

How Risky is Distracted Driving? What Crash Data Reveals



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This Presentation

- National Crash Data – NASS
Crashworthiness Data System (CDS)
 - Overall prevalence of distracted driving crashes
 - Specific sources of driver distraction
- Findings from other studies based on state crash data
- Conclusions

Crashworthiness Data System (CDS)

- Annual probability sample of ~5,000 police-reported crashes
- Passenger vehicles towed from the crash scene
- Professional crash investigation teams
- In 1995, began coding “driver attention status at time of crash”

Attention Status of Driver

- Attentive
- Distracted (11 categories)
- Looked but didn't see
- Sleepy or fell asleep
- Unknown or no driver

Inattentive Driving

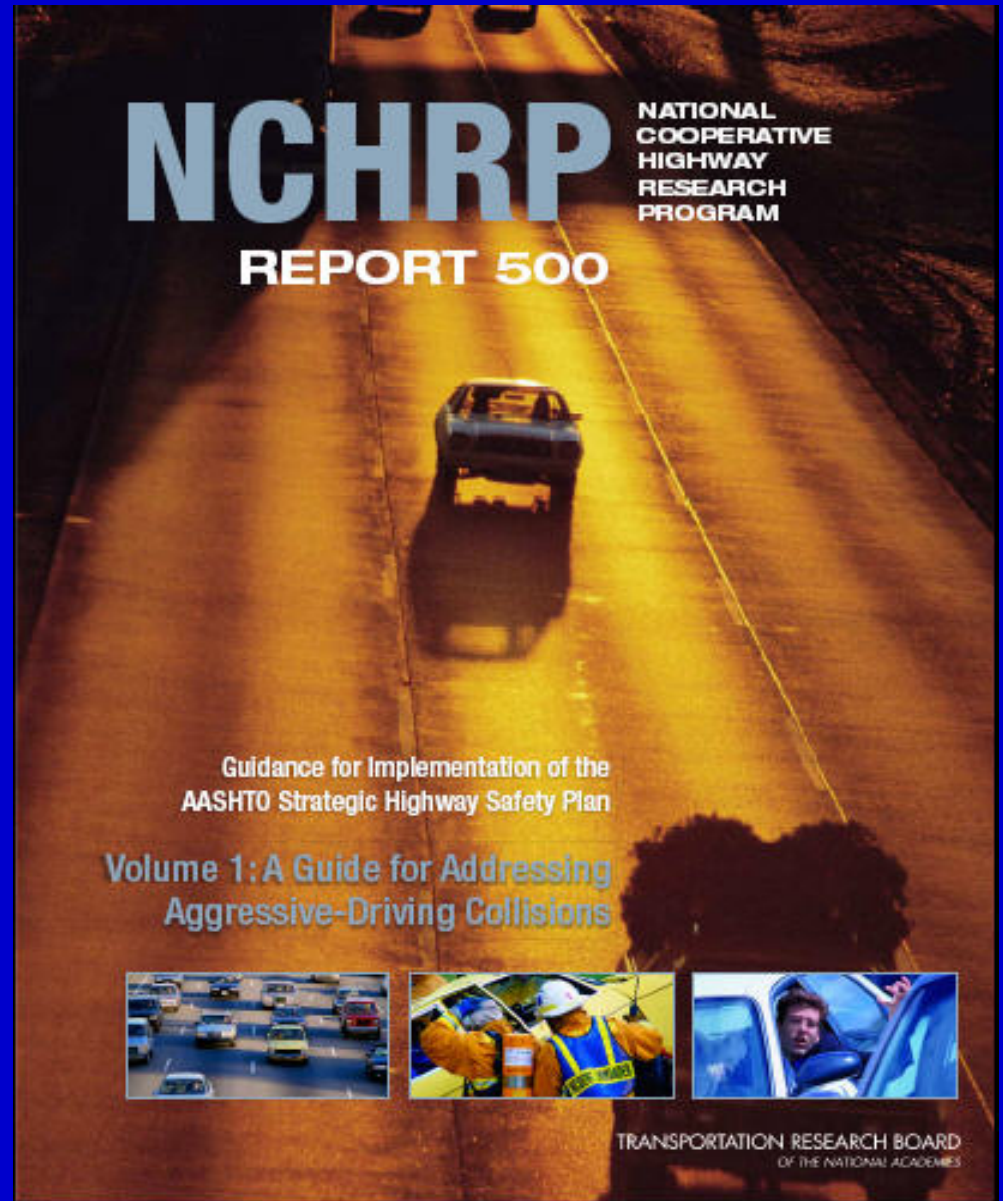
- **Distraction** – typically defined in terms of a triggering event that draws attention away from the driving task
- **Cognitive inattention** – “not paying attention” or “lost in thought”
- **Drowsiness** and **fatigue** – generally results in a progressive withdrawal of attention from the driving task

Quick Overview of the Problem

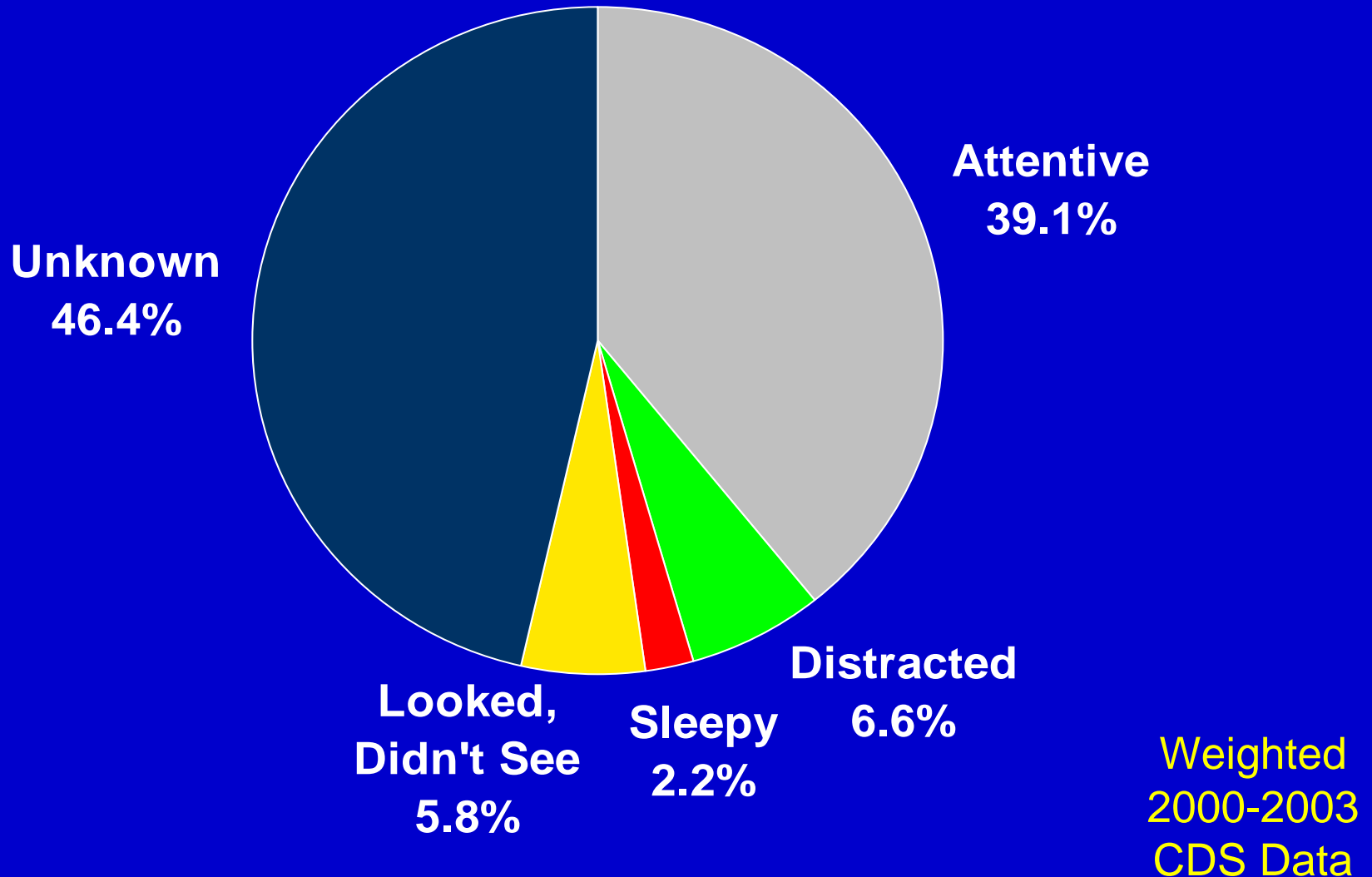
- NHTSA conservatively estimates that 25-30 percent of crashes involve driver inattention.
- Available crash data underreport the problem.
- Most states capture information on drivers who fall asleep and crash.
- An increasing number of states incorporate information on driver distraction in crashes (recommended in 2003 MMUCC).
- Quality of the data has not been demonstrated.

Guidance
Documents for
Implementing the

AASHTO
Strategic Highway
Safety Plan



Driver Attention Status, Based on National CDS Data



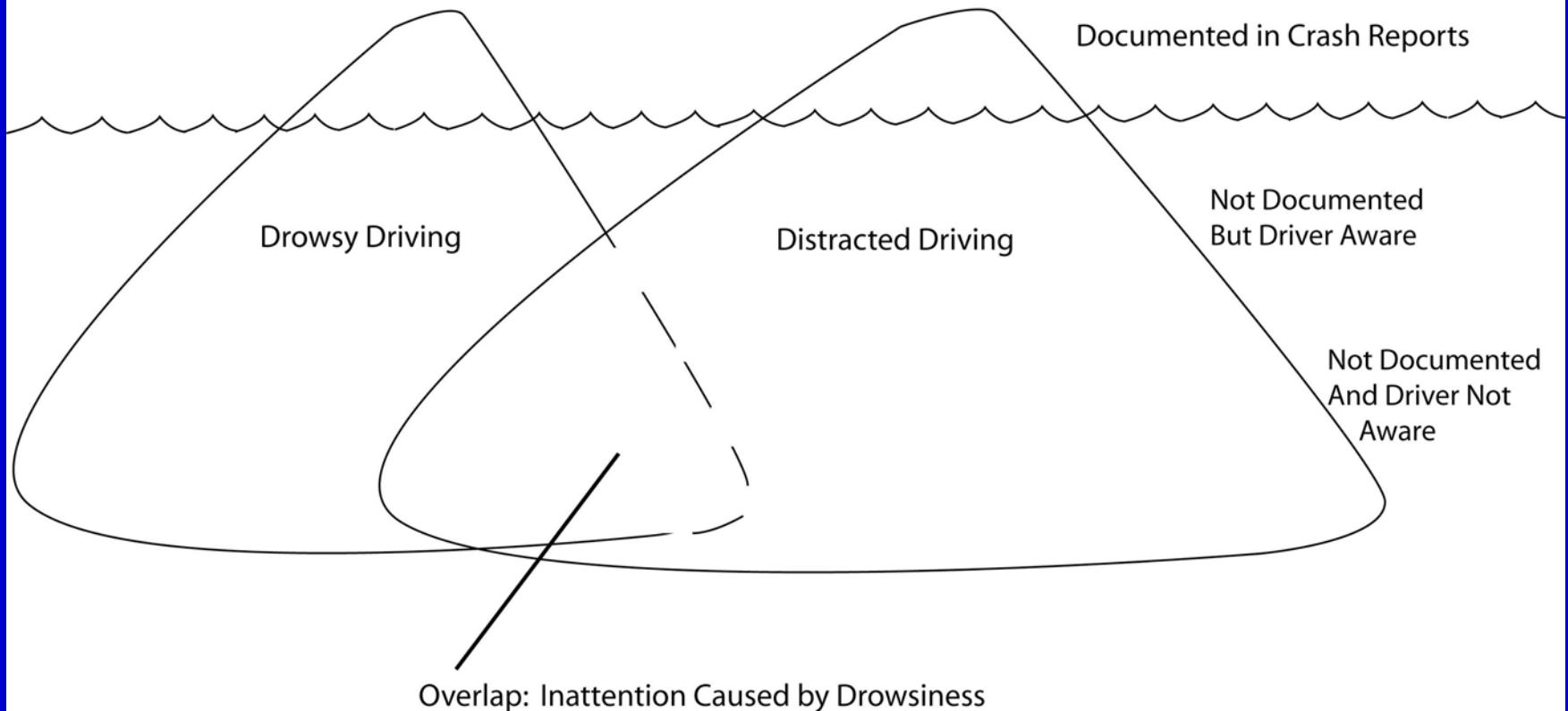
Extending the CDS Driver Data to Crashes:

- 11.6% of crashes involve one or more distracted drivers.
- 10.2% involve one or more drivers who “looked but didn’t see.”
- 3.9% involve one or more drivers who were sleepy or had fallen asleep.

These are conservative estimates

An Underreported Problem

"Dual Icebergs": Drowsy & Distracted Driving

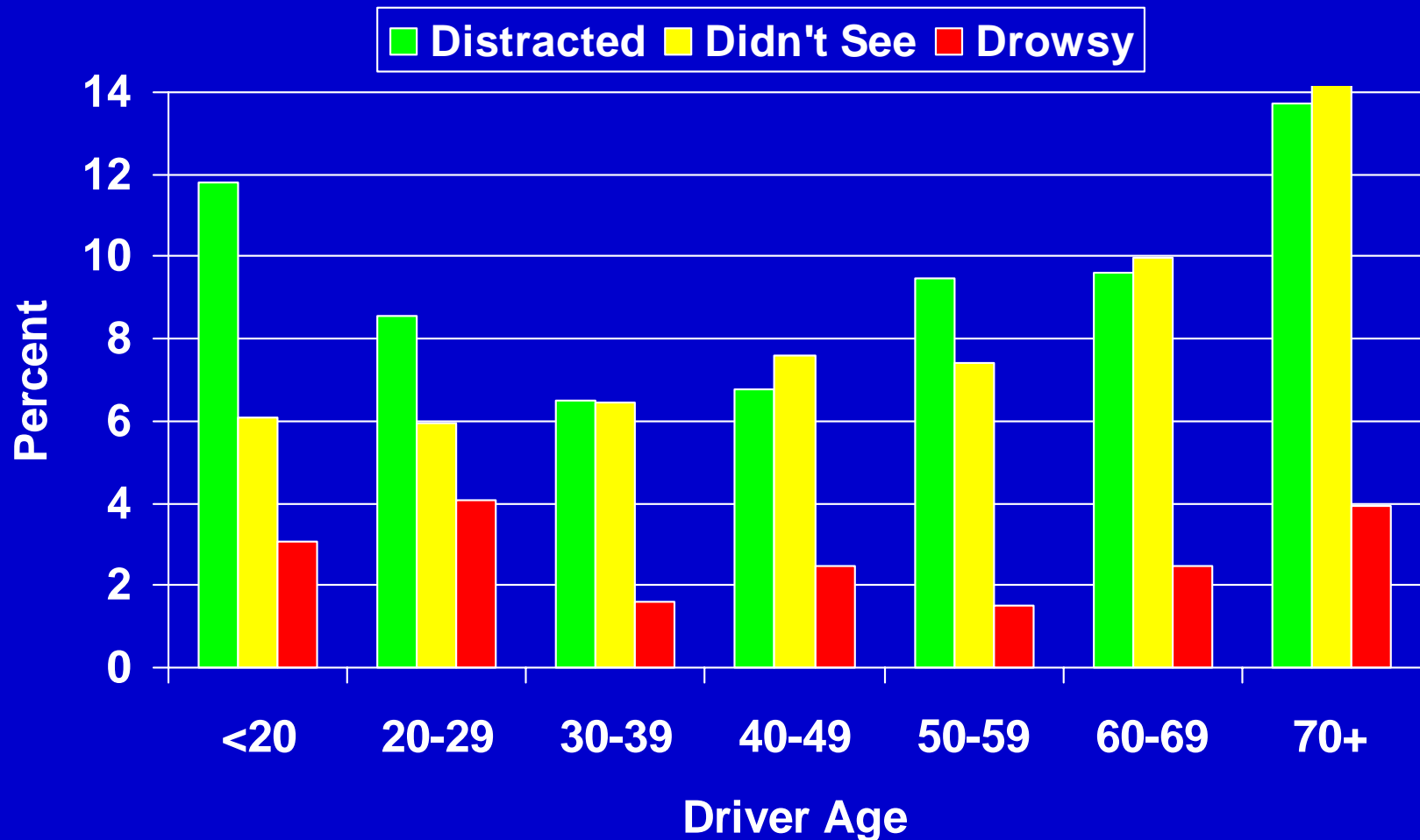


Sources of Driver Distraction

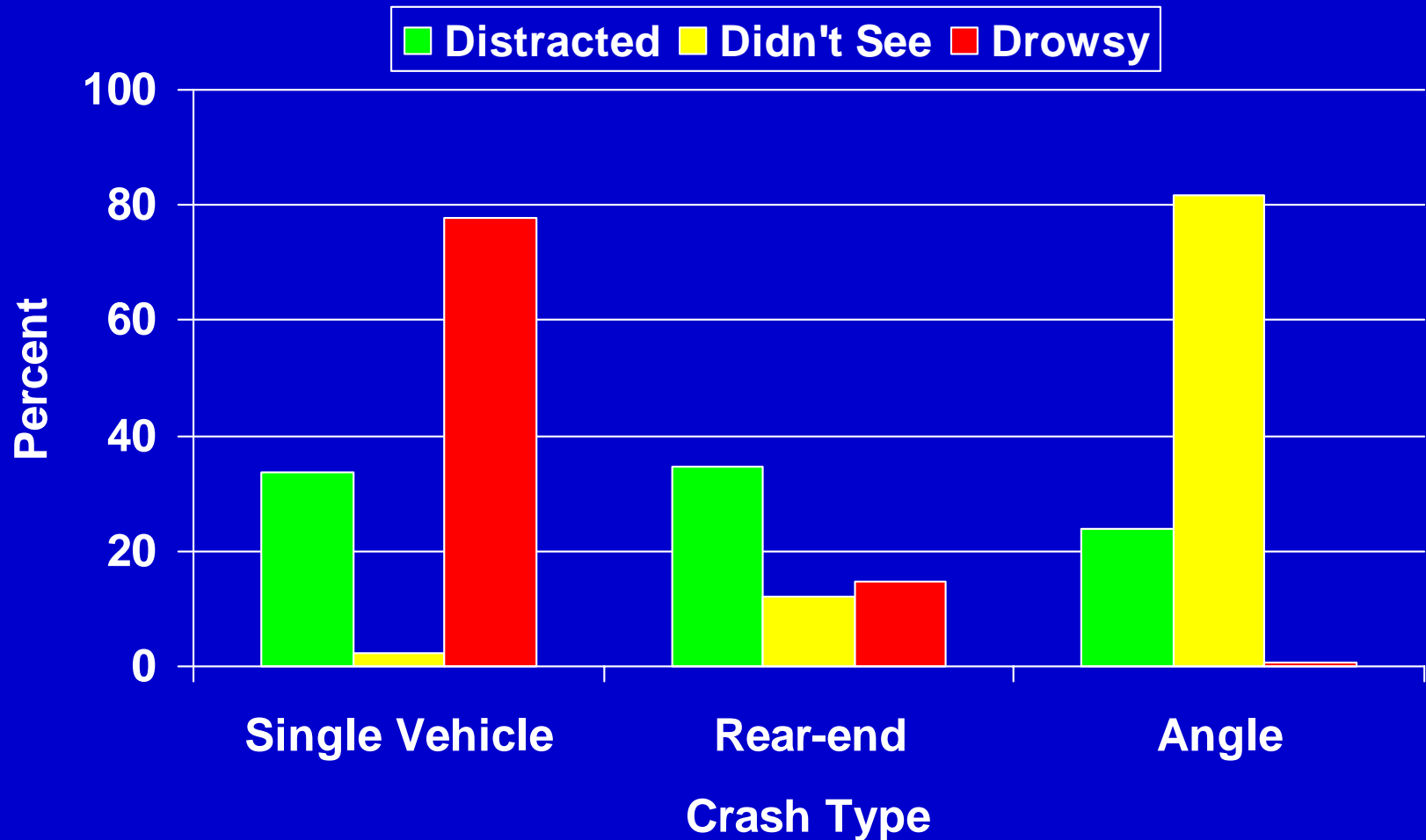
(Based on 2000-2003 National Crash Data)

| | <u>Percent</u> |
|-------------------------------|----------------|
| Outside object, person, event | 23.7 ↓ |
| Other occupant in vehicle | 20.8 ↑ |
| Using other device or object | 5.2 ↑ |
| Moving object in vehicle | 3.7 |
| Using/dialing cell phone | 3.6 ↑ |
| Adjusting radio, cassette, CD | 2.9 ↓ |
| Eating / drinking | 2.8 ↓ |
| Vehicle / climate controls | 1.5 |
| Smoking related | 1.0 |
| Other / Unknown | 34.8 |

Percent of Distracted/Drowsy Drivers within Age Categories (Unadjusted for unknowns)



Percent of Distracted/Drowsy Drivers by Type of Crash (Unadjusted for unknowns)



State Crash Data and the MMUCC

(Model Minimum Uniform Crash Criteria)

- Guidelines released Summer 2003
- Recommended codes for driver distraction:
 - Not distracted
 - Distracted by:
 - Electronic communication device
 - Other electronic device
 - Other distraction inside the vehicle
 - Object outside the vehicle

Published State Data

(Source: NCSL, August 2005)

| State | Total Crashes | Inattention a Factor | Percent |
|------------|---------------|----------------------|-------------|
| California | 491,083 | 5,677 | 1.2 |
| Florida | 243,294 | 1,796 | 0.7 |
| Michigan | 576,951 | 3,841 | 0.7 |
| Minnesota | 94,969 | 28,413 | 28.9 |
| Montana | 21,778 | 7,105 | 32.6 |

Published State Data (cont.)

(Source: NCSL, August 2005)

| State | Total Crashes | Inattention a Factor | Percent |
|--------------|---------------|----------------------|-------------|
| Nebraska | 75,436 | 4,602 | 6.1 |
| New York | 175,218 | 32,867 | 18.8 |
| Oklahoma | 73,926 | 8,868 | 12.0 |
| Pennsylvania | 147,253 | 2,358 | 1.6 |
| Wisconsin | 2,691 | 669 | 24.9 |

Conclusions

- Driver distraction is a significant contributing factor to crashes.
 - But available crash data are unclear as to its exact magnitude.
 - 25-30 percent appears to be a reasonable lower bound.
- There are many potential sources of distraction to drivers.
 - Cell phones and wireless technologies are one source, but many other things distract drivers.
- There are clear challenges to collecting good data on the role of driver distraction in crashes.
 - And no easy solutions.

AASHTO Guide for Reducing Crashes Due to Distracted and Drowsy Driving

<http://safety.transportation.org>

Strategic Highway Safety Plan

American Association of State Highway and Transportation Officials
and the National Cooperative Highway Research Project

AASHTO - NCHRP

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IMPLEMENTATION GUIDES

In 1998, AASHTO approved its [Strategic Highway Safety Plan](#), which was developed by the AASHTO Standing Committee for Highway Traffic Safety with the assistance of the Federal Highway Administration, the National Highway Traffic Safety Administration, and the Transportation Research Board Committee on Transportation Safety Management. The plan includes strategies in 22 key emphasis areas that affect highway safety. Each of the emphasis areas includes strategies and an outline of what is needed to implement each strategy.

[NCHRP Project 17-18\(3\)](#) is developing a series of guides to assist state and local agencies in reducing injuries and fatalities in targeted emphasis areas. The guides correspond to the emphasis areas outlined in the AASHTO Strategic Highway Safety Plan. Each guide includes a brief introduction, a general description of the problem, the strategies/countermeasures to address the problem, and a model implementation process.

[Viewing the Guides](#)

These are the first six volumes of NCHRP Report 500: Guidance for Implementation of the AASHTO Strategic Highway Safety Plan, a series in which relevant information is assembled into single concise volumes, each pertaining to specific types of highway crashes (e.g., run-off-road, head-on) or contributing factors (e.g., aggressive driving). Future volumes of the report will be published and linked to the AASHTO Safety Plan Web site as they are completed. All six guides are available in pdf format; the first two guides are also available as html links.

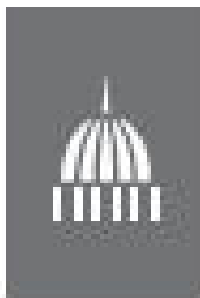
- [Volume 1: A Guide for Addressing Aggressive-Driving Collisions](#)
- [Volume 2: A Guide for Addressing Collisions Involving Unlicensed Drivers and Drivers with Suspended or Revoked Licenses](#)
- [Volume 3: A Guide for Addressing Collisions with Trees in Hazardous Locations](#)
- [Volume 4: A Guide for Addressing Head-On Collisions](#)
- [Volume 5: A Guide for Addressing Unsignalized Intersection Collisions](#)
- [Volume 6: A Guide for Addressing Run-Off-Road Collisions](#)

[View a Site Map of all the Implementation Guides \(including appendices\)](#)

[Ordering the Guides](#)

National Conference of State Legislatures Report:

[http://www.ncsl.org/print/transportation/
cellphoneup805.pdf](http://www.ncsl.org/print/transportation/cellphoneup805.pdf)



National Conference of State Legislatures

CELL PHONES AND
HIGHWAY SAFETY

2005 STATE LEGISLATIVE UPDATE

August 2005

by Matt Sundeen, Program Principal

Thank you!

Questions or Comments?

