

# Understanding Child Injury Deaths – Child Fatality Review Advisory Team Annual Report 2021

## 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 a ten-year period and compares them with national data. The most current data are for 2019.
- **Section II** describes the demographic characteristics of NYC’s child injury fatalities, pooling data from 2010 to 2019 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 2010 to 2019 by place of occurrence of the fatal injury.
- **Section IV** recommends strategies for continued success in preventing child injury deaths in NYC.

### INJURY INTENT DEFINITIONS

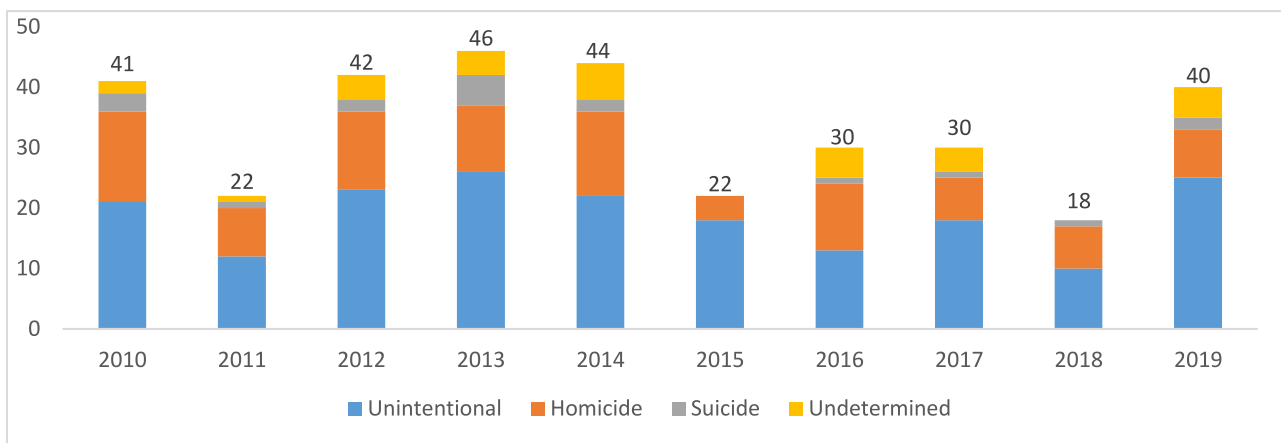
The intent of actions that lead to injury deaths:

- **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

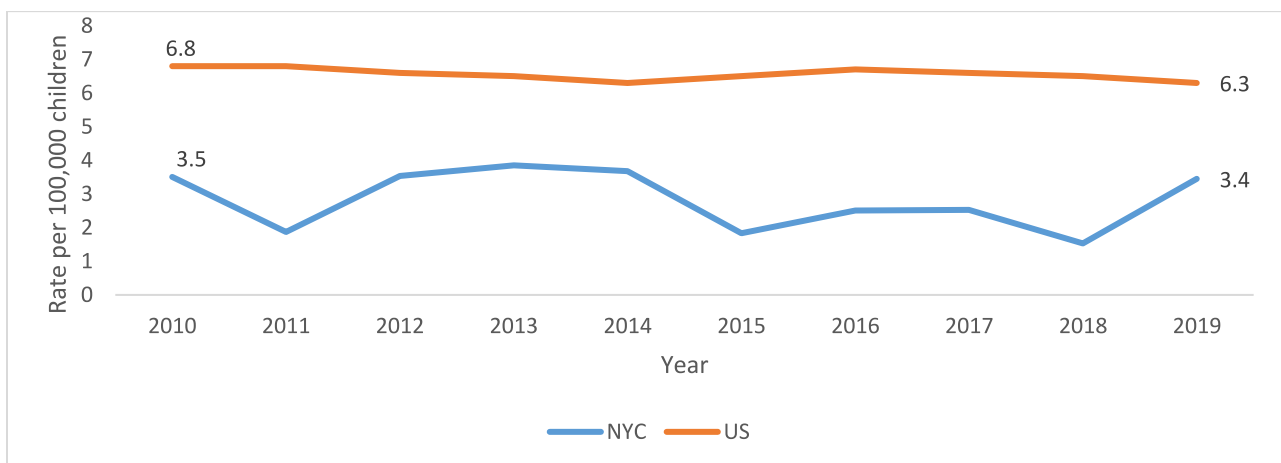
- The number of injury deaths among NYC children had declined in recent years (2015-2018) compared with earlier years (2010, 2012-2014), and reached 40 in 2019. The rate was 3.4 deaths per 100,000 children in 2019.
- NYC’s injury death rates among children ages 1 to 12 years have been consistently lower than national rates.
- Out of the 40 injury deaths in 2019, 25 were unintentional, 8 were homicides, 2 were by suicide, and 5 were of undetermined intent. Two incidents in 2019 resulted in multiple child injury deaths, a homicide that resulted in 2 child deaths and a residential fire that caused 4 child deaths.

### Yearly numbers of injury deaths among NYC children ages 1 to 12 years by intent, 2010-2019



Source: DOHMH Bureau of Vital Statistics

### Trends in injury death rates\* among children ages 1 to 12 years, NYC vs US, 2010-2019



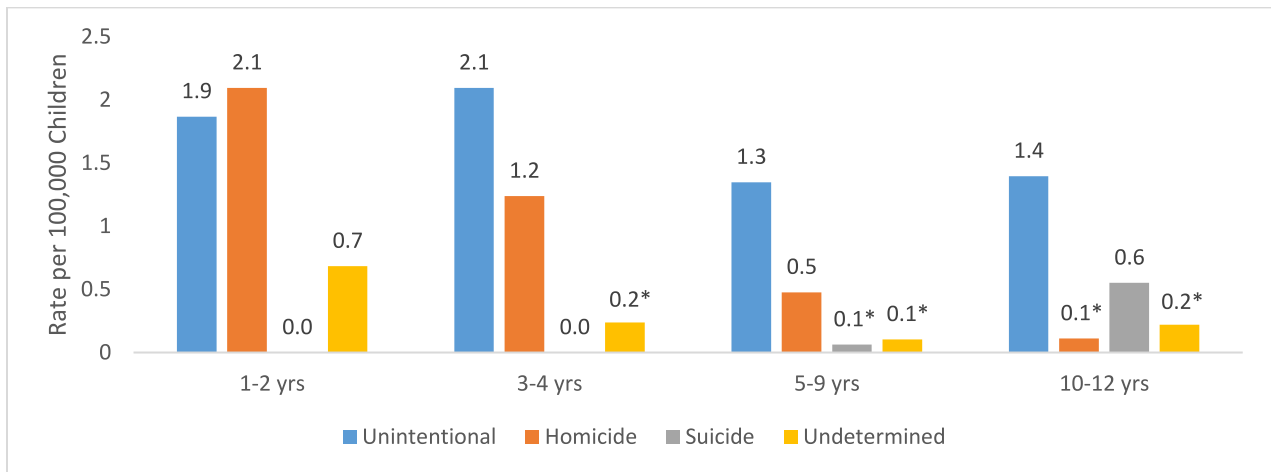
Sources: DOHMH Bureau of Vital Statistics and NYC DOHMH population estimates, modified from US Census Bureau interpolated intercensal population estimates, 2000-2019. Updated September 2020. CDC

\*Rates were calculated using interpolated intercensal population estimates updated in 2019 and may differ from previously reported rates based on the 2000 Census or previous versions of population estimates.

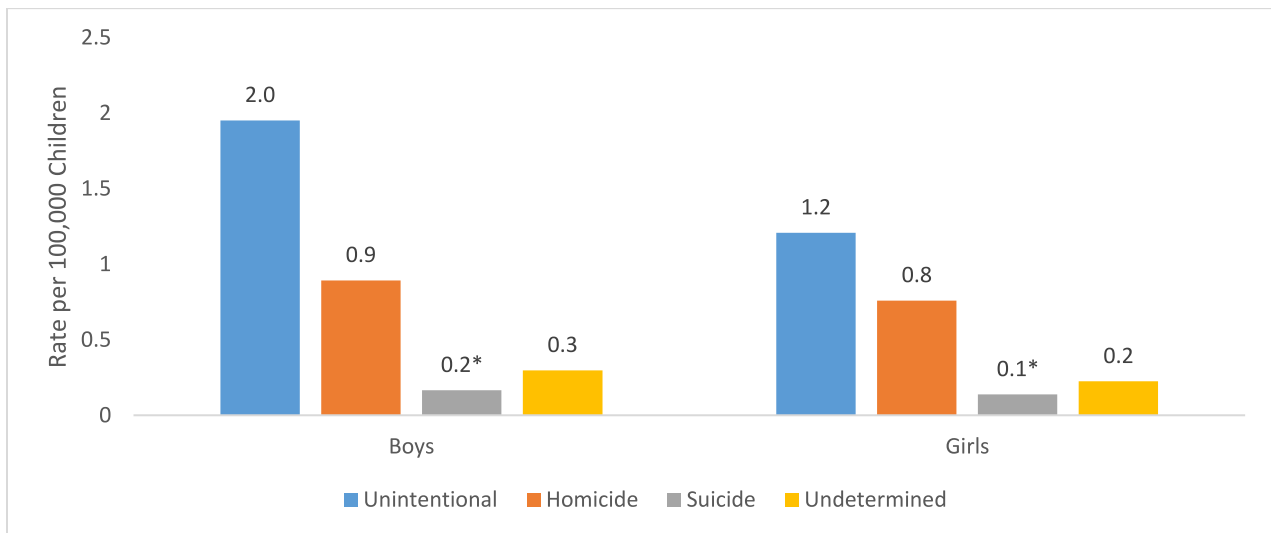
## Section II: Demographics of child injury deaths

- Between 2010 and 2019, there were a total of 335 injury deaths among NYC children ages 1 to 12 years. Of those 335 deaths, 56% (N=188) were unintentional, 29% (N=98) were homicides, 5% (N=18) were suicides, and 9% (N=31) 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 structural issues, such as racism, at their foundation.

### Injury death rates among children ages 1-12 years by intent and by age, 2010-2019



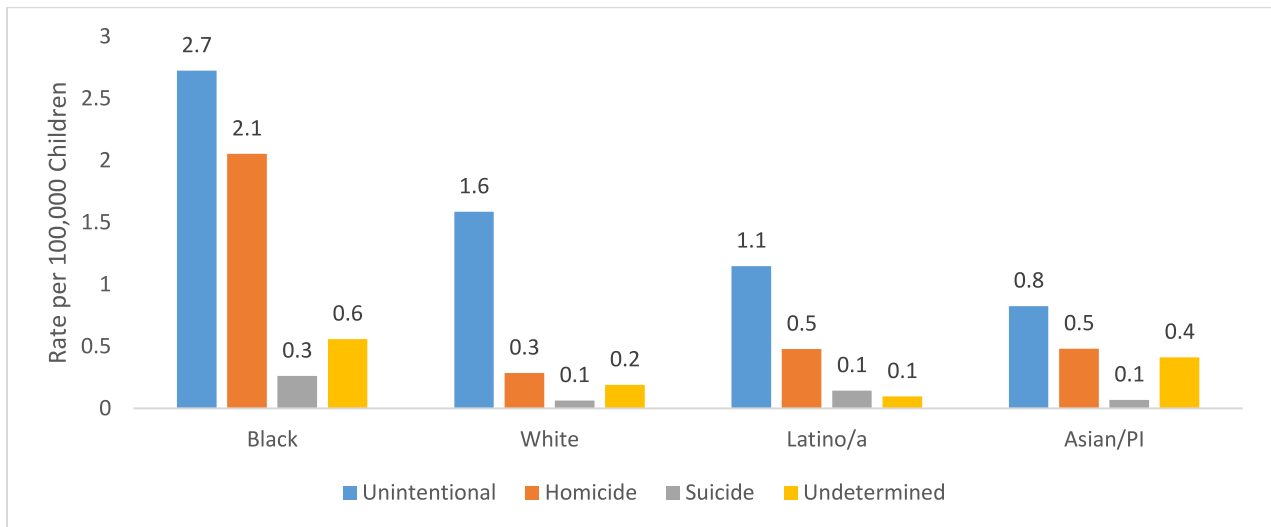
### Injury death rates among children ages 1 to 12 years by intent and gender, 2010-2019



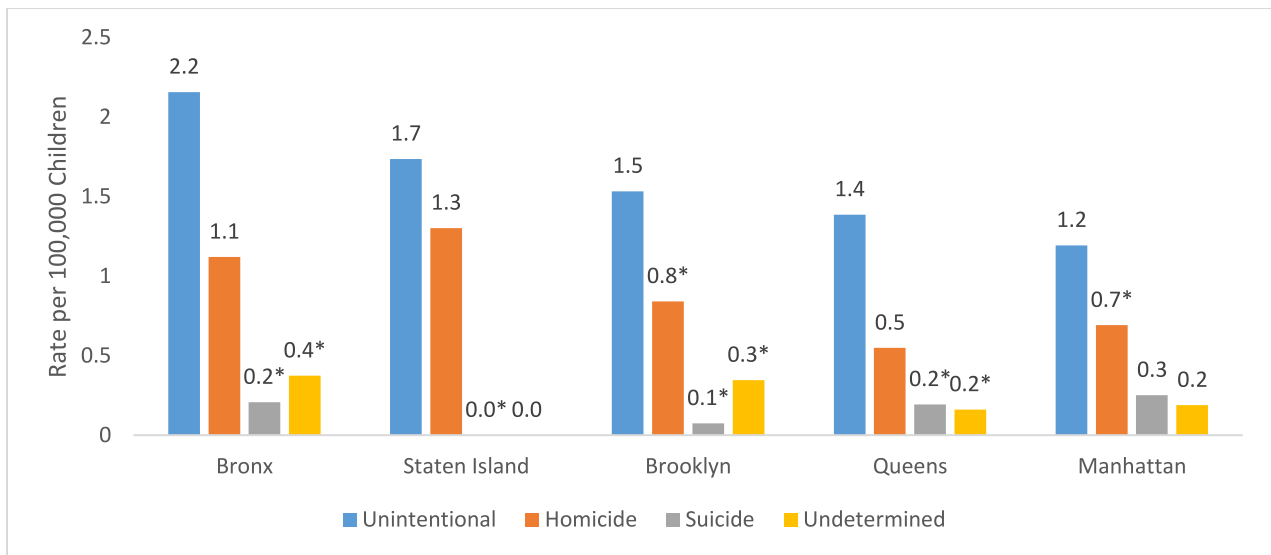
Source: DOHMH Bureau of Vital Statistics NYC DOHMH population estimates, modified from US Census Bureau interpolated intercensal population estimates, 2000-2019. Updated September, 2020.

\*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#, 2010-2019



### Injury death rates among children ages 1 to 12 years by intent and borough, 2010-2019

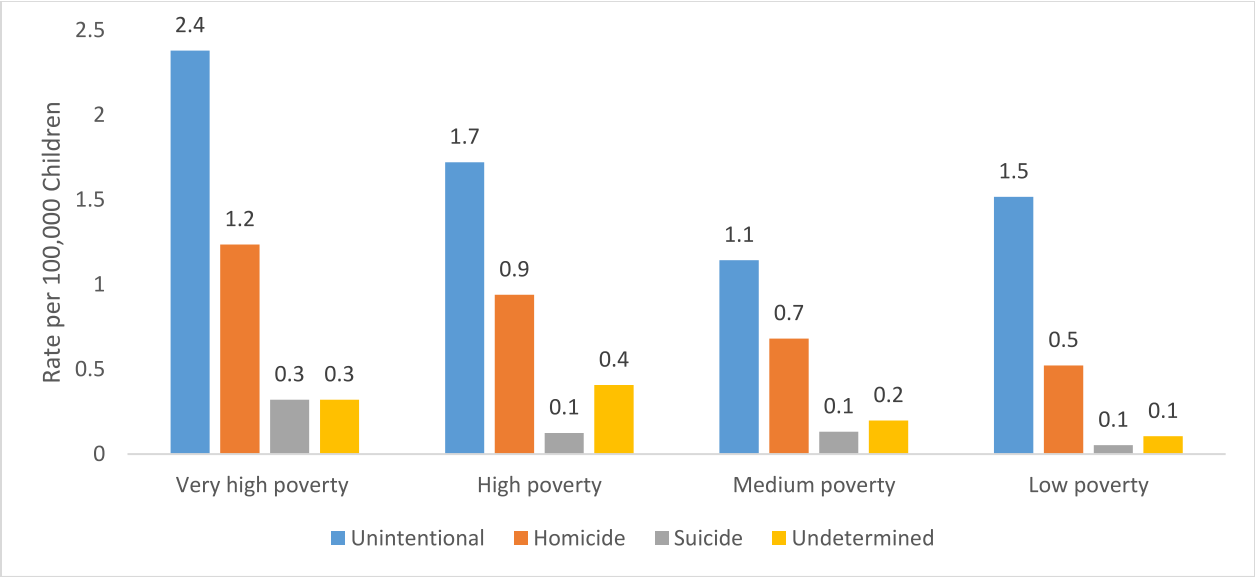


Source: DOHMH Bureau of Vital Statistics and NYC DOHMH population estimates, modified from US Census Bureau interpolated intercensal population estimates, 2000-2019. Updated September, 2020.

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

**Injury death rates among children ages 1 to 12 years by intent and area-based poverty #, 2010-2019**



Source: DOHMH Bureau of Vital Statistics and NYC DOHMH population estimates, modified from US Census Bureau interpolated intercensal population estimates, 2000-2019. Updated September, 2020.

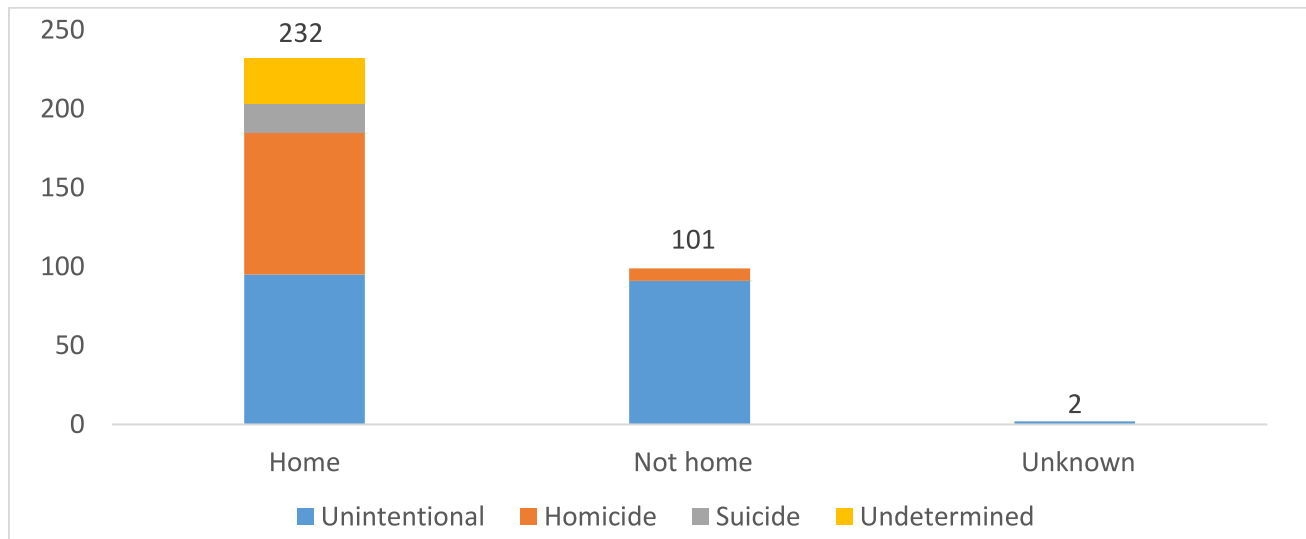
#Area-based poverty is defined as the proportion of residents in a ZIP code with incomes below 100% of the Federal Poverty Level (FPL) per the American Community Survey (2010-2014) in four categories: Low (<10% FPL), Medium (10%-<20% FPL), High (20%-<30% FPL) and Very High Poverty (≥30% FPL).

\*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 2010 and 2019, more than two thirds (69%, N=232) of all child injury deaths resulted from injuries that occurred **inside** the home. 41% (N=95) of those injuries were unintentional, 39% (N=90) were homicides, 8% (N=18) were suicides, and 13% (N=29) were of undetermined intent.
- Between 2010 and 2019, nearly a third (30%, N=99) of all child injury deaths resulted from injuries that occurred **outside** the home. 91% (N=90) of child injury deaths that occurred **outside** the home were unintentional, 7% (N=7) were homicides, and 2% (N=2) were of undetermined intent, and none were suicides.
- The leading cause of unintentional injury deaths **outside** the home was motor vehicle traffic, which accounted for two thirds of the injury deaths.
- In 80% of the 65 motor vehicle traffic fatalities, the child injured was a pedestrian (N=52).

#### Injury deaths among children ages 1 to 12 years by intent and location of injury<sup>#</sup>, 2010-2019



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

<sup>#</sup>“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.

#### Top 4 causes of injury deaths among children ages 1 to 12 years by location of injury, 2010-2019

Rank	Home (N)	Nonhome (N)
1	Homicide (90)	Unintentional MV Traffic (65)
2	Unintentional Fire/Flame (43)	Homicide (7)
3	Unintentional Suffocation (19)	Unintentional Fall (6)
4	Suicide (18)	Unintentional Drowning (5)

## **Section IV: 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 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](#), [Our Littlest New Yorkers](#) and the [CDC's Positive Parenting Tips](#) provide 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.
- Making Waves provides free learn-to-swim and water safety instruction to people ages 6 to 18 who live in low-income neighborhoods. Water safety tips can be found [here](#).

### **Actions for All**

- Insist on 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. Go [here](#) to learn more about health equity.
- 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 a school-based curriculum, like NYC Department of Education's [Respect for All](#).

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*In memory of Amita Toprani, 1977-2021, DOHMH Medical Director for Environmental Disease and Injury Prevention, dedicated civil servant, beloved friend and colleague, and steadfast advocate of child safety.*