

**DEATHS AND INJURIES TO PASSENGERS
RIDING IN THE CARGO BED
OF PICKUP TRUCKS IN TEXAS**

Sandra J. De La Zerda, M.S.
Tho Bella Dinh-Zarr, M.P.H.

Texas Transportation Institute
Texas A&M University System

September 2000
FINAL REPORT

DISCLAIMER

The conclusions and opinions expressed in this document are those of the authors, and do not necessarily represent those of the State of Texas, the Texas Department of Transportation (TxDOT), or any political subdivision of the State or Federal government.

ACKNOWLEDGEMENTS

The authors wish to thank and acknowledge the assistance and guidance of Dr. Lindsay I. Griffin III. Thank you to Amber Sahmel for her assistance in preparation of this document. We would also like to thank the staff of the Injury Epidemiology and Surveillance Program at the Texas Department of Health for their independent efforts to merge supplied Texas accident data with statewide trauma registry and mortality data.

TABLE OF CONTENTS

INTRODUCTION.....	9
SYNTHESIS OF THE LITERATURE.....	11
METHODOLOGY	17
Data analysis of Texas Department of Public Safety Data (1989 - 1998).....	17
Preparation of Crash Reports for Merging with 1997 - 1998 TDH Trauma Registry and Bureau of Vital Statistics Data	18
Trauma Registry and Bureau of Vital Statistics Matches	19
RESULTS	21
SECTION I: Analysis of 1989 - 1998 Crashes.....	21
Number of Vehicles Involved in Crashes.....	21
Object Struck.....	22
First Harmful Event	23
Accident Severity.....	24
Road Class	25
County.....	26
Time.....	26
Day of Week.....	27
Month of Year.....	28
SECTION II: Analysis by Driver.....	30
Driver Age.....	30
Driver Sex.....	30
License Status	30
Insurance Status	31
Contributing Factors.....	31
SECTION III: Analysis by Casualty.....	32
Fatalities	32
Incapacitating Injuries.....	33
Non-incapacitating Injuries	33
Possible Injuries.....	34
Occupant Sex.....	35
SECTION IV: Matched Analysis and Case Studies.....	36

Trauma Registry-Non-fatal Injuries.....	37
Fatalities	38
Traumatic Brain Injuries.....	39
Selected Case Studies.....	40
CURRENT STATE LAWS AND DATA FROM OTHER STATES	41
Methodology for Compilation and Interpretation of State Laws	41
Differences Among State Laws.....	41
Synopsis of the Statutes.....	46
CONCLUSIONS AND RECOMMENDATIONS.....	51
Policies.....	52
Social and Cultural Norms & Beliefs.....	53
Surveillance.....	54
REFERENCES	56

LIST OF FIGURES

Figure 1. Frequency of crashes by total number of vehicles involved (n=4242) 1989 - 1998.....	22
Figure 2. Frequency of crashes by object struck (n=4242) 1989 -1998.	23
Figure 3. Frequency of crashes by first harmful event (n=4242) 1989 -1998.....	24
Figure 4. Frequency of crashes by accident severity (TSEV) (n=4242) 1989 - 1998.....	25
Figure 5. Frequency of crashes by road class (n=4242) 1989 -1998.....	26
Figure 6. Frequency of crashes by accident time (n=4242) 1989 -1998.	27
Figure 7. Frequency of crashes by day of week (n=4242) 1989 -1998.	28
Figure 8. Frequency of crashes by month (n=4242) 1989 -1998.....	29
Figure 9. Distribution of drivers by age (n=4,249) 1989 -1998.....	30
Figure 10. Frequency of fatalities by age group (n=231) 1989 -1998.	33
Figure 11. Occurrence of injury type by age group (n=7069) 1989 -1998.....	35

LIST OF TABLES

Table 1. Summary of matched cases of traumatic brain injuries by year.....39

CHAPTER I INTRODUCTION

In 1997, Texas had 2,578,000 registered pickup trucks, the second largest number of any state in the US (1997 Census Bureau's Vehicle Inventory and Use Survey). This figure is equivalent to approximately one pickup for every eight people or one pickup for every five licensed drivers. Pickup trucks are primarily (71.4%) used for personal transportation (1997 Census Bureau's Vehicle Inventory and Use Survey). Texans may favor pickup trucks for a variety of reasons: recreational capability, affordability, and hauling capacity. Unfortunately, the high number of pickup trucks on Texas roads translates into high mortality and morbidity for drivers and passengers of pickup trucks. Contributing to this toll are deaths and injuries associated with riding in the cargo bed of pickup trucks. According to Texas Law (V.T.C.A. Transportation Code 545.414 *Riding in Open Beds*), it is unlawful to operate an open bed pickup truck or draw an open flatbed trailer at a speed greater than 35 miles per hour when a child younger than 12 years of age is occupying the bed of the truck or trailer. This offense is punishable by a fine of between \$25 and \$200. Despite this law, both adults and children continue to be injured and killed in the cargo bed of pickup trucks in Texas.

Injuries and deaths resulting from riding in cargo beds of pickup trucks are clearly an important public health concern in Texas. Therefore, data are needed to determine the extent of this problem and to provide a basis for strategies to reduce cargo bed trauma. The purposes of this report, as elaborated in Parts I, II, and III, are three-fold: (1) to provide an overview and synthesis of the current literature pertaining to passengers riding in the cargo bed of pickup trucks; (2) to analyze 1989-1998 Texas data

on injuries and fatalities incurred by passengers in pickup truck cargo beds; and (3) to report and evaluate current laws in other states. We will present our conclusions and recommendations based on the results of the data analysis at the close of this report.

Chapter II

SYNTHESIS OF THE LITERATURE

Methodology

The literature review was prepared following an extensive search of computerized databases. Searches were performed during September and October, 1999 and included the following databases: TRIS, OCLC First Search (including: Medline, World Cat, Article First, Contents First, Contents First, GPO, Papers First, Net First, and Conference Proceedings) and OVID (Transport). The dates queried included 1980 - present. In addition, the National Highway Traffic Safety Administration (NHTSA) and National Technical Information Service (NTIS) web sites were queried during this same time period. Search terms included: "pickup," "pick up," "pickup truck," "cargo space," "pickup truck beds," "pickup truck bays," "pickup trucks and injuries," and "passengers and pickup trucks." All relevant papers were obtained and read by at least one author prior to inclusion. All studies containing any type of information (regardless of methodology) were included for the sake of completeness.

Results of Literature Search

A thorough search of the literature resulted in a compilation of studies with diverse study populations, designs, and outcomes. The study populations comprised: purely pediatric populations, general populations bounded by geography, patients admitted to a certain hospital, and the population of the United States. The study designs were generally descriptive in nature, although various techniques were used for the descriptions (e.g. population-based death rates, case studies). A few studies had, in addition to the cargo bed study population, a comparison group (pickup truck occupants who were not in the cargo bed; occupants of other types of motor vehicles). The sources of data included: hospital medical records, trauma registries, written questionnaires, telephone surveys,

police reports, and large databases such as the Fatality Analysis Reporting System (FARS) and state crash databases. Outcomes ranged from fatalities alone to multiple levels of injury severity to a combination of the two. Despite these wide-ranging disparities in the literature, several “recurring variables” were identified among incidents involving passengers riding in the cargo beds of pickup truck. These variables will serve to aid in accurately describing the characteristics of these incidents, and thus provide the basis for developing strategies to reduce deaths and injuries associated with riding in the backs of pickup trucks in Texas.

The following issues were addressed using the results of the literature review:

- What are the characteristics of drivers who carry passengers in pickup truck cargo beds?
- What types of incidents lead to injuries and death (crash & non-crash events)? When and where are these incidents occurring?
- Who rides in the cargo beds of pickup trucks?
- What types of injuries are occurring?
- What is current Texas law and how do other states compare?

What are the Characteristics of Drivers Who Carry Passengers in the Cargo Beds?

Agran, Winn, & Anderson (1995) performed a study using data collected via a telephone survey of licensed drivers in Riverside County, California. The authors compared drivers who stated that they had transported at least one passenger in the back of a pickup truck (n = 119) to those who stated that they had not (n = 245). Reportedly higher proportions of 16- to 24-year-old and 35- to 44 year-old pickup truck drivers carried passengers in the cargo bed when compared to other age groups. These drivers were usually male (75%). Hispanics were also more likely to than non-Hispanic whites to carry passengers in the cargo bed. Drivers who carried passengers in the cargo bed were frequently students and not the main wage earner in a family. They were also less likely to be the owner of the vehicle. Larger households as well as those with teenagers were more likely to carry passengers in the backs of pickup trucks. Additionally, 9% of those who carried passengers in the back of pickup trucks stated that this was their only vehicle. Campers or shells were more common on pickup trucks used to carry passengers in the back (28% v. 19%). Agran, Winn, and Anderson, (1994) and Hamar, King, Bolton, and Fine, (1991) also reported that young males (between the ages of 20 and 40 years) were more likely to carry passengers in the cargo bed of pickup trucks. Agran et al. (1995), examined driving behavior including some regarded as "risky." Persons who admitted to carrying passengers in the backs of pickups were less likely to wear their seatbelts (71%) than those who did not (77%). They were also more likely to: drive after having had too much too drink (12% v. 4%); speed up at an intersection when approaching a yellow light (19% v. 8%); and change lanes frequently (17% v. 5%). With regard to risky driving behavior, Hamar et al., (1991) found that 35% of those drivers involved in

a fatal crash involving a passenger in the cargo bed of a pickup truck had been speeding at the time of the crash.

Fewer than two-thirds of the 364 respondents in Agran's study (Agran et al., 1995) were aware of a law regarding occupant travel in the back of pickup trucks and no one was able to correctly summarize the law.

What types of incidents lead to injuries and death? When and where are they occurring?

Injuries often occur when cargo bed passengers are ejected during non-crash events such as sudden deceleration, swerving, or riding on rough roads (Agran, Winn, and Castillo, 1990; Fallat, Svenson, Roussell, and Hardwick, 1995; US DOT, 1995). Head trauma is the most commonly noted injury sustained during a fall or ejection from the back of a pickup truck. In fatal cases, brain injury is the most frequently cited cause of death (Bucklew, Osler, Eidson, Clevenger, Olson, and Demarest, 1992; American Academy of Pediatrics, 1991).

Williams and Goins (1981) examined fatal falls and jumps from non-crash motor vehicles using 1978 FARS data and police reports from each state. Of the 345 non-crash cases examined, 100 were a result of falling or jumping from the cargo bay of a pickup truck. Vehicle actions such as braking, swerving, or traveling over rough roads contributed to 28% (40 of the 142) of the falls. Thirty percent of falls from pickup trucks occurred while the passenger stood upright in the truck bed, sat on the tailgate, changed positions, or was involved in "horseplay" or "fighting." Slipping furniture or other cargo contributed to 35% (25) of the cases. Of the 25 deaths that involved cargo, 10 occurred while the rider was sitting on a mattress that shifted in the wind. Incidents involving pickup trucks were also

more likely to occur in rural areas (72%). Even when passengers are not ejected from the vehicle, the hard surfaces of the floor and walls of the cargo bed can contribute to serious injury when the vehicle gyrates violently. The shifting weights of the persons in the cargo beds have also been known to decrease the drivers control of the vehicles during difficult maneuvers (National Transportation Safety Board, 1981). Surprisingly, in a New Mexico study that reviewed both crash and non-crash incidents (Bucklew et al., 1992), more than half of the injuries occurred in the absence of a crash.

Who rides in the cargo beds of pickup trucks?

Studies overwhelmingly show that most passengers who ride in the cargo beds of pickup trucks are young and male (Agran, Dunkle, and Winn, 1985; Agran et al., 1990; Bucklew et al., 1992; Fallat et al., 1995; Ferrer and Archer, 1997; Hamar et al., 1991; Williams and Goins, 1981; and Woodward and Bolte 1990). Males are over represented in pickup truck cargo beds with 65-79% passengers being male (Williams and Goins,1981; Agran et al., 1994; Ferrer & Archer, 1997).

Pick up truck bed-related injuries and deaths exact a heavy toll on the young. Scientists analyzing California crash data and FARS data found that half of those killed were under 18 years old (Agran et al., 1994). A study conducted by the Oklahoma Injury Prevention Service reported that 30% of those who received traumatic brain injuries (TBI) as a result of falling or being thrown from the back of a pickup truck were under 15 years old. Almost half of all TBI occurred to young adults between 15 and 24 (Ferrer & Archer, 1997). Alabama researchers (Hamar, et al., 1991) queried five years of FARS data and police reports for incidents in which at least one passenger in the back of a pickup truck was killed. Sixty three percent were between age 5 and 24. In addition, those younger than 35 years of age accounted for more than 80% of all victims.

What types of injuries occur?

Head injuries are the predominant form of injury, and in most cases the cause of death, associated with riding in pickup truck cargo beds.

Another unusual injury resulting from riding in the cargo bed is carbon monoxide poisoning. Of 68 children treated for accidental carbon monoxide poisoning in a Seattle hospital in a five year period, 20 were cargo bed passengers (Hampson and Norkool, 1992). All were treated with hyperbaric oxygen. Fifteen children suffered loss of consciousness with one dying of cerebral edema and one suffering permanent neurological deficits. All cases involved a tail pipe that exited the rear of the vehicle or a previously known leak in the exhaust system. Seventeen of the 20 children were riding under a rigid canopy and 3 under a tarpaulin, so although cargo beds without tops increase the risk of ejection, they also present an increased risk for carbon monoxide poisoning.

Chapter III

METHODOLOGY

We conducted a retrospective analysis of cargo bed incidents in Texas during the ten-year period from 1989-1998. Motor vehicle crash data were obtained from the Texas Transportation Institute's database of the Texas Department of Public Safety (DPS) Traffic Accident Data Base for 1989-98. This database contains data entered from forms filled out by law enforcement officers following a motor vehicle crash or injury-inducing incident. In July of 1995, the reporting threshold was raised include only those crashes in which someone was injured and/or one or more vehicles were towed from the scene. Data analysis and management were conducted using SAS and Excel programs. The Texas Department of Health (TDH) collaborated with this study by independently matching Texas crash data with statewide trauma registry and death certificate data to obtain a more complete view of the injury continuum. Three case series were also developed by TDH to provide insight into the health outcomes of cargo bed related injuries.

Data Analysis of Department of Public Safety Data

Three separate data sets were prepared using the 1989 - 1998 data: driver-based, crash-based, and casualty-based. The driver data set was prepared by selecting those drivers who were involved in a crash while driving a pickup truck or pickup truck with a camper in which someone received a K (fatal), A (incapacitating), B (non-incapacitating) or C (possible) injury. There were a total of 4,249 drivers involved in these crashes. The crash data set was created by selecting those crashes in which at least one of the vehicles involved was a pickup truck (or pickup truck with camper) that had at least one passenger riding in the cargo bed who received a K-, A-, B- or C-level injury.

There were a total of 4,242 crashes that met the criteria. The casualty data set was composed of all passengers injured (K-, A-, B- or C-level injury) while riding in the back of a pickup truck (or pickup truck with camper). There were 7,069 persons who were injured in these 4,242 crashes.

The following information was gathered from the above prepared data sets:

Driver: age, sex, contributing factors, liability insurance, and license status

Crash: weather, time of day, day of week, month of year, road conditions, road class, county in which crash occurred, crash severity, first harmful event, object struck, and number of vehicles involved in crash.

Casualty: age, sex, level of injury

Preparation of Crash Reports for Merging with 1997 – 1998 TDH Trauma Registry and Bureau of Vital Statistics Data

Texas DPS Accident files were queried and sorted resulting in two separate data sets: a crash-based file and a victim-based file. The crash file was created by searching the 1997 and 1998 Texas DPS accident data base and limiting it to only crashes involving pickup trucks (coded as *vehstyle* '30') and pickup trucks with campers (*vehstyle* '38'). A second database consisting of injured persons was also created. Crash records were first sorted on the basis of seating position, selecting only those without a proper seat [coded as *casseat* '+' (unknown), *casseat* '8' (rear of pickup truck), or *casseat* '9' (other in vehicle)]. These records were then further sorted to include only those in which the victim received an incapacitating (A- level) or fatal (K) injury. B- level injuries were not included because it

was believed that these cases were not likely to be listed in the TDH Trauma Registry. These files were then merged by accident record number. Some 570 accident records met our requirements. Hard copies of the accident reports were then obtained from the Texas DPS. Upon receiving the accident reports, the following information was entered into the database: officer's narrative, victim's name and hospital. In cases where it was determined that seating position was incorrect, the information was corrected by data entry personnel. Those injured persons who were determined not to have been riding in the back of a pickup truck were eliminated from the data set. We found a total of 296 cargo bed occupants who were killed or suffered incapacitating (A-level) injuries for the two years screened. The data were then forwarded to the Texas Department of Health.

Trauma Registry and Bureau of Vital Statistics Matches:

[Prepared by the Injury Epidemiology & Surveillance Program, Texas Department of Health]

a) Trauma Registry (Matching Injured and Fatal Cases)

The file from DPS was first prepared by removing middle names, Jr., etc. from the first name field; inserting the county code for injury county; inserting facility number for the alpha hospital field; and preparing the month and date fields to match the trauma registry format. The DPS file was matched with the trauma registry file for 1997 and 1998 containing major and minor traumas from a motor vehicle crash. It was first matched by name and injury date. This resulted in matches where last name, first name and injury date matched exactly, not allowing for misspelling. The DPS file was then matched by sex, age, injury date, injury county, and facility number, leading to additional matches where the name was misspelled or not available in the trauma registry file. If the names were available in both files but were not similar, however, they were not considered matches. The DPS file was then matched by

sex, age, injury date and injury county excluding the facility number, revealing additional matches where the facility was missing from the DPS file or the facility number was undetermined from the alpha field. This technique was repeated individually for the categories of age, injury date and injury county where the information was missing or incorrect in either file. The age field, which is calculated from the birth date and injury date in the trauma registry file, was incorrect in the DPS file in several instances. The matching process revealed 40 matches for 1997 and 46 matches for 1998. These 86 cases included both deaths and injuries.

b) Bureau of Vital Statistics (Matching Fatalities)

The fatalities from the DPS file were matched with the Bureau of Vital Statistics (BVS) death certificate file for 1997 and 1998. The BVS file was first prepared by using only individuals coded as a motor vehicle crash fatalities. Files were matched by name and injury date, resulting in only exact matches for first name, last name, and injury date. The files were then matched by sex, age, injury date and injury county. This revealed only a few additional matches in which the name was misspelled in the DPS file. The matching process with death certificates revealed an additional 10 matches for 1997 and 12 additional matches for 1998.

c) Final Outcome from Both Trauma Registry and Bureau of Vital Statistics

Combining the Trauma Registry and Bureau of Vital Statistics information, the 1997 and 1998 matches together revealed a total of 108 matches (36 fatalities, 72 non-fatal injuries).

Chapter IV

RESULTS

The 1989-1998 data were analyzed from three perspectives: crash, driver, and casualty. Analyses only included incidents that involved at least one pickup truck in which one of the injured passengers was riding in the cargo bed. Section I focuses on crash characteristics; Section II contains the demographic characteristics of the drivers; and Section III analyzes the demographic characteristics of the cargo bed passengers who were injured or killed. Section IV provides results from the Texas Department of Health concerning health outcomes for 1997-98 crash victims.

SECTION I: Analysis of 1989 –1998 Crashes

From 1989 to 1998, some 4,242 cargo bed incidents in which an individual was injured or killed occurred in the state of Texas. We refer to these incidents as “crashes” regardless of whether another object was involved for convenience sake, as well as to adhere to the terminology of the Texas DPS database.

Number of Vehicles Involved in Crash:

According to the literature, injurious incidents involving passengers in the cargo bed of a pickup truck are frequently a direct result of shifting objects and may not involve collisions with other vehicles or objects. Texas data indicate that there are a lot of single vehicle crashes, but it can not be determined if these crashes are resulting from shifting loads. For the 10 years of data studied, 45% of crashes (1,930) involved one vehicle. Two-vehicle crashes accounted for 48% (2,004) and three-

vehicle crashes accounted for 6% (249) of all crashes. The remaining multi-vehicle crashes involving four, five, six or seven vehicles compose approximately 1% (Figure 1).

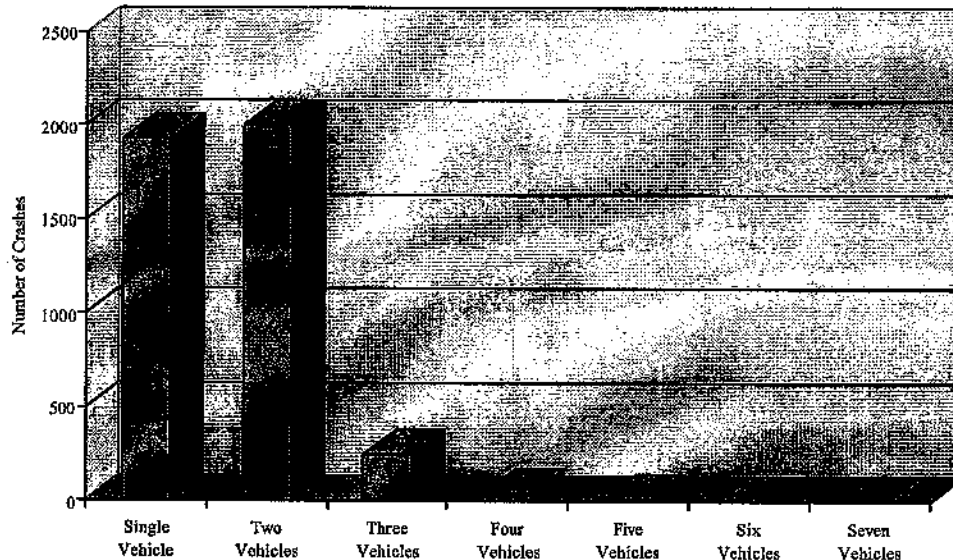


Figure 1. Frequency of crashes by total number of vehicles involved (n=4242) 1989 - 1998.

Object Struck:

Approximately 20% (855) of cargo bed incidents involved a person who fell or jumped from the vehicle. Sixty percent (253) were recorded as “no code applicable” in relation to object struck. Due to coding errors, a portion of these crashes could have been classified as “person fell or jumped,” thus the 20% due to falls and jumps is a conservative figure. The remaining 20% (857) involved crashes in which the pickup truck either struck one of the following objects or one of the following events occurred: vehicle overturned, hole in road, vehicle jack-knifed, train/road no X, train go forward, curb, culvert/headwall, guardrail, signal post, signal light/wires, luminaire pole, utility pole, mailbox, fence, house/building/fixture, commercial sign, other fixed object, work zone machine/material, median barrier,

end of bridge, side of bridge, pier at underpass, attenuation device, other object, concrete traffic barrier, delineator post, retaining wall, fire hydrant, ditch (earth), embankment (Figure 2).

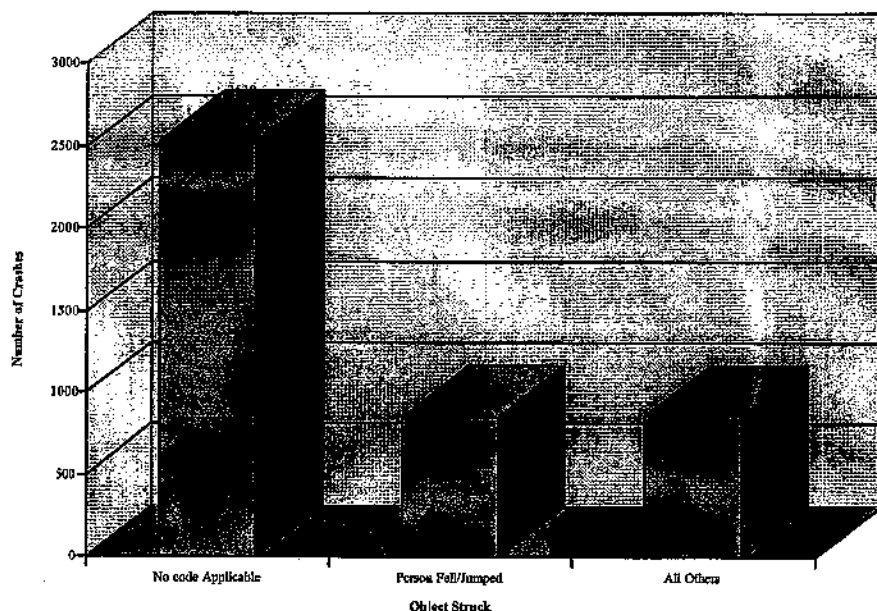


Figure 2. Frequency of crashes by object struck (n=4242) 1989 -1998.

First Harmful Event:

The “First Harmful Event” is a classification used by the Texas Department of Public Safety (DPS) to describe the nature of a crash and the location of the vehicle in relation to the road at the time of the first injury or damage. There are two broad categories of events: collisions and non-collisions and there are ten mutually exclusive sub-categories under these two categories. The non-collision category contains two sub-categories: overturning and other non-collision. The collision category contains eight sub-categories: collision of a motor vehicle in transport with any of the following: pedestrian, another motor vehicle in transport, a parked vehicle, a railway train, a pedal cyclist, an animal, a fixed object, or “other object.” Among the 4,242 incidents studied, 53% (2,235) reported the first harmful event as

“other motor vehicle in transit” (53%); an additional 24% were coded as “non-collision;” 10% (442) were “overturned;” and 12% (522) hit a “fixed object.” The remaining one percent involved a pedestrian, train, parked car, animal or other object (Figure 3).

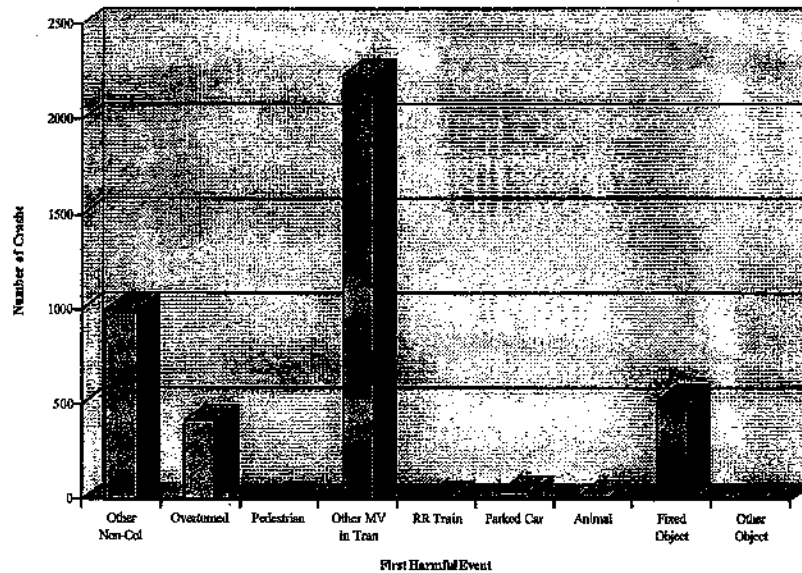


Figure 3. Frequency of crashes by first harmful event (n=4242) 1989 -1998.

Accident Severity:

Of the 4,242 cargo bed incidents, 262 (6%) resulted in at least one fatality. Another 1,154 crashes resulted in one or more incapacitating injuries; 1,597 crashes resulted in one or more non-incapacitating injuries; and 1,229 crashes resulted in one or more possible injuries (Figure 4). A list of crash severity by year can be found in Appendix B.

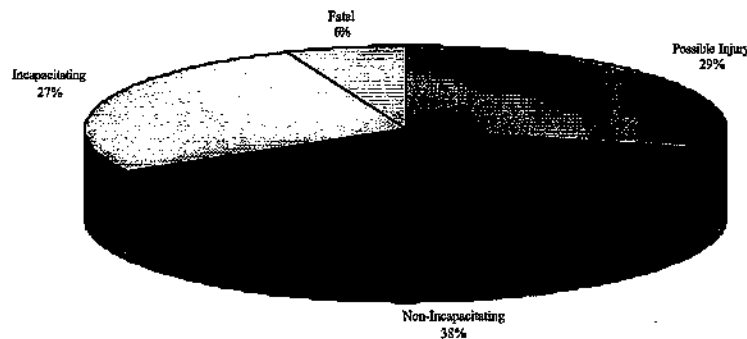


Figure 4. Frequency of crashes by accident severity (TSEV) (n=4242) 1989 - 1998.

Road Class:

The highest percentage of cargo bed incidents (37% or 1,556) occurred on a “city street.” Another 1,165 crashes occurred on U.S. and State Highways; 553 crashes occurred on country roads; 476 crashes occurred on Farm to Market roads; 463 crashes occurred on Interstates; the remaining 29 crashes occurred on Turnpike and Toll, Other (Alley), and Belt 8/Toll Bridge. (Figure 5).

Some 1,422 (91.4%) of these city-street crashes occurred in urban areas and 134 (8.6%) occurred in rural areas. (For the purpose of this report rural areas are defined as those with a population less than 5,000. Urban areas were all communities with a population of 5,000 or more.) Of 1,165 crashes that occurred on U.S. and State Highways some 629 (54%) were in urban areas and 536 (46%) occurred in rural areas. As expected, a greater percentage of the crashes that occurred on Farm to Market roads happened in a rural setting (8% vs. 3.2%). A majority of the crashes that

occurred on Interstates (7.1%) occurred in an urban setting compared to just 3.8% that occurred in a rural setting.

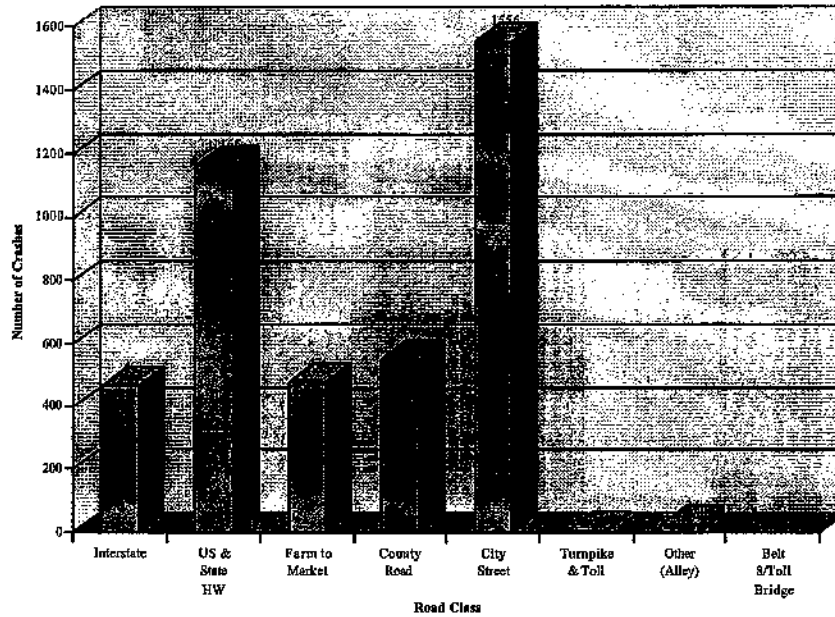


Figure 5. Frequency of crashes by road class (n=4242) 1989 -1998.

County:

Thirty-six percent of the reported 4,242 crashes occurred in five counties: Harris (11%), Dallas (9%), Bexar (7%), Tarrant (5%), and El Paso (4%). The five counties with the highest incidence of crashes occurring in rural areas included: Harris, Hidalgo, Cameron, Galveston, and Montgomery. A complete account of crashes occurring in each county can be found in Appendix A.

Time:

Seventy-four percent of the 4,242 crashes occurred between noon and midnight (23% occurred between noon and 3:59pm; 30% occurred between 4pm and 7:59pm; and 21% occurred between 8pm and 11:59). The remaining 26% occurred between midnight and 11:59am. The highest number of crashes (30%) occurred between 4pm and 7:59pm. Fewer crashes (6%) occurred between

4am and 7:59am than any other time (Figure 6). In addition, daylight vs. darkness hours were also compared. Sixty-one percent of the crashes occurred between 8am and 7:59pm. The remaining 39% (1,650) occurred between 8pm and 7:59am.

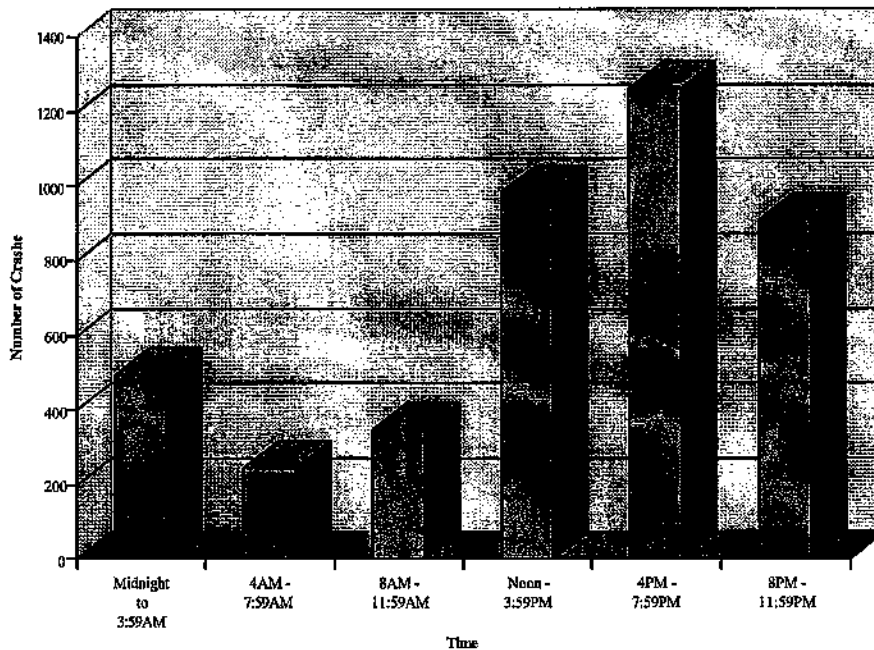


Figure 6. Frequency of crashes by accident time (n=4242) 1989 -1998.

Day of Week:

Most crashes (56%) occurred during the weekend --16% on Friday, 20% on Saturday, and 20% on Sunday. The remaining crashes were equally distributed among the weekdays Monday (11%), Tuesday (11%), Wednesday (11%), and Thursday (11%). This follows the trends in other studies suggesting that much of the transporting of passengers in cargo beds occurs during a recreational or non-work related event (Figure 7).

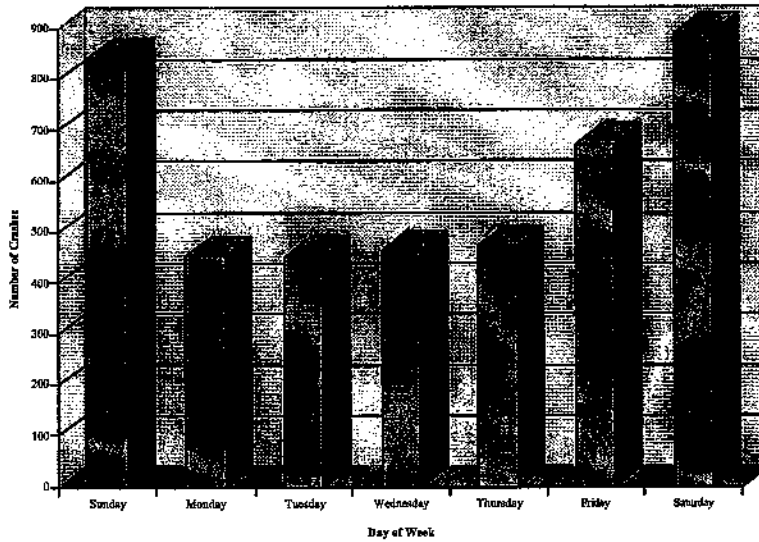


Figure 7. Frequency of crashes by day of week (n=4242) 1989 -1998.

Month of Year:

Eighty-two percent (3,487) of the crashes occurred between March and October. With crashes peaking during June, July and August (37%, 1,581). Again, these results are consistent with other studies suggesting that other means of transportation are being used during the winter months when the temperature is generally too cold for persons riding in the open cargo bed. November, December, January and February had the least number of crashes -18% (755).

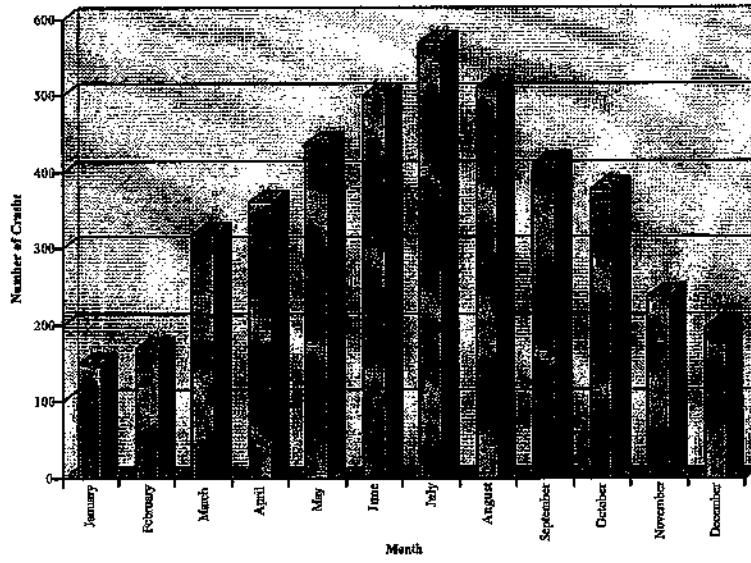


Figure 8. Frequency of crashes by month (n=4,242) 1989 -1998.

SECTION II: Analysis by Driver

Driver Age:

There were a total of 4,249 drivers involved in pickup truck crashes where at least one person was injured while riding in the cargo bed. The highest proportion of drivers fell in the 16-21 age group (32 percent), followed by those aged 21 – 27 (20 percent). The average age was 29.3 yrs. Ninety percent of the drivers were less than 50 years old (Figure 9).

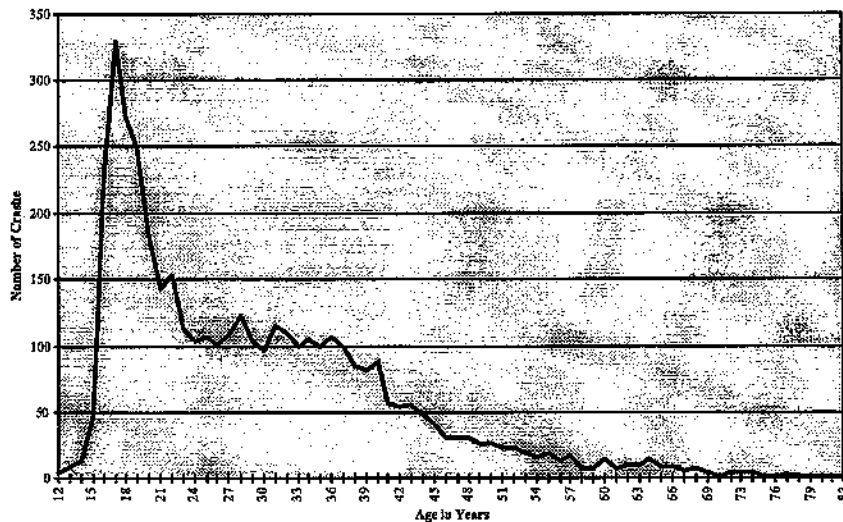


Figure 9. Distribution of drivers by age (n=4,249) 1989 -1998.

Driver Sex:

Not surprisingly, there were more male drivers (78 percent) than female drivers (21.5 percent). For slightly less than 2 percent of the drivers, sex was unknown.

License status:

A majority of the drivers (80.2 percent) were Texas residents with a known license status. However, nearly 12 % (502 drivers) were unlicensed. Another 5% were of unknown license status and the remaining 4.8% were non-residents of Texas with a known license status.

Insurance status:

More than 25 % of the drivers did not have liability insurance at the time of the crash. For 2% of the drivers it was not known. The remaining 71 % did have liability insurance.

Contributing factors:

For 906 drivers (21 percent), speeding, either unsafe for the conditions or over the limit, was reported as a contributing factor. Only 1% of the drivers were cited for illegal or dangerous turns while 7% were cited for failing to yield right of way and 4% were cited for disregarding a stop or stop and go. For the remaining 67% of the drivers, none of the contributing factor listed applied. Driving while under the influence of alcohol or drugs (DWI/DW drugs) was listed as a second contributing factor for 460 drivers (16 percent). Another 158 (11 percent) were cited for performing dangerous driving maneuvers. For 69% of the drivers none of the second contributing factors applied.

SECTION III: Analysis by Casualty

During the ten-year study period, 6,838 persons were injured and 231 killed while riding in pickup truck cargo beds. Adolescents aged 12 – 17 comprised the largest percentage of casualties (35%, 2,455). Of the 7,069 persons injured or killed, 23% (1,639) were children in the 0 – 11 age group and another 19% (1,357) were young adults in the 18 – 23 age group. All other adults accounted for the remaining deaths and injuries with persons age 24 - 34 making up 13% (918) of the total number of casualties and adults age 35 - 55 comprising 7% (501) of the casualties. The 56 - 93 age group accounted for just 1% (75) of all casualties. Age was unknown for 2% of the casualties. A detailed account by injury level follows.

Fatalities:

A total of 231 persons were killed on Texas roads while reportedly occupying the bed of a pickup truck between 1989 and 1998. As in other states across the county, young persons were most often the victims. Adolescents aged 12 - 17 comprised the largest percentage of fatally injured passengers (24 %), followed by young adults aged 18 – 23 (23 %). Children aged 0 – 11, (who are provided some protection by State law) made up 16% of all fatalities. Adults age 24 - 34 also made up 23% of all fatalities, while those age 35 - 55 accounted for 11%. Persons age 56 - 93 accounted for 5 deaths (2%).

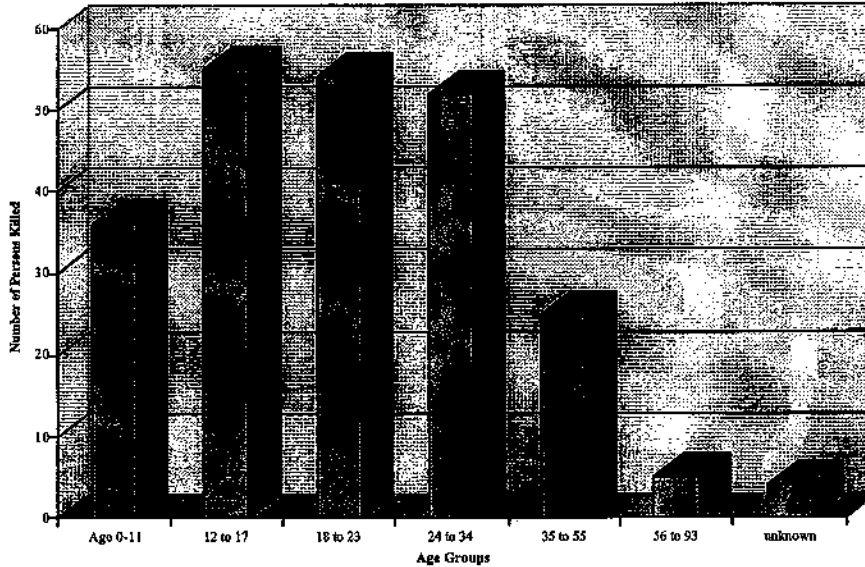


Figure 10. Frequency of fatalities by age group (n=231) 1989 -1998.

Incapacitating Injuries:

More than 30% of the 1,365 persons who sustained incapacitating injuries were adolescents aged 12 – 17. Young adults in the 18 – 23 age group incurred 23% of all incapacitating injuries, followed by children in the age group of 0 – 11 (16 %). Adults aged 24 - 34 also accounted for 16% of the injuries while adults aged 35 - 55 reportedly sustained 9% of the injuries. Twenty adults (1%) aged 56 - 93 sustained incapacitating injuries. The remaining 3% occurred among persons whose age was unknown.

Non-incapacitating Injuries:

During the 10 year study period a total of 2,556 persons received non-incapacitating injuries while riding as passengers in the cargo bed of pickup trucks. Nearly 40% (942) of these injuries were among the adolescent age group -12 to 17 years. Children aged 0 – 11 had the second highest

occurrence of non-incapacitating injuries, 23%, followed by young adults in the age group 18 – 24 (20 percent) and adults age 25 - 34 with a reported 12%. Older adults reported fewer non-incapacitating injuries than another age group with persons age 35 - 55 accounting for 6% of the injuries and those age 56 - 93 accounting for just 1%. Another 30 persons (2%) sustained non-incapacitating injuries however, their age was unknown.

Possible Injuries:

During the ten-year study period 2,917 persons reportedly sustained a possible injury. As with all of the other forms of injury, adolescents aged 12 – 17 reported the highest occurrence, 35% followed by children aged 0 – 11, 28%,. Young adults in the age group 18 – 23 accounted for 478 reports of possible injury. Twelve percent of those who received a possible injury were adults age 24 - 34. Adults age 35 - 55 accounted for 7% of the possible injuries while those age 56 - 93 accounted for just 1%. Forty-six persons (2%) reportedly sustained a possible injury however their age was unknown.

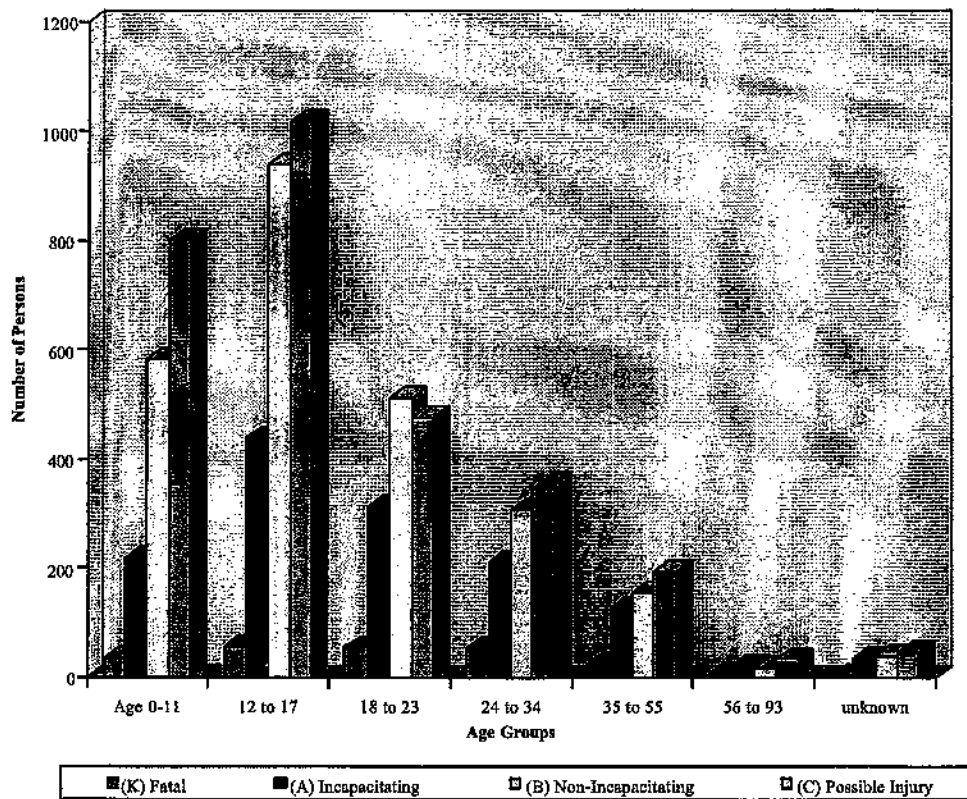


Figure 11. Occurrence of injury type by age group (n=7069) 1989 -1998.

Occupant Sex:

Not surprisingly, more males were injured or killed while occupying the cargo bed of a pickup truck comprising 4,898 of the total compared to 2,152 females.

SECTION IV: Matched Analysis and Case Studies

The 1997 and 1998 DPS accident data base was queried for accidents in which one or more pickup trucks were involved and where one or more passengers received incapacitating or fatal injuries coded as having been riding in “*rear of truck*,” “*other in vehicle*,” or “*position unknown*.”

According to the preliminary query of 1997/98 DPS accident data, there were 32 persons listed as seated in the “*other in vehicle*” position, 280 for which the seating position was unknown, and 258 for which seating was recorded as rear of truck. Of those 258 rear of truck passengers, 43 were fatalities while the remaining 215 were persons who had sustained incapacitating injuries.

The officer’s narratives were then read to determine how accurately seating position had been recorded for the 570 casualties. Quite a different picture then emerged. It was determined that one person was riding in a boat being towed, 3 were identified as the driver, 128 were front passengers, 4 were passengers riding on the hood of the pickup truck, 1 was a motorcyclist, 6 were pedestrians, 5 were rear passengers -not in the bed of pickup, and 293 were actually riding in the rear of the pickup. The remaining 129 were in an unknown seating position.

Of the 293 who were actually riding in the back of the pickup truck, 44 were fatalities and 249 suffered incapacitating injuries. By reading slightly more than 500 accident reports, we were able to determine that an additional 35 persons should have been coded as passengers who were riding in the “*rear of truck*” –34 of whom sustained incapacitating injuries and 1 of whom sustained a fatal injury. Using this pattern one might suspect that perhaps an additional 340 persons (34 x 10 yrs) may have been riding in “*rear of truck*” during the 1989 - 1998 period and that an additional 10 (1 x 10 yrs) persons may have been killed as a result. Recall that these cases did not include persons who sustained non-incapacitating injuries nor those who sustained a possible injury. One could expect a similar

number of miscodes for those injured persons as well. One possible explanation for errors in the cases we reviewed is that the accident report does not clearly provide an appropriate abbreviation for coding the seating position and as a result police officers are using a potpourri of abbreviations. Based on comparing the accident report to the accident data base only one abbreviation is acceptable -RT. In the cases we reviewed "rear," "truck," "bed," and "cargo bed" were all coded as seating position "unknown." Based on this one could surmise that the occurrence of passengers injured or killed while riding in the cargo bed is most likely underrepresented.

The following was prepared by the Injury Epidemiology & Surveillance Program, Texas Department of Health (TDH)

Some 108 deaths and injuries were analyzed by TDH: 20 deaths and 30 non-fatal injuries from 1997; 16 deaths and 42 non-fatal injuries in 1998.

a) Trauma Registry-Non-fatal Injuries

For the 72 non-fatally injured persons, their conditions at discharge from hospital were: 35 good, 7 moderate disability, 6 severe disability, 5 vegetative, and 19 unknown condition. Patients who were alive were discharged home (42), another acute care facility (20), rehabilitation facility (3), other (5), and unknown (2). Fifty-eight were males and 14 were females. Ages ranged from 2 to 55 with the mean age being 21. Thirty-eight (53%) were 18 or below. Twelve were 12 or below. The race/ethnicity was 23 whites, 37 Hispanics, 10 blacks, and 2 other/unknown. Alcohol was tested on 28 occupants with known results with 15 patients being found under the influence of any alcohol while four were legally intoxicated (.10).

The Glasgow coma score at admission was available for 72 patients with 14 severe, six moderate, and 52 mild traumas. The Glasgow coma score is the sum of the 3 scores of the patient's components (motor + verbal + eye). Revised trauma scores of less than 11, or an injury severity score of 9 or above, classifies cases as major trauma. This method classified 38 patients with a major trauma and was available for 72 patients. The mean hospital stay was found to be five days which was available for 71 patients (range <1 to 80 days). Eighteen patients were treated and released on the same day. Twenty patients stayed for 1-2 days. Twenty-two patients stayed for 3-7 days. The mean ICU stay was found to be 2 days which was available for 36 patients (range 1 to 16 days). The bill information was available for 30 patients and the mean was found to be \$29,000. The bill field was totaled and found to be over \$868,000. The highest bill was over \$308,000. Payor information was available for 57 patients where their bill was paid by Medicaid (7), BlueCross/BlueShield (3), other insurance group (2), HMO (1), Worker's Comp. (1), auto insurance (2), self-pay (32), and other (15). Protective device use was available for 72 patients: 57 used none, three used seat belts, and 12 were unknown.

The most common non-fatal injury was traumatic brain injury (TBI). Traumatic brain injuries include most skull fractures and all intracranial injuries. Other injuries included fractures of an extremity, open wounds, fractures of the neck or trunk, internal injuries of the chest, abdomen or pelvis, and certain traumatic complications and unspecified injuries. Patients can have more than one diagnosis code or injury.

b) Fatalities

The most common cause of death was traumatic brain injury. Among the 36 fatalities, 31 were male and 5 were female. The age of the fatalities ranged from one to 55. Sixteen of the fatalities were 18 or below. The race/ethnicity of the fatalities were 15 white, 16 Hispanic, three black and two other/unknown. Twenty of the fatalities occurred in 1997 while 16 occurred in 1998. Twenty-two fatalities occurred during the summer months of May, June, July or August. The time was known for 22 of the fatalities, 18 occurred in the afternoon or evening hours before midnight while four occurred in the hours after midnight and before noon. The county of residence for the top five with fatalities was: Harris (4), Bastrop (2), Fort Bend (2), Smith (2), Uvalde (2). Premature mortality is measured by the Years of Potential Life Lost (YPLL) statistic, which is simply the sum of the years of life lost annually by persons who suffered deaths before age 65. The sum of YPLL for the 36 fatalities in this study is 1,491.

c) Traumatic Brain Injuries

The table shows a summary of the matched cases of traumatic brain injuries by year.

Table 1: Summary of matched cases of traumatic brain injuries by year.

	DPS file	Matched Cases	Matched with TBI
Fatal	44	36 (82%)	21 (58%)
Non-fatal	252	72 (29%)	32 (44%)
Total	296	108 (36%)	53 (49%)

Selected Case Studies

The Texas Department of Health selected three cases of cargo bed injuries in order to provide a sample, in case study format, of the types of injuries experienced by Texans who are injured in cargo beds.

- I. A female was injured as an occupant in the back of a pickup truck. She was transferred to another acute care facility with a traumatic brain injury (TBI) and a severe disability. (Note: Cost data were not available for this first case study due to data restrictions in 1997).
- II. A male child was injured in the spring as an occupant riding in the back of a pickup truck. He sustained a severe TBI, and upper and lower extremity fractures. He stayed in the hospital for a total stay of 80 days including 11 in ICU. He was discharged home in good condition. The total charges were over \$300,000.
- III. An adult male was injured during the summer in the evening as an occupant in the back of a pickup truck with a TBI. He was legally intoxicated. The patient stayed in the hospital for a total stay of 6 days (including 5 in ICU). The total charges were \$17,500. He was released to a rehabilitation facility with a severe disability.

Chapter V

CURRENT STATE LAWS AND DATA FROM OTHER STATES

Methodology for Compilation and Interpretation of State Laws

We obtained a table of state law summaries relating to the transport of passengers in pickup cargo beds from the National Conference of State Legislatures as well as the Insurance Institute for Highway Safety. Discrepancies were found. To resolve these discrepancies, we contacted the Attorney General's Office for each state that had a law restricting passengers from riding in the back of pickup trucks. A copy of the current state statute, and our interpretation of that statute, was submitted to each Attorney General's Office for verification and review. In addition, we contacted each state and requested results of any studies that had been conducted regarding passengers who ride in the cargo bed of pickups. A complete text of state laws can be found in Appendix A.

Differences Among State Laws

Current Texas law restricts passengers under the age of 12 from riding in the back of an open bed pickup truck or an open flat bed trailer if the vehicle is traveling faster than 35 mph. The single exception to this law is in case of emergency. Violation of this section is a misdemeanor punishable by a fine of between \$25 and \$200.

States vary greatly in their restrictions for travel in cargo beds. New Jersey's law is an example of a law with no caveats. It clearly prohibits passengers of any age from riding in the cargo bed of a pickup truck with the exception of employees engaged in their duties. Pennsylvania's law is an example of a law that allows occupants to travel in the cargo bed under various circumstances. The law allows passengers 18 years of age or older to ride in the cargo bed when the vehicle is traveling under 35 mph

while occupants 17 and younger are allowed in the cargo bed only if it is enclosed or if the truck is being used in a parade, for hunting or for farm operations.

Many of the laws can be confusing to the average citizen and after close examination it is frequently determined that the law applies to very few occupants. For instance, New York's law allows for transportation of persons sitting on the bed of a truck but provides limitations for persons who are standing in the bed of the truck. According to the New York Department of Motor Vehicles "Vehicle and Traffic Law 1222 (2) prohibits operation of an auto truck in excess of 5 miles while "there are in excess of five persons under eighteen years of age in the body of such truck unless at least one person over eighteen years of age also rides in the body of said truck." Thus, if there are 6 persons riding in the cargo bed of the truck, there must also be at least one person over 18 years of age riding in the bed as well." (Dugan, 2000).

There are also state laws that have been interpreted differently by different entities within that same state. Colorado's statute states that a person is prohibited from ... "attaching himself or herself to the outside, top, hood, or fenders of any vehicle, or to any other portion thereof, other than the specific enclosed portion of such vehicle intended for passengers or while in a sitting position in the cargo bed of a vehicle if such area is fully or partially enclosed on all four sides, while the same is in motion...". According to a Colorado Assistant Attorney General in the Litigation Section, state patrol officers regard the bed of a truck to be "an enclosed cargo space" and therefore persons sitting on the floor of the bed would not be in violation of the law, but someone sitting on the side rail would be. The Denver City police "do not pull a vehicle over for its passengers riding in the bed of a truck unless safety is an issue." The Boulder County Sheriff's department considers "riding in the bed of a truck to be a secondary offense. That is, one cannot be pulled over for either riding in the bed or for driving a truck

with a passenger in the bed, but one may get a ticket for doing so” if pulled over for another offense (Mele, 2000). One law, three different interpretations and methods of enforcement. From the actions of just these three law enforcement agencies in Colorado, it is clear that a more unified piece of legislation could clear up confusion and ultimately decrease the incidence of deaths and injuries to occupants who ride in the cargo bed of pickup trucks by making laws clearer to both drivers and law enforcement officers.

In 1981 the National Transportation Safety Board (NTSB) recommended that a model law be drafted by the National Committee on Uniform Traffic Laws and Ordinances (NCUTL). However, to date one has not been drafted. The NCUTL was contacted just prior to publication of this report and stated that a task force is actively pursuing the endeavor and that they expect to have a product available before January 2001 (Osina, 2000).

Twenty-six states and the District of Columbia have laws restricting passengers (to some degree) from riding in or on the cargo bed of pickup trucks: Arkansas, California, Colorado, Connecticut, District of Columbia, Florida, Georgia, Hawaii, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Missouri, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, and Wisconsin.

Requests for evaluations and studies about deaths and injuries resulting from riding in the back of a pickup truck were sent to all 50 states. Twenty-four states responded: Alaska, Arizona, Arkansas, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Montana, New Jersey, New Mexico, North Carolina, Oklahoma, Pennsylvania, Tennessee, Virginia, Washington, and Wisconsin. Interestingly, only one state, North Carolina, had performed such a study, and they were unable to draw any conclusions.

Four states (Florida, Missouri, Tennessee, and Washington) did, however, offer various types of data. Florida provided a copy of their 1997 Crash Facts related to pickup truck passengers. According to their publication, 352 passengers were injured and 8 were killed while riding in the back of a pickup truck in 1997. It was not reported whether the pickup trucks were equipped with camper shells. Of the 352 injured, 255 were under the age of 25. Of the eight killed, 3 were under the age of 25.

Tennessee provided eight years of data (1991-98) for crashes involving trucks with passengers in the bed of pickup trucks (1998 was noted as containing preliminary data). During those eight years 2,643 persons were reportedly in the bed at the time of a crash. Of those 2643, more than 25% (943) were injured and 30 were killed.

Missouri provided a detailed report of their 1998 data comparing occupants of unenclosed pickup trucks to occupants riding in passenger compartments. Eighty-six people were injured and one person killed while riding in unenclosed cargo beds of pickup trucks. Being ejected vastly increased the levels of death and injury to passengers riding in the cargo bed of unenclosed pickup trucks. Of the 86 persons injured, 48 were partially or totally ejected. Being thrown or falling from the open bed cargo bed was a significant factor leading to a number of the injuries. Nearly one-fourth (22.1%) of the injuries reported were caused by the occupant falling or being thrown from the vehicle. Had these passengers been riding in an enclosed passenger compartment instead of the open bed, many of these injuries might have been prevented.

Washington State submitted a report from the Traffic Records Data Center published in May 1991. According to this report, 122 passengers were involved in crashes while riding outside of a pickup truck in the state during 1990. The fatality rate among this group was 2.5%. In comparison, for

1990 there was a 0.24 % occurrence of fatalities in the general population of vehicle occupants who were involved in collisions. According to this report, a person who is riding in the back of a pickup truck at the time of a crash is 10.4 times more likely to be killed than other occupants involved in all other collisions. In addition, the disabling injury rate for passengers riding in the back of pickup trucks was 20% compared to only 2.2% for the general population of vehicle occupants in collisions. The majority of these reported incidents occurred in rural areas (60%) with the remaining (40%) occurring urban areas. The most common type of roadway for these incidents was city streets (41.8%) followed by county roads at 33.6 percent.

Synopsis of the Statutes

[The following summaries should not be construed as legal interpretation of state laws. The sole intent of providing such summaries is to better our understanding of laws. The laws in their exact form are found in Appendix C. A table summarizing the laws can be found in Appendix D.]

California: Persons of all ages are prohibited from riding in the back of a pickup truck while traveling on California highways. However, travel in the cargo bed is permissible if the passengers are restrained by safety devices on their seats, are being transported in an emergency response situation by public agency or pursuant to the direction or authority of a public agency, or if the person is being transported in an enclosed camper or camper shell that prevents the person from being discharged. Travel is also permitted for employees in a motortruck and for persons being transported during a parade provided the truck does not exceed eight miles per hour.

Colorado: All passengers are prohibited from riding in the back of unenclosed pickup trucks. Passengers riding in fully or partially enclosed cargo beds must be in a sitting position. These provisions do not apply to persons participating in parades, caravans, or exhibitions which are officially authorized or otherwise permitted by law. This section does not apply to vehicles owned by the United States government or any agency or instrumentality thereof, or to a vehicle owned by the state of Colorado or any of its political subdivisions, or to privately owned vehicle when operating in a governmental capacity under contract with or permit from any governmental subdivision or under permit issued by the public utilities commission of the state of Colorado, when in the performance of their duties persons are required to stand or sit on the exterior of the vehicle and said vehicle is equipped with adequate handrails and safeguards. It is a class A infraction with a \$15 fine.

Connecticut: Passengers under the age of 16 are prohibited from riding in the open bed of a pickup truck unless the running bed of the pickup truck is fitted with seats and the passengers are restrained by safety devices on their seats. Violation of this law is punishable as an infraction. Exceptions to this law include: farming vehicles, parades, and recreational hayrides between August and December. Violation of this law shall be an infraction.

District of Columbia: Unable to obtain copy of statute and therefore were unable to generate a synopsis.

Florida: Passengers are prohibited from riding "on any vehicle upon any portion thereof not designed or intended for the use of passengers" traveling on state, county or municipality maintained highways and streets. However, this does not apply if the passengers are occupying seats which are secured to the exterior of such vehicle. This provision does not apply to an employee engaged in the necessary discharge of a duty or to a person or persons riding within truck bodies in bed intended for merchandise. In addition, persons engaged in a professional exhibition or persons participating in an

exhibition or parade are excluded from this provision. There is a \$60 fine and violation assessed to the driver and a \$30 fine to the passenger.

Georgia: Passengers under the age of 18 are prohibited from riding in the back of an uncovered pickup trucks while traveling on the highway. The penalty is a misdemeanor.

Hawaii: No person shall stand in the back of a pickup while the vehicle is in operation unless the side racks of the vehicle are securely attached and the tailboard or tailgate is securely closed and every passengers in the bed or load carrying area of the vehicle is seated on the floor and does not attempt to control unlash cargo and there are no seats available in the cab or if the truck bed is completely enclosed. Said passengers can not attempt to control unlash cargo and must be sitting on the flat area. Restrictions do not apply if the vehicle is being used by a business that serves the public. Passengers under the age of 12 may be transported in the case of an emergency or if the vehicle is being operated in parades, caravans, or exhibitions which are officially authorized or otherwise permitted by law. The fine for transporting persons over the age of 12 is \$25 and \$50 for transporting children under the age of 12.

Kansas: prohibits passengers under the age of 14 from riding in the back of a pickup truck while traveling on highway or streets unless the running bed of the pickup truck contains seats and passengers are restrained by the safety devices on their seats. Penalty for violating this law is a \$10 fine.

Kentucky: No one is allowed to ride in the back of a pickup truck unless the pickup truck has seats in the running bed and the passengers are restrained by safety devices on their seats.

Secondary law

Louisiana: Persons under the age of 12 years are prohibited from riding in the bed of a pickup truck or in a utility trailer while moving upon a highway. This does not apply to pickup trucks traveling less than 15 mph while participating in an authorized parade or in the event of an emergency situation if the child is accompanied within the truck bed by an adult.

Maine: Passengers under the age of 19 being transported in a pickup truck must ride in the passenger compartment of the pickup truck. Exceptions include: workers or trainees, including agricultural workers or trainees, engaged in the necessary discharge of their duties or training or being transported between work or train locations; licensed hunters being transported to or from a hunting location, as long as those passengers are in compliance with laws regarding possession of firearm in a motor vehicle or if the passenger is secured by a seat belt in a manufacturer-installed seat located outside the passenger compartment.

Maryland: Persons under the age of 16 are prohibited from riding in the back of an unenclosed pickup truck that is traveling 25 mph or more on a highway. The exceptions to this law include: work related activities, and farming.

Massachusetts: No person is allowed to travel in passenger motor vehicles, vanpool vehicles and trucks under eighteen thousand pounds without being restrained by a seat belt. Children under the age of five and under forty pounds must be secured in a child passenger restraint system. Exceptions to this law for children under the age of 12 include: children riding in a school bus; children riding in a motor vehicle manufactured before July 1, 1966; children physically unable to use either a conventional child passenger restraint or a child restraint specifically designed for children with special needs; provided, however, that such condition is duly certified in writing by a physician. Exceptions for adults and persons over the age of 12 years include: any person riding in a motor vehicle manufactured before July 1, 1966; any person physically unable to use safety belts; provided, however, that such condition is duly certified in writing by a physician; any rural carrier of the US Postal Service operating a motor vehicle while in the performance of his duties; anyone involved in the operation of taxis, liveries, tractors, trucks with a gross weight of eighteen thousand pounds or over, buses and passengers of authorized emergency vehicles.

Missouri: Persons under 18 are not allowed in the back of an unenclosed pickup truck while traveling on either highways or streets. This provision does not apply to an employee engaged in the necessary discharge of the employee's duties or any person engaged in agricultural activities. It is also permissible to ride in the unenclosed cargo bed of a pickup truck during parades, caravans, or an exhibition which has been authorized by law. Special events and emergencies also prevail over this provision as does the need of a family to use the unenclosed cargo bed when there are no more seats available in the cab. "Family" is defined as persons related within the first degree of consanguinity. Persons over the age of 18 may ride in the unenclosed cargo bed provided that there are seats in the running bed of the pickup truck and the passengers are restrained by safety devices on their seats.

Nevada: No passengers are allowed to ride in the cargo bed unless there is a necessary discharge of an employee's duty or if riding in the bed intended for merchandise. This is not considered a moving violation nor is it considered negligent or reckless.

New Hampshire: It is unlawful for any person to transport passengers of any age in the back of a pickup truck. Exceptions include: people enrolled in recreational and religious activities; and work related activities. This exception applies only to vehicles used to carry passengers for fees. However, these exceptions do not apply to children under the age of 12 due to the statute entitled: "Child Passenger Restraints Required".

New Jersey: All passengers are prohibited from riding in the cargo bed while on highways or streets. The only exception to this is the necessary discharge of a duty.

New Mexico: No person shall transport a child under the age of 11 unless said child is properly secured in a child passenger restraint device or by a safety belt, unless all seating positions equipped with safety belts are occupied.

New York: Does not apply to persons sitting. Applies only to trips of more than 5 miles unless: one-third or less of the passengers are standing; or if suitable seats are securely attached and there are side

rails and a tailgate. Does not apply if there are less than 5 persons 17 years or younger in the cargo bed or if at least one person 18 or older is in the cargo bed.

North Carolina: Persons under the age of 12 are not allowed to be transported in an open bed or open cargo bed. Unless there is a supervising adult present, this child is restrained by a seat belt, an emergency situation arises, the child is participating in a parade, the vehicle is being operated for agricultural use, or the vehicle is being operated in a county that has no incorporated area with a population in excess of 3,500. Persons found in violation of this law will have committed an infraction and shall pay a fine of \$25.

Ohio: No one under the age of 16 is allowed to ride in the back of an unenclosed pickup truck that is traveling more than 25 mph. Unless the passenger is seated on an installed seat and is secured by the seat safety belt or during an emergency situation. The provision does not apply to persons working on specialized highway or street maintenance or construction under authority of a public agency.

Pennsylvania: All persons are prohibited from riding in the back of a pickup truck if traveling faster than 35 mph. Persons under the age of 18 are not allowed to travel in the back of a pickup truck at any speed unless said child is: child of a farmer who is being transported during hunting season between parts of a farm or farms for purposes of performing farm work; in possession of a valid hunting license and is being transported between a hunting camp and a hunting site or between hunting sites; participating in an officially sanctioned parade; or is employed to perform farm labor and is being transported between parts of the farm or farms.

Rhode Island: Persons under the age of 16 are not allowed to ride in the back of a pickup truck unless securely fastened to prevent them from becoming loose or detached in any manner.

Tennessee: No person shall transport a child under the age of 6 years on any street of any municipality, roads or any county, or the highways of this state in the bed of a truck with a manufacture's ton rating not exceeding $\frac{3}{4}$ ton and having a pickup body style. No person shall transport any child between the ages of 6 and 12 years on any interstate defense highway or state highway in the bed of a truck with a manufacture's ton rating not exceeding $\frac{3}{4}$ ton and having a pickup body style. A city or county may prohibit a person from transporting a child between the age of 6 years and less than 12 years in the bed of a truck on city or county roads or highways. This provision does not apply to a person transporting a child in the bed of such vehicle during the event of a parade, when such vehicle is traveling less than 20 mph. The provision does not apply in the event of transport for agricultural reasons. Violation of this provision is a Class C misdemeanor.

Texas: No person under the age of 12 years may be transported in the bed of an open bed pickup truck or an open flatbed truck or an open flatbed trailer if said vehicle is traveling faster than 35 mph except in the case of an emergency. An offense under this section is considered a misdemeanor punishable by a fine of not less than \$25 or not more than \$200.

Utah: No one is allowed to ride in the cargo bed of a pickup truck while on highways except for the discharge of a duty or if said person is riding within or upon space intended for any load on said vehicle. The penalty/fine for this is a Class C misdemeanor.

Wisconsin: Persons under the age of 16 years are prohibited from riding in the back of a pickup truck unless he/she is engaged in the necessary discharge of the employee's duty. Exceptions included: if the truck is being used for farm work, involved in a parade, or transporting licensed deer hunters during the authorized deer hunting season with firearms.

Chapter VI

CONCLUSIONS AND RECOMMENDATIONS

The popularity of pick up trucks in Texas makes the problem of cargo bed injuries of paramount importance in this state. Results from our study are summarized below:

During the 10 year study period (1989 – 1998):

- * 4,242 Cargo Bed Incidents occurred
- * 37% Occurred on city streets
- * 56% Occurred during the weekend
- * 82% Occurred between March and October
- * 24% were non-collision events
- * 20% were due to falls and jumps

Drivers involved were:

- * Aged 16 - 21 (35%)
- * Male (78%)
- * Unlicensed (12%)
- * Uninsured (>25% did not have liability insurance)

Occupants sustained the following levels of injuries including those resulting in death:

- * 231 Deaths, 16% Children under the age of 12
- * 1,365 Incapacitating injuries
- * 2,556 Non-incapacitating injuries
- * 2,917 Possible injuries
- * Traumatic Brain Injury is the most common cause of death and injury to ejected occupants

The following paragraphs of this report highlight the areas in which interventions to address cargo bed injuries can be targeted in Texas: policies; activities to change social and cultural norms; and surveillance.

Policies

Our analysis of Texas data, in conjunction with data from other states, reinforces the conclusion that the cargo bed is not a safe location for passengers of any age or at any speed. Adolescents aged 12-17 years compose the largest percentage of injured persons in cargo bed incidents; yet Texas law allows individuals over the age of 12 to ride in the cargo bed of pick up trucks. Although we rightly protect our youngest passengers (children) from riding in pickup trucks, we err by not extending this protection to adolescents and adults. More than 75% of cargo bed deaths and injuries in Texas occur in those over the age of 12 years—deaths and injuries that occurred directly because of riding in a space not designed for passengers. In addition, regardless of age, Texas law allows passengers to ride in cargo beds under certain speeds (35 mph for Texas). The tally of deaths and injuries in Texas demonstrates that harm can occur at even slow speeds, as demonstrated by the variety of roads types on which injuries occur. Additionally, analyses of Texas data show that the most common roads on which cargo bed incidents occurred were not interstates or high speed highways, but rather city streets. Thus, policies that aim to reduce cargo bed injuries should not exempt slower moving vehicles. Those opposed to limiting passengers in cargo beds may argue that such laws would place undue burdens on businesses that transport employees in cargo beds. In addition to the obligation to protect employees from work-related injuries (the majority of which occur in motor vehicles), the data do not support this claim. According to Texas data, which echoes results of published studies, the majority of injuries in cargo beds occur during recreational or non-work related events, rather than during the work week. Thus, laws limiting the use of cargo beds for carrying passengers would have the most impact on those who do not use the space for business purposes.

In improving policies to reduce injuries, we do not limit ourselves to state policies. City laws can also be changed, as occurred with bicycle helmet laws. Laws must, however, be accompanied by a change in beliefs in order to be fully effective.

Social and Cultural Norms & Beliefs

It is clear that carrying passengers in cargo beds is a widely accepted practice in Texas. Although laws can be effective and should be enforced, 23% of cargo bed casualties are occurring in children under 12 years old, an age group that is currently protected under Texas law. Thus, legislation and enforcement alone are not sufficient. The concept that the cargo bed is not designed to carry passengers must be promoted to the public. Programs such as “Kids Aren’t Cargo” should be supported, as well as campaigns to discourage use of cargo beds by passengers of any age. While the effectiveness of these measures has not been clearly demonstrated, educational and mass media campaigns should be conducted (and evaluated) in Texas. Brief outpatient counseling by physicians has been shown to reduce the prevalence of alcohol consumption among problem drinkers (U.S. Preventive Services Task Force, 1996). Physicians should be encouraged to counsel patients against riding in the cargo beds of pickup trucks, just as they counsel in favor of wearing safety belts. Changes in belief systems, in tandem with policy changes, may contribute to decreasing the use of cargo beds for passengers, and ultimately prevent deaths and injuries.

We must also be sensitive to the socioeconomic restrictions of families with more children than passenger spaces. Nevertheless, it is important to note that in the research conducted by Agran et al. in California, only 9% of those who carried passengers in the back of pickup trucks had no other vehicle compared to 12% of those who stated that they did *not* carry passengers in the back. (Agran et al.,

1995). This research was, however, conducted among licensed drivers in households with a telephone. It would be difficult to generalize to households without telephones, which also tend to be those in the lower socioeconomic strata. More research should be conducted to find out more about both the sociocultural beliefs and socioeconomic restrictions among those who carry passengers in cargo beds. With this information, more effective (and culturally sensitive) interventions can be developed.

Surveillance

An intervention is only as good as the data upon which it is based. While immediate needs for trauma care and hospitalization are vital to the care of transportation injuries in Texas, prevention should not be neglected. And effective prevention strategies are based on surveillance data. While the constraints of budget and time are acknowledged, improved surveillance by all entities involved in injury care would provide valuable knowledge for the prevention efforts in the future. We sympathize with the difficulties that law enforcement officers face in collecting data during an emergency situation; nevertheless, more specific injury data (rather than the broadly defined KABCO scale) would be useful in determining the cause of motor vehicle injuries. In addition, regardless of law enforcement, data entry based on officers' reports should be made as complete and accurate as possible. Despite sophisticated techniques and labor-intensive hand searching by our colleagues at the Texas Department of Health, only a fraction of the crash record deaths and injuries could be matched with trauma data because of missing or incorrect information. More accurate recording of death certificate information and 100% participation of hospitals in a trauma registry would improve this outcome. While costly and time-consuming, it should be considered an investment in preventing the average \$29,000 cost that is incurred by *each* cargo bed victim in Texas. It is difficult to realize the importance of data collection to

help a population in the future when a few individuals must be helped today. Nevertheless, as a state, Texas must have the foresight to prioritize surveillance. Only then can the huge emotional and economic burden of cargo bed injuries be reduced for all Texans.

REFERENCES

- Agran PA, Dunkle DE. Motor vehicle occupants injuries to children in crash and noncrash events. *Pediatrics*. 1982;70:993-996.
- Agran PA, Dunkle DE, Winn DG. Motor Vehicle childhood injuries caused by noncrash falls and ejections. *JAMA* 1985;17:253.
- Agran PA, Winn DG, Anderson CL. Injuries to occupants in cargo areas of pickup trucks. *West J Med* 1994;161(5):479-482.
- Agran PA, Winn DG, Anderson CL. Who carries passengers in the back of pickup trucks? *Accident Analysis & Prevention*. 1995;27(1):125-130.
- Agran PA, Winn DG, Castillo DN. Pediatric injuries in the back of pickup trucks. *JAMA* 1990;264:712-716.
- Anderson CL, Winn DG, Agran PF. Differences between pickup truck and automobile driver-owners. *Accident Analysis & Prevention*. 1999;31:67-76.
- American Academy of Pediatrics (Committee on Injury and Poison Prevention). Children in Pickup Trucks (RE9216). *Pediatrics*. 1991; 88(2):393-394.
- Blincoe, LJ. The economic cost of motor vehicle crashes, 1994. Report to the National Highway Traffic Safety Administration (NHTSA). Report Number DOT HS 808 425. July 1996.
- Bucklew PA, Osler TM, Eidson JJ, Clevenger, FW, Olson, SE, Demarest, GB . Falls and ejections from pickup trucks. *The Journal of Trauma*. 1992; 32(4):468-472.
- Crashes Involving Trucks with Passengers in Bed of Pickup Truck. *Tennessee Crash Reporting System*. 1999;August 30.
- Dugan, D. V. State of New York Department of Motor Vehicles, Assistant Counsel. Personal correspondence. July 28, 2000.
- Fallat, Svenson, Roussell, & Hardwick. Hazards to children riding in the back of pickup trucks. *Kentucky Medical Association Journal*. 1995; 93:515-518.
- Ferrer JS, Archer P. Pickup truck bed-related traumatic brain injuries in Oklahoma, 1992-1995. *Injury Update: A Report to Oklahoma Injury Surveillance Participants*. Issue: February 14, 1997. Oklahoma State Department of Health, 1997.
- Gilbert DT. The tragic results of cargo bays revisited. *Traffic Safety*. 1997;November/December:7-9.

- Hamar GB, King W, Bolton A, and Fine, PR. Fatal incidents involving pickup trucks in Alabama. *Southern Medical Journal*. 1991; 84(3); 349-354.
- Hampson NB, Norkool DM. Carbon monoxide poisoning in children riding in the back of pickup trucks. *JAMA*. 1992; 267(4):538-540.
- Hausauer, N. and Salzberg, P. Traffic Records Data Center—DATA NOTES May, 1991. *Washington Traffic Safety Commission*.
- Mele, J. Assistant Attorney General, Litigation Section. Personnel correspondence. March 13, 2000.
- Motor Vehicles Traffic Crash Facts 1997. *Florida Department of Highway Safety*.
- National Transportation Safety Board (Bureau of Technology). Special Study—Fatalities and injuries associated with riding in cargo areas of pickup trucks. Report Number NTSB-HSS-81-2. September 9, 1981.
- Occupants in Unenclosed Areas of Motor Vehicles 1998. *Missouri State Highway Patrol Traffic Division and Statistical Analysis Center. Missouri Traffic Crash Analysis—August, 1999*
- Osina L. National Committee on Uniform Traffic Laws and Ordinances (NCUTL). Personnel communication. August 31, 2000.
- Tong T, Teaford P. Falls from pickup trucks during childhood. *AJDC*. 1989;143: 997-98.
- US Census Bureau. 1997 Vehicle Inventory and Use Survey: Here's What's New in Texas Truck Trends, March 8, 1999.
- US Department of Transportation. Legislative Fact Sheet: Kids Aren't Cargo in Pickup Trucks. November 1995.
- U.S. Preventive Services Task Force (1996). Screening for problem drinking. In *Guide to Clinical Preventive Services, 2nd Edition*, DiGiuseppi C, Atkins D, Woolf S, and Kamerow D, eds, pp 567-582. U.S. Department of Health and Human Services, Washington, DC.
- Woodward GA, Bolte RG. Children riding in the back of pickup trucks: A neglected safety issue. *Pediatrics*. 1990; 86(5):683-691.
- Williams AF, Goins SE. Fatal falls and jumps from motor vehicles. *American Journal of Public Health*. 1981;71(3): 275-279.

APPENDIX A

INCIDENCE OF CRASHES BY COUNTY* (1989 - 1998).

County	Rural	Urban	Total
ANDERSON	5	5	10
ANDREWS	3	0	3
ANGELINA	8	4	12
ARANSAS	4	2	6
ARCHER	2	0	2
ATASCOSA	18	2	20
AUSTIN	10	0	10
BAILEY	3	0	3
BANDERA	8	0	8
BASTROP	10	0	10
BAYLOR	1	0	1
BEE	6	1	7
BELL	19	16	35
BEXAR	28	248	276
BLANCO	6	0	6
BOSQUE	8	0	8
BOWIE	10	12	22
BRAZORIA	23	26	49
BRAZOS	9	26	35
BREWSTER	1	0	1
BRISCOE	2	0	2
BROOKS	3	4	7
BROWN	8	5	13
BURLESON	9	0	9
BURNET	8	0	8
CALDWELL	9	4	13
CALHOUN	4	2	6
CALLAHAN	4	0	4
CAMERON	58	42	100
CAMP	3	0	3
CARSON	1	0	1
CASS	7	0	7
CASTRO	2	0	2
CHAMBERS	16	0	16
CHEROKEE	13	8	21
CHILDRESS	2	0	2
CLAY	3	0	3
COKE	4	0	4
COLEMAN	4	1	5
COLLIN	19	25	44
COLORADO	8	0	8
COMAL	16	17	33

COMANCHE	2	0	2
COOKE	2	0	2
CORYELL	5	4	9
CROCKETT	4	0	4
CROSBY	1	0	1
CULBERSON	3	0	3
DALLAM	3	0	3
DALLAS	7	361	368
DAWSON	0	4	4
DEAF SMITH	0	5	5
DENTON	14	37	51
DEWITT	2	3	5
DICKENS	1	0	1
DIMMIT	2	0	2
DONLEY	4	0	4
DUVAL	2	0	2
EASTLAND	4	0	4
ECTOR	12	17	29
EDWARDS	2	0	2
EL PASO	21	166	187
ELLIS	11	14	25
ERATH	3	4	7
FALLS	5	1	6
FANNIN	9	2	11
FAYETTE	3	0	3
FISHER	1	0	1
FLOYD	3	0	3
FOARD	1	0	1
FORT BEND	29	19	48
FRANKLIN	1	0	1
FREESTONE	8	0	8
FRIO	10	3	13
GAINES	7	1	8
GALVESTON	41	62	103
GARZA	2	0	2
GOLIAD	6	0	6
GONZALES	4	3	7
GRAY	5	2	7
GRAYSON	12	6	18
GREGG	4	26	30
GRIMES	4	2	6
GUADALUPE	10	6	16
HALE	3	8	11
HALL	4	0	4
HAMILTON	4	0	4
HARDEMAN	3	0	3
HARDIN	8	2	10

HARRIS	145	336	481
HARRISON	16	7	23
HARTLEY	3	0	3
HAYS	13	13	26
HEMPHILL	1	0	1
HENDERSON	17	4	21
HIDALGO	65	53	118
HILL	10	2	12
HOCKLEY	4	3	7
HOOD	11	0	11
HOPKINS	1	0	1
HOUSTON	6	0	6
HOWARD	4	5	9
HUDSPETH	9	0	9
HUNT	10	9	19
HUTCHINSON	1	1	2
JACK	5	0	5
JACKSON	4	0	4
JASPER	3	1	4
JEFF DAVIS	3	0	3
JEFFERSON	10	49	59
JIM WELLS	3	4	7
JOHNSON	22	15	37
JONES	5	0	5
KARNES	5	1	6
KAUFMAN	12	4	16
KENDALL	6	0	6
KENEDY	6	0	6
KENT	2	0	2
KERR	8	0	8
KIMBLE	1	0	1
KING	1	0	1
KINNEY	1	0	1
KLEBERG	5	10	15
KNOX	1	0	1
LA SALLE	5	0	5
LAMAR	4	2	6
LAMB	1	0	1
LAMPASAS	7	1	8
LAVACA	4	0	4
LEE	5	0	5
LEON	3	0	3
LIBERTY	11	5	16
LIMESTONE	1	1	2
LIPSCOMB	1	0	1
LIVE OAK	11	0	11
LLANO	6	0	6

LUBBOCK	6	27	33
LYNN	4	0	4
MADISON	9	0	9
MARION	4	0	4
MATAGORDA	10	2	12
MAVERICK	1	4	5
MCCULLOCH	0	1	1
MCLENNAN	22	44	66
MCMULLEN	2	0	2
MEDINA	4	3	7
MIDLAND	7	13	20
MILAM	6	2	8
MILLS	3	0	3
MITCHELL	3	0	3
MONTAGUE	7	0	7
MONTGOMERY	39	8	47
MOORE	1	0	1
MORRIS	5	0	5
NACOGDOCHES	8	7	15
NAVARRO	8	7	15
NEWTON	5	0	5
NOLAN	3	4	7
NUECES	16	63	79
OCHILTREE	1	2	3
OLDHAM	1	0	1
ORANGE	4	7	11
PALO PINTO	4	2	6
PANOLA	9	2	11
PARKER	12	9	21
PECOS	4	2	6
POLK	12	0	12
POTTER	1	20	21
RANDALL	3	9	12
REAGAN	2	0	2
REAL	4	0	4
RED RIVER	7	0	7
RBEVES	6	0	6
REFUGIO	2	0	2
ROBERTSON	7	1	8
ROCKWALL	4	3	7
RUNNELS	4	0	4
RUSK	9	3	12
SABINE	4	0	4
SAN AUGUSTINE	3	0	3
SAN JACINTO	6	0	6
SAN PATRICIO	12	9	21
SCHLEICHER	1	0	1

SCURRY	1	7	8
SHACKELFORD	1	0	1
SHELBY	9	0	9
SHERMAN	1	0	1
SMITH	29	21	50
SOMERVELL	3	0	3
STARR	13	0	13
STEPHENS	0	1	1
STERLING	1	0	1
STONEWALL	1	0	1
SUTTON	3	0	3
SWISHER	0	4	4
TARRANT	11	214	225
TAYLOR	4	23	27
TERRELL	2	0	2
TERRY	2	2	4
THROCKMORTON	1	0	1
TITUS	4	3	7
TOM GREEN	9	26	35
TRAVIS	33	84	117
TRINITY	4	0	4
TYLER	7	0	7
UPSHUR	6	3	9
UVALDE	15	3	18
VAL VERDE	4	11	15
VAN ZANDT	12	0	12
VICTORIA	11	16	27
WALKER	9	9	18
WALLER	11	0	11
WARD	5	1	6
WASHINGTON	7	6	13
WEBB	8	47	55
WHARTON	14	2	16
WICHITA	1	12	13
WILBARGER	2	1	3
WILLACY	6	3	9
WILLIAMSON	13	9	22
WILSON	7	0	7
WINKLER	0	1	1
WISE	11	0	11
WOOD	8	0	8
YOAKUM	3	0	3
YOUNG	1	0	1
ZAVALA	2	0	2
	1745	2497	4242

*Counties that did not have a cargo bed incident are not listed in this table.

APPENDIX B

INCIDENCE OF CRASHES BY SEVERITY (1989 - 1998).

All Road Classes -1989

K	22
A	120
B	172
C	<u>107</u>
	<u>421</u>

All Road Classes-1990

K	21
A	140
B	160
C	<u>113</u>
	<u>434</u>

All Road Classes-1991

K	41
A	118
B	136
C	<u>98</u>
	<u>393</u>

All Road Classes-1992

K	30
A	117
B	189
C	<u>123</u>
	<u>459</u>

All Road Classes-1993

K	24
A	137
B	191
C	<u>119</u>
	<u>471</u>

Appendix B Con't.

All Road Classes-1994

K	33
A	109
B	189
C	<u>159</u>
	<u>490</u>

All Road Classes-1995

K	22
A	117
B	162
C	<u>165</u>
	<u>466</u>

All Road Classes-1996

K	20
A	105
B	158
C	<u>132</u>
	<u>415</u>

All Road Classes-1997

K	24
A	94
B	110
C	<u>106</u>
	<u>334</u>

All Road Classes-1998

K	25
A	97
B	130
C	<u>107</u>
	<u>359</u>

APPENDIX C

CURRENT STATE LAWS RESTRICTING THE PASSENGER USE OF LIGHT TRUCK CARGO BEDS

CALIFORNIA:

23116. (a) No person driving a pickup truck or a flatbed motortruck on a highway shall transport any person in or on the back of the truck. (b) No person shall ride in or on the back of a truck or flatbed motortruck being driven on a highway. (c) Subdivisions (a) and (b) do not apply if the person in the back of the truck is secured with a restraint system. The restraint system shall meet or exceed the federal motor vehicle safety standards published in Sections 571.207, 571.209, and 571.210 of Title 49 of the Code of Federal Regulations. (d) Subdivisions (a), (b), and (c) do not apply if the person in the back of the truck or the flatbed is being transported in an emergency response situation by a public agency or pursuant to the direction or authority of a public agency. As used in this subdivision, "emergency response situation" means instances in which necessary measures are needed in order to prevent injury or death to persons or to prevent, confine, or mitigate damage or destruction to property. (e) Subdivisions (a) and (b) do not apply if the person in the back of the truck is being transported in an enclosed camper or camper shell that prevents the person from being discharged. (f) This section does not affect requirements imposed by the Labor Code or by any other state or federal law or regulation regarding the transportation of employees in a motortruck. (g) Subdivisions (a) and (b) not apply if the person in the back of the truck or flatbed motortruck is being transported in a parade that is supervised by a law enforcement agency and the speed of the truck while in the parade does not exceed eight miles per hour.

COLORADO:

42-4-201 - Obstruction of view or driving mechanism - hazardous situation. (1) No person shall drive a vehicle when it is so loaded or when there are in the front seat such number of persons, exceeding three, as to obstruct the view of the driver to the front or sides of the vehicle or as to interfere with the driver's control over the driving mechanism of the vehicle. (2) No person shall knowingly drive a vehicle while any passenger therein is riding in any manner which endangers the safety of such passenger or others. (3) No person shall drive any motor vehicle equipped with any television viewer, screen, or other means of visually receiving a television broadcast which is located in the motor vehicle at any point forward of the back of the driver's seat or which is visible to the driver while operating the motor vehicle. The provisions of this subsection (3) shall not be interpreted to prohibit the usage of any computer, data terminal, or other similar device in a motor vehicle. (4) No vehicle shall be operated upon any highway unless the driver's vision through any required glass equipment is normal and unobstructed. (5) No passenger in a vehicle shall ride in such position as to create a hazard for such passenger or others, or to interfere with the driver's view ahead or to the sides, or to interfere with the driver's control over the driving mechanism of the vehicle; nor shall the driver of a vehicle permit any passenger therein to ride in such manner. (6) No person shall hang on or otherwise attach himself or

herself to the outside, top, hood, or fenders of any vehicle, or to any other portion thereof, other than the specific enclosed portion of such vehicle intended for passengers or while in a sitting position in the cargo area of a vehicle if such area is fully or partially enclosed on all four sides, while the same is in motion; nor shall the operator knowingly permit any person to hang on or otherwise attach himself or herself to the outside, top, hood, or fenders of any vehicle, or any other portion thereof, other than the specific enclosed portion of such vehicle intended for passengers or while in a sitting position in the cargo area of a vehicle if such area is fully or partially enclosed on all four sides, while the same is in motion. This subsection (6) shall not apply to parades, caravans, or exhibitions which are officially authorized or otherwise permitted by law. (7) The provisions of subsection (6) of this section shall not apply to a vehicle owned by the United States government or any agency or instrumentality thereof, or to a vehicle owned by the state of Colorado or any of its political subdivisions, or to a privately owned vehicle when operating in a governmental capacity under contract with or permit from any governmental subdivision or under permit issued by the public utilities commission of the state of Colorado, when in the performance of their duties persons are required to stand or sit on the exterior of the vehicle and said vehicle is equipped with adequate handrails and safeguards. (8) Any person who violates any provision of this section commits a class A traffic infraction.

CONNECTICUT:

Sec. 14-272a. Carrying of children in pickup trucks or open-bed vehicles. Restrictions. (a) No person may operate on any public highway any truck type motor vehicle with a gross vehicle weight rating not exceeding seventy-five hundred pounds having an open rear section or any motor vehicle having an open bed when a child under the age of sixteen years is in such open rear section or open bed unless such child wears a properly adjusted and fastened safety belt which conforms to the provisions of the Code of Federal Regulations Title 49, Section 571.209, as amended from time to time. The provisions of this subsection shall not apply to any person who operates such a vehicle (1) in a parade authorized by the municipality or municipalities in which such parade is conducted, (2) used for farming purposes or registered pursuant to subsection (q) of section 14-49 or (3) in a recreational hayride conducted between the months of August and December. (b) Violation of any provision of subsection (a) of this section shall be an infraction.(P.A. 93-116.)

DISTRICT OF COLUMBIA:

Unable to obtain copy of statute.

FLORIDA:

316.2015 Unlawful for person to ride on exterior of vehicle.-- (1) It is unlawful for any operator of a passenger vehicle to permit any person to ride on the bumper, radiator, fender, hood, top, trunk, or running board of such vehicle when operated upon any street or highway which is maintained by the state, county or municipality. However, the operator of any vehicle shall not be in violation of this section when such operator permits any person to occupy seats securely affixed to the exterior of such

vehicle. Any person who violates the provisions of this subsection shall be cited for a moving violation, punishable as provided in chapter 318. (2) No person shall ride on any vehicle upon any portion thereof not designed or intended for the use of passengers. This provision shall not apply to an employee engaged in the necessary discharge of a duty or to a person or persons riding within truck bodies in space intended for merchandise. Any person who violates the provisions of this subsection shall be cited for a nonmoving violation, punishable as provided in chapter 318. (3) This section shall not apply to a performer engaged in a professional exhibition or person participating in an exhibition or parade, or any such person preparing to participate in such exhibitions or parades. History.--s. 1, ch. 71-135; ss. 1, 12, ch. 76-31; s. 28, ch. 96-350. Note.--Former s. 316.100.

GEORGIA:

40-8-79 G *** CODE SECTION *** 10/15/99 40-8-79. It shall be unlawful for any person under the age of 18 to ride as a passenger in the uncovered bed of a pickup truck on any interstate highway in this state. The driver of any vehicle in violation of this Code section shall be guilty of a misdemeanor.

HAWAII:

§291-14 Pickup trucks; passenger restrictions. (a) No person shall stand in the bed or load-carrying area of any motor vehicle commonly known as a pickup truck while the vehicle is in operation. No operator of any pickup truck shall operate the vehicle with a passenger seated in the bed or load-carrying area of the vehicle unless: (1) There is no seating available in the cab of the vehicle; (2) The side racks of the vehicle are securely attached and the tailboard or tailgate is securely closed; (3) Every passenger in the bed or load-carrying area of the vehicle is seated on the floor and does not attempt to control unlash cargo. (b) This section shall not apply to persons or corporations operating a business or businesses that serve the public, who or which are subject to the jurisdiction, supervision, and regulations prescribed by state agencies or departments nor to their agents or employees when engaged in the business of such persons or corporations. (c) No operator of any pickup truck may operate the vehicle with any passenger twelve years of age or under in the bed or load-carrying area of the vehicle, unless one of the following applies: (1) An emergency exists that threatens the life of the passenger being transported in the bed or load-carrying area of the vehicle; or (2) The vehicle is being operated in parades, caravans, or exhibitions which are officially authorized or otherwise permitted by law. (d) Any person who violates this section shall be subject to a fine of \$25 for each violation; provided that any person who violates subsection (c) shall be subject to a fine of \$50 for each separate violation. (e) As used in this section, "pickup truck" means a light truck that has a cab on the front part of the vehicle covering the driver's seat and an open bed behind the cab designed primarily to transport property or cargo, with sides and a tailgate to retain the contents within the confines of the bed, and has a maximum gross vehicle weight rating (GVWR) of 11,000 pounds or less. [L 1989, c 167, §1; am L 1990, c 122, §1; am L 1997, c 60, §6 and c 105, §1]

KANSAS:

Chapter 8.—automobiles and other vehicles Article 13.—miscellaneous provisions

8-1344. Child passenger safety; restraining systems for children under the age of four; use of seat belts by children between the ages of five and fourteen. Every driver as defined in K.S.A. 8-1416, and amendments thereto, who transports a child under the age of 14 years in a passenger car as defined in K.S.A. 1998 Supp. 8-1343a, and amendments thereto, on a highway as defined in K.S.A. 8-1424, and amendments thereto, shall provide for the protection of such child by properly using: (a) For a child under the age of four years a child passenger safety restraining system that meets or exceeds the standards and specifications contained in federal motor vehicle safety standard no. 213 in effect on July 1, 1997; or (b) for a child four years of age but under the age of 14, a safety belt manufactured in compliance with federal motor vehicle safety standard no. 208, except that if the number of children subject to this requirement exceeds the number of passenger securing locations available for use by children affected by this requirement, and all of those securing locations are in use by children, then there is not a violation of this section. History: L. 1981, ch. 33, § 2; L. 1984, ch. 38, § 1; L. 1989, ch. 40, § 1; L. 1992, ch. 317, § 2; L. 1997, ch. 80, § 1; July 1.

8-1345. Chapter 8.-- automobiles and other vehicles Article 13.--miscellaneous provisions Same; unlawful acts; penalties; court cost and fine waived, when; defense to action. (a) It shall be unlawful for any driver to violate the provisions of K.S.A. 8-1344, and amendments thereto, and upon conviction such driver shall be punished by a fine of \$20. The failure to provide a child safety restraining system or safety belt for more than one child in the same passenger car at the same time shall be treated as a single violation. Any conviction under the provisions of this subsection shall not be construed as a moving traffic violation for the purpose of K.S.A. 8-255, and amendments thereto. (b) Ten dollars of the fine provided for in subsection (a) and court costs assessed under K.S.A. 28-172a, and amendments thereto, shall be waived if the driver convicted of violating subsection (a) of K.S.A. 8-1344, and amendments thereto, provides proof to the court that such driver has purchased or acquired an approved child passenger safety restraining system. (c) No driver charged with violating the provisions of this act shall be convicted if such driver produces in the office of the arresting officer or in court proof that the child was 14 years of age or older at the time the violation was alleged to have occurred. (d) Evidence of failure to secure a child in a child passenger safety restraining system or a safety belt under the provisions of K.S.A. 8-1344, and amendments thereto, shall not be admissible in any action for the purpose of determining any aspect of comparative negligence or mitigation of damages. History: L. 1981, ch. 33, § 3; L. 1984, ch. 38, § 2; L. 1989, ch. 40, § 2; L. 1992, ch. 317, § 3; July 1.

KENTUCKY:

189.125 Requirements of use of seat belts and child restraint systems -- Exceptions. (1) Except as otherwise provided in this section, "motor vehicle" as used in this section means every vehicle designed to carry ten (10) or fewer passengers and used for the transportation of persons, but the term does not include: (a) Motorcycles; (b) Motor driven cycles; or (c) Farm trucks registered for agricultural use only and having a gross weight of one (1) ton or more. (2) No person shall sell any new passenger vehicle in this state nor shall any person make application for registering a new passenger vehicle in this state unless the front or forward seat or seats have adequate anchors or attachments secured to the floor and/or sides to the rear of the seat or seats to which seat belts may be secured. (3) Any driver of a motor vehicle, when transporting a child of forty (40) inches in height or less in a motor vehicle operated

on the roadways, streets, and highways of this state, shall have the child properly secured in a child restraint system of a type meeting federal motor vehicle safety standards. (4) As used in this section, "child restraint system" means any device manufactured to transport children in a motor vehicle which conforms to all applicable federal motor vehicle safety standards. (5) Failure to wear a child passenger restraint shall not be considered as contributory negligence, nor shall such failure to wear said passenger restraint system be admissible as evidence in the trial of any civil action. Failure of any person to wear a seat belt shall not constitute negligence per se. (6) No person shall operate a motor vehicle manufactured after 1965 on the public roadways of this state unless the driver and all passengers are wearing a properly adjusted and fastened seat belt, unless the passenger is a child who is secured as required in subsection (3) of this section. The provisions of this subsection shall not apply to: (a) A person who has in his possession at the time of the conduct in question a written statement from a physician or licensed chiropractor that he is unable, for medical or physical reasons, to wear a seat belt; or (b) A letter carrier of the United States postal service while engaged in the performance of his duties. (7) A peace officer shall not stop or seize a person nor issue a uniform citation for a violation of subsection (6) of this section if the officer has no other cause to stop or seize the person other than a violation of subsection (6) of this section. (8) The provisions of subsections (6) and (7) of this section shall supersede any existing local ordinance involving the use of seat belts. No ordinance contrary to subsections (6) and (7) of this section may be enacted by any unit of local government. Effective: July 15, 1994 History: Amended 1994 Ky. Acts ch. 39, sec. 1, effective July 15, 1994. -- Amended 1988 Ky. Acts ch. 232, sec. 1, effective July 15, 1988. -- Amended 1982 Ky. Acts ch. 158, sec. 1, effective July 15, 1982. -- Created 1962 Ky. Acts ch. 76, sec. 1.

LOUISIANA:

R.S. 32:284.C. reads as follows: No person or persons under the age of twelve years shall be permitted to be a passenger in the open bed of a truck with a gross weight of six thousand pounds or less, commonly referred to as a pickup truck, or in a utility trailer while moving upon a highway of this state. The provisions of this Subsection shall not apply to a pickup truck traveling not more than fifteen miles per hour while participating in an authorized parade in a controlled situation. The provision of this Section shall be inapplicable in an emergency situation if the child is accompanied within the truck bed by an adult. (Acts 1962, No. 310, Subsection 1. Amended by Acts 1988, No. 573, Subsection 1.; Acts 1997, No. 245, Subsection 1.)

MAINE:

§ 2088. Passengers restricted to passenger compartment of pickup truck (REALLOCATED FROM TITLE 29-A, SECTION 2085) 1. Passengers under 19 years of age. When a passenger under 19 years of age is transported in a pickup truck, that passenger must ride in the passenger compartment of the pickup truck. [RR 1999, c. 1, §41 (ral).] 2. Exceptions. Subsection 1 does not apply to the following: A. Workers or trainees, including agricultural workers or trainees, engaged in the necessary discharge of their duties or training or being transported between work or training locations; [RR 1999, c. 1, §41 (ral).] B. Licensed hunters being transported to or from a hunting location, as long as those persons are in compliance with all laws pertaining to possession and transportation of firearms in a

motor vehicle; [RR 1999, c. 1, §41 (ral).] C. Participants in parades; or [RR 1999, c. 1, §41 (ral).] D. A passenger secured by a seat belt in a manufacturer-installed seat located outside the passenger compartment. [RR 1999, c. 1, §41 (ral).] [RR 1999, c. 1, §41 (ral).] Section History: 1999, RR c. 1, § 41 (RAL).

MARYLAND:

§ 21-1121. (a) This section applies only to a Class E (truck) vehicle registered or of a type capable of being registered in this State as a Class E (truck) vehicle with a manufacturer's rated capacity of 3/4 ton or less, the gross vehicle weight of which does not exceed 7,000 pounds. (b) (1) Subject to paragraph (2) of this subsection, this section does not apply to: (i) A vehicle traveling at a speed of not more than 25 miles per hour; or (ii) The transportation of: 1. An employee to or from a work site by the employer of the employee; or 2. An individual in a vehicle engaged in farming operations. (2) This subsection may not be construed as to eliminate applicable child safety seat and seat belt requirements under §§ 22-412.2 and 22-412.3 of this article. (c) An individual may not drive a Class E (truck) vehicle on a highway in the State while a passenger under the age of 16 years is riding in an unenclosed bed of the vehicle.

MASSACHUSETTS:

Massachusetts Safety Belt Law (Chapter 90, Section 13A). Massachusetts law requires the use of safety belts by all occupants, drivers and passengers, of private passenger motor vehicles, vanpool vehicles and trucks under eighteen thousand pounds. Any person who operates a motor vehicle without wearing a safety belt, and any person sixteen years of age or over who rides as a passenger in a motor vehicle without wearing a safety belt, shall be subject to a fine of twenty-five dollars. Any operator of a motor vehicle shall be subject to an additional fine of twenty-five dollars for each person under the age of sixteen who is a passenger in said motor vehicle and is not wearing a safety belt. Exemptions to this law include: 1) any person riding in a motor vehicle manufactured before July 1, 1966; 2) any person physically unable to use safety belts; provided, however, that such condition is duly certified in writing by a physician; 3) any rural carrier of the US Postal Service operating a motor vehicle while in the performance of his duties; 4) anyone involved in the operation of taxis, liveries, tractors, trucks with a gross weight of eighteen thousand pounds or over, buses and passengers of authorized emergency vehicles.

Massachusetts Child Passenger Safety Law (Chapter 90, Section 7AA)

Massachusetts law requires that all children twelve years of age and younger be properly restrained by a safety belt. Additionally, no child under age five and no child weighing forty pounds or less shall ride as a passenger in a motor vehicle on any way unless such child is properly fastened and secured, according to the manufacture's instructions, by a child passenger restraint. An operator of a motor vehicle who violates this law is subject to a fine of not more than twenty-five dollars. An operator of a motor vehicle licensed as a taxi cab not equipped with a child passenger restraint device shall not be subject to fine. Exemptions to this law include: 1) children riding in a bus; 2) children riding in a motor vehicle

manufactured before July 1, 1966; 3) children physically unable to use either a conventional child passenger restraint or a child restraint specifically designed for children with special needs; provided, however, that such condition is duly certified in writing by a physician.

MISSOURI:

Riding in open bed of truck prohibited, when, exceptions, penalty.

304.665. 1. No person shall operate any truck, as defined in section 301.010, RSMo, with a licensed gross weight of less than twelve thousand pounds on any highway which is part of the state or federal highway system or when such truck is operated within the corporate limits of any city when any person under eighteen years of age is riding in the unenclosed bed of such truck. No person under eighteen years of age shall ride in the unenclosed bed of such truck when the truck is in operation. Any person who operates a truck with a licensed gross weight of less than twelve thousand pounds in violation of this section is guilty of a class C misdemeanor. 2. The provisions of this section shall only apply when a truck described in subsection 1 of this section is operated on a highway which is part of the state or federal highway system or when such truck is operated within the corporate limits of any city. The provisions of this section shall not apply to: (1) An employee engaged in the necessary discharge of the employee's duties where it is necessary to ride in the unenclosed bed of the truck; (2) Any person while engaged in agricultural activities where it is necessary to ride in the unenclosed bed of the truck; (3) Any person riding in the unenclosed bed of a truck while such truck is being operated in a parade, caravan or exhibition which is authorized by law; (4) Any person riding in the unenclosed bed of a truck if such truck has installed a means of preventing such person from being discharged or such person is secured to the truck in a manner which will prevent the person from being thrown, falling or jumping from the truck; (5) Any person riding in the unenclosed bed of a truck if such truck is being operated solely for the purposes of participating in a special event and it is necessary that the person ride in such unenclosed bed due to a lack of available seating. "Special event", for the purposes of this section, is a specific social activity of a definable duration which is participated in by the person riding in the unenclosed bed; (6) Any person riding in the unenclosed bed of a truck if such truck is being operated solely for the purposes of providing assistance to, or ensuring the safety of, other persons engaged in a recreational activity; or (7) Any person riding in the unenclosed bed of a truck if such truck is the only legally titled, licensed and insured vehicle owned by the family of the person riding in the unenclosed bed and there is insufficient room in the passenger cab of the truck to accommodate all passengers in such truck. For the purposes of this subdivision the term "family" shall mean any persons related within the first degree of consanguinity. (L. 1997 S.B. 121 § 1)

NEVADA:

NRS 484.473 Unlawful riding. A person shall not ride on any vehicle upon any portion thereof not designed or intended for the use of passengers. This provision does not apply to an employee engaged in the necessary discharge of a duty, or to a person or persons riding within truck bodies and space intended for merchandise. (Added to NRS by 1969, 1507) NRS 484.474 Child riding in motor vehicle: Device to restrain child under 5 years of age required; penalty; exceptions. 1. Except as otherwise provided in subsection 5, any person who is transporting a child who is under 5 years of age and who weighs less than 40 pounds in a motor vehicle operated in this state which is equipped to carry

passengers shall secure him in a device for restraining a child which has been approved by the United States Department of Transportation. 2. A person who violates the provisions of subsection 1 shall be punished by a fine of not less than \$35 nor more than \$100 unless, within 14 days after the issuance of the citation for such a violation, the person presents to the court specified in the citation proof of his purchase of such a restraining device. Upon presentation of such proof, the court shall void the citation. 3. For the purposes of NRS 483.473, a violation of this section is not a moving traffic violation. 4. A violation of this section may not be considered: (a) Negligence in any civil action; or (b) Negligence or reckless driving for the purposes of NRS 484.377. 5. This section does not apply: (a) To a person who is transporting a child in a means of public transportation, including a taxi, school bus or emergency vehicle. (b) When a physician determines that the use of such a restraining device for the particular child would be impractical or dangerous because of such factors as the child's weight, physical unfitness or medical condition. In this case, the person transporting the child shall carry in the vehicle the signed statement of the physician to that effect. (Added to NRS by 1983, 1888; A 1985, 1170, 2293; 1995, 1528)

NEW HAMPSHIRE:

§ 265:106 *Carrying Passengers in Trucks Prohibited.* – Any person who shall drive or permit, allow or cause to be driven, any vehicle designed or constructed by the manufacturer exclusively for the transportation of goods, materials, commodities, freight, or merchandise, for the purpose of carrying passengers for a consideration, express or implied, shall be guilty of a violation. Source. 1941, 170:1. RL 119:49. RSA 263:79. 1981, 146:1, eff. Jan. 1, 1982.

§ 265:107 *Rules for Carrying Passengers.* – Nothing in RSA 265:106 shall be construed to prevent the transportation under such rules as shall be adopted pursuant to RSA 260:5 by the director of those enrolled at summer camps or students, teachers, or employees of colleges and schools when it is for recreational or religious purposes; or prevent the transportation of employees of any town, city, county or the state, federal government, or any agency thereof, or of employees of the owner of such vehicle when in the course of going to or from their place of employment; or when transportation is in a vehicle approved by the director under RSA 266:7.

Source. 1941, 170:1. RL 119:50. RSA 263:80. 1957, 161:1. 1981, 146:1, eff. Jan. 1, 1982.

§ 265:107-a *Child Passenger Restraints Required.* – I. No person shall drive a motor vehicle on any way while carrying as a passenger a person less than 18 years of age unless such person is wearing a seat or safety belt which is properly adjusted and fastened or, if the person is less than 4 years of age, unless such person is properly fastened and secured by a child passenger restraint which is in accordance with the safety standards approved by the United States Department of Transportation in 49 C.F.R. section 571.213. No person shall drive a motor vehicle on any way while carrying as a passenger a person less than 18 years of age unless the motor vehicle was designed for and equipped with the passenger restraints specified above. I-a. No person who is less than 18 years of age shall drive a motor vehicle on any way unless such person is wearing a seat or safety belt which is properly adjusted and fastened. II. A person shall not be guilty of a violation of this section if the motor vehicle the person is driving is regularly used to transport passengers for hire, is a school bus weighing more than 10,000 pounds or is a school bus weighing less than 10,000 pounds that was manufactured without safety belts, or there is an individual education plan statement contraindicating the use of restraints, is a

vehicle manufactured before 1968, is a motorcycle as defined in RSA 259:63 or is an antique motor car or motorcycle as defined in RSA 259:4. III. Any driver who violates the provisions of this section shall be guilty of a violation, and shall be subject to the following fines: (a) \$25 for a first offense. (b) \$50 for a second or subsequent offense. IV. A violation of this section shall not be used as evidence of contributory negligence in any civil action. V. A conviction for violating the provisions of this section shall not preclude prosecution of any other offense for which violation of this section might constitute an element. VI. Enforcement of this section by law enforcement agencies shall be accomplished only as a secondary action when a driver of a motor vehicle has been cited or charged with a violation or some other offense; provided, however, that a motor vehicle may be stopped for failure to comply with this section if the seat belt violation is for a person under 12 years of age. Source. 1983, 45:1. 1987, 240:1. 1989, 302:1. 1993, 21:1. 1995, 6:1, eff. May 26, 1995. 1997, 244:1-4, eff. Aug. 18, 1997.

NEW JERSEY:

39:4-69. Riding on part not intended for passengers prohibited No person shall ride on, and no operator shall knowingly allow a person to ride on a street car or vehicle, or on a portion thereof not designed or intended for the conveyance of passengers. This section shall not apply to an employee engaged in the necessary discharge of a duty. Amended by L.1951, c. 23, p. 79, s. 36

NEW MEXICO:

66-7-369. Child passenger restraint; enforcement. A. No person shall operate a passenger car, van or pickup truck in this state and not an authorized emergency vehicle, public transportation or a school bus unless each passenger under eleven years of age is properly secured in a child passenger restraint device or by a safety belt, unless all seating positions equipped with safety belts are occupied, as follows: (1) children less than one year of age shall be properly secured in a child passenger restraint device which meets the standards prescribed in 49 CFR 571.213; (2) children one year of age and older but less than five years of age shall be properly secured in a child passenger restraint device which meets the standards prescribed in 49 CFR 571.213 or in the rear seat by a safety belt provided in the motor vehicle; and (3) children five years of age and older but less than eleven years of age shall be secured by a safety belt provided in the motor vehicle in either the front or rear seat. B. Failure to be secured by a child passenger restraint device or by a safety belt as required by this section shall not in any instance constitute fault or negligence and shall not limit or apportion damages. History: Laws 1983, ch. 252, § 2; 1985, ch. 129, § 1; 1991, ch. 92, § 7.66-7-370

NEW YORK:

§ 1222, Persons riding on trucks. 1. No operator of any motor vehicle commonly known as an auto truck shall operate such auto truck, nor shall the owner thereof permit it to be operated, for a distance in excess of five miles, while there is standing therein or thereon any person or persons in excess of one-third of the number of persons therein or thereon: a. Unless suitable seats are securely attached to the body of such auto truck; b. Unless side racks of at least three feet in height above the floor of such auto

truck are securely attached; and c. Unless it shall have attached thereto a tail board or tail gate which is securely closed. The provisions of this subdivision shall not apply to persons or corporations operating an agency or agencies for public service, who or which are subject to the jurisdiction, supervision and regulations prescribed by or pursuant to the public service law nor to their agents or employees when engaged in the business of such persons or corporations. 2. No operator of any motor vehicle commonly known as an auto truck shall operate such auto truck, nor shall the owner thereof permit it to be operated, in excess of five miles, while there are in excess of five persons under eighteen years of age in the body of such truck unless at least one person over eighteen years of age also rides in the body of said truck.

NORTH CAROLINA:

§ 20-135.2B (1999). Transporting children under 12 years of age in open bed or open cargo area of a vehicle prohibited; exceptions. (a) The operator of a vehicle having an open bed or open cargo area shall insure that no child under 12 years of age is transported in the bed or cargo area of that vehicle. An open bed or open cargo area is a bed or cargo area without permanent overhead restraining construction. (b) Subsection (a) of this section does not apply in any of the following circumstances: (1) An adult is present in the bed or cargo area of the vehicle and is supervising the child. (2) The child is secured or restrained by a seat belt manufactured in compliance with Federal Motor Vehicle Safety Standard No. 208, installed to support a load strength of not less than 5,000 pounds for each belt, and of a type approved by the Commissioner. (3) An emergency situation exists. (4) The vehicle is being operated in a parade pursuant to a valid permit. (5) The vehicle is being operated in an agricultural enterprise. (6) The vehicle is being operated in a county that has no incorporated area with a population in excess of 3,500. (c) Any person violating this section shall have committed an infraction and shall pay a fine of twenty-five dollars (\$25.00). Conviction of an infraction under this section has no consequence other than payment of a penalty. A person found responsible for a violation of this section may not be assessed court costs. (d) No drivers license points or insurance surcharge shall be assessed on account of violation of this section. (1993 (Reg. Sess., 1994), c. 672, s. 1; 1995, c. 163, s. 7; 1999-183, s.4.)

NOTES: EFFECTS OF AMENDMENTS. –Session Laws 1999-183, s.4, effective October 1, 1999, in subsection (c), substituted “penalty” for “fine” twice, deleted the former second sentence regarding infractions, substituted “Conviction of an infraction under this section” for “The procedure for charging and trying an infraction is the same as for a misdemeanor, but conviction of an infraction” and substituted “found responsible for a violation of this section” for “convicted of an infraction” in the last sentence.

OHIO:

§ 4511.51 Prohibited solicitations by pedestrians; riding on outside of vehicle or in open cargo storage area or on tailgate. (A) No person while on a roadway outside a safety zone shall solicit a ride from the driver of any vehicle. (B)(1) Except as provided in division (B)(2) of this section, no person shall stand on a highway for the purpose of soliciting employment, business, or contributions from the occupant of any vehicle. (2) The legislative authority of a municipal corporation, by ordinance, may authorize the

issuance of a permit to a charitable organization to allow a person acting on behalf of the organization to solicit charitable contributions from the occupant of a vehicle by standing on a highway, other than a freeway as provided in division (A) of section 4511.051 [4511.05.1] of the Revised Code, that is under the jurisdiction of the municipal corporation. The permit shall be valid for only one period of time, which shall be specified in the permit, in any calendar year. The legislative authority also may specify the locations where contributions may be solicited and may impose any other restrictions on or requirements regarding the manner in which the solicitations are to be conducted that the legislative authority considers advisable. (3) As used in division (B)(2) of this section, "charitable organization" means an organization that has received from the internal revenue service a currently valid ruling or determination letter recognizing the tax-exempt status of the organization pursuant to section 501(c)(3) of the "Internal Revenue Code." (C) No person shall hang onto or ride on the outside of any motor vehicle, streetcar, or trackless trolley while it is moving upon a roadway, except mechanics or test engineers making repairs or adjustments, or workers performing specialized highway or street maintenance or construction under authority of a public agency. (D) No operator shall knowingly permit any person to hang onto, or ride on the outside of, any motor vehicle, streetcar, or trackless trolley while it is moving upon a roadway, except mechanics or test engineers making repairs or adjustments, or workers performing specialized highway or street maintenance or construction under authority of public agency. (E) No driver of a truck, trailer, or semi trailer shall knowingly permit any person who has not attained the age of sixteen years to ride in the unenclosed or unroofed cargo storage area of his vehicle if the vehicle is traveling faster than twenty-five miles per hour, unless either of the following applies: (1) The cargo storage area of the vehicle is equipped with a properly secured seat to which is attached a seat safety belt that is in compliance with federal standards for an occupant restraining device as defined in division (A)(2) of section 4513.263 [4513.26.3] of the Revised Code, the seat and seat safety belt were installed at the time the vehicle was originally assembled, and the person riding in the cargo storage area is in the seat and is wearing the seat safety belt; (2) An emergency exists that threatens the life of the driver or the person being transported in the cargo storage area of the truck, trailer, or semi trailer. (F) No driver of a truck, trailer, or semi trailer shall permit any person, except for those workers performing specialized highway or street maintenance or construction under authority of a public agency, to ride in the cargo storage area or on a tailgate of his vehicle while the tailgate is unlatched.

HISTORY: GC § 6307-49; 119 v 776, § 49; 121 v 684; Bureau of Code Revision, 10-1-53; 135 v H 995 (Eff 1-1-75); 143 v H 8 (Eff 9-13-89); 145 v H 331. Eff 7-2-93.

PENNSYLVANIA:

75 Pa.C.S.A. 3719. Passengers in open trucks.

(a) General rule. --An open-bed pickup truck or open flatbed truck may not be driven at a speed of more than 35 miles per hour if any person is occupying the bed of the truck. (b) Children.- Such a truck may not be driven at any speed if a child less than 18 years of age is occupying the bed of the truck or trailer. This subsection shall not apply to: (i) a child of a farmer who is being transported between parts of a farm or farms owned or operated by the farmer in order to perform work on the farm or farms; (ii) a child possessing a valid hunting license who is being transported between a hunting

camp and a hunting site or between hunting sites during hunting season; (iii) a child who is a participant in an officially sanctioned parade, only during the course of the parade; or (iv) a child employed to perform farm labor who is being transported between parts of a farm or farms owned or operated by the child's employer or employers.

RHODE ISLAND:

§ 31-25-10 Fastening of load and covering. – (a) No person shall operate on any highway any vehicle with any load unless the load and any covering thereon is securely fastened so as to prevent the covering or load from becoming loose, detached, or in any manner a hazard to other users of the highway. (b) No motor truck trailer or semi-trailer which is used for the purpose of hauling logs, pulpwood, lumber, or other materials which by their very nature may shift or roll so as to be likely to fall from the vehicle, shall be operated or moved over any highway unless its load is securely fastened to the vehicle by chains, cables, or other approved devices as will effectively prevent the shifting or falling of the load or any part thereof from the vehicle. The ends of the chains, cables, or other devices and any tire chains shall be tied securely, whether the vehicle is loaded or unloaded, so that loose ends shall not endanger pedestrians or other vehicles encountered on the highway. (c) This section shall not be construed to include a truck transporting lumber, wood, or sawmill wastes, when transported in a box type body with solid sides, provided that the truck is not loaded higher than its side-boards. (d) A person who violates the provisions of this section shall be fined not more than one hundred dollars (\$100) for the first violation, and not less than one hundred dollars (\$100) nor more than five hundred dollars (\$500) for any subsequent violations. (e) No person shall operate a motor truck or other vehicle carrying or transporting any rubbish, refuse, or other debris on any highway without first securely fastening a covering thereon to prevent the contents from falling to the highway. No person shall operate on any highway any vehicle with any load unless the load and any covering thereon is securely fastened so as to prevent said covering or load from becoming loose, detached, or in any manner a hazard to other users of the highway. (f) No person shall operate an open motor truck or other similar vehicle while carrying or transporting any child under sixteen (16) years of age without securely fastening the child to prevent them from becoming loose or detached in any manner.

TENNESSEE:

55-8-189. Transporting child in truck bed. (a) A person commits an offense who, on the streets of any municipality, roads of any county, or the highways of this state, transports a child under six (6) years of age in the bed of a truck with a manufacturer's ton rating not exceeding three-quarter (3/4) ton and having a pickup body style. (b) (1) A person commits an offense who, on any interstate defense highway or state highway, transports a child between six (6) years of age and under twelve (12) years of age in the bed of a truck with a manufacturer's ton rating not exceeding three-quarter (3/4) ton and having a pickup body style. (2) A city or county may prohibit, by ordinance or resolution, a person from transporting a child between six (6) years of age and under twelve (12) years of age in the bed of a truck with a manufacturer's ton rating not exceeding three-quarter (3/4) ton and having a pickup body

style on city or county roads or highways. (c) The provisions of this section do not apply to a person transporting such child in the bed of such vehicle when such vehicle is being used as part of an organized parade, procession, or other ceremonial event, and when such vehicle is not exceeding the speed of twenty miles per hour 20mph). (d) The provisions of this section do not apply when the child being transported is involved in agricultural activities. (e) A violation of (a) or (b)(1) is a Class C misdemeanor. [Acts 1996, ch. 635, § 1; 1999, ch. 325, § 1.]

TEXAS:

Sec. 545.414. Riding in Open Beds; Offense. (a) A person commits an offense if the person operates an open-bed pickup truck or an open flatbed truck or draws an open flatbed trailer at a speed of more than 35 miles per hour when a child younger than 12 years of age is occupying the bed of the truck or trailer. (b) An offense under this section is a misdemeanor punishable by a fine of not less than \$25 or more than \$200. (c) It is a defense to prosecution under this section that the person was operating or towing the vehicle in an emergency. Acts 1995, 74th Leg., ch. 165, Sec. 1, eff. Sept. 1, 1995. Sec. 545.415. Backing a Vehicle. (a) An operator may not back the vehicle unless the movement can be made safely and without interference with other traffic. (b) An operator may not back the vehicle on a shoulder or roadway of a limited-access or controlled-access highway. Acts 1995, 74th Leg., ch. 165, Sec. 1, eff. Sept. 1, 1995.

UTAH:

41-6-108. Prohibition as to passenger riding on improper portion of motor vehicle -- Exceptions. No person shall ride, and no person driving a motor vehicle shall knowingly permit any person to ride, upon any portion of any vehicle not designed or intended for the use of passengers. This provision shall not apply to any vehicle driven elsewhere than upon a highway or to an employee engaged in the necessary discharge of his duty or to persons riding within or upon any motor vehicle in space intended for any load on said vehicle.

No Change Since 1953

VIRGINIA:

CHAPTER 736 An Act to amend and reenact § 46.2-1095 of the Code of Virginia and to amend the Code of Virginia by adding in Article 20 of Chapter 10 of Title 46.2 a section numbered 46.2-1156.1, relating to limitations and conditions applicable to transportation of children in various vehicles; penalty. [S 751] Approved April 8, 2000 Be it enacted by the General Assembly of Virginia: 1. That § 46.2-1095 of the Code of Virginia is amended and reenacted and that the Code of Virginia is amended by adding in Article 20 of Chapter 10 of Title 46.2 a section numbered 46.2-1156.1 as follows: § 46.2-1095. Child restraint devices required; safety belts for children four to sixteen required; penalty. A. Any person who drives on the highways of Virginia any motor vehicle manufactured after January 1, 1968, shall ensure that any child under the age of four whom he transports therein is provided with and

properly secured in a child restraint device of a type which meets the standards adopted by the United States Department of Transportation.

B. Any person transporting any child at least four years of age, but less than sixteen years of age, shall ensure that such child is provided with and properly secured by an appropriate safety belt system when driving on the highways of Virginia in any motor vehicle manufactured after January 1, 1968, equipped or required by the provisions of this title to be equipped with a safety belt system, consisting of lap belts, shoulder harnesses, combinations thereof or similar devices.

C. A violation of this section shall not constitute negligence, be considered in mitigation of damages of whatever nature, be admissible in evidence or be the subject of comment by counsel in any action for the recovery of damages in a civil action.

D. Any person who violates subsection B of this section shall be subject to a civil penalty of twenty-five dollars to be paid into the state treasury and credited to the Child Restraint Device Special Fund pursuant to § 46.2-1097. No assignment of demerit points shall be made under Article 19 (§ 46.2-489 et seq.) of Chapter 3 of this title and no court costs shall be assessed for violations of this section. E. A violation of this section may be charged on the uniform traffic summons form. F. Nothing in this section shall apply to taxicabs, school buses, executive sedans, limousines, or the rear cargo area of vehicles other than pickup trucks or other vehicles.

§ 46.2-1156.1. Transportation of persons less than sixteen years old in pickup truck beds prohibited; exception. No person under sixteen years of age shall be transported in the rear cargo area of any pickup truck on the highways of Virginia. The provisions of this section shall not apply to transportation of persons in the bed of any pickup truck being operated (i) as part of an organized parade authorized by the Department of Transportation or the locality in which the parade is being conducted or (ii) on or across a highway from one field or parcel of land to another field or parcel of land in connection with farming operations.

WISCONSIN:

346.92 *Illegal riding.* (1) No person shall drive a vehicle when any person other than an employee engaged in the necessary discharge of the employee's duty is upon any portion thereof not designed or intended for the use of passengers. (2) No person other than an employee engaged in the necessary discharge of the employee's duty shall ride upon any portion of a vehicle not designed or intended for the use of passengers. (3) This section does not apply to persons riding within truck bodies in spaces intended for merchandise or to the operator of any such vehicle. History: 1991 a. 316. 346.922

Transporting children in cargo areas of motor trucks. (1) Notwithstanding s. 346.92, no person may operate upon a highway a motor truck having a gross weight of 10,000 pounds or less when any child under the age of 16 years is in an open cargo area of the motor truck. (2) Subsection (1) does not apply to any of the following: (a) A person operating a farm truck in conjunction with farm operations. (b) A person operating a motor truck in a parade sanctioned by a local municipality. (c) A person operating a motor truck for the purpose of transporting licensed deer hunters during the authorized deer hunting season with firearms. History: 1995 a. 420.

APPENDIX D

**TABLE OF RESTRICTIONS FOR RIDING
IN or ON CARGO BEDS OF PICKUP TRUCKS**

State	Law Title	Age Limits	Roadway Restrictions	Speed Restriction	Permissible with Seat Restraints	Penalty/Fine	Exceptions
California	Vehicle Code: 23116	ALL AGES	Specific to highways	none specified	YES	none stated	emergency situations; if cargo space is enclosed by a camper; employees necessary discharge of duty
Colorado	Revised Statutes Annotated: 42-4-201	ALL AGES	none specified	none specified	NO	Class A infraction; \$15 fine	persons may ride in the cargo bed if they are in a sitting position and area is "enclosed" (enclosed-meaning having 4 sides); riding in parades, caravans, or exhibitions (vehicles owned by the US government or state of CO are exempt)
Connecticut	General Statutes Annotated: 14-272a	Under 16	none specified	none specified	YES	Violation constitutes an infraction	(applies to pickup trucks with open beds) farming vehicles; parades; and recreational hayrides between August and December
D.C.	18 District of Columbia Municipal Regulations 2213.6	ALL AGES	none specified	none specified	NO	none stated	employees on duty; persons riding within truck bodies in a space intended for materials
Florida	Florida Statutes Annotated: 316.2015	ALL AGES	Applies to state, county or municipality maintained highways and streets	none specified	YES	\$60 fine and violation assessed to driver and \$30 fine to passenger	employees engaged in a professional exhibition or persons riding in areas intended for merchandise; persons participating in an exhibition or parade. Bed of pu o.k. -bumper, radiator, fender, hood, top, trunk, or running board of such vehicle not ok.
Georgia	Official Code of Georgia Annotated: 40-8-79	Under 18	Specific to highways	none specified	NO	Violation constitutes a misdemeanor	none
Hawaii	Revised Statutes Annotated: 29 1-14	ALL AGES	none specified	none specified	NO	\$25 for transporting persons over the age of 12 and \$50 for transporting children 12 and under	(applies to pickup trucks with open beds) passengers can only ride IF: there is no seating available in the cab of the vehicle, side racks of the vehicle are securely attached and the tailboard or tailgate is securely closed; all passengers must be seated
Kansas	Kansas Statute Annotated: 8-1416	Under 14	Specific to highways and city streets	none specified	NO	none stated	excludes persons 14 and older or anyone participating in a parade or for use of transporting employees to and from work
Kentucky	Kentucky Revised Statutes Annotated: 189.125	ALL AGES	none specified	none specified	YES	none stated	does not apply to persons with medical reasons prohibiting them from wearing a seat belt or to letter carriers of the US.

Louisiana	Louisiana Statutes Annotated: 32:284c	Under 12	Specific to highways	none specified	No	none stated	(applies to pickup trucks with open beds) pickup trucks traveling less than 15 mph while participating in an authorized parade or in the event of an emergency situation if the child is accompanied within the truck bed by an adult
Maryland	Annotated Code of Maryland: 21-1121 & 22-412.3	ALL AGES	none specified	may not exceed 25 mph	YES	none stated	transporting an employee to or from work, vehicle traveling less than 25 mph, farming operations. However, this does not eliminate the applicability of child safety seat and seat belt requirements
	Annotated Code of Maryland: 21-1121	Under 16	Specific to highways	none specified	No	none stated	applies to unenclosed pickup trucks only
Massachusetts	Chapter 90, Section 13A and 7AA	ALL AGES	none specified	none specified	YES	passengers over 16 are fined \$25 and operators of vehicle are charged an additional \$25 for each person under 16 years of age	pertains to persons 12 and over - persons 11 and younger are permitted provided the vehicle is being driven less than 5 mi and at less than 5 mph. participation in parades and farming activities is permitted
Missouri	VAMS 304.665	Under 18	State or Federal Highway system or within city limits	none specified	YES	Class C misdemeanor	employee engaged in the necessary discharge of duties, agricultural activities, parade, Applies to unenclosed pickup trucks. Exceptions include: caravan or exhibition. If there is a mechanism which is meant to prevent a person from being thrown or falling
Nevada	NRSA: 484.473	ALL AGES	none specified	none specified	NO	none stated	employee engaged in the necessary discharge of duty, or persons riding in space intended for merchandise
New Hampshire	Revised Statutes Annotated: 265:106 & 265:107 & 265:107-a	ALL AGES	none specified	none specified	No	none stated	people enrolled in recreational or religious activities, work related activities; exception applies only to vehicles used to carry passengers for fees; exceptions do not apply to children under age of 12
New Jersey	New Jersey Statutes Annotated: 39:4-69	ALL AGES	Specific to highways and streets	none specified	No	none stated	employees engaged in the necessary discharge of a duty
New Mexico	New Mexico Statutes: 66-7-369	Under 11	none specified	none specified	YES	none stated	unless all seating positions are occupied
New York	Vehicle and Traffic Law: 1222	Under 17	none specified	none specified	YES	none stated	applies to trips of 5 miles or less, trips of a distance greater than 5 miles do not apply if one-third or less of the passengers are

							standing, or if seats are attached and there are side rails and a tailgate. Further restrictions apply *see statute *.
North Carolina	General Statutes: 20-135.2B	Under 12	none specified	none specified	NO	\$25 fine and charged with an infraction	(law applies to open bed or open cargo area pickup trucks) -unless there is a supervising adult; in the case of an emergency, the child is in a parade, the vehicle is being used for agricultural purposes, or if the vehicle is operated in a county with a population in excess of 3500.
Ohio	Ohio Revised Statutes: 4511.51	Under 16	none specified	may not exceed 25 mph	Yes	none stated	(law applies to unenclosed pickup trucks) vehicles equipped with a properly secured seat and seat safety belt and is being used, during an emergency situation; maintenance or construction personnel under authority of a public agency
Pennsylvania	75 Pa. C.S.A. 3719	Under 18	none specified	not permitted	NO	none stated	(law applies to open bed or open cargo area pickup trucks) -does not apply to a child of a farmer being transported between parts of a farm or farms, child possessing a valid hunting license who is being transported between hunting camps, parades
Rhode Island	31.25.10(f)	Under 16	none specified	none specified	YES	none stated	children under 16 must be secured fastened so as to prevent them from becoming loose or detached in any manner.
Tennessee	Tennessee Code Annotated: 55-8-189	Under 6	streets of any municipality, roads of any county, or highways of the state	none specified	NO	Class C misdemeanor	when participating in a parade, travelling less than 20 mph, or when transporting for agricultural reasons
	Tennessee Code Annotated: 55-8-189	Under 12	interstate defense highway or state highway				a city or county may prohibit a person from transporting a child between 6 and 12 years of age. These provisions do not apply in the event of a parade, procession, or other ceremonial event provided the vehicle is not traveling over 20 mph. Does not apply
Texas	Texas Transportation Code: 545.414	Under 12	none specified	may not exceed 35 mph	NO	misdemeanor with a \$25 - \$200 fine	(applies to open-bed pickup trucks and open bed flatbed trailers) In the case of an emergency
Utah	Utah Code Annotated: 41-6-108	ALL AGES	Highways	none specified	NO	none stated	During the discharge of a duty, or if person is riding within or upon an area intended for any load on the vehicle
Wisconsin	Wisconsin Statutes Annotated: 346.92 & 346.922	Under 16	Highways	none specified	NO	none stated	(applies to open-bed pickup trucks only). Does not apply to person operating a farm truck in conjunction with farm operations. Does not apply.

346.922

operations. Does not apply during parades or for the purpose of transporting licensed deer hunters during the authorized deer hunting season