

Oregon Vital Statistics Annual Report 2016

Volume 1

- **Natality**
- **Induced termination of pregnancy**
- **Teen pregnancy**



PUBLIC HEALTH DIVISION
Center for Public Health Practice
Center for Health Statistics

Oregon
Vital Statistics
Annual Report
2016

Volume 1



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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. Vital events — births, deaths, marriage, divorce — chart the course Oregonians take throughout their lives. In today’s complex society, using this information for careful policy and resource planning is more important than it has ever been.

Each year, the Oregon Health Authority’s 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, policymakers and health professionals have a source of important knowledge they can use to form the basis for action and benchmarks for assessing progress.

Structure of the report

To improve ease of use and timeliness, the Oregon 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) and perinatal deaths.

The only marriage, divorce, domestic partnership and dissolution of domestic partnership data in the report are statewide occurrences and rates. Information by county and by month of occurrence — as well as a variety of year-to-date preliminary data on deaths, births, abortions and teen pregnancy — is available at the Center for Health Statistics (CHS) website:

<http://public.health.oregon.gov/BirthDeathCertificates/VitalStatistics>.

Additional data are available in the form of simple cross-tabulations. For information on availability or to request the data, call the Center for Health Statistics as listed on the previous credits page.

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 tables following the chapter narratives.

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. Tabulations and analyses 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 those deaths due to external or “non-natural” causes, which are certified by medical examiners. Hospital medical records personnel help to ensure that all certificates are complete and accurate.

These service providers then file the completed certificates using a Web-based system that simultaneously transmits the records to the county and state registrar.

Abortions are treated differently. The providers of induced abortions file the completed statistical data (which contain no identifying information) directly with the state registrar.

County officials

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

Other states

This report does not overlook events relating to Oregon residents that occurred in another state. The Centers for Health Statistics in each U.S. state and Canadian province have agreed to forward copies of birth, death and fetal death records 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.

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.

Executive summary

Each year, the Oregon Health Authority's 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 professionals have a source of important knowledge that can be used to form the basis for action and benchmarks for assessing progress. Volume 1 of the report includes data on live births, induced terminations of pregnancy, and teen pregnancy. In addition, Volume 1 contains counts of marriages, divorces, Oregon registered domestic partnerships and dissolutions of domestic partnership.

SUMMARY OF VITAL STATISTICS, VOLUME 1		
Vital statistic*	2016	2015
Population	4,076,350	4,013,845
Live births (residents)		
Number	45,533	45,656
Crude birth rate	11.2	11.4
Fertility rate	57.0	58.0
Low birthweight infants (residents)		
Number	2,980	2,931
Rate	65.5	64.2
Births to unmarried mothers (residents)		
Number	16,221	16,380
Ratio	357.1	359.6
Induced abortions (occurrences)		
Number	8,942	8,610
Ratio to live births	194.5	186.8
Unions and dissolutions (occurrences)**		
Marriages	28,041	27,794
Divorces	13,602	13,831
Domestic partnerships	71	103
Dissolutions of domestic partnership	34	88
<p>*Crude birth rates are per 1,000 population; fertility rates are per 1,000 15-44 year old females; unmarried mother ratio and low birthweight rate are per 1,000 live resident births; induced abortion ratio is per 1,000 live occurrence births. Rates and ratios exclude missing and unknown values.</p> <p>**Same-sex marriage became legal in Oregon on May 19, 2014.</p>		

Table of contents

Preface	i
Executive summary	iv
Section 1: Quick reference: Volume 1	1-1
Section 2: Natality	2-1
Demographics.....	2-3
Maternal race/ethnicity	2-3
Marital status of mother	2-4
Educational attainment	2-6
Maternal lifestyle and health characteristics.....	2-7
Tobacco	2-7
Maternal weight and weight gain	2-8
Medical risk factors.....	2-9
Medical services utilization	2-9
Prenatal care.....	2-9
Place of delivery and birth attendant	2-11
Method of delivery	2-13
Infant health characteristics	2-13
Period of gestation	2-13
Low birthweight.....	2-14
High birthweight	2-15
Apgar scores.....	2-15
Abnormal conditions and congenital anomalies	2-15
Multiple births	2-16
Infertility treatment	2-16
Source of payment	2-16
Endnote.....	2-16
Section 3: Induced termination of pregnancy	3-1
Current trends.....	3-1
Pregnancy outcomes	3-2
Abortion patients	3-3

Age.....	3-3
Race and ethnicity.....	3-4
Contraceptive use	3-5
Medical procedures.....	3-5
Geographic distribution.....	3-6
Endnote.....	3-7

Section 4: Teen pregnancy 4-1

Introduction	4-1
Oregon females, aged 15–17	4-1
Births to teens, aged 15–17	4-2
Abortion rates among teens, aged 15–17	4-3
Oregon females, aged 18–19	4-3
Oregon vs. U.S. birth rates	4-4
Level of infant health	4-5
Low birthweight.....	4-5
Race and ethnicity.....	4-6
Prenatal care.....	4-6
Early prenatal care	4-6
Inadequate prenatal care	4-7
Late care or no prenatal care	4-7
Low Apgar score.....	4-9
Substance use during pregnancy.....	4-9
Tobacco	4-9
Alcohol.....	4-9
Source of payment	4-10
Age of father.....	4-10
Endnotes	4-11

Appendices

Appendix A: Population	A-1
Appendix B: Technical notes	B-1
Definitions	B-1
Methodology	B-4
Step-by-step instructions	B-8
Formulas	B-16
Appendix C: List of figures and tables	C-1
Appendix D: Sample forms	D-1
Certificate of Live Birth	D-1
Report of Induced Termination of Pregnancy.....	D-3
Application, License, and Record of Marriage.....	D-4
Declaration of Oregon Registered Domestic Partnership	D-5
Record of Dissolution of Marriage, Annulment or Registered Domestic Partnership.....	D-6

SECTION 1: QUICK REFERENCE (VOLUME 1)

Quick reference (Volume 1)

Summary of Oregon Vital Events, 2016*		
Population	4,076,350	The population increased 62,505, or 1.6% over 2015.
Live births	Residents	
Number	45,533	The number of births decreased by 123. The crude rate decreased by 1.8% and the fertility rate decreased by 1.7%.
Crude rate	11.2	
Fertility rate	57.0	
Marriages	Occurrences	
Number	28,041	The number of marriages increased by 247. There was no change in the rate.
Crude rate	6.9	
Divorces	Occurrences	
Number	13,602	The number of divorces decreased by 229. The rate decreased by 2.9%.
Crude rate	3.3	
Domestic partnerships	Occurrences	
Number	71	The number of domestic partnerships decreased by 32.**
Dissolutions of domestic partnership	Occurrences	
Number	34	The number of dissolutions of domestic partnership decreased by 54.
Unmarried mothers	Residents	
Number	16,221	The number of unmarried mothers giving birth decreased by 159. The proportion of births which were to unmarried mothers decreased by .7%.
Ratio	357.1	
Low birthweight infants	Residents	
Number	2,980	The number of low birthweight infants increased by 49. The rate increased by 2.0%.
Rate	65.5	
Induced abortions	Occurrences	
Number	8,942	The number of reported abortions increased by 332, a increase of 3.9% from 2015. The abortion ratio increased 4.1%.
Ratio	194.5	
*Crude birth, marriage, divorce, and domestic partnership rates are per 1,000 population; fertility rates per 1,000 15-44 year old females; unmarried mother ratio and low birthweight rate, per 1,000 live resident births; induced abortion ratio per 1,000 live occurrence births. Rates and ratios exclude missing and unknown values.		
**Same-sex marriage became legal in Oregon on May 19, 2014.		

TABLE 1-1. Live births, births to unmarried mothers, marriages, and divorces, U.S., 1945-2016

Year	Live births		Births to unmarried mothers		Marriages		Divorces	
	Number	Rate ¹	Number	Ratio ²	Number	Rate ¹	Number	Rate ¹
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

See footnotes at end of table.

TABLE 1-1. Live births, births to unmarried mothers, marriages, and divorces, U.S., 1945-2016 (continued)

Year	Live births		Births to unmarried mothers		Marriages		Divorces	
	Number	Rate ¹	Number	Ratio ²	Number	Rate ¹	Number	Rate ¹
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
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	944,000	4.0
2001	4,025,933	14.1	1,349,249	335.1	2,345,000	8.2	940,000	4.0
2002	4,021,726	13.9	1,365,966	339.6	2,254,000	7.9	955,000	3.9
2003	4,089,950	14.1	1,415,995	346.0	2,224,000	7.5	927,000	3.8
2004	4,112,052	14.0	1,470,189	358.0	2,279,000	7.8	879,000	3.7
2005	4,138,349	14.0	1,527,034	369.0	2,249,000	7.6	847,000	3.6
2006	4,265,555	14.2	1,641,946	385.0	2,193,000	7.4	872,000	3.7
2007	4,317,119	14.3	1,714,643	397.0	2,205,000	7.3	856,000	3.6
2008	4,247,694	14.0	1,726,566	406.0	2,162,000	7.1	844,000	3.5
2009	4,131,019	13.5	1,693,850	410.0	2,077,000	6.8	840,000	3.5
2010	4,000,279	13.0	1,633,785	408.0	2,096,000	6.8	872,000	3.6
2011	3,953,590	12.7	1,607,773	406.7	2,118,000	6.8	877,000	3.6
2012	3,952,841	12.6	1,609,619	407.2	not available	NA	not available	NA
2013	3,932,181	12.4	1,595,873	405.8	not available	NA	not available	NA
2014	3,985,924	12.5	1,604,495	402.5	not available	NA	not available	NA
2015	3,978,497	12.4	1,601,527	402.5	not available	NA	not available	NA
2016	*3,941,109	12.3	*1,565,931	397.3	not available	NA	not available	NA

* Provisional data.

¹ Rate per 1,000 population for live births, marriages and divorces.² Ratio per 1,000 live births for births to unmarried mothers.

The source for data is: Births: Provisional Data for 2016. NVSS Vital Statistics Rapid Release Report No. 002, June 2017

Marriage and divorce number and rate: National Marriage and Divorce Rate Trends.
National Vital Statistics Reports.

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, selected years 1910-1940, 1945-2016

Year*	Population	Live births		Births to unmarried mothers		Marriages		Divorces	
		Number	Rate ¹	Number	Ratio ²	Number	Rate ¹	Number	Rate ¹
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
1935	1,020,800	13,143	12.9	-	-	6,795	6.7	2,304	2.3
1940	1,093,000	17,522	16.0	-	-	5,998	5.5	3,543	3.2
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
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

See footnotes at end of table.

TABLE 1-2. Population, live births and births to unmarried mothers, marriages, and divorces, Oregon, selected years 1910-1940, 1945-2016 — Continued

Year*	Population	Live births		Births to unmarried mothers		Marriages		Divorces	
		Number	Rate ¹	Number	Ratio ²	Number	Rate ¹	Number	Rate ¹
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
2003	3,541,500	45,935	13.0	14,553	317.4	25,565	7.2	15,359	4.3
2004	3,582,600	45,660	12.7	14,824	325.3	25,789	7.2	14,611	4.1
2005	3,631,440	45,905	12.6	15,254	332.8	26,471	7.3	15,033	4.1
2006	3,690,505	48,684	13.2	16,675	343.3	26,715	7.2	14,915	4.0
2007	3,745,455	49,373	13.2	17,311	350.8	26,664	7.1	14,921	4.0
2008	3,791,075	49,117	13.0	17,686	360.7	26,139	6.9	14,809	3.9
2009	3,823,465	47,188	12.3	16,613	352.9	25,239	6.6	14,948	3.9
2010	3,844,195	45,596	11.9	16,173	355.5	25,067	6.5	15,312	4.0
2011	3,857,625	45,136	11.7	15,971	354.5	25,530	6.6	14,823	3.8
2012	3,883,735	45,059	11.6	15,823	351.3	25,641	6.6	14,841	3.8
2013	3,919,020	45,136	11.5	16,046	356.5	24,951	6.4	14,274	3.6
2014	3,962,710	45,557	11.5	16,349	359.6	27,735	7.0	13,489	3.4
2015	4,013,845	45,656	11.4	16,380	359.6	27,794	6.9	13,831	3.4
2016	4,076,350	45,533	11.2	16,221	357.1	28,041	6.9	13,602	3.3

* Complete listings for years 1908-1944 can be found in annual reports before 2001.

¹ Rate per 1,000 population for live births, marriages and divorces.

² Ratio per 1,000 live births for births to unmarried mothers calculated excluding unknown marital status.

- Data not available.

TABLE 1-3. Population, live births and births to unmarried mothers, by county of residence, and marriages and divorces, by county of occurrence, Oregon, 2016

County	Estimated population July 1, 2016	Live births		Births to unmarried mothers		Marriages		Divorces	
		No.	Rate ¹	No.	Ratio ²	No.	Rate ¹	No.	Rate ¹
Total	4,076,350	45,533	11.2	16,221	357.1	28,041	6.9	13,602	3.3
Baker	16,510	160	9.7	62	387.5	99	6.0	49	3.0
Benton	91,320	763	§ 8.4	174	§ 228.0	432	§ 4.7	181	§ 2.0
Clackamas	404,980	4,238	§ 10.5	1,193	§ 281.7	3,074	§ 7.6	1,152	§ 2.8
Clatsop	38,225	408	10.7	167	409.3	620	§ 16.2	140	3.7
Columbia	50,795	527	10.4	212	403.0	303	§ 6.0	207	§ 4.1
Coos	63,190	626	§ 9.9	320	§ 512.0	378	§ 6.0	189	3.0
Crook	21,580	238	11.0	100	420.2	168	7.8	95	§ 4.4
Curry	22,600	182	§ 8.1	52	433.3	184	§ 8.1	82	3.6
Deschutes	176,635	1,799	§ 10.2	570	§ 317.7	1,366	§ 7.7	708	§ 4.0
Douglas	110,395	1,087	§ 9.8	512	§ 471.5	686	§ 6.2	477	§ 4.3
Gilliam	1,980	17	8.6	7	411.8	8	4.0	5	2.5
Grant	7,410	56	§ 7.6	18	321.4	52	7.0	23	3.1
Harney	7,320	93	12.7	35	376.3	42	5.7	4	§ 0.5
Hood River	24,735	252	10.2	78	310.8	436	§ 17.6	99	4.0
Jackson	213,765	2,293	10.7	944	§ 412.8	1,294	§ 6.1	937	§ 4.4
Jefferson	22,790	282	12.4	153	§ 542.6	136	6.0	78	3.4
Josephine	84,675	870	§ 10.3	422	§ 486.7	476	§ 5.6	330	§ 3.9
Klamath	67,410	821	12.2	394	§ 481.1	361	§ 5.4	159	§ 2.4
Lake	8,015	70	§ 8.7	25	357.1	51	6.4	37	4.6
Lane	365,940	3,555	§ 9.7	1,421	§ 400.1	2,142	§ 5.9	1,295	§ 3.5
Lincoln	47,735	435	§ 9.1	223	§ 512.6	751	§ 15.7	179	3.7
Linn	122,315	1,521	§ 12.4	570	374.8	808	6.6	499	§ 4.1
Malheur	31,705	465	§ 14.7	232	§ 500.0	215	6.8	80	§ 2.5
Marion	333,950	4,519	§ 13.5	1,847	§ 409.1	2,434	§ 7.3	1,222	§ 3.7
Morrow	11,745	164	§ 14.0	70	426.8	66	5.6	18	§ 1.5
Multnomah	790,670	9,023	11.4	2,968	§ 329.3	6,122	§ 7.7	2,500	§ 3.2
Polk	79,730	975	§ 12.2	340	348.7	534	6.7	205	§ 2.6
Sherman	1,795	17	9.5	2	117.6	9	5.0	6	3.3
Tillamook	25,920	255	§ 9.8	115	§ 451.0	534	§ 20.6	1	§ 0.0
Umatilla	79,880	949	11.9	474	§ 500.5	416	§ 5.2	227	§ 2.8
Union	26,745	312	11.7	130	416.7	149	§ 5.6	105	3.9
Wallowa	7,140	59	§ 8.3	10	§ 169.5	62	8.7	16	2.2
Wasco	26,700	321	12.0	129	401.9	177	6.6	102	3.8
Washington ...	583,595	6,999	§ 12.0	1,810	§ 258.9	2,644	§ 4.5	1,845	§ 3.2
Wheeler	1,465	17	11.6	9	529.4	15	10.2	2	1.4
Yamhill	104,990	1,160	11.0	429	369.8	797	§ 7.6	344	3.3

§ Indicates rate or ratio is significantly different from the state.

¹ Rate per 1,000 population for live births, marriages and divorces.

² Ratio per 1,000 live births for births to unmarried mothers, calculated excluding missing and unknown values.

NOTE: Total live births includes five unknown county of residence.

WARNING: Rates and ratios based on less than five events are unreliable.

TABLE 1-4. Population and births by city of residence, Oregon, 2016

City of residence	Estimated population July 1, 2016	Births	
		Number	Rate
Albany (Linn, Benton)	52,540	709	13.5
Ashland (Jackson)	20,620	123	6.0
Baker City (Baker)	9,890	105	10.6
Beaverton (Washington)	95,385	2,309	24.2
Bend (Deschutes)	83,500	1,057	12.7
Canby (Clackamas)	16,420	267	16.3
Central Point (Jackson)	17,585	241	13.7
Coos Bay (Coos)	16,615	237	14.3
Cornelius (Washington)	11,915	180	15.1
Corvallis (Benton)	58,240	513	8.8
Dallas (Polk)	15,345	192	12.5
Damascus (Clackamas)	10,625	106	10.0
Eugene (Lane)	165,885	1,607	9.7
Forest Grove (Washington)	23,375	324	13.9
Gladstone (Clackamas)	11,660	129	11.1
Grants Pass (Josephine)	36,815	666	18.1
Gresham (Multnomah)	108,150	1,001	9.3
Happy Valley (Clackamas)	18,680	331	17.7
Hermiston (Umatilla)	17,730	311	17.5
Hillsboro (Washington)	99,340	1,306	13.1
Keizer (Marion)	37,505	505	13.5
Klamath Falls (Klamath)	21,640	399	18.4
La Grande (Union)	13,200	191	14.5
Lake Oswego (Clackamas, Multnomah, Washington)	37,425	273	7.3
Lebanon (Linn)	16,435	257	15.6
McMinnville (Yamhill)	33,405	415	12.4
Medford (Jackson)	78,500	1,150	14.6
Milwaukie (Clackamas)	20,510	599	29.2
Newberg (Yamhill)	23,465	283	12.1
Newport (Lincoln)	10,190	123	12.1
Ontario (Malheur)	11,465	243	21.2
Oregon City (Clackamas)	34,240	572	16.7
Pendleton (Umatilla)	16,880	215	12.7
Portland (Clackamas, Multnomah, Washington)	627,395	8,538	13.6
Redmond (Deschutes)	27,595	410	14.9
Roseburg (Douglas)	22,820	388	17.0
Salem (Marion, Polk)	162,060	2,762	17.0
Sandy (Clackamas)	10,655	221	20.7
Sherwood (Washington)	19,145	234	12.2
Springfield (Lane)	60,140	876	14.6
St. Helens (Columbia)	13,120	178	13.6
The Dalles (Wasco)	14,625	223	15.2
Tigard (Washington)	49,745	724	14.6
Troutdale (Multnomah)	16,035	209	13.0
Tualatin (Clackamas, Washington)	26,840	332	12.4
West Linn (Clackamas)	25,615	232	9.1
Wilsonville (Clackamas, Washington)	23,740	288	12.1
Woodburn (Marion)	24,795	410	16.5

Selected cities of 9,800 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. Oregon rates of low birthweight, and measures of prenatal care, 1980-2016

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
2003	61.6	810.7	11.7	55.5	28.6	38.4
2004	60.6	804.3	10.9	57.9	30.3	41.0
2005	61.2	810.0	8.9	58.3	30.1	40.8
2006	61.0	792.3	9.3	61.5	32.6	42.3
2007	61.0	783.9	9.9	64.3	35.4	43.4
2008*	60.7	702.4	10.5	69.6	45.2	39.2
2009	63.0	712.1	8.5	62.0	41.9	31.7
2010	63.0	731.0	6.2	54.6	38.9	26.9
2011	61.4	750.6	7.1	54.2	38.0	25.4
2012	61.7	743.3	6.5	52.3	36.7	25.9
2013	63.0	778.3	6.5	56.7	36.4	29.9
2014	62.5	774.6	7.4	60.2	40.3	32.3
2015	64.2	789.5	7.2	57.2	37.9	30.9
2016	65.5	797.4	8.4	60.4	39.3	33.3

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

* Starting in 2008 prenatal care calculations changed, see Appendix B for details

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

TABLE 1-6. Domestic partnerships and dissolutions of domestic partnerships by county of occurrence, Oregon, 2016

County	Estimated population July 1, 2016	Domestic partnerships			Dissolutions of domestic partnership
		Total	Male- Male	Female- Female	
Total	4,076,350	71	20	51	34
Baker	16,510	–	–	–	–
Benton	91,320	–	–	–	–
Clackamas	404,980	1	–	1	5
Clatsop	38,225	–	–	–	–
Columbia	50,795	–	–	–	–
Coos	63,190	1	1	–	–
Crook	21,580	–	–	–	–
Curry	22,600	–	–	–	–
Deschutes	176,635	–	–	–	1
Douglas	110,395	3	1	2	1
Gilliam	1,980	–	–	–	–
Grant	7,410	–	–	–	1
Harney	7,320	–	–	–	–
Hood River	24,735	–	–	–	–
Jackson	213,765	1	–	1	2
Jefferson	22,790	–	–	–	–
Josephine	84,675	2	1	1	–
Klamath	67,410	–	–	–	1
Lake	8,015	–	–	–	–
Lane	365,940	3	1	2	3
Lincoln	47,735	–	–	–	1
Linn	122,315	1	–	1	1
Malheur	31,705	–	–	–	–
Marion	333,950	6	–	6	4
Morrow	11,745	–	–	–	–
Multnomah	790,670	38	13	25	10
Polk	79,730	–	–	–	1
Sherman	1,795	–	–	–	–
Tillamook	25,920	–	–	–	–
Umatilla	79,880	2	1	1	–
Union	26,745	–	–	–	–
Wallowa	7,140	–	–	–	–
Wasco	26,700	–	–	–	–
Washington ...	583,595	12	2	10	3
Wheeler	1,465	–	–	–	–
Yamhill	104,990	1	–	1	–

– Quantity is zero.

SECTION 2: NATALITY

Natality

In 2016, Oregon recorded **45,533 resident births**, 123 fewer than in 2015. The **crude birth rate** (the number of babies born divided by the total state population) was 11.2 per 1,000 population (see Table 1-2). Oregon's crude birth rate peaked in 1947 at 25.4 per 1,000 population. From 1975 to 2008, Oregon's rate was consistently in the mid- to low-teens, and has been under 13.0 for the last seven years. 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 2016, Oregon's rate was 8.9% lower than the national rate (11.2 vs. 12.3; see Figure 2-1).

Oregon's **fertility rate** decreased slightly from last year to 57.0 per 1,000 women aged 15–44 (see sidebar Table 2-A, Table 2-2). The fertility rate is based on the number of births per 1,000 women aged 15–44. The fertility rate is a more precise measurement of changes in behavioral patterns than crude birth rate. The fertility rate relates only to women of typical childbearing age, while the crude rate is based on the entire population. Age-specific birth rates decreased among all age groups of women except 35–39, which increased by 2.0%, and women aged 40–44, which increased by 7.8%. The largest percentage decrease was among women aged 15–19 (12.4%), followed by women aged 20–24 (6.7%; see Table 2-2, Figure 2-2).

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

Table 2-A. Fertility rates per 1,000 females 15-44, Oregon and U.S.		
Year	Oregon	U.S.
1985	62.2	66.3
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
2003	61.2	66.1
2004	60.0	66.3
2005	62.2	66.7
2006	65.5	68.5
2007	66.0	69.2
2008	64.6	68.6
2009	62.0	66.7
2010	60.0	66.7
2011	59.3	63.2
2012	58.8	63.0
2013	58.6	62.5
2014	58.6	62.9
2015	58.0	62.5
2016	57.0	62.0

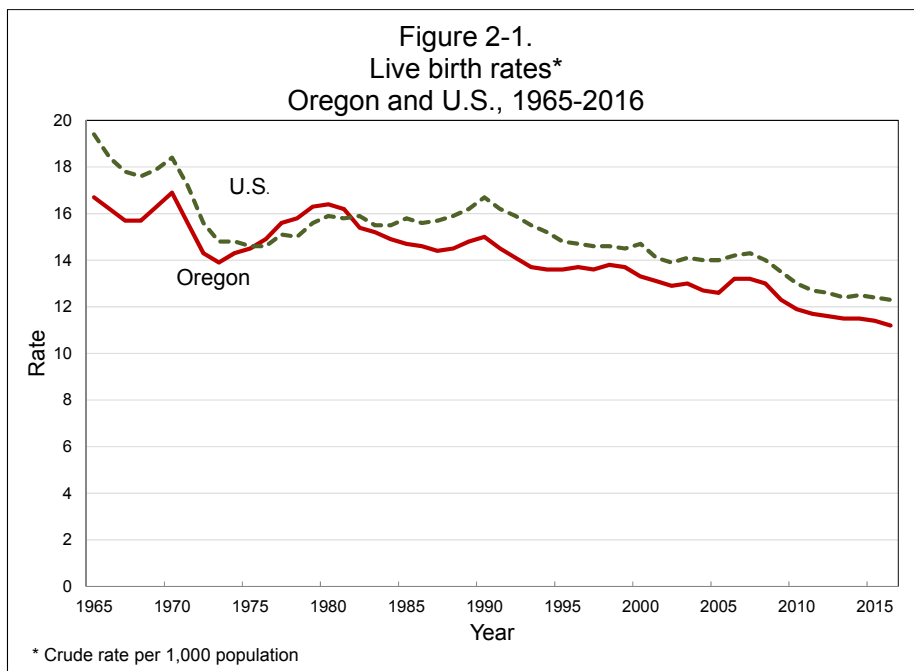
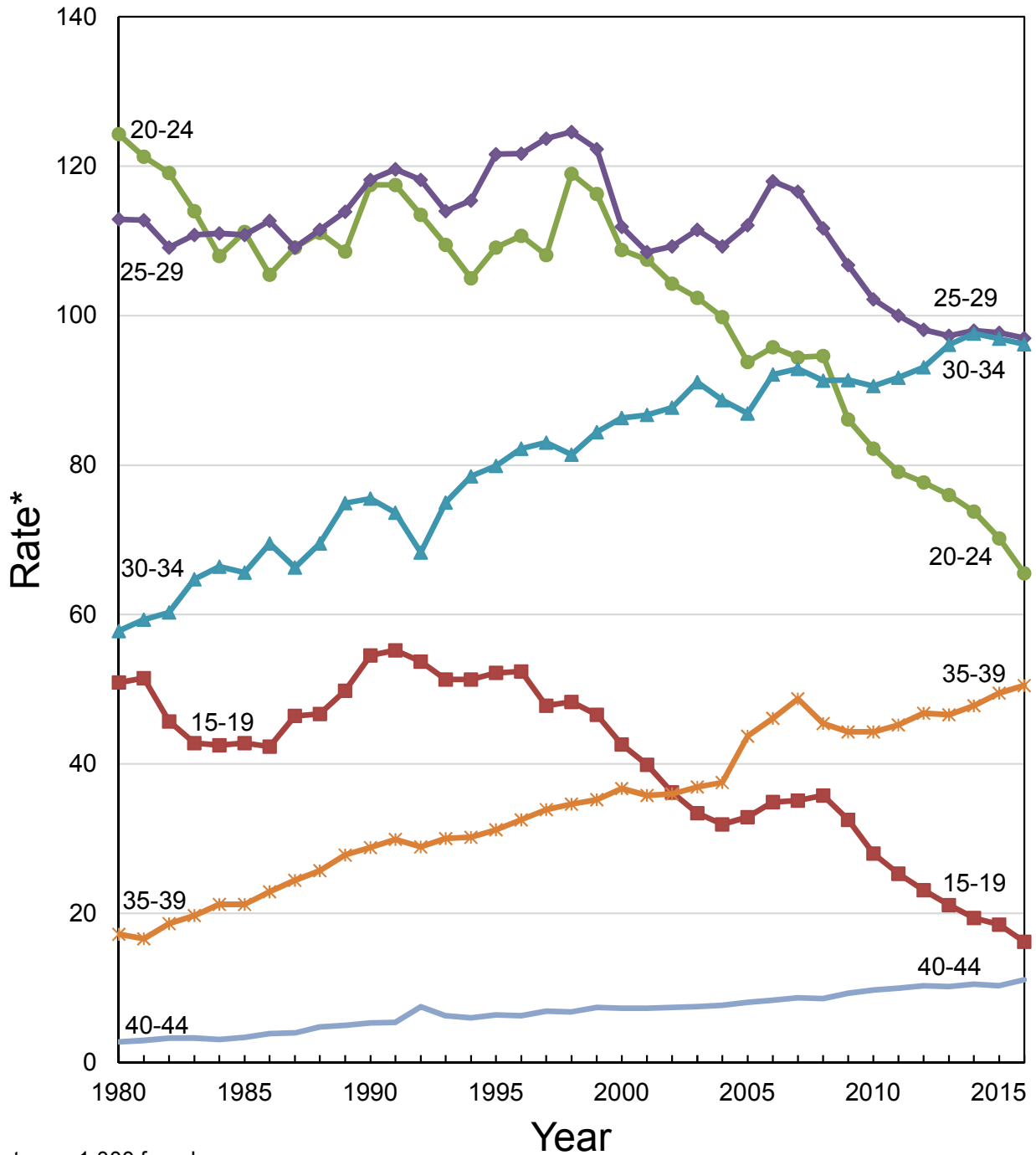


Figure 2-2. Age-specific birth rates, Oregon residents, 1980-2016



*Rate per 1,000 females

The youngest female to give birth in 2016 was 13 years old, and the oldest was 56 years. Mother's median age for all births was 29 years, and the mean age was 29 years. The median age at first birth was 27 years, and the mean age was 27 years. The **rate of first birth** decreased slightly from the previous year to 22.2 first births per 1,000 women aged 15–44. The proportion of first births among total births has been stable for the past decade. In 2000, 40.1% of births were first births; in 2016, 39.0% were first births.

Father's mean age for births was 32 years, and the median age was 31 years. The **birth rate per 1,000 men** ages 15–54 was 42.4 in 2016 for Oregon resident births. Information on the father was missing from 8.1% of birth certificates. Unknown father age was distributed in the same manner as national data (see Appendix B: “Technical notes — definitions”). The national birth rate for men in 2015 was 46.1 per 1,000 men.

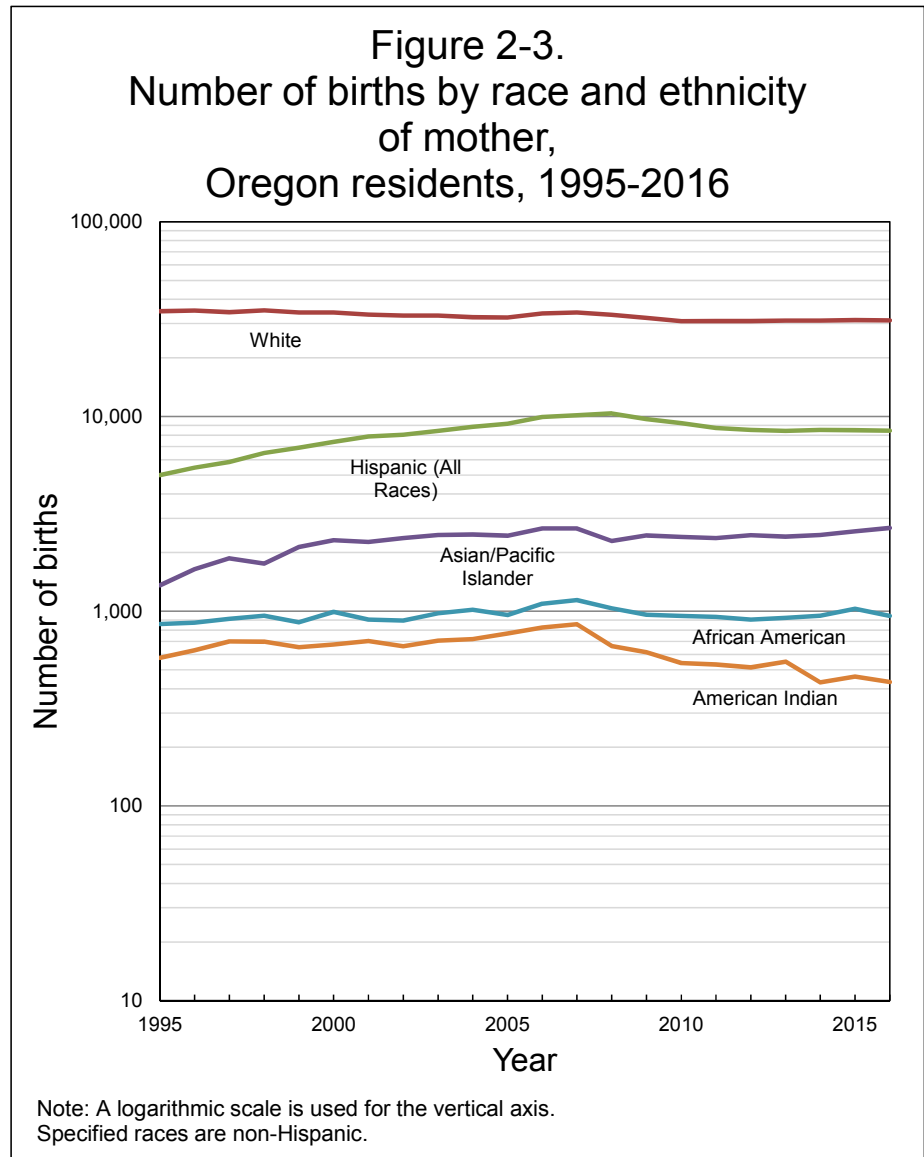
Demographics

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 1990, the number of births to women of Hispanic ethnicity has almost tripled to 18.6% of total births (see Table 2-7, Figure 2-3). The method for reporting the Hispanic category has changed in Oregon over the years. From 1981 to 1988, “Hispanic” was a race category on the birth certificate. From 1989 to 2007, information regarding Hispanic ethnicity was reported separately from race. Starting in 2008, an individual could choose multiple race/ethnicity responses (see Appendix B: “Technical notes — methodology”). Persons of Hispanic ethnicity may belong to any race category (or categories). This change addressed the complexity of race and ethnicity and increased self-reporting accuracy for Oregon.

Perinatal differences by race and ethnicity of mother persist. These differences are noted within the topic areas discussed in the remainder of this chapter.



Marital status of mother

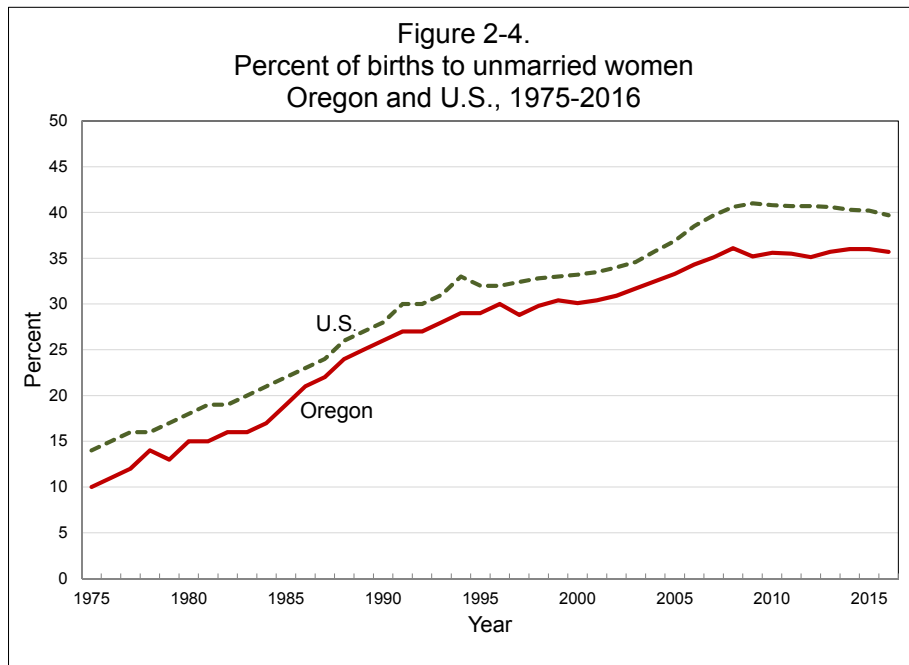
Unmarried women as a group have historically poorer birth outcomes than married women. They generally have a greater proportion of babies with lower birthweight and lower Apgar scores than do their married counterparts. Infants born to unmarried mothers are more likely to require neonatal intensive care, have congenital anomalies or die before the age of 1. In Oregon, the ratio of births to unmarried mothers in 2016 was 3.5 times higher than in 1975, and 5.6 times higher than in 1965 (see Table 1-2, Figure 2-4). While there has not been a matching increase in low birthweight rates and other indicators of poor health, the disparity in prenatal care, tobacco use and race/ethnicity between married and unmarried women continues.

In 2016, 35.7% of all Oregon births were to unmarried women, slightly down from the previous year (see Table 1-2). Oregon has consistently had a lower percentage of births to unmarried women than the United States. Oregon’s rate in 2016 was 10.1% lower than the national rate (see Figure 2-4).

Among women giving birth in 2016, the percentage of women who were unmarried varied widely by ethnic and racial group (see sidebar Table 2-B). Non-Hispanic American Indian women had the highest percentage of non-marital births (63.2%), followed by non-Hispanic African American women (55.4%) and Hawaiian/Pacific Islander women (50.2%). Non-Hispanic Asian women had the lowest percentage of unmarried mothers (12.3%; see Table 2-13).

Mothers under age 17 are likely to be unmarried, primarily because persons younger than age 17 cannot legally marry in Oregon. More than four-fifths of teens aged 15–19 who gave birth in 2016 were unmarried (85.1%), compared to 61.3% for women aged 20–24 and 35.0% for women aged 25–29. The percentage of unmarried women was lowest for mothers aged 35–39 (20.8%) and 30–34 (21.0%), while 28.7% of mothers aged 40-44 were unmarried (see Table 2-3). Twelve of Oregon’s 36 counties had proportions of non-marital births significantly higher than the state average (see Table 2-9). Among counties with statistically significant differences, Jefferson had the highest percentage (54.3%)

Table 2-B. Percent of unwed mothers by race/ethnicity, Oregon residents, 2016	
Total unmarried	35.7
Non-Hispanic	
African American	55.4
American Indian	63.2
Asian	12.3
Hawaiian/Pacific Islander	50.2
Multiple races	48.9
White	31.8
Hispanic	49.8



followed by Lincoln (51.3%) and Coos (51.2%); see Appendix B: “Technical notes — formulas” for information on statistical significance. Six Oregon counties had percentages of non-marital births significantly lower than the state average. Wallowa County had the lowest percentage of non-marital births (16.9%). 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.

Educational attainment

A mother’s level of education was closely related to prenatal care patterns. Women with less than a high school education had the lowest percentage of first trimester prenatal care. As educational attainment increases, so does the percentage of women obtaining first trimester care. Women with a master’s degree had the highest percentage of first trimester care (see sidebar Table 2-C, Table 2-19).

More than four-fifths of women who gave birth in 2016 had at least a high school diploma or GED (86.9%) and 32.2% had a bachelor’s degree or higher. The racial/ethnic groups with the highest percentages of high school completion were non-Hispanic Asian (93.5%) and non-Hispanic White (92.3%) mothers. Hispanic mothers had the lowest percentage of completion of at least 12 years of education (66.7%; see Table 2-13).

Table 2-C. Mothers' education and no first trimester care, Oregon residents, 2016

Education	No first trimester care (%)
8th grade or less	34.2
9th to 12th grade, no diploma	34.9
High school graduate or GED	26.4
Some college, no degree	20.7
Associate's degree	15.2
Bachelor's degree	11.8
Master's degree	9.5
Doctorate or professional degree	10.1

Maternal lifestyle and health characteristics

Tobacco

National Healthy People 2020 objective

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

2020 target:	98.6 %
2016:	90.4 %

Women who smoked had a low birthweight rate of 99.8 per 1,000.

Women who smoke when pregnant have a far higher incidence of low birthweight babies than do nonsmokers. Low birthweight infants are more likely to experience serious health problems, including increased rates of infant mortality. Women who smoked had a low birthweight rate of 99.8 per 1,000 live births, compared to 61.7 per 1,000 among women who did not smoke. Approximately one in 10 mothers (9.6%) reported using tobacco during pregnancy, slightly less than the previous year (10.0%) (see sidebar Table 2-D). The percentage of mothers who reported smoking during pregnancy generally decreased with age among married women. For unmarried women, smoking rates rose and fell with age, peaking in the mid- to late-20s. The percentage of tobacco use among unmarried women was more than five times that of married women (20.5% vs. 3.5%). The highest percentage of tobacco use during pregnancy in 2016 was among unmarried mothers

Figure 2-5.
Percentage of mothers who smoked during pregnancy by age and marital status, Oregon residents, 2016

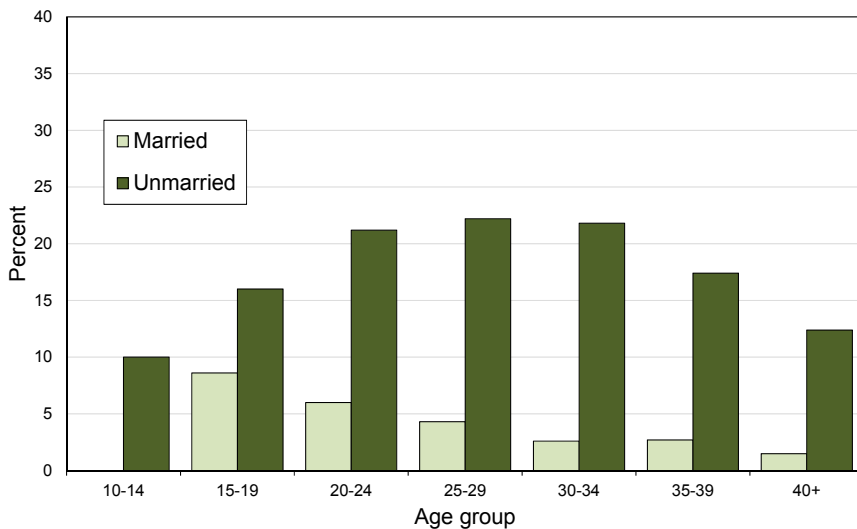


Table 2-D. Percent of maternal tobacco use by year, Oregon residents

1990	22.4
1995	17.9
2000	13.5
2005	12.4
2006	12.3
2007	11.7
2008	11.8
2009	11.3
2010	11.3
2011	10.7
2012	10.6
2013	10.2
2014	10.4
2015	10.0
2016	9.6

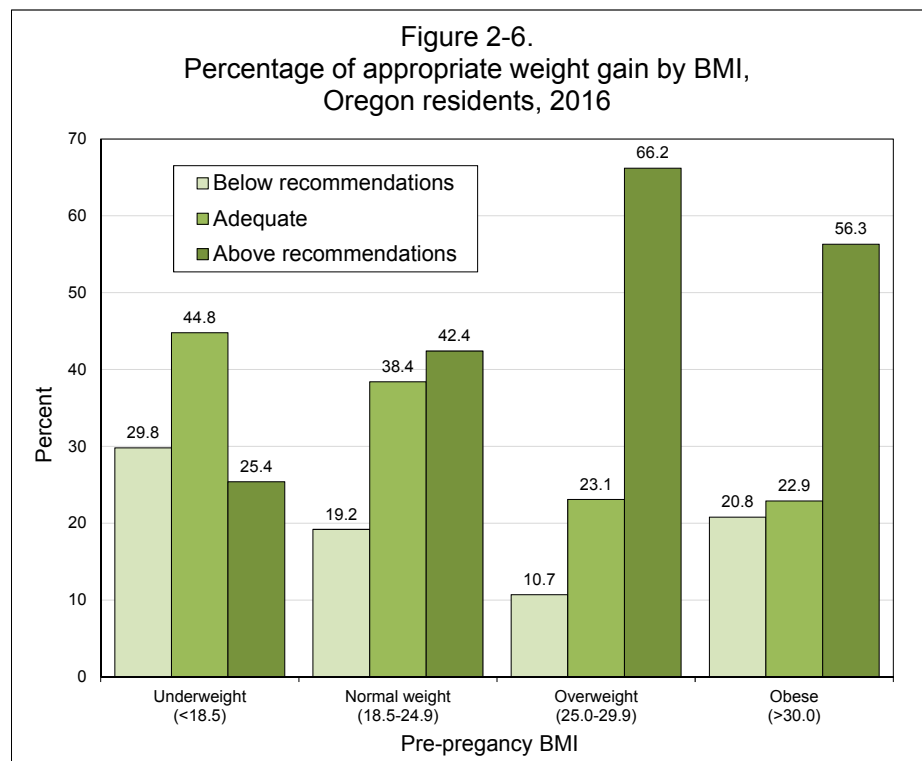
aged 25–29 (22.2%) and unmarried mothers aged 30–34 (21.8%). Married mothers aged 40 or older had the lowest percentage of smokers (1.5%), followed by married mothers aged 30–34 (2.6%). For the youngest mothers, aged 10–14, 10.0% reported smoking during pregnancy (see Figure 2.5).

Smoking prevalence as reported on birth certificates also varied among racial and ethnic groups. In 2016, non-Hispanic American Indian women (16.7%) and non-Hispanic women reporting multiple races (16.7%) had the highest reported proportion for smoking during pregnancy, while non-Hispanic Asian women (0.8%) and Hispanic women (3.7%) reported the lowest (see Table 2-25).

Maternal weight and weight gain

Appropriate maternal weight gain has been shown to be positively correlated with infant birthweight. Low maternal weight gain is associated with poor fetal growth, lower birthweight and the chance of a baby being born prematurely. High maternal weight gain is associated with higher infant birthweight and cesarean delivery. Excessive weight during pregnancy is often accompanied by chronic disease and is a health risk factor for both the mother and child.

In 2008, Oregon began collecting data on birth certificates about mothers’ pre-pregnancy weight, weight at delivery and height. These new data allow for the calculation of body mass index (BMI) and provide a better picture of



pre-pregnancy BMI and gestational weight gain. In 2009, the Institute of Medicine (IOM) revised its guidelines for weight gain during pregnancy; the guidelines express ideal weight gain in pregnancy as a range for each category of pre-pregnancy BMI (see sidebar Table 2-E). In 2016, 51.4% of women gained more weight than recommended by the IOM guidelines. Additionally, 50.6% of Oregon women entered pregnancy overweight or obese and also had the highest percentage of weight gain above the guidelines (66.2% and 56.3%, respectively; see Figure 2-6). Women starting pregnancy underweight had the highest percentage of weight gain below the IOM recommendations (29.8%) and had the highest percentage of low birthweight infants (8.9%).

Pre-pregnancy BMI (kg/m ²)	Weight gain (lbs)
Underweight (<18.5)	28-40
Normal weight (18.5-24.9)	25-35
Overweight (25.0-29.9)	15-25
Obese (>30.0)	11-20

Medical risk factors

Maternal medical risk factors influence pregnancy complications and infant health and vary greatly based on the mother’s age, race and ethnicity. In 2016, the most frequently reported medical risk factors were previous cesarean delivery (13.3%), gestational diabetes (8.2%) and pregnancy-associated hypertension (7.4%) (see Table 2-23, Table 2-26).

Medical services utilization

Prenatal care

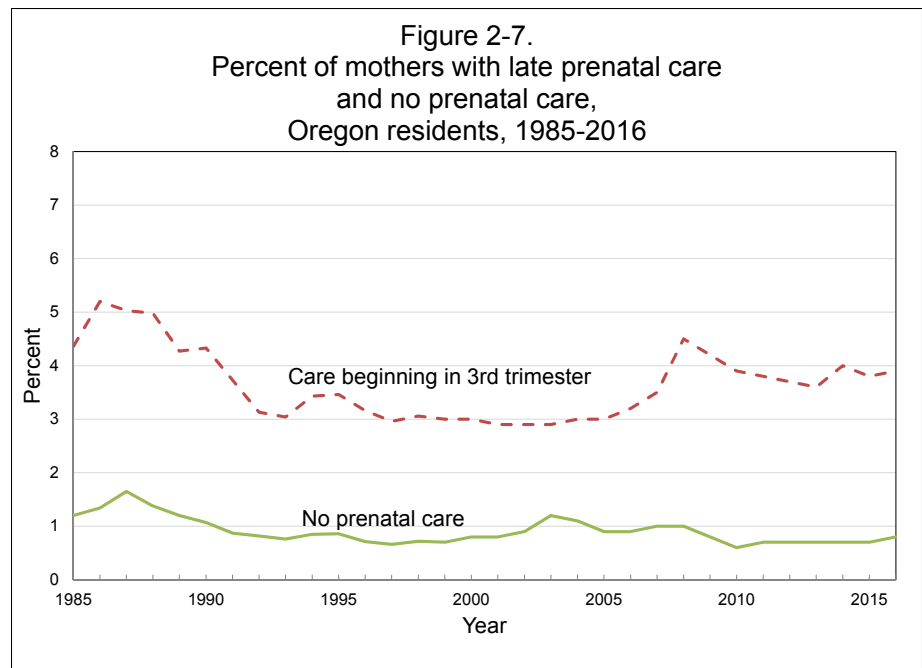
National Healthy People 2020 objective

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

<i>2020 target:</i>	<i>77.9 %</i>
<i>2016:</i>	<i>79.7 %</i>

Public health services and private care providers seek to minimize the risk of death and disability to infants. Additionally, they seek reductions in costs associated with low birthweight among infants by providing comprehensive prenatal care. The two ways Oregon measures prenatal care are:

- “Inadequate prenatal care,” defined as no care until the third trimester or fewer than five total prenatal visits; or
- “First trimester care,” defined as care beginning in the first 12 weeks of pregnancy, regardless of the number of total prenatal visits.



Overall, 79.7% of women who gave birth during 2016 received early prenatal care, which is 12.3% higher than the 2008 national number of 71.0% (see Table 2-17, Table 1-5). Moreover, this is 1.0% higher than the 2015 rate of 79.0%.

In 2016, 6.0% of women giving birth received inadequate prenatal care, and 20.3% received no first trimester care. The percentage of low birthweight infants was much higher for women who received inadequate prenatal care (12.5%) compared to 6.1% among children born to mothers who received adequate prenatal care. The percentage of mothers who received no prenatal care increased slightly from the previous year (0.8%). Mothers who initiated care in the third trimester increased from 3.8% in 2015 to 3.9% in 2016 (see Figure 2-7).

Age, marital status, education and race/ethnicity continue to show important differences in accessing prenatal care (see tables 2-17, 2-18, 2-19 and 2-21). For example, the highest percentage of inadequate care is found among non-Hispanic Hawaiian and Pacific Islander women (28.2%) and non-Hispanic women of other or unknown race (18.2%). White non-Hispanic and non-Hispanic Asian women had the lowest percentages of inadequate care (5.1% and 5.2%, respectively; see Table 2-18).

Three of Oregon's 36 counties had first trimester care rates significantly higher than the statewide rate: Clackamas (82.7%), Deschutes (87.6%) and Washington (83.7%).

Five counties had rates significantly lower than the state: Jefferson (67.6%), Lane (76.7%), Malheur (58.5%), Marion (75.1%) and Umatilla (68.1%). (See Table 2-20.)

The **Adequacy of Prenatal Care Utilization Index** is an alternate measure of prenatal care based on the month prenatal care 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 visits by at least 110%), adequate, intermediate or inadequate (see sidebar, Table 2-F). As with other measures of prenatal care, more women under the age of 20 received inadequate prenatal care, while more women aged 40 and older received intensive prenatal care. Women with medical risk factors such as diabetes and hypertension also were more likely to receive intensive prenatal care.

Place of delivery and birth attendant

Hospital births. Hospitals were the most frequent place of birth, accounting for 96.1% of Oregon occurrence births. Most in-hospital births were planned to occur in the hospital (99.4%); 285 births were planned out-of-hospital at the onset of labor but subsequently delivered in the hospital. Medical doctors or osteopathic doctors delivered 78.7% of planned hospital births; certified nurse midwives delivered 21.0%, and other licensed medical professionals delivered 0.3% (see Table 2-38).

Table 2-F. Adequacy of Prenatal Care Utilization Index Oregon 2010-2016				
Year	Intensive	Adequate	Intermediate	Inadequate
2010	35.5	40.1	10.9	12.9
2011	34.8	41.3	11.8	12.2
2012	33.6	40.9	13.6	12.0
2013	32.5	41.7	13.5	12.3
2014	32.5	42.7	12.0	12.1
2015	33.4	43.6	10.9	11.5
2016	32.8	43.5	11.5	11.4

Out-of-hospital births. In 2016, 3.9% of Oregon births occurred out of hospital. As in past years, the majority of out-of-hospital births occurred in the mother’s home (57.2%). Of those home births, 94.5% were planned home births, while the remaining 5.5% were not intended to occur at home. Freestanding birthing centers accounted for 695, or slightly less than two-fifths of out-of-hospital births.

Table 2-G. Out-of-hospital births Oregon occurrence		
Year	Deliveries	Rate ¹
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
2003	1,000	21.3
2004	1,003	21.6
2005	1,058	22.6
2006	1,134	23.1
2007	1,267	25.4
2008	1,431	29.0
2009	1,404	29.4
2010	1,574	34.3
2011	1,680	36.9
2012	1,739	38.2
2013	1,702	37.3
2014	1,878	40.7
2015	1,798	39.0
2016	1,772	38.5

¹ Rate per 1,000 births

In 2011, the Oregon Legislative Assembly passed House Bill 2380, which required the Oregon Public Health Division to add two questions to the Oregon Birth Certificate to determine planned place of birth and birth attendant. Every mother who delivered in the hospital was asked whether she planned to deliver at a private home or in a freestanding birthing center and the planned primary attendant type at the time she went into labor. Overall, 1,934 births were planned out-of-hospital (4.2%). Of these, 285 (14.7%) planned out-of-hospital births ultimately delivered in hospital. Neonatal transfers were slightly more likely among women who planned an out-of-hospital birth (1.5% versus 1.2%; see Table 2-40). Women who planned out-of-hospital births tended to be 30 or older (59.5%), White non-Hispanic (86.2%), married (81.5%) and college educated (46.5%). (See Table 2-39.)

Women who planned out-of-hospital births generally experienced fewer medical interventions than those who planned hospital births. Medical intervention rates among planned out-of-hospital births included induction and augmentation of labor (10.9%), epidural or spinal anesthesia (8.5%), operative vaginal birth (1.0%) and cesarean section (4.1%). A woman planning to deliver in hospital was five times more likely to have a primary cesarean section than a woman who planned to deliver out of hospital (17.1% vs. 3.6%). In 2016, 20.5% of women planning out-of-hospital births did not have a Group B streptococcal test compared to 3.7% for women planning a hospital birth (see Table 2-40).

Outcomes generally have been positive for out-of-hospital births. Women who planned out-of-hospital births were more likely to deliver term infants (obstetric estimate of gestation of 37 completed weeks or more) and less likely to deliver low birthweight infants.

Birth attendant. There are three types of midwives in Oregon: certified nurse midwives (CNM), licensed direct entry midwives (LDM) and direct entry midwives (DEM). CNMs have completed an accredited, university-affiliated nurse-midwifery program and have an active nurse practitioner license. They may attend deliveries in hospitals, freestanding birth centers and homes. LDMs are direct entry midwives who have volunteered for state licensure through the Oregon Health Licensing Agency. They must

meet qualifications and adhere to Oregon regulations. Other midwives are lay midwives who are not licensed in Oregon, but are registered with the Center for Health Statistics to certify births.

A major shift during the past few decades has been the increasing prevalence of births attended by certified nurse midwives (CNMs). In 2016, 21.0% of planned hospital deliveries were CNM-attended. Women who planned out-of-hospital births reported the following planned attendants: CNMs (24.5%), LDMs (51.3%), naturopathic physicians (13.2%) and other midwives (8.3%). Non-medical attendants delivered 147 babies in total, including 8.1% of out-of-hospital births (see Table 2-38).

Method of delivery

In 2016, the rate of cesarean delivery was 27.2%, well below the 2016 national rate of 31.9%. Among all births, 2.6% were vaginal deliveries after a previous cesarean delivery, and 10.7% were repeat cesarean deliveries. The majority of births (70.2%) continue to be vaginal deliveries without prior cesarean (see Table 2-37). The number of vaginal deliveries (without prior cesarean) decreased slightly (0.8%) from 2015. Cesarean rates have declined slightly each year since their 2009 peak of 29.4%. The rate for 2016 is 0.4% higher than the previous year (27.1%) and 7.5% lower than 2009.

Infant health characteristics

Period of gestation

Preterm births (infants born prior to completion of 37 weeks’ gestation) accounted for 7.9% of total births in 2016, lower than the national rate in 2016 (9.8%; see Table 2-25). Proportions of preterm births were higher for non-Hispanic women with other or unknown race (13.5%) and for non-Hispanic Hawaiian and Pacific Islanders (11.6%). Non-Hispanic White women had the lowest proportion of preterm births (7.7%; see Table 2-25).

Year	Deliveries		
	Total	In-hospital	Out-of-hospital
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
2003	6,838	6,721	117
2004	6,586	6,472	114
2005	6,487	6,386	101
2006	7,102	6,996	106
2007	7,631	7,507	124
2008	8,004	7,820	184
2009	7,711	7,579	132
2010	7,476	7,257	219
2011	7,496	7,245	251
2012	7,454	7,156	298
2013	8,279	7,929	350
2014	8,456	8,059	397
2015	9,238	8,894	344
2016	9,649	9,335	314

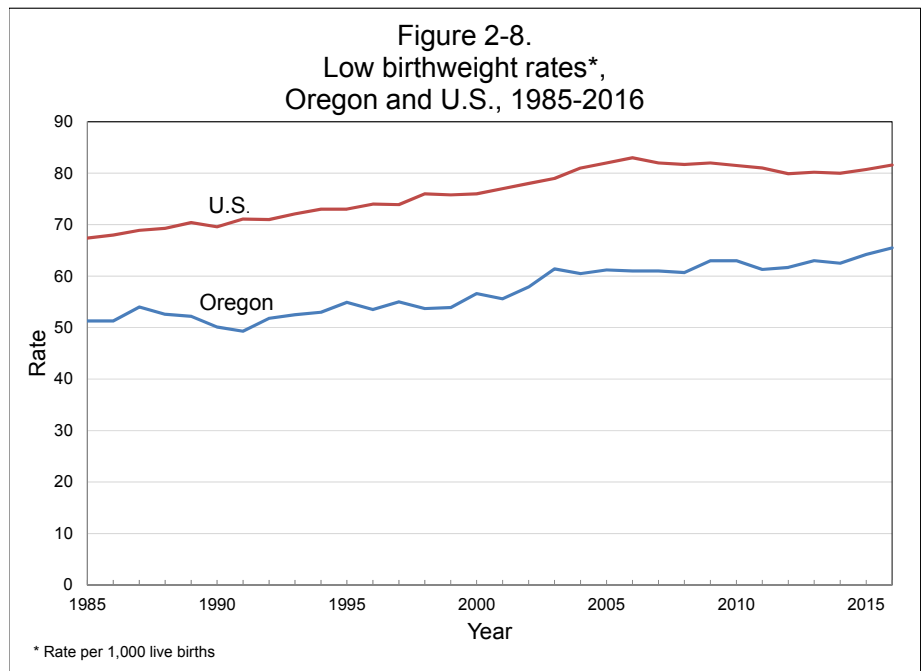
Low birthweight

National Healthy People 2020 objective

Percentage of live births resulting in low birthweight infant

<i>2020 target:</i>	<i>7.8 %</i>
<i>2016 actual:</i>	<i>6.6%</i>

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 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 “Chapter 7: Infant and fetal mortality” in *Oregon Vital Statistics Annual Report 2016, Volume 2: Mortality*.) The low birthweight rate is the proportion of infants who weigh less than 2,500 grams (5 pounds, 8 ounces) at birth. In 2016, 2,980 babies with low birthweight were born to Oregon mothers (see Table 2-27). One of the National Healthy People 2020 objectives is to reduce the percentage of low birthweight infants nationwide to 7.8%. In 2016, the percentage of low birthweight births in Oregon remained well below this objective at 6.6%, or 65.5 per 1,000 live births. This rate is 3.1% higher than the previous year. While annual changes have been small in the last 20 years, there has been a slight upward trend in low birthweight infants (see Table 1-5, Figure 2-8). Nevertheless, Oregon’s low



birthweight rates are typically 25% lower than national rates, and in 2016, Oregon’s rate was 19.8% lower than the 2016 national rate (65.5 vs. 81.6 per 1,000 births).

High birthweight

Birthweight is an important factor in the health of a newborn. Excessive birthweight, or fetal macrosomia, is a health risk factor for both the mother and child and is commonly defined as birthweight greater than 4,000 grams (8 pounds, 13 ounces).

Among Oregon resident births in 2016, the prevalence of fetal macrosomia at 4,000 grams was 10.3% (see tables 2-24 and 2-25). As maternal age increases, the risk of fetal macrosomia tends to increase (see Table 2-24). Among infants born to women aged 35 and older, the percentage weighing more than 4,000 grams at birth was 7.4% greater than the state average (11.1%), and 44.2% higher than among infants born to women under 20 years of age (7.7%; see Table 2-27).

In 2016, the prevalence of macrosomia was highest among non-Hispanic White women (11.2%; see Table 2-25). The lowest rates of macrosomia were found in Asian women (5.0%) and African American women (7.1%).

Apgar scores

The Apgar score is composed of measurements of five infant characteristics: heart rate, respiratory effort, muscle tone, reflex irritability and color. Each characteristic is rated 0–2 and the scores totaled. Total scores below 7, five minutes after birth, indicate poor to intermediate health at birth. In Oregon during 2016, 2.7% of infants had Apgar scores below 7 (see tables 2-24 and 2-25).

Abnormal conditions and congenital anomalies

The most frequently reported conditions on birth certificates were admission to the neonatal intensive care unit, assisted ventilation immediately after delivery, and antibiotics for suspected neonatal sepsis (see tables 2-33 and 2-34). Congenital anomalies reported on birth certificates are shown in Table 2-35. Although Oregon occurrences of some anomalies were somewhat higher than national rates, congenital anomalies are believed to be underreported nationally due to factors such as how recognizable and severe they are. Even at the national

Among Oregon resident births in 2016, the biggest baby born was 13 lbs, 14 oz.

Table 2-I. Percentage of infants born weighing more than 4,000 grams, Oregon residents		
Year	Percent	Largest infant born (in grams)
1990	14.2	6040
1991	13.9	6265
1992	13.8	5990
1993	13.8	6010
1994	13.8	5810
1995	13.5	6265
1996	13.1	6156
1997	12.8	6060
1998	13.0	6139
1999	12.8	6293
2000	12.8	6151
2001	12.4	5981
2002	11.8	5896
2003	11.5	6180
2004	10.9	5925
2005	10.9	6497
2006	10.7	5982
2007	10.5	7000
2008	10.7	7711
2009	10.7	6804
2010	10.4	6454
2011	10.9	6401
2012	10.6	6350
2013	10.6	5845
2014	10.7	5954
2015	10.4	5970
2016	10.3	6294

Year	Private insurance	Self-pay	Medicaid/OHP
	%	%	%
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
2003	58.9	3.5	37.6
2004	56.5	3.2	40.3
2005	55.6	3.0	41.4
2006	55.1	3.2	41.3
2007	56.1	3.5	40.4
2008	53.6	3.2	40.9
2009	52.3	2.5	42.3
2010	50.9	2.4	45.1
2011	50.8	2.2	45.5
2012	51.5	2.2	44.8
2013	52.7	2.3	43.5
2014	52.2	1.9	44.7
2015	51.7	1.5	45.5
2016	52.2	2.0	44.4

Note: Denominator excludes births with unknown payer source, and multiple payer source.

level, data users are advised to use caution in comparing annual occurrences for relatively small numbers.

Multiple births

Although 3.4% of births in Oregon during 2016 were multiple births, the proportion varied widely by age, race and ethnicity. During 2016, mothers aged 45 and older had the highest percentage of multiple births. The percentage of multiple births for each age group ranged from 1.7% for mothers aged 15–19 to 31.5% of births to mothers aged 45 and older. The percentage of multiple births generally increased with age (see Table 2-24). Non-Hispanic American Indian women had the highest percentage of multiple births at 4.2% (see Table 2-25).

Infertility treatment

Many fertility treatments increase a woman's chance of having twins, triplets or other multiples. Multiples are at higher risk for prematurity and low birthweight. During 2016, mothers aged 45 and older had the highest rate of infertility treatment (413.0 per 1,000 births; see Table 2-23).

Source of payment

The source of payment is reported as the expected primary payment source at the time of labor and delivery. Primary source of payment for delivery is noted on Oregon birth certificates under five categories: public insurance (Medicaid/Oregon Health Plan), private insurance, self-pay (no insurance), Indian Health Services, and other and unknown payment source. In 2016, birth certificate data reported that private insurance companies paid for the majority of deliveries in Oregon (52.2%), up from 51.7% in 2015 (see sidebar Table 2-J). Medicaid programs (e.g., the Oregon Health Plan) paid for more than two-fifths of Oregon resident births (44.4%). Delivery costs were more likely to be paid for by public insurance if the woman was under age 18 (see Table 2-14).

Endnotes

1. Centers for Disease Control and Prevention (CDC). Births: Provisional data for 2016. National Vital Statistics Rapid Release. June 2017; No.002.
2. Centers for Disease Control and Prevention (CDC). Births: Final data for 2015. National Vital Statistics Report. January 5, 2017; V66, No.1.

TABLE 2-1. Oregon resident births by age group of mother, selected years 1960-1990, 1995-2016

Year	Total	Age group of mother																		NS*
		Under 15		15-19		20-24		25-29		30-34		35-39		40-44		45+				
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%			
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	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	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	1	
1975	33,352	67	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	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	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	3	
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	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	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	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	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	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	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	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	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	7	
2003	45,935	47	0.1	4,116	9.0	11,901	25.9	13,033	28.4	10,840	23.6	4,842	10.5	1,067	2.3	80	0.2	9	9	
2004	45,660	55	0.1	3,980	8.7	11,769	25.8	12,959	28.4	10,704	23.4	4,994	10.9	1,102	2.4	87	0.2	10	10	
2005	45,905	52	0.1	3,992	8.7	11,644	25.4	13,381	29.1	10,432	22.7	5,276	11.5	1,051	2.3	75	0.2	2	2	
2006	48,684	45	0.1	4,263	8.8	12,176	25.0	14,298	29.4	11,184	23.0	5,534	11.4	1,084	2.2	95	0.2	5	5	
2007	49,373	50	0.1	4,328	8.8	12,259	24.8	14,319	29.0	11,396	23.1	5,795	11.7	1,114	2.3	102	0.2	10	10	
2008	49,117	38	0.1	4,474	9.1	11,986	24.4	14,274	29.1	11,471	23.4	5,693	11.6	1,101	2.2	75	0.2	5	5	
2009	47,188	39	0.1	4,074	8.6	10,877	23.1	13,831	29.3	11,551	24.5	5,572	11.8	1,165	2.5	76	0.2	3	3	
2010	45,596	27	0.1	3,511	7.7	10,325	22.6	13,381	29.3	11,480	25.2	5,580	12.2	1,202	2.6	90	0.2	0	0	
2011	45,136	20	0.0	3,135	6.9	9,874	21.9	13,232	29.3	11,874	26.3	5,683	12.6	1,242	2.8	75	0.2	1	1	
2012	45,059	33	0.1	2,849	6.3	9,693	21.5	12,999	28.8	12,158	27.0	5,956	13.2	1,287	2.9	83	0.2	1	1	
2013	45,136	15	0.0	2,595	5.7	9,507	21.1	12,978	28.8	12,646	28.0	6,015	13.3	1,282	2.8	94	0.2	4	4	
2014	45,557	20	0.0	2,392	5.3	9,264	20.3	13,167	28.9	12,996	28.5	6,275	13.8	1,340	2.9	100	0.2	3	3	
2015	45,656	15	0.0	2,289	5.0	8,887	19.5	13,279	29.1	13,102	28.7	6,637	14.5	1,343	2.9	102	0.2	2	2	
2016	45,533	10	0.0	2,008	4.4	8,386	18.4	13,389	29.4	13,255	29.1	6,924	15.2	1,468	3.2	92	0.2	1	1	

* NS indicates age not stated; the percentage is negligible.

TABLE 2-2. Age specific birth rates, fertility rates and total fertility rates, Oregon, 1950, 1960, 1970, 1975-2016

Year	Age-specific birth rates*						Fertility 15-44	Total fertility rate
	15-19	20-24	25-29	30-34	35-39	40-44		
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
2003	33.4	102.4	111.5	91.1	36.9	7.5	61.2	1,913.7
2004	31.9	99.8	109.3	88.7	37.5	7.7	60.0	1,874.5
2005	32.9	93.8	112.1	86.9	43.7	8.1	62.2	1,887.6
2006	34.9	95.8	118.0	92.1	46.1	8.4	65.5	1,976.5
2007	35.1	94.4	116.6	92.9	48.7	8.7	66.0	1,982.0
2008	35.8	94.6	111.7	91.3	45.4	8.6	64.6	1,936.6
2009	32.5	86.1	106.8	91.4	44.3	9.3	62.0	1,851.9
2010	28.0	82.2	102.2	90.6	44.3	9.7	60.0	1,785.2
2011	25.3	79.1	100.1	91.7	45.2	10.0	59.3	1,757.6
2012	23.1	77.7	98.1	93.1	46.8	10.3	58.8	1,745.2
2013	21.1	76.0	97.3	96.1	46.6	10.2	58.6	1,736.3
2014	19.4	73.8	98.0	97.6	47.8	10.5	58.6	1,735.4
2015	18.5	70.2	97.7	96.9	49.5	10.3	58.0	1,715.5
2016	16.2	65.5	97.0	96.2	50.5	11.1	57.0	1,681.2

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

TABLE 2-3. Percent of Oregon resident births to unmarried mothers, by age of mother, 1975, 1980-2016

Year	Age group of mother					
	15-19	20-24	25-29	30-34	35-39	40-44
1975	30.3	8.8	4.0	3.8	5.7	6.0
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
2003	79.9	47.9	24.0	13.9	14.5	16.5
2004	80.3	49.0	24.8	15.3	14.9	16.9
2005	78.6	51.0	26.1	15.9	15.3	17.5
2006	80.5	52.2	27.4	17.0	15.2	19.2
2007	81.0	53.6	28.3	17.1	16.4	19.5
2008	83.4	54.4	29.3	18.0	16.2	20.8
2009	83.8	55.2	28.7	18.0	16.0	17.4
2010	84.2	56.8	29.7	18.8	17.6	19.8
2011	85.9	57.8	29.9	19.4	18.4	22.6
2012	85.5	58.6	30.5	18.9	18.8	21.4
2013	86.6	60.6	31.1	19.7	19.3	24.4
2014	86.2	60.6	33.4	20.4	20.0	24.6
2015	86.4	60.6	34.3	20.7	20.6	26.2
2016	85.1	61.3	35.0	21.0	20.8	28.7

TABLE 2-4. Age of mother by live birth order, Oregon resident births, 2016

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	45,533	10	2,008	8,386	13,389	13,255	6,924	1,468	92	1
First	17,759	10	1,732	4,517	5,030	4,324	1,776	339	31	–
Second	14,742	–	245	2,792	4,549	4,423	2,304	408	21	–
Third	7,446	–	27	870	2,494	2,469	1,302	262	22	–
Fourth	3,326	–	3	167	966	1,223	783	175	8	1
Fifth	1,278	–	1	32	246	478	390	128	3	–
Sixth	540	–	–	4	69	213	184	68	2	–
Seventh	235	–	–	4	29	72	92	34	4	–
Eighth	91	–	–	–	4	33	32	22	–	–
Ninth+	116	–	–	–	2	20	61	32	1	–

– Quantity is zero.
N.S. = Not stated.

TABLE 2-5. Most frequently used baby names, Oregon occurrence, 2016

Boys			Girls		
Rank	Name	Count	Rank	Name	Count
1	Oliver.....	228	1	Olivia.....	249
2	Henry.....	205	2	Emma.....	213
3	William.....	201	3	Sophia.....	179
4	Benjamin.....	194	4	Evelyn.....	172
5	Liam.....	193	5	Charlotte.....	171
6	Wyatt.....	181	6	Abigail.....	153
7	Owen.....	179	7	Harper.....	148
8	Noah.....	177	8	Amelia.....	137
9	Mason.....	175	9	Isabella.....	134
10	Elijah.....	165	10	Ava.....	132
11	Lucas.....	164	11	Mia.....	129
12	James.....	161	12	Elizabeth.....	127
13	Alexander.....	152	13	Grace.....	113
14	Samuel.....	147	13	Penelope.....	113
15	Jackson.....	145	15	Avery.....	106
16	Logan.....	142	16	Scarlett.....	101
17	Isaac.....	138	17	Emily.....	100
18	Ethan.....	137	18	Paisley.....	96
19	Michael.....	135	19	Hazel.....	92
20	Daniel.....	133	19	Lily.....	92
21	Hunter.....	131	21	Addison.....	91
22	Carter.....	130	21	Sofia.....	91
23	Aiden.....	127	23	Eleanor.....	90
24	David.....	124	24	Aurora.....	89
25	Jacob.....	121	25	Ella.....	86
25	Lincoln.....	121	26	Violet.....	85
27	Sebastian.....	120	27	Ruby.....	83
28	Hudson.....	119	28	Aria.....	81
29	Jack.....	116	29	Nora.....	78
30	Julian.....	114	29	Zoey.....	78
Total boys' names: 4,629			Total girls' names: 6,164		

Total 2016 Oregon occurrence births: 45,977

**TABLE 2-6. Pregnancies¹ by age and county of residence,
Oregon residents, 2016**

County of residence	All ages	Age groups							
		10-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	53,742	2,840	10,715	15,659	14,767	7,846	1,789	123	3
Baker	169	9	47	56	42	13	2	—	—
Benton	852	34	121	257	288	129	21	2	—
Clackamas	4,895	233	793	1,444	1,518	734	163	10	—
Clatsop	484	31	108	144	130	58	13	—	—
Columbia	610	32	130	188	164	75	16	5	—
Coos	693	51	183	230	161	59	8	1	—
Crook	268	23	69	79	58	30	8	—	1
Curry	209	19	51	51	56	27	4	1	—
Deschutes	2,165	99	399	596	661	323	78	9	—
Douglas	1,216	86	331	423	240	116	18	2	—
Gilliam	17	—	3	6	6	1	—	1	—
Grant	61	3	14	16	22	6	—	—	—
Harney	99	7	21	38	19	11	3	—	—
Hood River	290	19	51	86	66	51	17	—	—
Jackson	2,666	141	677	818	639	320	68	3	—
Jefferson	321	25	84	109	66	31	4	2	—
Josephine	1,031	64	270	338	225	103	30	1	—
Klamath	893	69	255	304	163	86	16	—	—
Lake	85	5	26	30	16	8	—	—	—
Lane	4,269	256	916	1,281	1,140	542	130	4	—
Lincoln	497	35	99	149	129	70	15	—	—
Linn	1,686	113	432	592	360	147	40	2	—
Malheur	490	39	138	143	112	45	11	—	2
Marion	5,129	331	1,237	1,614	1,160	619	162	6	—
Morrow	175	12	49	41	40	27	5	1	—
Multnomah	11,763	475	1,929	2,936	3,555	2,282	543	43	—
Polk	1,076	57	262	351	261	119	23	3	—
Sherman	18	—	3	6	5	4	—	—	—
Tillamook	291	17	57	103	69	37	7	1	—
Umatilla	1,079	112	290	322	233	102	20	—	—
Union	342	21	90	114	81	33	3	—	—
Wallowa	65	4	4	24	23	7	3	—	—
Wasco	373	25	106	116	79	30	16	1	—
Washington	8,111	311	1,186	2,245	2,626	1,406	312	25	—
Wheeler	18	1	3	7	6	1	—	—	—
Yamhill	1,328	79	279	400	347	193	30	—	—
Unknown	8	2	2	2	1	1	—	—	—

— Quantity is zero.

N.S. = Not stated.

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, selected years 1975-1995, 2000-2016

Year	Single mention race ¹							Hispanic
	Total	White	African American	American Indian	Chinese	Japanese	Other & unknown	
1975	33,352	31,910	614	389	81	80	278	*
1980	43,091	40,787	792	475	140	96	801	*
1985	39,419	35,877	784	519	141	129	745	1,224
1990	42,830	39,808	917	745	230	162	968	2,969
1995	42,715	39,566	872	628	222	110	1,317	4,996
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
2003	45,935	41,221	1,009	860	229	123	2,493	8,433
2004	45,660	40,943	1,044	861	214	119	2,479	8,850
2005	45,905	41,180	995	846	214	120	2,550	9,168
2006	48,684	43,514	1,136	918	239	138	2,739	9,944
2007	49,373	44,082	1,177	953	245	108	2,808	10,129
2008	49,117	40,744	1,080	800	373	159	5,961	10,366
2009	47,188	39,222	1,006	720	368	147	5,725	9,697
2010	45,596	37,528	994	664	381	151	5,878	9,237
2011	45,136	37,585	990	649	381	152	5,379	8,718
2012	45,059	37,238	971	636	435	134	5,645	8,521
2013	45,136	37,384	989	665	398	144	5,556	8,440
2014	45,557	37,377	996	559	439	125	6,061	8,519
2015	45,656	37,777	1,087	576	476	121	5,619	8,508
2016	45,533	37,246	1,008	541	479	114	6,145	8,456

Year	Any mention race and ethnicity ²							Hispanic
	Total	White	African American	American Indian	Asian	Native Hawaiian/Pacific Islander	Other & unknown	
2008	49,117	41,928	1,359	1,497	2,575	472	2,918	10,366
2009	47,188	40,441	1,294	1,414	2,589	449	2,413	9,697
2010	45,596	38,946	1,324	1,511	2,574	507	2,637	9,237
2011	45,136	39,004	1,339	1,443	2,600	461	2,137	8,718
2012	45,059	38,740	1,383	1,440	2,696	493	2,318	8,521
2013	45,136	38,881	1,387	1,463	2,668	458	2,232	8,440
2014	45,557	39,384	1,446	1,789	2,786	496	2,169	8,519
2015	45,656	39,590	1,608	1,477	2,917	461	1,892	8,508
2016	45,533	39,090	1,571	1,506	2,967	508	2,251	8,456

* Data not available.

¹ Includes any ethnicity mention.

² Includes any race (1 or more) and ethnicity mention.

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. For consistency, single mention race includes any ethnicity. In 2008, the method for collecting race/ethnicity data changed dramatically, see Appendix B for more details.

TABLE 2-8. Ethnicity, race and county of residence of mother, Oregon resident births, 2016

County of residence	Total births	Non-Hispanic single mention race							Hispanic ⁵
		White	Black	AI/ AN ¹	Asian	NH/ PI ²	Other/ NS ³	Multiple races ⁴	
Total	45,533	31,130	945	433	2,356	320	194	1,699	8,456
Baker	160	142	2	—	1	—	—	4	11
Benton	763	532	7	2	80	4	4	36	98
Clackamas	4,238	3,335	32	15	194	9	12	143	498
Clatsop	408	320	3	3	8	1	—	14	59
Columbia	527	452	2	5	6	—	—	26	36
Coos	626	514	4	9	9	3	3	30	54
Crook	238	201	—	—	3	—	1	5	28
Curry	182	141	1	4	4	1	1	12	18
Deschutes	1,799	1,473	2	6	24	—	13	52	229
Douglas	1,087	962	6	12	13	—	1	25	68
Gilliam	17	14	—	—	—	—	—	2	1
Grant	56	50	—	1	—	—	2	—	3
Harney	93	81	—	—	1	—	1	2	8
Hood River	252	148	—	—	3	—	1	3	97
Jackson	2,293	1,630	7	21	43	15	17	88	472
Jefferson	282	110	—	72	2	1	3	15	79
Josephine	870	728	6	10	8	1	6	33	78
Klamath	821	589	11	28	9	1	5	47	131
Lake	70	58	—	2	1	—	—	4	5
Lane	3,555	2,745	20	31	80	8	32	187	452
Lincoln	435	311	—	16	7	3	—	17	81
Linn	1,521	1,241	—	10	14	3	5	47	201
Malheur	465	230	12	4	2	1	3	4	209
Marion	4,519	2,442	39	34	94	88	16	140	1,666
Morrow	164	76	—	—	—	1	—	3	84
Multnomah	9,023	5,766	607	51	711	117	40	401	1,330
Polk	975	685	7	19	24	5	4	34	197
Sherman	17	15	—	—	—	—	1	—	1
Tillamook	255	203	1	1	1	—	2	8	39
Umatilla	949	520	7	30	7	4	5	20	356
Union	312	276	4	1	4	7	—	3	17
Wallowa	59	55	—	—	1	—	—	1	2
Wasco	321	202	—	14	3	2	—	11	89
Washington ...	6,999	4,009	161	23	984	45	15	245	1,517
Wheeler	17	15	—	—	—	—	—	1	1
Yamhill	1,160	857	3	9	15	—	1	35	240
Unknown	5	2	1	—	—	—	—	1	1

— Quantity is zero.

See footnotes at end of table.

TABLE 2-8. Ethnicity, race and county of residence of mother, Oregon resident births, 2016 (continued)

County of residence	Total births	Any mention race and ethnicity ⁶							Hispanic ⁵
		White	Black	AI/ AN ¹	Asian	NH/ PI ²	Other	NS ³	
Total	45,533	39,090	1,571	1,506	2,967	508	1,743	508	8,456
Baker	160	155	5	3	2	—	—	—	11
Benton	763	614	16	24	98	8	48	8	98
Clackamas	4,238	3,881	77	83	254	20	69	30	498
Clatsop	408	364	5	6	18	5	21	4	59
Columbia	527	514	8	25	15	2	—	—	36
Coos	626	588	11	33	17	9	6	5	54
Crook	238	226	—	5	5	1	5	3	28
Curry	182	162	2	18	4	2	9	1	18
Deschutes	1,799	1,683	17	42	47	2	62	24	229
Douglas	1,087	1,040	11	31	19	3	25	2	68
Gilliam	17	17	—	1	1	—	—	—	1
Grant	56	53	—	2	—	—	1	1	3
Harney	93	88	—	1	2	1	1	2	8
Hood River	252	247	1	—	5	1	2	—	97
Jackson	2,293	2,052	35	93	70	32	56	79	472
Jefferson	282	178	4	98	5	5	17	3	79
Josephine	870	822	11	38	19	4	18	7	78
Klamath	821	699	21	65	21	1	65	7	131
Lake	70	66	1	6	1	1	—	—	5
Lane	3,555	3,132	91	156	131	25	218	57	452
Lincoln	435	387	3	36	13	5	22	1	81
Linn	1,521	1,379	11	50	30	13	107	6	201
Malheur	465	422	16	8	3	1	22	2	209
Marion	4,519	3,527	85	148	133	99	623	132	1,666
Morrow	164	146	1	2	1	1	9	7	84
Multnomah	9,023	7,320	836	236	848	151	88	57	1,330
Polk	975	824	18	41	35	6	84	8	197
Sherman	17	16	—	—	—	—	—	1	1
Tillamook	255	242	2	6	3	3	4	6	39
Umatilla	949	815	16	52	11	5	71	19	356
Union	312	293	6	3	5	9	2	—	17
Wallowa	59	58	—	1	1	—	—	—	2
Wasco	321	298	2	22	7	4	1	—	89
Washington ...	6,999	5,661	244	134	1,119	85	61	27	1,517
Wheeler	17	17	—	1	—	—	—	—	1
Yamhill	1,160	1,100	14	34	23	4	26	9	240
Unknown	5	4	1	2	1	—	—	—	1

— Quantity is zero.
¹ Includes American Indian & Alaskan Native.
² Includes Native Hawaiian & Pacific Islander.
³ NS indicates race not stated.
⁴ Non-Hispanic, two or more mention race
⁵ Includes any race.
⁶ Includes any race (1 or more) and ethnicity mention.

**TABLE 2-9. Births to unmarried mothers,
Oregon residents, 2016**

County of residence	Total births	Number unmarried	Percent unmarried ¹
Total	45,533	16,221	35.7
Baker	160	62	38.8
Benton	763	174	§ 22.8
Clackamas	4,238	1,193	§ 28.2
Clatsop	408	167	40.9
Columbia	527	212	40.3
Coos	626	320	§ 51.2
Crook	238	100	42.0
Curry	182	52	43.3
Deschutes	1,799	570	§ 31.8
Douglas	1,087	512	§ 47.1
Gilliam	17	7	41.2
Grant	56	18	32.1
Harney	93	35	37.6
Hood River	252	78	31.1
Jackson	2,293	944	§ 41.3
Jefferson	282	153	§ 54.3
Josephine	870	422	§ 48.7
Klamath	821	394	§ 48.1
Lake	70	25	35.7
Lane	3,555	1,421	§ 40.0
Lincoln	435	223	§ 51.3
Linn	1,521	570	37.5
Malheur	465	232	§ 50.0
Marion	4,519	1,847	§ 40.9
Morrow	164	70	42.7
Multnomah	9,023	2,968	§ 32.9
Polk	975	340	34.9
Sherman	17	2	11.8
Tillamook	255	115	§ 45.1
Umatilla	949	474	§ 50.1
Union	312	130	41.7
Wallowa	59	10	§ 16.9
Wasco	321	129	40.2
Washington	6,999	1,810	§ 25.9
Wheeler	17	9	52.9
Yamhill	1,160	429	37.0
Unknown	5	4	80.0

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 five 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, 2016

County of residence	Total births	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	45,533	10	2,008	8,386	13,389	13,255	6,924	1,468	92	1
Baker	160	–	8	43	55	40	13	1	–	–
Benton	763	–	20	92	232	274	125	18	2	–
Clackamas	4,238	–	144	628	1,262	1,399	664	134	7	–
Clatsop	408	–	21	88	122	114	51	12	–	–
Columbia	527	–	24	106	170	147	65	12	3	–
Coos	626	–	46	162	206	149	56	7	–	–
Crook	238	–	19	56	72	55	27	8	–	1
Curry	182	–	13	43	44	52	25	4	1	–
Deschutes	1,799	–	60	307	506	586	281	52	7	–
Douglas	1,087	–	71	295	392	211	103	14	1	–
Gilliam	17	–	–	3	6	6	1	–	1	–
Grant	56	–	2	11	16	21	6	–	–	–
Harney	93	–	7	20	37	17	10	2	–	–
Hood River	252	–	14	45	72	60	47	14	–	–
Jackson	2,293	1	111	561	722	568	275	53	2	–
Jefferson	282	1	16	75	99	59	27	4	1	–
Josephine	870	1	40	220	292	207	86	24	–	–
Klamath	821	–	58	239	283	149	78	14	–	–
Lake	70	–	4	22	22	14	8	–	–	–
Lane	3,555	–	173	696	1,085	1,025	468	105	3	–
Lincoln	435	–	27	83	134	118	60	13	–	–
Linn	1,521	–	96	372	547	336	133	35	2	–
Malheur	465	–	37	130	137	109	42	10	–	–
Marion	4,519	2	255	1,047	1,450	1,055	558	147	5	–
Morrow	164	–	10	45	41	39	23	5	1	–
Multnomah	9,023	3	294	1,207	2,106	2,992	1,954	433	34	–
Polk	975	–	47	224	326	244	113	19	2	–
Sherman	17	–	–	3	6	5	3	–	–	–
Tillamook	255	–	14	50	89	63	33	5	1	–
Umatilla	949	–	92	246	291	215	91	14	–	–
Union	312	–	17	80	104	77	31	3	–	–
Wallowa	59	–	2	4	21	23	6	3	–	–
Wasco	321	1	16	86	105	72	28	13	–	–
Washington	6,999	1	194	872	1,966	2,428	1,252	267	19	–
Wheeler	17	–	1	3	6	6	1	–	–	–
Yamhill	1,160	–	54	220	365	319	179	23	–	–
Unknown	5	–	1	2	–	1	1	–	–	–

– Quantity is zero.
N.S. = Not stated.

TABLE 2-11. Unmarried mothers by age of mother and county of residence, Oregon resident births, 2016

County of residence	Total births	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	16,221	10	1,709	5,141	4,688	2,783	1,443	422	24	1
Baker	62	—	7	21	22	8	4	—	—	—
Benton	174	—	16	49	55	31	18	4	1	—
Clackamas	1,193	—	117	340	391	207	104	33	1	—
Clatsop	167	—	16	55	49	31	11	5	—	—
Columbia	212	—	21	70	65	31	21	1	3	—
Coos	320	—	43	105	92	57	18	5	—	—
Crook	100	—	14	29	28	15	10	3	—	1
Curry	52	—	4	16	13	12	3	3	1	—
Deschutes	570	—	53	188	163	109	44	11	2	—
Douglas	512	—	60	188	161	67	31	5	—	—
Gilliam	7	—	—	2	3	2	—	—	—	—
Grant	18	—	2	6	4	5	1	—	—	—
Harney	35	—	5	11	14	1	3	1	—	—
Hood River	78	—	12	23	21	11	8	3	—	—
Jackson	944	1	101	338	277	139	73	15	—	—
Jefferson	153	1	14	54	50	20	12	1	1	—
Josephine	422	1	33	146	130	72	27	13	—	—
Klamath	394	—	54	166	102	41	26	5	—	—
Lake	25	—	2	14	5	3	1	—	—	—
Lane	1,421	—	151	446	407	267	110	39	1	—
Lincoln	223	—	25	63	67	47	16	5	—	—
Linn	570	—	83	213	161	71	26	16	—	—
Malheur	232	—	34	90	55	37	11	5	—	—
Marion	1,847	2	216	614	528	289	148	50	—	—
Morrow	70	—	9	25	17	9	8	2	—	—
Multnomah	2,968	3	246	766	818	603	399	121	12	—
Polk	340	—	42	126	92	44	28	8	—	—
Sherman	2	—	—	—	1	1	—	—	—	—
Tillamook	115	—	11	32	46	14	11	1	—	—
Umatilla	474	—	76	165	125	74	29	5	—	—
Union	130	—	14	50	34	23	8	1	—	—
Wallowa	10	—	2	1	2	4	1	—	—	—
Wasco	129	1	14	50	40	14	7	3	—	—
Washington	1,810	1	163	537	527	343	186	51	2	—
Wheeler	9	—	1	3	—	4	1	—	—	—
Yamhill	429	—	47	137	123	77	38	7	—	—
Unknown	4	—	1	2	—	—	1	—	—	—

— Quantity is zero.
N.S. = Not stated.

TABLE 2-12. Region and selected country of mother's birth by continent of father's birth, Oregon residents, 2016

Region & selected country of mother's birth	Total	Continent of father's birth					
		North & Central America	South America	Europe	Asia	Africa	Other & unknown
Total	45,533	38,020	138	885	2,116	471	3,903
North America	40,862	36,293	80	407	398	109	3,575
Canada	158	149	1	6	—	—	2
Mexico	3,531	3,248	8	4	5	2	264
United States	37,173	32,896	71	397	393	107	3,309
Central America	348	308	3	—	2	1	34
El Salvador	87	78	1	—	1	—	7
Guatemala	191	169	—	—	—	—	22
Caribbean	63	53	—	1	2	1	6
South America	164	107	45	2	6	1	3
Brazil	45	28	14	—	1	1	1
East Europe	703	195	3	354	131	4	16
Moldava	59	7	—	37	13	—	2
Romania	79	34	1	39	—	1	4
Russia	156	50	1	43	56	2	4
Ukraine	314	50	—	216	44	1	3
North Europe	135	95	2	32	5	—	1
United Kingdom	83	65	—	16	2	—	—
South Europe	71	44	1	21	2	1	2
West Europe	177	148	—	19	6	—	4
Germany	137	121	—	9	4	—	3
East Asia	692	270	1	2	397	4	18
China	352	70	1	—	270	1	10
Japan	104	79	—	—	23	—	2
South Korea	157	93	—	2	57	1	4
Taiwan	62	20	—	—	39	1	2
Southeast Asia	714	303	1	2	382	2	24
Laos	39	15	1	—	23	—	—
Philippines	224	152	—	2	59	2	9
Thailand	78	45	—	—	31	—	2
Vietnam	263	53	—	—	200	—	10
South Asia	555	39	—	5	503	3	5
India	433	32	—	4	392	2	3
Central Asia	85	13	—	27	42	1	2
Middle East	285	35	1	9	227	6	7
Iraq	59	1	—	—	58	—	—
Saudi Arabia	104	3	—	—	98	2	1
East Africa	266	25	—	—	3	216	22
Ethiopia	93	8	—	—	1	75	9
Somalia	114	3	—	—	—	101	10
North Africa	62	9	—	—	2	51	—
Oceania	229	53	1	2	7	2	164
Australia & New Zealand	32	18	1	1	4	—	8
Micronesia	161	24	—	1	2	2	132
Other & unknown countries	122	30	—	2	1	69	20

— Quantity is zero.

TABLE 2-13. Race, ethnicity, and place of birth of mother by selected demographic characteristics (percent), Oregon resident births, 2016

Characteristic of mother	Total	Non-Hispanic single mention race							Hispanic ²
		White	African American	American Indian	Asian	Hawaiian/ Pacific Islander	Other/ NS ¹	Multiple races	
Total	45,533	31,130	945	433	2,356	320	194	1,699	8,456
Ratio of males to females ³	1,056	1,054	1,011	1,133	1,047	1,038	1,180	1,042	1,064
All births									
All births	45,533	31,130	945	433	2,356	320	194	1,699	8,456
Age 10-19	4.4	3.4	4.7	7.6	0.6	7.5	3.1	6.8	8.6
4 or more live births	12.3	10.7	19.9	26.1	4.3	25.0	19.6	10.7	18.5
Unmarried mothers	35.7	31.8	55.4	63.2	12.3	50.2	40.0	48.9	49.8
Less than 12 years education	13.1	7.7	19.3	25.5	6.5	22.6	15.3	12.5	33.3
Mothers born in the United States									
Total born in the U.S.	37,173	29,379	572	429	487	137	143	1,585	4,441
Age 10-19	4.8	3.5	6.3	7.7	1.8	8.0	2.8	7.1	12.0
4 or more live births	10.9	10.3	17.1	26.1	5.7	23.4	18.9	10.7	12.2
Unmarried mothers	37.4	33.0	74.7	63.6	26.0	50.7	43.1	51.6	54.6
Less than 12 years education	9.5	7.6	14.8	25.7	3.9	13.2	8.3	12.6	19.5
Mothers born outside the United States									
Total born outside of the U.S.	8,360	1,751	373	4	1,869	183	51	114	4,015
Age 10-19	3.0	1.5	2.1	-	0.2	7.1	3.9	2.6	4.7
4 or more live births	18.6	16.7	24.1	25.0	3.9	26.2	21.6	11.4	25.5
Unmarried mothers	28.2	11.0	25.8	25.0	8.7	49.7	32.0	11.4	44.4
Less than 12 years education	29.0	9.2	26.1	-	7.2	29.5	30.0	10.5	48.7

- Quantity is zero.

TABLE 2-13. Race, ethnicity, and place of birth of mother by selected demographic characteristics (percent), Oregon resident births, 2016 (continued)

Characteristic of mother	Total	Any mention race and ethnicity ⁴							Hispanic ²
		White	African American	American Indian	Asian	Hawaiian/ Pacific Islander	Other	Unk.	
Total	45,533	39,090	1,571	1,506	2,967	508	1,743	508	8,456
Ratio of males to females ³	1,056	1,054	1,054	1,000	1,042	1,073	1,073	969	1,064
All births									
All births	45,533	39,090	1,571	1,506	2,967	508	1,743	508	8,456
Age 10-19	4.4	4.3	7.1	8.0	1.3	6.9	10.0	5.1	8.6
4 or more live births	12.3	11.8	17.3	16.9	4.9	19.9	19.6	22.8	18.5
Unmarried mothers	35.7	35.3	59.0	58.7	16.1	48.9	50.6	48.6	49.8
Less than 12 years education	13.1	11.8	17.6	20.2	6.8	18.6	38.4	35.1	33.3
Mothers born in the United States									
Total born in the U.S.	37,173	34,387	1,170	1,469	985	304	768	256	4,441
Age 10-19	4.8	4.5	8.9	8.2	3.1	6.2	16.4	4.7	12.0
4 or more live births	10.9	10.5	15.2	16.7	6.2	16.8	10.7	15.6	12.2
Unmarried mothers	37.4	35.9	70.6	59.3	30.7	49.8	57.9	51.0	54.6
Less than 12 years education	9.5	8.9	15.1	19.7	5.6	10.9	24.0	19.8	19.5
Mothers born outside the United States									
Total born outside of the U.S.	8,360	4,703	401	37	1,982	204	975	252	4,015
Age 10-19	3.0	3.4	2.0	-	0.4	7.8	4.9	5.6	4.7
4 or more live births	18.6	21.5	23.2	24.3	4.2	24.5	26.7	30.2	25.5
Unmarried mothers	28.2	31.1	25.2	35.1	8.9	47.5	45.0	46.2	44.4
Less than 12 years education	29.0	32.9	24.8	40.5	7.3	29.9	49.8	48.1	48.7

- Quantity is zero.

1 NS = Not stated.

2 Hispanic ethnicity may include any race.

3 Ratio of male live births per 1,000 female live births.

4 Includes any race (1 or more) and ethnicity mention.

NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-14. Maternal characteristics by principal method of payment for delivery, Oregon resident births, 2016

Characteristics	Total	Private insurance	Medicaid-/OHP*	Self-pay	Other	Unknown
Mother's age and marital status						
Total	45,533	23,733	20,161	926	630	83
Married	29,199	19,639	8,330	720	467	43
Unmarried	16,221	4,051	11,816	200	119	35
Less than 18	491	106	376	3	5	1
Married	27	8	19	—	—	—
Unmarried	463	97	357	3	5	1
18-24	9,913	2,955	6,651	143	145	19
Married	3,481	1,451	1,854	84	83	9
Unmarried	6,397	1,499	4,790	57	41	10
25-34	26,644	15,090	10,565	567	371	51
Married	19,113	13,268	5,053	464	301	27
Unmarried	7,471	1,793	5,507	100	52	19
35+	8,484	5,582	2,569	212	109	12
Married	6,578	4,912	1,404	172	83	7
Unmarried	1,889	662	1,162	39	21	5
First trimester care						
Total	36,052	20,859	14,137	523	489	44
Married	24,514	17,545	6,133	432	374	30
Unmarried	11,467	3,284	7,994	89	86	14
Percent	79.7	88.3	70.8	57.6	78.4	60.3
Married	84.5	89.7	74.3	60.8	81.0	73.2
Unmarried	71.3	81.4	68.3	46.1	72.9	46.7
Inadequate prenatal care						
Total	2,722	646	1,869	149	37	21
Married	1,153	427	618	86	19	3
Unmarried	1,551	215	1,246	60	14	16
Percent	6.0	2.7	9.4	16.4	5.9	28.8
Married	4.0	2.2	7.5	12.1	4.1	7.3
Unmarried	9.7	5.3	10.7	31.1	11.9	53.3
Tobacco use						
Percent	9.8	2.8	18.3	6.6	9.2	20.5
Alcohol use						
Percent	0.9	1.1	0.7	1.0	0.4	4.7
Low birthweight						
Percent	6.5	6.2	7.1	3.7	7.3	6.1

— Quantity is zero.

* OHP = Oregon Health Plan.

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. Table represents expected principal method of payment for delivery. Actual method of payment may differ.

TABLE 2-15. Reported use of tobacco by mother's age and county of residence, Oregon births, 2016

County of residence	Total births	Tobacco use								
		Number	%	Tobacco use by age of mother						
				<20	20-24	25-29	30-34	35-39	40+	N.S.
Total	45,533	4,337	9.6	300	1,280	1,412	873	400	71	1
Baker	160	38	23.8	3	10	17	6	1	1	-
Benton	763	48	6.3	4	16	13	8	6	1	-
Clackamas	4,238	285	6.7	23	70	105	51	31	5	-
Clatsop	408	81	20.0	10	24	22	16	8	1	-
Columbia	527	70	13.3	4	16	27	15	8	-	-
Coos	626	143	22.9	7	45	50	33	7	1	-
Crook	238	55	23.2	5	15	18	9	6	1	1
Curry	182	25	13.7	4	6	7	7	1	-	-
Deschutes	1,799	168	9.4	19	53	59	27	9	1	-
Douglas	1,087	223	20.5	18	61	86	44	13	1	-
Gilliam	17	5	29.4	-	1	2	2	-	-	-
Grant	56	7	13.0	-	2	2	2	1	-	-
Harney	93	13	14.4	1	4	5	3	-	-	-
Hood River	252	6	2.4	1	3	-	1	1	-	-
Jackson	2,293	311	13.6	21	104	99	60	25	2	-
Jefferson	282	43	15.4	2	13	15	9	4	-	-
Josephine	870	170	19.6	11	53	54	31	14	7	-
Klamath	821	158	19.4	12	55	52	19	16	4	-
Lake	70	13	18.6	-	6	5	2	-	-	-
Lane	3,555	447	12.6	26	126	143	104	41	7	-
Lincoln	435	83	19.1	6	24	22	20	10	1	-
Linn	1,521	233	15.3	25	77	77	34	14	6	-
Malheur	465	50	10.8	2	22	18	5	2	1	-
Marion	4,519	369	8.2	26	111	116	75	33	8	-
Morrow	164	11	6.7	1	4	1	3	2	-	-
Multnomah	9,023	553	6.1	21	140	168	130	80	14	-
Polk	975	93	9.5	4	39	28	13	9	-	-
Sherman	17	-	-	-	-	-	-	-	-	-
Tillamook	255	41	16.3	1	11	19	6	4	-	-
Umatilla	949	112	11.9	9	32	35	28	7	1	-
Union	312	52	16.8	3	18	14	12	4	1	-
Wallowa	59	8	13.6	2	-	4	1	1	-	-
Wasco	321	36	11.2	4	11	11	5	4	1	-
Washington	6,999	249	3.6	12	64	77	66	26	4	-
Wheeler	17	2	11.8	-	-	-	2	-	-	-
Yamhill	1,160	135	11.6	13	43	41	24	12	2	-
Unknown	5	1	20.0	-	1	-	-	-	-	-

- Quantity is zero.

WARNING: Rates and percentages based on less than five events are unreliable.

NOTE: Percentages for tobacco use exclude missing and unknown values in the calculation.

TABLE 2-16. Maternal risk factors by county of residence, Oregon, 2016

County of residence	Total births	Inadequate care ¹	Minority race/ethnicity ²	Age < 18	Age ≥35	4+ live births	<12 years educ.	Unmarried	Tobacco use
Total	45,533	6.0	31.6	1.1	18.6	12.3	13.1	35.7	9.6
Baker	160	7.6	11.2	—	8.8	15.6	9.4	38.8	23.8
Benton	763	4.5	30.3	0.5	19.0	10.0	6.2	22.8	6.3
Clackamas	4,238	5.5	21.3	0.8	19.0	10.4	7.5	28.2	6.7
Clatsop	408	4.5	21.6	0.5	15.4	11.8	18.4	40.9	20.0
Columbia	527	7.2	14.2	1.3	15.2	14.0	11.7	40.3	13.3
Coos	626	6.0	17.9	2.1	10.1	11.3	17.9	51.2	22.9
Crook	238	5.1	15.5	2.1	14.8	12.6	15.1	42.0	23.2
Curry	182	10.0	22.5	1.1	16.5	12.1	11.2	43.3	13.7
Deschutes	1,799	2.5	18.1	0.6	18.9	8.8	7.6	31.8	9.4
Douglas	1,087	5.2	11.5	1.5	10.9	12.4	14.5	47.1	20.5
Gilliam	17	11.8	17.6	—	11.8	11.8	5.9	41.2	29.4
Grant	56	3.6	10.7	3.6	10.7	17.9	3.7	32.1	13.0
Harney	93	9.8	12.9	1.1	12.9	19.4	13.0	37.6	14.4
Hood River	252	2.9	41.3	1.2	24.2	10.3	17.5	31.1	2.4
Jackson	2,293	7.2	28.9	1.4	14.4	12.6	17.4	41.3	13.6
Jefferson	282	9.4	61.0	2.1	11.3	20.9	23.8	54.3	15.4
Josephine	870	8.8	16.3	1.3	12.6	13.9	14.5	48.7	19.6
Klamath	821	7.8	28.3	2.3	11.2	12.9	17.1	48.2	19.4
Lake	70	10.1	17.1	1.4	11.4	12.9	11.4	35.7	18.6
Lane	3,555	7.4	22.8	1.1	16.2	10.7	10.7	40.0	12.6
Lincoln	435	7.9	28.5	1.1	16.8	19.3	18.0	51.3	19.1
Linn	1,521	5.4	18.4	1.8	11.2	14.0	14.5	37.5	15.3
Malheur	465	13.0	50.5	2.2	11.2	21.1	27.1	50.0	10.8
Marion	4,519	5.7	46.0	1.4	15.7	18.4	19.7	40.9	8.2
Morrow	164	11.0	53.7	3.0	17.7	22.0	26.4	42.7	6.7
Multnomah	9,023	6.6	36.1	0.9	26.8	10.2	11.9	33.0	6.1
Polk	975	4.2	29.7	0.9	13.7	16.0	12.0	34.9	9.5
Sherman	17	—	11.8	—	17.6	23.5	6.2	11.8	—
Tillamook	255	4.7	20.4	0.4	15.3	17.6	16.6	45.1	16.3
Umatilla	949	9.9	45.2	2.7	11.1	16.6	24.3	50.1	11.9
Union	312	8.1	11.5	0.3	10.9	11.5	12.2	41.7	16.8
Wallowa	59	—	6.8	1.7	15.3	18.6	10.2	16.9	13.6
Wasco	321	7.0	37.1	0.9	12.8	17.1	20.6	40.2	11.2
Washington	6,999	4.6	42.7	0.6	22.0	9.8	10.3	25.9	3.6
Wheeler	17	6.2	11.8	—	5.9	5.9	—	52.9	11.8
Yamhill	1,160	4.7	26.2	0.5	17.4	13.4	12.5	37.0	11.6
Unknown	5	20.0	60.0	—	20.0	—	25.0	80.0	20.0

— Quantity is zero.

¹ Less than five prenatal visits or care began in the third trimester.

² Includes nonwhite race and Hispanic ethnicity.

WARNING: Rates based on less than five 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, 2016**

Mother's age	Total births	First trimester care		Inadequate prenatal care ¹	
		Number	Percent	Number	Percent
Total	45,533	36,052	79.7	2,722	6.0
Less than 15	10	2	20.0	5	50.0
15-19	2,008	1,300	65.5	231	11.7
20-24	8,386	6,105	73.4	712	8.6
25-29	13,389	10,662	80.1	808	6.1
30-34	13,255	11,044	83.9	597	4.5
35-39	6,924	5,713	83.2	289	4.2
40-44	1,468	1,156	79.3	74	5.1
45+	92	70	76.9	5	5.5
Unknown	1	—	—	1	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 five 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, 2016**

Mother's race/ethnicity	Total births	First trimester care		Inadequate prenatal care ¹		Adequate	
		Number	Percent	Number	Percent	Number	Percent
Total	45,533	36,052	79.7	2,722	6.0	42,296	94.0
Non-Hispanic single mention race							
Total non-Hispanic	37,077	29,837	81.0	2,114	5.8	34,618	94.2
White	31,130	25,478	82.3	1,560	5.1	29,303	94.9
African American	945	641	68.9	120	12.9	808	87.1
American Indian	433	263	61.3	63	14.8	364	85.2
Asian	2,356	1,911	81.6	121	5.2	2,215	94.8
Hawaiian/Pacific Islander	320	133	42.6	87	28.2	222	71.8
Other/unknown	194	123	66.5	34	18.2	153	81.8
Multiple races	1,699	1,288	76.3	129	7.7	1,553	92.3
Hispanic single mention race							
Total Hispanic	8,456	6,215	74.3	608	7.3	7,678	92.7
White	6,117	4,538	75.0	458	7.6	5,546	92.4
African American	63	49	77.8	7	11.1	56	88.9
American Indian	108	67	62.6	10	9.5	95	90.5
Asian	31	25	80.6	—	—	31	100.0
Hawaiian/Pacific Islander	19	13	68.4	2	10.5	17	89.5
Other/unknown	1,864	1,347	72.9	115	6.3	1,702	93.7
Multiple races	254	176	71.3	16	6.5	231	93.5
Any mention race and ethnicity²							
White	39,090	31,410	80.9	2,147	5.5	36,540	94.5
African American	1,571	1,109	71.7	170	11.0	1,375	89.0
American Indian	1,506	1,027	68.6	157	10.6	1,330	89.4
Asian	2,967	2,391	81.2	161	5.5	2,778	94.5
Hawaiian/Pacific Islander	508	271	54.4	101	20.4	394	79.6
Other	1,743	1,252	72.4	113	6.7	1,586	93.3
Unknown	508	362	73.0	50	10.1	446	89.9
Hispanic	8,456	6,215	74.3	608	7.3	7,678	92.7

— Quantity is zero.

¹ Less than five prenatal visits or care began in the third trimester.

² Includes any race (1 or more) and ethnicity mention.

WARNING: Rates and percentages based on less than five 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, 2016**

Mother's education	Total births	First trimester care		Inadequate prenatal care ¹	
		Number	Percent	Number	Percent
Total	45,533	36,052	79.7	2,722	6.0
8th grade or less	1,306	844	65.8	142	11.2
9th to 12th grade, no diploma	4,624	2,982	65.1	584	12.9
High school graduate or GED	9,901	7,227	73.6	806	8.3
Some college, no degree	11,133	8,761	79.3	614	5.6
Associate's degree	3,772	3,190	84.8	148	3.9
Bachelor's degree	9,030	7,926	88.2	250	2.8
Master's degree	4,139	3,730	90.5	95	2.3
Doctorate or professional degree ...	1,396	1,250	89.9	35	2.5
Unknown	230	142	65.1	47	21.7

¹ Less than five prenatal visits or care began in the third trimester.

WARNING: Rates and percentages based on less than five 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, 2016

County of residence	Total births	First trimester care		Inadequate prenatal care ¹	
		Number	Percent	Number	Percent
Total	45,533	36,052	79.7	2,722	6.0
Baker	160	133	84.2	12	7.6
Benton	763	605	79.6	34	4.5
Clackamas	4,238	3,472	§ 82.7	230	5.5
Clatsop	408	314	77.3	18	4.5
Columbia	527	434	82.7	38	7.2
Coos	626	496	79.7	37	6.0
Crook	238	190	80.9	12	5.1
Curry	182	139	76.8	18	10.0
Deschutes	1,799	1,571	§ 87.6	44	§ 2.5
Douglas	1,087	881	81.3	56	5.2
Gilliam	17	12	70.6	2	11.8
Grant	56	43	76.8	2	3.6
Harney	93	72	77.4	9	9.8
Hood River	252	211	86.5	7	2.9
Jackson	2,293	1,789	78.2	164	§ 7.2
Jefferson	282	188	§ 67.6	26	9.4
Josephine	870	664	76.7	76	§ 8.8
Klamath	821	633	77.3	64	7.8
Lake	70	47	68.1	7	10.1
Lane	3,555	2,709	§ 76.7	262	§ 7.4
Lincoln	435	325	75.1	34	7.9
Linn	1,521	1,245	82.0	82	5.4
Malheur	465	271	§ 58.5	60	§ 13.0
Marion	4,519	3,370	§ 75.1	253	5.7
Morrow	164	112	68.7	18	§ 11.0
Multnomah	9,023	7,187	80.2	592	§ 6.6
Polk	975	774	79.7	40	§ 4.2
Sherman	17	14	82.4	—	—
Tillamook	255	193	75.7	12	4.7
Umatilla	949	633	§ 68.1	92	§ 9.9
Union	312	244	79.0	25	8.1
Wallowa	59	48	81.4	—	—
Wasco	321	259	82.0	22	7.0
Washington	6,999	5,798	§ 83.7	318	§ 4.6
Wheeler	17	13	86.7	1	6.2
Yamhill	1,160	960	83.3	54	4.7
Unknown	5	3	60.0	1	20.0

— Quantity is zero.

¹ Less than five prenatal visits or care began in the third trimester.

§ Rate is significantly different from the state rate.

WARNING: Rates and percentages based on less than five 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, 2016

County of residence	Total births	First trimester care		Inadequate prenatal care ¹	
		Number	Percent	Number	Percent
Total	16,221	11,467	71.3	1,551	9.7
Baker	62	47	77.0	10	16.4
Benton	174	104	60.5	16	9.3
Clackamas	1,193	880	74.8	108	9.2
Clatsop	167	121	72.5	10	6.0
Columbia	212	163	77.6	21	10.0
Coos	320	236	74.2	26	8.2
Crook	100	75	75.8	8	8.1
Curry	52	42	80.8	5	9.6
Deschutes	570	467	§ 81.9	22	3.9
Douglas	512	382	74.9	42	8.2
Gilliam	7	*	*	*	*
Grant	18	15	83.3	—	—
Harney	35	24	68.6	5	14.3
Hood River	78	55	73.3	2	2.7
Jackson	944	646	68.6	102	10.9
Jefferson	153	91	60.7	18	12.0
Josephine	422	293	69.6	53	12.6
Klamath	394	287	72.8	39	9.9
Lake	25	14	58.3	3	12.5
Lane	1,421	976	69.3	162	11.5
Lincoln	223	152	68.5	24	10.9
Linn	570	432	75.8	46	8.1
Malheur	232	129	§ 55.8	37	16.1
Marion	1,847	1,235	67.4	171	9.6
Morrow	70	44	63.8	6	8.7
Multnomah	2,968	2,097	71.2	321	10.9
Polk	340	241	71.3	22	6.7
Sherman	2	*	*	*	*
Tillamook	115	80	69.6	9	7.8
Umatilla	474	286	§ 61.4	63	13.5
Union	130	101	78.3	17	13.2
Wallowa	10	*	*	*	*
Wasco	129	94	74.6	15	11.9
Washington	1,810	1,307	73.6	133	7.6
Wheeler	9	*	*	*	*
Yamhill	429	326	76.2	33	7.7
Unknown	4	2	50.0	1	25.0

— Quantity is zero.

¹ Less than five 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 five events are unreliable.

NOTE: Rates and percentages are calculated excluding missing and unknown values.

**TABLE 2-22. Prenatal care
by birthweight, Oregon residents, 2016**

Birthweight (in grams)	Total births	First trimester care		Inadequate care ¹	
		Number	Percent	Number	Percent
Total	45,533	36,052	79.7	2,722	6.0
Low birthweight					
Total low birthweight	2,980	2,296	77.9	339	11.6
499 & less	45	36	80.0	27	60.0
500-999	165	115	71.0	58	36.0
1000-1499	231	180	78.3	32	14.0
1500-1999	622	482	78.5	75	12.3
2000-2499	1,917	1,483	78.2	147	7.8
Birthweight greater than 2499 grams					
2500-2999	7,027	5,447	78.4	499	7.2
3000-3499	17,130	13,455	79.1	1,021	6.0
3500-3999	13,682	11,016	80.9	657	4.8
4000-4499	4,004	3,265	82.0	171	4.3
4500-4999	635	512	80.8	34	5.4
5000 & over	66	55	84.6	—	—
Unknown	9	6	75.0	1	12.5

— Quantity is zero.

¹ Less than five prenatal visits or care began in the third trimester.

WARNING: Rates and percentages based on less than five events are unreliable.

NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-23. Rates¹ of selected medical risk factors by age of mother, Oregon residents, 2016

Medical risk factor of mother	Total births ²	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+
Total births	45,533	10	2,008	8,386	13,389	13,255	6,924	1,468	92
Diabetes-chronic	9.4	–	4.5	6.7	6.9	9.6	15.5	21.8	43.5
Diabetes-gestational	82.2	–	25.4	48.5	69.5	90.0	127.2	172.3	293.5
Hypertension-chronic	17.5	–	5.5	8.2	13.2	18.9	32.9	39.5	54.3
Hypertension-gestational	73.6	100.0	70.7	73.7	69.1	71.7	80.0	99.5	163.0
Eclampsia	6.7	–	11.0	6.8	6.0	6.2	6.9	8.2	43.5
Previous preterm infant ³	38.4	–	8.0	27.1	39.7	40.1	49.5	66.1	43.5
Infertility treatment ⁴	23.3	–	–	3.6	12.2	27.0	48.1	94.7	413.0
Previous cesarean delivery	132.8	–	13.4	78.0	125.5	153.2	192.7	204.4	228.3

– Quantity is zero.

¹ Rates per 1,000 mothers.

² Total includes mothers with unstated age.

³ Gestation less than 37 completed weeks.

⁴ Includes pregnancies resulting from fertility enhancing drugs and/or assisted reproductive technology.

NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-24. Selected medical or health characteristics by mother's age (percents), Oregon resident births, 2016

Characteristic	Total births ¹	Age of mother							
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+
All births - mother									
Total births	45,533	10	2,008	8,386	13,389	13,255	6,924	1,468	92
First trimester care	79.7	20.0	65.5	73.4	80.1	83.9	83.2	79.3	76.9
Inadequate care ²	6.0	50.0	11.7	8.6	6.1	4.5	4.2	5.1	5.5
No prenatal care	0.8	–	1.2	1.1	0.9	0.7	0.6	0.8	1.1
Out-of-hospital birth	3.8	–	1.2	2.3	3.7	4.8	5.0	4.2	2.2
Primary cesarean	16.5	–	15.6	15.3	15.2	16.4	18.9	24.9	46.7
Repeat cesarean	10.7	–	1.0	6.4	10.0	12.2	15.8	16.4	20.7
Multiple births	3.4	–	1.7	2.1	2.9	4.1	4.4	6.3	31.5
Tobacco use	9.6	10.0	14.9	15.3	10.6	6.6	5.8	4.8	1.1
Overweight/obese ³	50.6	–	40.5	50.6	52.2	49.1	52.2	54.6	51.1
All births - infant									
Preterm births ⁴	7.9	–	8.8	7.6	7.1	7.6	9.4	11.9	28.3
Very low birthweight ⁵ ..	1.0	–	1.6	0.9	0.8	0.9	1.2	1.0	2.2
Low birthweight ⁶	6.5	–	7.4	6.5	5.9	6.2	7.5	9.7	22.8
Fetal macrosomia ⁷	10.3	20.0	7.7	8.2	10.3	11.7	11.6	9.2	5.4
5 minute Apgar < 7	2.7	10.0	3.7	2.8	2.7	2.6	2.5	3.2	3.3
Mothers born in the U.S.									
Total births	37,173	6	1,765	7,227	11,073	10,753	5,310	982	56
First trimester care	81.1	33.3	66.6	74.8	81.3	85.6	84.9	83.0	80.0
Inadequate care ²	5.6	33.3	10.7	7.8	5.8	4.1	3.9	4.0	3.6
No prenatal care	0.9	–	1.2	1.2	1.0	0.7	0.6	0.8	1.8
Out-of-hospital birth	4.4	–	1.4	2.5	4.1	5.4	5.9	5.8	3.6
Primary cesarean	16.7	–	15.9	15.7	15.3	16.7	19.1	26.1	39.3
Repeat cesarean	10.3	–	1.1	6.2	10.1	12.0	15.0	15.4	14.3
Multiple births	3.5	–	1.9	2.0	3.0	4.3	4.6	7.1	28.6
Tobacco use	11.5	16.7	16.9	17.6	12.5	7.9	7.3	6.8	1.8
Overweight/obese ³	51.1	–	41.4	51.5	53.1	49.7	52.0	52.6	48.1
Infants of mothers born in the U.S.									
Preterm births ⁴	8.0	–	9.3	7.7	7.2	7.5	9.6	12.2	35.7
Very low birthweight ⁵ ..	1.0	–	1.6	1.0	0.8	0.9	1.3	1.0	3.6
Low birthweight ⁶	6.5	–	7.8	6.6	5.8	6.0	7.4	9.9	26.8
Fetal macrosomia ⁷	10.8	33.3	8.0	8.3	10.7	12.4	12.3	10.5	7.1
5 minute Apgar < 7	2.9	16.7	4.0	2.9	2.9	2.8	2.7	3.6	5.4

– Quantity is zero.

See footnotes at end of table.

TABLE 2-24. Selected medical or health characteristics by mother's age (percent), Oregon resident births, 2016 (continued)

Characteristic	Total births ¹	Age of mother							
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+
Mothers born outside the U.S.									
Total births	8,360	4	243	1,159	2,316	2,502	1,614	486	36
First trimester care	73.6	—	56.7	64.5	74.4	76.7	77.3	71.7	72.2
Inadequate care ²	8.0	75.0	18.9	13.7	7.7	6.4	5.1	7.4	8.3
No prenatal care	0.6	—	1.7	1.0	0.6	0.6	0.5	0.6	—
Out-of-hospital birth	1.5	—	—	0.8	1.5	2.0	1.7	1.0	—
Primary cesarean	15.8	—	13.2	12.8	14.6	15.1	18.0	22.4	58.3
Repeat cesarean	12.4	—	0.4	7.6	9.5	13.2	18.2	18.5	30.6
Multiple births	2.9	—	—	2.1	1.9	3.1	3.7	4.7	36.1
Tobacco use	1.0	—	0.4	1.4	1.1	0.9	0.8	0.8	—
Overweight/obese ³	48.3	—	33.6	44.7	48.1	46.5	52.8	58.7	55.6
Infants of mothers born outside the U.S.									
Preterm births ⁴	7.6	—	5.3	6.4	7.0	7.7	8.4	11.3	16.7
Very low birthweight ⁵ ..	0.9	—	1.6	0.5	0.8	0.9	1.0	1.0	—
Low birthweight ⁶	6.9	—	4.5	5.9	6.1	7.2	7.6	9.3	16.7
Fetal macrosomia ⁷	8.1	—	4.9	7.3	8.2	8.6	9.1	6.6	2.8
5 minute Apgar < 7	1.9	—	2.1	2.2	1.9	1.8	1.7	2.5	—

- Quantity is zero.
- 1 Total includes one birth with unknown age of mother.
- 2 Less than five prenatal visits or care began in the third trimester.
- 3 Body Mass Index of greater than 25.0 kg/m² for women over 15.
- 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 Birthweight of more than 4,000 grams (8 lb 13 oz).

NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-25. Selected medical or health characteristics by mother's race (percents), Oregon resident births, 2016

Characteristic	Total births	Non-Hispanic single mention race							Hispanic ²
		White	African American	American Indian	Asian	Hawaiian/Pacific Islander	Other/unk.	Mult. races	
All births - mother									
Total births	45,533	31,130	945	433	2,356	320	194	1,699	8,456
First trimester care	79.7	82.3	68.9	61.3	81.6	42.6	66.5	76.3	74.3
Inadequate care ³	6.0	5.1	12.9	14.8	5.2	28.2	18.2	7.7	7.3
No prenatal care	0.8	0.8	2.0	3.5	0.3	3.6	5.3	1.1	0.7
Out-of-hospital birth	3.8	4.8	1.9	5.5	1.2	0.6	5.2	4.0	1.1
Primary cesarean	16.5	16.8	17.7	15.0	19.2	16.6	15.5	16.3	14.6
Repeat cesarean	10.7	10.0	13.5	15.5	10.3	15.3	11.3	11.5	12.5
Multiple births	3.4	3.7	3.9	4.2	3.3	2.5	2.1	2.9	2.4
Tobacco use	9.6	11.4	7.9	16.7	0.8	6.9	9.4	16.7	3.7
Overweight/obese ⁴	50.6	48.1	57.4	64.0	27.1	74.2	53.7	54.5	63.2
All births - infant									
Preterm births ⁵	7.9	7.7	10.1	9.0	8.3	11.6	13.5	8.5	8.2
Very low birthweight ⁶ ..	1.0	0.9	1.9	0.7	1.0	0.6	2.6	1.1	1.0
Low birthweight ⁷	6.5	6.3	10.3	5.1	8.3	8.4	9.8	6.5	6.5
Fetal macrosomia ⁸	10.3	11.2	7.1	9.9	5.0	9.4	10.8	9.8	8.8
5 minute Apgar < 7	2.7	2.9	3.6	3.0	2.0	1.9	5.2	2.6	2.4
Mothers born in the U.S.									
Total births	37,173	29,379	572	429	487	137	143	1,585	4,441
First trimester care	81.1	82.8	69.8	61.4	82.7	57.8	68.4	76.6	76.0
Inadequate care ³	5.6	4.9	13.2	14.7	3.9	19.3	16.1	7.4	7.3
No prenatal care	0.9	0.8	2.7	3.3	0.6	3.0	4.4	1.1	0.9
Out-of-hospital birth	4.4	4.8	2.1	5.6	2.1	0.7	5.6	4.2	1.7
Primary cesarean	16.7	16.9	18.2	15.2	16.2	16.1	16.1	16.7	15.0
Repeat cesarean	10.3	10.0	14.9	15.4	8.6	13.9	11.2	11.1	10.9
Multiple births	3.5	3.7	3.8	4.2	3.3	2.9	2.8	3.2	2.3
Tobacco use	11.5	11.9	12.8	16.6	2.1	14.0	10.7	17.6	6.7
Overweight/obese ⁴	51.1	48.7	65.1	64.1	39.6	78.4	54.7	55.6	62.4
Infants of mothers born in the U.S.									
Preterm births ⁵	8.0	7.8	12.6	9.1	9.4	8.8	11.9	8.5	8.1
Very low birthweight ⁶ ..	1.0	1.0	2.6	0.7	1.2	–	1.4	1.0	1.0
Low birthweight ⁷	6.5	6.4	11.9	5.1	9.4	6.6	8.4	6.6	6.1
Fetal macrosomia ⁸	10.7	11.2	5.9	10.0	4.5	11.7	12.6	10.3	9.1
5 minute Apgar < 7	2.9	2.9	3.5	3.0	3.5	2.9	4.3	2.7	2.7

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

TABLE 2-25. Selected medical or health characteristics by mother's race (percents), Oregon resident births, 2016 (continued)

Characteristic	Total births	Non-Hispanic single mention race							Hispanic ²
		White	African American	American Indian	Asian	Hawaiian/Pacific Islander	Other/unk.	Mult. races	
Mothers born outside the U.S.									
Total Births	8,360	1,751	373	4	1,869	183	51	114	4,015
First trimester care	73.6	74.1	67.6	50.0	81.3	31.1	61.2	72.6	72.4
Inadequate care ³	8.0	7.7	12.5	25.0	5.5	35.1	24.0	11.5	7.3
No prenatal care	0.6	0.6	1.1	25.0	0.3	4.0	8.0	0.9	0.5
Out-of-hospital birth	1.5	4.3	1.6	–	1.0	0.5	3.9	1.8	0.5
Primary cesarean	15.8	14.8	16.9	–	20.0	16.9	13.7	10.5	14.2
Repeat cesarean	12.4	9.0	11.5	25.0	10.8	16.4	11.8	16.7	14.4
Multiple births	2.9	3.8	4.0	–	3.3	2.2	–	–	2.4
Tobacco use	1.0	2.6	0.3	25.0	0.5	1.6	6.0	3.5	0.4
Overweight/obese ⁴	48.3	37.7	45.0	50.0	23.8	70.9	51.1	38.2	64.1
Infants of mothers born outside the U.S.									
Preterm births ⁵	7.6	5.1	6.2	–	8.0	13.7	18.0	8.8	8.3
Very low birthweight ⁶ ..	0.9	0.5	0.8	–	1.0	1.1	5.9	1.8	0.9
Low birthweight ⁷	6.9	4.7	7.8	–	8.0	9.8	13.7	6.1	6.9
Fetal macrosomia ⁸	8.1	10.8	8.8	–	5.1	7.7	5.9	3.5	8.4
5 minute Apgar < 7	1.9	1.4	3.8	–	1.6	1.1	8.0	0.9	2.1

- Quantity is zero.
- ² Hispanic includes any mention of race.
- ³ Less than five prenatal visits or care began in the third trimester.
- ⁴ Body Mass Index of greater than 25.0 kg/m².
- ⁵ Born prior to 37 completed weeks of gestation.
- ⁶ Birthweight of less than 1,500 grams (3 lb 4 oz).
- ⁷ Birthweight of less than 2,500 grams (5 lb 8 oz).
- ⁸ Birthweight of more than 4,000 grams (8 lb 13 oz).

NOTE: Rates and percentages are calculated excluding missing and unknown values.

**TABLE 2-25. Selected medical or health characteristics by mother's race (percents)
Oregon resident births, 2016 (continued)**

Characteristic	Total births	Any mention race and ethnicity ¹							Hispanic ²
		White	African American	American Indian	Asian	Hawaiian/ Pacific Islander	Other	Unk.	
All births - mother									
Total births	45,533	39,090	1,571	1,506	2,967	508	1,743	508	8,456
First trimester care	79.7	80.9	71.7	68.6	81.2	54.4	72.4	73.0	74.3
Inadequate care ³	6.0	5.6	11.0	10.6	5.5	20.4	6.7	10.1	7.3
No prenatal care	0.8	0.8	1.9	2.0	0.5	2.6	0.8	1.8	0.7
Out-of-hospital birth	3.8	4.2	2.0	4.4	1.8	1.6	0.8	1.6	1.1
Primary cesarean	16.5	16.4	17.1	16.0	18.3	16.5	16.4	13.0	14.6
Repeat cesarean	10.7	10.4	13.3	12.8	10.7	13.2	12.5	13.8	12.5
Multiple births	3.4	3.5	4.1	3.2	3.1	2.4	2.7	1.8	2.4
Tobacco use	9.6	10.5	12.0	18.6	2.4	10.1	2.1	4.6	3.7
Overweight/obese ⁴	50.6	50.6	58.7	61.5	30.7	68.9	64.4	65.8	63.2
All births - infant									
Preterm births ⁵	7.9	7.8	9.4	9.1	8.4	11.0	8.1	7.7	8.2
Very low birthweight ⁶ ..	1.0	0.9	1.5	0.9	1.0	1.0	0.9	1.0	1.0
Low birthweight ⁷	6.5	6.4	9.4	5.7	8.2	7.9	6.1	5.5	6.5
Fetal macrosomia ⁸	10.3	10.7	7.8	11.3	5.6	9.1	9.4	9.6	8.8
5 minute Apgar < 7	2.7	2.8	3.3	2.6	2.1	2.6	2.5	2.2	2.4
Mothers born in the U.S.									
Total births	37,173	34,387	1,170	1,469	985	304	768	256	4,441
First trimester care	81.1	81.9	72.9	69.0	81.5	67.1	73.7	71.4	76.0
Inadequate care ³	5.6	5.2	10.5	10.5	5.1	12.6	7.5	12.1	7.3
No prenatal care	0.9	0.8	2.1	1.9	0.9	2.0	1.2	2.0	0.9
Out-of-hospital birth	4.4	4.5	2.1	4.5	3.5	2.0	1.2	2.3	1.7
Primary cesarean	16.7	16.7	17.2	16.1	16.1	17.1	16.8	13.3	15.0
Repeat cesarean	10.3	10.1	13.9	12.8	9.7	11.8	10.4	13.7	10.9
Multiple births	3.5	3.5	4.3	3.3	3.0	2.6	3.0	2.3	2.3
Tobacco use	11.5	11.7	16.0	19.0	5.7	15.2	3.9	7.8	6.7
Overweight/obese ⁴	51.1	50.3	62.9	61.3	42.8	68.2	64.1	62.7	62.4
Infants of mothers born in the U.S.									
Preterm births ⁵	8.0	7.9	10.5	9.1	9.2	9.6	7.4	9.4	8.1
Very low birthweight ⁶ ..	1.0	1.0	1.7	0.8	1.1	1.0	0.9	0.8	1.0
Low birthweight ⁷	6.5	6.4	10.1	5.5	8.7	6.6	6.2	5.1	6.1
Fetal macrosomia ⁸	10.7	10.9	7.1	11.3	7.1	9.9	10.7	9.8	9.1
5 minute Apgar < 7	2.9	2.9	3.1	2.7	3.1	3.6	2.7	2.0	2.7

See footnotes at end of table.

**TABLE 2-25. Selected medical or health characteristics by mother's race (percents)
Oregon resident births, 2016 (continued)**

Characteristic	Total births	Any mention race and ethnicity ¹							
		White	African American	American Indian	Asian	Hawaiian/ Pacific Islander	Other	Unk.	Hispanic ²
Mothers born outside the U.S.									
Total Births	8,360	4,703	401	37	1,982	204	975	252	4,015
First trimester care	73.6	73.1	68.1	55.6	81.0	35.0	71.4	74.6	72.4
Inadequate care ³	8.0	8.0	12.4	13.9	5.7	32.5	6.0	8.1	7.3
No prenatal care	0.6	0.6	1.3	8.3	0.3	3.6	0.4	1.6	0.5
Out-of-hospital birth	1.5	2.0	1.7	2.7	1.0	1.0	0.5	0.8	0.5
Primary cesarean	15.8	14.1	17.0	13.5	19.4	15.7	16.0	12.7	14.2
Repeat cesarean	12.4	12.6	11.5	13.5	11.1	15.2	14.2	13.9	14.4
Multiple births	2.9	2.9	3.7	–	3.2	2.0	2.5	1.2	2.4
Tobacco use	1.0	1.2	0.3	2.7	0.7	2.5	0.6	1.6	0.4
Overweight/obese ⁴	48.3	53.1	45.7	67.6	24.6	69.9	64.6	68.8	64.1
Infants of mothers born outside the U.S.									
Preterm births ⁵	7.6	7.3	6.0	10.8	8.0	13.2	8.6	6.0	8.3
Very low birthweight ⁶ ..	0.9	0.8	0.7	2.7	1.0	1.0	0.9	1.2	0.9
Low birthweight ⁷	6.9	6.4	7.2	13.5	7.9	9.8	6.1	6.0	6.9
Fetal macrosomia ⁸	8.1	9.0	9.7	10.8	4.9	7.8	8.3	9.5	8.4
5 minute Apgar < 7	1.9	1.9	3.8	–	1.6	1.0	2.3	2.4	2.1

- Quantity is zero.
- ¹ Includes any race (1 or more) and ethnicity mention.
- ² Hispanic includes any mention of race.
- ³ Less than five prenatal visits or care began in the third trimester.
- ⁴ Body Mass Index of greater than 25.0 kg/m².
- ⁵ Born prior to 37 completed weeks of gestation.
- ⁶ Birthweight of less than 1,500 grams (3 lb 4 oz).
- ⁷ Birthweight of less than 2,500 grams (5 lb 8 oz).
- ⁸ Birthweight of more than 4,000 grams (8 lb 13 oz).

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, 2016

Medical risk factor of mother	Total births ¹	Non-Hispanic single mention race							Hispanic ²
		White	African American	American Indian	Asian	Hawaiian/Pacific Islander	Other/NS	Multiple races	
Total births	45,533	31,130	945	433	2,356	320	194	1,699	8,456
Diabetes-chronic	428	228	16	6	21	7	3	21	126
Diabetes-gestational	3,742	2,026	80	32	387	40	22	158	997
Hypertension-chronic	799	570	30	8	21	5	2	30	133
Hypertension-gestational	3,352	2,411	62	28	134	19	11	137	550
Eclampsia	306	195	10	5	7	0	2	14	73
Previous preterm infant ³	1,750	1,070	58	30	74	23	12	76	407
Infertility treatment ⁴	1,062	850	15	2	88	1	7	29	70
Previous cesarean delivery	6,047	3,825	170	72	314	58	30	232	1,346

Medical risk factor of mother	Total births	Any mention race and ethnicity ⁵							Hispanic ²
		White	African American	American Indian	Asian	Hawaiian/Pacific Islander	Other	NS	
Total births	45,533	39,090	1,571	1,506	2,967	508	1,743	508	8,456
Diabetes-chronic	428	336	22	18	29	10	36	6	126
Diabetes-gestational	3,742	2,934	128	143	450	62	190	60	997
Hypertension-chronic	799	703	37	30	31	10	24	6	133
Hypertension-gestational	3,352	2,977	111	118	186	34	99	23	550
Eclampsia	306	274	14	14	12	1	4	4	73
Previous preterm infant ³	1,750	1,433	90	89	95	35	89	23	407
Infertility treatment ⁴	1,062	930	24	14	101	2	16	10	70
Previous cesarean delivery	6,047	5,053	266	220	400	80	262	93	1,346

— Quantity is zero.

¹ Total includes mothers with unstated race/ethnicity.

² Hispanic includes any race.

³ Gestation less than 37 completed weeks.

⁴ Includes pregnancies resulting from fertility enhancing drugs and/or assisted reproductive technology.

⁵ Includes any race (1 or more) and ethnicity mention.

NS = Not stated.

TABLE 2-27. Age of mother by birthweight, Oregon resident births, 2016

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	45,533	10	2,008	8,386	13,389	13,255	6,924	1,468	92	1
Low birthweight										
Total low birthweight	2,980	–	149	543	788	819	518	142	21	–
499 & less	45	–	3	12	11	14	5	–	–	–
500-999	165	–	9	28	47	38	33	8	2	–
1000-1499	231	–	21	38	54	64	47	7	–	–
1500-1999	622	–	29	131	130	182	118	25	7	–
2000-2499	1,917	–	87	334	546	521	315	102	12	–
Birthweight greater than 2499 grams										
2500-2999	7,027	2	399	1,430	1,987	1,932	1,005	252	19	1
3000-3499	17,130	4	818	3,295	5,115	4,867	2,468	533	30	–
3500-3999	13,682	2	488	2,430	4,121	4,087	2,131	406	17	–
4000-4499	4,004	2	134	591	1,189	1,321	654	110	3	–
4500-4999	635	–	18	87	172	201	133	22	2	–
5000 & over	66	–	2	9	13	25	14	3	–	–
Unknown	9	–	–	1	4	3	1	–	–	–
Column percent										
1499 & less	1.0	–	1.6	0.9	0.8	0.9	1.2	1.0	2.2	–
1500-2499	5.6	–	5.8	5.5	5.1	5.3	6.3	8.7	20.7	–
2500-4499	91.9	100.0	91.6	92.4	92.7	92.1	90.4	88.6	75.0	100.0
4500 & over	1.5	–	1.0	1.1	1.4	1.7	2.1	1.6	2.2	–

– Quantity is zero.

N.S. = Not stated.

WARNING: Rates and percentages based on less than five events are unreliable.

NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-28. Age of unmarried mothers by birthweight, Oregon resident births, 2016

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	16,221	10	1,709	5,141	4,688	2,783	1,443	422	24	1
Low birthweight										
Total low birthweight	1,261	–	132	370	335	241	130	50	3	–
499 & less	29	–	3	11	7	6	2	–	–	–
500-999	81	–	9	24	21	15	9	3	–	–
1000-1499	97	–	18	26	18	16	18	1	–	–
1500-1999	263	–	26	94	60	50	20	11	2	–
2000-2499	791	–	76	215	229	154	81	35	1	–
Birthweight greater than 2499 grams										
2500-2999	2,909	2	350	964	800	468	248	74	2	1
3000-3499	6,349	4	693	2,069	1,853	1,019	538	164	9	–
3500-3999	4,373	2	407	1,383	1,293	787	392	102	7	–
4000-4499	1,146	2	110	296	363	237	107	29	2	–
4500-4999	164	–	15	51	41	28	25	3	1	–
5000 & over	17	–	2	7	2	3	3	–	–	–
Unknown	2	–	–	1	1	–	–	–	–	–
Column percent										
1499 & less	1.3	–	1.8	1.2	1.0	1.3	2.0	0.9	–	–
1500-2499	6.5	–	6.0	6.0	6.2	7.3	7.0	10.9	12.5	–
2500-4499	91.1	100.0	91.3	91.7	91.9	90.2	89.1	87.4	83.3	100.0
4500 & over	1.1	–	1.0	1.1	0.9	1.1	1.9	0.7	4.2	–

– Quantity is zero.

N.S. = Not stated.

WARNING: Rates and percentages based on less than five events are unreliable.

NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-29. Race of mother and birthweight, Oregon residents, 2016

Mother's race/ethnicity	Total births	Birthweight (grams)										5000 & over	Unk.
		499 & less	500-999	1000-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500-4999		
Total births	45,533	45	165	231	622	1,917	7,027	17,130	13,682	4,004	635	66	9
Non-Hispanic single mention race													
Total non-Hispanic ...	37,077	34	137	189	506	1,562	5,670	13,749	11,258	3,368	539	57	8
White	31,130	28	110	152	416	1,250	4,484	11,423	9,742	2,982	486	49	8
African American	945	3	7	8	18	61	188	354	239	60	6	1	-
American Indian	433	-	2	1	5	14	74	172	121	40	3	1	-
Asian	2,356	1	8	15	33	139	541	968	534	104	10	3	-
Hawaiian/Pacific Islander	320	-	1	1	7	18	54	117	92	26	3	1	-
Other/unknown	194	1	2	2	3	11	37	67	50	18	3	-	-
Multiple races	1,699	1	7	10	24	69	292	648	480	138	28	2	-
Hispanic single mention race													
Total Hispanic	8,456	11	28	42	116	355	1,357	3,381	2,424	636	96	9	1
White	6,117	6	22	32	87	266	970	2,449	1,776	448	54	6	1
African American	63	-	1	-	-	1	5	36	11	5	4	-	-
American Indian	108	-	-	-	-	6	27	30	30	13	2	-	-
Asian	31	-	-	-	1	1	3	15	5	5	1	-	-
Hawaiian/Pacific Islander	19	-	1	-	-	-	5	5	5	3	-	-	-
Other/unknown	1,864	5	3	8	21	69	304	748	531	140	32	3	-
Multiple races	254	-	1	2	7	12	43	98	66	22	3	-	-

- Quantity is zero.

TABLE 2-29. Race of mother and birthweight, Oregon residents, 2016 (continued)

Mother's race/ethnicity	Total births	Birthweight (grams)										Unk.	
		499 & less	500-999	1000-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500-4999		5000 & over
Total births	45,533	45	165	231	622	1,917	7,027	17,130	13,682	4,004	635	66	9
Any mention race and ethnicity¹													
White	39,090	35	140	196	530	1,588	5,776	14,567	12,038	3,583	571	57	9
African American	1,571	4	8	11	30	94	292	608	402	105	16	1	-
American Indian	1,506	-	8	5	18	55	257	569	422	149	21	2	-
Asian	2,967	1	9	20	47	165	656	1,207	695	143	20	4	-
Hawaiian/Pacific Islander	508	-	3	2	9	26	82	197	143	40	5	1	-
Other	1,743	5	2	9	22	69	294	706	473	133	29	1	-
Unknown	508	1	3	1	3	20	82	192	157	37	10	2	-
Hispanic	8,456	11	28	42	116	355	1,357	3,381	2,424	636	96	9	1

- Quantity is zero.

¹ Includes any race (1 or more) and ethnicity mention.

TABLE 2-30. Low birthweight infants by county of residence, Oregon, 2016

County of residence	Total births	Low birthweight infants			Low birthweight rates ¹		
		Total low birthweight	Less than 1500 grams	1,500-2,499 grams	All low birthweight	Less than 1500 grams	1,500-2,499 grams
Total	45,533	2,980	441	2,539	65.5	9.7	55.8
Baker	160	13	4	9	81.3	25.0	56.3
Benton	763	40	6	34	52.4	7.9	44.6
Clackamas	4,238	242	37	205	§ 57.1	8.7	§ 48.4
Clatsop	408	23	4	19	56.4	9.8	46.6
Columbia	527	33	2	31	62.7	3.8	58.9
Coos	626	43	3	40	68.7	4.8	63.9
Crook	238	22	7	15	92.4	§ 29.4	63.0
Curry	182	12	2	10	65.9	11.0	54.9
Deschutes	1,799	113	11	102	62.8	6.1	56.7
Douglas	1,087	60	17	43	55.2	15.6	§ 39.6
Gilliam	17	1	—	1	58.8	—	58.8
Grant	56	3	—	3	53.6	—	53.6
Harney	93	2	—	2	21.5	—	21.5
Hood River	252	17	2	15	67.5	7.9	59.5
Jackson	2,293	151	24	127	65.9	10.5	55.4
Jefferson	282	20	3	17	70.9	10.6	60.3
Josephine	870	52	5	47	59.8	5.7	54.0
Klamath	821	68	6	62	82.8	7.3	75.5
Lake	70	6	—	6	85.7	—	85.7
Lane	3,555	237	28	209	66.7	7.9	58.8
Lincoln	435	28	5	23	64.4	11.5	52.9
Linn	1,521	99	15	84	65.1	9.9	55.2
Malheur	465	35	5	30	75.3	10.8	64.5
Marion	4,519	278	54	224	61.5	12.0	49.6
Morrow	164	8	2	6	49.1	12.3	36.8
Multnomah	9,023	615	84	531	68.2	9.3	58.9
Polk	975	62	13	49	63.6	13.3	50.3
Sherman	17	2	—	2	117.6	—	117.6
Tillamook	255	16	2	14	62.7	7.8	54.9
Umatilla	949	64	8	56	67.4	8.4	59.0
Union	312	14	5	9	44.9	16.0	28.8
Wallowa	59	3	—	3	50.8	—	50.8
Wasco	321	23	6	17	71.7	18.7	53.0
Washington	6,999	485	67	418	69.3	9.6	59.7
Wheeler	17	3	—	3	176.5	—	176.5
Yamhill	1,160	87	14	73	75.0	12.1	62.9
Unknown	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 five events are unreliable.

NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-31. Weight gain of mother by period of gestation and race/ethnicity of mother, Oregon resident births, 2016

Period of gestation ¹ and race/ethnicity ² of mother	All births ³	Mother's weight gain during pregnancy						
		Weight loss	1-10 pounds	11-20 pounds	21-30 pounds	31-40 pounds	41+ pounds	Not stated
All gestation periods								
Total births	45,533	1,006	2,445	6,543	12,144	12,019	10,790	586
White	31,130	663	1,407	3,917	8,084	8,733	8,021	305
African American	945	31	86	186	242	179	205	16
American Indian	433	18	29	69	112	85	111	9
Asian	2,356	14	78	359	820	699	351	35
Hawaiian/Pacific Islander	320	10	26	44	79	65	82	14
Other/unknown	194	7	9	33	51	35	42	17
Multiple races	1,699	42	116	223	417	412	470	19
Hispanic	8,456	221	694	1,712	2,339	1,811	1,508	171
Under 37 weeks								
Total births	3,617	138	321	709	907	744	700	98
White	2,389	87	185	426	585	537	510	59
African American	95	3	16	18	30	12	13	3
American Indian	39	4	1	10	8	6	9	1
Asian	196	1	14	46	66	43	24	2
Hawaiian/Pacific Islander	37	2	4	7	6	8	7	3
Other/unknown	26	1	1	11	3	3	4	3
Multiple races	144	8	13	27	39	28	26	3
Hispanic	691	32	87	164	170	107	107	24
37 - 40 weeks								
Total births	36,713	805	1,945	5,331	9,963	9,734	8,521	414
White	24,893	532	1,110	3,167	6,567	7,021	6,292	204
African American	732	26	61	145	179	152	159	10
American Indian	359	13	26	54	98	70	90	8
Asian	1,931	12	59	294	695	563	281	27
Hawaiian/Pacific Islander	254	8	21	36	65	51	64	9
Other/unknown	145	6	7	20	43	29	30	10
Multiple races	1,385	31	98	182	335	337	387	15
Hispanic	7,014	177	563	1,433	1,981	1,511	1,218	131
41 weeks and over								
Total births	5,176	61	177	497	1,272	1,537	1,565	67
White	3,828	43	111	319	930	1,173	1,215	37
African American	117	2	8	23	33	15	33	3
American Indian	35	1	2	5	6	9	12	—
Asian	228	1	5	19	59	93	46	5
Hawaiian/Pacific Islander	29	—	1	1	8	6	11	2
Other/unknown	22	—	1	2	5	3	8	3
Multiple races	169	2	5	14	43	47	57	1
Hispanic	748	12	44	114	188	191	183	16

— Quantity is zero.

¹ Expressed in complete weeks.

² Non-Hispanic single mention race and Hispanic ethnicity.

³ The subtotals for gestation period may not add to the total because of births of unknown gestation periods.

TABLE 2-32. Percent low birthweight by weight gain of mother, period of gestation, and race/ethnicity of mother, Oregon residents, 2016

Period of gestation ¹ and race/ethnicity ² of mother	Mother's weight gain during pregnancy							
	All births ³	Weight loss	1-10 pounds	11-20 pounds	21-30 pounds	31-40 pounds	41+ pounds	Not stated
	Percent low birthweight infants							
All gestation periods								
Total births	6.5	11.8	12.5	9.6	6.2	4.8	4.9	12.1
White	6.3	11.8	12.9	9.9	5.8	4.7	4.8	13.4
African American	10.3	12.9	17.4	11.3	9.9	8.4	6.8	25.0
American Indian	5.1	27.8	3.4	5.8	4.5	4.7	2.7	—
Asian	8.3	7.1	14.1	14.8	8.3	5.6	6.6	2.9
Hawaiian/Pacific Islander	8.4	—	3.8	11.4	10.1	9.2	6.1	14.3
Other/unknown	9.8	14.3	11.1	27.3	3.9	5.7	7.1	5.9
Multiple races	6.5	9.5	9.5	9.9	7.7	4.4	4.7	10.5
Hispanic	6.5	11.8	12.1	7.4	6.2	4.2	5.0	11.7
Under 37 weeks								
Total births	55.8	65.9	67.3	61.9	54.6	49.5	50.7	57.1
White	55.5	67.8	68.6	61.7	53.5	50.1	51.4	57.6
African American	68.4	33.3	75.0	61.1	70.0	66.7	69.2	100.0
American Indian	41.0	100.0	100.0	30.0	25.0	50.0	33.3	—
Asian	61.7	100.0	57.1	76.1	57.6	60.5	50.0	50.0
Hawaiian/Pacific Islander	45.9	—	25.0	57.1	50.0	50.0	42.9	66.7
Other/unknown	65.4	100.0	100.0	81.8	33.3	33.3	75.0	33.3
Multiple races	54.2	50.0	69.2	63.0	56.4	39.3	53.8	33.3
Hispanic	54.8	65.6	65.5	59.1	55.9	43.0	45.8	58.3
37 - 40 weeks								
Total births	2.6	3.5	4.5	3.5	2.6	2.1	2.0	3.4
White	2.5	3.6	4.9	3.8	2.4	2.0	1.9	2.9
African American	4.4	11.5	4.9	6.9	1.7	4.6	3.1	10.0
American Indian	1.7	7.7	—	1.9	3.1	1.4	—	—
Asian	3.8	—	5.1	5.8	4.2	2.3	3.9	—
Hawaiian/Pacific Islander	3.9	—	—	2.8	7.7	3.9	3.1	—
Other/unknown	1.4	—	—	—	2.3	3.4	—	—
Multiple races	2.4	—	2.0	2.7	3.0	2.1	2.1	6.7
Hispanic	2.4	2.8	4.4	2.0	2.4	2.0	2.2	4.6
41 weeks and over								
Total births	0.3	—	1.7	0.6	0.3	0.1	0.1	—
White	0.2	—	0.9	0.6	0.2	0.1	0.2	—
African American	—	—	—	—	—	—	—	—
American Indian	—	—	—	—	—	—	—	—
Asian	0.9	—	—	5.3	1.7	—	—	—
Hawaiian/Pacific Islander	—	—	—	—	—	—	—	—
Other/unknown	—	—	—	—	—	—	—	—
Multiple races	—	—	—	—	—	—	—	—
Hispanic	0.4	—	4.5	—	0.5	—	—	—

— Quantity is zero.

¹ Expressed in complete weeks.

² Non-Hispanic single mention race and Hispanic ethnicity.

³ The subtotals for gestation period may not add to the total because of births of unknown gestation periods.

NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 2-33. Live births with selected abnormal conditions of the newborn by age of mother, Oregon residents, 2016

Conditions of newborn	Total births	Mother's age								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total births	45,533	10	2,008	8,386	13,389	13,255	6,924	1,468	92	1
Immediate ventilation	2,648	1	142	470	740	735	436	109	15	–
Ventilator > 6 hrs.	951	–	51	175	263	245	162	48	7	–
Admission to NICU	3,357	–	170	608	907	928	569	151	24	–
Surfactant therapy	192	–	16	28	59	53	31	5	–	–
Antibiotics	1,101	–	87	248	320	263	147	32	4	–
Seizures	38	–	3	8	10	11	5	1	–	–
No condition noted	40,566	9	1,749	7,453	11,998	11,910	6,121	1,263	62	1

– Quantity is zero.

N.S. = Not stated.

NOTE: More than one abnormal condition may be reported for a given birth.

TABLE 2-34. Live births with selected abnormal conditions of the newborn by race of mother, Oregon residents, 2016

Conditions of newborn	Total births	White	African American	American Indian	Asian	Hawaiian/Pacific Islander	Other/NS	Hispanic ¹
Non-Hispanic single mention race								
Total births	45,533	31,130	945	433	2,356	320	194	8,456
Immediate ventilation	2,648	1,905	67	26	110	15	11	417
Ventilator > 6 hrs.	951	672	15	9	41	8	3	166
Admission to NICU	3,357	2,328	97	31	149	33	18	557
Surfactant therapy	192	148	5	2	3	–	–	31
Antibiotics	1,101	712	13	20	61	4	5	236
Seizures	38	32	–	1	–	1	–	4
No condition noted	40,566	27,685	815	383	2,136	280	165	7,608
Any mention race and ethnicity ²								
Total births	45,533	39,090	1,571	1,506	2,967	508	2,251	8,456
Immediate ventilation	2,648	2,314	106	85	142	23	111	417
Ventilator > 6 hrs.	951	830	30	30	57	14	44	166
Admission to NICU	3,357	2,881	155	118	197	56	152	557
Surfactant therapy	192	173	7	7	4	1	8	31
Antibiotics	1,101	915	31	57	78	9	92	236
Seizures	38	35	–	1	–	1	1	4
No condition noted	40,566	34,824	1,363	1,326	2,679	441	1,998	7,608

– Quantity is zero.

¹ For single mention race, Hispanic includes any race.² Includes any race (1 or more) and ethnicity mention.

NS = Not stated.

TABLE 2-35. Congenital anomalies by age of mother, Oregon resident births, 2016

Reported congenital anomaly	All ages ¹	Age of mother					
		<20	20-24	25-29	30-34	35-39	40+
Total births	45,533	2,018	8,386	13,389	13,255	6,924	1,560
No congenital anomaly reported	45,228	1,996	8,322	13,319	13,174	6,881	1,535
Anencephalus	4	—	2	1	1	—	—
Spina bifida	16	4	4	3	2	2	1
Heart disease	65	6	11	15	17	9	7
Hypospadias	35	—	10	9	9	5	2
Hernia	12	—	5	2	3	1	1
Omphalocele	11	—	—	4	6	1	—
Gastroschisis	22	4	10	4	3	1	—
Limb reduction defect	6	—	2	1	3	—	—
Cleft lip	38	3	6	13	9	4	3
Cleft palate alone	11	—	2	4	3	1	1
Down syndrome (confirmed)	26	—	2	3	6	8	7
Down syndrome (suspected)	29	6	1	3	8	7	4
Chromosomal disorder (confirmed)	15	1	2	2	7	2	1
Chromosomal disorder (suspected)	36	2	8	6	10	9	1

— Quantity is zero.

¹ Total includes mothers with unstated age.

NOTE: More than one type of malformation may be reported for a given birth.

TABLE 2-36. County of occurrence by type of institution and delivery attendant, Oregon occurrence births, 2016

County of occurrence	Total	Born in hospital or on arrival					
		Total hospital births	M.D.	D.O.	C.N.M.	Other licensed medical	Non-medical
Total	45,977	44,205	31,907	2,830	9,335	129	4
Baker	136	126	126	—	—	—	—
Benton	1,147	1,084	655	38	388	3	—
Clackamas	4,663	4,560	2,502	110	1,947	1	—
Clatsop	448	441	371	—	62	8	—
Columbia	15	—	—	—	—	—	—
Coos	681	674	377	43	254	—	—
Crook	2	—	—	—	—	—	—
Curry	28	12	9	—	3	—	—
Deschutes	2,242	2,178	1,666	325	179	8	—
Douglas	905	882	639	—	243	—	—
Gilliam	—	—	—	—	—	—	—
Grant	43	39	26	13	—	—	—
Harney	67	67	30	37	—	—	—
Hood River	411	404	371	33	—	—	—
Jackson	2,494	2,395	1,749	378	241	27	—
Jefferson	152	148	148	—	—	—	—
Josephine	856	793	676	106	—	11	—
Klamath	820	782	780	1	1	—	—
Lake	56	56	44	12	—	—	—
Lane	3,862	3,663	3,232	100	316	15	—
Lincoln	370	362	218	105	38	1	—
Linn	949	857	740	116	—	1	—
Malheur	448	445	53	207	185	—	—
Marion	5,198	5,069	4,074	262	712	20	1
Morrow	2	—	—	—	—	—	—
Multnomah	10,953	10,465	7,669	599	2,182	15	—
Polk	13	—	—	—	—	—	—
Sherman	1	—	—	—	—	—	—
Tillamook	191	183	182	—	—	1	—
Umatilla	731	719	711	6	—	2	—
Union	285	272	137	135	—	—	—
Wallowa	55	55	55	—	—	—	—
Wasco	280	275	208	—	63	4	—
Washington	6,339	6,162	3,726	128	2,295	10	3
Wheeler	—	—	—	—	—	—	—
Yamhill	1,133	1,037	733	76	226	2	—
Unknown	1	—	—	—	—	—	—

— Quantity is zero.

M.D. = Medical doctor

D.O. = Doctor of osteopathy

C.N.M. = Certified nurse midwife

N.D. = Naturopathic doctor

L.D.M. = Licensed direct entry midwife

**TABLE 2-36. County of occurrence by type of institution and delivery attendant,
Oregon occurrence births, 2016 (continued)**

County of occurrence	Born out-of-hospital							
	Total births	M.D./ D.O.	C.N.M.	N.D.	L.D.M.	Midwife	Other licensed medical	Non- medical
Total	1,772	1	314	237	932	133	12	143
Baker	10	—	—	—	2	6	—	2
Benton	63	—	18	—	32	12	—	1
Clackamas	103	—	5	19	43	29	1	6
Clatsop	7	—	—	1	5	—	1	—
Columbia	15	—	1	1	5	2	1	5
Coos	7	—	3	—	—	2	—	2
Crook	2	—	—	—	1	—	—	1
Curry	16	—	9	—	—	7	—	—
Deschutes	64	—	—	—	55	4	—	5
Douglas	23	—	—	—	2	19	—	2
Gilliam	—	—	—	—	—	—	—	—
Grant	4	—	—	—	—	—	—	4
Harney	—	—	—	—	—	—	—	—
Hood River	7	—	1	2	3	—	—	1
Jackson	99	1	—	36	52	2	1	7
Jefferson	4	—	—	—	3	1	—	—
Josephine	63	—	—	—	54	3	—	6
Klamath	38	—	35	—	1	—	—	2
Lake	—	—	—	—	—	—	—	—
Lane	199	—	115	1	57	11	—	15
Lincoln	8	—	—	—	5	—	1	2
Linn	92	—	—	—	88	3	—	1
Malheur	3	—	—	—	—	—	1	2
Marion	129	—	46	5	46	14	3	15
Morrow	2	—	—	—	—	—	—	2
Multnomah	488	—	64	95	291	2	3	33
Polk	13	—	—	—	10	1	—	2
Sherman	1	—	—	1	—	—	—	—
Tillamook	8	—	—	—	8	—	—	—
Umatilla	12	—	—	—	3	3	—	6
Union	13	—	—	—	4	7	—	2
Wallowa	—	—	—	—	—	—	—	—
Wasco	5	—	—	—	3	2	—	—
Washington	177	—	6	76	78	3	—	14
Wheeler	—	—	—	—	—	—	—	—
Yamhill	96	—	11	—	81	—	—	4
Unknown	1	—	—	—	—	—	—	1

— Quantity is zero.

M.D. = Medical doctor

D.O. = Doctor of osteopathy

C.N.M. = Certified nurse midwife

N.D. = Naturopathic doctor

L.D.M. = Licensed direct entry midwife

TABLE 2-37. Delivery method by day of birth, mother's age, race/ethnicity, and payment source (percents), Oregon resident births, 2016

Characteristics	Total births	Vaginal	Vaginal after previous C-section	Primary C-section	Repeat C-section
Day of birth					
All births ¹	45,533	31,972	1,177	7,512	4,870
Sunday	5,048	77.0	2.8	14.5	5.7
Monday	6,569	66.7	2.7	16.9	13.7
Tuesday	6,981	67.5	2.2	17.4	13.0
Wednesday	7,053	68.7	2.6	16.8	11.9
Thursday	7,014	70.4	2.5	16.7	10.4
Friday	7,189	68.0	2.7	17.0	12.3
Saturday	5,679	76.1	2.8	15.5	5.7
Mother's age					
<15	10	100.0	—	—	—
15-19	2,008	83.1	0.3	15.6	1.0
20-24	8,386	76.9	1.4	15.3	6.4
25-29	13,389	72.3	2.5	15.2	10.0
30-34	13,255	68.3	3.1	16.4	12.2
35-39	6,924	61.9	3.5	18.9	15.8
40-44	1,468	54.7	4.0	24.9	16.4
45+	92	30.4	2.2	46.7	20.7
N.S.	1	100.0	—	—	—
Non-Hispanic single mention race/ethnicity					
White	31,130	70.9	2.3	16.8	10.0
African American	945	64.3	4.4	17.7	13.5
American Indian	433	68.4	1.2	15.0	15.5
Asian	2,356	67.5	3.0	19.2	10.3
Hawaiian/Pacific Islander	320	65.3	2.8	16.6	15.3
Other/unknown	194	68.6	4.1	15.5	11.3
Multiple races	1,699	70.0	2.2	16.3	11.5
Hispanic	8,456	69.4	3.4	14.6	12.5
Payment source²					
Medicaid/OHP*	20,161	69.8	2.7	14.9	12.7
Private insurance	23,733	69.7	2.5	18.4	9.4
Self-pay	926	90.2	3.5	4.4	1.8
Other coverage	630	73.0	3.7	14.3	9.0
Unknown mention	83	77.1	—	10.8	10.8
Body mass index in kg/m					
Underweight (< 18.5)	1,405	78.6	2.6	13.3	5.5
Normal (18.5 - 24.9)	20,838	75.4	2.6	14.6	7.5
Overweight (25.0 - 29.9)	11,379	69.5	3.0	16.5	11.0
Obese (> 30.0)	11,378	60.6	2.2	20.5	16.8
Unknown	533	68.1	3.6	15.2	12.9

— Quantity is zero.

* Oregon Health Plan.

¹ Total includes 2 births with unknown delivery method.

² Expected principal method of payment for delivery. Actual method of payment may differ.

Note: Rates and percentages are calculated excluding missing and unknown values.

Table 2-38: Planned attendant by planned place of birth, Oregon occurrence, 2016

Planned birth attendant ¹	Total births ²	Planned hospital birth	Planned out-of-hospital birth		
			Total	Intrapartum transfer to hospital	Neonatal transfer
Total births	45,977	43,920	1,934	285	29
All gestation periods³					
Total	45,977	43,920	1,934	285	29
M.D.s and D.O.s	34,570	34,569	—	—	—
Certified nurse midwives	9,694	9,219	473	161	7
Licensed direct-entry midwives	1,008	—	992	76	17
Unlicensed direct-entry midwives	163	—	160	30	—
Naturopathic physicians	255	—	255	18	5
Other	287	132	54	—	—
Under 37 weeks					
Total	3,667	3,634	19	12	1
M.D.s and D.O.s	3,371	3,371	—	—	—
Certified nurse midwives	254	245	9	6	—
Licensed direct-entry midwives	7	—	7	4	1
Unlicensed direct-entry midwives	2	—	2	2	—
Naturopathic physicians	—	—	—	—	—
Other	33	18	1	—	—
37-38 weeks					
Total	10,170	9,970	168	40	2
M.D.s and D.O.s	8,044	8,044	—	—	—
Certified nurse midwives	1,937	1,891	46	26	—
Licensed direct-entry midwives	77	—	76	6	2
Unlicensed direct-entry midwives	8	—	8	3	—
Naturopathic physicians	33	—	33	5	—
Other	71	35	5	—	—
39-40 weeks					
Total	26,891	25,584	1,247	128	16
M.D.s and D.O.s	19,816	19,815	—	—	—
Certified nurse midwives	6,009	5,698	309	80	6
Licensed direct-entry midwives	666	—	653	33	7
Unlicensed direct-entry midwives	99	—	97	11	—
Naturopathic physicians	152	—	152	4	3
Other	149	71	36	—	—
41 weeks and over					
Total	5,227	4,719	496	105	10
M.D.s and D.O.s	3,328	3,328	—	—	—
Certified nurse midwives	1,494	1,385	109	49	1
Licensed direct-entry midwives	254	—	252	33	7
Unlicensed direct-entry midwives	54	—	53	14	—
Naturopathic physicians	70	—	70	9	2
Other	27	6	12	—	—

— Quantity is zero.

¹ For planned hospital births, actual attendant type is used. For planned out-of-hospital births with intrapartum transfer to hospitals, planned attendant type is reported by mother and not verified.

² Total includes 123 births that occurred en route, were unplanned home deliveries, or were other out-of-hospital births not otherwise classified. Total also includes 22 births with unknown gestation.

³ Includes reported clinical estimate of gestation in completed weeks and missing or unknown gestations.

Table 2-39: Maternal characteristics by planned place of birth, Oregon occurrence, 2016

Selected maternal characteristics	Total births ¹	Planned hospital birth			Planned out-of-hospital birth		
		Clinical estimate of gestation					
		<37	37-40	41+	<37	37-40	41+
Total births	45,977	3,634	35,554	4,719	19	1,415	496
Mother's age							
<20	2,031	172	1,560	266	2	22	3
20-24	8,444	644	6,661	895	2	158	56
25-29	13,535	960	10,545	1,447	6	393	140
30-34	13,381	1,007	10,159	1,480	5	515	171
35-39	7,002	643	5,402	559	2	274	108
40+	1,583	207	1,227	72	2	53	18
Single mention race²							
White	31,541	2,415	23,948	3,426	16	1,214	433
African American	960	100	724	113	–	13	4
American Indian	442	41	343	32	–	17	6
Asian/Hawaiian/Pacific Islander	2,699	233	2,169	256	–	29	4
Other/multiple races	1,905	169	1,468	167	1	66	22
Hispanic	8,430	676	6,902	725	2	76	27
Marital status							
Married	29,598	2,180	22,653	3,121	14	1,159	399
Unmarried	16,376	1,454	12,898	1,598	5	256	97
Mother's education							
8th grade or less	1,303	118	1,058	106	–	8	4
Some high school	4,637	446	3,701	404	–	53	9
High school graduate/GED	9,972	811	7,914	922	6	216	71
Some college	11,247	854	8,818	1,064	5	340	137
Associate's degree	3,821	324	2,951	365	2	125	49
Bachelor's degree	9,179	620	6,846	1,107	5	430	149
Postbaccalaureate	5,589	425	4,119	725	1	230	76
Source of payment³							
Medicaid/Oregon Health Plan	20,291	1,667	16,224	1,909	8	308	99
Private insurance	24,082	1,890	18,603	2,703	6	625	222
Self-pay	951	33	229	41	3	455	165
Other coverage	577	39	457	59	–	12	8
Birth order							
1st	17,993	1,392	13,099	2,804	6	461	202
2nd	14,887	1,052	11,996	1,172	6	471	139
3rd	7,474	616	6,064	456	3	237	74
4th +	5,623	574	4,395	287	4	246	81
Pre-pregnancy body mass index							
Underweight (< 18.5)	1,421	130	1,102	114	3	51	13
Normal (18.5 - 24.9)	21,118	1,449	16,086	2,370	10	855	287
Overweight (25.0 - 29.9)	11,429	895	8,874	1,179	3	341	107
Obese (> 30.0)	11,490	1,075	9,151	1,005	3	150	82
Maternal tobacco use							
Tobacco use	4,382	457	3,509	345	1	31	10
No tobacco use	41,490	3,167	31,969	4,362	17	1,381	486
Initiation of care							
1st trimester	36,426	2,853	28,577	3,657	15	959	305
2nd trimester	7,032	524	5,192	788	1	342	153
3rd trimester	1,823	98	1,382	236	1	71	26
No care	388	111	191	16	1	24	10
Prenatal care⁴							
Adequate	42,697	3,160	33,301	4,394	15	1,290	452
Inadequate	2,782	400	1,899	287	3	104	40

– Quantity is zero.

¹ Total includes 123 births that occurred en route, were unplanned home deliveries, or other out-of-hospital births not otherwise classified. Total also includes 22 births with unknown gestation.² Non-Hispanic single mention race. The Hispanic category may include any mention of race.³ Expected principal method of payment for delivery. Actual method of payment may differ.⁴ Adequate care: Care that began in the first or second trimester and included at least five visits. Inadequate care: No care, or care that began in the third trimester or fewer than five visits.

Table 2-40 Characteristics of labor & delivery, and maternal & infant health characteristics by planned place of birth, Oregon occurrence, 2016

Selected medical and health characteristics	Total births ¹	Planned hospital birth			Planned out-of-hospital birth		
		Clinical estimate of gestation					
		<37	37-40	41+	<37	37-40	41+
Total births	45,977	3,634	35,554	4,719	19	1,415	496
Characteristics of labor and delivery							
Premature rupture of the membrane ²	3,548	664	2,287	467	2	90	33
Precipitous labor ³	2,826	237	2,072	220	–	179	46
Prolonged labor ⁴	1,527	69	1,025	307	–	67	57
Induction/augmentation of labor	21,290	1,099	16,632	3,336	2	119	90
Epidural/spinal anesthesia	27,727	1,924	22,327	3,308	1	97	66
Antepartum/intrapartum transfer	744	343	90	26	12	168	105
Chorioamnionitis	1,288	83	910	277	–	8	9
Neonatal transfer	572	205	295	34	1	18	10
Method of delivery							
Vaginal	30,995	1,687	24,104	3,298	14	1,318	440
Forceps	239	15	174	43	–	6	1
Vacuum	1,063	49	812	189	–	9	4
VBAC ⁵	1,166	85	886	132	2	47	10
Primary cesarean	7,599	1,280	5,298	950	3	31	36
Repeat cesarean	4,915	518	4,280	107	–	4	5
Maternal conditions							
Multiples	1,568	872	685	2	–	8	–
Diabetes-chronic	431	119	306	3	–	3	–
Diabetes-gestational	3,798	458	3,160	125	–	39	8
Hypertension-chronic	811	176	620	11	–	1	1
Hypertension-gestational	3,382	630	2,552	159	2	29	7
Eclampsia	321	99	209	11	–	2	–
Group B streptococcal test	43,918	3,047	34,595	4,639	13	1,114	408
Maternal transfusion	257	60	161	25	–	9	2
3 rd or 4 th degree perineal laceration	420	3	306	88	–	17	4
Ruptured uterus	21	5	12	4	–	–	–
Unplanned hysterectomy	21	10	11	–	–	–	–
Admission to intensive care	89	43	41	3	–	2	–
Unplanned operating room procedure	262	46	177	30	–	5	2
Characteristics of infant							
Immediate assisted ventilation	2,691	973	1,403	219	2	54	32
Assisted ventilation 6+ hours	966	636	281	33	2	6	3
Admission to NICU	3,394	1,950	1,257	133	5	19	14
Surfactant therapy	196	168	24	1	1	1	–
Antibiotics	1,108	449	528	103	2	10	9
Seizure	40	5	26	5	–	3	1

– Quantity is zero.
¹ Total includes 123 births that were unplanned home deliveries, occurred en route, or were out-of-hospital births not otherwise classified. Total also includes 22 births with unknown gestation.
² Rupture of the membranes ≥ 12 hours.
³ Precipitous labor < 3 hours.
⁴ Prolonged labor ≥ 20 hours.
⁵ Vaginal birth after a cesarean section.

**TABLE 2-41. Live birth order by county of residence,
Oregon resident births, 2016**

County of residence	Total births	Birth order							
		1st	2nd	3rd	4th	5th	6th	7th	8th+
Total	45,533	17,759	14,742	7,446	3,326	1,278	540	235	207
Baker	160	48	57	30	14	1	8	–	2
Benton	763	345	238	104	51	14	7	1	3
Clackamas	4,238	1,683	1,447	668	273	105	39	13	10
Clatsop	408	163	120	77	29	7	8	–	4
Columbia	527	173	172	108	43	15	4	6	6
Coos	626	254	190	111	42	18	7	4	–
Crook	238	98	71	39	25	3	–	–	2
Curry	182	73	53	34	11	6	2	3	–
Deschutes	1,799	722	639	279	103	37	10	5	4
Douglas	1,087	389	379	184	75	36	12	8	4
Gilliam	17	8	5	2	1	1	–	–	–
Grant	56	23	11	12	7	3	–	–	–
Harney	93	39	24	12	16	1	1	–	–
Hood River	252	105	82	39	19	3	2	1	1
Jackson	2,293	835	750	419	174	74	19	12	10
Jefferson	282	73	81	69	32	13	10	2	2
Josephine	870	338	265	146	80	21	9	6	5
Klamath	821	285	268	162	64	26	6	6	4
Lake	70	24	19	18	7	1	–	–	1
Lane	3,555	1,464	1,202	510	238	82	36	14	9
Lincoln	435	166	113	72	51	16	9	4	4
Linn	1,521	564	475	269	121	49	18	15	10
Malheur	465	118	133	116	45	24	12	7	10
Marion	4,519	1,443	1,369	877	470	203	86	37	34
Morrow	164	54	40	34	22	7	7	–	–
Multnomah	9,023	4,012	2,890	1,200	524	217	91	42	47
Polk	975	359	285	175	92	37	14	4	9
Sherman	17	4	7	2	2	1	1	–	–
Tillamook	255	95	67	48	25	12	4	–	4
Umatilla	949	308	284	199	88	36	20	10	4
Union	312	114	108	54	16	13	2	4	1
Wallowa	59	17	19	12	8	2	–	–	1
Wasco	321	105	100	61	40	10	3	2	–
Washington	6,999	2,843	2,406	1,066	420	155	71	25	13
Wheeler	17	6	6	4	–	1	–	–	–
Yamhill	1,160	405	367	233	98	28	22	4	3
Unknown	5	4	–	1	–	–	–	–	–

– Quantity is zero.

**Table 2-42: Payment of delivery by county of residence,
Oregon resident births, 2016**

County of residence	Total births	Private insurance	Medicaid /OHP*	Self-pay	Other	Unknown
Total	45,533	23,733	20,161	926	630	83
Baker	160	63	82	11	4	—
Benton	763	483	249	21	10	—
Clackamas	4,238	2,861	1,227	99	49	2
Clatsop	408	145	218	13	30	2
Columbia	527	299	206	10	8	4
Coos	626	236	364	3	21	2
Crook	238	87	140	4	7	—
Curry	182	71	61	9	40	1
Deschutes	1,799	894	846	41	16	2
Douglas	1,087	350	686	27	23	1
Gilliam	17	8	9	—	—	—
Grant	56	27	24	3	2	—
Harney	93	38	55	—	—	—
Hood River	252	122	123	2	1	4
Jackson	2,293	915	1,287	54	35	2
Jefferson	282	49	216	6	10	1
Josephine	870	260	551	45	10	4
Klamath	821	298	478	5	38	2
Lake	70	22	45	3	—	—
Lane	3,555	1,702	1,722	72	40	19
Lincoln	435	118	287	10	18	2
Linn	1,521	665	782	41	28	5
Malheur	465	140	303	14	8	—
Marion	4,519	1,998	2,403	71	44	3
Morrow	164	69	93	2	—	—
Multnomah	9,023	5,340	3,450	161	55	17
Polk	975	500	433	19	22	1
Sherman	17	9	7	—	—	1
Tillamook	255	98	144	10	3	—
Umatilla	949	355	550	23	16	5
Union	312	127	168	13	3	1
Wallowa	59	24	32	3	—	—
Wasco	321	108	195	12	6	—
Washington	6,999	4,650	2,191	96	61	1
Wheeler	17	6	10	1	—	—
Yamhill	1,160	594	522	22	22	—
Unknown	5	2	2	—	—	1

— Quantity is zero.

* OHP = Oregon Health Plan.

NOTE: Table represents expected principal method of payment for delivery. Actual method of payment may differ.

Table 2-43 Selected maternal conditions, infant characteristics by county, Oregon occurrence, 2016

County of occurrence	Total births	Maternal Conditions					Infant Characteristics			
		Eclampsia	Premature Rupture of the Membrane ¹	Antepartum / Intrapartum Transfer	Multiples	Transferred prior to delivery ²	Immediate Assisted Ventilation	Assisted Ventilation 6+ hours	Admission to NICU	Antibiotics
Total births	45,977	321	3,548	744	1,568	557	2,691	966	3,394	1,108
Baker	136	—	13	1	2	—	9	2	6	4
Benton	1,147	9	109	19	24	6	91	10	58	27
Clackamas	4,663	27	215	28	138	14	176	18	229	40
Clatsop	448	3	30	4	2	—	20	11	16	7
Columbia	15	—	—	—	—	—	1	—	2	1
Coos	681	1	15	5	11	2	24	5	34	57
Crook	2	—	—	—	—	—	—	—	—	—
Curry	28	—	2	1	—	—	2	1	1	—
Deschutes	2,242	24	98	42	81	36	96	22	199	16
Douglas	905	8	5	4	13	—	24	11	40	25
Gilliam	—	—	—	—	—	—	—	—	—	—
Grant	43	1	—	—	—	—	3	—	—	—
Harney	67	—	2	—	—	—	4	1	—	—
Hood River	411	4	27	2	2	—	26	1	8	6
Jackson	2,494	6	129	88	117	81	194	56	241	35
Jefferson	152	1	7	3	2	—	8	—	4	2
Josephine	856	—	2	—	22	—	77	13	28	7
Klamath	820	1	32	9	18	7	94	34	35	49
Lake	56	—	3	—	—	—	7	—	1	—
Lane	3,862	13	434	142	180	112	178	157	405	173
Lincoln	370	3	22	—	10	—	14	4	13	7
Linn	949	9	25	6	16	1	51	8	27	29
Malheur	448	9	2	—	2	—	12	1	9	1
Marion	5,198	11	159	41	141	28	334	123	322	229
Morrow	2	—	—	—	—	—	—	—	—	—
Multnomah	10,953	155	1,039	244	488	209	705	296	1,262	230
Polk	13	—	—	—	—	—	—	—	1	—
Sherman	1	—	—	—	—	—	—	—	—	—
Tillamook	191	1	9	1	4	1	11	5	5	3
Umatilla	731	1	6	4	12	—	20	4	9	9
Union	285	4	1	5	2	2	5	—	6	—
Wallowa	55	1	1	—	—	—	5	—	2	—
Wasco	280	1	19	1	6	1	5	1	4	3
Washington	6,339	24	1,106	91	253	56	435	176	411	137
Wheeler	—	—	—	—	—	—	—	—	—	—
Yamhill	1,133	4	36	3	22	1	60	6	16	11

— Quantity is zero.

¹ Rupture of the membranes \geq 12 hours.

² Mother transferred during labor prior to delivery to a facility in designated county.

NOTE: Total includes one birth with unknown county of occurrence.

SECTION 3: INDUCED TERMINATION OF PREGNANCY

Induced termination of pregnancy

Current trends

During 2016, 8,942 induced terminations of pregnancy (abortions) were performed in Oregon. This total represents a 3.9% increase from 2015, and a decrease of 43.2% from the record high of 15,735 abortions reported in 1980 (see Figure 3-1).

This chapter reports data for all abortions occurring in Oregon whether obtained by Oregon residents or residents of another state. The percentage of abortions in Oregon obtained by out-of-state residents has been between 9.4% and 12.6% from 1994 to the present. In 2016, 947 patients (10.6%) were out-of-state residents (see Table 3-6). Oregonians who obtained abortions out of state are not included in these data. Because rate calculations use Oregon population numbers, they substitute out-of-state residents for the unknown number of Oregonians who obtained an abortion in another state (see Appendix B: “Technical notes,” for a more extensive discussion of the completeness of abortion data).

Behavioral changes are revealed more by shifts in rates, which account for population change, than by changes in the number of events. The national abortion rate has been declining since 1980 from approximately 25 per 1,000 women aged 15–44 to 12.5 per 1,000 in 2013, the most recent year

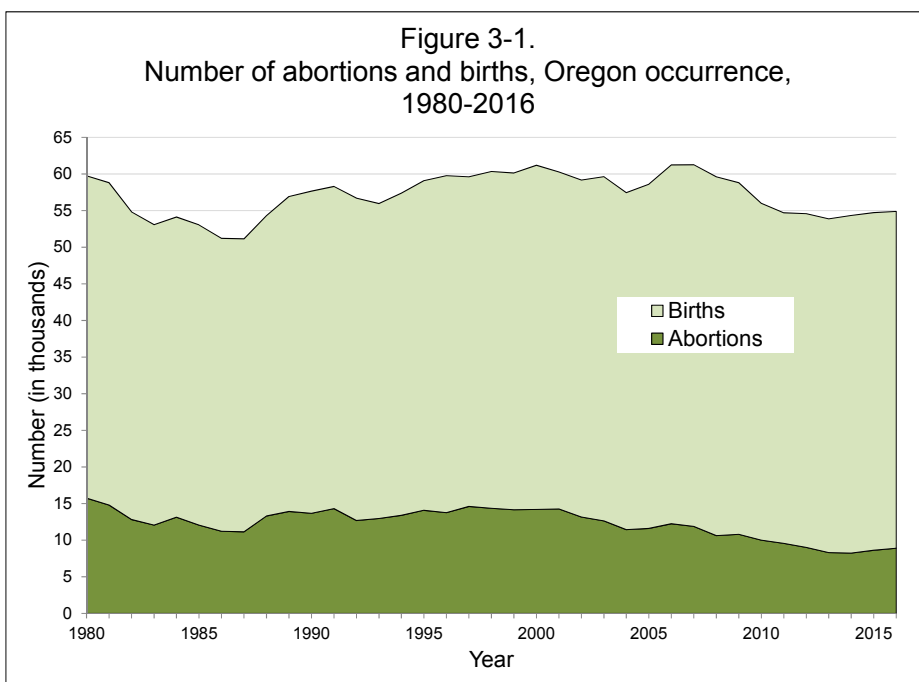


Table 3-A. Comparison of Oregon and U.S. abortion ratios, 1985-2013		
Year	U.S. abortion ratio ¹	Oregon's abortion ratio ² as percent difference from U.S.
1985	354	-16%
1986	354	-21%
1987	356	-21%
1988	352	-9%
1989	346	-6%
1990	344	-11%
1991	338	-4%
1992	334	-13%
1993	333	-10%
1994	321	-4%
1995	311 ³	+2%
1996	315	-4%
1997	306	+6%
1998	264 ³	+17%
1999	256 ³	+12%
2000	245 ⁴	+24%
2001	246 ⁴	+25%
2002	246 ⁴	+16%
2003	241 ⁵	+12%
2004	238 ⁵	+4%
2005	233 ⁶	+7%
2006	236 ⁷	+6%
2007	231 ⁷	+4%
2008	234 ⁷	-8%
2009	227 ⁸	0%
2010	228 ⁷	-5%
2011	219 ⁹	-3%
2012	210 ⁷	-6%
2013	*200 ⁷	-9%

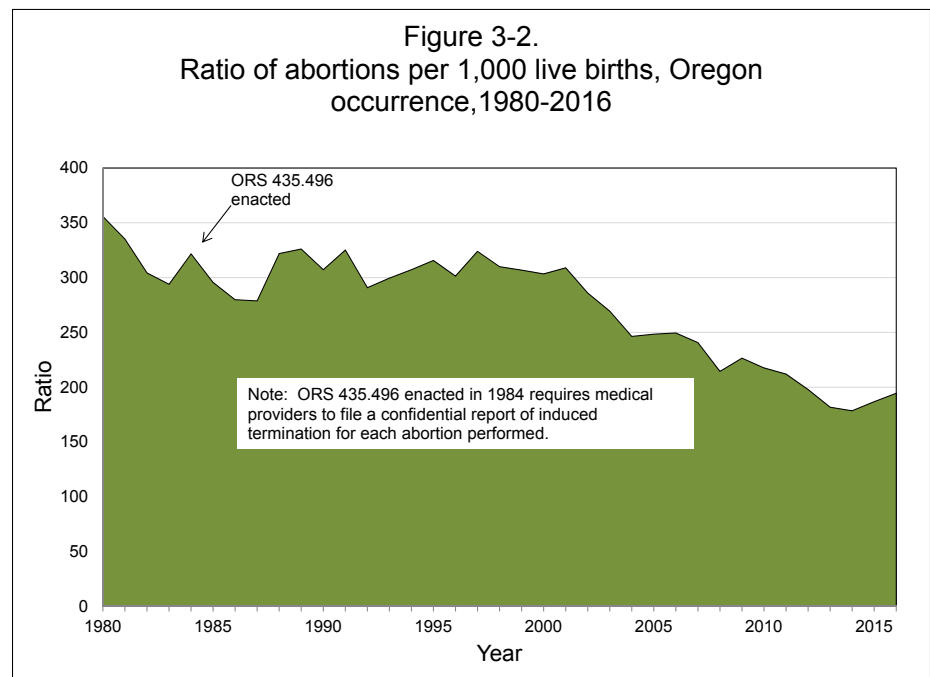
¹ CDC. Abortion surveillance - United States, 2013. MMWR November 25, 2016; 65 (12).
² See Table 3-2
³ Alaska, California, New Hampshire, and Oklahoma did not report
⁴ Alaska, California, and New Hampshire did not report
⁵ California, New Hampshire and West Virginia did not report
⁶ California, Louisiana and New Hampshire did not report
⁷ California, Maryland and New Hampshire did not report
⁸ California, Delaware, Maryland, and New Hampshire did not report
⁹ Alaska, California, Delaware, Louisiana, Maryland, New Hampshire, and West Virginia did not report
 NOTE: These are original numbers reported by the CDC and may not reflect any subsequent changes
 * Most recent data available

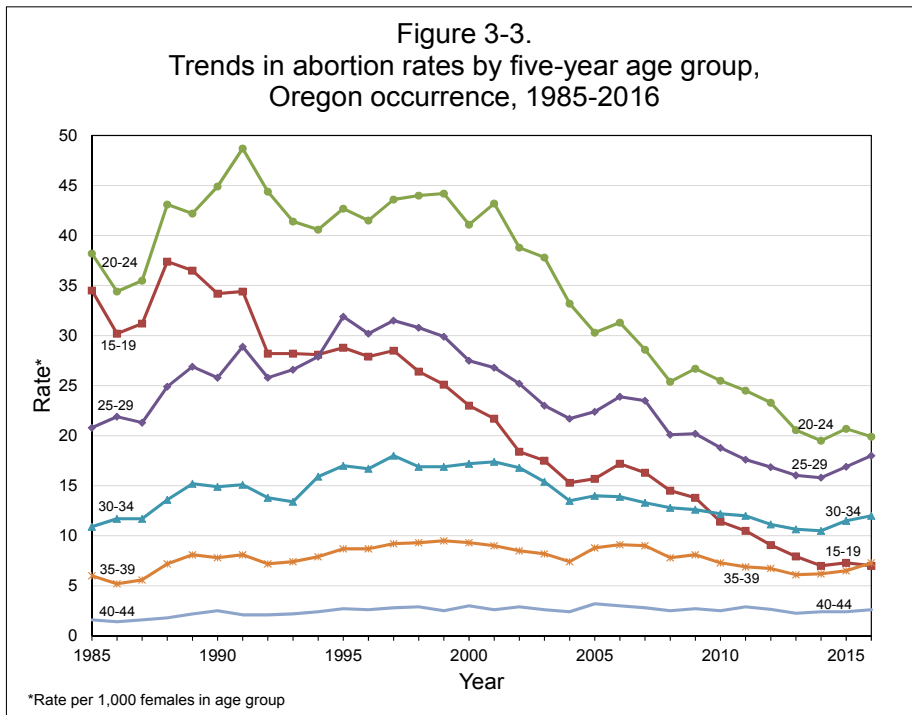
for which national data are available.(1) In 2016, the Oregon rate increased to 11.1 per 1,000 women aged 15–44, a 1.8% increase from 2015, and a 55.8% decrease from the record high seen in 1980 (25.1 per 1,000). During the past 20 years, Oregon’s abortion rate for women aged 15–44 has generally declined — from a high of 20.9 in 1997 to 11.1 per 1,000 women in 2016.

Pregnancy outcomes

Figure 3-2 shows the ratio of abortions to births occurring in Oregon. 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. In 1984, the level of reporting increased due to new legislation that required providers to report all abortions performed. Although the overall abortion ratio has gradually declined since 1980, with periodic spikes (see Figure 3-2), the last three years have seen a slight increase in the ratio.

In 2016, there were 194.5 abortions per 1,000 births in Oregon. This represents an 4.1% increase from 2015 and a 45.3% decrease from 1980 when this ratio was 355.8 per 1,000 births (see Table 3-2). Since 1973 when the U.S. Supreme Court’s decision in Roe v. Wade legalized abortion, Oregon’s abortion ratio has fluctuated relative to the national ratio. Since the mid-2000s, however, Oregon’s abortion ratio has remained near the national ratio (see sidebar Table 3-A).





Abortion patients

Similar to birth rates, abortion rates differ by age group, race, ethnicity, marital status and prior pregnancy. Just over two-thirds of abortion patients have never been married (see Table 3-3), and half have previously given birth (see Table 3-5).

Age

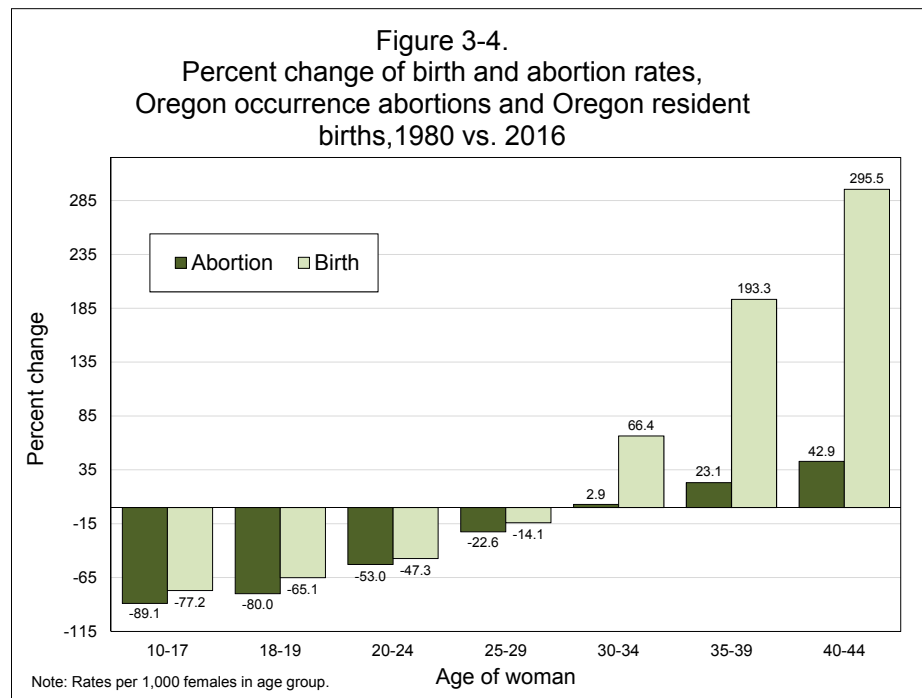
There is wide variation in abortion rates among age groups. The highest rate in 2016 occurred among women aged 20–24 (19.9 per 1,000). The lowest rates were among women under age 15 and women 45–49 (0.2 per 1,000 and 0.3 per 1,000; see sidebar Table 3-B).

The 2016 abortion rate among teens aged 10–17 was 89.1% lower than the rate in 1980, when the statewide abortion rate was highest; the rate for 18–19-year-olds was 80.0% lower (see 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 35–39, abortion rates were 23.1% higher in 2016 than in 1980.

Age	Rate ²	%
<15	0.2	0.2
15-19	7.0	9.7
20-24	19.9	28.5
25-29	18.0	27.7
30-34	12.0	18.6
35-39	7.3	11.1
40-44	2.6	3.8
45-49	0.3	0.4
15-44	11.1	99.4

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.

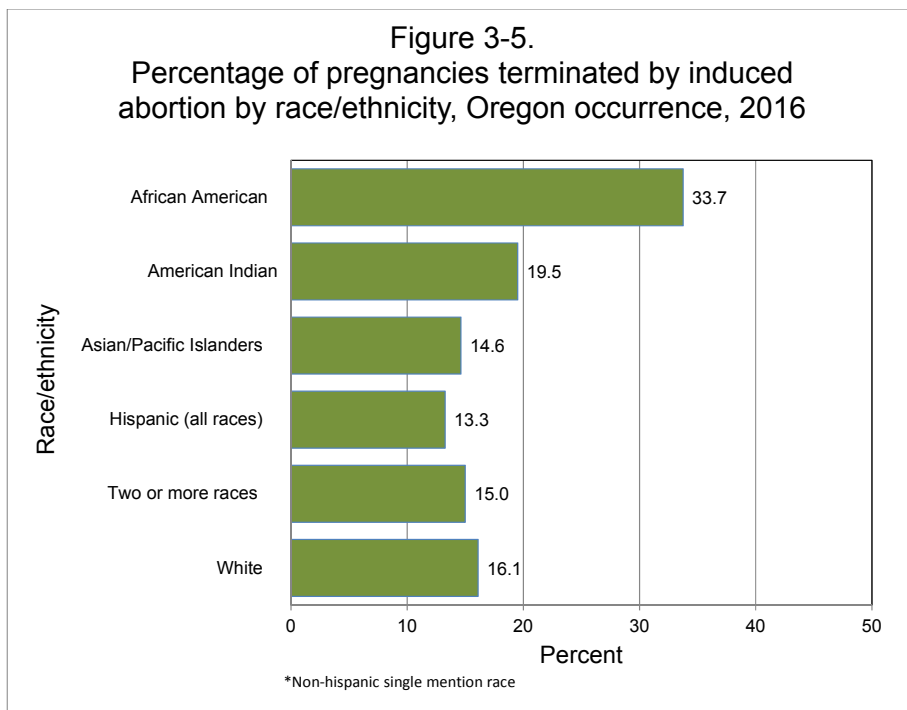
² Per 1,000 females in age group



Race and ethnicity

Beginning in 2008, collection of race and ethnicity data on Oregon birth certificates changed to obtain more precise information about an individual's race and Hispanic ethnicity. In prior years, only one race category could be selected. Now multiple race and ethnicity categories may be chosen. For this reason, pregnancy data (births and abortions) by race/ethnicity since 2008 are not directly comparable to years before 2008.

The frequency with which abortion procedures were used to terminate pregnancies varied among ethnic and racial groups. African American and American Indian women had the highest percentages of terminated pregnancies in 2016 with 33.7% and 19.5%, respectively. Because of Oregon's predominately White demographic composition, White women obtained the majority of abortions by count in 2016; however, they had the third highest percentage of pregnancies terminated, 52.2% lower than African American women. The lowest percentage of pregnancies terminated was among women of Hispanic ethnicity (13.3%) followed by Asian/Pacific Islander women (14.6%) (see Figure 3-5).

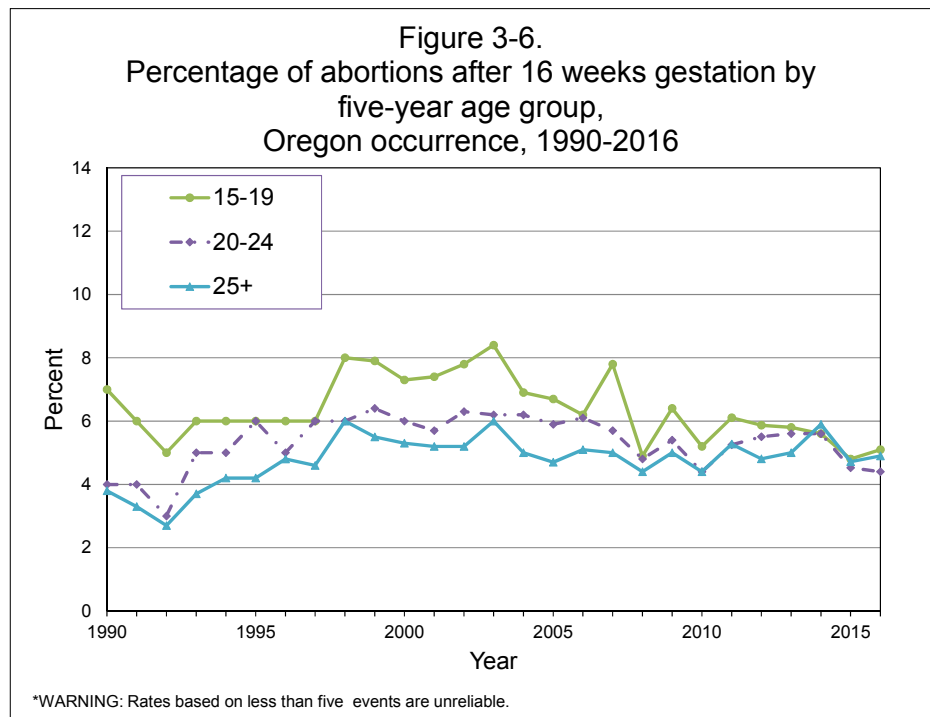


Contraceptive use

In the majority of abortions that occur in Oregon, the pregnancy is not a result of contraceptive failure. In 2016, based upon data obtained from abortion reports, 36.1% of women used some method of contraception to avoid pregnancy. Of the 63.9% of abortion patients who did not report using contraceptives, 37.0% had previously obtained an abortion (see Table 3-5).

Medical procedures

For abortions with known gestation periods, 89.2% were performed prior to the 13th week of pregnancy. Approximately one in 20 (4.8%) induced terminations where gestation was known was performed after 16 weeks. Medical (non-surgical) was the procedure used in 48.2% of terminations prior to the 13th week where method was reported. Dilution and evacuation was the procedure in 88.8% of terminations occurring after 16 weeks' gestation. Women younger than 20 obtained 6.9% more abortions after 16 weeks' gestation than women aged 20 and older (see Table 3-4). The percentage of abortions occurring after 16 weeks' gestation increased for age groups 15–19 and 25+ and decreased for age group 20–24 (see Figure 3-6).



Complications at the time of the induced termination procedure were reported for 370 terminations (4.1% of abortion patients). Retained products (121 patients) and failure of first method (45 patients) were the most common complications. In Oregon, no woman is reported to have died as the result of a legally induced termination.

Geographic distribution

Abortion rates varied widely within Oregon with 35 of 36 counties reporting at least one resident who obtained an abortion in 2016. Service providers, conversely, were geographically concentrated. In 2016, abortions were reported in eight counties. The concentration was evident in the fact that 90.2% of all abortions were obtained in the five counties of highest occurrence: Jackson, Lane, Marion, Multnomah and Washington (see Table 3-7). Although abortions often may be sought outside a patient's community to help ensure anonymity, this degree of concentration suggests that access to abortion may be limited for some Oregon women.

Endnote

1. Centers for Disease Control and Prevention (CDC).
Abortion surveillance — United States, 2013. MMWR.
Nov. 25, 2016; V65, No.12.

TABLE 3-1. Number, rate, and percent change for pregnancies, births, and abortions to 15- to 44-year-olds, Oregon, selected years 1980, 1985, 1990, 1995-2016

Year	Pregnancies ¹			Births ²			Abortions ³				
	No.	Rate	% change in rate from previous year	No.	Rate	% change in rate from previous year	No.	Rate	% change in rate from previous year	% 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
1985	51,287	81.1	-2.9	39,364	62.2	-1.0	11,923	18.8	-9.1	23.2	-6.5
1990	56,315	85.8	1.3	42,741	65.2	3.0	13,754	20.7	-3.0	24.1	-4.4
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
2003	58,337	77.9	-0.9	45,799	61.2	0.5	12,538	16.7	-5.6	21.5	-4.4
2004	56,865	74.9	-3.9	45,508	60.0	-2.0	11,357	15.0	-10.2	20.0	-7.0
2005	57,271	77.9	4.0	45,776	62.2	3.7	11,495	15.6	4.0	20.1	0.5
2006	60,678	81.9	5.1	48,539	65.5	5.3	12,139	16.4	5.1	20.0	-0.5
2007	60,885	81.7	-0.2	49,211	66.0	0.8	11,674	15.7	-4.3	19.2	-4.2
2008	59,496	78.4	-4.0	48,999	64.6	-2.2	10,497	13.8	-11.6	17.6	-8.0
2009	57,804	76.1	-2.9	47,070	62.0	-4.0	10,734	14.1	2.2	18.6	5.3
2010	55,395	73.1	-4.0	45,479	60.0	-3.2	9,916	13.1	-7.5	17.9	-3.6
2011	54,562	71.8	-1.8	45,040	59.3	-1.2	9,522	12.5	-4.6	17.5	-2.2
2012	53,845	70.5	-1.8	44,942	58.8	-0.8	8,903	11.7	-6.4	16.7	-4.6
2013	53,182	69.2	-1.8	45,023	58.6	-0.3	8,159	10.6	-9.4	15.3	-8.4
2014	53,390	68.9	-0.4	45,434	58.6	0.0	7,956	10.3	-2.8	14.9	-2.6
2015	54,097	68.9	0.0	45,537	58.0	-1.0	8,560	10.9	5.8	15.8	6.0
2016	54,318	68.1	-1.2	45,430	57.0	-1.7	8,888	11.1	1.8	16.4	3.8

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).

Note: ORS 435.496 was implemented in 1984, requiring all providers of abortion to file a report of induced termination of pregnancy for each abortion performed. Rates per 1,000 females 15-44 years of age.

Table 3-2. Live births and induced abortions occurring in Oregon, 1980-2016

Year	Births	Induced abortions	
		Number	Ratio
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
2003	46,844	12,622	269.4
2004	46,453	11,443	246.3
2005	46,715	11,602	248.4
2006	49,089	12,246	249.5
2007	49,373	11,883	240.7
2008	49,492	10,610	214.4
2009	47,685	10,801	226.5
2010	45,904	9,990	217.6
2011	45,136	9,567	212.0
2012	45,566	9,016	197.9
2013	45,591	8,287	181.8
2014	46,100	8,231	178.5
2015	46,102	8,610	186.8
2016	45,977	8,942	194.5

* The increase in the 1980 total 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 performed abortions in previous years.

**The increase in the 1984 total 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, 2016

Race/ethnicity and marital status	Total	Age groups								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	8,942	20	865	2,548	2,478	1,659	997	341	34	—
White	6,989	18	673	1,998	1,945	1,298	771	259	27	—
African American	733	1	70	238	225	117	65	17	—	—
American Indian	254	1	33	75	71	48	21	5	—	—
Chinese	103	—	8	30	20	21	12	10	2	—
Japanese	48	1	6	10	10	12	4	5	—	—
Hawaiian	47	—	6	16	12	4	7	2	—	—
Filipino	69	—	8	22	16	13	7	3	—	—
Other Asian/Pacific Islander ...	322	—	12	75	94	77	44	17	3	—
Other non-white	401	1	62	121	94	76	36	11	—	—
Unknown	408	—	45	107	114	63	58	19	2	—
Hispanic	1,301	6	172	431	334	203	114	40	1	—
White	705	5	86	250	188	107	47	21	1	—
African American	66	—	7	27	18	6	8	—	—	—
American Indian	44	1	6	15	10	7	5	—	—	—
Chinese	1	—	—	—	1	—	—	—	—	—
Japanese	8	—	—	5	—	1	—	2	—	—
Hawaiian	9	—	1	3	1	—	4	—	—	—
Filipino	6	—	1	2	—	2	1	—	—	—
Other Asian/Pacific Islander	13	—	2	4	3	3	1	—	—	—
Other non-white	305	1	52	92	69	56	27	8	—	—
Unknown	210	—	26	60	53	31	30	10	—	—
Non-Hispanic	7,641	14	693	2,117	2,144	1,456	883	301	33	—
White	6,284	13	587	1,748	1,757	1,191	724	238	26	—
African American	667	1	63	211	207	111	57	17	—	—
American Indian	210	—	27	60	61	41	16	5	—	—
Chinese	102	—	8	30	19	21	12	10	2	—
Japanese	40	1	6	5	10	11	4	3	—	—
Hawaiian	38	—	5	13	11	4	3	2	—	—
Filipino	63	—	7	20	16	11	6	3	—	—
Other Asian/Pacific Islander	309	—	10	71	91	74	43	17	3	—
Other non-white	96	—	10	29	25	20	9	3	—	—
Unknown	198	—	19	47	61	32	28	9	2	—
Ethnicity unknown	—	—	—	—	—	—	—	—	—	—
Marital status										
Never married	5,759	19	766	2,055	1,666	811	370	68	4	—
Now married	1,319	—	14	149	346	395	275	121	19	—
Widowed	34	—	1	2	6	11	8	6	—	—
Divorced/dissolution	766	—	2	59	172	225	210	90	8	—
Separated	403	—	4	81	119	114	62	22	1	—
Domestic partnership	43	—	3	7	6	9	13	5	—	—
Unknown	618	1	75	195	163	94	59	29	2	—

— Quantity is zero.

NOTE: Subsets may not add to the category totals due to persons reporting multiple race.

TABLE 3-4. Abortions in relation to length of gestation by method, complications, and age of patient, Oregon occurrence, 2016

Method, complications and age of patient	Total	Weeks gestation						
		< 9	9-12	13-16	17-20	21-22	23+	Unk.
Total	8,942	6,452	1,501	537	254	96	78	24
Method								
Suction curette	3,043	1,826	992	213	3	1	–	8
Medical (non-surgical)	3,880	3,670	166	1	7	9	14	13
Dilation & evacuation	1,999	952	343	322	242	81	57	2
Vaginal prostaglandin	11	–	–	1	2	3	5	–
Sharp curettage	1	1	–	–	–	–	–	–
Other	8	3	–	–	–	2	2	1
Complications¹								
None	8,572	6,158	1,458	528	247	92	70	19
Hemorrhage	11	4	1	1	2	–	3	–
Infection	12	9	2	–	1	–	–	–
Retained products	121	97	17	2	1	3	1	–
Failure of first method	45	39	5	–	–	–	–	1
Other	140	114	15	2	2	1	2	4
Multiple complications ²	41	31	3	4	1	–	2	–
Age groups								
<15	20	8	4	6	1	–	–	1
15-19	865	558	183	79	23	11	10	1
20-24	2,548	1,847	440	143	70	26	16	6
25-29	2,478	1,806	412	129	63	37	22	9
30-34	1,659	1,225	250	105	49	11	16	3
35-39	997	716	161	60	40	7	11	2
40-44	341	265	46	14	7	4	3	2
45+	34	27	5	1	1	–	–	–

– Quantity is zero.

¹ Reported complications. Categorized as none if no specific complication was reported.

² Patients having more than one complication are listed here. Their individual complications are not listed above.

TABLE 3-5. Contraceptive use, number of previous abortions, and number of living children by age of patient, Oregon occurrence, 2016

Contraceptive used, previous abortions, and number of living children	Total	Age groups								N.S.
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	
Total	8,942	20	865	2,548	2,478	1,659	997	341	34	—
None used	5,421	13	596	1,543	1,478	959	597	215	20	—
No previous abortion	3,362	13	525	1,102	830	472	305	106	9	—
One	1,147	—	51	290	352	237	147	63	7	—
Two	499	—	8	80	168	139	76	26	2	—
Three	195	—	3	29	65	52	34	12	—	—
Four or more	130	—	—	20	38	41	24	6	1	—
Pills used	1,036	3	91	351	311	175	86	18	1	—
No previous abortion	631	3	80	236	169	89	46	7	1	—
One	237	—	8	71	85	49	17	7	—	—
Two	101	—	2	30	34	23	10	2	—	—
Three	32	—	—	5	12	7	6	2	—	—
Four or more	22	—	—	4	7	5	6	—	—	—
Condoms used	1,227	1	83	336	336	241	162	59	9	—
No previous abortion	732	1	73	241	192	111	73	34	7	—
One	297	—	8	63	86	74	50	14	2	—
Two	112	—	1	20	35	30	18	8	—	—
Three	39	—	—	5	12	10	10	2	—	—
Four or more	28	—	—	1	7	11	8	1	—	—
Other contraceptive	913	3	57	221	257	217	118	37	3	—
No previous abortion	520	3	50	152	144	104	46	20	1	—
One	242	—	6	52	63	71	35	13	2	—
Two	84	—	—	10	29	21	21	3	—	—
Three	38	—	—	4	10	13	11	—	—	—
Four or more	19	—	—	1	5	8	4	1	—	—
Contraceptive use unknown ..	459	—	47	131	121	91	51	17	1	—
No previous abortion	292	—	43	95	75	45	24	9	1	—
One	92	—	1	23	24	30	10	4	—	—
Two	35	—	1	8	12	4	9	1	—	—
Three	13	—	—	1	3	3	5	1	—	—
Four or more	12	—	—	1	3	4	2	2	—	—
Number of living children										
No children ¹	4,253	20	738	1,577	1,113	499	236	65	5	—
Total with children	4,673	—	125	966	1,361	1,157	760	275	29	—
One	1,999	—	109	637	587	371	228	63	4	—
Two	1,626	—	13	254	496	453	284	113	13	—
Three	697	—	1	68	197	219	143	61	8	—
Four	248	—	1	7	63	85	67	22	3	—
Five or more	103	—	1	—	18	29	38	16	1	—

— Quantity is zero.

¹ Rows will not add to total due to some patients having an unknown number of children.
N.S. = Not stated.

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, 2016

County of residence	Total	Age groups								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	8,942	20	865	2,548	2,478	1,659	997	341	34	-
Baker	4	-	-	2	1	1	-	-	-	-
Benton	89	-	14	29	25	14	4	3	-	-
Clackamas	654	2	86	163	182	119	70	29	3	-
Clatsop	76	-	10	20	22	16	7	1	-	-
Columbia	81	1	7	22	18	17	10	4	2	-
Coos	67	-	5	21	24	12	3	1	1	-
Crook	30	-	4	13	7	3	3	-	-	-
Curry	27	-	6	8	7	4	2	-	-	-
Deschutes	365	1	38	92	90	74	42	26	2	-
Douglas	129	-	15	36	31	29	13	4	1	-
Gilliam	-	-	-	-	-	-	-	-	-	-
Grant	5	-	1	3	-	1	-	-	-	-
Harney	6	-	-	1	1	2	1	1	-	-
Hood River	38	-	5	6	14	6	4	3	-	-
Jackson	371	-	29	115	95	71	45	15	1	-
Jefferson	39	-	8	9	10	7	4	-	1	-
Josephine	159	-	23	49	46	18	16	6	1	-
Klamath	72	-	11	16	21	14	8	2	-	-
Lake	14	-	1	4	7	2	-	-	-	-
Lane	710	1	82	219	194	114	74	25	1	-
Lincoln	62	-	8	16	15	11	10	2	-	-
Linn	164	1	16	59	45	24	14	5	-	-
Malheur	10	-	1	2	4	1	2	-	-	-
Marion	605	3	69	190	162	105	60	15	1	-
Morrow	5	-	1	2	-	1	1	-	-	-
Multnomah	2,729	1	177	719	825	560	328	110	9	-
Polk	100	-	10	38	24	17	6	4	1	-
Sherman	1	*	*	*	*	*	*	*	*	*
Tillamook	36	-	3	7	14	6	4	2	-	-
Umatilla	16	-	2	3	7	4	-	-	-	-
Union	4	-	-	2	1	1	-	-	-	-
Wallowa	1	-	1	-	-	-	-	-	-	-
Wasco	49	-	8	19	9	7	2	3	1	-
Washington	1,107	2	114	313	278	196	154	44	6	-
Wheeler	1	*	*	*	*	*	*	*	*	*
Yamhill	166	2	23	59	35	26	14	7	-	-
Out of state	947	6	86	291	261	176	95	29	3	-
Not stated	3	-	1	-	2	-	-	-	-	-

- Quantity is zero.
N.S. = Not stated.

* Detailed reporting of small numbers may breach confidentiality.

TABLE 3-7. Induced terminations of pregnancy by county of residence and county of occurrence, Oregon occurrence, 2016

County of residence	Total	County of occurrence							
		Benton	Clackamas	Deschutes	Jackson	Lane	Marion	Multnomah	Washington
Total	8,942	8	413	454	524	875	565	5,471	632
Baker	4	—	—	3	—	—	—	1	—
Benton	89	5	4	—	—	19	35	24	2
Clackamas	654	—	133	—	1	1	6	491	22
Clatsop	76	—	1	1	—	—	—	53	21
Columbia	81	—	4	—	—	—	—	64	13
Coos	67	—	—	—	3	53	—	10	1
Crook	30	—	1	24	—	—	—	5	—
Curry	27	—	—	—	16	9	—	2	—
Deschutes	365	—	—	332	—	3	1	29	—
Douglas	129	—	—	2	8	94	1	24	—
Gilliam	—	—	—	—	—	—	—	—	—
Grant	5	—	—	5	—	—	—	—	—
Harney	6	—	—	6	—	—	—	—	—
Hood River	38	—	2	—	—	—	—	36	—
Jackson	371	—	1	—	304	29	—	37	—
Jefferson	39	—	—	34	—	—	—	5	—
Josephine	159	—	—	—	125	17	1	16	—
Klamath	72	—	—	7	49	6	—	9	1
Lake	14	—	—	13	—	—	—	1	—
Lane	710	—	4	2	5	599	3	96	1
Lincoln	62	—	3	—	—	8	20	26	5
Linn	164	2	5	—	1	28	59	63	6
Malheur	10	—	—	7	—	—	—	3	—
Marion	605	—	54	2	—	2	321	207	19
Morrow	5	—	—	—	—	—	—	5	—
Multnomah	2,729	—	137	—	2	1	7	2,528	54
Polk	100	1	5	1	—	—	55	31	7
Sherman	1	—	—	—	—	—	—	1	—
Tillamook	36	—	1	—	—	1	2	26	6
Umatilla	16	—	1	—	—	—	—	15	—
Union	4	—	—	—	—	—	—	4	—
Wallowa	1	—	—	—	—	—	—	1	—
Wasco	49	—	1	—	—	—	—	47	1
Washington	1,107	—	24	—	1	—	7	652	423
Wheeler	1	—	—	—	—	—	—	1	—
Yamhill	166	—	6	1	—	—	39	82	38
Out of state	947	—	26	14	8	5	6	876	12
Not stated	3	—	—	—	1	—	2	—	—

— Quantity is zero.

SECTION 4: TEEN PREGNANCY

Teen pregnancy

Introduction

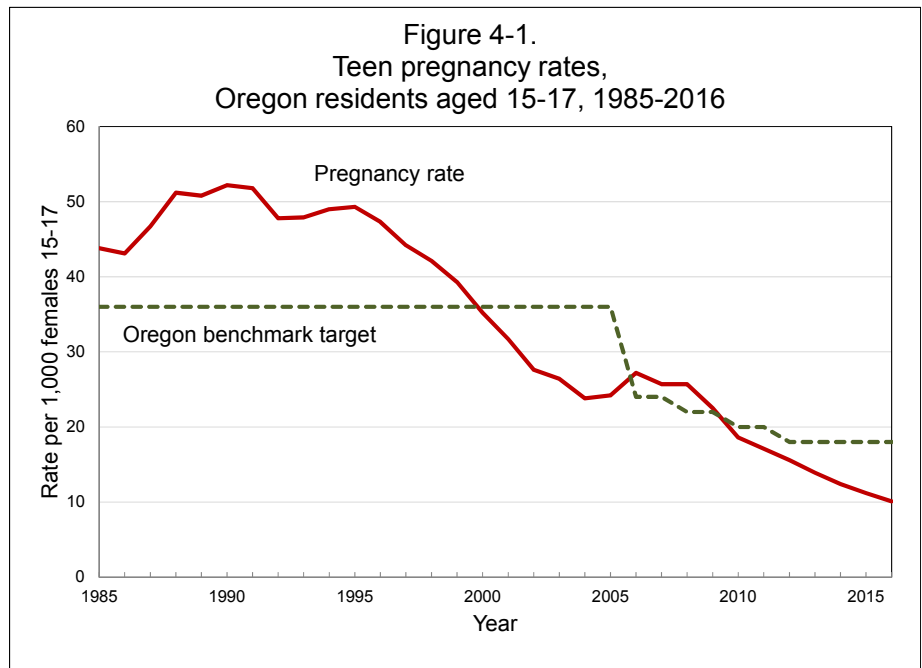
In 2016, 2,840 pregnancies occurred among Oregon females under the age of 20. Twenty-five pregnancies occurred among females under age 15. Ten girls aged 10–14 gave birth during 2016, five fewer than in the previous year (see Table 4-2). The youngest female to give birth was 13, and the youngest to obtain an abortion was 12.

Due to 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 aged 15–17 and females aged 18–19. These two groups are compared to each other and to women aged 20 and older. The number of pregnancies is determined by adding the number of births and abortions reported for Oregon residents. Because some neighboring states (e.g., California) do not exchange abortion reports with Oregon, persons who obtain an abortion out of state are not always included in this count (see Appendix B).

Oregon females, aged 15–17

Efforts to prevent teen pregnancies focus primarily on females aged 15–17. During 2016, 726 pregnancies were recorded for Oregon females aged 15–17, 78 fewer than in 2015. The statewide pregnancy rate among women aged 15–17 decreased 9.8%, from 11.2 in 2015 to a current low of 10.1 (see Table 4-1). Historically, the teen pregnancy rate has trended downward, and the 2016 rate is 71.3% lower than it was in 2000 (see Figure 4-1). Pregnancy rates for teens aged 15–17 varied by county. Four counties had rates significantly different than the state rate (see Table 4-3).

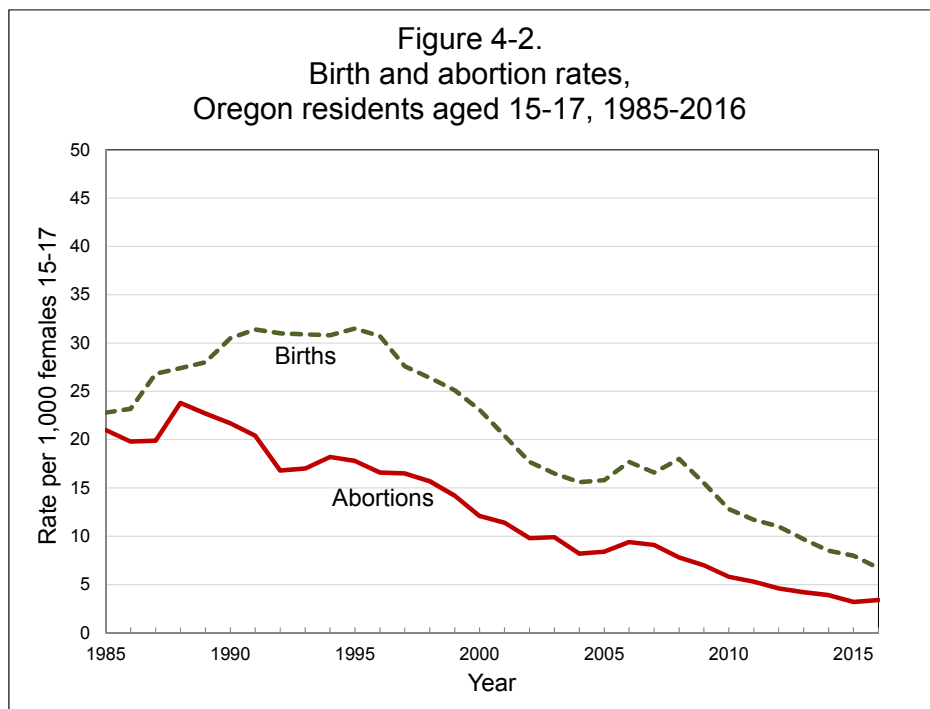
Pregnancy rates for Oregonians ages 15 to 17 decreased by 9.8% from 2015.



Births to teens, aged 15–17

Of pregnancies to teens aged 15–17, 66.3% resulted in a live birth, compared to 46.2% in 1980 (see Table 4-1). There were 481 births to Oregon teens aged 15–17 in 2016. It was the mother’s first child in 94.2% of these births (see Table 4-9). The birth rate for females aged 15–17 was 6.7 per 1,000 females, a decrease of 16.3% from the previous year. Among those who took their pregnancies to term, 94.4% were unmarried at the time of birth (see Table 4-10).

Abortion rates for teens aged 15 to 17 decreased 5.9% from 2015.

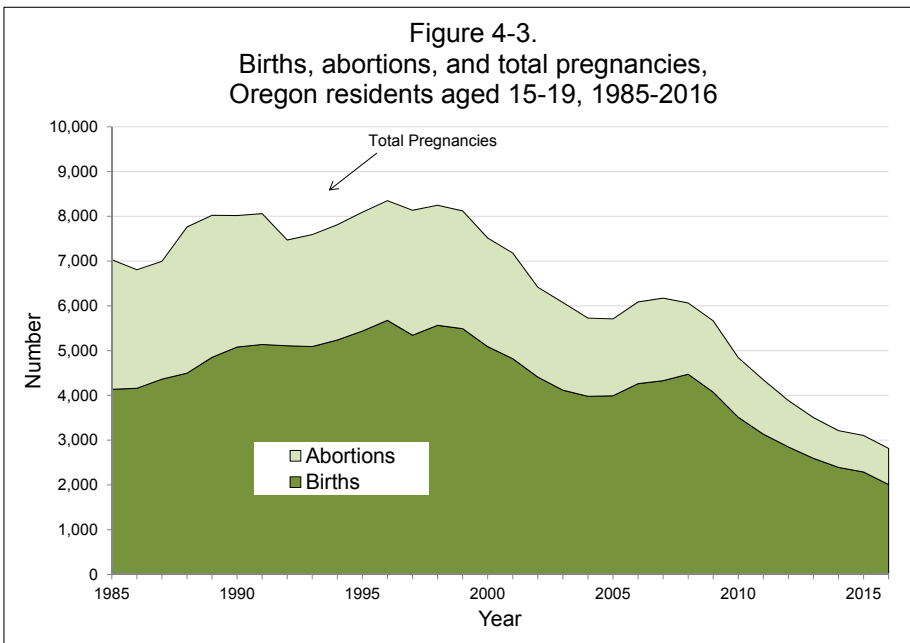


Abortion rates among teens, aged 15–17

Abortion rates among teens increased 6.2% from 2015. For females aged 15–17, the abortion rate increased slightly to 3.4 per 1,000 from the historic low in 2015 of 3.2 (see Table 4-1, Figure 4-2). There were 245 abortions among Oregon females aged 15–17 reported during 2016, 18 more than in 2015. Since the record high abortion rate in 1980, the rate for females aged 15–17 has decreased by 89.3% (from 31.9 to 3.4 per 1,000 females).

Figures 4-3 and 4-4 present historical pregnancy outcomes (birth and abortion). As Figure 4-4 indicates, a higher percentage of teen pregnancies were carried to term in recent years than in 1985. Since 1985, the younger the teen, the higher the percentage of terminated pregnancies. However, among teens under 15, 40.0% of the pregnancies resulted in a live birth in 2016 (see Table 4-2, Figure 4-4).

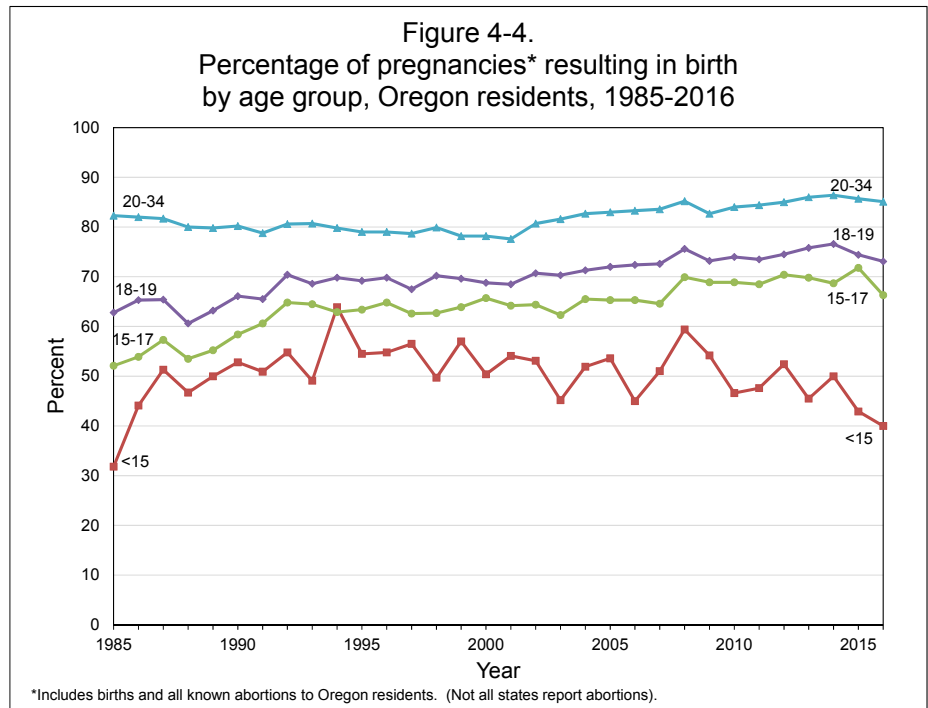
Birth rates for teens aged 18 to 19 decreased by 11.7% from 2015.



Oregon females, aged 18–19

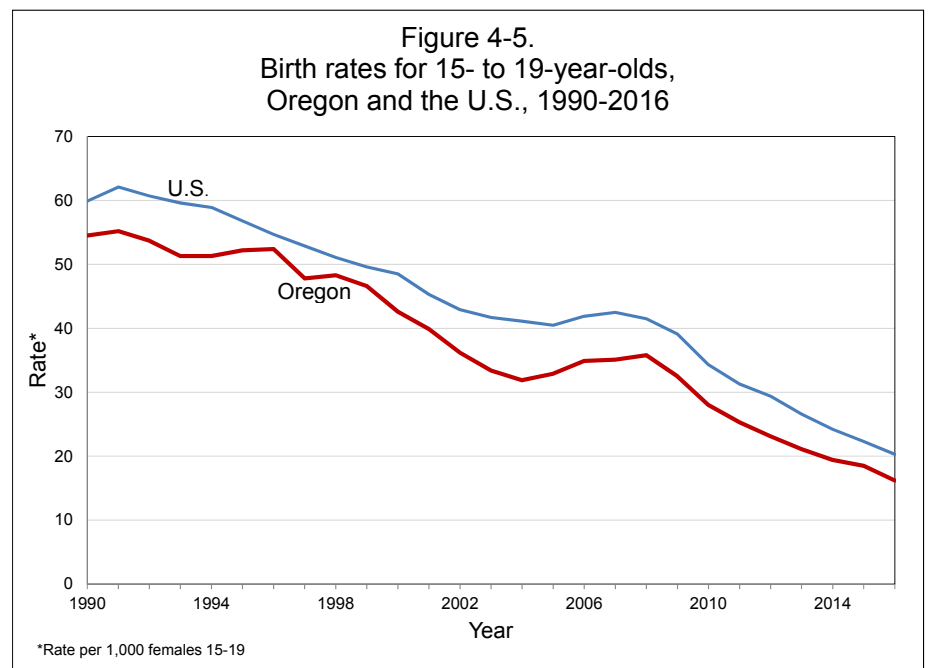
In 2016, the pregnancy rate for Oregonians aged 18–19 was 40.0 per 1,000 females, a 10.1% decrease from 2015. Comparisons with the 2015 figures show a decrease in the birth rate (11.7%) and a decrease in the abortion rate (5.3%) among women aged 18–19 (see Table 4-1).

Of the 2,089 pregnancies among women aged 18–19, 73.1% (1,527) resulted in a live birth (see Figure 4-4). It was the first child for 83.8% of this group.



Oregon vs. U.S. birth rates

In Oregon, the birth rate among 15- to 19-year-olds (commonly used in historical and national comparisons) decreased 12.4% in 2016 (16.2 vs. 18.5 per 1,000 females in 2015; see Table 4-1). The 2016 rate was 70.7% lower than the 1991 rate of 55.2 per 1,000, which is the highest rate recorded during the past quarter century (see Figure 4-5).



Oregon’s 2016 birth rate for 15–19-year-old teens was 20.2% below the national rate (1) (16.2 vs. 20.3 per 1,000 females; see sidebar Table 4-A). Oregon’s lower teen birth rate continued to decrease at the same time the state became more diverse. Historically, African American and Hispanic populations have had higher teen birth rates and have been underrepresented in the state’s population. Between the 1990 and 2010 census, the proportion of racial minorities was relatively stable while the proportion of Hispanic residents tripled from 4% to 12% (2,3). Nevertheless, during this period of increased diversity, Oregon’s teen pregnancy rate for 15–19-year-olds fell from 86.0 per 1,000 females in 1990 to 22.7 in 2016, a 73.6% decrease (see Table 4-1). For further discussion of Oregon’s demographic characteristics and teen pregnancy rates, see Appendix B: “Methodology.”

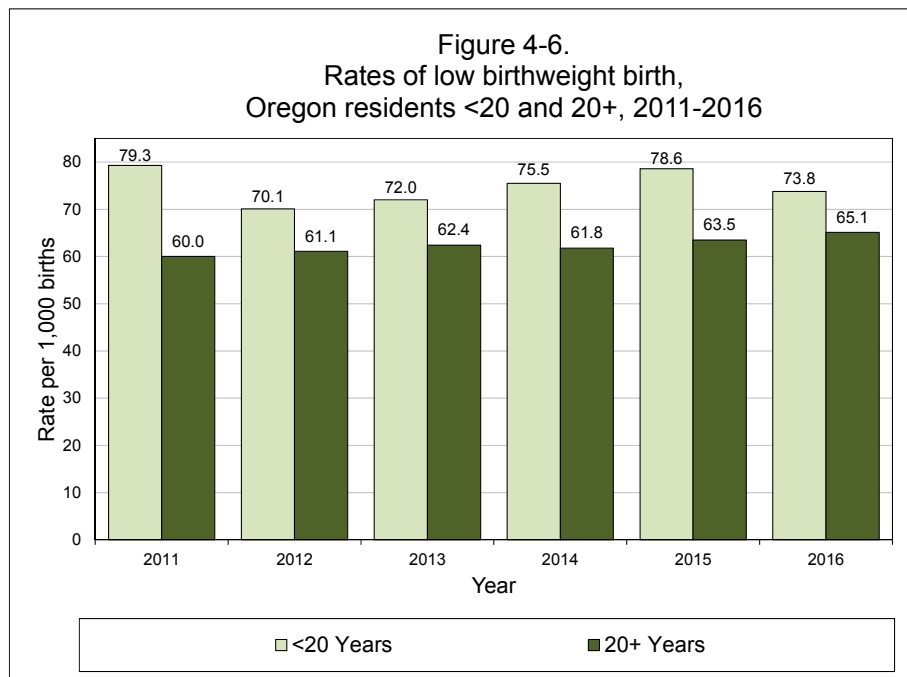
Age	Oregon		U.S.
	2016	2015	2016
15-17	6.7	8.0	8.8
18-19	29.3	33.2	37.5
15-19	16.2	18.5	20.3

¹ All rates per 1,000 females.

Level of infant health

Low birthweight

The best single measure of newborn infant health is low birthweight, which is defined as less than 2,500 grams (5.5 pounds). Low birthweight is closely related to premature delivery and small size for gestational age. Changes in the low birthweight rate for a group might indicate aggregate changes in the mother’s personal behavior during pregnancy, or it could indicate other conditions that affect



fetal health such as nutrition or access to prenatal care.

In 2016, the low birthweight rate for teen mothers aged 15–19 was 74.2 per 1,000 births (see Table 4-7), a 6.2% decrease from 2015. For 15–17-year-olds, the rate (89.4 per 1,000) increased by 7.4%. The teen rate for low birthweight remained higher than for mothers aged 20 and older (65.1 per 1,000; see Table 2-27). The difference in the low birthweight rates between teen and older mothers decreased slightly in 2016 (see Figure 4-6).

Race and ethnicity

Demographic factors such as race, ethnicity and marital status combine with age to influence the likelihood a teenager will receive early prenatal care. In 2016, for example, 56.1% of unmarried Hispanics aged 15–17 started prenatal care during their first trimester, compared to 67.8% of married non-Hispanic White women aged 18–19 (see Table 4-7).

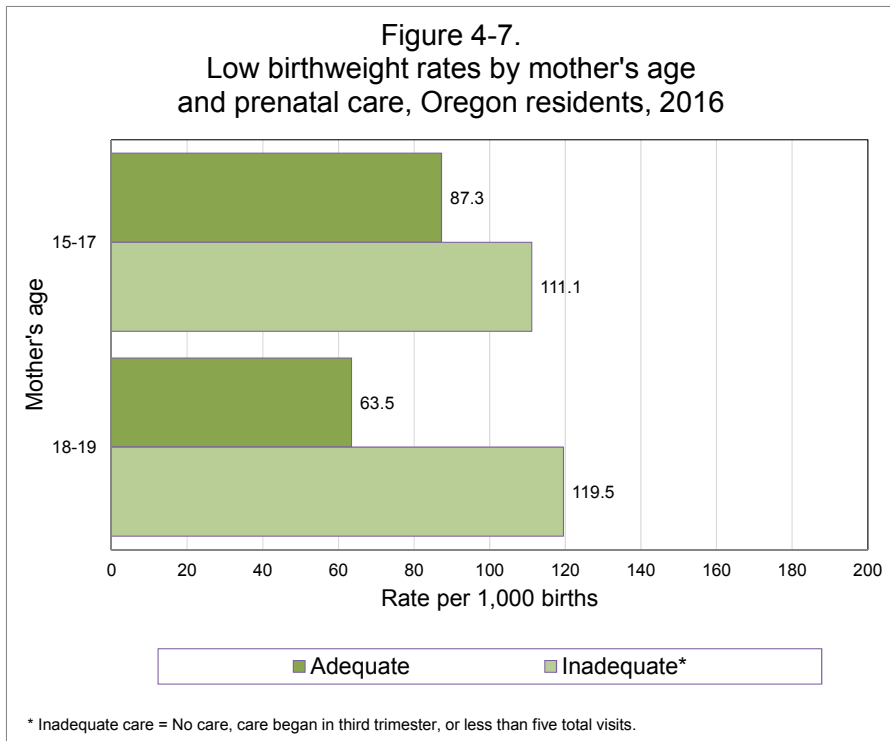
Low birthweight rates among teen mothers by racial/ethnic grouping are displayed in Table 4-7. Between 2015 and 2016, the rate of low birthweight infants for Hispanic teens aged 15–17 increased by 13.9%. The low birthweight rate for Hispanic teens aged 18–19 during this same period decreased by 1.4%. Among non-Hispanic non-White groups, the low birthweight rate for teens aged 15–17 decreased by 70.6%, while the rate for 18–19-year-olds decreased by 0.2 %.

Prenatal care

Table 4-6 shows the association between inadequate prenatal care and frequency of low birthweight infants for teens who gave birth in 2016. Among mothers aged 15–19, those who received inadequate prenatal care had a greater number of low birthweight babies than those who had received adequate care (116.9 vs. 69.0 per 1,000 live births). Figure 4-7 shows low birthweight rates per 1,000 live births by adequate and inadequate prenatal care. For mothers 15–17, the rates were 111.1 vs. 87.3; for mothers 18–19, the rates were 119.5 vs. 63.5.

- **Early prenatal care**

Prenatal care should begin within the first 12 weeks of pregnancy to allow early detection of complications and to ensure the health of both mother and infant.



In 2016, 65.2% of teen mothers started prenatal care during the first trimester, compared to 80.4% for women aged 20 and older (see sidebar Table 4-B). Only 59.2% of those 15–17 received first trimester prenatal care, an increase from 57.6% in 2015 (see Table 4-10).

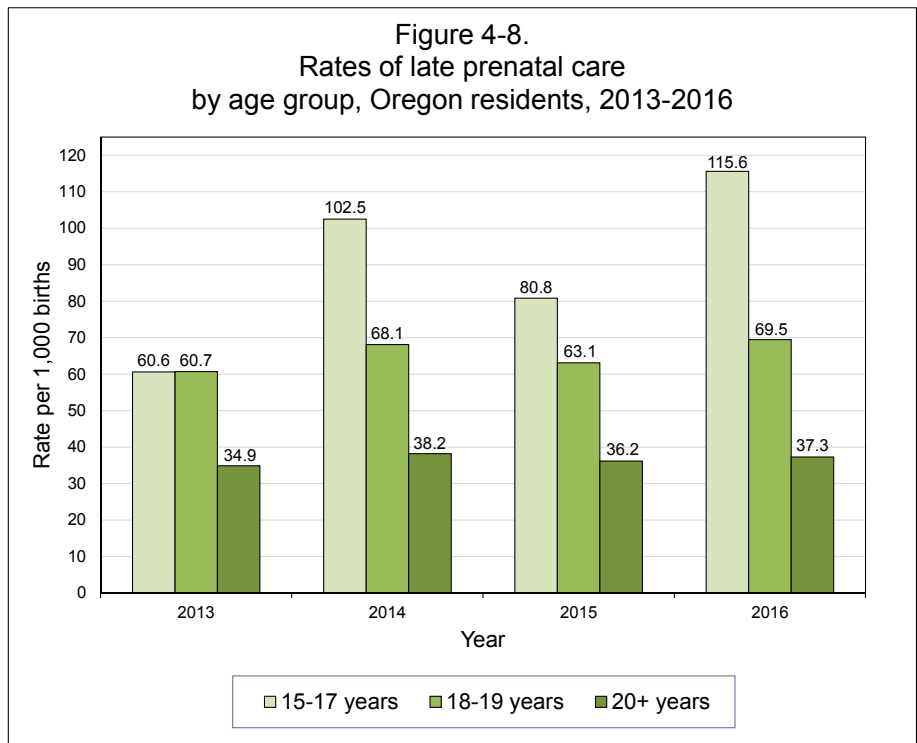
• **Inadequate prenatal care**

Inadequate prenatal care is defined as no prenatal care, care beginning after the second trimester of pregnancy, or care involving fewer than five prenatal visits. By this measure, 15.2% of 15–17-year-old teens and 10.6% of 18–19-year-old teens received inadequate prenatal care in 2016. This compares with 5.8% of women aged 20 or older that received inadequate care (see Table 4-10). The proportion of women under age 20 that received inadequate prenatal care increased by 21.6% in 2016, to 11.9% from 9.8% in 2015.

• **Late care or no prenatal care**

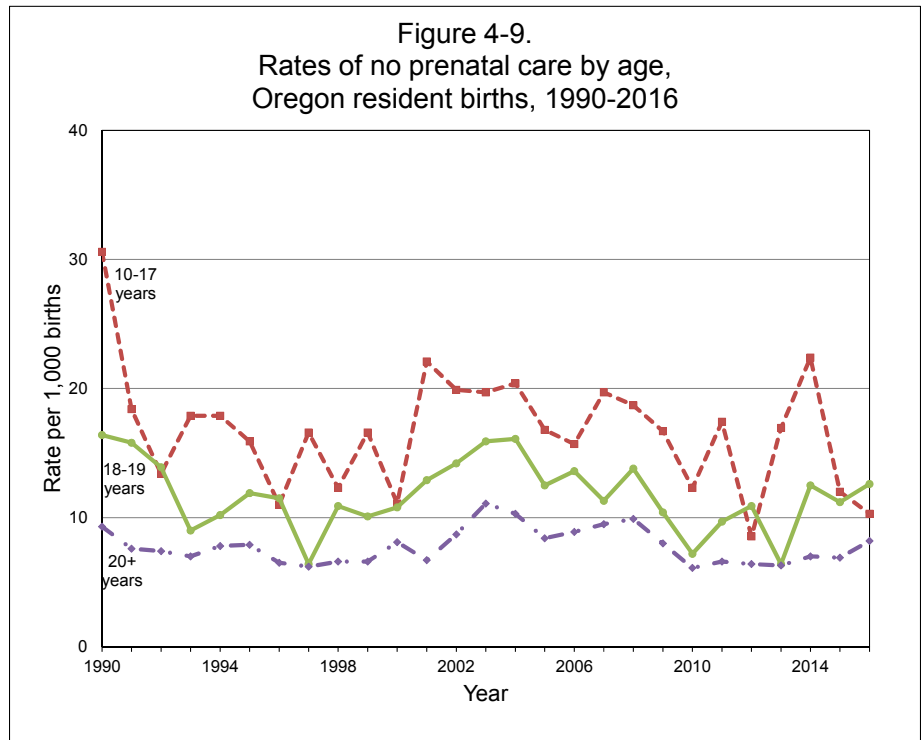
From 2015 to 2016, the proportion of teens aged 15–17 that began prenatal care during the third trimester increased 43.0% to 115.5 per 1,000 live births (see Figure 4-8). In 2016, a higher percentage of teens under age 18 went through pregnancy without a single visit to a medical provider than did women 20 and older. The rate of no prenatal care among teens 15–17 is 10.5 per

All Women	79.7
All Teens	65.2
15-17 Years	59.2
18-19 Years	67.4
20+ Years	80.4



1,000 live births, just under 1.3 times the rate of women aged 20 and older (8.2 per 1,000 live births; see Table 4-10, Figure 4-9).

Low Apgar score



The Apgar score recorded by the birth attendant five minutes after birth provides another measure of infant health at the time of delivery. A score under 7 is considered low and indicates an infant at greater than normal risk for morbidity and mortality. In 2016, the rate of low five-minute Apgar scores for newborns of mothers aged 15–17 was 43.8 per 1,000 births (Table 4-9), an 80.4% increase from 2015 (24.3 per 1,000). The low five-minute Apgar rate for infants born to women under age 20 was 40.1% higher than the rate for infants born to women 20 years or older (37.7 compared to 26.9 per 1,000).

Substance use during pregnancy

Estimates of tobacco and alcohol use during pregnancy are presumed to be minimum counts due to underreporting on birth certificates. The legal age to purchase alcohol in Oregon is 21. The legal age to purchase tobacco products is 18. Teen mothers may be deterred by age limits placed by Oregon law on the purchase or possession of these substances.

Tobacco

The percentage of teens aged 15–19 that reported smoking during pregnancy in 2016 was just over 1.5 times higher than the percentage reported by women aged 20 and older (14.9% vs. 9.3%; see Table 4-9). Women who smoked during pregnancy had a higher number of low birthweight babies than nonsmokers. Mothers aged 20 or older showed the greatest difference between low birthweight rates by tobacco use (100.6 vs. 61.3 per 1,000 live births). This is partly because the low birthweight rate for teen mothers was higher than for women aged 20 and older (see sidebar Table 4-C). Tobacco use remains one of the most important preventable causes of low birthweight infants for teen mothers.

Alcohol

Teens aged 15–19 reported less use of alcohol during pregnancy than did women aged 20 and older (3.1 per 1,000 births vs. 9.7 per 1,000 births).

Source of payment

	<20	20+
Nonsmokers	71.1	61.3
Smokers	90.0	100.6

¹ All Rates per 1,000 births

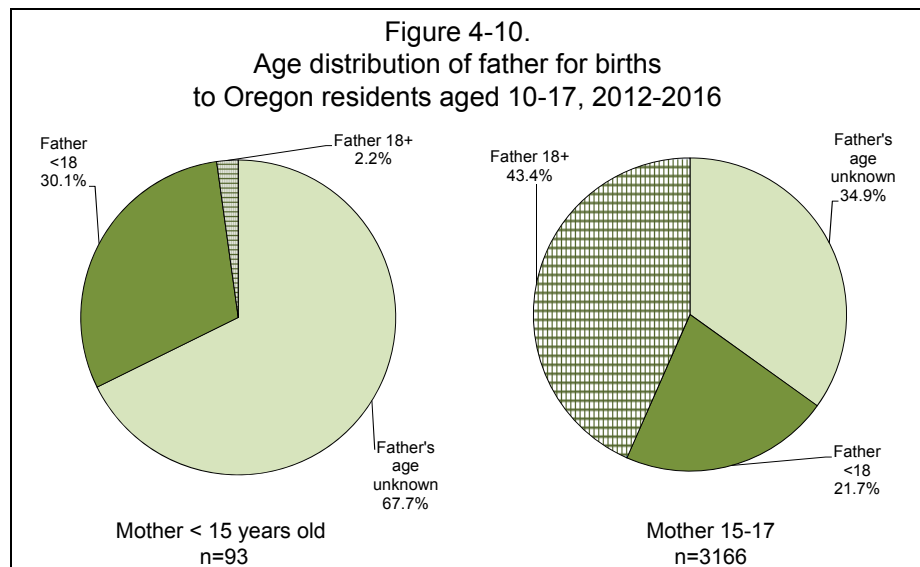
Medicaid/OHP paid for 78.0 percent of births to teens in 2016.

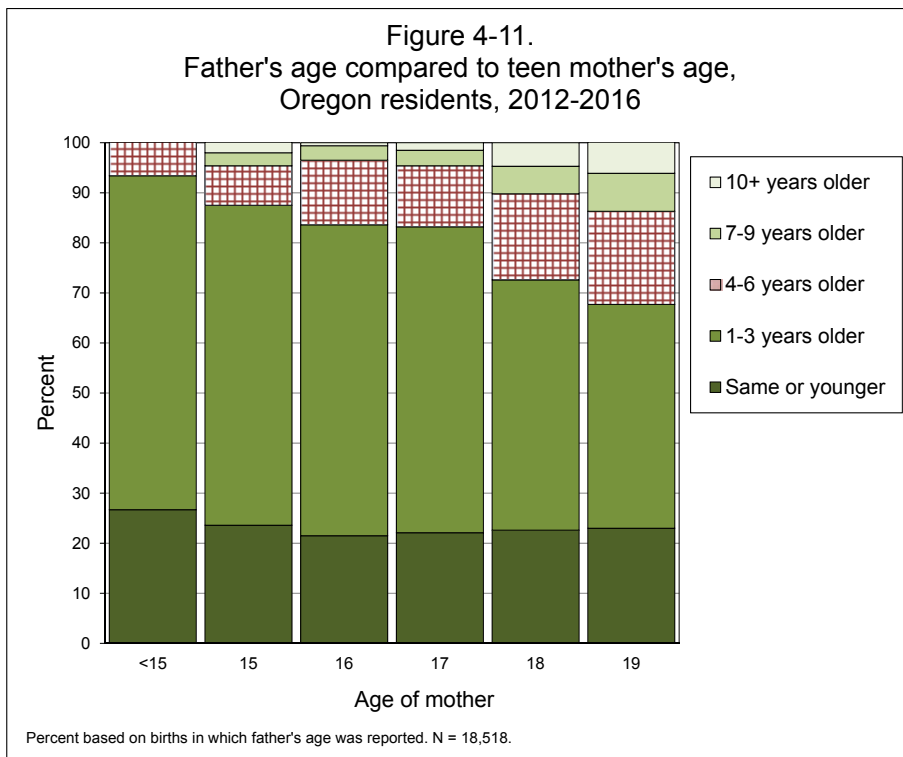
The source of payment is reported as the expected primary payment source at the time of labor and delivery. The percentage of teen mothers that reported the use of public funds to pay the costs associated with birth was nearly twice that of older mothers. In 2016, birth certificate data reported that Medicaid/Oregon Health Plan paid for 77.8% of births to teens aged 15–19 and 42.8% of births to women aged 20 and older where source of payment was reported (see Table 4-10).

Age of father

Between 2012 and 2016, 34.9% of birth records for babies born to teens aged 15–17 did not indicate the father’s age, or the father was not identified on the birth certificate (see Figure 4-10, Table 4-13). Just over two-thirds (67.7%) of the birth records where the mother was under age 15 did not list the father’s age. When the father’s age was reported for teen mothers under age 15, 93.3% were younger than age 18, and 6.7% were aged 18 or older. Birth records for mothers aged 15–17 reported the father’s age for 65.1% of births. Where the father’s age was reported, 33.4% of fathers were under age 18, and 66.6% were aged 18 or older.

For all teens giving birth in Oregon during 2012–2016 where the father’s age was reported including those less than 15 years of age, 10.6% of the fathers were more than six years older than the mother. The percentage of births to teen mothers where the father was more than six years older than the mother ranged from a low of 0% of births to





mothers under age 15, to a high of 13.8% for 19-year-old teens (see Figure 4-11).

Endnotes

1. Centers for Disease Control and Prevention (CDC). Births: Provisional data for 2016. National Vital Statistics Rapid Release. June 2017; No.002.
2. U.S. Census Bureau. Census 2000. 2000 census of population and housing, Oregon: 2000 summary population and housing characteristics. Issued June 2002. PHC -1-39.
3. U.S. Census Bureau. Census 2010. 2010 census of population and housing, Oregon: 2010 summary population and housing characteristics. Issued June 2012, CPH -1-39.

TABLE 4-1. Oregon pregnancies to teens 15-19 years, 1975-2016

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
1975	3,718	NA	5,135	NA	8,853	80.2	1,868	NA	3,338	NA
1980	3,844	59.3	6,576	141.9	10,420	93.8	1,775	27.4	3,883	83.8
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
2003	1,965	26.4	4,110	84.2	6,075	49.3	1,225	16.5	2,891	59.2
2004	1,791	23.8	3,935	79.5	5,726	45.8	1,173	15.6	2,807	56.7
2005	1,762	24.2	3,947	81.5	5,709	47.1	1,151	15.8	2,841	58.7
2006	1,996	27.2	4,091	83.8	6,087	49.8	1,303	17.7	2,960	60.6
2007	1,902	25.7	4,271	86.9	6,173	50.1	1,228	16.6	3,100	63.1
2008	1,931	25.7	4,133	82.6	6,064	48.5	1,349	18.0	3,125	62.5
2009	1,696	22.5	3,970	79.3	5,666	45.2	1,169	15.5	2,905	58.0
2010	1,406	18.6	3,436	68.8	4,842	38.6	969	12.8	2,542	50.9
2011	1,243	17.1	3,106	60.9	4,349	35.1	852	11.7	2,283	44.8
2012	1,133	15.6	2,752	53.9	3,885	31.5	798	11.0	2,051	40.2
2013	1,002	13.9	2,502	49.0	3,504	28.4	699	9.7	1,896	37.1
2014	889	12.4	2,324	45.4	3,213	26.1	611	8.5	1,781	34.8
2015	804	11.2	2,300	44.5	3,104	25.1	577	8.0	1,712	33.2
2016	726	10.1	2,089	40.0	2,815	22.7	481	6.7	1,527	29.3

¹ Pregnancy estimates are based on the total number of births and abortions.
 See footnote (2) on the next page regarding changes in estimating abortions.
 All rates are per 1,000 females.
 NA = Not Available

TABLE 4-1. Oregon Pregnancies to Teens 15-19 Years, 1975-2016 (continued)

Births		Abortions ²						NS	Year
15 to 19		15 to 17		18 to 19		15 to 19			
No.	Rate	No.	Rate	No.	Rate	No.	Rate		
5,206	47.2	1,850	NA	1,797	NA	3,647	33.1	23	1975
5,658	50.9	2,069	31.9	2,693	58.1	4,762	42.9	903	1980
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
4,116	33.4	740	9.9	1,219	25.0	1,959	15.9	33	2003
3,980	31.9	618	8.2	1,128	22.8	1,746	14.0	12	2004
3,992	32.9	611	8.4	1,106	22.8	1,717	14.2	24	2005
4,263	34.9	693	9.4	1,131	23.2	1,824	14.9	18	2006
4,328	35.1	674	9.1	1,171	23.8	1,845	15.0	24	2007
4,474	35.8	582	7.8	1,008	20.1	1,590	12.7	47	2008
4,074	32.5	527	7.0	1,065	21.3	1,592	12.7	34	2009
3,511	28.0	437	5.8	894	17.9	1,331	10.6	49	2010
3,135	25.3	391	5.3	823	16.1	1,214	9.8	60	2011
2,849	23.1	335	4.6	701	13.7	1,036	8.4	43	2012
2,595	21.1	303	4.2	606	11.9	909	7.4	89	2013
2,392	19.4	278	3.9	543	10.6	821	6.7	202	2014
2,289	18.5	227	3.2	588	11.4	815	6.6	6	2015
2,008	16.2	245	3.4	562	10.8	807	6.5	3	2016

² 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.
 NA = Not Available
 All rates are per 1,000 females.

TABLE 4-2. Oregon pregnancies to young teens 10-17 years, 1975-2016

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	
1975	216	2,934	NA	67	1,935	NA	149	1,999	NA	31.0	49.2
1980	203	4,047	24.7	71	1,846	11.3	132	2,201	13.4	35.0	45.6
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	49.7	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
2003	104	2,069	10.5	47	1,272	6.5	57	797	4.1	45.2	61.5
2004	106	1,897	9.5	55	1,228	6.2	51	669	3.4	51.9	64.7
2005	97	1,859	9.5	52	1,203	6.2	45	656	3.4	53.6	64.7
2006	100	2,096	10.6	45	1,348	6.8	55	748	3.8	45.0	64.3
2007	98	2,000	10.1	50	1,278	6.4	48	722	3.6	51.0	63.9
2008	64	1,995	10.0	38	1,387	7.0	26	608	3.1	59.4	69.5
2009	72	1,768	8.9	39	1,208	6.1	33	560	2.8	54.2	68.3
2010	58	1,464	7.4	27	996	5.0	31	468	2.3	46.6	68.0
2011	42	1,285	6.7	20	872	4.6	22	413	2.2	40.6	67.9
2012	63	1,196	6.3	33	831	4.4	30	365	1.9	52.4	69.5
2013	33	1,035	5.4	15	714	3.8	18	321	1.7	45.5	69.0
2014	40	929	4.9	20	631	3.3	20	298	1.6	50.0	67.9
2015	35	839	4.4	15	592	3.1	20	247	1.3	42.9	70.6
2016	25	751	3.9	10	491	2.6	15	260	1.4	40.0	65.4

¹ Pregnancy estimates are based on the total number of births and abortions. See also footnote (2) below regarding changes in estimating abortions.

² 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.

³ Percentage of pregnancies resulting in a live birth.

NA = Not Available

All rates are per 1,000 females.

TABLE 4-3. Pregnancy rates of teens by county of residence, Oregon, 2016

County of residence	Total pregnancies (all ages)	Age				Pregnancy rate ¹			
		<15	15-17	18-19	15-19	10-17	15-17	18-19	15-19
Total ²	53,742	25	726	2,089	2,815	3.9	10.1	40.0	22.7
Baker	169	1	—	8	8	1.4	—	62.5	19.7
Benton	852	—	4	30	34	§ 1.1	§ 2.6	§ 10.4	§ 7.7
Clackamas	4,895	2	64	167	231	3.2	7.9	37.4	§ 18.5
Clatsop	484	—	7	24	31	4.1	11.6	52.4	29.2
Columbia	610	1	8	23	31	3.5	8.4	44.5	21.1
Coos	693	—	14	37	51	5.3	13.5	53.5	29.5
Crook	268	—	7	16	23	7.2	19.0	§ 91.4	§ 42.4
Curry	209	—	5	14	19	6.7	17.1	§ 97.9	§ 43.6
Deschutes	2,165	1	19	79	98	§ 2.3	6.1	43.6	19.9
Douglas	1,216	—	20	66	86	4.1	10.6	§ 59.8	28.7
Gilliam	17	—	—	—	—	—	—	—	—
Grant	61	—	*	*	3	*	*	*	19.6
Harney	99	—	1	6	7	2.9	7.5	82.2	34.1
Hood River	290	—	5	14	19	3.7	9.9	54.1	24.9
Jackson	2,666	1	43	97	140	4.4	11.4	38.2	22.2
Jefferson	321	1	5	19	24	5.2	11.2	§ 78.2	34.9
Josephine	1,031	1	18	45	63	5.0	12.9	55.3	28.5
Klamath	893	—	22	47	69	§ 6.9	§ 18.6	§ 57.4	§ 34.5
Lake	85	—	*	*	5	*	*	*	27.3
Lane	4,269	1	59	196	255	3.9	9.5	§ 30.6	20.2
Lincoln	497	—	9	26	35	5.3	14.7	§ 68.4	§ 35.3
Linn	1,686	1	30	82	112	5.0	13.0	§ 55.6	§ 29.6
Malheur	490	—	10	29	39	6.1	16.8	§ 67.9	§ 38.2
Marion	5,129	5	84	242	326	5.0	12.4	§ 50.8	§ 28.2
Morrow	175	—	7	5	12	9.9	25.6	34.0	28.6
Multnomah	11,763	4	129	342	471	4.3	11.4	36.4	22.8
Polk	1,076	—	11	46	57	2.6	7.1	29.9	18.4
Sherman	18	—	—	—	—	—	—	—	—
Tillamook	291	—	1	16	17	0.9	2.4	§ 76.2	26.9
Umatilla	1,079	—	33	79	112	§ 7.6	§ 20.1	§ 74.8	§ 41.5
Union	342	—	4	17	21	3.2	8.8	38.1	23.4
Wallowa	65	—	*	*	4	*	*	*	25.3
Wasco	373	1	4	20	24	3.8	8.4	§ 70.4	31.5
Washington	8,111	3	88	220	308	3.1	8.0	§ 33.4	§ 17.5
Wheeler	18	*	*	*	1	*	*	*	35.7
Yamhill	1,328	2	10	67	77	2.2	§ 4.8	37.7	19.9

— Quantity is zero.
¹ All rates per 1,000 females.
² Total includes eight pregnancies where county of residence was unknown.
 § Pregnancy rate is significantly different from the state.
 * Detailed reporting of small numbers may breach confidentiality.

WARNING: Rates based on less than five 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 4-4. Birth rates of teens by county of residence, Oregon, 2016

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	45,533	10	481	1,527	2,008	2.6	6.7	29.3	16.2
Baker	160	—	—	8	8	—	—	62.5	19.7
Benton	763	—	4	16	20	1.1	2.6	§ 5.5	§ 4.5
Clackamas	4,238	—	35	109	144	§ 1.7	§ 4.3	§ 24.4	§ 11.5
Clatsop	408	—	2	19	21	1.2	3.3	41.5	19.8
Columbia	527	—	7	17	24	2.8	7.4	32.9	16.3
Coos	626	—	13	33	46	4.9	12.5	§ 47.7	§ 26.6
Crook	238	—	5	14	19	5.2	13.6	§ 80.0	§ 35.0
Curry	182	—	2	11	13	2.7	6.8	§ 76.9	29.8
Deschutes	1,799	—	10	50	60	§ 1.2	§ 3.2	27.6	12.2
Douglas	1,087	—	16	55	71	3.3	8.4	§ 49.8	§ 23.7
Gilliam	17	—	—	—	—	—	—	—	—
Grant	56	—	*	*	2	*	*	*	13.1
Harney	93	—	1	6	7	2.9	7.5	82.2	34.1
Hood River	252	—	3	11	14	2.2	6.0	42.5	18.4
Jackson	2,293	1	31	80	111	3.2	8.2	31.5	17.6
Jefferson	282	1	5	11	16	5.2	11.2	45.3	23.3
Josephine	870	1	10	30	40	2.9	7.2	36.9	18.1
Klamath	821	—	19	39	58	§ 6.0	§ 16.1	§ 47.6	§ 29.0
Lake	70	—	*	*	4	*	*	*	21.9
Lane	3,555	—	38	135	173	2.4	6.1	§ 21.0	§ 13.7
Lincoln	435	—	5	22	27	2.9	8.2	§ 57.9	§ 27.2
Linn	1,521	—	27	69	96	§ 4.3	§ 11.7	§ 46.7	§ 25.3
Malheur	465	—	10	27	37	§ 6.1	§ 16.8	§ 63.2	§ 36.2
Marion	4,519	2	62	193	255	3.6	9.1	§ 40.5	§ 22.1
Morrow	164	—	5	5	10	7.1	18.3	34.0	23.9
Multnomah	9,023	3	78	216	294	2.6	6.9	§ 23.0	§ 14.2
Polk	975	—	9	38	47	2.1	5.8	24.7	15.2
Sherman	17	—	—	—	—	—	—	—	—
Tillamook	255	—	1	13	14	0.9	2.4	§ 61.9	22.2
Umatilla	949	—	26	66	92	§ 6.0	§ 15.8	§ 62.5	§ 34.1
Union	312	—	1	16	17	0.8	2.2	35.9	18.9
Wallowa	59	—	*	*	2	*	*	*	12.7
Wasco	321	1	2	14	16	2.3	4.2	49.3	21.0
Washington	6,999	1	44	150	194	§ 1.5	§ 4.0	§ 22.8	§ 11.0
Wheeler	17	—	*	*	1	*	*	*	35.7
Yamhill	1,160	—	6	48	54	1.1	2.9	27.0	14.0

— Quantity is zero.

¹ All rates per 1,000 females.

§ Birth rate is significantly different from the state rate.

* Detailed reporting of small numbers may breach confidentiality.

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

TABLE 4-5. Abortion rates of teens by county of residence, Oregon, 2016

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	8,209	15	245	562	807	1.4	3.4	10.8	6.5
Baker	9	1	—	—	—	1.4	—	—	—
Benton	89	—	—	14	14	—	—	§ 4.8	§ 3.2
Clackamas	657	2	29	58	87	1.5	3.6	13.0	6.9
Clatsop	76	—	5	5	10	2.9	8.3	10.9	9.4
Columbia	83	1	1	6	7	0.8	1.1	11.6	4.8
Coos	67	—	1	4	5	0.4	1.0	5.8	2.9
Crook	30	—	2	2	4	2.1	5.4	11.4	7.4
Curry	27	—	3	3	6	4.0	10.2	21.0	13.8
Deschutes	366	1	9	29	38	1.2	2.9	16.0	7.7
Douglas	129	—	4	11	15	0.8	2.1	10.0	5.0
Gilliam	—	—	—	—	—	—	—	—	—
Grant	5	—	*	*	1	*	*	*	6.5
Harney	6	—	—	—	—	—	—	—	—
Hood River	38	—	2	3	5	1.5	4.0	11.6	6.6
Jackson	373	—	12	17	29	1.2	3.2	6.7	4.6
Jefferson	39	—	—	8	8	—	—	§ 32.9	11.6
Josephine	161	—	8	15	23	2.1	5.7	18.4	10.4
Klamath	72	—	3	8	11	0.9	2.5	9.8	5.5
Lake	15	—	*	*	1	*	*	*	5.5
Lane	714	1	21	61	82	1.4	3.4	9.5	6.5
Lincoln	62	—	4	4	8	2.3	6.5	10.5	8.1
Linn	165	1	3	13	16	0.6	1.3	8.8	4.2
Malheur	25	—	—	2	2	—	—	4.7	2.0
Marion	610	3	22	49	71	1.4	3.2	10.3	6.1
Morrow	11	—	2	—	2	2.8	7.3	—	4.8
Multnomah	2,740	1	51	126	177	1.7	4.5	§ 13.4	§ 8.6
Polk	101	—	2	8	10	0.5	1.3	5.2	§ 3.2
Sherman	1	—	—	—	—	—	—	—	—
Tillamook	36	—	—	3	3	—	—	14.3	4.8
Umatilla	130	—	7	13	20	1.6	4.3	12.3	7.4
Union	30	—	3	1	4	2.4	6.6	2.2	4.5
Wallowa	6	—	*	*	2	*	*	*	12.7
Wasco	52	—	2	6	8	1.5	4.2	21.1	10.5
Washington	1,112	2	44	70	114	1.6	4.0	10.6	6.5
Wheeler	1	—	—	—	—	—	—	—	—
Yamhill	168	2	4	19	23	1.1	1.9	10.7	5.9

— Quantity is zero.
¹ All rates per 1,000 females.
² Total includes three abortions where county of residence was unknown.
 § Abortion rate is significantly different from the state.
 * Detailed reporting of small numbers may breach confidentiality.

WARNING: Rates based on less than five events are unreliable.
 NOTE: Includes abortions 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. Births to teens 15-19 by race/ethnicity, adequacy of prenatal care, and birthweight, Oregon residents, 2016

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 births²							
15-19	2,008	27	204	120	1,620	2	35
15-17	481	8	64	35	366	–	8
18-19	1,527	19	140	85	1,254	2	27
Non-Hispanic single mention race							
White							
15-19	1,056	11	81	70	882	1	11
15-17	229	4	20	22	183	–	–
18-19	827	7	61	48	699	1	11
African American							
15-19	44	1	8	2	32	–	1
15-17	13	1	3	–	8	–	1
18-19	31	–	5	2	24	–	–
American Indian							
15-19	32	–	6	1	25	–	–
15-17	10	–	4	–	6	–	–
18-19	22	–	2	1	19	–	–
Asian							
15-19	12	1	3	–	8	–	–
15-17	3	–	–	–	3	–	–
18-19	9	1	3	–	5	–	–
Hawaiian/Pacific Islander							
15-19	24	–	5	2	15	–	2
15-17	4	–	1	1	2	–	–
18-19	20	–	4	1	13	–	2
Other/unknown							
15-19	6	1	2	–	3	–	–
15-17	1	–	–	–	1	–	–
18-19	5	1	2	–	2	–	–
Multiple races							
15-19	115	–	14	6	94	–	1
15-17	20	–	4	–	15	–	1
18-19	95	–	10	6	79	–	–
Hispanic ethnicity							
Hispanic³							
15-19	719	13	85	39	561	1	20
15-17	201	3	32	12	148	–	6
18-19	518	10	53	27	413	1	14

– Quantity is zero.

See footnotes at the end of table.

TABLE 4-6. Births to teens 15-19 by race/ethnicity, adequacy of prenatal care, and birthweight, Oregon residents, 2016 (continued)

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 births²							
15-19	2,008	27	204	120	1,620	2	35
15-17	481	8	64	35	366	–	8
18-19	1,527	19	140	85	1,254	2	27
Any mention race and ethnicity⁴							
White							
15-19	1,686	18	158	108	1,373	1	28
15-17	400	5	48	33	309	–	5
18-19	1,286	13	110	75	1,064	1	23
African American							
15-19	112	2	12	7	89	–	2
15-17	30	2	5	2	20	–	1
18-19	82	–	7	5	69	–	1
American Indian							
15-19	119	–	21	3	94	–	1
15-17	31	–	9	–	21	–	1
18-19	88	–	12	3	73	–	–
Asian							
15-19	37	1	8	1	27	–	–
15-17	10	–	1	–	9	–	–
18-19	27	1	7	1	18	–	–
Hawaiian/Pacific Islander							
15-19	35	–	6	2	25	–	2
15-17	7	–	2	1	4	–	–
18-19	28	–	4	1	21	–	2
Other							
15-19	173	5	17	7	140	–	4
15-17	44	1	4	2	35	–	2
18-19	129	4	13	5	105	–	2
Unknown							
15-19	26	1	2	1	21	1	–
15-17	4	–	1	–	3	–	–
18-19	22	1	1	1	18	1	–
Hispanic³							
15-19	719	13	85	39	561	1	20
15-17	201	3	32	12	148	–	6
18-19	518	10	53	27	413	1	14

– Quantity is zero.

¹ Less than five prenatal visits or care began in the third trimester.

² Total includes cases with unknown birthweight.

³ Hispanic ethnicity includes any race.

⁴ Includes any race (1 or more) and ethnicity mention.

NOTE: The sum of the subsets may not equal the total because of cases with missing values.

TABLE 4-7. Births to teens 15-19 by marital status, race/ethnicity, and age by adequacy of prenatal care and birthweight, Oregon residents, 2016

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 Births¹							
15-19	2,008	149	74.2	1,300	654.6	231	117.2
15-17	481	43	89.4	282	592.4	72	152.2
18-19	1,527	106	69.4	1,018	674.2	159	106.1
Non-Hispanic single mention race							
White	1,056	82	77.7	742	706.0	92	88.1
15-17	229	26	113.5	151	659.4	24	104.8
Married	18	3	166.7	13	722.2	3	166.7
Unmarried	210	23	109.5	137	652.4	21	100.0
18-19	827	56	67.7	591	719.0	68	83.4
Married	152	5	32.9	103	677.6	14	92.7
Unmarried	671	51	76.0	485	728.2	54	81.8
African American	44	3	68.2	23	534.9	9	209.3
15-17	13	1	76.9	4	333.3	4	333.3
Married	—	—	—	—	—	—	—
Unmarried	13	1	76.9	4	333.3	4	333.3
18-19	31	2	64.5	19	612.9	5	161.3
Married	6	—	—	4	666.7	—	—
Unmarried	25	2	80.0	15	600.0	5	200.0
American Indian	32	1	31.2	18	562.5	6	187.5
15-17	10	—	—	6	600.0	4	400.0
Married	—	—	—	—	—	—	—
Unmarried	10	—	—	6	600.0	4	400.0
18-19	22	1	45.5	12	545.5	2	90.9
Married	2	—	—	—	—	—	—
Unmarried	20	1	50.0	12	600.0	2	100.0
Asian/Pacific Islander⁴	36	3	83.3	15	441.2	9	264.7
15-17	7	1	142.9	3	428.6	1	142.9
Married	1	—	—	—	—	—	—
Unmarried	6	1	166.7	3	500.0	1	166.7
18-19	29	2	69.0	12	444.4	8	296.3
Married	13	—	—	4	333.3	4	333.3
Unmarried	16	2	125.0	8	533.3	4	266.7
Other/multiple races	121	7	57.9	72	595.0	17	141.7
15-17	21	—	—	9	428.6	4	200.0
Married	—	—	—	—	—	—	—
Unmarried	21	—	—	9	428.6	4	200.0
18-19	100	7	70.0	63	630.0	13	130.0
Married	3	—	—	2	666.7	—	—
Unmarried	97	7	72.2	61	628.9	13	134.0
Hispanic ethnicity							
Hispanic⁵	719	53	73.7	430	609.9	98	140.4
15-17	201	15	74.6	109	553.3	35	179.5
Married	8	2	250.0	3	375.0	2	250.0
Unmarried	193	13	67.4	106	560.8	33	176.5
18-19	518	38	73.4	321	631.9	63	125.2
Married	87	6	69.0	61	709.3	10	119.0
Unmarried	427	31	72.6	258	615.8	53	127.4

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

TABLE 4-7. Births to teens 15-19 by marital status, race/ethnicity, and age by adequacy of prenatal care and birthweight, Oregon residents, 2016 (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
Total Births¹							
15-19	2,008	149	74.2	1,300	654.6	231	117.2
15-17	481	43	89.4	282	592.4	72	152.2
18-19	1,527	106	69.4	1,018	674.2	159	106.1
Any mention race/ ethnicity⁶							
White	1,686	127	75.3	1,121	672.5	176	106.2
15-17	400	38	95.0	248	626.3	53	134.2
Married	25	4	160.0	15	600.0	5	200.0
Unmarried	374	34	90.9	232	627.0	48	130.1
18-19	1,286	89	69.2	873	686.9	123	97.5
Married	208	9	43.3	141	681.2	22	107.3
Unmarried	1,073	80	74.6	729	687.7	101	95.9
African American	112	9	80.4	71	645.5	14	127.3
15-17	30	4	133.3	15	517.2	7	241.4
Married	—	—	—	—	—	—	—
Unmarried	30	4	133.3	15	517.2	7	241.4
18-19	82	5	61.0	56	691.4	7	86.4
Married	7	—	—	5	714.3	—	—
Unmarried	74	5	67.6	51	689.2	7	94.6
American Indian	119	3	25.2	63	529.4	21	178.0
15-17	31	—	—	14	451.6	9	300.0
Married	—	—	—	—	—	—	—
Unmarried	31	—	—	14	451.6	9	300.0
18-19	88	3	34.1	49	556.8	12	136.4
Married	6	—	—	1	166.7	—	—
Unmarried	82	3	36.6	48	585.4	12	146.3
Asian/Pacific Islander⁴	68	4	58.8	35	530.3	14	212.1
15-17	15	1	66.7	8	533.3	2	133.3
Married	1	—	—	—	—	—	—
Unmarried	14	1	71.4	8	571.4	2	142.9
18-19	53	3	56.6	27	529.4	12	235.3
Married	16	—	—	7	466.7	4	266.7
Unmarried	37	3	81.1	20	555.6	8	222.2
Other/unknown	199	15	75.4	120	603.0	25	128.9
15-17	48	3	62.5	23	479.2	6	130.4
Married	1	1	1000.0	1	1000.0	—	—
Unmarried	47	2	42.6	22	468.1	6	133.3
18-19	151	12	79.5	97	642.4	19	128.4
Married	32	2	62.5	24	750.0	2	64.5
Unmarried	116	9	77.6	71	612.1	17	149.1
Hispanic⁵	719	53	73.7	430	609.9	98	140.4
15-17	201	15	74.6	109	553.3	35	179.5
Married	8	2	250.0	3	375.0	2	250.0
Unmarried	193	13	67.4	106	560.8	33	176.5
18-19	518	38	73.4	321	631.9	63	125.2
Married	87	6	69.0	61	709.3	10	119.0
Unmarried	427	31	72.6	258	615.8	53	127.4

— 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 births.
 3 Less than five prenatal visits or care began in the third trimester.
 4 Includes Asian, Native Hawaiian and Pacific Islander.
 5 Includes any race.
 6 Includes any race (1 or more) and ethnicity mention.

WARNING: Rates based on less than five events are unreliable.
 NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 4-8. Births to teens 15-19 by level of prenatal care, low birthweight rates, and county of residence, Oregon, 2016

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	2,008	16.2	149	74.2	1,300	654.6	231	117.2
Baker	8	19.7	*	*	*	*	*	*
Benton	20	§ 4.5	1	50.0	10	500.0	3	150.0
Clackamas	144	§ 11.5	13	90.3	104	727.3	19	133.8
Clatsop	21	19.8	1	47.6	13	619.0	2	95.2
Columbia	24	16.3	3	125.0	19	791.7	3	125.0
Coos	46	§ 26.6	1	21.7	35	760.9	6	133.3
Crook	19	§ 35.0	2	105.3	15	833.3	—	—
Curry	13	29.8	1	76.9	9	692.3	—	—
Deschutes	60	12.2	9	150.0	46	766.7	1	§ 16.7
Douglas	71	§ 23.7	4	56.3	55	774.6	—	—
Gilliam	—	—	—	—	—	—	—	—
Grant	2	13.1	*	*	*	*	*	*
Harney	7	34.1	*	*	*	*	*	*
Hood River	14	18.4	2	142.9	9	692.3	—	—
Jackson	111	17.6	5	45.0	74	672.7	11	100.0
Jefferson	16	23.3	2	125.0	9	562.5	2	125.0
Josephine	40	18.1	3	75.0	32	800.0	4	100.0
Klamath	58	§ 29.0	10	172.4	32	551.7	6	103.4
Lake	4	21.9	*	*	*	*	*	*
Lane	173	§ 13.7	14	80.9	120	697.7	20	115.6
Lincoln	27	§ 27.2	1	37.0	20	740.7	1	37.0
Linn	96	§ 25.3	6	62.5	69	718.8	11	115.8
Malheur	37	§ 36.2	3	81.1	18	486.5	7	189.2
Marion	255	§ 22.1	17	66.7	148	587.3	37	151.0
Morrow	10	23.9	*	*	*	*	*	*
Multnomah	294	§ 14.2	20	68.0	175	603.4	50	172.4
Polk	47	15.2	3	63.8	28	595.7	2	45.5
Sherman	—	—	—	—	—	—	—	—
Tillamook	14	22.2	1	71.4	8	571.4	3	214.3
Umatilla	92	§ 34.1	6	65.2	50	561.8	12	134.8
Union	17	18.9	1	58.8	10	588.2	1	58.8
Wallowa	2	12.7	*	*	*	*	*	*
Wasco	16	21.0	—	—	13	812.5	—	—
Washington	194	§ 11.0	10	51.5	114	609.6	22	119.6
Wheeler	1	35.7	*	*	*	*	*	*
Yamhill	54	14.0	7	129.6	38	703.7	3	55.6
Unknown	1	-	-	-	1	-	-	-

— Quantity is zero.

¹ Less than five prenatal visits or care began in the third trimester.

² Rates per 1,000 females 15-19 years of age.

³ Rates per 1,000 births to 15-19 year olds.

§ Rate is significantly different from the state rate.

* Detailed reporting of small numbers may breach confidentiality.

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

NOTE: Rates and percentages are calculated excluding missing and unknown values.

TABLE 4-9. Birth outcomes of infants by age of mother, Oregon residents, 2016

Birth outcomes	Total births	Mother's age								
		<15	15	16	17	18	19	15-19	20+	N.S.
Total births	45,533	10	40	155	286	578	949	2,008	43,514	1
Birthweight¹										
1499 grams or less										
<28 weeks	209	–	–	1	4	6	4	15	194	–
28-36 weeks	224	–	1	2	5	4	6	18	206	–
37-40 weeks	7	–	–	–	–	–	–	–	7	–
41+ weeks	–	–	–	–	–	–	–	–	–	–
Unknown	1	–	–	–	–	–	–	–	1	–
1500-2499 grams										
<28 weeks	5	–	–	–	–	–	1	1	4	–
28-36 weeks	1,582	–	1	1	22	24	23	71	1,511	–
37-40 weeks	938	–	–	4	2	15	23	44	894	–
41+ weeks	13	–	–	–	–	–	–	–	13	–
Unknown	1	–	–	–	–	–	–	–	1	–
2500+ grams										
<28 weeks	1	–	–	–	–	–	–	–	1	–
28-36 weeks	1,593	–	3	6	10	19	34	72	1,520	1
37-40 weeks	35,763	10	32	119	212	445	717	1,525	34,228	–
41+ weeks	5,163	–	3	22	31	65	141	262	4,901	–
Unknown	24	–	–	–	–	–	–	–	24	–
5 Minute apgar										
0-3	322	–	1	4	4	7	8	24	298	–
4-6	924	1	1	4	7	14	25	51	872	–
7-10	44,212	9	38	145	275	557	914	1,929	42,273	1
Not stated	75	–	–	2	–	–	2	4	71	–
Tobacco used										
Yes	4,337	1	6	15	43	79	156	299	4,036	1
No	41,076	9	34	140	243	497	792	1,706	39,361	–
Unknown	120	–	–	–	–	2	1	3	117	–
Alcohol used										
Yes	418	–	–	–	1	1	4	6	412	–
No	44,081	10	38	149	279	562	923	1,951	42,120	–
Not reported	935	–	2	6	6	15	21	50	885	–
Unknown	99	–	–	–	–	–	1	1	97	1
Birth order										
1 st	17,759	10	39	151	263	503	776	1,732	16,017	–
2 nd	14,742	–	1	4	21	68	151	245	14,497	–
3 rd	7,446	–	–	–	2	5	20	27	7,419	–
4 th	3,326	–	–	–	–	1	2	3	3,322	1
5+	2,260	–	–	–	–	1	–	1	2,259	–
Prenatal care										
No care	378	–	–	4	1	8	11	24	353	1
Little or late ²	2,344	5	9	17	41	51	89	207	2,132	–
Adequate ³	42,296	5	29	131	241	512	827	1,740	40,551	–
Unknown	515	–	2	3	3	7	22	37	478	–

– Quantity is zero.

¹ The birthweight was unknown for ten infants.

² Less than five prenatal visits or care began in the third trimester.

³ Prenatal care began prior to the third trimester; patient made at least five visits to a medical provider.

N.S. = Not stated.

TABLE 4-10. Demographic characteristics of mother by age, Oregon residents, 2016

Demographics of mother	Total births	Mother's age								
		<15	15	16	17	18	19	15-19	20+	N.S.
Total births	45,533	10	40	155	286	578	949	2,008	43,514	1
Ethnicity/race¹										
White	31,130	2	15	75	139	310	517	1,056	30,072	–
African American	945	–	3	5	5	11	20	44	901	–
American Indian	433	1	1	3	6	6	16	32	400	–
Asian	2,356	1	–	1	2	3	6	12	2,343	–
Native Hawaiian/Pacific Islander	320	–	–	–	4	8	12	24	296	–
Other and multiple races ² ...	1,893	–	5	4	12	39	61	121	1,771	1
Total Hispanic	8,456	6	16	67	118	201	317	719	7,731	–
Marital status										
Unmarried	16,221	10	38	152	263	505	751	1,709	14,501	1
Married	29,199	–	1	3	23	69	194	290	28,909	–
Unknown	113	–	1	–	–	4	4	9	104	–
Education										
8th grade or less	1,306	7	7	5	12	15	24	63	1,236	–
Some high school	4,624	3	33	142	213	306	315	1,009	3,612	–
High school graduate/GED	9,901	–	–	7	50	216	460	733	9,168	–
Some college	11,133	–	–	1	5	38	143	187	10,946	–
Associate's degree	3,772	–	–	–	–	–	3	3	3,769	–
Bachelor's degree	9,030	–	–	–	2	–	1	3	9,027	–
Postbaccalaureate	5,535	–	–	–	–	–	–	–	5,535	–
Unknown	232	–	–	–	4	3	3	10	221	1
Birth order										
1 st	17,759	10	39	151	263	503	776	1,732	16,017	–
2 nd	14,742	–	1	4	21	68	151	245	14,497	–
3 rd	7,446	–	–	–	2	5	20	27	7,419	–
4 th	3,326	–	–	–	–	1	2	3	3,322	1
5+	2,260	–	–	–	–	1	–	1	2,259	–
Unknown	–	–	–	–	–	–	–	–	–	–
Start of prenatal care										
1 st trimester	36,052	2	18	91	173	382	636	1,300	34,750	–
2 nd trimester	7,002	3	13	43	78	148	220	502	6,497	–
3 rd trimester	1,775	5	8	15	32	36	69	160	1,610	–
No care	378	–	–	4	1	8	11	24	353	1
Prenatal care										
Inadequate ³	2,722	5	9	21	42	59	100	231	2,485	1
Adequate	42,296	5	29	131	241	512	827	1,740	40,551	–
Source of payment										
Medicaid/OHP*	20,161	10	30	127	209	448	746	1,560	18,591	–
Private insurance	23,733	–	10	26	70	120	178	404	23,329	–
Self-pay	926	–	–	1	2	3	11	17	908	1
Other coverage	630	–	–	1	4	7	11	23	607	–
Unknown mention	83	–	–	–	1	–	3	4	79	–

– Quantity is zero.

¹ Non-Hispanic single mention race and Hispanic ethnicity.² 'Other and multiple races' includes missing or unknown race.³ Less than five prenatal visits or care began in the third trimester.

* Oregon Health Plan.

N.S. = Not stated.

TABLE 4-11. Demographic characteristics of abortion patients by age, Oregon residents, 2016

Demographics of patient	Total ¹	Patient's age								
		<15	15	16	17	18	19	15-19	20+	N.S.
Total abortions	8,209	15	34	73	138	239	323	807	7,385	2
Ethnicity/race										
Non-Hispanic White	5,473	8	21	46	80	140	221	508	4,956	1
Non-Hispanic African American	481	1	3	3	7	13	11	37	443	–
Non-Hispanic American Indian	105	–	–	1	3	3	6	13	92	–
Non-Hispanic Asian ²	393	–	1	–	2	8	8	19	374	–
Total Hispanic	1,210	5	5	13	32	51	57	158	1,047	–
Marital status										
Unmarried	5,850	13	29	59	121	202	279	690	5,147	–
Married	1,582	–	–	2	1	6	12	21	1,561	–
Unknown	777	2	5	12	16	31	32	96	677	2
Education										
8th grade or less	119	6	3	1	3	5	1	13	100	–
Some high school	834	8	28	60	101	62	65	316	510	–
High school graduate/GED	2,083	–	–	1	21	111	120	253	1,830	–
Some college	2,281	–	–	–	2	39	99	140	2,141	–
College/postbaccalaureate	2,152	–	–	–	–	2	8	10	2,142	–
Unknown	740	1	3	11	11	20	30	75	662	2
Children now alive										
One	1,792	–	–	3	10	28	56	97	1,694	1
Two	1,461	–	–	–	1	2	8	11	1,449	1
Three	630	–	–	–	–	–	–	–	630	–
Four+	308	–	–	–	–	1	1	2	306	–
Unknown	210	–	1	8	3	5	11	28	182	–
Previous abortions										
None	5,055	15	34	70	125	217	267	713	4,325	2
One	1,816	–	–	1	10	15	44	70	1,746	–
Two	733	–	–	–	–	4	5	9	724	–
Three+	463	–	–	–	1	–	–	1	462	–
Unknown	142	–	–	2	2	3	7	14	128	–
Gestation										
8 weeks or less	5,915	8	20	45	94	152	206	517	5,389	1
9-12 weeks	1,404	3	7	15	30	53	72	177	1,223	1
13-16 weeks	483	2	5	8	12	23	26	74	407	–
17 or more weeks	384	1	2	5	2	10	19	38	345	–
Unknown	23	1	–	–	–	1	–	1	21	–
Contraceptive used										
None used	4,786	8	22	43	88	160	212	525	4,253	–
Pills used	935	2	1	5	13	19	46	84	849	–
Condoms used	1,117	1	6	14	18	20	22	80	1,036	–
Other method used	842	3	2	1	11	17	23	54	785	–
Medical procedure										
Suction curettage	2,808	6	16	28	42	92	126	304	2,498	–
Medical (non-surgical)	3,666	4	8	33	68	101	139	349	3,311	2
Dilation & evacuation	1,713	5	10	12	28	45	58	153	1,555	–
Other specified	22	–	–	–	–	1	–	1	21	–

– Quantity is zero.

¹ Includes all abortions known to have been obtained by Oregon residents.

² Includes Chinese, Japanese, Filipino, other Asian and Pacific Islander.

N.S. = Not stated.

TABLE 4-12. Age of father by age of mother, Oregon residents, 2016

Father's age	Total	Mother's age								
		<15	15	16	17	18	19	20-24	25+	N.S.
Total	45,533	10	40	155	286	578	949	8,386	35,128	1
<15	3	1	2	—	—	—	—	—	—	—
15	13	—	4	8	1	—	—	—	—	—
16	47	—	3	21	11	8	3	—	1	—
17	107	1	5	21	33	25	13	5	4	—
18	240	1	5	29	41	73	50	35	6	—
19	401	—	2	10	47	84	111	127	20	—
20	583	—	—	4	29	89	128	295	38	—
21	782	—	—	3	15	52	126	511	75	—
22	977	—	—	3	7	37	92	697	141	—
23	1,196	—	—	—	9	22	70	849	246	—
24	1,450	—	—	1	1	17	52	999	380	—
25+	36,024	—	—	1	6	43	139	3,785	32,050	—
N.S.	3,710	7	19	54	86	128	165	1,083	2,167	1

— Quantity is zero.

TABLE 4-13. Age of father by age of mother, Oregon residents, 2012-2016

Father's age	Total	Mother's Age								
		<15	15	16	17	18	19	20-24	25+	N.S.
Total	226,941	93	355	1,009	1,802	3,369	5,598	45,737	168,967	11
<15	21	8	10	—	1	—	—	1	1	—
15	92	7	35	28	11	6	2	3	—	—
16	288	9	38	105	62	41	23	6	4	—
17	663	4	50	146	202	147	61	39	14	—
18	1,359	2	34	162	282	399	264	194	22	—
19	2,373	—	11	77	291	518	694	700	82	—
20	3,318	—	3	39	191	466	774	1,675	170	—
21	4,329	—	1	23	82	327	704	2,864	328	—
22	5,341	—	2	18	42	218	552	3,847	662	—
23	6,362	—	3	6	28	135	380	4,655	1,155	—
24	7,623	—	—	10	16	99	279	5,125	2,094	—
25+	175,421	—	4	6	42	266	813	20,488	153,801	1
N.S.	19,751	63	164	389	552	747	1,052	6,140	10,634	10

— Quantity is zero.

APPENDIX A: POPULATION

Appendix A: Population

Table A-1. Population distribution by age and sex, Oregon, 1950-2000 (selected years), 2005-2016

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	58,528	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	31,073	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
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
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
2000	3,421,399	223,005	234,474	242,098	244,427	230,406	233,850	236,845	255,751	270,823	271,315	235,840	173,008	131,380	112,614	106,728	218,835
M	1,696,550	114,006	120,115	124,235	125,429	118,100	121,031	122,237	129,083	134,072	134,761	117,417	85,369	64,218	53,193	48,510	84,774
F	1,724,849	108,999	114,359	117,863	118,998	112,306	112,819	114,608	126,668	136,751	136,554	118,423	87,639	67,162	59,421	58,218	134,061
2005	3,631,440	229,032	236,192	250,112	249,350	253,754	245,350	248,459	249,423	262,187	274,531	272,164	235,442	169,464	125,289	101,495	229,196
M	1,807,404	117,748	120,728	127,493	128,096	129,672	125,950	128,454	128,645	132,066	135,398	134,414	116,816	83,126	60,576	47,018	90,754
F	1,824,036	111,284	115,464	122,169	121,254	124,082	119,400	120,005	120,778	130,121	139,133	137,750	118,626	86,338	64,713	54,477	138,442
2006	3,690,505	230,910	237,216	252,504	251,425	259,704	248,533	251,540	248,957	261,231	276,019	280,822	251,186	178,919	128,422	100,797	232,320
M	1,838,346	118,827	121,169	129,072	129,146	132,669	127,362	130,125	128,969	132,069	135,957	138,459	124,789	87,809	62,397	46,886	92,642
F	1,852,159	112,084	116,047	123,433	122,279	127,035	121,171	121,415	119,988	129,162	140,062	142,363	126,397	91,109	66,025	53,911	139,678
2007	3,745,455	232,408	237,817	254,456	253,175	265,424	251,381	254,219	248,087	259,811	277,016	289,200	267,475	188,546	131,380	99,909	235,153
M	1,867,339	119,709	121,393	129,971	130,012	135,559	128,602	131,594	129,094	131,850	136,279	142,355	133,053	92,583	64,148	46,667	94,469
F	1,878,116	112,699	116,424	124,485	123,163	129,865	122,779	122,625	118,993	127,961	140,737	146,845	134,422	95,963	67,231	53,242	140,683
2008	3,791,075	234,168	242,401	253,790	256,673	259,359	262,454	258,656	259,537	260,859	272,087	277,102	259,397	206,048	147,484	109,384	231,675
M	1,890,189	120,054	124,243	129,545	131,583	132,637	134,635	133,035	134,056	133,088	135,603	136,260	128,042	101,457	71,392	51,441	93,120
F	1,900,886	114,115	118,158	124,246	125,090	126,722	127,819	125,621	125,482	127,771	136,485	140,842	131,355	104,591	76,092	57,943	138,555

Year and sex		Age groups																
		Total	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+
2009		3,823,465	234,555	243,024	253,412	257,141	258,627	265,937	259,627	260,379	257,872	268,503	275,905	265,073	217,588	157,370	113,323	235,131
	M	1,907,023	120,139	124,680	129,257	128,721	132,292	136,416	133,315	134,572	132,163	134,323	135,497	130,628	107,279	76,204	53,551	94,988
	F	1,916,442	114,416	118,344	124,155	125,420	126,335	129,521	126,312	125,806	125,709	134,180	140,408	134,445	110,309	81,166	59,771	140,143
2010		3,823,465	234,264	242,941	252,279	256,921	257,279	268,905	260,018	260,600	254,360	264,346	274,059	270,212	229,225	166,234	116,226	236,327
	M	1,907,023	119,877	124,756	128,586	131,503	131,630	137,945	133,304	134,776	130,976	132,766	134,433	132,948	113,164	80,525	55,185	95,963
	F	1,907,023	114,387	118,185	123,693	125,418	125,649	130,960	126,715	125,824	123,384	131,580	139,625	137,264	116,060	85,709	61,041	140,364
2011		3,857,625	237,996	236,267	242,121	253,963	253,352	266,455	261,862	255,011	250,951	261,846	272,797	272,104	240,710	177,377	127,550	247,263
	M	1,908,309	122,060	120,597	123,953	130,156	128,563	134,328	132,353	129,384	126,798	130,250	133,614	132,212	117,136	85,390	60,582	100,934
	F	1,949,316	115,936	115,670	118,168	123,807	124,789	132,127	129,509	125,627	124,153	131,596	139,183	139,892	123,574	91,988	66,968	146,330
2012		3,883,735	238,555	235,721	241,975	253,188	253,178	267,156	263,637	257,695	252,604	260,575	269,627	270,538	243,930	186,091	135,537	253,729
	M	1,920,130	122,352	120,257	123,923	129,710	128,432	134,658	133,105	130,420	127,410	129,742	132,360	131,449	118,459	89,437	64,345	104,071
	F	1,963,604	116,203	115,463	118,052	123,478	124,746	132,498	130,532	127,275	125,194	130,833	137,267	139,089	125,470	96,653	71,192	149,658
2013		3,919,020	239,469	235,523	242,005	252,560	253,762	268,823	265,499	260,497	254,373	259,448	266,638	269,109	247,305	196,642	145,070	262,300
	M	1,936,248	122,827	120,097	123,984	129,342	128,675	135,464	133,899	131,508	128,073	129,299	131,187	130,750	119,852	94,353	68,838	108,100
	F	1,982,772	116,642	115,426	118,021	123,217	125,087	133,359	131,599	128,989	126,300	130,149	135,451	138,359	127,453	102,288	76,232	154,199
2014		3,962,710	240,540	235,498	242,326	252,453	254,730	270,814	268,298	264,242	257,039	259,236	264,602	268,604	251,574	207,292	154,903	270,560
	M	1,956,552	123,383	120,028	124,193	129,241	129,120	136,436	135,162	133,061	129,181	129,306	130,475	130,498	121,669	99,299	73,469	112,030
	F	2,006,158	117,157	115,470	118,132	123,212	125,611	134,378	133,136	131,181	127,859	129,930	134,127	138,105	129,904	107,993	81,435	158,530
2015		4,013,845	241,795	235,647	242,822	252,898	256,791	273,970	272,264	269,161	260,820	260,132	263,708	269,245	257,006	216,708	164,044	276,833
	M	1,980,760	124,034	120,049	124,493	129,422	130,119	137,993	137,010	135,196	130,840	129,863	130,323	130,804	124,041	103,639	77,768	115,165
	F	2,033,085	117,761	115,598	118,329	123,475	126,672	135,977	135,254	133,965	129,979	130,269	133,385	138,441	132,965	113,069	86,276	161,670
2016		4,076,350	243,158	235,914	243,427	253,723	259,636	278,022	277,144	275,040	265,502	261,892	263,671	270,738	263,364	227,057	174,118	283,944
	M	2,010,468	124,742	120,133	124,849	129,799	131,514	139,998	139,312	137,797	132,940	130,847	130,591	131,520	126,847	108,407	82,503	118,668
	F	2,065,882	118,416	115,781	118,578	123,924	128,121	138,025	137,832	137,244	132,562	131,044	133,080	139,218	136,516	118,650	91,615	165,277

Table A-2. Population by age and sex for Oregon and its counties: July 1, 2016

County	Total population (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	80-84	85+
OREGON	4,076,350	243,158	235,914	243,427	147,520	106,203	259,636	278,022	277,144	275,040	265,502	261,892	263,671	270,738	263,364	227,057	174,118	119,318	80,402	84,224
BAKER	16,510	901	775	899	603	288	576	742	840	906	870	937	1,083	1,314	1,462	1,399	1,133	787	535	461
BENTON	91,320	3,485	3,822	4,340	3,164	5,773	14,017	6,718	5,449	4,704	4,520	4,759	5,083	5,510	5,463	4,813	3,593	2,529	1,670	1,909
CLACKAMAS	404,980	21,734	24,138	26,367	16,389	9,406	20,807	22,750	23,760	25,870	27,351	28,583	29,287	30,164	28,259	23,202	17,629	12,049	7,975	9,260
CLATSOP	38,225	2,174	1,970	2,109	1,316	957	2,100	2,005	2,275	2,331	2,194	2,349	2,460	2,997	3,079	2,910	1,992	1,322	872	813
COLUMBIA	50,795	2,679	2,864	3,360	1,999	1,097	2,301	2,442	3,210	3,169	3,544	3,471	3,887	3,913	3,905	3,194	2,322	1,624	915	900
COOS	63,190	3,474	3,026	3,287	2,068	1,424	2,755	3,037	3,541	3,388	3,326	3,614	4,089	4,907	5,388	5,072	4,227	2,928	1,977	1,661
CROOK	21,580	1,041	1,126	1,255	758	370	851	887	1,074	1,071	1,215	1,348	1,442	1,685	1,908	1,865	1,488	1,010	625	558
CURRY	22,600	830	776	977	625	322	699	871	905	1,079	1,008	1,264	1,477	1,975	2,468	2,392	2,026	1,281	850	776
DESCHUTES	176,635	10,720	10,755	11,209	6,467	3,774	8,712	10,535	11,269	12,170	11,974	11,749	11,652	11,815	12,370	10,952	8,278	5,306	3,512	3,415
DOUGLAS	110,395	5,653	5,389	6,105	3,917	2,370	5,070	5,180	5,899	5,787	6,021	6,407	7,221	8,332	9,156	8,619	7,215	5,130	3,464	3,457
GILLIAM	1,980	111	69	106	63	23	54	70	100	83	112	122	143	184	199	181	129	86	64	83
GRANT	7,410	305	290	378	226	110	239	267	355	353	353	423	463	629	705	725	575	443	273	285
HARNEY	7,320	390	389	429	302	158	267	370	411	389	395	423	466	577	635	586	431	322	191	191
HOOD RIVER	24,735	1,521	1,680	1,721	1,042	587	1,284	1,482	1,531	1,596	1,783	1,752	1,820	1,766	1,510	1,246	815	642	423	534
JACKSON	213,765	12,465	11,319	12,741	7,559	5,018	11,869	12,063	12,436	12,563	12,681	12,978	13,820	15,113	15,656	14,277	11,536	8,177	5,590	5,906
JEFFERSON	22,790	1,514	1,271	1,517	895	503	1,150	1,314	1,314	1,312	1,357	1,510	1,540	1,703	1,681	1,490	1,171	736	480	331
JOSEPHINE	84,675	4,255	4,110	4,819	2,963	1,727	3,645	3,904	4,500	4,334	4,484	4,905	5,473	6,244	7,241	6,663	5,782	4,036	2,748	2,842
KLAMATH	67,410	3,863	3,586	4,003	2,445	1,704	3,925	3,692	3,829	3,789	3,844	4,188	4,370	4,973	5,048	4,769	3,717	2,634	1,603	1,427
LAKE	8,015	351	319	403	289	101	268	341	463	443	549	541	606	644	735	685	497	383	215	183
LANE	365,940	17,430	17,455	19,241	12,812	12,539	31,559	25,210	23,823	21,825	21,635	21,648	22,851	24,700	24,791	22,379	17,536	11,723	8,211	8,571
LINCOLN	47,735	2,393	1,940	2,179	1,354	828	1,799	2,125	2,519	2,540	2,476	2,692	3,205	4,063	4,745	4,599	3,514	2,186	1,383	1,193
LINN	122,315	7,882	7,599	8,030	4,678	3,021	6,922	7,369	7,668	7,817	7,251	7,702	7,756	8,446	8,101	7,257	5,678	3,946	2,673	2,520
MALHEUR	31,705	2,284	2,065	2,111	1,241	923	2,048	2,059	1,993	2,025	1,937	1,874	1,894	1,894	1,848	1,700	1,369	1,019	664	759
MARION	333,950	24,337	23,563	23,091	14,016	9,874	22,609	22,866	21,950	21,153	20,429	20,073	20,148	20,242	19,173	16,214	12,706	8,811	6,199	6,495
MORROW	11,745	755	844	893	543	322	641	678	651	744	705	743	764	771	839	643	510	331	200	168
MULTNOMAH	790,670	47,671	42,029	40,337	23,129	18,604	55,328	72,518	70,907	67,341	59,940	53,788	50,439	47,599	42,675	34,394	24,559	16,267	10,929	12,218
POLK	79,730	5,222	5,065	5,521	3,229	2,895	6,081	4,759	4,526	4,867	4,759	4,619	4,770	4,864	4,818	4,417	3,491	2,552	1,679	1,597
SHERMAN	1,795	104	80	99	57	28	58	72	107	112	88	115	115	130	173	125	124	95	59	53
TILLAMOOK	25,920	1,520	1,276	1,451	873	495	1,002	1,183	1,305	1,432	1,421	1,476	1,760	2,081	2,295	2,256	1,681	1,125	718	567
UMATILLA	79,880	5,914	5,647	5,637	3,384	2,218	5,077	5,357	5,114	5,243	4,990	4,879	4,916	5,043	4,648	3,972	2,945	2,069	1,456	1,372
UNION	26,745	1,788	1,628	1,614	1,025	922	1,780	1,539	1,347	1,484	1,446	1,501	1,589	1,789	1,865	1,717	1,351	954	667	739
WALLOWA	7,140	442	377	361	209	98	198	243	384	323	391	368	454	564	677	666	522	354	250	261
WASCO	26,700	1,754	1,597	1,632	1,033	610	1,350	1,517	1,578	1,585	1,537	1,508	1,670	1,829	1,973	1,732	1,339	976	627	853
WASHINGTON	583,595	39,563	40,224	38,056	22,469	13,556	35,480	45,558	43,760	44,417	42,159	40,950	38,164	35,474	31,199	24,230	17,995	12,289	8,587	9,466
WHEELER	1,465	73	53	78	54	20	35	57	71	76	54	82	88	132	119	154	103	101	60	55
YAMHILL	104,990	6,560	6,800	7,071	4,322	3,539	7,080	6,242	6,281	6,709	6,701	6,552	6,703	6,673	6,558	5,563	4,138	3,096	2,058	2,344

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

Table A-2. Population by age and sex for Oregon and its counties: July 1, 2016

County	Male population																			
	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	80-84	85+
OREGON	2,010,468	124,742	120,133	124,849	75,800	53,999	131,514	139,998	139,312	137,797	132,940	130,847	130,591	131,520	126,847	108,407	82,503	54,416	34,544	29,708
BAKER	8,378	422	401	446	325	160	305	402	460	503	460	504	536	646	706	715	550	406	247	184
BENTON	45,566	1,708	1,799	2,217	1,619	2,883	7,518	3,691	2,758	2,352	2,243	2,333	2,465	2,666	2,639	2,319	1,756	1,168	727	707
CLACKAMAS	198,389	11,429	12,230	13,698	8,337	4,938	10,676	11,443	11,769	12,786	13,458	14,039	14,363	14,648	13,656	11,012	8,163	5,411	3,290	3,043
CLATSOP	18,974	1,009	996	1,012	711	500	1,109	1,035	1,222	1,188	1,130	1,182	1,218	1,454	1,492	1,400	1,008	630	377	300
COLUMBIA	25,392	1,386	1,450	1,775	1,047	580	1,208	1,220	1,609	1,556	1,770	1,735	1,940	1,947	1,655	1,106	775	396	324	
COOS	31,232	1,789	1,512	1,673	1,032	732	1,388	1,538	1,793	1,730	1,653	1,828	2,044	2,388	2,612	2,445	2,068	1,397	904	708
CROOK	10,650	547	568	658	390	195	437	427	522	527	592	645	723	777	923	938	754	494	314	221
CURRY	11,214	445	405	522	332	178	370	461	460	545	450	617	711	975	1,181	1,234	981	625	414	309
DESCHUTES	87,128	5,528	5,530	5,797	3,351	1,960	4,432	5,303	5,621	6,027	5,907	5,767	5,651	5,480	5,928	5,343	4,150	2,483	1,646	1,226
DOUGLAS	54,515	2,928	2,707	3,149	2,022	1,266	2,602	2,595	3,002	2,843	2,977	3,178	3,572	4,008	4,509	4,248	3,588	2,427	1,607	1,290
GILLIAM	1,025	62	29	63	34	14	34	40	58	52	61	64	79	83	111	78	69	39	29	24
GRANT	3,665	144	138	181	120	63	115	136	182	194	163	210	207	312	332	385	306	233	124	119
HARNEY	3,712	209	203	216	169	85	145	165	222	187	190	195	228	283	333	314	229	173	89	77
HOOD RIVER	12,427	764	923	883	538	328	697	766	766	811	855	885	899	896	773	613	401	304	164	159
JACKSON	104,138	6,361	5,728	6,463	3,798	2,476	5,892	6,070	6,134	6,386	6,276	6,472	6,807	7,267	7,351	6,813	5,519	3,748	2,422	2,156
JEFFERSON	12,017	827	634	801	451	260	622	689	728	744	737	815	810	908	843	768	648	371	232	128
JOSEPHINE	41,172	2,155	2,058	2,425	1,565	913	1,801	2,049	2,261	2,222	2,200	2,426	2,639	2,929	3,453	3,170	2,791	1,856	1,211	1,046
KLAMATH	33,396	1,923	1,888	2,004	1,264	886	1,971	1,842	1,915	1,897	1,937	2,101	2,143	2,429	2,466	2,348	1,827	1,279	738	538
LAKE	4,357	155	171	188	150	57	150	187	286	258	333	317	330	370	368	378	272	196	105	86
LANE	179,430	8,787	8,760	9,914	6,588	6,124	16,404	12,825	12,174	10,829	10,823	10,679	11,147	11,727	11,855	10,493	8,314	5,436	3,505	3,045
LINCOLN	23,216	1,190	994	1,079	742	449	965	1,111	1,285	1,325	1,190	1,350	1,507	1,874	2,198	2,155	1,715	1,008	649	434
LINN	60,273	4,170	3,935	4,113	2,365	1,544	3,412	3,628	3,750	3,904	3,595	3,835	3,853	4,132	3,947	3,498	2,674	1,797	1,197	924
MALHEUR	17,190	1,187	1,065	1,059	647	495	1,201	1,224	1,188	1,199	1,141	1,072	1,088	992	1,015	847	658	505	296	312
MARION	165,441	12,640	12,047	11,913	7,228	5,106	11,724	11,576	11,228	10,502	10,310	10,000	10,007	9,867	9,160	7,507	5,910	3,899	2,601	2,216
MORROW	6,020	397	415	458	270	175	355	369	325	394	361	395	381	380	438	310	252	165	106	74
MULTNOMAH	389,596	24,390	21,412	20,613	11,821	9,218	26,787	35,663	35,343	33,921	30,384	27,344	25,399	23,709	20,809	16,216	11,262	7,024	4,332	3,951
POLK	38,700	2,638	2,641	2,794	1,677	1,356	2,907	2,340	2,207	2,364	2,298	2,331	2,291	2,323	2,272	2,050	1,650	1,176	756	628
SHERMAN	914	50	39	52	31	14	31	31	58	65	46	66	55	63	94	61	56	47	24	31
TILLAMOOK	13,059	763	628	759	452	285	551	641	665	738	749	747	867	1,023	1,127	1,106	850	543	328	237
UMATILLA	41,938	3,094	2,775	2,933	1,742	1,162	2,839	3,032	2,877	2,896	2,756	2,613	2,578	2,656	2,348	1,977	1,499	985	655	521
UNION	13,242	922	860	808	573	476	834	821	675	719	753	702	795	876	907	871	681	436	287	245
WALLOWA	3,427	200	163	162	101	49	88	123	171	169	193	165	220	249	336	327	291	181	125	115
WASCO	13,217	857	804	794	555	325	680	804	789	806	771	735	831	884	990	903	654	462	270	305
WASHINGTON	284,302	20,181	20,687	19,552	11,492	6,970	17,678	22,390	21,528	21,709	20,746	20,135	18,820	16,989	14,573	11,157	7,842	5,244	3,448	3,160
WHEELER	728	43	29	39	31	15	18	33	49	35	25	34	38	63	52	82	42	53	26	20
YAMHILL	52,421	3,444	3,510	3,636	2,230	1,761	3,568	3,325	3,232	3,414	3,411	3,332	3,349	3,245	3,140	2,670	1,967	1,438	903	844

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

Table A-2. Population by age and sex for Oregon and its counties: July 1, 2016

County	Female population																			
	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	80-84	85+
OREGON	2,065,882	118,416	115,781	118,578	71,720	52,204	128,121	138,025	137,832	137,244	132,562	131,044	133,080	139,218	136,516	118,650	91,615	64,902	45,858	54,517
BAKER	8,132	480	374	453	278	128	270	340	380	403	410	433	547	669	756	684	582	381	288	277
BENTON	45,754	1,777	2,023	2,123	1,546	2,891	6,499	3,026	2,691	2,891	2,277	2,426	2,618	2,844	2,824	2,493	1,837	1,362	943	1,202
CLACKAMAS	206,591	10,305	11,908	12,669	8,052	4,467	10,131	11,307	11,991	13,085	13,893	14,543	14,923	15,517	14,603	12,190	9,467	6,638	4,685	6,217
CLATSOP	19,251	1,165	973	1,097	605	458	991	970	1,053	1,143	1,064	1,168	1,242	1,543	1,587	1,510	984	691	495	513
COLUMBIA	25,403	1,293	1,414	1,585	952	517	1,092	1,223	1,601	1,613	1,774	1,736	1,947	1,966	1,991	1,538	1,216	850	519	576
COOS	31,958	1,685	1,514	1,615	1,036	692	1,367	1,500	1,749	1,658	1,773	1,786	2,045	2,519	2,776	2,627	2,159	1,531	1,072	953
CROOK	10,930	495	558	598	368	175	414	461	553	544	623	703	720	907	985	927	734	516	311	338
CURRY	11,386	385	371	455	293	143	329	410	445	534	558	647	766	1,000	1,287	1,158	1,045	666	437	468
DESCHUTES	89,507	5,192	5,226	5,412	3,117	1,814	4,281	5,232	6,048	6,143	6,068	5,982	6,001	6,334	6,442	5,609	4,129	2,823	1,866	2,189
DOUGLAS	55,876	2,726	2,682	2,956	1,895	1,104	2,468	2,585	2,897	2,944	3,044	3,229	3,649	4,324	4,647	4,371	3,627	2,703	1,857	2,166
GILLIAM	955	49	39	43	30	9	20	30	41	31	51	58	64	101	87	103	59	46	36	59
GRANT	3,745	160	152	197	106	47	124	131	173	170	190	214	258	317	372	340	269	209	149	167
HARNEY	3,608	180	185	213	133	73	122	205	189	202	205	229	238	293	302	272	202	149	102	114
HOOD RIVER	12,308	757	757	838	504	259	586	716	765	786	928	867	921	870	737	633	414	337	259	375
JACKSON	109,627	6,104	5,591	6,279	3,761	2,541	5,977	5,993	6,303	6,177	6,405	6,506	7,012	7,846	8,305	7,464	6,018	4,429	3,168	3,750
JEFFERSON	10,773	687	637	716	445	243	528	625	586	568	620	695	730	794	838	722	523	365	248	204
JOSEPHINE	43,503	2,100	2,051	2,393	1,398	814	1,844	1,855	2,239	2,112	2,284	2,478	2,834	3,315	3,787	3,493	2,991	2,180	1,537	1,796
KLAMATH	34,014	1,940	1,697	2,000	1,181	819	1,955	1,849	1,913	1,892	1,907	2,086	2,227	2,544	2,582	2,421	1,890	1,355	866	889
LAKE	3,658	196	148	215	139	44	118	154	177	186	216	224	276	274	367	307	224	187	110	97
LANE	186,510	8,643	8,695	9,327	6,224	6,415	15,155	12,384	11,649	10,996	10,812	10,969	11,703	12,973	12,937	11,886	9,222	6,287	4,706	5,526
LINCOLN	24,519	1,203	947	1,100	612	380	835	1,014	1,234	1,215	1,286	1,343	1,698	2,189	2,547	2,444	1,799	1,178	734	759
LINN	62,042	3,712	3,664	3,917	2,313	1,476	3,511	3,740	3,917	3,912	3,656	3,867	3,903	4,314	4,155	3,758	3,005	2,149	1,476	1,596
MALHEUR	14,515	1,098	1,001	1,052	594	427	847	835	805	826	796	802	806	902	832	853	711	514	368	447
MARION	168,509	11,697	11,516	11,178	6,788	4,768	10,884	11,291	10,722	10,652	10,119	10,073	10,141	10,375	10,014	8,707	6,796	4,912	3,598	4,279
MORROW	5,725	358	429	435	273	147	285	309	326	350	345	348	383	391	401	333	258	166	94	94
MULTNOMAH	401,074	23,281	20,617	19,725	11,308	9,386	28,541	36,855	35,564	33,420	29,556	26,444	25,040	23,890	21,866	18,178	13,298	9,243	6,597	8,267
POLK	41,030	2,584	2,424	2,727	1,552	1,539	3,174	2,419	2,319	2,503	2,462	2,288	2,479	2,540	2,546	2,366	1,840	1,376	923	969
SHERMAN	881	54	41	47	26	14	26	40	48	47	43	49	60	67	80	64	68	48	34	22
TILLAMOOK	12,861	757	648	692	421	210	451	543	639	694	672	729	894	1,058	1,168	1,150	832	582	390	330
UMATILLA	37,942	2,819	2,872	2,704	1,642	1,056	2,238	2,325	2,238	2,347	2,235	2,266	2,338	2,387	2,300	1,995	1,446	1,084	802	851
UNION	13,503	867	768	805	452	446	946	718	672	764	693	799	794	913	958	846	670	518	380	494
WALLOWA	3,713	242	214	198	108	49	109	120	213	154	198	203	234	315	342	340	231	172	125	145
WASCO	13,483	897	793	839	478	284	670	713	789	778	767	773	839	944	983	829	685	514	357	549
WASHINGTON	299,293	19,382	19,537	18,503	10,977	6,587	17,802	23,167	22,232	22,708	21,413	20,815	19,345	18,485	16,626	13,073	10,153	7,045	5,139	6,306
WHEELER	737	30	24	39	23	5	17	24	21	41	30	48	49	69	68	71	61	48	34	34
YAMHILL	52,569	3,116	3,290	3,435	2,092	1,778	3,512	2,917	3,049	3,295	3,290	3,219	3,354	3,428	3,418	2,893	2,171	1,658	1,155	1,499

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

APPENDIX B: TECHNICAL NOTES

Appendix B: Technical notes - definitions

Births

- **Apgar Score** is a summary measure of the infant's condition based on 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, births tabulated as age of father not stated are distributed in the same proportions as births with known age within each five-year-age classification of the mother. The male birth rate is used to facilitate comparisons between Oregon and the national rate.

NCHS uses this procedure to avoid distortion in rates resulting from the disregard of the relationship between the mother and fathers' age.

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.M. — licensed direct entry midwife
- M.D. — medical doctor
- N.D. — naturopathic doctor
- R.N. — registered nurse

Endnote

¹Vital 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.

Appendix B: 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 termination of pregnancy

The induced termination of pregnancy data in this report represents nearly all abortions performed in Oregon during the current data year. Missing data is due to incomplete reporting by providers. Another consideration is the place of occurrence (Oregon) versus the mother's place of residence (residence could be anywhere). 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.

Number of First-Time Abortions By Year and Age Group, Oregon Occurrence, 1991-2005						
YEAR	AGE GROUPS					
	15-19	20-24	25-29	30-34	35-39	40-44
91	2584	2678	1190	716	402	122
92	2137	2396	1067	655	380	117
93	2267	2393	1176	598	357	117
94	2370	2379	1233	693	376	135
95	2510	2486	1402	755	463	144
96	2511	2566	1416	771	468	152
97	2679	2794	1502	835	501	151
98	2525	2679	1496	786	495	175
99	2426	2776	1482	803	503	163
00	2270	2888	1499	827	487	176
01	2194	3018	1445	826	481	149
02	1840	2665	1383	836	443	181
03	1839	2575	1270	749	420	165
04	1607	2370	1232	710	396	152
05	1605	2307	1261	729	427	178

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 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 1991 to 1995 and those of 20- to 24-year-olds from 1996 to 2000 with those of 25- to 29- year-olds from 2001 to 2005. This provides an estimate of the numerator in the following equation:

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

The denominator may be estimated by averaging the size of the cohort during 1991 to 1995. Table A-1 lists the annual estimate of the number of females within each cohort. For example, in 1991, the number of 15- to 19-year-old females was estimated to be 93,043; in the next year, it was 95,064. The average size of this age group from 1991 to 1995 was 98,540. Similarly, the number of 20- to 24- year-old women between 1996 and 2000 was 104,214 on average; the number of 25- to 29-year-olds averaged 93,065 between 2001 and 2005. Thus, between 1991 and 2005 the cohort of interest had an average population size of 98,606.

Substituting into the formula given above:

$$C_p = \frac{\text{Sum of First Abortions}}{N} = \frac{32,162}{98,606} = 0.326 \text{ or } 32.6 \text{ percent}$$

This figure approximates the proportion of females in the 25- to 29-year-old cohort who, by 2005, had ever had an abortion. This method of estimation assumes factors such as deaths and migration have not altered the composition of the female population in Oregon—that is, the women who left the state displayed the same characteristics as those who have moved into Oregon. It also assumes 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 teenage 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 Termination of Pregnancy methodology section.) 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- to 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 9 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 7 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.

Teen Birth Rates, U.S. vs. Oregon, Ages 15-19, 2008		
Race/Ethnicity	Birth Rate ¹	
	U.S.	Oregon
TOTAL*	41.5	34.0
Non-hispanic whites	26.7	26.7

¹ All rates per 1,000 females ages 15-19.
* All races and ethnicities combined.

Appendix B: 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

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

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.

Step 1: Finding the correct number

The first step is to determine how many instances 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 that 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 that 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 that occurred is compared to the population for which that event could have occurred, and the figure is then standardized to some number (such as 1,000 or 100,000) for convenience.

Here is an example:

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

the number of people
who could have died

a number chosen by vital
statisticians to improve the
ease of comparison

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 prepubescent or post-menopausal women in the population. (The turn of the century notion that only married women between the ages of 15 and 44 would be considered at risk of pregnancy has been abandoned for obvious reasons.)

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

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.

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 that do not reflect real changes. Consider Clatsop County’s infant mortality rates for a five-year period.

CLATSOP COUNTY			
YEAR	BIRTHS	INFANT DEATHS	INFANT DEATH RATES
2001	380	1	2.63
2002	432	6	13.89
2003	367	6	16.35
2004	397	2	5.04
2005	411	1	2.43
2001-2005	1,987	16	8.1

Clatsop county's five year infant death rate is 8.1, which is 2.5 percentage points higher than the state rate (5.6). Yet, for some years Clatsop's rate is more than six times as high as the rate of other years simply because five 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 percent 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:

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.

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

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. To the right 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 that 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 2005, 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 Statistic’s 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 1 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 that occur is not available in vital records. Nevertheless, a measure that excludes these outcomes provides an adequate indicator of the number of pregnancies.

Appendix B: Technical notes - formulas

GENERAL:

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

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

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

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

PREGNANCY:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

$$8. \text{ ABORTION RATIO} = \frac{\text{Resident Abortions}}{\text{Resident Births}} \times 1,000 \text{ or } \frac{\text{Occurrence Abortions}}{\text{Occurrence Births}} \times 1,000$$

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

$$9. \text{ ABORTION RATE} = \frac{\text{Resident Abortions or Occurrence Abortions}}{\text{Female Resident Population Aged 15-44}} \times 1,000$$

$$\begin{aligned} \text{Oregon 1994, Occurrence} \\ \text{with total adjusted} \\ \text{for unknown ages} \end{aligned} = \frac{13,300}{682,428} \times 1,000 = 19.5$$

DEATHS:

$$10. \text{ (CRUDE) DEATH RATE} = \frac{\text{Resident Deaths}}{\text{Population}} \times 1,000$$

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

$$11. \text{ INFANT DEATH RATE} = \frac{\text{Resident Infant Deaths}}{\text{Resident Births}} \times 1,000$$

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

$$12. \text{ NEONATAL DEATH RATE} = \frac{\text{Resident Neonatal Deaths}}{\text{Resident Births}} \times 1,000$$

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

$$13. \text{ POSTNEONATAL DEATH RATE} = \frac{\text{Resident Postneonatal Deaths}}{\text{Resident Births}} \times 1,000$$

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

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

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

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

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

MARRIAGE AND DIVORCE:

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

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

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

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

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

CALCULATING CONFIDENCE INTERVALS FOR RATES:

Confidence limits for rates based on less than 100 events

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

Lower Limit = R x L

Upper Limit = R x U

where:

R = the rate

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

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

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

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

$$\text{Lower Limit} = 13.0 \times 0.51671 = 6.7$$

$$\text{Upper Limit} = 13.0 \times 1.7468 = 22.7$$

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):

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

where:

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

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

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

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

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

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

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

DETERMINING STATISTICAL SIGNIFICANCE FOR RATES:

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

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

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

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

Baker County teen pregnancy rate for age 10-17

Lower Limit = 6.7

Upper Limit = 22.7

Jackson County teen pregnancy rate for age 10-17

Lower Limit = 11.5

Upper Limit = 16.0

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

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

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

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

where:

R_1 = the first rate

R_2 = the second rate

N_1 = the first number

N_2 = the second number

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

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

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

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

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

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

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

$$1.96 \sqrt{0.194}$$

$$= 1.96 \times .44$$

$$= 0.86$$

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

CALCULATING RATES ADJUSTED FOR SEX/AGE/RACE:

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

The *direct adjusted rate* applies each of the specific rates for a particular population (such as a county or 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. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, October 1999. The original materials are available online at 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 online at www.cdc.gov/nchs/data/tatnt/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

List of figures and tables

Figures

Figure 2-1.	Live birth rates, Oregon and the U.S., 1965-2016.....	2-1
Figure 2-2.	Age-specific birth rates, Oregon residents, 1980-2016.....	2-2
Figure 2-3.	Number of births by race and ethnicity of mother, Oregon residents, 1995-2016.....	2-4
Figure 2-4.	Percent of births to unmarried women, Oregon and U.S., 1975-2016.....	2-5
Figure 2-5.	Percentage of mothers who smoked during pregnancy by age and marital status, Oregon residents, 2016.....	2-7
Figure 2-6.	Percentage of appropriate weight gain by BMI, Oregon residents, 2016	2-8
Figure 2-7.	Percentage of mothers with late prenatal care and no prenatal care, Oregon residents, 1985-2016	2-10
Figure 2-8.	Low birthweight rates, Oregon and U.S., 1985-2016	2-14
Figure 3-1.	Number of abortions and births. Oregon occurrence, 1980-2016.....	3-1
Figure 3-2.	Ratio of abortions per 1,000 live births. Oregon occurrence, 1980-2016.....	3-2
Figure 3-3.	Trends in abortion rates by five-year age group, Oregon occurrence, 1985-2016.....	3-3
Figure 3-4.	Percent change of birth and abortion rates, Oregon occurrence abortions and Oregon resident births, 1980 vs. 2016	3-4
Figure 3-5.	Percentage of pregnancies terminated by induced abortion by race/ethnicity, Oregon occurrence, 2016	3-5
Figure 3-6.	Percentage of abortions after 16 weeks gestation by five-year age group, Oregon occurrence, 1990-2016.....	3-6
Figure 4-1.	Teen pregnancy rates, Oregon residents aged 15-17, 1985-2016	4-2
Figure 4-2.	Birth and abortion rates, Oregon residents aged 15-17, 1985-2016.....	4-2
Figure 4-3.	Births, abortions, and total pregnancies, Oregon residents aged 15-19, 1985-2016	4-3
Figure 4-4.	Percentage of pregnancies resulting in birth by age group, Oregon residents, 1985-2016	4-4
Figure 4-5.	Birth rates for 15- to 19-year-olds, Oregon and the U.S., 1990-2016.....	4-4
Figure 4-6.	Rates of low birthweight birth, Oregon residents <20 and 20+, 2010-12016.....	4-5
Figure 4-7.	Low birthweight rates by mother's age and prenatal care, Oregon residents, 2016.....	4-7
Figure 4-8.	Rates of late prenatal care by age group, Oregon residents, 2013-2016.....	4-8
Figure 4-9.	Rates of no prenatal care by age, Oregon resident births, 1990-2016.....	4-8

Figure 4-10.	Age distribution of father for births to Oregon residents aged 10-17, 2012-2016	4-10
Figure 4-11.	Father's age compared to teen mother's age, Oregon residents, 2012-2016	4-11

Tables

	Summary of Oregon Vital Events, 2016	1-1
Table 1-1.	Live births, births to unmarried mothers, marriages, and divorces, U.S., 1945-2016.....	1-2
Table 1-2.	Population, live births and births to unmarried mothers, marriages and divorces, Oregon, selected years 1910-1940, 1945-2016.....	1-4
Table 1-3.	Population, live births and births to unmarried mothers by county of residence, and marriages and divorces by county of occurrence, Oregon, 2016.....	1-6
Table 1-4.	Population and births by city of residence, Oregon, 2016	1-7
Table 1-5.	Oregon rates of low birthweight, and measures of prenatal care, 1980-2016.....	1-8
Table 1-6.	Domestic partnerships and dissolutions of domestic partnerships by county of occurrence, Oregon, 2016.....	1-9
Table 2-1.	Oregon resident births by age group of mother, selected years, 1960-1990, 1995-2016.....	2-17
Table 2-2.	Age specific birth rates, fertility rates and total fertility rates, Oregon, 1950, 1960, 1970, 1975-2016.....	2-18
Table 2-3.	Percent of Oregon resident births to unmarried mothers, by age of mother, 1975, 1980-2016.....	2-19
Table 2-4.	Age of mother by live birth order, Oregon resident births, 2016.....	2-20
Table 2-5.	Most frequently used baby names, Oregon occurrence, 2016	2-21
Table 2-6.	Pregnancies by age and county of residence, Oregon residents, 2016	2-22
Table 2-7.	Resident births by race of mother, Oregon, selected years 1975-1995, 2000-2016	2-23
Table 2-8.	Ethnicity, race and county of residence of mother, Oregon resident births, 2016.....	2-24
Table 2-9.	Births to unmarried mothers, Oregon residents, 2016.....	2-26
Table 2-10.	Age of mother and county of residence, Oregon resident births, 2016.....	2-27
Table 2-11.	Unmarried mothers by age of mother and county of residence, Oregon resident births, 2016.....	2-28
Table 2-12.	Region and selected country of mother's birth by continent of father's birth, Oregon residents, 2016.....	2-29
Table 2-13.	Race, ethnicity, and place of birth of mother by selected demographic characteristics (percent), Oregon resident births, 2016	2-30
Table 2-14.	Maternal characteristics by principal method of payment for delivery, Oregon resident births, 2016.....	2-32

Table 2-15.	Reported use of tobacco by mother's age and county of residence, Oregon births, 2016	2-33
Table 2-16.	Maternal risk factors by county of residence, Oregon 2016.....	2-34
Table 2-17.	Prenatal care by mother's age, Oregon residents, 2016	2-35
Table 2-18.	Prenatal care by mother's race and ethnicity, Oregon residents, 2016	2-36
Table 2-19.	Prenatal care by mother's education, Oregon residents, 2016.....	2-37
Table 2-20	Prenatal care by mother's county of residence, Oregon residents, 2016.....	2-38
Table 2-21.	Prenatal care by resident county for unmarried mothers, Oregon residents, 2016.....	2-39
Table 2-22.	Prenatal care by birthweight, Oregon residents, 2016	2-40
Table 2-23.	Rates of selected medical risk factors by age of mother, Oregon residents, 2016	2-41
Table 2-24.	Selected medical or health characteristics by mother's age (percents), Oregon resident births, 2016.....	2-42
Table 2-25.	Selected medical or health characteristics by mother's race (percents), Oregon resident births, 2016.....	2-44
Table 2-26.	Mothers with selected medical risk factors by race of mother, Oregon residents, 2016.....	2-48
Table 2-27.	Age of mother by birthweight, Oregon resident births, 2016	2-49
Table 2-28.	Age of unmarried mothers by birthweight, Oregon resident births, 2016.....	2-50
Table 2-29.	Race of mother and birthweight, Oregon residents 2016	2-51
Table 2-30.	Low birthweight infants by county of residence, Oregon, 2016.....	2-53
Table 2-31.	Weight gain of mother by period of gestation and race/ethnicity of mother, Oregon resident births, 2016	2-54
Table 2-32.	Percent low birthweight by weight gain of mother, period of gestation, and race/ethnicity of mother, Oregon residents, 2016	2-55
Table 2-33.	Live births with selected abnormal conditions of the newborn by age of mother, Oregon residents, 2016	2-56
Table 2-34.	Live births with selected abnormal conditions of the newborn by race of mother, Oregon residents, 2016	2-56
Table 2-35.	Congenital anomalies by age of mother, Oregon resident births, 2016.....	2-57
Table 2-36.	County of occurrence by type of institution and delivery attendant, Oregon occurrence births, 2016.....	2-58
Table 2-37.	Delivery method by day of birth, mother's age, race/ethnicity, and payment source (percents), Oregon resident births, 2016	2-60
Table 2-38.	Planned attendant by planned place of birth, Oregon occurrence, 2016	2-61
Table 2-39.	Maternal characteristics by planned place of birth, Oregon occurrence, 2016	2-62
Table 2-40.	Characteristics of labor & delivery, and maternal & infant health characteristics by planned place of birth, Oregon occurrence, 2016.....	2-63

Table 2-41.	Live birth order by county of residence, Oregon resident births, 2016	2-64
Table 2-42.	Payment of delivery by county of residence, Oregon resident births, 2016	2-65
Table 2-43.	Selected maternal conditions, infant characteristics by county, Oregon occurrence, 2016.....	2-66
Table 3-1.	Number, rate, and percent change for pregnancies, births, and abortions to 15- to 44-year-olds, Oregon, selected years 1980-1990, 1995-2016.....	3-8
Table 3-2.	Live births and induced abortions occurring in Oregon, 1980-2016.....	3-9
Table 3-3.	Induced abortions by race/ethnicity, marital status and age, Oregon occurrence, 2016	3-10
Table 3-4.	Abortions in relation to length of gestation by method, complications, and age of patient, Oregon occurrence, 2016.....	3-11
Table 3-5.	Contraceptive use, number of previous sbortions, and number of living children by age of patient, Oregon occurrence, 2016	3-12
Table 3-6.	Induced terminations of pregnancy by residence and age group of patient, Oregon occurrence, 2016.....	3-13
Table 3-7.	Induced terminations of pregnancy by county of residence and county of occurrence, Oregon occurrence, 2016.....	3-14
Table 4-1.	Oregon pregnancies to teens 15-19 years, 1975-2016.....	4-12
Table 4-2.	Oregon pregnancies to young teens 10-17 years, 1975-2016.....	4-14
Table 4-3.	Pregnancy rates of teens by county of residence, Oregon, 2016	4-15
Table 4-4.	Birth rates of teens by county of residence, Oregon, 2016.....	4-16
Table 4-5.	Abortion rates of teens by county of residence, Oregon, 2016.....	4-17
Table 4-6.	Births to teens 15-19 by race/ethnicity, adequacy of prenatal care and birthweight, Oregon Residents, 2016	4-18
Table 4-7.	Births to teens 15-19 by marital status, race/ethnicity, and age by adequacy of prenatal care and birthweight, Oregon residents, 2016	4-20
Table 4-8.	Births to teens 15-19 by level of prenatal care, low birthweight rates and county of residence, Oregon, 2016.....	4-22
Table 4-9.	Birth outcomes of infants by age of mother, Oregon residents, 2016.....	4-23
Table 4-10.	Demographic characteristics of mother by age, Oregon residents, 2016.....	4-24
Table 4-11.	Demographic characteristics of abortion patients by age, Oregon residents, 2016.....	4-25
Table 4-12.	Age of father by age of mother, Oregon residents, 2016	4-26
Table 4-13.	Age of father by age of mother, Oregon residents, 2012-2016.....	4-26

Appendices

Table A-1.	Population distribution by age and sex, Oregon, 1950-2000 (selected years), 2005-2016.....	A-1
Table A-2.	Population by age and sex for Oregon and its counties: July 1, 2016.....	A-3

APPENDIX D: SAMPLE FORMS

Appendix D: Sample form — Certificate of Live Birth



CERTIFICATE OF LIVE BIRTH

136-

Center for Health Statistics
Type or print in permanent black ink.
See handbook for instructions.

State File Number

CHILD	1. CHILD — NAME (First, Middle, Other Middle, Last, Suffix)			
	2. SEX	3a. DATE OF BIRTH (Month, Day, Year)	3b. TIME OF BIRTH	4a. COUNTY OF BIRTH
	4b. FACILITY OF BIRTH		4c. CITY, TOWN, OR LOCATION OF BIRTH	
MOTHER	5a. MOTHER'S CURRENT LEGAL NAME (First, Middle, Last, Suffix)		5b. MOTHER'S NAME PRIOR TO FIRST MARRIAGE (First, Middle, Last, Suffix)	
	5c. MOTHER'S RESIDENCE — STATE	5d. COUNTY	5e. CITY, TOWN, OR LOCATION	
	5f. STREET AND NUMBER			5g. ZIP CODE
	6a. DATE OF BIRTH (Month, Day, Year)	6b. BIRTHPLACE (State, Territory, or Foreign Country)		
FATHER/ SECOND PARENT	7. FATHER/SECOND PARENT'S CURRENT LEGAL NAME (First, Middle, Last, Suffix)			
	8a. DATE OF BIRTH (Month, Day, Year)	8b. BIRTHPLACE (State, Territory, or Foreign Country)		
INFORMANT	9a. INFORMANT'S NAME		9b. INFORMANT'S RELATIONSHIP TO CHILD	
	9c. INFORMANT'S SIGNATURE — I certify that the personal information provided on this certificate is correct to the best of my knowledge and belief. SIGNATURE			
CERTIFIER	10a. CERTIFIER'S NAME	10b. CERTIFIER'S TITLE	10c. CERTIFIER'S ADDRESS	
	10d. CERTIFIER'S SIGNATURE — I certify that this child was born alive at the place, time and date stated. SIGNATURE			10e. DATE SIGNED (Month, Day, Year)
	11a. REGISTRAR'S SIGNATURE			11b. DATE FILED (Month, Day, Year)

MOTHER	12a. WAS HOME DELIVERY PLANNED? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		12b. IS ADOPTION/LEGAL PROCEEDING EXPECTED? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		
	13. MOTHER'S MAILING ADDRESS — <input type="checkbox"/> Check if same as Mother's residence, OR:				
	13a. STATE	13b. CITY, TOWN, OR LOCATION	13c. STREET AND NUMBER	13d. ZIP CODE	
SSN	13e. RESIDENCE INSIDE CITY LIMITS? (Check appropriate answer) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		13f. PRIMARY TELEPHONE NUMBER	13g. SECONDARY TELEPHONE NUMBER	
	14a. REQUEST A SOCIAL SECURITY NUMBER FOR THIS CHILD? <input type="checkbox"/> Yes <input type="checkbox"/> No	14b. MOTHER'S — Social Security Number <input type="checkbox"/> Check if none	14c. FATHER/SECOND PARENT'S — Social Security Number <input type="checkbox"/> Check if none		
PARENTAGE	15a. MOTHER MARRIED — at conception, at delivery, or within 300 days prior to birth of the child? <input type="checkbox"/> Yes <input type="checkbox"/> No				
	15b. MOTHER IN OREGON REGISTERED DOMESTIC PARTNERSHIP — at conception, at delivery, or within 300 days prior to birth of the child? <input type="checkbox"/> Yes <input type="checkbox"/> No				
MOTHER	15c. PATERNITY ACKNOWLEDGMENT — If answers to 15a and 15b are "no", has a paternity acknowledgment been signed? <input type="checkbox"/> Yes <input type="checkbox"/> No				
	16. EDUCATION (Check highest grade completed)				
	<input type="checkbox"/> 8th grade or less <input type="checkbox"/> High school diploma or GED <input type="checkbox"/> Associate's degree <input type="checkbox"/> Master's degree <input type="checkbox"/> Unknown <input type="checkbox"/> 9th–12th grade; no diploma <input type="checkbox"/> Some college credit but no degree <input type="checkbox"/> Bachelor's degree <input type="checkbox"/> Doctorate or Professional degree				
	17. HISPANIC ORIGIN (Check all that apply)				
FATHER/ SECOND PARENT	<input type="checkbox"/> No, not Spanish/Hispanic/Latina <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Other Hispanic Origin (specify): _____ <input type="checkbox"/> Yes, Mexican, Mexican-American, Chicana <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Unknown				
	18. RACE (Check all that apply)				
	<input type="checkbox"/> White <input type="checkbox"/> Asian Indian <input type="checkbox"/> Korean <input type="checkbox"/> Guamanian or Chamorro <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Black or African American <input type="checkbox"/> Chinese <input type="checkbox"/> Vietnamese <input type="checkbox"/> Samoan <input type="checkbox"/> Unknown <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Filipino <input type="checkbox"/> Other Asian (specify): _____ (specify tribe(s)): _____ <input type="checkbox"/> Japanese <input type="checkbox"/> Native Hawaiian <input type="checkbox"/> Other Pacific Islander (specify): _____				
	19. EDUCATION (Check highest grade completed)				
MOTHER	<input type="checkbox"/> 8th grade or less <input type="checkbox"/> High school diploma or GED <input type="checkbox"/> Associate's degree <input type="checkbox"/> Master's degree <input type="checkbox"/> Unknown <input type="checkbox"/> 9th–12th grade; no diploma <input type="checkbox"/> Some college credit but no degree <input type="checkbox"/> Bachelor's degree <input type="checkbox"/> Doctorate or Professional degree				
	20. HISPANIC ORIGIN (Check all that apply)				
	<input type="checkbox"/> No, not Spanish/Hispanic/Latino <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Other Hispanic Origin (specify): _____ <input type="checkbox"/> Yes, Mexican, Mexican-American, Chicano <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Unknown				
	21. RACE (Check all that apply)				
FATHER/ SECOND PARENT	<input type="checkbox"/> White <input type="checkbox"/> Asian Indian <input type="checkbox"/> Korean <input type="checkbox"/> Guamanian or Chamorro <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Black or African American <input type="checkbox"/> Chinese <input type="checkbox"/> Vietnamese <input type="checkbox"/> Samoan <input type="checkbox"/> Unknown <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Filipino <input type="checkbox"/> Other Asian (specify): _____ (specify tribe(s)): _____ <input type="checkbox"/> Japanese <input type="checkbox"/> Native Hawaiian <input type="checkbox"/> Other Pacific Islander (specify): _____				
	22. DID MOTHER GET WIC FOOD? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	23. MOTHER'S HEIGHT (feet/inches)	24a. MOTHER'S WEIGHT (Pre-pregnancy) (pounds)	24b. MOTHER'S WEIGHT (At delivery) (pounds)	
	25. CIGARETTE SMOKING BEFORE AND DURING PREGNANCY		26. ALCOHOL USE DURING THIS PREGNANCY? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	# per day 3 months before pregnancy # _____ Cigarettes 2nd 3 months of pregnancy # _____ Cigarettes 1st 3 months of pregnancy # _____ Cigarettes 3rd 3 months of pregnancy # _____ Cigarettes		If yes, average number of drinks per week?		
MOTHER	27. MOTHER'S MEDICAL RECORD # (optional)	28. MOTHER'S MEDICAID #	29. DATE OF LAST MENSES (Month, Day, Year)		
	30. PRINCIPAL METHOD OF PAYMENT			31a. DATE OF 1st PRENATAL CARE VISIT (Month, Day, Year) <input type="checkbox"/> Check if none	
	<input type="checkbox"/> Medicaid/Oregon Health Plan <input type="checkbox"/> Self-pay <input type="checkbox"/> Champus/Tricare <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Private insurance <input type="checkbox"/> Indian Health Services <input type="checkbox"/> Other government <input type="checkbox"/> Unknown				
31b. TOTAL # OF PRENATAL CARE VISITS	32a. PREVIOUS LIVE BIRTHS (# now living)	32b. PREVIOUS LIVE BIRTHS (# now dead)	32c. DATE OF LAST LIVE BIRTH (Month, Year)		

COMPLETE BACKSIDE OF FORM

45-1 (03/15)

SPACE ABOVE MUST BE LEFT BLANK

33. OTHER PREGNANCY OUTCOMES (<i>Spontaneous and Induced terminations, ectopic pregnancies</i>)		34. MOTHER TESTED FOR HIV?	
33a. COMBINED # OTHER OUTCOMES	33b. DATE OF LAST OTHER OUTCOME (Month, Year)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
35. PREGNANCY RISK FACTORS (<i>Check all that apply</i>)			
<input type="checkbox"/> Diabetes — Gestational		<input type="checkbox"/> Hypertension — Eclampsia	<input type="checkbox"/> Mother had a previous cesarean delivery
<input type="checkbox"/> Diabetes — Pre-pregnancy		<input type="checkbox"/> Previous Preterm Births (<37 completed weeks gestation)	How many? _____
<input type="checkbox"/> Hypertension — Pre-pregnancy (<i>Chronic</i>)		<input type="checkbox"/> Pregnancy resulted from infertility treatment — fertility-enhancing drugs	<input type="checkbox"/> None of the above
<input type="checkbox"/> Hypertension — Gestational		<input type="checkbox"/> Pregnancy resulted from infertility treatment — assisted reproductive technology	
36. MOTHER TESTED FOR: (<i>Check all that apply</i>)	37. INFECTIONS PRESENT and/or TREATED (<i>Check all that apply</i>)	38. OBSTETRIC PROCEDURES (<i>Check all that apply</i>)	39. ONSET OF LABOR
<input type="checkbox"/> Syphilis <input type="checkbox"/> Group B Strep	<input type="checkbox"/> Gonorrhea <input type="checkbox"/> Hepatitis B <input type="checkbox"/> Syphilis <input type="checkbox"/> Hepatitis C <input type="checkbox"/> Chlamydia <input type="checkbox"/> None of the above	<input type="checkbox"/> Cervical cerclage <input type="checkbox"/> Tocolysis <input type="checkbox"/> External cephalic version successful <input type="checkbox"/> External cephalic version failed <input type="checkbox"/> None of the above	<input type="checkbox"/> Premature rupture ≥ 12 hours <input type="checkbox"/> Precipitous labor < 3 hours <input type="checkbox"/> Prolonged labor ≥ 20 hours <input type="checkbox"/> None of the above
40. CHARACTERISTICS OF LABOR AND DELIVERY (<i>Check all that apply</i>)			
<input type="checkbox"/> Induction of labor		<input type="checkbox"/> Steroids for fetal lung maturation prior to delivery	<input type="checkbox"/> Clinical chorioamnionitis diagnosed during labor or maternal temp. ≥ 38°C
<input type="checkbox"/> Augmentation of labor		<input type="checkbox"/> Antibiotics during labor	<input type="checkbox"/> Epidural or spinal anesthesia during labor
			<input type="checkbox"/> None of the above
41. METHOD OF DELIVERY			
41a. FETAL PRESENTATION AT DELIVERY	41b. FINAL ROUTE AND METHOD OF DELIVERY		
<input type="checkbox"/> Cephalic <input type="checkbox"/> Other <input type="checkbox"/> Breech <input type="checkbox"/> Unknown	<input type="checkbox"/> Vaginal/spontaneous <input type="checkbox"/> Vaginal/vacuum <input type="checkbox"/> Unknown <input type="checkbox"/> Vaginal/forceps <input type="checkbox"/> Cesarean — If Cesarean, was a trial of labor attempted? <input type="checkbox"/> Yes <input type="checkbox"/> No		
42. MATERNAL MORBIDITY (<i>Check all that apply</i>)			
<input type="checkbox"/> Maternal transfusion		<input type="checkbox"/> Ruptured uterus	<input type="checkbox"/> Admission to intensive care unit
<input type="checkbox"/> 3rd or 4th degree perineal laceration		<input type="checkbox"/> Unplanned hysterectomy	<input type="checkbox"/> Unplanned operating room procedure following delivery
			<input type="checkbox"/> None of the above <input type="checkbox"/> Unknown at this time
43. MOTHER TRANSFERRED TO THIS FACILITY PRIOR TO DELIVERY?		44. INFANT TRANSFERRED FROM THIS FACILITY AFTER DELIVERY?	
<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, name of facility: _____		<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, name of facility: _____	
45. INFANT'S MEDICAL RECORD # (<i>optional</i>)	46. BIRTH WEIGHT _____ lbs./oz. OR _____ g	47. APGAR _____ 5 min. _____ 10 min.	48. OBSTETRIC ESTIMATE OF GESTATION (<i>weeks</i>)
49. PLURALITY (<i>Single, Twin, Triplet, etc.</i>)	50. BIRTH ORDER (<i>1st, 2nd, 3rd, 4th, etc.</i>)	51. NUMBER BORN ALIVE THIS DELIVERY	52. INFANT ALIVE AT TIME OF REPORT? <input type="checkbox"/> Yes <input type="checkbox"/> No
53. INFANT BREASTFED AT DISCHARGE? <input type="checkbox"/> Yes <input type="checkbox"/> No	54. ABNORMAL CONDITIONS OF THE NEWBORN (<i>Check all that apply</i>)		
	<input type="checkbox"/> Assisted ventilation required immediately <input type="checkbox"/> Antibiotics received by newborn for suspected neonatal sepsis		
	<input type="checkbox"/> Assisted ventilation for more than 6 hours <input type="checkbox"/> Seizure/serious neurologic dysfunction		
	<input type="checkbox"/> NICU Admission <input type="checkbox"/> Other significant birth injury		
	<input type="checkbox"/> Newborn given surfactant replacement therapy <input type="checkbox"/> None of the above		
55. CONGENITAL ANOMALIES (<i>Check all that apply</i>)			
<input type="checkbox"/> Anencephaly		<input type="checkbox"/> Suspected chromosomal disorder, karyotype confirmed	
<input type="checkbox"/> Meningocele/Spina bifida		<input type="checkbox"/> Suspected chromosomal disorder, karyotype pending	
<input type="checkbox"/> Cyanotic congenital heart disease		<input type="checkbox"/> Suspected chromosomal disorder, karyotype unknown	
<input type="checkbox"/> Congenital diaphragmatic hernia		<input type="checkbox"/> Hypospadias	
<input type="checkbox"/> Omphalocele		<input type="checkbox"/> None of the anomalies listed above	
<input type="checkbox"/> Gastroschisis			
		<input type="checkbox"/> Limb reduction defect	
		<input type="checkbox"/> Cleft lip with or without cleft palate	
		<input type="checkbox"/> Cleft palate alone	
		<input type="checkbox"/> Down Syndrome, karyotype confirmed	
		<input type="checkbox"/> Down Syndrome, karyotype pending	
		<input type="checkbox"/> Down Syndrome, karyotype unknown	
56a. WAS HEARING TEST PERFORMED? <input type="checkbox"/> Inpatient <input type="checkbox"/> Refused <input type="checkbox"/> Missed <input type="checkbox"/> Outpatient <input type="checkbox"/> Transfer	56b. TEST DATE (Month, Day, Year)	56c. TEST RESULTS — Left ear <input type="checkbox"/> Pass <input type="checkbox"/> Equipment failure <input type="checkbox"/> Refer <input type="checkbox"/> Physical condition Equipment type used: <input type="checkbox"/> A-ABR <input type="checkbox"/> OAE	56d. TEST RESULTS — Right ear <input type="checkbox"/> Pass <input type="checkbox"/> Equipment failure <input type="checkbox"/> Refer <input type="checkbox"/> Physical condition Equipment type used: <input type="checkbox"/> A-ABR <input type="checkbox"/> OAE
57a. DID INFANT RECEIVE HEPATITIS B VACCINE? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused	57b. DATE ADMINISTERED (Month, Day, Year)	57c. MANUFACTURER <input type="checkbox"/> Glaxo <input type="checkbox"/> Merck <input type="checkbox"/> Other	57d. LOT NUMBER
58. MOTHER HBsAg+? <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Unknown <input type="checkbox"/> Not screened			
59a. DID INFANT RECEIVE HEPATITIS B IMMUNE GLOBULIN (HBIG)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused	59b. DATE ADMINISTERED (Month, Day, Year)	59c. MANUFACTURER <input type="checkbox"/> Glaxo <input type="checkbox"/> Merck <input type="checkbox"/> Other	59d. LOT NUMBER

MOTHER

NEWBORN

Appendix D: Sample form — Report of Induced Termination of Pregnancy



REPORT OF INDUCED TERMINATION OF PREGNANCY

Information is **PRIVATE** and **CONFIDENTIAL**

STATE FILE NUMBER _____


TO BE COMPLETED BY PATIENT	Facility use only	1. Patient's ID number: <small>(Patient ID/Facility Chart/Case No.)</small> _____	2. Date termination performed: <small>(Month/Day/Year)</small> _____	3. Patient's age: _____	
	4. Patient's residence address: <small>(City) (County) (State) (Zip)</small> _____		5. Inside city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
TO BE COMPLETED BY FACILITY	6. Date last normal menses began: <small>(Month/Day/Year)</small> _____	Facility use only	7. Clinical estimation of gestational age: _____ Completed weeks		
	8. Previous live births (enter a number or "none"):		9. Previous terminations (enter a number or "none"):		
	a. Live births now living: _____		a. Spontaneous Abortions, Miscarriages, Stillbirths, Fetal Deaths: _____		
	b. Live births now dead: _____		b. Induced Abortions (Do NOT include this termination): _____		
	10. Marital status: <input type="checkbox"/> Never Married <input type="checkbox"/> Now Married <input type="checkbox"/> Declaration of Oregon Registered Domestic Partnership <input type="checkbox"/> Separated <input type="checkbox"/> Divorced/Dissolution of Domestic Partnership <input type="checkbox"/> Widowed <input type="checkbox"/> Unknown				
	11. Education: <input type="checkbox"/> 8th grade or less; none <input type="checkbox"/> Some college credit, but no degree <input type="checkbox"/> Master's degree <input type="checkbox"/> 9th-12th grade; no diploma <input type="checkbox"/> Associate's degree <input type="checkbox"/> Doctorate or professional degree <input type="checkbox"/> High school graduate or GED <input type="checkbox"/> Bachelor's degree <input type="checkbox"/> Unknown				
	12. Is patient of Hispanic origin?		13. Patient's race (select one or more):		
	<input type="checkbox"/> No, not Spanish/Hispanic/Latina <input type="checkbox"/> Yes, Mexican, Mexican-American, Chicano <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Yes, other Hispanic Origin (specify): _____		<input type="checkbox"/> White <input type="checkbox"/> Black or African American <input type="checkbox"/> American Indian or Alaska Native (specify tribe(s)): _____ <input type="checkbox"/> Asian Indian <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other Asian (specify): _____ <input type="checkbox"/> Native Hawaiian <input type="checkbox"/> Samoan <input type="checkbox"/> Guamanian or Chamorro <input type="checkbox"/> Other Pacific Islander (specify): _____ <input type="checkbox"/> Other (specify): _____		
	14. Was birth control being used at the time patient became pregnant? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If yes, specify method(s) below (check all that apply): <input type="checkbox"/> Birth Control Pill <input type="checkbox"/> Hormone Implant <input type="checkbox"/> IUD/IUC <input type="checkbox"/> Patch <input type="checkbox"/> Condoms, Prophylactics <input type="checkbox"/> Rhythm <input type="checkbox"/> NuvaRing <input type="checkbox"/> Non-surgical sterilization; e.g., Essure <input type="checkbox"/> Emergency Contraception <input type="checkbox"/> Contraceptive Injection; e.g., Depo-Provera <input type="checkbox"/> Other (specify): _____				
	15. Name of facility where termination occurred: _____				
16. Location of termination: <small>(City) (County) (State) (Zip)</small> _____					
17. Primary procedure that terminated this pregnancy (check only one): <input type="checkbox"/> Suction Curettage <input type="checkbox"/> Medical – Mifepristone <input type="checkbox"/> Other medical (Non-surgical); specify medication(s): _____ <input type="checkbox"/> Dilation and Evacuation (D & E) <input type="checkbox"/> Vaginal Prostaglandin <input type="checkbox"/> Sharp Curettage (D & C) <input type="checkbox"/> Hysterotomy/Hysterectomy <input type="checkbox"/> Other (specify): _____					
18. Other procedures used for this termination (check all that apply): <input type="checkbox"/> Suction Curettage <input type="checkbox"/> Medical – Mifepristone <input type="checkbox"/> Other medical (Non-surgical); specify medication(s): _____ <input type="checkbox"/> Dilation and Evacuation (D & E) <input type="checkbox"/> Vaginal Prostaglandin <input type="checkbox"/> Sharp Curettage (D & C) <input type="checkbox"/> Hysterotomy/Hysterectomy <input type="checkbox"/> None <input type="checkbox"/> Other (specify): _____					
19. Was follow-up visit recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No		20. Was post-operative/after-care information provided? <input type="checkbox"/> Yes <input type="checkbox"/> No			
21. Were there complications at the time of the procedure? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, specify complications (check all that apply): <input type="checkbox"/> Hemorrhage <input type="checkbox"/> Infection <input type="checkbox"/> Uterine perforation <input type="checkbox"/> Cervical laceration <input type="checkbox"/> Retained products <input type="checkbox"/> Failure of first method <input type="checkbox"/> Other (specify): _____					
22. At time of completion of this report, had follow-up visit occurred at this facility? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If yes, specify complications (check all that apply): 22a. Complications: <input type="checkbox"/> None <input type="checkbox"/> Hemorrhage <input type="checkbox"/> Infection <input type="checkbox"/> Uterine perforation <input type="checkbox"/> Cervical laceration <input type="checkbox"/> Retained products <input type="checkbox"/> Failure of first method <input type="checkbox"/> Other (specify): _____					
23. At time of completion of this report, had follow-up visit occurred outside this facility? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If yes, specify location of follow-up visit AND specify complications (check all that apply): 23a. Type of location of follow-up visit: <input type="checkbox"/> Physician's Office <input type="checkbox"/> Clinic <input type="checkbox"/> Hospital <input type="checkbox"/> Unknown <input type="checkbox"/> Other (specify): _____ 23b. Complications: <input type="checkbox"/> None <input type="checkbox"/> Hemorrhage <input type="checkbox"/> Infection <input type="checkbox"/> Uterine perforation <input type="checkbox"/> Cervical laceration <input type="checkbox"/> Retained products <input type="checkbox"/> Failure of first method <input type="checkbox"/> Unknown <input type="checkbox"/> Other (specify): _____					

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

(See information on the back side of this form.)

45-113 (01/15)

Appendix D: Sample form — Application, License, and Record of Marriage


136-
 Authority CENTER FOR HEALTH STATISTICS
APPLICATION, LICENSE, AND RECORD OF MARRIAGE

Local file number _____ State file number _____

LOCAL OFFICIAL	County: _____	License effective on or after: _____	License expires (month, day, year): _____
PARTY A: Groom, Bride or Spouse CONSENT FORM <input type="checkbox"/> WAIVER	PARTY A is (check one): <input type="checkbox"/> Groom <input type="checkbox"/> Bride <input type="checkbox"/> Spouse		
	1a. Legal name: First _____ Middle _____ Last _____		
	1b. Legal name at birth (if different): _____		1c. Previous name (if different): _____
	2. Birthplace (state or foreign country): _____	3. Date of birth (month, day, year): _____	4. Age (18 or older, 17 with consent): _____
	5. Sex: _____	6. Occupation: _____	7. Previous marital status (single, widowed, divorced): _____
	8a. Father's name (first, middle, legal surname prior to first marriage): _____		8b. Birthplace (state or foreign country): _____
	9a. Mother's name (first, middle, legal surname prior to first marriage): _____		9b. Birthplace (state or foreign country): _____
	10a. Address: Street and number _____ City or town _____ State/country _____ ZIP _____	10b. County of residence: _____	
	11. Legal name taken after marriage: First _____ Middle _____ Last _____		
	PARTY B is (check one): <input type="checkbox"/> Groom <input type="checkbox"/> Bride <input type="checkbox"/> Spouse		
	PARTY B: Groom, Bride or Spouse CONSENT FORM <input type="checkbox"/> WAIVER	12a. Legal name: First _____ Middle _____ Last _____	
12b. Legal name at birth (if different): _____		12c. Previous name (if different): _____	
13. Birthplace (state or foreign country): _____		14. Date of birth (month, day, year): _____	15. Age (18 or older, 17 with consent): _____
16. Sex: _____		17. Occupation: _____	18. Previous marital status (single, widowed, divorced): _____
19a. Father's name (first, middle, legal surname prior to first marriage): _____		19b. Birthplace (state or foreign country): _____	
20a. Mother's name (first, middle, legal surname prior to first marriage): _____		20b. Birthplace (state or foreign country): _____	
21a. Address: Street and number _____ City or town _____ State/country _____ ZIP _____		21b. County of residence: _____	
22. Legal name taken after marriage: First _____ Middle _____ Last _____			
AFFIDAVIT OF AGE 23. <input type="checkbox"/> Party A — name and address of affiant: _____ 24. <input type="checkbox"/> Party B — name and address of affiant: _____			
SIGNATURES 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. 25. Party A's legal signature: _____ Date: _____ 26. Party B's legal signature: _____ Date: _____ Neither you nor your spouse is the property of the other. The laws of the State of Oregon affirm your right to enter into marriage and, at the same time, to live within the marriage free from violence and abuse.			
LICENSE TO MARRY This license authorizes the marriage in this state of the parties named above by any person duly authorized to perform a marriage ceremony under the laws of the State of Oregon. 27. Date license issued: _____ 28. Signature of issuing official: _____ 29. Title of issuing official: _____			
CEREMONY 30a. Date of marriage: _____ 30b. Where married (city, town or location): _____ 30c. County: OREGON 31a. I certify that the above named persons were married on the date listed above (30a). Signature of person performing ceremony (officiant): _____ 31b. Title: _____ 31c. Name and address of officiant (person performing ceremony): Name: _____ Address: _____ Phone: _____ 31d. Name and address of authorizing religious congregation/organization of officiant: Name: _____ Address: _____ Phone: _____ 32. Witness name (print): _____ 33. Witness name (print): _____			
LOCAL OFFICIAL 34. Signature of county official: _____ 35. Date filed by county official (month, day, year): _____			

APPLICANT: DO NOT WRITE BETWEEN THESE LINES
OFFICIAL USE ONLY

ORS.432.010 required statistical information: The information below will not appear on the certified copies of the record.

36. Party A's Social Security number (specify number, none or unknown): _____		37. Party B's Social Security number (specify number, none or unknown): _____	
38. Number of this marriage — first, second, etc. (specify below):	39. If previously married, the date and reason the last marriage ended: By death, divorce, dissolution or annulment (specify below): _____ Date (month, day, year): _____	40. Race — OPTIONAL such as Asian, American Indian, African American, White, etc. (specify below): _____	41. Education (specify the highest grade completed): Elementary/ Secondary (0–12): (1–4 or 5+); College
PARTY A	38a.	39a.	39b.
PARTY B	38b.	39c.	39d.
		40a.	40b.
		41a.	41b.

The authorized person performing this marriage is required to return the original copy of this form to the county clerk within five (5) days following the date of the marriage (ORS 432.173). A penalty may be assessed (ORS 106.990). 45-4 (4/14)

ORIGINAL — VITAL RECORDS COPY

Appendix D: Sample form — Declaration of Oregon Registered Domestic Partnership



Oregon Department of Human Services
Center for Health Statistics

136-

Local file number

State file number

Declaration of Oregon Registered Domestic Partnership

This declaration of domestic partnership must be registered with an Oregon county clerk to be valid.

Partner A	1. Partner A – Legal name: First Middle Last						
	2. Surname at birth (if different than current legal name):			3. Other legal surnames used:			
	4. Birthplace (state or foreign country):		5. Date of birth (month, day, year):		6. Age (18 or older):		
	7. Sex:	8. Current status (never married, widowed, divorced):		9a. Resident county:	9b. Resident state:		
	9c. Mailing address: Number and street		City or town		State	Country ZIP code	
	10. Partner A legal name taken after domestic partnership: First Middle Last						
	Partner B	11. Partner B – Legal name: First Middle Last					
		12. Surname at birth (if different than current legal name):			13. Other legal surnames used:		
		14. Birthplace (state or foreign country):		15. Date of birth (month, day, year):		16. Age (18 or older):	
		17. Sex:	18. Current status (never married, widowed, divorced):		19a. Resident county:	19b. Resident state:	
19c. Mailing address: Number and street		City or town		State	Country ZIP code		
20. Partner B legal name taken after domestic partnership: First Middle Last							
Signatures/notaries	I acknowledge that: I am entering into a domestic partnership with the party listed above (Partner B); I am at least 18 years of age; I and/or my partner reside in Oregon and am otherwise capable to enter into this relationship. I declare the information and representations contained herein are true, correct and contain no material omissions of fact to the best of my knowledge and belief. I consent to the jurisdiction of the circuit courts of Oregon for the purpose of an action to obtain a judgment of dissolution or annulment of the domestic partnership or for legal separation of the partners in the domestic partnership, or for any other proceeding related to the partners' rights and obligations, even if one or both partners cease to reside in or to maintain a domicile in this state.						
	Signature partner A (current name) _____ Date _____ State of _____ county of _____. This instrument was acknowledged before me on _____ (date), by _____ (name(s) of person(s)). Signature of notarial officer: _____ Seal: My commission expires: _____						
	I acknowledge that: I am entering into a domestic partnership with the party listed above (Partner A); I am at least 18 years of age; I and/or my partner reside in Oregon; and am otherwise capable to enter into this relationship. I declare the information and representations contained herein are true, correct and contain no material omissions of fact to the best of my knowledge and belief. I consent to the jurisdiction of the circuit courts of Oregon for the purpose of an action to obtain a judgment of dissolution or annulment of the domestic partnership or for legal separation of the partners in the domestic partnership, or for any other proceeding related to the partners' rights and obligations, even if one or both partners cease to reside in or to maintain a domicile in this state.						
	Signature Partner B (current name) _____ Date _____ State of _____ county of _____. This instrument was acknowledged before me on _____ (date), by _____ (name(s) of person(s)). Signature of notarial officer: _____ Seal: My commission expires: _____						
	County of filing:			Signature of county official at county of filing:			
	Date registered at county:			Name of issuing official (print):			
	Local Official						

The information below is optional and will not appear on certified copies of the RECORD.

Partner A	20. Number of this partnership (include marriages and domestic partnerships) 1st, 2nd, etc. (specify below):	21. If previously married or part of a domestic partnership, how did it end? By death, divorce, dissolution or annulment? (specify below)	22. Hispanic origin (if yes, specify):	23. Race(s):	24. Education - highest grade completed (specify below):	25. Occupation:
	20a.	21a.	22a.	23a.	24a.	25a.
Partner B	20b.	21b.	22b.	23b.	24b.	25b.

Appendix D: Sample form — Record of Dissolution of Marriage, Annulment or Registered Domestic Partnership



RECORD OF DISSOLUTION OF MARRIAGE, ANNULMENT OR REGISTERED DOMESTIC PARTNERSHIP

136-

State file number:

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. In all cases the completed record shall be a prerequisite to the granting of the final judgment.

Case number: _____			
Judgment type: <input type="checkbox"/> Dissolution of marriage <input type="checkbox"/> Annulment <input type="checkbox"/> Dissolution of registered domestic partnership(RDP)			
Spouse / Partner A	1. Spouse/Partner A – Legal name: (first, middle, last, suffix)		2. Last name at birth: (not required for RDP)
	3. Residence or legal address: (street and number) (city or town) (county) (state)		
	4. Other legal last names used:		
	5. Date of birth: (mm/dd/yyyy)		6. Birthplace: (state, territory or foreign country)
Spouse / Partner B	7. Spouse/Partner B – Legal name: (first, middle, last, suffix)		8. Last name at birth: (not required for RDP)
	9. Residence or legal address: (street and number) (city or town) (county) (state)		
	10. Other legal last names used:		
	11. Date of birth: (mm/dd/yyyy)		12. Birthplace: (state, territory or foreign country)
Marriage / Declaration	13. Date of marriage / filing of RDP declaration: (mm/dd/yyyy)		14. Date couple last resided in same household: (mm/dd/yyyy)
	15a. Place of marriage/RDP: (city, town or location)	15b. County:	15c. State or foreign country:
	16. Number of children under 18 in this household as of the date in item 14: Number: _____ None <input type="checkbox"/>		17. Petitioner: <input type="checkbox"/> Spouse/Partner A <input type="checkbox"/> Spouse/Partner B <input type="checkbox"/> Both
	18a. Name of petitioner's attorney: (print)		18b. Address: (street and number or rural route number, city or town, state, ZIP code)
Attorney	19a. Name of respondent's attorney: (print)		19b. Address: (street and number or rural route number, city or town, state, ZIP code)
	20. Marriage/RDP declaration of the above named persons was dissolved on: (mm/dd/yyyy)		21. Date judgment becomes effective: (mm/dd/yyyy)
Judgment	22. Number of children under 18 whose physical custody was awarded to: ____ Spouse/Partner A ____ Spouse/Partner B ____ Joint (shared custody) ____ Other (specify) _____ <input type="checkbox"/> No children		
	23. County of decree:		24. Title of court: <div style="text-align: center; font-weight: bold;">Circuit</div>
	25. Signature of court official:		26. Title of court official:
			27. Date signed: (mm/dd/yyyy)

Information below will not appear on the certified copies of the record.

28. Spouse A's Social Security number: (not required for RDP)				29. Spouse B's Social Security number: (not required for RDP)					
30. Number of this marriage/RDP – first, second, etc.:		31. If previously married or in a RDP date last marriage/RDP ended:		32. Hispanic origin: Cuban, Mexican, Puerto Rican		33. Race(s): Black, White, etc.		34. Education – Specify only highest grade completed:	
		By death, divorce, dissolution or annulment (specify below) Date: (mm/dd/yyyy)		List all that apply (specify below)		List all that apply (specify below)		Elementary/Secondary: College: (1-4 or 5+)	

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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 usually takes much longer to publish. Making the data available online increases the timeliness and decreases the cost of publications.



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Center for Health Statistics

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