

Chapter 1 : Teen Drivers: Get the Facts | Motor Vehicle Safety | CDC Injury Center

Findings include that older drivers are somewhat more likely than middle-aged ones to cause an accident, but the bigger issue may be that they are much more likely to be injured or killed if they are in an accident, regardless of fault.

How many older drivers are there? How are the numbers of older drivers and their crash rates changing over time? Compared with drivers ages 16-69, fewer people 70 and older are licensed to drive, Federal Highway Administration. Insurance Institute for Highway Safety. However, older people now keep their licenses longer and make up a bigger proportion of the population than in past years as baby boomers age. According to the U.S. Census Bureau, Projections of the population by age and sex for the United States: The increase in the older driver population has led to concerns about the potential effects on traffic safety. A Institute study examined historical crash rates of older drivers and projected that older drivers would become an increasing proportion of the overall crash problem, including fatal crashes. Older driver involvements in police reported crashes and fatal crashes: Yet fewer older drivers died in crashes and fewer were involved as drivers in fatal collisions during than in previous decades. The rate of fatalities per capita among older people has decreased 43 percent since 1980. Trends in passenger vehicle crash involvement rates among drivers 70 and older since the mids were examined in a Institute study. Trends in older driver crash involvement rates and fragility: Accident Analysis and Prevention Nationally, the fatal crash involvement rates of drivers 70 and older declined per licensed driver during and per vehicle mile traveled between and at a faster pace than the rates for drivers years old. The reductions were strongest among the oldest drivers age 80 and older. During 1980-1990, the decline in fatal crash involvement rates per licensed older driver began to slow relative to middle-aged drivers. However, this did not undo earlier gains for older drivers. A follow-up study looked more closely at how crash involvement rates and crash survivability for older drivers changed during this period. Why have fatality rates among older drivers declined? The relative contributions of changes in survivability and crash involvement. From 1980 to 1990, police-reported crash rates per mile traveled declined more than deaths per crash among drivers ages 75 and older, relative to drivers ages 16-69. Thus, while the reduced fatality risk of drivers ages 75 and older reflects both a lower likelihood of being involved in a crash and a greater likelihood of surviving when they do crash, reductions in crash risk played a bigger role. Improvements in crash survivability relative to middle-aged drivers were larger in side impacts than in frontal impacts. How much do seniors drive? Based on travel data, drivers 70 and older drove 45 percent fewer miles, on average, than drivers ages 16-69. Older drivers are traveling more miles than they used to. From 1980 to 1990, average yearly mileage increased by 42 percent for drivers 70 and older, compared with a 21 percent increase for drivers 16-69. Characteristics of older drivers who self-limit their driving. Association for the Advancement of Automotive Medicine. This supports other research showing that many older drivers self-limit their driving. Self-regulation of driving and its relationship to driving ability among older adults. Driving avoidance and functional impairment in older drivers. Factors relating to driving difficulty and habits in older drivers. Do older drivers with visual and cognitive impairments drive less? Journal of the American Geriatrics Society The relationship between self-regulation and driving-related abilities in older drivers: Traffic Injury Prevention 9: Self-regulation of driving by older adults. Based on follow-up interviews in the Institute study, becoming widowed or divorced was associated with an increase in driving, whereas retiring was associated with less driving. Changes in self-regulatory driving among older drivers over time. Traffic Injury Prevention Older drivers with worsening memory and physical mobility avoided more driving situations. However, during the three-year study period, reported changes in impairments and driving patterns were not large, perhaps because older drivers with larger changes were among those who did not complete the follow-up surveys. How do crash rates for older drivers compare with those for drivers of other ages? Older drivers have low rates of police-reported crash involvements per capita; their per capita fatal crash rates begin to increase at about age 75. Per mile traveled, crash rates and fatal crash rates also start increasing at about age 75. Some caution should be used when comparing crash rates per mile traveled of different age groups. Older drivers generally travel fewer miles than most other age groups and, like low-mileage drivers of other ages, they tend to accumulate much of their mileage in city driving

conditions. In contrast, drivers who accumulate more miles tend to drive more on freeways or divided multilane roads, which generally have much lower crash rates than other types of roads. Hence, the elevated crash rates for older drivers when measured per mile traveled may be somewhat inflated due to the type of driving they do. Accidents, mileage, and the exaggeration of risk. Insurance claims provide another view of crashes of all severities. Drivers ages have the lowest rates of property damage liability claims and collision claims per insured vehicle year. Rates start increasing after about age 65. Similar results are found with more recent data for 65+. Fragility increases starting around middle age and continues to rise with age. How do crashes involving older drivers differ from the crashes of other drivers? Compared with younger drivers, senior drivers are more likely to be involved in certain types of collisions – angle crashes, overtaking or merging crashes, and especially intersection crashes. Age-related differences in fatal intersection crashes in the United States. Studies of senior-involved crashes have found that failure to yield the right-of-way is the most common error among seniors. Seniors are cited for this error more often than younger drivers. Collisions involving senior drivers: Traffic Injury Prevention 7: In a nationally representative study of serious U.S. Critical older driver errors in a sample of serious U.S. These findings are consistent with an earlier study reporting that similar types of errors were the most common among older drivers who were at fault in intersection crashes. Traffic Injury Prevention 8: How do age-related changes affect driving ability? Specific physical, cognitive and visual abilities may decline with advancing age. However, there are large individual differences in the onset and degree of functional impairments, so age alone is not sufficient information to judge driving ability. Still, functional impairments can interfere with driving and may become particularly evident in stressful or challenging driving situations such as merging or changing lanes. Several studies have shown that higher levels of physical, cognitive or visual impairment among older drivers are associated with increased risk of crash involvement. Psychology and Aging 6: Visual attention problems as predictor of vehicle crashes in older drivers. Investigative Ophthalmology and Visual Science Vision impairment, eye disease, and injurious motor vehicle crashes in the elderly. Cognitive, sensory and physical factors enabling driving safety in older adults. Clinical Psychology Review 25 1: Many older drivers also take medications, which can impair driving ability at any age but can be especially impairing for an older person. Relations among chronic medical conditions, medications, and automobile crashes in the elderly: A population-based case-control study. American Journal of Epidemiology, 157: Do older drivers constitute a substantial hazard to other road users? In terms of fatalities, older drivers are a danger mostly to themselves and their passengers, who also typically are older and thus more vulnerable to injuries. Are older drivers actually at higher risk of involvement in collisions resulting in deaths or non-fatal injuries among their passengers and other road users? Risk to self versus risk to others: How do older drivers compare to others on the road? American Journal of Preventive Medicine Do older drivers pose a risk to other road users? Risks older drivers pose to themselves and to other road users. Journal of Safety Research In 1997, 74 percent of people killed in crashes involving drivers 70 or older were either the older drivers themselves 59 percent or their older passengers 15 percent. An Institute study found that, per licensed driver, fewer pedestrians, bicyclists, motorcyclists and occupants of other vehicles die in crashes involving drivers 60 and older than in crashes involving drivers ages 16-59. More than half the states have one or more renewal provisions specific to older drivers, such as shorter renewal cycles, required vision or road testing and in-person rather than mail or electronic renewal. The ages at which special regulations are required vary by state. See License renewal procedures. An Institute study of a Florida vision test requirement for drivers 80 and older found that 80 percent of those eligible to renew their licenses attempted to do so, and 7 percent of them were denied renewal because they failed the vision test.

Chapter 2 : Statistical Method for Identifying Areas of High Crash Risk to Older Drivers

The Rand Institute's conclusions regarding the accident risk of older drivers is: Relative risk of accident by older drivers actually diminishes with age. The relative risk of older drivers changed little between the early 's and , despite a continually aging population.

If you drive a car you must have sufficient auto insurance Drivers can be classified as high-risk or low-risk drivers Having too many moving violations can increase your insurance premiums Having a vehicle means that you must carry auto insurance on it. The rate that an auto insurance agent assigns to you is calculated based on whether you are a high or low-risk driver. Every driver is considered a risk taker. Find the best auto insurance rates right here when you type your zip code into our FREE search tool and start saving today! High and Low Risks If you are a licensed driver, then you are considered a risk. Your rating as a high-risk or a low-risk driver depends on a few different factors. One of the most important personal factors that are used to calculate your auto insurance risk is age. Drivers between the ages of 25 and 55 are considered to be in the prime age bracket and are considered a lower risk. Single parents are also considered as less of a risk. Insurance companies take into consideration that a single parent is already responsible enough to parent a child alone so they are more likely to be financially responsible as well. Married drivers pay less for their auto insurance policies than a single driver does. They are thought to be more stable than single drivers due the fact that they often have more responsibilities. A single driver of the same age with the same driving record as a married person will be assessed as a higher risk simply because of their marital status. A Good Driving History is Important If you have any type of driving violation attached to your driving history , be prepared to pay a higher insurance rate than someone whose driving record has no infractions. Any prior accidents that you have been involved in will be reflected on your driving record, which increases your risk. In some instances, insurance agencies have been known to slap a severe penalty on your driving record for up to five years after the accident has occurred. Any type of speeding ticket will raise your risk factor. Speeding reflects carelessness and a disregard for the driving laws set in place by the government. Insurance companies will consider any type of speeding ticket as a bad reflection of the driver. This is calculated into your insurance risk rating and will ultimately increase your premiums. The bottom line is that the better your driving record is free of accidents, tickets, moving violations , the lower your risk rating will be which will result in lower insurance rates. Your Address Makes a Difference in Your Rate The area where you reside plays a huge role in how your auto insurance risk is calculated by your insurance agent. Drivers who claim a residence in a larger metropolitan area run a higher risk of not only being involved in an accident but also of being the victim of vandalism or theft. Cities are congested with much more traffic than urban areas. The logic of insurance risk is that the more cars that are used in an area, the more likely they are to hit or be hit by another car. Those drivers who live in an area that has less traffic will be considered less of a risk and that helps lower their premiums. Some neighborhoods are under the insurance radar as being a high crime area. If you live in one of these areas, expect your insurance risk to be calculated at a higher rate because your vehicle will be more likely to be involved in a theft. Any type of anti-theft protection that is installed in your vehicle will usually guarantee a decrease to your insurance policy FREE Auto Insurance Comparison Compare quotes from the top auto insurance companies and save! Sports cars are expensive to manufacture which is why they are expensive to repair in case of an accident. A vehicle that has a lesser value will cost less to insure. If you plan on driving a brand new four-by-four with all of the fixings, be prepared to be immediately calculated as a higher risk simply because it could cost a small fortune in repairs if you are involved in an accident. If you would like to see what your vehicle is valued at, visit the website Kelley Blue Book. Of course, the value that you are given will only be as accurate as the information that you provide. When you have a car that is a company car, make sure to tell your insurance agent that the vehicle you wish to insure is used specifically for business purposes. Other Items That are Added to Your Risk Factor The distance that you drive to and from work every day is another factor that is calculated into your risk rating. The less mileage you accrue per year, the less of a risk you pose. If you only drive a few miles a day to reach your job site, your risk of having an accident is lower so

your insurance premiums will be lower. Teenage drivers are considered an extremely high risk when it comes to driving. The Insurance Information Institute III states that teenage drivers have an extremely high crash rate due to their inexperience and lack of maturity. Vehicle accidents, according to the III, are the leading cause of death for teenagers. This is another factor that is used to calculate your insurance risk. Parents often add their teenage drivers to their policies because it is usually much less expensive than having an individual policy as a teenage driver. Be aware, however, that if your teen is involved in any type of accident, it is reflected on your policy and your overall premiums will increase.

Number of Years You Have Been Driving Matters This is tied into the age factor of drivers, but some people do not always start driving as soon as they hit the legal age. If you are 30 years old and have only been driving for the past two years, your risk will be calculated at a higher rate due to lack of experience. A driver of the same age who has been driving for the last 10 years will pay significantly lower premiums because they are considered to be less of a risk. Insurance agencies run a credit check on everyone to whom they issue a policy. Ensuring that their customers can and will pay for their policies on a timely basis is very important. The better your credit score is, the lower your risk and the lower your premiums will be. Having a lower credit score can scream that you are irresponsible because you do not always pay your bills or that you are often late in making your payments. Your credit score is compiled by the three main credit-reporting agencies, which are TransUnion, Equifax, and Experian. Credit scores range between to The simple logic is that the higher your credit score is, the better for you because it means you are less of a credit risk and you are more likely to pay your creditors and pay them on time. If you would like to know what your current credit score is, you can visit [FreeCreditReport](#). You are entitled to one free credit report per year. If you would like to have more than one per year, there is a fee associated with it.

Chapter 3 : Older Adult Drivers | Motor Vehicle Safety | CDC Injury Center

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Helping older adult drivers prevent accidents by CBS. Their accumulated driving experience, ability to think critically, and aptitude for controlling impulses and managing their emotions gives them a distinct advantage over younger, inexperienced drivers. In addition, older adult drivers are more willing to wear seat belts, tend to drive when conditions are safe—such as during daytime hours and in good weather, and have a lower incidence of impaired driving due to alcohol consumption. Decreased vision and declines in cognitive and motor skills often put them at risk in a multitude of driving situations. In 2010, older individuals were injured in traffic crashes, accounting for 8 percent of all the people injured in traffic crashes during the year. These older individuals made up 15 percent of all traffic fatalities, 14 percent of all vehicle occupant fatalities, and 18 percent of all pedestrian fatalities. Studies conducted by the NHTSA confirm this finding and place older adult drivers into three age categories: The increasing age of the driver has a great impact on whether or not they will become involved in an accident. This is an induced exposure analysis measurement that determines the ratio of at-fault to not-at-fault drivers. Values lower than 1. Drivers aged 60 scored 0. However, the risk increases to 1. Drivers aged 60 had crash rates similar to those of middle-aged drivers under most conditions, although their crash risk was elevated during daylight hours and at intersections. In general, left turns become more risky for drivers aged 60 and older. In most cases, these drivers were more likely to be the vehicle that was struck during an accident, to be involved in angle crashes, and to have received citations for failure to yield. In addition, in single-vehicle crashes, drivers 60 and older were more likely to have been alone in the vehicle, and were less likely to have made a maneuver to avoid the collision. Drivers 70 and older had elevated risk levels in these and additional environmental conditions, such as driveways, alleys, and at intersections controlled by stop or yield signs. Drivers 80 and older differed from those aged 70 to 79. For these drivers, the risk of an accident increased in conditions that required navigating complex situations such as intersections, left turns and reacting to an imminent crash. Additional factors for older adult drivers becoming involved in accidents are attributed to being ill or blacking out, drowsy or asleep, and using medications or drugs other than alcohol. To help older adult drivers prevent accidents and stay sharp while behind the wheel, Christian Brothers Risk Management Services recommends conducting behind-the-wheel driver evaluations for drivers aged 75 and older. As a result of performing these evaluations and then combining them with driver awareness training, accidents experienced by older drivers within the religious community have decreased, along with related claims expense. It is critical for religious communities to develop an older adult driver policy that is approved and enforced by its members. A leadership team should be appointed to implement and enforce the policy. Items to incorporate into this policy include: Additional prevention techniques, suggested by the Centers for Disease Control and Prevention (CDC), that older adult drivers can practice to stay mentally and physically fit for driving include: Wear glasses and corrective lenses as required. Find the safest route with well-lit streets, intersections with left turn arrows, and easy parking. Plan out the route before driving. Remember the four-second rule if you are driving a car, increase it to five seconds for vans and add an additional second for adverse weather or road conditions. National Highway Traffic Safety Administration.

Chapter 4 : How Your Auto Insurance Risk is Calculated?

Estimating the Accident Risk of Older Drivers [David S. Loughran, Seth A. Seabury] on calendrierdelascience.com
**FREE* shipping on qualifying offers. As the U.S. population ages, so will the population of licensed drivers.*

Carrying passengers has been identified as a possible risk factor for these crashes. The relative risk of death was 1. The risk of death increased significantly for drivers transporting passengers irrespective of the time of day or sex of the driver, although male drivers were at greater risk. Driver deaths per crashes increased for and year-olds transporting male passengers or passengers younger than 30 years. This result supports inclusion of restrictions on carrying passengers in graduated licensing systems for young drivers. The basic premise of these systems is that beginning drivers need to earn a full license step-by-step. For the intermediate period, restrictions vary widely by state in the United States and may include restrictions on nighttime driving and carrying passengers. Only 9 of these 24 states included any restrictions related to teenaged drivers carrying passengers. Knowing the circumstances associated with increased risk to teenaged drivers is useful for formulating graduated driver licensing programs and for advising health professionals who take care of teenagers. Our study examined the associations between crashes fatal to and year-old drivers and the characteristics of passengers. The following potential risk factors were examined: Methods Data Data for this study were from 3 federal sources: Some analyses included drivers aged 30 to 59 years for purposes of comparison. FARS collects data on all fatal traffic crashes within the United States that involve a motor vehicle traveling on a public road and result in a death within 30 days of the crash. The NPTS provides comprehensive data on transportation patterns in the United States based on a national telephone survey of 42, households conducted from May to July Once a household was selected, travel diaries were mailed to the household and every person within the household who was aged 14 years or older was interviewed regarding trips made on a recent preassigned day. A proxy summarized trips for children aged 5 to 13 years. We chose number of trips as the measurement of travel exposure because individual trips vary in the number and characteristics of passengers. The GES is a probability sample of US police-reported crashes on public roads that result in property damage, injury, or death. Because uninjured passengers were not fully reported in some of the primary sampling units in the GES, we excluded those units from GES data to avoid misclassification of drivers with uninjured passengers as having carried fewer passengers. These primary sampling units could not be identified within FARS because the specific locations of GES primary sampling units are confidential and thus unavailable to researchers. Analysis Driver deaths were studied rather than deaths among all vehicle occupants because higher occupancy increases the probability that a crash will be fatal by increasing the population at risk. Risk of Death per 10 Million Trips. FARS and NPTS data were used to calculate driver deaths per 10 million trips by number of passengers, driver age and sex, and time of day. These trip-based death rates measured the likelihood of involvement in a crash fatal to a or year-old driver. FARS and GES data were used to compute deaths per crashes for and year-old drivers, combined, by passenger age and sex deaths per 10 million trips could not be calculated by passenger age and sex because the NPTS lacked data on characteristics of passengers who were not household members. This different type of measure, deaths per crashes, represents crash outcome rather than fatal crash incidence and reflects crash forces and other variables eg, seatbelt use that might be affected by driver behaviors associated with the presence of passengers. Passengers of both and year-old drivers, combined, were classified in 3 age groups: Analyses showed no differences among results based on passengers aged 20, 21, 22 to 24, or 25 to 29 years; therefore, passengers aged 20 to 29 years were grouped. Relative Risk and Confidence Intervals. Relative risk was defined as the death rate ratio, calculated by dividing the death rate for the target group by that of the reference group. Ninety-five percent confidence intervals for the rates were calculated by the substitution method described by Daly. Drivers aged 16 and 17 years had markedly higher risks for fatal crashes than older drivers Figure 1 , Table 1. Compared with driving alone, driver death rates per 10 million trips increased with the number of passengers for drivers aged 16 or 17 years. The highest death rate 5. In contrast, death rates per 10 million trips for drivers aged 30 to 59 years were lower for drivers with passengers than for those without passengers.

Whether or not passengers were transported, male drivers had higher death rates than female drivers Table 1. Carrying passengers dramatically increased the risks of and year-old male drivers per 10 million trips: Carrying passengers also significantly increased the fatal crash risks of and year-old female drivers but to a lesser extent. Nighttime death rates greatly exceeded daytime death rates among and year-old drivers, combined Table 2. For drivers aged 16 to 17 years, carrying passengers significantly increased the risk of driver deaths per 10 million trips during each of the 3 time periods analyzed. The highest driver death rate for and year-old drivers, Crash Outcome Analyses Passenger Age. When crashes occurred, carrying passengers aged 13 to 19 years or aged 20 to 29 years was associated with significantly increased driver fatalities per crashes for to year-old drivers, combined Table 3. The risk of death increased with the number of passengers. Carrying passengers aged 30 years or older did not increase the driver fatality rates. Crash-involved and year-old drivers, combined, with male passengers were significantly more likely to die than those with only female passengers Table 4. Risk of death increased with the number of male passengers. Similar effects of male passengers were observed for male and female drivers. Driver deaths per crashes more than doubled for both male and female drivers when there were 2 or more male passengers and nearly doubled with 1 male passenger. Comment The incidence of motor vehicle crashes fatal to and year-old drivers increased with the number of passengers for both male and female drivers, during daytime and at night. In contrast, to year-old drivers who carried passengers had decreased death rates. Crashes are more likely to be fatal to drivers aged 16 and 17 years in the presence of male passengers, teenaged passengers, and passengers aged 20 to 29 years, findings not previously documented. Why were there more deaths when and year-old drivers carried passengers? A survey of high school drivers reported that dangerous driving behaviors driving after drinking alcohol or using drugs, speeding, swerving, crossing the center line, purposely skidding, and running a red light were strongly associated with the presence of peers. A study that observed vehicles on the road found that, on average, young drivers with male passengers drove at higher speeds and followed preceding vehicles more closely than those without passengers or with female passengers. Another possible explanation for passenger-related increases in fatalities is that drivers are more likely to be impaired by alcohol when carrying passengers, particularly those who can legally purchase alcohol. Unfortunately, we were unable to estimate the increased driver fatality risk associated with carrying passengers because alcohol use information was not consistently available from our data sources. Teenaged drivers are more susceptible than adult drivers to the impairing effect of alcohol: Further study will be needed to clarify the relationship between the risk of teenaged driver crashes, carrying passengers of various ages, and alcohol use. Driving at night is much more dangerous than driving during the daytime. The present study and previous research by Preusser et al 8 indicate that the effect of passengers is similar for both daytime and nighttime driving. Nighttime driving restrictions are especially appropriate but cannot substitute for passenger restrictions, since more than half of the fatal crashes of teenaged drivers with passengers occur during daylight hours. Graduated driver licensing has reduced teenaged driver crashes in Canada, 4 New Zealand, 20 and Florida. Health professionals should advise parents of teenagers of the risks associated with the transport of passengers by young drivers.

Chapter 5 : SafetyLit: Perception of the risk of an accident by young and older drivers

Older drivers saw the risk of an accident as significantly greater for young male drivers than for older male drivers and saw their own chances of an accident as significantly lower than those of both similar aged male drivers and young male drivers.

Chapter 6 : Accident Risk of Older Drivers

Three different methods of estimating the risk of accident involvement were used to compare risk estimates of young and older drivers. The methods included general questions about accident involvement, rating the riskiness often specific driving situations illustrated in still photographs, and rating the riskiness of fifteen videotaped driving.

Chapter 7 : Helping older adult drivers prevent accidents |

Estimating the accident risk of older drivers: 3. Estimating the accident risk of older drivers. by David S Loughran; Seth A Seabury Print book: English.

Chapter 8 : Formats and Editions of Estimating the accident risk of older drivers [calendrierdelascience.com

But how at risk are older drivers? crash involvement among drivers aged is times that of the safest group and about the same as for those aged.

Chapter 9 : Perception of the risk of an accident by young and older drivers.

Drivers 65 and older are 16 percent likelier than adult drivers (those years old) to cause an accident, and they pose much less risk to the public than do drivers under 25, who are percent likelier than adult drivers to cause an accident.