

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, and/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 chronic disease, reduced quality of life in adulthood, reduced life expectancy, and lower rates of school engagement.^{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 as 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, 2017

CITY/TOWN	BIRTHS	# TO LOW-INCOME MOTHERS	# TO SINGLE MOTHERS	# TO MOTHERS WITHOUT A HIGH SCHOOL DIPLOMA	# TO MOTHERS YOUNGER THAN 20
Central Falls	321	277	209	85	35
Pawtucket	864	588	514	121	30
Providence	2,366	1,737	1,395	493	158
Woonsocket	519	381	317	95	45
<i>Rhode Island</i>	<i>10,050</i>	<i>4,992</i>	<i>4,524</i>	<i>1,098</i>	<i>397</i>

Source: Rhode Island Department of Health, KIDSNET Database, 2017.

- ◆ The U.S. birth rate has been declining since 2007, reaching an historic low in 2016. The U.S. teen birth rate also reached a record low in 2016. Rhode Island had the fifth lowest overall birth rate and the seventh lowest teen birth rate in the U.S. in 2016, with 10.2 births per 1,000 women ages 15 to 44 and 12.9 births per 1,000 women ages 15 to 19.¹²
- ◆ The total number of babies born in Rhode Island to Rhode Island women declined 16% between 2007 and 2017, from 12,010 to 10,050 births. The proportion of Rhode Island births that were to mothers without a high school diploma fell from 18% to 11% and the proportion of all births that were to teen mothers fell from 10% to 4% of all births during the same time period.¹³
- ◆ All babies born in Rhode Island are screened through the Rhode Island Department of Health's Newborn Risk Assessment Program. In 2017, there were 6,303 newborns (63%) who "screened positive," indicating the presence of one or more risk factors associated with poor developmental outcomes.¹⁴
- ◆ Of the 10,050 babies born in Rhode Island to Rhode Island women in 2017, nearly one-third (3,129) had a mother with a documented history of treatment for mental health conditions. Also, 571 (6%) had a mother with a documented history of substance abuse problems, and 211 (2%) had a mother with documented involvement in the child welfare system (either as an adult or as a child).¹⁵

Table 16.

Infants Born at Risk, Rhode Island, 2017

CITY/TOWN	TOTAL # OF BIRTHS	# OF BIRTHS TO LOW-INCOME MOTHERS	# OF BIRTHS TO SINGLE MOTHERS	BIRTHS TO MOTHERS WITHOUT A HIGH SCHOOL DIPLOMA	# OF BIRTHS TO MOTHERS YOUNGER THAN AGE 20
Barrington	103	12	10	1	*
Bristol	128	44	47	5	*
Burrillville	116	36	44	6	*
Central Falls	321	277	209	85	35
Charlestown	36	9	14	0	0
Coventry	301	78	113	19	*
Cranston	772	346	305	68	20
Cumberland	325	81	73	12	5
East Greenwich	108	13	13	1	0
East Providence	447	175	181	22	12
Exeter	44	11	16	1	*
Foster	42	15	16	0	0
Glocester	47	16	19	1	0
Hopkinton	30	9	8	0	*
Jamestown	26	7	5	1	0
Johnston	250	103	106	9	*
Lincoln	171	50	60	8	*
Little Compton	7	3	2	0	0
Middletown	162	45	49	7	*
Narragansett	53	14	15	1	*
New Shoreham	5	4	3	1	0
Newport	226	101	94	28	9
North Kingstown	211	58	58	10	7
North Providence	291	121	131	14	8
North Smithfield	63	19	22	3	*
Pawtucket	864	588	514	121	30
Portsmouth	110	21	18	2	*
Providence	2,366	1,737	1,395	493	158
Richmond	43	9	9	0	0
Scituate	79	17	15	1	0
Smithfield	142	28	27	2	*
South Kingstown	150	40	39	7	6
Tiverton	75	28	25	6	*
Warren	88	28	27	4	*
Warwick	737	227	265	32	19
West Greenwich	46	8	14	1	0
West Warwick	330	161	182	24	13
Westerly	144	51	42	7	*
Woonsocket	519	381	317	95	45
Unknown	72	21	22	0	0
Four Core Cities	4,070	2,983	2,435	794	268
Remainder of State	5,908	1,988	2,067	304	129
Rhode Island	10,050	4,992	4,524	1,098	397

Source of Data for Table/Methodology

Rhode Island Department of Health, KIDSNET Database, 2017. Birth data from 2017 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 women are births to women with public health insurance (Medicaid/RIteCare) or no insurance. Of the 4,992 births to low-income families in 2017, 4,947 had Medicaid/RIte Care coverage and 45 had no insurance.

* Fewer than 5 births to mothers younger than age 20 are suppressed by the RI Department of Health due to the policy regarding sensitive reproductive health information of a potentially socially-stigmatizing age group. These births are still counted in the four core cities, remainder of state, and state totals.

The definition for this indicator changed in 2016. The percentage of births with specific risk factors (births to women under age 20, single, and without a high school diploma) and the number and percentage of all births with all three risk factors is no longer being reported.

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.
- ³⁴ *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. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232-e246.

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