

Understanding Teen Driver Risk

Gene LaDoucer
AAA-The Auto Club Group



2016 North Dakota
Injury Prevention Conference



Overview

- AAA Advocacy
- Snapshot of Teen Drivers
- National, U.S. Data on Teen Drivers
- Common Risk Factors
- Addressing the Risks
 - Graduated Driver Licensing (GDL)
 - Parental Involvement
- Dare to Prepare
 - Other AAA Resources




Traffic Safety

About AAA

- Founded in 1902
- Currently 56 million members in US and Canada
- Ensure the public's interests are represented in highway & automobile safety, infrastructure, travel and energy policies
- Traffic safety advocacy, including:
 - Child Passengers
 - Distracted Driving
 - Impaired/Drugged Driving
 - **Teen Drivers**
 - Senior Drivers





Traffic Safety

Snapshot of Teen Drivers

- Motor vehicle crashes are the leading cause of death among teenagers, accounting for approximately one third of all teen deaths
- In 2013, 2,163 teens in the United States ages 16–19 were killed and 243,243 were treated for injuries suffered in motor vehicle crashes
- Young people ages 15-24 represent only 14% of the U.S. population. However, they account for 30% (\$19 billion) of the total costs of motor vehicle injuries




Traffic Safety

Teen Drivers: Ready for the Challenge?

- **Age** (maturity level and brain development)
 - Immaturity
 - Heightened impulsivity
 - Greater willingness to engage in risk-taking behavior
 - More likely to make poor decisions
 - Overestimation of their abilities
- **Inexperience**
 - Prone to making simple driving errors
 - Speeding/too fast for conditions
 - Assessing risk/hazards
 - Driving at night
 - Joy riding versus driving with a purpose
 - Dealing with distractions
 - Teen passengers
 - Less likely to wear seat belts




Traffic Safety

Teen Drivers: Age

- A time of rapid change (physical and social)
 - Social affiliations shift toward peers
 - Increased novelty seeking
 - Increased risk taking
 - Less in control of emotions
- Teen brains differ from adult brains
 - Prefrontal cortex & connections develop into mid-20s
 - Associated with reasoning and decision making

Teens base actions less on reasoning and thinking and more on emotions

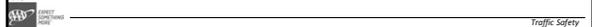



Traffic Safety

Teen Drivers: Inexperience

- North Dakota licensing system
 - Can obtain permit at age 14 with drivers education
 - Restricted license at age 15
 - Unrestricted license at age 16
 - No drivers education required if start at age 16
- Driver education requirements
 - Public school: 30 hours classroom; 6 hours BTW
 - Private school: 6 hours BTW only

It's estimated only 1 in 3 ND teens have a license by age 16
1 in 4 do not have a license at age 18

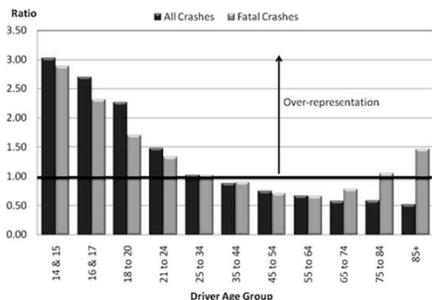


Age, Inexperience & Crashes

- Two studies found:
 - Inexperience appears to be a greater factor in motor vehicles crashes than risk taking (McKnight, 2003)
 - Studies evaluating crashes among young drivers imply lack experience is more important than supposed "risk taking behavior" (Masten and Foss, 2010)



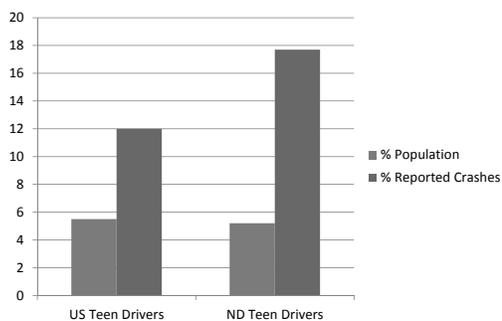
Age, Inexperience & Crashes



Source: NDDOT, 2008; FHWA, 2006

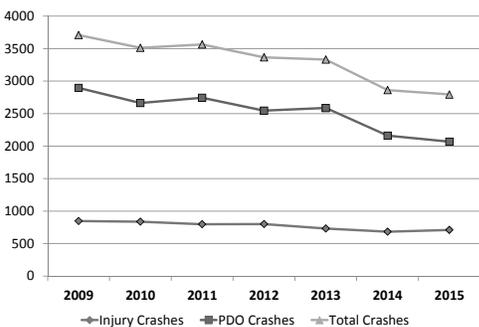


Teens: Crash Involvement (2014)



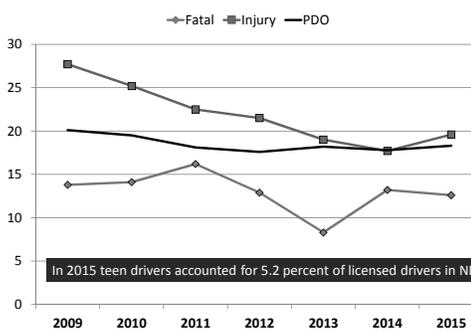
ND Teenage Driver Crashes

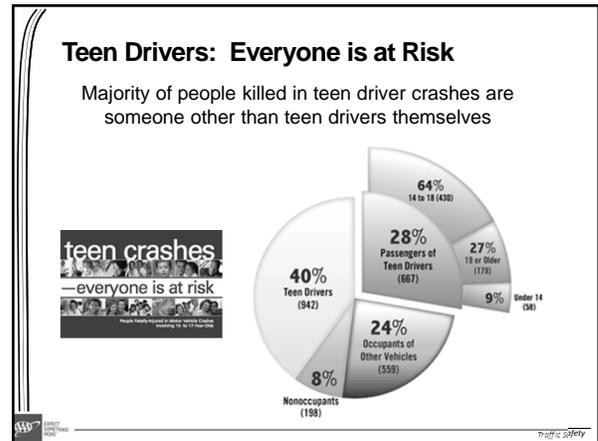
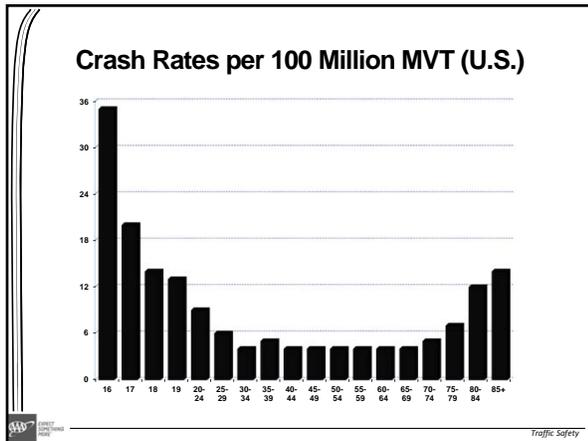
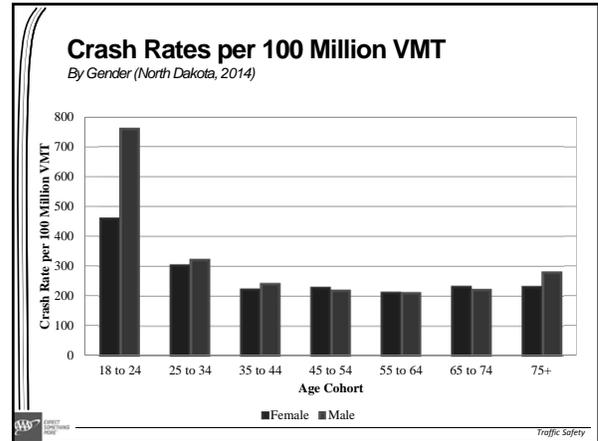
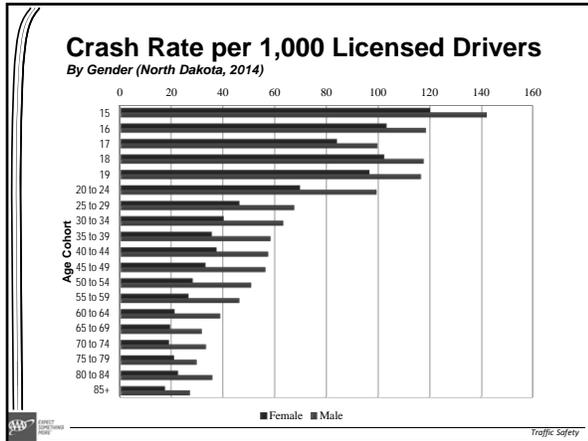
Number of crashes involving teenage drivers (ages 14-19)



ND Teen Driver Crashes

Percentage of crashes involving teenage drivers (ages 14-19)





Teen Drivers and Passengers

Fatalities in cars driven by a young driver, age 14-19, with one or more teen passengers (North Dakota):

- Fatality rate triples (207%) with one passenger age 3-17.
- Fatality rate more than triples (283%) with two passengers age 13-17.
- Fatality rate nearly quadruples (291%) with three or more passengers age 13-17.

Teen Drivers and Distractions

Sixty percent of teen crashes involve distractions behind the wheel (AAFTS)

- Talking or attending to other passengers in the vehicle: 15 percent of crashes
- Talking, texting or operating a cell phone: 12 percent of crashes
- Attending to or looking at something inside the vehicle: 11 percent of crashes

[Video: Teen Distraction Study](#)

Teen Drivers and Alcohol

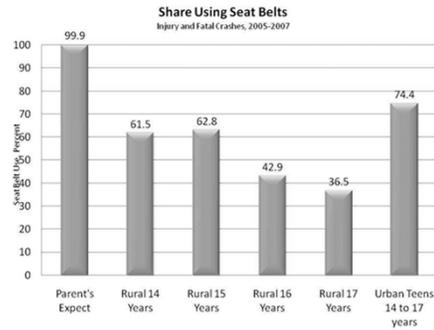
Alcohol is a factor in many teen crashes. Although young drivers are less likely than adults to drink and drive, their crash risk is higher when they do. The combination of drinking and driving is made worse by teenagers' relative inexperience both with drinking and with driving.

- At all levels of BAC, crash risk is greater for teens than for older drivers.
- Drivers are less likely to use restraint when they have been drinking.

National: In 2014, 26 percent of young drivers 14-20 years old who were killed in crashes had BACs of .01 or higher; 81 percent of those had BACs of .08 or higher.

North Dakota: Over the past 10 years, nearly a quarter of fatalities in a car driven by a teen (age 14-19) occurred when the teen driver was impaired by alcohol, drugs or both.

Teen Drivers and Seat Belts



Addressing the Risks

Two things that work:

- **Graduated Driver Licensing (GDL):**
 - Largely credited for a 42% reduction in fatal crashes of 16-year-old drivers since 1996.
 - Compared with licensing laws rated poor, laws rated good were associated with 30 percent lower fatal crash rates among 15- to 17-year-olds. Laws rated fair yielded fatal crash rates 11 percent lower. (IIHS)
- **Parental Involvement:** Teens who say their parents are involved and supportive are:
 - Half as likely to crash
 - 71% less likely to drive intoxicated
 - 30% less likely to use a cell phone when driving.
 - 50% more likely to buckle up (CHOP, 2009)

Why GDL Works

- Delays full licensure while allowing new drivers to gain skill and experience under low-risk conditions
 - Learner's permit
 - Restricted/intermediate/provisional license
 - Full, unrestricted license
- Balances trade-off between safety and mobility



GDL: Improvements Needed

- **In North Dakota:**
 - Night driving provision applies only to licensed 15-year-old drivers
 - No provision limiting passengers during intermediate phase
 - Drivers education not required if age 16 or older
 - As many as 2 in 3 teens obtain their license after age 16

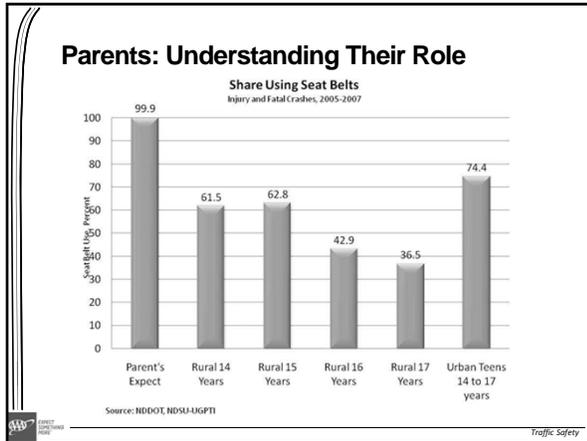


Parents: Understanding Their Role

AAAFTS Study:

- 52% of parents want their teen to get 'a lot of practice'
 - Teen drove an average of 1.6 hours/week spread over 3.2 days
 - Busy schedules and teen disinterest cited
- Most practice under relatively benign conditions and on same route
 - Only 16% of practice conducted in dark
 - Only 3% conducted in rain
 - Only 2% conducted in heavy traffic
- After a full year of driving:
 - 1 in 3 parents didn't think their teen was ready to driver unsupervised on the highway or in heavy traffic
 - 1 in 5 didn't think their teen was ready to drive unsupervised in rain
 - 47% said there was a least one condition in which they didn't feel comfortable letting their teen drive.

Yet, 68% allowed their teen to get a license within 1 month of eligibility



Parents: Understanding Their Role

Being a Role Model:

- Teens are watching; 'Do as I say, not as I do'
- Many view GDL laws as a maximum to shoot for rather than a minimum standard to exceed

Parents enable:

- More than half of teens talk on cellphones with their mother or father while driving (apa)

Parent programs should include specifics on how to lead by example and refrain from unsafe behaviors

[Video: Swapping Seats](#)

AAA Program: Dare to Prepare

- **Dare to Prepare**
 - A pre-permit presentation for parents and teens
 - 60-90 minute interactive presentation
 - Can be modified for parents or teens alone
 - Provides important information before teens take the wheel
 - Well received by attendees – both parents and teens
 - Can be difficult to convince to attend in the first place
 - Mandatory parent session during driver's education a better option

Other AAA Resources

www.teendriving.aaa.com

- Start Smart
- Dare to Prepare
- Parent-Teen Driving Agreement

www.aaafoundation.org

References

AAA Foundation for Traffic Safety
www.AAAFoundation.org

American Academy of Pediatrics
www.aap.org

American Psychological Association
www.apa.org

Centers for Disease Control and Prevention
www.cdc.gov

Harvard Health
www.health.harvard.edu

Insurance Institute for Highway Safety
www.iihs.org

National Highway Traffic Safety Administration
www.nhtsa.gov

NDSU Upper Great Plains Transportation Institute
<http://www.ugpti.org>

Toyota
<http://www.toyota.com/teendrive365>