

Motor Vehicle Deaths New York City

EPI Grand Rounds Quick Stats

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Good afternoon. My name is Joe Kennedy and I am a research analyst in the Bureau of Vital Statistics.

Motor Vehicle Deaths in New York City

- **Motor Vehicle deaths can be classified as**
 - Pedestrian
 - Pedal Cyclist
 - Occupant
- **Data derived from NYC death certificates**
- **Cause of death classified by International Classification of Disease, version 10, (ICD 10)**
- **Rates are age-adjusted unless otherwise mentioned**

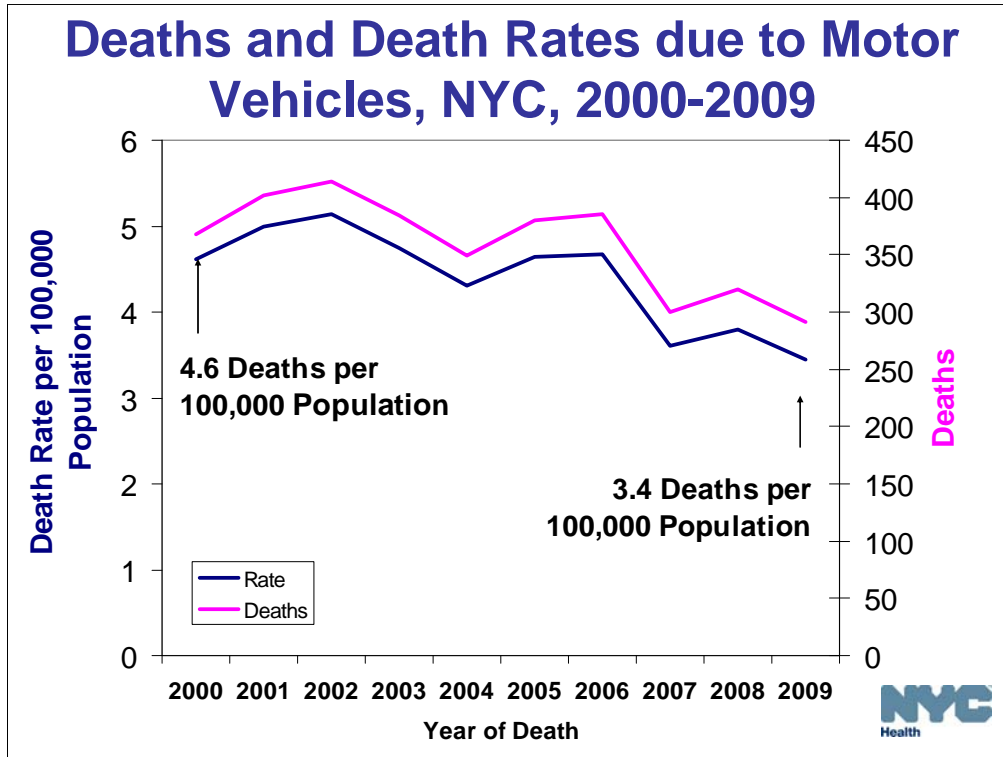


In today's quick stats session, I will present data on Motor Vehicle mortality – defined by three groups: Pedestrians killed by MV, Pedal Cyclists killed by motor vehicles and deaths of MV Occupants.

The data I will be sharing is derived from New York City Death Certificates.

And cause of death has been classified by the international classification of deaths, version 10, commonly referred to as ICD-10.

All rates are age-adjusted unless otherwise specified.



Let's start with Overall Mortality due to Motor Vehicles in New York City.

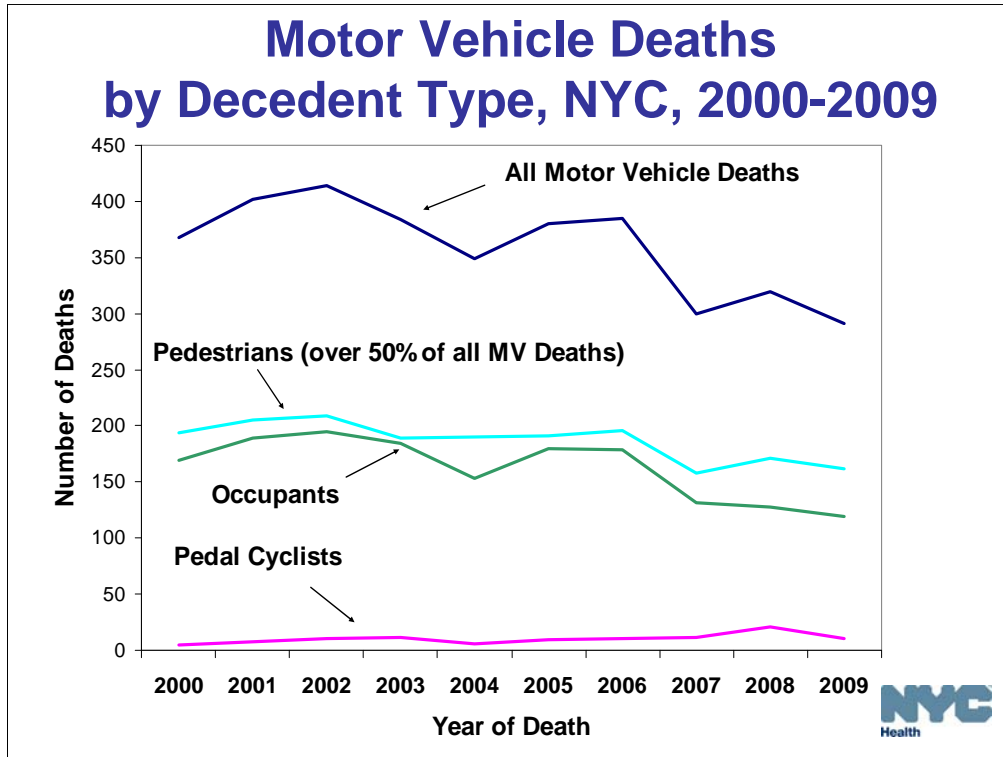
The top line represents deaths and bottom line death rates.

These have both generally declined from 2000 to 2009.

In 2000, there were 368 Motor Vehicle deaths. This represents an death rate of 4.6 deaths per 100,000 population.

By 2009 this had decreased to 291 deaths and a corresponding death rate of 3.4.

Thus, the death rate decreased 26% from 2000 to 2009.



Now let's look at Motor Vehicle deaths by decedent type.

The top – dark blue line is All Motor Vehicle Deaths as seen on the previous slide.

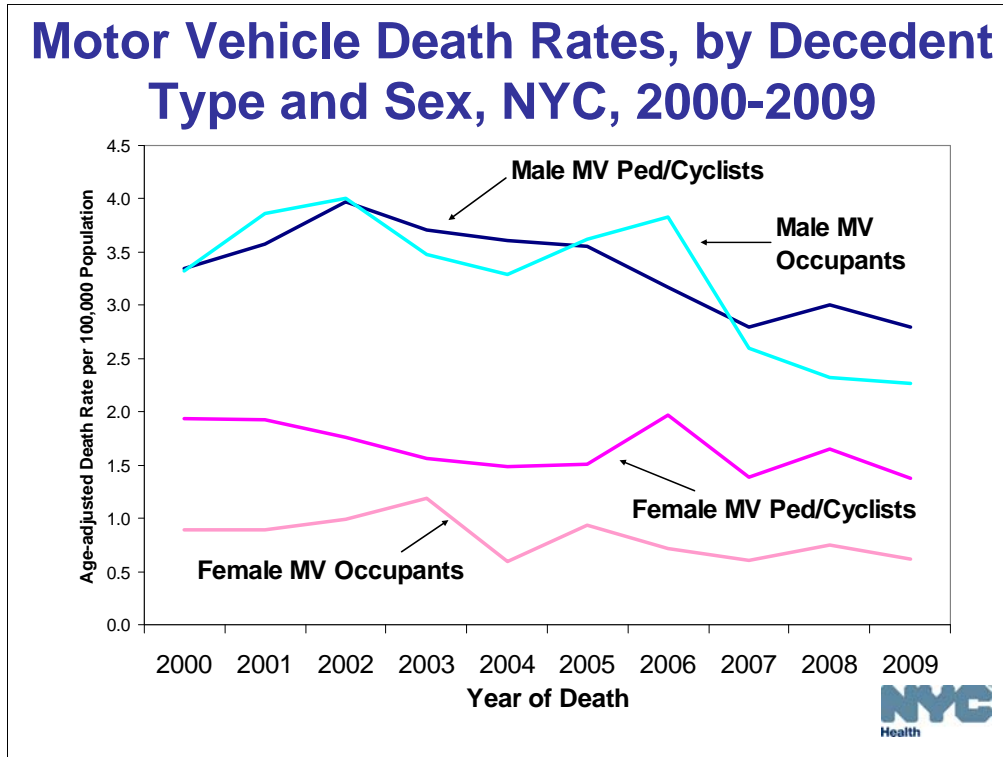
In addition there are trend lines for each type of decedent

This first of which is Pedestrians killed by MV, here displayed in light blue. These account for over 50% of all Motor Vehicle Deaths,

The next type of decedent is Pedal Cyclists killed by MV– the bottom line in pink – these account for less than 4% of all Motor Vehicle Deaths.

And finally, MV Occupants – in green - which include deaths to occupants of cars, motor vehicles, trucks, buses, as well as drivers of motorcycles and motorized scooters

For the remainder of this presentation I've combined data on pedal cyclists and pedestrians killed by motor vehicles and refer to them as "Ped/Cyclists MV deaths" since pedal cyclists represent a small number of deaths.



Now let's look at Motor vehicle death rates by decedent type and sex.

There is a downward trend regardless of sex and whether the decedent was a MV occupant, or Ped/Cyclists

Males, as displayed in the top two lines, have considerably higher death rates than those of females.

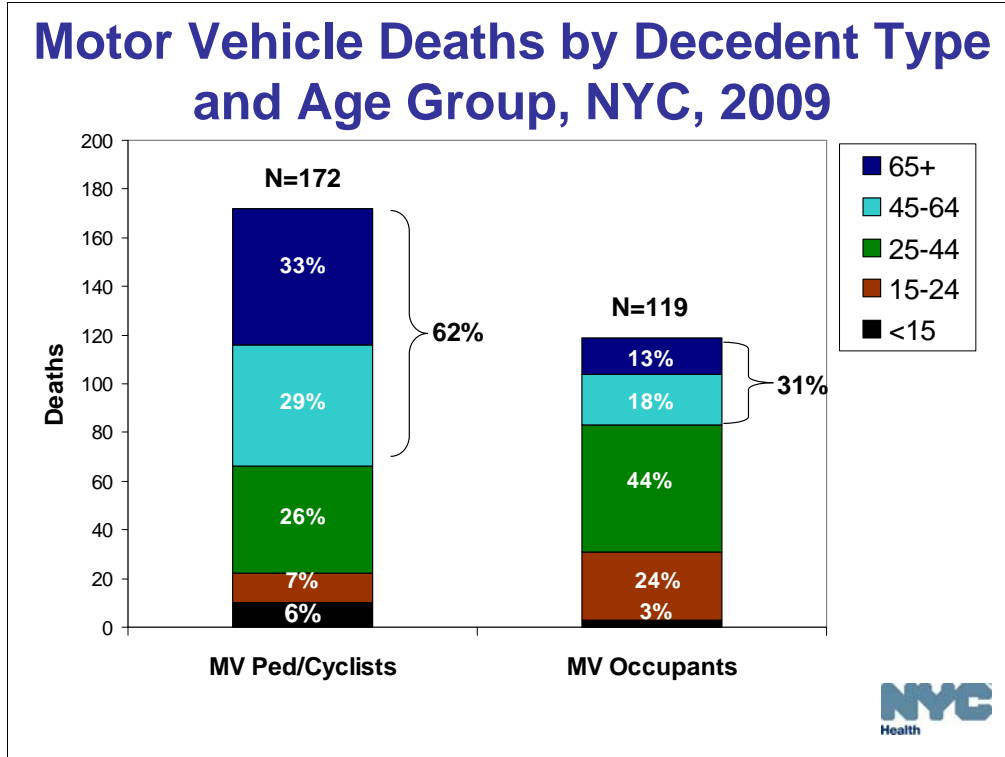
Among men, death rates are somewhat similar between MV occupants and non-occupants. In the last three years, the rates of MV occupants are lower than the Ped/Cyclists.

The bottom two lines represent Female death rates.

The death rate of female MV non-occupants, represented by the dark pink line, is about half that of their male counterparts

Displayed in dark blue.

Among females there is a consistent difference between the death rates of MV occupants and Ped/Cyclists with the lowest rates among female MV occupants.



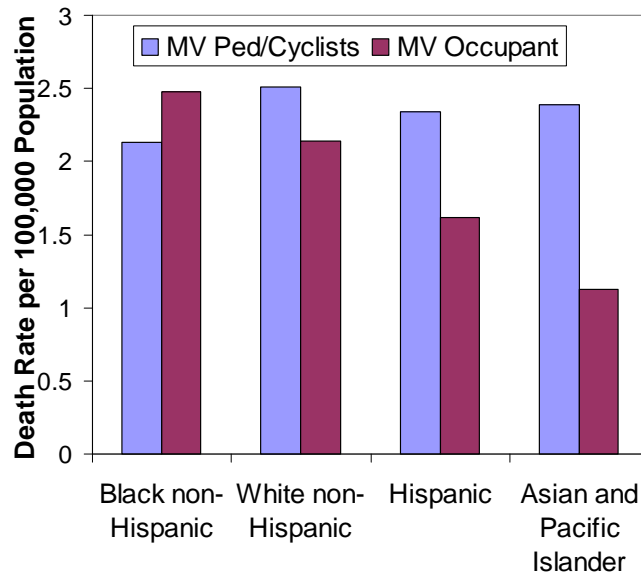
Next is Motor Vehicle deaths by decedent type and age group.

On the left side, we have deaths of MV non-occupants; on the right we have MV occupants.

Note, that nearly two thirds of deaths occurred to MV Ped/Cyclists over 45 years of age as opposed to about one third of MV occupants.

Also note MV deaths among 15 to 24 year olds in brown. 24% MV Occupants fell in this category vs. %7 among non-occupants.

Motor Vehicle Death Rates by Decedent Type and Race/Ethnicity, NYC, 2000-2009 Average



And for the last breakdown, MV death rates by Decedent Type and Race/ethnicity

Displayed here are 10 year average death rates broken down by Decedent type by race/ethnicity. On the left, Non-Hispanic Black MV occupants have the highest death rate of any Race Ethnic group, and the only group for which the MV Occupant death rate surpasses the MV non-occupant death rate.

Death rates for MV Non-occupants are similar across all race ethnic groups.

However, Asian and Pacific Islanders have the lowest rate of MV Occupant deaths, less than half the non-occupant death rate among Asian and Pacific Islanders.

Although not displayed here, we examined the trend of MV death rates by race/ethnicity over the past 10 years and found a general decrease among all race/ethnic groups.

So, what did we cover here.....

Summary

- **Motor vehicle deaths continue to decrease**
- **Death Rates of both motor vehicle occupants and Ped/Cyclists have decreased**
- **Males had higher death rates than females for both MV occupant and Ped/Cyclist deaths**
- **Nearly two thirds of Ped/Cyclist killed by motor vehicles were aged 45 and older**
- **Death rates of MV occupants vary by race/ethnic group**

**I would like to thank the following for their help:
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In summary, Motor Vehicle deaths continue to decrease.

This decrease has been seen among motor vehicle occupants and non-occupants.

When stratified by sex, males had higher death rates than females for all types of motor vehicle deaths.

The majority of MV Non-Occupants were aged 45 years and older.

And finally, MV Occupant death rates vary by race/ethnic group.