

Badges, Buckles, Belts & Beyond

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Back issues of the BBB&B Newsletter can be found at http://www.smartsafeandsober.org

Click It or Ticket Makes It's Return

It's baaack!! Plans for the 2005 *Click It or Ticket* campaign are moving along at a fast pace! For those of you who haven't heard, Virginia reached an all time high for safety belt use: 79.93%!!! This is all to the credit of your hard work, dedication and the desire of our citizens to reduce injuries and fatalities.

While we have reached record highs, we now have to dig deep and reach higher. The National Highway Traffic Safety Administration has set our 2005 goal, and it IS attainable. NHTSA has asked us to increase our safety belt use rates to: (drum roll...) 82%!

Some things to look forward to:

- Smart, Safe & Sober training sessions will be conducted beginning at the end of March. Some of the sessions have been scheduled, so mark your calendars now! March 29th we'll be in Wytheville, March 30th takes us to Lexington and March 31st we'll be in the Shenandoah Valley in Weir's Cave. Plans are still ongoing for Hampton Roads and Central Virginia, so be on the lookout.
- The master e-mail list is just about complete. If you have not been contacted, or want to be placed on

that list to receive communications, please contact our *Click It or Ticket* administrator Kathy Raymond at <u>clickitorticket@aol.com</u>. You can also use this e-mail address to ask any questions or if you need anything from us. Remember the web site <u>www.smartsafeandsober.org</u> also has tons of information to assist you.

- Media will be another large component again this year, so you can expect to have the radio and television support during your enforcement efforts.
- Wondering what the dates are? The 2005 Mobilization will be May 23-June 5, 2005.

Finally, I am looking forward to working with all of you again this year, and look forward to meeting those of you who are new to the *Click It or Ticket* program. Together, we can make 82% a reality and save lives!

The "Royal Tour" will be seeing you soon...

Mary "The Seat Belt Queen" Ann

Mary Ann Rayment, DMV CTSP Manager/Occupant Protection Coordinator maryann.rayment@dmv.virginia.gov Phone: (757) 416-1741

Smart, Safe & Sober Training Sessions

March 29th — Wytheville March 30th — Lexington

March 31st — Shenandoah Valley
(Wair's Caye)

(Weir's Cave)

Plans are still ongoing for Hampton Roads and Central Virginia. Please check the Smart, Safe & Sober website (www.smartsafeandsober.org) for updates and additional information as it becomes available.



Child Passenger Safety Changes on the Horizon

This year more than 22,000 people nationwide who are currently nationally certified as child passenger safety technicians are due for recertification. That number sounds overwhelming, but early in the CPS certification process everyone realized that the Standardized Child Passenger Safety (CPS) Training Program was a huge success. Over the years tens of thousands of individuals have been certified as Child Passenger Safety Technicians and Instructors since the standardized curriculum and certification program began in 1997. With this number of people in need of recertification and the large number of Virginia technicians trained in the past, many people are looking for resources and answers to the questions that have surfaced since January 2004 when the certification program was taken over by National SAFEKIDS.

Many would agree that the certification of these individuals helps to enhance the credibility and professionalism of all child passenger safety advocates and practitioners, the child passenger safety community, and the organizations and programs that use the services of certified CPS Technicians. But, with this new system came operational problems, which remain unresolved in the CPS community in Virginia.

In January 2004, the VA State Instructors Association met in Richmond and discussed the issues surrounding the current national certification process. The instructors voted unanimously to investigate how to resolve the current issues. All of the instructors polled agreed that the current national certification process is too cumbersome and time consuming, and that many agencies and individuals might drop the CPS programs completely unless an alternative to the national certification was developed and adopted.

In May 2004, a small delegation of VA stakeholders met with SAFEKIDS and NHTSA to discuss the current issues and explore some options that could benefit both the Commonwealth and the National programs.

To date some minor changes have been made to the current system. However, Virginia continues to lose CPS technicians and instructors. The cost factors and cumbersome process associated with the national program has caused some agencies to scale back their CPS activities. SAFEKIDS has made some operational changes to streamline the process of certification, but little progress has been made in allowing state or agency certification in concert with the national certification program. Several state representatives have attended national meetings to facilitate the operational changes needed to keep CPS strong in Virginia and will continue to work to resolve these issues.

In January 2005, the Virginia Instructors Association met again to discuss the future of CPS in Virginia. At this meeting David Mosley, Virginia Department of Motor Vehicles, advised the group that the state would ask for a CPS assessment to determine the actual CPS needs in the state. He indicated he would share the results with the instructors association as they become available. After some discussion the instructors tasked a small group of CPS instructors to come up with an operational plan for a state system for CPS certification.

The entire cadre of Virginia instructors expressed support for the national certification program but identified the need for a state program as well. Having a state certification system in place would ensure an alternative for agencies that do not wish to participate in the national certification process. (As more details are made available it will be posted on the SS&S web site at: www.smartsafeandsober.org. For more information you can contact: Marcia Franchok-Hill, Virginia Department of Health, (804) 864-7737 - Mary Ann Rayment, Virginia Department of Motor Vehicles or (757) 416-1741 or Bob Wall, VACP, (703) 304-9771.)

Child passenger safety certification workshops were

See CPS, page 6





PHOTOS BY ERIN SCHRAD, VACP

David Mosley from the Va. Dept. of Motor Vehicles (I.) and Bob Wall from the Va. Association of Chiefs of Police met with the Virginia Instructors Association to discuss the future of child passenger safety in Virginia and to develop a plan for a state certification system.



VACP Joins with Virginia Department of Health, DMV to Produce a 'New Parents' CPS Video

The Virginia Association of Chiefs of Police (VACP), working in concert with the Virginia Department of Health and the Department of Motor Vehicles, has produced a new parents child passenger safety video for distribution.

"Baby on Board: a safe ride — every time" is designed for new parents to highlight the importance of using child safety seats. The video highlights the importance of using child safety seats and is perfect for viewing at birthing centers and pre-natal classes by the first-time or new parent. The video is being reproduced for distribution by the Department of Health and should be available in early 2005.

In addition, there is a 35-second Public Service Announcement at the end of the tape reminding parents about the dangers of leaving children unattended in a parked automobile. This video and PSA is perfect for viewing on your local cable or health care networks.

For updates and additional information, check the VACP web site (<u>www.vachiefs.org</u>) or www.safetyseatva.org

Roanoke Valley Officers Check 104 Child Safety Seats

On November 10th, nineteen police officers from seven police agencies within the Roanoke Valley worked together during a checkpoint held at the Target parking lot in Roanoke, Virginia.



The checkpoint was sponsored by the Virginia Association of Chiefs of Police (VACP), Roanoke Memorial Hospital – Injury Prevention Unit, and the Roanoke Valley Safe Kids Coalition. The officers began the checkpoint at 11:00am, with parents waiting in line, and ended at 2:30pm. WSLS Channel 10, of Roanoke, along with it's affiliate radio stations handled the public service announcements and provided live on site coverage of the officers working with parents and children as to the proper installation of child safety seats. The officers checked 104 seats finding 88 of the seats installed improperly.

This checkpoint was a follow-up of one held in early February where 102 seats were inspected with 90% of the seats found to be installed incorrectly.

"We still have a problem with a high number of seats being used incorrectly, said Don Allen of the VACP, checkpoints are the best way to continue the education of parents and caregivers as to proper installation. Law enforcement officers, CPS advocates, fire fighters and emergency medical personnel are our best sources of assistance for the proper education of parents as to this problem."

Law Enforcement Challenge Training

In the fall and winter of 2004-05, the VACP started its "How To" traffic safety workshop series by continuing our "How to Compete in the Law Enforcement Challenge" workshops. In December 2004, the first workshop was held at the Fairfax County Criminal Justice Academy. It was soon followed by workshops in Portsmouth, Henrico, and Lynchburg. Over 50 Virginia law enforcement agencies attended Challenge workshops throughout the state.

VACP Staff reviewed the new 2004 Law Enforcement Challenge criteria and provided helpful tips and application completion procedures. Participants received a Step-by-Step overview to preparing a comprehensive Challenge application and were also provided 4 hours of in-service credit for attendance.

These workshops were conducted by VACP traffic safety specialists Bob Wall and Don

Allen. Assisting this year was a special guest



Sgt. Robert Cottrell from West Point PD assisted the VACP in instructing a series of workshops on "How-To Compete in the Law Enforcement Challenge".

instructor — Sgt. Robert Cottrell, West Point Police Department. Sgt Cottrell gave participants insight into West Point's recent award-winning entry and how small and large agencies can compete on both the state and national level. The West Point Police Department was presented with the "Best of the Best" award when they received the Clayton J. Hall Memorial Award at the 2004 National Law Enforcement Challenge awards ceremony in Los Angeles California in November.

The VACP thanks Sgt. Cottrell and Chief Hodges for sharing their time and talents with the law enforcement community in Virginia. VACP also thanks Fairfax County, Portsmouth, and Henrico Police Departments for hosting these workshops.

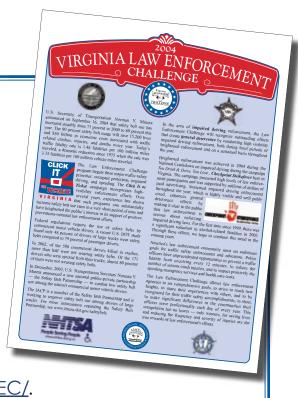


REMINDER!

The Virginia Law Enforcement Challenge applications are due May 2, 2005 to the VACP.

If you need assistance completing your application, or have questions about the program, contact: Bob Wall (<u>bob@vachiefs.org</u>) or Don Allen (<u>don@vachiefs.org</u>).

If you need a copy of the application, you can request one from the VACP offices by calling (804) 285-8227, or you can download a copy from the Smart, Safe & Sober website: http://www.smartsafeandsober.org/programs/LEC/.



VACP "How To" Training Series Continues to Grow

Partnership with Fujifilm brings digital photography workshops for beginners as well as advanced users

Partnering with Fujifilm, the Virginia Association of Chiefs of Police will soon be offering "How To" digital photography workshops across the state. Currently

the traffic safety staff is coordinating these workshops with Fuji and

dates and locations are being determined.

These workshops will be for both beginner and advanced law enforcement applications. Four workshops will be conducted for beginners and two workshops will cover more advanced topics and applications with law enforcement instructors highlighting the correct use of digital imaging for both the patrol officers on the road and the crime scene technician.



A full line of Fuji professional photo imaging products will be be available for law enforcement application and students will be utilizing these products throughout the workshops.

Please keep checking the VACP web site (<u>www.vachiefs.org</u>) for more information, dates and locations as they become available.

FinePix



Partnering with the Commonwealth's Attorneys' Services Council and the Virginia Department of Motor Vehicles, the Virginia Association of Chiefs of Police offered four DUI Enforcement & Prosecution workshops across the state. Starting in Norfolk and then traveling to Alexandria, Roanoke, and Richmond, the VACP traffic safety staff teamed up with the Commonwealth Attorney's Services Council to provide up-to-date information on DUI enforcement and prosecution. Over 150 officers attended these workshops as well as approximately 80 Commonwealth's Attorneys.

Each workshop began by reviewing the new changes in Virginia's DUI laws and how to prosecute offenders properly. Instructors from across the state outlined these new laws and the legal aspects of investigative stops, reasonable suspicion, and setting up sobriety checkpoints. This joint enforcement and prosecutor's workshop paired Commonwealth Attorneys from across the state with local



PHOTO BY ERIN SCHRAD, VACP

and state law enforcement officers. Instructors provided an overview of problems and issues common to enforcement and prosecutors and discussed how to over come some of the common problems as they move each case forward through the system. Later they interacted as teams to review sample cases and discuss how the officer should

handle each of these cases and then how the prosecutors should or would handle each as it entered the legal system. This "Best Practice" session was well received by both the officers and prosecutors and provided valuable information and insight into the current issues surrounding DUI enforcement and prosecution.

6th Annual Mid-Atlantic DUI Conference

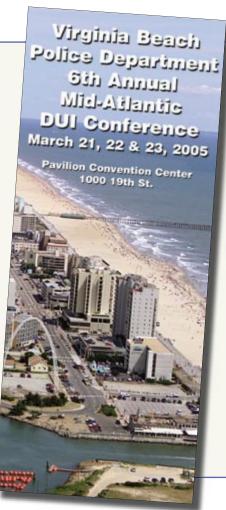
The Virginia Beach Police Department is proud to announce their 6th Annual Mid-Atlantic DUI Conference from **March 21-23, 2005**.

Held at the Virginia Beach Pavilion Convention Center, this three-day conference covers a wide array of topics. The training is specifically designed and intended for law enforcement professionals involved in the identification, arrest, prosecution, and treatment of persons arrested for DUI. The annual goal of this training conference is to bring high-caliber speakers who are experts in their field to educate participants on the latest legislation and technology that will aide them in their pursuit to prosecute drunk drivers and to save lives.

Last year, more than 270 participants attended this conference. Professionals from 75 jurisdictions from within eight Mid-Atlantic states, including Pennsylvania, New Jersey, New York, North Carolina, South Carolina, Georgia, Virginia, Maryland and the District of Columbia attended.

The conference registration fee will once again be only \$ 35.00 due to corporate sponsorship by the Anheuser Busch Corporation. The conference schedule and registration form may be accessed at www.vbgov.com/dui.

If you have any questions on this conference please contact the Virginia Beach Police Department at (757) 427-4606 or email at duiconf@vbgov.com.



CPS

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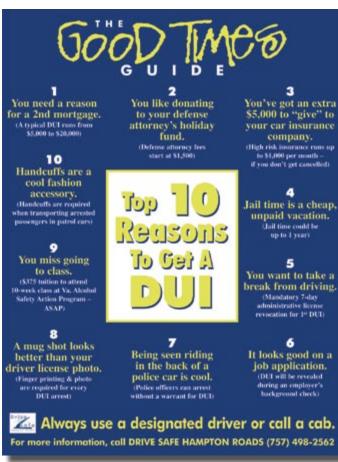
designed and piloted here in Virginia with NHTSA to teach individuals the technical and instructional skills needed to serve as child passenger safety resources for their organization, community or state. National certification workshops have been conducted by a variety of local, state and national agencies and organizations. Currently those who successfully complete the training workshop are eligible to receive national certification as a Child Passenger Safety Technician through the National Campaign. SAFEKIDS Technicians and Instructors put their knowledge to work through a variety of activities, including child safety seat checks where parents and caregivers receive education and hands-on assistance with the proper use of child restraint systems and safety belts.

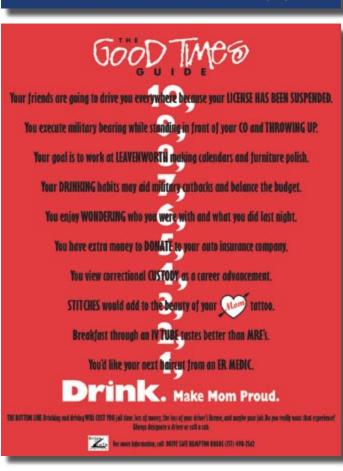


2004 Checkpoint Strikeforce Preliminary Statistics

(January, 2005)

Approx. number of hours specifically on DUI enforcement	15369
Approx. number of checkpoints	383
DWI Arrests	529
Safety Belt Citations	524
Child Safety Seat Citations	192
Felony Arrests	141
Recovered Stolen Vehicles	6
Fugitives Apprehended	33
Suspended Licenses	771
Uninsured Motorists	31
Speeding Citations	1348
Reckless Driving Citations	426
Drug Arrests	229





This is your You're singing to the You hear 5th trip to the crowd and it isn't "last call" and bathroom. think the phone Karaoke Night. is for you. You've convinced You know yourself you're You think a still on your haircut from an 2nd drink. ER nurse would you need a look cool. Designated 0 You think You think the embalming fluid sii revirQ will give you a city jail serves soft and smooth gourmet meals. complexion. 0 Ø O Your entire The bartender The person next dinner consisted knows your favorite to you is starting of olives, cherries drink, but YOU'VE to look "realllyy and oranges. forgotten it. goood."

BOTTOM LINE:
Always use a designated driver or call a cab.

For more information, call DRIVE SAFE HAMPTON ROADS (757) 498-2562



DRIVE SAFE HAMPTON ROADS and Hoffman Beverage Co. have partnered to produce a series of humorous posters warning about both the dangers and consequences of underage drinking and/or drinking and driving. The red poster is specifically designed to address a military audience and the green poster is designed for the under-21 crowd. A supply of posters may be requested by contacting Kim Tamburino, Consumer Affairs, Hoffman Beverage Co., at (757) 552-8336 or by email — ktamburino@hoffmanbeverage.com. Requests will be limited to 25 of each poster.

Primary safety belt laws would save 700 lives per year 28 States still allow ticket only if driver is stopped for another reason

ARLINGTON, VA — Safety belt use laws in only 21 states and the District of Columbia are primary, meaning police may stop vehicles solely for belt law violations. But in most states belt use law enforcement is secondary, so police cannot stop vehicles for this infraction alone (New Hampshire is the only state without a belt use law.) In a new study the Insurance Institute for Highway Safety found that when states strengthen their laws from secondary enforcement to primary, driver death rates decline by an estimated 7 percent.

"In states with primary laws, safety belt use rates are higher. The result is that crash deaths are reduced," says Institute senior vice president Susan Ferguson. "Where primary laws are in effect, drivers are more likely to buckle up because the perception is that they're going to be pulled over if they don't."

The most recent national observational survey conducted in 2004 by the National Highway Traffic Safety Administration shows that belt use rates averaged 84 percent in primary states compared with 73 percent in secondary states. A number of observational studies have shown that shifting from secondary to primary laws boosts safety belt use, but the Institute's is the first study to evaluate the effect of this shift on traffic deaths.

The Institute examined driver fatality data during 1989-2003 in 10 jurisdictions — California, the District of Columbia, Georgia, Indiana, Louisiana, Maryland, Michigan, New Jersey, Oklahoma, and Washington — where secondary laws were amended to primary. Researchers compared these data with data in states where the laws remained secondary.

One indication that the primary laws led to higher belt use comes from rates among fatally injured drivers. In 1989 before any of the laws were changed, belt use rates among fatally injured drivers were similar — about 20 percent — in both groups of states. By 2003 the rates had risen to 47 percent in states that switched to primary laws, compared with 36 percent in the secondary states.

The annual rate of passenger vehicle driver deaths per mile of travel declined in both groups of states, but it declined more in the states that changed to primary enforcement. Taking into account the timing of the change in each state and other factors that could have affected crash rates, primary laws were associated with a 7 percent reduction in death rates.

Ferguson points out that during the study period "many states participated in special 'Click It or Ticket' safety belt enforcement campaigns. The enhanced enforcement began earlier in the primary states so it's important to note that changes in belt use laws along with the increased enforcement led to the decrease in fatalities."

Based on the reduction in driver death rates, it's estimated that 2,990 lives have been saved in the study

states because of the tougher safety belt laws.

"If the 28 states that still have secondary laws were to switch to primary enforcement, about 700 lives would be saved each year. And if legislators in these states had enacted primary laws to begin with, more than 5,000 lives could have been saved since 1996," Ferguson says (see attached table).

For more information go to www.iihs.org

Effects of strengthening safety belt laws:

Lives that could have been saved in secondary states if belt laws had been primary

State	Passenger vehicle driver deaths 1996-2003	Lives that could have been saved since 1996
Alaska	326	23
Arizona	3,347	234
Arkansas	2,914	204
Colorado	2,646	185
Florida	10,889	761
Idaho	1,158	81
Kansas	2,373	166
Kentucky	4,027	282
Maine	838	59
Massachusetts	1,776	124
Minnesota	2,771	194
Mississippi	4,314	302
Missouri	5,459	382
Montana	1,070	75
Nebraska	1,345	94
Nevada	1,226	89
North Dakota	465	33
Ohio	6,309	441
Pennsylvania	6,644	465
Rhode Island	336	23
South Carolina	4,436	310
South Dakota	699	49
Utah	1,216	85
Vermont	372	26
Virginia	4,200	294
West Virginia	1,759	123
Wisconsin	3,454	242
Wyoming	675	47
TOTAL	77,084	5,390

NOTE: States listed are all those with secondary safety belt use laws.

Comcast to Richmond: 'Drive, Think, Live'

Comcast Corp.'s system in metro Richmond launched a public-safety campaign February 1st.

The operator teamed up with the families and friends of accident victims on "Drive, Think, Live," a series of seven original 30-second public-safety messages designed to encourage dialogue among teen-agers about the dangers that exist on the road.

Comcast donated \$500,000 worth of airtime for the spots, which will air on multiple channels throughout the Richmond area.

"Comcast believes too many young people are seriously injured or killed each year in traffic accidents," Comcast Richmond vice president and general manager Kirby Brooks said in a prepared statement.

"Drive, Think, Live will raise awareness about the problem of teen-age driving accidents and encourage young people to stop and think before they take an unnecessary risk on the road," Brooks added. "These powerful messages from the family and friends of accident victims will connect to viewers on a personal level."

Safe-driving effort aimed at SUV owners \$27 million ad blitz calls for more caution on the road

(Feb 1, 2005) NEW YORK—The nation's attorneys general announced a \$27 million ad campaign yesterday to coax sport utility vehicle owners to drive safely and to convince them they are not invulnerable when they get behind the wheel of one of the big vehicles.

The campaign, funded through a settlement with Ford Motor Co., is aimed at men 18 to 34, who are involved in a disproportionate number of rollover accidents involving sport utility vehicles.

The campaign features a monster named Esuvee that resembles a woolly mammoth with headlights. In one 30-second spot, men ride the beast as they would a bucking bronco. A narrator says: "Anybody can ride an SUV, but not everybody rides it right."

The campaign is the result of a 2002 nationwide settlement with Ford. The states accused Ford of running deceptive advertising promoting the safety of SUVs.

Susan Ferguson, senior vice president of research at the Insurance Institute for Highway Safety, questioned whether the ads would produce the desired effect.

"There's been a ton of research to suggest that people don't change their behavior just through education," Ferguson said.

"Just exhorting people to do the right thing does not have the effect of changing their behavior."

National Highway Traffic Safety Administration figures show that 67 percent of adults involved in fatal SUV rollovers in 2002 were men and 61 percent of fatal SUV rollovers involved people 20 to 39.



This billboard was developed by the Blue Ridge Transportation Safety Board in partnership with Carilion Patient Transportation Services for the None For The Road Campaign. This ad is being used on 12 billboards donated by Lamar Advertising throughout the region and has also been produced as 11X17 posters. Area law enforcement agencies partnered to maximize resources and set up DUI checkpoints throughout the region as part of the Checkpoint Strikeforce campaign, and to drive home the None For The Road message.

Brain Immaturity Could Explain Teen Crash Rate

Risky Behavior Diminishes At Age 25, NIH Study Finds

By Elizabeth Williamson Washington Post Staff Writer

(Feb 1, 2005) By most physical measures, teenagers should be the world's best drivers. Their muscles are supple, their reflexes quick, their senses at a lifetime peak. Yet car crashes kill more of them than any other cause — a problem, some researchers believe, that is rooted in the adolescent brain.

A National Institutes of Health study suggests that the region of the brain that inhibits risky behavior is not fully formed until age 25, a finding with implications for a host of policies, including the nation's driving laws.

"We'd thought the highest levels of physical and brain maturity were reached by age 18, maybe earlier — so this threw us," said Jay Giedd, a pediatric psychiatrist leading the study, which released its first results in April. That makes adolescence "a dangerous time, when it should be the best."

Last month, Sen. William C. Mims (R-Loudoun) cited brain development research in proposing a Virginia bill that would ban cell phone use in vehicles by drivers younger than 18. It passed Friday.

In Maryland, Dels. Adrienne A. Mandel and William A. Bronrott said the research could bolster three bills the Montgomery County Democrats submitted to the legislature Friday. The bills would expand training and restrict passenger numbers and cell phone use for certain teenage drivers.

The measures also are supported by crash statistics and a soon-tobe-released study from Temple University, which used a drivingstyle test to show that young people consistently take greater risks when their friends are watching.

"This goes toward supporting evidence that the judgment of teens further deteriorates with distractions. These crashes are preventable," Mandel said. "I would welcome [researchers'] testimony at our bill hearings."

The research has implications beyond driving: Attorneys cited brain development studies as the U.S. Supreme Court considered whether juvenile offenders should be eligible for the death penalty. The court is expected to reach a decision by midyear.

Critics of brain-imaging research — and Giedd himself — emphasize that there is no proven correlation between brain changes and behavior. Giedd, however, said the duration and depth of the study mean "it's time to bring neuroscience to the table" in the teen driving debate.

"We can determine what is the relationship between brain development and driving ability and what we can do to make it better." Giedd said.

At Temple University in Philadelphia, psychology professor and researcher Laurence Steinberg plans a new study: scanning teenagers' brains while they perform a task that simulates driving decisions, in an effort to understand the biological underpinnings of risk-taking among young people.

Giedd intends to pursue similar studies with his subjects, focusing on ways to give young people, and those responsible for them, more tools for beating the odds.

Teenagers are four times as likely as older drivers to be involved in a crash and three times as likely to die in one, according to the Insurance Institute for Highway Safety.

"Right now our first subjects are reaching driving age," Giedd said. "What better application could there be than saving their lives?"

Environmental Impact

Lily and Zoe Ulrich, 15-year-old identical twins from Frederick, have been part of Giedd's study at NIH for two years. When they signed up, they answered questions about

their diet, athletics, social habits, peer pressure, language skills and intellectual achievements.

The blond, 5-foot-4 sisters wear glasses, earn straight A's and often finish each other's sentences. They will receive their learner's permits this month. "I'm excited . . . it's really cool," Lily said. "I'm a little more nervous," said Zoe. "We think the same a lot of the time but not always."

Giedd would like to know why.

Sitting in his closet-size office in NIH's sprawling Building 10, he turns to his laptop, where the fruit of 13 years' work appears. It's an eight-second, time-lapse image of the brain, swept by a vivid blue wave symbolizing maturing gray matter. The color engulfs the frontal lobes and ends in "a direct hit," Giedd said, with the dorsal-lateral prefrontal cortex, just behind the brow.

About as thick and wide as a silver dollar, this region distinguishes humans from other animals. From it, scientists believe, come judgments and values, long-term goals, the weighing of risks and consequences — what parents call wisdom or common sense and what science calls "executive functions."

While society and tradition have placed the point of intellectual maturity, the "age of reason," years earlier, the study — an international effort led by NIH's Institute of Mental Health and UCLA's Laboratory of Neuro Imaging — shows it comes at about age 25.

The process is generally completed a year or two earlier in women but varies greatly from person to person. Why that is, Giedd said, "we still don't know."

"We have to find out what matters. Diet? Education, video games? Medicine, parenting, music? Is the biggest factor whether you're a musician or a jock or the amount of sleep you get?"

As important, Giedd said, is the study's finding that the brain

matures in a series of fits and starts. While it remains to be proved, he said, this "may be a key to when the brain is most receptive" to learning certain skills, such as driving.

The study, which is ongoing, involves scanning the brains of 2,000 people ages 4 through 26 using magnetic resonance imaging, a radiation-free tool that permits researchers to view the organs of healthy people in minute detail.

Every two years, study participants come to the Bethesda-based National Institute of Mental Health, where they are scanned and interviewed. Half the children are healthy, and half have brain-related disorders. In the next phase, researchers plan to focus almost solely on twins, hoping to expand beyond the 180 pairs participating now, to measure the impact of environmental factors on the maturing brain.

Giedd said he's been bashed by teenagers who said the study suggests they're brain-damaged. On the contrary, he said: "Teenagers' brains are not broken; they're just still under construction."

The pattern probably serves an evolutionary purpose, he said, perhaps preparing youths to leave their families and fend for themselves, without wasting energy worrying about it.

The findings imply that many life choices — college and career, marriage and military service — often are made before the brain's decision-making center comes fully online. But for young adults, "dying on a highway is the biggest risk out there," Giedd said. "What if we could predict earlier in life what could happen later?"

A 'Period of Recklessness'

Temple's Steinberg said the NIH/ UCLA research supports his theory that teen recklessness is partly the result of a critical gap in time — starting with the thrill-seeking that comes in puberty and ending when the brain learns to temper such behavior. Since children today reach puberty earlier than previously, about age 13, and the brain's reasoning center doesn't reach maturity until the mid-twenties, Steinberg said, "this period of recklessness has never been as long as it is now."

In a study to be published this year, Temple researcher Margo Gardner and Steinberg illustrated the impact of peer pressure on risk-taking. Volunteers in three age groups — 13 to 16, 18 to 22 and 24 and older — were told to bring two friends to the study, which involved an arcade-style driving game.

To "win," participants guided a car through a course as quickly as possible. Periodically, a yellow warning light flashed, and some time later a "wall" popped up. If players hit it, they lost all their "points."

Participants took the test alone and with their friends in the room. Researchers found that those in the two younger groups consistently took more chances with friends present. Those 24 and older behaved equally cautiously, regardless of whether friends were watching.

The results help show why teenagers are more likely to drink, take drugs or commit crimes in groups, he said. They're also reflected in auto crash statistics.

According to the Arlington-based Insurance Institute for Highway Safety, the chances of a crash by a 16- or 17-year-old driver are doubled with two peers in the vehicle and quadrupled with three or more. "Every passenger you add increases the risk," said Alan Williams, chief scientist at the institute. The brain and behavior studies, he said, "certainly tie in with what we know."

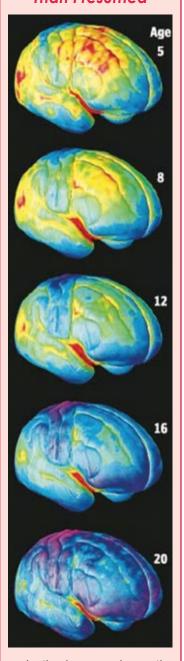
After a spate of teen driving deaths across the Washington region in the fall, Maryland is attempting to join Virginia and the District in limiting the number of unrelated passengers in cars with young drivers. In addition to cell phone restrictions that the Maryland and Virginia legislatures are considering, Maryland Gov. Robert L. Ehrlich Jr. (R) is backing a measure that would revoke the licenses of convicted drunk drivers under age 21, for as long as five years.

Steinberg said he agrees with such approaches. "We have to limit the harm adolescents [encounter], rather than to try and change them."

The best way to do that, he added, "is by passing laws."

Staff writer David Snyder contributed to this report.

Growth Takes Longer Than Presumed



In the images above, the shades of blue symbolize maturing brain functions. The maturation culminates in the prefrontal cortex, the area just behind the brow. This is the seat of "executive functions,:" the area that controls judgment and the weighing of risks and consequences.

Previously, this area was thought to be fully mature by about age 18, but the study suggests that this area is not fully developed until about age 25.

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