



Pathology & Biology Section – 2008

G92 Risk Factors for Pedestrian Deaths

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After attending this presentation, attendees will understand some of the pertinent risk factors associated with pedestrian deaths.

This presentation will impact the forensic community and public health agencies by documenting and highlighting factors which can help focus injury prevention strategies.

All pedestrian deaths investigated by the Central Virginia District Office of the Chief Medical Examiner in the years 2002 through 2006 were reviewed using police reports, death certificates, and medical examiner investigation and autopsy reports. The decedent information and circumstances of the death were extracted to analyze factors such as age, sex, race, manner of death, intoxication, time of day, season, location of death, activity of decedent, and vehicles involved.

Approximately 70% of all deaths were adults (21 to 65 years old) and 70% of all deaths were males. The rate of pedestrian deaths (per million) was 21 for males compared with 8.7 for females. Rates were highest for Hispanics (24.2) followed by African Americans (19.3) then non-Hispanic Caucasians (12.1).

Considering individual risk factors in adult pedestrian deaths, the leading factor was darkness with approximately 76% of deaths occurring at night. The second most prominent factor was alcohol intoxication (Blood Alcohol \geq 0.08 % by weight by volume) present in 44% of pedestrian deaths. The next most common factors were crossing a road (41%) or walking along or in a road (25%). Almost 8% of the pedestrian deaths were associated with a domestic dispute and 88% of the victims were male. Nearly 7% of the pedestrian deaths occurred in victims of or responders to a previous motor vehicle accident.

Most of the pedestrian deaths were certified as accidents (94%). Only 4% of the pedestrian deaths were certified as suicides but in an additional 6% of the deaths there were circumstances which were suspicious for but not diagnostic of suicide.

Education and enforcement focusing of risks of darkness, alcohol use and pedestrians crossing or walking on roads are focus areas for prevention. Pedestrians and responders on roads after motor vehicle collisions are at great risk. Domestic disputes are associated with a surprising number of pedestrian deaths. Pedestrian deaths require careful investigation to correctly establish manner of death.

Pedestrian, Motor Vehicle, Death