

# 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 80% 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 early childhood experiences and stable, loving relationships with parents and other caregivers have a sturdy foundation to achieve healthy growth and development, while babies who go without often encounter educational, social-emotional, health, and developmental challenges.<sup>1,2,3</sup>

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 developmental delays, health problems, cognitive impairment, lowered rates of school success, and unhealthy behaviors throughout life.<sup>4,5,6</sup>

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.<sup>7</sup> In the U.S., 44% of all infants and toddlers live in low-income families (below 200% of the federal poverty line) and 21% live in poverty, a significantly higher proportion than older children and adults. Children under age three are more than twice as likely to live in poverty than adults age 65 or older.<sup>8</sup>

Family planning programs help individuals avoid unintended pregnancies which are associated with negative educational, health, and economic outcomes for women and children.<sup>9,10</sup> In addition, evidence-based home visiting programs for vulnerable families help parents develop critical nurturing skills and improve outcomes for children and families.<sup>11</sup>

**Births by Key Risk Factors, Four Core Cities and Rhode Island 2018**

CITY/TOWN	BIRTHS	# TO LOW-INCOME MOTHERS	# TO SINGLE MOTHERS	# TO MOTHERS WITHOUT A HIGH SCHOOL DIPLOMA	# TO MOTHERS YOUNGER THAN 20
Central Falls	303	263	213	97	20
Pawtucket	852	596	481	110	38
Providence	2,352	1,760	1,355	466	147
Woonsocket	465	343	315	95	40
<i>Rhode Island</i>	<i>9,952</i>	<i>5,069</i>	<i>4,441</i>	<i>1,069</i>	<i>395</i>

Source: Rhode Island Department of Health, KIDSNET Database, 2018.

- ◆ The U.S. birth rate has been declining since 2007, reaching an historic low in 2017. The U.S. teen birth rate also reached a record low in 2017. Rhode Island had the fifth lowest overall birth rate and the sixth lowest teen birth rate in the U.S. in 2017, with 10.0 births per 1,000 women ages 15 to 44 and 11.4 births per 1,000 teens ages 15 to 19.<sup>12</sup>
- ◆ The total number of babies born in Rhode Island to Rhode Island women declined 17% between 2008 and 2018. The proportion of Rhode Island births that were to mothers without a high school diploma fell from 17% 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.<sup>13</sup>
- ◆ All babies born in Rhode Island are screened through the Rhode Island Department of Health's Newborn Risk Assessment Program. In 2018, there were 6,333 newborns (64%) who "screened positive," indicating the presence of one or more risk factors associated with poor developmental outcomes.<sup>14</sup>
- ◆ Of the 9,952 babies born in Rhode Island to Rhode Island women in 2018, nearly one-third (3,189) had a mother with a documented history of treatment for mental health conditions. Also, 627 (6%) had a mother with a documented history of substance abuse problems, and 225 (2%) had a mother with documented involvement in the child welfare system (either as an adult or as a child).<sup>15</sup>

Table 16.

## Infants Born at Risk, Rhode Island, 2018

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	107	14	8	0	0
Bristol	103	35	31	6	*
Burrillville	121	44	50	5	6
Central Falls	303	263	213	97	20
Charlestown	54	22	20	4	*
Coventry	280	84	84	9	*
Cranston	756	314	298	48	28
Cumberland	346	96	87	13	6
East Greenwich	109	17	18	0	0
East Providence	447	197	199	37	11
Exeter	52	11	12	3	0
Foster	41	11	10	2	*
Glocester	69	17	21	1	*
Hopkinton	30	11	7	1	0
Jamestown	22	4	2	0	0
Johnston	270	107	107	20	5
Lincoln	160	43	48	4	*
Little Compton	6	2	-	0	0
Middletown	156	51	39	8	*
Narragansett	42	19	15	2	*
New Shoreham	2	1	1	0	0
Newport	207	104	100	30	14
North Kingstown	235	55	61	7	7
North Providence	311	159	134	19	15
North Smithfield	83	35	28	2	*
Pawtucket	852	596	481	110	38
Portsmouth	135	23	33	2	*
Providence	2,352	1,760	1,355	466	147
Richmond	79	18	20	3	*
Scituate	89	24	26	3	*
Smithfield	132	31	35	2	*
South Kingstown	155	50	40	8	*
Tiverton	73	22	26	6	*
Warren	80	29	29	1	*
Warwick	712	233	265	24	12
West Greenwich	49	7	9	0	0
West Warwick	326	158	159	26	9
Westerly	140	48	54	5	*
Woonsocket	465	343	315	95	40
Unknown	1	1	1	0	0
Four Core Cities	3,972	2,962	2,364	768	245
Remainder of State	5,979	2,096	2,076	301	150
Rhode Island	9,952	5,059	4,441	1,069	395

### Source of Data for Table/Methodology

Rhode Island Department of Health, KIDSNET Database, 2018. Birth data from 2018 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 5,059 births to low-income families in 2017, 5,023 had Medicaid/Rite Care coverage and 36 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

- <sup>1</sup> *The basics of infant and early childhood mental health: A briefing paper.* (2017). Washington, DC: Zero to Three.
- <sup>2</sup> First Things First. (n.d.). *Brain development.* Retrieved February 22, 2019, from [www.firstthingsfirst.org/early-childhood-matters/brain-development](http://www.firstthingsfirst.org/early-childhood-matters/brain-development)
- <sup>3</sup> Zero to Three. (2019). *Share the Think Babies message.* Retrieved February 22, 2019, from [www.thinkbabies.org](http://www.thinkbabies.org)
- <sup>4</sup> *Toxic stress.* (2017). Cambridge, MA: Harvard Center on the Developing Child.
- <sup>5</sup> Robert Wood Johnson Foundation. (2001-2018). *Adverse childhood experiences.* Retrieved February 22, 2019 from [www.rwjf.org](http://www.rwjf.org)
- <sup>6</sup> *Traumatic experiences widespread among U.S. youth, new data show.* (2017). Washington, DC: Robert Wood Johnson Foundation.

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