Teen driving safety
Evidence in Support of Public Policy

Dennis Durbin, MD, MSCE
Professor of Pediatrics

Co-Scientific Director
The Center for Injury Research and Prevention
The Children's Hospital of Philadelphia
LEADING CAUSE OF DEATH FOR TEENS

Crashes kill 5 times as many teens as cancer or poisoning.

For each fatality, 400 more children and youth receive medical treatment for injuries.
WE’RE MAKING PROGRESS

- 46% decline in deaths to teens behind the wheel since 2005
- 30% of deaths are to people outside the teen’s vehicle

Crash Fatalities with Teens Behind the Wheel (2005-2010)

Total number of deaths in 2010: 3,413
Total number of fatal crashes in 2010: 3,198
VARIATION IN FATALITY RATES

Teen Deaths in Motor Vehicle Crashes per 100,000 Population by State
(average fatality rates for 2009-2010 color-coded by quartile)
THE BURDEN OF INJURIES

• Motor vehicle crashes are the leading cause of traumatic brain injuries among 15-19 year olds in the US.

People Injured in Tow-away Crashes with Teens Behind the Wheel (Annual Average, 2009-2010)

Average number of injured persons: 94,479 per year
Average number of tow-away crashes with an injury: 60,264 per year
CRASHES: A LINKED CHAIN OF CAUSE-EFFECT EVENTS

Underlying Cause
- Inexperience
- Immaturity/age
- Alcohol

Prevention Effort
- Graduated Driver Licensing (GDL) restrictions, driver education
- ↑ GDL minimum age requirements
- Zero tolerance policies, education
Linked cause-effect events
Proximate cause

Identified Proximate Factors
- Peer passengers
- Nighttime driving
- Risky driving behaviors
- In-car distraction
## WHAT ARE THE MOST COMMON REASONS THAT TEENS CRASH?

<table>
<thead>
<tr>
<th>Reason for the crash</th>
<th>How common is it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver errors</td>
<td>95% of crashes</td>
</tr>
<tr>
<td>Speeding</td>
<td>23%</td>
</tr>
<tr>
<td>Not noticing a hazard</td>
<td>23%</td>
</tr>
<tr>
<td>Distraction</td>
<td>20%</td>
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<tr>
<td>Bad decision</td>
<td>14%</td>
</tr>
<tr>
<td>Lost control</td>
<td>8%</td>
</tr>
<tr>
<td>Bad road conditions</td>
<td>3%</td>
</tr>
<tr>
<td>Vehicle problem</td>
<td>1%</td>
</tr>
<tr>
<td>Unknown cause</td>
<td>1%</td>
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</tbody>
</table>
WHY TEENS CRASH INEXPERIENCED? NOT ME!

- Driver's inexperience makes a lot of difference to safety: 60%
- Witnessed inexperienced peer drivers often or always: 15%
WHY TEENS CRASH
POOR SCANNING
WHY TEENS CRASH
POOR HAZARD DETECTION
WHY TEENS CRASH
BAD DECISION
WHY TEENS CRASH
DISTRACTION
TEEN PERSPECTIVE: Cell Phones

Things drivers do that take their eyes and focus off the road

<table>
<thead>
<tr>
<th>Activity</th>
<th>Perceived &amp; Always (%)</th>
<th>Makes a lot of difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The driver is talking on a cell phone.</td>
<td>57%</td>
<td>28%</td>
</tr>
<tr>
<td>The driver is selecting music while driving.</td>
<td>52%</td>
<td>13%</td>
</tr>
<tr>
<td>Music in the car is very loud.</td>
<td>46%</td>
<td>14%</td>
</tr>
<tr>
<td>The driver and passengers are dancing or singing along to the music.</td>
<td>33%</td>
<td>21%</td>
</tr>
<tr>
<td>The driver is text messaging, playing a video game, or using some other kind of handheld electronic device.</td>
<td>19%</td>
<td>79%</td>
</tr>
</tbody>
</table>
RESULTS: CELL PHONE USE

- 75% of US 9th to 11th grade adolescents reported owning a cell phone
- Cell Phone use While Driving
  - 52% rarely engage
  - 38% sometimes or occasionally
  - 10% often or always
- Greater use associated with:
  - being in a higher grade
  - having poorer grades
  - greater sensation seeking
  - more frequent driving in general
Peer passengers
Increase the risk of a fatal crash

The more passengers, the greater the danger.
TEEN PERSPECTIVE: PASSENGERS

Things Passengers do that take the driver’s eyes and focus off the road

- There are other teenagers in the car: 64%
- The driver and passengers are dancing or singing along to the music: 33%
- The driver pays attention to the passengers because they are acting wild: 65%
- The passengers in the car are trying to get the driver to speed, drive on the sidewalk, do donuts, etc.: 62%
- The passengers in the car have been drinking alcohol: 47%
- The passengers in the car have been smoking marijuana: 48%
RISK TO YOUNGER PASSENGERS

WHY TEENS CRASH
PASSENGERS – COMPOUND CHALLENGES

[Image of a video player interface with text: FWD +0.00, LAT +0.01, TIME +4.50]
TIMELINE FOR SAFETY

Prepare
Assess
Model
Teach

Coach
Monitor
Assess
Set rules
Remediate

Time Zero
Independent driving
THE FIRST 6 MONTHS: HIGHEST RISK

Novice Driver’s Risk Begins To Drop With Experience

There is a steep drop in the crash risk as new drivers gain experience during the first 12 months of driving.

Time Zero

Novice Driver’s Risk Begins To Drop With Experience

The crash risk drops by more than 2/3 after the first 1000 - 1500 miles of independent driving.
PREPARING TEENS TO DRIVE ALONE
PA GDL LAW

- **Learner phase**
  - Adult supervisor in vehicle
  - 65 hours of practice required
    - 10 at night
    - 5 in inclement weather

- **Junior/ restricted license**
  - 6 mos minimum holding period
  - Passenger restriction
  - Night driving restriction / curfew

- **Full unrestricted license**
PREPARING TEENS TO DRIVE ALONE
PA GDL LAW

- Unique role of pediatrician/ health care provider in assessing readiness to drive
- Focused on medical/physical/cognitive issues
ASSESSING READINESS TO DRIVE

• Ready to accept responsibility?
• Good judgment and maturity?
• Knowledge of the rules of the road?
• Ready to commit to sufficient practice?
  • Adult able to commit?
• Able to receive constructive criticism?
DRIVER EDUCATION
THE IDEAL SITUATION

- Driving Instructor is expert coach
  - Teaches new skills
- Parent is reinforcer of skills
  - Regular practice

Teen: Learner
Driving Instructor: Expert
Parent: Reinforcer
DRIVING PRACTICE LOG

• Beginning
  • Vehicle operation
  • Low speed
  • Low traffic volume

• Intermediate
  • Higher speed limits
  • More traffic

• Advanced
  • Busier roads
  • Unfamiliar routes
  • Night and bad weather
NATIONAL DRIVER EDUCATION STANDARDS- 2009

• Multidisciplinary working group
• Standards for
  • Program Administration
  • Education/Training
  • Instructor Qualification
  • Parent/guardian involvement
  • Coordination with Driver Licensing
PARENTING STYLES:
The balance between support and control

The Permissive Parent
Is highly supportive but makes few rules and trusts rather than monitors.

"I trust you’ll do the right thing."

The Authoritative Parent
Is highly supportive AND closely monitors and sets rules.

"I care, and I’ll give you the freedoms you earn; but, for safety-related issues, you’ll do as I say."

The Uninvolved Parent
Sets few rules, does not monitor, and offers little active support.

"Kids will be kids — you’ll learn from your mistakes."

The Authoritarian Parent
Sets many rules and closely monitors but offers little support.

"You’ll do as I say."
PARENTS REALLY DO MATTER

Teens who describe authoritative parents are

- Half as likely to crash
- 71% less likely to drive while intoxicated
- 30% less likely to use a cell phone while driving

-as compared to teens of uninvolved parents
PARENTS REALLY DO MATTER

Teens who describe authoritative or authoritarian parents are:

- Twice as likely to use seatbelts
- Twice as likely to believe belts affect safety
  - as compared to teens of uninvolved parents
- Speed half as often
  - as compared to teens of uninvolved or permissive parents
HOW DO YOU EMPOWER PARENTS?

- Understand importance of lots of varied supervised practice driving and monitoring during first year of driving
- Set rules during first year, gradually introducing new privileges
- Be role models
- Understand GDL
- Control Access to the Keys
HOW DO YOU EMPOWER PARENTS?

Communicate in a way that helps their teen be receptive to their guidance:

- Honor teen’s independence
- Emphasize safety not control
- Reward teens for responsibility
SUMMARY

• Not Driving yet?
  • Teach child to be a good passenger

• Learning to Drive?
  • Get enough practice (>65h)
  • Practice under varied conditions
  • Don’t move on until they’ve proven they can

• New Driver (first 6-12 months)?
  • Work with teen to set rules and expectations:
    • Low risk then higher risk driving situations
    • No passengers at first
    • Mandatory seat belt use for everyone at all times
    • Zero tolerance for alcohol, cell phone use, texting
RESOURCES FOR YOU TO USE
WWW.TEENDRIVERSOURCE.ORG