

Enhancing Parent Involvement in Teen Driving: Checkpoints in Michigan

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Presentation Outline

- Checkpoints program
- Checkpoints trial #1 in Michigan
- Checkpoints trial #2 in Michigan
- Checkpoints trial #3 in Michigan



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Checkpoints Program

Simons-Morton's self-administered parent program (NICHD)

Facilitates parent management of teen driving to reduce risk

Persuasive messages & Parent-Teen Driving Agreement

- Initially teens drive alone only in low-risk conditions (still drive with adult in high-risk conditions)
- Later with experience and responsible behavior, teens gain increased privileges



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### Trials of Checkpoints

- Two 2 studies completed (CT, MD) with families recruited at state licensing offices (permit, provisional license)
- Promising results
  - Increased agreement use
  - Increased early restrictions (permission & time, but not as much for night, passengers, road types)
  - Reduced risky driving
- Four studies underway (RI, MI)




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### Driver Education as a Setting for Checkpoints

- Timing - prime moment for intervention before driving
- Driver education a relevant topic
- Interaction with a facilitator
- Venue for parent-teen interaction and discussion




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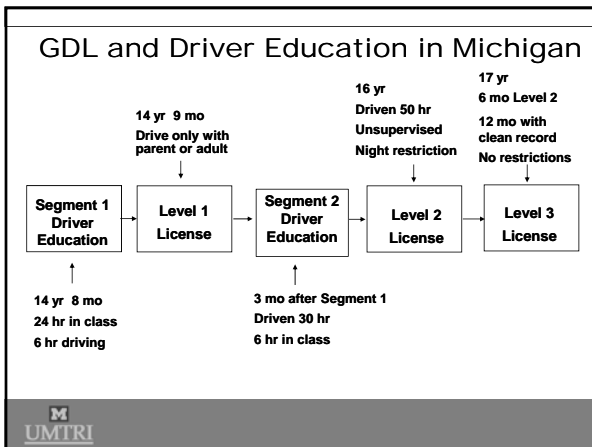
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Checkpoints Trial #1 in Michigan

- **Funded by NICHD**
- **Test efficacy in a group-randomized trial**
  - **Adapted for Michigan's GDL**
  - **Delivered as a brief group intervention**
  - **Led by trained health educator**
  - **Delivered through driver education**



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Objectives of Checkpoints in Michigan

- **Raise parents' awareness of risks to teen drivers**
- **Encourage adoption of parent/teen driving agreement**
- **Encourage setting of appropriate driving restrictions**
- **Involve parents in monitoring teens' early driving**
- **Reduce teens' risky driving**



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Parent/Teen Session

- **Parents/teens in driver education classroom**
- **Study enrollment and baseline survey (30 minutes)**
- **Checkpoints Session (30 minutes)**
- OR
- **Comparison Session (5 minutes)**



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## Checkpoints Classroom Session

- Introduction
- Video “Who Want to Be a Driver;” discussion
- Persuasive messages
- Teen drivers’ risk
- Written parent/teen agreement: discussion and completion, one condition at a time
- Conclusion/parent poll of intended driving restrictions




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## Checkpoints Agreement: Part 1 Driving Conditions

LEVEL 2 DRIVING PRIVILEGES				
DRIVING CONDITIONS	CHECKPOINT 1	CHECKPOINT 2	CHECKPOINT 3	CHECKPOINT 4
NIGHTTIME				
TEEN PASSENGERS				
Daytime				
Nighttime				
WEATHER				
Daytime				
Nighttime				
ROADS				
Daytime				
Nighttime				
Length of time in effect				
Next date to review progress: <i>Fulfills privileges? Improve skills? Enough practice? Obey rules?</i>				
Parent and teen initial: understand and agree to accept driving conditions	Parent _____ Teen _____	Parent _____ Teen _____	Parent _____ Teen _____	Parent _____ Teen _____




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## Checkpoints Agreement: Part 2 Rules and Consequences

RULES	CONSEQUENCES
<b>RULE 1: CHECK IN WITH A PARENT EVERY TIME YOU DRIVE.</b>	
Tell a parent where you are going, who will be the passengers, 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 drive home safely. Parent will arrange a safe ride home.	
<b>RULE 2: CHECK IN WITH PARENTS AND TEEN.</b>	
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 when any alcohol or drug use is occurring.	
Wear your seat belt at all times as a driver and as a passenger.	
Have every passenger wear a seat belt at all times.	
Do not drive unsafely (e.g., speeding, tailgating, or cutting others off).	
<b>RULE 3: DO NOT TAKE UNNECESSARY RISKS WHILE DRIVING.</b>	
Do not play around with passengers, mess around with the radio, talk on a cell phone, etc.	
Do not drive when overly tired, angry, or upset.	
Do not put yourself or others at increased risk by making unnecessary trips in bad weather.	
<b>ADDITIONAL RULES</b>	
<b>AGREE: We understand and agree to these driving privileges and rules/consequences.</b> Parent(s) Initials: _____ Date: _____ Teen Initials: _____ Date: _____	




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## Risk for Teen Drivers

**CERTAIN DRIVING CONDITIONS ARE EVEN MORE DANGEROUS FOR YOUNG DRIVERS THAN THEY ARE FOR EXPERIENCED DRIVERS!**

CONDITION	Lower Risk	Higher Risk	Highest Risk
<b>AGE AND DRIVING EXPERIENCE:</b> Teens have high crash risks the first 2 years and 20,000 miles of driving. Crashes are the #1 cause of teen death and injury.	Over 25	Ages 19 to 25	Ages 16 to 18
<b>NIGHT TIME DRIVING:</b> Teen driver crashes at night are much more likely to involve injury or death.	Daylight	9 pm to midnight	Midnight to 6 am
<b>TEEN PASSENGERS:</b> Teen passengers greatly increase crash/injury risk.	No teen passengers or adult-supervised	One teen passenger	Two or more teen passengers
<b>ADVERSE WEATHER:</b> Teen drivers have more weather-related crashes.	Fair weather	Rain	Heavy rain, snow, fog
<b>HIGH SPEEDS:</b> High speeds increase risk and severity of teen crashes.	Local roads (25-35 mph)	40 to 55 mph	55 mph and over
<b>ALCOHOL &amp; OTHER DRUGS:</b> Impairs judgment, especially in young drivers.	No one using alcohol or other drugs.	Passengers using alcohol or other drugs.	Driver using alcohol or other drugs.
<b>NOT USING SEAT BELTS:</b> Young drivers are the least likely to wear seat belts and the most likely to crash.	Every person wearing a seat belt	Back-seat passengers not wearing seat belts	Driver/front-seat passengers not wearing seat belts




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## Recommended Driving Limits

LEVEL 2 DRIVING PRIVILEGES				
DRIVING CONDITIONS	CHECKPOINT 1	CHECKPOINT 2	CHECKPOINT 3	CHECKPOINT 4
<b>NIGHTTIME</b>	<i>Sundown or 9 pm</i>	<i>10 pm</i>	<i>11 pm</i>	<i>Midnight</i>
<b>TEEN PASSENGERS</b>	Daytime: None Nighttime: None	Daytime: 1, sometimes Nighttime: None	Daytime: 1, sometimes Nighttime: 1	Daytime: 2, sometimes Nighttime: 1
<b>WEATHER</b>	Daytime: Dry Nighttime: Dry	Daytime: Dry, light rain Nighttime: Dry	Daytime: Moderate Nighttime: Dry, light rain	Daytime: Most Nighttime: Moderate
<b>ROADS</b>	Daytime: Neighborhood Nighttime: Neighborhood	Daytime: Local Nighttime: Neighborhood	Daytime: All but highways Nighttime: Local	Daytime: Most Nighttime: All but highways
Length of time in effect	<i>First 1-3 months</i>	<i>Next 1-3 months</i>	<i>Next 3-6 months</i>	<i>Next 3-6 months</i>
Next date to review progress: <i>Follow privileges? Improve skills? Enough practice? Obey rules?</i>	<i>January 1</i>	<i>April 1</i>	<i>July 1</i>	<i>October 1</i>
Parent and teen initial: understand and agree to accept driving conditions	Parent _____ Teen _____	Parent _____ Teen _____	Parent _____ Teen _____	Parent _____ Teen _____




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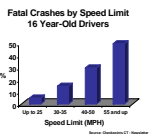
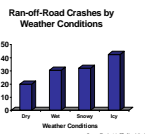
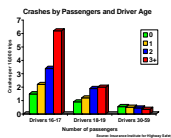
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## Teen Drivers' Risk




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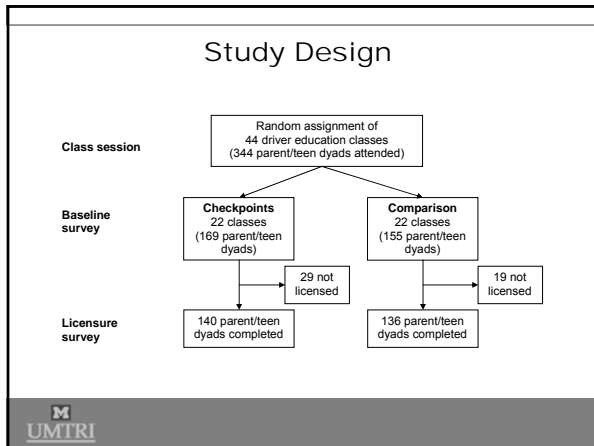
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- ### Results - Recruitment
- **22 intervention, 22 comparison sessions (44)**
    - 344 parent/teen dyads, or 30% of eligible families
  - **94% enrolled in study and did baseline survey**
  - **85% licensed during study + licensure survey**
  - **84% in sessions with at least 5 dyads (n = 231)**
  - **No differences between those in analysis or excluded**
- UMTRI

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- ### Results - Parent Characteristics
- **68% female (65% mother of teen)**
  - **65% 40-49 years old**
  - **84% married**
  - **65% working full time**
  - **59% college or higher degree**
  - **75% household income \$70,000+**
- UMTRI

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## Desired Outcomes

- Increased awareness of teen driver risk
- Completion of a parent/teen agreement
- Adoption of recommended restrictions



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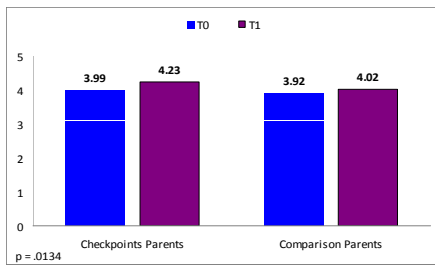
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## Results - Awareness of Risk



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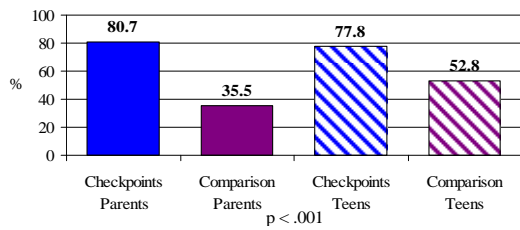
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## Results - Adoption of Agreement



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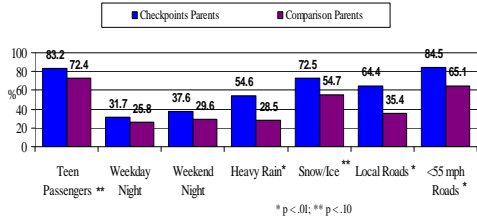
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## Results - Recommended Restrictions




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## Summary - Trial #1

- Checkpoints feasible through Segment 2 driver ed, but only 30% of eligible families participated
- Checkpoints parents:
  - Had greater awareness of teen driving risk
  - Were more likely to have completed agreement
  - Were more likely to set recommended restrictions
    - No heavy rain
    - Only local and lower speed roads
    - Teen passengers and snow ice (marginal)
- Three and six month data forthcoming

Zakrajsek, Shope, Ouimet, Wang, Simons-Morton. *Family and Community Health* 32(2), 175-188, 2009.




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## Checkpoints in Michigan - Trial #2

- Funded by National Center for Injury Prevention and Control at Centers for Disease Control and Prevention
- Randomized controlled trial
- Driver education instructors trained to deliver program
- Additions
  - Poster of crashes as learners, intermediates
  - Parent responsibilities in agreement
  - Booklet for parents to take home




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### Progress - Trial #2

- 151 families enrolled
- Positive feedback from instructors
- Observed instructors delivered quality program
- Completed enrollment January 2009
- Complete follow-up surveys August 2009
- Preliminary results
  - At licensure, more parents used agreement and restricted driving after dark, on high speed and icy roads



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### Checkpoints in Michigan - Trial #3

- Funded by National Center for Injury Prevention and Control at Centers for Disease Control and Prevention
- Project goals:
  - Develop a web-based Checkpoints program
  - Develop a promotional plan and promotional partners
  - Test the promotional plan and website in Michigan



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**Thank you!!**

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### Feasibility - Checkpoints in a Classroom Setting

- Classroom space and equipment
- Adequate time to complete the curriculum
- Engagement in session and parent-teen interaction
- 100% initiated a parent-teen agreement during session
- All parents indicated intention to set limits on at least one driving condition during informal session polls



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### Feasibility - Parent Attendance

- Schedule / parent availability
  - Saturday mornings best
- Promotion
  - Letters and flyers
  - Driver education instructors



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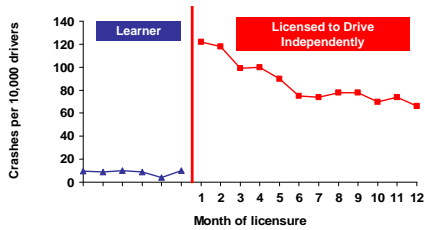
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### New Classroom Figure Crash Rate by Licensure Month



Adapted from: Mayhew et al., 2003 - Accident Analysis and Prevention



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