

# **Understanding Child Injury Deaths – Child Fatality Review Advisory Team Annual Report 2023**

## **About This Report**

Local law 115 of 2005 (and its extension of 2012) requires the New York City (NYC) Department of Health and Mental Hygiene (DOHMH) and the Child Fatality Review Advisory Team it chairs to produce an annual report on injury-related child fatalities in NYC. The report features the most current data on injury-related deaths among children ages **1 to 12** years and offers recommendations for preventing child injury deaths in NYC.

Data and implications for prevention are presented in four sections:

- **Section I** examines child injury fatality rates over a ten-year period and compares them with national data. The most current data are for 2021.
- **Section II** describes the demographic characteristics of NYC’s child injury fatalities, pooling data from 2012 to 2021 to stabilize small counts and to allow for reliable statistical description. Findings are organized by injury intent (*see definitions below*).
- **Section III** summarizes child injury deaths from 2012 to 2021 by place of occurrence of the fatal injury.
- **Section IV** recommends strategies preventing child injury deaths in NYC.

### **INJURY INTENT DEFINITIONS**

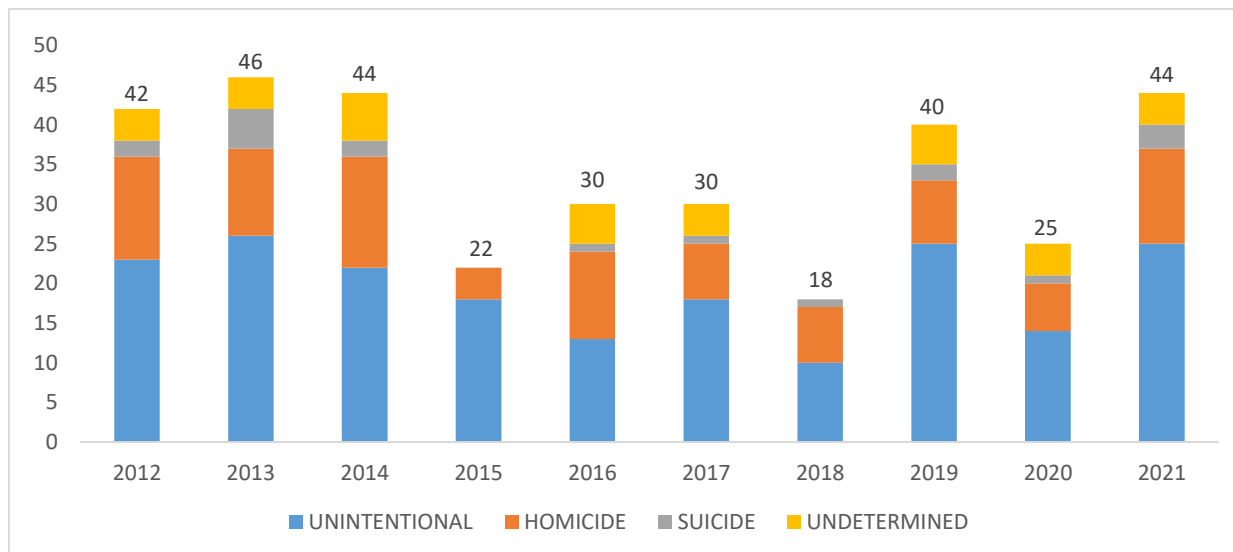
The intent of actions that lead to injury deaths:

- **Unintentional** – Injury death that occurred without intent to cause harm, also known as “accident.”
- **Intentional** – Injury death that occurred with the intent to cause harm. Intentional deaths are further classified as:
  - **Homicide** – Intentional death resulting from injuries inflicted by another person.
  - **Suicide** – Intentional injury death resulting from self-harm.
- **Undetermined** – Injury death for which the intent cannot be determined.

## **Section I: Trends and Comparison with National Data**

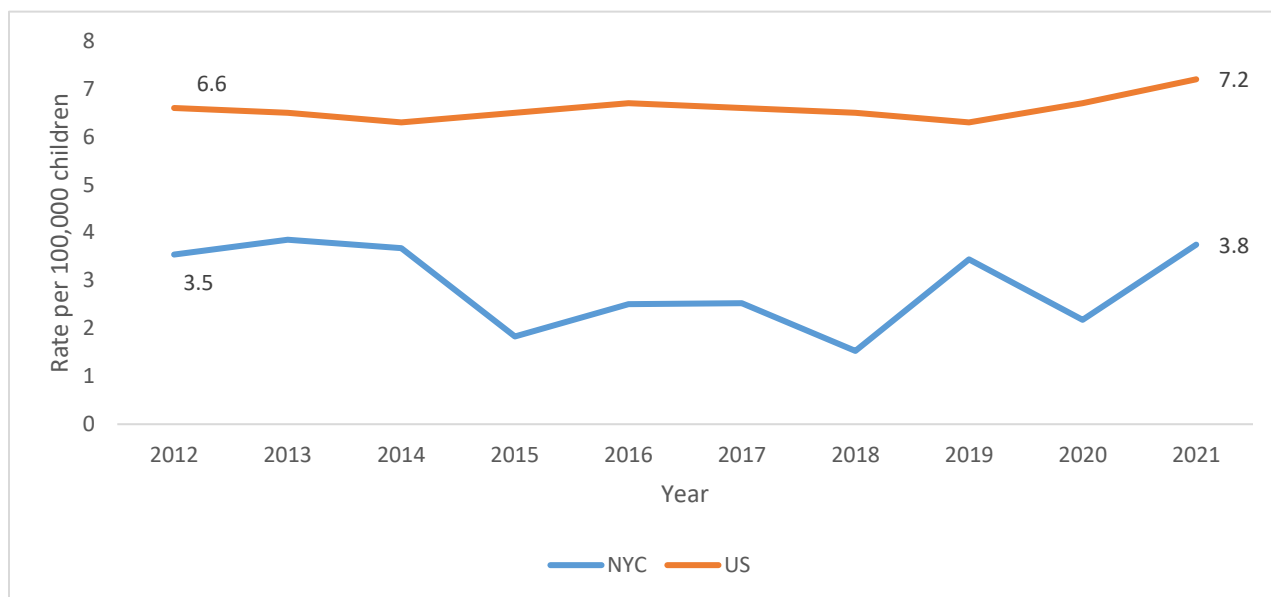
- The number of injury deaths among NYC children had declined in recent years (2015-2018) compared with earlier years (2012-2014). While injury deaths among NYC children fell to 25 in 2020, they reached 44 in 2021. The rate was 3.8 deaths per 100,000 children in 2021.
- NYC's injury death rates among children ages 1 to 12 years have been consistently lower than national rates.
- Out of the 44 injury deaths in 2021, 25 were unintentional, 12 were homicides, 3 were by suicide, and 4 were of undetermined intent.

**Each year from 2012-2021, between 18 and 46 NYC children ages 1 to 12 years died from injuries**



Source: DOHMH Bureau of Vital Statistics

## Injury death rates\* among children ages 1 to 12 years are lower in NYC than in the US



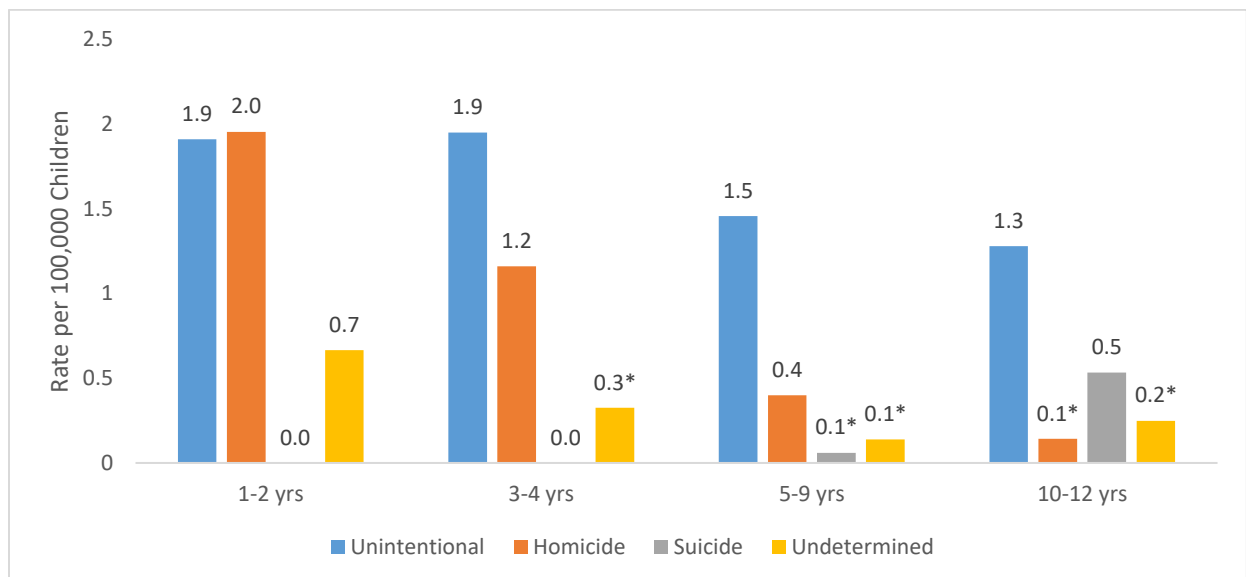
Sources: DOHMH Bureau of Vital Statistics and NYC DOHMH population estimates, modified from US Census Bureau interpolated intercensal population estimates, 2000-2020. Updated June 2022. CDC WONDER accessed October 2023.

\*Rates were calculated using interpolated intercensal population estimates updated in 2020 and may differ from previously reported rates based on the 2000 Census or previous versions of population estimates.

## **Section II: Demographics of child injury deaths**

- Between 2012 and 2021, there were a total of 341 injury deaths among NYC children ages 1 to 12 years. Of those 341 deaths, 57% (N=194) were unintentional, 27% (N=93) were homicides, 5% (N=18) were suicides, and 11% (N=36) were deaths of undetermined intent.
- In NYC, fatal injuries disproportionately affected younger children (ages 1-4), boys, Black children, children living in the Bronx, and children living in very high poverty areas. Racial and economic disparities in child injury deaths persist, signaling systemic and structural issues, such as racism, at their foundation.

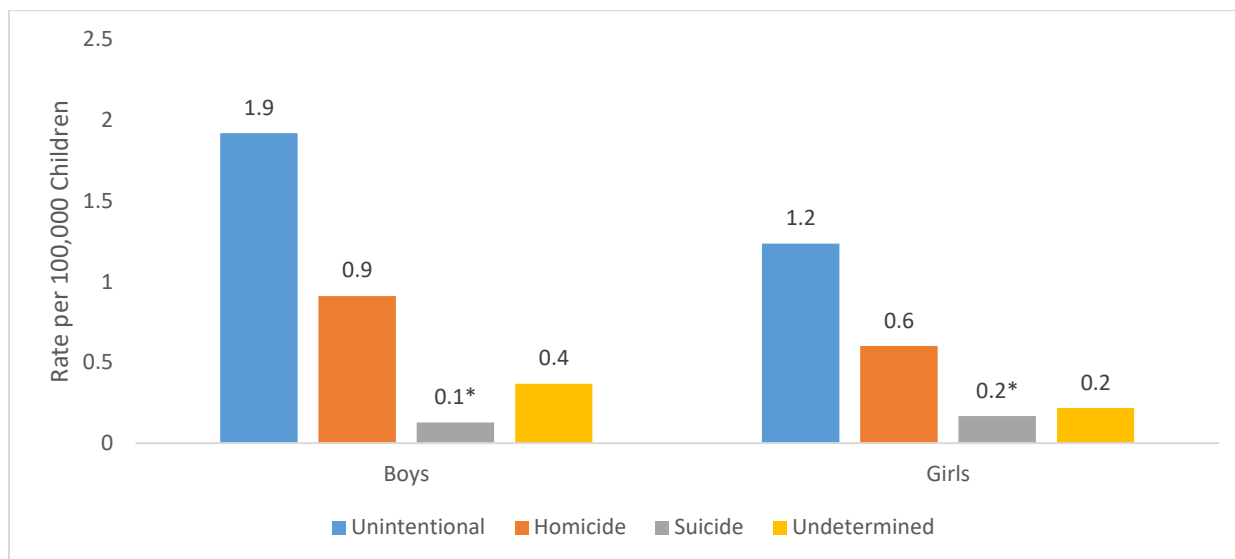
**From 2012-2021, unintentional and homicide injury death rates were higher among children ages 1 to 4 years than among children ages 5 to 12 years**



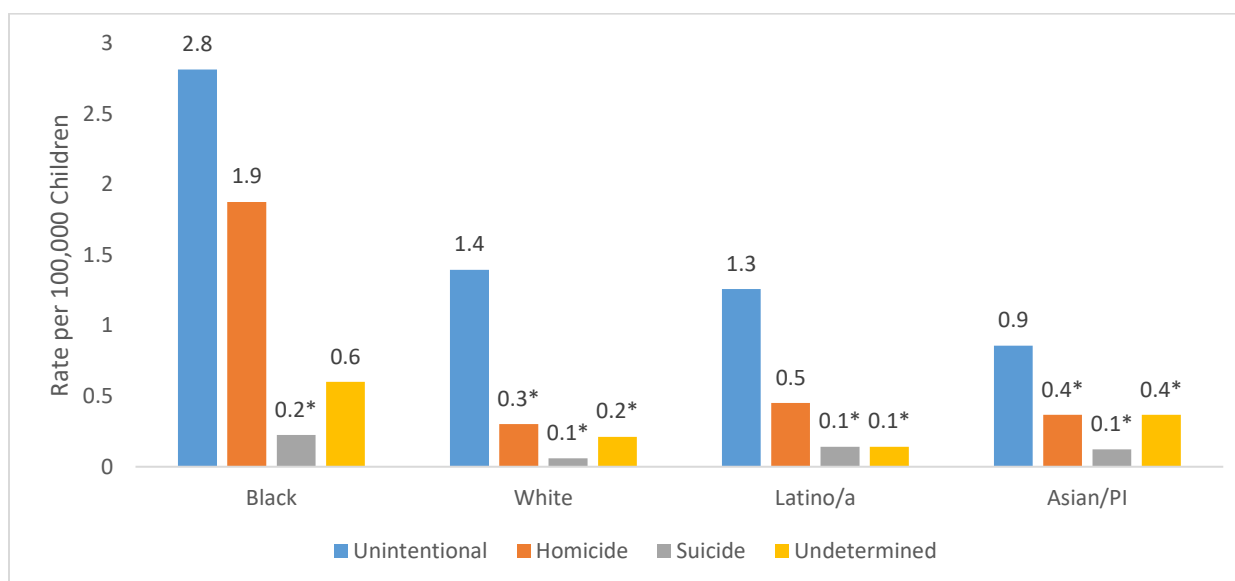
Source: DOHMH Bureau of Vital Statistics NYC DOHMH population estimates, modified from US Census Bureau interpolated intercensal population estimates, 2000-2020. Updated September 2022.

\*Estimate should be interpreted with caution. Estimate's relative standard error (a measure of estimate precision) is greater than 30%, making the estimate potentially unreliable.

**From 2012-2021, unintentional and homicide injury death rates were higher among boys than girls**



**From 2012-2021 injury death rates among children ages 1 to 12 years were higher among Black children and lower among Asian/PI children**

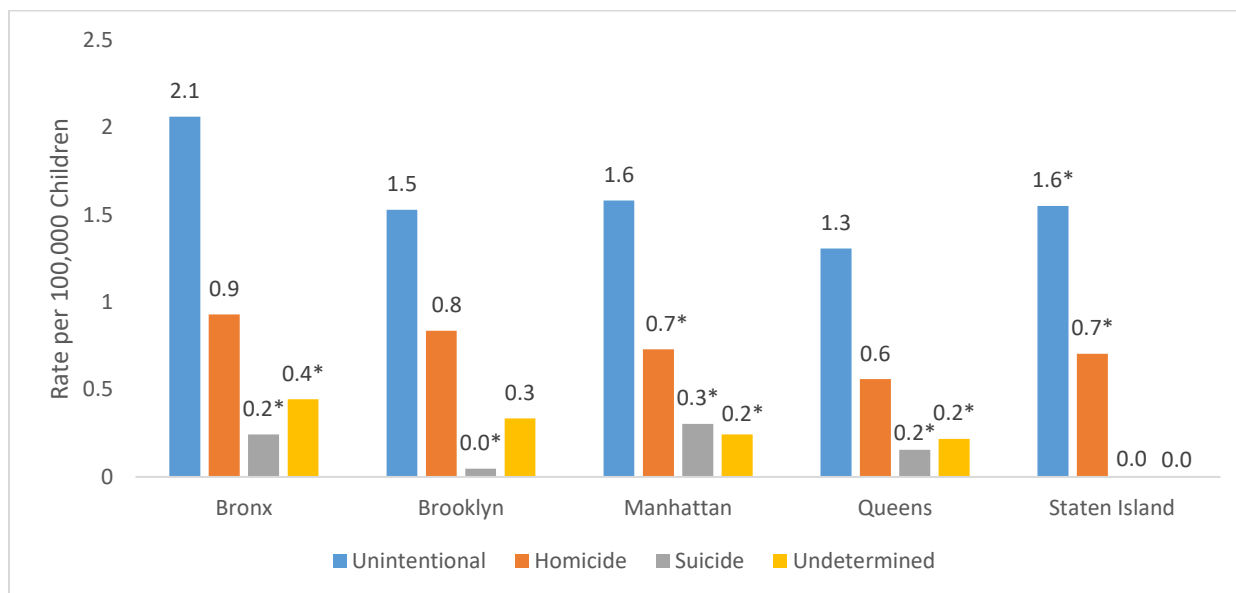


Source: DOHMH Bureau of Vital Statistics and NYC DOHMH population estimates, modified from US Census Bureau interpolated intercensal population estimates, 2000-2020. Updated September 2022.

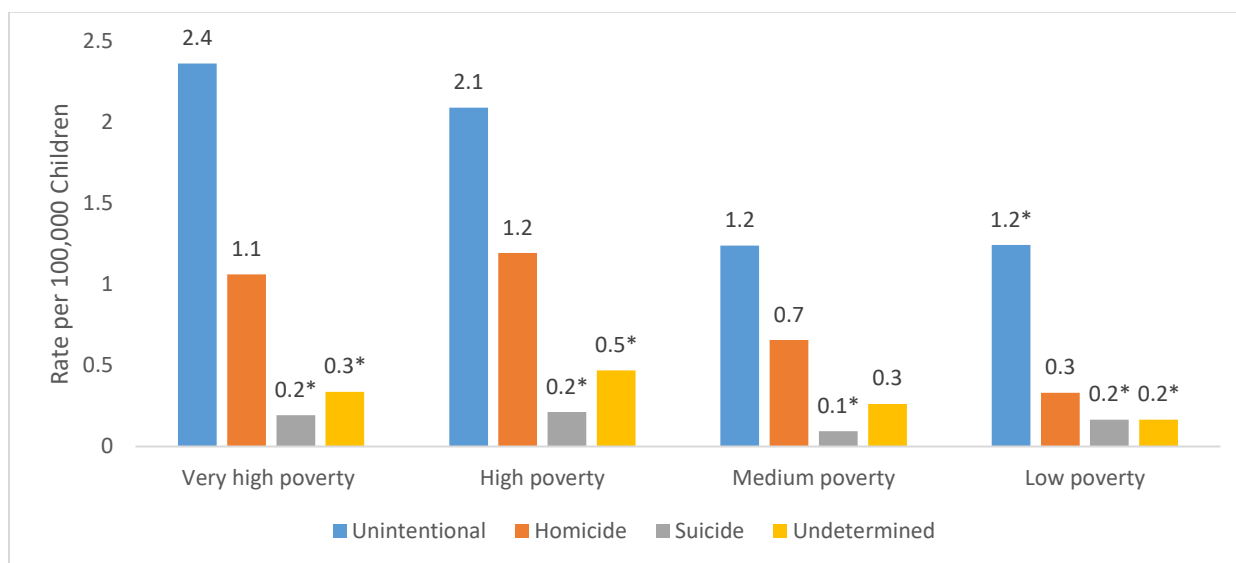
\*Estimate should be interpreted with caution. Estimate's relative standard error (a measure of estimate precision) is greater than 30%, making the estimate potentially unreliable.

#Latino/a includes Hispanic or Latino/a people of any race. White, Black, and Asian race categories exclude Latino/a ethnicity.

**From 2012-2021, unintentional injury death rates and homicide death rates were higher among children living in the Bronx**



**From 2012-2021, injury death rates were higher among children ages 1 to 12 living in high and very high poverty neighborhoods**



Source: DOHMH Bureau of Vital Statistics and NYC DOHMH population estimates, modified from US Census Bureau interpolated intercensal population estimates, 2000-2020. Updated September 2022.

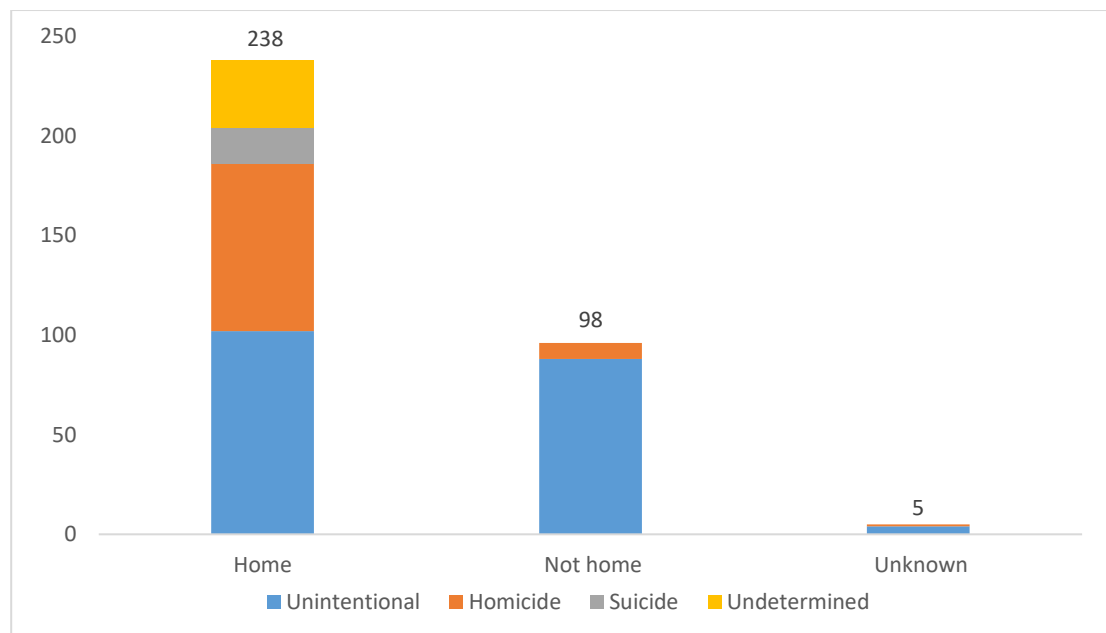
#Area-based poverty is defined as the proportion of residents in a ZIP code with incomes below 100% of the Federal Poverty Level (FPL) per the American Community Survey (2010-2014) in four categories: Low (<10% FPL), Medium (10%-<20% FPL), High (20%-<30% FPL) and Very High Poverty (≥30% FPL).

\*Estimate should be interpreted with caution. Estimate's relative standard error (a measure of estimate precision) is greater than 30%, making the estimate potentially unreliable.

### **Section III: Place of Occurrence of Fatal Injuries**

- Between 2012 and 2021, more than two thirds (70%, N=238) of all child injury deaths resulted from injuries that occurred at home. 43% (N=102) of those injuries were unintentional, 35% (N=84) were homicides, 8% (N=18) were suicides, and 14% (N=34) were of undetermined intent.
- Between 2012 and 2021, nearly a third (29%, N=98) of all child injury deaths resulted from injuries that did not occur at home. Ninety per cent (N=88) of the not-at-home child injury deaths were unintentional, 8% (N=8) were homicides, 2% (N=2) were of undetermined intent, and none were suicides.
- The leading cause of not-at-home child injury deaths was unintentional motor vehicle traffic (N=64), which accounted for two thirds of the not-at-home child injury deaths. In 78% of the motor vehicle traffic fatalities, the child injured was a pedestrian (N=50).

**From 2012-2021, most injury deaths among children ages 1 to 12 years occurred at home**



Source: DOHMH Bureau of Vital Statistics; Office of Chief Medical Examiner

“Home” injuries include those that occurred in a residence or apartment building as well as areas such as the elevator, yard, or rooftop of a residence. Residences other than the child’s primary residence and homeless shelters were included, as well. All other locations, including public buildings and streets, were included in the “Not home” category.

**Most injury deaths among children ages 1 to 12 years that happen at home are homicides and most that happen away from home are unintentional motor vehicle traffic crashes**

Rank	Home (N)	Not home (N)
1	Homicide (84)	Unintentional MV Traffic (64)
2	Unintentional Fire/Flame (47)	Unintentional Drowning (9)
3	Unintentional Suffocation <sup>#</sup> (18)	Homicide (8)

Sources: DOHMH Bureau of Vital Statistics; Office of Chief Medical Examiner

<sup>#</sup>Suffocation includes fatal injuries from inhalation, aspiration, or ingestion of food or other object (e.g., choking) and mechanical suffocation



## Section IV: Recommendations

Parents, caregivers, neighbors, educators, health care providers, faith-based leaders and policy makers can know about, act on, and use the following information and resources:

### Resources for Parents and Caregivers

- Comprehensive [resources for child welfare, safety and well-being](#) are available for all New Yorkers. The City also offers many [services and information for families](#).
- Be role models for [safe walking](#). Teach children to cross the street at crosswalks or at the corner, follow pedestrian and traffic signals, look both ways and keep scanning, and listen for car and truck engines. If you drive, be a role model for your children and other drivers. Slow down, pause and wait before you turn, and keep your eyes on the road.
- [Growing Up NYC](#), [Early Childhood Health and Development](#) and the [CDC's Positive Parenting Tips](#) offer tips for positive support through all stages of child development.
- The [Newborn Home Visiting Program](#) and [Nurse-Family Partnership](#) support parents in building a safe, nurturing foundation for their children's development.
- NYC Parks offers [Learn to Swim](#) classes. Water safety tips can be found [here](#).
- [NYC 988](#) offers free, confidential mental health support, including information for building resilience in children to reduce suicide risk. These resources focus on strengthening coping skills, improving school connectedness, and building peer, family and community supports.

### Actions for All

- Advance health equity by supporting racial justice initiatives and providing access to economic resources in neighborhoods left disinvested due to a history of structural racism and residential segregation. As with other causes of death, injury causes of death are shaped by social determinants. Go [here](#) to learn more about health equity.
- All children deserve to live without the fear of abuse and neglect. Call if you suspect that a child is being abused or neglected. Some professionals, such as physicians and teachers, are legally required to do so. Call 1(800) 342-3720 or 311. Learn more about [how to make a report](#).
- Learn more about building healthy family relationships and seek out [domestic violence services](#) if relationships may be unhealthy.
- Foster anti-bullying through a school-based curriculum, like NYC Department of Education's [Respect for All](#).
- Promote safe streets initiatives that pursue [Vision Zero](#) goals and encourage safer speeds, safer roads, safer vehicles, safer road users, and better post-crash care.
- Install/have working [smoke alarms, carbon monoxide detectors](#) and an evacuation plan in every household.