



Effects of all-offender alcohol ignition interlock laws on recidivism and alcohol-related crashes

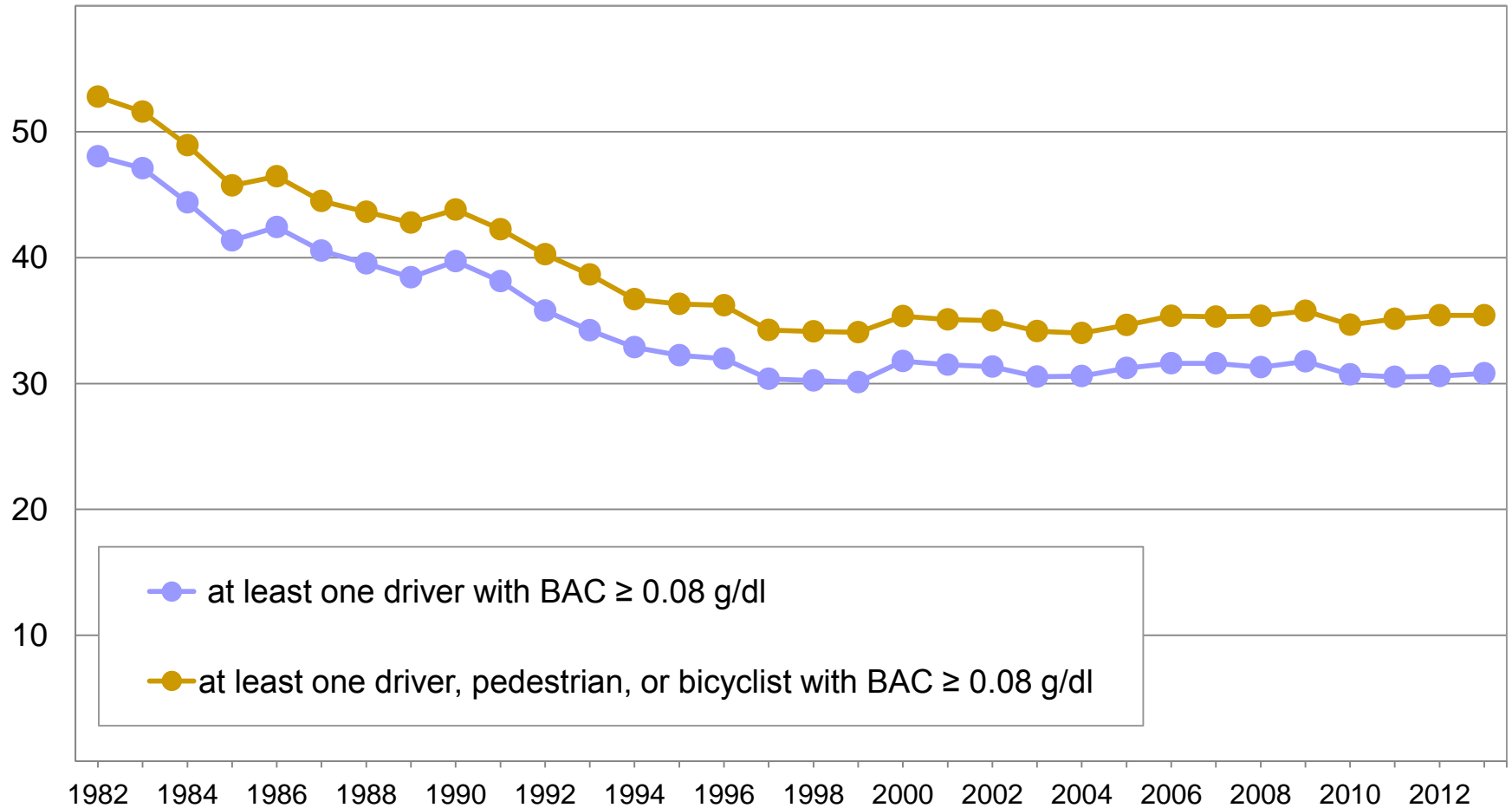
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Anne T. McCartt

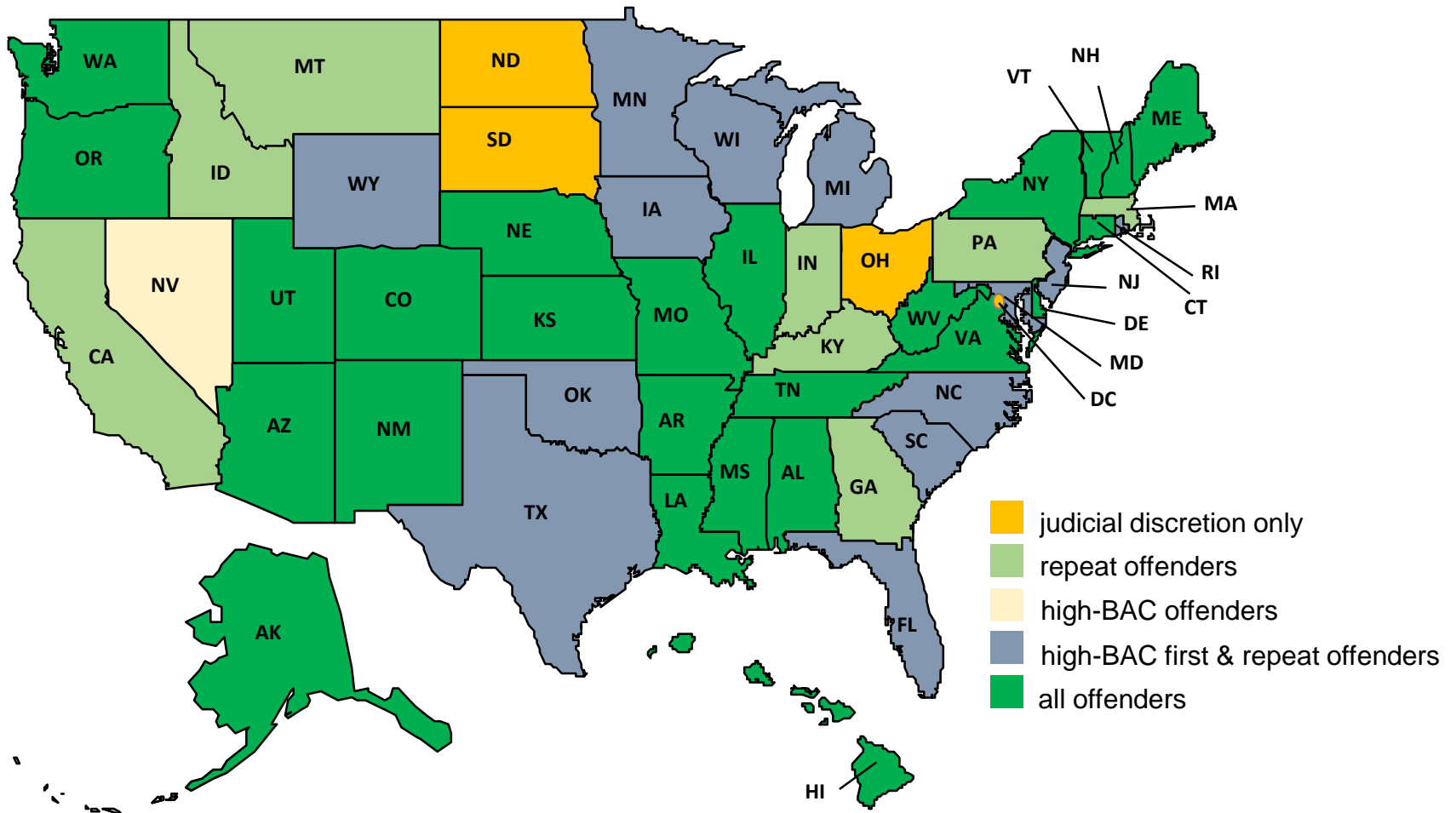
Percent of crash deaths involving BACs ≥ 0.08 g/dl

By calendar year, 1982-2013



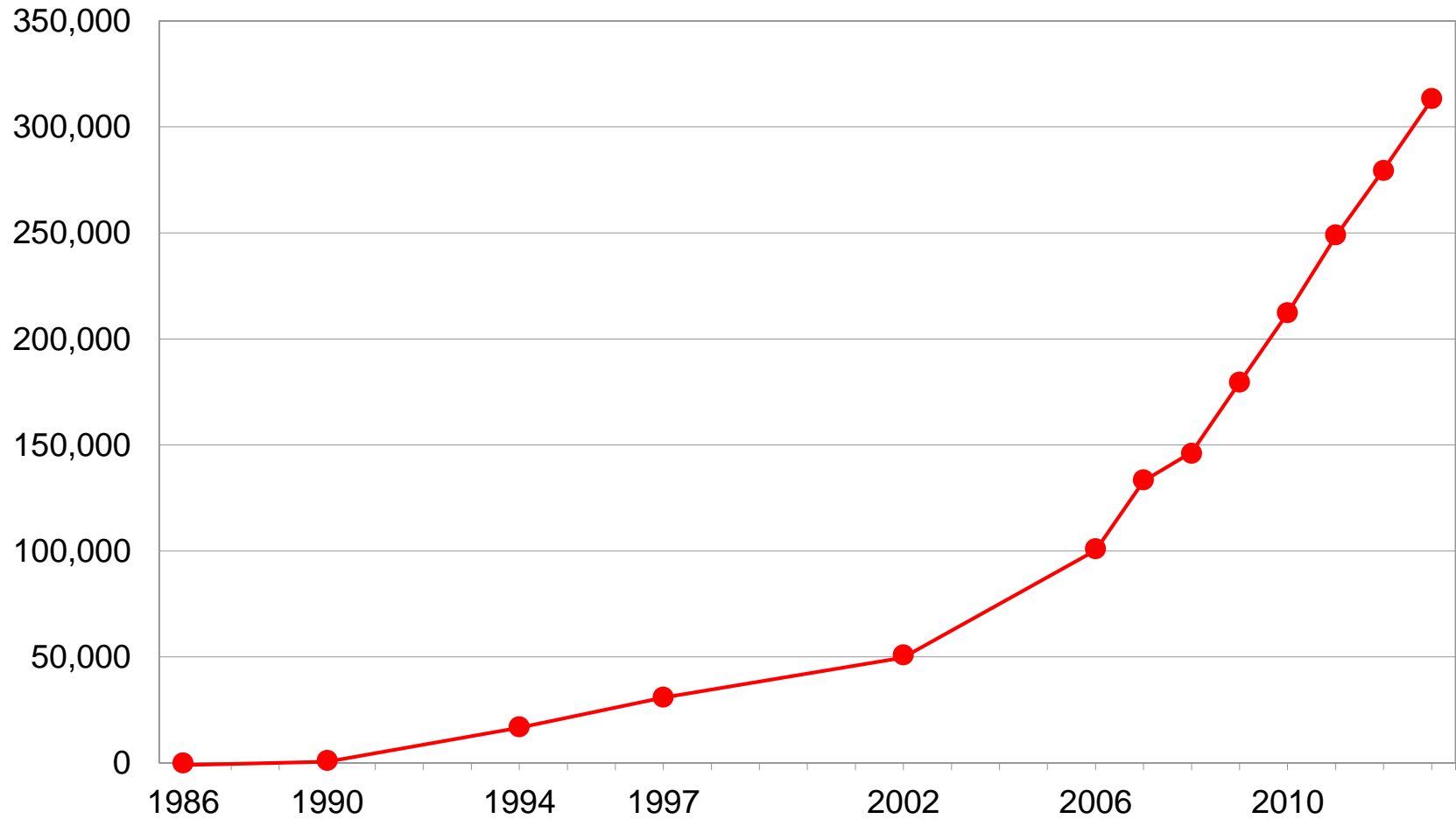
Laws mandating alcohol ignition interlock orders

March 2015



Installed interlocks in United States

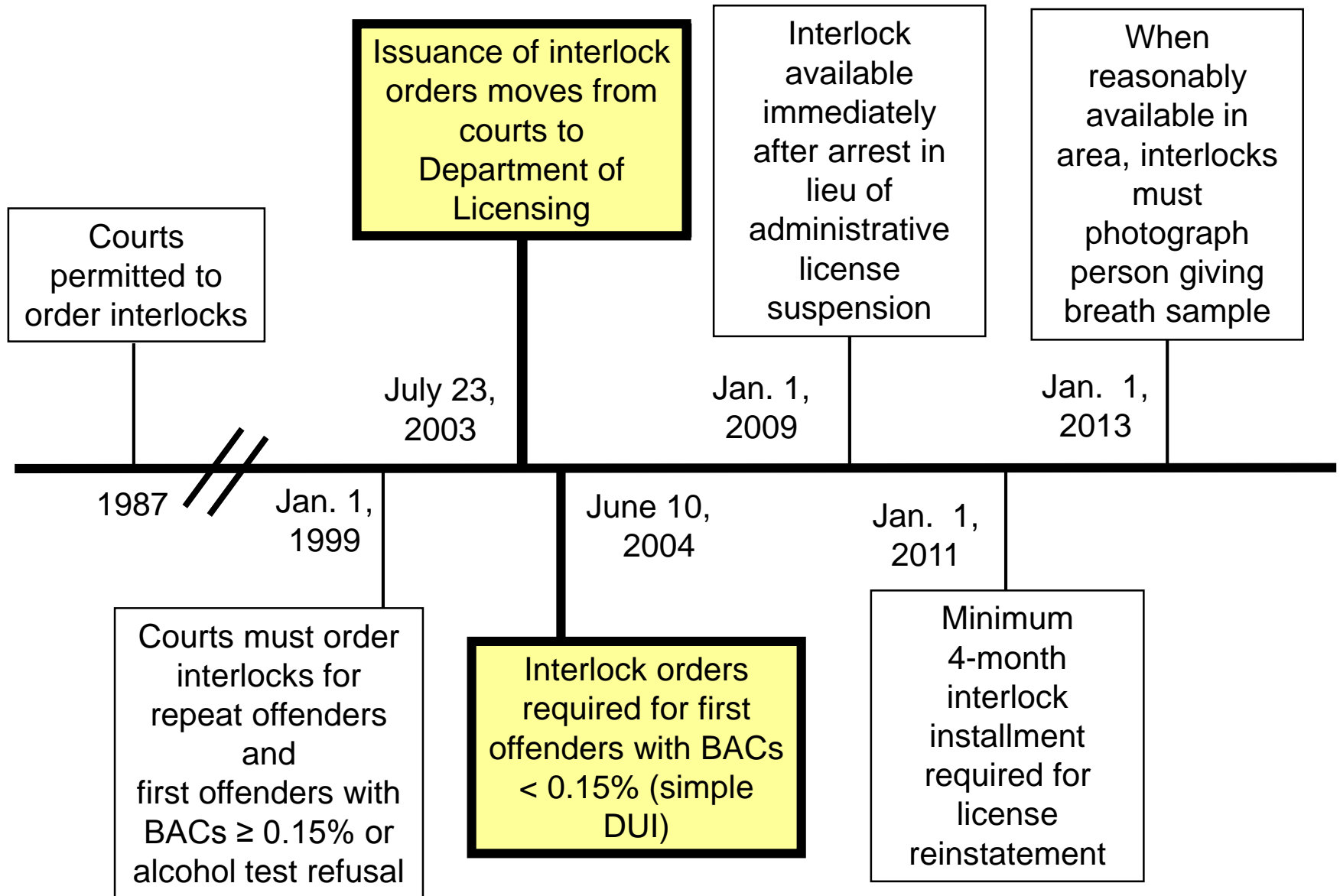
1986-2013



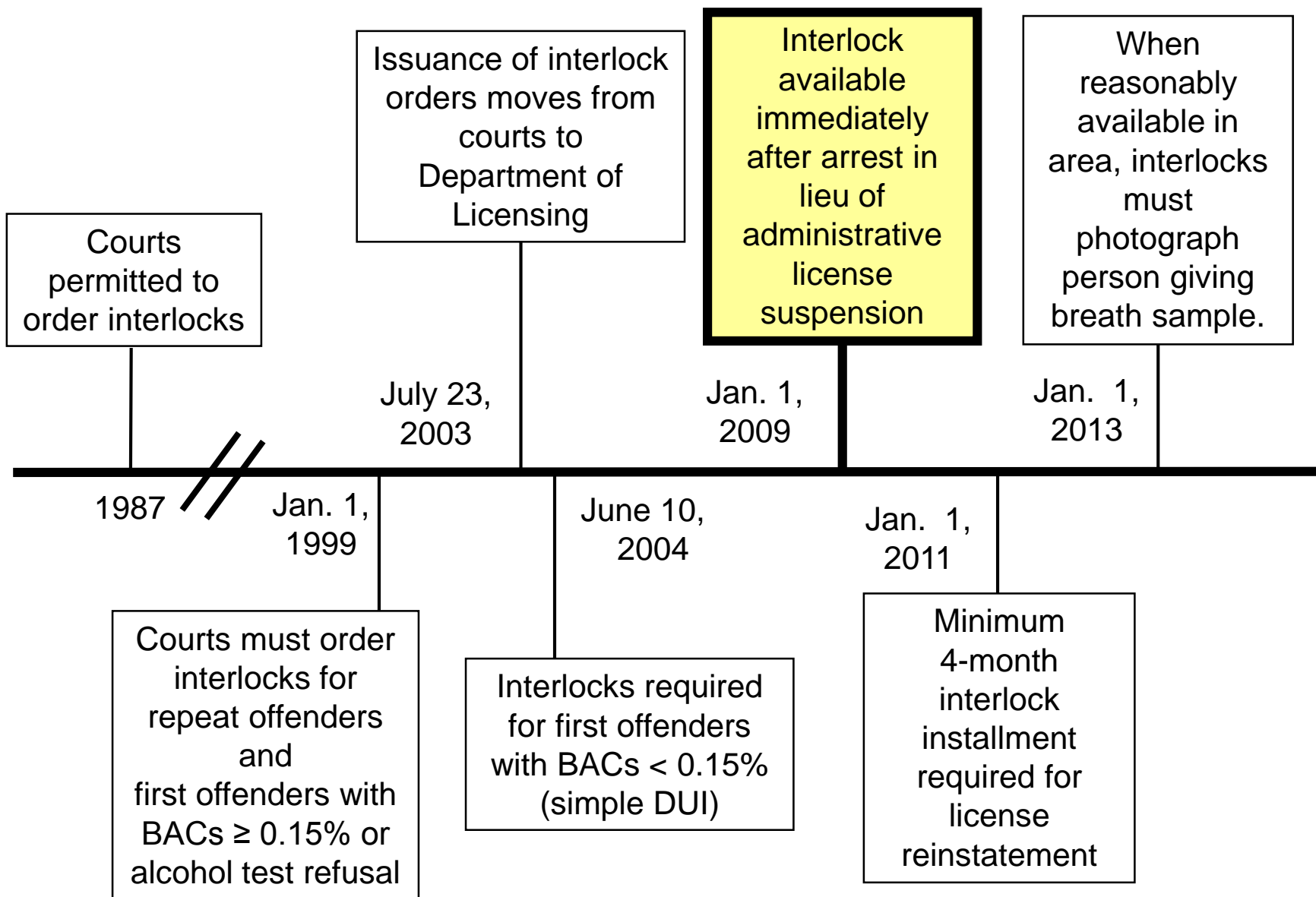
Prior studies of effects of interlocks on recidivism

- Most studies compared recidivism rates of offenders who installed interlocks vs. those who did not
 - Reductions in recidivism of 60-80 percent while interlocks installed
 - Reductions found for both repeat and first offenders
 - Effects dissipate after interlocks removed
 - Difficult to adequately account for potential differences between offenders who elected to get interlocks and those who did not
- No prior study examined the effects of an all-offender law requiring interlock orders on recidivism among all offenders affected by the law
- Little prior rigorous research on the effects of interlock programs on alcohol-related crashes

Timeline of Washington state interlock laws



Timeline of Washington state interlock laws



Research objectives

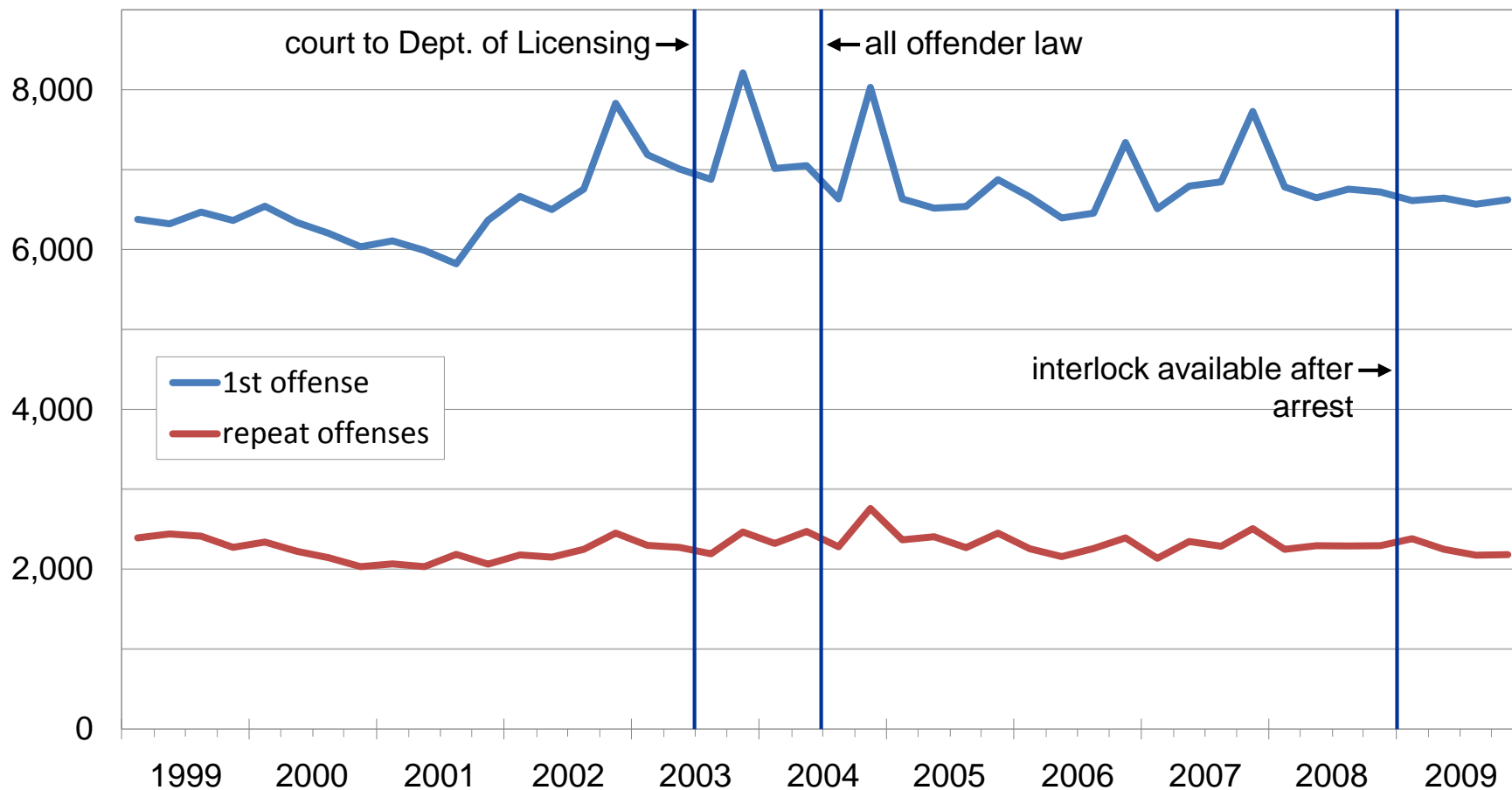
- Examine the effects of 2003 law change moving administration to the Department of Licensing and 2004 all-offender law requiring interlock orders on conviction types, interlock installation rates, and the recidivism rate among all offenders affected by the law
- Examine the preliminary effects of the 2009 law change making interlocks available immediately after arrest on conviction types and interlock installation rate
- Examine the general deterrent effect of 2003 and 2004 law changes on single-vehicle late-night crashes



Trends in conviction types and interlock installations

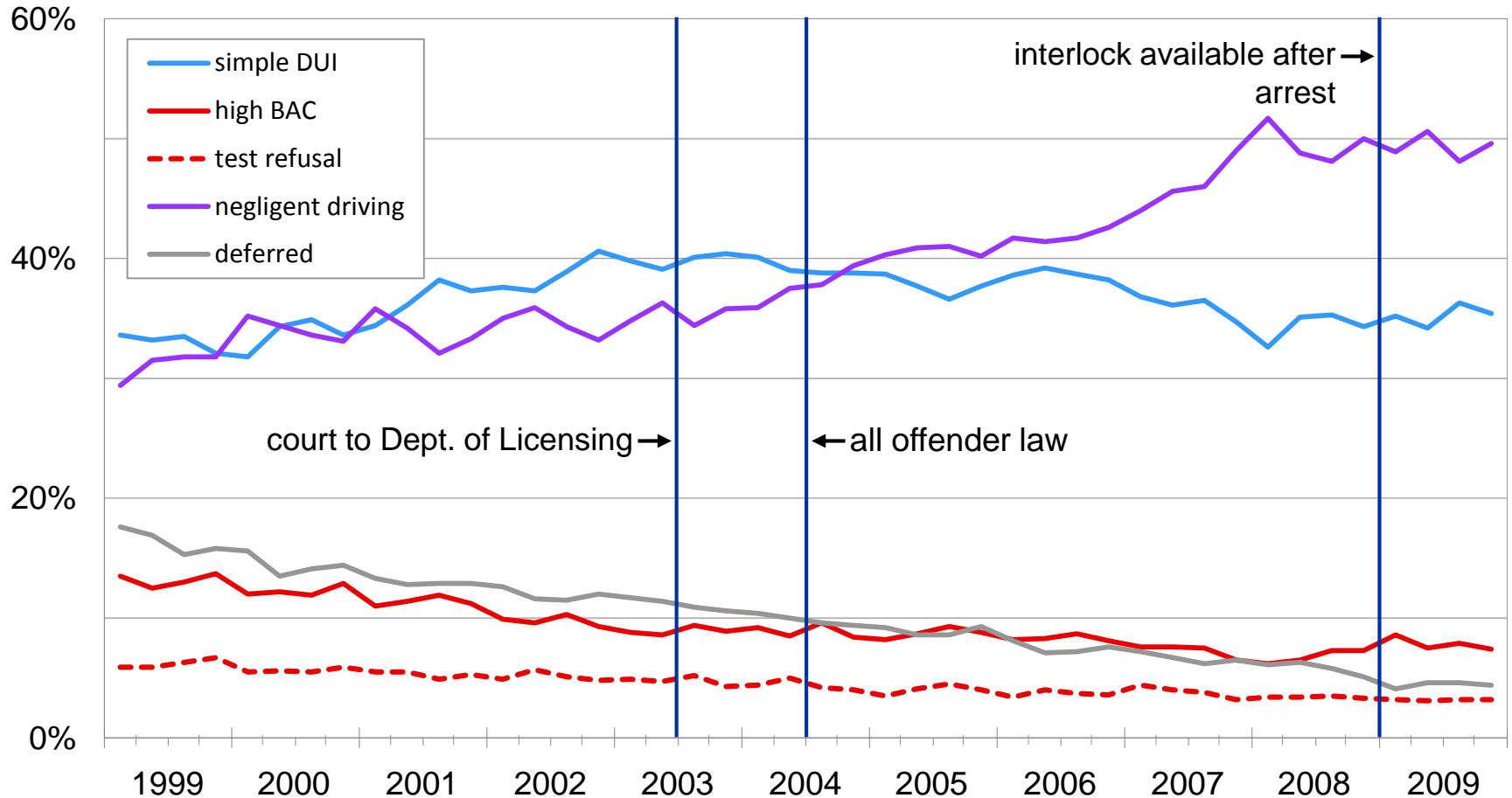
Counts of DUI-related convictions in Washington

By quarter of arrest, January 1999-December 2009



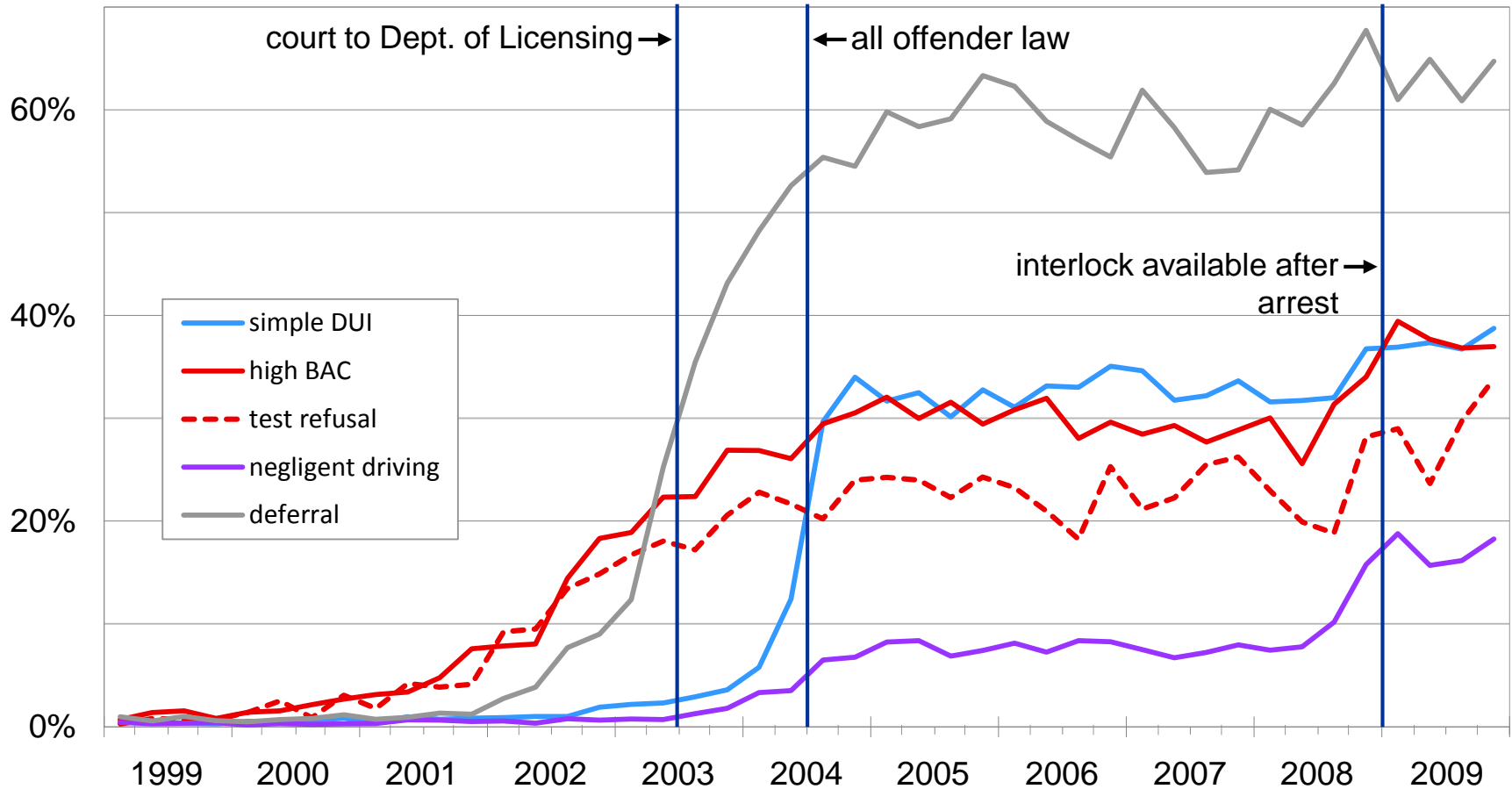
Distribution of 1st DUI-related convictions by type

By quarter of arrest, January 1999-December 2009



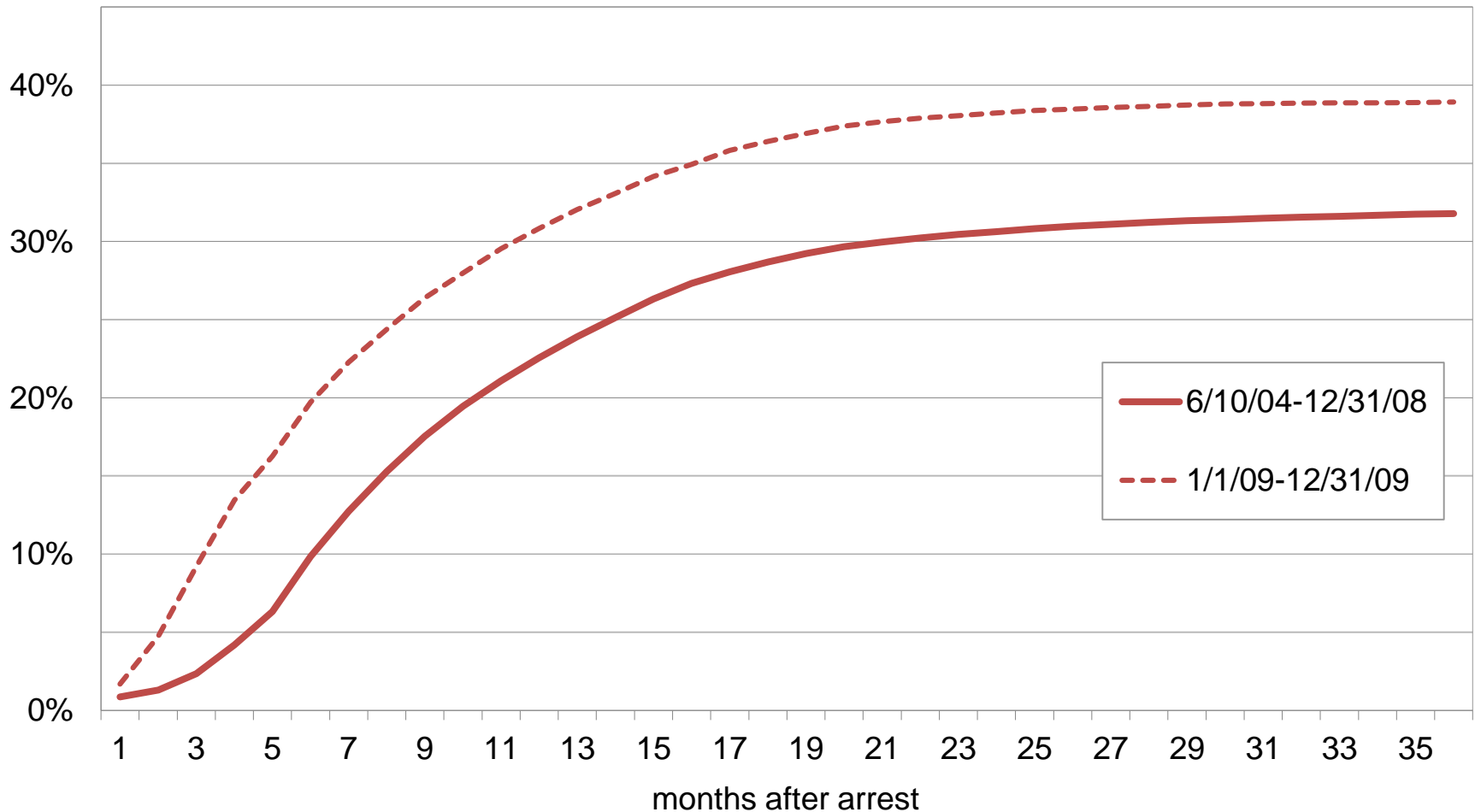
Percent of 1st DUI offenders who installed interlocks

By quarter of arrest and conviction type, January 1999-December 2009



Cumulative percentage of interlock installations by number of months elapsed since arrest

1st simple DUI offenders arrested after 2004 law change

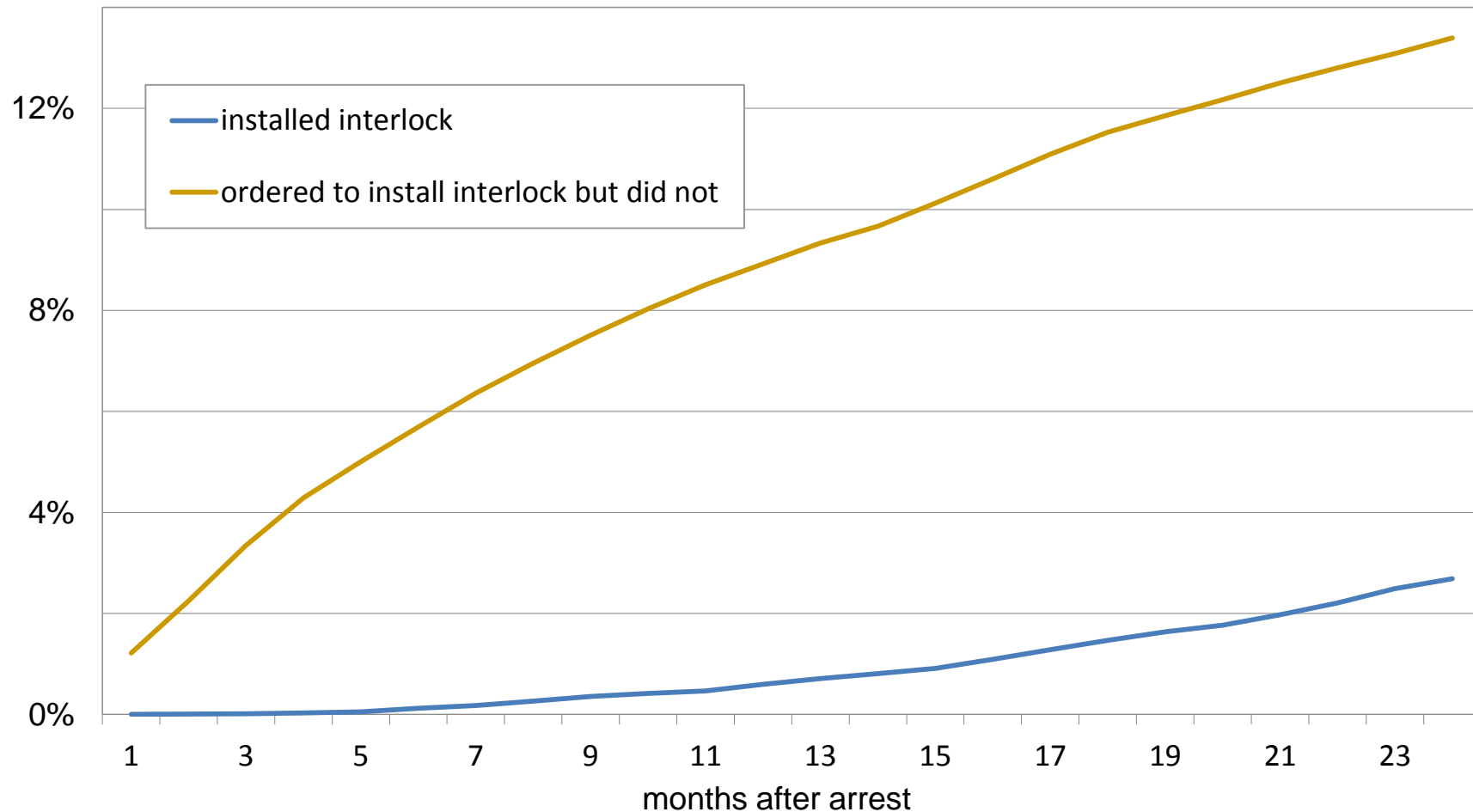




Effects of interlock law changes on recidivism

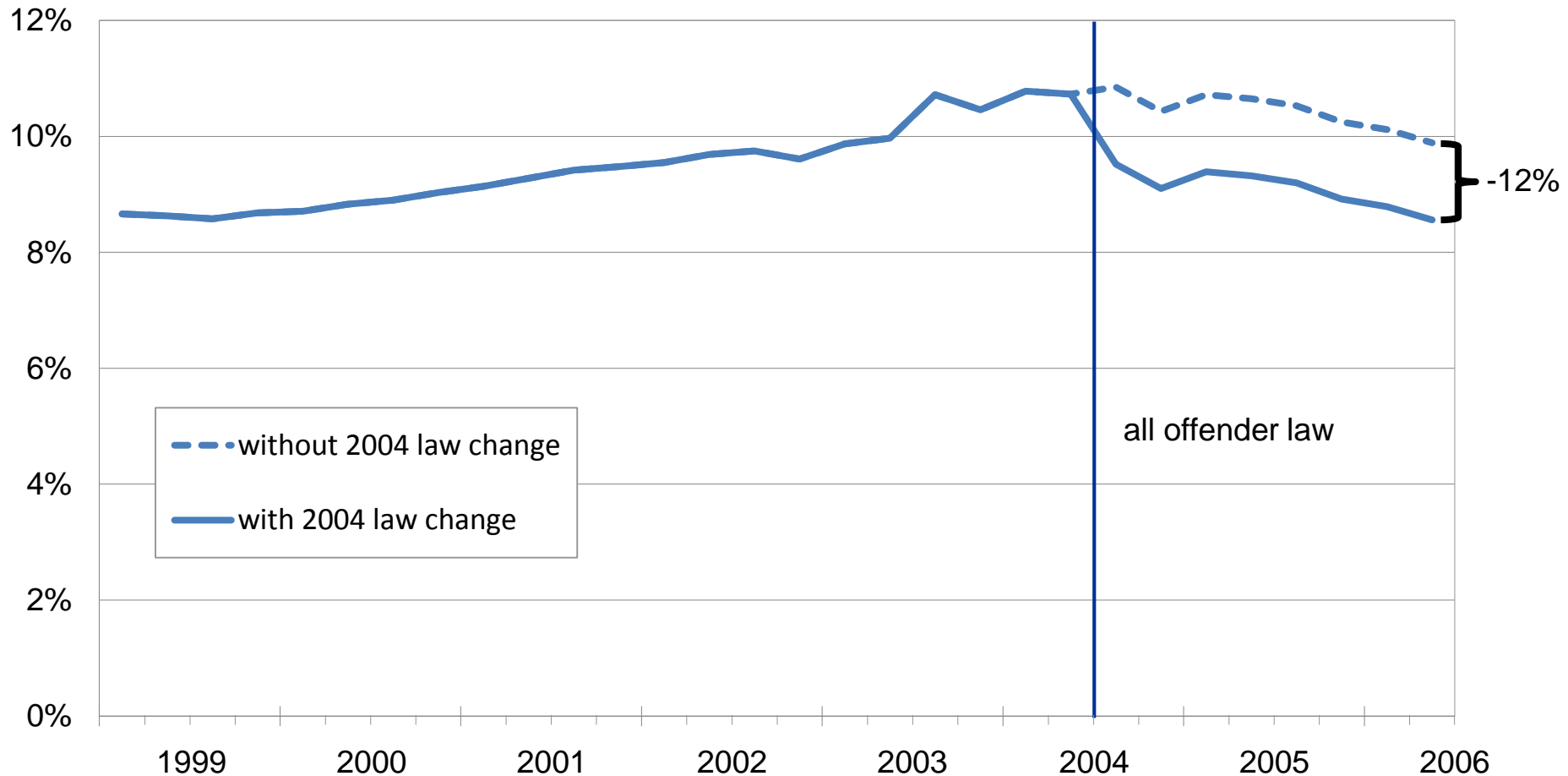
Cumulative percent of recidivism among 1st simple DUI offenders arrested after 2004 law change

By status of interlock, arrested between June 2004 and June 2006



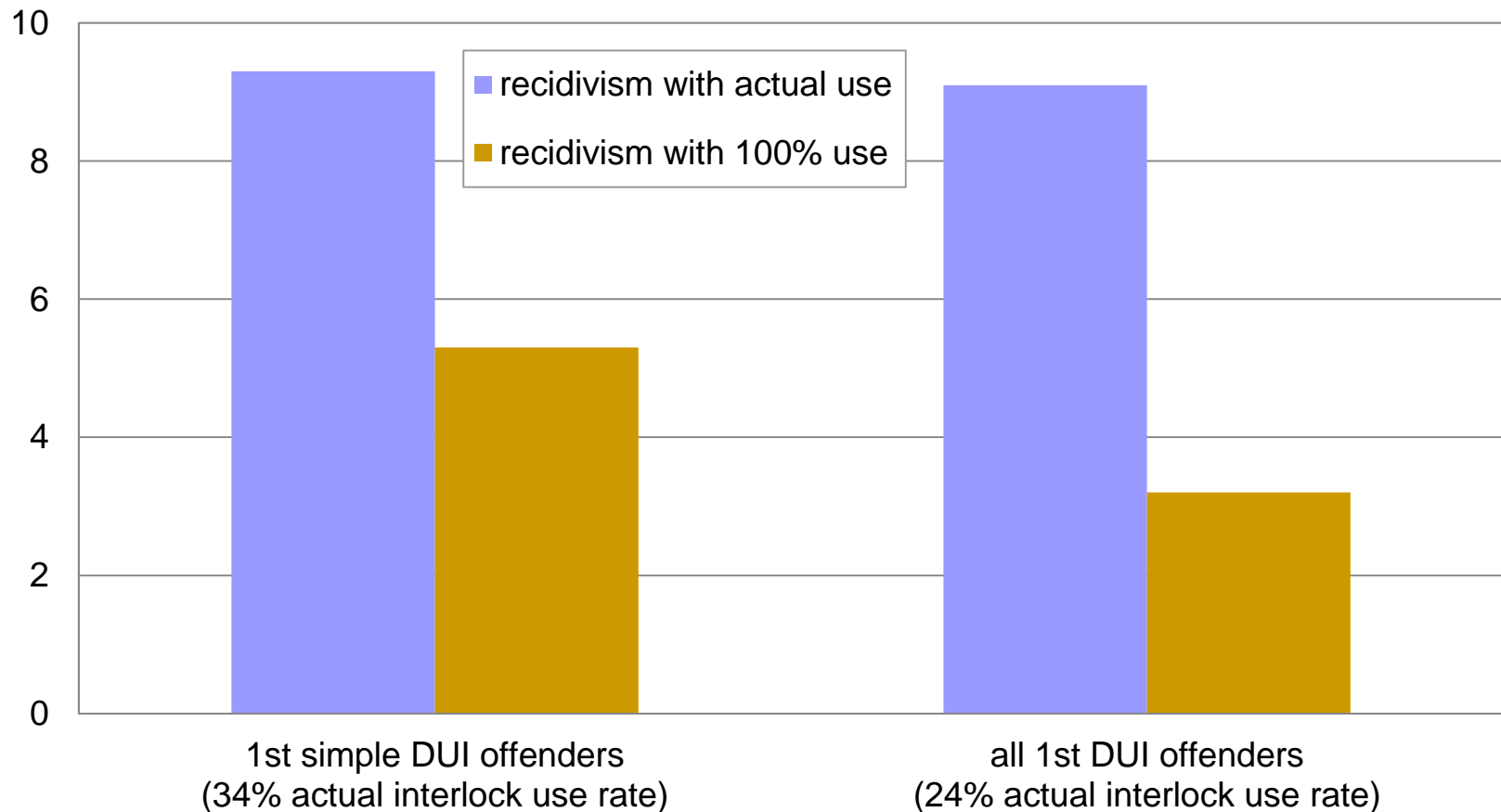
Predicted cumulative 2-year recidivism rate for 1st simple DUI convictions with & without 2004 law change

By quarter of arrest, January 1999-June 2006



Cumulative 2-year recidivism rate and projected rate with 100 percent interlock use

Arrests April-June 2006





Effects of interlock law changes on crashes

Percent decreases in single-vehicle, late-night crashes in Washington State

Relative to trends in Oregon and California

	percent	p value
2003 law change: issuance of interlock orders moved to Department of Licensing	-6.4	0.0792
2004 law change: interlock order requirement extended to all DUI convictions	-8.3	0.0183

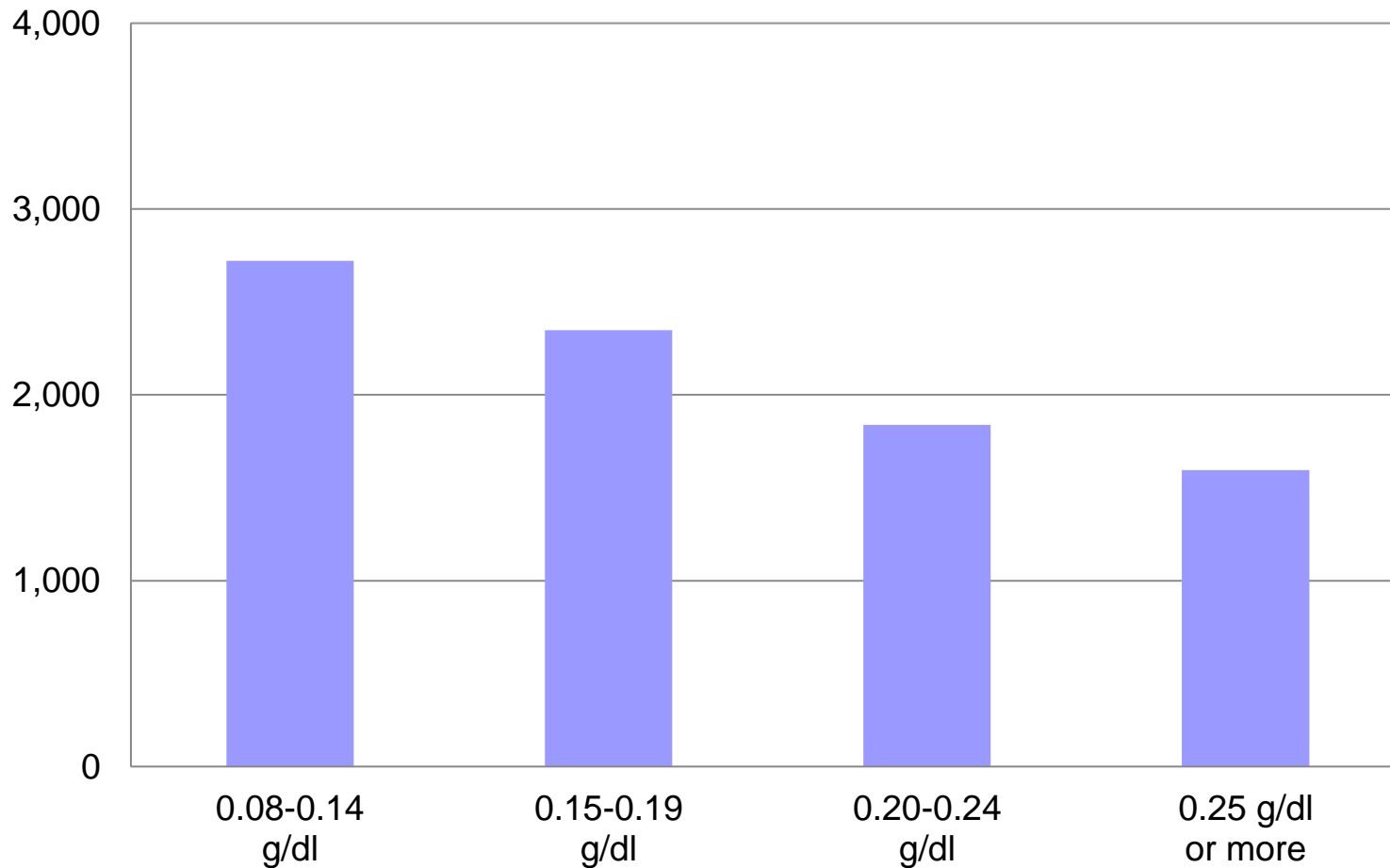
Conclusions

- Installation rates increased somewhat after administration was moved to Department of Licensing in 2003 and after the interlock requirement was extended to all DUI offenders in 2004
- Preliminary data suggest that allowing immediate interlock installation after arrest, in lieu of an administrative license suspension, led to more installations and earlier installations
- Extending interlock requirement to all first-time DUI convictions in Washington reduced recidivism by 12 percent
- Additional gains achievable with higher installation rates
- The all-offender law was associated with a significant reduction in risk of single-vehicle late-night crashes, suggesting a general deterrent effect



Should we focus primarily on
“hardcore” DUI offenders?

Deaths in 2013 involving passenger vehicle drivers with various BACs

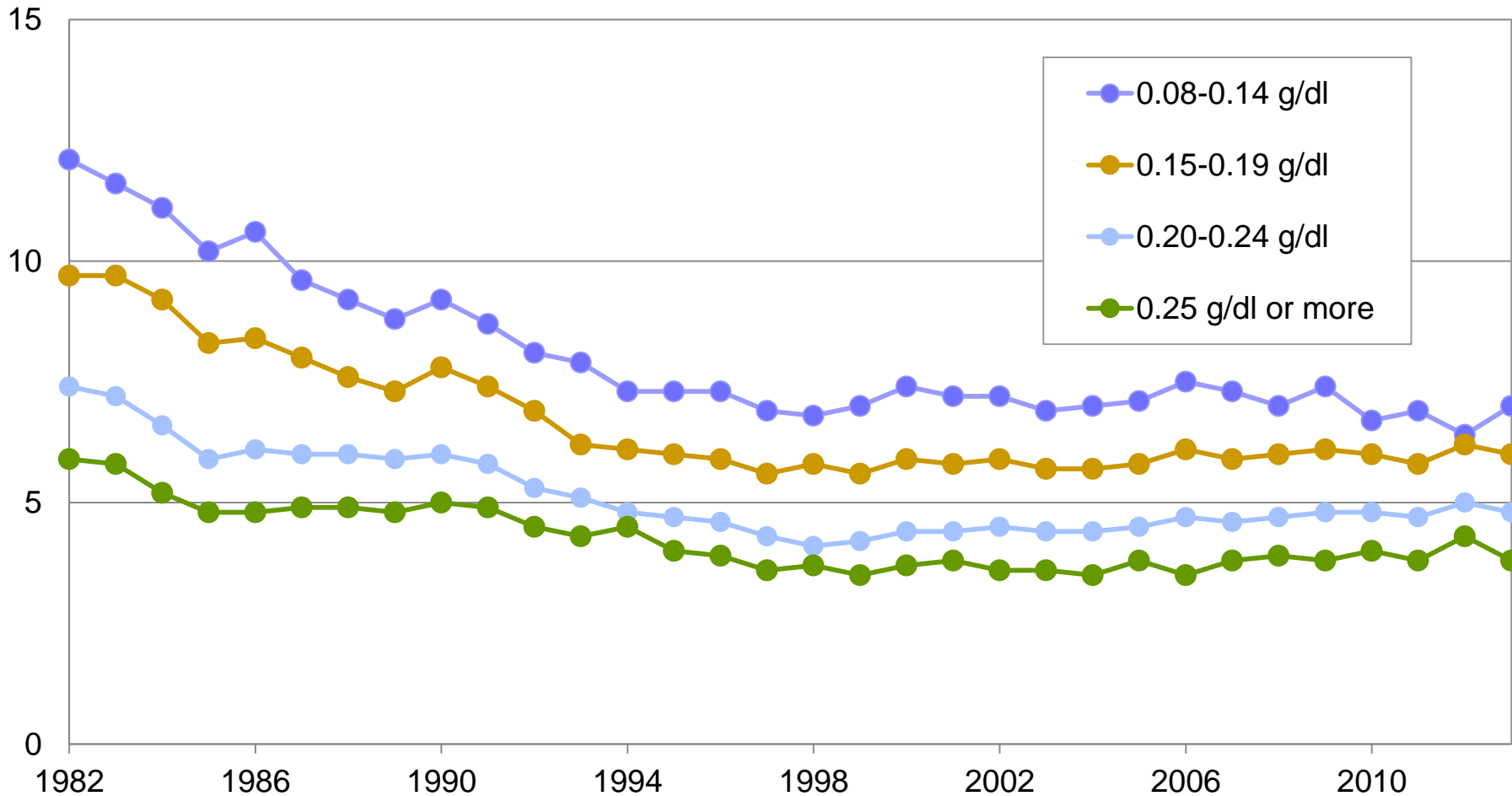


Percentage of passenger vehicle drivers in fatal crashes with DUI convictions within 3 years

2013

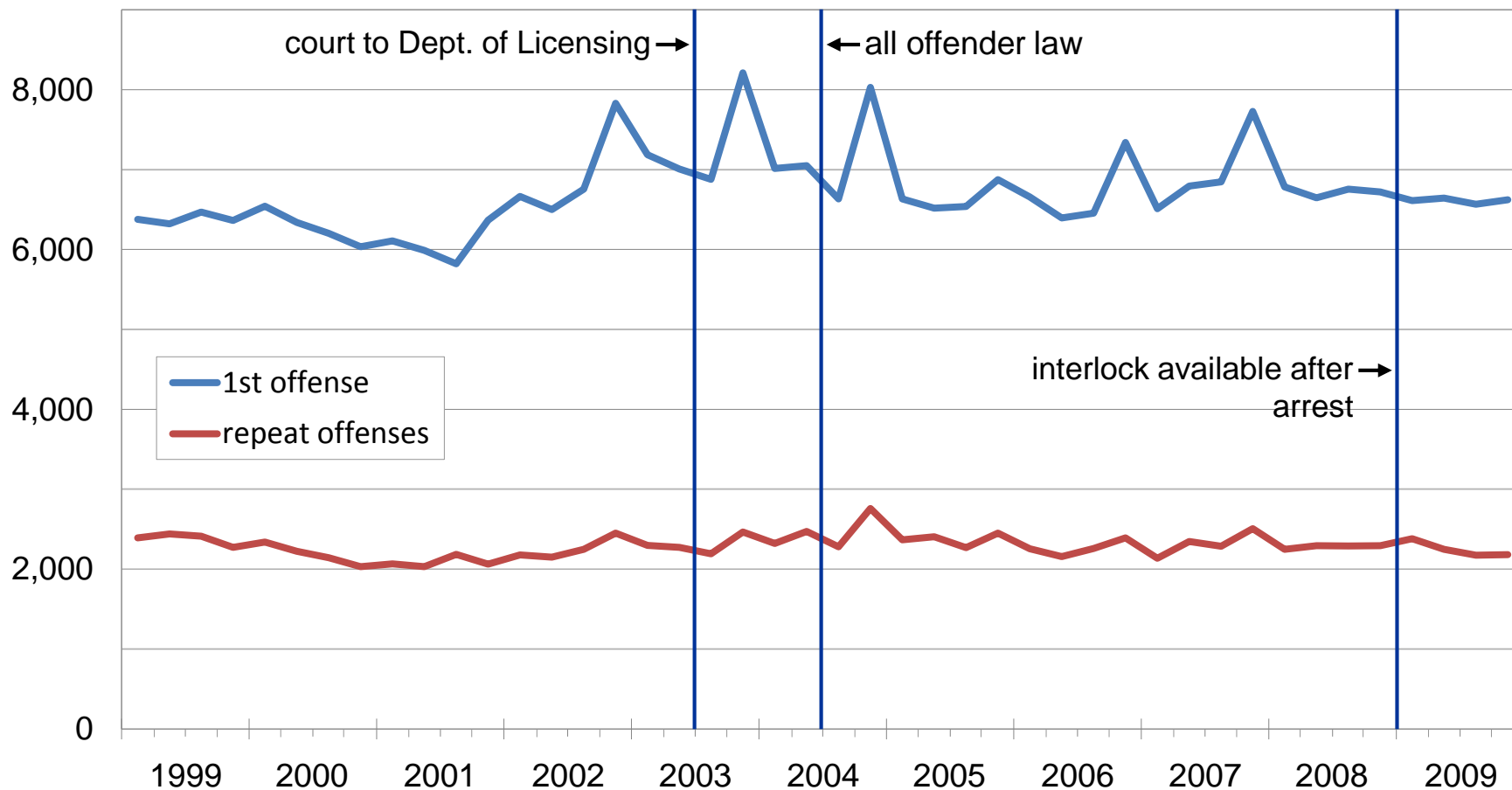
no prior offenses	95.7
1 prior offense	2.1
2 or more prior offenses	0.4
unknown	1.8

Percentage of passenger vehicle drivers in fatal crashes with various BACs, 1982-2013



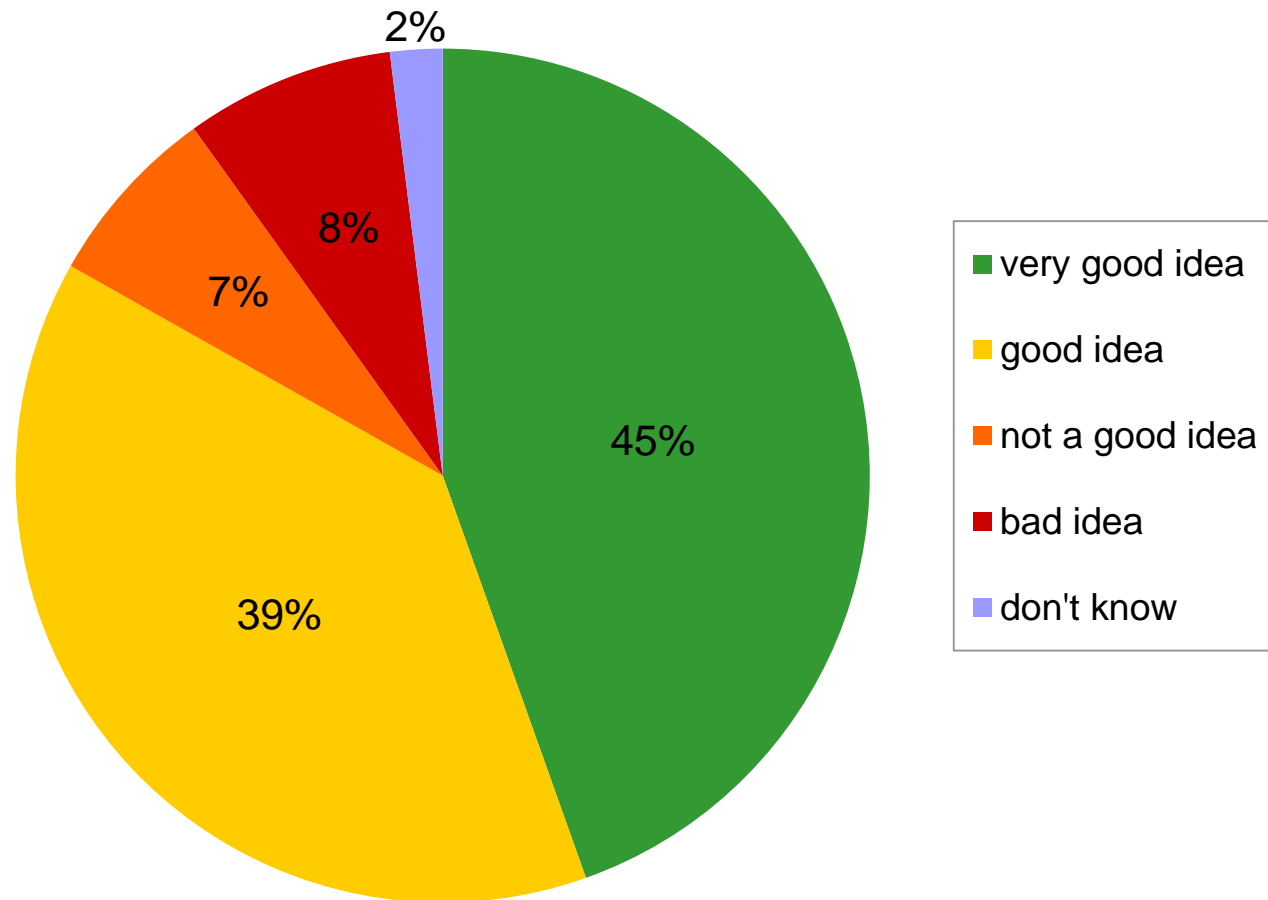
Counts of DUI-related convictions in Washington

By quarter of arrest, January 1999-December 2009



Attitudes toward requiring alcohol ignition interlocks for convicted DWI offenders

National telephone survey, 2009



Implications for states?

- Expand use of alcohol ignition interlocks by DUI offenders
 - Extend laws to all DUI convictions
 - Seek ways to increase interlock use rates
 - Reconsider loopholes in laws that allow reductions in DUI charges to traffic offenses without interlock requirements or other DUI penalties
- Publicize interlock laws to deter all drivers from driving impaired

There is little research on many specific implementation issues

- Is an interlock program more effectively administered by courts or licensing agencies?
- What are the effects on safety of allowing an interlock immediately after arrest and in lieu of an administrative license suspension?
- Should offenders be penalized for “failing” the interlock start test? Is so, how? Will this discourage interlock installations?
- Which law is better – one that allows offenders to serve the suspension rather than getting an interlock and then to reinstate their license, or one that does not permit offenders to reinstate until they show proof they installed the interlock?

Next research steps

- National study of association between alcohol-related fatal crash trends and state alcohol ignition interlock laws
- DUI offenders interviewed at court and probation offices in 2014
 - What are the factors involved in offenders' decisions to install or not install an interlock?
 - How are offenders' travel patterns affected by installing/not installing an interlock?

Alcohol-impaired driving

People continue to drive impaired, but good enforcement can deter them.

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Progress on impaired driving has stalled since the mid-1990s. Despite earlier declines in alcohol-related highway deaths, about a third of all drivers who die in crashes in the U.S. have blood alcohol concentrations of 0.08 percent or higher. Nearly 7,000 deaths could have been prevented in 2013 if all drivers were below the legal limit.

The key to reducing alcohol-impaired driving is deterrence. People are less likely to drink and drive if they believe they'll get caught. Sustained and well-publicized enforcement is the best way to let potential violators know they won't get away with it.

Effective measures against impaired driving include:

- ▶ **administrative license suspension.** This procedure, allowed in most states, lets police immediately take away the license of someone who either fails or refuses to be tested for alcohol even before they are convicted.
- ▶ **sobriety checkpoints.** Checkpoints, which have been upheld by the U.S. Supreme Court, don't always result in a lot of arrests, but they are a good deterrent if they are visible and publicized. Not all states have them.
- ▶ **minimum drinking age of 21.** Young drivers have a much higher crash risk after drinking alcohol than adults. Setting 21 as the minimum legal age for purchasing alcohol has helped reduce alcohol-impaired driving among teenagers. However, better enforcement of these laws is needed in many places.
- ▶ **alcohol interlocks.** Many states require these devices for people with impaired driving convictions. People are less likely to reoffend when they're required to have an interlock.



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Dedicated to reducing deaths, injuries,
and property damage on the highway

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