

## MAINE INFANT AND PERINATAL HEALTH

#### **Strengths**

9 in 10 Maine infants are

**born full-term** (8.7% premature at <37 weeks; 7<sup>th</sup> lowest prematurity rate in the U.S.)

7% of infants are born weighing

less than 2,500 gram. (low birthweight; 13<sup>th</sup> lowest in the U.S.)

### 9th lowest teen

**birth rate** in the U.S. (13.1 per 1,000 aged 15-19); the rate has been declining steadily since the 1990s.

1 in 3 infants are breastfed exclusively for 6 months. (5th highest in the U.S.); 85% have ever been breastfed (19th in the U.S.).

85% of infants are most often placed to sleep on their backs. (14% increase since 2004; 6<sup>th</sup> highest in the U.S.); only 35% usually put their infants to sleep on an approved surface and 44% put their infants to sleep without loose or soft bedding.



#### **Challenges**

### 10<sup>th</sup> highest

smoking rate during pregnancy (13% of women smoke during pregnancy; rate has been declining.)

**80 infant deaths** on average occur each year. Maine had the 18<sup>th</sup> highest **infant mortality rate** in the U.S. in 2016 (5.7 per 1,000); 8<sup>th</sup> highest rate among White, Non-Hispanics (2014-2016); Rate has been improving.

37% of new mothers in Maine did not intend to get pregnant or were unsure if they wanted to be pregnant (trend is improving).

1 in 11 new mothers in Maine used marijuana during pregnancy.

### Almost 1,000

infants are reported as **born drug affected** each year; of 28 states, Maine had the 2<sup>nd</sup> highest rate of neonatal abstinence syndrome in 2013. Number decreased for the first time in 2017.



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	Indicator	Maine Time 1	Maine Time 2	Change	US	ME vs US
	Infant mortality (rate per 1,000 live births)	2014 6.6	2017 5.7	0	2017 5.8	0
ty	Neonatal mortality (rate per 1,000 live births)	2014 4.6	2016 4.3	0	2016 3.9	0
rtali	Postneonatal mortality (rate per 1,000 live births)	2014 <b>2.1</b>	2016 1.5	0	2016 2.0	0
Infant and Fetal Mortality	Black/White infant mortality (rate per 1,000 births)	2011-15 <b>1.5</b>	2013-17 <b>1.3</b>	0	2014-16 2.3	NA
Feta	Fetal mortality (rate per 1,000 live births)	2014 4.3	2017 <b>5.5</b>	0	2017 <b>5.9</b>	0
and	Leading causes of infant mortality:					
fant	Preterm mortality (rate per 100,000 live births)	2014 283.5	2016 220.4	0	2016 201.6	0
드	Congenital abnormality mortality (rate per 100,000 live births)	2014 <b>118.1</b>	2016 118.1	0	2016 122.2	0
	SIDS/SUID mortality (rate per 100,000 live births)	2014 86.6	2016 <b>94.5</b>	0	2016 91.2	0
	Very Preterm (<32 weeks ) births	2014 1.3%	2017 <b>1.3%</b>	0	2017 <b>1.6%</b>	*
and	Early Term births (37-38 weeks)	2014 21.3	2017 23.4	į.	2017 <b>26.0</b>	<b>*</b>
Birthweight and Gestational Age	Preterm births (<37 weeks)	2014 8.4%	2017 <b>8.7</b> %	0	2017 9.9%	*
hwei tatio	Low birth weight (<2500 g)	2014 <b>7.6</b> %	2017 <b>7.1</b> %	0	2017 8.3%	<b>*</b>
Birt	Very low birth weight (<1500 g)	2014 1.2%	2017 1.2%	0	2017 1.4%	0
	Very low birth weight (<1500 g) born at level III	2014 <b>78.5</b> %	2017 <b>85.2</b> %	0	NA	NA
ng	Live births at a baby-friendly facility	2015 19.4%	2017 <b>18.4</b> %	NA	2017 <b>26.1%</b>	NA
eedi	Infants who are ever breastfed	2014 88.1%	2015 <b>85.3</b> %	0	2017 83.2%	0
Breastfeeding	Infants who are exclusively breastfed at 3 months	2014 <b>54.7</b> %	2015 <b>52.5</b> %	0	2015 46.9%	0
Bre	Infants who are exclusively breast fed to 6 months	2014 26.5%	2015 <b>34.1</b> %	0	2015 <b>24.9</b> %	<b>†</b>
	Smoking during pregnancy	2014 <b>16.5%</b>	2017 13.1%	*	2017 6.9%	·
lre Ire	Drinking alcohol during pregnancy	2014 <b>8.7</b> %	2015 <b>6.0</b> %	0	2015 8.0%	0
Substance Exposure	Marijuana use during pregnancy	NA	2016 <b>8.8%</b>	NA	NA	NA
Suk	Drug-affected infant reports (rate per 1,000 births)	2014 <b>75.8</b>	2017 <b>77.9</b>	0	NA	NA
	Neonatal abstinence syndrome (rate per 1,000 hospital births)	2014 <b>36.5</b>	2016 <b>33.1</b>	0	2016 <b>6.8</b>	!
a	Infants placed to sleep on their back	2014 83.6%	2016 85.4%	0	2016 <b>78.0</b> %	<b>*</b>
Car	Infants placed to sleep on a separate approved sleep surface	NA	2016 <b>34.4</b> %	NA	2016 <b>31.8%</b>	0
Infant Care	Infants placed to sleep without soft objects or loose bedding	NA	2016 44.5%	NA	2016 42.4%	0
<u> </u>	Well-baby check (ages 0-2)	NA	2016 <b>98.7%</b>	NA	2016 <b>90.7%</b>	NA

- Maine is significantly better than U.S./Trend is improving.
- ! Maine is significantly worse than U.S./Trend is worsening.
- No significant difference/no clear trend.
- NA Not available.



## MAINE INFANT AND **PERINATAL HEALTH**

Indicator	Definition and Data Source
Infant mortality (rate per 1,000 live births)	Rate per 1,000 live births of babies who died before their first birthday; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Death certificate data. U.S. data: National Vital Statistics System (NVSS).
Neonatal mortality (rate per 1,000 live births)	The number of neonatal deaths per 1,000 live births.  A neonatal death is defined as a death during the first 28 days of life (0-27 days); Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Death certificate data. U.S. data: National Vital Statistics System (NVSS).
Postneonatal mortality (rate per 1,000 live births)	The number of postneonatal deaths per 1,000 live births. A postneonatal death is defined as a death between 28 days and 364 days of life; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Death certificate data. U.S. data: National Vital Statistics System (NVSS).
Black/White infant mortality ratio	Ratio of the infant mortality rate per 1,000 live births of Black/African American women to the infant mortality rate per 1,000 births of White women; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Death certificate data. U.S. data: National Vital Statistics System (NVSS).
Fetal mortality (rate per 1,000 live births)	The number of fetal deaths per 100,000 resident live births. Fetal death is defined as death at 20 or more weeks gestation that occurs before birth, which is not an induced termination of pregnancy; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Fetal death certificate data. U.S. data: National Vital Statistics System (NVSS).
Preterm mortality (rate per 100,000 live births)	Number of infant deaths due to preterm-related causes per 100,000 live births. Causes are defined as preterm-related if 75% or more of infants whose deaths were attributed to that cause were born at at less than 37 weeks of gestation, and the cause of death was a direct consequence of preterm birth based on a clinical evaluation and review of the literature. This includes low birth weight, several maternal complications, respiratory distress, bacterial sepsis, etc. To be included as a preterm-related death, the infant must have been born preterm (<37 completed weeks of gestation) with the underlying cause of death assigned to one of the following ICD-10 categories: K550, P000, P010, P011, P015, P020, P021, P027, P070–P073, P102, P220–229, P250–279, P280, P281, P360–369, P520–523, and P77; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Linked birth-infant death certificate data. U.S. data: National Vital Statistics System (NVSS).
Congenital abnormality mortality (rate per 100,000 live births)	Number of infant deaths due to congenital anomalies (birth defects) per 100,000 live births; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Death certificate data.
SIDS/SUID mortality (rate per 100,000 live births)	The number of sudden unexplained infant deaths per 100,000 live births; SUID deaths include SIDS (R95), unknown cause (R99), and accidental suffocation and strangulation in bed (W75); Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Death certificate data. U.S. data: National Vital Statistics System (NVSS).
Very Preterm (<32 weeks ) births	Percent of infants born alive at <32 weeks gestation; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Birth certificate data. U.S. data: National Vital Statistics System (NVSS).
Early Term births (37-38 weeks)	Percent infants born alive at 37-38 weeks gestation; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Birth certificate data. U.S. data: National Vital Statistics System (NVSS).
Preterm births (<37 weeks)	Percent of infants born alive at less than 27 weeks gestation; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Birth certificate data. U.S. data: National Vital Statistics System (NVSS).
Low birth weight (<2500 g)	Percent of infants born weighing less than 2,500 grams; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Birth certificate data. U.S. data: National Vital Statistics System (NVSS).
Very low birth weight (<1500 g)	Percent of infants born weighing less than 1,500 grams; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Birth

certificate data. U.S. data: National Vital Statistics System (NVSS).



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l	Indicator	Definition and Data Source
	Very low birth weight (<1500 g) born at level III	Percent of infants born weighing less than 1,500 grams at a hospital with a Level III NICU; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Birth certificate data. U.S. data: National Vital Statistics System (NVSS).
	Live births at a baby-friendly facility	Percent of infants born born at hospitals that have achieved the "Baby –Friendly" designation that promotes breastfeeding; CDC National Immunization Survey (NIS) 2016-2017, among 2015 births.
	Infants who are ever breastfed	Percent of infants born in a specified year who were ever breastfed; CDC National Immunization Survey (NIS) 2016-2017, among 2015 births; CDC National Immunization Survey (NIS) 2016-2017, among 2015 births.
	Infants who are exclusively breastfed at 3 months	Percent of infants born in a specified year who were exclusively breastfed for at least three months; CDC National Immunization Survey (NIS) 2016-2017, among 2015 births.
	Infants who are exclusively breast fed to 6 months	Percent of infants born in a specified year who were exclusively breastfed for at least six months; CDC National Immunization Survey (NIS) 2016-2017, among 2015 births.
	Smoking during pregnancy	Percent of birth to mothers who smoked during pregnancy; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Birth certificate data. U.S. data: National Vital Statistics System (NVSS).
	Drinking alcohol during pregnancy	Percent of women with a recent live birth who report that they drank any alcohol during their most recent pregnancy; Pregnancy Risk Assessment Monitoring System.
	Marijuana use during pregnancy	Percent of women with a recent live birth who report that they used marijuana during their most recent pregnancy; Pregnancy Risk Assessment Monitoring System (PRAMS).
	Drug-affected infant reports (rate per 1,000 births)	Rate per 1,000 births of infants for which a healthcare provider reported to Maine's Office of Child and Family Services that there was reasonable cause to suspect the baby may be affected by illegal substance abuse or demonstrated withdrawal symptoms resulting from prenatal drug exposure or has a fetal alcohol spectrum disorder; <i>Maine Office of Child and Family Services</i> .
	Neonatal abstinence syndrome (rate per 1,000 hospital births)	Number of infants diagnosed with neonatal abstinence syndrome at birth per 1,000 hospital births; Maine Health Data Organization, Hospital Discharge Dataset; U.S. data: Healthcare Cost and Utilization Project (HCUP). Data on Maine rank: Ko JY, Patrick SW, Tong VT, Patel R, Lind JN, Barfield WD. Incidence of Neonatal Abstinence Syndrome — 28 States, 1999–2013. MMWR Morb Mortal Wkly Rep 2016;65:799–802(NAS).
	Infants placed to sleep on their back	Percent of mothers with a live birth reporting that they most often place their baby to sleep on their back only; Pregnancy Risk Assessment Monitoring System (PRAMS).
	Infants placed to sleep on a separate approved sleep surface	Percent of mothers with a recent live birth who report that their baby always or often sleeps alone, usually in a crib, bassinet, or pack and play, and not usually in a standard bed, couch, sofa, armchair, car seat, or swing; Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics, Maine Pregnancy Risk Assessment Monitoring System (PRAMS).
	Infants placed to sleep without soft objects or loose bedding	Number of mothers with a recent live birth who report that their baby does not usually sleep with blankets, toys, cushions, pillows, or crib bumper pads; Pregnancy Risk Assessment Monitoring System (PRAMS).
	Well-baby check (ages 0-2)	Percentage of parents of children aged 0 to 2 years who report that their child had a well-baby checkup in the past 12 months; Child and Adolescent Health Measurement Initiative, National Survey of Children's Health, Data Resource Center for Child and Adolescent Health.
	Births to adolescents aged 15-19 years per 1,000 females	Number of births to adolescent females aged 15-19 years per 1,000 females aged 15-19 years; Maine Center for Disease Control and

Prevention, Data, Research and Vital Statistics, Birth certificate data.

U.S. data: National Vital Statistics System (NVSS).