



FIRST DRIVE: '07 INFINITI G35. PLUS BMW Z2 & Z29 CONCEPT

Woodward Dream Cruise—Rain Could Not Dampen a Million Spirits

Autoweek

SEPTEMBER 4, 2006

autoweek.com[®]

**SPECIAL REPORT:
DRIVER EDUCATION**

Failing Our Children

More than 5000 teens die in cars each year. Some people are working to stop it. Here is how you can join them.

◀ Katherine has spent more hours loading her MP3 player than she has behind the wheel, but she has the car keys. That could be a fatal error.

AutoWeek

September 2006

Dear Concerned Driver:

Let me open this letter to say how heartened I am that you found value in the AutoWeek special Teenage Driver Education issue we recently completed. This is a subject about which we as parents - as well as driving enthusiasts - hold dear to our collective hearts.

It is a subject, too, that effects us all.

While we are just one voice at AutoWeek, we hear others ask to join our driving safety chorus.

In the days following this special section, we have had parents, teachers, Fortune 500 companies - you name it, they've called - ask how they can be involved and how they can spread this word of driver safety. For that reason we believe it is valuable to over-print this section for broader distribution.

Thanks to you for your interest and your help in getting the word out. In order to affect change we must first recognize the problem and begin to talk about it. This, I truly hope, opens that dialogue.

Sincerely,



Dutch Mandel
Editor & Associate Publisher
AutoWeek



BACK TO SCHOOL > Teenage Driving

» Since the March 2003 invasion of Iraq, about 2600 American troops have been killed in combat and war-related incidents. The count is well-known and updated regularly in news reports. Did you know during the same 41-month period, more than 22,000 teenagers, ages 15 to 19, died in traffic accidents on U.S. roads? »

By Kevin A. Wilson

Parents: It's your job. Some practical advice, page 21 > Why the old-school method just isn't enough, page 22 > Important things to know if ADHD is part of the equation, page 23 > Give your kid the edge before that chance slips away, page 26 > The right car is out there for your teen, page 28 > The cost of insuring your teen, and how to go about getting a discount, page 29 > The manufacturers get in on training future customers, page 30 > Parenting 007: Sometimes a little underhanded maneuvering is required, page 32

“**T**HINK ABOUT THOSE deaths on the roads for a moment,” says Phil Berardelli, author of *Safe Young Drivers* (and an article on page 21 of this magazine). “A highway fatality is as violent, bloody and gruesome as anything in warfare. It causes family members to grieve just as deeply as those of combat casualties; the lives cut short are just as tragically young, or younger.”

Berardelli uses the statistical comparison when called upon to speak in public on the subject. It’s not an exact comparison—there are far more teen drivers than there are soldiers deployed in Iraq. But the dismal fact is America watches many more young people die in traffic accidents than it does in military service, and yet there’s very little political and public activity related to stemming these deaths.

“We just accept the fact that somewhere between 5000 and 6000 kids will die on our roads this year and another 300,000 will be seriously injured. And it’s just not acceptable,” says Ron Langford, who created the MasterDrive driver-education program in Colorado after the death of his own 16-year-old daughter in a traffic accident.

Fortunately, Langford is not the only one thinking this way. The time is ripe for car enthusiasts—who have long bemoaned the state of driver education in America—to contribute to an evolving effort to address the problem. The past decade has seen rising interest in how we teach teens to drive and license them to do so. On one hand, states—with the encouragement of AAA, the insurance industry and the federal government—have implemented Graduated Driver Licensing programs. Generally speaking, GDL programs demand more hours of on-the-road training with a parent or guardian in the car during an extended learner’s permit period. GDLs then put restrictions on the hours during which newly licensed drivers can be on the road and how many teen passengers they can have with them and so on.

“Graduated licensing works,” asserts Ann Fleming, senior vp for communications at the Insurance Institute for Highway Safety. Indeed, teen fatality rates typically fall 20 percent to 25 percent in the period following a state’s enactment of GDL. “In state after state the fatality rates have decreased,” Fleming said. “Because [GDL] introduces teens to driving over an extended period, and it protects them from the high-risk situations until they have more experience—late night, numbers of passengers. We have seen a significant low-

ering of crash risk.”

Right now 44 states and the District of Columbia have GDL laws—and by AAA’s count, they all have at least some elements of the recommended array of restrictions on age, driving experience, curfews and other limitations. But not one has an “optimal” program as defined by NHTSA, AAA and IIHS, the leading advocates for such programs (to see how your state measures up, check out www.nhtsa.gov).

Critics, however, note GDL lowers fatalities by decreasing the numbers of teens on the road, not necessarily by improving their ability as drivers.

“Let’s give IIHS and its campaign for GDL credit for slowing down the push to license 16-year-olds,” says David Thompson of the Florida-headquartered New Driver Car Control Clinic, which offers programs in 14 states. “But what does that really do? It puts a barrier in the way”—a financial or regulatory wall to leap over—and that cuts the numbers of drivers in the youngest age cohort. “That’s not a small accomplishment,” says Berardelli. “Kids are alive who would have been dead doing it the old way. But for it to work best, it really needs parents to step up.”

Many parents seem to recognize GDL isn’t the be-all and end-all (those fatality rates are still too high), which is why the rise of GDL programs has also seen a parallel proliferation of programs that aim to expose teens to advanced driving skills such as emergency lane-change maneuvers, skid recovery and how to make best use of antilock brakes, traction control and other technologies. Talk to those leading these programs and you find a lot of passion and a lot of varied approaches to how to teach these skills, though. America is recognizing a problem, and a lot of people are trying to do something about it,

Getting started with your teen

► We contacted numerous advanced driving-skills programs for teens in the course of preparing these articles. Below is a list of websites where parents can find out more about the programs available—some are national touring programs, others are more regional in nature. This list does not purport to be comprehensive, and inclusion should not be construed as an endorsement by this magazine, but parents interested in finding programs for their own teens could get started here.

www.driversedge.com
www.streetsurvival.org
www.masterdrive.com
www.drivers.com/topic/8/
www.drivesafer.com
www.drivingconcepts.com
www.teendrivers.com
www.carcontrolschool.com
www.survivethedrive.org
www.drivingmba.com
www.roadreadyteens.org
www.tirerack.com
(click the “motorsports and driver’s schools” button on the home page)
http://raceschool.com/newsite/teen_academy.html
<http://nsc.org/train/ddc/student/live25.cfm>
www.xtrememeasures.org

► For more in-depth studies of teen driver-education issues, see the following websites. Most have search functions, and entering the terms teen, teen driver or driver education will turn up a wealth of information.

www.nhtsa.gov
www.aaafoundation.org
www.iihs.org
www.nsc.org
www.chop.edu/injury

► For a complete list of websites and reference materials visit autoweek.com

but we haven’t agreed on the same answer.

“This is an exciting time in driver education circles,” asserts Bill Van Tassel, manager of driver training operations for the national AAA. “There’s a lot of focus on the subject. One good question is whether the goal should be to make us into good driving citizens for life, or is the goal to keep them safe for that first six months or 1000 miles?”

Why not both? “You probably want both,” says Van Tassel, “but it makes a difference in how you set priorities.”

We’ve been arguing priorities for a long time now. Thompson, Langford and many others who teach advanced skills maintain the IIHS’s former leader, Brian O’Neill, was such a staunch opponent of driver education—saying that skills-training programs *did not* work to improve teen safety and citing numerous studies to support his assertion—that he almost single-handedly set progress back a decade or more.

Counters the IIHS’s Fleming: “We’re not anti-driver education; it may be a good thing to teach these skills. It just shouldn’t be confused with making teens safer. Generally speaking, it’s

not an issue of skills; the risk has to do with attitudes. You can teach them skid control all day and it won’t affect the teenager’s sense of... invulnerability.”

A recent study by Children’s Hospital of Philadelphia (CHoP), sponsored by State Farm Insurance, concluded that the first six-month period of licensure is the most dangerous time for any driver, and the crash risk remains twice as high as that for adult drivers until age 25. This is also, perhaps not coincidentally, the age at which scientists now say a human brain

Back to School: Teenage Driving

is fully developed and capable of making mature decisions.

Issues of decision-making are compounded for teens diagnosed with ADHD, but the expert recommendations for parents of such teens in the article on page 23 have wider applicability. With the exception of the advice about managing medication, the rest can apply to any teen.

CHoP convened an international expert panel that recommended four initiatives for action: first, to strengthen Graduated Driver Licensing in all states; second, to stress training to optimize the two-second sequence just prior to a crash with improved hazard detection and response skills among novice drivers; third, tools to



enhance the teen-parent relationship; and fourth, it insists on incorporating the teen perspective to make sure intervention measures will “make sense” to teens.

Taken together, these four points suggest that, rather than the either/or arguments that tend to develop when discussing driver training, there may be a both/and answer that would serve us all. Former NHTSA administrator Dr. Ricardo Martinez, a specialist in emergency and trauma medicine, says GDL and issues of high-skills training “help bring it home to the supper table.” According to Martinez, “A driver’s license is something we pass an exam for once and then we’re assumed competent for life. Just look how much

technology has changed recently, with ABS and traction control and so on. Somehow a driver needs to understand how his car works. What’s emerging is a sense that we might need more lifelong learning or at least periodic recertification, like we expect of pilots or railroad engineers.”

We could start with more extensive training before a teen gets that first license, perhaps something like Langford’s MasterDrive program or any one of a number of other schools listed in this issue. Langford says the typical commercial driver school’s objective is to train students to meet a lowest-common-denominator standard: the ability to pass the state licensing exam, which isn’t very demanding. In the words of Florida’s Thompson: “The natives are eating the coconuts, but the coconuts have no nutritional value.”

Passing the exam may be the top concern of teens and parents. “But that’s not our objective,” says Langford. “We want the kid who graduates from our school to be as well-prepared, as competent and confident as we can make him or her. Driving is a psychomotor skill. The brain doesn’t learn it by talking about it; you have to do it, repeatedly.”

That’s why Langford’s program—offered in Denver and Colorado Springs, Colorado, and in Orange County, California—includes 52 hours of behind-the-wheel training.

In other areas, parents are latching onto one-day or half-day programs—either free or for nominal fees, thanks to sponsorship by car manufacturers and tiremakers—that give teens at least a taste of the advanced skills to supplement what they get through the state-certified schools, which those under 18 typically must attend before being allowed to take the exam.

One such free program operates under the rubric of Street Survival, a South Carolina-based driving school. The touring program is operated in conjunction with the BMW Car Club of America and sponsored by The Tire Rack, where vice president Matt Edmonds is excited by an initiative to expand by working with other car clubs. He convened a meeting of the BMW CCA, SCCA and the clubs for Porsche, Mercedes-Benz and Alfa Romeo owners, all of which have advanced training programs for their members.

“This will give us the opportunity to do many more schools at the same time all over the country,” says Edmonds. “All you need to run a program is a moderator and people trained and ready to ride in the cars and instruct.” Unlike some other similar

programs, such as Driver’s Edge (see page 26), this one has the students drive their own cars, so logistics are easier.

On another front, NHTSA has undertaken a study of the Las Vegas-based Driver’s Edge program to evaluate its effectiveness in crash reduction, data the school has been accumulating for years. In a Florida study, Thompson’s program saw a 77 percent reduction in crashes. In Colorado, Langford claims 25 percent to 55 percent improvement for graduates of MasterDrive. But other studies show no real gain after six months—the data are ambiguous. AAA’s Van Tassel says the auto club’s official stance is to hold back, neither supporting nor opposing such skills-focused training. Van Tassel himself is a graduate of the Bob Bondurant school, a racer in SCCA club racing and Solo competition, so you might assume that made him one of “us,” a believer in the value of advanced driver training. He is not yet convinced.

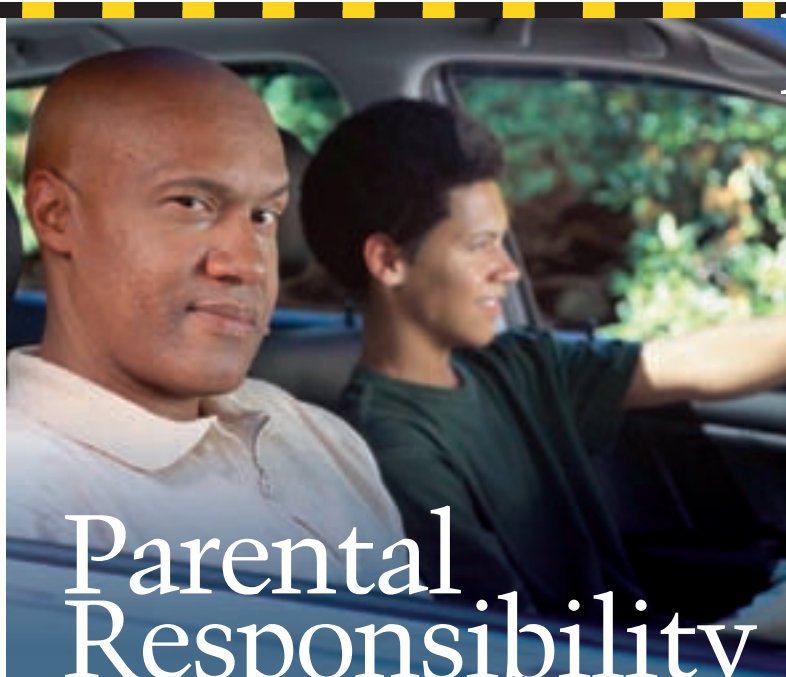
“What if,” he asks, “there’s no net gain? What if you give people the skills, but you also make them more confident, perhaps more confident than their actual skills warrant? We just haven’t seen the evidence. We’re really interested in seeing what the NHTSA study with Driver’s Edge turns up, and there are some others to watch.”

So the Holy Grail for the leaders of these programs seems to be to accumulate a database that would prove to the safety community such programs do work, if not to reduce teen fatalities in that first six months, then in the sense of creating good drivers for life.

“What we really need,” says Kjell Kallman of the Jim Russell Racing School, which runs teen programs in conjunction with Yokohama Tire and Discount Tire, “is a consortium of some kind. We need to come together and agree on what such a program should entail, set a code of ethics and a curriculum. Then we can accumulate the database that will prove to insurers these programs have merit. And if you can convince them it is worth offering a discount, you’ll really drive some change.”

On the following pages you will read much more about teens and driving, how people can work as citizens to improve the state of driver education in America, and how parents can help their own teens survive this perilous period. Whether you have a teen of your own or not, you don’t want to sit back at this critical juncture—these are the people who will be driving in the lane next to you for many years to come. ■

how?



Parental Responsibility Is Critical

BY PHIL BERARDELLI



MANY PARENTS REMAIN SHOCKINGLY CLUELESS about the magnitude of the risk for teen drivers.

They give in much too easily to pressure from teens to obtain a driver's license on or near their 16th birthday. Likewise, many allow their kids to breeze through the perfunctory steps that pass for driving instruction in this country, then blithely hand over the keys to the family vehicle, or buy one for their young driver right away—often something flashy, top-heavy or too powerful.

What is so puzzling is how strongly this situation counters typical parental behavior for the first 16 years of a child's life. During that time parents eagerly spring for all kinds of instruction: piano lessons, dancing lessons, skating lessons and so forth. They cart the kids endlessly back and forth to such sessions, spending hundreds of hours and lots of money.

No parent would pay for only six piano lessons and then expect a child to perform at a concert. And no parent would send a child to six swimming lessons then demand a championship athletic performance.

So why is it, when it counts the most—when it becomes a matter of life and death—that so many parents shrink from their responsibility to instruct, supervise and protect their children? Why do they settle for only six hours of driver training behind the wheel?

Most states have at least imposed graduated licensing programs, which strengthen some of the requirements for beginning drivers—and have resulted in decreased fatality rates—but those laws go only so far.

Given the situation and the dangers, responsible parents have no choice. They must do for their beginning drivers what they have done during earlier phases of their children's development. They must assume responsibility to supervise a safe and complete driving instruction program.

First, take control

All states grant parents authority to decide whether their minor child should obtain a learner's permit and a license. If a parent thinks a teen is not yet ready, then that parent need do nothing—granting a permit or a license is what requires action, in the form of a signature. In 10 years of writing and speaking about this subject, this has never ceased to amaze me.

When parents express concerns about prospective drivers, and I advise them to hold off the instruction until they are confident their kid is ready, many look stunned—as though they had never even considered refusing to cave in to pressures for the permit and the license.

Take the time

Safety experts agree good basic driving skills require at least 100 hours of supervised instruction behind the wheel. That means gradually exposing kids to as many of the potential conditions they will face on the road as possible. For both of your sakes, begin in a place of safety, such as an empty parking lot, and move carefully from there into conditions of increasing complexity—but only after the teen has mastered each new skill and challenge.

Don't hurry

There is no specific age at which he or she must begin driving. Forget about your own inconvenience and concentrate on teaching. If at any time you feel a sense of inattention, resistance or rebellion, become the parent again. Say something like: "I'm sorry, but you're not taking this as seriously as I would have hoped, so we're going to suspend the lessons until you start showing a better attitude."

Likewise, don't quit early

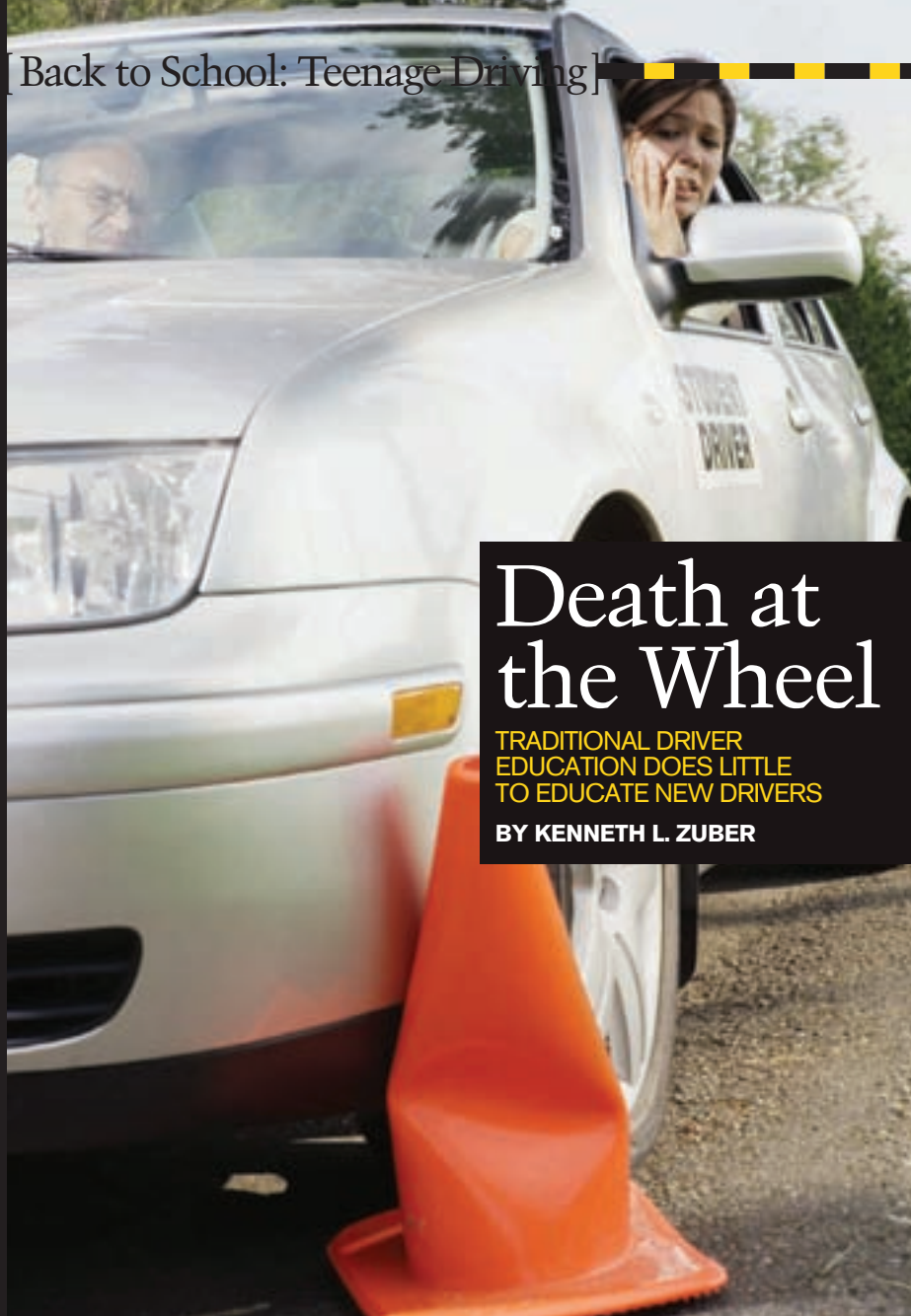
Even after your teen is licensed, instruction should continue. Lay down sensible limits, such as no passengers for the first six months, curfews, and absolutely no drinking or drugs. Make it a point, whenever you and your teen travel together, to require him or her to drive. It's a good way to continue to sharpen skills and detect bad habits. And remember that until your child reaches age 18, you still have the authority to suspend or revoke driving privileges.

Last, enjoy this

This approach is not punitive—it's loving and caring. It conveys how much you desire to see your child receive the best training possible, just as you have all along. And it's a great time to reacquaint yourself with your offspring.

Isn't this worth at least as much as piano lessons?

Phil Berardelli is the author of *Safe Young Drivers: A Guide for Parents and Teens*, www.safeyoungdrivers.com



Death at the Wheel

TRADITIONAL DRIVER EDUCATION DOES LITTLE TO EDUCATE NEW DRIVERS

BY KENNETH L. ZUBER

control in their own lives. Driving equals control, and teens understand that at the deepest level. Driver ed, instead of using this powerful motivation, does everything it can to kill it. It harangues endlessly about yielding and obeying and never encourages competence in the task of control. Is it any wonder kids are not receptive?

Content: Every generation calls driver ed a Mickey Mouse course. Enough said.

Method: Traditional driver ed employs tricks and gimmicks to simulate skill and understanding. The initial introduction to driving should never be done with simulators. Kids need to feel a car's reaction to their inputs. Parking-lot driving ranges virtually ensure a lifelong habit of aiming and scanning much too near the front of the car—where you can see the cones or lines on the pavement. Instructional time behind the wheel is absurdly brief.

Traditional driver ed produces kids who can't drive but think they can because they have "earned" their licenses. Many crash. Some die. Others mutilate and kill. Appalled adults ask why and request reform. To date, that reform consists of Graduated Driver Licensing.

Years ago a student of mine told me Stirling Moss once said practice does make perfect, but only if one practices the right things. Well, look around at what passes for driving. The people performing those atrocities include the parents charged by GDL with responsibility for teaching their teens to drive. Obviously, GDL alone is not the magic bullet.

In the end, it seems clear the people at the top of the driver ed establishment don't love driving. If they did, they could not help but to teach it well.

These problems are not insoluble. Proper philosophy, psychology, content and method exist. Driver ed nonsense can be replaced with programs that apprentice teens to skilled and experienced drivers who can lead them to mastery. They'll find it enjoyable and rewarding to do so, and it will be safer for us all on the roads.

Do the best you can for your kids, including high-performance driving schools if feasible. Spread the truth, expose the irrational, set good examples, and keep intolerable pressure on those who can effect the radical changes needed to replace driver ed with real education for driving. ■

Kenneth L. Zuber is the author of Joyriding: A Practical Manual for Learning the Fundamentals of Masterful Driving. Available from www.motorists.org



TRADITIONAL HIGH SCHOOL driver education does not work. The National Safety Council, in its 2004 *Teen Driver: A Family Guide to Teen Driving Safety*, even asserts the failure is global. That's not the worst of it though. This information is anything but new. At least as far back as 1962, Edward A. Tenney's book, *The Highway Jungle*, told "The Story of the Hoax in Our Schools That Is Putting Death at the Wheel."

An honest, careful analysis of traditional driver ed can lead to only one conclusion: It doesn't teach driving, let alone good driving. Its faults are fundamental and pervasive. The damage it causes is crippling and permanent. Its philosophy, psychology, content and method are wrong.

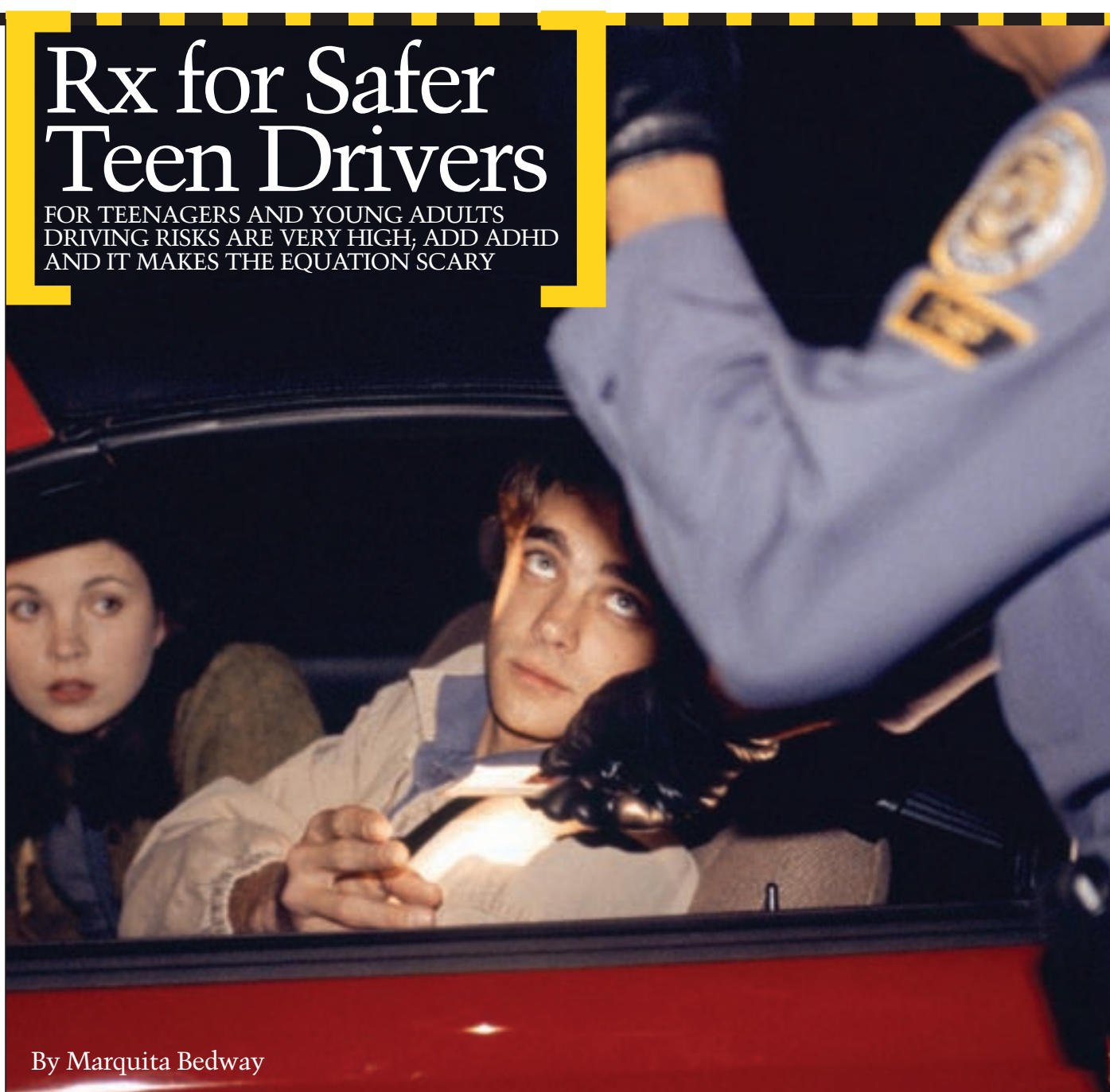
Philosophy: The idea behind traditional

driver education is to get teenagers driver's licenses and to teach them good citizenship as defined by driver education. Driver ed proponents believe driving is developmental (like walking and talking). Thus little actual coaching is given in the car—it's not about mastering a new skill, but about adopting a defensive posture. It's pretty much up to the student to learn to drive by himself while the teacher figuratively holds his hand. Classroom instruction amounts to preaching and attempting to scare the students into using "mature judgment" without giving them the knowledge necessary to do so.

Psychology: A teenager's primary job is becoming an adult. They labor tirelessly to stop mindlessly obeying orders. They are being forced by nature itself to achieve con-

Rx for Safer Teen Drivers

FOR TEENAGERS AND YOUNG ADULTS DRIVING RISKS ARE VERY HIGH; ADD ADHD AND IT MAKES THE EQUATION SCARY



By Marquita Bedway



DOES THIS SOUND FAMILIAR? Your newly minted teen driver flies into the garage and moments later spins back to the kitchen in a frantic search for the car keys. In a panic—in which he accuses everyone of moving them—he finds the keys, complains about being late and races out the door. Not much later he earns his first speeding ticket.

It's a classic case of "Ready, fire, aim!" behavior, and though many teens (and adults) experience isolated incidents like this, if this pattern occurs across different situations over several years, it suggests the teen may have a condition called

attention-deficit hyperactivity disorder, or ADHD.

Now before you snigger and say, "Where was ADHD when *I* was growing up?" understand it was something you knew as "being hyper" or "excitable." ADHD has been around forever, but only officially diagnosed in 1980. Today experts believe between 5 percent and 8 percent of children and young adults are afflicted with ADHD.

Properly addressed, those with ADHD can lead normal, healthy lives. But first they must acknowledge what they are dealing with—otherwise there could be trouble, particularly behind the wheel.

To be able to help ADHD drivers, it's important to know something about the disorder. ADHD is the most common childhood neurobehavioral disorder. Core symptoms include inattention, impulsivity and hyperactivity. It persists into adulthood, with a strong hereditary basis. Without intervention, ADHD can negatively affect school, work and the general ability to function. The good news is there are several ways to effectively operate in the mobile world.

There are three types of ADHD: inattentiveness (where no hyperactivity or impulsivity is present); hyperactivity/impulsivity (mostly found in preschool-

age children); and a combination of the two others (inattention, hyperactivity and impulsivity). Couple any type of ADHD with operating a motor vehicle and you have a recipe for disaster—a perfect automotive storm.

Studies challenge the notion you can outgrow ADHD. Indeed, as you grow with it unaddressed, so can the problems increase. Children and teens with ADHD are at greatest risk for academic problems, school suspensions and expulsions, and for dropping out of school. Additionally, studies show adolescents with ADHD are two to four times more likely to have motor vehicle crashes and are more than three times more likely to sustain injuries.



Why? A leading theory suggests inability to control behavior—"behavioral inhibition"—drives ADHD. Monitoring behavioral inhibition is what enables a person to self-regulate behavior. Our executive functions, like a car's engine control unit, allow us to reflect on and adjust behavior.

Four essential executive functions—nonverbal working memory (the ability to use the past to plan for the future); verbal working memory (self-talk, problem solving and reading comprehension); self-regulation of mood/arousal (moderate emotional reaction to events); motor control (control of off-task behavior and restarting tasks)—are key to coping with life successfully. For our brain to operate as a high-performance engine, executive functions must work properly. A teen driving with problems in any of these areas is at high risk.

An effective driver must remember to slow down in construction and school zones and allow time to get to a destination (nonverbal working memory). An effective driver must quickly grasp that a detour sign requires a decision (verbal working memory), must calm down before getting behind the wheel (self-regulation), and must resist the temptation to use a cell phone and/or reach for something on the floor (motor control). Failure in these areas could be fatal for any driver, but more so for a green-horn teen pilot.

A quarter-century of study illustrates significant driving risks associated with ADHD. One study confirmed young drivers with ADHD received speeding tickets

at an astonishingly higher rate than those without ADHD (100 percent vs. 54 percent), had licenses suspended or revoked more frequently (32 percent vs. 4 percent) and were involved in more accidents (80 percent vs. 52 percent). Also, more crashes by young adults with ADHD involved injuries (60 percent vs. 17 percent).

In 2002 Russell Barkley, Ph.D., and colleagues examined driving histories and driving behaviors of 105 teens and young adults with ADHD compared to 64 teens and young adults without ADHD. They also examined the cognitive skills necessary for safe driving—reaction time, following the rules and visual discrimination.

Group differences clearly showed teens and young adults with ADHD at higher risk in number of citations, license suspensions/revocations, and crashes as measured

in dollar-value damage (\$4,221 vs. \$1,665). Additionally, the ADHD group had difficulties with sustaining attention and following the rules of driving and they demonstrated poor resistance to distraction.

What does this say? The problem is not that these at-risk drivers failed to learn driving safety. Rather, they do not reliably follow through with what they know when stressed or distracted. The fix is knowing what to do to keep them on a safe course.

DRIVING SAFETY: THE PARENTS' ROLE

It is no surprise to parents of teens with ADHD that their kids need guidance, direct supervision and above all support. All parents should view state driving requirements as the minimum, and recognize extra work during driver training can prevent accidents and injuries.

J. Marlene Snyder, Ph.D., offers excellent suggestions in *ADHD @ Driving: A Guide for Parents of Teens with ADHD*. This should be a mandated read. Snyder emphasizes communication, the establishment of rules and proactive monitoring.

Communication should start when children are young and still listening. Ongoing discussions throughout childhood/adolescence emphasizing safe driving and self-restraint must be the voice in your teen's ear when he or she is not with you. For example, the next time your child is with you when you're cut off in traffic, resist the urge to use the single-digit salute. Instead talk about why you are controlling your temper; be a good role model. This includes staying off the cell phone while driving and obeying the posted speed limit. Yes, this parenting stuff is hard.

Driving rules must include incentives. Rules should be specific, like "Have the car home by 9 p.m." Establish a written driving contract where your child restates and/or writes down the rule each time before he or she leaves. Stipulate in the contract such things as acceptable stereo volumes and no cell phone use (including hands-free), and limit the number of passengers in the car with your teen.

Do not forget to monitor rule compliance. Let your teen know you will reward positive behaviors—with praise, extra drive time or even a later curfew for special occasions. But inconsistent enforcement of the rules is equivalent to having no rules at all. Don't let small things slide; it is not the time to allow your teen to negotiate your rules.

Just as cars require regular maintenance, teens with ADHD must be accountable.

male teens...



...are more likely than females to die in a motor vehicle crash; two of three crash death victims ages 13 to 19 in 2003 were male. Young males are more likely to engage in risky driving behaviors such as speeding. According to the Youth Risk Behavior Surveillance Study of 2003, high school males are more likely than their female counterparts to report driving after drinking (15 percent vs. 9 percent) and are less likely to wear a seatbelt (22 percent vs. 15 percent never or rarely wear a seatbelt).

CENTERS FOR DISEASE CONTROL

Enforce contract agreements. Apply consequences immediately, before normal activities are resumed. It is fact: Teens with ADHD learn much better when consequences are on the spot, before they can forget it was their inappropriate driving behavior that triggered the response.

Notice the consequences do not include lectures, sermons or guilt trips. If the teen refuses to comply with the rules, immediately confiscate keys and end *all* driving privileges. "Defiance and driving are a deadly duo," Snyder points out.

Is proactive monitoring too Big Brother? Maybe, but how important is your child's life? Monitoring can be as simple as asking friends and neighbors to watch your teen's driving and report both positive and negative behaviors. Verify your child's story by checking the car's odometer, or consider investing in equipment that can check how fast your child was driving as well as his or her whereabouts (see accompanying story, page 32).

Putting your teen in a safe vehicle is another essential move. To the extent it is possible, choose cars with good safety ratings. And we can't stress enough: You should strongly consider enrolling your teen in an effective defensive-driving program (see page 30 for a list of schools).

DRIVING SAFETY: MEDICATION'S ROLE

A comprehensive driving program is not complete without a frank discussion about the medication benefits for individuals with ADHD. Think of medication as the essential "brake fluid." Numerous studies show medication is the most effective treatment for ADHD symptoms, and recent studies found stimulant medication improves driving performance of drivers with ADHD. (While an exhaustive discussion of medication is beyond the scope of this piece, interested readers can read Barkley's *Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment, third edition.*)

If parents decide their children need medication, they should familiarize themselves with how long the medication works and how it enhances a teen's driving. Parents should carefully observe patterns, since every medication works differently.

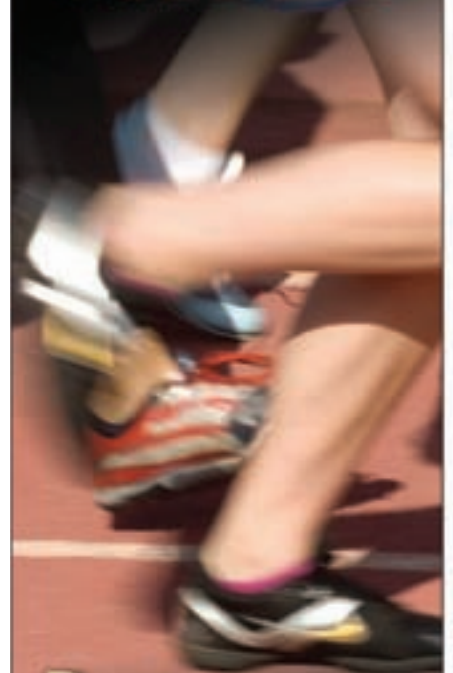
Teens should also be encouraged to self-monitor. Does the teen make more driving mistakes between 5 p.m. and 6 p.m., when his or her medicine is wearing off? If so, talk with the treating physician to discuss options to cover your teen when he or she is on the road. Often, using both long-acting and short-acting medicines is optimal. Finally, if medication enhances the teen's driving performance, the privilege to drive must be tied to medication compliance. This is one of the most important points in the driving contract.

To get the optimal performance out of turbocharged teens, parents need to design and enforce solid driving contracts, obtain the best driving instruction possible, and consider treatment options. Assemble a crew—including driving instructors and medical/psychological experts—equipped to help your teen safely navigate life's road. And remember that even for multiple-world champion Michael Schumacher to win, he first has to finish the race. ■

Marquita Bedway, Ph.D., is a psychologist in private practice in Grosse Pointe, Michigan. She holds a faculty position at Wayne State University and was co-director of the ADHD Clinic at Children's Hospital of Michigan.

► For a comprehensive list of reference materials used in this article, visit autoweek.com and click on this story.

TIRES ARE LIKE SHOES



Dress Appropriately.

Get fitted at
www.tirerack.com/shoes



THE **TIRE RACK**
Performance Specialists

www.tirerack.com
1-888-378-8473

©2006 TRS



Driver Ed vs. Driver's Edge

PERFORMANCE-DRIVING EXERCISES PREPARE TEENS FOR THE RIGORS OF THE ROAD

BY BOB GRITZINGER



AS THE SEDAN picked up speed toward a line of cones delineating an area deliberately soaked with slippery, soapy water, the driving instructor yanked on the emergency brake. The result was predictable: The novice teen driver sat paralyzed behind the wheel as the car pivoted and spun in a complete circle before coming to a stop.

On lap two, the driver reacted to the impending disaster but still managed to collect an orange cone before clearing the danger zone. Finally, on laps three and four the car skidded on cue, but this time the teen driver took command, turned in the direction of the skid, and expertly drove through

the obstacle course without incident.

"It was like being on a roller coaster," was the initial reaction from almost-15-year-old daughter Katie Gritzinger, the novice teen at the wheel of the Pontiac who just weeks earlier had completed the first phase of a Michigan-mandated driver education course.

Needless to say, this exercise occurred well outside the bounds of the state-mandated curriculum, where learning the basics (what does an octagonal red sign mean?) and mastering the pitfalls of parking get more attention than hands-on training in emergency maneuvers.

"You get to do things here that most people never get to do," says Jeff Payne, founder

and president of Driver's Edge (www.driversedge.org), where skidding is just one part of the curriculum.

The skid-control drill is part of the half-day Driver's Edge program. Driver's Edge travels to more than a dozen cities nationwide each year, and is free to participants age 15 to 21 (and their parents, who are encouraged to attend). The program is sponsored by Bridgestone Firestone North American Tire and funded by the sponsor, grants and private donations.

"In this country none of us is really taught how to drive," says Payne. "No one is really preparing you for what happens out on the highway. We'd rather have you experience it here for the first time, rather

than out on the highway."

That's not to say standard driver training doesn't serve a purpose—it's just that its purposes don't include providing real-world experience dealing with skids and spins and past-the-limit driving situations. Being of the requisite age to qualify for state-mandated driver training coursework does not necessarily mean a teen is ready for the rigors of the road. And taking a state-mandated driver training course does little more than move your teen from holding bicycle handlebars to holding down a seat behind the wheel.

Typical driver training programs follow the Graduated Driver Licensing system, teaching a state-required curriculum.

Covered in the coursework are basic in-car skills like driving forward and backward, smooth acceleration and stopping, turning techniques, vehicle familiarization, lane changes, adjusting speed for curves and hills, driving in residential neighborhoods, multilane and expressway driving, city driving, driving on one-way streets, watching for pedestrians and parked cars, and parking maneuvers. Driving exercises are augmented with classroom work on everything from driving laws, driver safety, drunken driving, driver awareness, crash avoidance, and understanding road markings and signs.

"Once they complete our course, they've learned basic skills," says Steve Roberts, an instructor for Lake Orion (Michigan) Community Driving School, a suburban Detroit private driver training program. "They're at a level where they can operate a car, but they're not very experienced."

Skids and antilock braking stops are addressed in videos shown in class, but hands-on experience is usually limited to students who take the course during icy winter months, and then only on a limited basis. Roberts encourages students to seek out more advanced programs that allow drivers to practice emergency techniques.

Driver's Edge seeks to fill that void, but realistically can only accommodate 30,000 teens and their parents per year, a drop in the proverbial bucket compared to the millions of newly licensed teens taking to the highways each year in the United States.

"I think this should be mandatory in every driver training school," said Driver's Edge parent/spectator Ellen Reid Monkman. "They're being put in situations that they would never normally experience."

In addition to the skid



exercise, which emphasizes the racing skill of looking where you want the car to go and steering out of a skid, Driver's Edge also includes an antilock braking/evasive lane-change maneuver that points out the limits of braking and cornering in ABS-equipped BMW 3 Series sedans. Static modules cover general vehicle knowledge like tire care (hey, the program is sponsored by a tire company), checking fluids, correct driving position for seats and mirrors, and rules and regulations of the road as presented by a police officer (in this case, Michigan State Police Lt. Gary Megge).

Megge is impressed with Driver's Edge, mostly because he knows young drivers will drive past the limit at some point, whether deliberately or due to inexperience, and need to know how to react when that time comes.

"How many kids have done this stuff? None," says Megge. "How many of their parents have? All of them."

While Driver's Edge takes its show on the road every year, it's not the only program available. Ford created a hands-on, on-track version

of its Driving Skills for Life (www.drivingskillsforlife.com) training materials and offered it to licensed teen drivers in Michigan this summer. The daylong program, similar to Ford's \$300-per-day Family and Friends Driving Program open to anyone with a friend or relative on the Ford payroll, runs young drivers through a series of skidpad and vehicle-dynamics exercises.

Sixteen-year-old newbie driver Tina Wolverton found the skidpad exercises eye-opening.

"In drivers training, we just talked about [skid control], we didn't get to experience it," Wolverton said. "If it ever happens to me, I'll know what to do. It makes me feel like a more confident driver."

If programs like Driver's Edge boost competence beyond standard driver training courses, then true driving schools like those offered by Bridgestone, Bob Bondurant, Skip Barber, Jim Russell Racing and Mid-Ohio are the ultimate in accident prevention. And each of them offers programs—some in conjunction with automakers—specifically geared toward teens on the highway, rather than maximum lap speeds. If it sounds counterintuitive to send your teen to racing school to learn to become a safer driver, think again.

"One of the best insurance policies is to spend the money to go to a good driving school," urges Payne. "It just simply comes down to training, training and more training, which is something we don't get enough of in this country." ■

percentage of young people

ages 16 to 20 with a driver's license:

AGE	
16	56.8
17	61.3
18	72.0
19	79.4
20	81.8
GENDER	
Male	74.1
Female	73.1
RACE	
White	81.3
Black	48.6
Hispanic	52.4
Asian	76.9
American Indian	46.8

CENTERS FOR DISEASE CONTROL



What's the Right Car?

» IF YOU'RE READING THIS magazine, there's a good chance your child has grown up in a household where enthusiasm for cars and driving is considered the norm. It's not the norm in America, but when it comes time to put your teen behind the wheel you'll face the same concerns as all other parents: What's the right car?

First, carefully consider whether you want your new driver to even have a car of his or her own. Having to ask for the keys, and wait for one of the family's cars to be available, could be regarded as a rational restriction of a novice driver's mobility. A car of his or her own can be something the teen earns, not only with money, but with behavior and demonstration of responsibility and increasing mastery of driving skills.

Cars and insurance aren't cheap. Even if your personal wealth allows for the addition of a new car to your fleet for the exclusive use of a teen, do a little pencil work to see if it might not be wiser to invest in a used car—perhaps insisting on some contribution from the teen—and set the rest aside for college.

Any youthful driver, especially one raised in a car-loving atmosphere, will want something flashy and fast. But that's not a wise choice for one still on the steep end of the learning curve. Remember, when you're picking a car for your teen to drive, you're not trying to be their best friend. It's not about buying affection; it's about being a parent.

As we researched this package of stories with experts in the field, we asked what cars they recommended and what they bought for their own teens. There is wide diversity of opinion, but there is general agreement on what not

to buy: No powerful sports cars and no SUVs. Or, as AAA's Bill Van Tassel said, "Probably not anything they really want."

Matt Edmonds, The Tire Rack "My daughter had a Jetta and my son has a four-door Audi A3. You want something new enough to have ABS, traction control, side airbags and a good crash test performance, plus something nimble enough that they can make an evasive maneuver. Make sure they know how to use those features."

Phil Berardelli, author "My older daughter had a 1981 Pontiac LeMans in 1988. My younger daughter, who wasn't really interested right away, had a 1975 Cutlass, a big solid car. She had three fender benders. Now what I find myself recommending is a Taurus station wagon. They have airbags, and they can have ABS. Side-curtain airbags? They help, but only a little, and there are other considerations. This myth we have about the safety of the vehicle—I would never recommend a new car for a new driver.

When they're first learning to drive, you don't want to encourage showing off. A Taurus wagon is big enough that if they crash it or get hit and they're belted in, they've got a good chance of survival. More likely, they're going to scrape the car or have little fender benders—why pay for a new car and that kind of insurance? There's time for nice cars later; at first all they need is mobility and safety."

David Thompson, New Driver Car Control Clinic Thompson recommends the Volkswagen Jetta, New Beetle and Mini. His website, www.carcontrol.com, links to articles on how to make the decision to get a car for a teen, and what that car should be.

Stars of the crash test rating system

NHTSA ratings out of five stars (with side airbags)

www.nhtsa.dot.gov/NCAP

COMPACT

Chevrolet Aveo

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Honda Civic

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Hyundai Elantra

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Mini Cooper

Two-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear—no data
Rollover ★★★★★

Saturn Ion

Two-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Scion xA

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Toyota Corolla

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

MIDSIZE

Acura TSX

Four-door body style
Frontal crash, driver ★★★★★

passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Chevrolet Impala

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Ford Fusion

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Honda Accord

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Hyundai Sonata

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Pontiac G6

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Volkswagen Jetta

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Volvo S40

Four-door body style
Frontal crash, driver ★★★★★
passenger ★★★★★
Side crash, front ★★★★★
rear ★★★★★
Rollover ★★★★★

Can I Get a Break Here?

INSURANCE FOR TEEN DRIVERS

INSURING A TEEN DRIVER IS EXPENSIVE, but a few discounts are still available to make quality coverage more affordable. Many insurers stopped offering discounts for completion of driver education programs about a decade ago, just as Graduated Driver Licensing programs were rolling out across the country. The premise is research showed no long-term improvement in insurance loss rates (read: damages, injuries and deaths) for traditional driver education, so the discounts were dropped. There are often discounts for students with good grades, however, because there is a

statistical correlation between grades and on-the-road loss rates.

Discounts vary, as insurance is regulated by state, not the Federal government. Still, several programs could be worth looking into. Be sure to make some calls, or work with your agent to seek out the discounts available in your state. In Colorado for instance, students completing a course of study that closely matches that offered



by MasterDrive can get a 15 percent discount from Allstate, which offers only a 5 percent discount to students who complete less rigorous programs. Below are some insurance company programs:

COMPANY: State Farm

PROGRAM NAME: Steer Clear Discount

REQUIREMENTS: New drivers age 16 to 24 watch a video, study a manual then take a quiz. They must also complete 20 to 30 trips and keep a log of their strengths and weaknesses. After completing these requirements, teens meet with their State Farm agent

DISCOUNT: Up to 15 percent

RECOGNIZED SCHOOLS: In-house program

COMPANY: MetLife Auto Insurance

PROGRAM NAME: Teens on the Road to Safety

REQUIREMENTS: Complete one year accident free

DISCOUNT: \$50 cash for each year of being accident free

COMPANY: MetLife Auto Insurance

PROGRAM NAME: Sunday Drive

REQUIREMENTS: Log 20 trips of at least 30 minutes each with a parent or guardian in the passenger seat

DISCOUNT: \$100 U.S. Savings Bond

The most important safety feature of your car is the driver.



It's time for the Audi Driving Experience, a teen driving program that stresses accident avoidance through driver performance. We provide hands-on instruction to give your new driver skill and confidence behind the wheel. We give you peace of mind knowing that you have helped prepare your new driver to safely navigate the road ahead.

Call 1.855.232.AUDI
or visit www.audidrivingexperience.com
to enroll your teen driver in the
Audi Driving Experience

Audi driving experience  Audi



Driving instructor Randy Bleicher, in Orange County, California, explains to high school students Nick Frontiera and Uzma Zaveri how cell phones are distracting and can cause accidents while driving at Ford Motor Co.'s Driving Skills for Life program. Driving Skills for Life is designed to help prevent driving fatalities by making teens better drivers.

Automakers' Learning Opportunities for Teens

TRAINING THAT GOES BEYOND THE NORM

BY LARRY EDSALL

» MANY PARENTS—ESPECIALLY AMONG THE CAR-smart who read *AutoWeek*—are capable of teaching the traffic awareness and dynamic skills needed to keep a car safely under control. But even those who can do so find teaching their own adolescents is sometimes emotionally challenging for both parties. This is one reason for the proliferation of specialized teen-driver instructional programs. Many are backed by auto-

makers, and most feature dynamic instruction in parking lots or on tracks.

Such programs provide an opportunity to learn skills in a controlled and safe environment, says John Mendel, senior vice president of auto operations for American Honda. "Proper training and instruction for teenage drivers helps lay a foundation of responsibility that they will hopefully carry with them into their adult years," he adds.

Ford community relations manager James Graham says it is a natural fit for a company that builds cars to teach people how to drive them. Graham notes, however, Ford's Driving Skills for Life program is not coordinated through the sales and marketing department but by the philanthropic Ford Motor Co. fund.

While basically a computer-based program, Ford offers hands-on instructional sessions, too. One such session was held earlier this year in Orlando, Florida. "One school [in that community] lost five teens in a six-month period," Graham said. School officials sought help, and Ford sent its professional instructors to train students from four schools.

"This [Driving Skills for Life] is a several-million-dollar-a-year program," said Graham, "but if you can save one life..."

The following is a look at automaker-affiliated teen driver programs:

Audi Driving Experience

» Conducted with the Panoz Racing School, the Audi Driving Experience offers one- and two-day programs for teenagers at either the Road Atlanta or Sebring circuits, where the emphasis is on learning—in a safe environment—how to deal with extreme driving situations.

The one-day session begins with classroom instruction on vehicle dynamics, then moves into an Audi A4 for a low-speed finesse driving exercise that includes instruction on proper seating position, hand placement, steering techniques and driver awareness. Students then go to a wet skidpad to learn about grip and car-control techniques. The next exercise is designed to teach the teen how to bring a car smoothly and safely back onto pavement after one or more wheels has left the road.

A controlled-braking session covers ABS and obstacle avoidance under braking, and is followed by an emergency single-lane-change exercise and a test that reviews the day's instruction. The two-day program provides much more on-track time and adds a slalom and double-lane-change maneuver.

The next one-day session, which costs \$595, is Oct. 7. Two-day sessions, at \$1,095, are scheduled Sept. 16-17, Oct. 28-29, Nov. 18-19 and Dec. 27-28. For more information and enrollment forms see www.audidrivingexperience.com.

BMW Teen School

» The BMW Performance Driving School is in Spartanburg, South Carolina, near the German automaker's U.S. assembly plant. It offers one- and two-day programs designed for inexperienced drivers ages 15 to 18. Participants need a learner's permit.

Instruction takes place in 3 Series sedans on the BMW test track, which is equipped with water jets that can be activated to simulate obstacles suddenly appearing in the roadway.

The one-day program includes classroom and on-course instruction ranging from hand and seat positions to learning balance and cornering techniques in a slalom, a handling and performance session, and control in under- and oversteer situations. Lane-change techniques, accident avoidance and a safety challenge competition round out the day.

The two-day program reinforces first-day learning and adds a double-lane-change and an off-road session that includes water crossing, approach and

departure angles, and dealing with steep side slopes. It ends with a stopping-distance exercise and parking-box maneuvers.

The one-day class is \$400, the two-day session is \$700. The next open one-day dates are Sept. 16, Oct. 28 and Nov. 22. The next open two-day dates are Nov. 20-21 and Dec. 29-30. For information see www.bmwusa.com.

Chrysler Road Ready Teens

» Road Ready Teens is a home-based program for parents and the new drivers in their families. Road Ready Teens is available in English and Spanish, and can be accessed at www.roadreadyteens.org.

Road Ready follows Graduated Licensing principles. The program includes an interactive instructional computer simulation for the teen driver and a 12-page manual for parents. One of those pages is the "parent-teen road rules contract" that, like the entire program, covers basic driver-ed stuff, such as "I will obey *all* traffic laws."

Ford Driving Skills for Life

» Though primarily a web-based educational program for teenagers and parents, Ford's Driving Skills for Life includes behind-the-wheel sessions around the country. The web-based part, available in English and Spanish, has instructions for parents and various learning activities for the teen. Six hundred students attended a summer driving camp at Ford's Michigan Proving Ground. A session is planned this fall in Southern California, with eight more anticipated in 2007. For more information visit www.drivingskillsforlife.com.

General Motors/Bob Bondurant School of High-Performance Driving

» Students in Bondurant's advanced teen-age driving course must be licensed and have at least six months of on-road experience. Bondurant's teen-specific course is based on the car-control techniques taught in the school's high-performance class, not in its racing instruction program.

The teen course spans one, two or three days, and stresses active driving skills to build confident and aware drivers. Some 80 percent of the time is spent in a vehicle—such as a Cadillac CTS—with an instructor for one-on-one teaching that stresses not only the physics of car control, but the new driver's need to elevate the eyes to be aware of what's coming down the road. Students also drive a special skid

car that can simulate low-traction situations.

The one-day course runs \$1,175, the two-day session is \$2,195 and the three-day is \$3,095. One-day classes are limited, but there are several two- and three-day sessions each month. For availability and registration information visit www.bondurant.com.

Honda Teen Defensive Driving Program

» Honda offers a 15 percent tuition discount if a teen's parent goes through the adult defensive-driving program at the same time. Honda's program is offered in conjunction with the Mid-Ohio Sports Car Course in Lexington, Ohio, though instruction takes place off the racing surface at a vehicle dynamics center. Honda also offers beginning motorcycle rider instruction that is open to teenagers and parents.

Students start in the classroom, then move into a Civic EX coupe for a wet-braking drill, emergency lane-change and collision-avoidance exercise, and then on to a skid car to simulate adverse traction conditions. There's also a vehicle-maintenance session. The fee for a one-day teen (or adult) defensive-driving program is \$350 (the two-day motorcycle course is \$295, and includes the use of one of the school's bikes). The teen program runs on weekends through mid-November. For information visit www.midohio.com.

Toyota Driving Expectations

» Toyota Driving Expectations, a new four-hour program held at various venues, offers classroom and at-the-wheel driving education for newly licensed teenagers and their parents. New drivers are taught proper techniques, and parents can learn to break their own bad habits.

Distraction and reaction, and the relationship between the two are emphasized in on-course instruction that includes evasive maneuvers, wet and dry braking, and a slalom. The day ends with teens and parents in a joint session.

Enrollment is free, but sessions fill quickly. The next events are scheduled for Oct. 6-8 at Paramount's Kings Island in Cincinnati (registration starts Sept. 11), Oct. 13-15 at The Woodlands Racetrack in Kansas City, Kansas (registration starts Sept. 18) and Oct. 20-22 at Wild Rivers Waterpark in Irvine, California (registration starts Sept. 25).

For additional information visit www.toyotadrivingexpectations.com. ■



SPY KIDS

HOW TO KEEP AN EYE ON YOUR TEEN DRIVER

BY ERIC ADAMS



IT'S A PROBLEM AS OLD as the car itself—as soon as a teenage driver gets behind the wheel, inexperience and immaturity join forces to create a startling potential for havoc. The Insurance Institute for Highway Safety reports the crash rate per mile driven for 16- to 19-year-olds is four times the risk for older drivers. Other findings: More than half of teenage driving deaths occur on a Friday, Saturday or Sunday,

usually between 3 p.m. and midnight, and most often when other teenagers are in the car.

Fortunately driving deaths are decreasing from year to year—something IIHS attributes mostly to safer cars—and more states are adopting phased license-acquisition programs (Graduated Driver Licensing), in which young drivers are only granted full licenses after getting safely through various provisional periods. IIHS says 16 is the highest-risk age

for drivers, and states with such licensing programs are specifically targeting that group first.

But when it's your kid on the road, how can you be sure he or she is driving safely? After all, accident rates, deaths and injuries are merely the tip of the iceberg—close calls, fender benders and run-ins with the law can be troubling indicators of problematic behavior. You can't ride shotgun on every outing of course, but new technologies including GPS, cellular communication and onboard vehicle sensors can make you feel like you are. The devices can monitor your teen's driving and provide reports when you check in or download data, or even give you live updates to your PC or cell phone when your young driver exceeds certain limits.

Though some people might wince at the idea of such close monitoring,

arguing it is a violation of privacy, others embrace technology as a way of keeping their kids safe, particularly when lives are at stake and significant amounts of money are invested in family vehicles.

BASIC MONITORING

» Before you start shelling out cash for high-tech devices, remember how your own parents kept an eye on you—without the benefit of GPS, the internet or cellular phone networks. It's a good bet your dad kept mental notes on odometer readings before he turned over the keys. To see if your own kids are driving more often and farther than you've agreed to, check the odometer before they leave and after they get home.

If you've left the kids home with instructions not to drive, check the car when you return—James Bond-style, by placing your hand on the hood to see if it's hot and been running recently. If it's a hot summer day, look underneath the car for dripping condensation from the air conditioning. Does the car have an automatic toll-paying device, such as an EZ-Pass or FasTrak? Check the account online every week to see if there are any unauthorized trips downtown or to the beach. A few more tricks: Monitor credit-card activity, which might reveal out-of-town merchants, gas purchases or other vehicle expenses—including, say, emergency repairs—and monitor the contents of the car for telltale receipts and other evidence of unauthorized trips.

None of these, however, will tell you anything about how safely (or not) the kids are behaving at the wheel. Before stepping up to serious hardware, consider this final trick: If you or your spouse happens to be an exercise nut and you have a wrist-mounted GPS, you can activate the device before the kids set off on a daytrip or even a short drive to work. While they're inside getting ready, start the timer and place the wrist unit in the car where it can find the GPS satellites, perhaps in the rear window, concealed behind a headrest. Most devices will last 15 hours on a single charge, so when they get home you can upload to the "fitness" software all the data from their trip: distance traveled, approximate geographic area covered—including towns and roads, depending on the software—and, critically, maximum speed and average speed.

HIGH-TECH TRACKING

» If you wish to have more information there are options. Perhaps the most effective and simple is a service called Report My Teen (www.reportmyteen.com). Launched by a pair of concerned moms in Texas, the service involves placing a bumper sticker on your teen's car that encourages other drivers to report problematic driving by dialing a telephone number and entering a vehicle-specific four-digit PIN. The message is instantly forwarded to your cell phone and is stored online for later access—typically for playing to the driver. Though there is significant potential for abuse with this system, particularly from practical jokers, the creators claim prank calls are easily weeded out. They argue the system works primarily because the young drivers know they can be reported for any sort of infraction, by anybody, and they instinctively alter their behavior when they know they're being watched.

Teen Arrive Alive (www.teenarrivealive.com) has a different tech strategy: using the teen's own GPS-enabled cell phone to keep tabs on him or her. Parents can log onto online accounts from a computer or cell phone to locate their child's Nextel cell phone. If the phone is in a moving vehicle, the system shows its position, direction of travel and speed. (Sprint's Family Locator and Verizon's Chaperon programs offer similar services.) A decal on the back of the car enables other drivers, as with Report My Teen, to report unsafe driving. The recording is immediately forwarded to your phone.

By far the most reliable and effective—and most expensive—systems use embedded data recording and vehicle sensors to monitor driving, allowing parents to see how the car is being accelerated and braked, as well as the basics of speed, average speed and distance traveled. For \$389, Alltrack USA (www.alltrackusa.com) customers get a small black-box recording device that uses GPS tracking and a cellular connection to transmit data about how and where the car is being operated. Parents can access the information through either a web browser or any telephone—an automated voice will give an address, direction of travel and speed. The system also can alert parents when the car exceeds preset speeds or if it crosses predefined geographic boundaries. It will send e-mails when the kids arrive at destina-

tions and will even unlock doors if they get locked out.

Davis Instruments (www.davisnet.com), the best-known manufacturer of vehicle-monitoring technology, offers the CarChip, an OBD II scanner that plugs into the OBD port and stays there during vehicle use, continuously recording up to 75 hours of vehicle activity. Parents can download the activity and view graphically the time and date for each trip, the distance traveled, the speed and any hard braking or rapid acceleration. At \$139, it's a reasonable expense with a variety of alternative applications, including reading engine-warning light codes and testing emission status.

HONESTY

» Finally, don't assume your kids are driving only your car or even their own. If their friends have hot rides—and many of them will—it's a good bet they're getting their chance at the wheel. Ask them about it and be honest about why you're asking. Explain to them that driving performance cars safely and well takes practice and familiarity with how vehicles function.



When you think your kids are ready to approach it maturely, offer to let them take a performance-driving program to familiarize them with vehicle physics and safe handling. This will help get it out of their systems and also make them better drivers under most circumstances. In the end you want them to be good, safe drivers all the time—not only when they suspect someone's watching. ■

AutoWeek THE INSIDE TRACK

Weekly Coverage of All Things Automotive

SPECIAL SUBSCRIPTION RATE

GO TO www.AutoWeek.com

OR CALL **1.888.288.6954** (offer code: 6TEEN)

ONLY \$29⁹⁵
FOR A FULL YEAR OF AUTOWEEK!



**\$29.95 for
an entire year of AutoWeek**

Get the most UP-TO-DATE Automotive Information!

First with: Road tests • Race Coverage • Spy Photos • Auto Shows
Plus much more!