



Impaired Driving Behavioral Interventions Around the Globe

Impaired Driving Behavioral Interventions ICADTS Interest Group

March 13th, 10:00 am Eastern Time Zone, U.S. & Canada

What is ICADTS?

- ICADTS - The International Council on Alcohol, Drugs and Traffic Safety.
- ICADTS is an independent not-for-profit body whose only goal is to reduce mortality and morbidity brought about by misuse of alcohol and drugs by operators of vehicles in all modes of transport.
- To accomplish this goal, the Council sponsors international and regional conferences to collect, disseminate and share essential information among professionals in the fields of law, medicine, public health, economics, law enforcement, public information and education, human factors and public policy.



What is Impaired Driving Behavioral Interventions ICADTS Working Group - IDBIIG?

Mission

- To expand the awareness, adoption, and implementation of effective behavioral intervention to address impaired driving around the world.

Goals

- Facilitate educational events identifying effective interventions including pretrial services, early intervention services, treatment court guiding principles and other best practices that may be implemented in various jurisdictions around the world.
- Implementation of these services where requested. Ex. trainings/workshops for multiple countries at regional summits incorporating the knowledge and information developed from various entities around the world.

Global Survey

Initial survey responses included respondents across 14 countries.

- 79% jail is used as a current action upon arrest/conviction of an impaired driving offense.
- 38% no pretrial intervention programs are offered in their jurisdiction.
- 35% defendants are not screened and assessed for risk and needs at the pre-trial or pre-sentence stage, and 41% didn't know.
- 35% screening and assessment tools are not validated for impaired driving, and 47% didn't know.
- 52% no testing is conducted to monitor impaired driving offenders pre-trial, and 33% didn't know.

Our Speakers



Dr. Flavio Pechansky



Dr. Zahra Tabibi



Dr. Christine Wickens



Dr. James Fell

The gap is still wide:
comparing roadside approaches
between developing vs. developed
countries

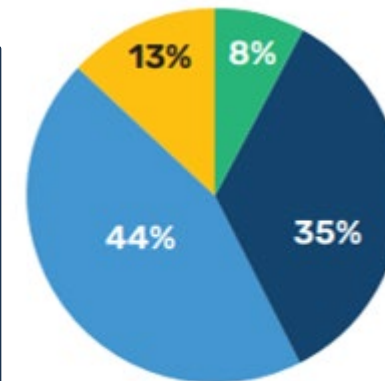
Flavio Pechansky, MD, PhD

Daiane Silvello, BA, PhD

Road fatalities vs. country by income

■ High-income ■ Upper middle-income ■ Lower middle-income ■ Low-income

- Around 60% of the vehicles are in middle and low-income countries
- They account for around 90% of the road fatalities
- Nine in 10 deaths occur in low- and middle-income countries



Estimated road fatalities

Potential explanations

- Poorer quality of roads and motor vehicles when compared with high income countries
- Knowledge and attitudes towards road safety and risk factors may be weaker in LMICs

Why don't northern American solutions to drinking and driving work in southern America?

Flavio Pechansky^{1,2} & Aruna Chandran³

Department of Psychiatry of the Federal University of Rio Grande do Sul, Rio Grande do Sul, Brazil,¹ Center for Drug and Alcohol Research, Hospital de Clínicas de Porto Alegre and Federal University of Rio Grande do Sul, Rio Grande do Sul, Brazil² and International Injury Research Unit, Departments of International Health and Pediatrics, Johns Hopkins University, Baltimore, MD, USA³

Case-based approach

- Case vignette proposed to 6 road safety professionals - Argentina, Australia, Brazil, Mexico, Norway, and United States
- Questions on how the vignette scenario might play out given the current state of DWI enforcement in these countries
- Enforcement actions and sanctions summarized by each professional and correlated with objective data (economic development parameters for each country)
- Professionals were chosen on convenience

Case example

Saturday, 2 a.m. Two male friends were at an end-of-year gathering in a bohemian neighborhood. Both had several beers along with shots of liquor through the course of the evening.

A Brazilian case example

Saturday, 2 a.m. Two male friends were at an end-of-year gathering in a bohemian neighborhood. Both had several beers along with shots of liquor through the course of the evening.

One decides to drive home instead of calling a taxi, and offers his friend a ride; the streets are empty. Both are aware of the local DWI laws, but decide to risk it. However, they are surprised and pulled into a police roadblock.

A Brazilian case example

Saturday, 2 a.m. Two male friends were at an end-of-year gathering in a bohemian neighborhood. Both had several beers along with shots of liquor through the course of the evening.

One decides to drive home instead of calling a taxi, and offers his friend a ride; the streets are empty. Both are aware of the local DWI laws, but decide to risk it. However, they are surprised and pulled into a police roadblock.

The driver's documents are in order, but the officer observes clear signs of intoxication and requests a breath test. The man refuses, invoking invasion of his individual rights based on the country's constitution.

In your country:

What would be the officer's attitude and actions from this point forward?


Which would be the repercussions/penalties as a result of the driver's behavior?

Brazil - Actions

- Refusal would be recorded
- License would be retained

Brazil - Actions

- Refusal would be recorded
- License would be retained
- Driver might call a licensed driver (who is requested to do a breath test) to drive his vehicle. If there are clear signs of intoxication: driver **may** be taken to a traffic precinct



Depends on officer training

Brazil - Actions

- A blood test may be required → may take hours until it is obtained
- Even if positive, the driver is free to go
 - If BAC is < 0.6 → administrative process
 - If higher → criminal process

Brazil - Penalties

- Administrative process: fine of US \$600, driving suspension for 12 months, driving course of 20 hours

Brazil - Penalties

- Administrative process: fine of US \$600, driving suspension for 12 months, driving course of 20 hours
- Without official signs of intoxication:
 - penalty may be commuted to community services + a 4-hour course

There are law firms specialized on pledges to reduce this type of sentencing

What's on the other side?



Australia - Actions

- In most circumstances, a driver cannot refuse a breath test → officers have the power to require or direct any person driving a vehicle to take a test

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- It is not a defense to refuse or fail to take a breath test on the basis that a driver wants to seek legal advice before providing a sample

Australia - Actions

- In most circumstances, a driver cannot refuse a breath test → officers have the power to require or direct any person driving a vehicle to take a test
- It is not a defense to refuse or fail to take a breath test on the basis that a driver wants to seek legal advice before providing a sample
- There are no implications for constitutional protection for this type of offense in Australia

Australia - Penalties

- Refusal: major offense
- Significant and serious penalties in terms of fines, driver's licence suspensions, mandatory ignition interlocks with any subsequent licensing, and terms of imprisonment will apply

Australia - Penalties

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- Significant and serious penalties in terms of fines, driver's licence suspensions, mandatory ignition interlocks with any subsequent licensing, and terms of imprisonment
- Penalties are significantly increased if it is a second traffic offence

Australia - Penalties

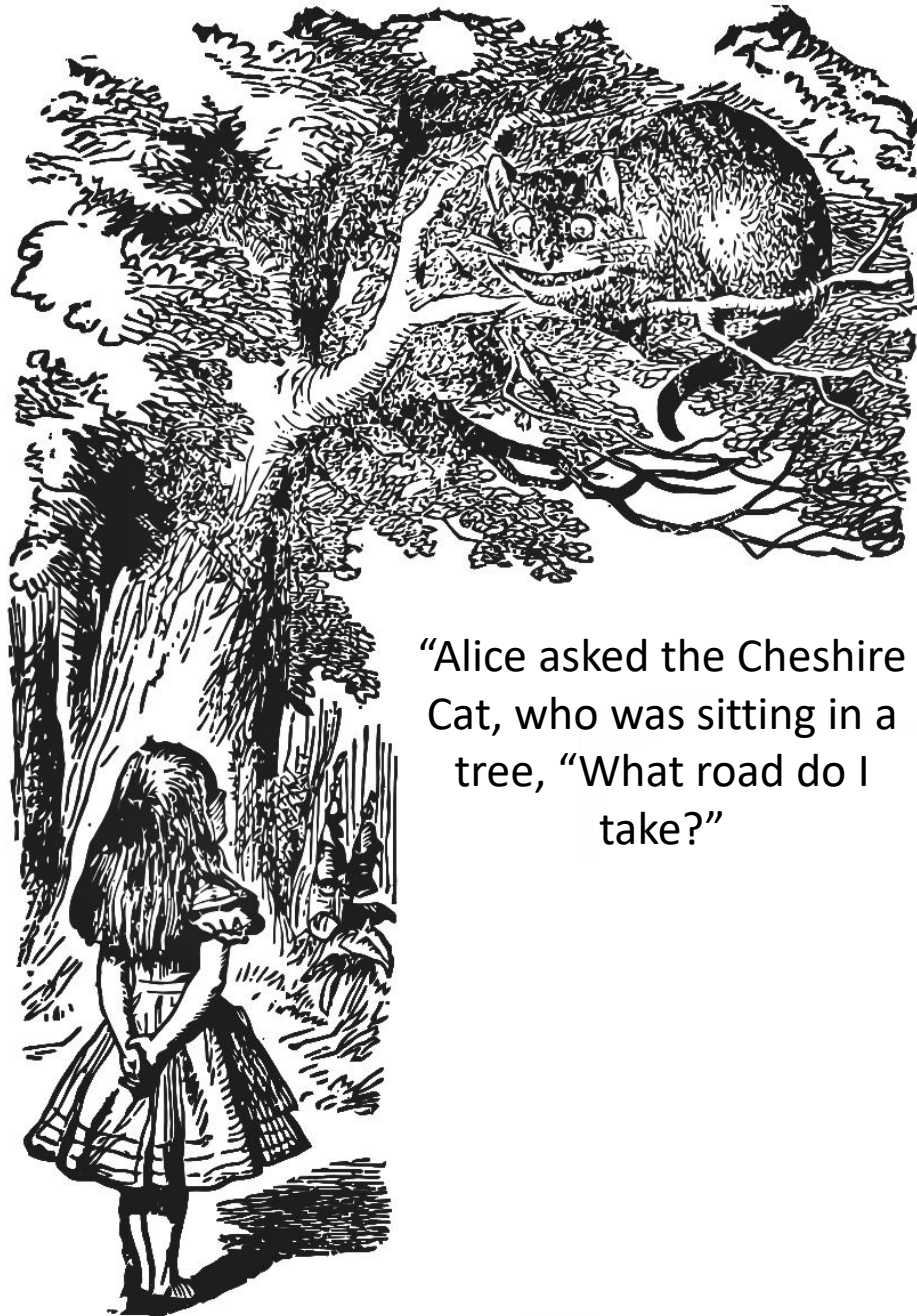
- Refusal: major offense
- Significant and serious penalties in terms of fines, driver's licence suspensions, mandatory ignition interlocks with any subsequent licensing, and terms of imprisonment
- Penalties are significantly increased if it is a second traffic offence
- Penalties for a refusal of a breath test or breath analysis are severe

Summary – six countries

Country	Individual vs. Public, Constitutional rights	Role of police officer
Argentina	Constitutional rights guaranteed, but law enforcement is strict. Tendency to penalize the individual when public health is an issue, but still a “fuzzy approach”	Marked difference between written law and practice, so officers are not supported in enforcing the law.
Mexico	“In between” approach – tendency to benefit the public	Enforcement is extremely variable, so traffic officers are not respected by the public.
Brazil	“Legalistic approach” – individualities come first, public health comes later, tendency to bureaucratize the process. Sanctions exist, but they are rarely enforced. If so – tendency towards “community service”	Can be questioned. Perception of enforcement varies due to a lot of subjective issues.
U.S.	Public health is protected through implied consent. Refusal to follow police instruction is considered punishable.	Laws vary by state, but in general, officers are authorized to protect the public.
Norway	Intoxicated driver seen as dangerous to public health. No margin for interpretations.	Absolute – the officer is charged with protecting public health.
Australia	No question about public vs. Individual rights. Penalties are severe from the start, and refusal is a serious punishable offense.	Final. No margin for discussion.

Income (GNI), Human Development Index (HDI), Safety and Trust

	<u>Classification by the World Bank</u>	<u>Gross National Income per capita</u>	<u>HDI Rank (2021)</u>	<u>PERCEPTION OF SAFETY* (%)</u>
<u>Brazil</u>	<u>Upper Middle Income</u>	8.140	0.754	73
<u>Mexico</u>	<u>Upper Middle Income</u>	12.868	0.758	66
Argentina	<u>High Income Non - OECD</u>	11.590	0.842	70
United States	<u>High Income OECD</u>	76.770	0.921	83
<u>Australia</u>	<u>High Income OECD</u>	60.840	0.951	83
<u>Norway</u>	<u>High Income OECD</u>	94.540	0.961	92



“Alice asked the Cheshire Cat, who was sitting in a tree, “What road do I take?”

Where should efforts be aimed at?

Campaigns?

Enforcement

Training

Police forces

Judges

Prosecutors

Data may be somewhat old...
But the concept still applies!!

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Impaired Driving Behavioral Interventions around the Globe: The Case of Iran

Zahra Tabibi & Mohadesseh Moradi
Ferdowsi University of Mashhad, Iran

The Impaired Driving Behavioral Interventions - ICADTS Interest Group
(IDBIIG) - March 13th 2024



Iran

1. **Iran** is located in West Asia
2. **Borders** with 7 countries and the Caspian Sea, Persian Gulf, and Gulf of Oman.
3. **Area: 1,648,000** square kilometres
4. **Iran's population:** over 84 million
5. **Official language** in Iran: **Persian**
6. **Religious: 98% Muslim**



Mashhad

- Mashhad is located Northe East of Iran
- Population: over 3,000,000
- The second largest city and spiritual centre



Ferdowsi University of Mashhad



Founded **1949**

Over **25000** students

The **third** oldest university

Ferdowsi is a Persian poet and the author of Shahnameh

Introduction: drug & alcohol use in Iran

2.7%

Use drugs in the past week (1)

5.6-12

Times more likely to use drugs in men compared to women (2,3)

0.1% - 3.8%

Consume alcoholic beverages in the last 30 days by province of residence

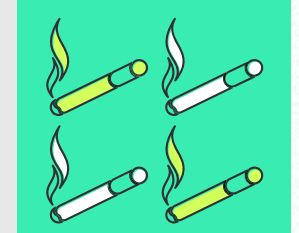
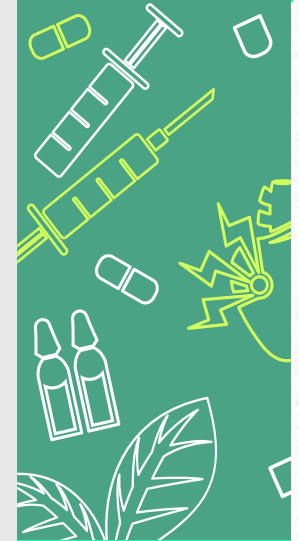


Use of any drug and alcohol is illegal along with ethical-ideological approach.

1. Moradinazar, M., Najafi, F., Jalilian, F., Pasdar, Y., Hamzeh, B., Shakiba, E., ... & Mirzaei-Alavijeh, M. (2020). Prevalence of drug use, alcohol consumption, cigarette smoking and measure of socioeconomic-related inequalities of drug use among Iranian people: findings from a national survey. *Substance abuse treatment, prevention, and policy*, 15, 1-11.
2. Amin-Esmaili, M., Rahimi-Movaghar, A., Sharifi, V., Hajebi, A., Radgoodarzi, R., Mojtabai, R., ... & Motevalian, A. (2016). Epidemiology of illicit drug use disorders in Iran: prevalence, correlates, comorbidity and service utilization results from the Iranian Mental Health Survey. *Addiction*, 111(10), 1836-1847.
3. Rastegari, A., Baneshi, M. R., Hajebi, A., Noroozi, A., Karamouzian, M., Shokoohi, M., ... & Sharifi, H. (2023). Population size estimation of people who use illicit drugs and alcohol in Iran (2015-2016). *International journal of health policy and management*, 12.

Introduction: drug & alcohol use in Iran

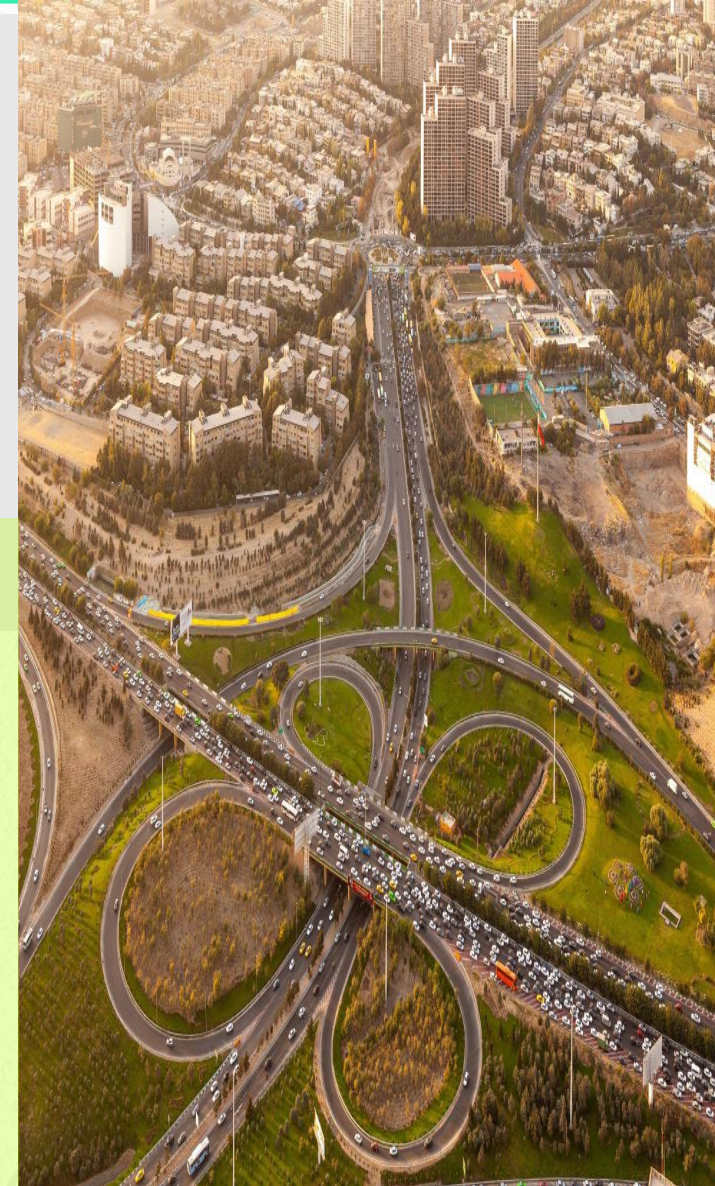
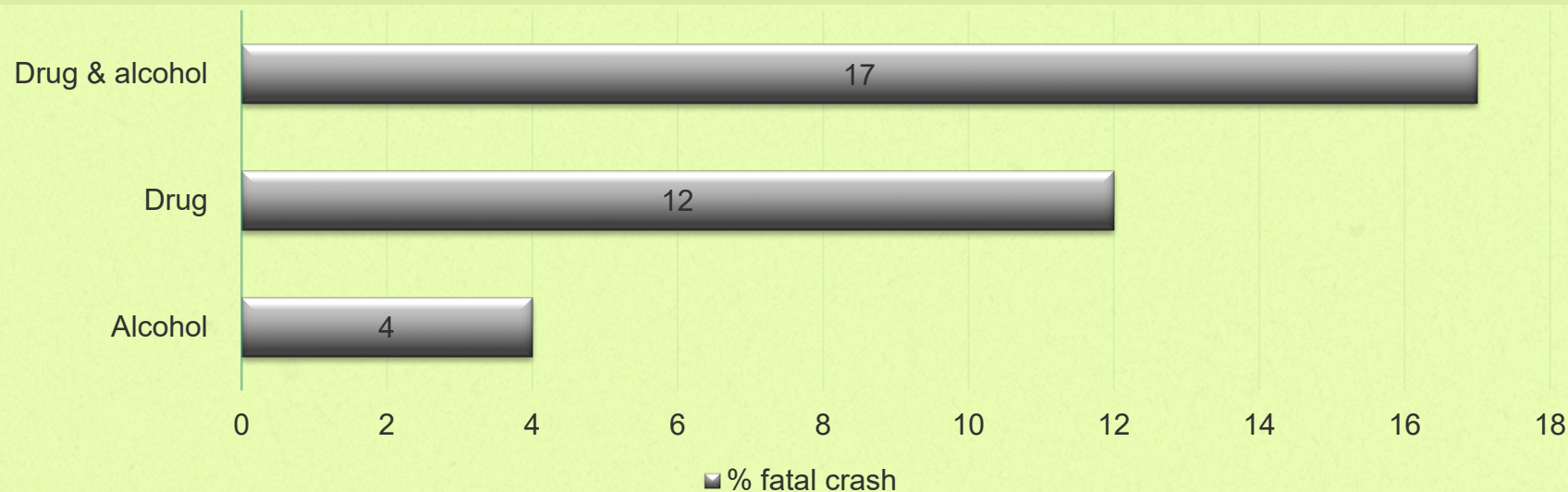
- In 1997: A change in crime view to harm reduction view and accept drug users as patients in specific conditions².
- Alcohol use is a crime: sentence of 80 lashes
- 2011-2012: A change alcohol-specific national strategy to prevent, reduce and treat alcohol use disorders¹.



Introduction: impaired driving in Iran

- Road traffic deaths in Iran 20.5 per 100.000 inhabitants¹
- Self-reported driving under drug influence is: 10.6% - 47.1%
- Estimated opioid related injuries & fatalities among drivers in Iran is: 8.4% - 51%

% Drug & Alcohol Fatal Crash



Aim & Objectives

1. What practices and initiatives are implemented for preventing impaired driving in Iran
2. Objectives:
 - i. What preventive measures are taken before arrest
 - ii. What preventive measures are taken after arrest
 - iii. What preventive measures are taken to rejoin community


Methods

1. A search of national and international published papers focusing on impaired driving in Iran:
 - a. data and information on completed or ongoing road safety initiatives and activities implemented
2. Review of official documents of the Islamic Penal Code
3. Review of criminal procedure of IRR
4. Personal consultation with relevant stakeholders



Methods

Applying within the five-pillar matrix of the Decade of Action for Road Safety coordinated by the United Nations Road Safety Collaboration:

- a. Pillars 1: Road Safety Management
 - b. Pillar 2: Safer Roads
 - c. Pillar 3: Safer Vehicles
 - d. Pillar 4: Safer Road Users
 - e. Pillar 5: Post-crash Response
- 

What preventive measures are taken before arrest

Pillars 1: Road Safety Management:

1. Drug & Alcohol use & driving is illegal (Crime) = zero tolerance
 - a. Police can stop when suspicious of impaired driving (2023)
 - i. Use breathalyzer and saliva test (limit: 0/02)
 - ii. Use rapid drug use test

What preventive measures are taken before arrest

Pillar 4: Safer Road Users

1. Health examination to prevent issuing driving license for individuals with addiction (positive urine result).
 - a. For the second level driving certificate = physician decides
 - b. For the first level driving certificate = compulsory
 - c. For public drivers = periodical drug test compulsory

What preventive measures are taken after arrest

Since 2022

Pillar 1: Road Safety Management



Police can stop suspicious driver
Use breathalyzer and saliva test (limit: 0/02)
Use rapid drug use test



Fine, five times more than the highest fine indicated in article 7



Suspension of driving license for 6 months



10 demerit score for car & 20 for public transport drivers

May refer to training course



Referring to court

What preventive measures are taken after arrest

Pillar 4: Safer Road Users



Training Courses:

- General educational training for any offending driver (e.g., speed or drug offender)
- No comprehensive educational program but could be on:
 - knowledge of traffic regulations
 - Driving attitudes, skills & behavior
 - Anger management

What preventive measures are taken after arrest: In Court

Pillar 5: Post-crash Response

If impaired
driving

1-5 years suspension of driving license

If no-fatal car
crash¹

at greatest 5 months imprisonment and/or 1-5 years
suspension of driving license and/or blood money

If fatal car crash

at greatest 3 years imprisonment (could be substituted by
money) & blood money and/or 1-5 years suspension of
driving license

The executive regulations of clauses a and b of article 10 of the traffic violations law. Approved on 2011- 9 -11 by the ministers who are members of the Social Affairs and Electronic Government Commission

1. Articles 714-717 of the Islamic Penal Code (Punishment Law)



What preventive measures are taken after arrest: In Court

Pillar 5: Post-crash Response

- **Procedure & substitute measures for imprisonment:**
 - Social workers report: evaluating economic, family and social situation of the offender
 - Physician & Psychiatrist report: evaluating mental health of the offender
 - If under 18 years (1999): Presence of psychologist & Social scientist in court⁴
- **Under supervision as an alternative to prison¹**
 - Referring to community services² (e.g., in welfare and medical systems) (2013)
 - Daily monetary punishment and equalized³ (2013)

1. Article 83 of the Penal Code
2. Article 84
3. Article 85 & 86
4. Article 304



What preventive measures are taken to rejoin community

Pillar 4: Safer Road Users & Pillar 5: Post-crash Response

- Established road user insurance scheme.
- Rehabilitation care for drug abuse in prisons^{1,2}.
- The majority of Iran's provinces have an after-care center for prisoners returning to the community¹:



- 1- the establishment of government-supported residential therapeutic centers
- 2- the founding (in 1995) of a branch of Narcotics Anonymous (NA Iran) and NA support groups
- 3- the revival of outpatient clinics (2)



1. International Narcotics Control Board Report for 2006, E/INCB/2006/1, p. 71.

2. Calabrese J. Iran's war on drugs: holding the line. The Middle East Institute, Policy Brief. 2007 Dec 3;3:1-8

Conclusion: gaps & priorities

1. **Pillar 1: Road Safety Management: Limited national strategic plan (mainly legally oriented)**
2. Pillar 2: Safer Roads: No evidence of any activity
3. Pillar 3: Safer Vehicles: No evidence of any activity
4. **Pillar 4: Safer Road Users: limited evidence on activities to increase awareness on impaired driving through social marketing or trainings; Established national program on health examination; limited intervention specific for impaired driving**
5. **Pillar 5: Post-crash Response: Established legal response for impaired driving BUT no evaluation regarding efficiency & efficacy**

THANK YOU



References

1. Jafari, S., Mathias, R., Joe, R. S., Baharlou, S., & Nasr, A. (2015). Effect of law enforcement on drug abuse: A comparison of substance use in Pakistan, Afghanistan, Iran and Turkey. *Journal of Substance Use*, 20(4), 295-300.
2. Ekhtiari H, Noroozi A, Farhoudian A, Radfar SR, Hajebi A, Sefatian S, Zare-bidoky M, Razaghi EM, Mokri A, Rahimi-Movaghar A, Rawson R. The evolution of addiction treatment and harm reduction programs in Iran: a chaotic response or a synergistic diversity?. *Addiction*. 2020 Jul;115(7):1395-403.
3. Law for addition of 1 article to drug control law. , (2017).
4. Moeini B, Bashirian S, Moghimbeigi A, Kafami V, Mousali A. Effect of Educational Program to Decrease Substance Abuse among Suburban Bus Drivers Based on Theory of Planned Behavior. *Avicenna Journal of Clinical Medicine*. 2015;21(4):330-40.
5. .2 Moeini B ,Kafami V, Barati M, Abbas Mosali A. Application of Theory of planned behavior in predicting of drug abuse among Applicants for Driving License in Hamadan. *Police Cultural Studies*. 2015;1(3):23-43.
6. محمودی، سیما. 1398. مطالعه تطبیقی سیاست جنایی تقنینی ایران و آلمان در قبال جرائم و تخلفات رانندگی. کنفرانس بین المللی پژوهشهای دینی، علوم اسلامی، فقه و حقوق در ایران و جهان اسلام مجموعه مقالات دومین کنفرانس بین المللی پژوهشهای دینی، علوم اسلامی، فقه و حقوق در ایران و جهان اسلام



Back on Track:
The Remedial Program for
Impaired Driving Offenders in
Ontario, Canada

camh

Christine M. Wickens
Senior Scientist
Institute for Mental Health Policy Research

Impaired Driving Laws in the Criminal Code of Canada

Penalties			
Charge	1 st offence	2 nd offence	3 rd offence
<ul style="list-style-type: none"> Alcohol-impaired driving Having a Blood Alcohol Concentration (BAC) at or over 80mg per 100ml of blood within 2 hours of driving 	Mandatory minimum: \$1000 fine Maximum: 10 years imprisonment	Mandatory minimum: 30 days imprisonment Maximum: 10 years imprisonment	Mandatory minimum: 120 days imprisonment Maximum: 10 years imprisonment
<ul style="list-style-type: none"> Drug-impaired driving Having 5ng or more of THC per ml of blood within 2 hours of driving Any detectable level of LSD, psilocybin, psilocin, ketamine, PCP, cocaine, methamphetamine, 6-mam within 2 hours of driving Having 5mg or more of GHB per 1 litre of blood within 2 hours of driving 			
Combination <ul style="list-style-type: none"> Having a BAC of 50mg per 100ml of blood + 2.5ng or more of THC per 1ml of blood within 2 hours of driving 			
Refusal to comply with demand for sample	Minimum: \$2000 fine		
Drug-impaired driving - Summary conviction <ul style="list-style-type: none"> Having over 2ng but less than 5ng of THC per ml of blood within 2 hours of driving 	Maximum \$1000 fine		
Impaired driving causing bodily harm	<ul style="list-style-type: none"> Summary conviction: Maximum 2 years imprisonment less a day Indictment: Maximum 14 years imprisonment 		
Impaired driving causing death	<ul style="list-style-type: none"> Indictment: Maximum life imprisonment 		
First offence + BAC of 80-119mg	Mandatory minimum \$1000 fine		
First offence + BAC of 120-159mg	Mandatory minimum \$1500 fine		
First offence + BAC of 160mg or more	Mandatory minimum \$2000 fine		

Impaired Driving Laws in the Ontario Highway Traffic Act

Impairment penalties for all drivers

- with Blood Alcohol Concentration of **0.08 or more**
- who fail or refuse to comply with a demand for alcohol or drug testing
- who perform poorly during a Drug Recognition Expert evaluation

First time	<ul style="list-style-type: none">• immediate roadside 90-day suspension• 7-day vehicle impoundment• \$550 penalty
Second time	<ul style="list-style-type: none">• immediate roadside 90-day suspension• 7-day vehicle impoundment• education program (8 hours)• \$550 penalty
Third time	<ul style="list-style-type: none">• immediate roadside 90-day suspension• 7-day vehicle impoundment• treatment program (16 hours)• Ignition interlock condition for six months• \$550 penalty

Impaired Driving Laws in the Ontario Highway Traffic Act

Impairment penalties for all drivers

- with Blood Alcohol Concentration of **0.08 or more**
- who fail or refuse to comply with a demand for alcohol or drug testing
- who perform poorly during a Drug Recognition Expert evaluation

First conviction	<ul style="list-style-type: none"> • licence suspension of at least 1 year • mandatory education or treatment program • ignition interlock device for at least 1 year
Second conviction within 10 years	<ul style="list-style-type: none"> • licence suspension of at least 3 years • mandatory education or treatment program • ignition interlock device for at least 3 years • mandatory medical evaluation: do you meet requirements for driving in Ontario
Third conviction within 10 years	<ul style="list-style-type: none"> • lifetime licence suspension, may be reduced after 10 years • mandatory education or treatment program • ignition interlock device for at least 6 years • mandatory medical evaluation: do you meet requirements for driving in Ontario
Fourth conviction within 10 years	<ul style="list-style-type: none"> • lifetime licence suspension, with no possibility of reduction

Impaired Driving Laws in the Ontario Highway Traffic Act

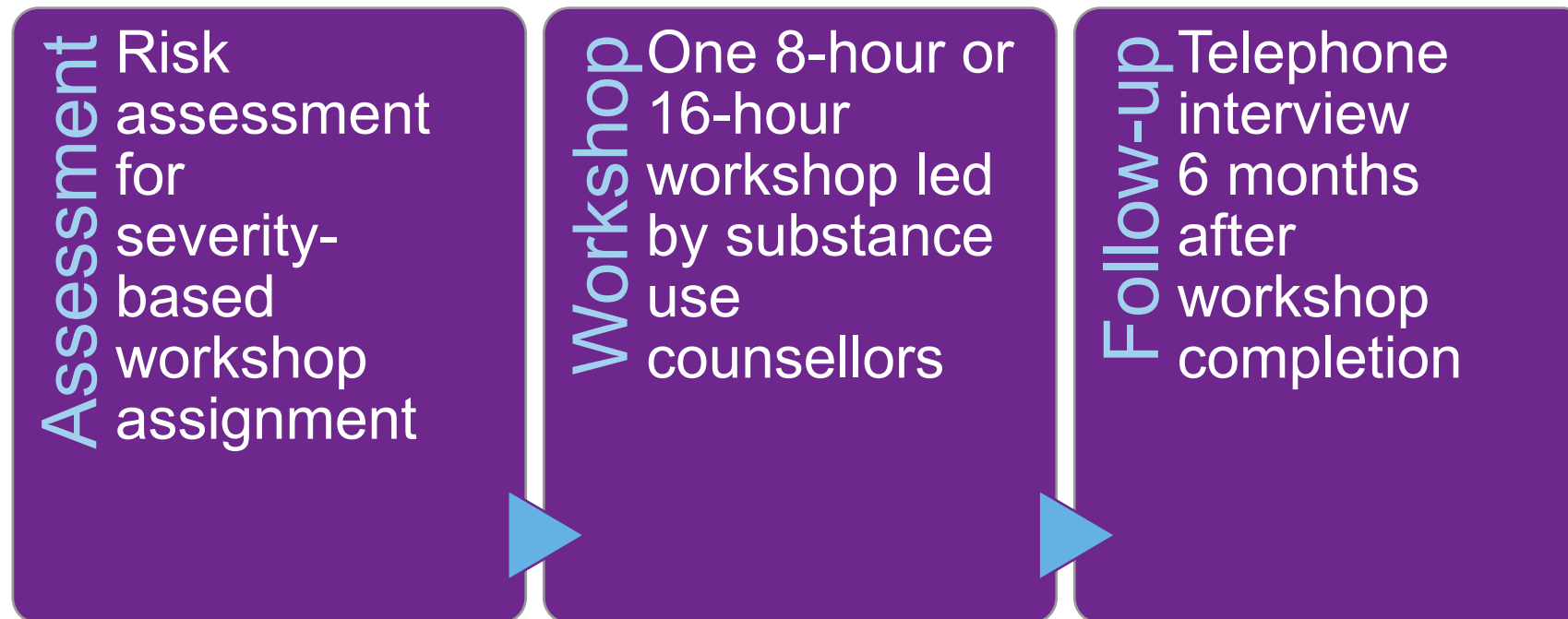
Warn range penalties for all drivers

- with a Blood Alcohol Concentration (BAC) between **0.05-0.079**
- who fail the Standard Field Sobriety Test
- Or novice drivers exceeding zero blood BAC or THC

First time	<ul style="list-style-type: none">• 3-day immediate licence suspension• \$250 penalty
Second time	<ul style="list-style-type: none">• 7-day immediate licence suspension• education program (8 hours)• \$350 penalty
Third time	<ul style="list-style-type: none">• 30-day immediate licence suspension• treatment program (16 hours)• Ignition Interlock condition for six months• \$450 penalty

Back on Track (BOT)

- Ontario's remedial education program for impaired driving offenders
- Required for full reinstatement of driving privileges after suspension
- Currently offered at 30 sites across the province

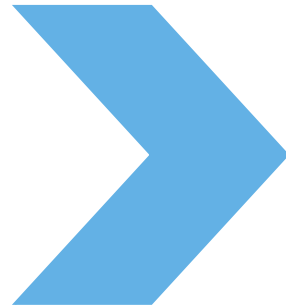


- The 3 components of BOT can be completed in less than 1 year.

BOT Assessment Interview

- 30-minute interview to assess substance use, related problems, and risk of recidivism
- Assignment to the 8-hour vs 16-hour workshop based on assessed addiction severity criteria

Assessment Risk
assessment
for
severity-
based
workshop
assignment

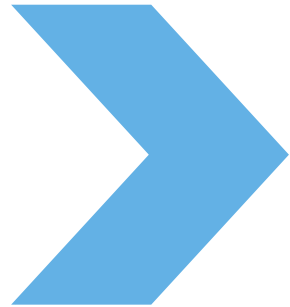


Includes:

- **Alcohol Dependence Scale (ADS)**
- **Drug Abuse Screening Test (DAST)**
- **Research Institute on Addictions Self-Inventory (RIASI)**
- **Psychoactive Drug Use History**
- **Adverse Consequences of Substance Use Scale (ACSUS)**

BOT Educational Workshop

Workshop One 8-hour or
16-hour
workshop led
by substance
use
counsellors

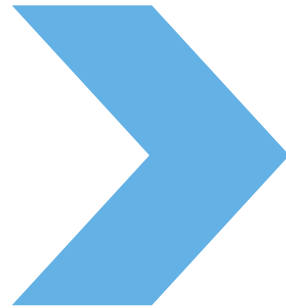


- 22 components in the 8-hour and 27 components in the 16-hour workshop including:
 - How alcohol is processed in the body
 - Blood alcohol concentration
 - The standard drink
 - Effects of alcohol and other drugs on driving
 - Impaired driving laws and penalties
 - How to prevent impaired driving

BOT Follow-up Interview

- Completed 6 months following workshop completion

Follow-up
Telephone
interview
6 months
after
workshop
completion



Includes:

- **Psychoactive Drug Use History**
- **Adverse Consequences of Substance Use Scale (ACSUS)**

Back on Track (BOT)

Convicted Criminal Code Offenders (BAC \geq 0.08)	Criminal Code Offenders NOT Convicted and Warn Range Offenders (BAC 0.05 to 0.079)
<ul style="list-style-type: none"> ➤ Assessment ➤ Either: <ul style="list-style-type: none"> ▪ 8-hour workshop, or ▪ 16-hour workshop ▪ Depending on their risk category (determined by the Assessment) ➤ Follow-up interview 6 months later 	<ul style="list-style-type: none"> ➤ Second-time offenders: 8-hour workshop ➤ Third-time offenders: 16-hour workshop



BOT Evaluation Measures

Convicted Criminal Code Offenders ONLY

- Psychoactive Drug Use History
 - # of days in last 90 days using
- Adverse Consequences of Substance Use Scale (ACSUS)
 - 8 domains: legal, mood, relationship, etc.

All Offenders

- Pre-Workshop Questionnaire:
 - Attitudes
 - Negative Affect
 - Self-efficacy
 - Behavioural Intentions
- Post-Workshop Questionnaire
 - Same as pre-workshop questionnaire
- Client Satisfaction
- Presentation Clarity



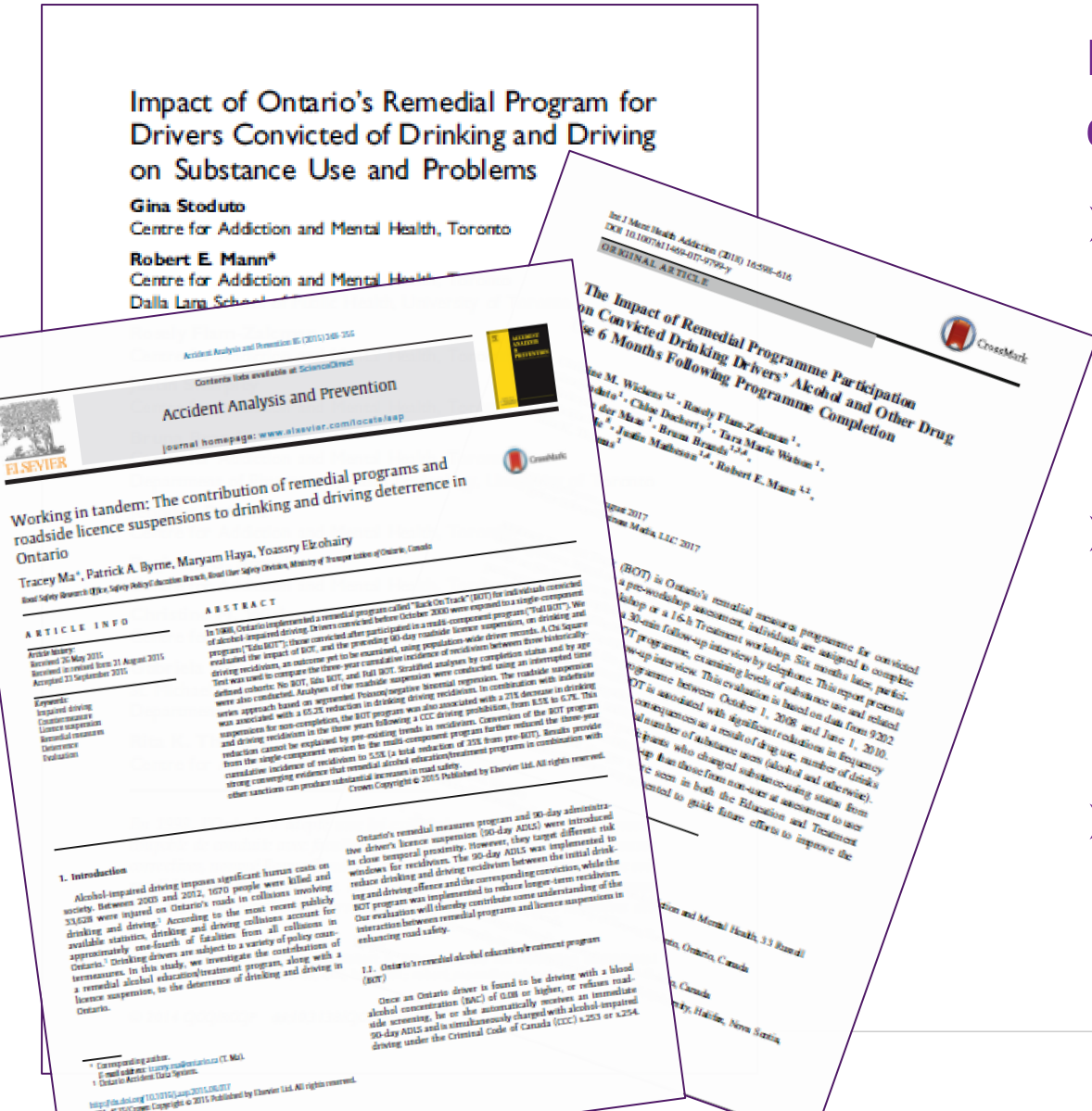
BOT Evaluations

Impact of Ontario's Remedial Program for Drivers Convicted of Drinking and Driving on Substance Use and Problems

Gina Stoduto
Centre for Addiction and Mental Health, Toronto
Robert E. Mann*
Centre for Addiction and Mental Health, Toronto
Dalla Lana School of Public Health, University of Toronto

Evaluations of the BOT program have demonstrated:

- Improvement in knowledge, attitude, negative affect, self-efficacy and behavioural intentions immediately following workshop participation (pre- to post-workshop change) (Wickens 2019)
- Reductions in alcohol and other drug use and associated problems (eg, legal, memory, relationship problems) at 6-month follow-up (Stoduto et al., 2014; Wickens et al., 2018)
- Reduced provincial recidivism rate by about one third following introduction of BOT (Ma et al., 2015)



BOT Evaluations

Evidence of the Predictive Validity of the RIASI:

- There are strong associations between scores on the RIASI and measures of:
 - alcohol and other drug use,
 - problems related to that use, and
 - measures of health service utilization six months later.
- (Mann et al, 2009; Shuggi et al, 2006)



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Predictive Validity of the RIASI: Alcohol and Drug Use and Problems Six Months Following Remedial Program Participation

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Abstract: The ability of screening instruments for convicted drinking drivers to predict subsequent alcohol and drug-related problems rarely has been studied. The predictive validity of the Research Institute on Addictions Self-Inventory (RIASI) was investigated in a sample of 6,003 convicted drinking drivers who were participating in Back on Track (BOT), Ontario's remedial measures program for convicted drinking drivers. All BOT participants complete an assessment (which includes the RIASI), followed by a brief education or treatment program, and concluded 6 months later by a follow-up interview. The follow-up interview collects information on self-reported alcohol and other drug use and problems, and contacts with other health care providers in the 90 days prior to the follow-up contact. The ability of scores on the RIASI to predict these measures was assessed. The results revealed that, for almost all comparisons, individuals who used alcohol and other drugs, reported more substance-related problems at follow-up, and reported more contacts with other health and addictions providers had significantly higher scores on the RIASI total score and

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BOT Evaluations

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Evidence from regression-discontinuity analyses for beneficial effects of a criterion-based increase in alcohol treatment

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Key words

regression-discontinuity analysis, drinking drivers, alcohol treatment, assessment, treatment assignment

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Abstract

Brief interventions effectively reduce alcohol problems; however, it is controversial whether longer interventions result in greater improvement. This study aims to determine whether an increase in treatment for people with more severe problems resulted in better outcome. We employed regression-discontinuity analyses to determine if drinking driver clients ($n = 22,277$) in Ontario benefited when they were assigned to a longer treatment program (8-hour versus 16-hour) based on assessed addiction severity criteria. Assignment to the longer 16-hour program was based on two addiction severity measures derived from the Research Institute on Addictions Self-inventory (RIASI) (meeting criteria for assignment based on either the total RIASI score or the score on the recidivism subscale). The main outcome measure was self-reported number of days of alcohol use during the 90 days preceding the six month follow-up interview. We found significant reductions of one or two self-reported drinking days at the point of assignment, depending on the severity criterion used. These data suggest that more intensive treatment for alcohol problems may improve results for individuals with more severe problems.
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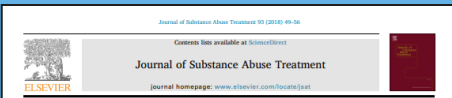
Severity-based Assignment to More Intensive Treatment is Beneficial:

- Based on regression discontinuity analyses, clients with higher problem levels assigned to longer programming (16- vs 8-hour workshop) showed a significant reduction in drinking days at 6-month follow-up, attributable to program assignment. (Flam-Zalcman et al, 2013)

BOT Evaluations

Moderators of Severity-Based Assignment Benefit

- Severity-based assignment benefit is moderated by five of the RIASI factors: Negative Affect, Sensation Seeking, High Risk Lifestyle, Alcohol Problems, and Family History. (Wickens et al, 2018)



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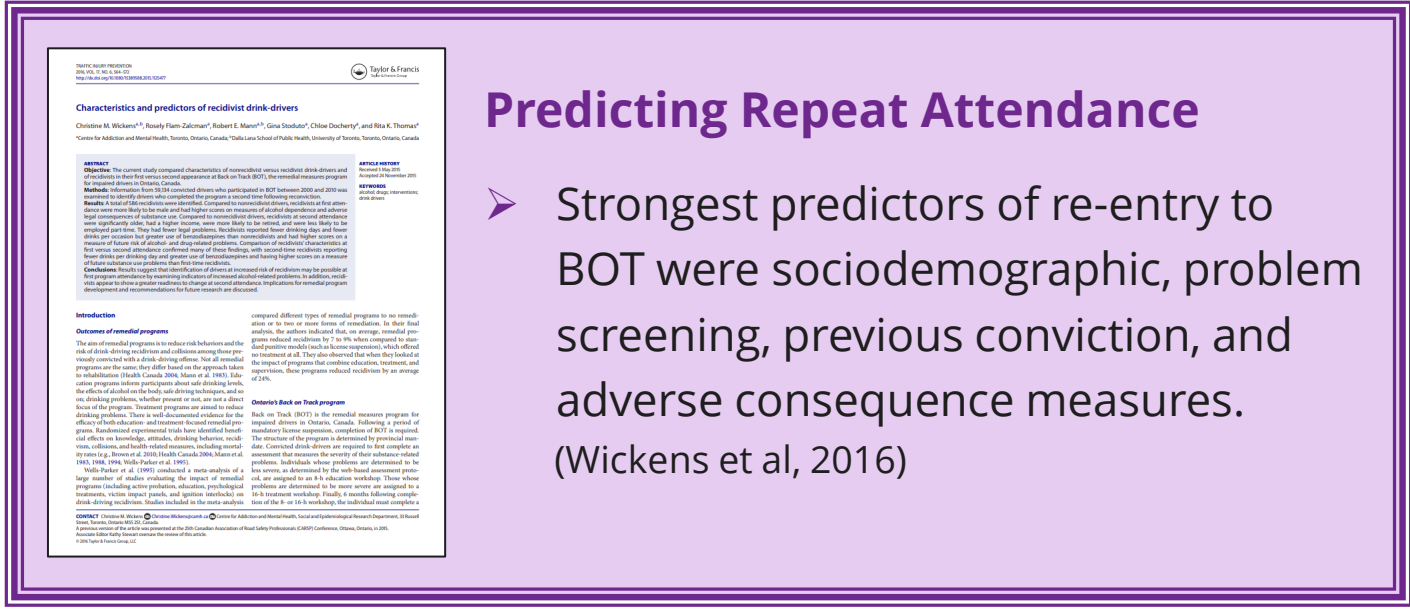
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Abstract
Remedial programs for impaired driving offenders have proven valuable in reducing subsequent alcohol and other drug use and preventing recidivism in this population. Many of these programs are based on a severity-based assignment scheme, where individuals assessed to have greater problems or be at higher risk are assigned to longer, more intensive interventions. Recent research using response discontinuity analyses, provided support for severity-based assignment schemes in demonstrating that those with higher problem or risk levels assigned to longer and more intensive programming showed a significant reduction in drinking days over a follow-up interval, attributable to program engagement. Response discontinuity analyses can also be used to assess maintenance of the assignment benefit. We report an assessment of the impact of eight potential moderators of assignment benefit, derived from a factor analysis of the Research on Addiction Self-Recovery (RASRS) instrument. Five of the eight factors were found to moderate the assignment benefit: Negative Affect, Sensation Seeking, High Risk Lifestyle, Alcohol Problems, and Family History. The significance of these results for developing more effective program engagement procedures is discussed.

1. Introduction
Drinking-driving is a leading cause of alcohol-related deaths and injuries in the developed and developing world (e.g., Anderson, Chikara, & Liu, 2005). While in some parts of the world it is more common, there have been significant reductions in drinking-driving fatality rates that have been related to specific interventions (e.g., Strick, McLean, & Hinchey, 2014; Ma, Byrne, Strick, & Dunbar, 2013), the rate of deaths and injuries associated with this behavior remains unacceptably high (Corduneanu et al., 2009). One important response to the drinking-driving problem has been to introduce remedial programs for those apprehended and convicted (e.g., Long, Vaughan, & De Groot, 1983; O'Neil, 1997; Sagarin, Downs, McMillen, & Williams, 1995; Wilson, Ratten, Plummer, & Stoduto, 2013). Compulsory author or license for Motor Vehicle Policy Research, Centre for Addiction and Mental Health, St. Michael's Hospital, Toronto, Ontario M5S 2S2, Canada. E-mail address: christine@ckm.utoronto.ca (C.M. Wickens).

Multiple Warn Range (MWR) vs Criminal Code (CC) Offenders

- MWR offenders share a similar demographic profile to 1st-time CC offenders and report significantly higher recidivism risk than CC offender groups.
- Suggests that MWR offenders may include high-functioning problem-drinkers who are likely to continue their drink-driving behaviour and may escalate to a CC drink-driving offence. (Wickens et al, 2018)



Predicting Repeat Attendance

- Strongest predictors of re-entry to BOT were sociodemographic, problem screening, previous conviction, and adverse consequence measures. (Wickens et al, 2016)

Characteristics and predictors of recidivist drink-drivers
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Abstract
Objective: The current study compared characteristics of nonrecidivist versus recidivist drink-drivers and of recidivists in their first versus second appearance at Back on Track (BOT), the remedial measures program for impaired drivers in Ontario, Canada.

Methods: Information from 1034 convicted drivers who participated in BOT between 2004 and 2010 was used to identify drivers who completed the program, returned to BOT, or were convicted of another offence. Results: A total of 616 drivers completed the program, 170 returned to BOT, and 248 were convicted of another offence. Recidivists were more likely to be male and had higher scores on measures of alcohol dependence and adverse legal consequences of substance use. Compared to nonrecidivists, recidivists spent fewer drinking days and longer days per drinking day, had a higher income, were more likely to be married, and were less likely to be employed part-time. They had fewer legal problems, frequently reported fewer drinking days, and longer days per occasion but greater use of transportation than nonrecidivists. They had higher scores on a measure of lower risk of alcohol and drug-related problems. Comparison of recidivists' characteristics at their second appearance to their first appearance revealed that they were more likely to be recidivists reporting fewer drinks per drinking day and greater use of transportation and having higher scores on a measure of future substance use problems than their first appearance.

Conclusions: Results suggest that identification of alcohol at increased risk of recidivism may be possible at the program outset by measuring indicators of nonrecidivist alcohol-related problems in recidivists. Results also appear to indicate greater readiness to engage at second appearance. Implications for remedial program development and recommendations for future research are discussed.

Introduction
The most common program to reduce risk behaviors and the risk of drink-driving reoffense and collisions among those previously convicted with a drink-driving offence, but not currently on treatment at all. They also observed that when they looked at the impact of programs that combine education, restriction, and suspension, these programs reduced recidivism by an average of 24%.

Ontario's Back on Track program
Back on Track (BOT) is the remedial measures program for impaired drivers in Ontario, Canada. Following a period of mandatory license suspension, completion of BOT is required. The structure of the program is determined by provincial laws, collisions, and health-related outcomes, including mortality (e.g., Brown et al., 2010; Health Canada, 2006; Krasner et al., 1993, 1994, 1995; Wells-Parke et al., 1995). Wells-Parke et al. (1995) conducted a meta-analysis of a large number of studies evaluating the impact of remedial programs including driver education, education, psychological treatment, victim impact panels, and ignition interlocks on drink-driving recidivism. Studies included in the meta-analysis compared different types of remedial programs to no education or to two or more forms of remediation. In their final analysis, the authors indicated that, on average, remedial programs reduced recidivism by 20–29% when compared to standard practice (no remediation). In some jurisdictions, which offered no treatment at all. They also observed that when they looked at the impact of programs that combine education, restriction, and suspension, these programs reduced recidivism by an average of 24%.

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Multiple "Lower BAC" offenders: Characteristics and response to remedial interventions^a

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Abstract
Background: In recent years, there has been increasing attention to "lower BAC" drinking drivers, typically those whose blood alcohol content (BAC) is under the legal limit, defined in Ontario, Canada, as 0.05% (or higher) on roadside testing. In Ontario, Canada this resulted in more than 100,000 lower BAC offenders in 2016. These offenders are required to attend the Back on Track (BOT) remedial measures program. This study aimed to provide (1) a preliminary characterization of MWR offenders based on their program results, and (2) an initial assessment of outcomes associated with BOT participation among MWR offenders.

1. Introduction
For as long as regulated legal limits on blood alcohol content (BAC) permissible when driving a motor vehicle, per se legislation is considered the foundation of deterrence-based approaches to the prevention of alcohol-impaired driving (Eaton and Lacey, 1990; Wickens et al., 2013). The introduction of per se legislation in many jurisdictions around the world followed years of scientific efforts dedicated to developing a reliable measure of alcohol in the body, and linking this measurement to impairment of driving-related skills and increased collision risk (Holland, 1980; Ivers, 1962). Canada established its current

In-Person vs Videoconference Delivery of BOT



- Prior to COVID-19, the BOT Assessment and Workshop were done in-person only
 - Ensure participant IS participant
 - Ensure abstinence from substances
- Interest in online delivery to improve accessibility in remote areas
- 2018 pilot study identified challenges

Transport Canada ERTSPP Funding

Purpose: To examine the benefits, drawbacks, and overall effectiveness of delivery of the BOT program via videoconferencing technology.

In-Person vs Videoconference Delivery of BOT

Study 1: Randomized Controlled Trial

- Randomly assigned participants to in-person vs videoconference delivery of BOT.
 - Compared groups on pre- and post-workshop evaluation materials (and learner engagement measure), 6-month follow-up interview, and an added 9- to 12-month follow-up interview
 - Few significant differences between in-person and videoconference groups found immediately following workshop participation (i.e., change in attitudes, negative affect, self-efficacy and behavioural intentions related to impaired driving; client satisfaction; clarity of presentation ratings; learner engagement)
 - Analysis of substance use and related problems at 6- and 9- to 12-month follow-up still ongoing.
-

In-Person vs Videoconference Delivery of BOT

Study 2: One-on-one Interview Study

- Interviews (via Webex) with ten BOT facilitators from across province
- Thematic analysis by two independent raters



In-Person vs Videoconference Delivery of BOT

Study 2: One-on-one Interview Study – Themes Identified

➤ Benefits of Videoconference Delivery

- Increased Program Accessibility: distance, weather, absence of public transportation not an issue
 - Ability to Accommodate More Clients: clients could attend workshops outside their catchment area
 - Easier to Maintain a Safe Learning Environment: mute disruptive participants
 - Reduced Anxiety: discomfort attending workshop at addiction treatment centre, in the company of strangers
 - Online Workshop Split across 2 Days: felt less rushed, able to absorb and better learn material
-

In-Person vs Videoconference Delivery of BOT

Study 2: One-on-one Interview Study – Themes Identified

- Challenges of Videoconference Delivery:
 - Technical glitches
 - Its own accessibility issue
 - Difficult to build connections with and between clients
 - Challenges of Videoconference Delivery Overcome:
 - Challenges observing body language but can still detect substance use
 - Developed ability to manage distractions
-

Conclusion

The Back on Track Management and Evaluation Teams:

- Have demonstrated the program's effectiveness as a remedial program for impaired driving offenders
- Strive to continue improving the program and its delivery
- Share our successes with the broader scientific community



Thank
You

Dr. Christine Wickens

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Join us at CARSP 2024 where we will present results of the Transport Canada-funded research of videoconference-based delivery of the Back on Track program.

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<https://carsp.ca>

Court Enhanced Supervision of Repeat DUI Offenders: Alcohol Monitoring is the Key

By

James C. Fell

NORC at the University of Chicago



**ICADTS WEBINAR:
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Interventions Around the Globe**

March 13, 2024

BACKGROUND

Impaired Driving Problem in the United States

- Past 10 years: **10,000-13,000** people killed in crashes each year involving an intoxicated driver (BAC \geq .08 g/dL)
- **1,000,000** drivers arrested each year for DWI
- About 1/3 of DWI offenders arrested each year are either **repeat offenders, alcohol abusers, or alcoholics**
- Most DWI offenders need some form of treatment or monitoring and a meaningful sanction

Courtroom Enhanced Supervision for Repeat DUI Offenders

About 30% of repeat DUI offenders need treatment in a DUI Court. The remaining 70% can benefit from the Courtroom Enhanced Supervision model:

	HIGH RISK	LOW RISK
HIGH NEEDS	Treatment	Monitoring
LOW NEEDS	Supervision	Diversion



Courtroom Enhanced Supervision for Repeat DUI Offenders

Courtroom Enhanced Supervision is designed to provide education, training and monitoring that fills a gap in court involvement for high risk, repeat DUI offenders who do not have high treatment needs



The Under-Recognized Group

- **High-Risk for re-offense but low substance use disorder (SUD) treatment needs**
 - Very different
 - Issues generally cognitive, behavioral
 - Need to be handled differently

Monitoring & Accountability

- **The Courtroom Enhanced Supervision model:**
 - **ONE YEAR** of alcohol (and drug) monitoring with installation verified
 - **FOUR TO FIVE** times daily
 - **NO REVERSION** to norm upon removal
 - **REDUCTION IN RECIDIVISM** increases every year for the six years of measurement



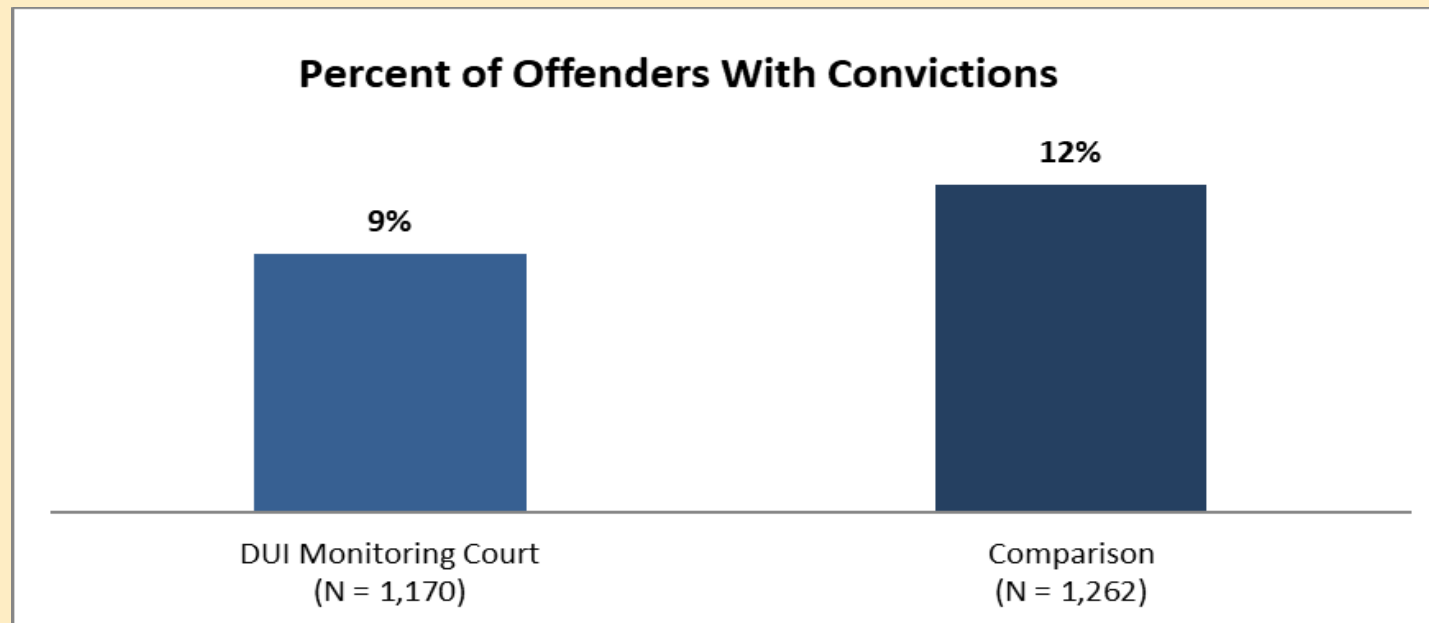
Monitoring & Accountability

■ The Alcohol Monitoring Model:

- Ignition Interlock Device
- Portable Breath Testing (24/7 Sobriety)
- Transdermal (SCRAM ankle bracelet)
- Urine or Oral Fluid

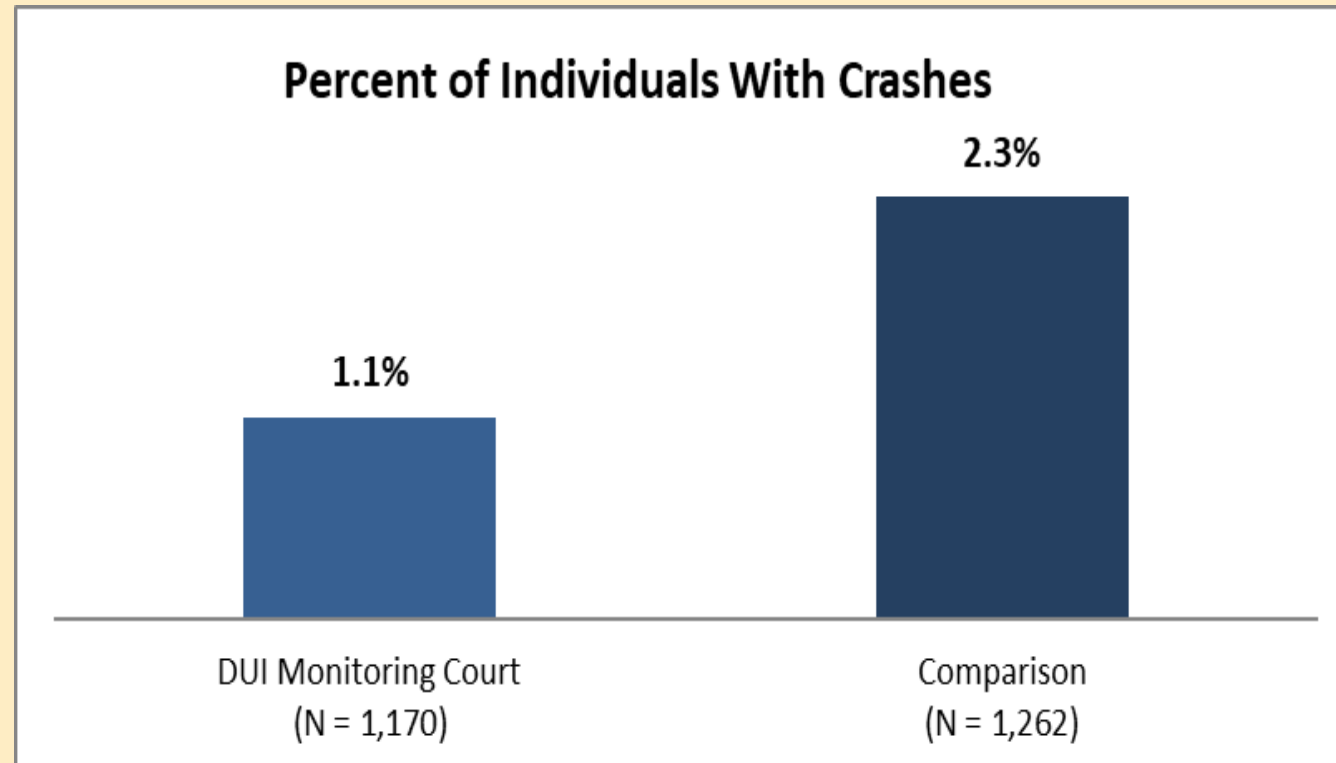
San Joaquin County Court

- An evaluation of the San Joaquin County Court showed that offenders on traditional probation were re-convicted for a new DUI about 32% more often in the 18 months after their index arrest than those who participated in the San Joaquin DUI Monitoring Court (Carey, Allen & Einspruch 2012).



The San Joaquin County Court

In addition, the crash rates of the San Joaquin DUI Monitoring Court offenders were also lower than the comparison group of offenders.





Alcohol Monitoring of DUI Offenders is the Key



EFFECTIVE STRATEGIES PROVIDING ALTERNATIVES TO JAIL

- **House Arrest**
- **DUI courts**
- **Transdermal BAC Monitoring**
- **South Dakota 24/7 Sobriety Program**
- **Alcohol Ignition Interlocks**

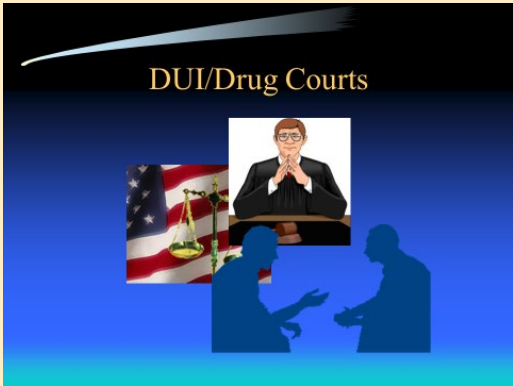
OBJECTIVES OF THE LITERATURE REVIEW

Conduct a comprehensive literature review and synthesis of the effectiveness of alcohol monitoring as a treatment for DWI offenders in reducing recidivism

Emphasis on:

- *Strategies*
- *Obstacles to implementation*
- *Effectiveness in reducing recidivism and/or problem drinking*

ALCOHOL MONITORING DEVICES FOUND



SUMMARY & SYNTHESIS

There is **PROMISING to STRONG** evidence that alcohol monitoring is an effective strategy in the treatment of DWI offenders and in reducing recidivism (numerous citations).

The **strengths of alcohol monitoring** (specifically transdermal alcohol monitoring) include:

- **Improvement in public safety** [enforces abstinence; helps in recovery; better than random breath or urine tests]
- **Cost efficient alternative to jail** [eliminates jail costs; reduces case worker time; reduces public costs (offender pays for monitoring)]

Alcohol Ignition Interlocks



- **Reduces DWI recidivism by about 65%** for offenders with interlocks (who sometimes use alternative vehicles) compared to similar offenders who did not get the interlock.
- **Reduces recidivism by 70%** for first-time DWI offenders (on, then off).
- **Reduces recidivism by 55%** for multiple DWI offenders (on, then off).
- If installed on all vehicles of offenders, would probably prevent 95% of DWI behavior during installation period.



States with Mandatory Interlock Laws for All Convicted DWI Offenders

34 STATES PLUS DC:

AL, AK, AR, AZ, CO, CT, DE, DC, HI, ID, IL, IA,
KS, KY, LA, ME, MD, MS, MO, NE, NV, NH, NJ,
NM, NY, OK, OR, RI, TN, TX, UT, VT, VA, WA,
WV

Interlock Law Effects on Impaired Drivers in Fatal Crashes

Percent changes in number of impaired drivers, 49 states and DC, 2001-14

	0.01+ g/dL	0.08+ g/dL	0.15+ g/dL
All-offender vs none	-16.1*	-15.9*	-12.5*
High-BAC + repeat vs none	-8.2*	-8.0*	-7.7*
Repeat-only vs none	-2.7	-2.6	-3.2

* Statistically significant at 0.05 level

Conclusions

- ▶ **All-offender laws** are beneficial, with **16 percent fewer** impaired drivers in fatal crashes compared to no law
- ▶ Repeat-offender laws are associated with a small benefit
- ▶ **Laws covering repeat and high-BAC** offenders are associated with an **8 percent benefit**, compared to no law
- ▶ Stronger results for drivers with prior DUIs, suggesting possible specific deterrence effect or stronger effect for drivers more experienced in the impaired driving justice system
- ▶ **States without all-offender interlock laws and have the goal of reducing alcohol-related fatal crashes should consider adopting these laws**

United States:

Alcohol-Impaired Driving Fatalities

- Alcohol-Impaired driving fatalities occur in crashes where at least one driver has a BAC equal to or greater than the illegal per se limit in every State (.08 g/dL). There were **10,142 (28%) people killed in 2019** in alcohol-impaired driving crashes out of a total of **36,096** traffic fatalities.
- PANDEMIC YEARS: In **2020**, there were **11,654 (30%)** people killed in alcohol impaired driving crashes out of **38,824** traffic fatalities. In **2021**, there were **13,384 (31%)** people killed in impaired driving crashes out of **42,939** total traffic fatalities.

Source: National Center for Statistics and Analysis. (2023, June, Revised). State alcohol-impaired-driving estimates: 2021 data (Traffic Safety Facts. Report No. DOT HS 813 472). National Highway Traffic Safety Administration.

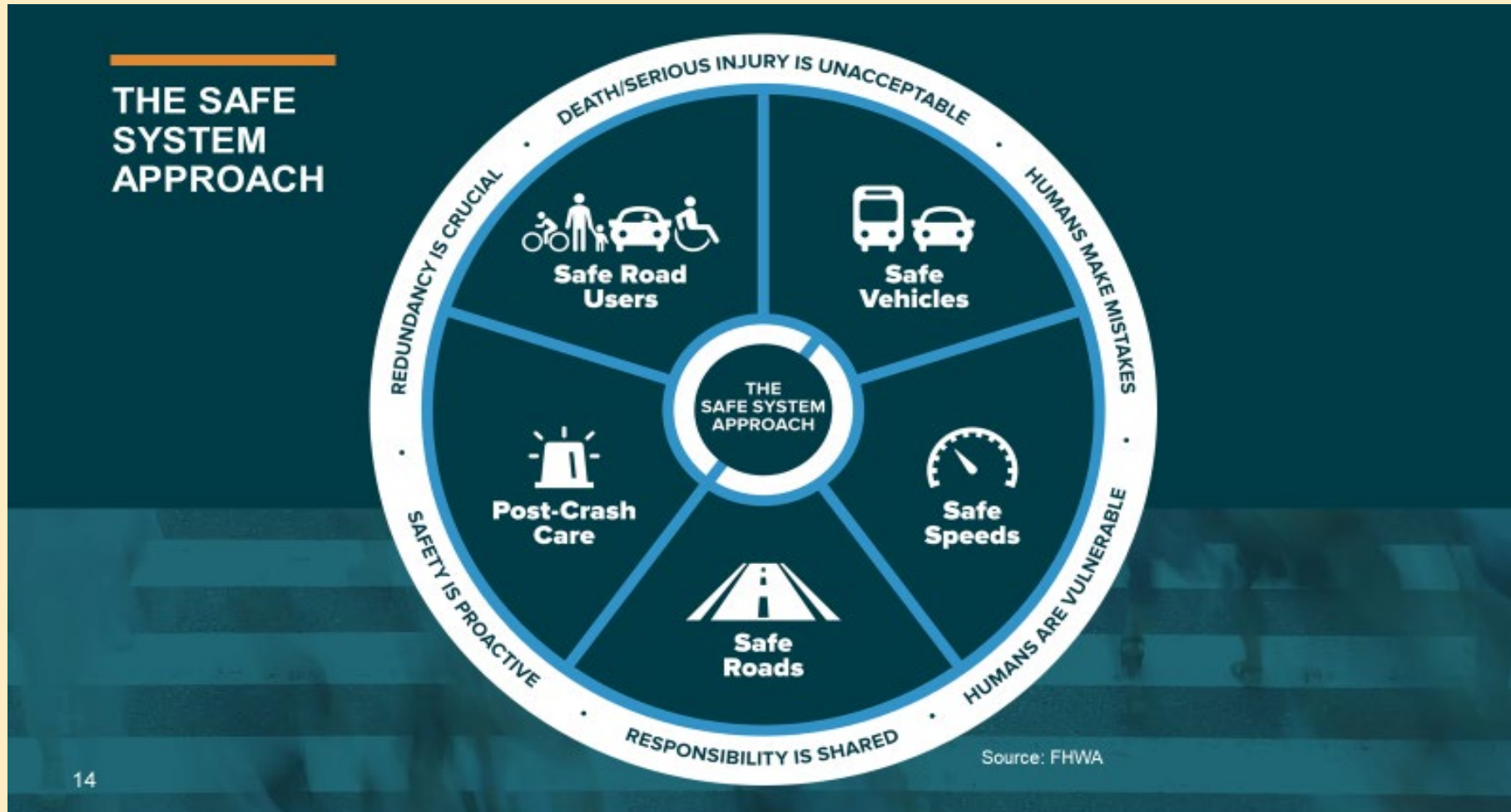
How Can We Resume Progress?

- Many countries around the world are committed to the vision of eliminating fatalities on their Nation's roads. The **Zero Deaths vision** is a way of describing how a combination of strategies is going to affect safety: Toward Zero Deaths.
- The goal was first adopted by Sweden in 1997
- The goal for most nations is Zero Traffic Fatalities by 2050.

How Can We Resume Progress?

- “Vision Zero” using the Safe System approach has evolved across the world and is supported by the **World Health Organization** and the **United Nations**.
- The approach uses a data-driven multidisciplinary approach involving highway design, vehicle safety features and the integration of education, enforcement, engineering and emergency medical services (**www.TowardZeroDeaths.org**).

How Can We Resume Progress?




Thank you.

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University of
Chicago



QUESTIONS???



The Effectiveness of Alcohol Monitoring as a Treatment for Driving-While-Intoxicated (DWI) Offenders:

A Literature Review and Synthesis

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Traffic Injury Prevention, 2021, Special Supplemental Issue



State alcohol ignition interlock laws and fatal crashes

Evaluation of Alcohol Ignition Interlock Laws in the States

Sponsored by the Insurance Institute for Highway Safety

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