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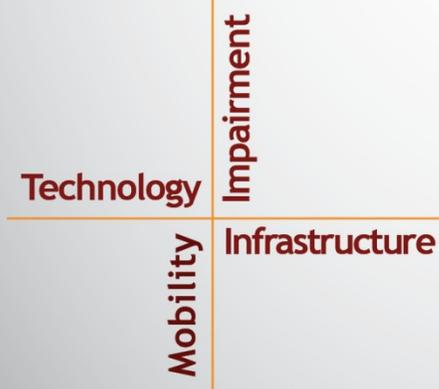
National Surface Transportation Safety Center for Excellence

Development of Curriculum for the Virginia Driver's Licensing Ceremony

Final Report

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LIST OF ABBREVIATIONS AND SYMBOLS

BAC	Blood Alcohol Concentration
GDL	Graduated Driver Licensing
NSTSCE	National Surface Transportation Safety Center for Excellence
VTI	Virginia Tech Transportation Institute

CHAPTER 1. INTRODUCTION

BACKGROUND

Novice teen drivers are involved in four times as many crashes and near-crashes as adults.⁽¹⁾ The main difference between young drivers and older drivers is experience. Teens are still new to driving and have not fully developed the skills needed to manage everything associated with driving. Graduated Driver Licensing (GDL) and parental management (i.e., involvement and monitoring) are two important ways to increase safety for teens as they learn to drive. GDL allows young drivers to gain valuable experience under safer conditions before obtaining full driving privileges.⁽²⁾ For example, GDL places restrictions on nighttime driving and driving with passengers, which are riskier driving situations for newly licensed teens.

While GDL has been extremely successful in reducing fatal crashes among teenage drivers,⁽³⁾ the role of parental management of the learning to drive process is also important. Research suggests that parental management of teen driving increases teen driver safety.⁽⁴⁾ Parents can help ensure that their teen gains driving experience in the safest conditions before gradually introducing them to riskier conditions as they become experienced. Researchers at the National Surface Transportation Safety Center for Excellence (NSTSCE) want to find ways to inform teens and parents about GDL restrictions and the importance of parental management. There is a unique step in Virginia's licensing process that offers such an opportunity: the Virginia Driver's Licensing Ceremony.

In Virginia, to receive the actual driver's license (as opposed to the temporary driving permit), both a parent and the teenage driver must appear before a family district court judge and participate in the Virginia Driver's Licensing Ceremony. This is an opportune moment when safety information is disseminated to parents and their novice drivers. These ceremonies are written and created primarily by district court judges. While some judges have taken a great deal of time and compiled excellent information, others are unsure about the information that should be relayed. Through the Development of Curriculum for the Virginia Driver's Licensing Ceremony project, NSTSCE researchers were able to assist judges in taking full advantage of this unique opportunity by offering them up-to-date information on teen driving safety.

PURPOSE OF THE STUDY

The purpose of this project was to develop a PowerPoint presentation and handout based on contemporary teen driving research and to disseminate the materials to district court judges throughout the state of Virginia for use in their licensing ceremonies. The PowerPoint presentation included the slides but also was accompanied with a script for the judges to use during the presentation. The slides and script provide parents and teens with key safety information, including the driving risks teens face, the GDL laws in Virginia, and how to use a parent-teen driving contract as a mechanism for risk reduction and parental management. The judges may use the presentation in its entirety or just sections of it. This outreach activity has tremendous potential benefit for the state of Virginia to improve the education of novice drivers and contribute to their safety on the roads.

CHAPTER 2. APPROACH

Over the course of this project, a presentation with PowerPoint slides, presentation script, and a handout were developed to disseminate to district court judges throughout the state of Virginia for use in their licensing ceremonies. The presentation, script, and handout were created using a three-phase approach that included a literature review, development of materials, and stakeholder review of materials. At the end of the development process, the final slides and accompanying script were presented at the district court judges' annual meeting.

Literature Review

A literature search was carried out to determine the state of knowledge regarding teen driving behaviors that may contribute to higher crash involvement and activities that may reduce the risks. This focus of this literature review was to identify the top risks facing teen drivers and potential countermeasures for addressing those risks. A thorough search was performed which resulted in the inclusion of 35 peer reviewed articles and research fact sheets published by federal transportation agencies and national research foundations (e.g., AAA-FTS) that were used to create the 30-slide presentation. The literature review identified seven major risks that teen drivers face, as well as several approaches believed to reduce the risks. These risks and safety strategies are outlined below and described in detail in the presentation (see Appendix A).

Primary teen driving risks:

- Speeding
- Nighttime driving
- Distracted driving
- Seatbelt nonuse
- Presence of teen passengers
- Primary access to a vehicle (i.e., teen is main driver of vehicle)
- Impaired driving (i.e., alcohol, drowsy driving)

Approaches to reduce risk for teen drivers:

- GDL
- Parental management (i.e., involvement and monitoring)
- Parent-teen driving agreements

DEVELOPMENT OF MATERIALS

The literature review was used to develop a presentation (see Appendix A), the script, and a handout (see Appendix B). The presentation incorporated state-of-the-art research and evidence-based recommendations. After organizing the content into a PowerPoint presentation and script, VTTI communication specialists made recommendations for summarizing content and organizing the presentation to effectively reach the target audience. VTTI graphic artists also revised the slides to create an appealing design for teens and parents.

STAKEHOLDER INPUT

The presentation and script were presented to stakeholders in the novice driving safety field to obtain their opinions and input. Stakeholders included a circuit domestic and family court judge, members of the state police, and a representative of a non-profit that focuses on driving safety outreach and education. Stakeholders provided comments on the presentation's content and display. The stakeholder's review and input were critical to ensuring that the information provided in the presentation and handout was accurate and presented in a manner that would be impactful to both parents and teens. Stakeholder comments were used to inform and revise the project materials.

CHAPTER 3. FINAL OUTCOME AND NEXT STEPS

PRESENTATION AT DISTRICT COURT JUDGE ANNUAL MEETING

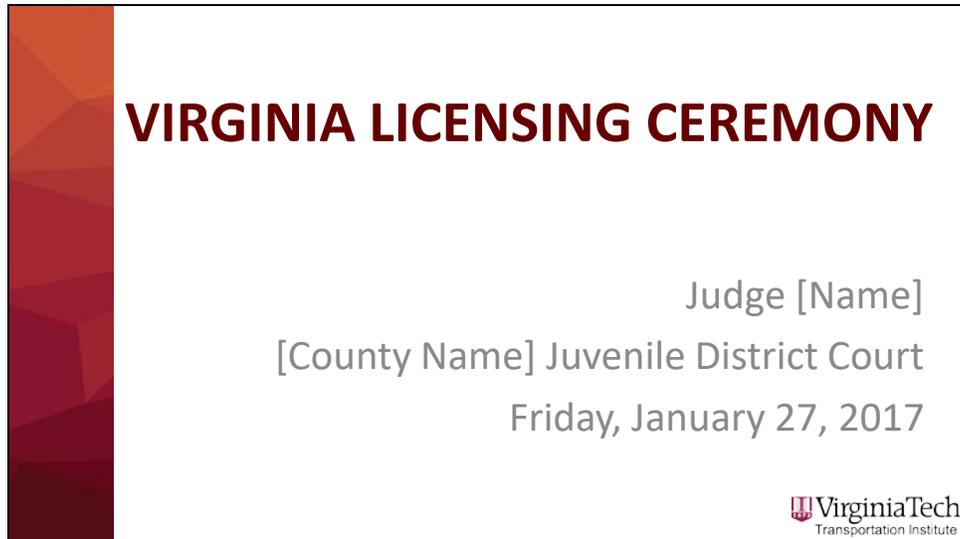
As a final step in the study, the materials were presented and disseminated to judges. A senior NSTSCE researcher presented the final product to Virginia Commonwealth District Court Judges at the annual Judicial Transportation Safety Conference (held in Williamsburg, Virginia, in August 2015). The licensing ceremony and handout were made available to judges for use in their own licensing ceremonies. The final presentation and handout are found in Appendix A and B. The materials are also posted on the Virginia Tech Transportation Institute website (<http://www.vtti.vt.edu/research/cvrus/index.php>).

NEXT STEPS

The final deliverables of this outreach project were the presentation and handout that are now being used by judges in Virginia. Although the materials were reviewed by stakeholders during the development process, the research team would like to follow up on this project with an evaluation of the licensing ceremony presentation materials. The research team would like to find out how effective the materials are at informing parents and teens about the greatest risk factors associated with teen driving, how to reduce the risks, and the importance of parental management (i.e., involvement and monitoring) of the learning-to-drive process. It would also be helpful to discuss with judges how they are using the presentation materials and gather their suggestions for improvement. The research team would then update the presentation based on outcomes from the evaluation.

APPENDIX A. PRESENTATION

Slide 1



VIRGINIA LICENSING CEREMONY

Judge [Name]
[County Name] Juvenile District Court
Friday, January 27, 2017

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- I want to welcome you to the Juvenile Domestic Relations Court in what I hope this is going to be your only visit! Today is an important day for both parents and teens.

Slide 2



I want to start by saying: Congratulations on earning your driver's license!

Teens, you have:

1. Held your learner's permit for 9 months
2. Completed a driver's education program
3. Practiced under supervision for 45 hours (15 hours at night)
4. Convinced your parent to bring you here today 😊

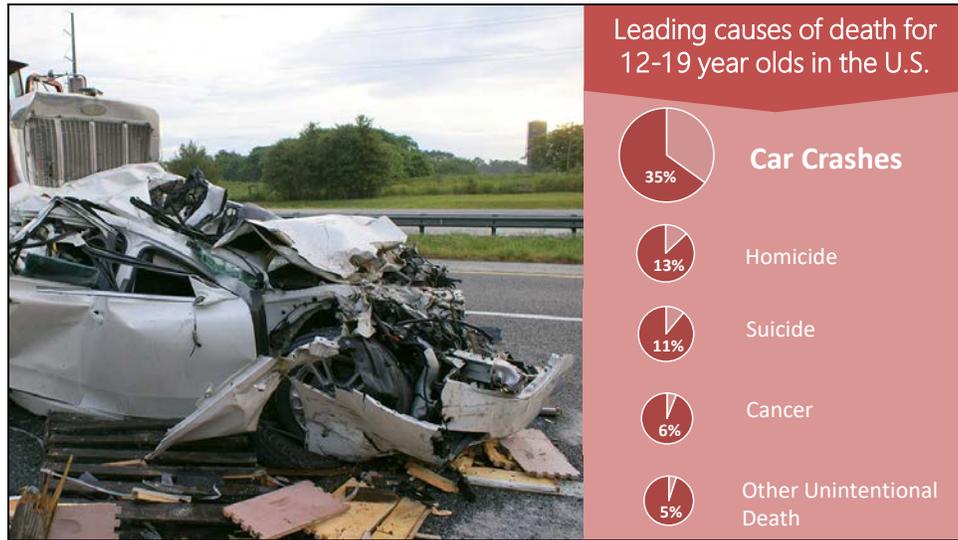
You've checked all the necessary boxes and now you're ready to drive independently. But with this new permission to drive independently comes a huge amount of risk! *press next*

Slide 3



- Driving is risky for everyone, at every age, but teen drivers have especially high crash risk.
- Compared to adult drivers, teens are **more than twice as likely** to be involved in a fatal crash.
- The main difference between young drivers and old drivers is **experience**. Teens are still new to driving and haven't fully developed the skills needed to manage everything associated with driving.
- As with any new skill, it takes practice to become experienced. When a toddler is learning how to walk, they are going to fall many times before they master the skill of walking. But with driving, the consequences of a mistake can be much greater than a scraped knee.

Slide 4



Motor vehicle crashes are the leading cause of death for teens in the U.S. *press next* They consistently rank above all other causes of death for teens.

1 in 5 16-year-old drivers have an accident within their first year of driving.

Slide 5



The good news is that teens are on their way to becoming experienced drivers!

Parents, you might be thinking – ok, so I know that this is one of the riskiest moments in my child's life, but...

What creates more risk for my teen?

What has been shown to reduce risk for my teen?

What can parents do?

press next

Parents can help teens gain independent driving experience in the **safest conditions** & **gradually introduce** them **to riskier conditions** as they become more experienced.

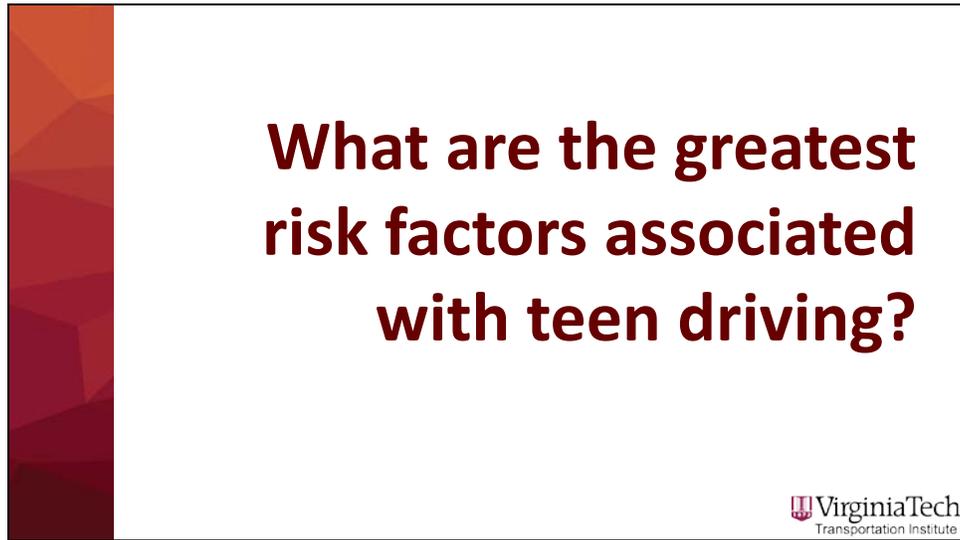
A good example is night driving. The VA state curfew for teens is midnight, but it gets dark much earlier than 12 a.m. To help teens gain experience in night driving gradually, parents could set the curfew at 9 p.m. for the first 3 months of driving. After 3 months, if the teen has demonstrated good driving behavior, the parents can extend the curfew to 10 p.m. 3 months later the curfew could be extended again to 11 p.m.

Slide 6



- In this presentation, we want to help identify conditions that increase risk for teen drivers and how to minimize that risk.
- The information presented isn't based on opinion or scare-tactics. All of the information in this presentation is backed by research.

Slide 7



What are the greatest risk factors associated with teen driving?

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What are the greatest risk factors associated with teen driving?

Slide 8



There are 7 major risks that teen driver's face. *press next 7 times and state each risk*

I am going to discuss each of these risks and provide research on their risk.

You will see that when one risk is introduced, the likelihood of another occurring is often higher and the situation riskier.

Slide 9



- Let's start with speeding.
- A third of all fatal teen crashes are speeding related
- While some risky behaviors may decrease over time, naturalistic driving studies have shown that teens' **speeding behavior has a tendency to increase over time**, possibly due to confidence.
- There is evidence that teens speed more at night and in the presence of peers.
- Speeding is dangerous because it **reduces the time you have to respond**. *press next*
- If you have to slam on your brakes at 60 mph it will take 5 seconds to stop and in that time you travel 240 feet.
- It's also dangerous because the **faster** you go, the **harder the impact** of the crash, and the greater risk of **death or injury**.



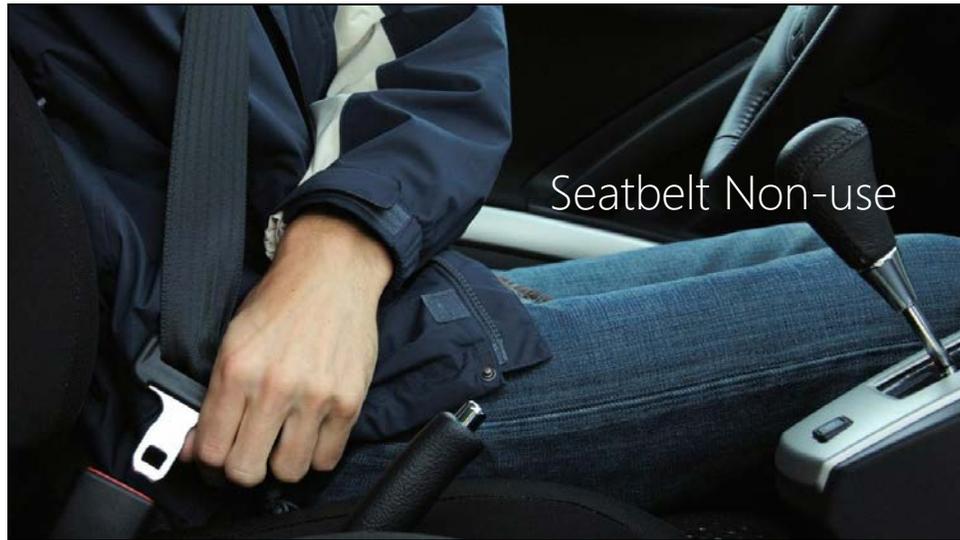
- While only **25%** of teens' driving is at night, **41%** of fatal teen crashes occur at night.
- 16- & 17-year-old drivers are **3 times** more likely to be involved in a fatal crash at night than 30-59 year olds.
- Night driving is dangerous because obstacles in the roadway are not easily visible, as your **headlights only illuminate a few seconds ahead of you.**
- Also, we have a tendency to become **drowsy** at night.

Slide 11



- Between 2007-2011, 16- to 24-year-old drivers used hand-held devices more than any other age group.
press next
- **Novice driver crash or near crash risk is increased:**
press next 4x while texting
press next 7x while reaching for a cell phone
press next 8x while reaching for an object
press next 8x while dialing a cell phone
- Distracted driving takes your **eyes off the road**. Crashes happen in a matter of seconds!
- When you aren't looking forward, you are **missing potential hazards** and **cannot respond quickly**.

Slide 12



- The next risk is seatbelt non-use.
- Seat belts reduce serious crash-related injuries and deaths by about half!
- **55%** of US high school students reported they **always wear seat belts** when riding with someone else.
- **7.6%** of US high school students reported they **never wear seat belts** when riding with someone else.

Slide 13



58% of teen drivers killed in crashes were not wearing a seat belt.

50% of teen passengers killed in crashes involving a teen driver were not buckled up.

You never know when you are going to get in an accident so you should **ALWAYS** wear a seatbelt.

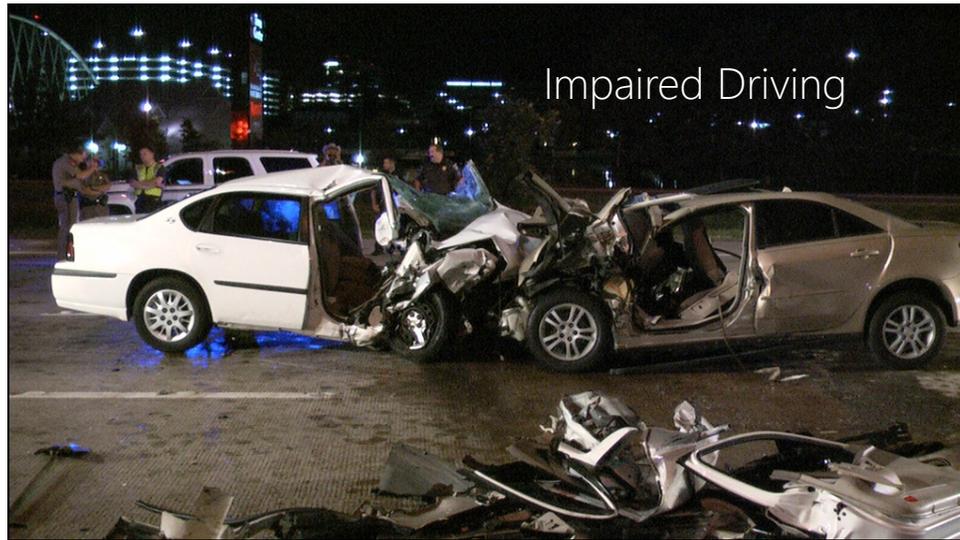


- For teens, each additional passenger, the risk of a driver fatality is increased.
- 42% of fatal crashes of 16- & 17-year-old drivers involved teens transporting teens.
- The presence of peers can create a distraction and increases teens' tendency to take risks.
- Rates of risky driving behaviors are especially high among teens with risky friends.



- **What is primary access?** the teen is the main driver of the vehicle.
- **Teens who have primary access to a vehicle:**
 - have higher crash risk than teens who share a vehicle.
 - are more likely to speed.
 - use cell phones more often while driving.
 - are more likely to drive smaller, older vehicles, despite the fact that these vehicles are substandard in crash protection.

Cars often get passed down in the family and it might make sense for your family to have an old beat-up car for the teen to drive. And not everyone can afford new vehicles with state-of-the-art crash protection, but consider just how safe that old car is when you hand it off to the teen. If you're thinking about buying your teen an old used car so they don't damage your newer car, consider having them share your safer car instead.



Good News 😊

- Alcohol-related fatalities involving teens have reduced over the past decade. From 2002-2011, fatalities from crashes involving young drivers and alcohol decreased by 57%!

Bad News ☹️

- In 2011, 32% of young drivers who were killed in crashes had a BAC of .01 or higher; 26% had a BAC of .08 or higher.
- Teens cannot purchase alcohol on their own, so someone is giving them access. These are preventable deaths.

Slide 17

1/27/2017

**IMPAIRED DRIVING KILLS OVER 10,000
PEOPLE ON OUR ROADWAYS EACH YEAR.**

Based on 2012 NHTSA data



**BUZZED DRIVING
IS DRUNK DRIVING**

buzzeddriving.adcouncil.org

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Slide 18



So what has been shown to reduce teen driving risk?

Graduated Driver's Licensing (GDL)		
1) Learner Stage:	2) Intermediate Stage:	3) Full Privilege Stage:
<ul style="list-style-type: none">• Minimum age: 15 years & 6 months• Supervised driving: 45 hours (15 at night)• Pass Driver's Ed• Duration: At least 9 months	<ul style="list-style-type: none">• Minimum age: 16 years & 3 months• Limited unsupervised driving in high-risk conditions	<ul style="list-style-type: none">• Minimum age: 18 years

Since 1995, states across the U.S. have adopted some form of Graduated Driver's Licensing. *press next* I will be calling this GDL from here on out.

What this means is that there are laws in place that have new teen drivers go through stages before they receive their "full privilege" license.

In Virginia, there are 3 driver's licensing phases: *press next* the Learner's stage *press next* the Intermediate stage and *press next* the Full privilege stage.

Your teen has successfully completed the Learner Stage and will remain in the intermediate stage with their provisional license until they are 18. Let's discuss the GDL and other driving laws that apply to them.

<p><u>Night driving:</u></p>  <p>No driving between 12am and 4am</p>	<p><u>Cell Phone Use:</u></p> <p>All cell phone use is illegal</p>	<p><u>Teen Passengers:</u></p> <p>First year of licensure: </p> <p>After 1 year of licensure: </p>
<p><u>Alcohol Use:</u></p> <p>Zero tolerance Driving with any alcohol in your system is illegal</p>		 <p>Driving laws for licensed drivers under 18</p>

press next

- First, night driving is restricted. Teens are not allowed to drive between the hours 12 a.m. and 4 a.m.

press next

- Second is cell phone use: Talking and texting are illegal for teens. Texting is now a primary offense for teens.

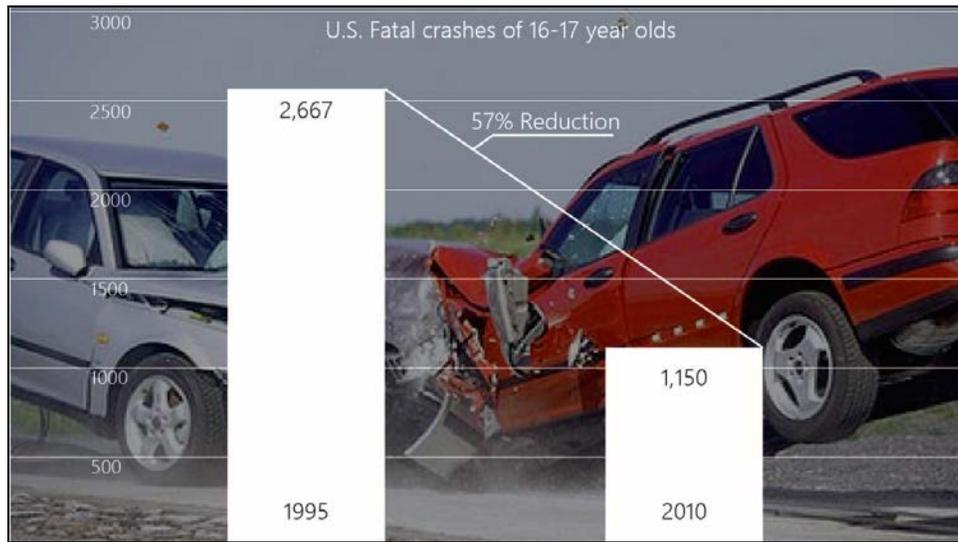
press next

- During the first year of licensure, no more than 1 passenger under 21 is allowed. After 1 year of licensure, no more than 3 passengers under 21 are allowed. The only exception to this rule is close relatives.

press next

- If you are under the legal drinking age of 21 there is zero tolerance for driving under the influence! It doesn't matter if you blow a .02 BAC, driving with any alcohol in your system is illegal. If you are convicted of a DUI, the court will suspend your license for one year and a minimum mandatory fine of \$500 or 50 hours of community service will be given.
- It's important to know the law and enforce it with your kids. They are still learning to drive and these restrictions are meant to protect them.

Slide 21



- Since the introduction of GDL in 1995, fatal teen crashes have reduced by more than half! However, it is still a leading cause of death among teens.
- The greatest reductions for 16-year-olds occurred in nighttime crashes, alcohol-related fatal crashes, and fatal crashes involving multiple teenage passengers. These are the risks that GDL laws target! And I'll add that these laws are working because parents are enforcing them on their kids.
- While GDL has helped, there is still more to be done. Car accidents are consistently the number one cause of death for teens. Parental involvement is important to encourage teen's safety and driving improvement.

Slide 22

1/27/2017

Age: 15-19	2010	2011	2012	2013	2014
Injuries	13218	13890	14283	13366	12579
Fatalities	109	101	114	96	75

Source: Virginia Department of Motor vehicles

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Injury and fatality statistics for the state of Virginia. Note that the numbers are going down over time. We still have further to go!



- After teens check all the boxes in the learner's stage and are able to drive independently, it may seem best to just let your teen drive as often as possible in all conditions. The more experience they get, the more their driving will improve! However, parental involvement *post*-licensure is critical in reducing crash involvement. GDL and other driving laws are in place to reduce exposure to risky conditions, but these should be viewed as the 'minimum' for parents.
- Research shows that parents tend to underestimate their teen's risky behaviors. Studies where parents and teens state the driving restrictions in their family, their teens often report a much lower level of restriction.
- One tool parents should consider is a Parent-Teen Driving Agreement.



- Parent-Teen Driving Agreements are basically an extended, family-level GDL.
- Studies have shown that when teens and parents disagree on parent-imposed driving restrictions, there is more high-risk driving in teens.
- By using a PTDA, parents and teens have the opportunity to define expectations early and work together on a driving agreement customized to their family's needs, potentially reducing disagreement in driving restrictions. A PTDA rewards teens with additional privileges after good driving behavior over time.
- Checkpoints has been the most extensively studied and research-supported PTDA. It was developed through the National Institute of Child Health & Human Development. I am going to show you an example of what the Checkpoints GDL looks like.

Unsupervised Driving Privileges	
Privileges	
Nighttime Driving	
Teen Passengers – Daytime	
– Nighttime	
Weather – Daytime	
– Nighttime	
Mobile Phone Use	
Road Types – Daytime	
– Evening	
Next Review Date	

- First, outline Unsupervised Driving Privileges.
- Risky driving conditions such as night driving, passengers, and weather are listed on the left. *press next*
- The first checkpoint lasts 3 months after the teen starts driving independently. The example here limits teens driving in these conditions. After 3 months, the agreement will be reviewed and if conditions have been met *press next* teens advance to the next checkpoint and are allowed more driving privileges.
- The limits here are suggestions and you can alter them to meet your family’s needs. Just make sure passenger limits and night driving limits stay with Virginia State Law.

➤ **Outline Driving Rules and Consequences**

Read, discuss, and put into effect each rule.

Check in With a Parent Every Time You Drive

- ✓ Tell parent where you are going, of any passengers who will be with you, and when you will return.
- ✓ Call home if you will be more than _____ minutes late.
- ✓ Call home if your plans change while you are out.
- ✓ Call home if you cannot get home safely.

Do Not Take Unnecessary Risks While Driving

- ✓ No playing around with passengers or messing around with the radio.
- ✓ No texting or talking on a cell phone while the car is in motion.
- ✓ Do not drive when overly tired, angry, or upset.
- ✓ Do not put yourself or others at increased risk by making unnecessary trips in adverse weather.

Obey All Traffic Laws and Signs

- ✓ Never use alcohol or other drugs and drive.
- ✓ Never ride with a person who is driving after using alcohol or other drugs.
- ✓ Never ride in a car where any alcohol or drug use is occurring.
- ✓ Always wear your seat belt at all times – whether you are the driver or a passenger.
- ✓ Always have every passenger wear a seat belt.
- ✓ Do not drive aggressively (e.g., speeding, tailgating, or cutting others off).

- Then, outline driving rules and consequences. This PTDA has checking in with parents, don't take unnecessary risks, and obey the law

- **Resources**
- <http://www.youngdriverparenting.org/>

Slide 27

Example Violation	Consequences
Came home more than ____ minutes late without calling.	Lose driving privileges for ____ months/years Other: _____
Had more passengers in the car than allowed.	Lose driving privileges for ____ months/years Other: _____
Didn't make all passengers wear seat belts.	Lose driving privileges for ____ months/years Other: _____
Used cell phone without a hands-free device while driving.	Lose driving privileges for ____ months/years Other: _____
Got a ticket for speeding.	Lose driving privileges for ____ months/years Other: _____
Lied about where s/he was going with the car.	Lose driving privileges for ____ months/years Other: _____
Used alcohol or other drugs and drove.	Lose driving privileges for ____ months/years Other: _____
Other: _____	Lose driving privileges for ____ months/years Other: _____

We agree to the above privileges and restrictions outline in this document.

Parent Signature Date Teen Signature Date Date for Follow Up Review

- Next, discuss example violations and possible consequences. This way there aren't any surprise consequences down the road and teens know what to expect if they are unsafe drivers.
- And finally *press next*, the parent and teen each sign the agreement.

Slide 28



- Checkpoints also created a website to keep track of your PTDA. The address is safedrivingforteens.org.
- There are videos about how to use Checkpoints, as well as email reminders at the end of each Checkpoint.

Teen driving risks:

1. Speeding
2. Night Driving
3. Distracted Driving
4. Seatbelt Non-use
5. Passengers
6. Primary Access to a Vehicle
7. Impaired

Minimize the risks:

- Keep driving with your teens after licensure.

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To review, here are the major teen driving risks. *press next*

These risks have been researched extensively and it's clear that these are the biggest risks your teen faces while driving

And let's review how parents can reduce that risk *press next*

1) Enforce the minimum Virginia driving laws with your teen.

This means having them buckle up EVERY time. This means having them home before midnight. This means NOT allowing alcohol use or cell phone use in the car.

2) Create a family-level Graduated Driver's Licensing system

Again, graduated driver's licensing just means gradually introducing your teen to risky driving situations over time. Discuss driving privileges, rules, and consequences at the beginning of independent driving.

3) Have your teen share a vehicle with you and/or other family members. I understand that with different schedules and convenience, it really might be unrealistic for you family to share a vehicle. But what is the policy with your teen? Can they grab the keys and vehicle whenever they want or do they need to ask you first? If you have them ask you for the keys every time before they get in that car, then the car won't feel like something they are entitled to but rather something they earn. And this is something you can include in you PTDA. Maybe for the first year they have to ask every time, but after that they don't. The great thing about the PTDA is that it allows teens to be rewarded and to earn driving privileges when they show they deserve them.

4) Passengers - Sometimes it can save time or gas to have teens carpool and can seem harmless. Talk with your teen's friends' parents about having your kids drive separately. Make it a part of the conversation.

5) Keep driving with your teens after licensure. When observing teens after they get their license, their risky driving was 67% lower with adults in the car. That is HUGE. This could be for a variety of reasons – maybe they are more focused with adults present, maybe they are getting advice from adults as they drive. But regardless, supervision does NOT need to stop after licensure! If you're teen wants to go to the store and the weather is poor, instead of just driving for them drive WITH them. They'll have to drive alone in bad weather at some point, so why not help them continue gaining experience with your guidance.



Conclusion

- Parents DO impact teen safety.
- YOU must empower parents and teenagers to work together toward a safer roadway environment for all.

- The bottom line is that parent's need to continue their involvement. It's not too late to get involved with your teen's driving.
- Parents underestimate their teen's risky behaviors. It's not about if you have a "good" kid or a "bad" kid. You might think my kid wouldn't do that, my kid is better than that. But these driving risks apply to ALL teens.
- Parents, this is about you saving your child's life. You have an opportunity to do that.

APPENDIX B. HANDOUT

Virginia Driver's Licensing Ceremony Presentation

Introduction

For a Virginia teen to receive the actual driver's license, both a parent and the teenage driver must appear before a family district court judge and participate in the Virginia Driver's Licensing Ceremony. This is an opportune moment to administer driving safety information to both parents and their novice drivers. While some judges have taken a great deal of time and compiled excellent information, others are unsure about what information to administer during the ceremony.

We have assembled a PowerPoint presentation to provide to judges. The information in the presentation is drawn from contemporary research regarding teen driving risks. We welcome judges to use the presentation in its entirety or simply use sections of it.

Presentation Outline

The goal of this presentation is to (1) identify conditions that increase risk for teen drivers and (2) discuss ways to minimize risk for new teen drivers.

Primary teen driving tasks:

- Speeding
- Nighttime driving
- Distracted driving
- Seatbelt nonuse
- Passengers
- Primary access to a vehicle
- Alcohol use

Reducing risk for teen drivers:

- Graduated driver licensing (GDL): The goal of GDL is to provide teens with driving practice under the safest conditions, then exposing them to more risky situations as experience is gained.
- GDL has been incredibly effective in reducing fatal teen crashes, but car crashes still continue to be the number one killer of teens.
- Parental involvement is critical to reducing crash involvement.
- The GDL laws, such as the midnight curfew, should be viewed as a minimum for parents.
- By setting up a Parent-Teen Driving Agreement, parents and teens have the opportunity to define expectations early and work together on an agreement customized to their family's needs, potentially reducing disagreement about driving restrictions.

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