

101 Deadliest Days on the Road

and how to survive them

Saturday before Memorial Day through Labor Day



VOLVO
for life

DRIVE *for* **LIFE**



Preface

Drive for Life is a public purpose initiative committed to the idea that drivers can significantly improve their safety on the road by changing the way they approach driving.

Our partners, Volvo Cars of North America, The American Automobile Association, Partners for Highway Safety, the National Association of Police Organizations, and the National Sheriffs' Association, are dedicated to raising public awareness about driving behaviors that increase risk on the road and helping drivers replace dangerous habits with safe ones.

Last year, Drive for Life commissioned a nationwide poll of driver behavior that revealed that drivers themselves – more than traffic conditions or vehicles – are the greatest safety threat on the road. In that poll, by Mason-Dixon Polling and Research Inc., American drivers admitted to knowingly and routinely engaging in careless driving behavior and dangerous practices. The poll also revealed that it's the harried, hurried, distracted drivers in the middle – people ages 26-44 – who admit to the most dangerous driving habits.

This year, building on the findings in that poll, Drive for Life developed this report, ***“The 101 Deadliest Days on the Road and How to Survive Them,”*** which documents an urgent national problem – the thousands of predictable, preventable deaths that mark and mar Americans' summer travel – and offers strategies to prevent it.

We undertook this advocacy because summer highway crashes all too often are family tragedies, when thousands of children lose their lives or lose a parent. The data make it clear that the great majority of these tragedies are preventable with planning, smart survival strategies and safe driving habits.

This report draws on an impressive roster of national experts on driving safety, with data and advice from the National Highway Traffic Safety Administration, the AAA Foundation for Traffic

Safety, the Centers for Disease Control, Mothers Against Drunk Driving, U.S. Department of Transportation, Insurance Institute of Highway Safety and Highway Loss Institute, National Center for Statistical Analysis, National Fatality Analysis Reporting System, National Center on Sleep Disorders, Partners for Child Passenger Safety, National Safe Kids Campaign, Liberty Mutual/Students Against Drunk Driving, and Progressive.com.

We drew heavily on the expertise of our partners: Volvo Cars of North America, which has pioneered trend-setting advances in automobile safety, AAA, which assists its 47 million members in reaching their driving destinations efficiently and safely, Partners for Highway Safety, whose break-through testing and education approaches are helping to reduce the crash rate of new drivers and evaluate the skills of aging drivers, as well as the National Sheriffs' Association and the National Association of Police Organizations.

Throughout this report we feature the stories of families that may well have been among those tragic statistics in the past year, but who were spared by a precaution, a habit or a driving behavior that saved their lives. At its best, driving is not just a necessity but also a pleasure. Our aim is to help American drivers – and families – survive and enjoy the road.

Executive Summary

Each major national holiday in America is ushered in with a grisly ritual, an announcement of the number of Americans projected to lose their lives in the days to follow. The names and faces are not yet known, but the numbers are remarkably predictable.

The causes of these crashes are predictable as well – and largely within the power of drivers to control and prevent. That’s the striking conclusion of this report, which examines summer traffic crash trends over the past five years.

This report focuses on a critical period that threatens the safety of American families and children – the 101 days from Memorial Day weekend to Labor Day weekend – when Americans take to the road in greater numbers and for longer periods and, tragically, when fatal crashes and child deaths peak. Drawing on a spectrum of traffic safety data and expert input from the nation’s most respected highway safety groups, this report seeks to help American families avoid becoming deadly statistics this summer.

This report outlines practical, proven strategies to guide drivers of all ages safely through these 101 days – a time when Americans will drive the equivalent of 150 trips to Pluto and back. These strategies provide a road map for families that could save their lives, whether they are driving cross-country to see the Grand Canyon or merely across town to return home from a cookout.

The 101 Days:

The Saturday before Memorial Day
through Labor Day Monday.



Executive Summary

Major Findings

Americans travel more than 1 trillion miles during the 101 days – that’s 10.5 million more miles per month than other months of the year. (*Bureau of Transportation Statistics, 2001*) Record numbers of Americans will travel this Memorial Day holiday. Based on a new AAA survey, nearly 37 million Americans will travel 50 miles or more from home this holiday – a 3.6 percent increase from last year.

All those miles take a tragic toll: On average, 269 more people die in traffic fatalities each month during the summer than in other months of the year. Of the 25 deadliest days on American roads in the past five years, 20 of them fell during the 101 days from Memorial Day weekend to Labor Day, including four of the top five. (*NHTSA, 1998-2002 data*)

Children also are casualties of summer. Motor vehicle deaths are the No. 1 cause of death of children, and child motor vehicle deaths are highest during the summer months. Teen traffic deaths also peak in summer: A 2003 study of teen driving behavior conducted by Liberty Mutual and Students Against Drunk Driving found that July saw more deaths (644) of youth ages 15-20 than any other month, followed by June (600), September (590) and August (587) in 2002.

Traffic deaths peak three times during the 101 days – Memorial Day weekend, the July 4th holiday, and Labor Day weekend. That alone marks the 101 days as a time for special caution: The average number of traffic deaths during holiday periods are 156 per day compared to 117 per day on non-holidays. (*NCSA, Research Note March, 2004, DOT HS 809 718*)

Most fatal crashes happen on two-lane, undivided highways and occur between 3 p.m. and 6 p.m. Most fatal crashes involving alcohol occur between midnight and 3 a.m.

Besides traveling more, American families tend to change their driving habits in the summer – in ways that heighten risk to children and teens. Children are more likely to be on the road with their parents in summer – parents who travel longer distances, travel at night and for longer stretches. During the summer, families with children were six times more likely to drive home from a long day trip while fatigued than people without children. And teen driving increases dramatically in summer, when many teens drive at night for the first time. Teen drivers average 44 percent more hours behind the wheel each week during the summer than during the school year, and 47 percent of teen drivers drive at night, compared to 6 percent during the school year. (*Liberty Mutual/ SADD, 2003*)

The good news is there are smart strategies that can drastically increase families’ chances of avoiding or surviving a crash this summer, as the family stories in this report illustrate. Some are basic good habits, such as buckling up and not drinking and driving. Others include avoiding late night driving marathons with children and not giving new drivers excessive driving privileges all at once just because summer is here.

We urge the drivers reading this report to draw from the strategies outlined here and develop their own family plan to survive the 101 deadliest days on the road.

6 Contributing Factors

1. Improper use of restraints

Safety belt use reached an all-time high in 2003, but failure to buckle up by 1 in 5 drivers still contributes heavily to deaths. Children of parents who don't wear seat belts are at greater risk of dying on the road, being unrestrained themselves. Child safety seats have reduced child deaths dramatically, but up to 75 percent of child restraints are improperly installed or used. Parents are moving children out of child safety seats and booster seats too young, with 83 percent of children ages 4-8 inappropriately restrained in adult seat belts. Children should never ride in the front seat, yet one in three children killed in motor vehicle crashes were riding in the front seat. *(NHTSA, Traffic Safety Facts 2003; Partners for Child Passenger Safety, 2000)*

2. Alcohol

Alcohol-related deaths account for 41 percent of total traffic fatalities or an average of one every 30 minutes. Two of every three children killed in alcohol-related crashes were riding in a car with a driver who had been drinking – but who was not necessarily drunk. Nearly a third of teen drivers who were killed in motor vehicle crashes had been drinking. More than two-thirds of them were not wearing seat belts. *(MADD)*

3. Fatigue

Fatigue impairs driving in similar ways as alcohol: It impairs reaction time, vigilance, attention and information processing. In the past five years, 1.35 million drivers involved in a car

crash attributed it to drowsiness. Fatigue-related crashes are likely to be serious and occur on high-speed roads, and the driver often does not attempt to avoid the crash. During summer, families with children were 6 times more likely to drive home from a long day trip while fatigued than people without children – 57 percent said they are likely to drive when fatigued to get home from a weekend getaway and 59 percent said they are likely to drive fatigued to get to a destination in one night. *(NHTSA, March 2003; Progressive.com)*

4. Car maintenance

Neglected maintenance leads to 2,600 deaths annually, nearly 100,000 disabling injuries and more than \$2 billion in lost wages, medical expenses and property damage. Under-inflating or over-inflating tires can result in serious injuries. Tire care is especially critical in warm weather because long trips, heavy loads, higher speeds and higher temperatures all put additional stress on tires. *(NHTSA, Automotive Aftermarket Industry Assn. May 19, 2003)*

5. Speed

Most crashes occur at 40 mph or less, but most fatal crashes occur at top speeds. Speeding creates an economic cost to society of \$40.5 billion per year. In 2002, speeding was a contributing factor in 31 percent of all fatal crashes, and 13,713 lives were lost in speeding-related crashes. At least eight in 10 drivers admit to speeding at least monthly on each road type. Men are 25 percent more likely to speed than women. *(NHTSA 2002, National Safe Driving Test Survey, 2003).*

6. Distractions

More than 1.5 million police-reported crashes involved some kind of driver distraction. Most drivers admit to engaging in one or more activity while driving, including eating (59 percent), talking on a cell phone (37 percent) and even reading (14 percent). (*Mason Dixon Drive for Life poll, 2003*) Other common distractions are talking to passengers (81 percent), changing radio stations or CDs (66 percent) or dealing with children in the backseat (24 percent). Only one in four drivers perceives these behaviors as distracting or dangerous. More than 7 million drivers involved in a crash attribute it to distractions and 292,000 attribute the cause to talking on a cell phone. (*NHTSA, March 2003, National Survey*)

Summer Statistics

- On average, 12,758 fatalities occur during the 101 deadliest days of summer (1998-2002 data, NHTSA). That's 126 deaths per day, five deaths per hour or one death every 11 minutes. (*NHTSA, 2002*)
- On average, 269 more people die in traffic fatalities each month during the summer than in other months of the year. (*NHTSA, 2002*)
- The average number of traffic deaths during holiday periods in 2002 were 156 per day, compared to 117 per day on non-holidays. (*NHTSA, 2002*)
- In 2002, traffic crashes on summer holiday weekends claimed 491 lives on Memorial Day weekend, 683 lives on July 4th weekend and 541 lives on Labor Day weekend. (*NHTSA, 2002*)
- Child motor vehicle deaths are highest during the summer months. (*Insurance Institute for Highway Safety, 2002*)

The 101 Deadliest Days

Motor vehicle crashes cost society more than \$230 billion a year or \$7,300 per second. But the cost in human suffering is incalculable, especially when a family is struck by tragedy and children or parents lose their lives.

Memorial Day weekend marks the beginning of the 101 deadliest days on the road for American families, a time when more children will lose their lives in car crashes – the leading cause of death for children – than any other time of the year.

Summer is a time when traffic crashes and fatalities peak three times – Memorial Day weekend, July 4th and Labor Day weekend. It's a time when American families pack up what's most precious to them – their families – and travel more than one trillion miles – that's an extra 10.5 million miles a month. *(U.S. Bureau of Transportation Statistics, 2001)*

For most families, those miles are filled with pleasure, adventure and togetherness – new places to explore and special times to remember. But for hundreds of thousands of Americans, those memories will be marred by crashes resulting in injuries, costly damages and inconvenience. And for thousands, summer road trips will cost them their lives.

This report is intended to raise drivers' awareness of the 101 deadliest days and arm them with information and strategies to keep their families safe on the road during the summer months and year-round.

Leading Cause of Children's Deaths

The dramatic drop in child deaths on the road in the past 30 years is a great American success story. Innovations in car safety and child restraints, together with greater use of child restraints, has reduced child motor vehicle deaths by 56 percent since 1975. *(IIHS, 2002, Fatality Facts on Children)*

Still, motor vehicle crashes remain the leading cause of death of American children, claiming 1,610 children in 2002, and child deaths on the road peak in the summer months. Motor vehicle deaths account for one of every three injury deaths among children. By far, the greatest contributors to child deaths on the road are improper use of child restraints and alcohol use by the car's driver. *(IIHS, 2002)*

Teen traffic deaths also peak in the summer, when teens log more hours behind the wheel than at any other time of the year. Teen drivers average 44 percent more hours behind the wheel each week during the summer than during the school year, and they are more likely to drive at night. In the summer months, 47 percent of teen drivers drive at night, compared to 6 percent during the school year. A 2003 survey completed by Liberty Mutual and SADD found that, of the 6,434 motor vehicle fatalities involving youth ages 15-20 in 2000, July saw more deaths (644) than any other month, followed by June (600), September (590) and August (587.)

Child Casualties

- More child motor vehicle deaths occur on Friday, Saturday and Sunday than on other days of the week.
- More children die between the hours of 3 – 6 p.m. than at any other time of the day. More than one in four fatal crashes claiming the lives of children occurred at that time.
- An average of six children ages 0-14 were killed and 721 a day were injured per day in motor vehicle crashes in 2002. *(NHTSA, Traffic Safety Facts, 2002)*
- One in three children killed in motor vehicle crashes were riding in the front seat.

(Insurance Institute on Highway Safety and Highway Loss Data Institute, 2002)

August 1, 2003

Four Teenagers Survive Fiery Rollover

excerpted WestportNow

Four teenagers from Westport and Fairfield escaped a fiery rollover crash Friday night on Hyde Lane near Long Lots Elementary School. The 16-year-old male driver lost control of a Mercedes sport utility vehicle going around a curve in wet weather. The car became wedged between a stone wall and a tree and its engine compartment burst into flames. Three of the teens – the driver and two females in the back – managed to get out by themselves, but the fourth – Robert Paniccia riding in the front passenger seat – was trapped before a passerby rescued him through the roof. The victims were taken to Norwalk Hospital for treatment of non-life-threatening injuries.



6 Major Contributing Factors



1

Improper use of restraints

Safety belts are the most effective safety device in motor vehicles, and their increasing use has saved more than 164,750 lives since 1975.

Safety belt use reached an all-time high of 79 percent in 2003. A 2001 report by the Centers for Disease Control (CDC) concluded that safety belts are 45 percent to 60 percent effective in reducing deaths and 50-65 percent effective in reducing moderate to critical injuries.

Similarly, growing use of child safety seats has dramatically reduced child deaths on the road. A National Highway Traffic Safety Administration (NHTSA) study found that approximately 62 percent of children weighing less than 80 pounds were restrained in a child safety seat and 26 percent were restrained in a safety belt. Still, despite the progress, nearly 12 percent of children were unrestrained. The CDC reports that child safety seats are 55 percent to 70 percent effective in preventing deaths.

Failure to use safety belts and improper use of child restraints remain a major contributor to traffic injuries and fatalities. Studies report that between 73 percent and 75 percent of child restraints are improperly installed or used, and 83 percent of children between the ages of 4 and 8 are inappropriately restrained in adult seat belts rather than child safety seats. That's a serious problem because children ages 4-8 are four times more likely to suffer a serious head injury while restrained in a seat belt rather than a booster seat. In fact, more than 90 percent of children ages 4-8 who were seriously injured were not in a booster seat. (Partners for Child Passenger Safety, 1998-2000)

One in three children killed in motor vehicle crashes were riding in the front seat. Riding in the back seat reduces injuries by 46 percent in cars with front passenger seat airbags and 30 percent in cars with no front airbags. (CDC, Child Passenger Safety Facts, 2004)

Proper restraint use among children is strongly related to their parents' habits regarding buckling up. One study found almost 40 percent of children riding with unbelted drivers were themselves unrestrained. Another study reported that 92 percent of children transported by belted drivers were restrained in either a child safety seat or safety belt, compared to 62 percent of children transported by unbelted drivers. Unrestrained children are three times more likely to suffer a serious injury, most commonly head injuries, compared to restrained children.

Failure to buckle up also plays a significant role in teen driving deaths and is related to alcohol consumption: Teens who have been drinking are less likely to wear a safety belt. In 2002, nearly a third of young drivers (15-20 years old) killed in motor vehicle crashes had been drinking and 77 percent of those were unrestrained. (MADD, 2003)

Child restraints:

Requirements and recommendations

All 50 states and the District of Columbia have child restraint laws. Child restraint and seatbelt laws require children to travel in approved child safety seats and booster seats and require older children to use adult safety belts. The age at which children may use safety belts rather than child safety seats is governed by state law.

NHTSA recommendations:

- Infants should ride in a rear-facing child safety seat until they are at least one year old AND weigh at least 20 pounds.
- Toddlers between 20 and 40 pounds should ride in a forward-facing child safety seat with a harness.

Survival Strategies

- **Use safety belts**, always, even for short trips.
- **Keep children restrained in a child safety** or booster seat until they turn 8 or weigh 80 pounds.
- **Make sure child safety seats are properly installed.** Ask your local sheriff's office or police department to check if you are unsure.
- **Keep children in back.** Keep children properly restrained in the back seat.
- **Replace child safety seats every five years** because wear from use and temperature changes may weaken a seat's strength and integrity.
- **Carefully read the instruction booklet** for your child safety seat as well as your vehicle owner's manual.
- **Children can move into seat belts** when they can sit with their backs straight against the vehicle seat back and their knees can bend over the seat edge without forcing the child to slouch. The seat belt should fit the child low across the hips and thighs, and across the shoulder and chest. It should not cut into the child's abdominal area, neck or face.
- **Be sure the harness straps on a child safety seat are snug**, are properly threaded and are not twisted.
- **Avoid using a secondhand safety seat.** It is hard to tell if a seat has been recalled, mistreated, involved in a crash or is missing any key components.

- Children who have outgrown a forward-facing safety seat should be restrained in a booster seat until at least age 8, unless the child is taller than 4 feet, 9 inches.
- Children should not sit in a front passenger seat of a car equipped with an air bag until at least age 13.

Survivor Story

May 2003

College student survives wreck with only scratch on her knee

Excerpted from letter to Volvo Cars of North America

In May of 2003, Sara Fajkowski, 23, a college student from Boston, Massachusetts, was on a weeklong vacation in a New Jersey shore town between semesters. She pulled her '92 green Volvo out of her parking space and was halfway onto the street when a pickup truck plowed into the driver's side door. Fajkowski, covered in glass, climbed out of the totaled car through the passenger door with only a scratch on her knee. She credits the Volvo with saving her life: "I later went to look at the car and take some pictures once I found out that it was totaled. I truly believe that if I was not in a car designed to crush and protect when hit on the side, I would either not be here today or I would be severely injured." To view pictures of the crash, visit www.fajkowski.com/volvo



2

Alcohol

In 2002, an estimated 17,419 people died in alcohol-related crashes – an average of one every 30 minutes. These deaths constitute 41 percent of the 42,815 total traffic fatalities.

Alcohol also plays a major role in child fatalities: Two of every three children killed in alcohol-related crashes were riding in a car with a drinking driver. A recent CDC study found that 2,335 children died in car crashes involving drinking – not necessarily drunk – drivers between 1997 and 2002. In the overwhelming majority of those cases – 68 percent – the child was riding with a drinking driver.

Alcohol also strongly figures into teen driving deaths: Nearly a third (29 percent) of drivers ages 15 to 20 who were killed in motor vehicle crashes in 2002 had been drinking. The most likely time to encounter a driver who has been drinking is between midnight and 3 a.m. on Saturdays and Sundays. In fact, the National Fatality Analysis Reporting System (FARS) reports that “the risk of teenage drunk-driving fatalities is nearly 200 times as great at 1 a.m. Sunday as the risk nine hours later at 10 a.m. Sunday morning.”

Alcohol-related fatalities

(NHTSA, persons killed during holiday periods, 2002)

Memorial Day weekend	236
July 4th weekend	328
Labor Day weekend	298

Nearly 80 percent of fatal crashes occurring from midnight to 3 a.m. involved alcohol. The rate of alcohol involvement in fatal crashes is more than three times as high at night than during the day, and, in all crashes, the alcohol involvement rate is five times as high at night.

Survival Strategies

- **Don't drink and drive** – even short distances. Drivers who have been drinking have higher crash rates even if they don't exceed the legal limit. You can be convicted of alcohol-impaired driving even if you are under the legal blood alcohol concentration of .08 to .10 percent if there are other indications that your driving is impaired.
- **Keep your family off the road in the wee hours.** Avoid driving all night to cover more ground while the children are asleep: It puts you at the greatest risk of encountering a drunk driver.
- **Have a plan.** When you take your family to a barbecue or party where you know you will be drinking, arrange for a designated driver to drive your family home or car pool with another family.
- **Give teens greater driving privileges gradually,** as they gain experience – not all at once, just because it's summer.
- **Eat when drinking.** Eating items high in protein such as meat, cheese and nuts, will aid in slowing the body's absorption of alcohol.
- **Don't mix pharmaceuticals and alcohol.** Ask your doctor or pharmacist about alcohol and drug interactions and follow any given directions.
- **Don't be deceived.** The average glass of wine, mixed drink, straight liquor, bottle of beer or can of beer contains almost the same quantity of pure alcohol and will all read the same on a breathalyzer.



Survivor Story

Seattle, Washington

'He's A Miracle, My Miracle'

August 1, 2003

Excerpted from KOMO TV report

Curtis Taylor cherishes the moment when he first held his son, Solomon Miracle Taylor. He says 'Miracle' is the name that truly fits. Rescue crews had to cut Curtis' wife Consonya out of her car after a drunk driver crashed into her in downtown Seattle.

The impact of the crash spun Consonya's car around and crushed the front, leaving her trapped inside. She was eight months pregnant. She had broken bones all over her body; her ankles, one leg, her hip, an arm and a wrist. Miraculously, their son was delivered by emergency C-section.

Consonya told people at the hospital right after the crash that she wanted the son to be named 'Miracle'. Curtis says he had to make an executive decision about the name, and decided to make 'Miracle' his son's middle name.

6 Major Contributing Factors



Driver fatigue

Fatigue produces profound physical symptoms that impact driving ability in many of the same ways as alcohol consumption – also with deadly results. Sleepiness impairs performance and may ultimately lead to falling asleep at the wheel. But long before a driver is close to falling asleep, fatigue impairs reaction time, vigilance, attention and information processing. In fact, scientists contend that long blinks and eye closures are poor indicators of when to pull over because by the time they occur drivers are already well into the danger zone.

Fatigue-related crashes are likely to be serious and often involve a single vehicle leaving the roadway. The over-tired driver, who is usually traveling on a high-speed road, often does not awake soon enough to avoid the crash.

A March 2003 NHTSA report found that 1.35 million drivers involved in a car crash in the previous five years attributed it to drowsiness. Drowsiness is listed in police reports as the primary causal factor in 100,000 crashes per year, resulting in 76,000 injuries and 1,500 deaths. Unlike alcohol use, no blood, breath or other measurable test is currently available to quantify levels of sleepiness at crash sites.

Fatigue is a special risk in the summer. In a study of 400 drivers, 57 percent said they were more likely to drive when overtired or fatigued when driving home from a weekend getaway, and 59 percent said they were more likely to drive when fatigue-impaired because they wanted to get to a summer destination in one night. In the same study, families with children were six times more likely to drive home from a long day trip while fatigued than people without children. Half of those surveyed said the most aggravating time to drive during the summer was on Friday evenings on the way to a weekend getaway, followed by Sunday evenings returning from a trip (27 percent.)

Sleepiness reduces optimum reaction time and even a moderate degree of sleepiness can impair a driver's ability to stop in time to avoid a collision. Very small decrements in reaction time can have a profound effect on crash risk, especially at high speeds. Lack of sleep also causes deficits in information processing. Processing and integrating information takes longer if the driver is sleepy, and the accuracy of short-term memory decreases, affecting performance.

Around the clock:

- Risk of a fatigue-related crash increases at night among young drivers and all drivers younger than age 45.
- Fatigue-related crashes peak at 7 a.m. for drivers ages 45-65, with fewer nighttime crashes for this age group.
- Drivers older than 65 are more likely to have fatigue-related crashes in mid-afternoon.

Facts about fatigue-related crashes:

- Likely to be serious
- Often involve a single vehicle leaving the roadway
- Usually occur on high-speed roads
- Driver often does not attempt to avoid the crash
- Driver is often alone in the vehicle

6 Major Contributing Factors

Risk factors

Among the factors that increase the likelihood of a fatigue-related crash are:

- Driving a substantial number of miles each day or year.
- Driving for long periods without taking a break.
- Driving between midnight and 6 a.m.
- Sleep loss.
- Use of sedating medication.
- Untreated or unrecognized sleep disorders.
- Alcohol consumption

Summer facts

Fatigue is a special risk in the summer. In one study of 400 drivers:

- 57 percent said they were more likely to drive when overtired or fatigued when driving home from a weekend getaway.
- 59 percent were more likely to drive when fatigue-impaired because they wanted to get to a summer destination in one night.
- During the summer, families with children were six times more likely to drive home from a long day trip while fatigued than people without children.
- Half of those surveyed said the most aggravating time to drive during the summer was on Friday evenings on the way to a weekend getaway followed by Sunday evenings returning from a trip (27 percent.)
- 26 percent report driving when they shouldn't after drinking at summer barbecues and 23 percent said they would be more likely to drive after drinking at a summer party if they didn't have far to drive. *(Progressive.com.)*

Survival Strategies

- **Get enough sleep the night before a long trip.** Sleeping less than six hours increases your risk of falling asleep at the wheel.
- **Don't plan to work all day and drive all night.** Research shows that a driver who has been awake 20 or more hours is at high risk of falling asleep.
- **Don't drive straight through on a long trip.** Build in time to stop, stretch and eat. Schedule a break every two hours or 100 miles.
- **Build in side trips** on a long trip that give you a chance to see local sights and stop driving for awhile.
- **Stop and eat meals** at a restaurant, rather than going through a drive-through.
- **Share the driving** and stop for naps.
- **Stop for the night** before you feel the physical symptoms of falling asleep or else you are already in the danger zone.



Car maintenance

Neglected maintenance leads to more than 2,600 deaths annually, nearly 100,000 disabling injuries and more than \$2 billion in lost wages, medical expenses and property damage. (*Automobile Aftermarket Industry Association, May 19, 2003*)

In the summer, tires are especially vulnerable because long trips, heavy loads, higher temperatures and higher speeds put additional stress on tires.

Surveys conducted by NHTSA in 2001 concluded 27 percent of passenger cars and 32 percent of light trucks (including SUVs, vans and pickups) on U.S. roadways are driven with one or more substantially under-inflated tire. U.S. Transportation Secretary Norman Y. Mineta urged motorists to check their tire pressure and inflate them properly before setting out on trips: "Driving with substantially under-inflated tires can lead to crashes and tragedy, in addition to reducing fuel efficiency and shortening tire life."

In 2001, NHTSA estimated that 49 to 79 deaths and 6,585 to 10,635 injuries could be prevented annually if all vehicles were equipped with tire pressure monitoring systems. This system would warn drivers when a vehicle has a significantly under inflated tire.

During voluntary vehicle inspections conducted by AAA in 2002, one-third of all vehicles tested required some form of basic maintenance. The most frequent problems were improper tire pressure (38 percent); low or dirty motor oil, antifreeze or other fluids (34 percent); insufficient tire tread depth (20 percent); battery problems (18 percent); blistered, cracked or glazed hoses (6 percent), and faulty headlights (6 percent).

Survival Strategies

- **Bring your car in for a major service visit** two weeks before a big road trip.
- **Make time for a last-minute safety check.** Before getting on the road, check tire pressure, wipers and fluid levels. Clean windows and adjust mirrors. Check child safety seats and any towing hitch.
- **Secure any loose objects in vehicle.** In a collision, a loose object can become a deadly missile. Drive the speed limit. A high rate of speed in hot weather over a long period of time is an increased burden on your tires.

Tire Check

- Measure tire pressure when tires are cold and use an accurate gauge.
- Keep tire pressure at the level recommended in your owner's manual, also listed on a label in the glove box and another near the door latch on the driver's side.

Key car systems to check before a trip:

- **Cooling**
- **Braking**
- **Lights**
- **Belts**
- **Hoses**
- **Wipers**
- **Horn**
- **Tires**

• Check tires regularly for visible signs of wear, damage, bulges or tread separation.

• Don't confuse recommendation inflation with maximum inflation, which is printed on the side of the tire. At the recommended inflation pressure, tires will last longer, be less likely to fail and the car will use less fuel. Serious injury can result from over- and under-inflating.

6 Major Contributing Factors

- Never overload your vehicle. Your car and tires are designed to operate safely only up to their load limits, which are listed the owner's manual and on the side of the driver's side door.
- Tire tread should be deep enough so that grooves at least touch the top of Lincoln's head on a penny inserted head first into the groove. Bald tires with low tread should be replaced.
- If tires are worn unevenly, check with your tire dealer, service station or mechanic. You could have worn shock absorbers or misaligned wheels. Make sure tires are aligned and balanced.

Preventative Maintenance

Two weeks before a major road trip, take your vehicle to a trusted mechanic with a full-service shop. This allows enough time to make necessary repairs, and allows time for adjustments. In most cases, if anything goes wrong after major repairs, it will be in the first 100-200 miles.

The day of your trip:

- Check tire pressure and fill, if necessary, to manufacturer's recommended tire pressure**
- Clean windows**
- Make sure towing hitch is secure**
- Check lights on trailer or other item being towed**
- Top off fluids**
- Adjust interior and exterior rearview mirrors**
- Make sure all loose objects inside the vehicle are securely fastened.**
- Test child's safety seats to make sure they don't**

Two weeks out, have your mechanic:

- Perform all regularly scheduled maintenance on your vehicle**
- Inspect tire treads and pressure in addition to evaluating tires for rotation and balance**
- Check braking system**
- Examine hoses and belts**
- Check spark plugs**
- Check your battery**
- Check and replace (if needed) filters**
- Check fluids (brake, power steering, transmission, anti-freeze/coolant**
- Inspect exhaust system**
- Change oil**
- Make sure all signal lights (brake, turn, back up) are working and replace bulbs if necessary**
- Check windshield wipers, replace if necessary**

Top 3 Deadliest Days:

1. Saturday
2. Sunday
3. Friday

6 Major Contributing Factors



Speed

move more than an inch and are fit your child snugly

Speeding is one of the most prevalent factors contributing to traffic crashes. The economic cost to society of speeding-related crashes is estimated by NHTSA to be \$40.4 billion per year. In 2002, speeding was a contributing factor in 31 percent of all fatal crashes, and 13,713 lives were lost in speeding-related crashes.

Speeding reduces a driver's ability to steer safely around curves or objects in the roadway, extends the distance necessary to stop a vehicle, and increases the distance a vehicle travels while the driver reacts to a dangerous situation. Despite that, most drivers believe speeding is OK. In a national Drive for Life poll conducted last year by Mason-Dixon, 71 percent of drivers – even seniors – said they speed and most believe it's OK to routinely exceed the speed limit by 5 mph. One in three men surveyed believe it's OK to exceed the speed limit by 10 mph.

Most crashes (57 percent) occur at 40 mph or less, but most fatal crashes occur at top speeds. More than half of fatal crashes in 2002 occurred on roads with posted speed limits of 55 mph or more. But these roads are not necessarily in urban areas. In fact, 42 percent of all motor vehicle fatalities occurred on rural roads with cars traveling at 55 mph or greater.

Speeding statistics

- The 2001 costs of speeding-related crashes were estimated to be \$40.4 billion— \$76,865 per minute or \$1,281 per second.
- At least eight in 10 younger drivers report speeding at least monthly on each road type.
- Six in 10 drivers age 65 or older report speeding on all road types. (NHTSA, NCSA Traffic Safety Facts, 2002)

Survival *Strategies*

- **Drive the speed limit.** Speeding limits your ability to steer safely around curves or objects in the road and extends the distance needed to stop.
- **Don't let the car behind you pressure you to speed.** Let it pass you.
- **Slow down even below the speed limit in rainy, icy or snowy weather** or on a road that is under construction.
- **Don't tailgate.** Allow three seconds or more between the time when the car in front of you passes a fixed object and when you pass it.
- **Generally keep pace with the flow of traffic.** Driving much slower than the cars around you also can increase the chances of a collision.

Speeding also leads to excessive lane changes, which contribute to crashes. More than 43 percent of all motor vehicle crashes reported in 2001 involved a lane change or road departure. The U.S. Department of Transportation reports 55 percent of fatal accidents are caused by unintended lane departure, including veering off the road.

Deadliest Months: July and August

Survivor Story

North Platte, Nebraska

Family Credits Child Seat Check-Up Event With Saving Children's Lives

July 1, 2002 Excerpted from Nebraska State Patrol report



On Monday, Toni Slattery, of North Platte, Neb., was driving her 1995 Chevy Suburban on a county road when she lost control in the gravel. The Suburban rolled four times and landed in a ditch. Also in the vehicle were her four young children; Kari, age 7; Katie, age 5; Jessica, age 3; and 8-month-old Julie. All five escaped serious injury.

Three months before the crash, Toni attended a free child safety seat check-up event in North Platte to have her child seats inspected. All four seats were found to have been improperly installed. In May 2002, Slattery made an appointment with a child passenger safety technician at the Nebraska State Police office in North Platte because she was concerned that one of the child seats was not secured tightly enough. The technician provided Slattery with a locking clip to tighten the seat.

Slattery credits those visits and the proper use of child safety seats with saving the lives of her children. "Learning what I was doing wrong and how to fasten the child seats correctly saved my daughters' lives," Slattery said. Once they were freed from the wreck, the family was in good condition and happy to be alive.



6 Major Contributing Factors

Distractions

But slower speeds alone don't guarantee safety especially in congested, urban areas.

Of slow-speed crashes (30 mph or less) that resulted in a fatality, 75 percent occurred in urban settings.

Top Driving Distractions:

- CD/Cassette Players and Radio
- Children
- Pets
- Eating
- Drinking
- Smoking
- Cell phones

Safe driving requires a driver's complete attention and concentration. A momentary distraction can lead to tragedy on the road. Yet multiple surveys and studies document that

America is a nation of distracted drivers. NHTSA estimates that more than 1.5 million police-reported crashes involved some kind of driver distraction. Drive for Life's 2003 national survey of driver behavior found that most drivers engage in one or more other activities while driving, including eating (59 percent), talking on a cell phone (37 percent) and even reading (14 percent).

Those results echo the findings of a 2002 NHTSA survey that found drivers also talk to other passengers (81 percent), change radio stations or CDs (66 percent.), or deal with children in the back seat (24 percent).

While drivers are estimated to make a billion driving trips a week while engaging in these behaviors, fewer than one in four drivers perceives them as distracting or making driving more dangerous.

For instance, drivers who use cell phones while driving are half as likely to feel that cell phone use is dangerous.

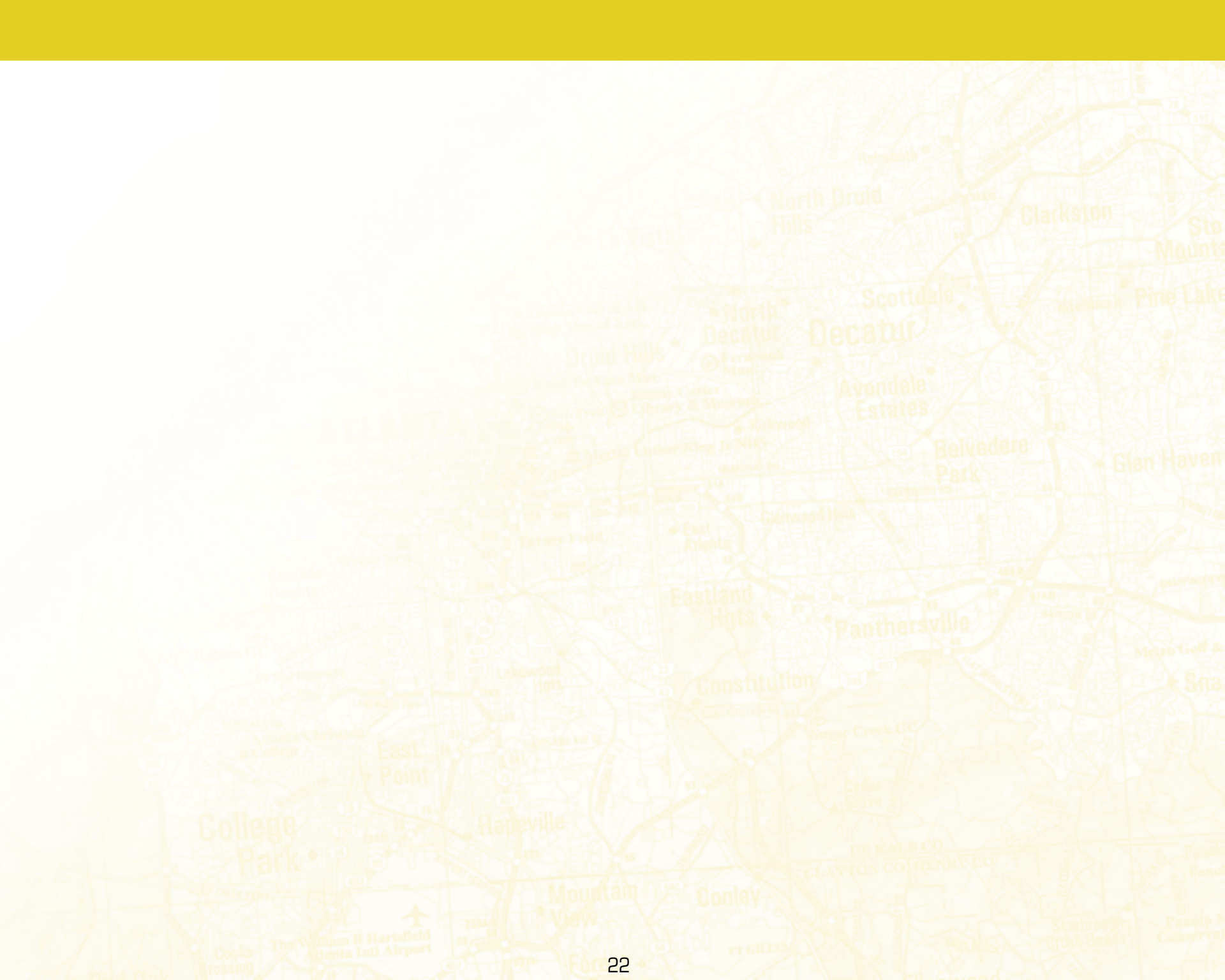
One in four drivers have been involved in a crash in the past five years. About 7.17 million drivers involved in a crash attribute the cause to distractions and 292,000 attribute the cause specifically to talking on a cell phone. *(NHTSA, National Survey, Spring 2002)*

Survival *Strategies*

- **Keep your eyes on the road** in the direction the car is moving at all times.
- **Avoid using a cell phone while driving.** If you must, place the call only when stopped.
- **Ask front seat passengers to change CDs,** wait until you are stopped, or invest in a multiple CD-changer.
- **If you must eat in the car, pack along finger foods** that are small pieces and won't dribble, drip or leak. Have them someplace easy to reach or handed to you. If you stop for food, avoid the drive-thru; instead, take a break and eat at a table.
- **Drinks in the car should be in spill-proof containers** that fit your beverage holders. Use a straw to keep both eyes on the road even if both hands are not on the wheel.
- **Establish rules, rewards and consequences with children** for disruptive and good behavior before a road trip.
- **Pull off the road to deal with a disciplinary situation.**
- **If a child is crying but otherwise fine** and stopping is not an option, turn up the radio, breathe deeply, and remember that your job is to focus on driving.
- **Secure items that move or roll around** the car and distract you from driving.
- **Use a pet restraint system** or transport small pets in carriers.

101 Deadliest Days

year	fatalities
1998	12,752
1999	12,656
2000	12,716
2001	12,669
2002	12,995







May 2004
For more information on Drive for Life
visit
www.driveforlife.com