

# Understanding Child Injury Deaths – Child Fatality Review Advisory Team Annual Report 2019

## 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 closes with recommendations for preventing child injury deaths in NYC.

Data and implications for prevention are presented in five sections:

- **Section I** examines child injury fatality rates over time and compares them with national data. The most current data are for 2017.
- **Section II** describes the demographic characteristics of NYC’s child injury fatalities, pooling data from 2009 to 2017 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 2009 to 2017 by place of occurrence of the fatal injury.
- **Section IV** outlines strategies for continued success in preventing child injury deaths in NYC.

### IMPORTANT DEFINITIONS

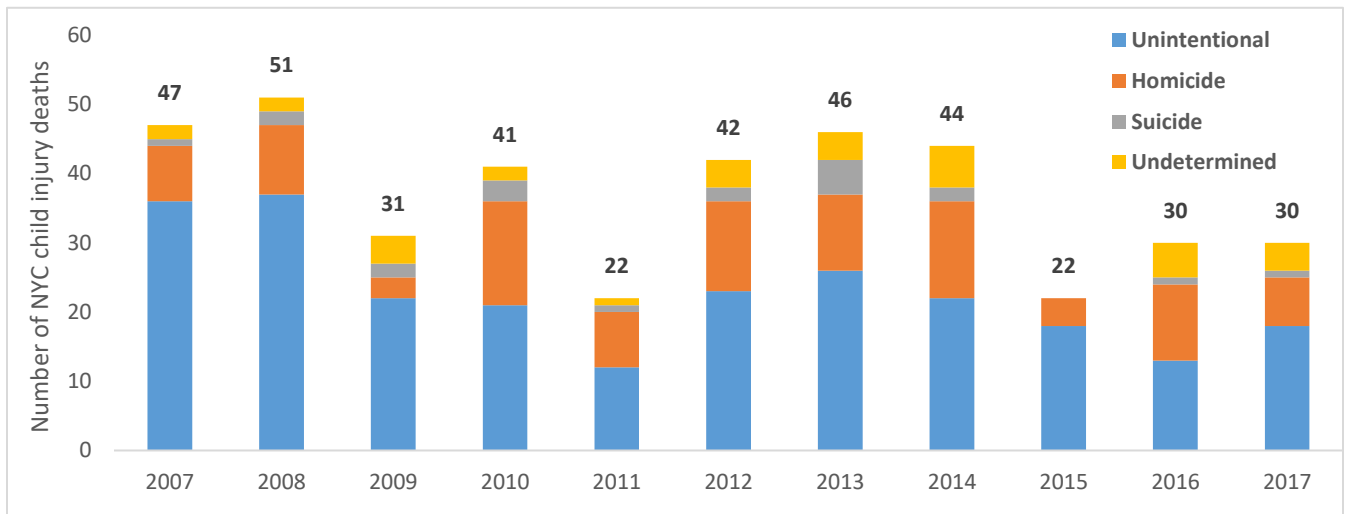
The intent of actions that lead to injury deaths:

- **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

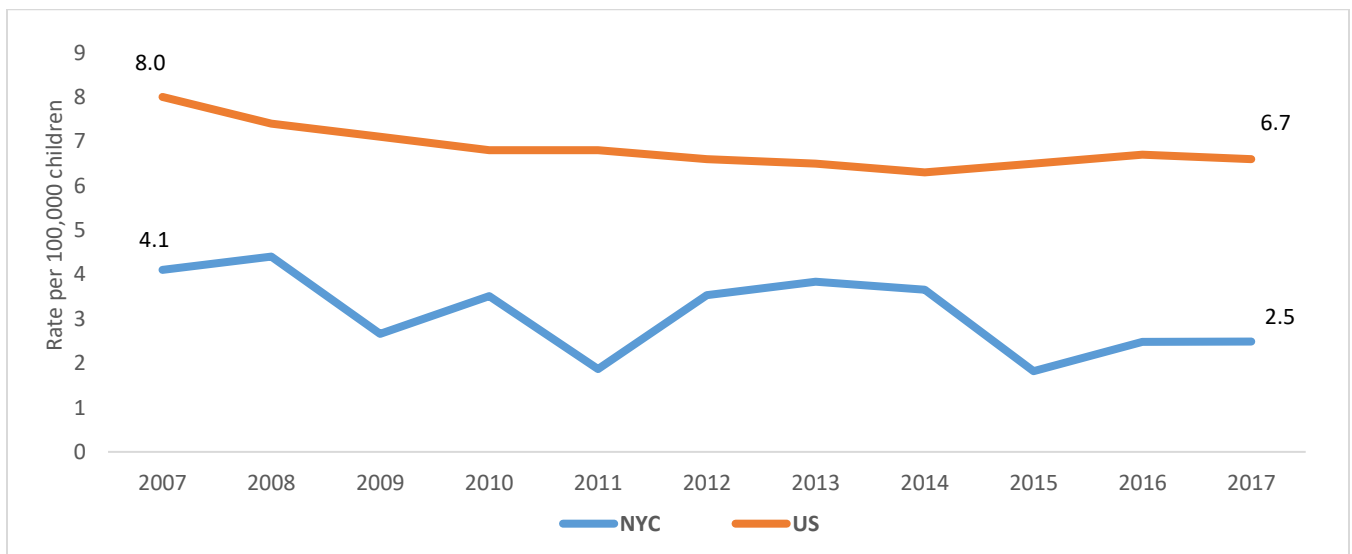
- The number of injury deaths among NYC children declined from 47 in 2007 to 30 in 2017, corresponding to a rate of 4.1 to 2.5 per 100,000 children respectively.
- NYC’s injury death rates among children ages 1 to 12 years have been consistently lower than national rates. The decline in NYC mirrors the national trend.
- Out of the 30 injury deaths in 2017, 18 were unintentional, 7 were homicides, 1 was a suicide, and 4 were of undetermined intent

### Yearly numbers of injury deaths among NYC children ages 1 to 12 years by intent, 2007-2017



Source: DOHMH Bureau of Vital Statistics

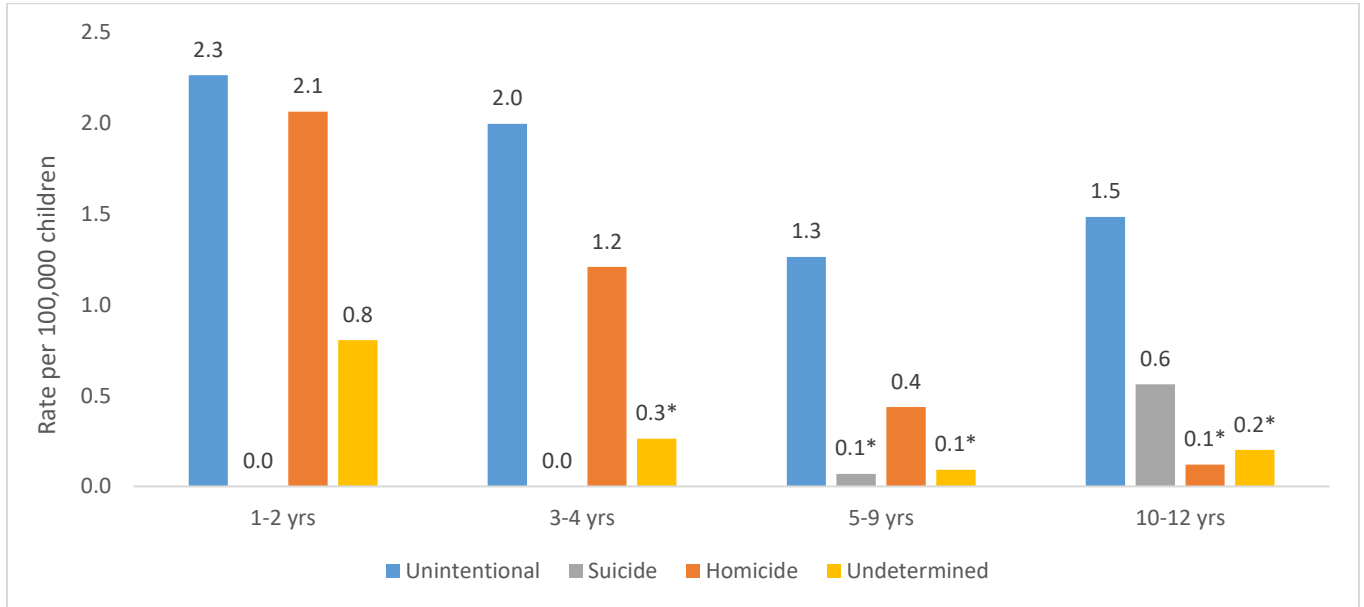
### Trends in injury death rates among children ages 1 to 12 years, NYC vs US, 2007-2017



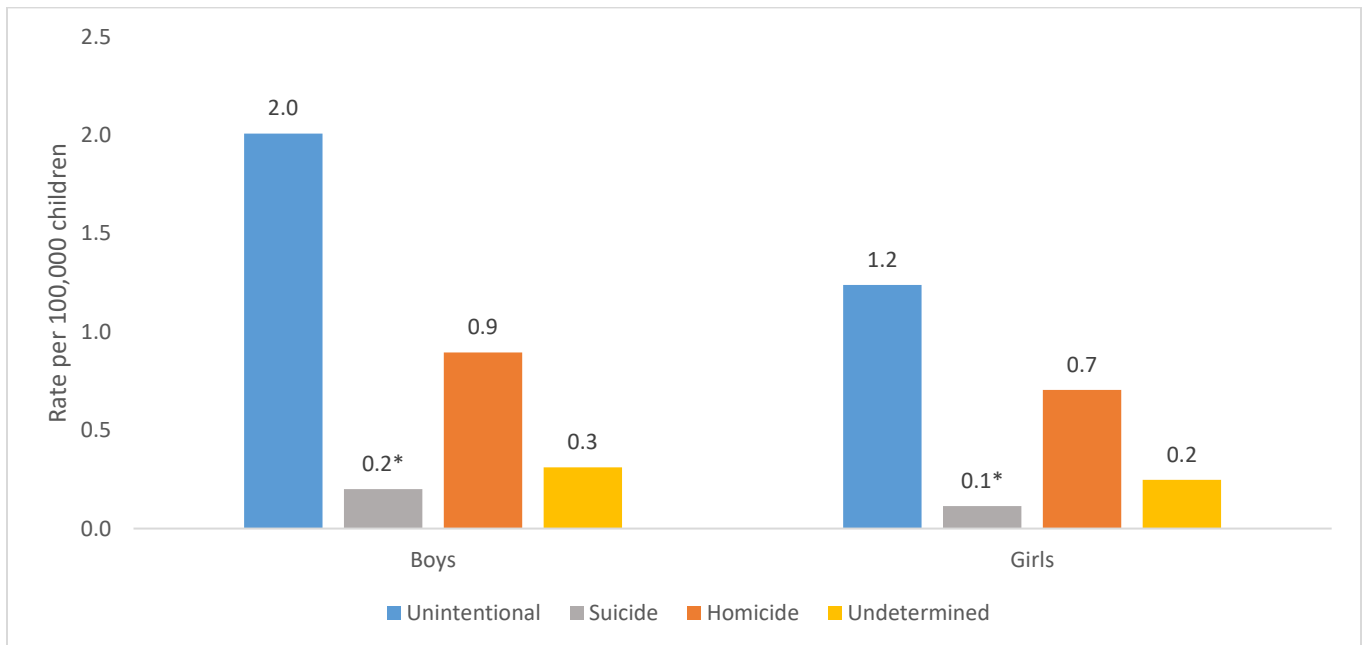
Sources: DOHMH Bureau of Vital Statistics and DOHMH Population estimates updated 2015  
 CDC WONDER accessed April 2017

- Between 2009 and 2017, there were a total of 308 injury deaths among NYC children ages 1 to 12 years. Of those 308 deaths, 56% (n=175) were unintentional, 28% (n=86) were homicides, 6% (n=17) were suicides, and 10% (n=30) 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.

### Injury death rates among children ages 1-12 years by intent and by age, 2009-2017



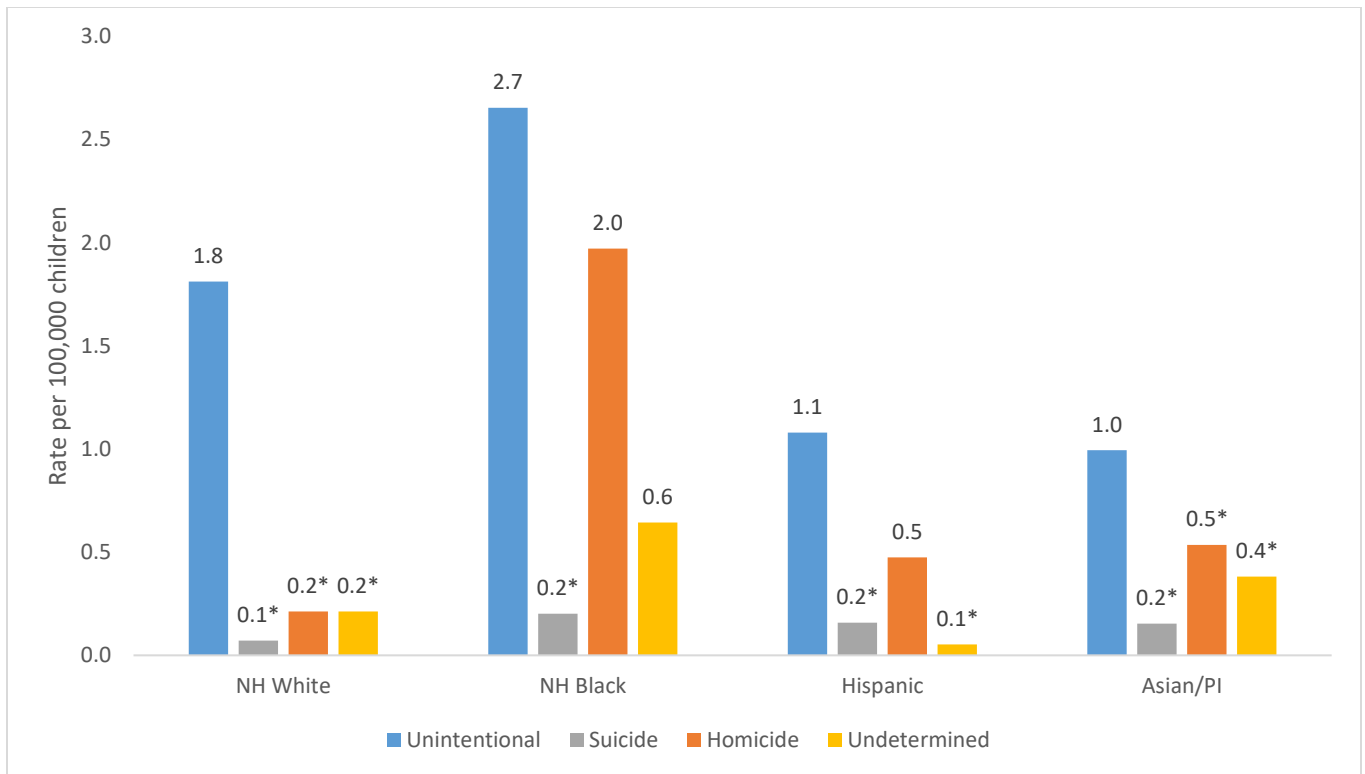
### Injury death rates among children ages 1 to 12 years by intent and gender, 2009-2017



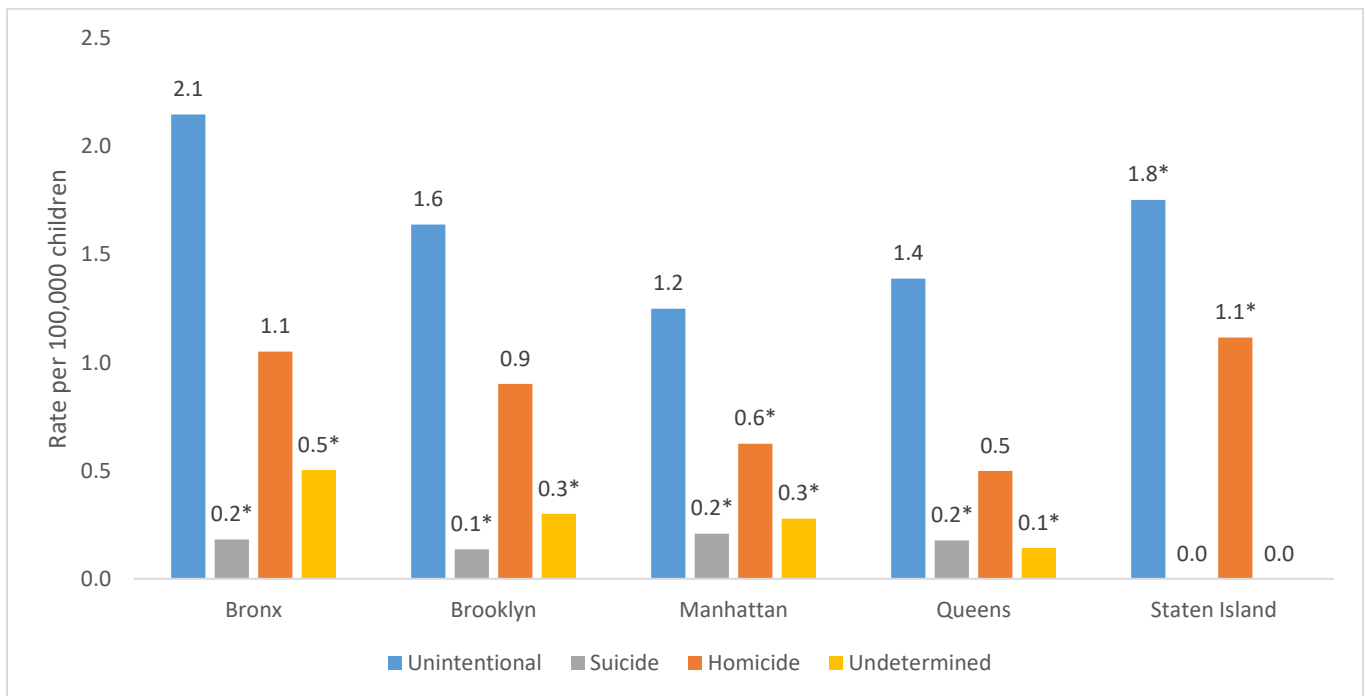
Source: DOHMH Bureau of Vital Statistics and DOHMH population estimates updated 2015

\*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

### Injury death rates among children ages 1 to 12 years by intent and race, 2009-2017



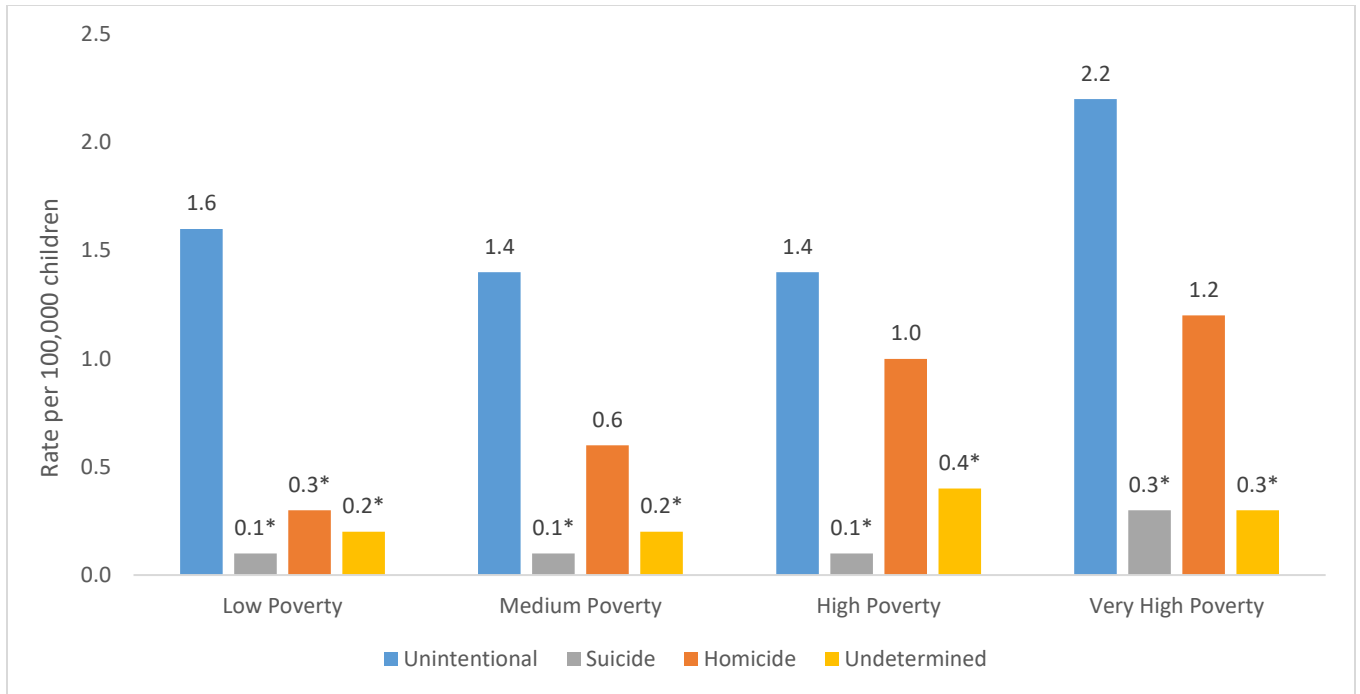
### Injury death rates among children ages 1 to 12 years by intent and borough, 2009-2017



Source: DOHMH Bureau of Vital Statistics and DOHMH population estimates updated 2015

\*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

## Injury death rates among children ages 1 to 12 years by intent and area-based poverty level#, 2009-2017



Source: DOHMH Bureau of Vital Statistics and DOHMH population estimates updated 2015

\*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

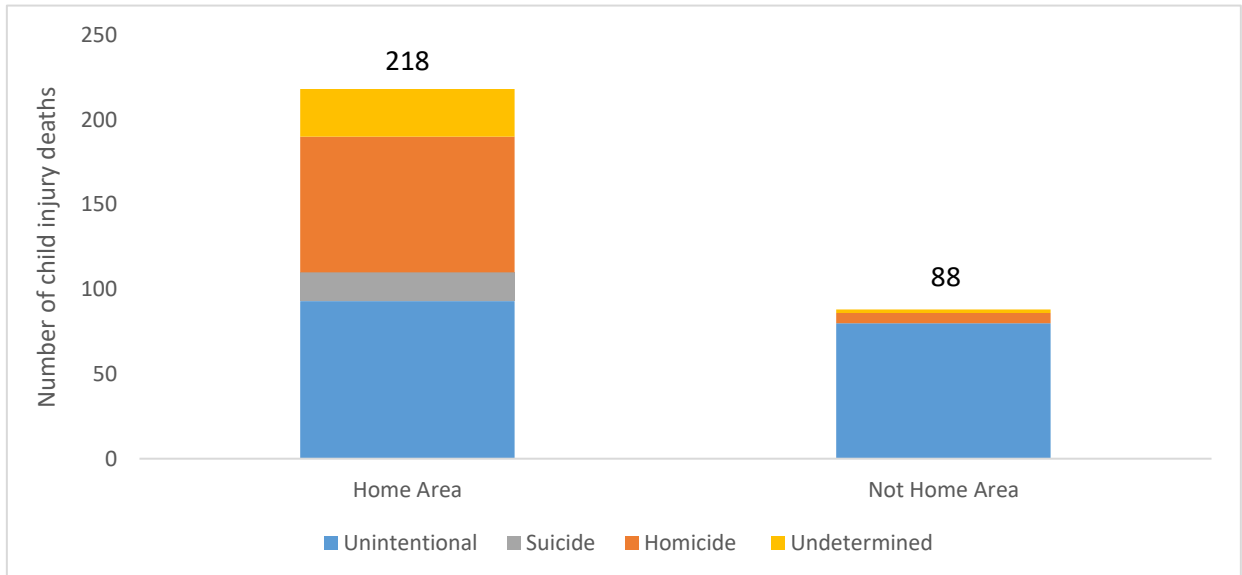
# Area-based poverty defined as proportion of residents in a ZIP code with incomes below 100% of the Federal Poverty Level (FPL) per the American Community Survey (2010-2014) in four categories:

Low (<10% FPL), Medium (10%-<20% FPL), High (20%-<30% FPL) and Very High Poverty (≥30% FPL).

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

- Between 2009 and 2017, almost three quarters (71%, N=218) of all child injury deaths resulted from injuries that occurred **in and around** the home. 43% (N=93) of those injuries were unintentional, 8% (N=17) were suicides, 37% (N=80) were homicides, and 13% (N=28) were of undetermined intent.
- Between 2009 and 2017, over a quarter (29%, N=88) of all child injury deaths resulted from injuries that occurred **outside** the home area. 91% (N=80) of child injury deaths that occurred **outside** the home area were unintentional, 7% (N=6) were homicides, and 2% (N=2) were of undetermined intent, and none were suicides.
- The leading cause of unintentional injury deaths **outside** the home area was motor vehicle traffic, which accounted for 61 injury deaths.
- In 49 out of 61 (80%) motor vehicle traffic fatalities, the child injured was a pedestrian.

**Child injury deaths by location of injury<sup>a</sup> and intent, 2009-2017**



Source: DOHMH Bureau of Vital Statistics. Two cases had missing location information

<sup>a</sup>The definition of “Home Area” injuries includes injuries 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 Area” category.

Top causes of injury deaths for children ages 1 to 12 years by intent for fatal injuries that occurred within and outside the home area, NYC, 2009-2017

Rank	Home Area	Not Home Area
1	Homicide (all cause) - 80	Unintentional Motor Vehicle - 61
2	Unintentional Fire/Flame – 37	Unintentional Drowning - 5
3	Unintentional Suffocation - 19	Unintentional Fall, Natural/Environmental, Struck By/Against – TIE - 3

Source: DOHMH Bureau of Vital Statistics

## **Recommendations**

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

### **Resources for Parents and Caregivers**

- 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, look both ways and keep scanning, and listen for car and truck engines.
- [Growing Up NYC](#), [Our Littlest New Yorkers](#) and the CDC's Positive Parenting Tips offer positive support through all stages of child development.
- [Newborn Home Visiting Program](#) and [Nurse-Family Partnership](#) are programs that help parents provide a safe and nurturing environment for their children.
- 1-888-NYC-WELL and [nyc.gov/nycwell](http://nyc.gov/nycwell) provide 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**

- Promote safe streets initiatives that pursue [Vision Zero](#) goals and encourage responsible driver behavior, more speed enforcement cameras, and additional targeted enforcement.
- Install/have working smoke alarms and carbon monoxide detectors and an evacuation plan in every household.
- Report suspicions of child abuse or neglect. Some professionals such as physicians and teachers are legally required to do so. Call 1-800-635-1522 or 311.
- Foster anti-bullying through school-based curriculum, like NYC Department of Education's [Respect for All](#)
- Promote health equity by supporting racial justice initiatives and providing access to economic resources in neighborhoods left disinvested due to history of structural racism and residential segregation. Go [here](#) to learn more about health equity.