

Infants Born at Risk

DEFINITION

Infants born at risk is the number of babies born in Rhode Island to Rhode Island women who were low-income, single, did not have a high school diploma, or were under age 20.

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 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" caused by a variety of adverse childhood experiences and risk factors, including poverty, maternal depression, family chaos, exposure to violence, child maltreatment, parental substance abuse, and/or parental incarceration. These negative experiences in early childhood

place a child at increased risk for lower rates of school engagement, chronic disease, reduced quality of life in adulthood and reduced life expectancy.^{4,5,6}

Economic hardship in early childhood is associated with poor educational and health outcomes. Differences in development are evident by age two, with children born into low-income families lagging behind children born into higher income families. When economic insecurity is combined with other risk factors such as having a single parent, a parent with low education levels, and/or a teen parent, children are at markedly increased risk for poor outcomes.⁷ In the U.S., 45% of all infants and toddlers live in low-income families (below 200% of the federal poverty line), a significantly higher proportion than older children and adults. In fact, children under age three are more than twice as likely to live in poverty than adults age 65 or older.⁸

Family planning programs help individuals avoid unintended pregnancies which are associated with negative educational, health, and economic outcomes for women and children.^{9,10} In addition, evidence-based home visiting programs for vulnerable families beginning during pregnancy (or as early as possible) and continuing through infancy and toddlerhood help parents develop critical nurturing skills and improve outcomes for children.¹¹

Births by Key Risk Factors, Four Core Cities and Rhode Island, 2016

CITY/TOWN	BIRTHS	# TO LOW-INCOME MOTHERS	# TO SINGLE MOTHERS	# TO MOTHERS WITHOUT A HIGH SCHOOL DIPLOMA	# TO MOTHERS YOUNGER THAN 20
Central Falls	326	289	233	106	30
Pawtucket	941	650	555	162	52
Providence	2,309	1,768	1,415	473	162
Woonsocket	541	387	351	109	44
<i>Rhode Island</i>	<i>10,212</i>	<i>5,128</i>	<i>4,672</i>	<i>1,144</i>	<i>452</i>

Source: Rhode Island Department of Health, KIDSNET Database, 2016.

- ◆ The U.S. birth rate has been declining since 2007, reaching another historic low in 2015. The U.S. birth rate has also been declining for teens and for single women. Rhode Island had the fifth lowest birth rate in the U.S. in 2015, with 10.4 births per 1,000 women ages 15 to 44.¹²
- ◆ The total number of babies born in Rhode Island to Rhode Island women declined 15% between 2007 and 2016, from 12,010 to 10,212 births.¹³
- ◆ Between 2007 and 2016 in Rhode Island, the proportion of births to mothers without a high school diploma fell from 18% to 11% and births to teen mothers fell from 10% to 4% of all births. The proportion of births to single mothers decreased from 47% to 46% of all births during that time.¹⁴
- ◆ All babies born in Rhode Island are screened through the Rhode Island Department of Health's Newborn Risk Assessment Program. In 2016, there were 6,475 newborns (63%) who "screened positive," indicating the presence of one or more risk factors associated with poor developmental outcomes.¹⁵
- ◆ Of the 10,212 babies born in Rhode Island to Rhode Island women in 2016, nearly one-third (3,167) had a mother with a documented history of treatment for mental health conditions. Also, 568 had a mother with a documented history of substance abuse problems and 196 had a mother with documented involvement in the child welfare system (either as an adult or as a child).¹⁶

Table 16.

Infants Born at Risk, Rhode Island, 2016

CITY/TOWN	TOTAL # OF BIRTHS	# OF BIRTHS TO LOW-INCOME FAMILIES	# OF BIRTHS TO SINGLE MOTHERS	BIRTHS TO MOTHERS WITHOUT A HIGH SCHOOL DIPLOMA	# OF BIRTHS TO MOTHERS YOUNGER THAN AGE 20
Barrington	107	19	18	3	0
Bristol	130	40	42	6	*
Burrillville	110	38	44	8	6
Central Falls	326	289	233	106	30
Charlestown	56	22	20	3	*
Coventry	290	91	106	13	5
Cranston	797	334	314	40	15
Cumberland	338	76	87	12	6
East Greenwich	119	16	15	3	*
East Providence	466	174	197	31	17
Exeter	43	9	8	2	0
Foster	26	9	9	1	0
Glocester	58	18	16	0	0
Hopkinton	39	9	11	0	0
Jamestown	14	2	3	0	0
Johnston	253	109	105	9	6
Lincoln	183	67	61	8	6
Little Compton	13	4	3	0	0
Middletown	133	30	32	2	*
Narragansett	51	19	19	2	0
New Shoreham	14	10	3	1	0
Newport	240	99	93	24	5
North Kingstown	216	57	67	9	*
North Providence	289	121	113	14	13
North Smithfield	75	29	20	3	*
Pawtucket	941	650	555	162	52
Portsmouth	110	18	24	2	0
Providence	2,309	1,768	1,415	473	162
Richmond	40	9	13	2	*
Scituate	93	10	22	3	*
Smithfield	136	31	26	0	0
South Kingstown	160	43	43	5	*
Tiverton	74	26	26	5	*
Warren	66	28	32	5	5
Warwick	730	218	258	33	30
West Greenwich	42	12	11	1	*
West Warwick	338	152	170	34	16
Westerly	147	48	48	10	*
Woonsocket	541	387	351	109	44
Unknown	99	37	39	0	3
Four Core Cities	4,117	3,094	2,554	850	288
Remainder of State	5,996	1,997	2,079	294	161
Rhode Island	10,212	5,128	4,672	1,144	452

Source of Data for Table/Methodology

Rhode Island Department of Health, KIDSNET Database, 2016. Birth data from 2016 are provisional. Data include only births that occurred in Rhode Island to Rhode Island residents. This table shows the number of births with key risk factors that place a child at high risk for poor developmental outcomes. Births to low-income families are births to women with public health insurance (Medicaid/RiteCare) or no insurance. Of the 5,128 births to low-income women in 2016, 5,069 had Medicaid/Rite Care coverage and 59 had no insurance).

*Fewer than 5 births are in this category. Actual numbers are not shown because they are considered sensitive information by the Rhode Island Department of Health. These births are still counted in the four core cities, remainder of state, and state totals.

The definition for this indicator has changed. The number and percentage of births with all three specific risk factors (births to women under age 20, single, and without a high school diploma) and the percentage of all births with these risk factors is no longer being reported.

Unknown: Births were to Rhode Island residents, but specific city/town information was unavailable.

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

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.

^{3A} *Early experiences matter: A guide to improved policies for infants and toddlers*. (2009). Washington, DC: Zero to Three National Center for Infants and Toddlers.

³ 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.

(continued on page 180)