

Table 1. Sleep-related injury deaths among infants by year NYC, 2016-2020		
	N	Percent
<b>Total</b>	185	100%
<b>Year</b>		
2016	36	19%
2017	35	19%
2018	41	22%
2019	41	22%
2020	32	17%

**Data source**

NYC DOHMH Bureau of Vital Statistics and NYC Office of Chief Medical Examiner.

**Infant injury death**

Sleep-related injury death is classified as infant injury death due to select injury causes (unintentional suffocation in bed, unspecified threat to breathing, and undetermined causes). An injury was considered to be sleep-related if the infant was asleep when last seen alive and if any of the following factors was present at the time of death: unsafe sleep position, unsafe sleep surface, bed sharing and excess bedding.

**Table 2. Sleep-related injury infant deaths and all live births: age at death, sex, gestational age, mother's demographics and pregnancy characteristics  
NYC, 2016-2020**

	Sleep-Related Injury Deaths		All Live Births		Rate <sup>1</sup>
	N	Percent*	N	Percent*	
<b>Total</b>	185	100%	562,140	100%	32.9
<b>Age at Death</b>					
< 28 days	24	13%	--	--	--
28 days to 4 months	125	68%	--	--	--
5-12 months	36	19%	--	--	--
<b>Cause of Death</b>					
Accidental suffocation & strangulation in bed; Unspecified threat to breathing	46	25%	--	--	--
Undetermined cause	139	75%	--	--	--
<b>Sex</b>					
Boy	98	53%	287,947	51%	34.0
Girl	87	47%	274,193	49%	31.7
<b>Gestational Age</b>					
Preterm (<37 weeks)	34	18%	50,908	9%	66.8
Full term (>=37 weeks)	140	76%	511,186	91%	27.4
Unknown <sup>2</sup>	11	6%	--	--	--
<b>Mother's Age</b>					
<20	15	8%	14,424	3%	104.0
20-24	43	23%	80,910	14%	53.1
25-34	81	44%	312,971	56%	25.9
35+	35	19%	153,834	27%	22.8
Unknown <sup>2</sup>	11	6%	--	--	--
<b>Mother's Race</b>					
Black non-Hispanic	66	36%	103,817	19%	63.6
Hispanic	62	34%	157,292	28%	39.4
White non-Hispanic	30	16%	196,395	35%	15.3
Asian/Pacific Islander	11	6%	95,058	17%	11.6
Other	4	2%	--	--	--
Unknown <sup>2</sup> /Missing	12	6%	--	--	--
<b>Mother's Education</b>					
High school or less	112	61%	214,498	38%	52.2
Some college or above	59	32%	345,503	62%	17.1
Unknown <sup>2</sup> /Missing	14	8%	--	--	--
<b>Mother's Nativity</b>					
Foreign born	53	29%	281,753	50%	18.8
U.S. born	120	65%	279,987	50%	42.9
Unknown <sup>2</sup> /Missing	12	6%	--	--	--
<b>Parity</b>					
0 previous live birth	45	24%	239,398	43%	18.8
1 previous live birth	64	35%	176,364	31%	36.3
2 + previous live births	65	35%	146,283	26%	44.4

Unknown <sup>2</sup>	11	6%	--	--	--
<b>Program Participation</b>					
Medicaid or WIC	146	79%	348,426	62%	41.9
Neither	28	15%	213,714	38%	13.1
Unknown <sup>2</sup>	11	6%	--	--	--
<b>Borough of Residency</b>					
Bronx	50	27%	90,906	18%	55.0
Staten Island	6	3%	25,788	5%	23.3
Manhattan	23	12%	80,988	16%	28.4
Brooklyn	55	30%	186,501	37%	29.5
Queens	37	20%	120,613	24%	30.7
Unknown <sup>2</sup> /Missing	14	8%	--	--	--
<b>Area-Based Poverty<sup>3</sup></b>					
Low	23	12%	129,661	29%	17.7
Medium	49	26%	140,804	31%	34.8
High	37	20%	83,316	18%	44.4
Very High	53	29%	100,740	22%	52.6
Unknown <sup>2</sup> /Missing	23	12%	--	--	--

#### Data source

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#### Infant injury death

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#### Notes

1. Sleep-related infant injury death rates per 100,000 live births in the selected population.
2. Unknown are infants who were born outside New York City but died due to sleep-related injury in New York City. Because they were born outside New York City, DOHMH does not have access to their birth files with their mother's demographic information.
3. Area-based poverty (based on census tracts) is defined as the percent of residents with incomes below 100% of the Federal Poverty Level per American Community Survey (2016–2020): Low (wealthiest): <10%; Medium: 10 to <20%; High: 20 to <30%; Very high (poorest): ≥30%

\*Percent may not sum to 100% due to rounding.

**Table 3. Environmental factors for sleep-related injury deaths among infants  
NYC, 2016-2020**

	N	Percent*
<b>Total</b>	185	100%
<b>Sleep Position</b>		
Back/supine	112	61%
Stomach	35	19%
Side	17	9%
Other <sup>1</sup>	21	11%
<b>Sleep Location</b>		
Crib/bassinette/play pen	47	25%
Adult bed	104	56%
Couch/sofa	11	6%
Other <sup>2</sup>	23	13%
<b>Bed Sharing</b>		
Yes	98	53%
No	87	47%
<b>Excess Bedding<sup>3</sup></b>		
Yes	136	74%
No	49	26%

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**Notes**

1. Other sleep positions include lying face up in adult's arms, lying [unknown] in adult's arm etc.
2. Other sleep locations include stroller, held by adult etc.

3. Using the 2022 American Association of Pediatric safe sleep guidelines, the presence of excess bedding was defined as having anything other than a sleep sack and one fitted bed sheet in the infant's sleep environment. Examples of excess bedding include any blanket, loose bedding, pillows, comforters, quilts, crib-bumpers and stuffed animals.

Methods note: Information on sleep-related injury deaths included in this table was obtained from review of Office of Chief Medical Examiner files from 2016-2020.

\*Percent may not sum to 100% due to rounding.