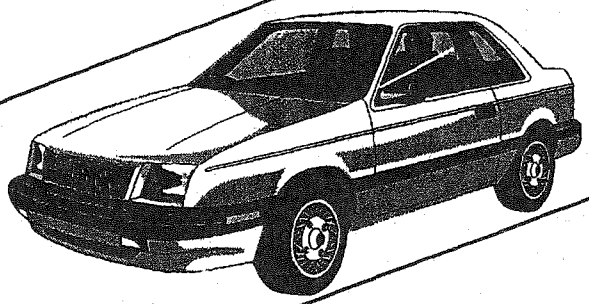
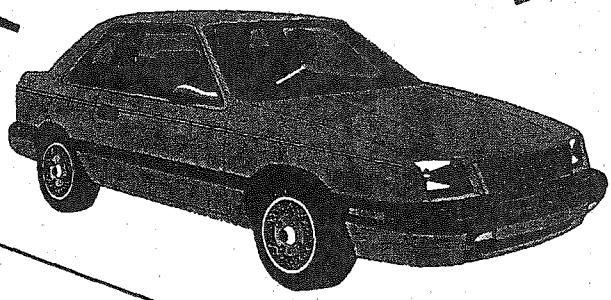
# Safety belt use in Maine, 1995





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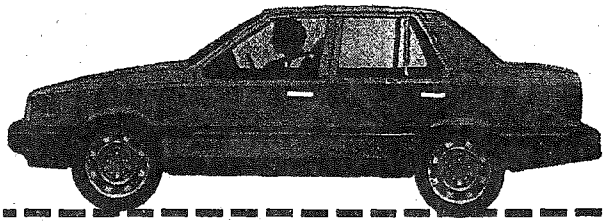

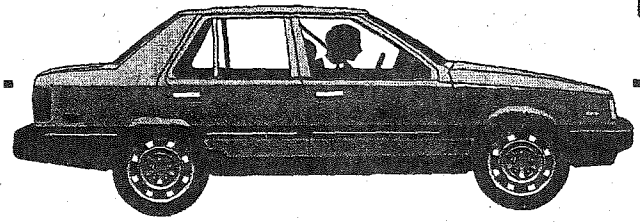



for the
Bureau of Highway Safety
Department of Public Safety
State of Maine

June, 1996

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*June, 1996*

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*June, 1996*

## ACKNOWLEDGMENTS

We express our appreciation to the many persons who assisted us with this project. Richard Perkins, Michael Martin, and Rick Tarr provided direction and support on behalf of the Maine Bureau of Highway Safety. Robert Baker of the Maine Department of Transportation provided the traffic data used in drawing the sample of observation locations. Sharon Smith provided child restraint device use training to the observers.

At the Edmund S. Muskie Institute for Public Affairs at the University of Southern Maine, we are especially appreciative of the efforts of the members of the professional interviewing staff of the Survey Research Center who conducted the field observations: supervisors Margaret Irish, Lisa Pardus, and Pete Weigel; and observers Gary Canter, Jill Cournoyer, Evelyn Emmons, Debra Keenan, and Tammy Richards. At the Margaret Chase Smith Center at the University of Maine, we thank Tammie Breen, who designed and produced the report cover and tables; and Charles Morris and Karla Bosse, who reviewed and edited the final draft.

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# Safety Belt Use in Maine, 1995
# EXECUTIVE SUMMARY

Three out of every five persons who die in vehicle crashes would have survived if they had been wearing their safety belts. Average hospitalization costs are nearly $5,000 less for persons injured in crashes and hospitalized, if they were wearing their safety belts at the time of the crash. Nationally, about sixty-seven percent of motorists use their safety belts.[1]

In the absence of a mandatory use law for adults until early 1996, the rate at which motorists in Maine have worn their safety belts has been about half the national rate.[2] In November 1995, Maine voters narrowly approved a referendum question establishing a secondary enforcement law requiring all persons to wear safety belts, or, in the case of children and infants, be appropriately placed in child restraint devices (CRDs). The study reported here is an observation study of safety belts and child restraint device use conducted in late summer *before the referendum vote took place.* It provides a pre-mandatory-use baseline to help the Bureau of Highway Safety measure the effect of changes in the law, and also serves as one measure of the extent to which use rates had changed in the immediately prior years without a mandatory use law, but with intensive efforts directed toward public information and education.

The research project was conducted jointly by the Survey Research Center of the Edmund S. Muskie Institute of Public Affairs at the University of Southern Maine and the Margaret Chase Smith Center for Public Policy at the University of Maine, under a contract with the Bureau of Highway Safety, Department of Public Safety of the State of Maine. The field observation and data processing were conducted by the Muskie Institute, while the Smith Center provided research design, sampling and analysis expertise, and prepared this report.

***Four-leg intersections as primary observation sites.*** Observations were recorded from two vantage points at each of forty full-signalled intersections,

which were selected using a standard unbiased sampling procedure, supplemented by an additional sample of twenty rural intersections with stop signs, but without full sets of lights. The sampling design was developed consistent with National Highway Traffic Safety Administration (NHTSA) guidelines supplied by the Maine Bureau of Highway Safety. In all, observations of 10,710 passenger vehicles and the restraint use or nonuse of 16,975 occupants were recorded.

## INTERSECTION OBSERVATION STUDY FINDINGS

*Overview: Compliance with the law.* The data gathered in the intersection observation study indicate substantial, but by no means universal, compliance with the law requiring child restraint devices for children aged three and under. The law requiring safety belts for children aged four through eighteen (as the law required at the time of the observations) is less frequently observed, with only 61% of the children observed to be properly restrained. Even fewer adults, for whom there was at the time of observation no mandatory use safety belt law, wear safety belts.

### Adults aged 19 and over

Persons aged nineteen and over at the time of the study were not required by Maine law to wear safety belts. (The law now applies to all adults.) However, almost half (47%) of persons aged 19 and over wore a safety belt in 1995, an increase from 33% in 1991. Adult men are less likely to wear safety belts than adult women.

### Children and youth

*Children aged 15 through 18.* Although vehicle occupants were required to use appropriate safety restraint until their 19th birthday under Maine law at the time the 1995 observations were conducted, those in their

mid to late teens have the next to the lowest safety belt use rate of any age group.

Children aged 15 through 18 would have been in late elementary school, junior high school, and high school when the law was extended in 1991 to require safety belt use through the age of nineteen. Their 1995 use rate at 48% is almost identical to that of persons aged 19 and over, and it is higher than the 29% use rate for their approximate age cohort of children who would have been 11 through 15-year-olds four years earlier in 1991, suggesting that more children may be using belts as they grow older. However, these point-in-time data cannot show conclusively whether that is the case.

In the fifteen through eighteen age group, females are more likely to use their safety belts than males, especially when they are driving: 54% of the female drivers use their safety belts, but only 42% of the males. As passengers, females' use rate in this age group is 57%, while that of the males is 44%.

*Children aged 11 through 14.* The percentage of eleven through fourteen year old children wearing safety belts -- 65% -- is more than twice what it was in 1991, when only 29% were properly restrained. More children in this age group are seated in the right front (passenger) seat than any other position, and are therefore quite vulnerable to injury in a crash.

The 11 through 14 age group is important because it is they who will be driving in a few years, and who may be in a position to influence the use of safety belts by persons who are passengers in their vehicles. This group has been and should continue to be a target for safety belt education efforts in the junior high and middle schools, and high schools. The increase in safety belt use in this age group from 29% in 1991 to 65% in 1995 is even greater than might have been expected from an extrapolation of the 1991 use rates for the younger four through ten year old cohort, suggesting that some preteens and early teenagers who had not used safety restraints as younger children are using them now.

*Children aged 4 through 10.* Compliance with the "buckle up" requirement is higher among children estimated to be aged four through ten than among those aged eleven through fourteen. Almost three-quarters (72%) of the four through ten year-olds wear their safety belts.

Safety belt use rates among elementary school aged children have increased dramatically since 1991, from about five in ten children to about seven in ten. However, the use rate for these children has declined from the 81% rate at which their age cohort was installed in child restraint devices as infants through three year olds in 1991. While safely restrained as very young children, apparently some of these elementary school aged children have been allowed to lapse into unsafe practices just as they are reaching the age at which they are able to buckle themselves in on their own initiative.

*Toddlers aged one through three.* The law now requires children aged one through three years to be properly installed in a CRD, whether or not they are travelling with their parents or legal guardians. (The law in 1991 allowed an exception for children travelling with persons who were not their parents or legal guardians and a CRD was not available, in which case they were to be properly secured by a seat belt, if one were available.)

As with the entire "under four" age group, a high proportion (84%) of children aged one through three are properly restrained in CRDs, an increase from 78% in 1991.

None of the observed children in this age group are totally without restraint except for a very small number held in the lap of another person, and about twenty-five children incorrectly installed in CRDs.

*Infants in their first year of age.* Almost all (92%) of these infants were found to be in CRDs, but 19% of those in CRDs were not correctly placed. Most frequently the incorrect placement meant that the devices were not facing backward, which is the safest position for infants.

### Passengers' use of safety belts related to use by driver

As in the 1991 study, buckling up is a friend-and-family affair. When drivers wear their safety belts, the other occupants of the vehicle (who are most likely family and friends of the driver) are three to four times more likely to be appropriately restrained than they are when the driver is not wearing a seat belt. In addition, the presence of a passenger in the middle front position in the front seat, which is often not a true seating position or a particularly safe one, is associated with nonbelted drivers.

### Comparison with other geographic areas

While safety belt use in Maine has increased since 1991, it still ranks among the states with the lowest rates.[3] As of December 1994, Maine's use rate was 36%, third lowest from the bottom of a list of states, the District of Columbia, and Puerto Rico. Maine's rate surpassed only those of Rhode Island (32%) and North Dakota (32%). Even if the most recently obtained rate of 50% use (including adults and children in CRDs) were matched against the rank- ordered states, and assuming no change in the other states' rates, Maine would rank no higher than 7th or 8th from the bottom of the list.

### Driver Restraint Use by Site and Vehicle Characteristics

***In-state and out-of-state vehicle registration.*** Drivers of Maine-registered vehicles have lower safety belt use rates than any out-of-staters. The driver safety belt use rate for Maine passenger vehicles is 43%, compared to a high of 87% for drivers of vehicles with Canadian registration (where each province has its own belt use law); 64% for drivers of other (non-Maine) New England vehicles; 78% for vehicles registered in New York, New Jersey, and Pennsylvania; and 64% for other states in the United States.

***Size and type of vehicle.*** It is likely that selection of a vehicle and the propensity to buckle up or not are both related to age, lifestyle, and personality characteristics. The drivers with the highest rates of safety belt use are those who are driving station wagons: 59% of them are buckled up.

Drivers of economy cars are next, with 55% wearing seat belts. Drivers of intermediate-sized cars, of vans, and of jeep-type sport utility vehicles all exhibited the same safety belt use rate: fifty percent.

Drivers of sports and GT-type cars wear safety belts less often: 37% of them are buckled up. Least likely to wear safety belts are the drivers of pickup trucks: only 23% of these drivers comply with safety recommendations. The driver belt use rates in these two categories of vehicles have increased only slightly since 1991, when 31% of GT/sport car drivers and 21% of pick-up truck drivers wore safety belts.

*Helmet use by motorcycle riders*. Although helmet use was not a specific focus of this study, the opportunity was taken to observe the use or non-use of helmets by persons operating and riding on the 124 motorcycles that stopped before the observers. Helmets are used by motorcycle operators at about the same rate at which adults wear safety belts: 45% of the motorcycle operators are helmeted, as are 44% of their passengers statewide.

## Summary

Safety restraint use rates in Maine for all ages increased from 36% in 1991 to 50% in 1995. Part of that increase may be accounted for by a 1992 change in the law requiring safety belts for youth up to their 19th birthday.

It is among adults that safety belt use has increased markedly from 33% among those aged 16 and over in 1991 to 47% among those 19 and over in 1995. It is important to note that these results were obtained in the summer of 1995 before the November referendum in which the voters narrowly approved a mandatory safety restraint use law for Maine. The referendum had not attracted much attention at the time the observations were conducted, so it is unlikely that it had much effect on behavior.

Infants and young children are much more likely to be installed in restraint devices or to wear safety belts than are older children. As high a

proportion as 92% of infants are in child restraint devices (although some are improperly installed), and about seven in ten elementary school-age children are wearing safety belts. From that age, however, usage declines, such that slightly fewer than half of teenagers wear safety belts. Their usage rates are very similar to those of adults of all ages.

Before the implementation of the mandatory use law, Maine ranked among the lowest 10% of states in terms of compliance with safe practice. While this ranking of states depends as much on the activities of the other states as upon what is done in Maine, it is clear even from the observations in Maine that out-of-staters use their safety belts far more often than people from Maine. The effect of the change in the law, of course, remains to be seen.

Orono, Maine
June 27, 1996

# INTRODUCTION

Three out of every five persons who die in vehicle crashes would have survived if they had been wearing their safety belts. Average hospitalization costs are nearly $5,000 less for persons injured in crashes and hospitalized, if they were wearing their safety belts at the time of the crash. Nationally, about sixty-seven percent of motorists use their safety belts.[4]

In the absence of a mandatory use law for adults until early 1996, the rate at which motorists in Maine have worn their safety belts has been about half the national rate.[5] In November 1995, Maine voters narrowly approved a referendum question establishing a secondary enforcement law requiring all persons to wear safety belts, or, in the case of children and infants, be appropriately placed in child restraint devices (CRDs). The study reported here is an observation study of safety belts and child restraint device use conducted in late summer before the referendum vote took place. It provides a pre-mandatory-use baseline to help the Bureau of Highway Safety measure the effect of changes in the law, and also serves as one measure of the extent to which use rates had changed in the immediately prior years without a mandatory use law, but with intensive efforts directed toward public information and education.

The research project was conducted jointly by the Survey Research Center of the Edmund S. Muskie Institute of Public Affairs at the University of Southern Maine and the Margaret Chase Smith Center for Public Policy at the University of Maine, under a contract with the Bureau of Highway Safety, Department of Public Safety of the State of Maine. The field observation and

data processing were conducted by the Muskie Institute, while the Smith Center provided research design, sampling and analysis expertise, and prepared this report.

The study was designed to determine the rate of safety restraint use in Maine as part of the development of an annual statewide comprehensive highway safety plan as required by the National Highway Traffic Safety Administration (NHTSA) and the Federal Highway Administration (FHWA) pursuant to the Federal Highway Safety Act of 1966.

# METHODOLOGY

*Selection of four-leg intersections as primary observation sites.*

Observation sites must afford opportunity for a reasonably representative flow of multi-purpose traffic, while allowing observers a safe viewing position as well as a clear vantage point in front of which vehicles pass slowly enough to permit careful observation and recording of a number of characteristics of the vehicles and all their occupants. For these reasons, full-signalled four-leg intersections, at which there is a red, yellow, and green traffic light at a crossroads where traffic comes to a full stop, were selected as the primary observation sites. In addition, a smaller number of rural non-signalized sites were designated to assure inclusion of non-congested travel.

At the full-signalled four-leg traffic sites, travel is likely to represent varied origins and destinations; is relatively heavier (which probably originally prompted the installation of the full set of signal lights); and the flow of traffic periodically comes to a full stop, allowing a clear view of occupants and time to record observations of multiple vehicles. Full-signalled intersections are also likely to have sidewalks, traffic islands, or other safe and raised surfaces from which observers may look down into vehicles.

At each of the forty primary observation sites selected, two observation points were established, so that two observers could record data about traffic flowing to the stop signal from two different directions (that is, so that they would not be observing the same vehicles).

Observers were instructed to start their observations with the second vehicle in line at the signal light, on the assumption that stopping for or running red lights is behavior that may be related to restraint use because it

involves reluctance or willingness to take risks. Observers were to record data concerning as many passenger (non-commercial) vehicles as possible during the time the traffic was stopped for the light.

***Supplementary selection of rural intersections.*** In addition to the forty sites described above, observations were made from a selection of rural four-leg non-signalized intersections to assure inclusion of travel with more rural origins and destinations, and to assure appropriate representation of vehicles in counties with few full-signalled intersections. One thousand sixty vehicles and their occupants were observed at twenty rural non-signalized intersections.

***Sampling.*** The sampling design was developed consistent with National Highway Traffic Safety Administration (NHTSA) guidelines supplied by the Maine Bureau of Highway Safety.

Maine's sixteen counties were divided into two strata, urban and rural, such that the urban stratum was comprised of the five counties with the greatest population and the greatest density of traffic flow as measured by the number of vehicles entering four-way signalized intersections. Cumberland, York, Kennebec, Androscoggin, and Penobscot Counties comprised the urban stratum, which contains 63% of Maine's population and 88% of the traffic volume in four-way signalized intersections. The remaining eleven counties were designated as rural.

Twenty four-way full-stop signalized intersections were then selected from each stratum with probability proportional to the traffic volume measured in thousands of vehicles entering each intersection, according to Maine Department of Transportation (DOT) data.

In the rural stratum, Franklin, Piscataquis, Lincoln, and Waldo Counties had only one eligible intersection each: these intersections were automatically included. Washington County had only two intersections with

full signals; one of these was selected with probability of selection proportional to the number of entering vehicles. The remaining rural stratum four-way signalized intersections were selected with probability proportional to the number of entering vehicles from the DOT list of such intersections in the remaining rural stratum counties.

To ensure representation of travel with rural origin or destination, twenty additional intersections were selected from a DOT listing of four-leg rural intersections with varying but known and representative volumes of traffic and with some means of traffic control other than a full-signalled traffic light; most commonly, a stop sign. From each county one such non-signalized intersection was selected, with equal probability of selection to provide appropriate likelihood of selection of low-volume intersections. The four counties with only two intersections selected (the sole signalized intersection and one non-signalized intersection) were then allocated one additional non-signalized intersection site each.

Observations were conducted from two vantage points at each of the forty signalized intersections, and from one point at the twenty non-signalized intersections, for a total of one hundred observation points. In all, observations of 10,710 passenger vehicles and the restraint use or nonuse of 16,975 occupants were recorded. A list of the towns and cities in which observations were made appears as Table 23.

*Weighting*. Consistent with NHTSA guidelines, the data were weighted to reflect the stratified sampling design and the average daily traffic volume measured in thousands of entering vehicles at the selected intersections. Data weighted by both design elements are used in the presentation of statewide study findings.

One effect of the weighting is to produce results reported in fractions of observations. The weights are decimal rather than integer weights, and the fractional observations are the result of multiplying a simple observation count by the decimal weight. In the tables in this report, the decimal frequencies have all been rounded, as have the percentages reflecting the weighted data. The unavoidable effects of proportionately weighted data are that results for subsets of data may not always sum precisely to totals presented elsewhere, and rounded percentages do not always sum exactly to one hundred percent nor always translate directly into whole numbers of observations.

***Observation times and days.*** Given the selection of forty intersections with two vantage points and twenty intersections with one, observations were made at one hundred locations throughout the state for ninety minutes each, on a structured schedule of observation times and days that would maximize the opportunity to study variations in restraint use by time and by day of week. Observations were recorded for a total of 150 hours.

The observation assignments were allocated across a schedule of time slots that began at 7:00 a.m. and ended at 7:00 p.m. on each of the seven days of the week. Observations were conducted from August 6 through August 31, 1995.

***Observer training.*** Observers were trained using a study-specific training manual written for this project by the Margaret Chase Smith Center and the Edmund S. Muskie Institute's Survey Research Center, based upon a manual developed by the National Highway Traffic Safety Administration,[6] upon materials from the Transportation Research Institute at the University of Michigan,[7] and the manual produced by the Muskie Institute for the 1991 observation study. The observers were trained to recognize vehicle types and sizes as well as driver and passenger gender, age group and restraint type. The

training involved not only use of the written materials and oral presentation, but also demonstrations, slides, and field practice.

# INTERSECTION OBSERVATION STUDY FINDINGS

## Restraint Use by Age and Gender

*Contents of this section*. This section of the report contains descriptions of the restraint use behavior of male and female adults and children of several age groups, as well as the variations in use of safety restraints by persons in various seating positions in the vehicles.

Where possible and appropriate, comparisons are made to the restraint use rates of similar demographic groups in the 1991 and 1986 studies. Those comparisons can address questions about changes in use rates that may have been prompted by changes in the law, by educational efforts targeted to specific age groups, or by the risk-taking behaviors characteristic of particular age groups.

*Comparing age group-specific use rates with results of prior studies*. These data may be used to suggest whether the safety restraint use behaviors of children endure as the children age. With data from two successive observation studies conducted in 1991 and in 1995, we can roughly compare the use rates of children in 1995 with the use rates for the age group to which they belonged in 1991. For example, use rates of children in the four to ten year old age group in 1995 may be compared to the use rates for children aged four years younger -- birth to three -- in 1991. Because observers recorded only the estimated age *group* of vehicle occupants, not a specific year of age, these comparisons are of course not exact. However, they can begin to help

understanding of the relationship of early childhood behavior and later behavior.

There are at least two logical explanations for differences in behavior exhibited by different age groups at one point in time. One is that there are differences in "generations." For example, today's junior high school students may be different from those of several years ago. The second is that behavior may change throughout one's life cycle; for example, a teenager may not think or behave in the same way as she did in late elementary school. These data cannot indicate which of these explanations is "correct" in describing age group differences. However, because they are collected at two points in time, the data can suggest whether members of an age group use safety restraints at a higher rate than would have been expected if only generational change were operating; that is, if they have simply carried with them the behavior learned at the earlier age. In addition, knowing that use rates may decline at certain ages may help educators plan messages and curricula to reinforce earlier behavior or anticipate later behavior.

*Overview: Compliance with the law.* The data gathered in the intersection observation study indicate substantial, but by no means universal, compliance with the law requiring child restraint devices for children aged three and under. The law requiring safety belts for children aged four through eighteen (as the law required at the time of the observations) is less frequently observed, with only 61% of the children observed to be properly restrained. Even fewer adults, for whom there was at the time of observation no mandatory use safety belt law, wear safety belts. Figure 1 presents a summary of rates of appropriate use.

## Figure 1
## 1995 Maine Seatbelt Use Observation Study
Summary, restraint use and non-use
Number of observations and percent of use and non-use, by age group

**Number of observations**

Presence/absence of restraint; restraint type

| Age (Est.) | Lap/ shoulder belt | CRD: correct | CRD: incorrect | In lap of another | No restraint | Total |
|---|---|---|---|---|---|---|
| <1 | 0 | *71* | 17 | 5 | 3 | 96 |
| 1-3 | 13 | *367* | 25 | 5 | 25 | 435 |
| 4-10 | *675* | *14* | 2 | 1 | 247 | 938 |
| 11-14 | *371* | 0 | 0 | 1 | 199 | 571 |
| 15-18 | *513* | 0 | 0 | 3 | 555 | 1,071 |
| 19+ | *6,518* | 0 | 0 | 0 | 7,348 | 13,866 |
| TOTAL | *8,089* | *452* | 44 | 15 | 8,377 | 16,977 |

**Percentages**

Presence/absence of restraint; restraint type

| Age (Est.) | Lap/ shoulder belt | CRD: correct | CRD: incorrect | In lap of another | No restraint | Total (by age group) | Total correct use |
|---|---|---|---|---|---|---|---|
| <1 | 0% | *74%* | 18% | 5% | 3% | 100% | *74%* |
| 1-3 | 3% | *84%* | 6% | 1% | 6% | 100% | *84%* |
| 4-10 | *72%* | *1%* | *% | *% | 26% | 100% | *73%* |
| 11-14 | *65%* | 0% | 0% | *% | 35% | 100% | *65%* |
| 15-18 | *48%* | 0% | 0% | *% | 52% | 100% | *48%* |
| 19+ | *47%* | 0% | 0% | 0% | 53% | 100% | *47%* |
| TOTAL | *48%* | 3% | *% | *% | 49% | 100% | *50%* |

Numbers in italics represent appropriate use.
*Less than 1% (but not zero).

## Adults aged 19 and over

Persons aged nineteen and over at the time of the study were not required by Maine law to wear safety belts. (The law now applies to all adults.) However, almost half (47%) of persons aged 19 and over wore a safety belt in 1995 (Table 17), an increase from 33% in 1991.

Drivers aged 19 and over are slightly less likely than other adult passengers to wear a belt (Table 2): 46% of drivers wear safety restraints, while 51% of right-front seat passengers do so; 46% of those in the seat immediately behind the driver wear belts; 46% of those in the middle back seat (which often either has no belt, or is not even a true seating position) wear them; 43% of those in the seat behind the front seat passenger do so; and at least one-third (38 to 67%) of those in additional rear seating, such as in vans, wear belts. All these safety belt use rates are markedly higher than the corresponding 1991 use rates.

Adult men are less likely to wear safety belts than are adult women (Tables 3 and 4). Four in ten male drivers (41%) wear safety belts, while slightly over half (53%) of female drivers wear them. Slightly more than one in three adult male right-front seat passengers wears a safety belt (35%). Over half the adult female passengers (56%) in that seating position wear one.

Forty-eight percent of females in the seat immediately behind the driver, 39% of the adult females in the seat behind the front seat passenger, and one-third of those in the back middle seat wear them.

## Children and youth

*Children aged 4 through 18.* Children aged four through eighteen at the time the observations were made (late summer 1995) were required by Maine law to wear safety belts.

In this study, the observers were asked to distinguish within this age group between children aged four through ten, preteens and teens aged eleven through fourteen, and older teenagers aged fifteen through eighteen. The observation results for children in these age groups are discussed below.

***Children aged 15 through 18.*** Although vehicle occupants were required to use appropriate safety restraint until their 19th birthday under Maine law at the time the 1995 observations were conducted, **those in their mid to late teens have the next to the lowest safety belt use rate of any age group.**

Children aged 15 through 18 would have been in late elementary school, junior high school, or high school when the law was extended in 1992 to require safety belt use through the age of nineteen. Their 1995 use rate at 48% (Table 17) is almost identical to that of persons aged 19 and over. In addition, it is higher than the 29% use rate for their approximate age cohort of children who would have been 11 through 15-year-olds four years earlier in 1991, suggesting that more children may be using belts as they grow older. However, these point-in-time data cannot show conclusively whether that is the case.

In the fifteen through eighteen age group, females are more likely to use their safety belts than males, especially when they are driving: 54% of the female drivers use their safety belts, but only 42% of the males do so (Tables 15 and 16). As right front seat passengers, females' use rate in this age group is 57%, while that of the males is 44%.

***Children aged 11 through 14.*** The percentage of eleven through fourteen year old children wearing safety belts -- 65% -- is more than twice what it was in 1991, when only 29% were properly restrained. (The comparable age group in the 1991 study was 11 through 15 years, not fourteen.)

More children in this age group are seated in the right front (passenger) seat than any other position, and are therefore quite vulnerable to injury in a crash (see Table 13). Sixty-five percent of the children in the 11 through 14 age group in the right front passenger seat are wearing seat belts. Seat belt use among this group is relatively uniform across seating positions, except for the middle front position, where safety belts are often not available, or are not convenient. Sixty-seven percent of the 11 through 14 year-olds in the seat immediately behind the driver are wearing belts; 53% of those in the middle back seat; and 69% of those in the seat behind the front passenger are wearing safety belts.

The 11 through 14 age group is important because it is they who will be driving in a few years, and who may be in a position to influence the use of safety belts by persons who are passengers in their vehicles. This group has been and should continue to be a target for safety belt education efforts in the junior high and middle schools, and high schools. The increase in safety belt use in this age group from 29% in 1991 to 65% in 1995 is even greater than might have been expected from an extrapolation of the 1991 use rates for the younger four through ten year old cohort, suggesting that some preteens and early teenagers who had not used safety restraints as younger children are using them now.

***Children aged 4 through 10.*** Compliance with the "buckle up" requirement is higher among children estimated to be aged four through ten than among those aged eleven through fourteen. Almost three-quarters (72%) of the four through ten year-olds wear their safety belts (Table 17). A few of the youngest (less than 2%) are buckled in child safety seats or booster seats, and a tiny number are incorrectly installed in CRDs. Incorrect installation for this age group is most likely to involve not being buckled into the CRD.

Slightly over one-third of the children aged four through ten are seated in the right front passenger seat (Table 11). Belt use rates are the highest (78%) for this age group at this seating position, although the use rates are quite uniform across all seating positions except the middle front (38% are wearing belts there), and the middle back where 61% are wearing belts.

***Summary: Children aged four through fourteen.*** Almost three-quarters (73%) of the children in this age group wear safety belts or are properly installed in restraint devices when riding in the right front, or left or right side of the back seat. Only when they are in the center seating positions is their restraint device use lower: 35% in the front center seat and 58% in the center back (Table 12).

Safety belt use rates among elementary school aged children have increased dramatically since 1991, from about five in ten children to about seven in ten. However, the use rate for these children has declined from the 81% rate at which their age cohort was installed in child restraint devices as infants through three year olds in 1991. While safely restrained as very young children, apparently some of these elementary school aged children have been allowed to lapse into unsafe practices just as they are reaching the age at which they are able to buckle themselves in on their own initiative.

***Children from birth through three years.*** Compliance with the law and with good practice in restraining their children is high among parents of children in this age group. These infants and toddlers are required to be in child restraint devices, and about 82% of them are apparently properly restrained (Table 17). Another 8% are in CRDs, but not properly so. Common improper uses of a CRD included not having children belted in, or not having the CRD attached to the car seat. In addition, some CRDs were placed sideways in the seat, and some were held by another person.

In 1991, 78% of children from birth through three were properly riding in CRDs, and 7% were improperly installed in CRDs.

***Toddlers aged one through three.*** The law now requires children aged one through three years to be properly installed in a CRD, whether or not they are travelling with their parents or legal guardians. (The law in 1991 allowed an exception for children travelling with persons who were not their parents or legal guardians and a CRD was not available, in which case they were to be properly secured by a seat belt, if one were available.)

As with the entire "under four" age group, a high proportion (84%) of children aged one through three are properly restrained in CRDs (see Table 17 and Figure 1), an increase from 78% in 1991. A very small number of children in this are group are held in the lap of another person, and about twenty-five children are incorrectly installed in CRDs (see Table 10).

Children aged one through three years are more likely to be placed in the back seat behind the driver than in any other location (see Table 10). Good practice suggests that in the event of a crash the back seat of a car is a safer place for an infant or toddler than the front seat.

Of no minor concern is the number, albeit small (N=7), of toddlers riding in the middle position of the front seat without proper restraint. These children are at risk for severe injury in a crash because protuberances such as the gear shift, the steering wheel, the knobs on the dashboard and radio, and the lower part of the dashboard itself (which is usually not as thickly padded as the top edge) are all at head, face, and neck level for a small child.

***Infants in their first year of age.*** Almost all (92%) of these infants were found to be in CRDs, but 19% of those in CRDs were not correctly placed (Tables 8 and 17). Most frequently the incorrect placement meant that the devices were not facing backward, which is the safest position for infants.

### Passengers' use of safety belts related to use by driver

As in the 1991 study, buckling up is a friend-and-family affair. When drivers wear their safety belts, the other occupants of the vehicle (who are most likely family and friends of the driver) are three to four times more likely to be appropriately restrained than they are when the driver is not wearing a seat belt (Table 21). In addition, the presence of a passenger in the middle front position in the front seat, which is often not a true seating position or a particularly safe one, is associated with nonbelted drivers.

### Comparison with other geographic areas

While safety belt use in Maine has increased since 1991, it still ranks among the states with the lowest rates (see Table 22).[8] As of December 1994, Maine's use rate was 36%, third lowest from the bottom of a list of states, the District of Columbia, and Puerto Rico. Maine's rate surpassed only those of Rhode Island (32%) and North Dakota (32%). Even if the most recently obtained rate of 50% use (including adults and children in CRDs) were matched against the rank-ordered states, and assuming no change in the other states' rates, Maine would rank no higher than 7th or 8th from the bottom of the list. It should not be ignored, however, that Maine's use rate has substantially increased. It is highly likely that the implementation of the mandatory use law will further increase Maine's use rate as well.

### Comparison of 1995 with 1986 and 1991 Maine data

Two earlier studies in Maine have been conducted for the Bureau of Highway Safety of the Maine Department of Public Safety. The first was completed by Northeast Research for the School of Public Health of the

Boston University Medical School,[9] and the more recent, by the Edmund S. Muskie Institute of Public Affairs at the University of Southern Maine.[10]

The 1986 study, which was conducted during February of that year, involved observation of occupant safety restraint use in vehicles at intersections, toll plazas, and ramps on controlled-access highways in Maine. Detailed comparisons of the data described here with the 1986 study are not readily made because of the difference in the season of the year in which the two studies were conducted, the differences in the types of intersections studied, and the differing categories used to record the age of the vehicle occupants. It should also be considered that in 1986 it was no doubt more difficult to observe safety belt usage because there were more older vehicles on the road without the more readily observable shoulder belts, and because the study was conducted in the winter when bulky clothing may have concealed lap belts. However, some general comparisons may be made.

In 1991, a second observational study of safety belt and child restraint device use was conducted. That study involved observation of 10,517 passenger vehicles, 159 motorcycles, and 14,735 persons from two vantage points at each of forty four-way stop intersections in Maine. The intersections were selected randomly with probability of selection proportional to traffic volume in urban and rural sampling strata. The sampling, observer training, observation methods, and information collected in the 1991 study are replicated in this 1995 study with only minor changes. The 1991 study also included a close observation and interview component focussing on proper installation and use of child restraint devices. That portion of the 1991 study is not replicated here.

In the 1986 study the youngest age grouping recorded was children from birth through five years of age. In that age group, 55% were observed to

be using seat belts when they were in the front seat of a vehicle that was not travelling on the freeway. There is no explicit mention of child restraint devices, although one would assume that a child in a child restraint device would have been counted as a child using a safety belt. In the same study, 71% of the children through five years of age riding in the back seat and not on the freeway were using seat belts.

In the 1991 study, 81% of all children through age three were wearing lap belts, lap and shoulder belts, or were correctly installed in child restraint devices. A slightly higher percentage of the children in the back seat were properly restrained than the percentage properly restrained in the front seat.

In 1995, 82% of children through age three are properly restrained, and children in the back seat are slightly more likely to be properly restrained than are those in the front. It may be that parents who make children buckle up are more likely than those who ignore restraints to place their children in safer seating positions.

In 1986, 23% of children aged six through fifteen years in the front seat not on the freeway were using seat belts, and 17% of the children in that age group in the back seat were using seat belts. In the 1991 study, 45% of all children aged four through fifteen (51% of those aged four through ten and 29% of those aged eleven through fifteen) wore safety belts.

In 1995, 70% of all children aged four through fourteen (72% of those aged four through ten and 65% of those eleven through fourteen) are properly restrained, a considerable increase over the 1991 figures.

Adult use of safety belts has similarly increased. In the 1986 study, 21% of drivers aged 16 and over in non-freeway conditions wore safety belts; in 1991, 35% did so; and in 1995, 46% of drivers aged 15 and over wore lap and shoulder belts (Table 5). In 1986, 17% of adult right front seat

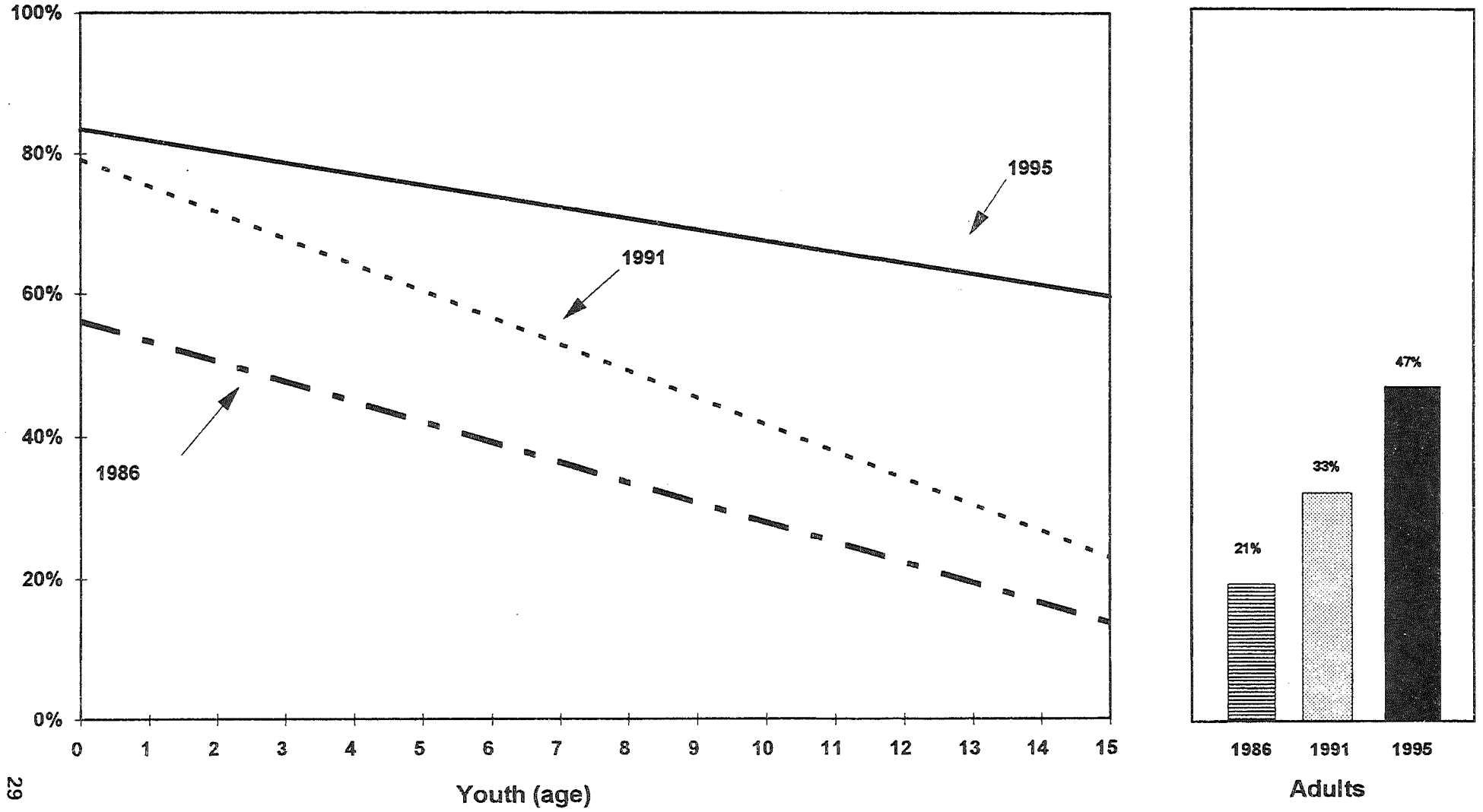
passengers wore belts; in 1991, 29% of right front seat passengers aged 16 and over wore them; and in 1995, 51% of those 15 and over in the passenger seat did so. In 1986, 8% of adults seated in the rear used seat belts; in 1991, 13% did so; and in 1995, 47% of those 15 and over wore their safety belts in the back seat.

*Summary: Change from 1986 to 1995.* A graphic representation of the change in rates of safety restraint use observed in the 1986, 1991, and 1995 studies is shown in Figure 2. The lines in the graph are the "best fit" lines drawn through a set of points representing the proportion of persons of various estimated ages who are properly restrained. Because observers recorded their observations of age according to age ranges, not single years of age, it was necessary to estimate mathematically the rates of use for the individual years of age. Therefore, this chart cannot be interpreted as displaying the observed use rate for persons of a specific year of age. Rather, it shows how use declines as children's age increases. The rates of adult use for each of the study years are shown for comparison.

Using the graph in Figure 2, one can see that between 1986 and 1991 the change in use rates was greater among the youngest age groups, while between 1991 and 1995 the greatest change occurred among older children. It is also clear that children are increasingly learning to use safety restraints: the use rates for children who are in their teens in 1995 are higher than the use rates almost ten years ago for the toddlers and preschoolers -- the age group to which they belonged in 1986.

The changes in restraint use from 1986 through 1995 are all in the direction of increased use of safety restraints, for children and adults, with a marked increase in the more recent years. These differences are consistent

# Figure 2
# Restraint use
# Maine youth aged 0-15 and adults
Linear approximation



with changes in the law concerning safety restraints for children, and with continued educational efforts.

## Driver Restraint Use by Site and Vehicle Characteristics

In this portion of the report, only the driver's use of safety belts will be examined in detail. As described in the text above, the driver's use or non-use of a safety belt is strongly related to the use or non-use of restraints by others in the vehicle. At the time of the observations, drivers were not responsible for seeing that passengers aged nineteen and over were wearing safety belts.

***In-state and out-of-state vehicle registration.*** The observations were conducted in the month before Labor Day, and therefore included summer tourist traffic. Even in late summer, 88% of the observed vehicles were from Maine. The other five New England states accounted for 6% of the vehicles; New York, New Jersey, and Pennsylvania (as a group) for 2%; other states, 4%; and Canada, less than one percent.

The out-of-state vehicle data suggest some interesting findings, even though the number of observations from other states is relatively small (see Table 18). Drivers of Maine-registered vehicles have lower safety belt use rates than any out-of-staters. The driver safety belt use rate for Maine passenger vehicles is 43%, compared to a high of 87% for drivers of vehicles with Canadian registration (where each province has its own belt use law); 64% for drivers of other (non-Maine) New England vehicles; 78% for vehicles registered in New York, New Jersey, and Pennsylvania; and 64% for vehicles from other states in the United States.

Consistent with the increase in use rates among Maine vehicles, the use rates for drivers of vehicles with out-of-state plates are higher than they were in

1991, by ranges of seven percentage points for Canadian passenger vehicles (which had the highest rates at the outset), to 32 percentage points for the New York-New Jersey-Pennsylvania state group.

*Size and type of vehicle.* There are some clear differences in driver safety belt use rates according to the type of vehicle the driver is operating (See Table 18). It is likely that selection of a vehicle and the propensity to buckle up or not are both related to age, lifestyle, and personality characteristics, so it is not surprising that these differences occur.

The drivers with the highest rates of safety belt use are those who are driving station wagons: 59% of them are buckled up. Drivers of economy cars are next, with 55% wearing seat belts. Drivers of intermediate-sized cars, vans, and jeep-type sport utility vehicles all exhibited the same safety belt use rate: fifty percent.

Drivers of sports and GT-type cars wear safety belts less often: 37% of them are buckled up. Least likely to wear safety belts are the drivers of pickup trucks: only 23% of these drivers comply with safety recommendations. The driver belt use rates in these two categories of vehicles have increased only slightly since 1991, when 31% of GT/sport car drivers and 21% of pick-up truck drivers wore safety belts.

*Helmet use by motorcycle riders.* Although helmet use was not a specific focus of this study, the opportunity was taken to observe the use or non-use of helmets by persons operating and riding on the 124 motorcycles that stopped before the observers. Helmets are used by motorcycle operators at about the same rate at which adults wear safety belts: 45% of the motorcycle operators are helmeted, as are 44% of their passengers statewide (Table 19).

Relatively small differences are observed between the urban and rural strata: in the more urban counties, 40% of the drivers wear helmets. In the

more rural counties, 33% do so. In urban counties, 43% of the passengers wear helmets; in rural counties, 45% of passengers do so.

*Day of the week.* Observations were conducted on all days of the week, and while there are variations in safety belt usage on the various days (Table 18), there is no readily explained pattern to the findings. The assignment of days and times of observation to the sites was systematic and unbiased, but the number of observations obtained on each day varied considerably because the traffic volume at the selected intersections varied. Use rates are marginally higher on Thursdays, and are consistent across other days except on Monday, when the rate is much lower.

*Time of day.* Safety belt use varies throughout the day (Table 18). Forty-five percent of drivers wear their safety belts during the morning rush hour and about 50% do so in the afternoon. It is likely that those drivers who wear their belts in the morning also wear them in the afternoon, although no duplicate observation of intersections was carried out to examine that possibility. The lowest periods of safety belt use are at lunch time (11:30 a.m. to 1:00 p.m.) and in the late afternoon period preceding the evening rush hour (2:30 to 4:00 p.m.). This lower rate of use may mean that persons on familiar routes and short trips are less likely to buckle up. Additional study would be required to determine whether heavier traffic flow prompts use of safety belts; or whether persons who drive in the traditional rush hour are persons who are more likely to use their belts under any and all traffic conditions.

*Weather and road conditions.* The weather cooperated with the study by not causing conditions so adverse that observations had to be rescheduled, but the researchers had actually hoped for moderately inclement weather to occur during a larger portion of the observation period so that more of the observations could be made under adverse conditions. The pavement was wet

and the weather was rainy for only about 1% of the observations (Table 18). It is therefore not possible from these data to assess the effect of adverse weather on the likelihood of safety belt use.

*Urban and rural locations.* As described earlier, the intersections were assigned to one of two sampling strata depending upon the county in which they are located. The urban stratum, comprised of the five counties with the greatest population and the greatest density of traffic flow as measured by the number of vehicles entering four-way signalized intersections, consists of Cumberland, York, Kennebec, Androscoggin, and Penobscot Counties. The remainder are designated as rural counties. Within stratum, the data are weighted by the Department of Transportation's average daily traffic flow data. As shown in Table 20, there is little difference in safety restraint use between the two strata, even though the origin and destination of travel of vehicles in the two strata must reflect more densely populated areas in the urban stratum, and more sparsely populated areas in the rural stratum.

## Summary

Safety restraint use rates in Maine for all ages increased from 36% in 1991 to 50% in 1995. Part of that increase may be accounted for by a 1992 change in the law requiring safety belts for youth up to their 19th birthday.

It is among adults that safety belt use has increased markedly from 33% among those aged 16 and over in 1991 to 47% among those 19 and over in 1995. It is important to note that these results were obtained in the summer of 1995 before the November referendum in which the voters narrowly approved a mandatory safety restraint use law for Maine. The referendum had not attracted much attention at the time the observations were conducted, so it is unlikely that it had much effect on behavior.

Infants and young children are much more likely to be installed in restraint devices or to wear safety belts than are older children. As high a proportion as 92% of infants are in child restraint devices (although some are not properly installed), and about seven in ten elementary school-age children are wearing safety belts. From that age, however, usage declines, such that slightly fewer than half of teenagers wear safety belts. Their usage rates are very similar to those of adults of all ages.

Before the implementation of the mandatory use law, Maine ranked among the lowest 10% of states in terms of compliance with safe practice. While this ranking of states depends as much on the activities of the other states as upon what is done in Maine, it is clear even from the observations in Maine that out-of-staters use their safety belts far more often than people from Maine. The effect of the change in the law, of course, remains to be seen.

# ENDNOTES


1. U. S. Department of Transportation, National Highway Traffic Safety Administration, *Three of five unbelted motorists in fatal crashes would have survived, study reports*, (press release 9-96), Feb. 15, 1996.

2. Suzanne K. Hart, *Child Restraint Device and Safety Belt Use in Maine, 1991*, Edmund S. Muskie Institute of Public Affairs, University of Southern Maine, prepared for the Bureau of Highway Safety, Department of Public Safety, State of Maine, August 1992; and Deidre Hungerford, David Kovenock, and James Sorg, *Maine Seat Belt Use Observation Study, February 1986: Preliminary Summary*, Northeast Research, Orono, Maine, 1986.

3. National Highway Traffic Safety Administration World Wide Web site, February 2, 1996: http://www.nhtsa.dot.gov/fedworld/nhtsa-ts/final'94.txt

4. U. S. Department of Transportation, National Highway Traffic Safety Administration, *Three of five unbelted motorists in fatal crashes would have survived, study reports*, (press release 9-96), Feb. 115, 1996.

5. Suzanne K. Hart, *Child Restraint Device and Safety Belt Use in Maine, 1991*, Edmund S. Muskie Institute of Public Affairs, University of Southern Maine, prepared for the Bureau of Highway Safety, Department of Public Safety, State of Maine, August 1992; and Deidre Hungerford, David Kovenock, and James Sorg, *Maine Seat Belt Use Observation Study, February 1986: Preliminary Summary*, Northeast Research, Orono, Maine, 1986.

6. Peter N. Ziegler, *Guidelines for Observing Child Safety Seat Use*, U.S. Department of Transportation, National Highway Traffic Safety Administration, undated (DOT HS 807 128).

7. Alexander C. Wagenaar, Fredrick M. Streff, Lisa J. Molnar, Karen L. Businski, Robert H. Schultz, *Factors Related to Nonuse of Seatbelts in Michigan*, The University of Michigan Transportation Research Institute, Ann Arbor, 1987; and Alexander C. Wagenaar, Lisa J. Molnar, Karen L. Businski, Lewis H. Margolis, *Correlates of Child Restraint Use*, The University of Michigan Transportation Research Institute, Ann Arbor, 1986.

8. National Highway Traffic Safety Administration World Wide Web site, February 2, 1996: http://www.nhtsa.dot.gov/fedworld/nhtsa-ts/final'94.txt

9. Deidre Hungerford, David Kovenock, and James Sorg, *Maine Seat Belt Use Observation Study, February 1986: Preliminary Summary*, Northeast Research, Orono, Maine, 1986.

10. Suzanne K. Hart, *Child Restraint Device and Safety Belt Use in Maine, 1991*, Edmund S. Muskie Institute of Public Affairs, University of Southern Maine, prepared for the Bureau of Highway Safety, Department of Public Safety, State of Maine, August 1992.

# *Table of Tables*

# Table of Tables
## 1995 Maine Safety Belt Use Observation Study

*Tables*

# TABLE 1

## Restraint Use In Passenger Vehicles
## By Seating Position
## Statewide

## Maine, 1995

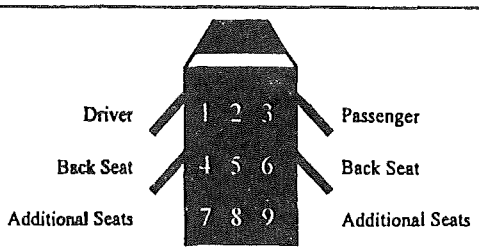
| | | |
|---|---|---|
| Lap/Shoulder[a] 46%<br>No Restraint 54%<br>❶ N = 10,535 | Lap/Shoulder[a] 21%<br>CRD-Correct 9%<br>CRD-Incorrect 2%<br>In Lap[b] 4%<br>No Restraint 64%<br>❷ N = 135 | Lap/Shoulder[a] 52%<br>CRD-Correct 2%<br>CRD-Incorrect *<br>In Lap[b] *<br>No Restraint 46%<br>❸ N = 4,352 |
| Lap/Shoulder[a] 49%<br>CRD-Correct 18%<br>CRD-Incorrect 2%<br>In Lap[b] 0%<br>No Restraint 31%<br>❹ N = 795 | Lap/Shoulder[a] 38%<br>CRD-Correct 28%<br>CRD-Incorrect 2%<br>In Lap[b] 1%<br>No Restraint 31%<br>❺ N = 298 | Lap/Shoulder[a] 50%<br>CRD-Correct 15%<br>CRD-Incorrect 1%<br>In Lap[b] 1%<br>No Restraint 34%<br>❻ N = 749 |
| Lap/Shoulder[a] 50%<br>CRD-Correct 12%<br>CRD-Incorrect 1%<br>In Lap[b] 0%<br>No Restraint 31%<br>❼ N = 90 | Lap/Shoulder[a] 39%<br>CRD-Correct 20%<br>CRD-Incorrect 2%<br>In Lap[b] 2%<br>No Restraint 36%<br>❽ N = 51 | Lap/Shoulder[a] 55%<br>CRD-Correct 8%<br>CRD-Incorrect 1%<br>In Lap[b] 5%<br>No Restraint 30%<br>❾ N = 66 |

Cells in table reflect seating position in the vehicle shown below.

*N* = 16,843 persons (weighted data)
10,535 passenger vehicles (non-commercial, no motorcycles)

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
[b]In the lap of another person
*less than one percent



## TABLE 2

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

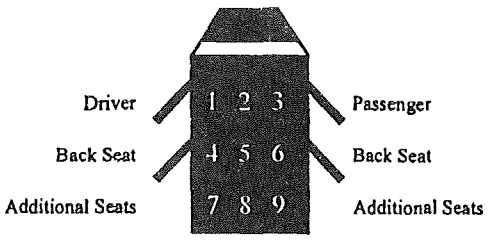
***Persons Aged 19 and Over***

| | | |
|---|---|---|
| Lap/Shoulder[a] 46%<br>No Restraint 54%<br>❶ N = 10,148 | Lap/Shoulder[a] 15%<br>No Restraint 85%<br>❷ N = 42 | Lap/Shoulder[a] 51%<br>No Restraint 49%<br>❸ N = 3,272 |
| Lap/Shoulder[a] 46%<br>No Restraint 54%<br>❹ N = 171 | Lap/Shoulder[a] 46%<br>No Restraint 54%<br>❺ N = 24** | Lap/Shoulder[a] 43%<br>No Restraint 57%<br>❻ N = 212 |
| Lap/Shoulder[a] 38%<br>No Restraint 62%<br>❼ N = 12** | Lap/Shoulder[a] 67%<br>No Restraint 33%<br>❽ N = 3** | Lap/Shoulder[a] 63%<br>No Restraint 37%<br>❾ N = 11** |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 3

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

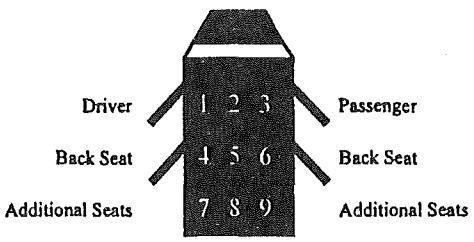
***Males Aged 19 and Over***

| | | |
|---|---|---|
| Lap/Shoulder[a] 41%<br>No Restraint 59%<br>❶ N=5,893 | Lap/Shoulder[a] 0%<br>No Restraint 0%<br>❷ N=0 | Lap/Shoulder[a] 35%<br>No Restraint 65%<br>❸ N=843 |
| Lap/Shoulder[a] 42%<br>No Restraint 58%<br>❹ N=61 | Lap/Shoulder[a] 64%<br>No Restraint 36%<br>❺ N=10** | Lap/Shoulder[a] 53%<br>No Restraint 47%<br>❻ N=63 |
| Lap/Shoulder[a] 50%<br>No Restraint 50%<br>❼ N=5** | Lap/Shoulder[a] 50%<br>No Restraint 50%<br>❽ N=2** | Lap/Shoulder[a] 58%<br>No Restraint 42%<br>❾ N=7** |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 4

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

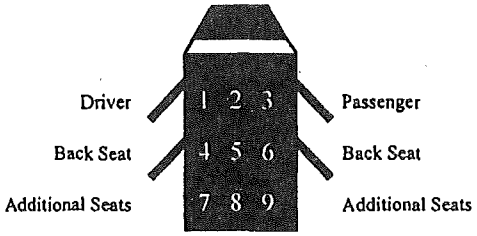
***Females Aged 19 and Over***

| | | |
|---|---|---|
| Lap/Shoulder[a] 53%<br>No Restraint 47%<br>❶ N=4,237 | Lap/Shoulder[a] 16%<br>No Restraint 84%<br>❷ N=31 | Lap/Shoulder[a] 56%<br>No Restraint 44%<br>❸ N=2,423 |
| Lap/Shoulder[a] 48%<br>No Restraint 52%<br>❹ N=108 | Lap/Shoulder[a] 33%<br>No Restraint 67%<br>❺ N=14** | Lap/Shoulder[a] 39%<br>No Restraint 61%<br>❻ N=148 |
| Lap/Shoulder[a] 29%<br>No Restraint 71%<br>❼ N=7** | Lap/Shoulder[a] 100%<br>No Restraint 0%<br>❽ N=1** | Lap/Shoulder[a] 64%<br>No Restraint 36%<br>❾ N=3** |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 5

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

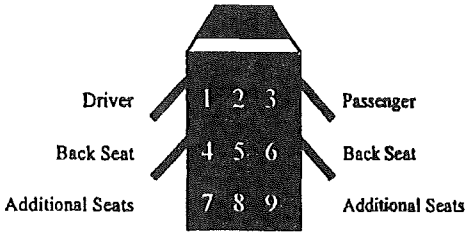
***Persons Aged 15 and Over***

| | | |
|---|---|---|
| Lap/Shoulder[a] 46%<br>No Restraint 54%<br>❶ N = 10,520 | Lap/Shoulder[a] 14%<br>No Restraint 86%<br>❷ N = 57 | Lap/Shoulder[a] 51%<br>No Restraint 49%<br>❸ N = 3,674 |
| Lap/Shoulder[a] 48%<br>No Restraint 52%<br>❹ N = 286 | Lap/Shoulder[a] 44%<br>No Restraint 56%<br>❺ N = 50 | Lap/Shoulder[a] 46%<br>No Restraint 54%<br>❻ N = 316 |
| Lap/Shoulder[a] 38%<br>No Restraint 62%<br>❼ N = 27 | Lap/Shoulder[a] 35%<br>No Restraint 65%<br>❽ N = 8** | Lap/Shoulder[a] 51%<br>No Restraint 49%<br>❾ N = 26 |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 6

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

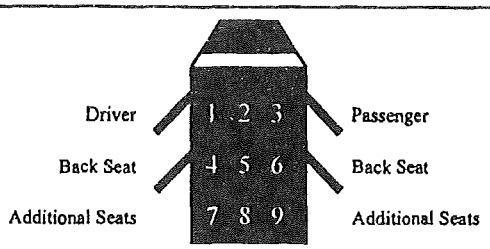
***Males, Aged 15 and Over***

| | | |
|---|---|---|
| Lap/Shoulder[a] 41%<br>No Restraint 59%<br>❶ N=6,142 | Lap/Shoulder[a] 0%<br>No Restraint 100%<br>❷ N=15 | Lap/Shoulder[a] 37%<br>No Restraint 63%<br>❸ N=1,041 |
| Lap/Shoulder[a] 43%<br>No Restraint 57%<br>❹ N=103 | Lap/Shoulder[a] 53%<br>No Restraint 47%<br>❺ N=20 | Lap/Shoulder[a] 50%<br>No Restraint 50%<br>❻ N=106 |
| Lap/Shoulder[a] 45%<br>No Restraint 55%<br>❼ N=15** | Lap/Shoulder[a] 19%<br>No Restraint 81%<br>❽ N=5** | Lap/Shoulder[a] 49%<br>No Restraint 51%<br>❾ N=12** |

**Cells in table reflect seating position in the vehicle shown below.**

*Note*: **Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.**

*Key*: **[a]Wearing lap and shoulder belt, or a lap belt alone.**
***less than one percent**
****Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.**



## TABLE 7

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

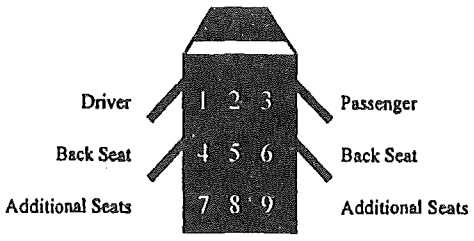
***Females, Aged 15 and Over***

| | | |
|---|---|---|
| Lap/Shoulder[a] 53%<br>No Restraint 47%<br>❶ N=4,364 | Lap/Shoulder[a] 17%<br>No Restraint 83%<br>❷ N=41 | Lap/Shoulder[a] 56%<br>No Restraint 44%<br>❸ N=2,630 |
| Lap/Shoulder[a] 42%<br>No Restraint 58%<br>❹ N=103 | Lap/Shoulder[a] 53%<br>No Restraint 47%<br>❺ N=20 | Lap/Shoulder[a] 44%<br>No Restraint 56%<br>❻ N=210 |
| Lap/Shoulder[a] 26%<br>No Restraint 72%<br>❼ N=11** | Lap/Shoulder[a] 54%<br>No Restraint 46%<br>❽ N=4** | Lap/Shoulder[a] 49%<br>In Lap[b] 7%<br>No Restraint 44%<br>❾ N=12** |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
[b]In the lap of another person
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 8

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

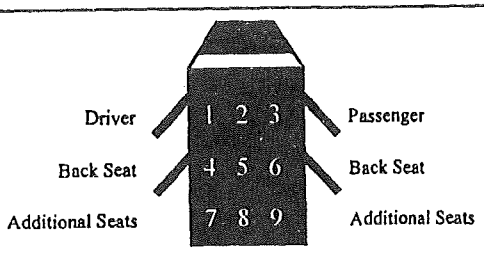
### *Infants Less Than 1 Year Old*

| | | |
|---|---|---|
| NOT APPLICABLE<br>❶ N = 0 | Lap/Shoulder[a] 0%<br>CRD-Correct 64%<br>CRD-Incorrect 36%<br>In Lap[b] 0%<br>No Restraint 0%<br>❷ N = 3** | Lap/Shoulder[a] 0%<br>CRD-Correct 80%<br>CRD-Incorrect 16%<br>In Lap[b] 0%<br>No Restraint 4%<br>❸ N = 31 |
| Lap/Shoulder[a] 0%<br>CRD-Correct 73%<br>CRD-Incorrect 27%<br>In Lap[b] 0%<br>No Restraint 0%<br>❹ N = 25 | Lap/Shoulder[a] *<br>CRD-Correct 88%<br>CRD-Incorrect 6%<br>In Lap[b] 0%<br>No Restraint 6%<br>❺ N = 19** | Lap/Shoulder[a] 0%<br>CRD-Correct 62%<br>CRD-Incorrect 15%<br>In Lap[b] 17%<br>No Restraint 6%<br>❻ N = 15** |
| Lap/Shoulder[a] 0%<br>CRD-Correct 0%<br>CRD-Incorrect 100%<br>In Lap[b] 0%<br>No Restraint 0%<br>❼ N = 1** | Lap/Shoulder[a] 0%<br>CRD-Correct 50%<br>CRD-Incorrect 0%<br>In Lap[b] 50%<br>No Restraint 0%<br>❽ N = 2** | Lap/Shoulder[a] 0%<br>CRD-Correct 50%<br>CRD-Incorrect 0%<br>In Lap[b] 50%<br>No Restraint 0%<br>❾ N = 2** |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of roudning may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
[b]In the lap of another person
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 9

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

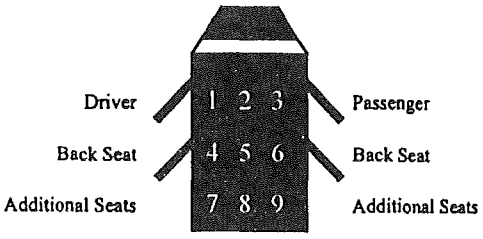
***Children From Birth through 3 Years***

| | | |
|---|---|---|
| NOT APPLICABLE<br>❶ N = 0 | Lap/Shoulder[a] 0%<br>CRD-Correct 60%<br>CRD-Incorrect 6%<br>In Lap[b] 19%<br>No Restraint 15%<br>❷ N = 20 | Lap/Shoulder[a] 4%<br>CRD-Correct 74%<br>CRD-Incorrect 11%<br>In Lap[b] 0%<br>No Restraint 11%<br>❸ N = 108 |
| Lap/Shoulder[a] 4%<br>CRD-Correct 87%<br>CRD-Incorrect 9%<br>In Lap[b] 0%<br>No Restraint 1%<br>❹ N = 158 | Lap/Shoulder[a] 1%<br>CRD-Correct 84%<br>CRD-Incorrect 6%<br>In Lap[b] 1%<br>No Restraint 8%<br>❺ N = 94 | Lap/Shoulder[a] 1%<br>CRD-Correct 90%<br>CRD-Incorrect 3%<br>In Lap[b] 4%<br>No Restraint 3%<br>❻ N = 121 |
| Lap/Shoulder[a] 0%<br>CRD-Correct 84%<br>CRD-Incorrect 7%<br>In Lap[b] 0%<br>No Restraint 9%<br>❼ N = 13** | Lap/Shoulder[a] 0%<br>CRD-Correct 78%<br>CRD-Incorrect 11%<br>In Lap[b] 11%<br>No Restraint 0%<br>❽ N = 11** | Lap/Shoulder[a] 12%<br>CRD-Correct 61%<br>CRD-Incorrect 0%<br>In Lap[b] 27%<br>No Restraint 0%<br>❾ N = 10** |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
[b]In the lap of another person
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 10

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

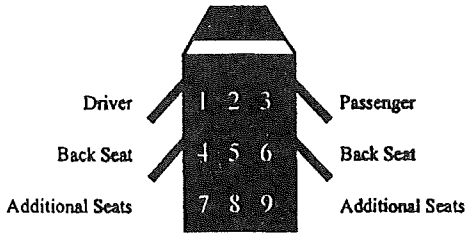
### *Toddlers Aged 1 through 3 Years*

| | | |
|---|---|---|
| NOT APPLICABLE<br>❶ N=0 | Lap/Shoulder[a] 0%<br>CRD-Correct 60%<br>CRD-Incorrect 0%<br>In Lap[b] 23%<br>No Restraint 18%<br>❷ N=16** | Lap/Shoulder[a] 5%<br>CRD-Correct 72%<br>CRD-Incorrect 9%<br>In Lap[b] 0%<br>No Restraint 14%<br>❸ N=77 |
| Lap/Shoulder[a] 4%<br>CRD-Correct 89%<br>CRD-Incorrect 5%<br>In Lap[b] 0%<br>No Restraint 1%<br>❹ N=133 | Lap/Shoulder[a] 2%<br>CRD-Correct 83%<br>CRD-Incorrect 6%<br>In Lap[b] 1%<br>No Restraint 9%<br>❺ N=75 | Lap/Shoulder[a] 1%<br>CRD-Correct 93%<br>CRD-Incorrect 2%<br>In Lap[b] 2%<br>No Restraint 2%<br>❻ N=106 |
| Lap/Shoulder[a] 0%<br>CRD-Correct 90%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 10%<br>❼ N=12** | Lap/Shoulder[a] 0%<br>CRD-Correct 86%<br>CRD-Incorrect 14%<br>In Lap[b] 0%<br>No Restraint 0%<br>❽ N=8** | Lap/Shoulder[a] 15%<br>CRD-Correct 62%<br>CRD-Incorrect 0%<br>In Lap[b] 23%<br>No Restraint 0%<br>❾ N=8** |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
[b]In the lap of another person
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 11

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

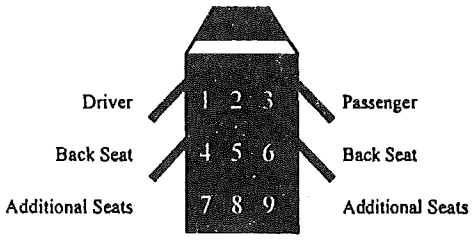
***Children Aged 4 through 10***

| | | |
|---|---|---|
| NOT APPLICABLE<br>❶ N = 0 | Lap/Shoulder[a] 38%<br>CRD-Correct 2%<br>CRD-Incorrect 2%<br>In Lap[b] 0%<br>No Restraint 59%<br>❷ N = 48 | Lap/Shoulder[a] 78%<br>CRD-Correct 1%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 21%<br>❸ N = 336 |
| Lap/Shoulder[a] 74%<br>CRD-Correct 2%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 24%<br>❹ N = 231 | Lap/Shoulder[a] 61%<br>CRD-Correct 5%<br>CRD-Incorrect 0%<br>In Lap[b] 1%<br>No Restraint 34%<br>❺ N = 102 | Lap/Shoulder[a] 76%<br>CRD-Correct 2%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 22%<br>❻ N = 175 |
| Lap/Shoulder[a] 74%<br>CRD-Correct 0%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 26%<br>❼ N = 29 | Lap/Shoulder[a] 45%<br>CRD-Correct 4%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 51%<br>❽ N = 20 | Lap/Shoulder[a] 65%<br>CRD-Correct 0%<br>CRD-Incorrect 5%<br>In Lap[b] 0%<br>No Restraint 30%<br>❾ N = 18** |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
[b]In the lap of another person
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 12

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

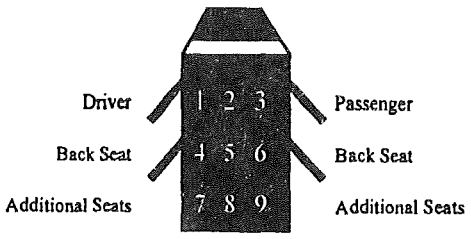
***Children Aged 4 through 14***

| | | |
|---|---|---|
| Lap/Shoulder[a] 0%<br>No Restraint 0%<br>❶ N = 0 | Lap/Shoulder[a] 35%<br>CRD-Correct 1%<br>CRD-Incorrect 1%<br>In Lap[b] 2%<br>No Restraint 60%<br>❷ N = 59 | Lap/Shoulder[a] 73%<br>CRD-Correct *<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 27%<br>❸ N = 561 |
| Lap/Shoulder[a] 72%<br>CRD-Correct 2%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 27%<br>❹ N = 346 | Lap/Shoulder[a] 58%<br>CRD-Correct 3%<br>CRD-Incorrect 0%<br>In Lap[b] 1%<br>No Restraint 38%<br>❺ N = 152 | Lap/Shoulder[a] 73%<br>CRD-Correct 1%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 26%<br>❻ N = 308 |
| Lap/Shoulder[a] 69%<br>CRD-Correct 0%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 31%<br>❼ N = 50 | Lap/Shoulder[a] 54%<br>CRD-Correct 5%<br>CRD-Incorrect 0%<br>In Lap[b] 0%<br>No Restraint 40%<br>❽ N = 31 | Lap/Shoulder[a] 70%<br>CRD-Correct 0%<br>CRD-Incorrect 3%<br>In Lap[b] 0%<br>No Restraint 27%<br>❾ N = 30 |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

Key: [a]Wearing lap and shoulder belt, or a lap belt alone.
[b]In the lap of another person
*less than one percent



## TABLE 13

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

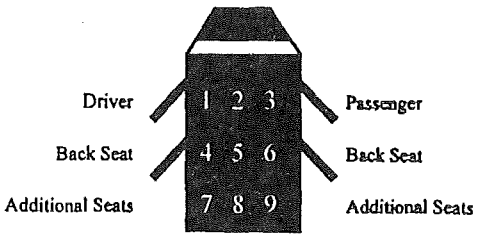
***Children Aged 11 through 14***

| | | |
|---|---|---|
| Lap/Shoulder[a] 0%<br>No Restraint 0%<br>❶ N=0 | Lap/Shoulder[a] 23%<br>In lap[b] 11%<br>No Restraint 66%<br>❷ N=10** | Lap/Shoulder[a] 65%<br>No Restraint 35%<br>❸ N=225 |
| Lap/Shoulder[a] 67%<br>No Restraint 33%<br>❹ N=115 | Lap/Shoulder[a] 53%<br>No Restraint 47%<br>❺ N=50 | Lap/Shoulder[a] 69%<br>No Restraint 31%<br>❻ N=133 |
| Lap/Shoulder[a] 63%<br>No Restraint 37%<br>❼ N=21 | Lap/Shoulder[a] 77%<br>No Restraint 23%<br>❽ N=5** | Lap/Shoulder[a] 78%<br>No Restraint 22%<br>❾ N=12** |

Cells in table reflect seating position in the vehicle shown below.

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
[b]In the lap of another person
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 14

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

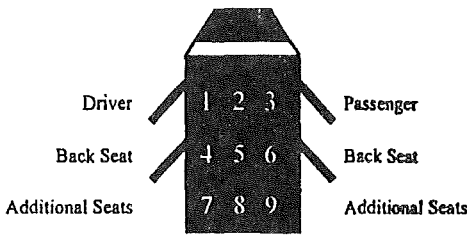
***Persons aged 15 through 18***

| | | |
|---|---|---|
| Lap/Shoulder[a] 46%<br>No Restraint 54%<br>❶ N=375 | Lap/Shoulder[a] 13%<br>No Restraint 87%<br>❷ N=16** | Lap/Shoulder[a] 51%<br>No Restraint 49%<br>❸ N=402 |
| Lap/Shoulder[a] 50%<br>No Restraint 50%<br>❹ N=115 | Lap/Shoulder[a] 42%<br>No Restraint 58%<br>❺ N=25 | Lap/Shoulder[a] 52%<br>No Restraint 48%<br>❻ N=104 |
| Lap/Shoulder[a] 39%<br>No Restraint 61%<br>❼ N=15** | Lap/Shoulder[a] 20%<br>No Restraint 80%<br>❽ N=6** | Lap/Shoulder[a] 41%<br>No Restraint 53%<br>❾ N=15** |

**Cells in table reflect seating position in the vehicle shown below.**

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 15

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

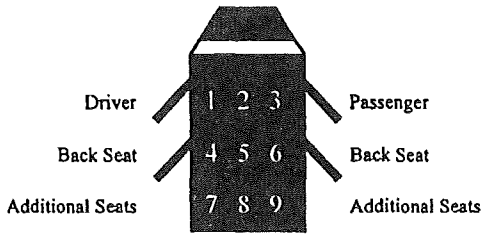
### *Males, Aged 15 through 18*

| | | |
|---|---|---|
| Lap/Shoulder[a] 42%<br>No Restraint 58%<br>❶ N=248 | Lap/Shoulder[a] 0%<br>No Restraint 100%<br>❷ N=5** | Lap/Shoulder[a] 44%<br>No Restraint 56%<br>❸ N=197 |
| Lap/Shoulder[a] 43%<br>No Restraint 57%<br>❹ N=42 | Lap/Shoulder[a] 41%<br>No Restraint 59%<br>❺ N=9** | Lap/Shoulder[a] 46%<br>No Restraint 54%<br>❻ N=43 |
| Lap/Shoulder[a] 43%<br>No Restraint 57%<br>❼ N=11** | Lap/Shoulder[a] 0%<br>No Restraint 100%<br>❽ N=3** | Lap/Shoulder[a] 37%<br>No Restraint 63%<br>❾ N=6** |

**Cells in table reflect seating position in the vehicle shown below.**

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 16

### Restraint Use In Passenger Vehicles
### By Seating Position
### Statewide

### Maine, 1995

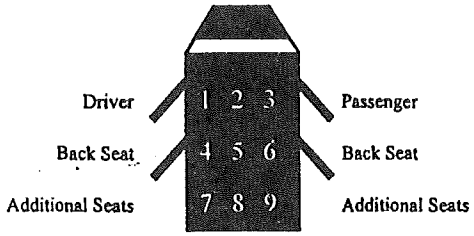
***Females, Aged 15 through 18***

| | | |
|---|---|---|
| Lap/Shoulder[a] 54%<br>No Restraint 46%<br>❶ N = 126 | Lap/Shoulder[a] 20%<br>No Restraint 80%<br>❷ N = 10** | Lap/Shoulder[a] 57%<br>No Restraint 43%<br>❸ N = 205 |
| Lap/Shoulder[a] 54%<br>No Restraint 46%<br>❹ N = 73 | Lap/Shoulder[a] 44%<br>No Restraint 56%<br>❺ N = 15** | Lap/Shoulder[a] 56%<br>No Restraint 44%<br>❻ N = 61 |
| Lap/Shoulder[a] 43%<br>No Restraint 57%<br>❼ N = 10** | Lap/Shoulder[a] 40%<br>No Restraint 60%<br>❽ N = 3** | Lap/Shoulder[a] 44%<br>No Restraint 56%<br>❾ N = 9** |

**Cells in table reflect seating position in the vehicle shown below.**

*Note*: Data are weighted, and the resulting non-integer frequencies are rounded for presentation in this table. Percentages are also rounded. The result of rounding may be percentages which sum to slightly more or less than exactly 100%.

*Key*: [a]Wearing lap and shoulder belt, or a lap belt alone.
*less than one percent
**Interpret with caution. Number of cases too small to permit calculation of meaningful percentages.



## TABLE 17

### Restraint Use In Passenger Vehicles
### By Age
### Statewide

### Maine, 1995

| AGE | Lap or Lap/Shoulder Belt | CRD Correct | CRD Incorrect | In Lap | No Restraint | TOTAL N | TOTAL % |
|---|---|---|---|---|---|---|---|
| <1 Year | 0% | 74% | 18% | 5% | 3% | 96 | 100% |
| 1 thru 3 | 3% | 84% | 6% | 1% | 6% | 435 | 100% |
| <1 thru 3 | 3% | 82% | 8% | 2% | 5% | 531 | 100% |
| 4 thru 10 | 72% | 1% | *% | 1% | 26% | 938 | 100% |
| 11 thru 14 | 65% | 0% | 0% | *% | 35% | 571 | 100% |
| 4 thru 14 | 69% | 1% | *% | *% | 30% | 1509 | 100% |
| 15 thru 18 | 48% | 0% | 0% | *% | 52% | 1,071 | 100% |
| 19+ | 47% | 0% | 0% | *% | 53% | 13,866 | |
| ALL AGES | 48% | 3% | *% | *% | 49% | 16,975 | 100% |

Key: *Less than 1% (but not zero).

TABLE 18

Percent of Drivers Wearing Safety Belts
Under Selected Conditions

MAINE, 1995

| STATE GROUP/CANADIAN VEHICLE LICENSE PLATE (travelling in Maine) | | PERCENT OF DRIVERS WEARING SAFETY BELTS |
|---|---|---|
| Canada | (N = 76) | 87% |
| Maine | (N = 9,220) | 43% |
| Other New England | (N = 598) | 64% |
| NY, NJ, PA | (N = 244) | 78% |
| Other U.S. | (N = 394) | 64% |
| **DAY OF THE WEEK** | | |
| Sunday | (N = 1,128) | 49% |
| Monday | (N = 1,148) | 33% |
| Tuesday | (N = 1,421) | 48% |
| Wednesday | (N = 2,332) | 47% |
| Thursday | (N = 1,630) | 51% |
| Friday | (N = 1,115) | 49% |
| Saturday | (N = 1,740 | 43% |
| **ROAD CONDITIONS** | | |
| Dry | (N = 10,244) | 46% |
| Wet | (N = 108)* | 31% |
| Construction | (N = 183) | 53% |
| **WEATHER** | | |
| Sunny | (N = 9,417) | 45% |
| Rain | (N = 120) | 49% |
| Fog | (N = 0) | 0% |
| Cloudy | (N = 998) | 53% |

*Number of observations under non-dry conditions is too small to permit meaningful comparisons.

Table 18, continued

| TIME OF OBSERVATION | | PERCENT OF DRIVERS WEARING SAFETY BELTS |
|---|---|---|
| 7:00 - 8:30 A.M. | (N = 813) | 45% |
| 8:30 - 10:00 | (N = 1,311) | 44% |
| 10:00 - 11:30 | (N = 1,382) | 47% |
| 11:30 - 1:00 P.M. | (N = 1,049) | 38% |
| 1:00 - 2:30 | (N = 1,072) | 49% |
| 2:30 - 4:00 | (N = 1,220) | 39% |
| 4:00 - 5:30 | (N = 1,743) | 50% |
| 5:30 - 7:00 | (N = 1,948) | 49% |
| **SIZE/TYPE OF VEHICLE** | | |
| Economy Car | (N = 1,224) | 55% |
| Intermediate | (N = 4,593) | 50% |
| Sports, GT Car | (N = 490) | 37% |
| Station Wagon | (N = 857) | 59% |
| Van | (N = 827) | 50% |
| Jeep-Type | (N = 763) | 50% |
| Pick-Up Truck | (N = 1,780) | 23% |

## TABLE 19

### Motorcycles
### Presence/Absence of Helmet; Gender; Age of Driver and Passenger

### Statewide, and Urban/Rural Counties
### Maine, 1995

| | | |
|---|---|---|
| DRIVER | Male | 95% |
| | Age 15-18 | 3% |
| | 19+ | 97% |
| | Wearing helmet | 45% |
| | N = 124 | |
| PASSENGER | Male | 23% |
| | Age 0-10 | 11% |
| | 11-14 | 3% |
| | 15-18 | 3% |
| | 19+ | 83% |
| | Wearing helmet | 44% |
| | N = 27 | |

**Urban Counties**
**(N = 49 vehicles)**

| | | |
|---|---|---|
| DRIVER | Male | 100% |
| | Age 19+ | 100% |
| | Wearing helmet | 40% |
| PASSENGER | Male | 50% |
| | Age 19+ | 88% |
| | Wearing helmet | 43% |

**Rural Counties**
**(N = 75 vehicles)**

| | | |
|---|---|---|
| DRIVER | Male | 100% |
| | Age 19+ | 95% |
| | Wearing helmet | 33% |
| PASSENGER | Male | 10% |
| | Age 19+ | 80% |
| | Wearing helmet | 45% |

## TABLE 20

### Restraint Use, All Passengers
### All Passenger Vehicles
### All Ages
### All Seating Positions
### Urban And Rural Counties

### Maine, 1995

| RESTRAINT TYPE | URBAN[a] N | URBAN[a] % | RURAL[b] N | RURAL[b] % | STATEWIDE[c] N | STATEWIDE[c] % |
|---|---|---|---|---|---|---|
| LAP/Shoulder Belt | 4,353 | 49% | 3,719 | 47% | 8,076 | 48% |
| CRD-Correct | 205 | 2% | 167 | 2% | 372 | 2% |
| CRD-Incorrect | 17 | * | 15 | * | 32 | * |
| In Lap of Another | 1 | * | 13 | * | 14 | * |
| No Restraint | 4,335 | 49% | 4,015 | 51% | 8,349 | 50% |
| TOTAL | 8,911 | 100% | 7,924 | 100% | 16,843 | 100% |

Key: [a]Observations in Cumberland, York, Kennebec, Androscoggin, and Penobscot counties, weighted to adjust for traffic volume within stratum.

[b]Observations in all other counties, weighted for traffic volume within stratum.

[c]Total weighted observations. Observations are weighted to adjust for oversampling rural counties relative to their traffic volume. Therefore, the statewide estimates do not reflect the simple arithmetic sum of the two strata.

## TABLE 21

### Driver Safety Belt Use/Nonuse And Use/Nonuse of Restraints[1] By Others in the Vehicle, By Seating Position

### Maine, 1995

**When the driver is wearing a belt...**

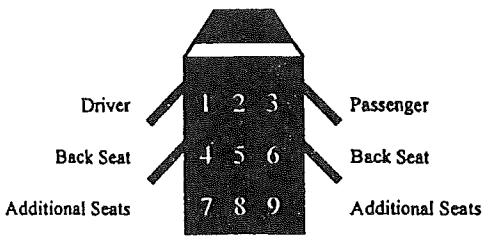
| | | |
|---|---|---|
| Using Restraint 46%<br>❶ N=4,847 | Restraint 68%<br>No restraint 32%<br>❷ N=29 | Restraint 86%<br>No restraint 14%<br>❸ N=2,160 |
| Restraint 82%<br>No restraint 18%<br>❹ N=471 | Restraint 82%<br>No restraint 18%<br>❺ N=165 | Restraint 82%<br>No restraint 18%<br>❻ N=441 |
| Restraint 78%<br>No restraint 22%<br>❼ N=49 | Restraint 68%<br>No restraint 32%<br>❽ N=32 | Restraint 78%<br>No restraint 22%<br>❾ N=41 |

**When the driver is NOT wearing a belt...**

| | | |
|---|---|---|
| No Restraint 54%<br>❶ N=5,688 | Restraint 20%<br>No restraint 80%<br>❷ N=106 | Restraint 22%<br>No restraint 78%<br>❸ N=2,162 |
| Restraint 44%<br>No restraint 56%<br>❹ N=317 | Restraint 45%<br>No restraint 55%<br>❺ N=129 | Restraint 39%<br>No restraint 61%<br>❻ N=300 |
| Restraint 42%<br>No restraint 58%<br>❼ N=40 | Restraint 42%<br>No restraint 58%<br>❽ N=18 | Restraint 33%<br>No restraint 67%<br>❾ N=24 |

Note: Cell entries reflect seating position in vehicle.

Key: "Restraint" means persons are travelling with proper use of safety belt or CRD. "No restraint" means persons travelling without appropriate safety restraint, or with a restraint used improperly, or in the lap of another person.



# Table 22

## Observed Safety Belt Use Rates Reported by States to NHTSA as of December 1994

| | | | |
|---|---|---|---|
| Hawaii | 84% | Dist of Columbia | 62% |
| California | 83% | Ohio | 62% |
| North Carolina | 81% | Idaho | 61% |
| Washington | 81% | Florida | 61% |
| New Mexico | 79% | Arizona | 60% |
| Oregon | 77% | Tennessee | 60% |
| Iowa | 73% | West Virginia | 58% |
| Virginia | 72% | Kentucky | 58% |
| New York | 72% | Minnesota | 57% |
| Pennsylvania | 72% | Georgia | 57% |
| Puerto Rico | 72% | Indiana | 56% |
| Connecticut | 72% | Alabama | 55% |
| Nevada | 71% | Colorado | 54% |
| Texas | 71% | New Hampshire | 54% |
| Kansas | 70% | Utah | 53% |
| Montana | 69% | Arkansas | 51% |
| Maryland | 69% | Louisiana | 50% |
| Alaska | 69% | Massachusetts | 47% |
| Vermont | 68% | Oklahoma | 45% |
| Missouri | 68% | Mississippi | 43% |
| Illinois | 68% | South Dakota | 40% |
| Michigan | 66% | ***Maine*** | ***36%*** |
| New Jersey | 64% | North Dakota | 32% |
| Wisconsin | 64% | Rhode Island | 32% |
| South Carolina | 64% | Wyoming | N/A |
| Nebraska | 63% | | |
| Delaware | 63% | | |

*Source: National Highway Traffic Safety Administration World Wide Web site, February 2, 1996:* http://www.nhtsa.dot.gov/fedworld/nhtsa-ts/final'94.txt

## Table 23

### Locations of Intersections
### Passenger restraint observation study
### Maine, 1991

Observations at the selected intersections were conducted by each of two observers on opposite sides of the intersections, so that observations were recorded for two different streams of traffic.

**Locations (number of intersections)**

Auburn (2)
Augusta (1)
Bangor (2)
Belfast (1)
Bridgton (1)
Brownfield (1)
Brunswick (1)
Buxton (1)
Calais (1)
Caribou (2)
Carthage (1)
Dover-Foxcroft (2)
Dresden (1)
Eliot (1)
Ellsworth (3)
Fairfield (1)
Farmington (1)
Fort Fairfield (1)
Fort Kent (1)
Gray (1)
Greenville (1)
Jay (1)
Jonesport (1)
Lubec (1)
Millinocket (1)
Paris (1)
Plymouth (1)
Portland (6)
Presque Isle (1)
Richmond (1)
Rockland (2)
Rockport (1)
Saco (2)
Sanford (1)
Scarborough (1)
Sedgwick (1)
Sidney (1)
Skowhegan (2)
South Portland (1)
St. George (1)
Swanville (1)
Topsham (2)
Turner (1)
Waldoboro (1)
Windsor (1)