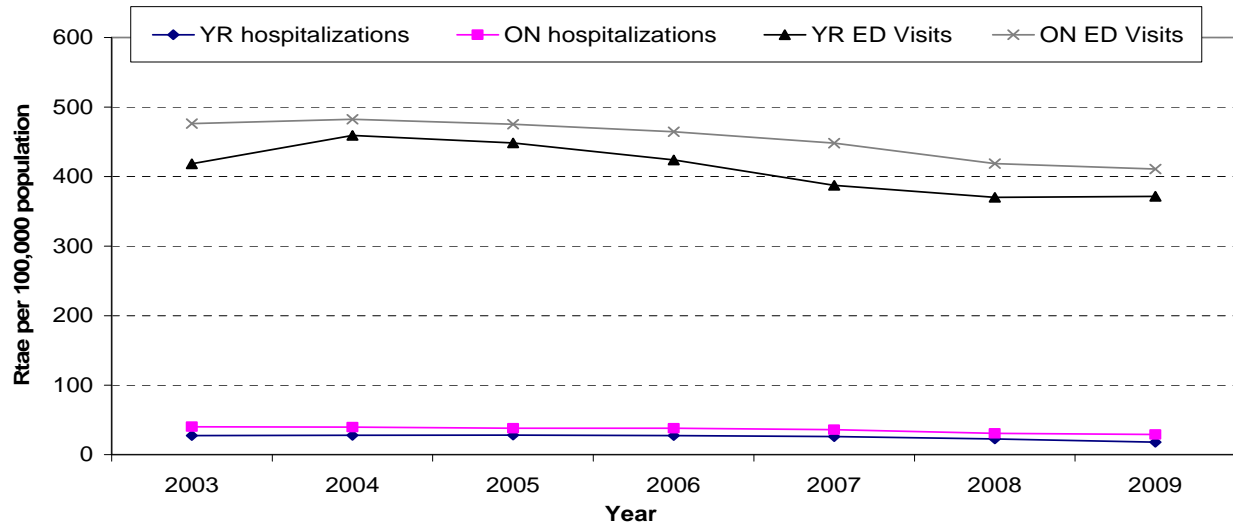


## Motor Vehicle Traffic Crash-Related Injuries

This summary focuses on the total rate and number of hospitalizations and emergency department (ED) visits from motor vehicle traffic crashes (MVTC) in York Region and Ontario.

Ontario Public Health Standards, Chronic Diseases and Injuries Program Standard, Prevention of Injury and Substance Misuse – Req 1.

### Age Standardized Rate<sup>†</sup> for MVTC-Related Injuries, York Region and Ontario, 2003-2009



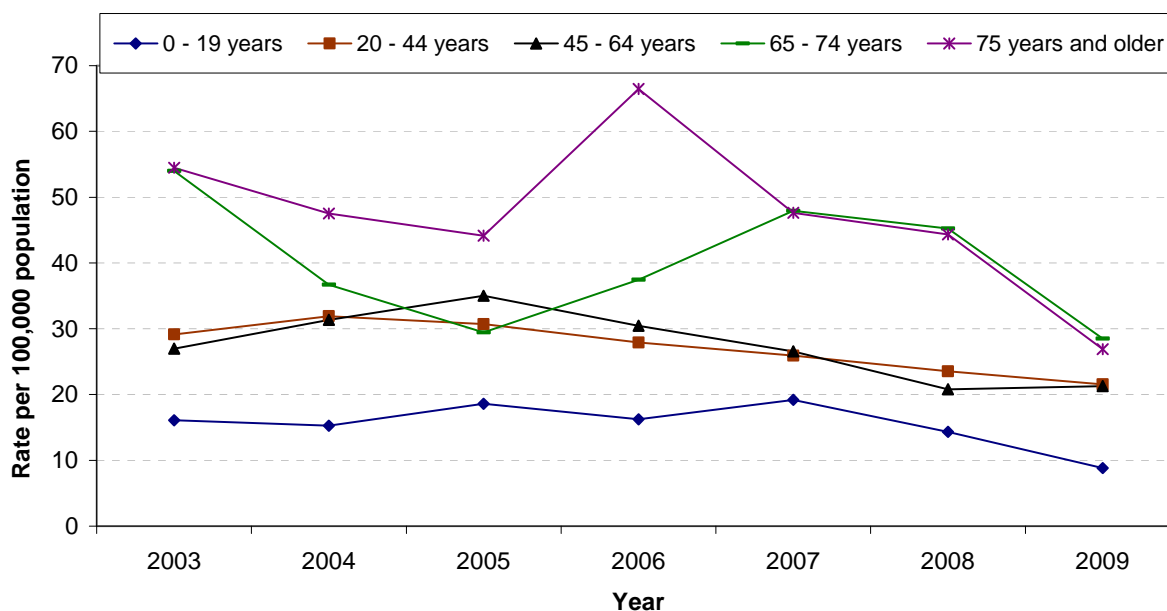
<sup>†</sup> Rate age standardized to the 1991 Canadian population standard

Data Sources: Inpatient Diagnosis and External Cause & Ambulatory All Visit All Tables, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO [Oct/2010]. Rates were calculated using population estimates from Statistics Canada, Table 051-0052 - Estimates of population by census division, sex and age group for July 1, based on the Standard Geographical Classification (SGC) 2006, annual (persons) (table), CANSIM (database).

### Interpretation:

- In 2009, the rate of MVTC-related injury hospitalizations in York Region was 18.0 per 100,000 residents, compared to a peak of 28.3 per 100,000 in 2005, while the rate of MVTC-related ED visits was 371.6 per 100,000 in 2009 compared to a peak of 459.1 per 100,000 in 2004. The rate of MVTC-related injury hospitalizations in York Region decreased significantly across all years when compared to 2009. The rate of MVTC-related injury ED visits has also decreased significantly between 2003 and 2006 when compared to 2009.
- The total number of MVTC-related injury hospitalizations in York Region was 185 hospitalizations in 2009, compared to a peak of 257 hospitalizations in 2005. The total number of MVTC-related injury ED visits was 3,755 visits in 2009, compared to a peak of 3,992 visits in 2005.
- Provincial rates of both MVTC-related injury hospitalizations and ED visits were significantly higher than York Region rates over the seven years. Provincial rates of MVTC hospitalizations fell from 40.2 per 100,000 in 2003 to 29.0 per 100,000 in 2009. Provincial rates of MVTC-related ED visits fell from a peak of 482.3 per 100,000 in 2004 to 411.0 per 100,000 in 2009.
- With the exceptions of 2003 and 2007, rates of MVTC-related hospitalizations were significantly higher in York Region men when compared to women (data not shown). Between 2007 and 2009, rates of MVTC-related ED visits were significantly higher in women when compared to men (data not shown).

## Hospitalization Rate for MVTC-Related Injury in York Region by Age Group, 2003-2009

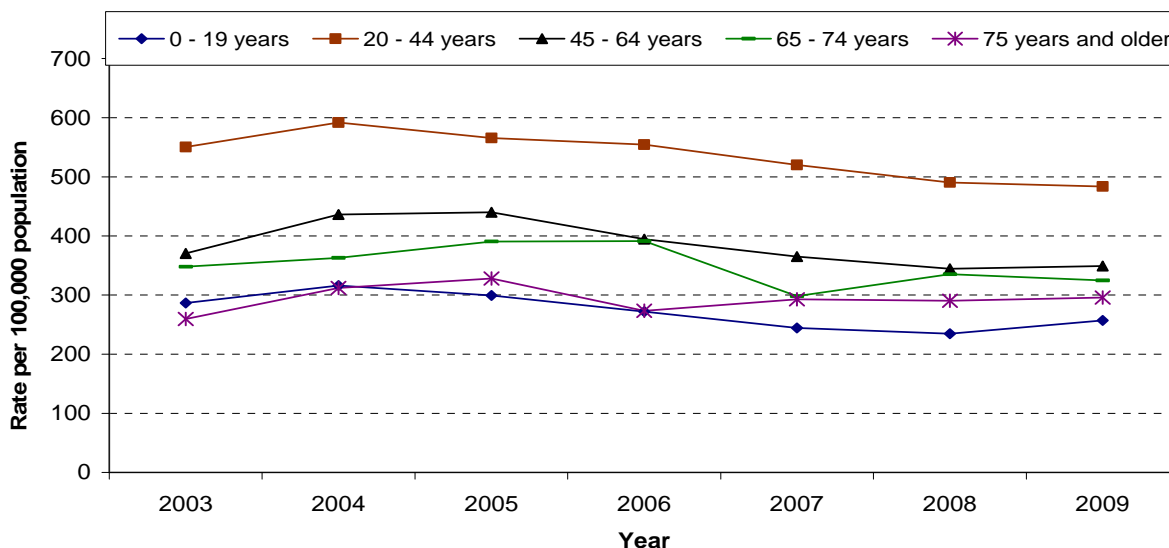


Data Sources: Inpatient Diagnosis and External Cause, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO [Oct/2010]. Rates were calculated using population estimates from Statistics Canada. Table 051-0052 - Estimates of population by census division, sex and age group for July 1, based on the Standard Geographical Classification (SGC) 2006, annual (persons) (table), CANSIM (database).

### Interpretation:

- In York Region, the 2009 rate of MVTC-related injury hospitalizations was 8.4 per 100,000 for York Region residents aged 19 years and younger; 20.4 per 100,000 for York Region residents aged 20 to 44 years; 20.6 per 100,000 for York Region residents aged 45 to 64 years; and 28.5 per 100,000 for residents aged 65 to 74 years; 26.9 per 100,000 in residents aged 75 years and older.
- When compared to residents in the 45 to 64 year, 20 to 44 year and 0 to 19 year age groups, rates of MVTC-related injury hospitalization in York Region were significantly higher in residents aged 75 years and older, with the exceptions of 2004, 2005 and 2009. Rates of MVTC-related injury hospitalizations were similar between 65 to 74 years and residents aged 75 years and over across all years of data collection.
- Rates of MVTC-related injury hospitalizations in residents aged 19 years or younger ranged from 8.4 per 100,000 in 2009 to a peak of 19.2 per 100,000 in 2007. Rates of MVTC-related injury hospitalizations in residents aged 75 years and older ranged from 26.9 per 100,000 in 2009 to a peak of 66.4 per 100,000 in 2006.

## MVTC-Related Emergency Department Visit Rate in York Region by Age Group, 2003-2009



Data Sources: Ambulatory All Visit All Tables, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO [Oct/2010]. Rates were calculated using population estimates from Statistics Canada. Table 051-0052 - Estimates of population by census division, sex and age group for July 1, based on the Standard Geographical Classification (SGC) 2006, annual (persons) (table), CANSIM (database).

### Interpretation:

- In York Region, the 2009 rate of MVTC-related injury was 257.1 per 100,000 for York Region residents aged 19 years and younger; 483.9 per 100,000 for York Region residents aged 20 to 44 years; 349.1 per 100,000 for York Region residents aged 45 to 64 years; and 324.9 per 100,000 for residents aged 65 to 74 years; 295.8 per 100,000 in residents aged 75 years and older.
- Rates of MVTC-related injury ED visits in York Region were significantly higher in 20 to 44 year olds when compared to the other age groups. Rates of MVTC-related injury ED visits were statistically similar among the other age groups.
- Rates of MVTC-related injury ED visits in 20 to 44 year olds ranged from 483.9 per 100,000 in 2009 to a peak of 591.7 per 100,000 in 2004. Rates of MVTC-related injury ED visits in residents aged 19 years or younger ranged from 234.5 per 100,000 in 2008 to a peak of 316.1 per 100,000 in 2004.

### Data Notes:

The age standardized hospitalization rate presented is the total number of hospitalizations per 100,000 residents that would occur if York Region had the same age distribution of a chosen standard population. This statistical adjustment minimizes the effects of age differences when comparing rates in different populations or over time.

Rates are based on the number of hospital discharges, not the number of individuals.

Data are analyzed based on the residence of the patient, not where the hospitalization or injury occurred.

Records were excluded from this analysis: i) if Ontario residents were treated outside of the province; or ii) hospital discharge records were not attributed to a particular public health unit.

Statistical significance was examined using Computer Programs for Epidemiologists: WINPEPI (PEPI-for-Windows). Version 1.31. Salt Lake City, Utah: Sagebrush Press; 2004.