034	Malignant neoplasms of kidney and renal pelvis	9,521	9,521	1.0000	0.0022	0.2	0.9957	1.0043
035	Malignant neoplasm of bladder	9,563	9,594	0.9968	0.0026	0.3	0.9916	1.0019
036	Malignant neoplasms of meninges, brain and other parts of central nervous system	10,039	10,359	0.9691	0.0025	0.3	0.9642	0.9740
037	Malignant neoplasms of lymphoid, hematopoietic and related tissue	44,715	44,530	1.0042	0.0012	0.1	1.0019	1.0064
038	Hodgkin's disease	1,021	1,036	0.9855	0.0089	0.9	0.9680	1.0030
039	Non-Hodgkin's lymphoma	17,924	18,326	0.9781	0.0018	0.2	0.9745	0.9817
040	Leukemia	16,600	16,405	1.0119	0.0019	0.2	1.0083	1.0155
041	Multiple myeloma and immunoproliferative neoplasms	9,099	8,763	1.0383	0.0030	0.3	1.0324	1.0443
042	Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue	*	*	*	*	*	*	*
043	All other and unspecified malignant neoplasms	51,182	45,492	1.1251	0.0021	0.2	1.1210	1.1292
044	In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior	9,263	5,532	1.6744	0.0164	1.0	1.6422	1.7067
045	Anemias	3,059	3,200	0.9559	0.0077	0.8	0.9409	0.9710
046	Diabetes mellitus	48,636	48,242	1.0082	0.0011	0.1	1.0060	1.0103
047	Nutritional deficiencies	3,215	2,763	1.1636	0.0165	1.4	1.1312	1.1960
048	Malnutrition	2,607	2,665	0.9782	0.0151	1.5	0.9487	1.0078
049	Other nutritional deficiencies	608	98	6.2041	0.5961	9.6	5.0358	7.3724
050	Meningitis	592	584	1.0137	0.0136	1.3	0.9871	1.0403
051	Parkinson's disease	10,404	10,392	1.0012	0.0028	0.3	0.9956	1.0067
052	Alzheimer's disease	29,707	19,121	1.5536	0.0071	0.5	1.5398	1.5675
053	Major cardiovascular diseases	796,919	798,435	0.9981	0.0002	0.0	0.9977	0.9985
054	Diseases of heart	615,564	624,405	0.9858	0.0002	0.0	0.9854	0.9863
055	Acute rheumatic fever and chronic rheumatic heart diseases	2,446	2,980	0.8208	0.0089	1.1	0.8034	0.8382
056	Hypertensive heart disease	17,322	21,577	0.8028	0.0028	0.3	0.7973	0.8083
057	Hypertensive heart and renal disease	2,170	2,027	1.0705	0.0160	1.5	1.0392	1.1019
058	Ischemic heart diseases	466,459	466,935	0.9990	0.0002	0.0	0.9985	0.9994
059	Acute myocardial infarction	178,125	180,169	0.9887	0.0003	0.0	0.9880	0.9893
060	Other acute ischemic heart diseases	2,667	2,638	1.0110	0.0117	1.2	0.9880	1.0340
061	Other forms of chronic ischemic heart disease	285,667	284,128	1.0054	0.0004	0.0	1.0046	1.0062

See footnotes at end of table.

From: Anderson RN, Minino AM, Hoyert DL, Rosenberg HM. Comparability of cause of death between ICD-9 and ICD-10: Preliminary estimates. National vital statistics reports; Vol. 49, No. 2. Hyattsville, Maryland: National Center for Health Statistics. 2001.

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For further information about calculating confidence intervals and adjusting rates, see:

National Center for Health Statistics: Infant Mortality, by J. C. Kleinman, Statistical Notes for Health Planners, No. 2. Health Resources Administration, Washington, D.C., July 1976.

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Appendix D: Sample Forms

TYPE OR PRINT IN PERMANENT BLACK INK

OREGON DEPARTMENT OF HUMAN SERVICES
HEALTH DIVISION
CENTER FOR HEALTH STATISTICS
CERTIFICATE OF DEATH

I.D. TAG NO.

136-

Local File Number

State File Number

DECEDENT

1

2

3

4

5

PARENTS

DISPOSITION

7

8

9

REGISTRAR

10

11

12

13

14

CONDITIONS IF ANY WHICH GAVE RISE TO IMMEDIATE CAUSE STATING THE UNDERLYING CAUSE LAST

15

16

17

CAUSE OF DEATH

CAUSE OF DEATH INSTRUCTIONS ON REVERSE SIDE OF GREEN AND PINK COPY

1. DECEDENT'S NAME First Middle Last			2. SEX	3. DATE OF DEATH (Month, Day, Year)					
4. SOCIAL SECURITY NUMBER		5a. AGE-Last Birthday (Years)	5b. Under 1 Year Mos. Days	5c. Under 1 Day Hours Mins.	6. BIRTHPLACE (City and State or Foreign Country)	7. DATE OF BIRTH (Month, Day, Year)			
8. WAS DECEDENT EVER IN U.S. ARMED FORCES? <input type="checkbox"/> Yes <input type="checkbox"/> No			9a. PLACE OF DEATH (Check only one) HOSPITAL <input type="checkbox"/> Inpatient <input type="checkbox"/> ER/Outpatient <input type="checkbox"/> DOA <input type="checkbox"/> OTHER <input type="checkbox"/> Nursing Home <input type="checkbox"/> Decedent's Home <input type="checkbox"/> Other (Specify) _____						
9b. FACILITY NAME (If not institution, give street and number)			9c. CITY, TOWN, OR LOCATION OF DEATH		9d. COUNTY OF DEATH				
10a. DECEDENT'S USUAL OCCUPATION (Give kind of work done during most of working life. Do not use retired.)		10b. KIND OF BUSINESS/INDUSTRY		11. MARITAL STATUS - Married, Never Married, Widowed, Divorced (Specify)		12. SPOUSE (If Married, Widowed)			
13a. RESIDENCE - STATE		13b. COUNTY		13c. CITY, TOWN OR LOCATION		13d. STREET AND NUMBER			
13e. INSIDE CITY LIMITS? <input type="checkbox"/> Yes <input type="checkbox"/> No		13f. ZIP CODE		14. WAS DECEDENT OF HISPANIC ORIGIN? (Specify No or Yes - If yes, specify Cuban, Mexican, Puerto Rican, etc.) <input type="checkbox"/> No <input type="checkbox"/> Yes Specify: _____		15. RACE American Indian, Black, White, etc. (Specify)		16. DECEDENT'S EDUCATION (Specify only highest grade completed) Elementary/Secondary (0-12) College (1-4 or 5 +)	
17. FATHER - NAME first middle last			18. MOTHER - NAME first middle maiden			19. INFORMANT NAME and relationship to deceased		20. PLACE OF DISPOSITION (Name of cemetery, crematory, or other place)	
20a. METHOD OF DISPOSITION <input type="checkbox"/> Mausoleum <input type="checkbox"/> Burial <input type="checkbox"/> Cremation <input type="checkbox"/> Removal from State <input type="checkbox"/> Donation <input type="checkbox"/> Other (Specify) _____			20b. PLACE OF DISPOSITION (Name of cemetery, crematory, or other place)			21. ADDRESS AND ZIP OF FACILITY		22. NA	
21a. SIGNATURE OF OREGON FUNERAL SERVICE LICENSEE OR PERSON ACTING AS SUCH			21b. OREGON LICENSE NO. (Of _____)		22. NA		23. DATE FILED (Month, Day, Year)		24. REGISTRAR'S SIGNATURE
RESERVED FOR REGISTRAR'S USE									
TO BE COMPLETED BY CERTIFYING PHYSICIAN									
27. TIME OF DEATH			28. WAS MEDICAL EXAMINER NOTIFIED? <input type="checkbox"/> Yes <input type="checkbox"/> No			31a. TIME OF DEATH		31b. DATE PRONOUNCED DEAD (Month, Day, Year, Hour)	
29. To the best of my knowledge, death occurred at the time, date, place and due to the cause(s) and manner stated. (Signature)					32. On the basis of examination and/or investigation, in my opinion death occurred at the time, date, place and due to the cause(s) and manner stated. (Signature)				
30. DATE SIGNED (Month, Day, Year)			33. DATE SIGNED (Month, Day, Year)			COUNTY			
34. NAME, TITLE, ADDRESS AND ZIP OF CERTIFIER/MEDICAL EXAMINER (Type or Print)									
35. NAME OF ATTENDING PHYSICIAN IF OTHER THAN CERTIFIER (Type or Print)									
36. IMMEDIATE CAUSE (ENTER ONLY ONE CAUSE PER LINE FOR (a), (b), AND (c). Do not enter mode of dying, e.g. Cardiac or Respiratory Arrest.								Interval between onset and death	
PART I (a) DUE TO, OR AS A CONSEQUENCE OF:								Interval between onset and death	
PART I (b) DUE TO, OR AS A CONSEQUENCE OF:								Interval between onset and death	
PART I (c) OTHER SIGNIFICANT CONDITIONS - Conditions contributing to death but not resulting in the underlying cause given in PART I.									
37. Did tobacco use contribute to the death? <input type="checkbox"/> Yes <input type="checkbox"/> Probably <input type="checkbox"/> No <input type="checkbox"/> Unknown			38. AUTOPSY <input type="checkbox"/> Yes <input type="checkbox"/> No		39. If YES were findings considered in determining cause of death? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A				
40. MANNER OF DEATH <input type="checkbox"/> Natural <input type="checkbox"/> Pending Investigation <input type="checkbox"/> Accident <input type="checkbox"/> Undetermined Manner <input type="checkbox"/> Suicide <input type="checkbox"/> Legal Intervention <input type="checkbox"/> Homicide <input type="checkbox"/> Other		41a. DATE OF INJURY (Month, Day, Year)		41b. TIME OF INJURY M <input type="checkbox"/> Yes <input type="checkbox"/> No		41c. INJURY AT WORK? <input type="checkbox"/> Yes <input type="checkbox"/> No		41d. DESCRIBE HOW INJURY OCCURRED	
41a. PLACE OF INJURY - At home, farm, street, factory, office building, etc. (Specify)				41f. LOCATION (Street and Number or Rural Route Number, City or Town, State)					
RESERVED FOR REGISTRAR'S USE									

TYPE OR PRINT IN PERMANENT BLACK INK

OREGON DEPARTMENT OF HUMAN RESOURCES HEALTH DIVISION

Center for Health Statistics REPORT OF FETAL DEATH

136-

I D TAG NO

Local File Number

State File Number

Form sections 1-14: FACILITY NAME, COUNTY OF DELIVERY, MOTHER - NAME, FATHER - NAME, IMMEDIATE CAUSE, OTHER SIGNIFICANT CONDITIONS, NAME OF PHYSICIAN, etc.

MOTHER

FATHER

CAUSE OF FETAL DEATH

OPTIONAL

Fetus-Name

MOTHER

FATHER

Form sections 15-35: MEDICAL HISTORY, OCCUPATION AND BUSINESS/INDUSTRY, MEDICAL FACTORS FOR THIS PREGNANCY, OTHER FACTORS FOR THIS PREGNANCY, CONGENITAL ANOMALIES, etc.

Oregon Department of Human Services – Health Division

Adolescent Suicide Attempt Report

1. Name of hospital: _____ County _____
2. Date of attempt (Month/Day/Year): _____ / _____ / _____
3. Admitted as an in-patient? Yes No Transferred to another hospital (Specify) _____
4. Patient or hospital chart number: _____
5. Date of birth (Month/Day/Year): _____ / _____ / _____
6. Sex: Male Female
7. Race: White Black Am. Indian Hispanic Other (Specify) _____
8. Residence: City _____ County _____
9. Patient lives with:
- Both parents Father only Mother only Foster parents Friends
- Parent and stepparent Unknown Other, homeless, etc. (Specify): _____
10. Place of attempt:
- Own home Another's home School Other (Specify): _____
11. Method or methods used in attempt:
- Poisoning by solid or liquid substance including drug or alcohol overdoses, and other potentially toxic substances
Specify substance(s): _____
- Hanging or suffocation – Specify method: _____
- Firearms and explosives – Specify type (Hand gun, rifle, etc.) and body site: _____
- Cutting or piercing – Specify instrument and body site: _____
- Other means such as motor vehicle crash, drowning, fire, etc. Specify: _____
12. History of mental health issues:
- Acute depression Chronic depression Bipolar disorder Adjustment disorder
- Conduct disorder Other _____ Unknown None
13. Number of previous suicide attempts made during lifetime:
- 1 2 3 4 5 6 7+ Attempts made, but # unknown History unknown
14. Precipitating events and risk factors:
- Family discord Argument or breakup with boyfriend/girlfriend Peer pressure/argument
- School problems Suicide or attempt by friend/relative Pregnancy
- Death of friend/relative Move or new school None
- Physical abuse – Specify type and perpetrator, if known: _____
- Sexual abuse or rape – Specify type and perpetrator, if known: _____
- Alcohol and/or drug abuse – Specify substance(s): _____
- Prior arrests and/or convictions of a crime – Specify: _____
- Other – Specify: _____
15. Did the youth tell others of his or her plan to attempt/commit suicide? Yes No Unknown
- If yes, whom did the youth tell? Parent Friend Teacher Other _____
16. Was the youth referred for intervention? No Yes – Specify to whom: _____
17. Name of person completing report (Print): _____ Dept. _____

ORS 441.750 states that

"Any hospital which treats as a patient a person under 18 years of age because the person has attempted to commit suicide:

"shall cause that person to be provided with information and referral to in-patient or out-patient community resources, crisis intervention or other appropriate intervention by the patient's attending physician, hospital social work staff or other appropriate staff." and

"shall report statistical information to the Health Division of the Department of Human Services about the person. . ."

Mail this form no later than the 15th of the month following the month of the attempt to: Center for Health Statistics

Telephone: 503-731-4354

P.O. Box 14050

OSI Form 45-119 (Rev. 4-01)

Portland, Oregon 97293-0050

Oregon Department of Human Resources
HEALTH DIVISION

**ADOLESCENT SUICIDE ATTEMPT REPORT:
ZERO ATTEMPTS**

1. Name of HOSPITAL _____ COUNTY _____
2. During the month of _____, there have been ZERO teen suicide attempts treated here.
3. Contact person at this facility: _____
- Title/Dept: _____ Phone: _____

MAIL THIS FORM TO THE ADDRESS LISTED BELOW NO LATER THAN THE 15TH OF THE MONTH FOLLOWING ANY MONTH IN WHICH THERE WERE NO TEEN SUICIDE ATTEMPTS TREATED AT YOUR HOSPITAL:

**Adolescent Suicide Report Program
Center for Health Statistics
PO Box 14050
Portland, OR 97293-0050
Telephone (503) 731-4354**