

Infants Born at Highest Risk

DEFINITION

Infants born at highest risk is the percentage of babies born in Rhode Island to Rhode Island women who were under age 20, unmarried, and had fewer than 12 years of education.

SIGNIFICANCE

The basic architecture of the human brain develops during the infant and toddler years. By age three, a child's brain has grown to 90% of its adult size and the foundation of many cognitive structures and systems are in place. Early experiences lay the foundation for future learning, and strong, positive relationships are the building blocks for healthy development. Babies who have positive, predictable relationships with parents and other caregivers have a sturdy foundation from which to achieve healthy growth and development, while babies who do not have a strong relationship with a nurturing caregiver often encounter challenges in future learning and development.^{1,2,3}

Infancy is a time of great opportunity and vulnerability. A child's development can be compromised by "toxic stress" and a variety of adverse childhood experiences and risk factors including poverty, maternal depression, family chaos, exposure to violence, child maltreatment, and unsafe, low-quality child care.^{4,5}

Maternal marriage status, age, and education level at birth influence the likelihood that a child will live in poverty and predict many developmental vulnerabilities. When a child is born to a teenage, unmarried mother who has not graduated from high school, he or she is nine times more likely to grow up in poverty than a child born to a married woman over age 20 with a high school diploma.⁶ Most children facing these three economic and social risk factors at birth continue to face great challenges throughout childhood. In 2015 in Rhode Island, 240 babies (2% of all babies) were born to unmarried teen mothers without high school diplomas.⁷

Providing early and intensive support to families with multiple risk factors can help parents develop critical nurturing skills.⁸ Evidence-based home visiting programs for vulnerable families beginning during pregnancy (or as early as possible) and continuing through infancy and toddlerhood improve outcomes for children facing significant adversity.⁹

Rhode Island offers three evidence-based home visiting programs shown to improve outcomes in vulnerable families – Nurse-Family Partnership, Healthy Families America, and Parents as Teachers.¹⁰

Births by Key Risk Factors, Four Core Cities and Rhode Island, 2015

CITY/TOWN	BIRTHS	% TO MOTHERS WITHOUT A HSD/GED	% TO SINGLE MOTHERS	% TO MOTHERS YOUNGER THAN 20	% TO MOTHERS WITH ALL 3 RISK FACTORS
Central Falls	300	35%	70%	12%	7%
Pawtucket	916	16%	60%	6%	3%
Providence	2,471	21%	59%	8%	4%
Woonsocket	500	17%	64%	8%	4%
<i>Rhode Island</i>	<i>10,418</i>	<i>11%</i>	<i>45%</i>	<i>5%</i>	<i>2%</i>

Source: Rhode Island Department of Health, KIDSNET Database, 2015.

- ◆ The U.S. birth rate had been declining since 2007 and reached an historic low in 2013, but rose slightly in 2014. Rhode Island had the fifth lowest birth rate in the U.S. in 2014, with 10.3 births per 1,000 women ages 15 to 44.¹¹
- ◆ The total number of babies born in Rhode Island to Rhode Island women declined 13% between 2007 and 2015, from 12,010 to 10,418 births.¹²
- ◆ Between 2007 and 2015 in Rhode Island, the number of infants born at highest risk (babies born to unmarried teen mothers without a high school diploma) fell 63%. The proportion of births to single mothers declined from 47% to 45% of births, while the proportion of births to mothers without a high school diploma fell from 18% to 11%, and the proportion of births to teen mothers fell from 10% to 5% of all births.¹³
- ◆ All babies born in Rhode Island are screened through the Rhode Island Department of Health's Newborn Risk Assessment Program. In 2015, there were 6,546 babies born (63% of all babies born) who "screened positive," indicating the presence of one or more risk factors associated with poor developmental outcomes.¹⁴
- ◆ Of the 10,418 babies born to Rhode Island women in 2015, nearly one-third (3,052) had a mother with a history of treatment for mental health conditions. Also, 482 had a mother with a documented history of substance abuse problems and 227 had a mother who was involved or had been involved with the child welfare system (either as an adult or as a child).¹⁵

Table 16.

Infants Born at Highest Risk, Rhode Island, 2015

CITY/TOWN	TOTAL # OF BIRTHS	BIRTHS TO MOTHERS WITHOUT A HIGH SCHOOL DIPLOMA	BIRTHS TO SINGLE MOTHERS	BIRTHS TO MOTHERS YOUNGER THAN AGE 20	BIRTHS TO MOTHERS WITH ALL 3 RISK FACTORS	% OF BIRTHS WITH ALL 3 RISK FACTORS
Barrington	113	4	21	1	0	0%
Bristol	132	9	49	7	4	3%
Burrillville	125	2	48	4	1	<1%
Central Falls	300	106	209	37	21	7%
Charlestown	38	1	15	3	0	0%
Coventry	305	9	111	8	2	<1%
Cranston	802	53	305	24	13	2%
Cumberland	320	11	91	3	1	<1%
East Greenwich	119	2	21	1	1	<1%
East Providence	433	41	178	13	5	1%
Exeter	51	2	17	2	1	2%
Foster	29	1	10	1	1	3%
Glocester	64	1	15	0	0	0%
Hopkinton	41	2	9	0	0	0%
Jamestown	28	0	5	0	0	0%
Johnston	272	17	128	12	6	2%
Lincoln	209	7	61	5	2	1%
Little Compton	15	0	4	0	0	0%
Middletown	165	11	54	7	5	3%
Narragansett	49	0	18	0	0	0%
New Shoreham	11	0	4	0	0	0%
Newport	224	30	91	7	5	2%
North Kingstown	226	8	62	7	1	<1%
North Providence	338	24	148	20	5	1%
North Smithfield	72	2	17	0	0	0%
Pawtucket	916	144	549	52	25	3%
Portsmouth	106	0	18	0	0	0%
Providence	2,471	527	1,455	189	98	4%
Richmond	30	2	13	4	2	7%
Scituate	84	2	22	3	1	1%
Smithfield	135	2	37	1	1	<1%
South Kingstown	154	4	61	6	1	<1%
Tiverton	64	2	21	2	0	0%
Warren	81	2	22	1	1	1%
Warwick	796	33	264	21	6	<1%
West Greenwich	40	2	11	1	0	0%
West Warwick	329	34	167	26	9	3%
Westerly	130	3	41	3	2	2%
Woonsocket	500	84	319	42	20	4%
Unknown	101	0	31	0	0	NA
Four Core Cities	4,187	861	2,532	320	164	4%
Remainder of State	6,130	323	2,159	193	76	1%
Rhode Island	10,418	1,184	4,722	513	240	2%

Source of Data for Table/Methodology

Rhode Island Department of Health, KIDSNET Database, 2015. Birth data from 2015 are provisional. Data include only births that occurred in Rhode Island to Rhode Island residents. This table shows the number and percentage of all births with three risk factors that place a child at very high risk for poor developmental outcomes.

Core cities are Central Falls, Pawtucket, Providence, and Woonsocket.

Caution should be used with small numbers in numerators and denominators.

References

- ¹ U.S. Department of Health and Human Services. (2011). *Supporting brain development in traumatized children and youth*. Washington, DC: Child Welfare Information Gateway.
- ² U.S. Department of Health and Human Services. (2009). *Understanding the effects of maltreatment on brain development*. Washington, DC: Child Welfare Information Gateway.
- ^{3,4} *Early experiences matter: A guide to improved policies for infants and toddlers*. (2009). Washington, DC: Zero to Three National Center for Infants and Toddlers.
- ⁵ Shonkoff, J. P., Garner, A. S., & the Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; and Section on Developmental and Behavioral Pediatrics. (2011). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232-e246.
- ⁶ *Teen pregnancy, poverty, and income disparity*. (2010). Washington, DC: The National Campaign to Prevent Teen Pregnancy.
- ^{7,12,13,14,15} Rhode Island Department of Health, KIDSNET Database, 2007-2015.
- ⁸ Clothier, S. & Tweedie, J. (2012). Bringing up baby. *State Legislatures*, 38(1), 24-26.
- ⁹ *Expanding home visiting research: New measures of success*. (n.d.). Washington, DC: The Pew Charitable Trusts.
- ¹⁰ *Home Visiting Program: Rhode Island*. (2015). Washington, DC: U.S. Department of Health and Human Services, Health Resources and Services Administration.

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