

**VIRGINIA
MATERNAL
MORTALITY
REVIEW
TEAM:
PUBLIC
HEALTH
BRIEF**

- **Motor vehicle accidents are the leading cause of death for pregnant and recently pregnant women in Virginia.**
- **Most women who died were under 30 years old.**
- **Two-thirds of the decedents were not wearing seat-belts at the time of the injury.**



Motor Vehicle Collisions: The Leading Cause of Pregnancy-Associated Death in Virginia

APRIL, 2014

The death of a woman while pregnant or within one year of pregnancy from any cause or manner is considered a pregnancy-associated death. Many of these deaths are the result of injuries, both unintentional and intentional. Between 1999 and 2007, a total of 397 women died a pregnancy-associated death in Virginia. Nearly half (n=182, 45.8%) were due to injuries. Motor vehicle accidents accounted for the largest number of deaths (n=61) followed by homicides (n=52), accidental overdoses (n=34), suicide (n=27), and other accidents (n=8). Each case was reviewed by the Virginia Maternal Mortality Review Team to further our understanding of the circumstances so that risk factors can be identified and prevention strategies can be developed. As part of this review, the Team identifies opportunities for changes that could prevent deaths in the future. For the deaths due to injury overall, nearly 80% were determined to be probably or definitely preventable. For the deaths due to motor vehicle accidents—the largest group of injury-related deaths, 88.1% were thought to be at least probably preventable.

The decedent was the driver in most of the automobile related deaths (52.5% of the cases). Six of these drivers (18.7%) had blood alcohol levels at or above the legal driving limit of 0.08% after the fatal event. Forty-one percent of the decedents were passengers and in four cases (6.6%), decedents were pedestrians struck by motor vehicles. Sixty percent of the passengers were riding in the front seat. While most of these fatal events occurred after the postpartum period (more than 42 days after delivery), 27.9% of the women who died were pregnant at the time of injury.

Almost all (91.8%) of the women who died were under 30 years old. The largest group was between the ages of 20 and 24 years old. More white women died than black women in motor vehicle related incidents (n=37 and n=22 respectively).

Virginia's medical examiner system has four district offices. Figure 1 on page 2 shows the proportion of pregnancy-associated motor vehicle related fatalities in each of the districts. As shown, most fatal injuries occurred in the Central District followed by the Western District.

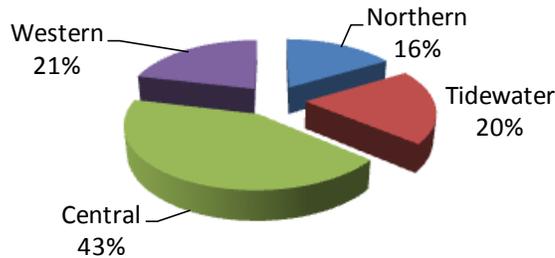
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How to Wear a Seatbelt During Pregnancy: Properly positioning the three point safety belt found in most cars is the most important way you can protect yourself and your baby.



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Figure 1. OCME District of Fatal Pregnancy-Associated Motor Vehicle Injury



Examination of the factors contributing to these pregnancy-associated motor vehicle related deaths showed that 39 of the 57 women (68.4%) driving or riding in motor vehicles were not using seat belts at the time of the fatal injury. Only five of 17 women (29.4%) who were pregnant at the time of the fatal event were known to be wearing seat belts. Ninety-two percent of deaths to unbelted decedents were preventable. Of the 12 women known to be wearing seatbelts, eight deaths (66.6%) were preventable. Factors that contributed to these deaths included use of alcohol or sedating medications and improper placement of seatbelts.

The Virginia Maternal Mortality Review Team recommends all pregnant women follow the guidelines for proper seat belt use in pregnancy which is available on the Virginia Department of Health website at: http://www.vdh.virginia.gov/ofhs/prevention/cps/Pregnancy_and_Seatbelts.htm. These guidelines state, “The shoulder belt should cross over your collar bone and lay between your breasts. It should be positioned so that it does not hit your neck. The lap belt should never ever be placed on or above your belly. It should be worn snugly under your belly and across the hips. Never put the shoulder belt behind your back or under your arm. Wearing a lap belt alone will do more harm

For additional information, please visit the Virginia Maternal Mortality Review Team Website: <http://www.vdh.virginia.gov/medExam/>