Homicide and Assault Injuries As a Public Health Problem in New York State (NYS) 2008-2010

1 Background
Homicide and assault are commonly thought of as a problem for the criminal justice system; however, homicide and assault are a significant public health problem. In fact, homicide is the second leading cause of death for New Yorkers ages 15-34 years old. Nationally, homicide is the fourth-leading cause of fatal injuries, and nonfatal violence in the workplace accounted for about 15% of all nonfatal violence against persons age 16 or older.

Assaults affect the quality of the victim’s life and can result in long-term diminished health, job changes, loss of income and depression.

2 Data Sources
Injury surveillance data included the NYS Vital Statistics and Multiple Causes of Death data, and the NYS inpatient and outpatient discharge data. The death data includes ICD-10 external cause of mortality codes X85-Y09, Y87.1, and U01-U02. The hospital and ED data includes E-codes E960-E969.

Surveillance of occupational assaults and homicides was conducted with Survey of Occupational Injuries and Illnesses (SOII) and Census of Fatal Occupational Injuries (CFOI) data from the Bureau of Labor Statistics.

3 Results
Mechanism of Injury
The leading mechanisms for assault vary by the victim’s age group and by the severity of injury sustained.

Disparities
Not all New Yorkers are at equal risk to be victims of homicide or assault. Disparities exist among different age groups, genders, races, occupations, and socioeconomic and employment statuses.

4 Conclusion
Homicide and assault continues to be a significant public health problem. The surveillance of assault-related injuries in NYS is part of a public health approach that will allow for targeted implementation of programs and interventions to prevent assault-related morbidity and mortality. The disparities in incidence emphasize the continued need to make NYS safer for all its residents and workers.

This exploratory data analysis will help guide future analyses and prevention activities.

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Race and Ethnicity
While poverty is a risk factor, its impact varies among races and ethnicities. The individual races are exclusive of the Hispanic ethnicity.

Disparities among workers in NYS
The mean salary of all occupations in NYS is $53,510; however, the mean salary for service workers is $32,250. These lower paid workers are at higher risk for work-related assault. While they represent only 20% of the NYS working population, they account for 72% of all work-related assault injuries and 30% of work-related homicides.

The rate of work-related assault injuries among all workers is 132.0 per 100,000 workers, but 473.0 per 100,000 service workers. There are a higher percentage of Black and Hispanic workers that are employed in service occupations, when compared with other occupations and with the NYS workforce as a whole.

Service occupations include: protective services, food and beverage services, health services, cleaning and building services, and personal services.

Conclusion
Homicide and assault continues to be a significant public health problem in NYS. The surveillance of assault-related injuries in NYS is part of a public health approach that will allow for targeted implementation of programs and interventions to prevent assault-related morbidity and mortality. This exploratory data analysis will help guide future analyses and prevention activities.