National Transportation Safety Board

Reaching Zero: Actions to Eliminate Substance-Impaired Driving

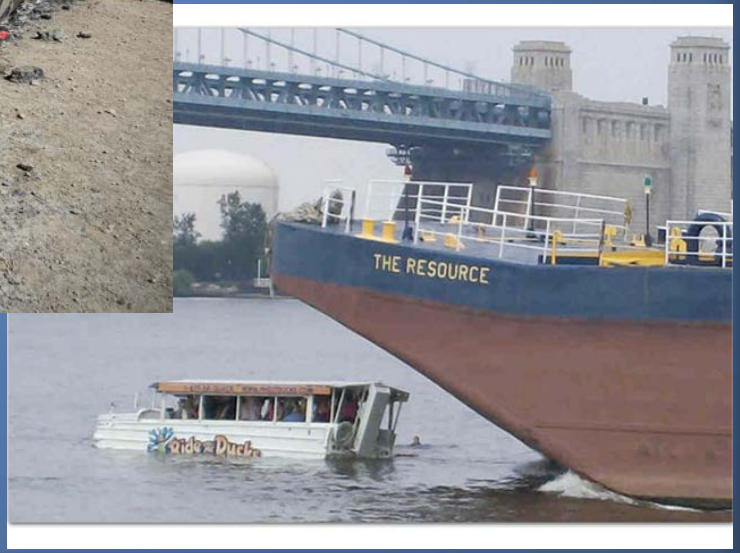
Mark R. Rosekind, Ph.D.
Board Member

NADCP Board of Directors
July 13, 2013

1) determining the probable cause of transportation accidents

2) making recommendations to prevent their recurrence

All Modes



NTSB

Independent Federal Agency: Created in 1967

- ~ 132,000 accident investigations
- 13,500+ safety recommendations
- ~ 2,500 organizations/recipients
- 82% acceptance rate

NTSB Characterized as:

‘moral compass and industry conscience’

NTSB Chairman Deborah A.P. Hersman

Carrollton, KY (May 14, 1988)

67 passengers, 27 fatalities, 34 serious injuries; driver: .28 BAC

Since 1988 . . .

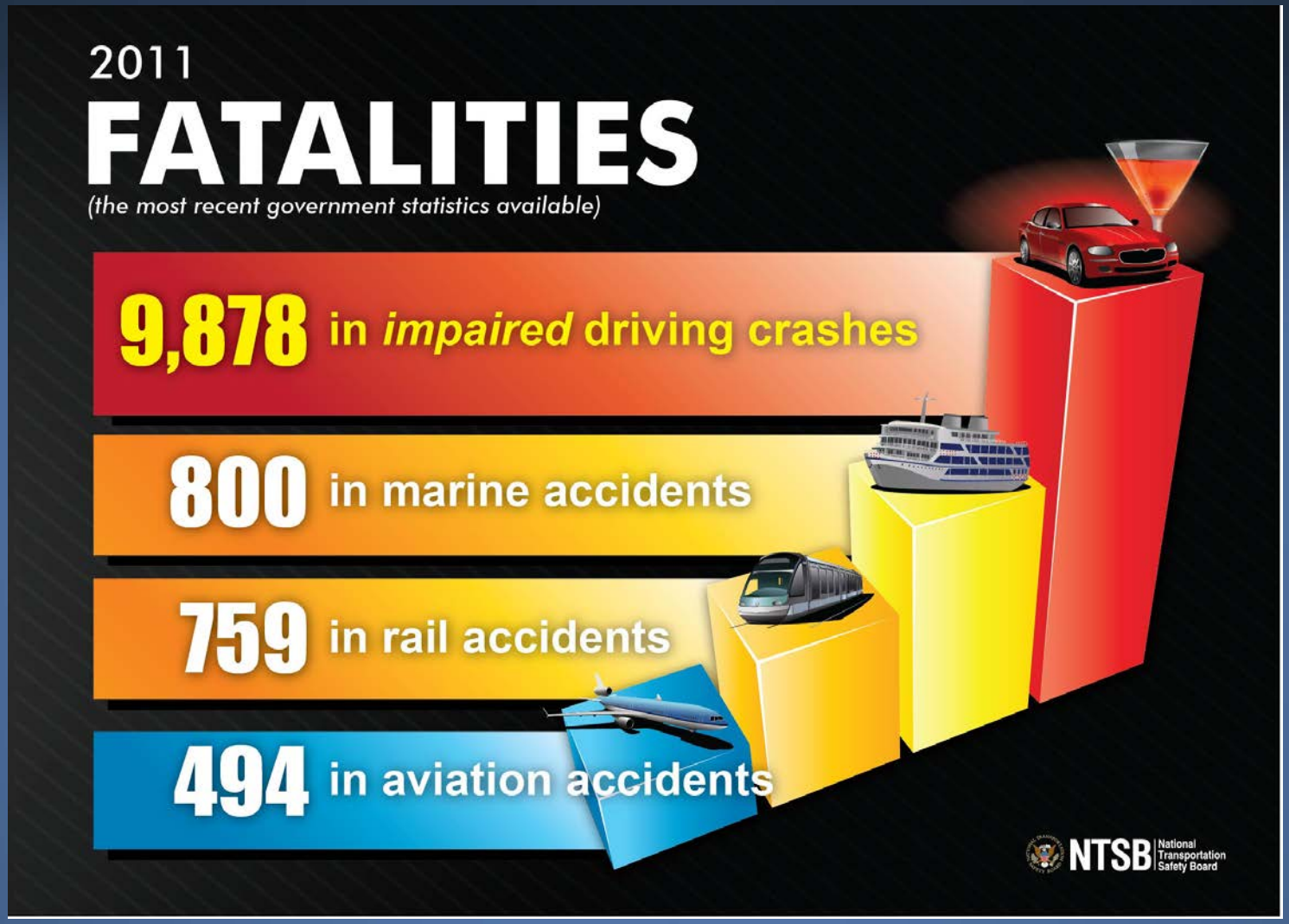
- 300,000 lives lost
- Millions injured
- 41% of fatalities to 31%
- 31% for over 15 years

Since 1988 . . .

- 200 law enforcement lives lost

Every Year . . .

- 10,000 lives lost
- 173,000 injuries
  - 27,000 are life-altering


2011
FATALITIES
(the most recent government statistics available)
9,878 in impaired driving crashes
800 in marine accidents
759 in rail accidents
494 in aviation accidents
NTSB
National Transportation Safety Board

#1: NTSB Forum: May 15-16, 2012

REACHING ZERO

Actions to Eliminate Substance-Impaired Driving

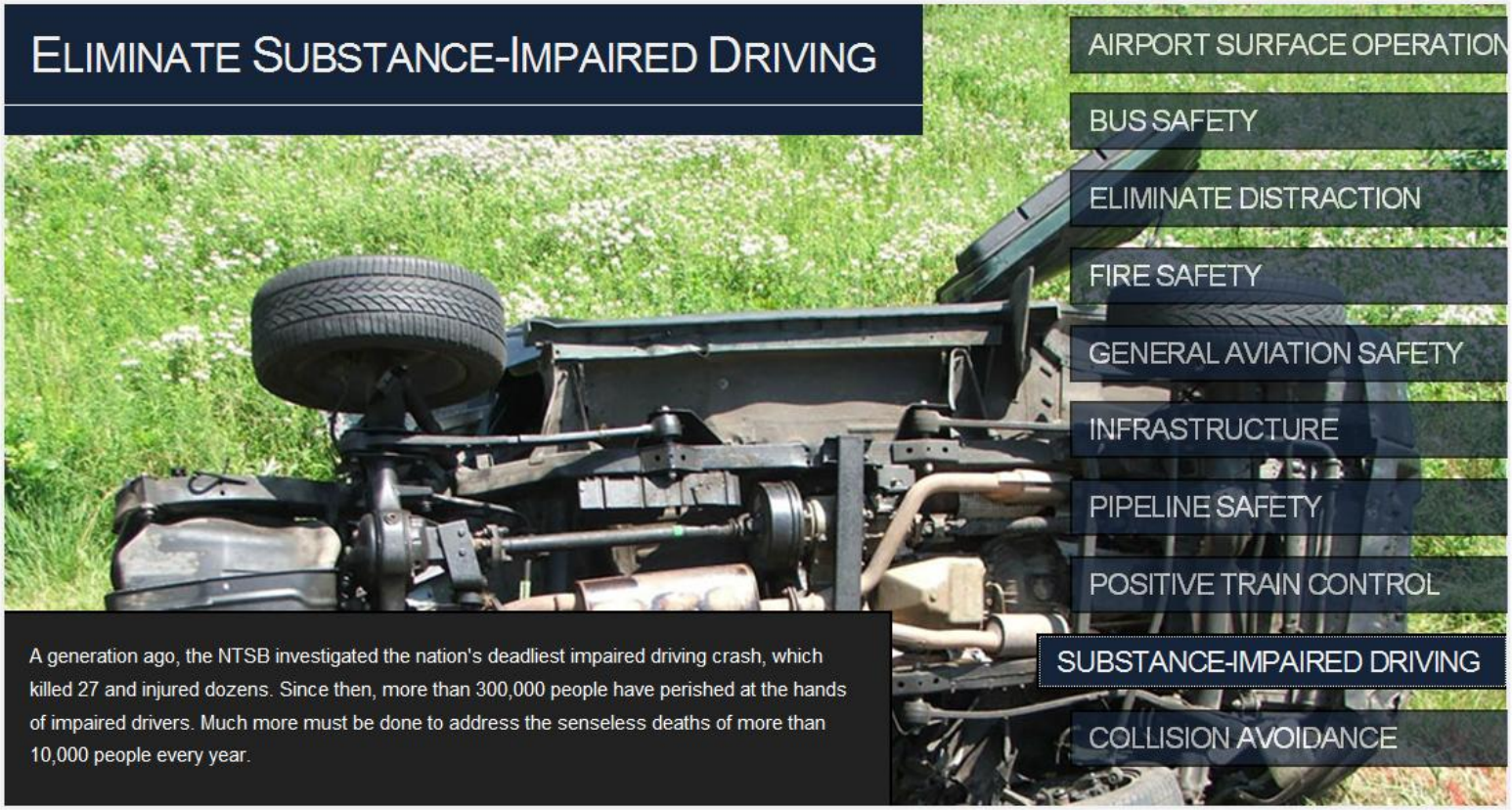
#1: NTSB Forum: May 15-16, 2012

- 8 panels with 37 panelists
- Topics included:
  - the substance
  - current interventions
  - consequences
  - international view
  - the problem
  - enforcement
  - prevention
  - next steps

#2: November 14, 2012

Most Wanted List

The Most Wanted List represents the NTSB's advocacy priorities. It is designed to increase awareness of, and support for, the most critical changes needed to reduce transportation accidents and save lives.



NTSB

#3: November 23, 2012

- NTSB issues 6 new safety recommendations
- Focus: better data

Wrong-Way Driving

Special Investigation Report

NTSB/SIR-12/01
PB2012-917003

National Transportation Safety Board

NTSB

#4: December 11, 2012

- Wrong-way driver report
  - > 60% involve alcohol-impaired drivers
- NTSB issues 3 new safety recommendations
- Technology focus:
  - all offender ignition interlock
  - in-vehicle passive monitoring (DADSS)

Reaching Zero: Actions to Eliminate Alcohol-Impaired Driving

Safety Report

NTSB/SR-13/01
PB2013-106566

National Transportation Safety Board

NTSB

#5: May 14, 2013

- Safety Study
  - Reaching Zero: Actions to Eliminate Alcohol-Impaired Driving

- NTSB issues 10 new safety recommendations

10 New Safety Recommendations

- Laws: reducing per se BAC limit; expand ALS/ALR
- HVE incorporating PAS technology
- Expand use of in-vehicle devices (ignition interlocks)
- Repeat offenders: use DWI courts/other programs
- Establishing measurable goals/tracking progress (states)

NTSB Safety Report Findings

11. Driving while intoxicated (DWI) courts, with their emphasis on ensuring offender accountability and changing offender behaviors, represent a useful approach to rehabilitating drivers for whom traditional countermeasures are not effective.

To the National Highway Traffic Safety Administration:

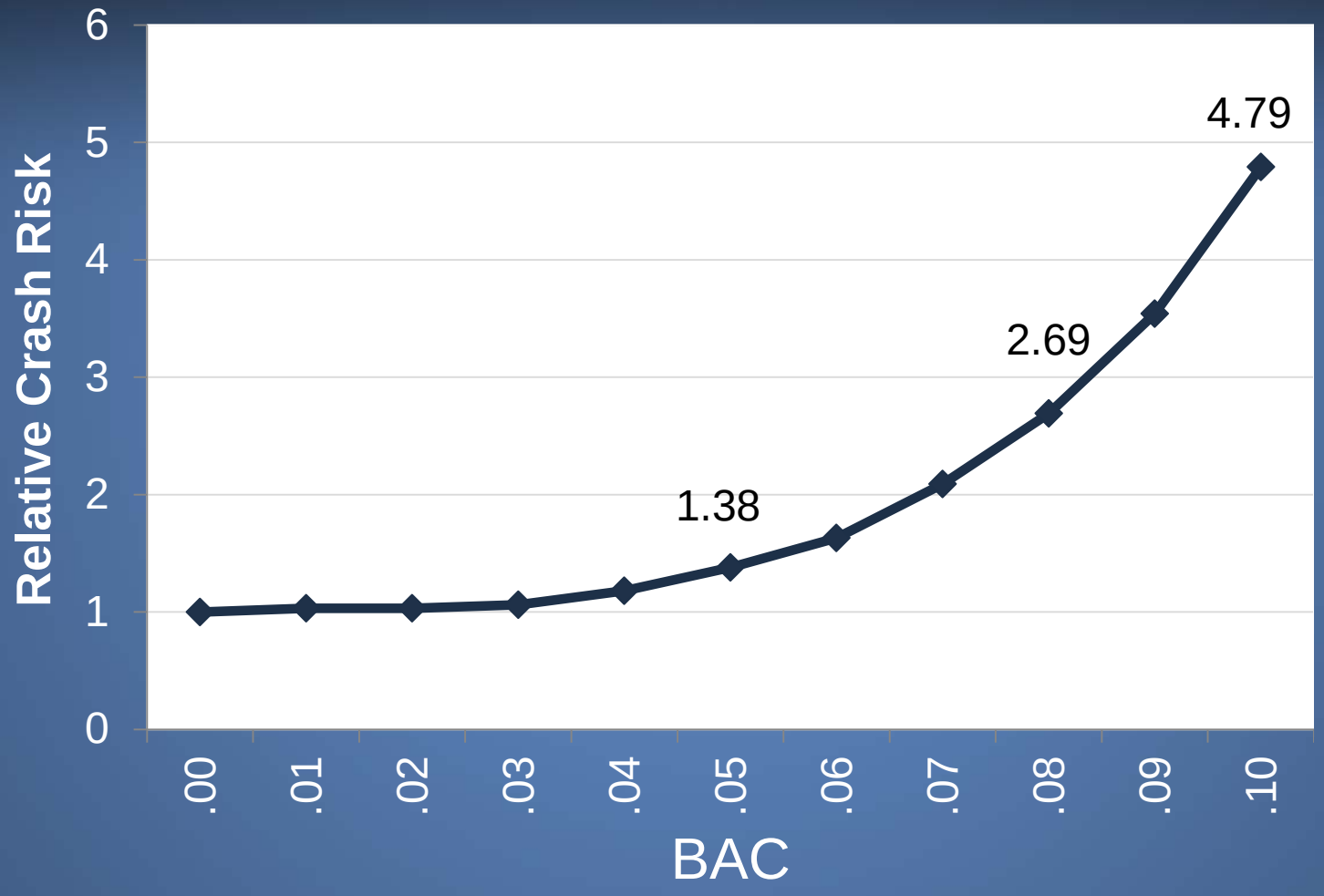
- Develop and disseminate to the states best practices for driving while intoxicated (DWI) courts. (H-13-4)

Alcohol Impairment and Per Se Laws

Driving-Related Performance

BAC (g/dL)	Driving Related Tasks Affected
.001 – .009	Driving Simulator Lane Deviations, Divided Attention
.010 – .019	Drowsiness
.020 – .029	
.030 – .039	Vigilance
.040 – .049	Perception, Visual Functions
.050 – .059	Tracking
.060 – .069	Cognitive Tasks, Psychomotor Skills, Choice Reaction Time
.070 – .079	
.080 – .089	
.090 – .099	
≥ .100	Simple Reaction Time, Critical Flicker Fusion

Crash Risk

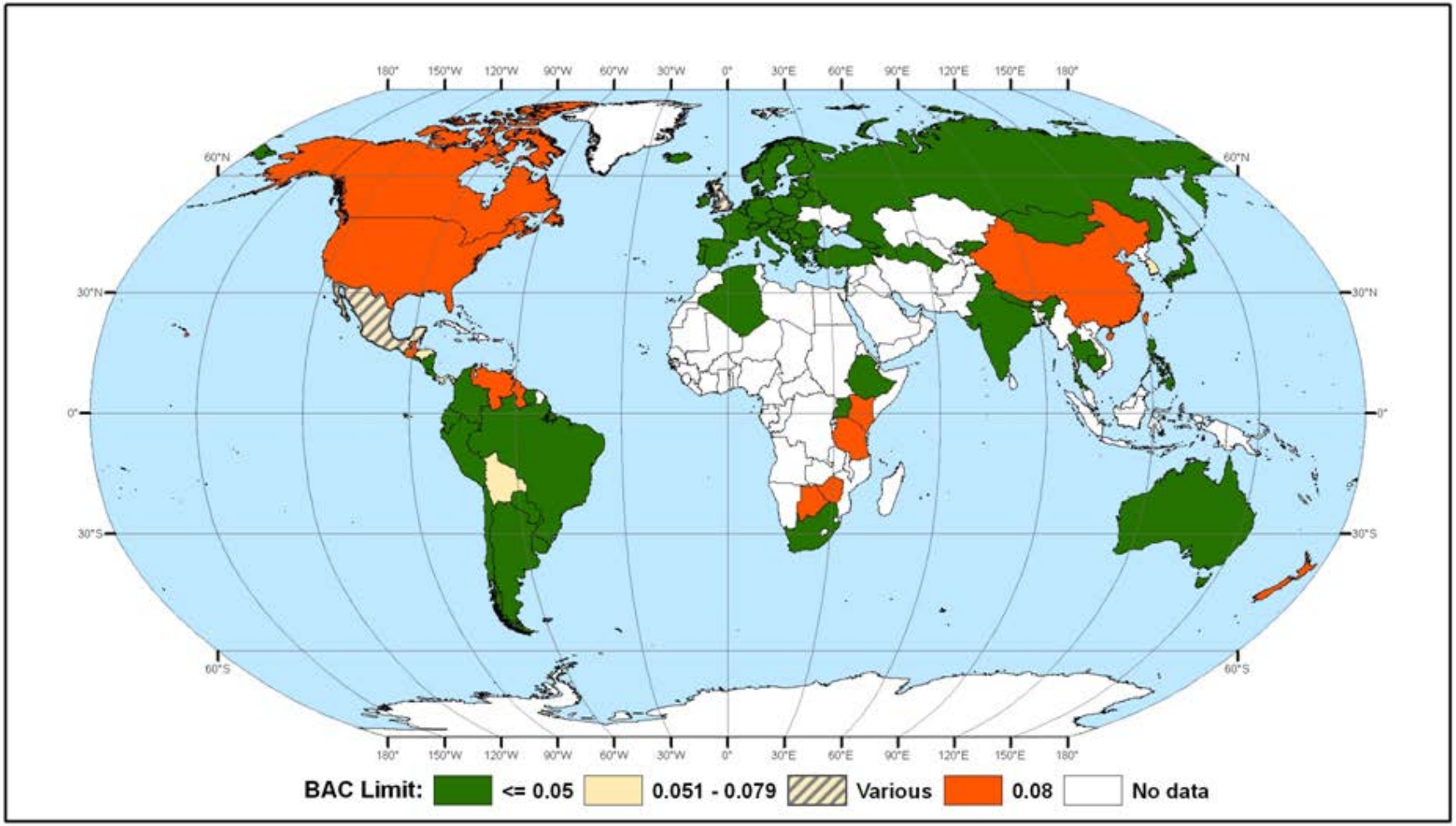


NTSB

Reducing Per Se BAC Limits

- Reduces crashes and fatalities
  - Move from 0.10 to 0.08
  - Move to 0.05
    - up to 18% decrease in fatalities
- Changes drinking and driving behavior at all BAC levels

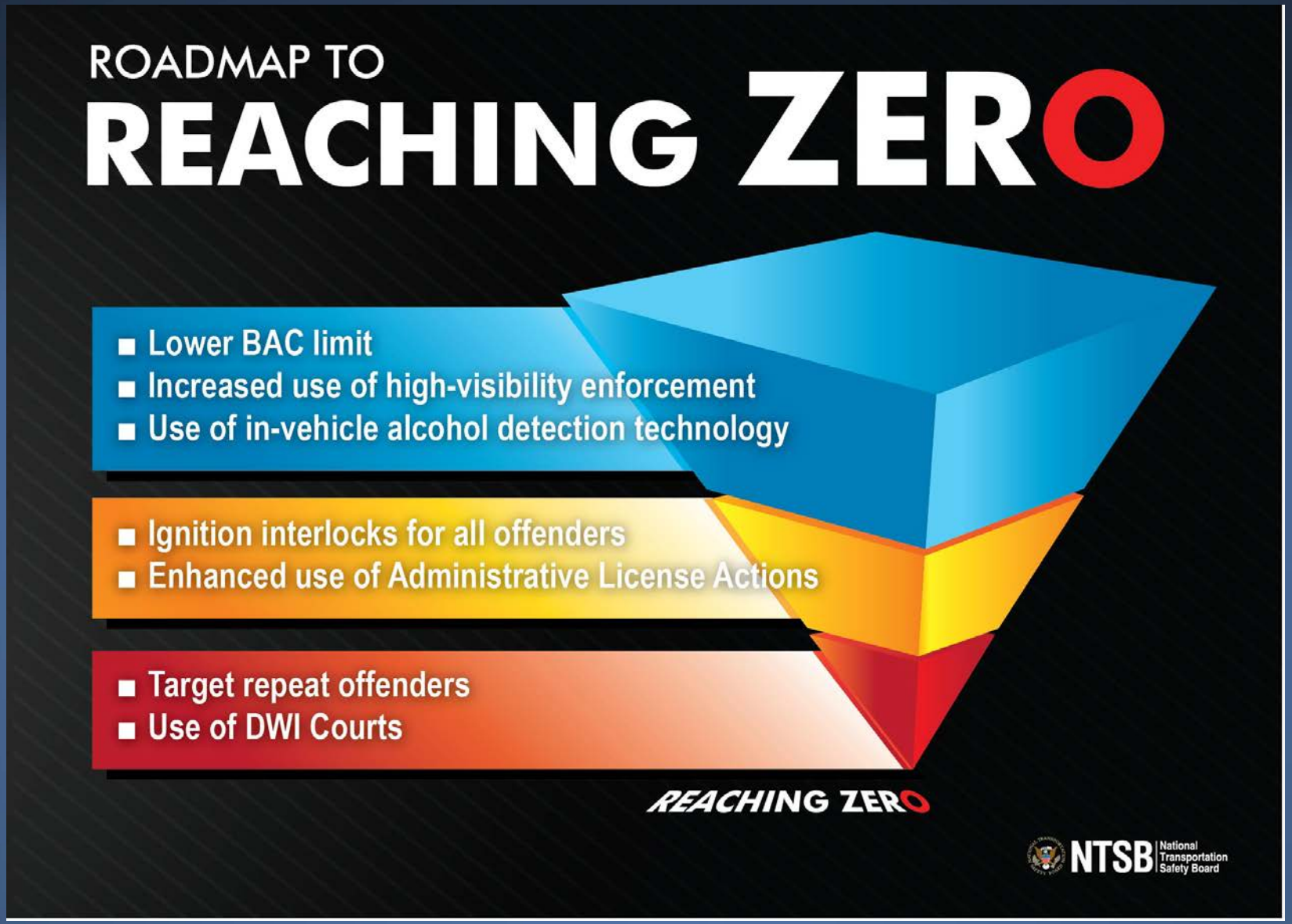
BAC Per Se Limits World Wide



Traffic Safety and Public Health Support

- Association for the Advancement of Automotive Medicine
- American Medical Association
- World Health Organization
- World Medical Association

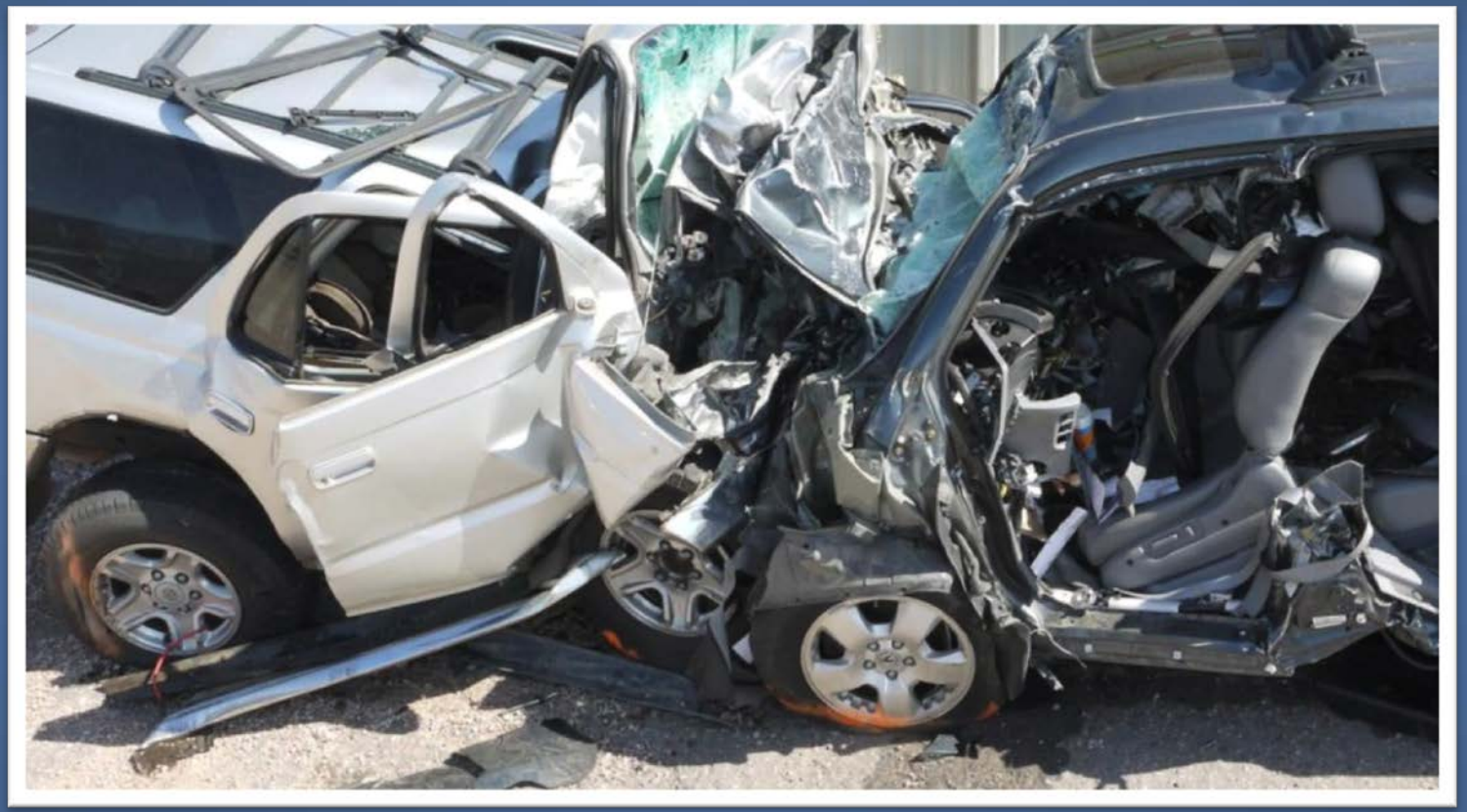
Reaching Zero: Bold Actions and Contentious


ROADMAP TO
REACHING ZERO
Lower BAC limit
Increased use of high-visibility enforcement
Use of in-vehicle alcohol detection technology
Ignition interlocks for all offenders
Enhanced use of Administrative License Actions
Target repeat offenders
Use of DWI Courts
REACHING ZERO
NTSB
National Transportation Safety Board

NTSB Roadmap: Enhance Safety

- Science-based/data-driven
- Diverse approaches
- Set of targeted interventions
- Near- and long-term strategies

Reaching Zero



NTSB

National Transportation Safety Board