



Mark You Calendar

**Drive Sober or
Get Pulled Over
National Crackdown**
Dec 12, 2012 -
Jan 1, 2013



**2013 Commercial
Driver's License National
Partnership Symposium**
Washington, DC
January 23—25, 2013

Lifesavers Conference
Denver, CO
April 14—16, 2013

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Between the Lines

Biomarker Testing for Criminal Justice Professionals

By Stephen K. Talpins* and Mark M. Neil*

Alcohol use and misuse have long been major factors when addressing issues faced daily by criminal justice professionals. Their impact is seen repeatedly over a wide variety of offenses and offenders, whether as an element of the offense, a contributing cause of criminal behavior or a reason for failure in a post-conviction supervision setting.

Most people who consume alcohol do so safely and responsibly. On the other hand, there are millions who are dependent or misuse it. Hardcore alcohol-impaired drivers, those who are repeat offenders or drive with a blood alcohol concentration of 0.15 or higher, and who are resistant to changing their behavior despite previous sanctions, treatment or education are among them. Criminal justice professionals deal with these offenders, along with their dependency and misuse of alcohol, from the pre-trial release stages through post-adjudication supervision. In doing this, a multitude of tools and assets are needed to swiftly identify, ensure certain punishment and provide effective treatment. One tool available to these professionals is biomarkers.

Biomarkers are "physiological indicators" that are created whenever alcohol is introduced into the body, whether through consumption or transdermal absorption. These biomarkers may reflect the presence of chronic and/or high level of use of alcohol. American justice professionals began using biomarkers, primarily ethyl glucuronide (EtG) and ethyl sulfate (EtS), about 10

years ago to monitor offenders who committed alcohol-related offenses for consumption. Biomarkers can be measured at relatively low concentrations. They may be used when screening for alcohol problems, motivating offenders to reduce or cease drinking, and to identify a relapse in drinking behavior. But the use of any technology brings with it challenges.

Offenders began complaining that the biomarker tests resulted in "false positives." Critics argued that the test was too sensitive, particularly because many foods and "non-alcoholic" drinks contain alcohol. Additionally, there were no standardized test methods or cut-off levels. In 2006, the Substance Abuse and Mental Health Services (SAMSHA) responded to the concerns, advising that "the use of an EtG test in determining abstinence lacks sufficient proven specificity for use as a primary or sole evidence than an individual prohibited from drinking, in a criminal justice or a regulatory compliance context, has truly been drinking." Undaunted, forensic scientists continued to study biomarker testing and significantly improved their methods. In 2011-2012, SAMHSA reviewed the growing body of literature on biomarkers, recognized the important role that biomarker testing could play in the criminal justice system, and revised its position. This article is intended to help criminal justice professionals incorporate testing into their programs and develop protocols to minimize the likelihood false positives.

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Using EtG and EtS

EtG and EtS remain the most popular biomarkers, largely because they are relatively sensitive and specific. Research suggests that they result from as little as one drink. The “window of detection” varies according to the cutoff levels used by individual laboratories and the level of drinking. A person who obtains a 0.08 BAC may test positive up to 24 hours later. Accordingly, officials the tests might consider doing so randomly *and* frequently (a minimum of two times a week for high risk offenders with significant alcohol misuse issues).

False Positives

There is no standard cutoff laboratory level for EtG and EtS testing. A high cutoff level increases the possibility that a person who consumed alcohol can evade detection, but reduces the likelihood of a false positive. Readings of 1,000 ng/ml or more are unlikely to result from “extraneous exposure.” However, most criminal justice professionals believe that lower cutoffs are preferable for several reasons. First, the government has a compelling interest in test sensitive enough to ensure that alcohol-abusing defendants who present a threat to the public safety do not drink. Second, offenders can be ordered to avoid products containing alcohol, such as mouthwash, certain medicines, household cleaners and disinfectants, lotions, body washes, perfumes, and colognes. Thus, “extraneous exposure” itself can be a violation of an offender’s supervision. Third, the government’s burden of proof in bond revocation, probation and parole hearings typically is low. Fourth, the system affords offenders the opportunity to rebut whatever evidence the government introduces.

Who Should be Monitored?

Research suggests that even the most effective interventions take at least 90 days to change behavior for the long term. Thus, at least 90 days of alcohol monitoring might be appropriate for those who (a) refuse to be tested; (b) have a blood alcohol concentration (BAC) of 0.15 or higher; (c) test positive for alcohol and drugs; (d) or who have a prior convictions. A longer monitoring period might be appropriate for those with two or more prior convictions or who are dependent on alcohol as demonstrated by a validated risk assessment.

Repercussions for a Positive Test

People typically change because they have to. Monitoring deters unacceptable behavior only when it is couple with swift, certain and meaningful sanctions. Offenders who test positive might be subjected to short jail terms and other sanctioning, as well as enhanced treatment opportunities.

Conclusion

Understanding the options and the tools available to assist criminal justice professionals is essential in swiftly identifying, monitoring, properly sanctioning and effectively treating those offenders who misuse alcohol. Biomarkers provide one tool among many in reaching the ultimate goal of reducing recidivism and saving lives.

For more information on biomarkers and the SAMHSA review, contact the National Traffic Law Center.

Holiday Season 2012
Drunk Driving Prevention Campaign
December 12, 2012 - January 1, 2013
Drive Sober or Get Pulled Over

The holiday season is particularly dangerous. During December 2010, 2,597 people lost their lives in motor vehicle traffic crashes, an average of 25 people per day. Thirty (30%) percent of those fatalities involved an alcohol-impaired driver. Of those, seventy-one percent (71 %) involved a driver with a blood alcohol concentration of .15 and above.

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