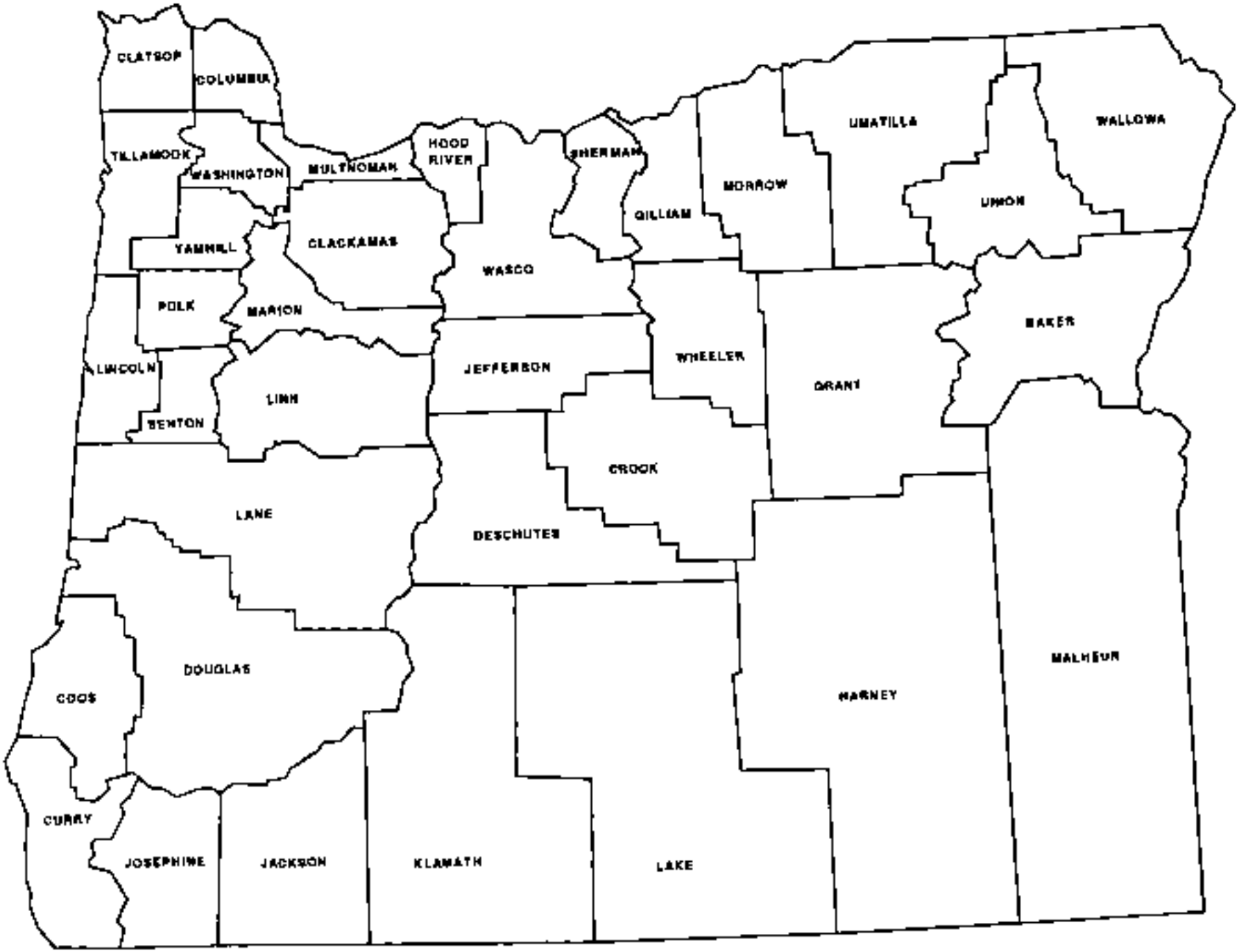
Oregon Vital Statistics Annual Report 2002

Volume 1:
Natality
Induced Terminations of Pregnancy
Teen Pregnancy

oregon department of human services

Health Services
Office of Disease Prevention and Epidemiology
Center for Health Statistics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Prepared by:
Center for Health Statistics

Researchers:

Chris Bushore
Joyce Grant-Worley
Karen Hampton
David Hopkins
Don Peterson

Desktop Publishing:
Melissa Grace Franklin

Special thanks to other staff members of the Center for Health Statistics:

Bisrat Afeworki
Diane Aho
Teresa Bailey
Tony Bojanowski
Terrie Bollinger
Becki Buskirk
Kathy Cook
Terresa Davis
Azure Diamon
Carol Dopp
Debbie Draghia
Rosalind Fong
Jane Gillette
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Kara Rosenthal
Nancy Salta
Carol Sanders
Cory Schatz
Karen Semprevivo
Denice Sprague
Johanna Swenson
Chan Vannarath
Sheila Vu
Jennifer Woodward

P.O. Box 14050
Portland, OR 97293-0050
Phone: (503) 731-4354

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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/index.cfm. 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.

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 on 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. Microfilmers 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.

Quick Reference: Volume 1

Quick Reference: Volume 1

Summary of Oregon Vital Events, 2002

Population	3,504,700	Population increased 33,000 or 1.0 percent over 2001.
Live Births	**Residents**	
Number	45,190	Number decreased by 128. Both the crude rate and the fertility rate decreased slightly.
Crude Rate	12.9	
Fertility Rate	60.9	
Marriages	**Occurrence**	
Number	24,979	Number of Marriages decreased by 1,011, a decrease of 3.9 percent from 2001. The rate decreased by 5.3 percent.
Crude Rate	7.1	
Divorces	**Occurrence**	
Number	16,146	Number of divorces decreased 413 from 2001. The rate decreased by 4.2 percent.
Crude Rate	4.6	
Unmarried Mothers	**Residents**	
Number	13,962	Number increased by 229. Proportion of births which were to unmarried mothers increased slightly.
Rate	30.9	
Low Birthweight Infants	**Residents**	
Number	2,617	Number of low birthweight infants increased by 96. Rate increased by 4.1 percent.
Rate	57.9	
Induced Abortions	**Occurrence**	
Number	13,172	The number of reported abortions decreased by 1,100, a decrease of 7.7 percent from 2001. The abortion ratio decreased by 7.4 percent.
Ratio	286.0	

Crude birth, death, marriage, and divorce rates are per 1,000 population; fertility rate per 1,000 15-44 year old females; unmarried mother rate and low birthweight rate, per 1,000 live resident births; induced abortion ratio per 1,000 live occurrence births. Rates and percentages are calculated excluding missing and unknown values.

Table 1-1. Live Births, Births to Unmarried Mothers, Marriages, and Divorces, U.S., 1945-2002

Year	Live Births		Births to Unmarried Mothers		Marriages		Divorces	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1945	2,735,456	20.6	117,400	42.9	1,612,992	12.2	485,000	3.5
1946	3,288,672	23.5	125,200	38.1	2,291,045	16.4	610,000	4.3
1947	3,699,940	25.8	131,900	35.7	1,991,878	13.9	483,000	3.4
1948	3,535,068	24.2	129,700	36.7	1,811,155	12.4	408,000	2.8
1949	3,559,529	23.9	133,200	37.4	1,579,798	10.6	397,000	2.7
1950	3,554,149	23.6	141,600	39.8	1,667,231	11.1	385,144	2.6
1951	3,750,850	24.5	146,500	39.1	1,594,694	10.4	381,000	2.5
1952	3,846,986	24.7	150,300	39.1	1,539,318	9.9	392,000	2.5
1953	3,902,120	24.7	160,800	41.2	1,546,000	9.8	390,000	2.5
1954	4,017,362	24.9	176,600	44.0	1,490,000	9.2	379,000	2.4
1955	4,047,295	24.6	183,300	45.3	1,531,000	9.3	377,000	2.3
1956	4,163,090	24.9	193,500	46.5	1,585,000	9.5	382,000	2.3
1957	4,254,784	25.0	201,700	47.4	1,518,000	8.9	381,000	2.2
1958	4,203,812	24.3	208,700	49.6	1,451,000	8.4	368,000	2.1
1959	4,244,796	24.0	220,600	52.0	1,494,000	8.5	395,000	2.2
1960	4,257,850	23.7	224,300	52.7	1,523,000	8.5	393,000	2.2
1961	4,268,326	23.3	240,200	56.3	1,548,000	8.5	414,000	2.3
1962	4,167,362	22.4	245,000	58.8	1,577,000	8.5	413,000	2.2
1963	4,098,020	21.7	259,400	63.3	1,654,000	8.8	428,000	2.3
1964	4,027,490	21.0	275,700	68.5	1,725,000	9.0	450,000	2.4
1965	3,760,358	19.4	291,200	77.4	1,800,000	9.3	479,000	2.5
1966	3,606,274	18.4	302,400	83.9	1,857,000	9.5	499,000	2.5
1967	3,520,959	17.8	318,100	90.3	1,927,000	9.7	523,000	2.6
1968	3,501,564	17.6	339,200	96.9	2,069,000	10.4	584,000	2.9
1969	3,600,206	17.9	360,800	100.2	2,145,000	10.6	639,000	3.2
1970	3,731,368	18.4	398,700	106.9	2,158,802	10.6	708,000	3.5
1971	3,555,970	17.2	401,400	112.9	2,190,481	10.6	773,000	3.7
1972	3,258,411	15.6	403,200	123.7	2,282,154	10.9	845,000	4.0
1973	3,136,965	14.8	407,300	129.8	2,284,108	10.8	915,000	4.3
1974	3,159,958	14.8	418,100	132.3	2,229,667	10.5	977,000	4.6
1975	3,144,198	14.6	447,900	142.5	2,152,662	10.0	1,036,000	4.8
1976	3,167,788	14.6	468,100	147.8	2,154,807	9.9	1,083,000	5.0
1977	3,326,632	15.1	515,700	155.0	2,178,367	9.9	1,091,000	5.0
1978	3,333,279	15.0	543,900	163.2	2,282,272	10.3	1,130,000	5.1
1979	3,494,398	15.6	597,800	171.1	2,331,337	10.1	1,181,000	5.3
1980	3,612,258	15.9	665,747	184.3	2,390,252	10.6	1,189,000	5.2
1981	3,629,238	15.8	686,605	189.2	2,422,145	10.6	1,213,000	5.3
1982	3,680,537	15.9	715,277	194.3	2,456,278	10.6	1,170,000	5.0
1983	3,638,933	15.5	737,893	202.8	2,445,604	10.5	1,179,000	5.0
1984	3,669,141	15.5	770,355	210.0	2,477,192	10.5	1,169,000	4.9
1985	3,760,561	15.8	828,174	202.2	2,425,000	10.2	1,187,000	5.0
1986	3,756,547	15.6	878,477	233.9	2,400,000	10.0	1,159,000	4.8
1987	3,809,394	15.7	933,013	243.7	2,421,000	9.9	1,157,000	4.8
1988	3,909,510	15.9	1,005,299	257.1	2,389,000	9.7	1,183,000	4.8
1989	4,040,958	16.2	1,094,169	270.8	2,404,000	9.7	1,163,000	4.7

See footnotes at end of table.

Table 1-1. Live Births, Births to Unmarried Mothers, Marriages, and Divorces, U.S., 1945-2002 — Continued

Year	Live Births		Births to Unmarried Mothers		Marriages		Divorces	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1990	4,158,212	16.7	1,165,384	280.3	2,448,000	9.8	1,175,000	4.7
1991	4,110,907	16.2	1,213,769	295.3	2,371,000	9.4	1,187,000	4.7
1992	4,065,014	15.9	1,244,876	300.0	2,362,000	9.2	1,215,000	4.7
1993	4,000,240	15.5	1,240,172	310.0	2,334,000	9.0	1,187,000	4.6
1994	3,952,767	15.2	1,289,592	326.3	2,362,000	9.1	1,191,000	4.6
1995	3,899,589	14.8	1,253,976	322.0	2,336,000	8.9	1,169,000	4.4
1996	3,891,494	14.7	1,260,306	324.0	2,344,000	8.8	1,150,000	4.3
1997	3,880,894	14.5	1,257,444	324.0	2,384,000	8.9	1,163,000	4.3
1998	3,941,553	14.6	1,293,567	328.0	2,256,000	8.3	1,135,000	4.2
1999	3,959,417	14.5	1,308,560	330.0	2,358,000	8.6	not available	4.1
2000	4,058,814	14.7	1,347,043	332.0	2,329,000	8.2	not available	4.1
2001	4,025,933	14.1	1,349,249	335.1	2,345,000	8.2	not available	3.9
2002	4,021,726	13.9	1,365,966	339.6	*2,254,000	*7.8	not available	*4.0

* Provisional data.
Rate per 1,000 population for live births, marriages and divorces.
Rate per 1,000 live births for births to unmarried mothers.

The source for federal data is Births: Final Data for 2002 Vol. 52, No. 10, December 17, 2003. This publication belongs to the monthly Vital Statistics Report series published by the National Center for Health Statistics (NCHS).
Marriage and divorce numbers and rates: Births, Marriages, Divorces and Deaths. Provisional Data for October - December 2002. National Vital Statistics Report, Vol. 51, No. 10, June 17, 2003, p.3.
Vital Statistics of the United States, Volumes 1-3, lists historical data.

TABLE 1-2. Population, Live Births and Births to Unmarried Mothers, Marriages, and Divorces, Oregon, 1910, 1915, 1920, 1925, 1930-2002

Year*	Population	Live Births		Births to Unmarried Mothers		Marriages		Dissolutions of Marriage	
		Number	Rate	Number	Ratio[1]	Number	Rate	Number	Rate
1910	673,002	9,176	13.6	-	-	5,541	8.2	-	-
1915	732,226	12,232	16.7	-	-	4,983	6.8	-	-
1920	791,701	14,954	18.9	-	-	7,557	9.5	-	-
1925	874,800	15,579	17.8	-	-	6,999	8.0	-	-
1930	958,450	13,473	14.1	-	-	7,678	8.0	2,825	2.9
1931	967,200	13,227	13.7	-	-	7,346	7.6	2,417	2.5
1932	980,600	12,845	13.1	-	-	6,668	6.8	1,728	1.8
1933	994,000	12,228	12.3	-	-	5,715	5.7	1,844	1.9
1934	1,007,400	13,071	13.0	-	-	6,237	6.2	2,248	2.2
1935	1,020,800	13,143	12.9	-	-	6,795	6.7	2,304	2.3
1936	1,034,100	14,119	13.7	-	-	7,433	7.2	2,578	2.5
1937	1,047,500	15,495	14.8	-	-	7,602	7.3	2,718	2.6
1938	1,061,000	16,333	15.4	-	-	6,734	6.3	3,162	3.0
1939	1,074,000	16,727	15.6	-	-	4,902	4.6	3,422	3.2
1940	1,093,000	17,522	16.0	237	13.5	5,998	5.5	3,543	3.2
1941	1,107,000	18,784	17.0	229	12.2	7,445	6.7	4,122	3.7
1942	1,148,500	22,283	19.4	247	11.1	8,768	7.6	4,725	4.1
1943	1,167,200	25,380	21.7	328	12.9	9,272	7.9	5,643	4.8
1944	1,221,000	23,444	19.2	407	17.4	8,675	7.1	6,619	5.4
1945	1,227,200	23,339	19.0	504	21.6	9,764	8.0	7,949	6.5
1946	1,347,900	29,566	21.9	517	17.5	14,674	10.9	10,241	7.6
1947	1,423,300	36,190	25.4	608	16.8	12,881	9.1	6,707	4.7
1948	1,470,800	34,937	23.8	575	16.5	12,373	8.4	6,405	4.4
1949	1,511,200	35,062	23.2	502	14.3	10,746	7.1	6,274	4.2
1950	1,521,341	35,991	23.7	667	18.5	11,300	7.4	5,943	3.9
1951	1,568,000	37,317	23.8	623	16.7	10,118	6.5	6,133	3.9
1952	1,602,100	39,752	24.8	780	19.6	9,998	6.2	6,311	3.9
1953	1,636,800	39,866	24.4	772	19.4	10,502	6.4	6,373	3.9
1954	1,662,680	38,550	23.2	909	23.6	9,567	5.8	6,130	3.7
1955	1,690,840	38,678	22.9	880	22.8	10,632	6.3	6,158	3.6
1956	1,734,650	38,432	22.2	958	24.9	10,568	6.1	5,827	3.4
1957	1,737,470	37,828	21.8	1,088	28.8	9,961	5.7	5,261	3.0
1958	1,728,550	36,295	21.0	1,091	30.1	9,896	5.7	5,452	3.2
1959	1,777,000	36,634	20.6	1,217	33.2	10,166	5.7	6,009	3.4
1960	1,768,687	38,347	21.7	1,250	32.6	10,590	6.0	5,711	3.2
1961	1,816,345	37,475	20.6	1,433	38.2	10,798	5.9	6,023	3.3
1962	1,825,138	36,983	20.3	1,499	40.5	11,122	6.1	6,074	3.3
1963	1,856,190	34,863	18.8	1,708	49.0	11,786	6.3	6,180	3.3
1964	1,906,000	33,500	17.6	1,754	52.4	12,297	6.5	6,486	3.4

See footnotes at end of table.

TABLE 1-2. Population, Live Births and Births to Unmarried Mothers, Marriages, and Divorces, Oregon, 1910, 1915, 1920, 1925, 1930-2002 — Continued

Year*	Population	Live Births		Births to Unmarried Mothers		Marriages		Dissolutions of Marriage	
		Number	Rate	Number	Ratio[1]	Number	Rate	Number	Rate
1965	1,972,150	32,955	16.7	2,094	63.5	13,252	6.7	6,219	3.2
1966	1,999,780	32,446	16.2	2,330	71.8	13,981	7.0	6,764	3.4
1967	2,006,360	31,446	15.7	2,478	78.8	14,401	7.2	7,603	3.8
1968	2,050,900	32,136	15.7	2,831	88.1	16,125	7.9	8,258	4.0
1969	2,081,640	33,834	16.3	3,000	88.7	16,874	8.1	8,643	4.2
1970	2,091,385	35,353	16.9	2,912	82.4	17,302	8.3	9,583	4.6
1971	2,143,010	33,344	15.6	2,603	78.1	18,100	8.4	10,687	5.0
1972	2,183,270	31,308	14.3	2,552	81.5	19,265	8.8	11,706	5.4
1973	2,224,900	30,902	13.9	2,599	84.1	19,661	8.8	12,382	5.6
1974	2,266,000	32,506	14.3	2,984	91.8	20,002	8.8	13,538	6.0
1975	2,299,000	33,352	14.5	3,382	101.4	19,322	8.4	15,526	6.8
1976	2,341,750	34,840	14.9	3,825	109.8	19,182	8.2	16,070	6.9
1977	2,396,100	37,467	15.6	4,596	122.7	20,303	8.5	16,372	6.8
1978	2,472,000	38,964	15.8	5,279	135.5	21,055	8.5	16,965	6.9
1979	2,544,000	41,564	16.3	5,599	134.7	22,063	8.7	17,584	6.9
1980	2,633,105	43,091	16.4	6,360	147.6	23,004	8.7	17,762	6.7
1981	2,660,435	42,974	16.2	6,384	148.6	22,904	8.6	17,697	6.7
1982	2,656,185	41,012	15.4	6,484	158.1	24,186	9.1	16,792	6.3
1983	2,634,993	39,949	15.2	6,467	161.9	23,346	8.9	16,173	6.1
1984	2,660,000	39,536	14.9	6,861	173.5	23,074	8.7	15,631	5.9
1985	2,675,800	39,419	14.7	7,385	187.3	22,408	8.4	15,736	5.9
1986	2,659,500	38,850	14.6	7,999	205.9	22,015	8.3	15,774	5.9
1987	2,690,000	38,674	14.4	8,659	223.9	22,301	8.3	15,602	5.8
1988	2,741,000	39,850	14.5	9,377	235.3	23,407	8.5	15,188	5.5
1989	2,791,000	41,223	14.8	10,437	253.2	23,908	8.6	15,083	5.4
1990	2,847,000	42,830	15.0	11,024	257.4	25,348	8.9	15,734	5.5
1991	2,930,000	42,458	14.5	11,312	266.4	24,934	8.5	15,839	5.4
1992	2,979,000	41,941	14.1	11,310	269.7	24,866	8.3	16,067	5.4
1993	3,038,000	41,566	13.7	11,719	281.9	24,856	8.2	16,345	5.4
1994	3,082,000	41,832	13.6	12,007	287.0	25,194	8.2	15,844	5.1
1995	3,132,000	42,715	13.6	12,350	289.1	25,292	8.1	15,289	4.9
1996	3,181,000	43,645	13.7	12,944	296.6	25,815	8.1	14,944	4.7
1997	3,217,000	43,765	13.6	12,606	288.0	26,074	8.1	14,864	4.6
1998	3,267,550	45,228	13.8	13,451	297.6	25,424	7.8	15,234	4.7
1999	3,300,800	45,193	13.7	13,738	304.0	25,876	7.8	15,647	4.7
2000	3,436,750	45,786	13.3	13,778	301.0	25,926	7.5	16,579	4.8
2001	3,471,700	45,318	13.1	13,733	304.0	25,990	7.5	16,559	4.8
2002	3,504,700	45,190	12.9	13,962	309.5	24,979	7.1	16,146	4.6

- Data not available.
Rate per 1,000 population for live births, marriages and dissolutions of marriage.
[1] Ratio per 1,000 live births for births to unmarried mothers calculated excluding unknown marital status.
* Complete listings for years 1908-1929 can be found in annual reports before 2001.

TABLE 1-3. Population, Live Births and Births to Unmarried Mothers by County of Residence, and Marriages and Dissolutions of Marriage by County of Occurrence, Oregon, 2002

County	Estimated Population July 1, 2002	Live Births		Births to Unmarried Mothers		Marriages		Dissolutions of Marriage	
		No.	Rate	No.	Ratio	No.	Rate	No.	Rate
Total	3,504,700	45,190	12.9	13,962	309.5	24,979	7.1	16,146	4.6
Baker	16,700	175	§ 10.5	47	268.6	122	7.3	85	5.1
Benton	79,900	780	§ 9.8	119	§ 152.8	459	§ 5.7	300	§ 3.8
Clackamas	350,850	4,068	§ 11.6	1,019	§ 250.6	2,720	§ 7.8	1,407	§ 4.0
Clatsop	36,100	432	12.0	167	§ 387.5	486	§ 13.5	179	5.0
Columbia	44,600	513	§ 11.5	144	280.7	267	§ 6.0	244	§ 5.5
Coos	62,650	630	§ 10.1	254	§ 404.5	480	7.7	211	§ 3.4
Crook	20,200	215	§ 10.6	65	303.7	157	7.8	99	4.9
Curry	21,250	150	§ 7.1	41	390.5	150	7.1	106	5.0
Deschutes	126,500	1,487	§ 11.8	384	§ 258.2	1,054	§ 8.3	713	§ 5.6
Douglas	101,300	1,035	§ 10.2	397	§ 383.6	821	§ 8.1	621	§ 6.1
Gilliam	1,900	14	§ 7.4	3	214.3	12	6.3	9	4.7
Grant	7,750	72	§ 9.3	11	§ 152.8	37	§ 4.8	35	4.5
Harney	7,600	77	§ 10.1	24	311.7	46	6.1	26	3.4
Hood River	20,450	326	§ 15.9	81	248.5	238	§ 11.6	100	4.9
Jackson	187,600	2,111	§ 11.3	704	334.0	1,343	7.2	1,034	§ 5.5
Jefferson	19,850	309	§ 15.6	148	§ 479.0	155	7.8	70	§ 3.5
Josephine	77,650	738	§ 9.5	260	352.3	532	6.9	484	§ 6.2
Klamath	64,550	755	§ 11.7	262	347.5	440	6.8	268	4.2
Lake	7,450	73	§ 9.8	19	267.6	37	§ 5.0	27	3.6
Lane	328,150	3,494	§ 10.6	1,191	§ 341.2	2,156	§ 6.6	1,641	§ 5.0
Lincoln	44,700	434	§ 9.7	196	§ 451.6	659	§ 14.7	241	§ 5.4
Linn	104,000	1,400	13.5	496	§ 354.3	686	§ 6.6	567	§ 5.5
Malheur	32,000	482	§ 15.1	176	§ 365.1	177	§ 5.5	118	§ 3.7
Marion	291,000	4,430	§ 15.2	1,609	§ 363.5	2,096	7.2	1,413	4.9
Morrow	11,250	155	13.8	57	367.7	61	§ 5.4	49	4.4
Multnomah	670,250	9,340	§ 13.9	3,065	§ 328.2	5,287	§ 7.9	2,814	§ 4.2
Polk	63,450	770	12.1	219	284.4	415	6.5	152	§ 2.4
Sherman	1,850	15	8.1	4	266.7	9	4.9	9	4.9
Tillamook	24,600	242	§ 9.8	88	368.2	254	§ 10.3	82	§ 3.3
Umatilla	71,000	1,066	§ 15.0	431	§ 404.3	460	§ 6.5	386	§ 5.4
Union	24,600	285	11.6	85	298.2	185	7.5	141	§ 5.7
Wallowa	7,150	56	§ 7.8	9	160.7	64	9.0	29	4.1
Wasco	23,750	290	12.2	91	313.8	175	7.4	116	4.9
Washington	463,050	7,568	§ 16.3	1,719	§ 227.2	2,125	§ 4.6	1,949	§ 4.2
Wheeler	1,550	10	§ 6.5	4	400.0	17	11.0	7	4.5
Yamhill	87,500	1,193	13.6	373	312.9	597	6.8	414	4.7

NOTE: Rate per 1,000 population for live births, marriages and dissolutions of marriage. Ratio per 1,000 live births for births to unmarried mothers. Ratio is calculated excluding missing and unknown values.
§ Indicates rate or ratio is significantly different from the state.
WARNING: Rates based on less than 5 events are unreliable.

TABLE 1-4. Population and Births by City of Residence, Oregon, 2002

City of Residence	Estimated Population July 1, 2002	Births	
		Number	Rate
Albany (Linn, Benton)	42,280	676	16.0
Ashland (Jackson)	20,130	158	7.8
Beaverton (Washington)	77,990	1,993	25.6
Bend (Deschutes)	57,750	826	14.3
Canby (Clackamas)	13,440	270	20.1
Central Point (Jackson)	14,120	239	16.9
Coos Bay (Coos)	15,620	235	15.0
Corvallis (Benton)	52,450	517	9.9
Dallas (Polk)	12,850	160	12.5
Eugene (Lane)	142,380	1,701	11.9
Forest Grove (Washington)	18,520	341	18.4
Gladstone (Clackamas)	11,620	127	10.9
Grants Pass (Josephine)	23,870	400	16.8
Gresham (Multnomah)	92,620	1,099	11.9
Hermiston (Umatilla)	14,120	292	20.7
Hillsboro (Washington)	74,840	1,416	18.9
Keizer (Marion)	33,100	474	14.3
Klamath Falls (Klamath)	19,680	346	17.6
La Grande (Union)	12,450	192	15.4
Lake Oswego (Clackamas, Multnomah, Washington)	35,750	322	9.0
Lebanon (Linn)	13,110	220	16.8
McMinnville (Yamhill)	28,200	448	15.9
Medford (Jackson)	66,090	963	14.6
Milwaukie (Clackamas)	20,550	698	34.0
Newberg (Yamhill)	18,750	313	16.7
Ontario (Malheur)	11,140	221	19.8
Oregon City (Clackamas)	27,270	532	19.5
Pendleton (Umatilla)	16,600	205	12.3
Portland (Clackamas, Multnomah, Washington)	538,180	8,358	15.5
Redmond (Deschutes)	16,110	265	16.4
Roseburg (Douglas)	20,170	386	19.1
Salem (Marion, Polk)	141,150	2,744	19.4
Springfield (Lane)	53,910	941	17.5
St. Helens (Columbia)	10,780	166	15.4
The Dalles (Wasco)	12,250	189	15.4
Tigard (Washington)	44,070	841	19.1
Troutdale (Multnomah)	14,240	261	18.3
Tualatin (Clackamas, Washington)	24,100	373	15.5
West Linn (Clackamas)	23,430	204	8.7
Wilsonville (Clackamas, Washington)	15,590	233	14.9
Woodburn (Marion)	20,860	451	21.6

Selected cities of 10,000 or more population listed. Counties listed in parentheses.
Population source: Center for Population Research and Census, Portland State University.
Rate per 1,000 population.

TABLE 1-5. United States Rates of Low Birthweight, and Measures of Prenatal Care, 1980-2002

Year	Low Birthweight	First Trimester Care	No Care	Inadequate Care [1]	Third Trimester Care	Less than Five Visits
1980	68.4	763.6	13.5	87.2	38.1	69.4
1981	68.1	763.5	14.1	87.1	38.4	68.6
1982	67.5	759.3	15.9	90.8	39.9	71.9
1983	68.2	760.6	17.0	88.7	39.7	69.9
1984	67.2	764.5	17.1	87.8	39.4	68.7
1985	67.5	763.1	17.0	88.0	40.6	67.6
1986	68.1	760.4	19.3	89.6	41.1	68.4
1987	69.0	760.0	20.1	90.5	41.8	68.8
1988	69.3	760.5	18.8	90.4	42.1	68.4
1989	70.5	754.5	21.8	96.3	42.7	74.6
1990	69.7	758.3	19.8	91.3	41.1	70.4
1991	71.2	762.5	19.1	86.7	38.6	66.6
1992	70.8	777.5	17.3	78.6	34.5	60.6
1993	72.2	789.0	16.0	72.7	32.4	55.2
1994	72.8	802.2	13.6	66.9	30.4	50.4
1995	73.2	812.7	12.3	63.0	30.2	46.7
1996	73.9	818.6	11.8	60.5	28.2	44.7
1997	75.1	825.3	12.2	58.1	27.0	44.5
1998	76.0	828.3	11.9	57.9	27.0	44.1
1999	76.0	832.0	11.2	56.3	25.8	43.4
2000	76.0	832.0	10.9	57.7	26.6	42.7
2001	77.0	834.0	10.6	na	26.9	43.1
2002	78.0	837.0	9.9	na	26.2	na

[1] Inadequate prenatal care is defined as care that began in the third trimester or consisted of less than five prenatal visits.

All rates are per 1,000 live births. Rates and percentages are calculated excluding missing and unknown values.

Source of national data is Martin JA, Hamilton BE, Sutton PD. Births: Final data for 2002. National vital statistics reports; vol 52 no 10. Hyattsville, Maryland: National Center for Health Statistics. 2003.

TABLE 1-6. Oregon Rates of Low Birthweight, and Measures of Prenatal Care, 1980-2002

Year	Low Birthweight	First Trimester Care	No Care	Inadequate Care [1]	Third Trimester Care	Less than Five Visits
1980	50.4	780.8	5.5	58.0	35.2	41.4
1981	48.5	775.6	8.9	63.1	38.6	43.0
1982	49.2	769.3	11.2	70.3	41.0	48.0
1983	50.0	775.3	11.3	66.5	38.5	44.9
1984	51.5	771.5	11.0	68.2	41.1	46.2
1985	51.3	752.0	12.1	72.9	43.7	47.5
1986	51.3	738.7	11.7	83.3	52.1	54.6
1987	54.0	736.8	16.5	86.2	50.3	58.5
1988	52.6	738.8	13.8	83.6	49.9	54.7
1989	52.2	750.7	12.0	73.2	42.9	48.7
1990	50.1	757.1	10.7	70.0	43.4	45.1
1991	49.2	768.2	8.7	61.0	37.4	38.6
1992	51.8	787.0	8.2	52.6	31.4	34.0
1993	52.5	794.6	7.6	51.7	30.4	33.8
1994	53.0	790.9	8.5	57.8	34.3	36.4
1995	54.9	787.7	8.6	58.4	34.7	38.2
1996	53.5	799.3	7.1	53.7	31.7	34.8
1997	55.0	811.2	6.7	50.0	29.6	32.3
1998	53.7	807.2	7.2	53.5	30.7	35.3
1999	53.9	809.9	7.3	53.7	29.6	35.7
2000	56.6	812.8	8.5	55.9	29.8	36.6
2001	55.6	815.2	8.0	50.5	28.7	33.1
2002	57.9	816.4	9.4	52.2	28.6	35.7

[1] Inadequate prenatal care is defined as care that began in the third trimester or consisted of less than five prenatal visits.
All rates are per 1,000 live births. Rates and percentages are calculated excluding missing and unknown values.

Natality

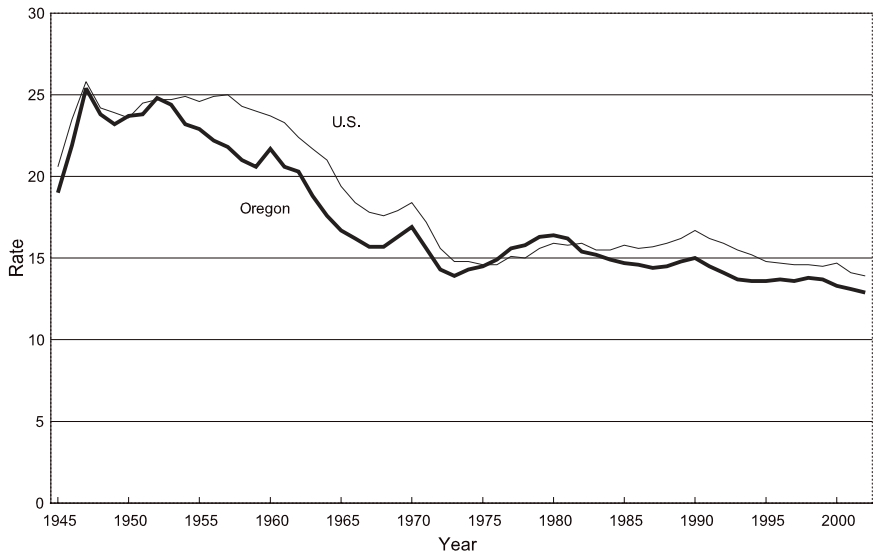
Natality

In 2002, Oregon recorded **45,190 resident births.** There were 128 fewer resident births than in 2001 and the **crude birth rate** (the number of babies born divided by the total state population) decreased slightly, from 13.1 to 12.9 per 1,000 population. [Table 1-2]. Oregon's crude birth rate peaked in 1947 at 25.4 per 1,000 population. For the past thirty years however, Oregon's rates have held in the mid-teens, ranging from a high of 16.4 in 1980 to the current low of 12.9. Except for the period between 1976 and 1981, Oregon's crude birth rate has remained lower than the national rate for the past 50 years. In 2002, Oregon's rate was 7.2 percent lower than the nation's (12.9 vs. 13.9). [Figure 2-1].

Oregon's crude birth rate and fertility rate both remain below the national rates.

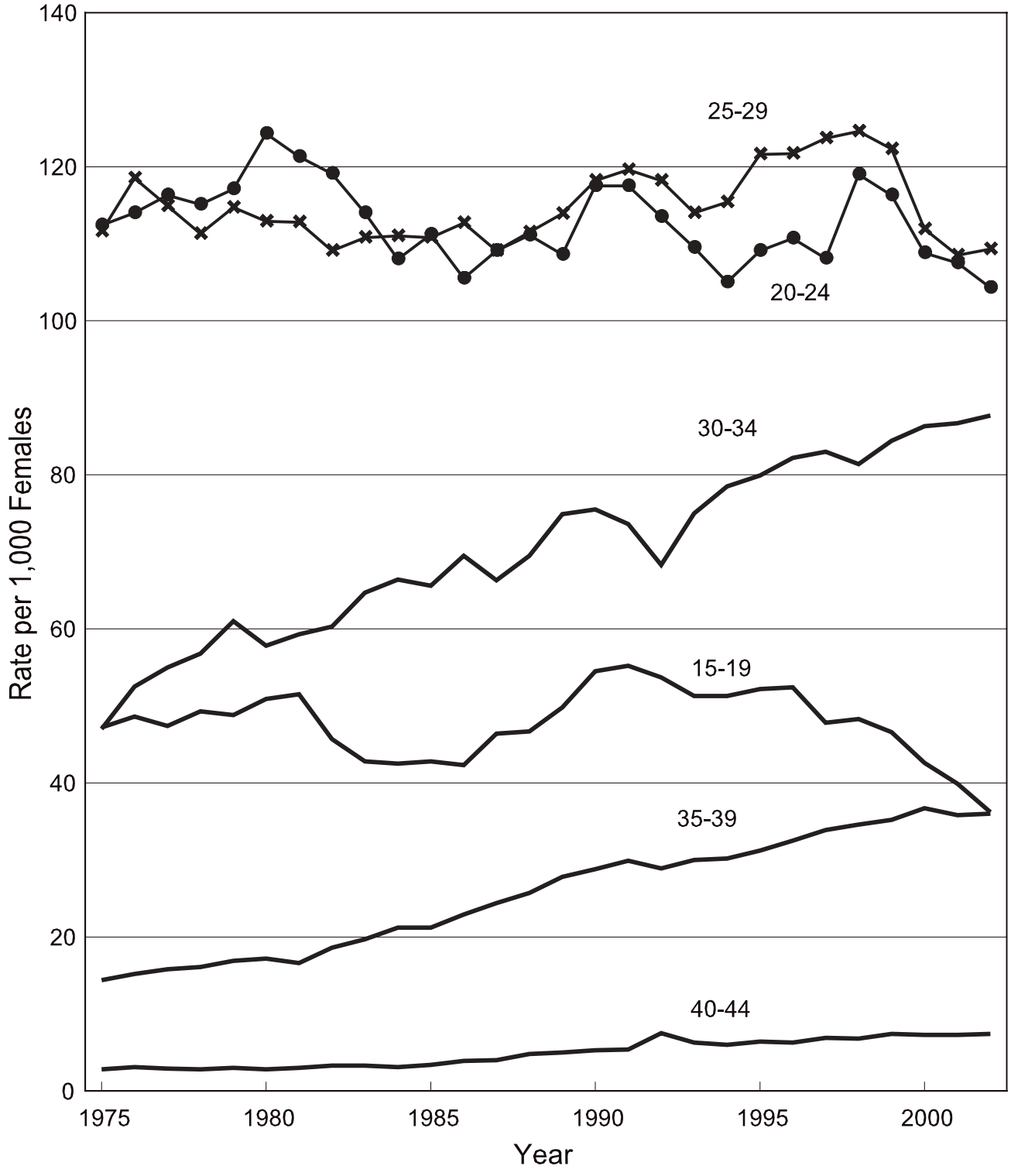
Oregon's **fertility rate** decreased to 60.9 per 1,000 women age 15-44. [See sidebar page 2-3, Table 2-2]. The fertility rate is based on the number of births per 1,000 women age 15-44. The fertility rate is a more precise measurement of changes in behavioral patterns because it consists only of women who are of childbearing age while the crude rate is based on the entire population. Age-specific **birth rates** increased for women age 25 and older and decreased for women age 15-24. The largest percentage decrease was among women age 15-19 (9.3%). [Table 2-2, Figure 2-2]. The two youngest mothers in 2002 were 12 years old; the oldest was 52. The median age of mothers for all births was 27 and the mean age was 27.2. The median age at first birth was 24 and the mean age was 25.1. The **first birth rate** was 24.3 first births per 1,000 women age 15-44, slightly lower than the national rate of 25.8 and a decrease from 2001 (24.6). The proportion of first births among

Figure 2-1.
Live Birth Rates*,
Oregon and the U.S., 1945-2002



* Crude Rates per 1,000 population.

Figure 2-2.
Age-Specific Birth Rates,
Oregon Residents, 1975-2002



total births has been stable for the past decade. In 1990, 39.6 percent of births were first births; in 2002, 39.9 percent were first births.

The mean age for fathers was 30.1 years and the median age was 30. The **birth rate per 1,000 men** age 15-54 was 43.5 in 2002 for Oregon resident births. Information on the father was missing from almost ten percent of birth certificates. Unknown father age was distributed in the same manner as national data. (See Technical Notes- Definitions for details, Appendix B.) The national birth rate for men in 2002, was 48.4 per 1,000 men.

DEMOGRAPHICS

Maternal Race/Ethnicity

Birth rates for racial and ethnic groups are not calculated in this report because precise population data by racial and ethnic groups are available only for census years. Instead this report focuses on the race and ethnicity of women who gave birth as a proportion of total births. Since 1989, the number of births to women of Hispanic ethnicity has more than tripled to 17.9 percent of total births. [Table 2-7, Figure 2-3]. From 1981 to 1988, 'Hispanic' was a race category on the birth certificate. Since 1989, information regarding Hispanic ethnicity is reported separately from race. This change addressed the complexity of race and ethnicity and increased the accuracy when self-reporting. Differences by race and ethnicity of mother persist. Non-Hispanic American Indians and White Hispanics were far more likely to receive inadequate prenatal care than other groups. Japanese women and Filipino women (Hispanic and non-Hispanic) were least likely to receive inadequate care (3.7% and 4.5% respectively). [Table 2-18].

Marital Status of Mother

Historically, unmarried women as a group have had poorer birth outcomes than married women. They generally have a greater proportion of babies with low birthweight and low Apgar scores than do their married counterparts. Their infants are also more likely to require neonatal intensive care, to have congenital anomalies, or to die before age one. Between 1973 and 1993, the ratio of births to unmarried mothers more than tripled in Oregon. Since the mid-1990s, this ratio has stabilized. [Table 1-2, Figure 2-4]. While there hasn't been a matching increase in low birthweight rates and other indicators of poor health, the disparity in birth outcomes between married and unmarried women continues.

In 2002, 30.9 percent of all Oregon births were to unmarried women, a slight increase from the previous year. [Table 1-2]. Oregon has consistently had a lower percentage of births to unmarried women than the nation; Oregon's rate in 2002 was 8.9 percent lower. [Figure 2-4].

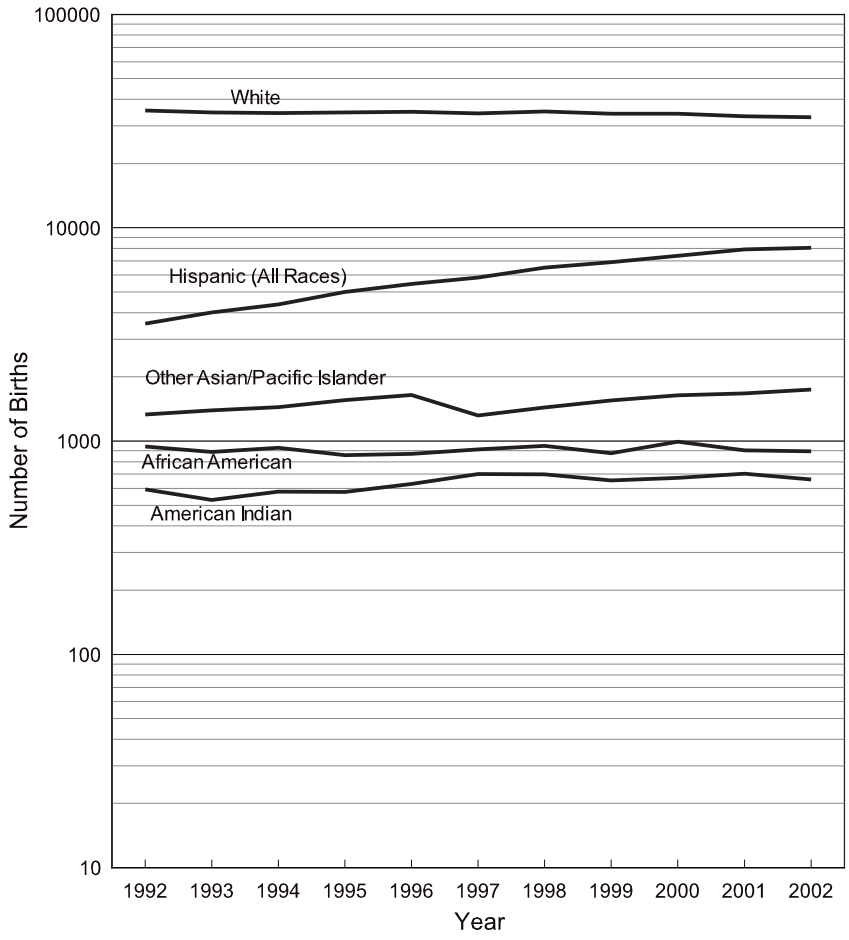
Among women giving birth in 2002, the percentage of women who were unmarried varied widely by ethnic and racial group (see sidebar, next page). Non-Hispanic African Ameri-

Fertility Rates Per 1,000 Females 15-44, Oregon vs. U.S.

Year	Oregon	U.S.
1980	69.3	68.4
1981	68.1	67.3
1982	65.2	67.3
1983	64.1	65.7
1984	62.8	65.5
1985	62.2	66.3
1986	61.8	65.4
1987	60.9	65.8
1988	61.8	67.3
1989	63.3	69.2
1990	65.1	70.9
1991	63.7	69.3
1992	62.5	68.4
1993	61.1	67.0
1994	61.0	65.9
1995	62.3	64.6
1996	63.2	64.1
1997	63.0	63.6
1998	64.2	64.3
1999	64.2	64.4
2000	62.9	65.9
2001	61.6	65.3
2002	60.9	64.8

Unmarried Mothers by Race/Ethnicity, Oregon Residents, 2002	
Race/Ethnicity	Unmarried (%)
Total	30.9
Non-Hispanic	
African American	61.7
American Indian	60.0
White	27.9
Asian	16.1
Hispanic	41.7

Figure 2-3.
Number of Births by Race and Ethnicity of Mother, Oregon Residents, 1992-2002



Note: A logarithmic scale is used for the vertical axis. Specified races are Non-Hispanic. Other Asian/Pacific Islander includes: Chinese, Japanese, Hawaiian, Filipino, and Other Asian/Pacific Islander.

can women had the highest rate of non-marital births (61.7%), followed by Non-Hispanic American Indian women (60.0%), and Hispanic women (41.7%). Non-Hispanic Asian women were least likely to be unmarried (16.1%). [Table 2-12].

Young mothers were also likely to be unmarried since persons younger than age 17 cannot get married in Oregon. More than three-fourths of the teens age 15-19 who gave birth in 2002 were unmarried (77.3%), compared to 46.1 percent for women age 20-24 and 21.6 percent for women age 25-29. Mothers age 30-34 (13.6%) and 35-39 (14.4%) were least likely to be unmarried, while 15.0 percent of mothers age 40-44 were unmarried. [Table 2-3]. Twelve of Oregon's 36 counties had proportions of non-marital births that were statistically significantly higher than the state average. [Table 2-9]. Among

counties with statistically significant differences, Jefferson had the highest percentage (47.9%) followed by Lincoln (45.2%), Coos (40.4%), and Umatilla (40.4%). [See Appendix B: Technical Notes for information on statistical significance.] Five Oregon counties had percentages of non-marital births that were statistically significantly lower than the state average. Benton and Grant Counties had the lowest percentage of non-marital births (15.3%). A county's non-marital birth proportion should be viewed in part as a function of its own specific population mix, especially age and race. Variations in population composition among counties will likely result in significant differences in non-marital births.

No First Trimester Care by Mothers' Education, Oregon Residents, 2002

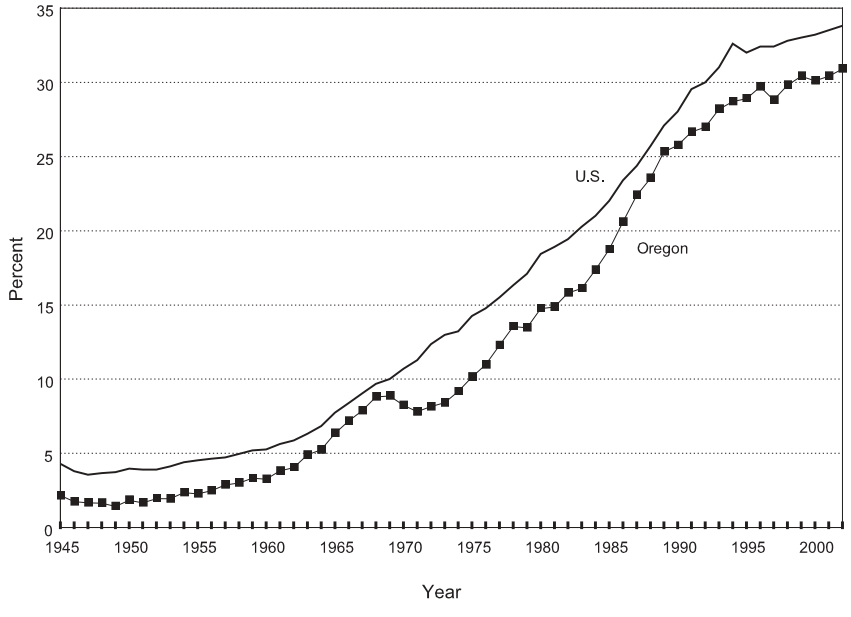
Years of Education	No First Trimester Care (%)
< 12	33.3
12	21.5
> 12	9.8

Educational Attainment

Mother's level of education was closely related to prenatal care patterns. Women with less than a high school education were least likely to obtain first trimester prenatal care, while those who had college degrees or higher were most likely to have obtained first trimester care. [See sidebar and Table 2-19].

More than three-fourths of women who gave birth in 2002 had 12 or more years of schooling (79.7%) and 24.6 percent had 16 or more years of formal schooling. Non-Hispanic Asian (91.7%) and Non-Hispanic White (88.4%) mothers were most likely to have completed 12 or more years of education.

Figure 2-4.
Percent of Births to Unmarried Women,
Oregon and the U.S., 1945-2002



Hispanic mothers of Mexican origin were least likely to have completed at least 12 years of formal schooling (38.5%). [Table 2-12].

Women who smoked had a low birthweight rate of 80.6 per 1,000.

MATERNAL LIFESTYLE AND HEALTH CHARACTERISTICS

Tobacco

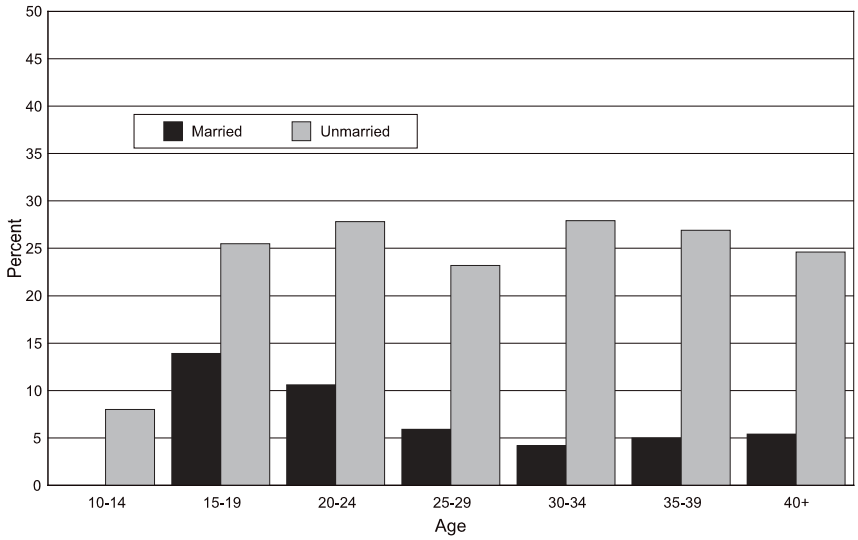
Oregon Benchmark for the Year 2010

Percentage of infants whose mothers did not use tobacco during pregnancy (self-reported).

Year 2010 Target:	*98 percent*
2002:	*87 percent*

Women who smoke when pregnant have a far higher incidence of low birthweight babies than nonsmokers. Low birthweight infants are more likely to experience serious health problems, including increased rates of infant mortality. In 2001, the Oregon infant mortality rate during the first 27 days of life (neonatal) was 43.2 per 1,000 live births for low birthweight (less than 2,500 grams) infants compared to 1.2 per 1,000 for infants with birthweights of 2,500 grams or more. In 2002, women who smoked had a low birthweight rate of 80.6 per 1,000 live births, compared to 54.1 per 1,000 among women who did not smoke. Less than one out of seven mothers (12.6%) reported using tobacco during pregnancy, a proportion that has declined 22.2 percent since 1997 and 1.6 percent

Figure 2-5.
Percentage of Mothers Who Smoked During Pregnancy
by Age and Marital Status, Oregon Residents, 2002



since 2001. Unmarried women were over three times more likely to smoke than married women (26.2% vs. 6.5%). For unmarried women, the smoking rate was highest among women age 30-34 (27.9%), 20-24 (27.8%) and 35-39 (26.9%) while for married women the lowest smoking prevalence rates were for women age 30-34 (4.2%) and age 35-39 (5.0%). [Figure 2-5].

Smoking prevalence as reported on birth certificates also varied among racial and ethnic groups. In 2002, Non-Hispanic American Indian women (22.4%) and Non-Hispanic African American women (19.6%) had the highest reported proportions for smoking during pregnancy, while Non-Hispanic Asian women (3.0%) and Hispanic women (3.3%) reported the lowest. [Table 2-24].

Alcohol and Illicit Drugs

Oregon Benchmark for the Year 2010

Percentage of infants whose mothers did not use alcohol during pregnancy (self-reported).

Year 2010 Target:	*98 percent*
2002:	*99 percent*

Used during pregnancy, alcohol can cause deformity, mental retardation, and other severe developmental problems. Based on birth certificate data, 1.3 percent of Oregon mothers (586 women) drank alcohol during pregnancy in 2002. This represents a 75 percent decline from 1990, when 5.2 percent of mothers reported alcohol use. Non-Hispanic African American women (2.9%), Non-Hispanic American Indian women (2.5%), and Hispanic women not from Mexico, Central or South America (2.4%) were most likely to have reported using alcohol during pregnancy. Hispanic women from Central or South America (0.3%), Hispanic women from Mexico (0.6%), and Non-Hispanic Asian women (0.5%) reported the lowest alcohol use during pregnancy. [Table 2-24]. Oregon also records information on the use of illicit drugs during pregnancy including heroin, cocaine, marijuana and methamphetamine. In 2002, illicit drugs were mentioned in 1 percent of resident births (1.0%). [Table 2-15].

Weight Gain

Maternal weight gain has been shown to have a positive correlation with the birthweight of the infant. The median weight gain during pregnancy was 30 pounds in 2002. The amount of weight gained by mothers varied by period of gestation, race and ethnicity. For all births, Hispanic women (49.8%) and Non-Hispanic African American women (43.4%) were least likely to gain more than 25 pounds during pregnancy. [Table 2-33]. Non-Hispanic African American women had the highest percent of low birthweight infants (9.8%).

Hispanic women, despite the lower weight gain, had the lowest percentage of low birthweight infants (5.3%). [Table 2-34]. Non-Hispanic Whites were most likely to gain more than 25 pounds during pregnancy and had the second lowest percentage of low birthweight infants. Although the standard recommendation is 25 to 35 pounds for women of normal weight, prepregnancy weight isn't collected on the birth certificate so percentages of mothers who had appropriate weight gains cannot be calculated.

Medical Risk Factors

Maternal medical risk factors influence pregnancy complications and infant health and vary greatly with the age, race and ethnicity of the mother. In 2002, the most frequently reported medical risk factors were anemia (5.7%) and pregnancy-associated hypertension (4.7%). [Tables 2-25 and 2-26].

MEDICAL SERVICES UTILIZATION

Prenatal Care

Oregon Benchmark for the Year 2002

Percentage of infants whose mothers received prenatal care beginning in the first trimester.

Year 2010 Target:	*90 percent*
2002:	*82 percent*

Public health services and private care providers seek to minimize the risk of death and disability, and to reduce costs associated with low birthweight infants by providing comprehensive prenatal care. Two ways to measure prenatal care are: 1) "inadequate prenatal care," defined as no care until the third trimester or fewer than five total prenatal visits; or 2) "first trimester care," defined as care beginning during the first three months of pregnancy, regardless of the number of total prenatal visits. First trimester care has been adopted as an Oregon Benchmark with a goal to ensure that at least 90 percent of women begin prenatal care within the first three months of their pregnancy. Overall, 81.6 percent of women who gave birth during 2002 received early prenatal care, slightly lower than the national number of 83.7. [Table 2-17; Table 1-5]. This is slightly higher than the 2001 rate and maintains the positive trend in Oregon. [Table 1-6].

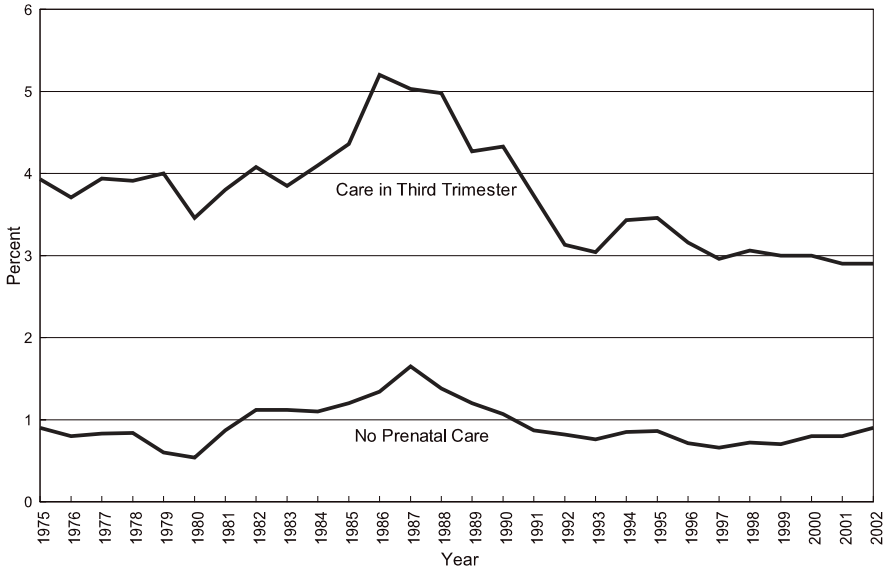
In 2002, five percent of women giving birth received inadequate prenatal care and eighteen percent received no first trimester care. Women who received inadequate prenatal care

were twice as likely to give birth to a low birthweight child as those who received adequate prenatal care, 11.7 percent compared to 5.4 percent. The proportion that received no prenatal care or third trimester care only remained about the same as previous years (0.9% and 2.9% respectively). [Figure 2-6]. Age, marital status, education and race/ethnicity continue to show important differences in accessing prenatal care. [Tables 2-14, 2-17, 2-18, 2-19].

Five of Oregon's 36 counties had first trimester care rates significantly lower than the statewide rate: Jefferson, Lane, Malheur, Marion, and Umatilla. Four counties had rates significantly higher than the statewide rate: Clackamas, Deschutes, Douglas and Washington. [Table 2-20].

The **Adequacy of Prenatal Care Utilization Index** is an alternative measure that is also based on the month prenatal began and the number of prenatal visits, adjusting for gestational age. Care is determined to be intensive (exceeding recommended care by a ratio of expected visits to actual by at least 110 percent), adequate, intermediate or inadequate. [See table, next page.] As with other measures of prenatal care, women under the age of 20 were least likely to receive adequate care, while women age 40 and over were most likely to receive intensive prenatal care. Women with medical risk factors such as diabetes and hypertension, were also more likely to receive intensive prenatal care. For 2002, Oregon's proportion of 11.0 percent of births with inadequate care was very similar to the national proportion of 11.3 percent.

Figure 2-6.
Percentage of Mothers With No Care and Late Care,
Oregon Residents, 1975-2002



Adequacy of Prenatal Care Utilization Index Oregon 1997-2002				
	Intensive	Adequate	Intermediate	Inadequate
1997	24.6	47.0	17.3	11.2
1998	25.2	45.8	17.0	12.0
1999	25.3	45.8	17.3	11.6
2000	24.9	44.5	18.3	11.4
2001	27.9	46.1	14.1	11.1
2002	26.5	46.7	14.9	11.0

Birth Attendant and Place of Delivery

Hospital Births A major shift over the past few years has been the increasing prevalence of births attended by Certified Nurse Midwives (CNM). In 2002, 15.0 percent of hospital deliveries were CNM-attended, a slight increase from 2001 (14.9%) and almost three times the proportion in 1988 (5.3%). This is almost twice the national proportion of births attended by CNM (2002= 7.5%). Most in-hospital births (80.6%) were delivered by MDs. [Table 2-28].

Out-of-Hospital Births In 2002, 2.1 percent of Oregon births occurred out-of-hospital. Oregon generally has a higher proportion of out-of-hospital births than the U.S. as a whole. In 2002, Oregon's proportion of out-of-hospital births was double that of the U.S. (2.1% vs. 0.9%). As in past years, the majority of out-of-hospital births occurred in the mother's home (73.3%). Freestanding birthing centers accounted for 179 births, almost one-fifth of the births occurring out-of-hospital. Outcomes have generally been positive for out-of-hospital births. In 2002, only 22 infants born out-of-hospital in Oregon had low birthweights (2.3%). Fifteen infants (1.6%) were reported to have a congenital anomaly, which is slightly higher than the percentage for in-hospital births (1.3%).

The type of attendant varied by birth setting. Licensed Direct Entry Midwives (LDEM) were predominant in out-of-hospital births, delivering one-fourth (27.7%) of those births in 2002. LDEMs are lay midwives who have volunteered for state licensure to provide natality care for Oregon women. In addition, Certified Nurse Midwives delivered one in ten out-of-hospital births (9.5%). Naturopathic physicians delivered one in eight out-of-hospital births (12.8%). Non-medical attendants, including non-licensed lay midwives, delivered 458 babies, 48.4 percent of the out-of-hospital births. [Table 2-28].

Out-of-Hospital Births Oregon Occurrence		
Year	Deliveries	Rate
1982	2,069	49.2
1983	2,060	50.2
1984	1,786	43.7
1985	1,772	43.5
1986	1,520	37.9
1987	1,361	34.0
1988	1,217	29.4
1989	1,117	26.2
1990	1,077	24.2
1991	979	22.2
1992	996	22.8
1993	936	21.6
1994	979	22.5
1995	967	21.7
1996	979	21.4
1997	970	21.5
1998	914	19.8
1999	948	20.6
2000	1,047	22.4
2001	1,007	21.7
2002	947	20.6

Rates per 1,000 births.

Method of Delivery

In 2002, the rate of cesarean delivery was 23.7 per 100 births, well below the national rate of 26.1 per 100 births. The rate for vaginal delivery after a previous cesarean was only 1.7 while repeat cesarean was 9.1 per 100 births. The majority of births (74.5 per 100) continue to be vaginal deliveries (without prior cesarean). [Table 2-27]. However, the number of vaginal deliveries (without prior Cesarean) has declined 2.6 percent from 2001 and a 4.2 percent decline from 1992. Cesarean rates increased 10.7 percent from 2001 (21.4 per 100 births) and 28.8 percent from 1992 (18.4 per 100 births).

INFANT HEALTH CHARACTERISTICS

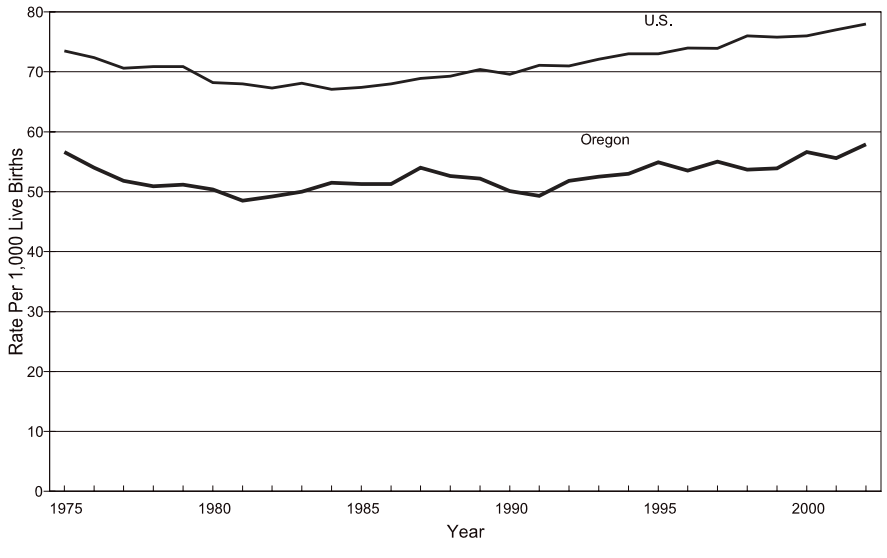
Period of Gestation

Preterm births, (born prior to completion of 37 weeks), comprised 8.2 percent of total births in 2002, much lower than the U.S. rate in 2002 (12.1%). (Table 2-23) Similar to national trends, proportions of preterm births are higher for Non-Hispanic African Americans (10.5%) and Non-Hispanic American Indians (12.0%). [Table 2-24].

Certified Nurse Midwife Deliveries, Oregon Occurrence

Year	Deliveries		
	Total	In-Hospital	Out-of-Hospital
1984	1,912	1,567	374
1985	2,022	1,661	390
1986	1,984	1,607	400
1987	1,843	1,483	385
1988	2,345	2,133	259
1989	2,886	2,706	244
1990	3,660	3,539	226
1991	4,262	4,096	166
1992	4,498	4,319	179
1993	4,784	4,618	173
1994	4,931	4,772	159
1995	5,601	5,441	160
1996	6,019	5,871	148
1997	5,853	5,734	119
1998	6,152	6,004	148
1999	6,357	6,193	164
2000	6,740	6,591	149
2001	6,848	6,721	127
2002	6,837	6,747	90

Figure 2-7.
Low Birthweight Rates,
Oregon and the U.S., 1975-2002



Low Birthweight

There were 2,617 low birthweight babies born to Oregon mothers in 2002.

National Healthy People 2010 Objective

Reduce low birthweight to an incidence of no more than 5.0 percent of live births.
Percentage of Oregon low birthweight births, 2002: 5.8

Of the thousands of infants born each year, not all thrive and become healthy adults. Low birthweight is the major predictor of infant death, which in turn is a fundamental measure of the health of a population. Infants with low birthweight are more likely to need extensive medical treatment and to have lifelong disabling conditions. (For more information, see the Fetal and Infant Mortality section published in Volume 2 of the Oregon Vital Statistics Annual Report). The low birthweight rate is the proportion of infants who weigh less than 2,500 grams (5.5 pounds) at birth. In 2002, there were 2,617 low birthweight babies born to Oregon mothers. [Table 2-22]. One of the National Healthy People 2010 Objectives is to reduce the percentage of low birthweight infants nationwide to 5.0 percent. In 2002, the percentage of low birthweight births in Oregon remained slightly above this objective at 5.8 percent, or 57.9 per 1,000 live births. This rate is an increase from the 2001 figure of 55.6. While annual changes have been slight over the last twenty years, there has been an upward trend in low birthweight infants and this year's rate is Oregon's highest in twenty-five years. [Table 1-6; Figure 2-7]. Nevertheless, Oregon's low birthweight rates are typically 25 percent lower than the national rate and in 2002, Oregon's rate was 25.9 percent lower than the national rate (57.9 vs. 78.1 per 1,000 births).

Major factors contributing to the risk of having a low birthweight baby are multiple births, tobacco use and chronic hypertension. Other factors include: non-white race of mother, mother's age (younger than 18 or older than 34), lack of prenatal care, low income, single marital status, a previous fetal or infant death, low education, and short spacing between births. As an example of risk factors, women age 40-44 have a higher than average rate of first trimester care (82.6%) compared to the state (81.6%). [Table 2-17]. Nevertheless, women age 40-44 continue to have a higher percentage of low birthweight babies, 7.5 percent compared to 5.8 percent for all births. [Table 2-23]. In 2002, most women (62.2%) had at least one risk factor for their pregnancy. Statewide 11.1 percent of the women had three or more risk factors.

Apgar Scores

The Apgar score is composed of measurements of five characteristics of the infant: heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each characteristic is rated 0-2 and the score totaled. Scores below 7, five minutes after birth, indicate poor to intermediate health at birth. In Oregon during 2002, 1.6 percent of infants had Apgar scores below 7, slightly higher than the 2002 national figure of 1.4 percent. [Table 2-23, Table 2-24].

Abnormal Conditions and Congenital Anomalies

The most frequently reported conditions on birth certificates were birth injury, assisted ventilation of less than 30 minutes and assisted ventilation of more than 30 minutes. [Table 2-35, Table 2-36]. Congenital anomalies reported on birth certificates are shown in Table 2-37. Although Oregon occurrences are somewhat higher than national rates for some anomalies, congenital anomalies are believed to be under reported nationally due to factors such as recognizability and severity. Even at the national level, data users are advised to use caution in comparing annual occurrences for relatively small numbers.

Multiple Births

Although slightly less than three percent of births in Oregon during 2002 were multiple births, the proportion varied widely by age, race and ethnicity. During 2002 mothers age 45 and older were most likely to have multiple births. Except for mothers age 14 and younger, the percentage of multiple births for each age group ranged from 1.5 percent for mothers age 15 to 19 to 23.0 percent of births to mothers age 45 and older, increasing with each five year age group [Table 2-23]. Non-Hispanic Whites and Non-Hispanic American Indians were most likely to have multiple births (3.3% and 3.2% respectively). [Table 2-24].

SOURCE OF PAYMENT

Primary source of payment for delivery is noted on Oregon birth certificates under four categories: 1) private insurance, 2) self-pay (no insurance), 3) public insurance (Medicaid/ Oregon Health Plan), and 4) other public insurance. The specific type of private insurance coverage is not defined. Multiple payment sources can be indicated. Private insurance companies paid for the majority of deliveries in Oregon (58.5%), down slightly from 61.2 percent in 2001 (see sidebar). Medicaid programs (e.g. the Oregon Health Plan) paid for slightly more than one-third of Oregon resident births (37.7%). Delivery costs were more likely to be paid for by public insurance if the woman was under age 18. [Table 2-14].

Primary Source of Payment for Delivery, Oregon Residents

Year	Private Insurance	Self Pay	Medicaid/-OHP
	%	%	%
1989	60.7	9.5	27.5
1990	60.4	8.7	28.7
1991	58.2	6.5	33.2
1992	57.2	5.8	35.2
1993	56.2	5.9	36.2
1994	57.5	5.6	34.9
1995	57.9	4.9	35.5
1996	58.3	5.7	35.0
1997	60.8	6.3	31.9
1998	62.2	6.3	30.7
1999	61.1	5.9	32.4
2000	61.6	5.4	32.8
2001	61.2	4.3	34.3
2002	58.7	3.5	37.8

NOTE: Denominator excludes births with unknown payor source, multiple payor source, and other payor source.

TABLE 2-1. Resident Births by Age Group of Mother, Oregon 1955, 1960, 1965, 1970, 1975-2002

Year	Total	Age Group of Mother																
		Under 15		15-19		20-24		25-29		30-34		35-39		40-44		45+		NS*
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1955	38,678	19	0.0	4,939	12.8	12,968	33.5	10,339	26.7	6,346	16.4	3,194	8.3	835	2.2	36	0.1	2
1960	38,347	31	0.1	5,896	15.4	14,122	36.8	9,338	24.4	5,303	13.8	2,808	7.3	799	2.1	48	0.1	2
1965	32,955	29	0.1	5,758	17.5	13,154	39.9	7,640	23.2	3,786	11.5	1,976	6.0	582	1.8	29	0.1	1
1970	35,353	41	0.1	6,027	17.0	14,587	41.3	9,778	27.7	3,373	9.5	1,195	3.4	324	0.9	27	0.1	1
1975	33,352	57	0.2	5,206	15.6	12,716	38.1	10,718	32.1	3,576	10.7	888	2.7	167	0.5	9	0.0	5
1976	34,840	67	0.2	5,367	15.4	12,895	37.0	11,386	32.7	3,992	11.5	935	2.7	180	0.5	11	0.0	7
1977	37,467	69	0.2	5,303	14.2	13,830	36.9	12,285	32.8	4,723	12.6	1,069	2.9	174	0.5	9	0.0	5
1978	38,964	72	0.2	5,588	14.3	13,906	35.7	12,710	32.6	5,319	13.7	1,181	3.0	178	0.5	7	0.0	3
1979	41,564	70	0.2	5,544	13.3	14,451	34.8	13,864	33.4	6,109	14.7	1,316	3.2	193	0.5	12	0.0	5
1980	43,091	71	0.2	5,658	13.1	14,912	34.6	14,297	33.2	6,499	15.1	1,456	3.4	185	0.4	11	0.0	2
1981	42,974	61	0.1	5,483	12.8	14,338	33.4	14,292	33.3	7,102	16.5	1,479	3.4	207	0.5	12	0.0	-
1982	41,012	52	0.1	4,783	11.7	13,422	32.7	13,534	33.0	7,202	17.6	1,765	4.3	241	0.6	13	0.0	-
1983	39,949	52	0.1	4,375	11.0	12,595	32.8	13,106	32.8	7,626	19.1	1,938	4.9	244	0.6	11	0.0	2
1984	39,536	56	0.1	4,245	10.7	12,035	30.4	12,783	32.3	7,961	20.1	2,193	5.5	248	0.6	13	0.0	2
1985	39,419	42	0.1	4,136	10.5	11,815	30.0	12,782	32.4	8,017	20.3	2,333	5.9	281	0.7	10	0.0	3
1986	38,850	64	0.2	4,159	10.7	11,334	29.2	12,308	31.7	8,067	20.8	2,574	6.6	327	0.8	13	0.0	4
1987	38,674	59	0.2	4,363	11.3	10,791	27.9	12,209	31.6	8,038	20.8	2,829	7.3	370	1.0	13	0.0	2
1988	39,850	57	0.1	4,496	11.3	10,874	27.3	12,477	31.3	8,436	21.2	3,055	7.7	469	1.2	11	0.0	2
1989	41,223	68	0.2	4,850	11.8	11,305	27.4	12,559	30.5	8,549	20.7	3,349	8.1	517	1.3	16	0.0	10
1990	42,830	76	0.2	5,080	11.9	11,523	26.9	12,974	30.3	8,961	20.9	3,607	8.4	585	1.4	13	0.0	11
1991	42,458	88	0.2	5,137	12.1	11,447	27.0	12,291	28.9	8,965	21.1	3,856	9.1	655	1.5	11	0.0	8
1992	41,941	86	0.2	5,108	12.2	11,367	27.1	11,953	28.5	8,898	21.2	3,763	8.9	725	1.7	29	0.1	12
1993	41,566	83	0.2	5,091	12.2	11,197	26.9	11,461	27.6	8,966	21.6	3,930	9.5	797	1.9	36	0.1	0
1994	41,832	117	0.3	5,238	12.5	10,999	26.3	11,592	27.7	9,150	21.9	3,904	9.3	776	1.9	45	0.1	11
1995	42,715	104	0.2	5,437	12.7	11,054	25.9	11,950	28.0	9,216	21.6	4,059	9.5	848	2.0	43	0.1	4
1996	43,645	91	0.2	5,676	13.0	11,268	25.8	12,286	28.1	9,202	21.1	4,232	9.7	847	1.9	39	0.1	4
1997	43,765	104	0.2	5,344	12.2	11,367	26.0	12,594	28.8	9,018	20.6	4,356	10.0	940	2.1	35	0.1	7
1998	45,228	95	0.2	5,565	12.3	11,855	26.2	12,850	28.4	9,303	20.6	4,560	10.1	942	2.1	46	0.1	12
1999	45,193	86	0.2	5,491	12.2	11,896	26.3	12,603	27.9	9,459	20.9	4,575	10.1	1,015	2.2	65	0.1	3
2000	45,786	66	0.1	5,090	11.1	12,265	26.8	12,680	27.7	9,943	21.7	4,669	10.2	1,007	2.2	61	0.1	5
2001	45,318	66	0.1	4,819	10.6	12,244	27.0	12,408	27.4	10,093	22.3	4,605	10.2	1,008	2.2	67	0.1	8
2002	45,190	51	0.1	4,410	9.8	11,997	26.6	12,634	28.0	10,320	22.8	4,674	10.3	1,036	2.3	61	0.1	7

* NS Indicates age not stated; the percentage is insignificant.

TABLE 2-2. Age Specific Birth Rates, Fertility Rates and Total Fertility Rates, Oregon, 1940, 1950, 1960, 1970, 1975-2002

Year	Age-Specific Birth Rates*						Fertility 15-44	Total Fertility Rate
	15-19	20-24	25-29	30-34	35-39	40-44		
1940	46.2	132.8	114.1	68.0	31.7	9.0	69.4	2,009.0
1950	92.9	223.0	169.5	100.9	46.7	12.6	108.8	3,228.3
1960	88.2	283.8	189.3	96.3	46.3	13.7	112.5	3,587.8
1970	58.9	167.5	139.4	58.3	21.7	5.4	81.5	2,255.6
1975	47.2	112.4	111.6	47.0	14.4	2.8	64.5	1,677.0
1976	48.6	114.0	118.5	52.5	15.2	3.1	67.4	1,759.3
1977	47.4	116.3	114.9	55.0	15.8	2.9	67.7	1,760.8
1978	49.3	115.1	111.3	56.8	16.1	2.8	67.3	1,757.5
1979	48.8	117.1	114.7	61.0	16.9	3.0	69.0	1,808.0
1980	50.9	124.3	112.9	57.8	17.2	2.8	69.3	1,829.5
1981	51.5	121.3	112.8	59.3	16.6	3.0	68.1	1,822.5
1982	45.7	119.1	109.1	60.3	18.6	3.3	65.2	1,780.6
1983	42.8	114.0	110.8	64.7	19.7	3.3	64.1	1,776.6
1984	42.5	108.0	111.0	66.4	21.2	3.1	62.8	1,761.6
1985	42.8	111.2	110.8	65.6	21.2	3.4	62.2	1,775.2
1986	42.3	105.5	112.7	69.5	22.9	3.9	61.8	1,784.0
1987	46.4	109.1	109.1	66.3	24.4	4.0	60.9	1,796.5
1988	46.7	111.1	111.5	69.5	25.7	4.8	61.8	1,846.5
1989	49.8	108.6	113.9	74.9	27.8	5.0	63.3	1,900.0
1990	54.5	117.5	118.2	75.5	28.8	5.3	65.1	1,999.0
1991	55.2	117.5	119.6	73.6	29.9	5.4	63.7	2,003.0
1992	53.7	113.5	118.2	68.3	28.9	7.5	62.5	1,950.5
1993	51.3	109.5	114.0	75.0	30.0	6.3	61.1	1,930.5
1994	51.3	105.0	115.4	78.5	30.2	6.0	61.0	1,932.0
1995	52.2	109.1	121.6	79.9	31.2	6.4	62.3	2,001.0
1996	52.4	110.7	121.7	82.2	32.5	6.3	63.2	2,029.0
1997	47.8	108.1	123.8	83.0	33.9	6.9	63.0	2,017.2
1998	48.3	119.0	124.6	81.4	34.6	6.8	64.2	2,074.3
1999	46.6	116.3	122.3	84.4	35.2	7.4	64.2	2,061.0
2000	42.6	108.8	111.9	86.3	36.7	7.3	62.9	1,968.0
2001	39.9	107.5	108.5	86.7	35.8	7.3	61.6	1,928.5
2002	36.2	104.3	109.3	87.7	36.0	7.4	60.9	1,904.5

*All rates are per 1,000 female population within the specific age group.
Births to mothers under 15 or over 44 are not included.
See Technical Notes section for definition of Total Fertility Rate.

TABLE 2-3. Percent of Oregon Resident Births to Unmarried Mothers, by Age of Mother, 1970-2002

Year	Age Group of Mother					
	15-19	20-24	25-29	30-34	35-39	40-44
1970	25.7	6.3	2.6	2.7	3.7	4.6
1971	24.4	6.0	2.6	2.2	3.1	4.3
1972	24.8	8.0	2.5	2.3	3.8	4.0
1973	26.0	6.4	2.8	2.6	3.4	5.5
1974	27.9	7.7	3.1	3.1	2.7	6.9
1975	30.3	8.8	4.0	3.8	5.7	6.0
1976	33.8	9.6	4.4	3.5	5.5	7.2
1977	37.8	11.8	5.2	4.1	5.6	4.6
1978	40.3	13.7	5.8	4.5	6.3	3.4
1979	39.5	14.0	6.4	5.5	6.5	6.2
1980	43.4	15.3	7.5	5.6	8.0	4.3
1981	43.4	16.1	7.8	5.7	6.0	8.7
1982	47.3	17.9	8.5	6.6	6.7	9.5
1983	50.0	18.7	9.1	6.8	7.8	7.4
1984	52.7	20.9	10.1	6.8	8.0	13.7
1985	56.6	23.0	11.1	8.0	8.5	10.3
1986	59.5	25.8	13.0	8.3	9.2	9.2
1987	61.3	28.7	14.1	9.7	10.3	10.8
1988	63.0	30.3	15.5	10.3	11.2	11.9
1989	65.6	32.6	16.4	11.6	11.3	13.7
1990	67.2	33.0	16.6	12.2	11.2	11.6
1991	68.7	34.6	17.3	12.2	10.9	15.0
1992	70.1	34.8	17.2	12.2	11.7	13.0
1993	72.6	36.7	18.3	13.0	11.4	14.4
1994	74.0	37.5	18.2	13.0	12.3	14.0
1995	73.9	38.6	17.5	13.4	12.8	12.4
1996	74.1	39.1	18.6	13.3	14.1	14.8
1997	73.7	38.4	18.3	12.9	14.1	14.1
1998	75.6	39.5	19.5	12.9	13.1	15.9
1999	76.2	40.7	20.3	13.3	14.0	15.5
2000	76.2	42.6	20.2	13.0	13.0	13.5
2001	76.3	43.6	20.9	13.0	13.1	16.5
2002	77.3	46.1	21.6	13.6	14.4	15.0

TABLE 2-4. Age of Mother by Live Birth Order, Oregon Resident Births, 2002

Live Birth Order	Total Births	Age of Mother								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	45,190	51	4,410	11,997	12,634	10,320	4,674	1,036	61	7
First	18,018	48	3,502	5,610	4,415	3,129	1,106	191	15	2
Second	14,798	2	777	4,225	4,436	3,574	1,459	305	17	3
Third	7,372	1	119	1,633	2,442	1,991	996	181	8	1
Fourth	3,027	–	10	415	954	977	528	135	8	–
Fifth	1,075	–	–	79	259	389	277	69	1	1
Sixth	449	–	–	24	81	147	145	51	1	–
Seventh	201	–	–	4	32	55	70	37	3	–
Eighth	113	–	–	–	7	27	48	29	2	–
Ninth+	113	–	–	–	3	23	43	38	6	–
Unknown	24	–	2	7	5	8	2	–	–	–

– Quantity is zero.

Table 2-5. Total Pregnancies[1] by Type of Outcome and Age Groups, Oregon Residents, 2002

Type of Outcome	Total	Age Group								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	58,584	98	6,672	16,523	15,589	12,348	5,802	1,453	87	12
Live Births	45,190	51	4,410	11,997	12,634	10,320	4,674	1,036	61	7
Percent	77.1	52.0	66.1	72.6	81.0	83.6	80.6	71.3	70.1	58.3
Fetal Deaths	222	1	20	64	41	57	30	8	1	–
Percent	0.4	1.0	0.3	0.4	0.3	0.5	0.5	0.6	1.1	–
Induced Abortions	13,172	46	2,242	4,462	2,914	1,971	1,098	409	25	5
Percent	22.5	46.9	33.6	27.0	18.7	16.0	18.9	28.1	28.7	41.7

[1] Induced abortion data are available by Oregon occurrence only. Estimate assumes that the number of Oregon residents who travel outside the state to obtain an abortion equals the number of out-of-state residents who obtain an abortion in Oregon.

– Data not available.

Percents may not add to 100 due to rounding.

WARNING: Rates based on less than 5 events are unreliable.

TABLE 2-6. Pregnancies[1] by Age and County of Residence, Oregon Residents, 2002

County of Residence	All Ages	Age							
		10-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	56,982	6,514	16,002	15,262	12,067	5,637	1,407	81	12
Baker	191	32	53	49	37	18	2	–	–
Benton	907	68	207	261	226	121	23	–	1
Clackamas	5,142	503	1,324	1,338	1,186	612	162	17	–
Clatsop	521	77	140	145	101	46	12	–	–
Columbia	610	75	169	168	123	53	20	2	–
Coos	727	119	249	172	112	61	12	2	–
Crook	238	45	75	60	39	10	9	–	–
Curry	171	17	64	44	28	13	5	–	–
Deschutes	1,773	177	503	463	403	174	53	–	–
Douglas	1,209	188	414	303	184	94	26	–	–
Gilliam	19	2	*	*	*	1	1	1	–
Grant	77	6	26	19	16	8	2	–	–
Harney	87	13	22	27	14	10	1	–	–
Hood River	376	44	93	102	84	46	7	–	–
Jackson	2,573	320	799	677	486	233	56	–	2
Jefferson	353	61	126	87	52	23	4	–	–
Josephine	874	113	280	236	161	61	23	–	–
Klamath	894	131	296	225	160	60	21	1	–
Lake	76	11	20	18	20	4	2	–	1
Lane	4,606	540	1,428	1,256	881	393	104	3	1
Lincoln	543	84	192	123	96	37	10	1	–
Linn	1,596	203	548	449	264	95	35	2	–
Malheur	501	79	158	138	83	34	9	–	–
Marion	5,298	782	1,604	1,408	959	445	94	5	1
Morrow	173	19	51	51	30	18	4	–	–
Multnomah	13,541	1,416	3,605	3,488	3,073	1,550	388	19	2
Polk	889	102	260	248	175	88	13	3	–
Sherman	17	2	*	*	*	–	–	–	–
Tillamook	291	44	92	68	54	27	5	1	–
Umatilla	1,243	205	411	323	196	86	21	–	1
Union	336	42	111	102	54	20	6	1	–
Wallowa	66	5	15	26	11	8	1	–	–
Wasco	336	37	111	93	57	33	4	1	–
Washington	9,313	744	2,125	2,708	2,428	1,049	237	20	2
Wheeler	11	2	*	*	*	*	*	–	–
Yamhill	1,402	206	420	372	263	104	34	2	1
Not Stated	2	–	–	1	1	–	–	–	–

– Quantity is zero.
1 Pregnancies include live births and induced abortions reported for Oregon residents.
* Detailed reporting of small numbers may breach confidentiality.

TABLE 2-7. Resident Births by Race of Mother, Oregon, 1974-2002

Year	Total	White	African American	American Indian	Chinese	Japanese	Other & Unknown	Hispanic
1974	32,506	31,508	569	341	66	80	243	*
1975	33,352	31,910	614	389	81	80	278	*
1976	34,840	33,369	586	356	88	81	340	*
1977	37,467	35,843	693	354	85	94	398	*
1978	38,964	37,197	751	374	86	94	462	*
1979	41,564	39,623	766	426	115	90	544	*
1980	43,091	40,787	792	475	140	96	801	*
1981	42,974	39,308	743	480	121	112	1,064	1,146
1982	41,012	37,355	773	468	156	131	941	1,188
1983	39,949	36,654	775	486	141	104	743	1,046
1984	39,536	36,146	725	497	148	104	770	1,146
1985	39,419	35,877	784	519	141	129	745	1,224
1986	38,850	35,190	755	524	163	129	768	1,321
1987	38,674	34,774	816	548	178	120	762	1,476
1988	39,850	35,541	888	596	201	125	865	1,634
1989	41,223	38,294	905	705	222	150	947	2,233
1990	42,830	39,808	917	745	230	162	968	2,969
1991	42,458	39,408	966	653	222	125	1,084	3,278
1992	41,941	38,873	955	665	231	122	1,095	3,549
1993	41,566	38,595	891	570	212	106	1,192	4,004
1994	41,832	38,723	944	621	213	97	1,234	4,368
1995	42,715	39,566	872	628	222	110	1,317	4,996
1996	43,645	40,366	892	671	196	112	1,408	5,455
1997	43,765	40,132	932	741	216	138	1,606	5,851
1998	45,228	41,490	966	752	161	101	1,758	6,499
1999	45,193	41,235	899	701	198	155	2,005	6,902
2000	45,786	41,584	1,015	727	273	142	2,045	7,397
2001	45,318	41,135	928	788	205	152	2,110	7,903
2002	45,190	40,895	934	805	237	135	2,184	8,051

*Data not available.
NOTE: Before 1981, neither Hispanic race nor ethnicity were recorded. Between 1981 and 1988, Hispanic was recorded as a race category. Since 1989, Hispanic ethnicity has been recorded separately from race and Hispanic mothers are included in each race category.

TABLE 2-8. Ethnicity, Race, and County of Residence of Mother, Oregon Resident Births, 2002

County of Residence	Total Births	Hispanic			Non-Hispanic			
		Total	White	Other	White	African American	American Indian	Other
Total	45,190	8,051	7,818	233	33,022	895	660	2,403
Baker	175	7	6	1	163	–	2	3
Benton	780	76	76	–	632	7	4	60
Clackamas	4,068	524	509	15	3,291	38	28	170
Clatsop	432	55	55	–	358	3	5	11
Columbia	513	27	25	2	469	–	4	13
Coos	630	37	32	5	555	2	25	6
Crook	215	21	18	3	188	–	5	1
Curry	150	11	11	–	134	–	3	2
Deschutes	1,487	140	56	84	1,301	6	15	23
Douglas	1,035	56	54	2	942	1	22	14
Gilliam	14	1	1	–	13	–	–	–
Grant	72	1	1	–	68	–	1	2
Harney	77	3	2	1	69	–	4	1
Hood River	326	135	134	1	189	–	1	1
Jackson	2,111	330	322	8	1,681	10	35	43
Jefferson	309	90	79	11	126	5	88	–
Josephine	738	48	48	–	670	2	8	8
Klamath	755	100	99	1	614	8	26	7
Lake	73	6	6	–	64	1	1	1
Lane	3,494	289	288	1	3,037	29	29	106
Lincoln	434	69	66	3	339	2	17	6
Linn	1,400	138	137	1	1,202	9	23	25
Malheur	482	222	217	5	249	–	3	4
Marion	4,430	1,522	1,509	13	2,654	33	61	135
Morrow	155	65	64	1	85	2	1	2
Multnomah	9,340	1,588	1,543	45	6,118	612	100	863
Polk	770	154	151	3	579	5	10	14
Sherman	15	3	3	–	12	–	–	–
Tillamook	242	44	44	–	187	1	5	5
Umatilla	1,066	327	320	7	655	1	57	21
Union	285	10	10	–	263	2	2	8
Wallowa	56	3	3	–	52	–	–	1
Wasco	290	58	58	–	214	–	14	2
Washington	7,568	1,650	1,633	17	4,931	114	39	826
Wheeler	10	1	1	–	9	–	–	–
Yamhill	1,193	240	237	3	909	2	22	19

– Quantity is zero.
NOTE: The sum of the subsets does not equal the total because of cases with unknown ethnicity or race.

TABLE 2-9. Births to Unmarried Mothers, Oregon Residents, 2002

County of Residence	Total Births	Number Unmarried	Percent Unmarried[1]
Total	45,190	13,962	30.9
Baker	175	47	26.9
Benton	780	119	§ 15.3
Clackamas	4,068	1,019	§ 25.1
Clatsop	432	167	§ 38.7
Columbia	513	144	28.1
Coos	630	254	§ 40.4
Crook	215	65	30.4
Curry	150	41	39.0
Deschutes	1,487	384	§ 25.8
Douglas	1,035	397	§ 38.4
Gilliam	14	3	21.4
Grant	72	11	§ 15.3
Harney	77	24	31.2
Hood River	326	81	24.8
Jackson	2,111	704	33.4
Jefferson	309	148	§ 47.9
Josephine	738	260	§ 35.2
Klamath	755	262	34.7
Lake	73	19	26.8
Lane	3,494	1,191	§ 34.1
Lincoln	434	196	§ 45.2
Linn	1,400	496	§ 35.4
Malheur	482	176	§ 36.5
Marion	4,430	1,609	§ 36.3
Morrow	155	57	36.8
Multnomah	9,340	3,065	§ 32.8
Polk	770	219	28.4
Sherman	15	4	26.7
Tillamook	242	88	36.8
Umatilla	1,066	431	§ 40.4
Union	285	85	29.8
Wallowa	56	9	16.1
Wasco	290	91	31.4
Washington	7,568	1,719	§ 22.7
Wheeler	10	4	40.0
Yamhill	1,193	373	31.3

[1] Percent of total live births where marital status is known.
§ Percent unmarried is significantly different from the state.
WARNING: Rates/Percentages based on less than 5 events are unreliable.
NOTE: Rates/Percentages are calculated excluding missing and unknown values.

TABLE 2-10. Age of Mother and County of Residence, Oregon Resident Births, 2002

County of Residence	Total	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	45,190	51	4,410	11,997	12,634	10,320	4,674	1,036	61	7
Baker	175	2	27	46	46	35	17	2	–	–
Benton	780	–	42	156	239	213	108	22	–	–
Clackamas	4,068	2	286	988	1,113	1,027	518	121	13	–
Clatsop	432	1	62	113	128	84	36	8	–	–
Columbia	513	–	51	141	151	107	43	18	2	–
Coos	630	2	98	216	151	100	54	8	1	–
Crook	215	–	42	67	57	36	9	4	–	–
Curry	150	–	13	57	39	27	11	3	–	–
Deschutes	1,487	–	124	409	400	358	154	42	–	–
Douglas	1,035	1	141	351	274	170	80	18	–	–
Gilliam	14	–	2	4	4	3	–	–	1	–
Grant	72	–	5	25	18	15	7	2	–	–
Harney	77	–	12	21	22	13	8	1	–	–
Hood River	326	–	29	82	88	76	45	6	–	–
Jackson	2,111	1	230	644	592	413	189	40	–	2
Jefferson	309	2	51	113	72	46	21	4	–	–
Josephine	738	1	85	245	210	133	48	16	–	–
Klamath	755	3	95	255	199	135	51	16	1	–
Lake	73	–	9	20	17	20	4	2	–	1
Lane	3,494	1	356	999	1,006	741	312	78	1	–
Lincoln	434	–	60	159	100	77	30	7	1	–
Linn	1,400	1	159	471	410	245	82	30	2	–
Malheur	482	–	77	154	133	80	31	7	–	–
Marion	4,430	5	595	1,313	1,229	845	365	73	4	1
Morrow	155	–	19	45	45	26	16	4	–	–
Multnomah	9,340	16	796	2,180	2,468	2,409	1,203	255	13	–
Polk	770	–	83	214	220	160	80	11	2	–
Sherman	15	–	1	4	5	5	–	–	–	–
Tillamook	242	1	28	81	60	49	18	4	1	–
Umatilla	1,066	1	163	355	285	168	77	16	–	1
Union	285	–	31	94	92	45	16	6	1	–
Wallowa	56	1	2	12	24	8	8	1	–	–
Wasco	290	1	31	96	75	54	29	3	1	–
Washington	7,568	8	455	1,517	2,321	2,162	911	178	15	1
Wheeler	10	–	2	–	4	1	2	1	–	–
Yamhill	1,193	1	148	350	337	234	91	29	2	1

– Quantity is zero.

TABLE 2-11. Unmarried Mothers by Age of Mother and County of Residence, Oregon Resident Births, 2002

County of Residence	Total	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	13,962	50	3,408	5,533	2,727	1,404	671	155	13	1
Baker	47	2	17	11	9	3	5	–	–	–
Benton	119	–	30	48	22	11	6	2	–	–
Clackamas	1,019	2	209	420	205	111	58	11	3	–
Clatsop	167	1	50	57	26	21	10	2	–	–
Columbia	144	–	42	59	25	14	3	1	–	–
Coos	254	2	73	111	27	20	18	2	1	–
Crook	65	–	26	18	13	6	1	1	–	–
Curry	41	–	7	20	7	3	2	2	–	–
Deschutes	384	–	92	167	62	33	24	6	–	–
Douglas	397	1	107	166	71	33	17	2	–	–
Gilliam	3	–	1	2	–	–	–	–	–	–
Grant	11	–	3	6	–	–	1	1	–	–
Harney	24	–	6	10	2	2	4	–	–	–
Hood River	81	–	19	28	13	12	8	1	–	–
Jackson	704	1	182	306	127	56	24	8	–	–
Jefferson	148	1	45	63	22	9	6	2	–	–
Josephine	260	1	55	118	45	21	13	7	–	–
Klamath	262	3	71	118	43	19	8	–	–	–
Lake	19	–	8	6	2	3	–	–	–	–
Lane	1,191	1	281	484	231	126	52	16	–	–
Lincoln	196	–	45	90	32	20	7	1	1	–
Linn	496	1	134	216	74	46	19	5	1	–
Malheur	176	–	59	64	27	17	7	2	–	–
Marion	1,609	5	453	608	317	149	67	10	–	–
Morrow	57	–	14	22	10	5	5	1	–	–
Multnomah	3,065	16	640	1,148	689	367	160	42	3	–
Polk	219	–	60	93	37	17	11	1	–	–
Sherman	4	–	1	2	1	–	–	–	–	–
Tillamook	88	1	20	40	16	9	1	–	1	–
Umatilla	431	1	130	161	84	29	21	5	–	–
Union	85	–	23	34	16	7	3	1	1	–
Wallowa	9	1	2	3	2	–	1	–	–	–
Wasco	91	1	26	40	13	9	2	–	–	–
Washington	1,719	8	371	639	388	200	92	19	2	–
Wheeler	4	–	2	–	2	–	–	–	–	–
Yamhill	373	1	104	155	67	26	15	4	–	1

– Quantity is zero.

TABLE 2-12. Race, Ethnicity and Place of Birth of Mother by Selected Demographic Characteristics (Percents), Oregon Resident Births, 2002

Characteristic of Mother	Total	Non-Hispanic White	Non-Hispanic African American	Non-Hispanic American Indian	Non-Hispanic Asian[1]	Total Hispanic	Mexican	Central or South American	Other Hispanic
Total	45,190	33,022	895	660	2,323	8,051	7,427	325	299
Ratio of males to females[2]	1,046	1,049	989	1,050	1,061	1,039	1,033	970	1,318
All Births	45,190	33,022	895	660	2,323	8,051	7,427	325	299
Mothers Under 20 Years	9.9	8.7	16.3	18.5	3.6	15.1	15.4	7.4	17.3
4th and Higher-Order	11.0	10.0	13.5	16.5	6.5	15.8	16.1	11.7	11.7
Unmarried Mothers	30.9	27.9	61.7	60.0	16.1	41.7	41.8	35.7	45.9
Completed 12+ Years Education	79.7	88.4	80.5	72.1	91.7	40.9	38.5	63.3	76.5
Born in the 50 States and D.C.	35,286	31,150	751	651	391	2,122	1,830	41	251
Mothers Under 20 Years	10.3	9.0	18.5	18.4	12.5	24.7	25.6	12.2	20.2
4th and Higher-Order	9.9	9.5	13.2	16.7	5.1	12.4	12.5	7.3	12.0
Unmarried Mothers	31.7	29.0	70.3	60.6	33.8	47.8	47.9	26.8	50.4
Completed 12+ Years Education	86.6	88.3	80.2	72.2	87.7	68.0	66.7	87.8	74.1
Born outside of the 50 States and D.C.	9,855	1,835	142	9	1,931	5,923	5,593	284	46
Mothers Under 20 Years	8.2	4.0	4.2	22.2	1.8	11.7	12.1	6.7	2.2
4th and Higher-Order	15.1	17.8	14.8	–	6.7	17.0	17.3	12.3	8.7
Unmarried Mothers	28.1	8.9	16.2	22.2	12.5	39.5	39.8	37.0	23.9
Completed 12+ Years Education	55.0	90.1	83.1	66.7	92.6	31.0	29.1	59.7	91.1

– Quantity is zero.
1 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.
2 Ratio of male live births per 1,000 female live births.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-13. Country of Mother's Birth by Continent of Father's Birth, Oregon Residents, 2002

Country of Mother's Birth	Total	Continent of Father's Birth					
		North America	Central and South America	Europe	Asia	Africa	Other and Unknown Countries
Total	45,190	36,762	416	807	1,826	219	5,160
Australia	27	19	–	–	1	–	7
Brazil	24	15	2	–	3	–	4
Cambodia	51	9	–	1	38	–	3
Canada	216	198	1	3	4	2	8
China (Peoples Republic of)	177	15	–	1	159	–	2
Colombia	25	17	4	–	–	1	3
El Salvador	85	37	36	–	2	–	10
Ethiopia	28	2	–	–	–	25	1
Fiji	20	4	–	–	1	–	15
France	27	19	–	5	–	1	2
Germany	201	164	3	19	2	–	13
Guam	27	17	–	–	1	1	8
Guatemala	131	45	68	–	1	–	17
Honduras	26	13	8	–	1	–	4
Hong Kong	31	16	–	–	14	–	1
India	255	15	–	1	234	2	3
Indonesia	21	9	–	–	12	–	–
Iran	26	3	–	–	21	–	2
Ireland	20	4	–	14	1	–	1
Japan	156	125	–	2	26	–	3
Khazakhastan	23	3	–	4	15	–	1
Korea	143	61	–	1	77	1	3
Laos	89	18	–	1	59	–	11
Lebanon	20	1	–	1	17	–	1
Malaysia	23	9	–	–	10	–	4
Marshall Islands	30	8	–	–	–	1	21
Mexico	5,494	4,844	85	2	8	3	552
Micronesia	43	5	–	–	–	–	38
Moldavia	26	1	–	20	4	–	1
Peru	29	18	9	–	–	–	2
Philippines	232	158	–	8	11	–	55
Puerto Rico	26	15	2	–	–	–	9
Romania	103	15	–	83	–	2	3
Russia	164	28	–	33	99	–	4
Somalia	37	–	–	–	–	35	2
South Korea	37	17	–	1	15	1	3
Spain	20	17	2	–	–	–	1
Taiwan	50	14	1	–	33	1	1
Thailand	74	24	–	–	39	2	9
U.S.A.	35,288	30,313	159	341	315	67	4,093
Ukraine	287	23	1	214	45	–	4
United Kingdom	105	77	2	21	2	–	3
Vietnam	464	35	–	–	398	–	31
Other and Unknown Countries	809	312	33	31	158	74	201

– Quantity is zero.

TABLE 2-14. Maternal Characteristics by Method of Payment for Delivery, Oregon Resident Births, 2002

Characteristics	Total	Private Insurance	Self-Pay	Medicaid-/OHP*	Other	N.S.	Multiple Mention
Mother's Age and Marital Status							
Total	45,190	26,017	1,556	16,778	44	719	76
Married	31,156	22,272	953	7,385	28	471	47
Unmarried	13,962	3,745	603	9,393	16	176	29
Less Than 18	1,358	358	81	897	2	18	2
Married	158	31	8	119	–	–	–
Unmarried	1,197	327	73	778	2	15	2
18-24	15,100	5,479	579	8,735	20	254	33
Married	7,283	3,664	285	3,178	12	130	14
Unmarried	7,794	1,815	294	5,557	8	101	19
25-34	22,954	15,795	715	6,042	20	346	36
Married	18,793	14,539	522	3,416	15	273	28
Unmarried	4,131	1,256	193	2,626	5	43	8
35+	5,771	4,383	181	1,104	2	96	5
Married	4,919	4,036	138	672	1	67	5
Unmarried	839	347	43	432	1	16	–
First Trimester Care							
Total	36,859	23,604	902	11,706	32	549	66
Married	27,038	20,586	597	5,405	22	385	43
Unmarried	9,765	3,018	305	6,301	10	108	23
Percent	81.6	90.7	58.0	69.8	74.4	79.0	86.8
Married	86.9	92.4	62.6	73.2	81.5	84.4	91.5
Unmarried	70.0	80.6	50.7	67.1	62.5	64.3	79.3
Inadequate Prenatal Care							
Total	2,359	564	293	1,441	4	53	4
Married	1,074	395	141	511	1	23	3
Unmarried	1,281	169	152	930	3	26	1
Percent	5.2	2.2	18.8	8.6	9.3	7.8	5.3
Married	3.5	1.8	14.8	6.9	3.7	5.2	6.4
Unmarried	9.2	4.5	25.2	9.9	18.8	15.8	3.4
Tobacco Use							
Percent	12.6	5.8	10.2	23.2	11.4	13.2	13.2
Alcohol Use							
Percent	1.3	1.3	1.2	1.4	–	0.9	–
Low Birthweight							
Percent	5.8	5.4	5.8	6.2	9.1	9.0	15.8

– Quantity is zero.
NOTE: The sum of the subsets may not equal the total because of unknown marital status and/or mother's age, which are not presented in this table. Rates and percentages are calculated excluding missing and unknown values.
*OHP = Oregon Health Plan.

TABLE 2-15. Reported Use of Illicit Substances, Alcohol, or Tobacco, by County of Residence, Oregon Births, 2002

County of Residence	Total Births	Tobacco Use		Alcohol Use		Illicit Drug Use			
		Number	%	Number	%	Number	%	Mentions	
								Single	Multiple
Total	45,190	5,618	12.6	586	1.3	448	1.0	266	182
Baker	175	49	28.0	1	0.6	–	–	–	–
Benton	780	65	8.4	12	1.5	5	0.6	5	–
Clackamas	4,068	511	12.6	92	2.3	31	0.8	19	12
Clatsop	432	85	19.9	3	0.7	6	1.4	3	3
Columbia	513	97	19.0	4	1.0	3	0.6	1	2
Coos	630	158	25.2	10	1.6	18	2.9	4	14
Crook	215	38	17.8	–	–	–	–	–	–
Curry	150	20	18.3	2	1.9	–	–	–	–
Deschutes	1,487	207	14.0	17	1.2	3	0.2	2	1
Douglas	1,035	256	25.0	14	1.4	2	0.2	1	1
Gilliam	14	3	21.4	–	–	–	–	–	–
Grant	72	15	20.8	1	1.4	1	1.4	1	–
Harney	77	16	21.3	4	5.4	2	2.6	1	1
Hood River	326	23	7.1	3	1.0	–	–	–	–
Jackson	2,111	315	15.1	28	1.3	30	1.4	22	8
Jefferson	309	40	13.2	4	1.3	1	0.3	1	–
Josephine	738	174	23.7	9	1.2	25	3.4	23	2
Klamath	755	133	17.7	7	0.9	13	1.7	6	7
Lake	73	15	20.8	–	–	–	–	–	–
Lane	3,494	409	11.8	6	0.2	3	0.1	3	–
Lincoln	434	89	21.3	11	2.6	1	0.2	1	–
Linn	1,400	296	21.2	27	1.9	19	1.4	9	10
Malheur	482	39	8.1	3	0.6	5	1.0	5	–
Marion	4,430	532	12.1	39	0.9	68	1.5	22	46
Morrow	155	10	8.0	3	2.7	–	–	–	–
Multnomah	9,340	1,070	11.5	195	2.1	154	1.6	98	56
Polk	770	82	10.7	7	0.9	14	1.8	2	12
Sherman	15	–	–	–	–	–	–	–	–
Tillamook	242	39	16.3	3	1.3	1	0.4	1	–
Umatilla	1,066	125	13.2	9	1.4	11	1.0	11	–
Union	285	49	17.3	1	0.4	–	–	–	–
Wallowa	56	10	17.9	1	1.8	1	1.8	1	–
Wasco	290	55	19.0	8	2.8	1	0.3	1	–
Washington	7,568	416	5.5	49	0.7	27	0.4	20	7
Wheeler	10	3	30.0	2	20.0	–	–	–	–
Yamhill	1,193	174	14.7	11	0.9	3	0.3	3	–

– Quantity is zero.
WARNING: Rates and percentages based on less than 5 events are unreliable.
NOTE: Percent illicit drug use is percent of total births where illicit drug use was mentioned. Percentages for tobacco use and alcohol use exclude missing and unknown values in calculating percentages.

TABLE 2-16. Maternal Risk Factors by County of Residence, Oregon, 2002

County of Residence	Live Births	Minority Race/ Ethnicity[1]	Inade-quate Care[2]	Age < 18	Age >=35	4+ Live Births	<12 Years Educ.	Unmar-ried	Tobacco Use
		Percent of Births with Risk Factor							
Total	45,190	26.6	5.2	3.0	12.8	11.0	20.3	30.9	12.6
Baker	175	6.3	2.9	5.7	10.9	15.5	22.3	26.9	28.0
Benton	780	18.7	2.6	2.2	16.7	8.7	9.7	15.3	8.4
Clackamas	4,068	18.7	4.7	1.9	16.0	10.0	14.9	25.1	12.6
Clatsop	432	17.1	6.2	4.4	10.2	10.2	23.7	38.7	19.9
Columbia	513	8.6	3.7	1.8	12.3	12.5	10.9	28.1	19.0
Coos	630	11.2	7.0	4.3	10.0	9.0	19.8	40.4	25.2
Crook	215	12.6	0.5	4.2	6.0	12.1	28.4	30.4	17.8
Curry	150	10.7	11.3	3.3	9.3	11.3	19.3	39.0	18.3
Deschutes	1,487	12.4	2.3	2.8	13.2	8.3	13.4	25.8	14.0
Douglas	1,035	9.0	2.4	4.3	9.5	12.4	16.7	38.4	25.0
Gilliam	14	7.1	–	7.1	7.1	7.1	14.3	21.4	21.4
Grant	72	5.6	5.6	–	12.5	11.1	11.1	15.3	20.8
Harney	77	9.1	3.9	2.6	11.7	16.9	14.1	31.2	21.3
Hood River	326	42.0	5.9	0.9	15.6	12.9	31.2	24.8	7.1
Jackson	2,111	19.6	5.7	3.9	10.9	10.3	21.7	33.4	15.1
Jefferson	309	59.2	10.4	6.1	8.1	18.1	36.9	47.9	13.2
Josephine	738	8.8	6.2	3.0	8.7	11.0	19.2	35.2	23.7
Klamath	755	18.5	5.2	4.4	9.0	12.7	23.1	34.7	17.7
Lake	73	12.3	4.1	5.6	8.3	13.7	26.0	26.8	20.8
Lane	3,494	12.9	6.7	3.2	11.2	9.0	13.7	34.1	11.8
Lincoln	434	21.7	8.6	3.7	8.8	10.6	26.5	45.2	21.3
Linn	1,400	13.9	5.8	4.2	8.1	12.6	19.8	35.4	21.2
Malheur	482	47.5	7.4	4.6	7.9	19.5	37.0	36.5	8.1
Marion	4,430	39.6	9.0	4.2	10.0	14.5	30.7	36.3	12.1
Morrow	155	45.2	9.2	3.9	12.9	17.4	29.1	36.8	8.0
Multnomah	9,340	34.0	5.3	2.6	15.7	10.0	20.8	32.8	11.5
Polk	770	23.8	4.5	3.4	12.1	12.5	19.9	28.4	10.7
Sherman	15	20.0	–	–	–	6.7	13.3	26.7	–
Tillamook	242	22.7	5.8	5.0	9.5	9.9	24.2	36.8	16.3
Umatilla	1,066	38.1	8.2	4.2	8.7	15.5	29.3	40.4	13.2
Union	285	7.7	3.2	1.8	8.1	14.0	8.1	29.8	17.3
Wallowa	56	7.1	1.8	3.6	16.1	8.9	8.9	16.1	17.9
Wasco	290	25.7	3.8	2.8	11.4	14.1	25.1	31.4	19.0
Washington	7,568	34.7	2.7	2.1	14.6	9.8	18.1	22.7	5.5
Wheeler	10	10.0	–	–	30.0	20.0	22.2	40.0	30.0
Yamhill	1,193	23.7	4.3	3.1	10.2	12.5	23.8	31.3	14.7

– Quantity is zero.
1 Includes nonwhite race and Hispanic ethnicity.
2 Less than 5 prenatal visits or care began in the third trimester.
* Detailed reporting of small numbers may breach confidentiality.
WARNING: Rates based on less than 5 events are unreliable.
NOTE: Risk factors expressed as a percentage of mothers within each risk category. Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-17. Prenatal Care by Mother's Age, Oregon Residents, 2002

Mother's Age	Total Births	First Trimester Care		Inadequate Prenatal Care[1]	
		Number	Percent	Number	Percent
Total	45,190	36,859	81.6	2,359	5.2
<15	51	25	49.0	12	23.5
15-19	4,410	2,923	66.4	405	9.2
20-24	11,997	9,125	76.1	793	6.6
25-29	12,634	10,713	84.9	554	4.4
30-34	10,320	9,134	88.6	348	3.4
35-39	4,674	4,032	86.3	188	4.0
40-44	1,036	855	82.6	54	5.2
45+	61	49	80.3	4	6.6
Unknown	7	3	60.0	1	20.0

[1] Less than 5 prenatal visits or care began in the third trimester.
WARNING: Rates and percentages based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-18. Prenatal Care by Mother's Race and Ethnicity, Oregon Residents, 2002

Mother's Race/Ethnicity	Total Births	First Trimester Care		Inadequate Prenatal Care[1]	
		Number	Percent	Number	Percent
Total	45,190	36,859	81.6	2,359	5.2
White	40,895	33,491	82.0	2,052	5.0
African American	934	707	75.9	55	5.9
American Indian	805	573	71.2	86	10.7
Chinese	237	198	83.5	13	5.5
Japanese	135	122	90.4	5	3.7
Hawaiian	52	44	86.3	3	5.9
Other Nonwhite	32	22	68.8	2	6.2
Filipino	220	183	83.2	10	4.5
Other Asian & Pacific Islander	1,748	1,417	81.1	123	7.0
Unknown Race	132	102	78.5	10	7.6
Hispanic					
Total	8,051	5,743	71.4	632	7.9
White	7,818	5,559	71.2	620	7.9
African American	38	30	81.1	2	5.4
American Indian	144	120	83.3	5	3.5
Chinese	1	–	–	1	100.0
Japanese	2	1	50.0	–	–
Hawaiian	4	3	100.0	–	–
Other Nonwhite	28	19	67.9	2	7.1
Filipino	8	6	75.0	–	–
Other Asian & Pacific Islander	3	2	66.7	–	–
Unknown Race	5	3	75.0	2	40.0
Non-Hispanic					
Total	36,980	30,992	83.9	1,716	4.6
White	33,022	27,889	84.5	1,427	4.3
African American	895	676	75.6	53	5.9
American Indian	660	453	68.6	81	12.3
Chinese	236	198	83.9	12	5.1
Japanese	133	121	91.0	5	3.8
Hawaiian	48	41	85.4	3	6.2
Other Nonwhite	4	3	75.0	–	–
Filipino	211	176	83.4	10	4.7
Other Asian & Pacific Islander	1,743	1,413	81.1	123	7.1
Unknown Race	28	22	81.5	2	7.4
Unknown Ethnicity	159	124	78.0	11	7.1

– Quantity is zero.
1 Less than five prenatal visits or care began in the third trimester.
WARNING: Rates and percentages based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-19. Prenatal Care by Mother's Education, Oregon Residents, 2002

Mother's Education (in years)	Total Births	First Trimester Care		Inadequate Prenatal Care[1]	
		Number	Percent	Number	Percent
Total	45,190	36,859	81.6	2,359	5.2
None	128	85	66.4	20	15.6
One	33	18	54.5	5	15.2
Two	87	50	57.5	9	10.3
Three	193	113	58.5	19	9.8
Four	156	93	59.6	14	9.0
Five	178	123	69.1	20	11.2
Six	1,311	877	67.0	126	9.6
Seven	207	129	62.3	29	14.0
Eight	659	422	64.1	77	11.7
Nine	1,836	1,241	67.7	167	9.1
Ten	1,791	1,177	65.8	192	10.7
Eleven	2,454	1,694	69.1	236	9.6
Twelve	13,815	10,838	78.5	859	6.2
Thirteen	4,080	3,483	85.4	153	3.8
Fourteen	5,091	4,457	87.6	153	3.0
Fifteen	1,593	1,404	88.2	52	3.3
Sixteen	6,422	5,955	92.8	99	1.5
Seventeen+	4,530	4,282	94.6	54	1.2
Unknown	626	418	67.2	75	12.0

[1] Less than five prenatal visits or care began in the third trimester.
WARNING: Rates and percentages based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-20. Prenatal Care by Mother's County of Residence, Oregon Residents, 2002

County of Residence	Total Births	First Trimester Care		Inadequate Prenatal Care[1]	
		Number	Percent	Number	Percent
Total	45,190	36,859	81.6	2,359	5.2
Baker	175	145	83.3	5	2.9
Benton	780	684	87.7	20	2.6
Clackamas	4,068	3,456	§ 85.0	193	4.7
Clatsop	432	340	78.9	27	6.2
Columbia	513	442	86.8	19	3.7
Coos	630	485	77.0	44	7.0
Crook	215	192	89.3	1	§ 0.5
Curry	150	112	74.7	17	11.3
Deschutes	1,487	1,361	§ 91.5	34	2.3
Douglas	1,035	924	§ 89.3	25	2.4
Gilliam	14	10	71.4	–	–
Grant	72	65	90.3	4	5.6
Harney	77	65	84.4	3	3.9
Hood River	326	275	84.6	19	5.9
Jackson	2,111	1,661	78.7	120	5.7
Jefferson	309	211	§ 68.5	32	10.4
Josephine	738	645	87.5	46	6.2
Klamath	755	588	78.0	39	5.2
Lake	73	60	82.2	3	4.1
Lane	3,494	2,673	§ 76.5	233	§ 6.7
Lincoln	434	326	75.6	37	8.6
Linn	1,400	1,117	79.8	81	5.8
Malheur	482	328	§ 68.8	35	7.3
Marion	4,430	3,264	§ 73.7	399	§ 9.0
Morrow	155	109	70.8	14	9.0
Multnomah	9,340	7,521	80.6	499	5.3
Polk	770	612	79.5	35	4.5
Sherman	15	10	66.7	–	–
Tillamook	242	209	86.4	14	5.8
Umatilla	1,066	773	§ 72.8	87	8.2
Union	285	226	79.3	9	3.2
Wallowa	56	50	89.3	1	1.8
Wasco	290	246	85.1	11	3.8
Washington	7,568	6,724	§ 88.9	202	§ 2.7
Wheeler	10	7	70.0	–	–
Yamhill	1,193	943	79.1	51	4.3

– Quantity is zero.
1 Less than 5 prenatal visits or care began in the third trimester.
§ Rate is significantly different from the state rate.
* Detailed reporting of small numbers may breach confidentiality.
WARNING: Rates and percentages based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-21. Prenatal Care by Resident County for Unmarried Mothers, Oregon Residents, 2002

County of Residence	Total Births	First Trimester Care		Inadequate Prenatal Care[1]	
		Number	Percent	Number	Percent
Total	13,962	9,765	70.0	1,295	9.3
Baker	47	32	68.1	5	10.6
Benton	119	86	72.3	12	10.1
Clackamas	1,019	763	75.0	80	7.9
Clatsop	167	110	66.3	17	10.2
Columbia	144	106	74.6	12	8.3
Coos	254	176	69.3	24	9.4
Crook	65	53	81.5	1	1.5
Curry	41	23	56.1	7	17.1
Deschutes	384	325	§ 84.6	18	4.7
Douglas	397	341	§ 85.9	14	3.5
Gilliam	3	*	*	*	*
Grant	11	8	72.7	2	18.2
Harney	24	18	75.0	2	8.3
Hood River	81	63	78.8	8	9.9
Jackson	704	487	69.2	64	9.1
Jefferson	148	86	58.5	24	16.2
Josephine	260	210	80.8	26	10.0
Klamath	262	177	67.8	19	7.3
Lake	19	13	68.4	2	10.5
Lane	1,191	785	65.9	117	9.8
Lincoln	196	128	65.6	30	15.3
Linn	496	346	69.8	52	10.5
Malheur	176	107	60.8	20	11.4
Marion	1,609	1,010	§ 62.9	212	§ 13.2
Morrow	57	34	59.6	10	17.5
Multnomah	3,065	2,118	69.1	273	8.9
Polk	219	140	63.9	19	8.7
Sherman	4	*	*	*	*
Tillamook	88	73	83.0	4	4.5
Umatilla	431	269	62.7	52	12.1
Union	85	64	75.3	6	7.1
Wallowa	9	*	*	*	*
Wasco	91	76	83.5	6	6.6
Washington	1,719	1,272	74.0	128	§ 7.5
Wheeler	4	*	*	*	*
Yamhill	373	255	68.5	28	7.5

[1] Less than 5 prenatal visits or care began in the third trimester.
§ Percent is significantly different from the state.
* Detailed reporting of small numbers may breach confidentiality.
WARNING: Rates and percentages based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-22. Prenatal Care by Birthweight, Oregon Residents, 2002

Birthweight (in grams)	Total Births	First Trimester Care		Inadequate Care[1]	
		Number	Percent	Number	Percent
Total	45,190	36,859	81.6	2,359	5.2
499 and Less	53	44	83.0	25	47.2
500-999	172	150	87.2	37	21.8
1000-1499	247	201	81.4	23	9.3
1500-1999	553	446	80.9	55	10.0
2000-2499	1,592	1,245	78.5	137	8.6
<2500	2,617	2,086	80.0	277	10.6
2500-2999	6,264	4,986	79.8	384	6.1
3000-3499	16,401	13,331	81.4	857	5.2
3500-3999	14,586	12,073	82.8	631	4.3
4000-4499	4,469	3,692	82.7	177	4.0
4500-4999	763	627	82.2	29	3.8
5000 & Over	88	62	70.5	4	4.5
Unknown	2	2	100.0	–	–

– Quantity is zero.
1 Less than five prenatal visits or care began in the third trimester.
WARNING: Rates and percentages based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-23. Selected Medical or Health Characteristics by Mother's Age (Percents), Oregon Resident Births, 2002

Characteristic	Total Births	Age of Mother								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
All Births - Mother										
Total Births[1]	45,190	51	4,410	11,997	12,634	10,320	4,674	1,036	61	7
1st Trimester Care	81.6	49.0	66.4	76.1	84.9	88.6	86.3	82.6	80.3	60.0
Inadequate Care[2]	5.2	23.5	9.2	6.6	4.4	3.4	4.0	5.2	6.6	20.0
Multiple Births	2.9	7.8	1.5	1.9	2.7	3.7	4.9	6.2	23.0	–
Primary Cesarean	14.6	17.6	13.8	12.9	13.9	16.0	17.5	18.4	32.8	–
Tobacco Use	12.6	7.8	22.9	18.5	9.6	7.4	8.2	8.2	11.5	–
Alcohol Use	1.3	2.0	1.1	1.2	1.0	1.5	2.2	2.7	1.7	–
All Births - Infant										
Preterm Births[3]	8.2	21.6	8.4	7.7	7.7	8.1	9.7	11.1	21.3	–
Very Low Birthweight[4]	1.0	3.9	1.2	1.0	0.9	1.0	1.3	1.1	1.6	–
Low Birthweight[5]	5.8	17.6	6.7	5.4	5.3	5.7	6.9	7.5	23.0	–
4,000+ Grams	11.8	2.0	7.8	10.1	12.3	13.3	14.2	15.4	8.2	14.3
5 Minute Apgar <7	1.6	6.0	1.8	1.9	1.4	1.4	1.5	1.7	1.6	–
Mothers Born Inside the US[6]										
Total Births[1]	35,286	43	3,600	9,622	9,617	7,980	3,572	803	44	5
1st Trimester Care	83.9	48.8	68.8	78.6	87.3	90.8	89.0	85.3	84.1	75.0
Inadequate Care[2]	4.5	23.3	8.2	5.9	3.7	2.7	3.4	4.2	4.5	–
Multiple Births	3.2	9.3	1.6	2.0	3.0	4.0	5.5	6.6	18.2	–
Primary Cesarean	14.8	18.6	14.5	13.1	14.1	16.2	17.8	18.2	36.4	–
Tobacco Use	15.6	9.3	27.6	22.5	12.3	9.2	10.2	10.0	13.6	–
Alcohol Use	1.6	2.3	1.3	1.4	1.2	1.7	2.7	3.1	2.3	–
Infants of Mothers Born Inside the US[6]										
Preterm Births[3]	8.4	23.3	8.6	8.1	7.9	8.4	9.9	10.5	18.2	–
Very Low Birthweight[4]	1.1	4.7	1.0	1.1	1.0	0.9	1.4	0.7	–	–
Low Birthweight[5]	5.8	20.9	6.6	5.6	5.3	5.6	7.0	7.2	15.9	–
4,000+ Grams	12.0	2.3	8.1	10.4	12.7	13.6	14.2	16.2	11.4	20.0
5 Minute Apgar <7	1.7	7.1	1.9	2.1	1.4	1.6	1.7	1.5	2.3	–

– Quantity is zero.
See footnotes at end of table.

TABLE 2-23. Selected Medical or Health Characteristics by Mother's Age (Percents), Oregon Resident Births, 2002 - Continued

	Total	Age of Mother								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Mothers Born Outside the US										
Total Births[1]	9,862	8	803	2,365	3,003	2,335	1,098	233	17	–
1st Trimester Care	73.6	50.0	55.9	66.2	77.1	80.9	77.4	73.3	70.6	–
Inadequate Care[2]	7.7	25.0	13.4	9.6	6.6	5.7	5.9	8.6	11.8	–
Multiple Births	2.2	–	1.2	1.6	1.8	2.5	3.2	4.7	35.3	–
Primary Cesarean	13.9	12.5	10.6	12.3	13.2	15.6	16.5	19.3	23.5	–
Tobacco Use	1.5	–	1.8	2.1	1.2	1.2	1.6	1.8	5.9	–
Alcohol Use	0.4	–	0.5	0.4	0.3	0.5	0.5	1.3	–	–
Infants of Mothers Born Outside the US										
Preterm Births[3]	7.2	12.5	7.5	5.9	6.8	7.3	8.7	12.9	29.4	–
Very Low Birthweight[4]	1.0	–	2.0	0.7	0.9	1.0	0.8	2.1	5.9	–
Low Birthweight[5]	5.6	–	7.1	4.6	5.1	5.9	6.4	8.6	41.2	–
4,000+ Grams	10.9	–	6.5	9.0	11.0	12.4	14.3	12.9	–	–
5 Minute Apgar <7	1.1	–	1.5	1.1	1.2	0.9	0.9	2.2	–	–

– Quantity is zero.
1 The subtotals for mothers born domestically and internationally may not add to total births due to unknown age.
2 Less than 5 prenatal visits or care began in the third trimester.
3 Born prior to 37 completed weeks of gestation.
4 Birthweight of less than 1,500 grams (3 lb 4 oz).
5 Birthweight of less than 2,500 grams (5 lb 8 oz).
6 Inside the U.S. includes the fifty states and the District of Columbia.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-24. Selected Medical or Health Characteristics by Mother's Race (Percents), Oregon Resident Births, 2002

Characteristic	Total Births	Non-Hispanic White	Non-Hispanic African American	Non-Hispanic American Indian	Non-Hispanic Asian[1]	Total Hispanic	Mexican	Central or South American	Other Hispanic
All Births - Mother									
Total Births[2]	45,190	33,022	895	660	2,323	8,051	7,427	325	299
1st Trimester Care	81.6	84.5	75.6	68.6	82.2	71.4	71.0	73.1	80.1
Inadequate Care[3]	5.2	4.3	5.9	12.3	6.5	7.9	8.0	6.5	5.7
Multiple Births	2.9	3.3	2.7	3.2	1.9	1.7	1.7	0.6	2.0
Primary Cesarean	14.6	14.9	17.2	13.3	17.6	12.1	11.8	16.9	13.4
Tobacco Use	12.6	15.1	19.6	22.4	3.0	3.3	3.0	1.6	13.1
Alcohol Use	1.3	1.5	2.9	2.5	0.5	0.7	0.6	0.3	2.4
All Births - Infant									
Preterm Births[4]	8.2	8.3	10.5	12.0	7.8	7.1	7.0	5.5	10.1
Very Low Birthweight[5]	1.0	1.0	1.8	1.4	1.2	0.9	0.9	0.9	1.3
Low Birthweight[6]	5.8	5.7	9.8	7.7	7.1	5.3	5.2	5.5	9.0
4,000+ Grams	11.8	12.6	7.2	12.4	6.1	10.5	10.7	8.9	5.7
5 Minute Apgar <7	1.6	1.7	2.2	3.1	1.4	1.2	1.1	2.5	2.0
Mothers Born Inside the US[7]									
Total Births[2]	35,286	31,150	751	651	391	2,122	1,830	41	251
1st Trimester Care	83.9	85.1	75.7	68.4	83.4	75.1	74.3	87.5	79.5
Inadequate Care[3]	4.5	4.1	5.7	12.4	4.1	7.7	7.9	5.0	6.0
Multiple Births	3.2	3.3	3.2	2.9	1.0	2.1	2.1	–	2.4
Primary Cesarean	14.8	14.9	17.6	13.2	14.3	12.4	12.1	12.2	14.3
Tobacco Use	15.6	15.7	22.8	22.4	9.0	10.3	10.0	2.5	14.1
Alcohol Use	1.6	1.5	3.5	2.4	1.0	1.6	1.5	–	2.4
Infants of Mothers Born Inside the US[7]									
Preterm Births[4]	8.4	8.4	11.6	11.9	7.9	7.6	7.1	12.2	10.8
Very Low Birthweight[5]	1.1	1.0	2.1	1.4	1.3	1.1	1.0	–	1.6
Low Birthweight[6]	5.8	5.7	10.7	7.7	4.6	5.8	5.4	7.3	9.2
4,000+ Grams	12.0	12.4	6.8	12.6	8.4	9.1	9.7	7.3	5.2
5 Minute Apgar <7	1.7	1.7	2.5	3.1	2.3	1.5	1.3	4.9	2.0

– Quantity is zero.
See footnotes at end of table.

TABLE 2-24. Selected Medical or Health Characteristics by Mother's Race (Percents), Oregon Resident Births, 2002 - Continued

	Total	Non-Hispanic White	Non-Hispanic African American	Non-Hispanic American Indian	Non-Hispanic Asian[1]	Total Hispanic	Mexican	Central or South American	Other Hispanic
Mothers Born Outside the US									
Total Births[2]	9,862	1,840	143	9	1,932	5,923	5,593	284	46
1st Trimester Care	73.6	75.6	74.8	88.9	81.9	70.1	70.0	71.1	82.6
Inadequate Care[3]	7.7	7.7	7.0	–	6.9	7.9	8.0	6.7	2.2
Multiple Births	2.2	4.2	–	22.2	2.1	1.5	1.6	0.7	–
Primary Cesarean	13.9	15.2	15.4	22.2	18.3	12.0	11.7	17.6	8.7
Tobacco Use	1.5	3.4	2.8	22.2	1.8	0.8	0.7	1.4	6.5
Alcohol Use	0.4	0.8	–	11.1	0.4	0.3	0.3	0.4	2.2
Infants of Mothers Born Outside the US									
Preterm Births[4]	7.2	7.7	4.9	22.2	7.8	6.9	7.0	4.6	4.3
Very Low Birthweight[5]	1.0	1.3	–	–	1.2	0.9	0.9	1.1	–
Low Birthweight[6]	5.6	5.2	5.6	11.1	7.6	5.1	5.1	5.3	4.3
4,000+ Grams	10.9	16.2	9.1	–	5.6	10.9	11.0	9.2	8.7
5 Minute Apgar <7	1.1	1.2	0.7	–	1.2	1.1	1.0	2.1	2.2

– Quantity is zero.
1 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.
2 The subtotals for mothers born domestically and internationally may not add to total births due to unknown race/ethnicity.
3 Less than 5 prenatal visits or care began in the third trimester.
4 Born prior to 37 completed weeks of gestation.
5 Birthweight of less than 1,500 grams (3 lb 4 oz).
6 Birthweight of less than 2,500 grams (5 lb 8 oz).
7 Inside the U.S. includes the fifty states and the District of Columbia.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-25. Rates[1] of Selected Medical Risk Factors by Age of Mother, Oregon Residents, 2002

Medical Risk Factor of Mother	Total Births[2]	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+
Total Births	45,190	51	4,410	11,997	12,634	10,320	4,674	1,036	61
Anemia (Hct<30/Hgb<10)	56.9	–	76.2	60.6	54.0	51.6	52.8	42.5	16.4
Cardiac Disease	4.8	–	3.4	3.8	4.3	5.5	7.9	6.8	16.4
Chronic Lung Disease	24.0	19.6	32.2	29.1	23.7	18.2	18.8	16.4	–
Gestational Diabetes	39.7	19.6	11.6	22.8	40.4	51.0	69.7	100.4	65.6
Chronic Diabetes	5.4	–	2.5	3.1	6.2	6.1	8.6	11.6	16.4
Genital Herpes	19.0	39.2	10.4	14.3	16.6	23.0	34.7	28.0	49.2
Hydramnios	14.0	19.6	13.8	14.3	13.0	13.1	18.8	10.6	32.8
Hemoglobinopathy	1.1	–	2.0	1.0	0.8	0.9	1.5	1.9	–
Hypertension, Chronic	8.7	–	2.5	4.3	8.0	10.6	20.5	24.1	16.4
Hypertension, Pregnancy-Associated	46.5	19.6	50.6	44.9	47.2	44.4	48.6	44.4	180.3
Eclampsia	3.7	–	3.9	1.9	3.7	4.6	6.0	4.8	–
Incompetent Cervix	3.7	–	2.5	2.4	3.7	4.9	4.9	3.9	49.2
Previous Infant 4000+ Grams	21.0	–	2.5	12.2	19.6	31.3	36.8	48.3	16.4
Previous Preterm Infant	17.3	–	5.4	16.0	19.4	19.2	19.5	26.1	49.2
Renal Disease	17.8	19.6	30.4	22.2	16.1	12.7	12.8	6.8	–
Rh Sensitization	13.6	39.2	15.0	12.5	14.1	14.5	11.8	11.6	16.4
Uterine Bleeding	8.3	–	4.5	7.8	7.7	9.8	10.9	10.6	16.4

– Quantity is zero.
1 Rates per 1,000 mothers.
2 Total includes mothers with unstated age.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-26. Mothers with Selected Medical Risk Factors by Race of Mother, Oregon Residents, 2002

Medical Risk Factor of Mother	Total Births	Non-Hispanic White	Non-Hispanic African American	Non-Hispanic American Indian	Non-Hispanic Asian[1]	Total Hispanic	Mexican	Central or South American	Other Hispanic
Total Births	45,190	33,022	895	660	2,323	8,051	7,427	325	299
Anemia (Hct<30/Hgb<10)	2,570	1,748	84	33	146	552	516	17	19
Cardiac Disease	216	183	5	4	3	19	19	–	–
Chronic Lung Disease	1,085	869	34	35	24	103	91	3	9
Gestational Diabetes	1,795	1,139	32	25	167	420	393	19	8
Chronic Diabetes	242	153	6	11	11	57	52	2	3
Genital Herpes	860	731	27	8	11	75	63	5	7
Hydramnios	634	412	21	7	41	147	135	10	2
Hemoglobinopathy	49	28	7	0	7	7	7	–	–
Hypertension, Chronic	395	319	26	7	7	32	28	2	2
Hypertension, Pregnancy-Associated	2,101	1,667	33	34	84	270	240	14	16
Eclampsia	167	142	1	5	3	15	12	1	2
Incompetent Cervix	169	130	5	4	12	17	16	–	1
Previous Infant 4000+ Grams	951	767	18	23	16	121	113	4	4
Previous Preterm Infant	780	555	36	20	66	97	84	9	4
Renal Disease	803	569	31	22	24	147	140	3	4
Rh Sensitization	614	558	2	9	3	40	37	1	2
Uterine Bleeding	375	283	14	7	19	47	39	3	5

– Quantity is zero.
1 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.

TABLE 2-27. Delivery Methods by Day of Birth, Mother's Age and Race, and Payment Source (Percents), Oregon Resident Births, 2002

Characteristics	Total Births	Vaginal	Vaginal after previous C-section	Primary C-section	Repeat C-section
Day of Birth					
All Births	45,190	33,688	784	6,604	4,114
Sunday	4,773	79.8	1.8	14.0	4.4
Monday	6,646	73.4	1.5	14.4	10.8
Tuesday	7,271	73.7	1.8	14.9	9.6
Wednesday	7,109	73.3	1.5	14.5	10.7
Thursday	6,962	73.7	1.7	15.1	9.6
Friday	7,150	71.7	1.8	15.0	11.5
Saturday	5,279	79.1	2.1	14.2	4.6
Mother's Age					
<15	51	82.4	–	17.6	–
15-19	4,410	83.7	0.3	13.8	2.2
20-24	11,997	79.4	1.2	12.9	6.6
25-29	12,634	75.6	1.8	13.9	8.8
30-34	10,320	70.0	2.2	16.0	11.7
35-39	4,674	63.5	3.0	17.5	15.9
40-44	1,036	63.1	2.4	18.4	16.0
45+	61	50.8	1.6	32.8	14.8
N.S.	7	100.0	–	–	–
Mother's Race					
Non-Hispanic White	33,022	74.5	1.6	14.9	9.0
Non-Hispanic African American	895	71.8	1.3	17.2	9.6
Non-Hispanic American Indian	660	73.5	2.3	13.3	10.9
Non-Hispanic Asian[1]	2,323	73.8	1.2	17.6	7.3
Total Hispanic	8,051	75.4	2.6	12.1	10.0
Payment Source					
Private Insurance	26,017	72.8	1.5	16.2	9.5
Medicaid/OHP*	16,778	76.5	2.0	12.7	8.8
Self-Pay	1,556	82.7	3.5	7.8	5.9
Other	44	70.5	2.3	22.7	4.5
N.S.	719	74.1	2.4	14.0	9.5
Multiple Mention	76	69.7	3.9	18.4	7.9

– Quantity is zero.
1 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.
* Oregon Health Plan.

TABLE 2-28. County of Occurrence by Type of Institution and Delivery Attendant, Oregon Occurrence Births, 2002

County of Occurrence	Total	Born in Hospital or on Arrival								
		Total Hospital Births	M.D.	D.O.	N.D.	C.N.M.	R.N.	L.D. E.M.	Other Licensed Medical	Non-Medical
Total	46,053	45,106	36,358	1,739	–	6,747	208	17	9	28
Baker	123	120	120	–	–	–	–	–	–	–
Benton	1,048	1,024	1,007	13	–	–	1	3	–	–
Clackamas	4,235	4,155	2,720	39	–	1,383	12	–	–	1
Clatsop	471	459	354	–	–	100	4	–	–	1
Columbia	13	1	–	–	–	–	–	–	–	1
Coos	646	639	418	25	–	189	7	–	–	–
Crook	116	115	110	5	–	–	–	–	–	–
Curry	70	67	16	18	–	33	–	–	–	–
Deschutes	1,764	1,727	1,610	–	–	115	1	–	1	–
Douglas	930	897	670	84	–	139	–	3	–	1
Gilliam	–	–	–	–	–	–	–	–	–	–
Grant	56	48	46	–	–	–	1	–	1	–
Harney	40	40	40	–	–	–	–	–	–	–
Hood River	398	392	305	–	–	87	–	–	–	–
Jackson	2,269	2,213	2,043	38	–	124	5	3	–	–
Jefferson	210	206	151	–	–	48	3	–	–	4
Josephine	692	663	640	–	–	12	10	–	–	1
Klamath	783	781	644	–	–	134	2	1	–	–
Lake	51	51	37	14	–	–	–	–	–	–
Lane	3,717	3,572	3,049	42	–	454	21	–	3	3
Lincoln	401	386	222	112	–	41	10	–	1	–
Linn	1,049	1,020	653	223	–	140	3	1	–	–
Malheur	711	710	372	180	–	154	–	3	–	1
Marion	4,885	4,842	3,693	63	–	1,038	43	–	1	4
Morrow	1	–	–	–	–	–	–	–	–	–
Multnomah	11,336	11,129	9,228	346	–	1,516	30	2	1	6
Polk	7	–	–	–	–	–	–	–	–	–
Sherman	–	–	–	–	–	–	–	–	–	–
Tillamook	160	152	152	–	–	–	–	–	–	–
Umatilla	915	909	805	103	–	–	1	–	–	–
Union	314	310	207	101	–	–	1	1	–	–
Wallowa	43	41	41	–	–	–	–	–	–	–
Wasco	295	291	185	101	–	–	5	–	–	–
Washington	7,270	7,128	6,180	160	–	737	45	–	1	5
Wheeler	–	–	–	–	–	–	–	–	–	–
Yamhill	1,034	1,018	640	72	–	303	3	–	–	–

– Quantity is zero.
M.D. = Medical Doctor
D.O. = Doctor of Osteopathy
N.D. = Naturopathic Doctor
C.N.M. = Certified Nurse Midwife
R.N. = Registered Nurse
L.D.E.M. = Licensed Direct Entry Midwife

TABLE 2-28. County of Occurrence by Type of Institution and Delivery Attendant, Oregon Occurrence Births, 2002 (Continued)

County of Occurrence	Born Out-of-Hospital								
	Total Out-of-Hospital Births	M.D.	D.O.	N.D.	C.N.M.	R.N.	L.D. E.M.	Other Licensed Medical	Non-Medical
Total	947	5	–	121	90	8	262	3	458
Baker	3	–	–	–	–	–	2	–	1
Benton	24	–	–	1	–	–	11	–	12
Clackamas	80	–	–	14	1	2	13	–	50
Clatsop	12	–	–	–	–	–	–	–	12
Columbia	12	–	–	1	1	–	1	1	8
Coos	7	–	–	–	–	–	1	–	6
Crook	1	–	–	–	–	–	–	–	1
Curry	3	–	–	–	–	–	–	–	3
Deschutes	37	–	–	–	–	–	13	–	24
Douglas	33	–	–	2	25	1	–	–	5
Gilliam	–	–	–	–	–	–	–	–	–
Grant	8	–	–	–	–	–	8	–	–
Harney	–	–	–	–	–	–	–	–	–
Hood River	6	–	–	2	–	–	–	–	4
Jackson	56	–	–	–	5	–	21	–	30
Jefferson	4	1	–	–	–	–	1	–	2
Josephine	29	–	–	–	2	–	6	–	21
Klamath	2	–	–	–	–	–	–	–	2
Lake	–	–	–	–	–	–	–	–	–
Lane	145	–	–	9	43	4	23	–	66
Lincoln	15	–	–	–	–	–	10	–	5
Linn	29	–	–	1	–	–	12	–	16
Malheur	1	–	–	–	–	–	–	–	1
Marion	43	–	–	6	–	–	11	–	26
Morrow	1	–	–	–	–	–	1	–	–
Multnomah	207	1	–	69	7	1	51	1	77
Polk	7	–	–	–	–	–	5	–	2
Sherman	–	–	–	–	–	–	–	–	–
Tillamook	8	–	–	2	–	–	3	–	3
Umatilla	6	–	–	–	1	–	3	–	2
Union	4	–	–	–	–	–	2	–	2
Wallowa	2	–	–	–	–	–	1	–	1
Wasco	4	–	–	1	–	–	1	–	2
Washington	142	3	–	10	4	–	55	1	69
Wheeler	–	–	–	–	–	–	–	–	–
Yamhill	16	–	–	3	1	–	7	–	5

– Quantity is zero.
M.D. = Medical Doctor
D.O. = Doctor of Osteopathy
N.D. = Naturopathic Doctor
C.N.M. = Certified Nurse Midwife
R.N. = Registered Nurse
L.D.E.M. = Licensed Direct Entry Midwife

TABLE 2-29. Age of Mother by Birthweight, Oregon Resident Births, 2002

Birthweight (in grams)	Total Births	Age of Mother								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	45,190	51	4,410	11,997	12,634	10,320	4,674	1,036	61	7
499 and Less	53	–	8	14	16	8	7	–	–	–
500-999	172	1	20	50	38	39	18	6	–	–
1000-1499	247	1	25	61	65	52	37	5	1	–
1500-1999	553	3	50	131	141	137	77	10	4	–
2000-2499	1,592	4	192	393	404	349	184	57	9	–
<2500	2,617	9	295	649	664	585	323	78	14	–
2500-2999	6,264	11	761	1,803	1,627	1,315	611	123	12	1
3000-3499	16,401	19	1,764	4,569	4,571	3,571	1,551	339	14	3
3500-3999	14,586	11	1,246	3,763	4,216	3,472	1,524	336	16	2
4000-4499	4,469	1	304	1,024	1,311	1,137	551	136	4	1
4500-4999	763	–	37	173	216	215	101	20	1	–
5000 & Over	88	–	3	16	29	23	13	4	–	–
Unknown	2	–	–	–	–	2	–	–	–	–
Column Percent:	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1499 & less	1.0	3.9	1.2	1.0	0.9	1.0	1.3	1.1	1.6	–
1500-2499	4.7	13.7	5.5	4.4	4.3	4.7	5.6	6.5	21.3	–
2500-4499	92.3	82.4	92.4	93.0	92.8	92.0	90.7	90.2	75.4	100.0
4500 & over	1.9	–	0.9	1.6	1.9	2.3	2.4	2.3	1.6	–

– Quantity is zero.
NOTE: Rates and percentages are calculated excluding missing and unknown values.
WARNING: Rates and percentages based on less than 5 events are unreliable.

TABLE 2-30. Age of Mother by Birthweight for Unmarried Mothers, Oregon Resident Births, 2002

Birthweight (in grams)	Total Births	Age of Mother								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	13,962	50	3,408	5,533	2,727	1,404	671	155	13	1
499 and Less	18	–	4	8	3	1	2	–	–	–
500-999	60	1	14	26	9	7	1	2	–	–
1000-1499	100	1	23	41	13	10	11	1	–	–
1500-1999	197	3	43	71	35	21	22	1	1	–
2000-2499	588	3	154	208	101	65	39	16	2	–
<2500	963	8	238	354	161	104	75	20	3	–
2500-2999	2,300	11	600	927	402	223	108	27	2	–
3000-3499	5,331	19	1,365	2,150	1,028	479	230	57	2	1
3500-3999	4,045	11	945	1,629	812	436	171	36	5	–
4000-4499	1,121	1	235	399	261	134	75	15	1	–
4500-4999	183	–	25	69	52	25	12	–	–	–
5000 & Over	19	–	–	5	11	3	–	–	–	–
Unknown	–	–	–	–	–	–	–	–	–	–
Column Percent:	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1499 & less	1.3	4.0	1.2	1.4	0.9	1.3	2.1	1.9	–	–
1500-2499	5.6	12.0	5.8	5.0	5.0	6.1	9.1	11.0	23.1	–
2500-4499	91.7	84.0	92.3	92.3	91.8	90.6	87.0	87.1	76.9	100.0
4500 & over	1.4	–	0.7	1.3	2.3	2.0	1.8	–	–	–

– Quantity is zero.
WARNING: Rates and percentages based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-31. Race of Mother and Birthweight, Oregon Residents, 2002

Mother's Race/Ethnicity	Total Births	499 & Less	500-999	1,000-1,499	1,500-1,999	2,000-2,499	2,500-2,999	3,000-3,499	3,500-3,999	4,000-4,499	4,500-4,999	5,000 & Over	Unk.
Total Births	45,190	53	172	247	553	1,592	6,264	16,401	14,586	4,469	763	88	2
Hispanic													
Total Births	8,051	4	34	36	96	260	1,145	3,151	2,483	690	141	11	–
White	7,818	4	32	35	95	251	1,096	3,063	2,417	676	138	11	–
African American	38	–	–	–	–	2	10	16	8	2	–	–	–
American Indian	144	–	2	1	1	3	29	55	40	10	3	–	–
Chinese	1	–	–	–	–	–	1	–	–	–	–	–	–
Japanese	2	–	–	–	–	–	–	–	2	–	–	–	–
Hawaiian	4	–	–	–	–	–	2	1	1	–	–	–	–
Other Nonwhite	28	–	–	–	–	2	3	12	9	2	–	–	–
Filipino	8	–	–	–	–	1	2	3	2	–	–	–	–
Other Asian & Pacific Islander	3	–	–	–	–	–	–	1	2	–	–	–	–
Unknown Race	5	–	–	–	–	1	2	–	2	–	–	–	–
Non-Hispanic													
Total Births	36,980	48	136	211	455	1,330	5,092	13,190	12,055	3,762	622	77	2
White	33,022	42	120	177	389	1,141	4,332	11,645	11,007	3,512	583	72	2
African American	895	2	4	10	23	49	186	359	198	58	4	2	–
American Indian	660	1	2	6	9	33	101	204	222	65	15	2	–
Chinese	236	–	–	–	–	6	42	106	71	9	2	–	–
Japanese	133	1	1	–	3	3	21	54	42	8	–	–	–
Hawaiian	48	1	–	–	–	3	9	18	16	1	–	–	–
Other Nonwhite	4	–	–	–	–	–	1	2	–	–	1	–	–
Filipino	211	–	–	1	2	6	39	90	53	19	1	–	–
Other Asian & Pacific Islander	1,743	1	8	16	29	88	357	704	437	87	15	1	–
Unknown Race	28	–	1	1	–	1	4	8	9	3	1	–	–
Unknown Ethnicity	159	1	2	–	2	2	27	60	48	17	–	–	–

– Quantity is zero.

TABLE 2-32. Low Birthweight Infants by County of Residence, Oregon, 2002

County of Residence	Total Births	Low Birthweight Infants			Low Birthweight Rates[1]		
		Total Low Birth-weight	<= 1,499 grams	1,500-2,499 grams	Rate for All Low Birth-weight	Rate for <= 1,499 grams	Rate for 1,500-2,499 grams
Total	45,190	2,617	472	2,145	57.9	10.4	47.5
Baker	175	10	5	5	57.1	28.6	28.6
Benton	780	25	6	19	32.1	7.7	§ 24.4
Clackamas	4,068	204	35	169	§ 50.2	8.6	41.6
Clatsop	432	24	7	17	55.6	16.2	39.4
Columbia	513	23	6	17	44.8	11.7	33.1
Coos	630	30	2	28	47.6	3.2	44.4
Crook	215	17	2	15	79.1	9.3	69.8
Curry	150	11	3	8	73.3	20.0	53.3
Deschutes	1,487	102	19	83	68.6	12.8	55.8
Douglas	1,035	64	11	53	61.8	10.6	51.2
Gilliam	14	–	–	–	–	–	–
Grant	72	3	–	3	41.7	–	41.7
Harney	77	12	2	10	§ 155.8	26.0	§ 129.9
Hood River	326	15	–	15	46.0	–	46.0
Jackson	2,111	118	23	95	55.9	10.9	45.0
Jefferson	309	18	4	14	58.3	12.9	45.3
Josephine	738	43	6	37	58.3	8.1	50.1
Klamath	755	55	12	43	72.8	15.9	57.0
Lake	73	8	2	6	109.6	27.4	82.2
Lane	3,494	192	33	159	55.0	9.4	45.5
Lincoln	434	24	4	20	55.3	9.2	46.1
Linn	1,400	77	11	66	55.0	7.9	47.1
Malheur	482	25	6	19	51.9	12.4	39.4
Marion	4,430	250	48	202	56.4	10.8	45.6
Morrow	155	15	1	14	96.8	6.5	90.3
Multnomah	9,340	578	102	476	61.9	10.9	51.0
Polk	770	44	8	36	57.1	10.4	46.8
Sherman	15	–	–	–	–	–	–
Tillamook	242	19	1	18	78.5	4.1	74.4
Umatilla	1,066	51	4	47	47.8	3.8	44.1
Union	285	20	1	19	70.2	3.5	66.7
Wallowa	56	1	–	1	17.9	–	17.9
Wasco	290	13	4	9	44.8	13.8	31.0
Washington	7,568	449	93	356	59.3	12.3	47.0
Wheeler	10	1	–	1	100.0	–	100.0
Yamhill	1,193	76	11	65	63.7	9.2	54.5

– Quantity is zero.
1 All rates are per 1,000 births.
§ Rate is significantly different from the state rate.
* Detailed reporting of small numbers may breach confidentiality.
WARNING: Rates based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-33. Weight Gain of Mother by Period of Gestation, Hispanic Ethnicity, and Race of Mother, Oregon Resident Births, 2002

Period of Gestation[1] and Race and Hispanic Origin of Mother	Mother's Weight Gain During Pregnancy								
	All Births[2]	Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41+ pounds	Not Stated
All Gestation Periods	45,190	5,846	4,549	6,007	7,550	5,971	5,402	8,331	1,534
Non-Hispanic White	33,022	3,813	3,024	4,195	5,619	4,543	4,183	6,725	920
Non-Hispanic African American	895	153	92	129	125	91	102	169	34
Non-Hispanic American Indian	660	107	68	76	61	71	72	158	47
Non-Hispanic Asian[3]	2,323	265	238	380	428	368	281	309	54
Total Hispanic	8,051	1,471	1,110	1,196	1,290	868	737	914	465
Under 37 Weeks	3,684	742	486	485	543	366	296	566	200
Non-Hispanic White	2,741	517	334	369	406	287	238	473	117
Non-Hispanic African American	94	18	10	17	17	7	7	12	6
Non-Hispanic American Indian	79	19	11	3	8	4	7	17	10
Non-Hispanic Asian[3]	181	33	30	23	28	19	16	27	5
Total Hispanic	569	150	98	71	84	47	27	34	58
37-39 Weeks	22,728	2,978	2,346	3,224	3,926	2,976	2,683	3,951	644
Non-Hispanic White	16,644	1,992	1,582	2,255	2,922	2,248	2,077	3,179	389
Non-Hispanic African American	479	93	57	70	58	53	49	86	13
Non-Hispanic American Indian	333	47	43	39	36	41	36	70	21
Non-Hispanic Asian[3]	1,264	136	126	234	241	195	149	160	23
Total Hispanic	3,882	689	532	607	649	425	356	429	195
40 Weeks and Over	18,704	2,126	1,717	2,298	3,081	2,629	2,423	3,813	617
Non-Hispanic White	13,583	1,304	1,108	1,571	2,291	2,008	1,868	3,072	361
Non-Hispanic African American	321	42	25	42	50	31	46	71	14
Non-Hispanic American Indian	246	41	14	34	17	26	29	71	14
Non-Hispanic Asian[3]	875	96	82	123	159	154	116	122	23
Total Hispanic	3,587	632	480	518	557	396	354	451	199

1 Expressed in complete weeks.
2 The subtotals for gestation period do not add to the 'All gestation periods' total because of births of unknown gestation periods and births to mothers of unknown race or ethnicity.
3 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.

TABLE 2-34. Percent Low Birthweight by Weight Gain of Mother, Period of Gestation, Hispanic Ethnicity, and Race of Mother, Oregon Residents, 2002

Period of Gestation[1] and Race and Hispanic Origin of Mother	Mother's Weight Gain During Pregnancy								
	Total Births	Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41+ pounds	Not Stated
	Percent Low Birthweight Infants								
All Gestation Periods	5.8	10.6	7.5	5.6	4.8	3.8	3.5	4.8	9.3
Non-Hispanic White	5.7	11.0	7.2	5.8	4.6	3.9	3.3	4.9	8.5
Non-Hispanic African American	9.8	13.1	12.0	11.6	11.2	5.5	6.9	7.1	11.8
Non-Hispanic American Indian	7.7	11.2	10.3	3.9	4.9	4.2	11.1	5.1	14.9
Non-Hispanic Asian[2]	7.1	13.2	12.2	5.5	7.0	3.0	3.9	7.1	11.1
Total Hispanic	5.3	8.8	6.5	4.2	4.1	3.5	3.3	2.8	9.7
Under 37 weeks	51.2	63.3	51.0	49.3	44.9	44.3	42.6	49.5	58.5
Non-Hispanic White	49.6	63.0	47.9	46.6	43.6	45.3	39.5	50.5	53.8
Non-Hispanic African American	68.1	72.2	70.0	82.4	64.7	42.9	71.4	66.7	50.0
Non-Hispanic American Indian	46.8	47.4	45.5	66.7	25.0	50.0	71.4	35.3	60.0
Non-Hispanic Asian[2]	58.6	84.8	66.7	52.2	53.6	36.8	37.5	48.1	100.0
Total Hispanic	54.1	60.7	56.1	54.9	46.4	40.4	59.3	35.3	63.8
37-39 Weeks	2.8	4.4	3.4	2.6	2.5	1.8	2.0	2.8	2.3
Non-Hispanic White	2.6	4.2	3.2	2.7	2.3	1.9	1.8	2.6	2.6
Non-Hispanic African American	4.4	6.5	7.0	1.4	3.4	3.8	4.1	4.7	–
Non-Hispanic American Indian	3.6	4.3	4.7	2.6	2.8	2.4	8.3	2.9	–
Non-Hispanic Asian[2]	4.1	3.7	6.3	3.0	6.2	1.5	3.4	5.6	–
Total Hispanic	2.7	4.9	2.6	1.8	2.0	1.4	2.2	3.0	2.6
40 Weeks and Over	0.5	1.0	0.8	0.6	0.6	0.5	0.3	0.2	1.1
Non-Hispanic White	0.5	1.0	0.8	0.7	0.7	0.3	0.4	0.2	0.6
Non-Hispanic African American	0.6	2.4	–	–	2.0	–	–	–	–
Non-Hispanic American Indian	0.8	2.4	–	–	–	–	–	–	7.1
Non-Hispanic Asian[2]	0.8	2.1	1.2	1.6	–	0.6	–	–	4.3
Total Hispanic	0.5	0.8	0.6	–	0.2	1.3	–	0.2	1.5

– Quantity is zero.
1 Expressed in complete weeks.
2 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-35. Live Births with Selected Abnormal Conditions of the Newborn by Age of Mother, Oregon Residents, 2002

Conditions of New Born	Total Births	Mother's Age								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total Births	45,190	51	4,410	11,997	12,634	10,320	4,674	1,036	61	7
Anemia (Hct. <39/Hgb. <13)	90	–	5	26	29	18	8	4	–	–
Injury	518	2	61	181	119	101	45	9	–	–
Fetal Alcohol	11	–	–	4	1	6	–	–	–	–
Hyaline Membrane	196	3	16	53	62	37	23	2	–	–
Meconium Aspire	83	–	11	17	19	22	10	3	1	–
Ventilator < 30 mins.	1,065	–	132	339	268	200	102	23	1	–
Ventilator > 30 mins.	596	4	64	168	131	123	85	19	2	–
Seizures	38	–	8	10	8	8	3	1	–	–

– Quantity is zero.

TABLE 2-36. Live Births with Selected Abnormal Conditions of the Newborn by Race of Mother, Oregon Residents, 2002

Conditions of New Born	Total Births	Mother's Race							
		Non-Hispanic White	Non-Hispanic African American	Non-Hispanic American Indian	Non-Hispanic Asian[1]	Total Hispanic	Mexican	Central or South American	Other Hispanic
Total Births	45,190	33,022	895	660	2,323	8,051	7,427	325	299
Anemia (Hct. <39/Hgb. <13)	90	72	–	–	2	15	14	1	–
Injury	518	384	7	8	31	84	79	4	1
Fetal Alcohol	11	9	–	–	–	2	2	–	–
Hyaline Membrane	196	153	2	8	2	26	25	1	–
Meconium Aspire	83	59	1	1	6	13	13	–	–
Ventilator < 30 mins.	1,065	837	10	23	34	157	142	7	8
Ventilator > 30 mins.	596	477	7	13	15	76	71	2	3
Seizures	38	27	–	2	4	5	4	1	–

– Quantity is zero.
1 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.

TABLE 2-37. Congenital Anomalies by Age of Mother, Oregon Resident Births, 2002

Reported Congenital Anomaly	All Ages	Age of Mother					
		<20	20-24	25-29	30-34	35-39	40-54
Total Births[1]	45,190	4,461	11,997	12,634	10,320	4,674	1,097
No Congenital Anomaly reported	44,614	4,406	11,854	12,486	10,180	4,609	1,072
Anencephalus	3	–	1	1	1	–	–
Spina Bifida/Meningocele	17	1	2	5	7	2	–
Hydrocephalus	11	–	1	2	6	–	2
Microcephalus	3	–	2	–	1	–	–
Other Central Nervous System	5	–	1	1	3	–	–
Heart Malformations	67	8	12	13	20	10	4
Other Circulatory/Respiratory	13	2	2	3	4	2	–
Rectal Atresia/Stenosis	9	1	1	3	2	2	–
Tracheo-Esophageal[2]	5	2	–	–	1	2	–
Omphalocele/Gastroschisis	24	3	12	3	4	2	–
Other Gastrointestinal	11	1	6	3	1	–	–
Malformed Genitalia	83	12	21	27	16	6	1
Renal Agenesis	19	1	3	6	7	1	1
Other Urogenital	52	4	11	16	15	5	1
Cleft Lip/Palate	71	6	18	23	16	7	1
Polydactyly/Syndactyly/Adactyly	60	4	14	13	17	8	4
Club Foot	39	8	6	13	9	3	–
Diaphragmatic Hernia	10	1	4	1	2	2	–
Musculoskeletal/Integumental	51	1	16	13	15	3	3
Down's Syndrome	45	6	5	7	6	12	9
Other Chromosomal	11	–	–	1	4	4	2
Other	55	8	21	11	9	4	2

– Quantity is zero.
1 Total births include seven births where mother's age was not stated. No congenital anomalies were reported for those births.
2 Includes Tracheo-Esophageal Fistula and Esophageal Atresia.
Note: More than one type of malformation may be reported for a given birth.

TABLE 2-38.
Most Popular Baby Names,
Oregon Occurrence, 2002

Rank	**Boys**	Count	Rank	**Girls**	Count
1	JACOB	336	1	EMILY	277
2	ETHAN	331	2	MADISON	256
3	JOSHUA	240	3	EMMA	252
4	MICHAEL	237	4	HANNAH	242
5	ANDREW	233	5	ELIZABETH	209
6	AUSTIN	215	6	OLIVIA	198
7	JOSEPH	213	7	GRACE	175
8	ALEXANDER	210	8	ABIGAIL	171
8	DANIEL	210	9	SARAH	157
10	SAMUEL	209	10	SAMANTHA	154
11	LOGAN	208	11	TAYLOR	150
12	DAVID	206	12	ISABELLA	149
12	GABRIEL	206	13	ALEXIS	148
14	BENJAMIN	205	14	HAILEY	145
15	TYLER	204	15	JESSICA	139
16	ZACHARY	202	16	ASHLEY	137
17	RYAN	187	16	SYDNEY	137
18	ANTHONY	183	18	SOPHIA	132
19	DYLAN	178	19	NATALIE	129
19	NOAH	178	20	ALYSSA	122
Total Boys' Names: 3,696			Total Girls' Names: 5,602		

Induced Terminations of Pregnancy

Induced Terminations of Pregnancy

CURRENT TRENDS

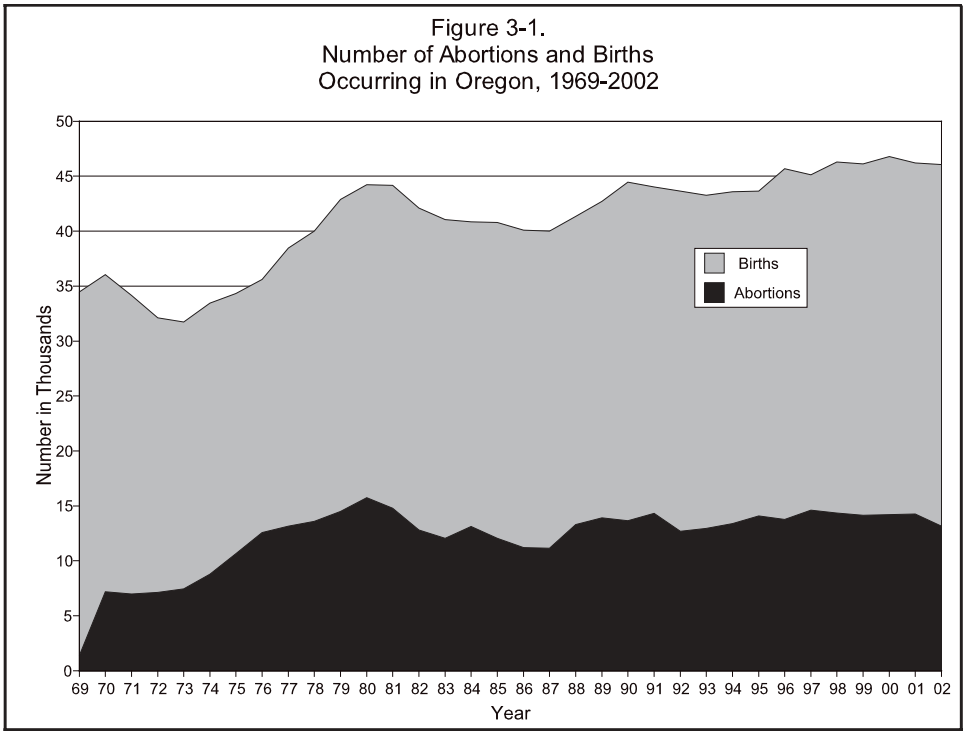
During 2002, 13,172 induced terminations of pregnancy occurred in Oregon. This total represents a 7.7 percent decrease from 2001 and a decrease of 16.3 percent from the record high of 15,735 abortions reported in 1980. [Figure 3-1].

This chapter reports occurrence data; that is, all abortions occurring in Oregon whether obtained by Oregon residents or residents of another state. During the 1990s, out-of-state residents generally accounted for 11 to 12 percent of abortions in Oregon. In 2002, 1,636 (12.4%) of patients were out-of-state residents. [Table 3-6]. Oregonians who obtained abortions out of state are not included in this data. Because rate calculations use Oregon population numbers, these calculations substitute out-of-state residents for the unknown number of Oregonians who obtained an abortion in another state. (See Appendix B, Technical Notes section for a more extensive discussion of the completeness of abortion data.)

Changes of behavior are revealed more by shifts in rates, which account for population change, than changes in the number of events. The U.S. abortion rate has been declining since 1980 from approximately 25 per 1,000 women age 15-44 to 16 per 1,000 in 2000.[1] In 2002, the Oregon rate declined to 17.7 per 1,000 women age 15-44, an 8.3 percent decrease from 2001 and 29.5 percent lower than the record high of 1980 (25.1 per 1,000). During the past twenty years, Oregon's abortion rate has fluctuated little; from a low of 17.5 per 1,000 women age 15-44 in 1987, to a high of 21.4 in 1991.

1. CDC. Abortion Surveillance - United States, 2000, MMWR, Nov. 28, 2003; V52, No. SS-12. This is the most current national data available.

Figure 3-1.
Number of Abortions and Births
Occurring in Oregon, 1969-2002



Comparison of Oregon and U.S. Abortion Ratios, 1972-2000

Year	U.S. Abortion Ratio[1]	Oregon's Abortion Ratio[2] as Percent Difference from U.S.
1972	180	+23%
1973	196	+19%
1974	242	+9%
1975	**	**
1976	312	+13%
1977	**	**
1978	347	-2%
1979	**	**
1980	359	-1%
1981	**	**
1982	354	-14%
1983	**	**
1984	364	-12%
1985	354	-16%
1986	354	-21%
1987	356	-21%
1988	352	-9%
1989	346	-6%
1990	344	-11%
1991	338	-4%
1992	334	-13%
1993	333	-10%
1994	321	-4%
1995[3]	311	+2%
1996	315	-4%
1997	306	+6%
1998	264[3]	+17%
1999	256[3]	+12%
*2000	245[4]	+24%

1 Estimated Number of Abortions per 1,000 Live Births.

2 See Table 3-2.

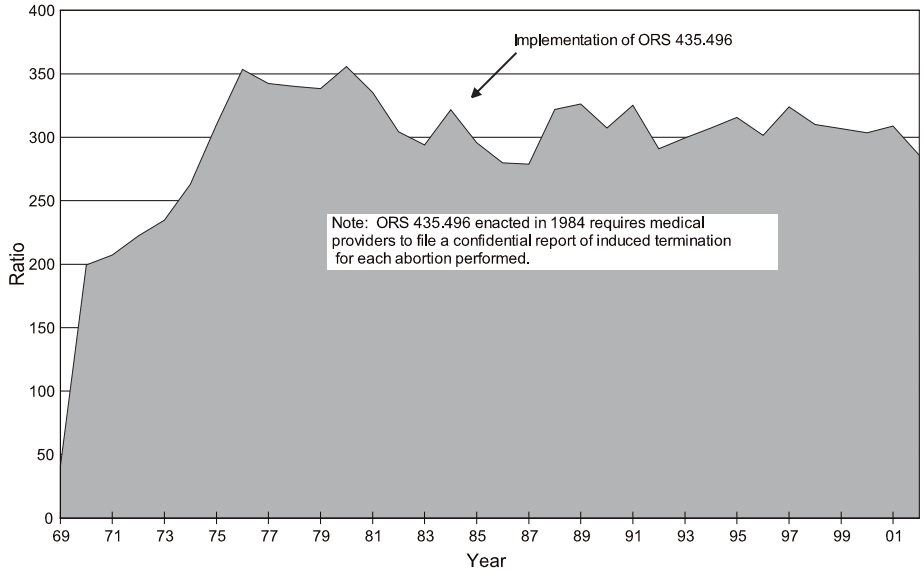
3 Alaska, California, New Hampshire, and Oklahoma did not report.

4 Alaska, Califonia, and New Hampshire did not report.

* Most recent data available.

** Data not available.

Figure 3-2.
Ratio of Abortions per 1,000 Live Births,
Oregon Occurrence, 1969-2002



PREGNANCY OUTCOMES

Figure 3-2 shows the ratio of abortions to births occurring in Oregon, indicating the prevalence of unwanted pregnancies that occurred in the state. Both the highest abortion rate (number of abortions per 1,000 female population) and the highest ratio of abortions (number of abortions per 1,000 births) occurred in 1980. Between 1980 and 1987, the ratio of abortions to births declined,

Figure 3-3.
Trends in Abortion Rates by Five-Year Age Groups,
Oregon Occurrence, 1980-2002

Note: Rates per 1,000 females in age group.

although an increased level of reporting beginning in 1984 (as a requirement of new legislation) obscures this fact. In 2002, there were 286.0 abortions per 1,000 occurrence births. This represents a 7.4 percent decrease from 2001 and a 19.6 percent decrease from 1980, when this ratio was 355.8 per 1,000 births. [Table 3-2].

In 1973, when the U.S. Supreme Court legalized abortion with the Roe v. Wade decision, Oregon's abortion ratio was about one-fifth higher than that of the U.S. [see sidebar, page 3-2]. In the mid-1980s and early 1990s this changed: Oregonians were less likely than residents of other states to terminate a pregnancy with an induced abortion. Since 1995, Oregon's abortion ratio has fluctuated around the U.S. ratio. The 2002 abortion ratio in Oregon was higher than the 2000 U.S. ratio (the most recent comparison available) 286 to 245; however this may be due in part to some states not reporting (Alaska, California, and New Hampshire).

ABORTION PATIENTS

Similar to birth rates, abortion rates differ by age group, race, ethnicity, marital status and prior pregnancy.

Almost two-thirds of abortion patients have never been married. [Table 3-3]. More than half have previously given birth. [Table 3-5].

Age

There is wide variation in abortion rates among age groups (see sidebar): The highest rate in 2002 occurred among women age 20-24 (38.8 per 1,000). The lowest rates were among women 45-49, (0.2 per 1,000) and women under age 15 (0.4 per 1,000). [Figure 3-3, sidebar].

Abortion Rates by Age and Percentage Distribution, Oregon Occurrence[1], 2002

Age	Rate[2]	%
< 15	0.4	0.3
15-19	18.4	17.0
20-24	38.8	33.9
25-29	25.2	22.1
30-34	16.8	15.0
35-39	8.5	8.3
40-44	2.9	3.1
45-49	0.2	0.2
15-44	17.7	99.5

[1] Occurrence data include all abortions reported by providers located in Oregon, regardless of the patient's residence. Because rate calculations employ Oregon population figures, these calculations, in effect, substitute out-of-state residents for Oregonians who may have obtained an abortion in another state.

[2] Per 1,000 females in age group.

Figure 3-4.
Percent Change of Birth and Abortion Rates,
Oregon Occurrence Abortions and Oregon Resident Births, 1980 vs. 2002

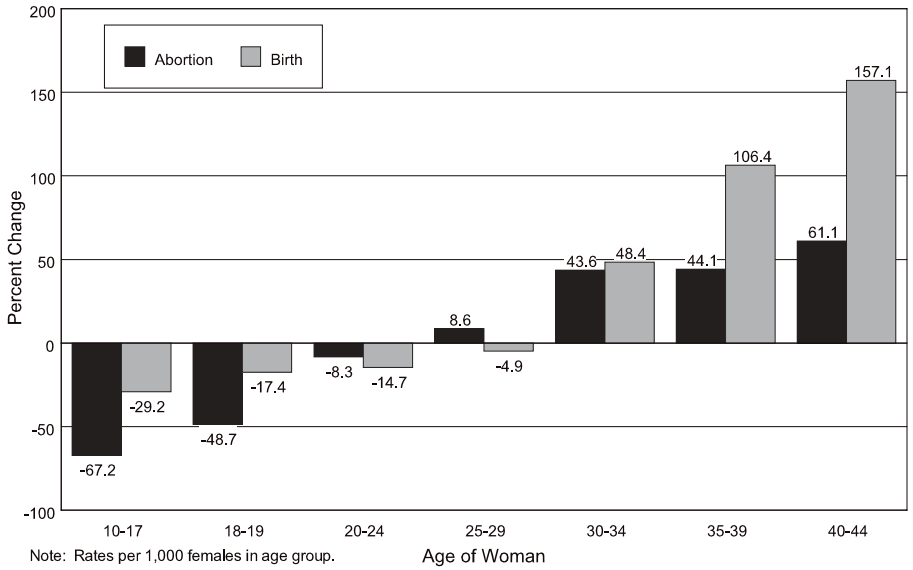
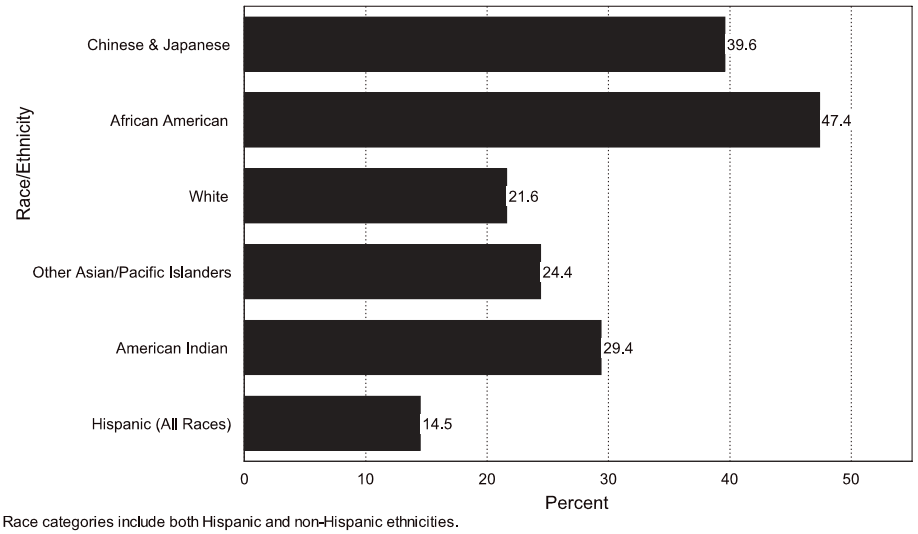


Figure 3-5.
Percentage of Pregnancies Terminated by Induced Abortion,
By Race/Ethnicity, Oregon Occurrence, 2002



Race categories include both Hispanic and non-Hispanic ethnicities.

The 2002 abortion rate among teens age 10-17 was 67.2 percent lower than the rate in 1980 (when the statewide abortion rate was highest); the rate for 18- to 19-year-olds was 48.7 percent lower. [Figure 3-4]. The absence of a corresponding increase in the birth rates among teens suggests success in avoiding unwanted pregnancy, rather than an increase in decisions to carry unwanted pregnancies to term. In contrast, among women age 30 and older, both abortion rates and birth rates were markedly higher in 2002 than in 1980.

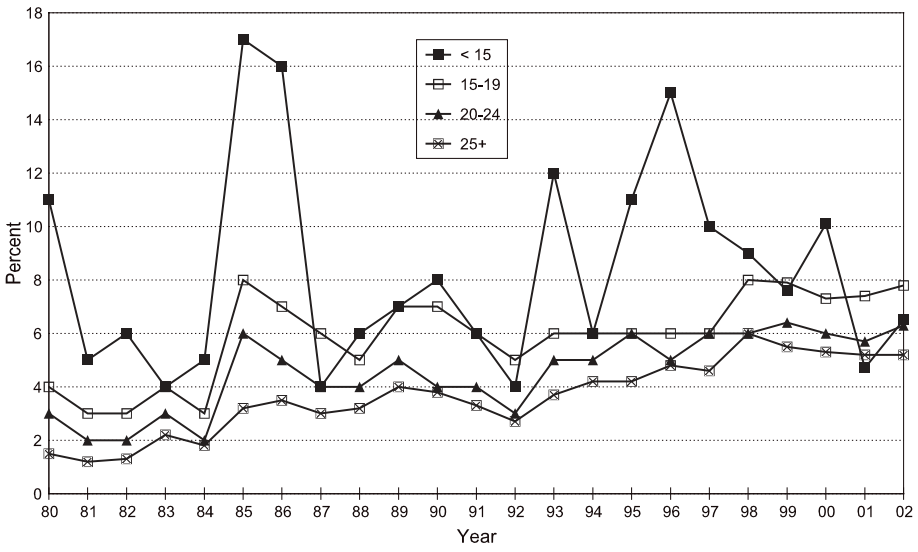
Race and Ethnicity

The frequency with which abortion procedures were used to terminate a pregnancy varied among ethnic and racial groups. African American women and Hawaiian women were most likely to have an abortion. In 2002, African American women terminated 47.4 percent of their pregnancies, Hawaiian women terminated 44.7 percent and Chinese and Japanese women terminated 39.6 percent. Because Oregon's demographic composition is predominately white, white women obtained the majority of abortions by count in 2002 (86%), although the group was second lowest in percentage of pregnancies terminated. As in past years, Hispanic women were least likely to terminate a pregnancy (14.5%). [Figure 3-5].

Contraceptive Use

In the majority of abortions that occur in Oregon, the pregnancy is not a result of contraceptive failure. In 2002, based upon data obtained from abortion reports, only 34.5 percent of women had used some method of contraception to avoid the pregnancy. [Table 3-5].

Figure 3-6.
Percentage of Abortions After 16 Weeks Gestation
By Five-Year Age Groups, Oregon Occurrence, 1980-2002



MEDICAL PROCEDURES

Nearly eighty-seven percent of abortions with known gestation were performed prior to the thirteenth week of pregnancy. Just one in seventeen (6%) of induced terminations were performed after sixteen weeks gestation. Suction curettage was the procedure used in 85.9 percent of terminations prior to the thirteenth week where method was reported. Dilation and evacuation was the procedure in 81.2 percent of terminations occurring after sixteen weeks gestation. Women age 15-19 were nearly 37 percent more likely to obtain an abortion after sixteen weeks gestation than were women age 20 and older. [Table 3-4]. The percentage of abortions occurring after sixteen weeks gestation increased for every group except for women age 25+, which remained the same at 5.2 % in 2002. [Figure 3-6].

Complications at the time of the procedure were reported for 250 terminations (1.9% of abortion patients): retained products (109 patients) and infection (24 patients) were the most common complications. In Oregon, no woman has died as the result of a legally induced termination.

GEOGRAPHIC DISTRIBUTION

Abortion rates varied widely within the state, yet all of Oregon's 36 counties had at least one resident who sought an abortion in 2002. The providers of such services, however, were geographically concentrated. In 2002, abortions were reported in 10 of Oregon's 36 counties. The degree of concentration was evident in the fact that nearly 98 percent of all abortions were obtained in the five counties of highest occurrence: Jackson, Lane, Marion, Multnomah and Washington. [Table 3-7]. Although abortions may often be sought outside a patient's community to help insure anonymity, this degree of concentration suggests that access to abortion services may be limited for some Oregon women.

TABLE 3-1. Number, Rate, and Percent Change for Pregnancies, Births, and Abortions to 15- to 44-year-olds, Oregon, 1980-2002

Year	Pregnancies[1]			Births[2]			Abortions[3]				
	Number	Rate	% Change in Rate from Previous Year	Number	Rate	% Change in Rate from Previous Year	Number	Rate	% Change in Rate from Previous Year	Percent of Pregnancies Ending in Abortion	% Change in Percent from Previous Year
1980	58,592	94.4	1.6	43,007	69.3	0.3	15,585	25.1	5.3	26.6	3.7
1981	57,586	91.4	-3.2	42,901	68.1	-1.7	14,685	23.3	-7.1	25.5	-4.1
1982	53,633	85.4	-6.6	40,947	65.2	-4.3	12,686	20.2	-13.3	23.7	-7.1
1983	51,847	83.3	-2.5	39,886	64.1	-1.7	11,961	19.2	-4.8	23.1	-2.5
1984	52,490	83.5	0.2	39,466	62.8	-2.0	13,024	20.7	7.8	24.8	7.4
1985	51,287	81.1	-2.9	39,364	62.2	-1.0	11,923	18.8	-9.1	23.2	-6.5
1986	49,894	79.5	-2.0	38,769	61.8	-0.6	11,125	17.7	-6.0	22.3	-3.9
1987	49,672	78.3	-1.5	38,600	60.9	-1.5	11,072	17.5	-1.5	22.3	0.0
1988	53,010	82.3	5.1	39,782	61.8	1.5	13,228	20.5	17.7	25.0	12.1
1989	54,989	84.7	2.9	41,139	63.3	2.4	13,850	21.3	3.8	25.2	0.8
1990	56,315	85.8	1.3	42,741	65.2	3.0	13,754	20.7	-3.0	24.1	-4.4
1991	56,561	85.1	-0.8	42,360	63.7	-2.3	14,201	21.4	3.3	25.1	4.1
1992	54,420	81.3	-4.5	41,826	62.5	-1.9	12,594	18.8	-12.0	23.1	-8.0
1993	54,286	80.0	-1.6	41,447	61.1	-2.2	12,839	18.9	0.5	23.7	2.6
1994	54,970	80.6	0.8	41,670	61.1	0.0	13,300	19.5	3.2	24.2	2.1
1995	56,521	82.8	2.7	42,568	62.4	2.1	13,953	20.4	4.6	24.7	2.1
1996	57,175	83.1	0.4	43,515	63.2	1.3	13,660	19.9	-2.5	24.4	-1.2
1997	58,106	84.0	3.1	43,619	63.0	-0.3	14,487	20.9	5.0	24.9	2.0
1998	59,284	84.5	0.6	45,075	64.2	1.9	14,209	20.3	-2.9	24.0	-3.6
1999	59,067	84.2	-0.4	45,039	64.2	0.0	14,028	20.0	1.5	23.7	-1.3
2000	59,758	82.4	-2.1	45,654	62.9	-2.0	14,104	19.4	-3.0	23.6	-0.4
2001	59,348	81.0	-1.7	45,177	61.6	-2.1	14,171	19.3	-0.5	23.9	1.3
2002	58,172	78.6	-3.0	45,071	60.9	-1.1	13,101	17.7	-8.3	22.5	-5.9
Change 1980-2002	-421	-15.8		2,064	-8.4		-2,484	-7.4		-4.1	
Percent Change 1980-2002	-0.7	-16.7		4.8	-12.1		-15.9	-29.5		-15.4	

[1]Pregnancies include resident births and occurrence abortions, but exclude fetal deaths and spontaneous abortions.

[2]Oregon residence figures for births (includes 15-44 year old females only).

[3]Oregon occurrence figures for abortions (includes 15-44 and unknown age females).

All rates per 1,000 population of 15-44 year old females. 2002: 740,268

Table 3-2. Live Births and Induced Abortions Occurring in Oregon, 1968-2002

Year	Births	Induced Abortions	
		Number	Ratio
1968	32,675	323	9.9
1969	34,477	1,407	40.8
1970	36,031	7,187	199.5
1971	33,753	6,997	207.3
1972	32,123	7,143	222.4
1973	31,738	7,447	234.6
1974	33,438	8,794	263.0
1975	34,312	10,641	310.1
1976	35,612	12,590	353.5
1977	38,448	13,163	342.4
1978	40,015	13,605	340.0
1979	42,874	14,501	338.2
1980	44,223	*15,735	355.8
1981	44,150	14,799	335.2
1982	42,093	12,807	304.3
1983	41,047	12,064	293.9
1984	40,841	**13,133	321.6
1985	40,778	12,056	295.6
1986	40,093	11,217	279.8
1987	39,996	11,147	278.7
1988	41,345	13,309	321.9
1989	42,710	13,928	326.1
1990	44,464	13,658	307.2
1991	44,007	14,310	325.2
1992	43,627	12,685	290.8
1993	43,272	12,961	299.5
1994	43,591	13,392	307.2
1995	44,609	14,079	315.6
1996	45,677	13,767	301.4
1997	45,117	14,612	323.9
1998	46,277	14,344	310.0
1999	46,106	14,145	306.8
2000	46,790	14,194	303.4
2001	46,200	14,272	308.9
2002	46,053	13,172	286.0

* The increase in the 1980 figure reflects improved reporting rather than an increase in the number of abortions performed. Approximately 1,000-1,400 of the abortions were performed by providers who did not participate in the voluntary abortion reporting system prior to 1980 even though they were performing abortions in previous years.
**The increase in the 1984 figure is probably a consequence of the implementation of ORS 435.496, which requires that an induced termination of pregnancy report be filed by abortion providers whenever an induced abortion is performed.
NOTE: Induced abortion ratio is the number of abortions per 1,000 live births.

TABLE 3-3. Induced Abortions by Race/Ethnicity, Marital Status and Age, Oregon Occurrence, 2002

Race/Ethnicity and Marital Status	Total	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	13,172	46	2,242	4,462	2,914	1,971	1,098	409	25	5
White	11,297	40	1,966	3,855	2,437	1,677	944	353	22	3
African American	840	4	154	331	218	81	38	13	1	–
American Indian	336	2	50	106	91	57	25	4	–	1
Chinese	173	–	17	38	29	36	40	11	2	–
Japanese	71	–	6	26	16	12	7	4	–	–
Hawaiian	42	–	10	12	13	5	2	–	–	–
Filipino	81	–	16	23	17	12	9	4	–	–
Other Asian or Pacific Islander	565	1	74	161	148	105	52	22	1	1
Other Non-white	13	1	2	3	5	2	–	–	–	–
Unknown	35	1	5	12	9	6	1	1	–	–
Hispanic	1,370	12	268	469	344	166	79	29	1	2
White	1,307	10	259	448	321	161	77	28	1	2
African American	29	2	2	13	10	1	1	–	–	–
American Indian	58	1	13	18	13	6	6	1	–	–
Chinese	1	–	–	–	–	1	–	–	–	–
Japanese	1	–	–	1	–	–	–	–	–	–
Hawaiian	2	–	1	–	1	–	–	–	–	–
Filipino	2	–	–	1	1	–	–	–	–	–
Other Asian or Pacific Islander	5	–	1	2	2	–	–	–	–	–
Other Non-white	11	1	1	3	4	2	–	–	–	–
Unknown	10	–	2	4	4	–	–	–	–	–
Non-Hispanic	11,786	34	1,973	3,987	2,567	1,801	1,018	379	24	3
White	9,979	30	1,706	3,402	2,116	1,513	866	324	21	1
African American	808	2	152	317	206	80	37	13	1	–
American Indian	277	1	37	88	78	50	19	3	–	1
Chinese	172	–	17	38	29	35	40	11	2	–
Japanese	70	–	6	25	16	12	7	4	–	–
Hawaiian	40	–	9	12	12	5	2	–	–	–
Filipino	79	–	16	22	16	12	9	4	–	–
Other Asian or Pacific Islander	560	1	73	159	146	105	52	22	1	1
Other Non-white	2	–	1	–	1	–	–	–	–	–
Unknown	24	1	3	8	4	6	1	1	–	–
Ethnicity Unknown	16	–	1	6	3	4	1	1	–	–
Marital Status										
Never Married	8,536	45	2,150	3,603	1,672	715	288	54	6	3
Now Married	2,301	–	50	446	597	585	409	197	16	1
Widowed	66	–	2	10	12	19	14	8	1	–
Divorced	1,383	–	3	158	378	433	292	117	2	–
Separated	709	–	15	187	215	185	79	27	–	1
Unknown	177	1	22	58	40	34	16	6	–	–

– Quantity is zero.

TABLE 3-4. Abortions in Relation to Length of Gestation by Method, Complications, and Age of Patient, Oregon Occurrence, 2002

Method, Complications and Age of Patient	Total	Weeks Gestation						
		< 9	9-12	13-16	17-20	21-22	23+	Unk.
Total	13,172	8,248	3,143	930	507	190	92	62
Method								
Suction curette	10,652	6,660	3,124	717	69	25	5	52
Medical (non-surgical)	1,581	1,557	7	2	3	4	2	6
Dilation & Evacuation	866	9	7	207	412	146	83	2
Intra-uterine Instillation	7	7	–	–	–	–	–	–
Vaginal Prostaglandin	39	–	–	2	21	13	1	2
Sharp Curettage	17	11	4	2	–	–	–	–
Other	6	1	–	–	2	2	1	–
Unknown	4	3	1	–	–	–	–	–
Complications								
None	12,917	8,063	3,096	922	502	184	91	59
Hemorrhage	11	7	2	1	–	–	–	1
Infection	24	17	4	1	1	1	–	–
Uterine Perforation	3	1	–	1	–	–	1	–
Cervical Laceration	8	6	1	1	–	–	–	–
Retained Products	109	84	16	3	2	3	–	1
Failure of First Method	20	15	3	–	–	1	–	1
Other	53	35	15	–	2	1	–	–
Multiple complications	22	19	2	1	–	–	–	–
Age Groups								
< 15	46	19	14	10	2	1	–	–
15-19	2,242	1,199	633	220	101	47	25	17
20-24	4,462	2,732	1,124	310	184	62	34	16
25-29	2,914	1,918	648	183	108	31	12	14
30-34	1,971	1,302	434	123	61	31	15	5
35-39	1,098	763	208	67	33	14	6	7
40-44	409	293	76	16	18	4	–	2
45+	25	18	6	1	–	–	–	–
N.S.	5	4	–	–	–	–	–	1

– Quantity is zero.

TABLE 3-5. Contraceptive Use, Number of Previous Abortions, and Number of Living Children by Age of Patient, Oregon Occurrence, 2002

Contraceptive Used, Previous Abortions, and Number of Living Children	Total	Age Groups								
		< 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	13,172	46	2,242	4,462	2,914	1,971	1,098	409	25	5
None Used	8,620	32	1,631	2,916	1,865	1,208	688	261	16	3
No Previous Abortion	4,865	31	1,304	1,728	892	511	272	115	10	2
One	2,232	1	255	767	546	359	221	78	4	1
Two	874	–	50	274	247	175	95	32	1	–
Three	360	–	13	95	97	85	48	21	1	–
Four or More	266	–	6	45	79	75	47	14	–	–
Pills Used	1,437	–	207	576	343	198	87	24	1	1
No Previous Abortion	751	–	157	319	147	78	38	11	1	–
One	412	–	38	179	94	62	32	6	–	1
Two	184	–	11	58	68	34	10	3	–	–
Three	52	–	–	16	16	12	6	2	–	–
Four or More	35	–	1	3	16	12	1	2	–	–
Condoms Used	2,439	14	371	814	524	410	232	68	5	1
No Previous Abortion	1,284	13	307	475	230	153	78	25	2	1
One	704	1	54	227	162	152	82	25	1	–
Two	263	–	8	73	83	53	36	8	2	–
Three	107	–	2	22	32	27	16	8	–	–
Four or More	75	–	–	17	16	23	18	1	–	–
Other Contraceptive	886	–	56	227	232	186	113	68	4	–
No Previous Abortion	431	–	44	125	96	80	52	32	2	–
One	259	–	11	68	78	53	28	21	–	–
Two	115	–	–	18	39	28	19	9	2	–
Three	50	–	1	9	13	16	9	2	–	–
Four or More	28	–	–	6	6	9	5	2	–	–
Contraceptive Use Unknown	12	–	4	4	2	1	1	–	–	–
No Previous Abortion	8	–	3	3	1	–	1	–	–	–
One	3	–	–	1	1	1	–	–	–	–
Two	1	–	1	–	–	–	–	–	–	–
Three	–	–	–	–	–	–	–	–	–	–
Four or More	–	–	–	–	–	–	–	–	–	–
Previous Abortions Unknown	4	–	–	–	–	–	3	1	–	–
Number of Living Children										
No Children	5,709	44	1,791	2,210	961	426	205	64	6	2
Total with Children	7,459	2	451	2,250	1,952	1,545	893	344	19	3
One	3,435	1	379	1,393	781	516	272	88	3	2
Two	2,626	1	66	687	758	609	352	140	13	–
Three	949	–	4	142	306	276	148	70	2	1
Four	309	–	1	22	85	99	74	28	–	–
Five or More	140	–	1	6	22	45	47	18	1	–

– Quantity is zero.

NOTE: Contraceptive totals include abortions where the number of previous abortions is unknown. Multiple contraceptive methods may be reported for a single patient.

TABLE 3-6. Induced Terminations of Pregnancy by Residence and Age Group of Patient, Oregon Occurrence, 2002

Place of Residence	Total	Age Groups								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	13,172	46	2,242	4,462	2,914	1,971	1,098	409	25	5
Baker	14	–	3	6	2	2	1	–	–	–
Benton	127	–	26	51	22	13	13	1	–	1
Clackamas	1,064	8	204	331	223	159	94	41	4	–
Clatsop	88	1	12	27	17	17	10	4	–	–
Columbia	97	1	23	28	17	16	10	2	–	–
Coos	97	–	19	33	21	12	7	4	1	–
Crook	23	–	3	8	3	3	1	5	–	–
Curry	21	–	4	7	5	1	2	2	–	–
Deschutes	284	–	52	94	63	44	20	11	–	–
Douglas	174	1	45	63	29	14	14	8	–	–
Gilliam	4	–	–	1	–	1	1	1	–	–
Grant	4	–	1	–	1	1	1	–	–	–
Harney	10	–	1	1	5	1	2	–	–	–
Hood River	50	–	15	11	14	8	1	1	–	–
Jackson	462	–	89	155	85	73	44	16	–	–
Jefferson	44	–	8	13	15	6	2	–	–	–
Josephine	136	1	26	35	26	28	13	7	–	–
Klamath	139	2	31	41	26	25	9	5	–	–
Lake	3	1	1	–	1	–	–	–	–	–
Lane	1,107	7	175	427	248	140	81	26	2	1
Lincoln	108	–	24	32	23	19	7	3	–	–
Linn	196	3	40	77	39	19	13	5	–	–
Malheur	5	–	–	1	2	–	1	1	–	–
Marion	862	4	176	290	177	113	80	21	1	–
Morrow	5	–	–	1	3	1	–	–	–	–
Multnomah	4,164	8	589	1,416	1,009	656	345	133	6	2
Polk	119	–	19	46	28	15	8	2	1	–
Sherman	1	–	–	1	–	–	–	–	–	–
Tillamook	49	–	15	11	8	5	9	1	–	–
Umatilla	56	–	12	23	12	6	2	1	–	–
Union	30	–	6	9	8	5	2	–	–	–
Wallowa	4	–	1	2	–	1	–	–	–	–
Wasco	46	–	5	15	18	3	4	1	–	–
Washington	1,733	3	275	604	384	264	138	59	5	1
Wheeler	1	–	–	–	1	–	–	–	–	–
Yamhill	208	2	55	70	35	29	12	5	–	–
Out of State	1,636	4	287	532	343	271	151	43	5	–
Not stated	1	–	–	–	1	–	–	–	–	–

– Quantity is zero.

TABLE 3-7. Induced Terminations of Pregnancy by County of Residence and County of Occurrence, Oregon, 2002

County of Residence	Total	County of Occurrence									
		Benton	Clackamas	Crook	Deschutes	Jackson	Klamath	Lane	Marion	Multnomah	Washington
Total	13,172	17	13	3	246	639	10	972	673	10,163	436
Baker	14	–	–	–	1	–	–	–	–	13	–
Benton	127	13	–	–	–	1	–	29	27	54	3
Clackamas	1,064	–	2	–	–	–	–	–	7	1,040	15
Clatsop	88	–	–	–	–	–	–	–	–	74	14
Columbia	97	–	–	–	–	–	–	–	–	96	1
Coos	97	–	–	–	–	2	–	37	6	52	–
Crook	23	–	–	3	14	–	–	1	–	5	–
Curry	21	–	–	–	–	6	–	11	1	3	–
Deschutes	284	–	–	–	197	–	–	11	5	70	1
Douglas	174	–	–	–	1	8	–	82	9	74	–
Gilliam	4	–	–	–	–	–	–	–	–	4	–
Grant	4	–	–	–	1	–	–	–	–	3	–
Harney	10	–	–	–	5	–	–	–	–	5	–
Hood River	50	–	–	–	–	–	–	–	–	50	–
Jackson	462	–	–	–	–	408	–	8	–	45	1
Jefferson	44	–	–	–	17	–	–	1	–	26	–
Josephine	136	–	–	–	–	113	–	5	1	17	–
Klamath	139	–	–	–	6	78	9	14	2	30	–
Lake	3	–	–	–	1	–	–	–	–	2	–
Lane	1,107	–	–	–	–	2	–	716	65	322	2
Lincoln	108	–	–	–	–	–	–	11	9	73	15
Linn	196	4	–	–	–	–	–	28	54	108	2
Malheur	5	–	–	–	1	1	–	–	–	3	–
Marion	862	–	2	–	–	1	–	4	410	431	14
Morrow	5	–	–	–	–	–	–	–	–	5	–
Multnomah	4,164	–	3	–	–	–	–	2	1	4,122	36
Polk	119	–	–	–	–	–	–	–	54	59	6
Sherman	1	–	–	–	–	–	–	–	–	1	–
Tillamook	49	–	–	–	–	–	–	–	–	35	14
Umatilla	56	–	–	–	–	–	–	–	1	53	2
Union	30	–	–	–	–	–	–	1	1	28	–
Wallowa	4	–	–	–	–	–	–	–	–	3	1
Wasco	46	–	–	–	–	–	–	–	–	46	–
Washington	1,733	–	3	–	–	1	–	–	3	1,464	262
Wheeler	1	–	–	–	–	–	–	1	–	–	–
Yamhill	208	–	–	–	–	–	–	1	17	150	40
Out of State	1,636	–	3	–	2	18	1	9	–	1,596	7

– Quantity is zero.

Teen Pregnancy

Teen Pregnancy

CURRENT TRENDS

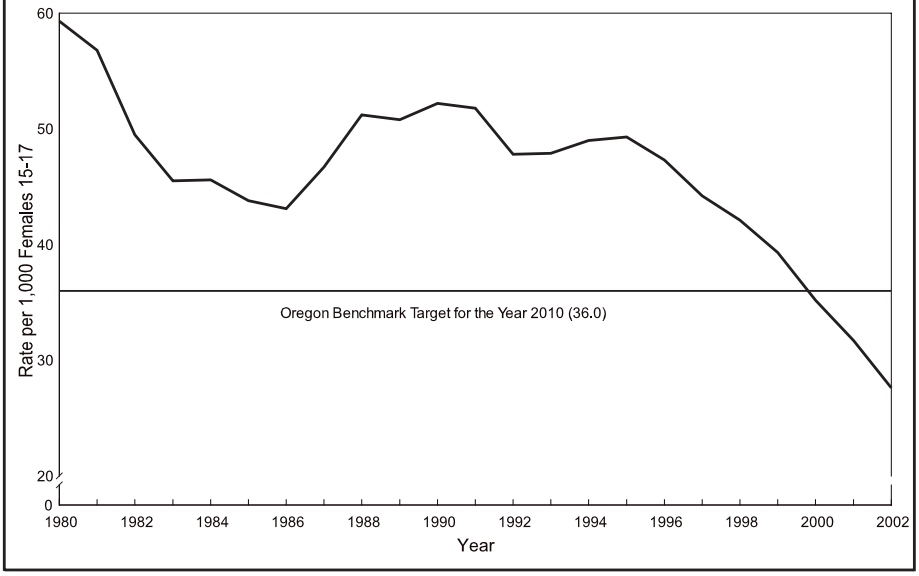
In 2002, there were 6,514 pregnancies to Oregon females under age 20. Of these, 54.1 percent had neither completed high school nor obtained a general equivalency diploma (GED). Of those who took their pregnancies to term, 77.6 percent were unmarried at the time of birth. [Table 4-10.] Because of differences in risk and severity of outcomes, this report bases its analysis on two separate age groups to aid in understanding teen pregnancy trends: females under age 18 and females age 18 to 19. These two groups are compared to each other and to women age 20 and older. The number of pregnancies is determined by adding the numbers of births and abortions reported for Oregon residents. Because some neighboring states (e.g., California) do not exchange abortion reports with Oregon, those who obtain an out-of-state abortion are not always included in this count. [See Appendix B].

Pregnancy rates for Oregonians age 10 to 17 declined 13.5 percent from 2001.

OREGON FEMALES UNDER 18

Efforts at preventing teen pregnancies are focused primarily on females under age 18. During 2002, at least 2,127 pregnancies occurred among Oregon females under age 18, 295 fewer than in 2001. [Table 4-2]. In 2002, the statewide pregnancy rate among women age 10 to 17 decreased 13.5 percent, from 12.6 in 2001 to 10.9 in 2002 (see Table 4-2). This continues a six-year decline and indicates that teens are showing improvement in protecting themselves against becoming pregnant. Pregnancy rates for teens age 10 to 17 varied by county and six counties had rates statistically significantly different than the state rate. [Table 4-5]. The 2002 rate for

Figure 4-1.
Teen Pregnancy Rates,
Oregon Residents Age 15-17, 1980-2002



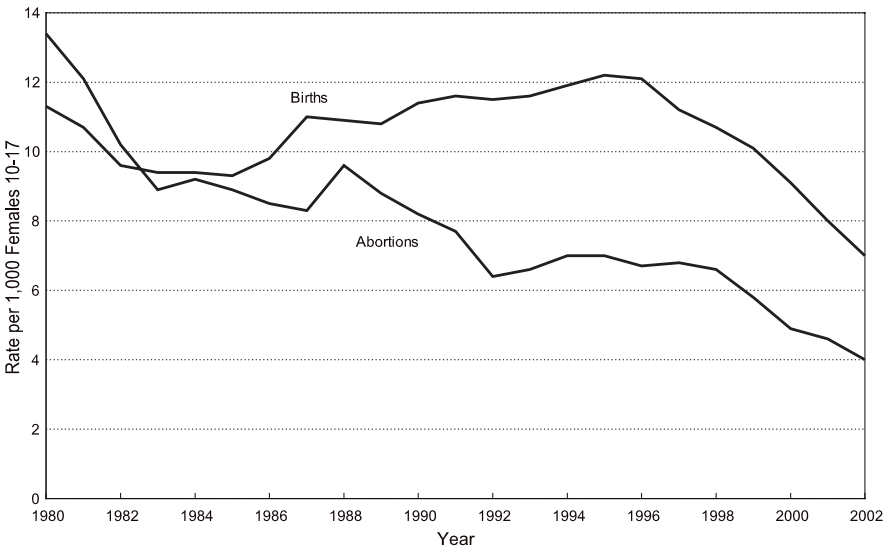
OREGON BENCHMARK:
Teen Pregnancy Rates 15-17

YEAR 2010 GOAL: 36.0

YEAR	RATE
1980	59.3
1981	56.8
1982	49.5
1983	45.5
1984	45.6
1985	43.8
1986	43.1
1987	46.7
1988	51.2
1989	50.8
1990	52.2
1991	51.8
1992	47.8
1993	47.9
1994	49.0
1995	49.3
1996	47.3
1997	44.2
1998	42.1
1999	39.3
2000	35.2
2001	31.7
2002	27.6

Pregnancy rate per 1,000 Oregon resident females ages 15-17.

Figure 4-2.
Birth and Abortion Rates,
Oregon Residents Age 10-17, 1980-2002



teens 15-17 was 23.3 percent below the Oregon Benchmark goal for the year 2010: 36 pregnancies per 1,000 females. [Figure 4-1].

In 2002, the three youngest teens to become pregnant were age 12. There were 96 pregnancies to females under age 15.

Births to Teens Under 18

There were 1,358 births to Oregon teens under age 18 in 2002. Sixty-four percent of pregnancies among teens age 10 to 17 resulted in a live birth, compared to 46 percent in 1980. [Table 4-2]. It was the mother's first child in 90.6 percent of these births. [Table 4-9]. The birth rate for teens age 10 to 17 was 7.0, a 12.5 percent decrease from 2001. Fifty-one girls age 10 to 14 gave birth during 2002, fifteen fewer than the previous year. [Table 4-2].

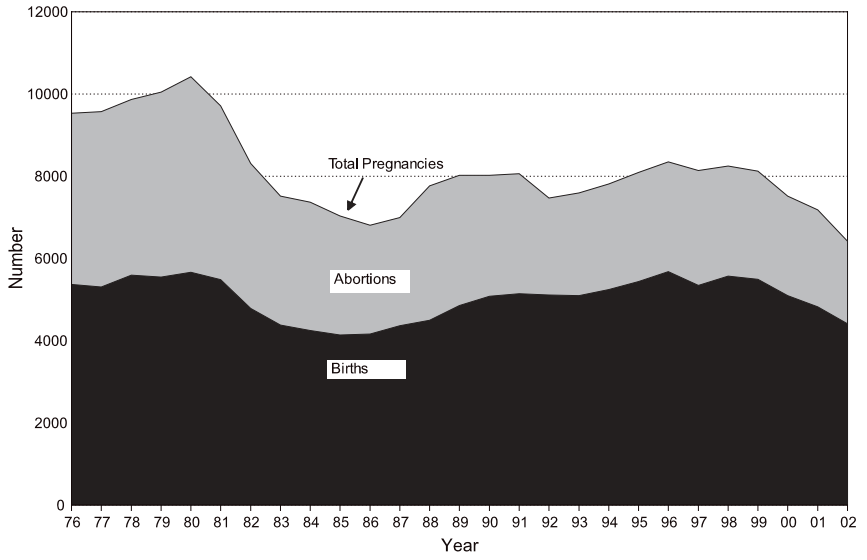
Abortion rates for teens age 10 to 17 decreased 13.0 percent from 2001

Abortions to Teens Under 18

Abortion rates among teens decreased compared to 2001; for females age 10 to 17, the abortion rate decreased by 13.0 percent. [Table 4-2; Figure 4-2]. There were 769 abortions to Oregonians age 10 to 17 reported during 2002, 110 fewer abortions than in 2001. Since the record high abortion rate recorded in 1980, the rate for females age 10 to 17 has decreased by more than 70 percent (from 13.4 to 4.0 per 1,000 females).

Figures 4-3 and 4-4 present the historical pattern of the result of pregnancies (birth and abortion). As Figure 4-4 indicates, teens are more likely to carry a pregnancy to term now than they were in 1980. Since 1980, the younger the teen, the more likely the pregnancy would be terminated. However, even among teens under 15, over half of the pregnancies resulted in a live birth in 2002. [Table 4-2; Figure 4-4].

Figure 4-3.
Births, Abortions, and Total Pregnancies,
Oregon Residents Age 15-19, 1976-2002



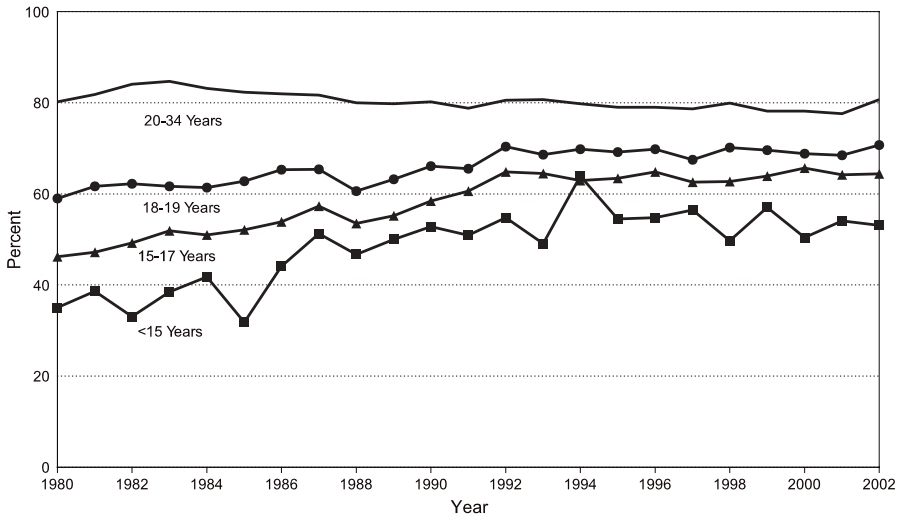
OREGON FEMALES 18-19

In 2002, the pregnancy rate for Oregonians age 18 to 19 was 90.8 per 1,000 females, a 10.1 percent decrease from 2001. Comparisons with the 2001 figures show decreases in both the birth rate (7.2%) and the abortion rate (16.4%) among women age 18 to 19. [Table 4-1].

Abortion rates for teens age 18 to 19 fell 16.4 percent.

Of the 4,387 pregnancies to women age 18 to 19, 70.7 percent (3,103) resulted in birth. [Figure 4-4]. It was the first child for 74.8 percent of the women giving birth.

Figure 4-4.
Percentage of Pregnancies Resulting in Birth,
By Age Group, Oregon Residents, 1980-2002



Includes births and all known abortions to Oregon residents. (Not all states report abortions).

OREGON RATES VS. U.S. RATES

In Oregon, the birth rate among 15- to 19-year-olds (commonly used in historical and national comparisons) decreased 9.3 percent in 2002 (36.2 vs. 39.9 per 1,000 females in 2001). [Table 4-1]. The 2002 rate was 34.4 percent lower than the 1991 rate of 55.2 per 1,000, which is the highest rate recorded during the past quarter century. [Figure 4-5].

Oregon's 2002 birth rate for 15- to 19-year-old teens was 15.8 percent below the national rate (36.2 vs. 43.0 per 1,000 females, see sidebar). Oregon's lower teen birth rate may be attributed in large part to its demographic characteristics. Historically, African American and Hispanic populations have had higher teen birth rates and have been under-represented in the state. Oregon's diversity, however, is increasing. Between the 1990 and the 2000 census, the proportion of Hispanic residents doubled from 4 percent to 8 percent while the proportion of racial minorities was relatively unchanged.[1] During this same ten year period, Oregon's teen pregnancy rate for 15- to 19-year-olds fell from 86.0 per 1,000 females in 1990 to 52.6 in 2002, a 38.8 percent decrease. [Table 4-1]. (For further discussion of Oregon's demographic characteristics and teen pregnancy rates, see the Methodology section of Appendix B).

Teen Birth Rates[1]

Age	Oregon		U.S.
	2002	2001	2002
10-17	7.0	8.0	NA
10-14	0.4	0.6	0.7
15-17	17.7	20.4	23.2
18-19	64.2	69.2	72.8
15-19	36.2	39.9	43.0

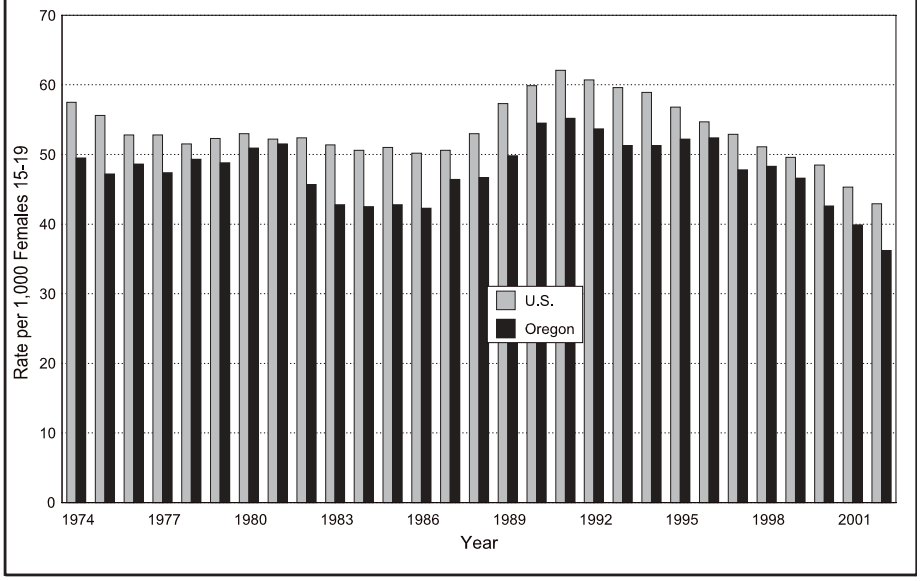
[1] All rates per 1,000 females.

LEVEL OF INFANT HEALTH

Low Birthweight

Whether reflecting premature delivery or small size for gestational age, the low birthweight (LBW) rate (less than 2,500 grams or 5.5 pounds) is the best single measure of health

Figure 4-5.
Birth Rates for 15- to 19-Year -Olds,
Oregon and the U.S., 1974-2002



for newborn infants. Changes in the low birthweight rate of a group might indicate aggregate changes in the mothers' personal behavior during pregnancy or other conditions that affect fetal health such as nutrition or access to prenatal care.

In 2002, the low birthweight rate for teen mothers age 15-19 was 66.9 per 1,000 births (Table 4-4), a 1.7% increase from 2001. For 15- to 17-year-olds, the rate (71.2 per 1,000) decreased by 13.1 percent. The teen rate for low birthweight remained higher than those for mothers age 20 and older (56.8 per 1,000). [Table 2-28]. The difference in the low birthweight rates between the two groups has been persistent. [Figure 4-6].

Race and Ethnicity

Demographic factors such as race, ethnicity, and marital status combine with age to influence the likelihood that a teenager will receive early prenatal care. In 2002, for example, 55.5 percent of unmarried Hispanics age 15-17 started prenatal care during their first trimester, compared to 74.6 percent of married non-Hispanic whites age 18-19. [Table 4-4].

Low birthweight rates to teen mothers by racial/ethnic grouping are displayed in the sidebar and in Table 4-4. Between 2001 and 2002, the rate of low birthweight for Hispanic teens age 15-17 decreased by 7.6 percent, but increased by 5.2 percent for those age 18-19. Among non-Hispanic, non-white groups, the low birthweight rate for teens age 15-17 remained the same but increased by 18.7 percent for those age 18-19 (see sidebar).

Low Birthweight Rates[1] By Race/Ethnicity and Age, 2002

Race/Ethnicity	Age	
	15-17	18-19
Rates		
Non-Hispanic White	65.4	63.4
Hispanic (All Races)	66.8	59.1
Non-hispanic, Non white	116.7	97.8
Percent Change, 2002 vs. 2001		
Non-Hispanic White	-20.0	10.8
Hispanic (All Races)	-7.6	5.2
Non-hispanic, Non white	0	18.7

[1] All rates per 1,000 births.

Figure 4-6.
Rates of Low Birthweight Birth,
Oregon Residents <20 and 20+, 1997-2002

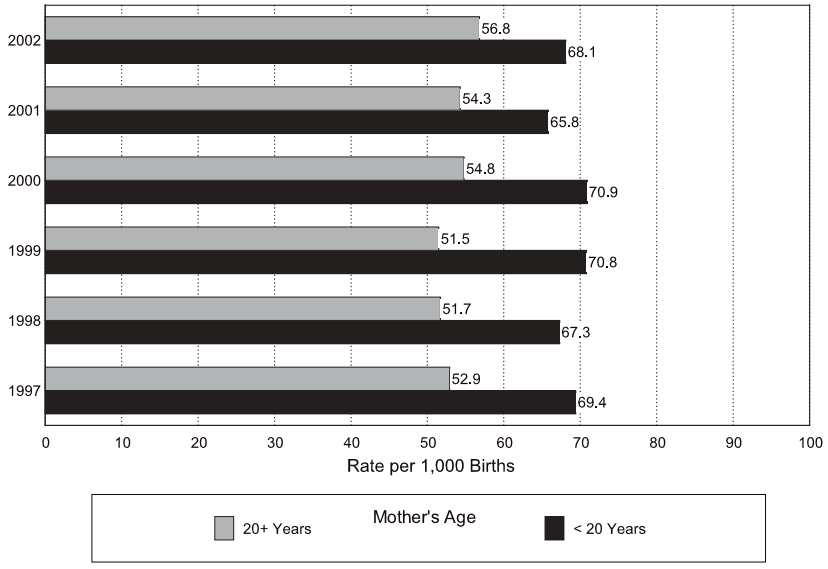
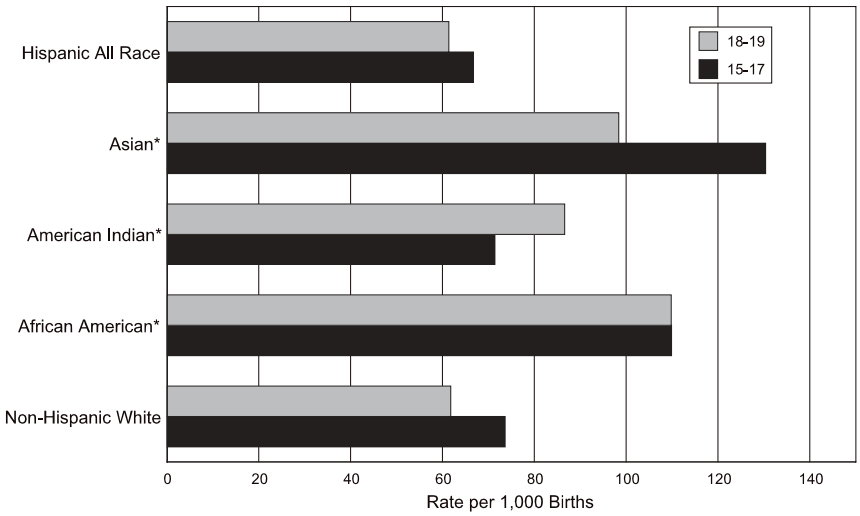


Figure 4-7.
Low Birthweight Rates to Teens 15-19 by Mother's Race and Age, Oregon Residents, 2000-2002

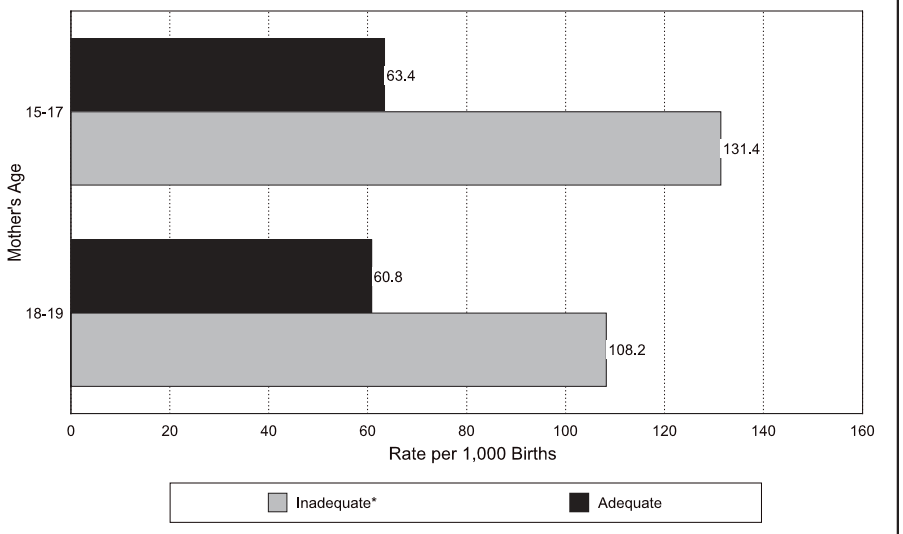


*Category includes both Hispanic and Non-Hispanic mothers.

Prenatal Care

Table 4-3 shows the association between inadequate prenatal care and frequency of low birthweight infants among teens who gave birth in 2002. Among mothers age 15-19, those who received inadequate prenatal care were more likely to have low birthweight babies than those who had received adequate care (116.0 vs. 61.6 per 1,000 live births). Figure 4-8 shows low birthweight rates per 1,000 live births by adequate and inadequate prenatal care. For mothers 15-17, the rates were 63.4 vs. 131.4; for mothers 18-19, they were 60.8 vs. 108.2.

Figure 4-8.
Low Birthweight Rates by Mother's Age and Prenatal Care, Oregon Residents, 2002



* Inadequate Care = 3rd Trimester Care Only or Less Than 5 Total Visits.

Early Prenatal Care

Prenatal care should begin within the first three months of pregnancy to allow early detection of complications and to ensure the health of both the mother and the infant. An Oregon Benchmark goal is that by the year 2010, ninety percent of pregnant women, regardless of age, will begin medical care during the first trimester of pregnancy. Teens are farther from this goal than any other age group: in 2002, only 66.2 percent of teens giving birth started prenatal care during the first trimester compared to 83.3 percent for women age 20 and older (see sidebar). Only 61.0 percent of those under age 18 received early prenatal care, a slight increase from 60.5 percent in 2001. [Table 4-10].

Oregon Benchmark:
First Trimester Prenatal Care, 2002

Year 2010 Goal: 90%

All Women	81.6%
All Teens	66.2%
10-17 Years	61.0%
18-19 Years	68.5%
20 + Years	83.3%

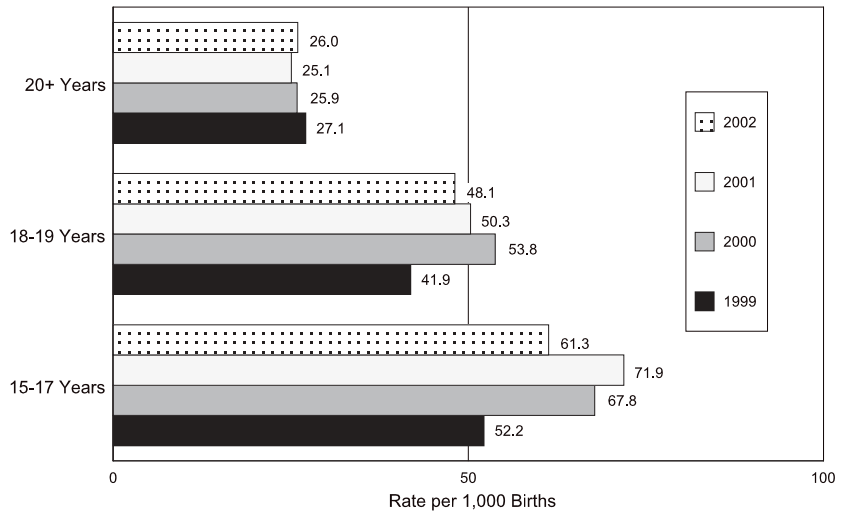
Inadequate Prenatal Care

Inadequate prenatal care has been defined as care that begins after the second trimester of pregnancy, or that involves fewer than five prenatal visits. By this measure, 10.5 percent of 15- to 17- year-old teens and 8.7 percent of 18- to 19- year-old teens received inadequate prenatal care in 2002. This compares with 4.8 percent of women age 20 or older that received inadequate care. [Table 4-10]. The proportion of women under age 20 who received inadequate prenatal care decreased by 2.1 percent in 2002, declining from 9.6 percent in 2001 to 9.4 percent.

Late Care and No Prenatal Care

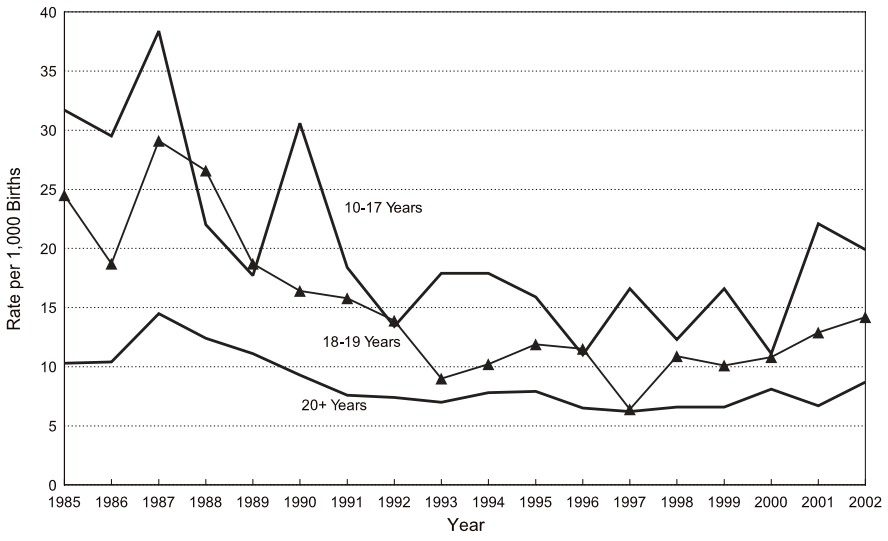
The proportion of teens age 15-17 who began prenatal care during the third trimester decreased 14.7 percent to 61.3 per 1,000 live births in 2002. [Figure 4-9]. Teens under age 18 are

Figure 4-9.
Rates of Late Prenatal Care,
by Age Group Oregon Residents, 1999-2002



Late Prenatal Care = Care began during third trimester. Calculations exclude births with unknown prenatal care.

Figure 4-10.
Rates of No Prenatal Care by Age,
Oregon Resident Births, 1985-2002



Low Birthweight Rates [1] By Mother's Age and Smoking Status, Oregon, 2002

	< 20	20+
Nonsmokers	64.8	53.1
Smokers	76.2	81.6

[1] All rates per 1,000 births.

more likely than older women to go through pregnancy without a single visit to a medical provider; in 2002, the rate of no prenatal care among teens under age 18 was 19.9 per 1,000 live births, more than two times the rate of women age 20 and older (8.7 per 1,000 live births). [Figure 4-10.]

Low Apgar Score

The Apgar score recorded by the birth attendant five minutes after birth provides another measure of infant health at time of delivery. A score of less than seven is considered low and indicates that an infant is at greater than normal risk for morbidity and mortality. The 2002 low Apgar rate for newborns of mothers age 10-19 was 18.4 per 1,000 births (Table 4-9), a 17.1 percent decrease from 2001 (22.2 per 1,000). The low Apgar rate for infants born to women under age 20 was 9.6 percent higher than the rate for infants born to women 20 years or older (15.6).

SUBSTANCE USE DURING PREGNANCY

Estimates of tobacco and alcohol use during pregnancy are presumed to be minimum counts due to under-reporting on birth certificates. The legal age to purchase or possess alcohol in Oregon is 21 years old. The legal age to purchase tobacco products is age 18.

Tobacco

Teens age 15 to 19 were almost twice as likely to report smoking during pregnancy than were women age 20 and over (22.9% vs. 11.5%). [Table 4-9]. Women who smoked during pregnancy were more likely to have low birthweight babies than

nonsmokers. Mothers age 20 or older show the greatest difference between low birthweight rates by tobacco use (81.6 vs. 53.1 per 1,000 live births). However, this is in part because the low birthweight rate for teen mothers is already much higher than that of women age 20 and older (see sidebar, page 4-8). Tobacco use remains one of the most important preventable causes of low birthweight infants for teen mothers.

Alcohol

Reported alcohol use by teens age 15 to 19 during pregnancy increased from 9.2 per 1,000 live births in 2001 to 11.4 in 2002, an increase of 23.9 percent. Teens age 15 to 19 were 18.4 percent less likely to report the use of alcohol during pregnancy than were women age 20 and over (11.4 vs. 13.5 per 1,000 births). [Table 4-9]. Alcohol use for women age 20 and over increased 36.4 percent, from 9.9 per 1,000 live births in 2001 to 13.5 in 2002.

SOURCE OF PAYMENT

Costs associated with births to teen mothers were more than twice as likely to be paid with public funds as births to older women. In 2002, Medicaid paid for 69.1 percent of births to teens (under age 20) and 34.3 percent of births to women age 20 and older where payor source was reported. [Table 4-10].

Medicaid paid for 69.1 percent of births to teens.

AGE OF FATHER

During 1998-2002, 34.7 percent of birth records for babies born to teens age 10 to 17 didn't indicate father's age, because the father wasn't identified on the certificate. [Figure 4-11, Table 4-13]. Over half (59.3%) of the birth records where mother was under age 15 did not list father's age. Where father's age was reported for teen mothers under age 15, 41.2 percent were younger than age 18 and 58.8 percent were age 18 or older. Birth records for mothers age 15 to 17 report father's age for 66.4

Figure 4-11.
Age Distribution of Father for Births
to Oregon Residents, Age 10-17, 1998-2002

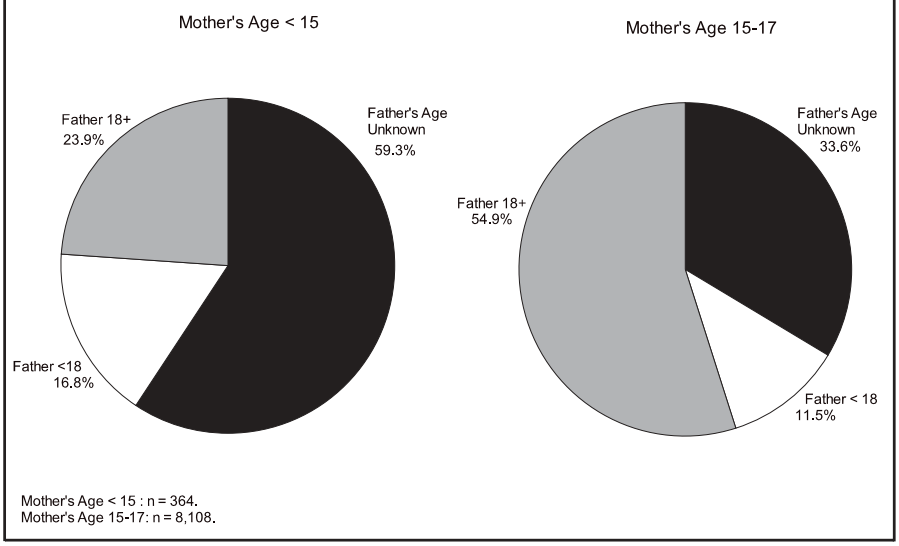
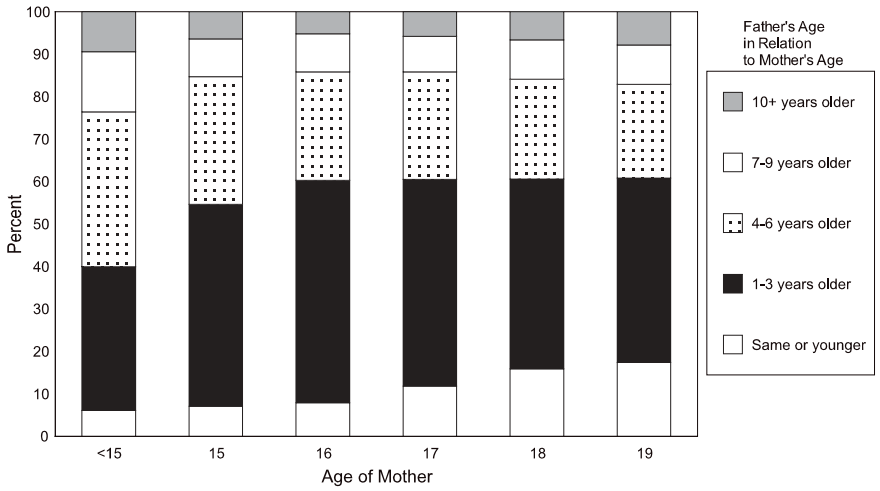


Figure 4-12.
Father's Age Compared to Teen Mother's Age,
Oregon Residents, 1998-2002



Percent based on births in which father's age was reported.
N = 19,084.

percent of the births. Where father's age was reported, 17.3 percent of fathers were under age 18 and 82.7 percent were age 18 or older.

For all teens, including the youngest mothers (age less than 15 years), the father was more than six years older than the mother in 16 percent of the births for the 1998–2002 period where father's age was reported. This difference in ages ranged from a low of 14.2 percent of births to 16 and 17 year-old mothers to a high of 23.6 for teens less than 15 years old. [Figure 4-12].

ENDNOTE

1 Source: U.S. Census Bureau, Census 2000, Table DP-1.

TABLE 4-1. Oregon Pregnancies to Teens 15-19, 1974-2002

Year	Pregnancies [1]						Births			
	15 to 17		18 to 19		15 to 19		15 to 17		18 to 19	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1974	3,361	---	4,881	---	8,242	77.2	1,918	---	3,438	---
1975	3,718	---	5,135	---	8,853	80.2	1,868	---	3,338	---
1976	3,883	---	5,644	---	9,527	85.7	1,837	---	3,530	---
1977	3,853	---	5,718	---	9,571	85.5	1,793	---	3,510	---
1978	3,895	---	5,968	---	9,863	87.1	1,892	---	3,696	---
1979	3,802	---	6,240	---	10,042	88.4	1,790	---	3,754	---
1980	3,844	59.3	6,576	141.9	10,420	93.8	1,775	27.4	3,883	83.8
1981	3,504	56.8	6,202	138.6	9,706	91.2	1,655	26.8	3,828	85.6
1982	2,978	49.5	5,332	119.9	8,310	79.4	1,466	24.4	3,317	74.6
1983	2,694	45.5	4,823	112.3	7,517	73.6	1,397	23.6	2,978	69.3
1984	2,677	45.6	4,693	114.3	7,370	73.9	1,365	23.2	2,880	70.2
1985	2,589	43.8	4,440	118.0	7,029	72.7	1,349	22.8	2,787	74.1
1986	2,536	43.1	4,271	108.3	6,807	69.2	1,368	23.2	2,791	70.8
1987	2,629	46.7	4,365	115.6	6,994	74.4	1,507	26.8	2,856	75.6
1988	2,893	51.2	4,869	122.2	7,762	80.6	1,547	27.4	2,949	74.0
1989	2,751	50.8	5,271	121.9	8,022	82.4	1,519	28.0	3,331	77.1
1990	2,842	52.2	5,174	133.4	8,016	86.0	1,660	30.5	3,420	88.2
1991	2,913	51.8	5,147	139.9	8,060	86.6	1,764	31.4	3,373	91.7
1992	2,756	47.8	4,715	125.9	7,471	78.6	1,787	31.0	3,321	88.6
1993	2,858	47.9	4,734	120.0	7,592	76.6	1,843	30.9	3,248	82.3
1994	3,031	49.0	4,780	118.6	7,811	76.5	1,905	30.8	3,333	82.7
1995	3,093	49.3	4,999	120.3	8,092	77.6	1,977	31.5	3,460	83.3
1996	3,108	47.3	5,242	122.9	8,350	77.1	2,015	30.7	3,661	85.8
1997	3,013	44.2	5,121	117.5	8,134	72.8	1,886	27.6	3,458	79.4
1998	2,985	42.1	5,263	118.5	8,248	71.5	1,872	26.4	3,693	83.2
1999	2,810	39.3	5,311	114.8	8,121	68.9	1,796	25.1	3,695	79.8
2000	2,522	35.2	4,993	104.4	7,515	62.9	1,656	23.1	3,434	71.8
2001	2,300	31.7	4,880	101.0	7,180	59.4	1,477	20.4	3,342	69.2
2002	2,031	27.6	4,387	90.8	6,418	52.6	1,307	17.7	3,103	64.2
Change Between 1992 and 2002	-725	-20.2	-328	-35.1	-1,053	-26.0	-480	-13.3	-218	-24.4
% Change Between 1992 and 2002	-26.3%	-42.3%	-7.0%	-27.9%	-14.1%	-33.1%	-26.9%	-42.9%	-6.6%	-27.5%
Change Between 1997 and 2002	-982	-16.6	-734	-26.7	-1,716	-20.2	-579	-9.9	-355	-15.2
% Change Between 1997 and 2002	-32.6%	-37.6%	-14.3%	-22.7%	-21.1%	-27.7%	-30.7%	-35.9%	-10.3%	-19.1%
Change Between 2001 and 2002	-269	-4.1	-493	-10.2	-762	-6.8	-170	-2.7	-239	-5.0
% Change Between 2001 and 2002	-11.7%	-12.9%	-10.1%	-10.1%	-10.6%	-11.4%	-11.5%	-13.2%	-7.2%	-7.2%

[1] Pregnancy estimates are based on the total number of births and abortions. See also footnote (2) on the next page regarding changes in estimating abortions. Percentage change calculations may vary due to computer rounding.

--- Data are not available.

All rates are per 1,000 females.

TABLE 4-1. Oregon Pregnancies to Teens 15-19, 1974-2002 (Continued)

Births		Abortions[2]							
15 to 19		15 to 17		18 to 19		15 to 19		Age Not Stated	Year
No.	Rate	No.	Rate	No.	Rate	No.	Rate		
5,356	50.1	1,443	---	1,443	---	2,886	27.0	30	1974
5,206	47.2	1,850	---	1,797	---	3,647	33.1	23	1975
5,367	48.3	2,046	---	2,114	---	4,160	37.4	14	1976
5,303	47.4	2,060	---	2,208	---	4,268	38.1	25	1977
5,588	49.3	2,003	---	2,272	---	4,275	37.7	33	1978
5,544	48.8	2,012	---	2,486	---	4,498	39.6	34	1979
5,658	50.9	2,069	31.9	2,693	58.1	4,762	42.9	903	1980
5,483	51.5	1,849	30.0	2,374	53.1	4,223	39.7	1,541	1981
4,783	45.7	1,512	25.1	2,015	45.3	3,527	33.7	2,091	1982
4,375	42.8	1,297	21.9	1,845	42.9	3,142	30.8	1,850	1983
4,245	42.5	1,312	22.3	1,813	44.2	3,125	31.3	1,700	1984
4,136	42.8	1,240	21.0	1,653	43.9	2,893	29.9	737	1985
4,159	42.3	1,168	19.8	1,480	37.5	2,648	26.9	114	1986
4,363	46.4	1,122	19.9	1,509	40.0	2,631	28.0	47	1987
4,496	46.7	1,346	23.8	1,920	48.2	3,266	33.9	48	1988
4,850	49.8	1,232	22.7	1,940	44.9	3,172	32.6	222	1989
5,080	54.5	1,182	21.7	1,754	45.2	2,936	31.5	122	1990
5,137	55.2	1,149	20.4	1,774	48.2	2,923	31.4	131	1991
5,108	53.7	969	16.8	1,394	37.2	2,363	24.9	169	1992
5,091	51.3	1,015	17.0	1,486	37.7	2,501	25.2	256	1993
5,238	51.3	1,126	18.2	1,447	35.9	2,573	25.2	180	1994
5,437	52.2	1,116	17.8	1,539	37.0	2,655	25.5	25	1995
5,676	52.4	1,093	16.6	1,581	37.1	2,674	24.7	21	1996
5,344	47.8	1,127	16.5	1,663	38.2	2,790	25.0	3	1997
5,565	48.3	1,113	15.7	1,570	35.4	2,683	23.3	43	1998
5,491	46.6	1,014	14.2	1,616	34.9	2,630	22.3	18	1999
5,090	42.6	866	12.1	1,554	32.6	2,425	20.3	20	2000
4,819	39.9	823	11.4	1,538	31.8	2,361	19.5	8	2001
4,410	36.2	724	9.8	1,284	26.6	2,008	16.5	7	2002
-698	-17.5	-245	-7.0	-110	-10.6	-355	-8.4		Change Between 1992 and 2002
-13.7%	-32.6%	-25.3%	-41.7%	-7.9%	-28.5%	-15.0%	-33.7%		% Change Between 1992 and 2002
-934	-11.6	-403	-6.7	-379	-11.6	-782	-8.5		Change Between 1997 and 2002
-17.5%	-24.3%	-35.8%	-40.6%	-22.8%	-30.4%	-28.0%	-34.0%		% Change Between 1997 and 2002
-409	-3.7	-99	-1.6	-254	-5.2	-353	-3.0		Change Between 2001 and 2002
-8.5%	-9.3%	-12.0%	-14.0%	-16.5%	-16.4%	-15.0%	-15.4%		% Change Between 2001 and 2002

[2] For 1985 and 1988 to current abortion estimates are based on reports for Oregon residents whether occurring in Oregon or another state. For years prior to 1985 (and in 1986-1987), abortion estimates were based on Oregon occurrences only but included abortions obtained by out-of-state residents. Because some neighboring states do not report abortions to the state of residence (especially California), this results in minimal estimates for both abortions and pregnancies.

--- Data not available.

All rates are per 1,000 females.

TABLE 4-2.
Oregon Pregnancies to Young Teens (10-17 Years), 1974-2002

Year	Pregnancies[1]			Births			Abortions[2]			Live Births[3]	
	10-14	10-17		10-14	10-17		10-14	10-17		10-14	10-17
	No.	No.	Rate	No.	No.	Rate	No.	No.	Rate	Percent	
1974	191	3,552	---	67	1,985	---	124	1,567	---	35.1%	55.9%
1975	216	3,934	---	67	1,935	---	149	1,999	---	31.0%	49.2%
1976	221	4,104	---	67	1,904	---	154	2,200	---	30.3%	46.4%
1977	209	4,062	---	69	1,862	---	140	2,200	---	33.0%	45.8%
1978	174	4,069	---	72	1,964	---	102	2,105	---	41.4%	48.3%
1979	201	4,003	---	70	1,860	---	131	2,143	---	34.8%	46.5%
1980	203	4,047	24.7	71	1,846	11.3	132	2,201	13.4	35.0%	45.6%
1981	158	3,662	22.8	61	1,716	10.7	97	1,946	12.1	38.6%	46.9%
1982	157	3,135	19.8	52	1,518	9.6	105	1,617	10.2	33.1%	48.4%
1983	135	2,829	18.3	52	1,449	9.4	83	1,380	8.9	38.5%	51.2%
1984	134	2,811	18.6	56	1,421	9.4	78	1,390	9.2	41.8%	50.6%
1985	132	2,721	18.2	42	1,391	9.3	90	1,330	8.9	31.8%	51.1%
1986	145	2,681	18.4	64	1,432	9.8	81	1,249	8.5	44.1%	53.4%
1987	115	2,744	19.2	59	1,566	11.0	56	1,178	8.3	51.3%	57.1%
1988	122	3,015	20.6	57	1,604	10.9	64	1,410	9.6	46.7%	53.2%
1989	136	2,887	19.6	68	1,587	10.8	68	1,300	8.8	50.0%	55.0%
1990	144	2,986	19.7	76	1,736	11.4	68	1,250	8.2	52.8%	58.1%
1991	173	3,086	19.3	88	1,852	11.6	85	1,234	7.7	50.9%	60.0%
1992	157	2,913	17.9	86	1,873	11.5	71	1,040	6.4	54.8%	64.3%
1993	169	3,027	18.2	83	1,926	11.6	86	1,101	6.6	49.1%	63.6%
1994	183	3,214	18.9	117	2,022	11.9	66	1,192	7.0	63.9%	62.9%
1995	191	3,284	19.2	104	2,081	12.2	87	1,203	7.0	54.5%	63.4%
1996	166	3,274	18.8	91	2,106	12.1	75	1,168	6.7	54.8%	64.3%
1997	184	3,197	18.0	104	1,990	11.2	80	1,207	6.8	56.5%	62.2%
1998	191	3,176	17.2	95	1,967	10.7	96	1,209	6.6	49.7%	61.9%
1999	151	2,961	15.9	86	1,882	10.1	65	1,079	5.8	57.0%	63.6%
2000	131	2,653	14.0	66	1,722	9.1	65	931	4.9	50.4%	64.9%
2001	122	2,422	12.6	66	1,545	8.0	56	879	4.6	54.1%	63.7%
2002	96	2,127	10.9	51	1,358	7.0	45	769	4.0	53.1%	63.8%
Change Between 1992 and 2002	-61	-786	-7.0	-35	-515	-4.5	-26	-271	-2.4		
% Change Between 1992 and 2002	-38.9%	-27.0%	-39.1%	-40.7%	-27.5%	-39.1%	-36.6%	-26.1%	-37.5%		
Change Between 1997 and 2002	-88	-1,070	-7.1	-53	-632	-4.2	-35	-438	-2.8		
% Change Between 1997 and 2002	-47.8%	-33.5%	-39.4%	-51.0%	-31.8%	-37.5%	-43.8%	-36.3%	-41.2%		
Change Between 2001 and 2002	-26	-295	-1.7	-15	-187	-1.0	-11	-110	-0.6		
% Change Between 2001 and 2002	-21.3%	-12.2%	-13.5%	-22.7%	-12.1%	-12.5%	-19.6%	-12.5%	-13.0%		

[1]Pregnancy estimates are based on the total number of births and abortions.

[2] For 1985 and 1988 - current; abortion estimates are based on reports for Oregon residents whether occurring in Oregon or another state.
For years prior to 1985 (and in 1986-1987), abortion estimates were based on Oregon occurrences only but included abortions obtained by out-of-state residents. This change permits closer comparison with the figures in Table 4-7 (and Table 4-5) but, because some neighboring states do not report abortions to the state of residence (especially California), this results in minimal estimates for both abortions and pregnancies.

[3] Percentage of pregnancies resulting in a live birth.

--- Data not available.

Rates per 1,000 females 10-17 years of age. 2002: 194,545.

TABLE 4-3. Births to 15- to 19-year-old Teens by Race/Ethnicity, Adequacy of Prenatal Care, and Birthweight, Oregon Residents, 2002

Race/Ethnicity and Age of Mother	Total Births	Adequacy of Prenatal Care					
		Inadequate[1]		Adequate		Not Stated	
		<2500 Grams	2500+ Grams	<2500 Grams	2500+ Grams	<2500 Grams	2500+ Grams
Total Births							
15-19	4,410	47	358	246	3,750	2	7
15-17	1,307	18	119	74	1,093	1	2
18-19	3,103	29	239	172	2,657	1	5
Non-Hispanic							
Total							
15-19	3,194	29	227	187	2,746	2	3
15-17	885	10	70	53	750	1	1
18-19	2,309	19	157	134	1,996	1	2
White	2,848	27	194	153	2,469	2	3
15-17	765	10	58	39	656	1	1
18-19	2,083	17	136	114	1,813	1	2
African American	139	–	5	11	123	–	–
15-17	53	–	3	8	42	–	–
18-19	86	–	2	3	81	–	–
American Indian	121	1	18	10	92	–	–
15-17	46	–	8	2	36	–	–
18-19	75	1	10	8	56	–	–
Asian[2]	81	1	10	12	58	–	–
15-17	20	–	1	4	15	–	–
18-19	61	1	9	8	43	–	–
Hispanic							
Total							
15-19	1,197	18	130	56	990	–	3
15-17	419	8	49	20	341	–	1
18-19	778	10	81	36	649	–	2
Mexican	1,123	17	123	52	928	–	3
15-17	389	7	46	19	316	–	1
18-19	734	10	77	33	612	–	2
Central or South American	24	–	2	–	22	–	–
15-17	8	–	1	–	7	–	–
18-19	16	–	1	–	15	–	–
Other Hispanic	50	1	5	4	40	–	–
15-17	22	1	2	1	18	–	–
18-19	28	–	3	3	22	–	–

– Quantity is zero.
1 Inadequate care is care that began in the third trimester or the total number of visits was less than 5.
2 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.
NOTE: The sum of the subsets may not equal the total because of cases with unknown birthweight.

TABLE 4-4. Births to Teens 15-19 by Marital Status, Race/Ethnicity, and Age by Adequacy of Prenatal Care and Birthweight, Oregon Residents, 2002

Marital Status, Race/Ethnicity and Age of Mother	Total Births[1]	Low Weight Births		First Trimester Care		Inadequate Care[3]	
		Number	Rate[2]	Number	Rate[2]	Number	Rate[2]
Total Births							
15-19	4,410	295	66.9	2,923	664.0	405	92.0
15-17	1,307	93	71.2	802	615.0	137	105.1
18-19	3,103	202	65.1	2,121	684.6	268	86.5
Non-Hispanic							
Total							
15-19	3,194	218	68.3	2,185	685.2	256	80.3
15-17	885	64	72.3	563	637.6	80	90.6
18-19	2,309	154	66.7	1,622	703.4	176	76.3
White	2,848	182	63.9	1,979	696.1	221	77.7
15-17	765	50	65.4	496	650.1	68	89.1
Married	88	8	90.9	68	772.7	3	34.1
Unmarried	677	42	62.0	428	634.1	65	96.3
18-19	2,083	132	63.4	1,483	713.0	153	73.6
Married	556	33	59.4	414	745.9	39	70.3
Unmarried	1,527	99	64.8	1,069	701.0	114	74.8
African American	139	11	79.1	93	669.1	5	36.0
15-17	53	8	150.9	33	622.6	3	56.6
Married	1	–	–	–	–	1	1000.0
Unmarried	52	8	153.8	33	634.6	2	38.5
18-19	86	3	34.9	60	697.7	2	23.3
Married	7	–	–	6	857.1	–	–
Unmarried	79	3	38.0	54	683.5	2	25.3
American Indian	121	11	90.9	66	545.5	19	157.0
15-17	46	2	43.5	25	543.5	8	173.9
Married	–	–	–	–	–	–	–
Unmarried	46	2	43.5	25	543.5	8	173.9
18-19	75	9	120.0	41	546.7	11	146.7
Married	15	–	–	12	800.0	2	133.3
Unmarried	60	9	150.0	29	483.3	9	150.0
Asian[4]	81	13	160.5	45	555.6	11	135.8
15-17	20	4	200.0	9	450.0	1	50.0
Married	1	–	–	–	–	–	–
Unmarried	19	4	210.5	9	473.7	1	52.6
18-19	61	9	147.5	36	590.2	10	163.9
Married	14	1	71.4	7	500.0	5	357.1
Unmarried	47	8	170.2	29	617.0	5	106.4

See footnotes at end of table.

TABLE 4-4. Births to Teens 15-19 by Marital Status, Race/Ethnicity, and Age by Adequacy of Prenatal Care and Birthweight, Oregon Residents, 2002 — Continued

Marital Status, Race/Ethnicity and Age of Mother	Total Births[1]	Low Weight Births		First Trimester Care		Inadequate Care[3]	
		Number	Rate[2]	Number	Rate[2]	Number	Rate[2]
Hispanic							
Total							
15-19	1,197	74	61.8	722	604.7	148	124.0
15-17	419	28	66.8	237	567.0	57	136.4
18-19	778	46	59.1	485	625.0	91	117.3
Mexican	1,123	69	61.4	679	605.7	140	125.0
15-17	389	26	66.8	215	552.7	53	136.6
Married	65	4	61.5	41	630.8	5	76.9
Unmarried	324	22	67.9	174	537.0	48	148.6
18-19	734	43	58.6	464	633.9	87	118.9
Married	229	10	43.7	146	640.4	26	114.0
Unmarried	505	33	65.3	318	631.0	61	121.0
Central or South American	24	–	–	13	541.7	2	83.3
15-17	8	–	–	5	625.0	1	125.0
Married	1	–	–	–	–	1	1000.0
Unmarried	7	–	–	5	714.3	–	–
18-19	16	–	–	8	500.0	1	62.5
Married	7	–	–	4	571.4	–	–
Unmarried	9	–	–	4	444.4	1	111.1
Other Hispanic	50	5	100.0	30	612.2	6	120.0
15-17	22	2	90.9	17	809.5	3	136.4
Married	–	–	–	–	–	–	–
Unmarried	22	2	90.9	17	809.5	3	136.4
18-19	28	3	107.1	13	464.3	3	107.1
Married	5	–	–	4	800.0	–	–
Unmarried	23	3	130.4	9	391.3	3	130.4

– Quantity is zero.
1 The subtotals of an age group may not add to the total for that age group because of unstated characteristics such as marital status or race/ethnicity.
2 All rates per 1,000 females.
3 Inadequate care is care that began in the third trimester or the total number of visits was less than five.
4 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.
WARNING: Rates based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 4-5. Pregnancy Rates of Teens by County of Residence, Oregon, 2002

County of Residence	Total Pregnancies	Age				Pregnancy Rate[1]			
		<15	15-17	18-19	15-19	10-17	15-17	18-19	15-19
Total[2]	6,514	96	2,031	4,387	6,418	10.9	27.6	90.8	52.6
Baker	32	2	10	20	30	11.7	25.3	108.1	51.7
Benton	68	–	29	39	68	§ 7.0	§ 17.5	§ 16.7	§ 17.0
Clackamas	503	10	139	354	493	§ 7.0	§ 17.9	§ 79.3	§ 40.4
Clatsop	77	2	24	51	75	12.4	27.9	91.4	52.9
Columbia	75	1	17	57	74	§ 6.1	§ 15.7	109.0	46.1
Coos	119	2	33	84	117	10.2	25.0	101.9	54.5
Crook	45	–	10	35	45	7.8	19.6	§ 157.0	61.3
Curry	17	–	9	8	17	8.9	24.5	§ 42.1	§ 30.5
Deschutes	177	–	65	112	177	8.8	23.9	§ 73.5	§ 41.7
Douglas	188	2	64	122	186	11.2	28.6	93.8	52.6
Gilliam	2	*	*	*	2	*	*	*	32.3
Grant	6	–	1	5	6	2.1	5.1	53.8	§ 20.6
Harney	13	–	2	11	13	4.2	11.8	144.7	52.8
Hood River	44	–	8	36	44	6.4	17.5	§ 137.9	61.2
Jackson	320	1	118	201	319	11.0	28.5	81.9	48.3
Jefferson	61	2	19	40	59	15.9	41.3	§ 175.4	§ 85.8
Josephine	113	2	30	81	111	§ 7.4	§ 18.5	94.1	44.6
Klamath	131	5	41	85	126	12.1	29.4	100.1	56.1
Lake	11	1	5	5	10	12.6	26.6	82.0	40.2
Lane	540	8	163	369	532	9.7	23.8	§ 69.2	§ 43.7
Lincoln	84	–	26	58	84	10.8	27.2	§ 123.1	58.9
Linn	203	4	71	128	199	12.3	30.7	93.3	54.0
Malheur	79	–	23	56	79	12.1	31.9	111.1	64.4
Marion	782	10	256	516	772	§ 15.6	§ 39.2	§ 117.1	§ 70.5
Moorow	19	–	6	13	19	8.3	22.3	72.2	42.2
Multnomah	1,416	25	427	964	1,391	§ 14.3	§ 35.7	§ 112.1	§ 67.7
Polk	102	–	33	69	102	8.5	22.0	§ 63.4	§ 39.4
Sherman	2	*	*	*	2	*	*	*	29.9
Tillamook	44	1	18	25	43	14.4	35.0	85.6	53.3
Umatilla	205	2	60	143	203	14.5	36.3	§ 137.6	§ 75.4
Union	42	–	9	33	42	6.1	14.9	73.5	39.9
Wallowa	5	1	2	2	4	6.3	11.1	30.8	§ 16.3
Wasco	37	1	9	27	36	7.1	16.4	100.0	44.0
Washington	744	11	251	482	733	10.3	26.9	85.4	49.0
Wheeler	2	*	*	*	2	*	*	*	36.4
Yamhill	206	3	52	151	203	10.2	25.4	97.4	56.4

– Quantity is zero.
* Detailed reporting of small numbers may breach confidentiality.
1 All rates per 1,000 females.
§ Pregnancy rate is significantly different from the state.
WARNING: Rates based on less than 5 events are unreliable.
NOTE: Includes births and reported abortions including those obtained out-of-state by Oregon residents. Because some states (e.g., California) do not record data on residence for abortion patients, not all out-of-state abortions are included.

TABLE 4-6. Birth Rates of Teens by County of Residence, Oregon, 2002

County of Residence	Total Births (All Ages)	Age				Birth Rate[1]			
		<15	15-17	18-19	15-19	10-17	15-17	18-19	15-19
Total	45,190	51	1,307	3,103	4,410	7.0	17.7	64.2	36.2
Baker	175	2	8	19	27	9.7	20.3	102.7	46.6
Benton	780	–	17	25	42	§ 4.1	§ 10.2	§ 10.7	§ 10.5
Clackamas	4,068	2	75	211	286	§ 3.6	§ 9.7	§ 47.3	§ 23.4
Clatsop	432	1	18	44	62	9.0	20.9	78.9	43.7
Columbia	513	–	9	42	51	§ 3.1	§ 8.3	80.3	31.8
Coos	630	2	25	73	98	7.9	18.9	§ 88.6	45.6
Crook	215	–	9	33	42	7.0	17.6	§ 148.0	§ 57.2
Curry	150	–	5	8	13	4.9	13.6	42.1	23.3
Deschutes	1,487	–	41	83	124	5.6	15.1	54.5	§ 29.2
Douglas	1,035	1	43	98	141	7.5	19.2	75.3	39.9
Gilliam	14	*	*	*	2	*	*	*	32.3
Grant	72	–	–	5	5	–	–	53.8	17.2
Harney	77	–	2	10	12	4.2	11.8	131.6	48.8
Hood River	326	–	3	26	29	2.4	6.6	99.6	40.3
Jackson	2,111	1	81	149	230	7.6	19.5	60.7	34.8
Jefferson	309	2	17	34	51	§ 14.4	§ 37.0	§ 149.1	§ 74.1
Josephine	738	1	21	64	85	5.1	12.9	74.3	34.2
Klamath	755	3	30	65	95	8.7	21.5	76.6	42.3
Lake	73	–	4	5	9	8.4	21.3	82.0	36.1
Lane	3,494	1	110	246	356	6.3	16.1	§ 46.1	§ 29.3
Lincoln	434	–	16	44	60	6.7	16.8	§ 93.4	42.1
Linn	1,400	1	58	101	159	§ 9.7	§ 25.1	73.6	§ 43.2
Malheur	482	–	22	55	77	11.6	§ 30.5	§ 109.1	§ 62.8
Marion	4,430	5	182	413	595	§ 11.0	§ 27.8	§ 93.7	§ 54.4
Morrow	155	–	6	13	19	8.3	22.3	72.2	42.2
Multnomah	9,340	16	225	571	796	7.6	18.8	66.4	38.7
Polk	770	–	26	57	83	6.7	17.3	52.3	32.1
Sherman	15	*	*	*	1	*	*	*	14.9
Tillamook	242	1	11	17	28	9.1	21.4	58.2	34.7
Umatilla	1,066	1	44	119	163	§ 10.5	§ 26.6	§ 114.5	§ 60.5
Union	285	–	5	26	31	3.4	8.3	57.9	29.5
Wallowa	56	1	1	1	2	4.2	5.6	15.4	§ 8.2
Wasco	290	1	7	24	31	5.7	12.8	88.9	37.9
Washington	7,568	8	149	306	455	6.2	16.0	§ 54.2	§ 30.4
Wheeler	10	*	*	*	2	*	*	*	36.4
Yamhill	1,193	1	36	112	148	6.9	17.6	72.3	41.1

– Quantity is zero.
* Detailed reporting of small numbers may breach confidentiality.
1 All rates per 1,000 females.
§ Birth rate is significantly different from the state.
WARNING: Rates based on less than 5 events are unreliable.

TABLE 4-7. Abortion Rates of Teens by County of Residence, Oregon, 2002

County of Residence	Total Abortions (All Ages)	Age				Abortion Rate[1]			
		<15	15-17	18-19	15-19	10-17	15-17	18-19	15-19
Total[2]	11,792	45	724	1,284	2,008	4.0	9.8	26.6	16.5
Baker	16	–	2	1	3	1.9	5.1	5.4	§ 5.2
Benton	127	–	12	14	26	2.9	7.2	§ 6.0	§ 6.5
Clackamas	1,074	8	64	143	207	3.4	8.3	§ 32.0	16.9
Clatsop	89	1	6	7	13	3.3	7.0	12.5	§ 9.2
Columbia	97	1	8	15	23	3.1	7.4	28.7	14.3
Coos	97	–	8	11	19	2.3	6.1	§ 13.3	§ 8.8
Crook	23	–	1	2	3	0.8	2.0	9.0	§ 4.1
Curry	21	–	4	–	4	3.9	10.9	–	7.2
Deschutes	286	–	24	29	53	3.2	8.8	19.0	12.5
Douglas	174	1	21	24	45	3.7	9.4	18.4	12.7
Gilliam	5	–	*	*	–	*	*	*	–
Grant	5	–	1	–	1	2.1	5.1	–	3.4
Harney	10	–	–	1	1	–	–	13.2	4.1
Hood River	50	–	5	10	15	4.0	10.9	38.3	20.9
Jackson	462	–	37	52	89	3.4	8.9	21.2	13.5
Jefferson	44	–	2	6	8	1.5	4.3	26.3	11.6
Josephine	136	1	9	17	26	2.3	5.5	19.7	§ 10.5
Klamath	139	2	11	20	31	3.4	7.9	23.6	13.8
Lake	3	1	1	–	1	4.2	5.3	–	4.0
Lane	1,112	7	53	123	176	3.4	7.7	23.1	14.5
Lincoln	109	–	10	14	24	4.2	10.5	29.7	16.8
Linn	196	3	13	27	40	2.6	5.6	19.7	§ 10.9
Malheur	19	–	1	1	2	§ 0.5	§ 1.4	§ 2.0	§ 1.6
Marion	868	5	74	103	177	4.6	11.3	23.4	16.2
Morrow	18	–	–	–	–	–	–	–	–
Multnomah	4,201	9	202	393	595	§ 6.7	§ 16.9	§ 45.7	§ 28.9
Polk	119	–	7	12	19	1.8	4.7	§ 11.0	§ 7.3
Sherman	2	–	*	*	1	*	*	*	14.9
Tillamook	49	–	7	8	15	5.3	13.6	27.4	18.6
Umatilla	177	1	16	24	40	4.0	9.7	23.1	14.9
Union	51	–	4	7	11	2.7	6.6	15.6	10.5
Wallowa	10	–	1	1	2	2.1	5.6	15.4	8.2
Wasco	46	–	2	3	5	1.4	3.6	11.1	§ 6.1
Washington	1,745	3	102	176	278	4.1	10.9	31.2	18.6
Wheeler	1	–	*	*	–	*	*	*	–
Yamhill	209	2	16	39	55	3.3	7.8	25.2	15.3

– Quantity is zero.
* Detailed reporting of small numbers may breach confidentiality.
1 All rates per 1,000 females.
2 Total includes two abortions where county of residence was unknown.
§ Abortion rate is significantly different from the state.
WARNING: Rates based on less than 5 events are unreliable.
NOTE: Includes births and reported abortions including those obtained out-of-state by Oregon residents. Because some states (e.g., California) do not record data on residence for abortion patients, not all out-of-state abortions are included.

TABLE 4-8. Teens 15-19: Births, Level of Prenatal Care and Low Birthweight Rates by County of Residence, Oregon, 2002

County of Residence	Total		Low Weight Births		First Trimester Care		Inadequate Care[1]	
	Number	Rate[2]	Number	Rate[3]	Number	Rate[3]	Number	Rate[3]
Total	4,410	36.2	295	66.9	2,923	664.0	405	92.0
Baker	27	46.6	3	111.1	24	888.9	–	–
Benton	42	§ 10.5	1	23.8	27	642.9	5	119.0
Clackamas	286	§ 23.4	15	52.4	202	706.3	27	94.4
Clatsop	62	43.7	5	80.6	42	688.5	7	112.9
Columbia	51	31.8	3	58.8	38	745.1	1	19.6
Coos	98	45.6	3	30.6	69	704.1	9	92.8
Crook	42	§ 57.2	3	71.4	37	881.0	–	–
Curry	13	23.3	–	–	7	538.5	2	153.8
Deschutes	124	§ 29.2	8	64.5	99	798.4	5	40.3
Douglas	141	39.9	10	70.9	115	§ 815.6	8	56.7
Gilliam	2	32.3	–	–	–	–	–	–
Grant	5	17.2	–	–	4	800.0	–	–
Harney	12	48.8	–	–	11	916.7	1	83.3
Hood River	29	40.3	4	137.9	22	785.7	4	137.9
Jackson	230	34.8	12	52.2	164	713.0	15	65.2
Jefferson	51	§ 74.1	3	58.8	29	568.6	7	137.3
Josephine	85	34.2	4	47.1	77	§ 905.9	6	70.6
Klamath	95	42.3	10	105.3	63	663.2	5	52.6
Lake	9	36.1	–	–	4	444.4	1	111.1
Lane	356	§ 29.3	23	64.6	206	§ 578.7	33	92.7
Lincoln	60	42.1	5	83.3	40	689.7	6	103.4
Linn	159	§ 43.2	6	37.7	108	679.2	10	63.3
Malheur	77	§ 62.8	1	13.0	42	545.5	7	90.9
Marion	595	§ 54.4	42	70.6	371	624.6	80	§ 134.7
Morrow	19	42.2	3	157.9	11	578.9	2	105.3
Multnomah	796	38.7	74	93.0	483	607.5	80	100.6
Polk	83	32.1	5	60.2	56	674.7	3	36.1
Sherman	1	14.9	–	–	1	1000.0	–	–
Tillamook	28	34.7	2	71.4	24	857.1	1	35.7
Umatilla	163	§ 60.5	9	55.2	95	586.4	17	105.6
Union	31	29.5	2	64.5	24	774.2	3	96.8
Wallowa	2	§ 8.2	–	–	–	–	–	–
Wasco	31	37.9	2	64.5	26	838.7	2	64.5
Washington	455	§ 30.4	24	52.7	305	671.8	49	107.9
Wheeler	2	36.4	1	500.0	1	500.0	–	–
Yamhill	148	41.1	12	81.1	96	648.6	9	60.8

– Quantity is zero.
1 Inadequate care is care that began in the third trimester or the total number of visits was less than 5.
2 Rates per 1,000 females 15-19 years of age.
3 Rates per 1,000 births to 15-19 year olds.
WARNING: Rates based on less than 5 events are unreliable.
NOTE: Rates and percentages are calculated excluding missing and unknown values.
§ Rate is significantly different than the state rate.

TABLE 4-9. Birth Outcomes of Infants by Age of Mother, Oregon Residents, 2002

Birth Outcomes	Total Births	Mother's Age								
		<15	15	16	17	18	19	15-19	20+	N.S.
Total Births	45,190	51	154	418	735	1,255	1,848	4,410	40,722	7
Birthweight[1]										
1499 Grams or Less										
<28 Weeks	208	1	1	5	2	9	11	28	179	–
28-36 Weeks	260	1	2	2	4	8	9	25	234	–
37-41 Weeks	4	–	–	–	–	–	–	–	4	–
42+ Weeks	–	–	–	–	–	–	–	–	–	–
1500-2499 Grams										
<28 Weeks	2	–	–	–	–	–	–	–	2	–
28-36 Weeks	1,414	7	4	12	33	42	48	139	1,268	–
37-41 Weeks	720	–	2	9	16	28	46	101	619	–
42+ Weeks	5	–	–	–	–	1	–	1	4	–
2500+ Grams										
<28 Weeks	–	–	–	–	–	–	–	–	–	–
28-36 Weeks	1,798	2	7	15	41	51	64	178	1,618	–
37-41 Weeks	40,068	40	138	368	623	1,096	1,633	3,858	36,163	7
42+ Weeks	635	–	–	6	14	20	34	74	561	–
5 Minute Apgar										
0-3	175	2	–	3	2	5	10	20	153	–
4-6	541	1	2	5	13	15	24	59	481	–
7-10	44,291	47	152	409	718	1,232	1,809	4,320	39,919	5
Not Stated	183	1	–	1	2	3	5	11	169	2
Tobacco Used										
Yes	5,618	4	24	76	177	289	427	993	4,621	–
No	39,096	47	126	337	543	952	1,391	3,349	35,695	5
Unknown	476	–	4	5	15	14	30	68	406	2
Alcohol Used										
Yes	586	1	3	5	16	13	12	49	536	–
No	43,580	50	145	402	696	1,214	1,780	4,237	39,288	5
Unknown	1,024	–	6	11	23	28	56	124	898	2
Birth Order										
1st	18,018	48	148	398	636	1,007	1,313	3,502	14,466	2
2nd	14,798	2	5	18	92	222	440	777	14,016	3
3rd	7,372	1	1	1	6	25	86	119	7,251	1
4th	3,027	–	–	1	–	–	9	10	3,017	–
5+	1,951	–	–	–	–	–	–	–	1,950	1
Unknown	24	–	–	–	1	1	–	2	22	–
Prenatal Care										
No Care	430	2	3	8	14	14	30	69	358	1
Little or Late[2]	1,929	10	19	37	56	91	133	336	1,583	–
Adequate[3]	42,765	39	132	372	663	1,147	1,682	3,996	38,726	4
Unknown	66	–	–	1	2	3	3	9	55	2

– Quantity is zero.
1 The birthweight was unknown for 2 infants.
2 Care began in the third trimester or number of visits was less than 5.
3 Prenatal care began prior to the third trimester; patient made at least 5 visits to a medical provider.

TABLE 4-10. Demographic Characteristics of Mother by Age, Oregon Residents, 2002

Demographics of Mother	Total Births	Mother's Age								
		<15	15	16	17	18	19	15-19	20+	N.S.
Total Births	45,190	51	154	418	735	1,255	1,848	4,410	40,722	7
Ethnicity/Race										
Non-Hispanic White	33,022	21	78	233	454	819	1,264	2,848	30,150	3
Non-Hispanic African American	895	7	8	18	27	35	51	139	749	–
Non-Hispanic American Indian	660	1	5	17	24	37	38	121	538	–
Non-Hispanic Asian[1]	2,323	2	6	7	7	35	26	81	2,240	–
Total Hispanic	8,051	20	57	142	220	323	455	1,197	6,830	4
Marital Status										
Unmarried	13,962	50	149	381	617	983	1,278	3,408	10,503	1
Married	31,156	1	5	36	116	272	568	997	30,155	3
Unknown	72	–	–	1	2	–	2	5	64	3
Education										
8th Grade or Less	2,952	37	40	48	62	100	133	383	2,532	–
9th Grade	1,836	12	75	102	81	100	121	479	1,345	–
10th Grade	1,791	1	31	180	174	160	169	714	1,076	–
11th Grade	2,454	–	4	49	228	275	269	825	1,629	–
12th Grade	13,815	–	–	34	170	560	928	1,692	12,122	1
Some College	10,764	–	–	–	7	42	191	240	10,523	1
College	6,422	–	–	–	–	–	–	–	6,420	2
Postbaccalaureate	4,530	–	–	–	–	–	–	–	4,530	–
Unknown	626	1	4	5	13	18	37	77	545	3
Other Children Now Alive										
One	14,939	2	4	18	91	219	444	776	14,158	3
Two	7,366	1	1	2	5	24	80	112	7,252	1
Three	2,930	–	–	–	–	–	8	8	2,922	–
Four+	1,818	–	–	–	–	–	–	–	1,817	1
Unknown	12	–	–	–	1	1	–	2	10	–
Start of Prenatal Care										
1st Trimester	36,859	25	82	246	474	839	1,282	2,923	33,908	3
2nd Trimester	6,573	17	53	135	209	339	445	1,181	5,374	1
3rd Trimester	1,293	7	16	29	35	61	88	229	1,057	–
No Care	424	2	3	8	14	14	30	69	352	1
Unknown	41	–	–	–	3	2	3	8	31	2
Prenatal Care										
Inadequate[2]	2,359	12	22	45	70	105	163	405	1,941	1
Adequate[3]	42,765	39	132	372	663	1,147	1,682	3,996	38,726	4
Unknown	66	–	–	1	2	3	3	9	55	2
Source of Payment										
Private Insurance	26,017	6	44	116	192	310	457	1,119	24,890	2
Medicaid/OHP*	16,778	42	98	269	488	871	1,266	2,992	13,744	–
Self-Pay	1,556	2	10	27	42	51	85	215	1,339	–
Other Coverage	44	–	–	1	1	2	2	6	38	–
Unknown Mention	719	1	2	5	10	16	35	68	645	5
Multiple Mention	76	–	–	–	2	5	3	10	66	–

– Quantity is zero.
1 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.
2 Care began in the third trimester or the total number of visits was less than five.
3 Prenatal care began prior to the third trimester; patient made at least five visits to a medical provider.
* Oregon Health Plan.

TABLE 4-11. Demographic Characteristics of Abortion Patients by Age, Oregon Residents, 2002

Demographics of Patient	Total[1]	Patient's Age								
		<15	15	16	17	18	19	15-19	20+	N.S.
Total Abortions	11,792	45	101	240	383	591	693	2,008	9,734	5
Ethnicity/Race										
Non-Hispanic White	8,803	26	80	173	290	449	514	1,506	7,270	1
Non-Hispanic African American	745	2	6	17	30	41	46	140	603	–
Non-Hispanic American Indian	245	1	–	6	11	8	11	36	207	1
Non-Hispanic Asian[2]	784	2	3	10	21	27	37	98	683	1
Total Hispanic	1,292	12	14	37	39	71	91	252	1,026	2
Marital Status										
Unmarried	8,779	41	98	230	364	553	637	1,882	6,853	3
Married	2,622	–	–	2	4	19	34	59	2,561	2
Unknown	391	4	3	8	15	19	22	67	320	–
Education										
8th Grade or Less	374	31	26	21	9	13	16	85	258	–
9th Grade	341	10	45	47	12	15	21	140	191	–
10th Grade	614	1	23	135	81	43	37	319	294	–
11th Grade	863	–	1	26	185	119	84	415	447	1
12th Grade	4,516	–	–	4	77	330	369	780	3,733	3
Some College	2,893	–	2	–	7	55	146	210	2,682	1
College/Postbaccalaureate	1,906	–	–	–	–	1	2	3	1,903	–
Unknown	285	3	4	7	12	15	18	56	226	–
Children Now Alive										
One	3,023	1	1	15	48	104	157	325	2,695	2
Two	2,310	1	–	1	2	12	42	57	2,252	–
Three	832	–	–	–	–	1	3	4	827	1
Four+	385	–	–	–	–	–	1	1	384	–
Unknown	3	–	–	–	1	–	–	1	2	–
Previous Abortions										
None	6,522	43	93	217	319	480	496	1,605	4,871	3
One	3,146	2	8	18	54	87	144	311	2,831	2
Two	1,243	–	–	5	7	18	36	66	1,177	–
Three+	848	–	–	–	2	5	14	21	827	–
Unknown	33	–	–	–	1	1	3	5	28	–
Gestation										
Eight Weeks or Less	7,385	19	46	111	194	348	368	1,067	6,295	4
9-12	2,876	14	27	85	122	146	204	584	2,278	–
13-16	807	9	15	30	43	52	56	196	602	–
17+	666	3	12	14	21	40	58	145	518	–
Unknown	58	–	1	–	3	5	7	16	41	1
Contraceptive Used										
None Used	7,809	33	78	188	271	449	495	1,481	6,292	3
Pills Used	1,240	–	4	14	38	49	73	178	1,061	1
Condom Used	2,111	12	18	34	69	83	112	316	1,782	1
Other/Unknown Used	769	–	1	4	9	11	24	49	720	–
Medical Procedure										
Suction Curettage	9,572	39	84	209	324	490	568	1,675	7,853	5
Dilation Evacuation	737	5	14	19	29	47	56	165	567	–
Other Specified	1,477	1	3	12	30	53	68	166	1,310	–

– Quantity is zero.
1 Includes all abortions known to have been obtained in-state by Oregon residents.
2 Includes Chinese, Japanese, Filipino, and Other Asian & Pacific Islander.

TABLE 4-12. Age of Father by Age of Mother, Oregon Residents, 2002

Father's Age	Total	Mother's Age								
		<15	15	16	17	18	19	20-24	25+	N.S.
Total	45,190	51	154	418	735	1,255	1,848	11,997	28,725	7
<15	4	2	1	–	–	1	–	–	–	–
15	12	5	2	1	1	2	–	1	–	–
16	54	1	8	26	5	8	3	3	–	–
17	169	1	7	37	39	49	15	18	3	–
18	373	2	24	52	81	92	60	54	8	–
19	720	2	13	48	97	147	176	219	18	–
20	1,013	2	14	35	80	151	198	490	43	–
21	1,231	1	10	16	58	146	220	692	88	–
22	1,586	1	4	12	53	100	217	1,040	159	–
23	1,767	1	3	11	38	78	143	1,201	292	–
24	1,987	–	–	8	26	56	126	1,277	494	–
25+	32,054	1	4	18	51	154	348	5,439	26,038	1
N.S.	4,220	32	64	154	206	271	342	1,563	1,582	6

– Quantity is zero.

TABLE 4-13. Age of Father by Age of Mother, Oregon Residents, 1998-2002

Father's Age	Total	Mother's Age								
		<15	15	16	17	18	19	20-24	25+	N.S.
Total	226,715	364	1,007	2,605	4,496	7,251	10,016	60,257	140,684	35
<15	21	9	7	3	–	1	–	1	–	–
15	100	16	33	23	12	10	2	3	1	–
16	365	15	70	105	93	55	13	13	1	–
17	1,035	21	83	235	268	219	112	90	7	–
18	2,357	19	114	354	493	603	367	370	36	1
19	3,923	18	76	282	550	858	890	1,133	116	–
20	5,268	16	48	183	491	853	1,180	2,279	218	–
21	6,583	8	45	142	334	786	1,193	3,635	440	–
22	8,082	8	26	100	281	596	1,087	5,242	742	–
23	8,817	5	14	59	183	425	739	6,024	1,368	–
24	9,757	1	10	54	109	288	582	6,329	2,383	1
25+	157,063	12	36	124	340	888	1,809	27,062	126,788	4
N.S.	23,344	216	445	941	1,342	1,669	2,042	8,076	8,584	29

– Quantity is zero.

Appendix A: Population

TABLE A-1. Population Distribution by Age and Sex, Oregon, 1950, 1960, 1970, 1975, 1980, 1985, 1990-2002

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
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

TABLE A-1. Population Distribution by Age and Sex, Oregon, 1950, 1960, 1970, 1975, 1980, 1985, 1990-2002 (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+
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
2000	3,436,750	224,027	235,548	243,199	245,520	231,425	234,926	237,938	256,938	272,054	272,524	236,889	173,773	131,949	113,094	107,180	219,764
M	1,703,661	114,639	120,759	124,797	125,988	118,645	121,654	122,658	129,741	134,653	135,302	117,969	85,653	64,559	53,382	48,739	84,524
F	1,733,089	109,388	114,790	118,403	119,533	112,780	113,272	115,280	127,197	137,401	137,223	118,920	88,120	67,390	59,712	58,440	135,241
2001	3,471,700	226,401	238,102	245,858	248,078	233,672	237,225	240,353	259,636	274,967	275,401	239,420	175,643	133,350	114,046	108,064	221,484
M	1,721,063	115,854	122,068	126,161	127,300	119,797	122,845	123,903	131,103	136,095	136,730	119,229	86,575	65,245	53,832	49,142	85,186
F	1,750,637	110,547	116,034	119,697	120,778	113,875	114,380	116,450	128,533	138,872	138,671	120,191	89,069	68,105	60,214	58,923	136,297
2002	3,504,700	227,668	240,525	248,332	250,518	235,989	239,632	242,805	262,277	277,752	278,150	241,802	177,357	134,599	115,039	108,983	223,273
M	1,737,468	116,502	123,310	127,431	128,552	120,984	124,091	125,167	132,437	137,473	138,095	120,415	87,420	65,856	54,300	49,559	85,876
F	1,767,232	111,166	117,215	120,902	121,965	115,004	115,541	117,638	129,840	140,279	140,055	121,387	89,938	68,743	60,739	59,423	137,397

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, 2002

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+
Oregon	3,504,700	227,668	240,525	248,332	151,264	99,254	235,989	239,632	242,805	262,277	277,752	278,150	241,802	177,357	134,599	115,039	108,983	97,013	126,260
Baker	16,700	872	1,020	1,296	811	380	598	656	844	1,114	1,303	1,329	1,186	1,044	965	864	814	649	955
Benton	79,900	4,045	4,515	5,136	3,409	4,788	11,263	5,578	4,743	5,127	5,899	6,288	5,067	3,412	2,367	2,116	1,978	1,790	2,376
Clackamas	350,850	20,765	25,852	27,582	15,920	9,172	19,442	20,256	22,655	27,544	31,061	31,058	27,614	20,104	13,328	10,156	9,296	8,379	10,666
Clatsop	36,100	1,972	2,204	2,553	1,766	1,147	2,038	1,845	1,960	2,500	2,816	3,184	2,718	2,006	1,696	1,512	1,421	1,191	1,571
Columbia	44,600	2,637	3,350	3,793	2,221	1,075	2,089	2,313	2,903	3,531	3,840	3,807	3,351	2,625	1,834	1,480	1,325	1,099	1,326
Coos	62,650	3,145	3,545	4,303	2,716	1,693	2,771	2,818	3,166	4,094	4,839	5,080	4,724	3,982	3,532	3,328	3,090	2,533	3,292
Crook	20,200	1,139	1,465	1,582	1,048	459	1,083	1,145	1,173	1,336	1,554	1,474	1,514	1,193	1,080	862	794	569	730
Curry	21,250	781	1,083	1,328	753	391	647	680	859	1,193	1,498	1,630	1,576	1,508	1,498	1,542	1,567	1,369	1,344
Deschutes	126,500	7,050	8,732	9,589	5,579	3,129	6,935	7,898	8,361	9,657	10,750	10,722	9,391	7,041	5,802	4,602	4,122	3,275	3,864
Douglas	101,300	5,532	6,439	7,481	4,588	2,672	4,996	4,808	5,368	6,582	7,723	7,947	7,419	6,053	5,321	5,198	4,698	3,885	4,589
Gilliam	1,900	87	119	141	87	40	67	84	99	127	173	154	133	104	108	95	94	96	92
Grant	7,750	384	553	581	406	191	252	344	378	521	620	640	588	496	435	381	319	245	415
Harney	7,600	440	550	632	350	155	316	358	418	579	641	596	537	429	398	378	289	238	296
Hood River	20,450	1,619	1,604	1,608	942	536	1,162	1,326	1,383	1,581	1,674	1,581	1,202	898	689	673	612	542	818
Jackson	187,600	10,571	12,760	13,676	8,517	5,041	11,308	10,369	10,847	12,736	14,344	15,238	13,970	10,659	8,191	7,354	7,114	6,546	8,357
Jefferson	19,850	1,547	1,648	1,768	945	468	1,062	1,214	1,298	1,415	1,363	1,307	1,228	1,051	998	844	699	427	570
Josephine	77,650	3,913	4,947	5,596	3,340	1,769	3,240	3,489	3,996	4,918	5,693	6,064	5,865	5,040	4,277	4,071	3,794	3,565	4,073
Klamath	64,550	4,160	4,655	4,945	2,864	1,745	3,788	3,673	3,671	4,373	4,712	5,054	4,584	3,569	3,025	2,801	2,503	2,021	2,407
Lake	7,450	359	484	594	386	125	253	347	353	478	614	628	557	470	423	406	355	294	325
Lane	328,150	18,555	20,330	22,105	14,056	10,950	28,010	21,945	20,771	22,758	24,835	26,900	23,475	16,822	12,765	10,901	10,811	9,775	12,386
Lincoln	44,700	2,172	2,456	2,965	1,962	968	1,899	1,914	2,278	2,832	3,434	3,858	3,601	2,868	2,590	2,598	2,281	1,908	2,117
Linn	104,000	7,167	7,378	7,778	4,744	2,819	5,869	6,197	6,581	7,441	7,788	7,821	7,048	5,682	4,440	3,874	3,698	3,313	4,360
Malheur	32,000	2,517	2,457	2,419	1,483	1,036	2,359	2,030	2,118	2,271	2,215	2,192	1,776	1,487	1,225	1,113	1,089	898	1,315
Marion	291,000	22,824	22,146	21,594	13,429	9,053	20,952	20,673	20,410	21,155	21,268	20,436	17,888	13,185	10,235	8,874	8,548	7,886	10,443
Morrow	11,250	815	1,008	935	553	371	674	713	681	791	912	828	700	562	460	409	330	245	262
Multnomah	670,250	46,771	41,690	40,166	24,569	17,662	50,381	59,968	56,916	54,472	54,175	53,881	44,905	29,795	21,158	17,225	17,342	16,307	22,870
Polk	63,450	3,608	4,405	4,849	3,080	2,237	5,075	3,431	3,615	4,153	4,594	4,963	4,337	3,241	2,433	2,254	2,073	2,044	3,059
Sherman	1,850	82	119	174	88	49	67	59	78	129	156	146	127	110	93	93	116	76	87
Tillamook	24,600	1,180	1,502	1,653	1,059	599	1,038	1,087	1,241	1,553	1,864	1,956	1,895	1,567	1,430	1,427	1,395	1,009	1,147
Umatilla	71,000	5,208	5,546	5,376	3,399	2,133	4,613	4,732	4,714	5,289	5,295	5,267	4,380	3,341	2,746	2,282	2,253	1,950	2,475
Union	24,600	1,508	1,581	1,809	1,238	922	2,012	1,292	1,202	1,479	1,785	2,002	1,754	1,298	1,069	973	832	695	1,147
Wallowa	7,150	311	412	601	371	134	215	259	270	457	564	724	561	465	399	379	368	286	374
Wasco	23,750	1,500	1,625	1,746	1,127	554	1,199	1,222	1,323	1,580	1,863	1,852	1,772	1,306	1,107	991	953	907	1,120
Washington	463,050	36,388	35,723	33,034	19,154	11,589	31,482	39,425	40,124	39,747	38,784	34,916	28,940	19,734	13,447	10,371	9,439	8,749	12,005
Wheeler	1,550	56	77	110	93	19	31	50	75	84	88	124	108	139	121	114	106	74	79
Yamhill	87,500	5,989	6,542	6,832	4,210	3,184	6,799	5,432	5,934	6,680	7,012	6,502	5,308	4,072	2,914	2,498	2,463	2,179	2,949

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, 2002 (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	1,767,232	111,166	117,215	120,902	73,643	48,322	115,004	115,541	117,638	129,840	140,279	140,055	121,387	89,938	68,743	60,739	59,423	55,883	81,514
Baker	8,538	426	497	631	395	185	292	316	409	551	658	669	595	530	493	456	444	374	618
Benton	40,071	1,975	2,200	2,500	1,660	2,331	5,489	2,690	2,298	2,538	2,979	3,166	2,544	1,730	1,209	1,117	1,079	1,031	1,534
Clackamas	176,575	10,139	12,598	13,428	7,751	4,465	9,475	9,767	10,976	13,636	15,688	15,639	13,863	10,195	6,807	5,362	5,069	4,827	6,892
Clatsop	18,314	963	1,074	1,243	860	558	993	890	950	1,238	1,422	1,603	1,364	1,017	866	798	775	686	1,014
Columbia	22,454	1,288	1,633	1,847	1,081	523	1,018	1,115	1,406	1,748	1,939	1,917	1,682	1,331	937	781	723	633	851
Coos	31,997	1,536	1,727	2,095	1,322	824	1,350	1,358	1,534	2,026	2,444	2,558	2,371	2,019	1,804	1,757	1,685	1,459	2,125
Crook	10,212	556	714	770	510	223	528	552	568	661	785	742	760	605	552	455	433	328	469
Curry	10,983	381	528	647	367	190	315	328	416	591	757	821	791	765	765	814	855	789	864
Deschutes	63,756	3,442	4,255	4,669	2,716	1,524	3,379	3,808	4,051	4,781	5,429	5,399	4,715	3,571	2,963	2,430	2,248	1,886	2,491
Douglas	51,537	2,701	3,138	3,642	2,234	1,301	2,435	2,318	2,601	3,258	3,901	4,001	3,725	3,070	2,718	2,744	2,562	2,238	2,951
Gilliam	971	43	58	69	43	20	33	41	48	63	87	78	67	53	55	50	51	55	60
Grant	3,950	188	270	283	198	93	123	166	183	258	313	322	295	251	222	201	174	141	269
Harney	3,851	215	268	308	170	76	154	173	202	286	324	300	270	217	203	200	158	137	190
Hood River	10,317	791	782	783	458	261	566	639	670	782	845	796	603	455	352	355	334	312	530
Jackson	95,154	5,162	6,218	6,658	4,147	2,454	5,511	5,000	5,255	6,305	7,245	7,673	7,013	5,405	4,183	3,883	3,879	3,771	5,392
Jefferson	9,983	755	803	861	460	228	518	585	629	701	688	658	617	533	510	445	381	246	367
Josephine	39,677	1,911	2,411	2,725	1,626	861	1,579	1,682	1,936	2,434	2,875	3,053	2,944	2,556	2,184	2,149	2,069	2,054	2,627
Klamath	32,651	2,031	2,269	2,408	1,394	849	1,846	1,771	1,778	2,165	2,380	2,545	2,301	1,810	1,545	1,479	1,365	1,164	1,551
Lake	3,794	175	236	289	188	61	123	167	171	237	310	316	279	238	216	214	194	170	209
Lane	165,657	9,060	9,907	10,762	6,843	5,331	13,650	10,581	10,063	11,266	12,543	13,545	11,785	8,530	6,519	5,756	5,895	5,631	7,989
Lincoln	22,815	1,061	1,197	1,443	955	471	926	923	1,104	1,402	1,734	1,942	1,808	1,454	1,323	1,372	1,244	1,099	1,358
Linn	52,626	3,500	3,596	3,787	2,310	1,372	2,860	2,988	3,188	3,684	3,933	3,938	3,538	2,881	2,268	2,045	2,016	1,909	2,813
Malheur	16,151	1,229	1,197	1,178	722	504	1,150	979	1,026	1,124	1,119	1,104	891	754	626	587	594	517	849
Marion	146,499	11,145	10,792	10,513	6,538	4,408	10,211	9,968	9,889	10,473	10,742	10,290	8,980	6,686	5,227	4,685	4,661	4,542	6,750
Morrow	5,644	398	491	455	269	180	329	344	330	392	461	417	352	285	235	216	180	141	169
Multnomah	336,950	22,837	20,317	19,555	11,962	8,599	24,552	28,914	27,575	26,966	27,361	27,130	22,543	15,109	10,806	9,095	9,456	9,393	14,781
Polk	32,163	1,762	2,147	2,361	1,499	1,089	2,473	1,654	1,751	2,056	2,320	2,499	2,177	1,644	1,243	1,190	1,130	1,177	1,991
Sherman	944	40	58	85	43	24	33	29	38	64	79	74	64	56	48	49	63	44	56
Tillamook	12,555	576	732	805	515	292	506	524	601	769	942	985	951	795	730	753	760	581	738
Umatilla	35,763	2,543	2,703	2,617	1,655	1,039	2,248	2,281	2,284	2,618	2,674	2,652	2,199	1,694	1,402	1,205	1,229	1,123	1,596
Union	12,465	737	771	881	603	449	981	623	582	732	902	1,008	881	658	546	514	454	400	744
Wallowa	3,655	152	201	293	180	65	105	125	131	226	285	365	282	236	204	200	200	165	241
Wasco	12,070	733	792	850	549	270	584	589	641	782	941	932	890	662	566	523	520	523	723
Washington	231,686	17,767	17,409	16,083	9,325	5,642	15,342	19,009	19,440	19,677	19,588	17,581	14,528	10,007	6,868	5,476	5,147	5,040	7,758
Wheeler	796	27	38	54	45	9	15	24	36	42	45	63	54	71	62	60	58	43	51
Yamhill	44,008	2,924	3,188	3,326	2,050	1,550	3,313	2,619	2,875	3,307	3,542	3,274	2,665	2,065	1,488	1,319	1,343	1,255	1,905

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, 2002 (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+
Oregon	1,737,468	116,502	123,310	127,431	77,620	50,932	120,984	124,091	125,167	132,437	137,473	138,095	120,415	87,420	65,856	54,300	49,559	41,130	44,746
Baker	8,162	446	523	665	416	195	307	340	435	562	645	660	591	515	472	408	370	275	338
Benton	39,829	2,070	2,315	2,635	1,749	2,457	5,774	2,889	2,445	2,589	2,920	3,122	2,523	1,682	1,158	999	900	759	843
Clackamas	174,275	10,626	13,253	14,153	8,169	4,706	9,967	10,489	11,679	13,908	15,374	15,420	13,752	9,909	6,521	4,794	4,227	3,552	3,774
Clatsop	17,786	1,009	1,130	1,310	906	589	1,045	955	1,011	1,262	1,394	1,581	1,353	989	830	714	646	505	557
Columbia	22,146	1,349	1,718	1,947	1,140	551	1,071	1,198	1,496	1,783	1,900	1,890	1,669	1,294	897	699	603	466	475
Coos	30,653	1,609	1,817	2,208	1,394	869	1,421	1,459	1,632	2,067	2,395	2,522	2,352	1,963	1,728	1,571	1,405	1,074	1,167
Crook	9,988	583	751	812	538	235	555	593	605	675	769	732	754	588	528	407	361	241	261
Curry	10,267	400	555	682	386	201	332	352	443	603	742	809	785	743	733	728	713	580	480
Deschutes	62,744	3,608	4,477	4,921	2,863	1,606	3,555	4,090	4,310	4,876	5,321	5,323	4,677	3,471	2,839	2,172	1,874	1,388	1,373
Douglas	49,763	2,831	3,301	3,839	2,354	1,371	2,561	2,490	2,767	3,323	3,823	3,945	3,695	2,984	2,604	2,454	2,136	1,647	1,638
Gilliam	929	45	61	73	45	21	34	44	51	64	86	77	66	51	53	45	43	41	32
Grant	3,800	197	284	298	208	98	129	178	195	263	307	318	293	244	213	180	145	104	146
Harney	3,749	225	282	324	180	80	162	186	215	292	317	296	268	211	195	178	132	101	106
Hood River	10,133	828	823	825	483	275	596	687	713	798	829	785	599	443	337	318	278	230	288
Jackson	92,446	5,409	6,542	7,018	4,371	2,587	5,797	5,370	5,592	6,431	7,100	7,565	6,957	5,254	4,008	3,471	3,235	2,775	2,965
Jefferson	9,867	792	845	907	485	240	544	628	669	715	675	649	612	518	488	398	318	181	203
Josephine	37,973	2,002	2,536	2,872	1,714	908	1,661	1,807	2,060	2,483	2,818	3,011	2,921	2,484	2,093	1,921	1,725	1,511	1,445
Klamath	31,899	2,129	2,387	2,538	1,470	895	1,942	1,902	1,892	2,208	2,332	2,509	2,283	1,759	1,480	1,322	1,138	857	856
Lake	3,656	183	248	305	198	64	130	179	182	241	304	312	277	232	207	192	162	125	115
Lane	162,493	9,495	10,422	11,343	7,213	5,619	14,360	11,364	10,707	11,492	12,292	13,355	11,690	8,292	6,245	5,146	4,916	4,144	4,396
Lincoln	21,885	1,111	1,259	1,521	1,007	496	974	991	1,175	1,430	1,699	1,915	1,793	1,413	1,267	1,226	1,037	809	759
Linn	51,374	3,668	3,783	3,991	2,434	1,446	3,009	3,209	3,392	3,757	3,855	3,883	3,510	2,801	2,173	1,829	1,682	1,405	1,548
Malheur	15,849	1,288	1,259	1,242	761	532	1,209	1,051	1,092	1,147	1,096	1,088	884	733	599	525	495	381	466
Marion	144,501	11,679	11,354	11,081	6,891	4,646	10,742	10,706	10,522	10,682	10,527	10,146	8,908	6,499	5,008	4,189	3,887	3,343	3,693
Morrow	5,606	417	517	480	284	190	346	369	351	400	452	411	349	277	225	193	150	104	93
Multnomah	333,300	23,933	21,373	20,611	12,607	9,063	25,829	31,054	29,340	27,505	26,814	26,751	22,362	14,686	10,352	8,131	7,886	6,913	8,089
Polk	31,287	1,846	2,258	2,488	1,580	1,148	2,602	1,777	1,864	2,097	2,274	2,464	2,160	1,598	1,190	1,064	943	866	1,068
Sherman	906	42	61	89	45	25	34	31	40	65	77	72	63	54	46	44	53	32	31
Tillamook	12,045	604	770	848	543	307	532	563	640	784	923	971	943	772	700	673	634	428	409
Umatilla	35,237	2,665	2,843	2,758	1,744	1,095	2,365	2,450	2,430	2,671	2,621	2,615	2,181	1,647	1,344	1,077	1,025	827	880
Union	12,135	772	811	928	635	473	1,032	669	619	747	884	994	874	640	523	459	378	295	402
Wallowa	3,495	159	211	308	190	69	110	134	139	231	279	360	280	229	195	179	167	121	133
Wasco	11,680	768	833	896	578	284	615	633	682	798	922	919	883	644	542	468	433	385	397
Washington	231,364	18,620	18,314	16,951	9,829	5,947	16,140	20,416	20,684	20,070	19,196	17,335	14,412	9,727	6,579	4,895	4,292	3,709	4,247
Wheeler	754	28	40	57	48	10	16	26	39	43	44	62	54	69	59	54	48	32	28
Yamhill	43,492	3,065	3,354	3,506	2,160	1,634	3,486	2,813	3,059	3,373	3,471	3,228	2,643	2,007	1,426	1,179	1,120	924	1,044

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

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 of less than 5 pounds, 8 ounces (2,500 grams) as reported on the birth certificate.

Birth rate per 1,000 men is the number of births per 1,000 males in Oregon. In computing birth rates by age of father, the National Center for Health Statistics (NCHS) method of distributing births where age of father was not stated in the same proportion as births where age of father was stated within each 5-year age interval of mother was used to facilitate national comparisons. NCHS uses this procedure to avoid distortion in rates that would result if the relationship between age of mother and age of father were disregarded.

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.

ENDNOTE

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

INDUCED TERMINATIONS OF PREGNANCY

Except for incomplete reporting by providers, the data represent *all* abortions performed in Oregon during the current data year. That is, the data constitute events associated with the place of occurrence rather than the "residence data" used in estimating births. This is necessary because many abortions obtained out-of-state by Oregon residents are not reported to Oregon's Center for Health Statistics. It reflects the great variation in abortion reporting procedures among states (e.g., some states do not record the patient's residence) as well as the fact that a comprehensive data collection network among all states, similar to that used in reporting births, does not exist in regard to abortions.

In using "occurrence" data rather than "residence" data to estimate abortion rates for Oregon residents, an implicit assumption is made that the number of Oregon residents who leave the state to obtain an abortion equals the number of out-of-state residents who obtain an abortion in Oregon. In formulating generalizations which involve trends or long-term behavioral patterns, annual totals are treated as sample values generated by ongoing social, economic, or political processes and thus subject to "chance" variability. For most purposes, numbers offered in this report should be viewed only as careful approximations and interpreted only within the framework of statistical safeguards developed to take sampling variability into account.

Some rates in this section are based on relatively *few events* and for most comparisons may be used only with extreme caution--due to the chance fluctuations associated with small numbers. A small percentage of abortion reports lack certain data items. This may

NUMBER OF FIRST-TIME ABORTIONS BY YEAR AND AGE GROUP, OREGON OCCURRENCE, 1975-1989

YEAR	AGE GROUPS					
	15-19	20-24	25-29	30-34	35-39	40-44
1975	3,470	2,751	1,331	620	296	107
1976	3,877	3,125	1,551	616	297	108
1977	3,605	2,921	1,467	650	300	107
1978	3,620	3,041	1,573	786	327	98
1979	3,821	3,149	1,552	811	289	108
1980	3,792	2,965	1,540	795	345	90
1981	3,261	2,643	1,361	760	343	96
1982	2,530	2,066	1,093	607	263	83
1983	2,340	1,976	971	519	287	67
1984	2,340	2,091	995	580	299	80
1985	2,442	2,041	915	496	324	64
1986	2,065	1,694	880	506	270	70
1987	2,375	1,926	935	584	322	83
1988	2,844	2,281	1,086	661	379	94
1989	2,801	2,453	1,245	637	415	110

greatly affect the estimation of rates. To minimize the potential bias inherent in such estimates, unknown events in some cases (Table 4-1) are assigned to the categories of analysis proportional to the distribution of known events. In this way, rates calculated for subsets (e.g., "abortions per thousand teen females") are, on average, less affected by incomplete data.

ESTIMATION OF THE CUMULATIVE PROPORTION OF FEMALES WHO HAVE EXPERIENCED AN ABORTION

This figure is estimated by tracing the abortion experience of a specific cohort of females over an extended time period. In the table on the previous page, an approximation of the "cumulative total" of first-time abortions by one of the cohorts may be obtained by summing the figures in the boxed area.

To obtain this value, it is necessary to sum the number of first-time abortions for 15- to 19-year-olds from 1975 to 1979 and those of 20- to 24-year-olds from 1980 to 1984 with those of 25- to 29-year-olds from 1985 to 1989. This provides an estimate of the numerator in the following equation:

$$\text{Cumulative proportion of females who have had an abortion} = \frac{\text{Total number of first time abortions among a specific cohort of females}}{\text{Number of females in cohort}}$$

The denominator may be estimated by averaging the size of the cohort during 1975-1989. Table A-1 lists the annual estimate of the number of females within each cohort. For example, in 1975 the number of 15- to 19-year-old females was estimated to be 110,334; in the next year it was 111,184. The average size of this age group from 1975 to 1979 was 112,047. Similarly, the number of 20- to 24-year-old women between 1980 and 1984 was 114,553 on average; the number of 25- to 29-year-olds averaged 111,724 between 1985 and 1989. Thus, between 1975 and 1989 the cohort of interest had an average population size of 112,775.

Substituting into the formula given above:

$$Cp = \frac{\text{Sum of First Abortions}}{N} = \frac{35,195}{112,775} = .312 \text{ or } 31.2 \text{ percent}$$

This figure approximates the proportion of females in the 25- to 29-year-old cohort who, by 1989, had *ever had an abortion*. This method of estimation assumes that factors such as deaths and migration have not altered the composition of the female population in Oregon--that is, the women who have left the state display the same characteristics as those who have moved into Oregon. It also assumes that patients with a history of previous abortions do not report the current procedure as a first abortion.

TEEN PREGNANCY

Pregnancy estimates are based upon the estimated number of teen births and induced terminations among Oregon teens; they do not include the number of fetal deaths or miscarriages (spontaneous abortions) which occur. The estimation of teen births is considered to be relatively complete and includes births to resident teens even when they occur out-of-state. The estimation of teen abortions is based on all reported abortions to teen age residents of Oregon; however, because states often do not report abortions obtained within their borders to the state of residence as occurs with vital events such as birth and death, an unknown number of Oregon teens obtain abortion services out-of-state. As a consequence, estimates of teen abortions and teen pregnancies should be considered minimal in nature.

Furthermore, because estimates of abortion for teens are based on "residence data," figures given in Chapter 4 do not correspond exactly to those in Chapter 3, which are based on "occurrence data." (See Induced Terminations of Pregnancy methodology section.)

TEEN BIRTH RATES, U.S. VS. OREGON, AGES 15-19, 1990

RACE/ETHNICITY	BIRTH RATE „	
	U.S.	OREGON
TOTAL †	59.9	54.8
NON-HISPANIC WHITES	42.5	50.6

„ ALL RATES PER 1,000 FEMALES.

† ALL RACES AND ETHNICITIES COMBINED.

The estimation of rates requires an estimate of the size of the appropriate population. Such estimates are now available for 15- to 17-year-olds and 18- to 19-year-olds for each county on an annual basis. Because estimated rates based on a small population may vary greatly due to chance factors, rates of teen pregnancy, birth, and abortion were calculated for these age groups only if there were 50 or more female residents of the appropriate age group in the county. Similarly, rates for 15- to 19-year-olds were calculated whenever a county had 50 or more female residents in this age group.

Great caution must be taken in the use of pregnancy statistics associated with females under 15 years of age. This is due to the fact that relatively few events are recorded each year for this group. Also, rates are based on the estimated population cohort of 10-14 year old females—many of whom are physiologically not yet at risk of pregnancy. Thus, any *direct* comparison of rates between this group and another age group—e.g., 15- to 17-year-olds—would be inappropriate.

DEMOGRAPHICS

The extent to which Oregon's demographic composition may affect its national ranking is indicated by comparisons shown in the sidebar. In 1990, Oregon's birth rate for all teens (regardless of race or ethnic affiliation) was nine percent lower than that of the U.S. and, among all 50 states, it had the 24th lowest teen birth rate. Yet, if comparisons were made in terms of births to non-Hispanic white teens only, Oregon would have been 36th and the rate would have been 19 percent *higher* than that of the U.S. This results from the fact that 87 percent of 15- to 19-year-old females in Oregon were non-Hispanic whites and only seven percent were either Hispanic or non-Hispanic African Americans. By comparison, 70 percent of the U.S. female population of that age were non-Hispanic whites and 26 percent were Hispanics or non-Hispanic African Americans.

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 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.

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

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.

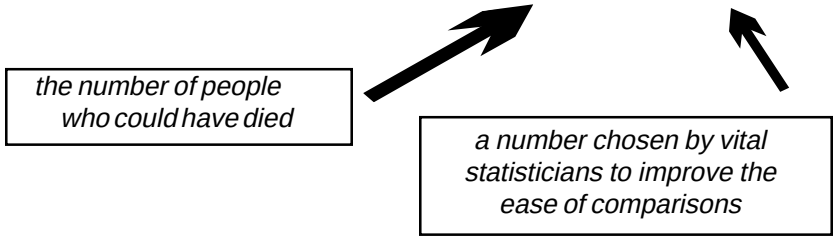
STEP 2: MAKING THE NUMBER MEANINGFUL WITH RATES AND RATIOS

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:

CRUDE DEATH RATE = (DEATHS/POPULATION) X 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:

	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

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 age-specific death rates for each 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 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 this report to illustrate changes. And finally, the staff of the Center for Health Statistics are available for data users who need assistance.

ENDNOTE

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. Nevertheless, a measure which excludes these outcomes provides an adequate indicator of the number of pregnancies.

Technical Notes — Formulas

GENERAL:

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

Birth rate, Oregon, 1993 = 13.7
Birth rate, Oregon, 1994 = 13.6

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

PREGNANCY:

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

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

---

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

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

---

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

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

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

---

4. $$TOTAL\ FERTILITY\ RATE = \left(\begin{array}{c} The\ Sum\ of\ Age\ Specific\ Birth\ Rates\ in \\ 5\text{-}Year\ Categories\ between\ 15\ and\ 44 \end{array} \right) X\ 5$$

$$Oregon,\ 1994 = 5\ (51.3 + 105. + 115.4 + 78.5 + 30.2 + 6.0) = 1{,}932.0$$

5. *FETAL DEATH RATIO* = $\frac{\textit{Resident Fetal Deaths (350+ grams Birthweight)}}{\textit{Resident Live Births}}$ *X* 1,000

Oregon, 1994 = $\frac{224}{41{,}832}$ *X* 1,000 = 5.4

---

6. *FETAL DEATH RATE* = $\frac{\textit{Resident Fetal Deaths (350+ grams Birthweight)}}{\textit{Resident Live Births + Resident Fetal Deaths}}$ *X* 1,000

Oregon, 1994 = $\frac{224}{43{,}591 + 224}$ *X* 1,000 = 5.1

---

7. *PERINATAL DEATH RATE* = $\frac{\textit{Resident Neonatal Deaths + Resident Fetal Deaths (350+ grams Birthweight)}}{\textit{Resident Live Births + Resident Fetal Deaths}}$ *X* 1,000

Oregon, 1994 = $\frac{148 + 203}{41{,}566 + 203}$ *X* 1,000 = 8.4

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

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8. *ABORTION RATIO* = $\frac{\textit{Resident Abortions}}{\textit{Resident Births}}$ *X* 1,000 *or* $\frac{\textit{Occurrence Abortions}}{\textit{Occurrence Births}}$ *X* 1,000

Oregon, 1994, *Occurrence* = $\frac{13{,}392}{43{,}591}$ *X* 1,000 = 307.2

---

9. *ABORTION RATE* = $\frac{\textit{Resident Abortions or Occurrence Abortions}}{\textit{Female Resident Population Aged 15–44}}$ *X* 1,000

Oregon 1994, *Occurrence with total adjusted for unknown ages* = $\frac{13{,}300}{682{,}428}$ *X* 1,000 = 19.5

DEATHS:

10. (*CRUDE*) *DEATH RATE* = $\frac{\textit{Resident Deaths}}{\textit{Population}}$ *X* 1,000

Oregon, 1994 = $\frac{27{,}361}{3{,}082{,}000}$ *X* 1,000 = 8.9

---

11. *INFANT DEATH RATE* = $\frac{\textit{Resident Infant Deaths}}{\textit{Resident Births}}$ *X* 1,000

Oregon, 1994 = $\frac{295}{41{,}832}$ *X* 1,000 = 7.1

---

12. *NEONATAL DEATH RATE* = $\frac{\textit{Resident Neonatal Deaths}}{\textit{Resident Births}}$ *X* 1,000

Oregon, 1994 = $\frac{164}{41{,}832}$ *X* 1,000 = 3.9

---

13. *POSTNEONATAL DEATH RATE* = $\frac{\textit{Resident Postneonatal Deaths}}{\textit{Resident Births}}$ *X* 1,000

Oregon, 1994 = $\frac{131}{41{,}832}$ *X* 1,000 = 3.1

---

14. *CAUSE-SPECIFIC DEATH RATE* = $\frac{\textit{Resident Deaths Due to Specific Cause}}{\textit{Population}}$ *X* 100,000

Oregon, 1994, *Heart Disease* = $\frac{7{,}417}{3{,}082{,}000}$ *X* 100,000 = 240.7

---

15. *AGE AND SEX-SPECIFIC DEATH RATE* = $\frac{\textit{Resident Deaths in Age-Sex Category}}{\textit{Population in Age-Sex Population}}$ *X* 1,000

Oregon, 1994, *Males Aged* 5-14 = $\frac{63}{225{,}880}$ *X* 100,000 = 27.9

MARRIAGE AND DIVORCE:

16. $$MARRIAGE\ RATE = \frac{Marriages}{Population}\ X\ 1{,}000$$

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

17. $$DIVORCE\ RATE = \frac{Divorces}{Population}\ X\ 1{,}000$$

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

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):

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

$$\text{Upper Limit} = R + [196 \times R / \sqrt{N}]$$

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:

$$\text{Lower Limit} = 13.7 - [196 \times (13.7 / \sqrt{143})]$$

$= 13.7 - [1.96 \times (13.7 / 11.96)]$
$= 13.7 - [1.96 \times 1.15]$
$= 13.7 - 2.25$
$= 11.5$

$$\text{Upper Limit} = 13.7 + [1.96 \times (13.7 / \sqrt{143})]$$

$= 13.7 + [1.96 \times (13.7 / 11.96)]$
$= 13.7 + [1.96 \times 1.15]$
$= 13.7 + 2.25$
$= 16.0$

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:

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

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

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

$$1.96\sqrt{0.194}$$

= 1.96 x .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 a Health Service Area) 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 a Health Service Area) 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.[2]

Both of these techniques have their 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.

REFERENCES:

1. US Department of Health & Human Services, Public Health Service, Centers for Disease Control and Prevention, October 1999. The original materials are available on-line at http://www.cdc.gov/nchs/products/training/phd-osp.htm.

2. For more information, please see "Direct Standardization (Age-Adjusted Death Rates)," U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Health Statistics, March 1995. The original materials are available on-line at http://www.cdc.gov/nchs/data/statnt/statnt06rv.pdf.
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.

National Center for Health Statistics: Mortality, by J. C. Kleinman, Statistical Notes for Health Planners, No. 3. Health Resources Administration, Washington, D.C., July 1977.

Appendix C: List of Figures and Tables

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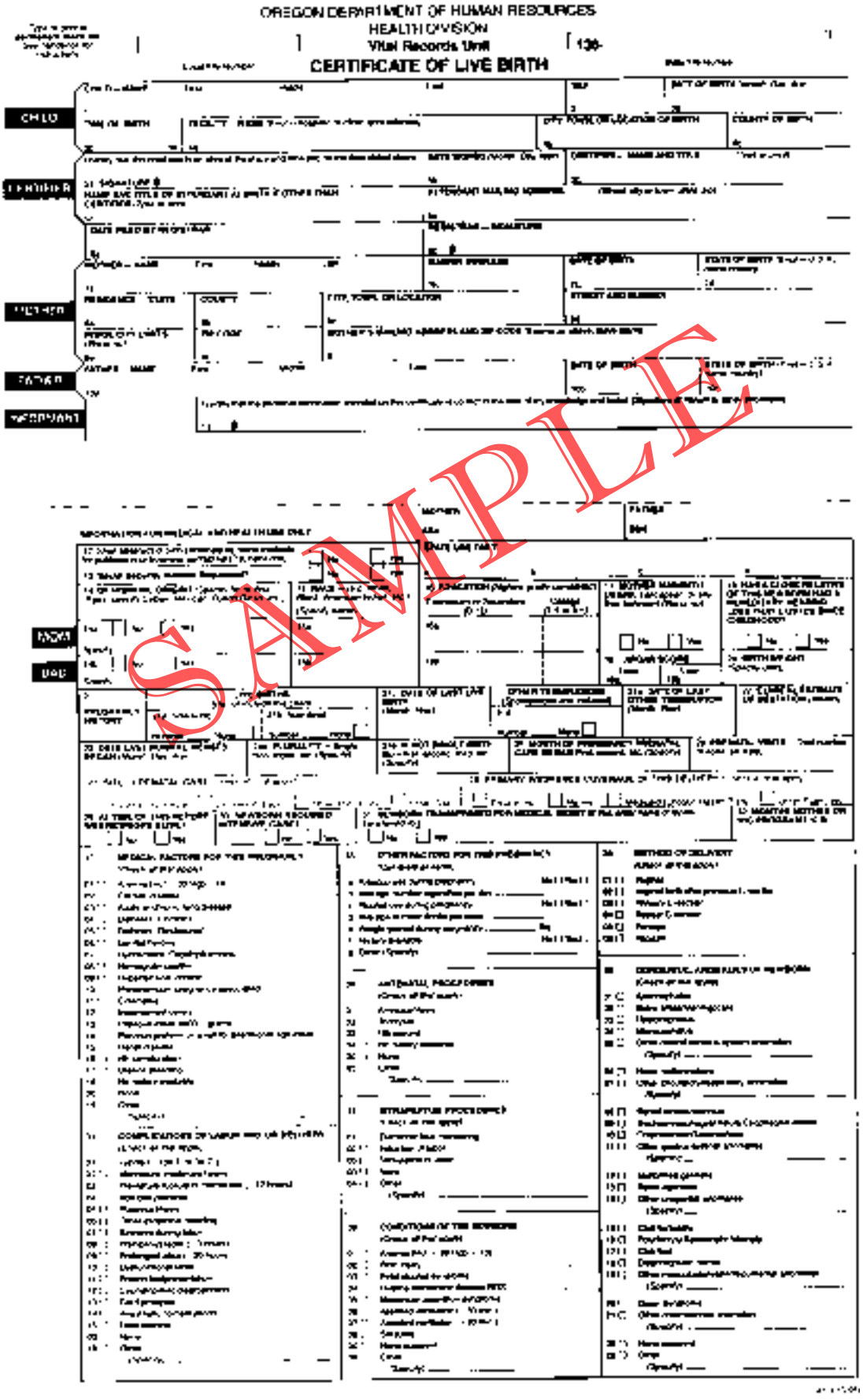
FIGURES

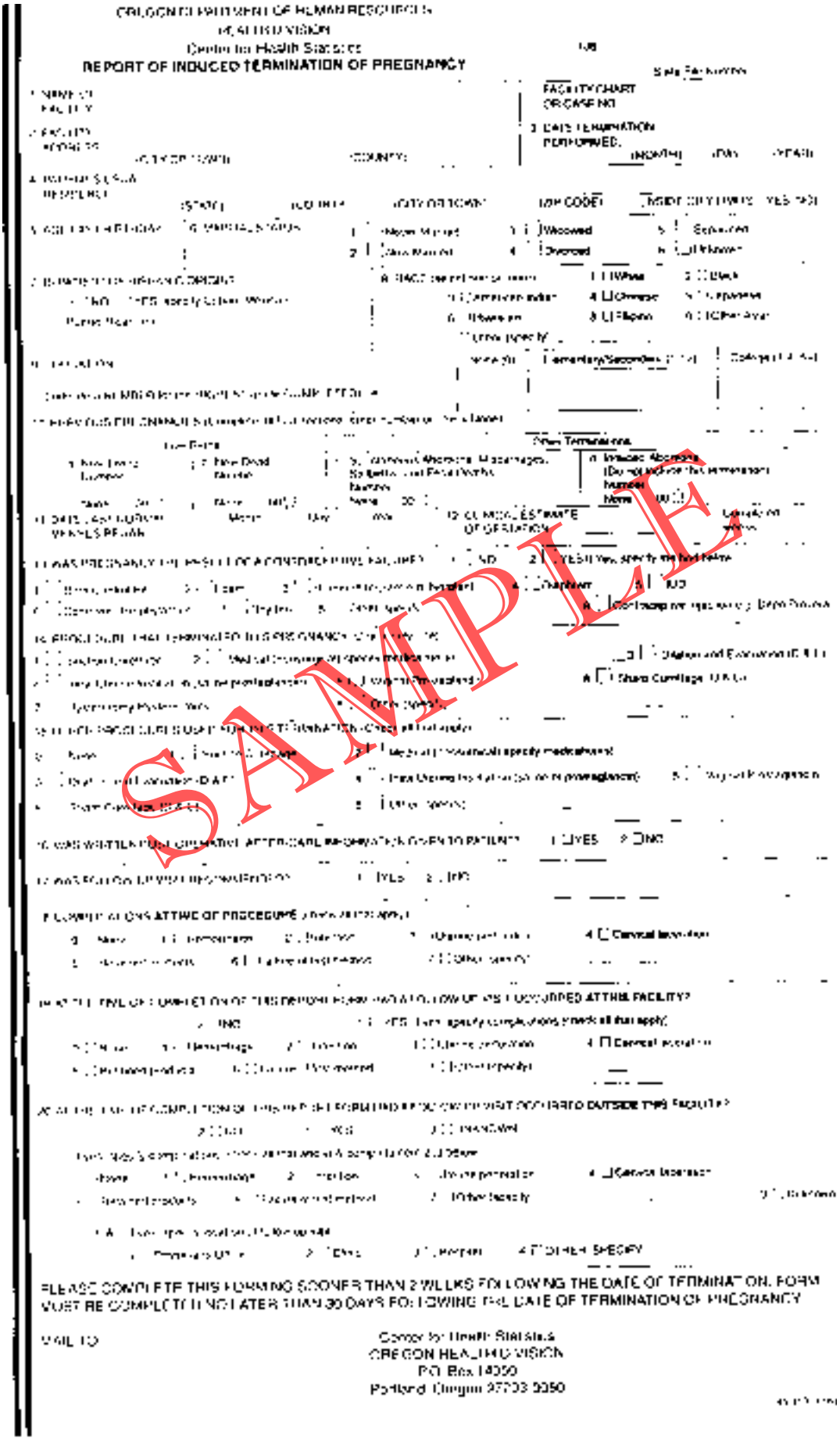
TABLES

APPENDICES

Appendix D: Sample Forms

Appendix D: Sample Forms





OREGON DEPARTMENT OF HUMAN RESOURCES
HEALTH DIVISION
Center for Health Statistics

REPORT OF INDUCED TERMINATION OF PREGNANCY

PLEASE COMPLETE THIS FORM NO SOONER THAN 2 WEEKS FOLLOWING THE DATE OF TERMINATION. FORM MUST BE COMPLETED NO LATER THAN 30 DAYS FOLLOWING THE DATE OF TERMINATION OF PREGNANCY.

MAIL TO:

Center for Health Statistics
OREGON HEALTH DIVISION
PO Box 14050
Portland, Oregon 97293-0050

TYPE/PRINT IN PERMANENT BLACK INK

OREGON DEPARTMENT OF HUMAN SERVICES
HEALTH DIVISION
CENTER FOR HEALTH STATISTICS
APPLICATION, LICENSE, AND RECORD OF MARRIAGE

State File Number

LICENSE EFFECTIVE ON OR AFTER

COUNTY

GROOM

1. GROOM'S NAME First Middle Last

2. BIRTH NAME

3. DATE OF BIRTH (Month, Day, Year)

4. AGE

5. SEX

7. PREVIOUS MARITAL STATUS

8. FATHER'S NAME

9. BIRTHPLACE

10. MOTHER'S NAME

11. BIRTHPLACE

12. RESIDENCE ADDRESS Street and Number City or Town County State Zip

BRIDE

14. BRIDE'S NAME First Middle Last

15. AGE

18. PREVIOUS MARITAL STATUS

19. BIRTHPLACE

20. BIRTHPLACE

21. RESIDENCE ADDRESS Street and Number City or Town County State Zip

SAMPLE

WE HEREBY CERTIFY THAT THE INFORMATION PROVIDED IS CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF AND THAT WE ARE FREE TO MARRY UNDER THE LAWS OF THIS STATE

23. GROOM'S LEGAL SIGNATURE

24. BRIDE'S LEGAL SIGNATURE

THE STATE OF OREGON

This License Authorizes the Marriage in the State of the Parties Named Above by Any Person Duly Authorized to Perform a Marriage Ceremony Under the Laws of the STATE OF OREGON

25. LICENSE EXPIRES (Month, Day, Year)

28. TITLE OF ISSUING OFFICIAL

29. COUNTY

OREGON

TITLE

LOCAL OFFICIAL

DATE FILED BY LOCAL OFFICIAL (Month, Day, Year)

SOCIAL SECURITY NUMBER

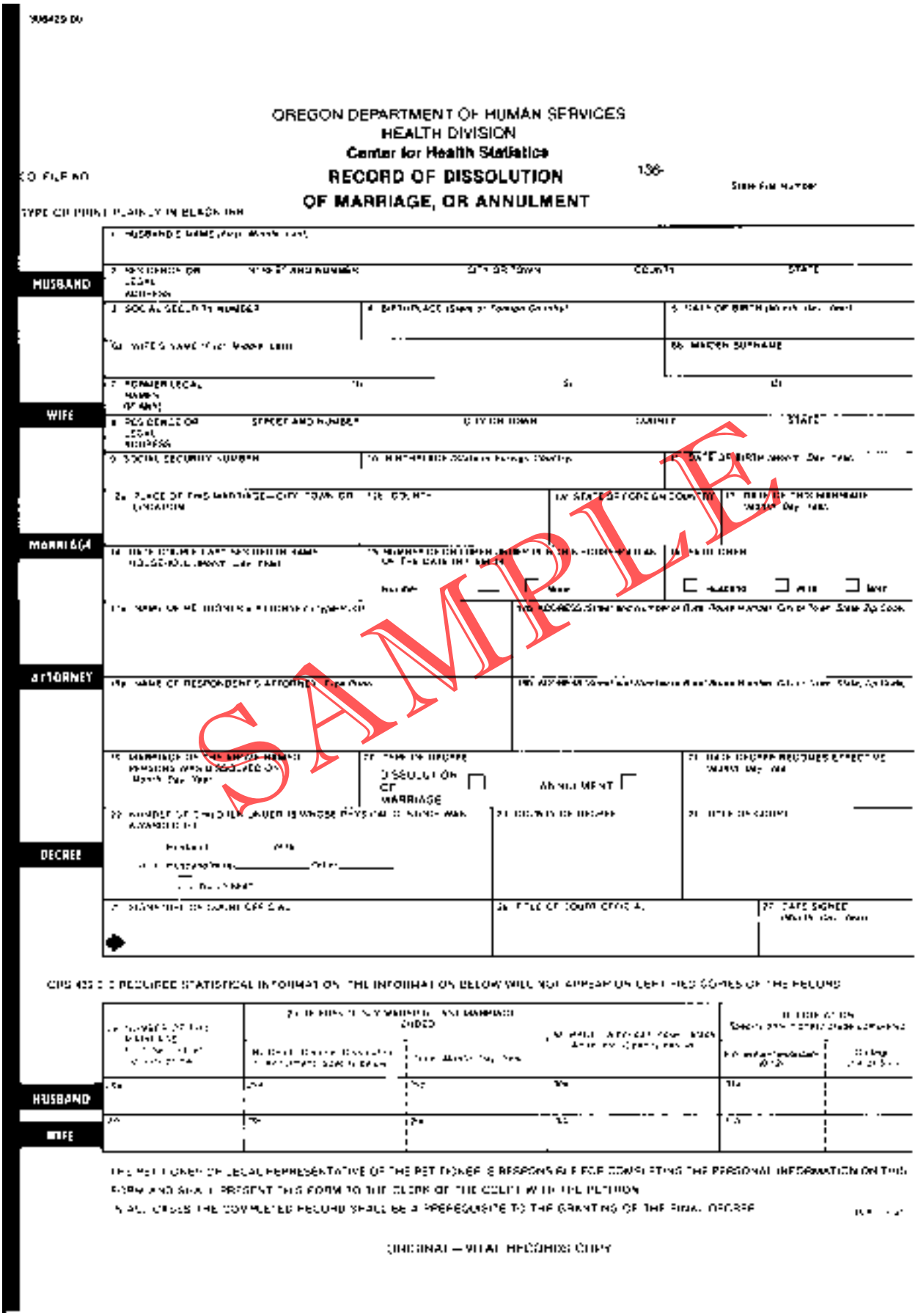
ONLY FOR STATISTICAL INFORMATION WILL NOT APPEAR ON CERTIFIED COPIES OF THE RECORD

RACE - OPTIONAL

GROOM

BRIDE

THE OFFICIAL OR PERSON PERFORMING THIS MARRIAGE IS REQUIRED TO RETURN THE ORIGINAL COPY OF THIS FORM TO THE COUNTY CLERK WITHIN TEN DAYS FOLLOWING THE DATE OF THE MARRIAGE



OREGON DEPARTMENT OF HUMAN SERVICES
HEALTH DIVISION
Center for Health Statistics

RECORD OF DISSOLUTION
OF MARRIAGE, OR ANNULMENT

TYPE OR PRINT PLAINLY IN BLACK INK

HUSBAND

WIFE

MARRIAGE

ATTORNEY

DECREE

ORS 432.120 REQUIRES STATISTICAL INFORMATION. THE INFORMATION BELOW WILL NOT APPEAR ON CERTIFIED COPIES OF THE RECORD

HUSBAND				
WIFE				

THE PETITIONER OR LEGAL REPRESENTATIVE OF THE PETITIONER IS RESPONSIBLE FOR COMPLETING THE PERSONAL INFORMATION ON THIS FORM AND SHALL PRESENT THIS FORM TO THE CLERK OF THE COURT WITH THE PETITION.

A FULLY COMPLETED RECORD SHALL BE A PREREQUISITE TO THE GRANTING OF THE FINAL DECREE.

ORIGINAL — VITAL RECORDS COPY

Do you want Oregon's most

Up-to-date Info

available from the

Center for Health Statistics?

On the web you can find the most recent data available - both preliminary and final tables.

Check out our

Web Site

http://www.healthoregon.org/chs

Are you looking for a specific table or report?

Vital Reports Data	
Births	Adequacy of prenatal care *Demographics of teen mothers by zipcode
Deaths	Manner of death *Age of decedent by county and zip code
Teen Pregnancy	Pregnancy rates by county of residence *Rolling pregnancy rate for past twelve months by county of residence

Survey Data

Adult Behavior Risk Survey - BRFSS

Oregon Healthy Teens Survey - YRBS

*These reports (and many others) available only *on-line.*

Individual tables and chapters of the annual reports, county data book and survey data are made available on the web as soon as finalized. The complete report (and paper edition) usually takes much longer to publish. Making the data available on-line increases the timeliness and decreases the cost of publications.

OREGON DEPARTMENT OF HUMAN SERVICES
HEALTH SERVICES
OFFICE OF DISEASE PREVENTION AND EPIDEMIOLOGY
CENTER FOR HEALTH STATISTICS
TELEPHONE: (503) 731-4354
800 NE OREGON ST STE 225
PORTLAND OR 97232-2162