

TABLE 7-1. Infant deaths by age and county of residence, Oregon residents, death cohort 2017

County of residence	Total infant deaths ¹	Infant death rate ²	Neonatal deaths ³ (Age <28 days)				Neonatal rate ²	Post-neonatal deaths ⁴	Post-neonatal rate ²
			Total neonatal	Under 1 day	1-6 days	7-27 days			
Total	236	5.4	157	111	21	25	3.6	79	1.8
Baker	1	6.4	—	—	—	—	—	1	6.4
Benton	4	5.7	2	1	1	—	2.9	2	2.9
Clackamas	16	3.9	10	5	2	3	2.4	6	1.5
Clatsop	1	2.7	—	—	—	—	—	1	2.7
Columbia	2	3.9	2	2	—	—	3.9	—	—
Coos	2	3.3	1	1	—	—	1.7	1	1.7
Crook	1	3.8	1	1	—	—	3.8	—	—
Curry	—	—	—	—	—	—	—	—	—
Deschutes	6	3.3	2	—	1	1	1.1	4	2.2
Douglas	9	8.4	4	4	—	—	3.7	5	4.7
Gilliam	—	—	—	—	—	—	—	—	—
Grant	—	—	—	—	—	—	—	—	—
Harney	—	—	—	—	—	—	—	—	—
Hood River	—	—	—	—	—	—	—	—	—
Jackson	14	6.2	10	6	3	1	4.4	4	1.8
Jefferson	4	15.2	3	2	—	1	11.4	1	3.8
Josephine	4	4.5	3	2	1	—	3.4	1	1.1
Klamath	8	10.1	5	4	—	1	6.3	3	3.8
Lake	—	—	—	—	—	—	—	—	—
Lane	20	5.8	13	10	1	2	3.8	7	2.0
Lincoln	2	5.0	1	—	—	1	2.5	1	2.5
Linn	7	4.8	4	3	—	1	2.7	3	2.0
Malheur	1	2.5	1	1	—	—	2.5	—	—
Marion	25	5.6	23	19	2	2	5.2	2	0.5
Morrow	2	11.8	1	1	—	—	5.9	1	5.9
Multnomah	42	5.0	27	12	8	7	3.2	15	1.8
Polk	8	9.3	7	5	—	2	8.1	1	1.2
Sherman	—	—	—	—	—	—	—	—	—
Tillamook	1	4.6	—	—	—	—	—	1	4.6
Umatilla	6	6.3	5	4	—	1	5.3	1	1.1
Union	2	6.7	1	1	—	—	3.4	1	3.4
Wallowa	—	—	—	—	—	—	—	—	—
Wasco	1	3.2	1	1	—	—	3.2	—	—
Washington	40	6.0	25	22	2	1	3.8	15	2.3
Wheeler	—	—	—	—	—	—	—	—	—
Yamhill	7	6.3	5	4	—	1	4.5	2	1.8

— Quantity is zero.

1 Infant deaths occur in the first year of life.

2 Rates per 1,000 live births.

3 Neonatal deaths occur in the first 27 days of life.

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

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

TABLE 7-2. Infant deaths by cause and age, Oregon residents, death cohort 2017

Selected causes of death (and their ICD-10 codes)	Total infant deaths ¹	Neonatal deaths ²				Post- neo- natal deaths ³
		Under 1 day	1-6 days	7-27 days	Total neo- natal	
Total	236	111	21	25	157	79
Rate ⁴	5.4	2.5	0.5	0.6	3.6	1.8
Infections & parasitic disease (A00-B99)	9	—	—	—	—	9
Gastroenteritis of infectious origin (A09)	4	—	—	—	—	4
Septicaemia (A40-A41)	3	—	—	—	—	3
Malignant neoplasms (C00-C97)	1	—	—	1	1	—
Diseases of blood & immune disorders (D50-D89)	2	—	—	—	—	2
Anemias (D50-D64)	1	—	—	—	—	1
Endocrine, nutritional, & metabolic disease (E00-E88)	1	—	—	—	—	1
Mental & behavioral disorders (F01-F99)	1	—	—	—	—	1
Diseases of the nervous system (G00-G99)	2	1	—	—	1	1
Diseases of the respiratory system (J00-J99)	1	—	—	—	—	1
Diseases of the digestive system (K00-K92)	3	—	—	—	—	3
Perinatal conditions (P00-P96)	117	83	18	13	114	3
Fetus & newborn affected by maternal factors (P00-P04)	33	32	1	—	33	—
Gestation & fetal growth (P05-P08)	37	33	2	—	35	2
Birth trauma (P10-P15)	2	1	—	1	2	—
Intrauterine hypoxia & asphyxia (P20-P21)	3	2	1	—	3	—
Respiratory distress (P22)	5	3	2	—	5	—
Other respiratory (P24-P28)	6	1	4	1	6	—
Bacterial sepsis of newborn (P36)	4	1	—	3	4	—
Haemorrhagic disorders of newborn (P50-P61)	6	3	3	—	6	—
Congenital anomalies (Q00-Q99)	55	27	3	8	38	17
Anencephaly (Q000)	3	3	—	—	3	—
Congenital hydrocephalus & spina bifida (Q03, Q05)	1	1	—	—	1	—
Malformation of the heart (Q20-Q24)	14	3	—	4	7	7
Down syndrome & other chromosomal (Q90-Q99)	14	9	3	—	12	2
Symptoms, signs not elsewhere classified (R00-R99)	23	—	—	3	3	20
Sudden infant death syndrome (R95)	21	—	—	3	3	18
Other ill-defined and unspecified causes (R99)	2	—	—	—	—	2
External causes of death (V01-Y89)	20	—	—	—	—	20
Accidents (V01-X59, Y85-Y86)	16	—	—	—	—	16
Transport accidents (V01-V99, Y85)	1	—	—	—	—	1
Nontransport accidents (W00-X59, Y86)	15	—	—	—	—	15
Drowning & submersion (W65-W74)	1	—	—	—	—	1
Accidental suffocation/strangulation in bed (W75)	11	—	—	—	—	11
Exposure to smoke, fire & flames (X00-X09)	1	—	—	—	—	1
Assault (homicide) (X85-Y09, Y87.1)	3	—	—	—	—	3
Events of undetermined intent (Y10-Y34, Y87.2, Y89.9)	1	—	—	—	—	1
Strangulation/suffocation, undetermined intent (Y20)	1	—	—	—	—	1

— Quantity is zero.

1 Infant deaths occur in the first year of life.

2 Neonatal deaths occur in the first 27 days of life.

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

4 Rates per 1,000 live births.

TABLE 7-3. Fetal deaths by age of mother and county of residence, Oregon, 2017

County of residence	Total	Age of mother								
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.
Total	185	—	8	32	53	53	29	8	—	2
Ratio to births ¹	4.2	—	4.4	4.1	4.2	4.1	4.1	5.6	—	**
Baker	2	—	—	—	—	1	1	—	—	—
Benton	5	—	—	—	3	1	1	—	—	—
Clackamas	15	—	—	3	4	8	—	—	—	—
Clatsop	1	—	—	—	—	1	—	—	—	—
Columbia	1	—	—	1	—	—	—	—	—	—
Coos	—	—	—	—	—	—	—	—	—	—
Crook	1	—	—	—	—	1	—	—	—	—
Curry	—	—	—	—	—	—	—	—	—	—
Deschutes	5	—	—	1	2	1	1	—	—	—
Douglas	4	—	—	—	3	—	1	—	—	—
Gilliam	—	—	—	—	—	—	—	—	—	—
Grant	1	—	—	—	1	—	—	—	—	—
Harney	—	—	—	—	—	—	—	—	—	—
Hood River	1	—	—	—	—	—	—	1	—	—
Jackson	13	—	—	1	4	5	2	1	—	—
Jefferson	1	—	—	—	1	—	—	—	—	—
Josephine	3	—	1	—	—	1	1	—	—	—
Klamath	4	—	—	2	—	2	—	—	—	—
Lake	1	—	—	—	1	—	—	—	—	—
Lane	11	—	1	3	4	1	2	—	—	—
Lincoln	3	—	1	—	2	—	—	—	—	—
Linn	11	—	1	5	4	—	—	—	—	1
Malheur	3	—	—	2	—	—	—	1	—	—
Marion	24	—	1	5	7	7	3	1	—	—
Morrow	—	—	—	—	—	—	—	—	—	—
Multnomah	40	—	2	5	9	12	8	3	—	1
Polk	6	—	—	2	1	2	1	—	—	—
Sherman	—	—	—	—	—	—	—	—	—	—
Tillamook	—	—	—	—	—	—	—	—	—	—
Umatilla	5	—	1	—	2	—	1	1	—	—
Union	1	—	—	—	1	—	—	—	—	—
Wallowa	—	—	—	—	—	—	—	—	—	—
Wasco	—	—	—	—	—	—	—	—	—	—
Washington	17	—	—	2	1	8	6	—	—	—
Wheeler	—	—	—	—	—	—	—	—	—	—
Yamhill	6	—	—	—	3	2	1	—	—	—

— Quantity is zero.

¹ All ratios per 1,000 live births.

** Ratio for unknown age group is not calculated.

TABLE 7-4. Fetal deaths by weeks of gestation and cause of death, Oregon, 2017

Selected causes of death (and their ICD-10 codes)	Total	Weeks of gestation ¹								
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+
Total	185	1	38	25	23	38	10	39	9	2
Perinatal conditions (P00-P96)	164	1	31	23	18	34	10	37	8	2
Maternal conditions unrelated to present pregnancy (P00)	14	–	3	3	1	3	–	4	–	–
Maternal complications of pregnancy (P01)	18	–	13	3	–	–	1	1	–	–
Complications of placenta, cord and membranes (P02)	37	–	5	8	4	7	1	12	–	–
Other complications of labor and delivery (P03)	2	–	–	–	–	–	–	1	1	–
Noxious influences transmitted via placenta (P04)	1	–	–	–	–	1	–	–	–	–
Slow fetal growth and fetal malnutrition (P05)	1	–	–	–	–	–	–	–	1	–
Transitory endocrine and metabolic disorders specific to fetus (P70-P74)	5	–	–	1	–	2	1	1	–	–
Other perinatal conditions (P80-P96)	85	1	10	8	13	21	7	18	5	2
Fetal death of unspecified cause (P95)	82	1	8	8	12	21	7	18	5	2
Congenital malformations (Q00-Q99)	18	–	4	2	5	4	–	2	1	–
Of the nervous system (Q00-Q07)	2	–	–	–	2	–	–	–	–	–
Congenital hydrocephalus (Q03)	1	–	–	–	1	–	–	–	–	–
Of the heart (Q20-Q24)	1	–	–	–	–	–	–	–	1	–
Of the urinary system (Q60-Q64)	2	–	–	1	–	1	–	–	–	–
Of musculoskeletal system, limbs, and integument (Q65-Q85)	3	–	1	1	1	–	–	–	–	–
Other congenital malformations (Q86-Q89)	1	–	–	–	1	–	–	–	–	–
Chromosomal abnormalities, NEC (Q90-Q99)	7	–	2	–	1	2	–	2	–	–
Edwards syndrome (Q91.0-Q91.3)	4	–	–	–	1	1	–	2	–	–

– Quantity is zero.

¹ Based on clinical estimate of gestation.

TABLE 7-5. Fetal deaths by weeks of gestation and age of mother, Oregon, 2017

Age of mother	Total	Weeks of gestation ¹								
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+
Total	185	1	38	25	23	38	10	39	9	2
<15	–	–	–	–	–	–	–	–	–	–
15-19	8	–	2	2	–	1	–	3	–	–
20-24	32	–	10	4	5	6	1	4	2	–
25-29	53	–	6	6	9	15	1	13	3	–
30-34	53	1	15	7	5	8	6	9	2	–
35-39	29	–	5	4	3	7	1	6	1	2
40-44	8	–	–	2	1	1	–	4	–	–
45+	–	–	–	–	–	–	–	–	–	–
N.S.	2	–	–	–	–	–	1	–	1	–

– Quantity is zero.

¹ Based on clinical estimate of gestation.**TABLE 7-6. Births by weeks of gestation and weight, Oregon residents, 2016**

Birthweight (in grams)	Total	Weeks of gestation ¹									
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+	N.S.
Total	45,533	11	55	150	311	1,625	1,465	25,730	10,983	5,176	27
349 and less	22	11	10	–	–	–	1	–	–	–	–
350-499	23	–	19	4	–	–	–	–	–	–	–
<500	45	11	29	4	–	–	1	–	–	–	–
500-749	81	–	25	46	9	1	–	–	–	–	–
750-999	84	–	1	58	22	2	–	–	–	–	1
1000-1249	97	–	–	28	50	15	–	4	–	–	–
1250-1499	134	–	–	7	86	35	3	–	3	–	–
1500-1999	622	–	–	3	125	370	57	58	4	4	1
2000-2499	1,917	–	–	2	15	663	352	840	36	9	–
<2500	2,980	11	55	148	307	1,086	413	902	43	13	2
2500+	42,544	–	–	1	4	537	1,052	24,827	10,936	5,163	24
2500-2999	7,027	–	–	1	3	396	634	4,934	834	219	6
3000-3499	17,130	–	–	–	1	116	330	10,938	4,122	1,615	8
3500-3999	13,682	–	–	–	–	23	74	6,939	4,427	2,211	8
4000-4499	4,004	–	–	–	–	1	11	1,712	1,331	947	2
4500+	701	–	–	–	–	1	3	304	222	171	–
Unknown	9	–	–	1	–	2	–	1	4	–	1

– Quantity is zero.

¹ Based on clinical estimate of gestation.

TABLE 7-7. Fetal deaths by weeks of gestation and weight, Oregon residents, 2016

Birthweight (in grams)	Total	Weeks of gestation ¹								
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+
Total	184	4	46	28	20	33	10	27	11	5
349 and less	—	—	—	—	—	—	—	—	—	—
350-499	34	3	25	5	—	1	—	—	—	—
<500	34	3	25	5	—	1	—	—	—	—
500-749	34	—	18	13	2	1	—	—	—	—
750-999	17	—	2	9	4	2	—	—	—	—
1000-1249	10	1	—	1	4	3	—	1	—	—
1250-1499	13	—	—	—	7	5	—	—	1	—
1500-1999	13	—	—	—	3	7	—	3	—	—
2000-2499	13	—	—	—	—	6	2	4	—	1
<2500	134	4	45	28	20	25	2	8	1	1
2500+	49	—	—	—	—	8	8	19	10	4
2500-2999	23	—	—	—	—	7	6	8	2	—
3000-3499	16	—	—	—	—	1	1	7	3	4
3500-3999	7	—	—	—	—	—	1	4	2	—
4000-4499	2	—	—	—	—	—	—	—	2	—
4500+	1	—	—	—	—	—	—	—	1	—
Unknown	1	—	1	—	—	—	—	—	—	—

— Quantity is zero.

¹ Based on clinical estimate of gestation.

**TABLE 7-8. Early neonatal deaths¹ by weeks of gestation and weight,
Oregon residents, birth cohort 2016**

Birthweight (in grams)	Total	Weeks of gestation ²									
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+	N.S.
Total ³	119	11	47	20	11	9	1	16	3	–	1
001-349	21	11	10	–	–	–	–	–	–	–	–
350-499	22	–	19	3	–	–	–	–	–	–	–
<500	43	11	29	3	–	–	–	–	–	–	–
500-749	28	–	18	8	1	1	–	–	–	–	–
750-999	7	–	–	6	–	–	–	–	–	–	1
1000-1249	2	–	–	–	2	–	–	–	–	–	–
1250-1499	4	–	–	1	1	2	–	–	–	–	–
1500-1999	13	–	–	1	5	3	–	4	–	–	–
2000-2499	3	–	–	–	2	–	1	–	–	–	–
<2500	100	11	47	19	11	6	1	4	–	–	1
2500+	18	–	–	–	–	3	–	12	3	–	–
2500-2999	5	–	–	–	–	1	–	4	–	–	–
3000-3499	8	–	–	–	–	2	–	5	1	–	–
3500-3999	4	–	–	–	–	–	–	3	1	–	–
4000-4499	–	–	–	–	–	–	–	–	–	–	–
4500+	1	–	–	–	–	–	–	–	1	–	–

– Quantity is zero.

¹ Early neonatal deaths occur through day six after birth.

² Clinical estimate of gestation. If clinical estimate is unknown, gestation is calculated from reported date of last menses.

³ Total includes reports with unknown weight.

TABLE 7-9. Late neonatal deaths¹ by weeks of gestation and weight, Oregon residents, birth cohort 2016

Birthweight (in grams)	Total	Weeks of gestation ²								
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+
Total	32	–	1	13	1	3	1	8	4	1
001-349	–	–	–	–	–	–	–	–	–	–
350-499	–	–	–	–	–	–	–	–	–	–
<500	–	–	–	–	–	–	–	–	–	–
500-749	8	–	1	7	–	–	–	–	–	–
750-999	5	–	–	4	1	–	–	–	–	–
1000-1249	1	–	–	1	–	–	–	–	–	–
1250-1499	–	–	–	–	–	–	–	–	–	–
1500-1999	3	–	–	–	–	1	1	–	1	–
2000-2499	5	–	–	1	–	2	–	2	–	–
<2500	22	–	1	13	1	3	1	2	1	–
2500+	10	–	–	–	–	–	–	6	3	1
2500-2999	3	–	–	–	–	–	–	2	1	–
3000-3499	5	–	–	–	–	–	–	4	1	–
3500-3999	2	–	–	–	–	–	–	–	1	1
4000-4499	–	–	–	–	–	–	–	–	–	–
4500+	–	–	–	–	–	–	–	–	–	–

– Quantity is zero.

¹ Late neonatal deaths occur from day seven through 27 after birth.

² Clinical estimate of gestation. If clinical estimate is unknown, gestation is calculated from reported date of last menses.

**TABLE 7-10. Postneonatal deaths¹ by weeks of gestation and weight,
Oregon residents, birth cohort 2016**

Birthweight (in grams)	Total	Weeks of gestation ²								
		<20	20-23	24-27	28-31	32-35	36	37-39	40	41+
Total	65	–	3	3	2	9	2	30	8	8
001-349	–	–	–	–	–	–	–	–	–	–
350-499	–	–	–	–	–	–	–	–	–	–
<500	–	–	–	–	–	–	–	–	–	–
500-749	6	–	3	2	1	–	–	–	–	–
750-999	1	–	–	1	–	–	–	–	–	–
1000-1249	–	–	–	–	–	–	–	–	–	–
1250-1499	–	–	–	–	–	–	–	–	–	–
1500-1999	7	–	–	–	1	5	1	–	–	–
2000-2499	7	–	–	–	–	1	–	6	–	–
<2500	21	–	3	3	2	6	1	6	–	–
2500+	44	–	–	–	–	3	1	24	8	8
2500-2999	12	–	–	–	–	3	–	5	2	2
3000-3499	25	–	–	–	–	–	1	15	5	4
3500-3999	3	–	–	–	–	–	–	2	–	1
4000-4499	3	–	–	–	–	–	–	2	1	–
4500+	1	–	–	–	–	–	–	–	–	1

– Quantity is zero.

¹ Postneonatal deaths occur from day 28 through 364 after birth.

² Clinical estimate of gestation. If clinical estimate is unknown, gestation is calculated from reported date of last menses.

TABLE 7-11. Neonatal deaths by birthweight, Oregon residents, birth cohort 2016

Birthweight (in grams)	Deaths	Rate ¹
Total ²	151	3.3
001-349	21	954.5
350-499	22	956.5
<500	43	955.6
500-749	36	444.4
750-999	12	142.9
1000-1249	3	*
1250-1499	4	*
1500-1999	16	25.7
2000-2499	8	4.2
<2500	122	40.9
2500+	28	0.7
2500-2999	8	1.1
3000-3499	13	0.8
3500-3999	6	0.4
4000-4499	—	—
4500+	1	*

— Quantity is zero.

¹ Rate per 1,000 live births.

² Total includes reports with unknown birthweight.

* Rates are not calculated when there are fewer than five deaths in a category.

TABLE 7-12. Neonatal deaths by birthweight, Oregon residents, birth cohort 2014-2016

Birthweight (in grams)	Deaths	Rate ¹
Total ²	459	3.4
001-349	68	985.5
350-499	75	914.6
<500	143	947.0
500-749	113	511.3
750-999	38	141.3
1000-1249	11	36.5
1250-1499	13	30.7
1500-1999	33	19.2
2000-2499	23	4.1
<2500	374	42.7
2500+	80	0.6
2500-2999	27	1.3
3000-3499	33	0.6
3500-3999	15	0.4
4000-4499	4	*
4500+	1	*

¹ Rate per 1,000 live births.

² Total includes reports with unknown birthweight.

* Rates are not calculated when there are fewer than five deaths in a category.

**TABLE 7-13. Perinatal death rates by county of residence,
Oregon residents, birth cohort 2016**

County of residence	Perinatal I ¹			Perinatal II ²			Neonatal ³	
	No.	Rate	Ratio	No.	Rate	Ratio	No.	Rate
Total	225	4.9	4.9	331	7.2	7.3	151	3.3
Baker	—	—	—	4	*	*	2	*
Benton	2	*	*	3	*	*	1	*
Clackamas	16	3.8	3.8	25	5.9	5.9	12	2.8
Clatsop	2	*	*	4	*	*	2	*
Columbia	1	*	*	2	*	*	1	*
Coos	5	7.9	8.0	6	9.5	9.6	1	*
Crook	4	*	*	5	20.7	21.0	2	*
Curry	1	*	*	2	*	*	1	*
Deschutes	6	3.3	3.3	11	6.1	6.1	3	*
Douglas	5	4.6	4.6	9	8.2	8.3	3	*
Gilliam	—	—	—	—	—	—	—	—
Grant	1	*	*	1	*	*	—	—
Harney	—	—	—	—	—	—	—	—
Hood River	1	*	*	2	*	*	1	*
Jackson	9	3.9	3.9	17	7.4	7.4	9	3.9
Jefferson	2	*	*	3	*	*	1	*
Josephine	4	*	*	5	5.7	5.7	1	*
Klamath	3	*	*	6	7.3	7.3	3	*
Lake	—	—	—	—	—	—	—	—
Lane	16	4.5	4.5	24	6.7	6.8	11	3.1
Lincoln	2	*	*	2	*	*	2	*
Linn	10	6.6	6.6	13	8.5	8.5	7	4.6
Malheur	2	*	*	5	10.7	10.8	1	*
Marion	29	6.4	6.4	35	7.7	7.7	17	3.8
Morrow	2	*	*	2	*	*	1	*
Multnomah	38	4.2	4.2	59	6.5	6.5	27	3.0
Polk	10	10.2	10.3	11	11.2	11.3	8	8.2
Sherman	1	*	*	1	*	*	1	*
Tillamook	2	*	*	4	*	*	1	*
Umatilla	4	*	*	7	7.3	7.4	3	*
Union	3	*	*	3	*	*	3	*
Wallowa	—	—	—	—	—	—	—	—
Wasco	2	*	*	3	*	*	3	*
Washington	35	5.0	5.0	47	6.7	6.7	19	2.7
Wheeler	—	—	—	1	*	*	—	—
Yamhill	7	6.0	6.0	9	7.7	7.8	4	*

— Quantity is zero.

¹ Perinatal definition I includes fetal deaths at 28 weeks of gestation or more and infant deaths of less than 7 days.

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

³ Neonatal deaths include infant deaths of less than 28 days.

* Rates are not calculated when there are fewer than five deaths in a category.

NOTE: Perinatal I and perinatal II ratios and neonatal rates are per 1,000 births. Perinatal I rates include all live births and fetal deaths at 28 weeks gestation or more. Perinatal II rates include all live births and fetal deaths at 20 weeks of gestation or more.

**TABLE 7-14. Perinatal death rates by county of residence,
Oregon residents, birth cohort 2014-2016**

County of residence	Perinatal I ¹			Perinatal II ²			Neonatal ³	
	No.	Rate	Ratio	No.	Rate	Ratio	No.	Rate
Total ⁴	721	5.3	5.3	1,010	7.4	7.4	459	3.4
Baker	2	*	*	6	12.7	12.8	2	*
Benton	13	5.8	5.8	18	8.0	8.0	6	2.7
Clackamas	54	4.3	4.3	78	6.2	6.2	38	3.0
Clatsop	8	6.4	6.4	12	9.6	9.6	7	5.6
Columbia	8	5.2	5.2	10	6.4	6.5	5	3.2
Coos	6	3.2	3.2	12	6.4	6.4	3	*
Crook	7	10.3	10.4	9	13.2	13.3	4	*
Curry	2	*	*	3	*	*	1	*
Deschutes	24	4.5	4.5	33	6.1	6.2	14	2.6
Douglas	20	6.1	6.1	30	9.1	9.1	13	3.9
Gilliam	—	—	—	—	—	—	—	—
Grant	1	*	*	1	*	*	—	—
Harney	2	*	*	2	*	*	2	*
Hood River	1	*	*	2	*	*	1	*
Jackson	38	5.4	5.4	53	7.5	7.6	24	3.4
Jefferson	4	*	*	8	9.4	9.5	3	*
Josephine	22	8.4	8.5	31	11.8	11.9	11	4.2
Klamath	8	3.3	3.3	14	5.7	5.8	5	2.1
Lake	—	—	—	—	—	—	—	—
Lane	51	4.7	4.7	72	6.6	6.6	36	3.3
Lincoln	8	6.2	6.2	10	7.7	7.7	6	4.6
Linn	22	4.9	4.9	34	7.6	7.6	13	2.9
Malheur	5	3.9	3.9	10	7.8	7.8	2	*
Marion	81	6.1	6.1	104	7.8	7.8	45	3.4
Morrow	3	*	*	3	*	*	1	*
Multnomah	146	5.2	5.3	204	7.3	7.3	104	3.7
Polk	21	7.8	7.8	26	9.6	9.7	17	6.3
Sherman	1	*	*	1	*	*	1	*
Tillamook	8	10.5	10.5	12	15.6	15.8	5	6.6
Umatilla	10	3.3	3.3	15	5.0	5.0	6	2.0
Union	10	11.1	11.1	10	11.1	11.1	8	8.9
Wallowa	—	—	—	1	*	*	1	*
Wasco	4	*	*	5	5.1	5.1	4	*
Washington	109	5.2	5.2	148	7.0	7.0	60	2.9
Wheeler	—	—	—	1	*	*	—	—
Yamhill	22	6.4	6.4	31	9.0	9.0	11	3.2

— Quantity is zero.

¹ Perinatal definition I includes fetal deaths at 28 weeks of gestation or more and infant deaths of less than 7 days.

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

³ Neonatal deaths include infant deaths of less than 28 days.

⁴ Total includes reports with unknown county of residence.

* Rates are not calculated when there are fewer than five deaths in a category.

NOTE: Perinatal I and perinatal II ratios and neonatal rates are per 1,000 births. Perinatal I rates include all live births and fetal deaths at 28 weeks gestation or more. Perinatal II rates include all live births and fetal deaths at 20 weeks of gestation or more.

TABLE 7-15. Perinatal death rates by maternal characteristics, Oregon residents, birth cohort 2016

Selected maternal characteristics	Perinatal I ¹			Perinatal II ²			Neonatal ³	
	No.	Rate	Ratio	No.	Rate	Ratio	No.	Rate
Total⁴	225	4.9	4.9	331	7.2	7.3	151	3.3
Marital status								
Married	111	3.8	3.8	170	5.8	5.8	73	2.5
Unmarried	112	6.9	6.9	157	9.6	9.7	76	4.7
Age of mother								
10-14	—	—	—	—	—	—	—	—
15-19	9	4.5	4.5	20	9.9	10.0	8	4.0
20-24	41	4.9	4.9	62	7.4	7.4	34	4.1
25-29	62	4.6	4.6	89	6.6	6.6	38	2.8
30-34	56	4.2	4.2	85	6.4	6.4	38	2.9
35-39	44	6.3	6.4	57	8.2	8.2	24	3.5
40-44	12	8.1	8.2	15	10.2	10.2	7	4.8
45+	1	*	*	3	*	*	2	*
Non-Hispanic race								
White	143	4.6	4.6	208	6.7	6.7	99	3.2
Black	6	6.3	6.3	14	14.7	14.8	5	5.3
American Indian	4	*	*	5	11.4	11.5	1	*
Asian ⁵	13	5.5	5.5	19	8.0	8.1	6	2.5
Pacific Islander ⁶	4	*	*	4	*	*	—	—
Other & not stated	6	30.6	30.9	9	45.7	46.4	6	30.9
Multiple races	4	*	*	7	4.1	4.1	4	*
Total Hispanic	45	5.3	5.3	65	7.7	7.7	30	3.5
Education								
8th grade or less	6	4.6	4.6	8	6.1	6.1	4	*
9th-12th grade, no diploma	35	7.5	7.6	50	10.7	10.8	20	4.3
High school/GED	59	5.9	6.0	81	8.1	8.2	38	3.8
More than high school	110	3.7	3.7	170	5.8	5.8	75	2.5
Start of prenatal care								
Any trimester	196	4.4	4.4	285	6.4	6.4	129	2.9
1st trimester	151	4.2	4.2	223	6.2	6.2	101	2.8
2nd trimester	39	5.7	5.7	55	8.0	8.1	27	4.0
3rd trimester	6	3.5	3.5	7	4.0	4.1	1	*
No prenatal care	19	48.2	49.2	30	74.8	77.7	15	38.9
Tobacco use								
Pre-pregnancy only	8	7.1	7.2	13	11.6	11.7	3	*
During pregnancy	41	9.4	9.5	53	12.2	12.3	24	5.6
No tobacco use	173	4.3	4.3	259	6.5	6.5	121	3.0
Multiple birth								
Yes	19	12.3	12.3	28	18.0	18.1	23	14.8
No	206	4.7	4.7	303	6.9	6.9	128	2.9

— Quantity is zero.

¹ Perinatal definition I includes fetal deaths at 28 weeks gestation or more and infant deaths of less than 7 days.

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

³ Neonatal deaths include infant deaths of less than 28 days.

⁴ Due to unreported items, the sum of all categories may not equal the total.

⁵ Includes Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese and other Asian.

⁶ Includes Guamanian, Hawaiian, Samoan and other Pacific Islander.

* Rates are not calculated when there are fewer than five deaths in a category.

NOTE: Perinatal I and perinatal II ratios and neonatal rates are per 1,000 births. Perinatal I rates include all live births and fetal deaths at 28 weeks gestation or more. Perinatal II rates include all live births and fetal deaths at 20 weeks of gestation or more.

TABLE 7-16. Perinatal death rates by maternal characteristics, Oregon residents, birth cohort 2014-2016

Selected maternal characteristics	Perinatal I ¹			Perinatal II ²			Neonatal ³	
	No.	Rate	Ratio	No.	Rate	Ratio	No.	Rate
Total ⁴	721	5.3	5.3	1,010	7.4	7.4	459	3.4
Marital status								
Married	397	4.5	4.5	550	6.3	6.3	247	2.8
Unmarried	320	6.5	6.5	449	9.1	9.2	207	4.2
Age of mother								
10-14	2	*	*	2	*	*	2	*
15-19	46	6.9	6.9	71	10.6	10.6	35	5.2
20-24	125	4.7	4.7	183	6.9	6.9	85	3.2
25-29	193	4.8	4.8	264	6.6	6.6	119	3.0
30-34	184	4.7	4.7	253	6.4	6.4	113	2.9
35-39	121	6.1	6.1	169	8.5	8.5	73	3.7
40-44	45	10.8	10.8	55	13.2	13.2	28	6.7
45+	2	*	*	6	20.2	20.4	3	*
Non-Hispanic race								
White	468	5.0	5.0	655	7.0	7.0	302	3.2
Black	29	9.9	9.9	44	14.9	15.1	22	7.5
American Indian	6	4.5	4.5	10	7.5	7.5	1	*
Asian ⁵	41	6.0	6.0	54	7.9	7.9	17	2.5
Pacific Islander ⁶	9	9.8	9.9	10	10.9	11.0	1	*
Other & not stated	10	20.2	20.2	14	28.2	28.3	11	22.3
Multiple races	24	4.5	4.5	36	6.8	6.8	17	3.2
Total Hispanic	134	5.2	5.3	187	7.3	7.3	88	3.5
Education								
8th grade or less	28	6.7	6.7	35	8.3	8.4	15	3.6
9th-12th grade, no diploma	91	6.2	6.2	132	9.0	9.1	57	3.9
High school/GED	186	6.2	6.2	253	8.4	8.4	121	4.0
More than high school	362	4.1	4.1	516	5.9	5.9	234	2.7
Start of prenatal care								
Any trimester	635	4.8	4.8	876	6.6	6.6	391	3.0
1st trimester	494	4.7	4.7	690	6.5	6.5	318	3.0
2nd trimester	118	5.4	5.4	161	7.3	7.3	69	3.1
3rd trimester	23	4.4	4.5	25	4.8	4.8	4	*
No prenatal care	43	40.2	40.8	68	62.6	64.5	35	33.2
Tobacco use								
Pre-pregnancy only	22	6.5	6.5	34	10.0	10.1	12	3.5
During pregnancy	112	8.2	8.3	156	11.5	11.5	65	4.8
No tobacco use	575	4.8	4.8	804	6.7	6.7	370	3.1
Multiple birth								
Yes	85	17.9	17.9	113	23.7	23.8	88	18.6
No	636	4.8	4.8	895	6.8	6.8	371	2.8

— Quantity is zero.

¹ Perinatal Definition I includes fetal deaths at 28 weeks gestation or more and infant deaths of less than seven days.

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

³ Neonatal deaths include infant deaths of less than 28 days.

⁴ Due to unreported items, the sum of all categories may not equal the total.

⁵ Includes Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese and other Asian.

⁶ Includes Guamanian, Hawaiian, Samoan and other Pacific Islander.

* Rates are not calculated when there are fewer than five deaths in a category.

NOTE: Perinatal I and perinatal II ratios and neonatal rates are per 1,000 births. Perinatal I rates include all live births and fetal deaths at 28 weeks gestation or more. Perinatal II rates include all live births and fetal deaths at 20 weeks gestation or more.

TABLE 7-17. Neonatal, postneonatal, and infant death rates by maternal characteristics, Oregon residents, birth cohort 2016

Selected maternal characteristics	Neonatal ¹		Postneonatal ²		Infant ³	
	No.	Rate	No.	Rate	No.	Rate
Total⁴	151	3.3	65	1.4	216	4.7
Marital status						
Married	73	2.5	29	1.0	102	3.5
Unmarried	76	4.7	36	2.2	112	6.9
Age of mother						
10-14	—	—	—	—	—	—
15-19	8	4.0	2	*	10	5.0
20-24	34	4.1	17	2.0	51	6.1
25-29	38	2.8	19	1.4	57	4.3
30-34	38	2.9	13	1.0	51	3.8
35-39	24	3.5	12	1.7	36	5.2
40-44	7	4.8	2	*	9	6.1
45+	2	*	—	—	2	*
Non-Hispanic race						
White	99	3.2	42	1.3	141	4.5
Black	5	5.3	3	*	8	8.5
American Indian	1	*	—	—	1	*
Asian ⁵	6	2.5	2	*	8	3.4
Pacific Islander ⁶	—	—	2	*	2	*
Other & not stated	6	30.9	—	—	6	30.9
Multiple races	4	*	2	*	6	3.5
Total Hispanic	30	3.5	14	1.7	44	5.2
Education						
8th grade or less	4	*	—	—	4	*
9th-12th grade, no diploma	20	4.3	8	1.7	28	6.1
High school/GED	38	3.8	25	2.5	63	6.4
More than high school	75	2.5	32	1.1	107	3.6
Start of prenatal care						
Any trimester	129	2.9	60	1.4	189	4.3
1st trimester	101	2.8	46	1.3	147	4.1
2nd trimester	27	4.0	8	1.2	35	5.1
3rd trimester	1	*	6	3.5	7	4.1
No prenatal care	15	38.9	1	*	16	41.5
Tobacco use						
Pre-pregnancy only	3	*	6	5.4	9	8.1
During pregnancy	24	5.6	15	3.5	39	9.0
No tobacco use	121	3.0	44	1.1	165	4.1
Multiple birth						
Yes	23	14.8	4	*	27	17.4
No	128	2.9	61	1.4	189	4.3

— Quantity is zero.

¹ Neonatal deaths include infant deaths of less than 28 days.

² Postneonatal deaths occur from day 28 through 364 after birth.

³ Infant deaths occur in the first year of life.

⁴ Due to unreported items, the sum of all categories may not equal the total.

⁵ Includes Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese and other Asian.

⁶ Includes Guamanian, Hawaiian, Samoan and other Pacific Islander.

* Rates are not calculated when there are fewer than five deaths in a category.

NOTE: All rates per 1,000 live births.

TABLE 7-18. Neonatal, postneonatal, and infant death rates by maternal characteristics, Oregon residents, birth cohort 2014-2016

Selected maternal characteristics	Neonatal ¹		Postneonatal ²		Infant ³	
	No.	Rate	No.	Rate	No.	Rate
Total⁴	459	3.4	208	1.5	667	4.9
Marital status						
Married	247	2.8	95	1.1	342	3.9
Unmarried	207	4.2	111	2.3	318	6.5
Age of mother						
10-14	2	*	1	*	3	*
15-19	35	5.2	16	2.4	51	7.6
20-24	85	3.2	60	2.3	145	5.5
25-29	119	3.0	62	1.6	181	4.5
30-34	113	2.9	36	0.9	149	3.8
35-39	73	3.7	26	1.3	99	5.0
40-44	28	6.7	6	1.4	34	8.2
45+	3	*	1	*	4	*
Non-Hispanic race						
White	302	3.2	139	1.5	441	4.7
Black	22	7.5	9	3.1	31	10.6
American Indian	1	*	2	*	3	*
Asian ⁵	17	2.5	11	1.6	28	4.1
Pacific Islander ⁶	1	*	3	*	4	*
Other & not stated	11	22.3	1	*	12	24.3
Multiple races	17	3.2	11	2.1	28	5.3
Total Hispanic	88	3.5	32	1.3	120	4.7
Education						
8th grade or less	15	3.6	4	*	19	4.5
9th-12th grade, no diploma	57	3.9	28	1.9	85	5.8
High school/GED	121	4.0	76	2.5	197	6.6
More than high school	234	2.7	99	1.1	333	3.8
Start of prenatal care						
Any trimester	391	3.0	187	1.4	578	4.4
1st trimester	318	3.0	133	1.3	451	4.3
2nd trimester	69	3.1	40	1.8	109	5.0
3rd trimester	4	*	14	2.7	18	3.5
No prenatal care	35	33.2	6	5.7	41	38.9
Tobacco use						
Pre-pregnancy only	12	3.5	16	4.7	28	8.3
During pregnancy	65	4.8	55	4.1	120	8.9
No tobacco use	370	3.1	136	1.1	506	4.2
Multiple birth						
Yes	88	18.6	20	4.2	108	22.8
No	371	2.8	188	1.4	559	4.2

— Quantity is zero.

1 Neonatal deaths include infant deaths of less than 28 days.

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

3 Infant deaths occur in the first year of life.

4 Due to unreported items, the sum of all categories may not equal the total.

5 Includes Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese and other Asian.

6 Includes Guamanian, Hawaiian, Samoan and other Pacific Islander.

* Rates are not calculated when there are fewer than five deaths in a category.

NOTE: All rates per 1,000 live births.

TABLE 7-19. Term fetal deaths¹ by planned attendant and planned place of birth, Oregon occurrence, 2017

Planned birth attendant	Total term fetal deaths ²	Planned hospital birth ³	Planned out-of-hospital birth		
			Total	Intrapartum transfer to hospital ⁴	Non-hospital delivery ⁵
Total	52	48	1	–	1
MD's and DO's	46	45	–	–	–
Certified nurse midwives	3	3	–	–	–
Licensed direct-entry midwives	–	–	–	–	–
Unlicensed direct-entry midwives	–	–	–	–	–
Naturopathic physicians	–	–	–	–	–
Other	3	–	1	–	1

– Quantity is zero.

¹ Term fetal deaths include fetal deaths with gestation of 37 weeks or more.

² Total includes three fetal deaths that occurred en route, were unplanned home deliveries, or were out-of-hospital deliveries not otherwise classified.

³ For planned hospital births, actual attendant type is used.

⁴ For planned out-of-hospital births with intrapartum transfer to hospitals, planned attendant type is reported by mother and not verified.

⁵ For planned out-of-hospital births with non-hospital deliveries, the actual attendant type is used.

TABLE 7-20. Term early neonatal deaths¹ by planned attendant and planned place of birth, Oregon occurrence, preliminary 2017 birth cohort

Planned birth attendant	Total term early neonatal deaths	Planned hospital birth ²	Planned out-of-hospital birth		
			Total	Intrapartum transfer to hospital ³	Non-hospital delivery ⁴
Total	20	18	2	–	2
MD's and DO's	18	18	–	–	–
Certified nurse midwives	–	–	–	–	–
Licensed direct-entry midwives	2	–	2	–	2
Unlicensed direct-entry midwives	–	–	–	–	–
Naturopathic physicians	–	–	–	–	–
Other	–	–	–	–	–

– Quantity is zero.

¹ Term early neonatal deaths include infant deaths of less than seven days and with gestation of 37 weeks or more.

² For planned hospital births, actual attendant type is used.

³ For planned out-of-hospital births with intrapartum transfer to hospitals, planned attendant type is reported by mother and not verified.

⁴ For planned out-of-hospital births with non-hospital deliveries, the actual attendant type is used.

NOTE: The 2017 birth cohort may include infant deaths that occurred in 2017 or 2018. Data for 2018 are undergoing editing processes and are subject to change.

Table 7-21: Fetal deaths by maternal characteristics by planned place of birth, Oregon occurrence, 2015-2017

Selected maternal characteristics	Total ¹	Planned hospital birth			Planned out-of-hospital birth		
		Clinical estimate of gestation					
		<37	37-40	41+	<37	37-40	41+
Total fetal deaths	570	414	123	12	3	2	—
Mother's age							
<20	32	23	7	—	1	—	—
20-24	111	91	14	2	—	—	—
25-29	145	94	40	4	—	1	—
30-34	152	113	33	2	2	1	—
35-39	99	75	20	3	—	—	—
40+	28	18	9	1	—	—	—
Single mention race²							
White	346	249	78	10	2	1	—
African American	26	21	4	—	—	—	—
American Indian	13	6	4	—	1	—	—
Asian/Hawaiian/Pacific Islander	43	30	12	—	—	—	—
Other/multiple races	31	22	5	—	—	1	—
Hispanic	111	86	20	2	—	—	—
Marital status							
Married	319	236	73	3	1	2	—
Unmarried	247	176	50	8	2	—	—
Mother's education							
8th grade or less	16	12	3	1	—	—	—
9th-12th, no diploma	78	56	17	1	1	—	—
High school/GED	150	109	32	4	1	—	—
Some college	137	105	28	1	1	—	—
Associate degree	36	28	7	—	—	—	—
Bachelor's degree	73	47	20	4	—	1	—
Postbaccalaureate	46	37	9	—	—	—	—
Pre-pregnancy body mass index							
Underweight (< 18.5)	9	7	1	—	—	—	—
Normal (18.5 - 24.9)	218	159	51	5	1	—	—
Overweight (25.0 - 29.9)	120	88	28	2	2	—	—
Obese (> 30.0)	174	129	36	3	—	1	—
Maternal tobacco use							
Tobacco use	94	69	23	—	—	—	—
No tobacco use	468	341	100	12	3	2	—
Initiation of care							
1st trimester	388	293	79	7	2	—	—
2nd trimester	104	68	33	2	—	1	—
3rd trimester	16	7	7	2	—	—	—
No care	46	32	4	1	1	1	—
Multiple birth							
Yes	25	22	2	—	—	—	—
No	545	392	121	12	3	2	—

— Quantity is zero.

¹ Total includes 14 fetal deaths that occurred en route, were unplanned home deliveries, or other out-of-hospital births not otherwise classified. Total also includes two fetal deaths with unknown gestation.

² Non-Hispanic single mention race. The Hispanic category may include any mention of race.

NOTE: Numbers within each maternal characteristic may not add up to total fetal death counts due to unknown responses.

Table 7-22: Early neonatal deaths by maternal characteristics by planned place of birth, Oregon occurrence, preliminary 2015-2017 birth cohort

Selected maternal characteristics	Total	Planned hospital birth			Planned out-of-hospital birth		
		Clinical estimate of gestation					
		<37	37-40	41+	<37	37-40	41+
Total early neonatal deaths¹	391	317	53	2	3	5	—
Mother's age							
<20	21	15	5	—	1	—	—
20-24	70	62	5	—	1	1	—
25-29	115	93	17	1	1	1	—
30-34	97	82	10	1	—	1	—
35-39	66	51	12	—	—	2	—
40+	22	14	4	—	—	—	—
Single mention race²							
White	248	204	31	2	1	4	—
African American	18	14	2	—	—	—	—
American Indian	5	4	1	—	—	—	—
Asian/Hawaiian/Pacific Islander	22	21	1	—	—	—	—
Other/multiple races	25	16	7	—	—	—	—
Hispanic	73	58	11	—	2	1	—
Marital status							
Married	207	166	31	2	2	3	—
Unmarried	184	151	22	—	1	2	—
Mother's education							
8th grade or less	10	9	1	—	—	—	—
9th-12th, no diploma	45	33	10	—	2	—	—
High school/GED	93	81	9	—	1	—	—
Some college	86	72	11	—	—	—	—
Associate degree	34	26	5	1	—	—	—
Bachelor's degree	58	44	7	1	—	5	—
Postbaccalaureate	37	29	8	—	—	—	—
Source of Payment³							
Medicaid/Oregon Health Plan	202	168	23	2	1	2	—
Private insurance	169	136	27	—	1	3	—
Self-pay	9	6	2	—	—	—	—
Other coverage	5	4	1	—	—	—	—
Birth order							
1st	159	132	18	1	1	5	—
2nd	111	90	15	1	1	—	—
3rd	49	41	6	—	1	—	—
4th +	72	54	14	—	—	—	—
Pre-pregnancy body mass index							
Underweight (< 18.5)	5	5	—	—	—	—	—
Normal (18.5 - 24.9)	145	109	28	2	1	3	—
Overweight (25.0 - 29.9)	87	72	12	—	2	1	—
Obese (> 30.0)	120	105	11	—	—	1	—
Maternal tobacco use							
Tobacco use	51	41	8	—	—	—	—
No tobacco use	328	268	44	2	3	5	—
Initiation of care							
1st trimester	287	238	41	2	1	2	—
2nd trimester	62	49	9	—	1	3	—
3rd trimester	3	2	1	—	—	—	—
No care	25	16	2	—	1	—	—
Prenatal care⁴							
Adequate	237	181	48	2	—	5	—
Inadequate	138	123	4	—	3	—	—

— Quantity is zero.

¹ Total includes eight births that occurred en route, were unplanned home deliveries, or other out-of-hospital births not otherwise classified. Total also includes four 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.