

# IGNITION INTERLOCKS AND DRUNK DRIVING

Richard Roth, PhD



Research Supported By  
NM TSB, NHTSA, PIRE, RWJ, and Impact DWI  
Lifesavers March 27, 2011

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**Drunk Driver Plows into Mexican Bike Race  
One Dead, 10 Injured , June 1, 2008**



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# Many Interventions Contributed to Reducing Drunk Driving in NM

- Ignition Interlocks
- Increased Enforcement
- Publicity and Prevention Programs
- DWI Task Force and Czar
- Mandatory Treatment for Subsequent Offenders
- DWI Courts
- License Revocation
- Victim Impact Panels
- Alcohol Sales Restrictions
- Research to guide legislative choices

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### An Ignition Interlock is an Electronic Probation Officer

- Dedicated Probation Officer in Front Seat
- On duty 24 hours per day
- Tests and Records daily BAC's
- Allows only Alcohol-Free Persons to Drive
- Reports All Violations to the Court
- Costs Offender only \$2.30 per day (1 less drink per day)

Sanctions Probation Violation Immediately

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4

### Interlocks are Effective, Cost-Effective and Fair

- Interlocks reduce DWI re-arrests by 40-90%
- They reduce the economic impact of drunk driving by \$3 to \$7 for every \$1 of cost.
- Interlocks are perceived as a fair sanction by 85% of over 12,000 offenders surveyed.

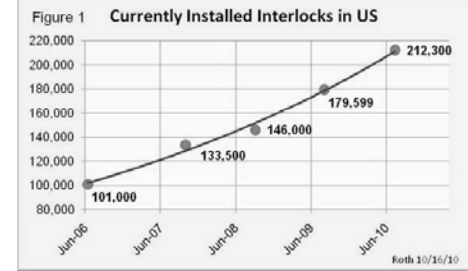
..But they only work if...  
you get them installed.

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### Only One out of Seven DWI Offenders Install Interlocks



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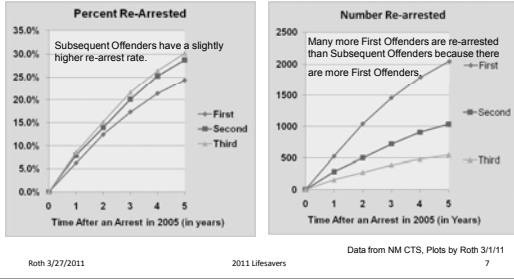
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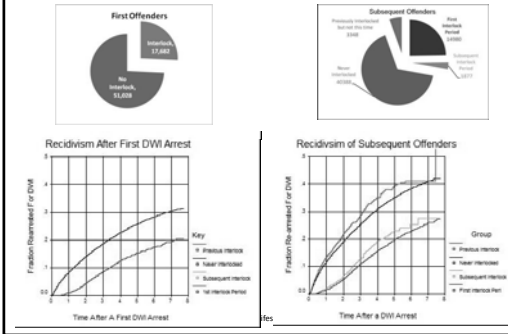
### Where Should We Focus our Resources?

In the past we have focused on Subsequent Offenders.

Now we are Focussing on First Offenders



### Interlocked Offenders Have Less Recidivism For up to 8 Years After Arrest



### I. Developing an Interlock Program

1. Identify Goals
2. Use Carrots and Sticks
3. Eliminate Hoops
4. Close Loopholes
5. Triage Sanctions
6. Research

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**I.1. Identify Goals**  
**Reduction of Drunk Driving Crashes, Injuries, and Fatalities.**  
With Effective, Cost-Effective, and Fair Sanctions

Objectives in Performance Terms

- Get interlocks installed ASAP after DWI.
- Get all offenders to install.
- Keep interlocks installed until there is evidence of changed behavior.

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**I.2. Increase the Incentives**

- Right to Drive Legally
- Condition of Probation
- Right to Re-register Vehicle
- Avoid Electronic Sobriety Monitoring
- Reduce or Avoid Jail time
- Satisfy one requirement for an Unrestricted License

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**I.3. Eliminate the Hoops**

- Period of Hard Revocation (Re-define)
- Fines and Fees Paid
- Outstanding legal obligations
- Alcohol Screening and Assessment
- Medical Evaluation
- DWI School
- Victim Impact Panel
- Community Service

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### I.4. Close Loopholes

- Not convicted
- Waiting out Revocation Period
- "No Car" or "Not Driving" Excuse
- Driving While Revoked
- Driving a non-interlocked vehicle
- Serve Warrants for Non-compliance

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13

### I.5. Triage Up in Sanctions

- Extension of Interlock Period
- Photo Interlock
- Home Photo Breathalyzer
- Continuous BAC monitoring
- Treatment
- House Arrest
- Jail

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14

### I.6. Research Measures of Effectiveness

- Interlocks per Arrested Offender
- Recidivism of Interlocked vs Not Interlocked
- Reduction in Overall Recidivism
- Reduction in DWI Crashes
- Reduction in DWI Injuries
- Reduction in DWI Fatalities

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## II. Model Ignition Interlock Program

by Dick Roth December 7, 2010

1. Mandatory Interlocks as a condition of probation for all convicted offenders. 1 yr for 1<sup>st</sup>, 2 yrs for second, 3 yrs for 3<sup>rd</sup>, and 5 yrs for 4 or more.
2. Electronic Sobriety Monitoring for convicted offenders who claim "no vehicle" or "not driving." Daily requirement of morning and evening alcohol-free breath tests as a condition of probation.(or \$1000/yr for supervised probation)
3. An ignition interlock license available to all persons revoked for DWI with no other restrictions. Allow MVD to set fee to cover cost.

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16

## Model Ignition Interlock Program

by Dick Roth December 7,2010 continued

4. An Indigent Fund with objective standards such as eligibility for income support or food stamps.
5. Vehicle immobilization or interlock between arrest and adjudication. Offender's choice. (or Void Vehicle Registration or Interlock as a condition of Bond)
6. Vehicle forfeiture for driving a non-interlocked vehicle while revoked for DWI.
7. Compliance Based Removal: No end to revocation period before satisfaction of at least one year of alcohol-free driving with an IID. (eg. ≥ 5000 miles and ≥ 1 year with no recorded BAC>0.05 by any driver) .
8. Criminal sanction for circumvention of IID.

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17

## III. The New Mexico Interlock Program

1. Evolution of Laws
2. Interlock Installations vs Time
3. Currently Installed Interlocks vs Time
4. Interlock Licenses Granted
5. Comparisons to Other States
6. What We Have Learned

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### III.1. The New Mexico Laws

- 1999 Optional Judicial Mandate for 2<sup>nd</sup> and 3<sup>rd</sup> DWI
- 2002 Mandatory Judicial Sanction for 1<sup>st</sup> Aggravated and All Subsequent Offenders
- 2002 Indigent Fund
- 2003 Ignition Interlock License available for all revoked offenders with no waiting period. (Admin. Prog.)
- 2005 Mandatory Judicial Sanction: 1 yr for 1<sup>st</sup>; 2 yrs for 2<sup>nd</sup>; 3 yrs for 3<sup>rd</sup>; and lifetime with 5 yr review for 4+
- 2005 ALR and JLR periods increased
- 2009 No Unrestricted License without Interlock Period
- 2010 Objective Standard for Indigency

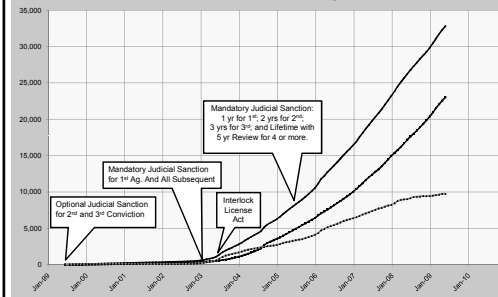
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19

### III.2.A

Interlocks in New Mexico  
Installed, Removed, and Currently Installed



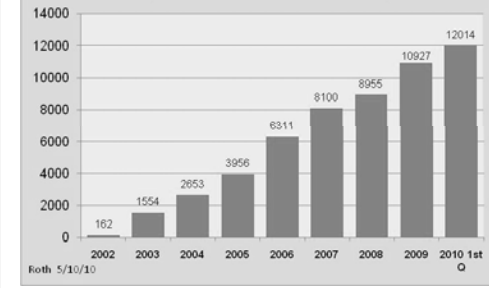
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### III.3

Currently Installed Interlocks in NM by Year



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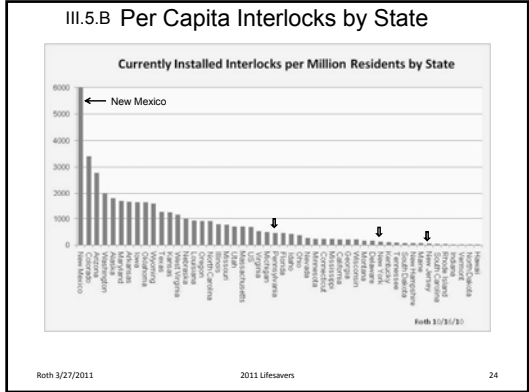
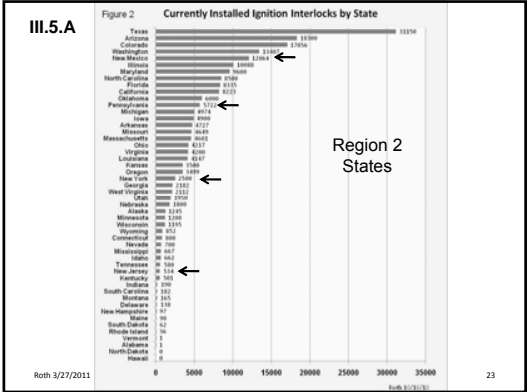
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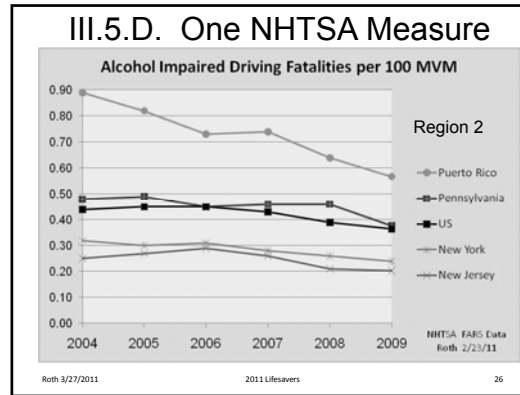
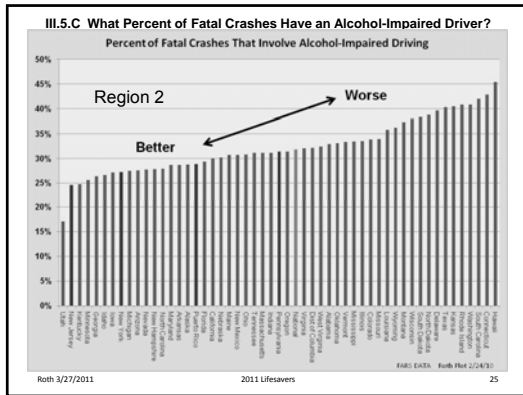
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- ### III.6. What We Have Learned in NM
- Judicial Mandates get more interlocks installed than Administrative requirements. 3 to 1 in NM.
  - First offenders must be included because they are 60% to 80% of all DWI offenders, and almost as likely to be re-arrested as subsequent offenders.
  - There must be an Interlock License available ASAP.
  - Revoked offenders are 3-4 times more likely to be re-arrested for DWI than interlocked offenders.
  - Hard revocation periods just teach offenders that they can drive without being arrested.
  - **Given a choice, most offenders choose revocation over interlock ...and they keep driving after drinking.**
- Roth 3/27/2011 2011 Lifesavers 27

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### IV. Measures of Effectiveness

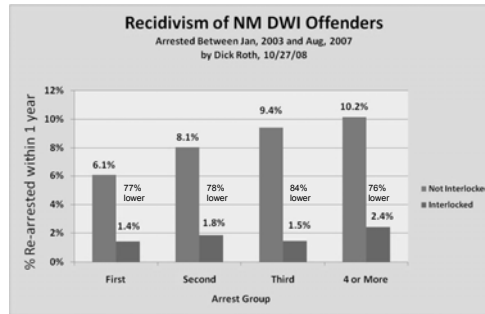
1. Recidivism After a DWI Arrest
2. Recidivism After a DWI Conviction
3. Overall Statewide Recidivism vs Time
4. Reduction in Alcohol-Involved Crashes
5. Reduction in Alcohol-Involved Injuries
6. Reduction in Alcohol-Involved Fatalities
7. Correlation between Interlocks Installed and Measures of Drunk Driving
8. New NHTSA Comparison Criteria: Alcohol-Impaired Driving Fatalities per 100 MVM
9. Opinions of Interlocked Offenders

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28

#### IV.1.D Recidivism After a DWI Arrest in NM

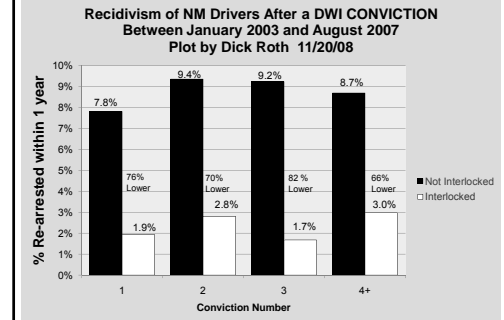


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29

#### IV.2. Recidivism After a DWI Conviction



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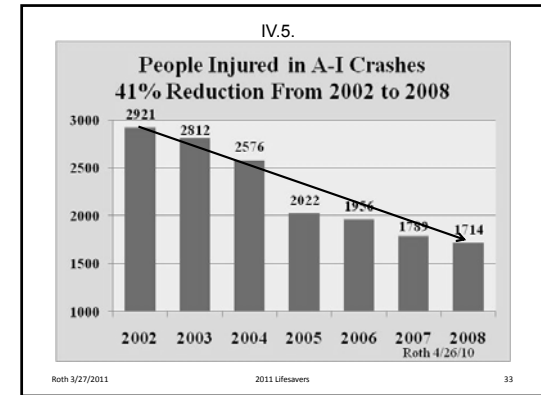
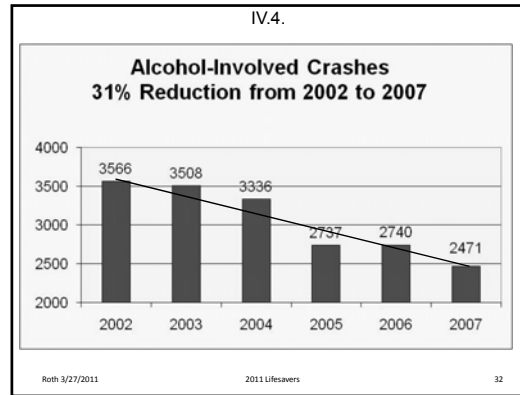
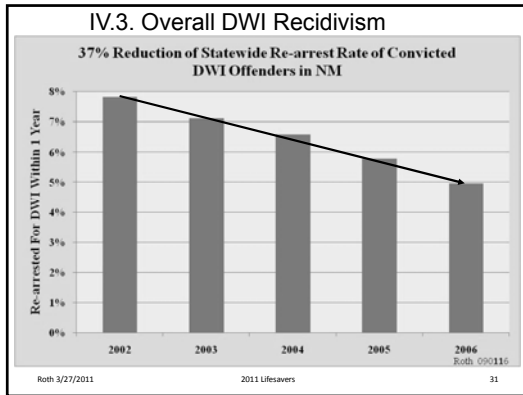
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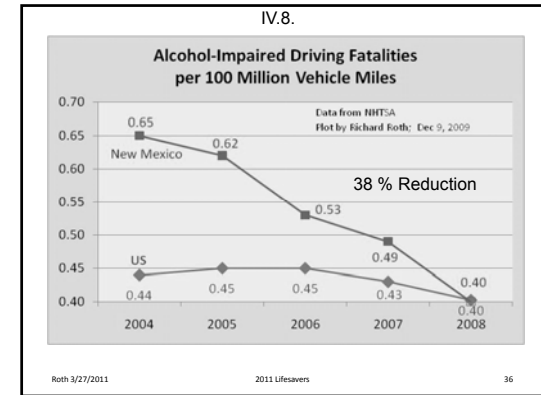
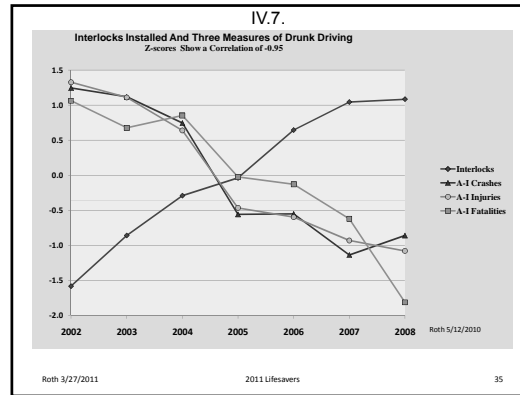
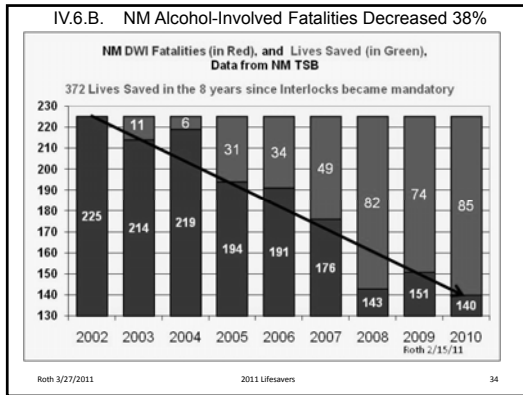
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IV.9.

### Survey of 1513 Interlocked Offenders

- 88% Helpful in avoiding another DWI
- 83% Helpful at reducing their drinking
- 89% Effective at reducing their drunk driving
- 70% Cost-Effective..benefits outweigh the costs
- 80% A Fair Sanction For DWI Offenders
- 72% All convicted DWI's should have interlocks
- 63% All arrested DWI's should have interlocks.

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### V. Loopholes that Remain in NM

1. "No Car" or "Not Driving" excuse SB306 2011
2. No interlock between arrest and adjudication (Learning, DWI, Absconding) SB308 2011
3. Ineffective Penalty for DWR ..SB307 2011
4. ~~Possibility of waiting out revocation period without installing an interlock~~
5. ~~No Objective Standard for Indigency~~
6. Insufficient Funding: Increase Alcohol Excise Tax
7. Refusals and Drugs Warrants for BAC SB387 2011

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### PART 2

- First Offenders: Myths vs Research
- Young Offenders 16-30
- Miscelaneous Findings
- Model Interlock Program
- Discussion

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### VI. Myths About First Offenders

1. First Offenders Drove Drunk Once
2. Are Not Alcohol Abusers or Alcoholics
3. Are a Negligible Part of the DWI Problem
4. Are Less Likely to be Re-Arrested
5. Are Not Responsible for Most DWI Fatalities
6. Interlocks are not cost-effective for them
7. Interlocks are a not a fair sanction for them
8. Interlocks are not effective for them
9. Interlocks are too lenient. Revoke them
10. Sanctions are more important than prevention

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### VI.1

#### *First Offenders Are Not First Offenders*

They are multiple offenders who were finally caught.

They have driven an average of 500 times after drinking before their first arrest.

R. Roth. Anonymous surveys of convicted DWI offenders at Victim Impact Panels in Santa Fe, NM

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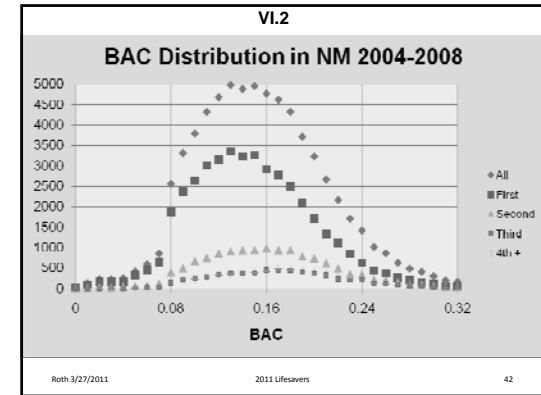
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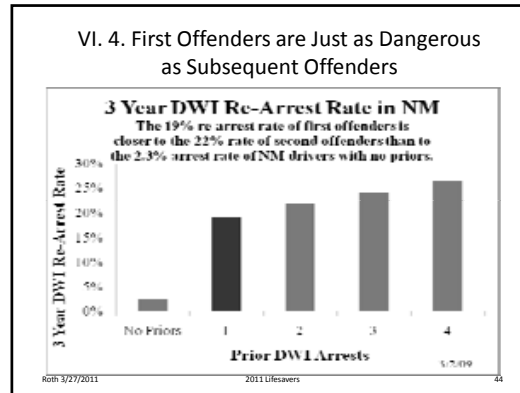
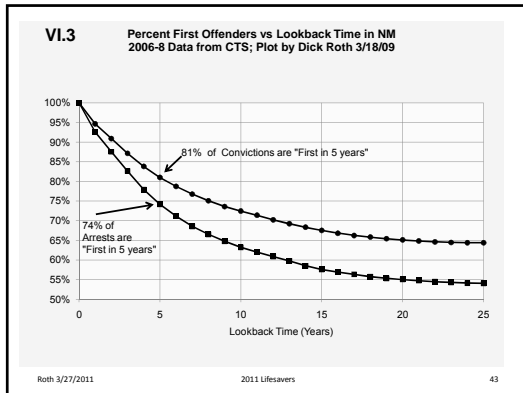
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**VI.5**  
**What Fraction of Impaired Drivers in Fatal Crashes are First Offenders?**

NHTSA Definitions;  
Impaired Driver: BAC >= 0.08  
First Offender: No BAC Conviction in Previous 3 Years.

**92 %**

<http://www-nrd.nhtsa.dot.gov/Pubs/811155.pdf> pp 4-5

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VI.8 Effective VI:6 Cost Effective

Recidivism of Convicted First Offenders  
10,117 Interlocked; 33,348 Not Interlocked

Univariate HR(CG/IG)= 4.52  
Multivariate HR(CG/IG)= 4.01

Univariate HR(CG/IG)= 1.77  
Multivariate HR(CG/IG)= 1.59

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VI.10 The importance of Prevention and General Deterrents

**DWI First Offenders in NM**  
Each Year a Greater Fraction of DWI Offenders are First Offenders. This indicates that our sanctions have been more successful than our prevention efforts.

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VII. Young Offenders (Under 30)

1. Have the highest DWI arrest rates
2. Have the highest re-arrest rates
3. Have the highest DWI crash rates

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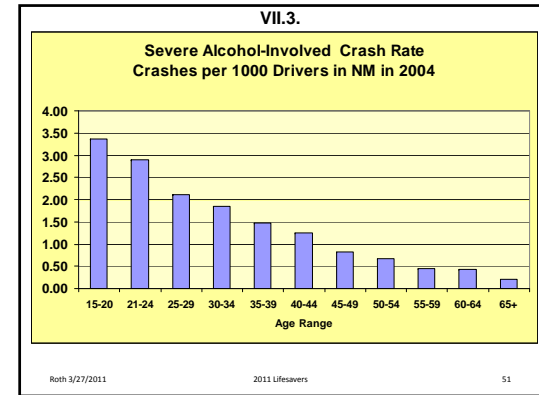
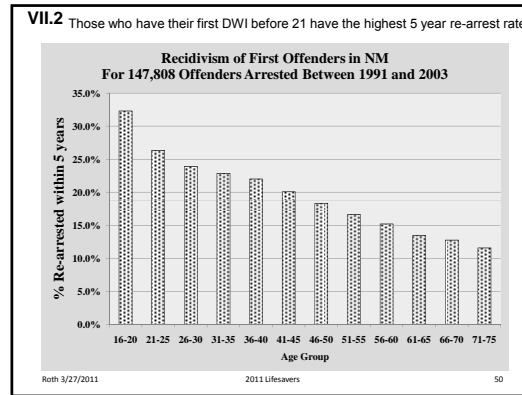
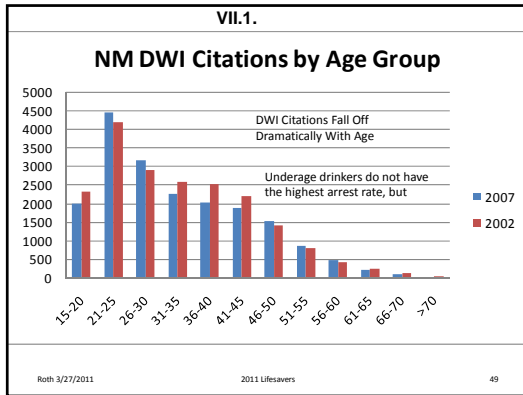
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### VIII. Miscellaneous Findings

1. Females are an increasing fraction of DWI
2. Longer interlock periods are more effective for subsequent offenders.
3. How do interlocked offenders get re-arrested for DWI?
4. Variations in Installation Rate by County.
5. Crime and Punishment
6. Who Dies in Alcohol-Impaired Crashes
7. BAC Limits by Country

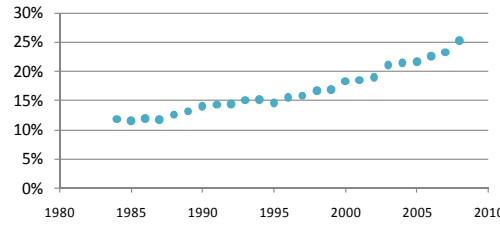
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52

#### VIII.1. Female DWI's in NM

Fraction of DWI Offenders That Are Female vs Year of Arrest

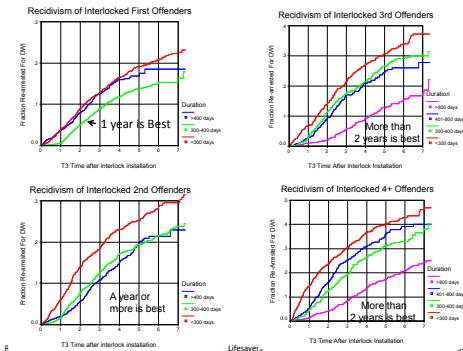


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#### VIII. 2. Recidivism vs Duration of Interlock....PRELIMINARY DATA



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Lifesaver

From T4 101126.sav; T5 101128.spo

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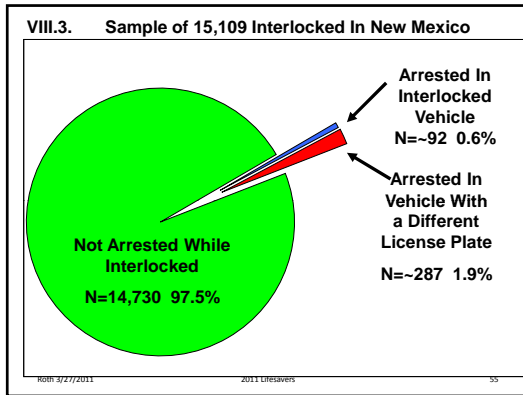
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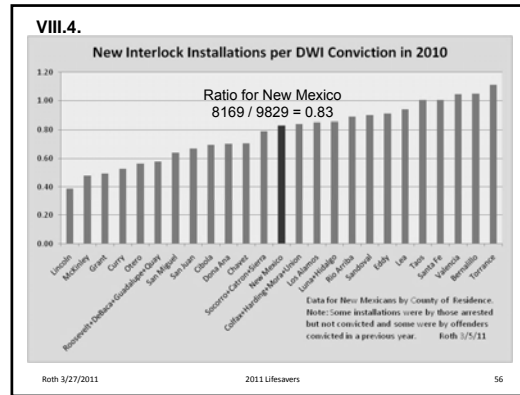
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**VIII.5. Crime and Punishment**

Adam, Benito, and Charlie all go to a party, have 5 drinks, and decide to drive home.

1. Adam gets home safely
2. Benito gets arrested for DWI
3. Charlie kills someone

What is the Punishment?

Charlie goes to jail. Benito gets an interlock. Adam home free.

What is the Crime?

All the same. Choosing to Drive after Drinking.

What is the difference?

**LUCK**

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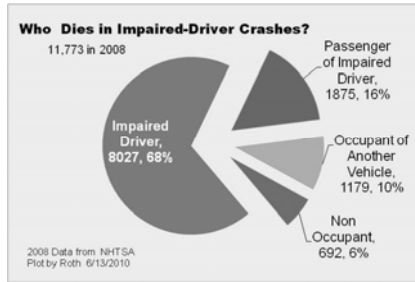
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VIII.6. Who Dies in Alcohol-Impaired Crashes?



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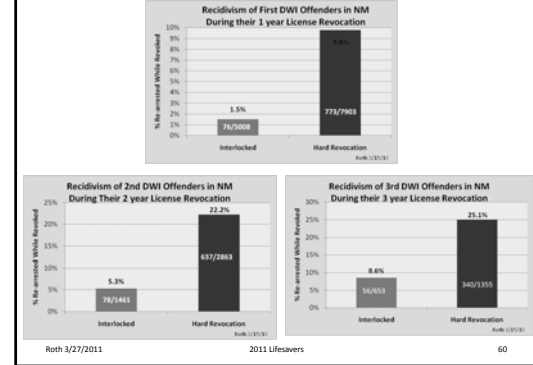
Most Countries Have *per se* BAC Limits Below 0.08%

Any Alcohol or 0.02%	0.04%	0.08%
<a href="#">Romania</a>	<a href="#">Lithuania</a>	<a href="#">Canada</a>
<a href="#">Russia</a>	<a href="#">Canada</a>	<a href="#">Malaysia</a>
<a href="#">Saudi Arabia</a>	<a href="#">Argentina</a>	<a href="#">Malta</a>
<a href="#">Slovakia</a>	<a href="#">Australia</a>	<a href="#">Mexico</a>
<a href="#">United Arab Emirates</a>	<a href="#">Austria</a>	<a href="#">New Zealand</a>
<a href="#">Brazil</a>	<a href="#">Belarus</a>	<a href="#">Puerto Rico</a>
<a href="#">Bangladesh</a>	<a href="#">Belgium</a>	<a href="#">Singapore</a>
<a href="#">Czech Republic</a>	<a href="#">Bulgaria</a>	<a href="#">United Kingdom</a>
<a href="#">Hungary</a>	<a href="#">Canada</a>	<a href="#">United States</a>
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<a href="#">Sweden</a>	<a href="#">Finland</a>	
	<a href="#">France</a>	
0.03%	<a href="#">Germany</a>	
<a href="#">India</a>	<a href="#">Greece</a>	
<a href="#">Serbia</a>	<a href="#">Hong Kong</a>	
<a href="#">Japan</a>	<a href="#">Iceland</a>	
<a href="#">Uruguay</a>		
	<a href="#">Ireland</a>	
	<a href="#">Israel</a>	
	<a href="#">Italy</a>	
	<a href="#">Latvia</a>	
	<a href="#">Luxembourg</a>	
	<a href="#">Macedonia</a>	
	<a href="#">Netherlands</a>	
	<a href="#">Peru</a>	
	<a href="#">Portugal</a>	
	<a href="#">Slovenia</a>	
	<a href="#">South Africa</a>	
	<a href="#">Spain</a>	
	<a href="#">Switzerland</a>	
	<a href="#">Thailand</a>	
	<a href="#">Taiwan</a>	
	<a href="#">Turkey</a>	

Source: [http://en.wikipedia.org/wiki/Blood\\_alcohol\\_content](http://en.wikipedia.org/wiki/Blood_alcohol_content)

Roth 3/27/2011 2011 Lifesavers 59

Recidivism: Interlock vs Hard Revocation



Roth 3/27/2011 2011 Lifesavers 60

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### IX. Model Ignition Interlock Program

by Dick Roth December 7, 2010

1. Mandatory Interlocks as a condition of probation for all convicted offenders. 1 yr for 1<sup>st</sup>, 2 yrs for second, 3 yrs for 3<sup>rd</sup>, and 5 yrs for 4 or more.
2. Electronic Sobriety Monitoring for convicted offenders who claim "no vehicle" or "not driving. Daily requirement of morning and evening alcohol-free breath tests as a condition of probation.(or \$1000/yr for supervised probation)
3. An ignition interlock license available to all persons revoked for DWI with no other restrictions. Allow MVD to set fee to cover cost.

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61

### Model Ignition Interlock Program

by Dick Roth December 7,2010 continued

4. An Indigent Fund with objective standards such as eligibility for income support or food stamps.
5. Vehicle immobilization or interlock between arrest and adjudication. (or Void Registration or Bond Requirement)
6. Vehicle forfeiture for driving a non-interlocked vehicle while revoked for DWI.
7. No end to revocation period before satisfaction of at least one year of alcohol-free driving with an IID. (eg. ≥ 5000 miles and ≥ 1 year with no BAC>0.05 by any driver).
8. Criminal sanction for circumvention of IID.

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62

### Would You Support This DWI Program?

Data Looks Good but No DWI's Prevented

- All DWI Convicts Admitted.
  - Program Lasts 5 years.
  - Over 70% of those admitted graduate.
  - Very low recidivism of graduates after program.
  - Zero Recidivism of Graduates During Program.
  - Program Cost? \$1 per offender
  - Program Components? **Kick Out If Arrested!**
- Conclusion: Follow ALL who **START** a treatment program.

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2011 Lifesavers

63

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Richard Roth, PhD  
 Executive Director Impact DWI  
 RichardRoth2300@msn.com

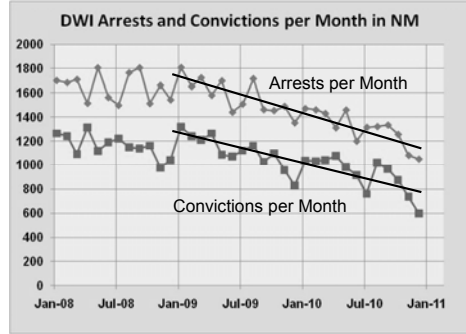


Impact DWI Websites  
[www.ImpactDWI.org](http://www.ImpactDWI.org)  
[www.PEDAforTeens.org](http://www.PEDAforTeens.org)  
[www.AlcoholTaxIncrease.org](http://www.AlcoholTaxIncrease.org)  
[www.RothInterlock.org](http://www.RothInterlock.org)

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2011 Lifesavers

64

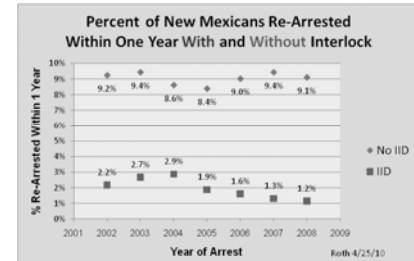


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65

IV.1.A Interlocked Offenders Have Much Less Recidivism In the Year After a DWI Arrest



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2011 Lifesavers

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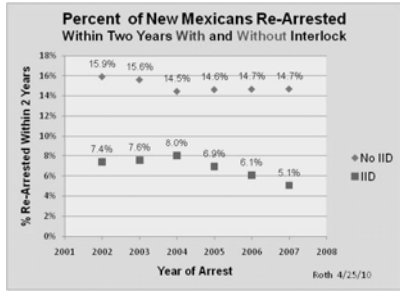
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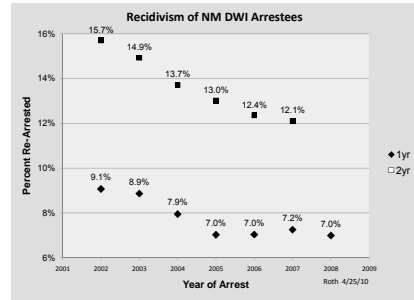
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IV.1.B Interlocked Offenders Have Much Less Recidivism In the Two Years After a DWI Arrest



109,897 NM (ZIP) Residents arrested 2002-2007. IID are those who installed interlock within 1 year of arrest  
 Roth 3/27/2011 2011 Lifesavers 67

IV.1.C Overall DWI Re-Arrests Substantially Reduced



Roth 3/27/2011 2011 Lifesavers 68

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