



Canadian Centre
on Substance Abuse
Centre canadien **de lutte**
contre les toxicomanies

Partnership. Knowledge. Change.
Collaboration. Connaissance. Changement.

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Presentation to the Saskatchewan Special Committee on Traffic Safety

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Saskatoon SK

June 3, 2013

Overview

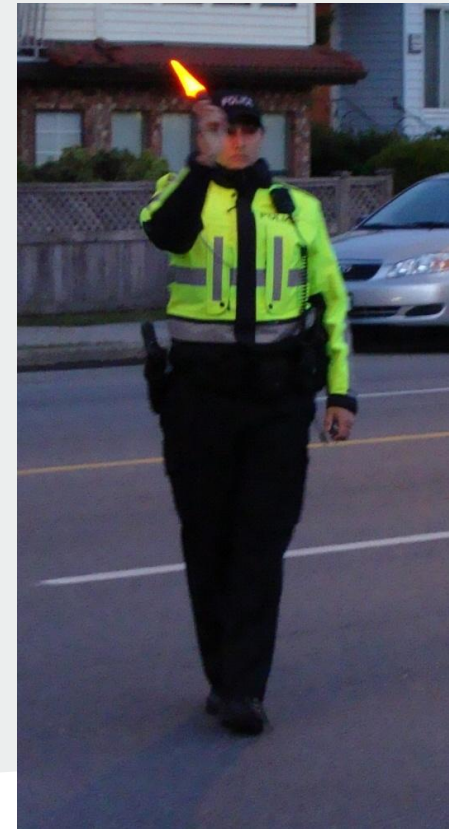
- **Two Topics:**
 1. *Alcohol-impaired driving*
 2. *Drug-impaired driving*
- **Context**
- **Major issues within each**
- **Opportunities for change**
- **Evidence/rationale supporting change**
- **Recommendations/Suggestions**



Overview

Alcohol-impaired Driving

- Background/Context
- What works?
 - High visibility enforcement
 - Administrative sanctions
 - Alcohol ignition interlocks
 - Assessment & rehabilitation



Overview

Drug-impaired Driving

- Background/Context
- Issues/Areas of Concern
 - Surveillance
 - Enforcement
 - Administrative sanctions
 - Assessment & rehabilitation
 - Prevention



Context: Impaired Driving Laws

- ***Criminal Code of Canada***
 - Driving while ***ability impaired*** by alcohol or drug or a combination of alcohol and drugs
 - Driving with a blood alcohol concentration (BAC) ***over 80*** mg/dL
 - ***Refusing to comply*** with a demand for a sample of breath, blood, urine or oral fluid or a demand to participate in field sobriety tests or a drug influence evaluation

Context: SK Provincial Legislation

- **Over 80 mg/dL**
 - **Immediate 24 hr suspension**
 - **90 day administrative suspension**
- **Over 40 mg/dL**
 - **Immediate 24 hr suspension**
- **New Drivers over 0 mg/dL (zero tolerance)**
 - **30 day suspension**
- **Fail or refuse SFST**
 - **Immediate 24 hr suspension**

Magnitude of the Problem



From 2000 to 2010, 9175 people died in crashes on Canadian roads involving a drinking driver

32,000 drinking drivers involved in serious injury crashes

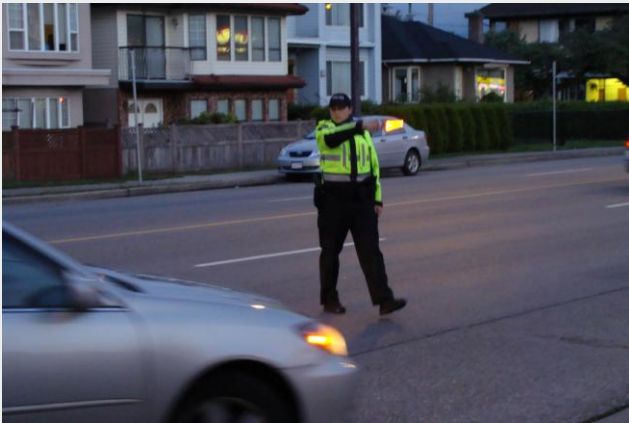
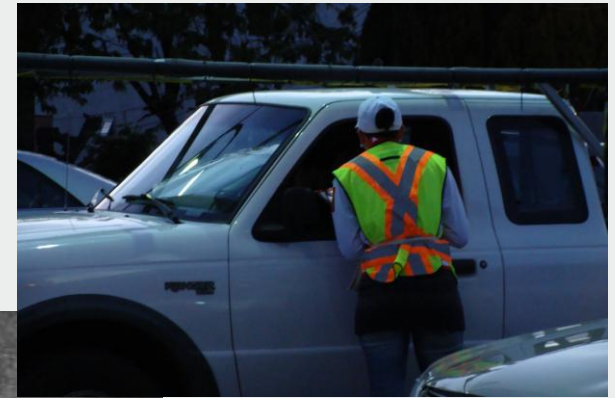
Estimated \$11 Billion in social costs per year

Surveillance Windows on the problem

- Self-report surveys
- Police charges

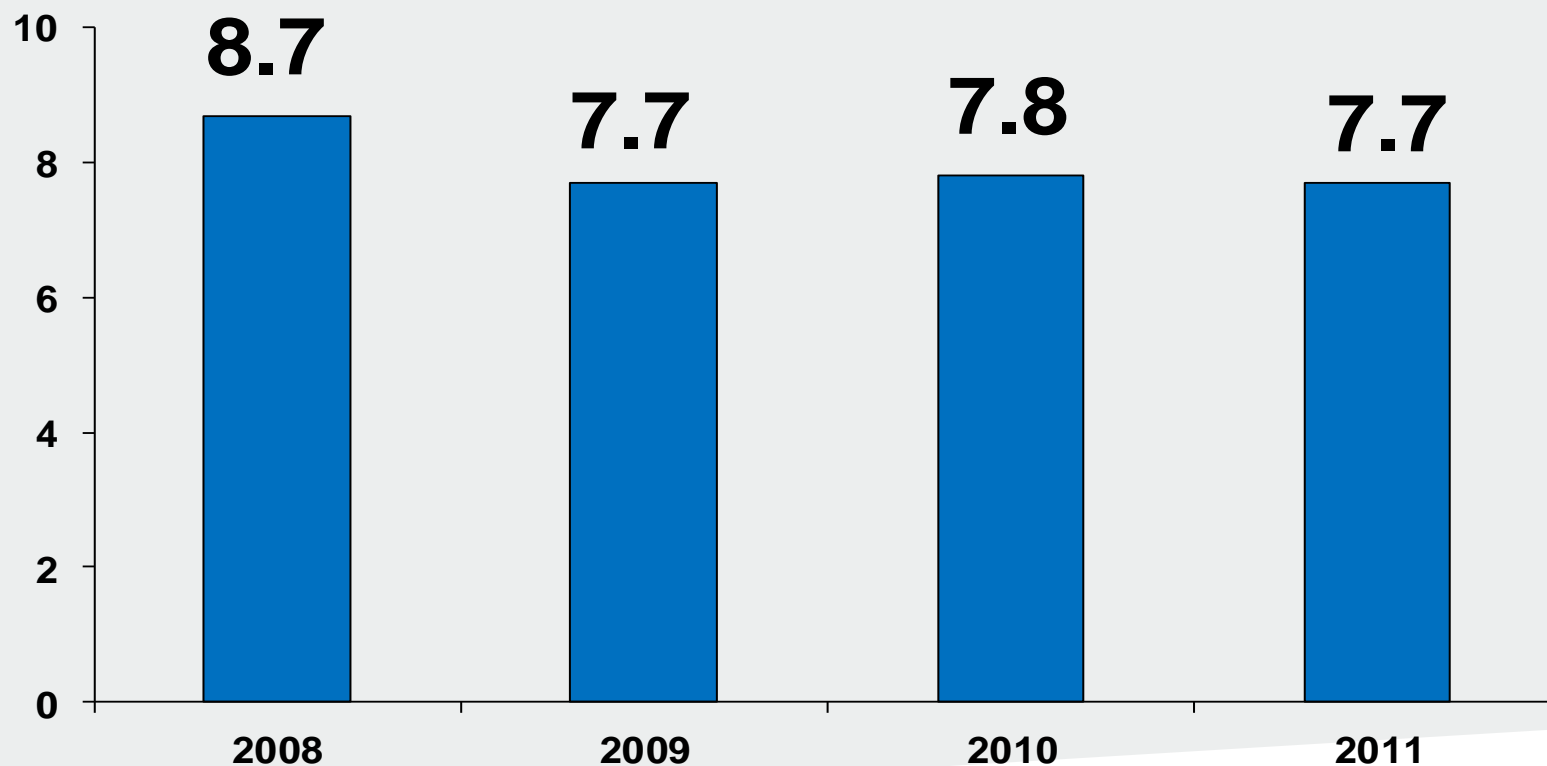


- Roadside surveys



- Crash-involved drivers

Self-reported Driving after Drinking



Source: Health Canada - CADUMS
2008 - 2011

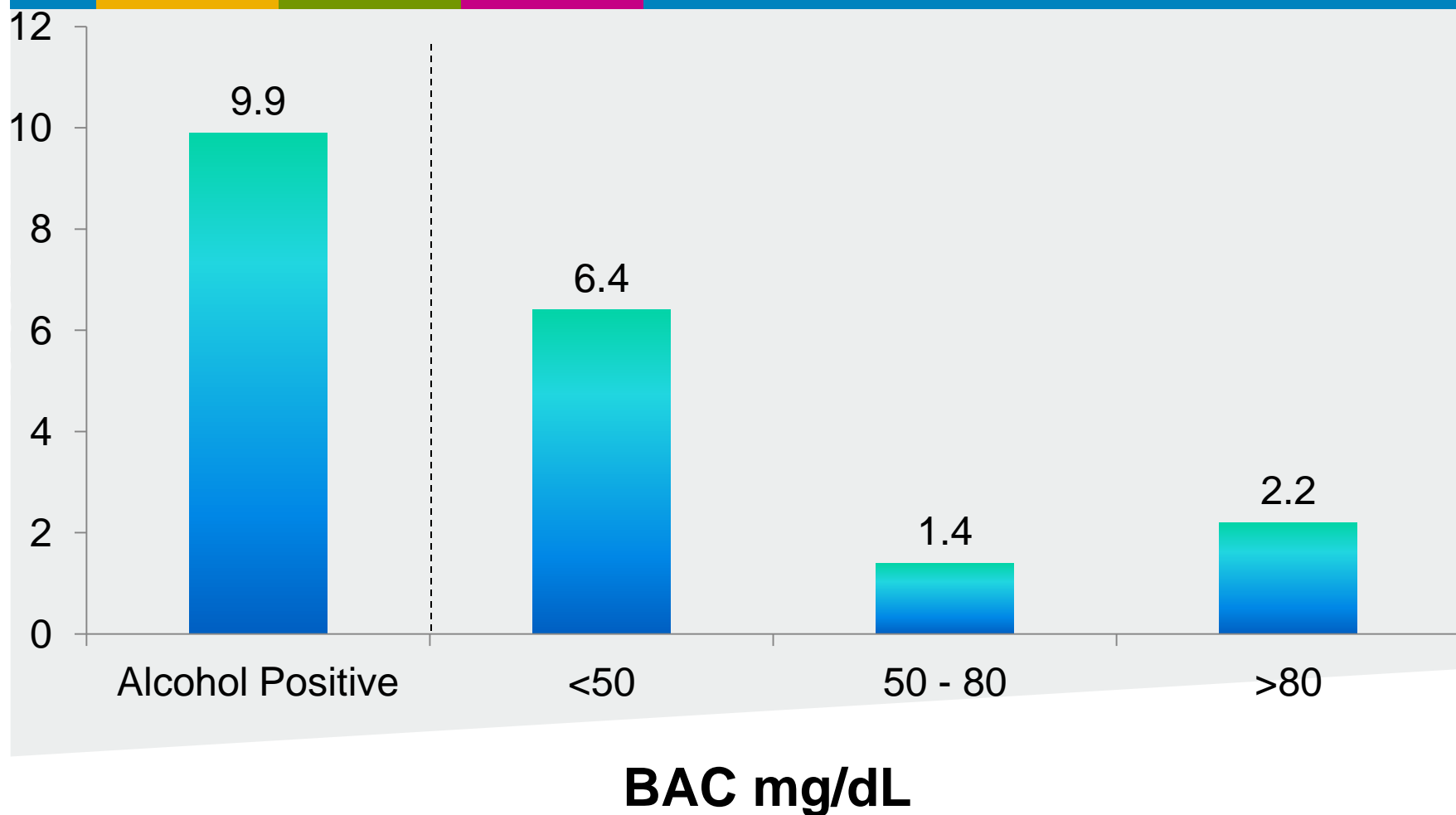
Roadside Surveys

Purpose: *To collect objective information on alcohol (and drug) use by drivers*

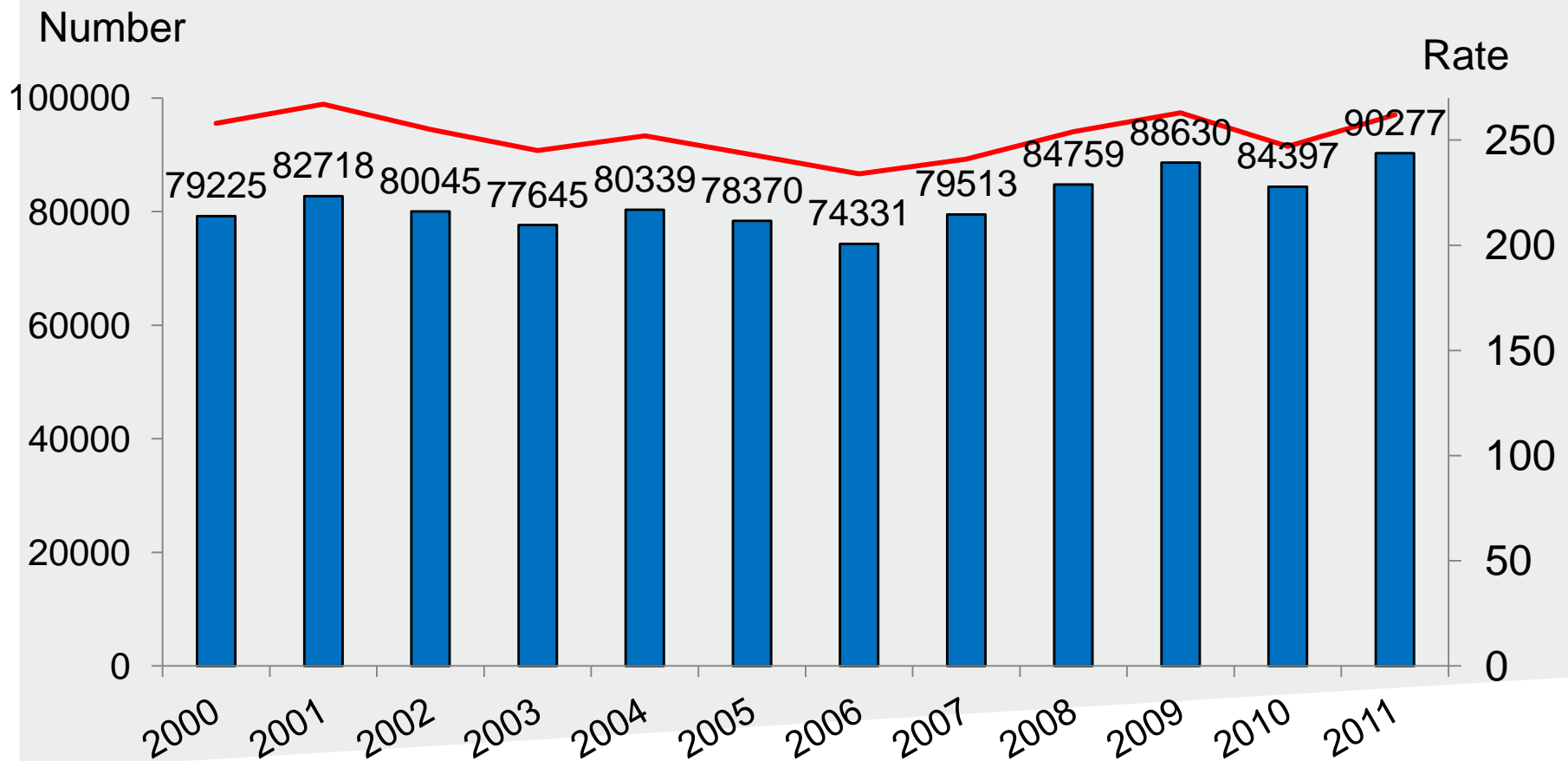
- **Wed through Sat**
- **9:00 PM to 3 AM**
- **4 sites per night – 90 minutes each**
- **Set up survey site in parking lot**
- **police officer to direct traffic**
- **Response rates are high!**



Roadside Surveys: Blood Alcohol Concentration



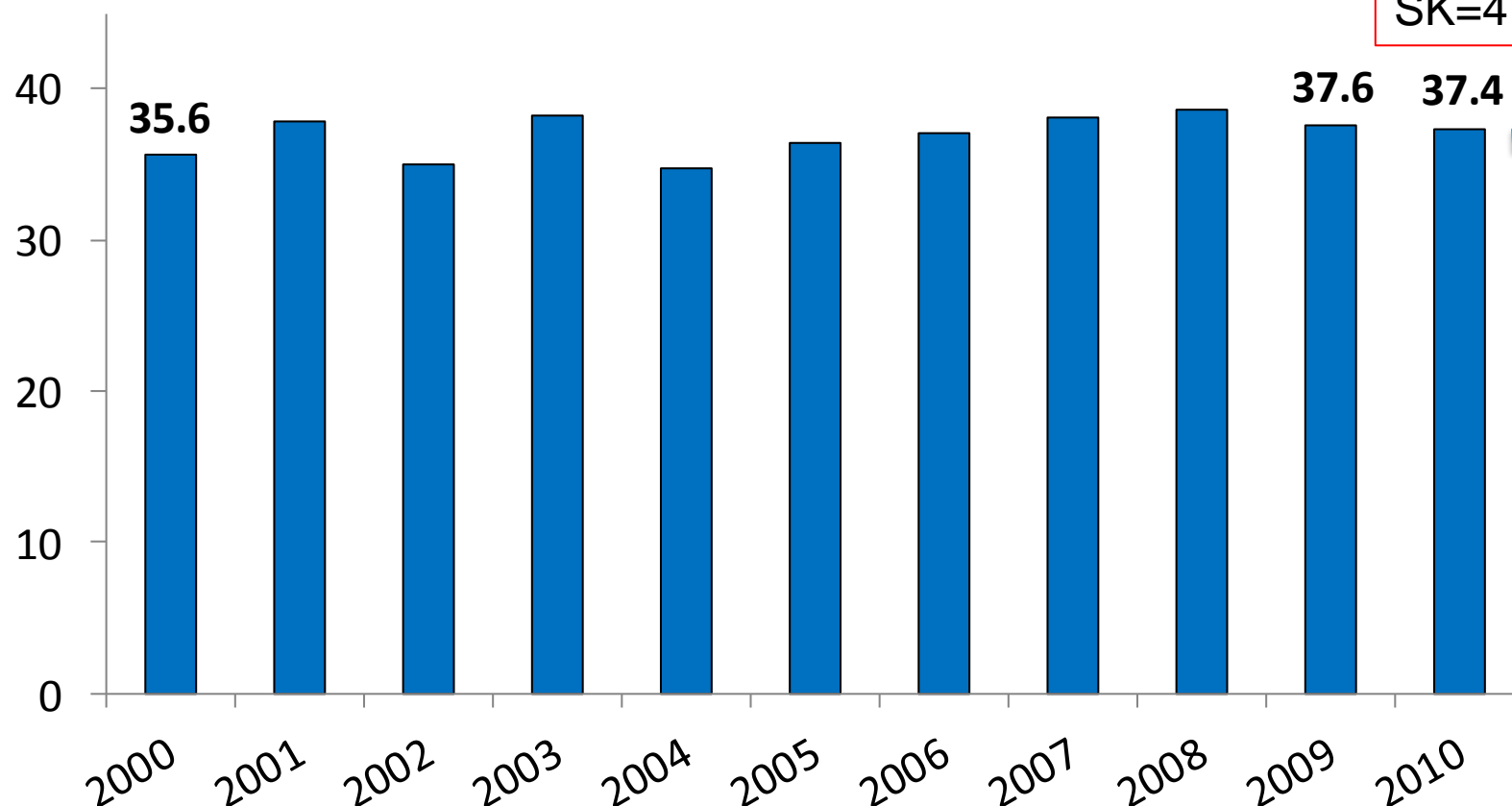
Number and Rate of Impaired Driving Charges: Canada (2006 – 2011)



Source: Statistics Canada Catalogue 85-002-X

Alcohol Use Among Fatally Injured Drivers (Canada: 2000 – 2010)

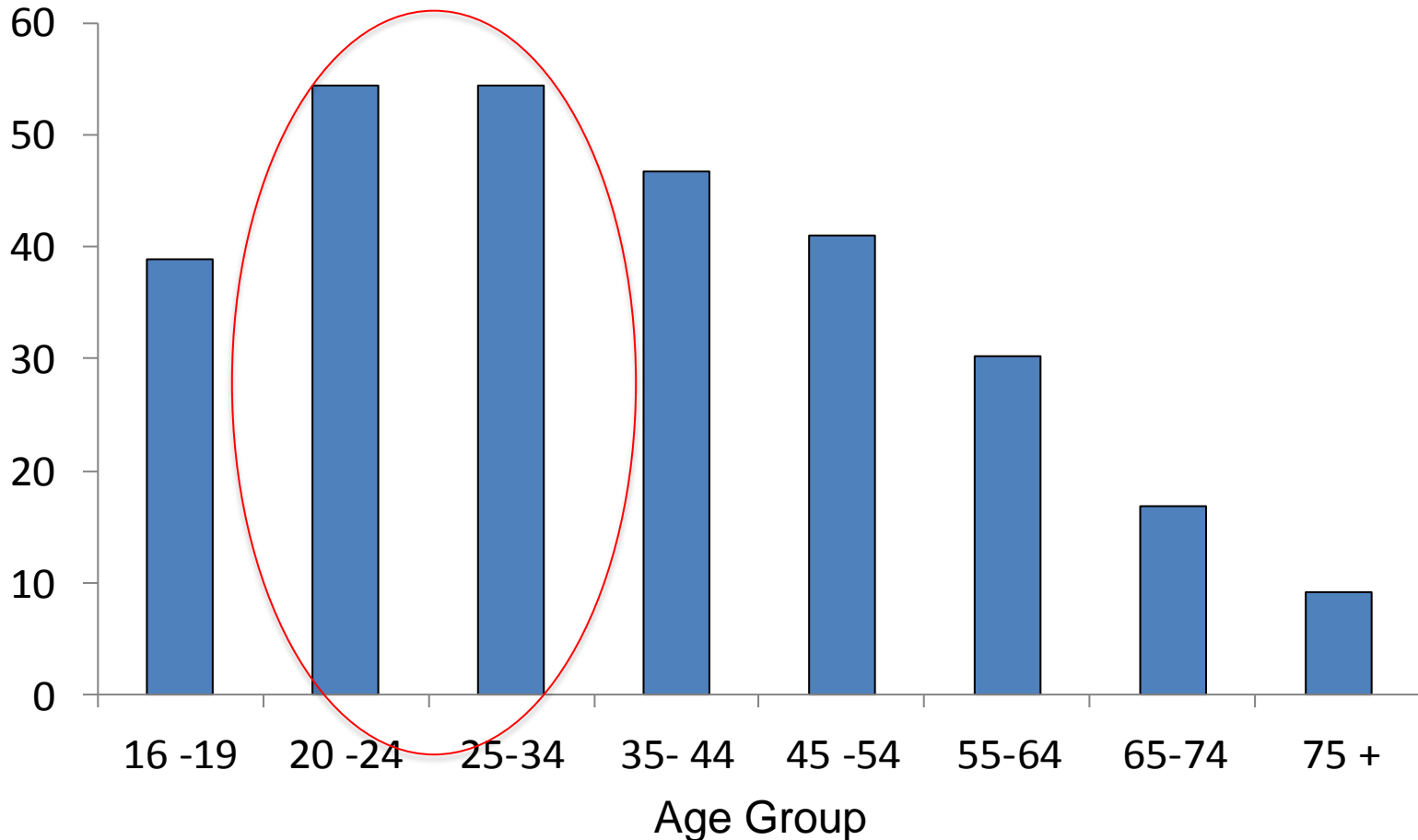
Percent



SK=41.7%

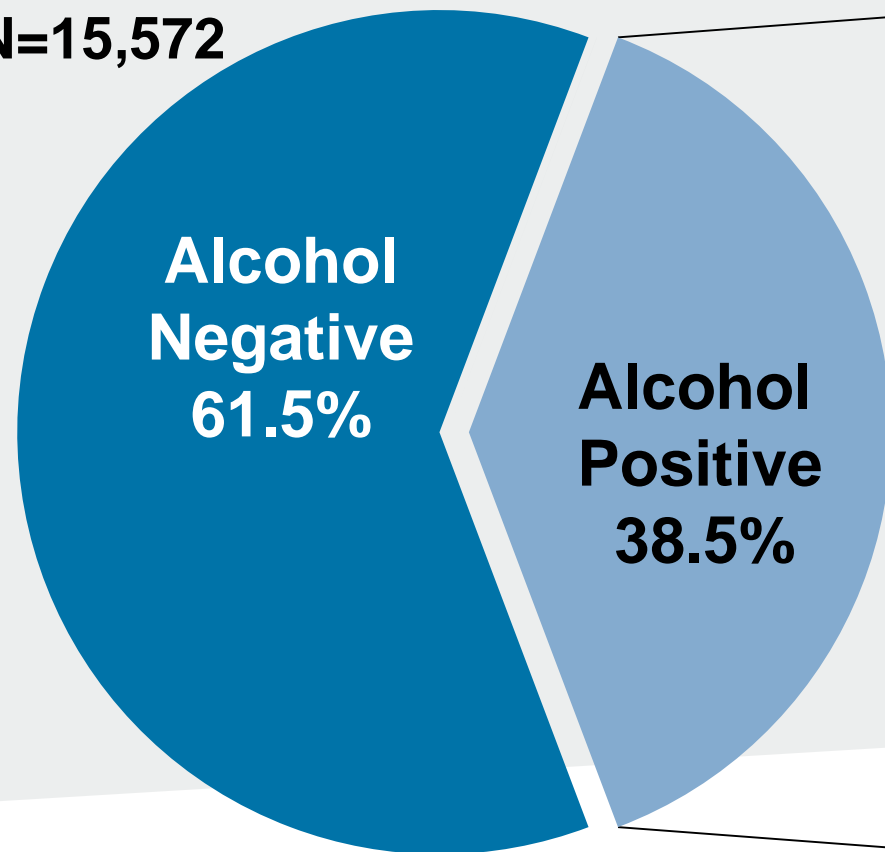
Drinking Driver Fatalities According to Age

Percent



Alcohol Among Fatally Injured Drivers: Canada 2000-2010

Tested Cases
N=15,572



BAC mg/dL

<50 11.5%

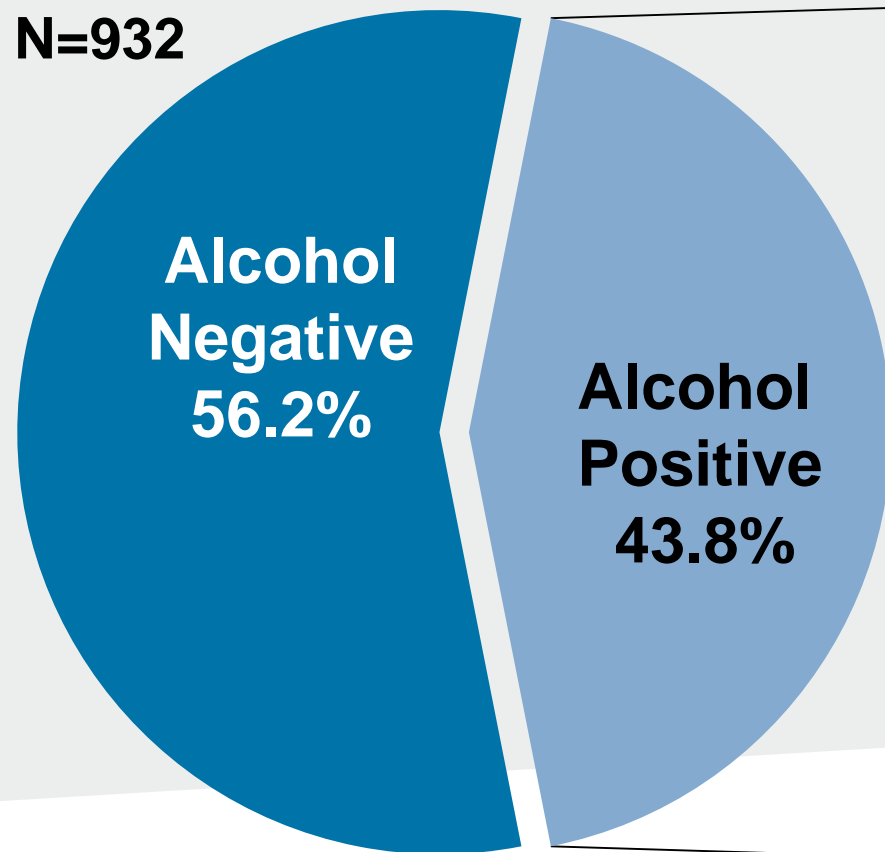
50-80 5.3%

80-160
26.8%

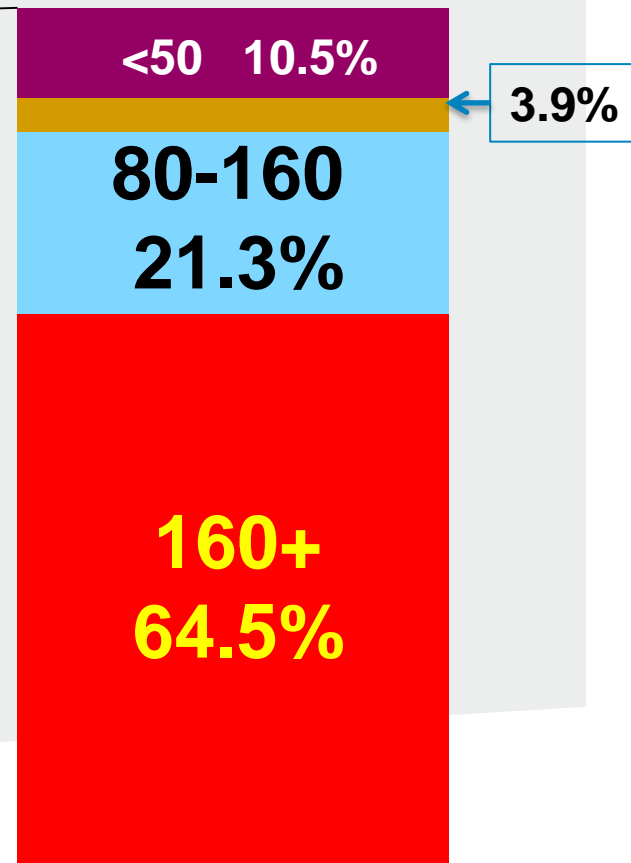
160+
56.4%

Alcohol Among Fatally Injured Drivers: Saskatchewan 2000-2010

Tested Cases
N=932



BAC mg/dL



Countermeasures that Work

- 1. Administrative sanctions**
- 2. Alcohol ignition interlocks**
- 3. High profile intensive enforcement**
- 4. Assessment and rehabilitation**

Administrative Sanctions

➤ **Already exist in SK**

- **Immediate 24 hr suspension for over 40 mg/dL**
- **Immediate 24 hr suspension followed by 90 suspension for BAC over 80 mg/dL**

➤ **Is the room for improvement?**

➤ **Can it be made more effective?**

Administrative Sanctions

- **Canadian Council of Motor Transport Administrators (CCMTA) 2005 model for low BACs**
 - Immediate 7-14 day suspension for over BAC over 50 mg/dL
 - Confiscate licence and require a reinstatement fee
 - More severe sanctions for repeat violations
 - Ongoing public awareness and enforcement
- **Based on key components of deterrence – *Swift, Certain, Severe***

BC's Immediate Roadside Prohibition (IRP)

September 2010 BC Introduced New Administrative Sanctions

- **Warn Range (50-80 mg/dL)**
 - ✓ **3 day license suspension**
 - ✓ **3 day impoundment**
 - ✓ **Administrative Penalty (\$200)**
 - ✓ **Reinstatement fee (\$250)**
 - ✓ **Towing and Storage (\$150+)**
 - ✓ **Total = \$600**

2010 Legislation – Immediate Roadside Prohibition (IRP)

- **Fail Range (>80 mg/dL)**
 - ✓ **90 day license suspension**
 - ✓ **30 day impoundment**
 - ✓ **Administrative Penalty (\$500)**
 - ✓ **Reinstatement fee (\$250)**
 - ✓ **Towing and Storage (\$680+)**
 - ✓ **Responsible Driver Program (\$880)**
 - ✓ **Interlock (\$1730)**
 - ✓ **Total = \$4040**

Evaluation: Does it work?

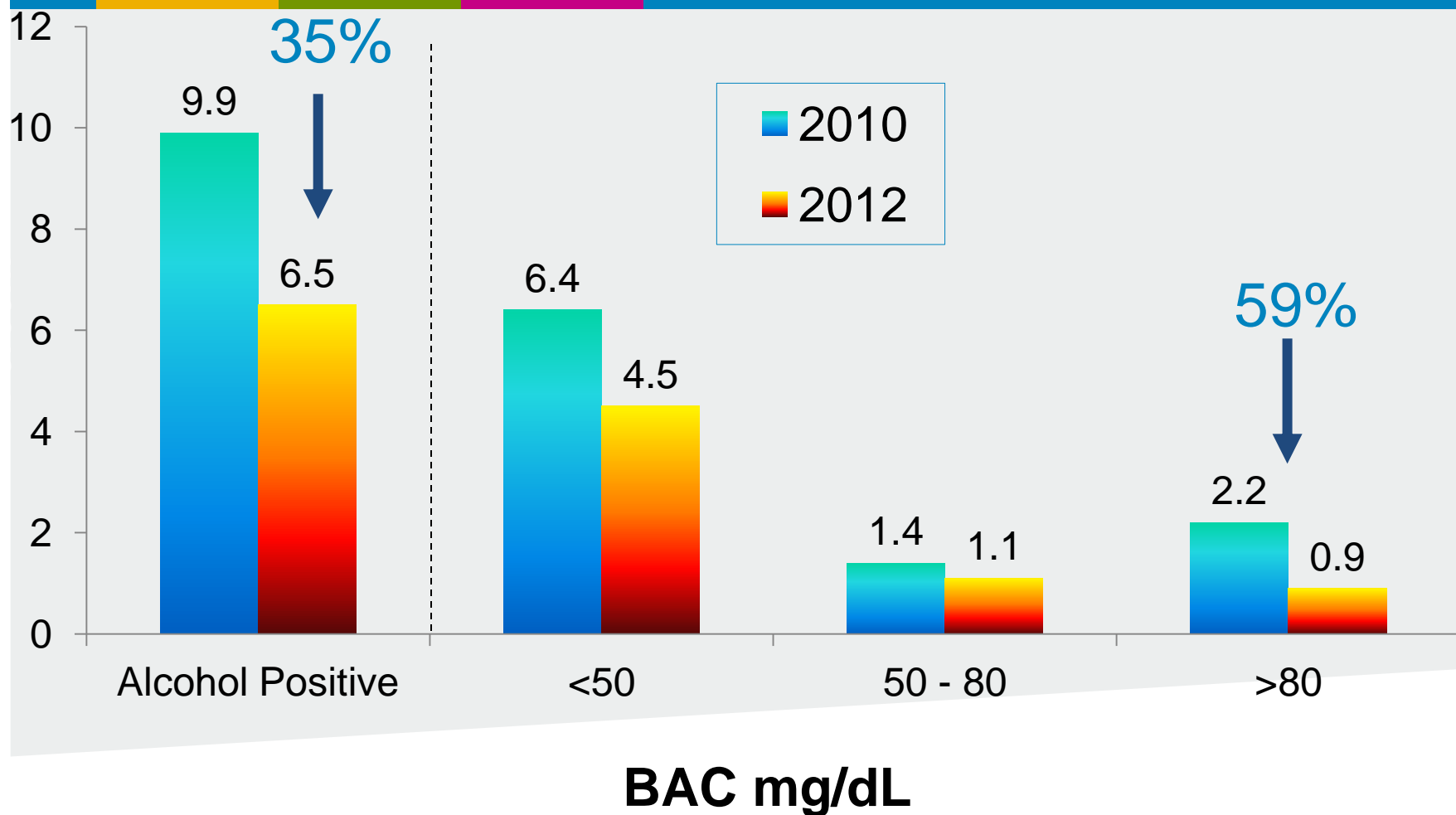
➤ Roadside Surveys

- June 2010 – prior to new IRP
- June 2012 – following new IRP
- Surveys dating back to 1995

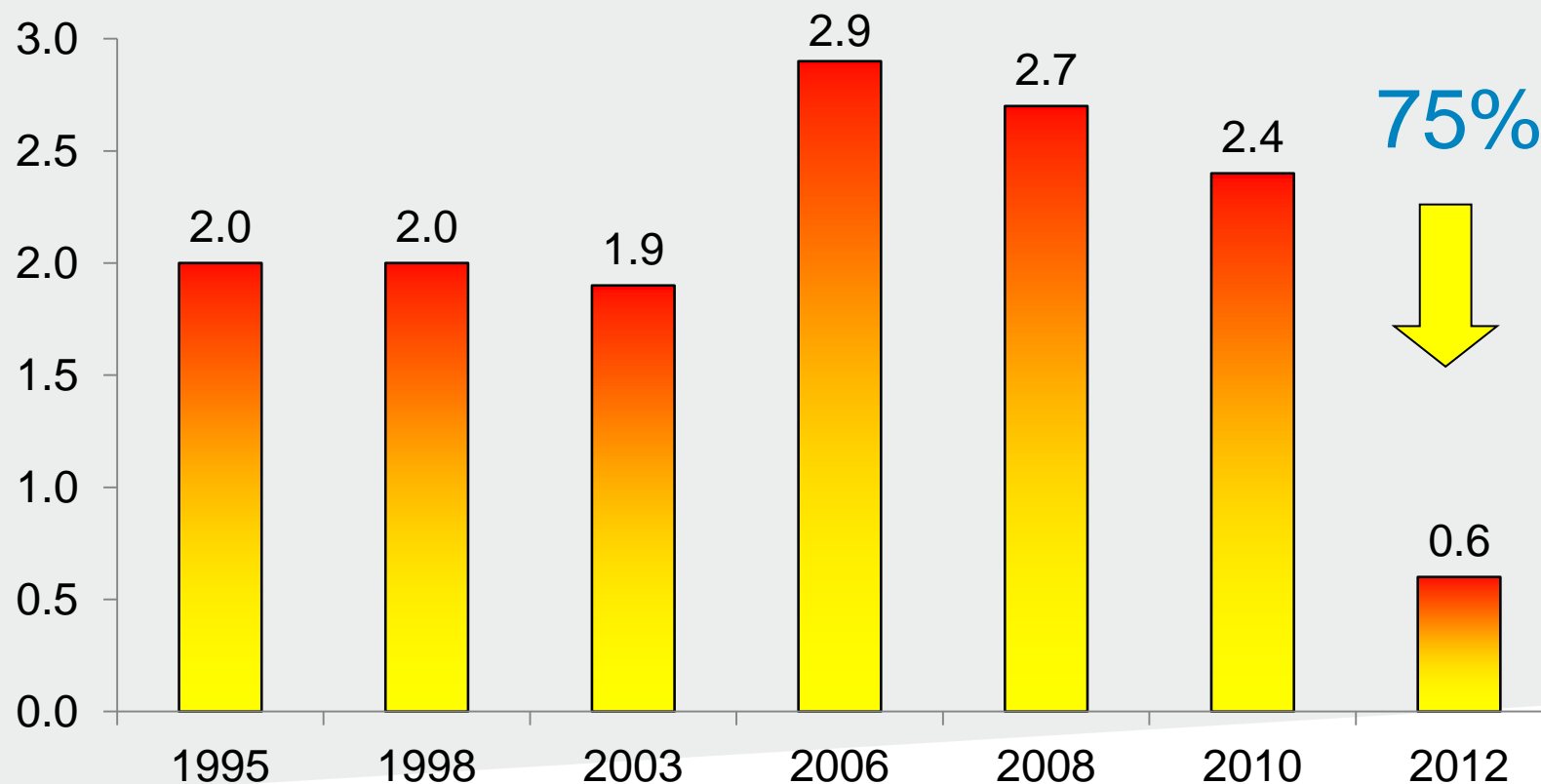
➤ Alcohol-involved Fatalities

- Before and after IRP

Roadside Surveys: Blood Alcohol Concentration

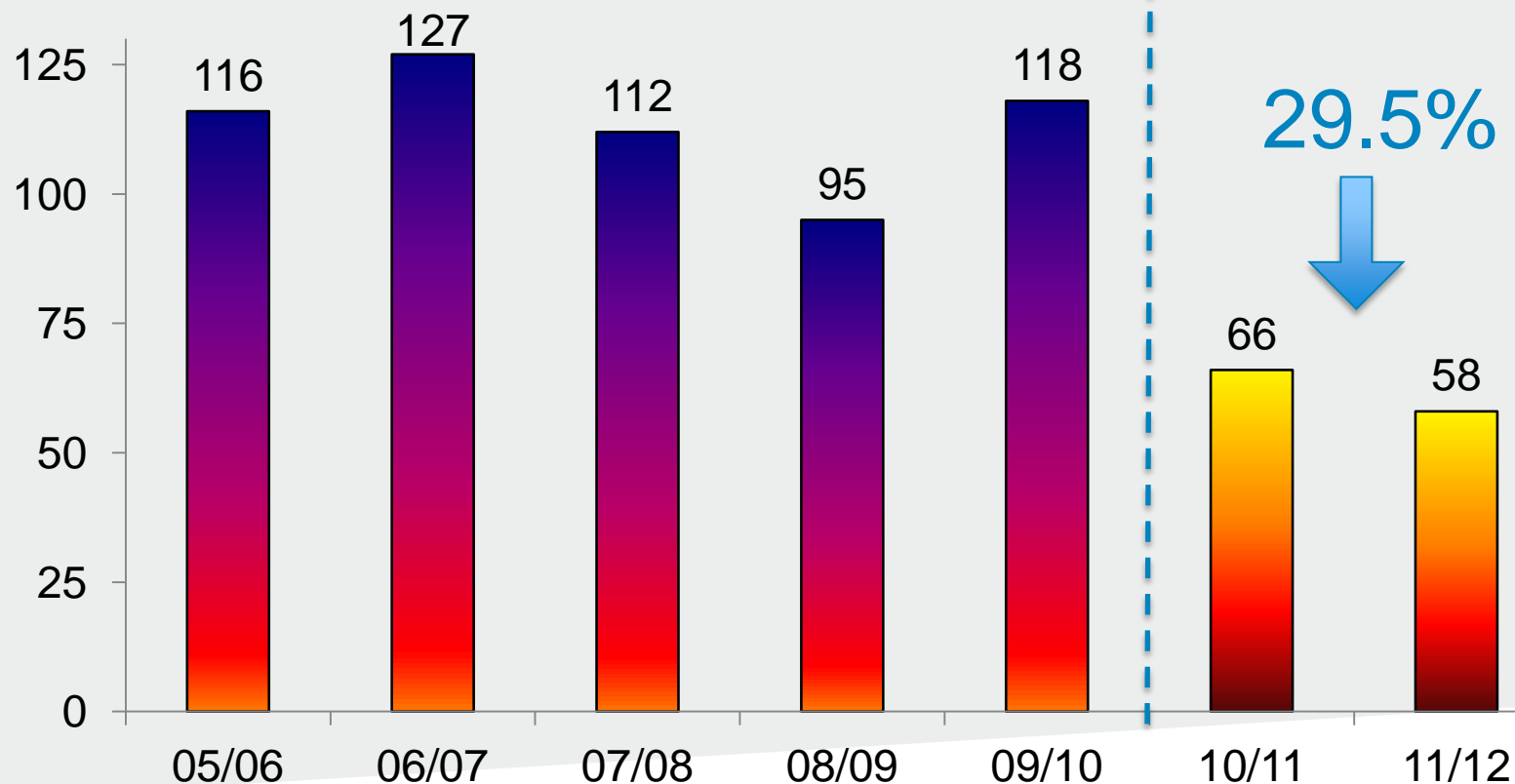


Roadside Surveys: Percent of Drivers with BACs > 80 mg%*



* Vancouver and Saanich only

Number of Alcohol-involved Fatalities: October 2005 – September 2012



Alcohol Ignition Interlocks

1970:

Solution to the alcohol-crash problem was a car that “Drunks couldn’t drive”

What is it?

**Breath test
device linked to
the vehicle's
ignition to
prevent it from
being started by
someone who
has had too
much to drink**



Do interlocks work?

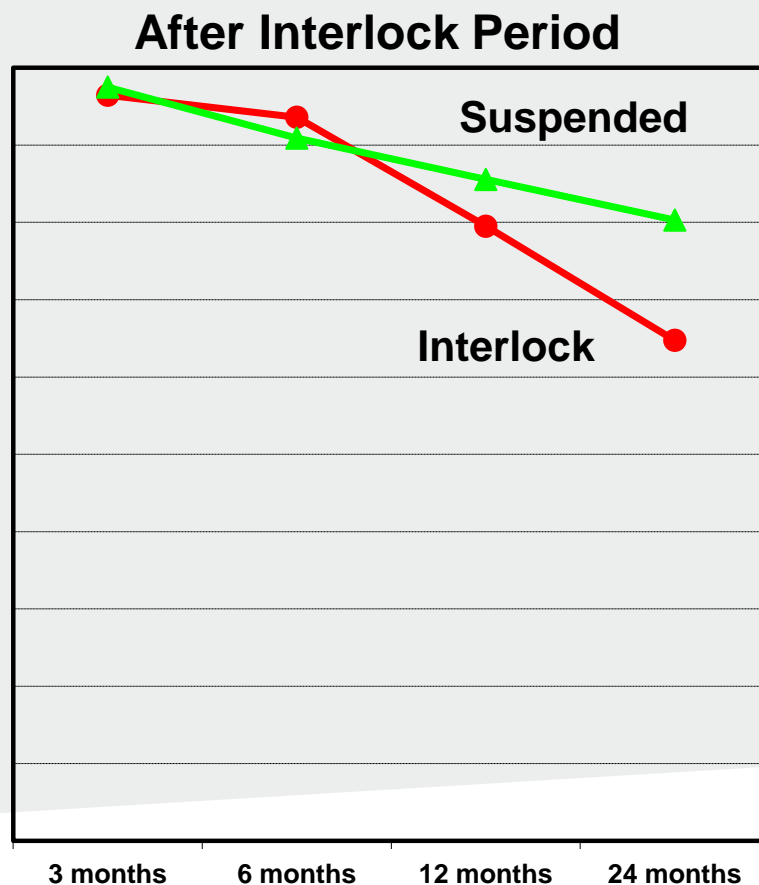
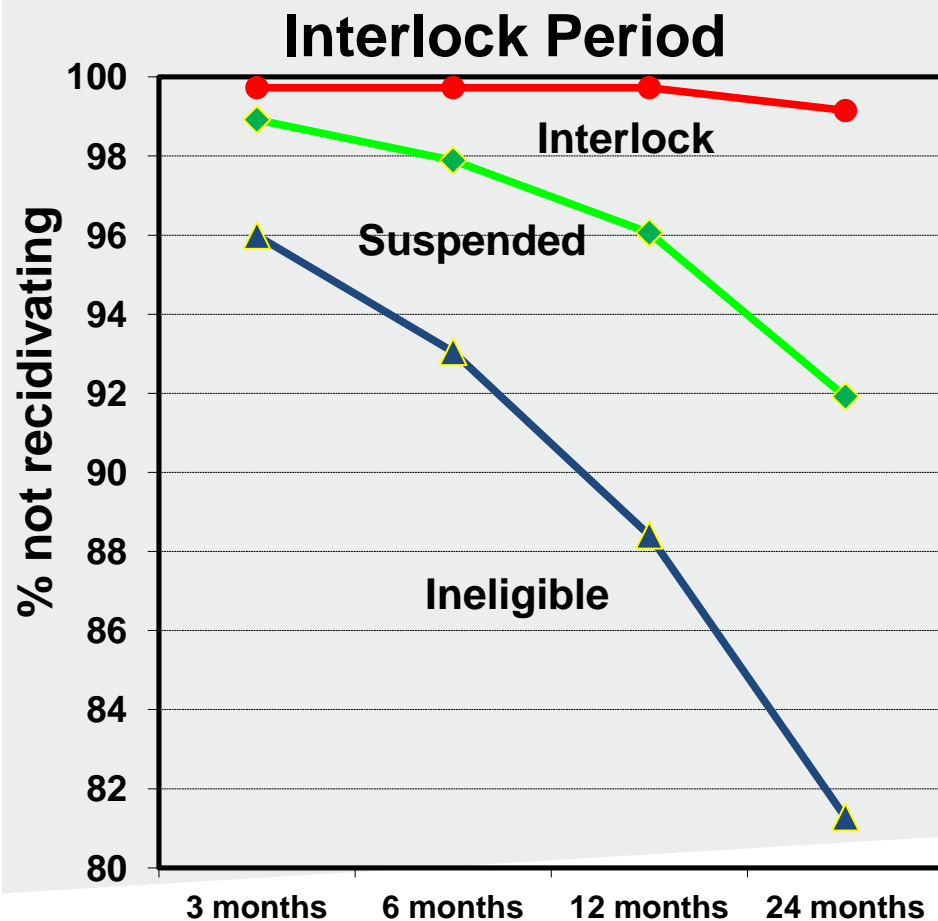
➤ 1. *Do interlock devices work?*

- Technical Standards for interlock devices
- Advanced technology prevents driver with BAC .01% over set point from driving 90% of the time
- Anti-circumvention features built into device

➤ 2. *Are they effective?*

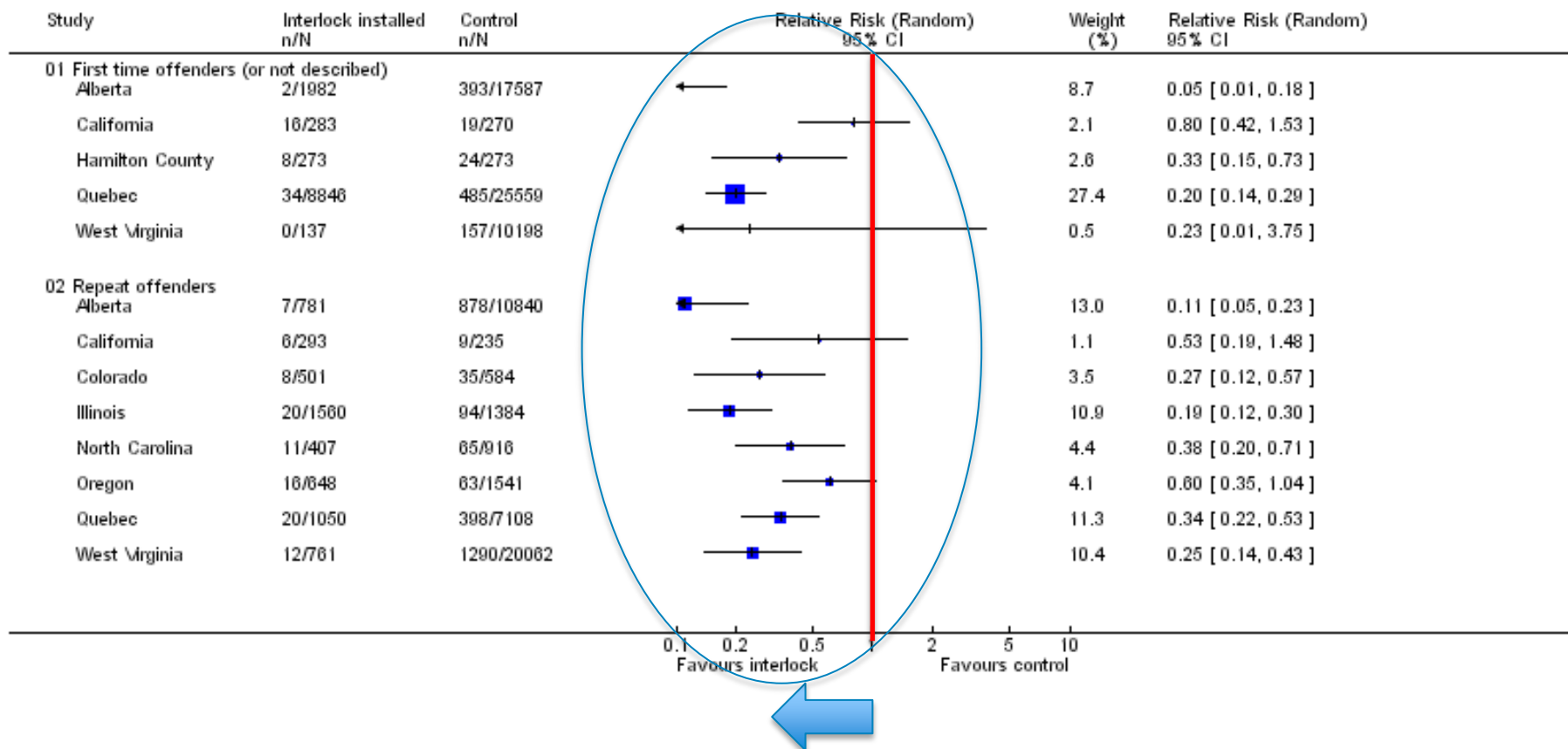
- Several studies all show reduced recidivism among interlock participants relative to control groups
- Up to 90% fewer repeat offences among interlock participants

Repeat Offenders Survival Rate



Cochrane Review of Interlocks

Review: Alcohol ignition interlock programmes for reducing drink driving recidivism
 Comparison: 02 Controlled Trials
 Outcome: 01 Recidivism while the interlock device is installed in offender's vehicle



Centers for Disease Control Review

Am J Preventive Medicine 2011;40(3); 362-76

- “Strong evidence” that interlocks are effective in reducing re-arrest rates
- Limited evidence that interlocks reduce alcohol-related crashes
- Potential for interlocks to have significant impact on impaired driving limited by the small proportion of offenders who participate in programs
- Link with rehabilitation

Interlocks in SK

- Voluntary program
- Offenders can reduce the period of suspension by participating in interlock program
- Approximately 500 interlock installations per year
- Only 7% of offenders!!
- There is room for improvement

Maximizing the Impact of Interlocks

➤ Best Practices

- **Perspective**
- **Purpose, rationale, guiding principles**
- **Form of incapacitation, not punishment**
- **Interlock is just a device. It cannot do more than it was made to do.**
- **Interlocks are part of a comprehensive program that includes education, rehabilitation, and behaviour change**

Maximizing the Impact of Interlocks

- **Mandatory participation for all convicted offenders – including “first” offenders!**
- **Minimum installation of 12 months**
- **Behaviour-based criterion for removal – make participants prove that they no longer require the device before it is removed**
- **Integrate interlock program with rehabilitation program**

High Visibility Intensive Enforcement

- **Police Checkpoints**
 - **Purpose is deterrence**
 - **Create real probability of detection**
 - **Requires publicity**
 - **Identify and charge violators**

High Visibility Intensive Enforcement

- **Effectiveness**
 - **US studies show up to 20% reduction in fatal crashes associated with intensive enforcement**
 - **For every \$1 invested in intensive enforcement, \$3.4 - \$6 saved**
 - **Publicity is a key element**

Screening, Assessment & Rehabilitation

- **Alcohol abuse is a major contributing factor**
- **Breaking the cycle is critical**
- **Evidence shows 8% benefit of rehabilitation programs**
- **More comprehensive/inclusive programs are better**
- **Need to review current system to determine if it could be improved**

Recommendations

- 1. Strengthen administrative sanctions**
- 2. Make interlock program mandatory for all offenders**
- 3. Integrate interlock program with rehabilitation**
- 4. Enhance high visibility enforcement**
- 5. Review current system of screening/assessment and rehabilitation**
- 6. Ensure all high BAC offenders complete rehabilitation**



Drug-impaired Driving

- Background/Context
- Issues/Areas of Concern
 - Surveillance
 - Policy and Legislation
 - Enforcement
 - Training - DEC/SFST/ARIDE
 - Assessment & Rehabilitation
 - Prevention



Starting Points

Drug-impaired Driving

- Related but different than alcohol
- 60+ years of research on alcohol
- In retrospect, alcohol was “easy”
- Drugs present a much more complex series of problems
- Extent of information pales in comparison with that on alcohol

What's a Drug?

Illicit Drugs

- LSD
- Crack
- Ecstasy
- Heroin

Cannabis

Ketamine

Amphetamine

Methamphetamine

Dextromethorphan



Pharmaceuticals

- Anti-depressants
- Anti-psychotics

Oxycodone

Fentanyl

What's a Drug?

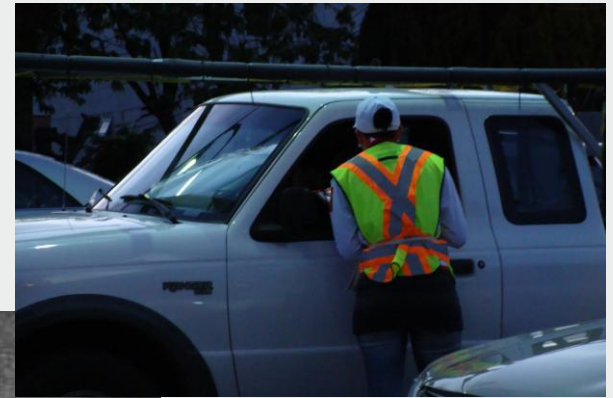
A “Drug” is any substance which, when taken into the human body, can impair the ability of the person to operate a vehicle safely.

Surveillance Windows on the problem

- Self-report surveys
- Police charges

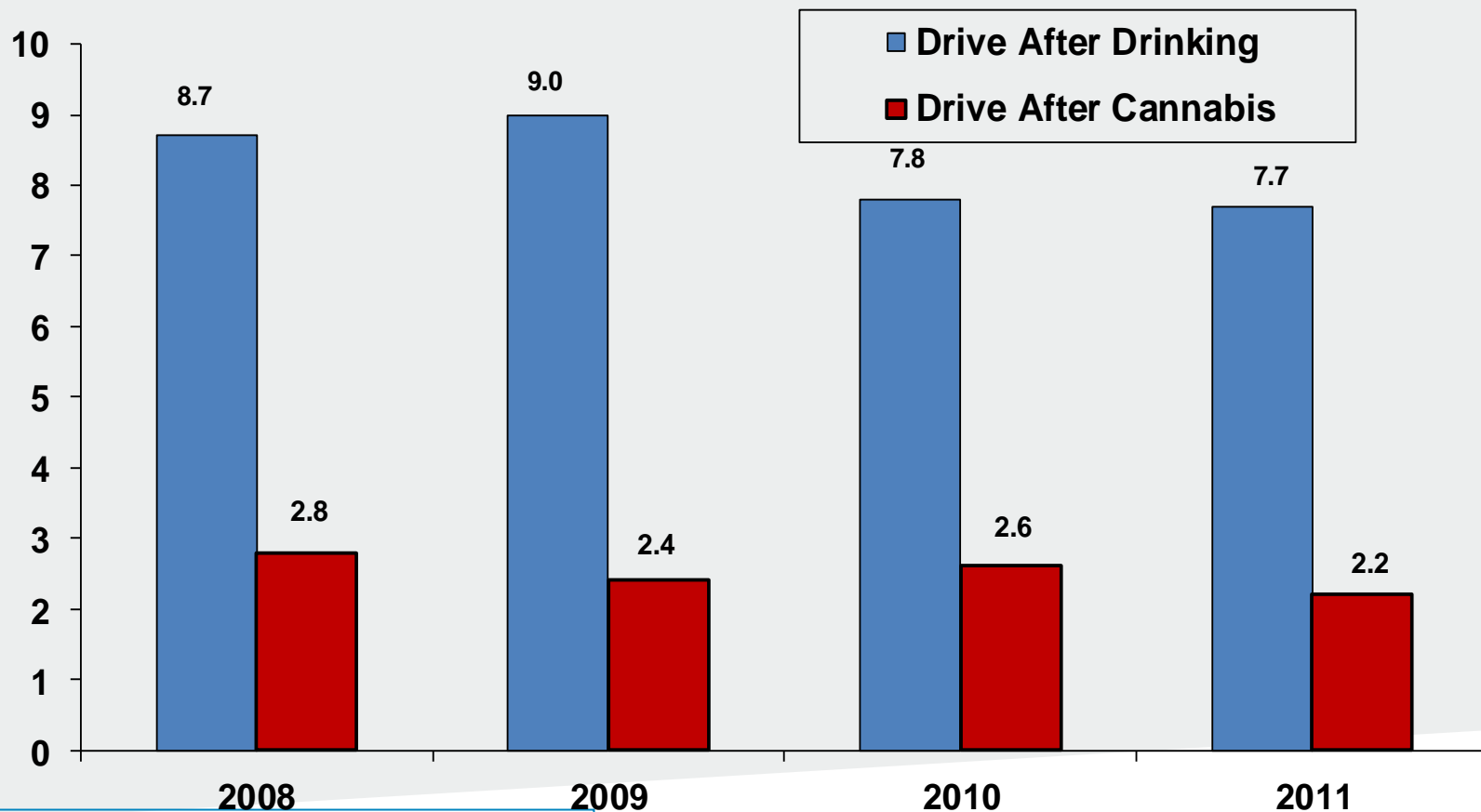


- Roadside surveys



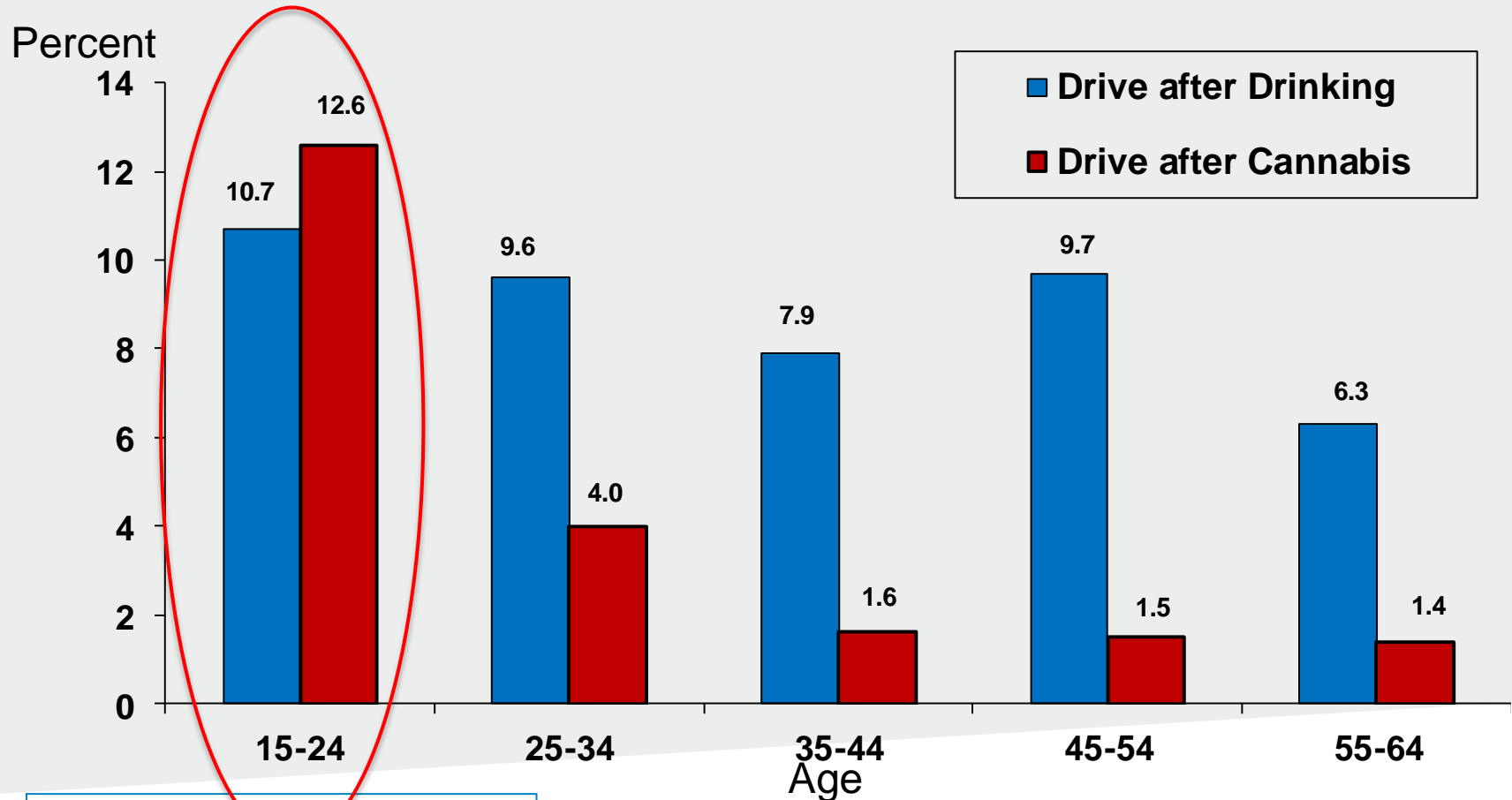
- Crash-involved drivers

Self-report Data



Source: Health Canada - CADUMS
2008 - 2011

Driving after Alcohol or Cannabis According to Age



Source:
Health Canada - CADUMS 2011

Roadside Surveys

- **BC 2008, 2010, 2012**
- **Collected oral fluid samples as well as breath**
- **> 70% of drivers provide a sample**
- **Sent to a lab for analysis**
- **Tested for:**
 - **Cannabis**
 - **Cocaine**
 - **Opiates**
 - **Amphetamine**
 - **Benzodiazepines**



Roadside Surveys

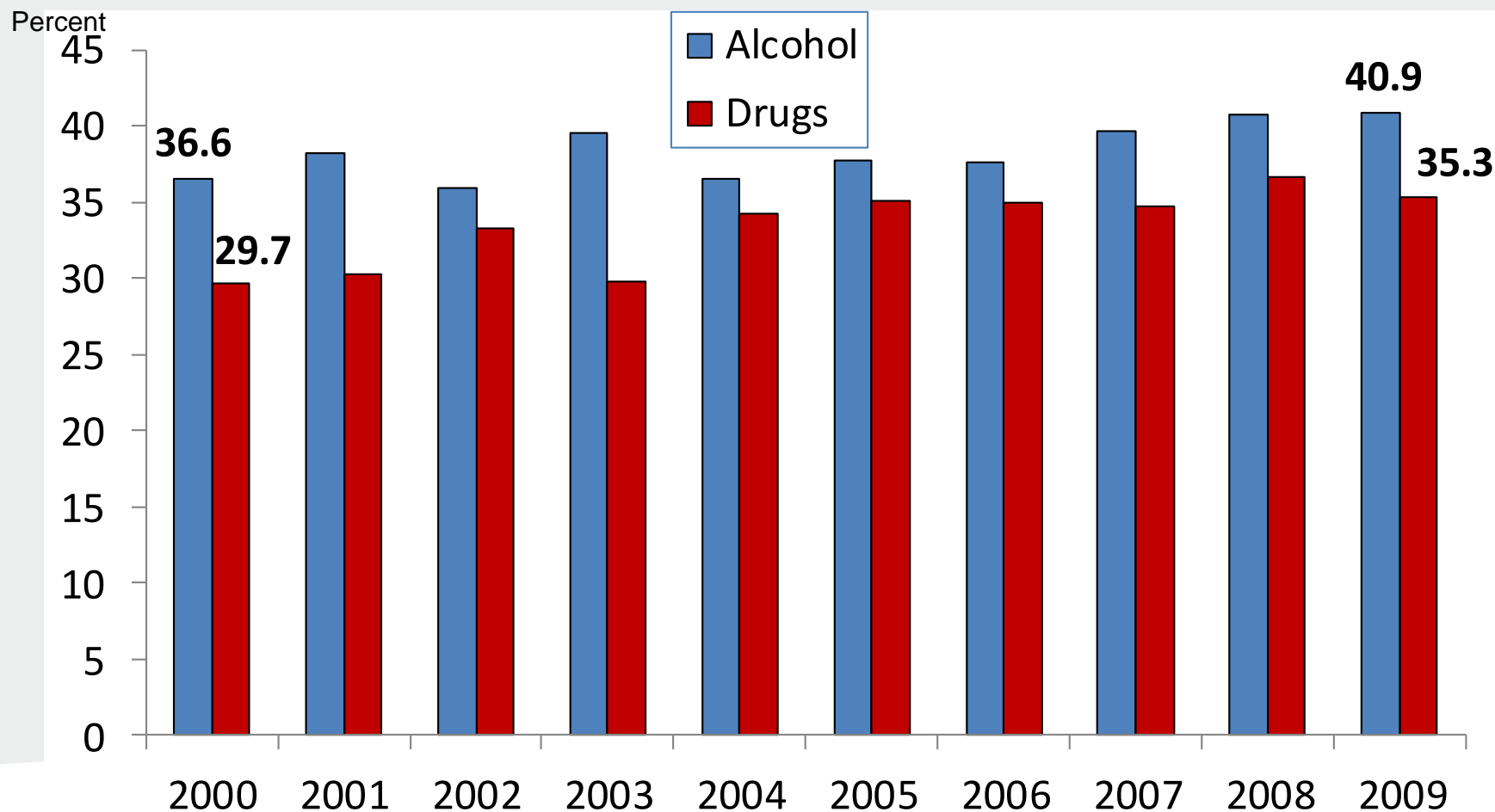
- **Drug Positive = 8.1%**
 - **Cannabis**
 - **Cocaine**
 - **Opiates**



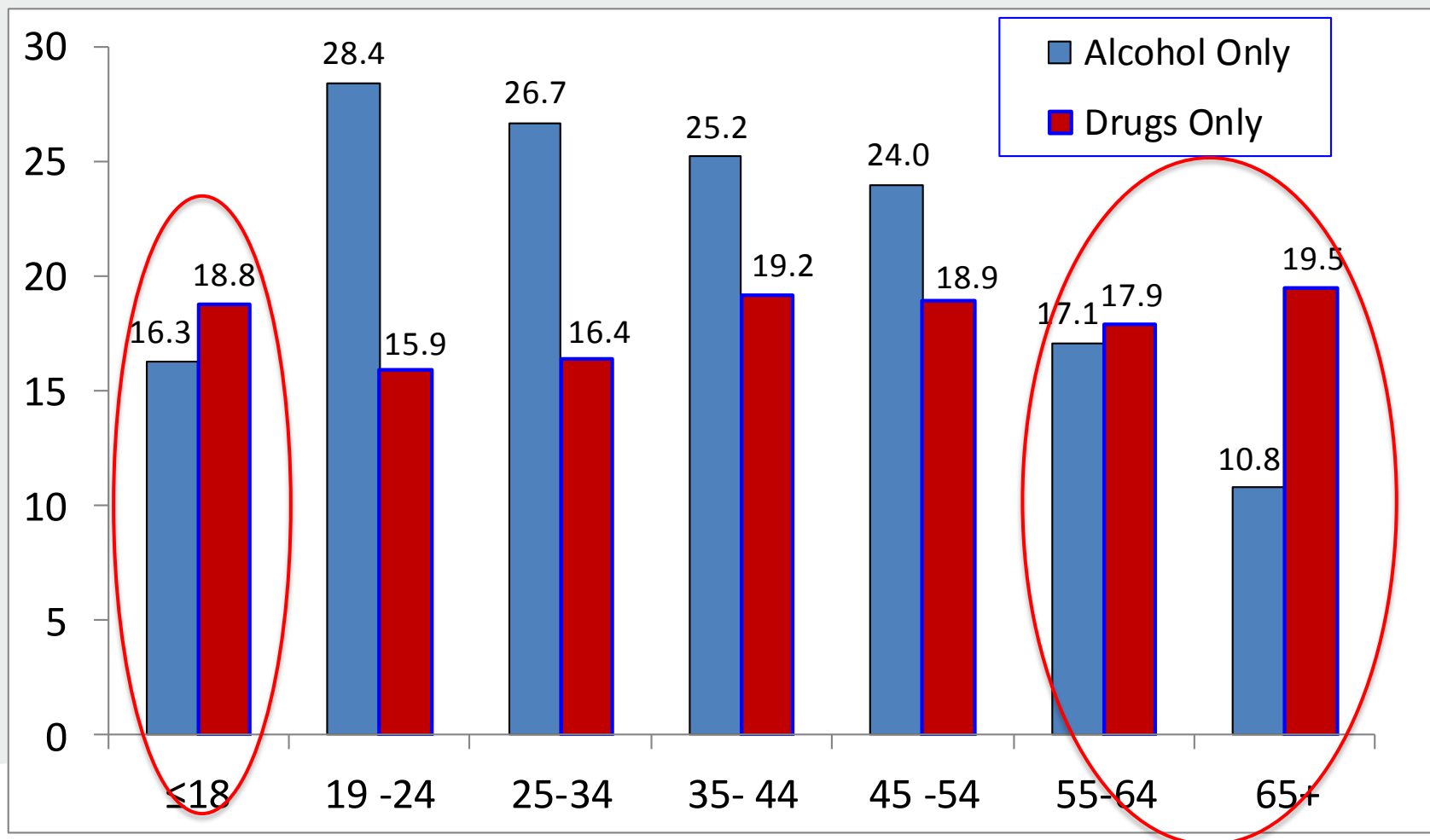
Fatally Injured Drivers

- **Substances classified into 7 categories used by the Drug Evaluation and Classification program**
 - **CNS Depressants (e.g., benzodiazepines)**
 - **Inhalants (e.g., toluene, nitrous oxide)**
 - **Dissociative Anaesthetics (e.g., ketamine, PCP)**
 - **Cannabis**
 - **CNS Stimulants (e.g., cocaine, amphetamines)**
 - **Hallucinogens (e.g., LSD, ecstasy)**
 - **Narcotic Analgesics (e.g., codeine, oxycontin)**

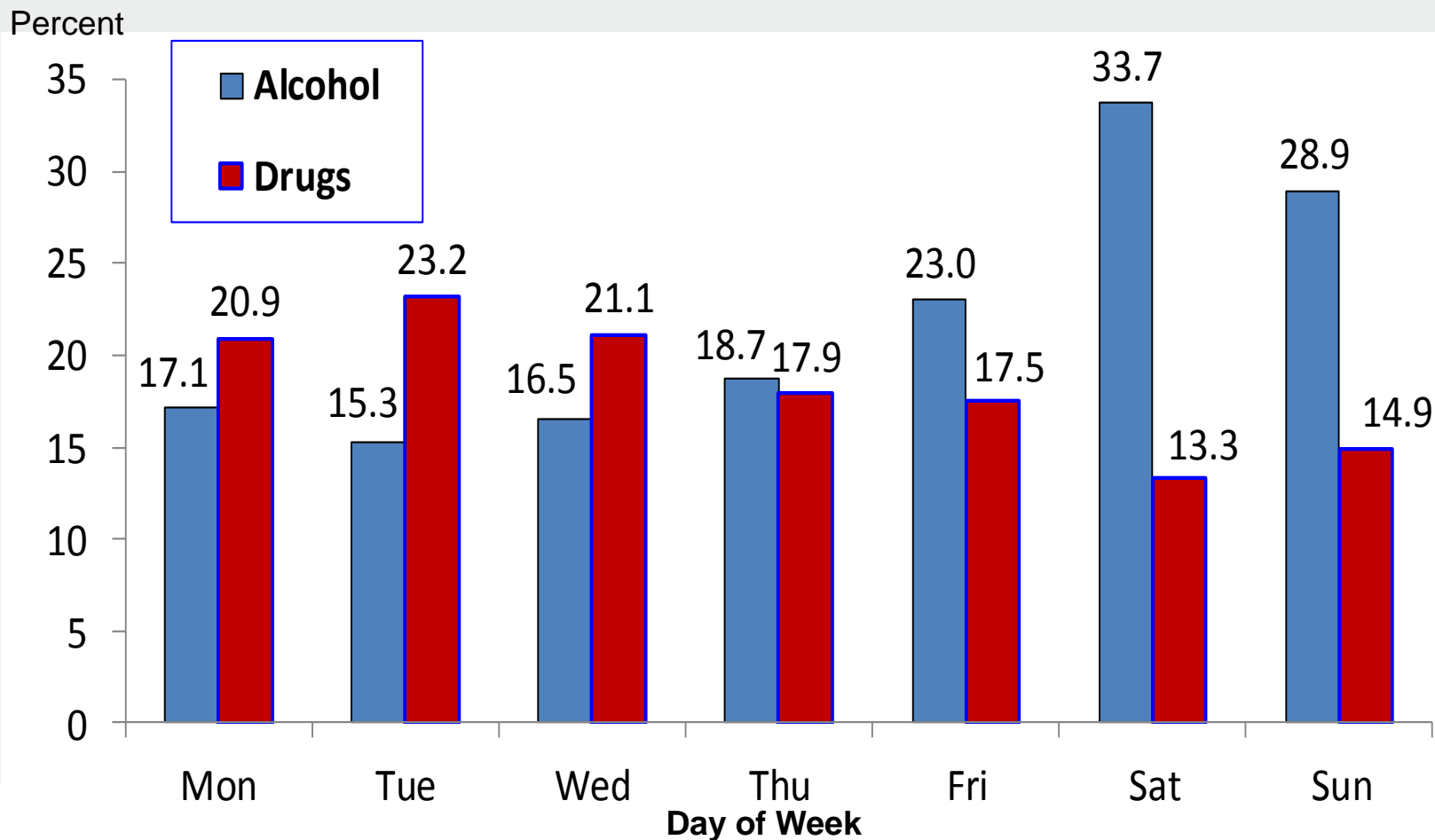
Drug and Alcohol Use Among Fatally Injured Drivers



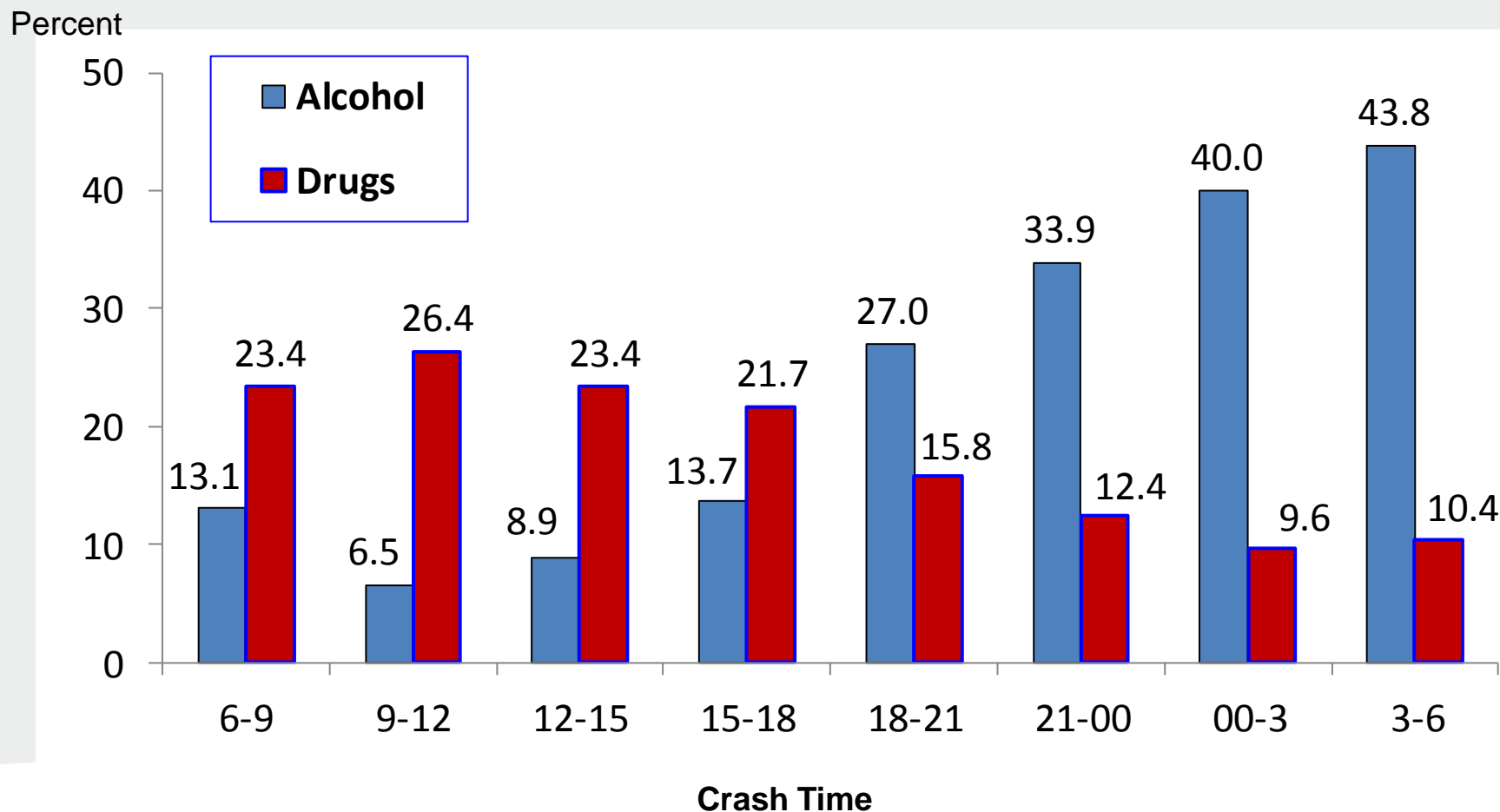
Drug and Alcohol Positive Driver Fatalities According to Age



Driver Fatalities Positive for Drugs or Alcohol According to Day of Week

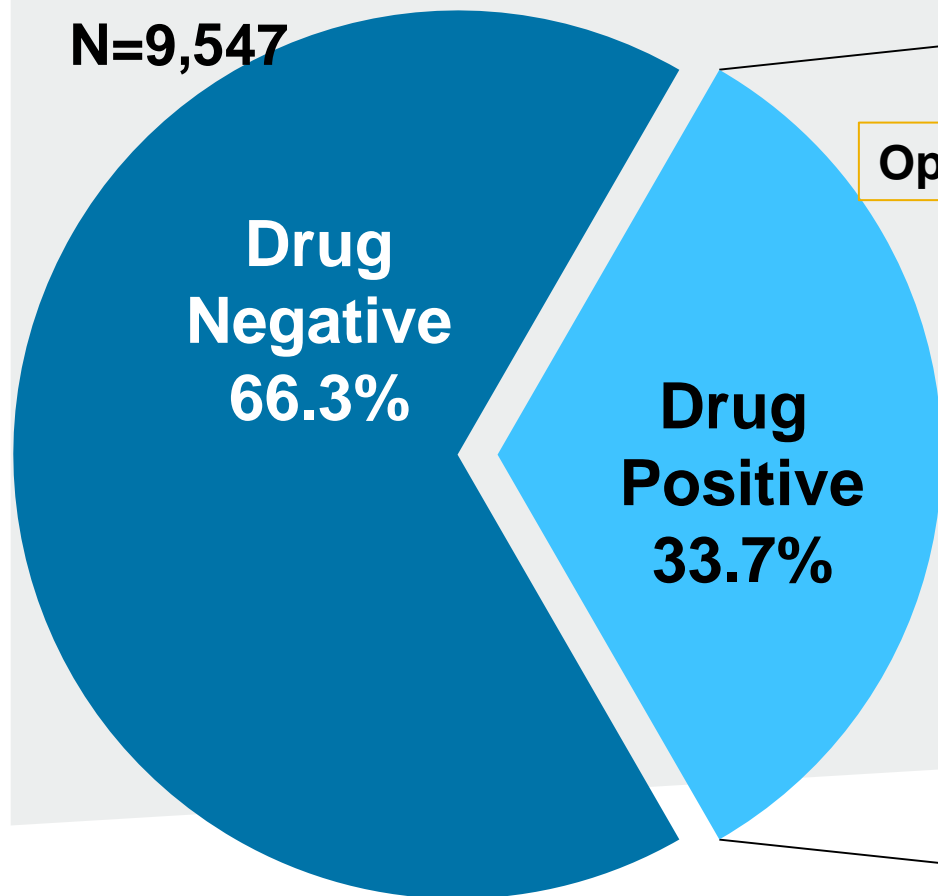


Percent of Driver Fatalities Positive for Drugs or Alcohol Positive According to Time of Crash



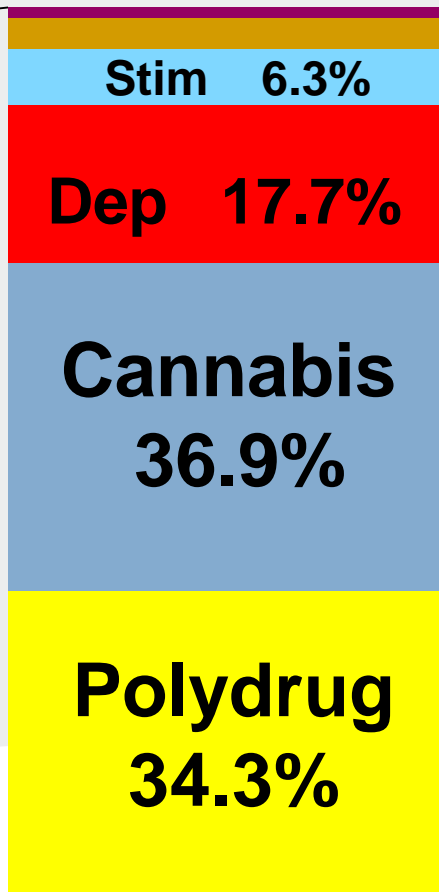
Drugs Among Fatally Injured Drivers: Canada 2000-2010

Tested Cases
N=9,547

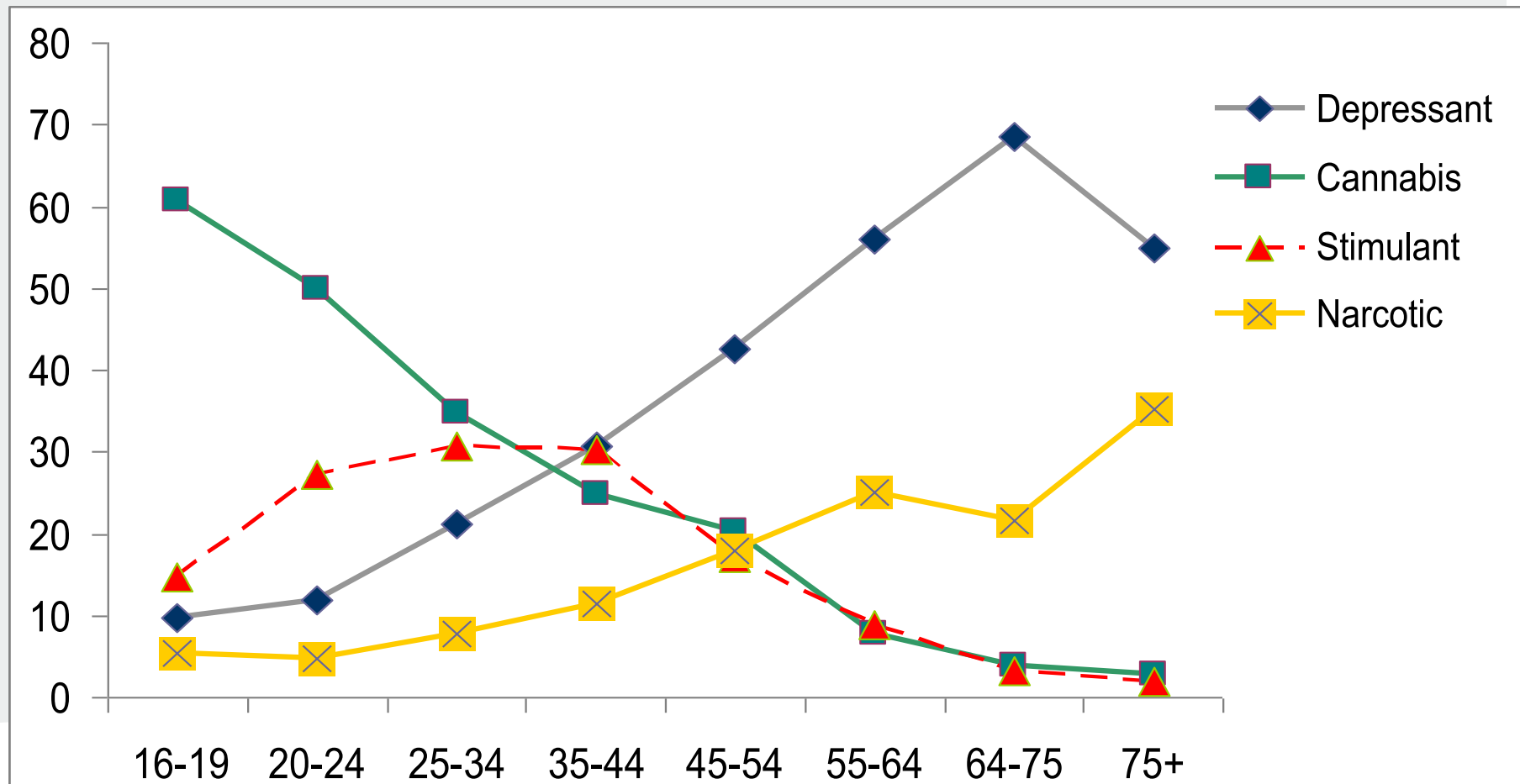


Opiates 3.5%

Drug Type



Drug Use According to Age Group



Key Action Areas

1. Legislation/Policy

- *What is it we're trying to control?*
- *Administrative Sanctions*

2. Surveillance

- *Understand the magnitude and nature of the problem*

3. Enforcement

- *Drug Evaluation and Classification Program*

4. Prevention

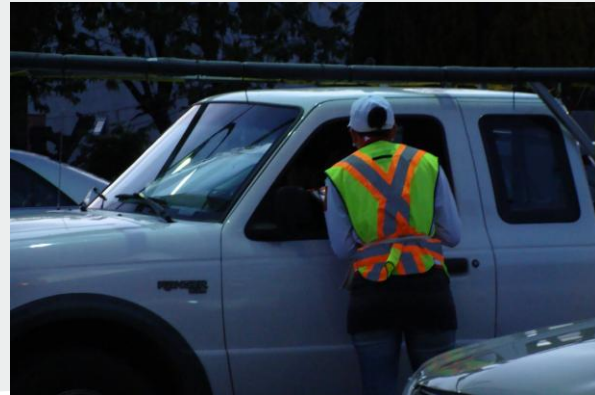
- *Target groups*
- *Focus*

Policy and Legislation

- **Keep focus on road safety, not drug control**
- **Criminal Code Amendments 2008 gave police the powers and tools necessary to enforce drug-impaired driving**
- **Provincial sanctions lag behind, creating disparity**
- **Administrative suspensions**
- **SK provides 24 hr suspension for failing SFST**

Surveillance

- **Need to know more about the nature and magnitude of the problem**
- **Monitor drug use among drivers involved in crashes**
 - Coroner data
 - Hospital data
 - Police data
- **Roadside survey**



Enforcement

- **2008 Legislation provided police with authority to demand a driver submit to:**
 - **Standardized Field Sobriety Test (SFST)**
 - **Drug Influence Evaluation by a Drug Recognition Expert (DRE)**
- **SK has 27 active DREs**

SFST

- Horizontal Gaze Nystagmus
- One-leg Stand
- Walk-and-Turn



Drug Evaluation and Classification (DEC)

- **Systematic and standardized assessment of drug influence**
- **12-step process assessing both clinical and psychophysical indicators of drug influence**
- **Purpose is to determine impairment and the drug category responsible for the impairment**
- **Concludes with the demand for a sample of bodily fluid for analysis of drug content to confirm officer's opinion**
- **2-week training course plus certification as a Drug Recognition Expert (DRE)**

DEC Program – Issues for Action

- **Training – lengthy, expensive, demanding**
- **Training will become responsibility of provinces**
- **Need to take steps to ensure strong, sustainable program with a core of DREs and instructors**
- **Enhance training for patrol officers in the detection of signs and symptoms of drug use that can form the basis of “suspicion” and “reasonable and probable grounds” of drug impairment**

Assessment and Rehabilitation

- **Screening and Assessment**
 - Specific to different patterns of drug use
- **Driving Without Impairment course**
 - 16 hours, \$150
 - Focus on alcohol
- **Treatment/Rehabilitation**
 - Brief interventions



Prevention

- Not simply a matter of changing “Don’t Drink and Drive” messages to include drugs
- Specific, targeted messages
 - Youth
 - Seniors
 - Health care providers
 - Those who mix drugs and alcohol
- Opportunities abound



Suggestions

- 1. Administrative sanctions**
- 2. Create structure for a strong DRE program**
- 3. Review Assessment/Treatment and ensure programs for drug-impaired drivers**
- 4. Facilitate Prevention activities**
- 5. Roadside Survey**