

Northwest Evaluator

The Pacific Northwest
Drug Recognition Expert Newsletter



INSIDE

Coordinator Comments
Page 1

UN Warns of Rise in Ketamine
Use in Dance Scene

Meth Hot Spots Identified
by New Method
Page 2

Swedish Study of Concentration
of THC in Blood
Page 3

The "CSI Effect" is Really
The "Tech Effect": Coping
With The New Forensic Reality

Nearly One-Half of Youths Who
Have Ever Misused Prescription
Pain Relievers Have Also Used
Two or More Illicit Drugs
Page 5



COORDINATOR COMMENTS by Senior Trooper Michael Iwai

On December 8, 2008, I was appointed as the Oregon Drug Evaluation Classification Program State Coordinator. I would like to thank all those who participated in the selection process including but not limited to, Superintendent Timothy McClain (OSP), Captain Gerry Gregg (OSP), Lieutenant Ethan Wilson (OSP), Troy Costales (ODOT), Gretchen McKenzie (ODOT), and Chuck Hayes (IACP). I appreciate the many others that have supported me with the transition to this new position.

With that said, I would like to recognize and extend my gratitude to my predecessor, Timothy Plummer. Throughout my DRE career, I have been blessed to have Timothy Plummer as a personal friend. I have met few with the desire and passion that Timothy Plummer has displayed for the DRE Program. His expertise and leadership as the DRE "Guru" has been recognized both at the local and national levels. His classes, workshops, and other presentations have always received high praise and excellent remarks. Not to mention, his DRE knowledge and his unique teaching style has made him one of the best DRE Instructors in the nation. Thanks Tim.

We are drawing closer to the Oregon DRE In-Service scheduled March 16 & 17, 2009, in Salem, Oregon. This training opportunity will meet the 8 hour requirement for re-certification. As a reminder, registration needs to be confirmed through Laura Steward by calling 503.934.0269 or by email laura.steward@state.or.us no later than February 27, 2009. When confirming your registration please advise if you will be purchasing lunch at the Oregon Public Safety Academy (OPSA) Cafeteria.

DRE Instructors and DREs mark your calendars for the upcoming 2009 Oregon DRE School scheduled April 28 through May 8 at the Oregon Military Academy in Monmouth, Oregon. Applications will be accepted through March 7, 2009, for review and selection by the Steering Committee. The course manager selected for this school will be contacting instructors for class assignments shortly.

In closing, I look forward to working with some of the best DREs in the nation. Keep up the excellent work.

UN WARNS OF RISE IN KETAMINE USE IN DANCE SCENE

A drug used to tranquilize horses, called ketamine, is gaining popularity within the dance scene in a number of countries throughout the world. That's according to a recent report by the United Nations Office of Drugs and Crime, which warned that long-term use of ketamine use can have serious effects on the brain, the kidneys and internal organs.

Now the most abused drug by so called "clubbers" in Hong Kong, ketamine is gaining popularity across southern China. Its use is spreading throughout East Asia as well as Australia, Europe and North America. But because ketamine is a legal substance – and therefore not controlled – the true extent of its use is unclear and probably underestimated.

Nicknamed 'Special K', ketamine can be taken in powder, liquid or tablet form but is often mixed with other drugs or alcohol. Sometimes ketamine is laced with synthetic drugs such as methamphetamine and then sold as ecstasy because it commands a higher price than straight ketamine.

"It is a new candy for the youth," explains UNODC expert Jeremy Douglas, who cautioned that people can be easily fooled. "Sometimes they know they're using ketamine, sometimes they don't." Uncertainty about the content of tablets sold as "ecstasy" is of concern and poses particular risk.

The effect of the drug depends on the dose. With low doses, party-goers may feel euphoric, have psychedelic experiences and high levels of energy, but high doses might plunge the user into an out-of-body or near-death experience known as the "K-hole." "It's an anaesthetic so it can put someone in a catatonic state, a different state of being. Perception of the body, time and reality is severely altered," Douglas said.

Long-term use may impair the memory and cognitive functions, and damage the kidneys and internal organs.

The emergence of ketamine on the synthetic drug scene has gone unnoticed in many parts of the world. Unlike illicit drugs, the trade in ketamine is not internationally controlled. This makes it hard to get a clear picture of how the drug is being diverted for illicit purposes. "We're seeing the use of ketamine taking off, but it's up to Member States and national governments to control it. Anyway, it seems that the use is growing both in developing countries and in the west," Douglas says.

Information obtained from CADCA Coalitions Online
November 13, 2008

METH HOT SPOTS IDENTIFIED BY NEW METHOD

A researcher at Oregon State University has used a new method of combining multiple sources of data to identify counties in Oregon with high numbers of methamphetamine-related problems per capita, giving officials a new tool in fighting the illegal drug.

The study, presented at a toxicology conference in Canada, examined statistics from four sources then identified five counties with the most meth-linked incidents per capita, such as deaths, poisonings and place where meth is made.

"This method of combining different types of data – like health statistics and the location of illicit labs-to assess Oregon's methamphetamine problem is a new approach toward studying a significant public health concern," said OSU associate professor Dr. Daniel Sudakin, the study's author. "There are a lot of people analyzing the issue of methamphetamine, but they do it from different angles. For example, some focus on health problems, others focus on hazardous chemical releases from meth labs.

"This OSU study incorporates information about when and where these incidents occurred, giving us a bigger picture of what's going on across the state," Sudakin added. "It also includes rural areas, which tend not to be studied as much as urban areas in terms of meth use and production."

Sudakin, a medical toxicologist and epidemiologist, said his study and method of analyzing multiple sources of data could help public health and policy officials to more effectively allocate funds and other resources for substance abuse treatment and prevention to areas of the state that need them most.

The study gathered countywide data on 2,570 meth-related incidents documented by the Oregon Poison Control Center, the Oregon Narcotics Enforcement Association, the Oregon State Police's Medical Examiner Division and the Oregon Public Health Division's Hazardous Substances Emergency Events Surveillance System. The statistics ran from 1998-2007, although each group of data didn't span this entire period.

The data included deaths connected with the stimulant; the discovery of places where meth was made; the release of dangerous fumes and chemicals from these "labs;" the accidental ingestion of toxic chemicals used to make the addictive drug; the haphazard dumping of waste from the labs; and calls to the Oregon Poison Control Center regarding overdoses and other meth-related concerns. The study, however, didn't include crime-related data like arrests for possession of meth. Sudakin then analyzed the data using a computer

Software program called SaTScan, which epidemiologists use to map diseases and other health concerns and determine if they're clustered in specific locations and time periods.

The analysis found that on a per-capita basis, these problems were most common in sparsely populated, rural Umatilla County when compared with other counties and the state overall, which has a population of about 3.7 million. The study determined that every time a lab or dump site was discovered, it was 11.5 times more likely to be in Umatilla County than in any other part of the state. When a meth-related spill, leak or other hazardous substance release was reported, it was 8.3 times more likely to be in Umatilla County, which is in a wheat-growing belt in northeastern Oregon and has slightly more than 70,000 residents.

After Umatilla, Sudakin's study identified Multnomah, Marion, Linn and Lincoln counties as having significant meth-related problems per capita, but it did not rank these four counties. In Multnomah County, labs and dump sites were 1.4 times more likely to be found there than in the rest of the state, and meth-related deaths were 2.1 times more likely to occur there. In Linn County, hazardous releases of meth-related substances were four times more likely to take place there than in the rest of Oregon, and deaths connected to meth were 1.2 times more likely.

The Public Health Division documented 43 meth labs in Umatilla County between 1998 and 2005, making it the county with the second-highest number of labs and giving it 15 percent of the statewide total. Multnomah ranked first within 88. The health division emphasized that the numbers are conservative given that they only include labs that had been operating within 72 hours leading up to their discovery.

Sudakin's study found that meth labs in Oregon have decreased since Oregon became the first state in the country in 2005 to pass a law to require a prescription to obtain cold medicines containing pseudoephedrine, which is used to make meth. The law took effect in July 2006.

"There has been substantial progress in reducing the number of methamphetamine laboratories across the state, but there are still significant problems with the abuse of the drug in Oregon," said Sudakin, who teaches environmental and molecular toxicology.

Clandestine meth labs are typically found in motel rooms, apartments and rental properties. The drug is made from common household items that are available at supermarkets and hardware stores. When these ingredients are mixed, they generate a large amount of chemical waste. It's typically dumped

down the drain but may be stored, buried or dumped elsewhere.

The study is called Regional and Temporal Variation in Methamphetamine-Related Incidents and was funded by Oregon Health and Science University's Medical Research Foundation.

Information obtained from TITAN Fusion Center, Narcotics and Gangs, Week of September 3, 2008

SWEDISH STUDY OF CONCENTRATION OF THC IN BLOOD

A recent paper compared the age, gender, and concentrations of Delta(9)-Tetrahydrocannabinol (THC) in blood of individuals apprehended for driving under the influence of drugs (DUID) in Sweden, where a zero-tolerance law operates. Specimens of blood or urine were subjected to a broad screening analysis by enzyme immunoassay methods. THC positives were verified by analysis of blood by gas chromatography-mass spectrometry (GC-MS) with a deuterium-labelled internal standard (d(3)-THC). All toxicology results were entered into a database along with the age and gender of apprehended drivers. Over a 10-year period (1995-2004), between 18% and 30% of all DUID suspects had measurable amounts of THC in their blood (> 0.3 ng/ml) either alone or together with other drugs. The mean age of cannabis users was 33 (range 15-66 years), with a strong predominance of men (94%). The frequency distribution of THC concentrations (n=8794) was skewed markedly to the right with mean, median and highest values of 2.1 ng/ml, 1.0 ng/ml and 67 ng/ml, respectively. The THC concentration was less than 1.0 ng/ml in 43% of cases and below 2.0 ng/ml in 61% of cases. The age of offenders was not correlated with the concentration of THC in blood. THC concentrations in blood were higher when this was the only psychoactive substance present (n=1276); mean 3.6 ng/ml, median 2.0 ng/ml compared with multi-drug users; mean 1.8 ng/ml, median 1.0 ng/ml. In cases with THC as the only drug present the concentration was less than 1.0 ng/ml in 26% and below 2.0 ng/ml in 41% of cases. The high prevalence of men, the average age and the concentrations of THC in blood were similar in users of illicit drugs (non-traffic cases). The study authors concluded that the concentration of THC in blood at the time of driving is probably a great deal higher than at the time of sampling (30-90 minutes later). The further concluded that enacting science-based concentration limits of THC in blood (e.g. 3-5 ng/ml), as discussed in some quarters, would result in many individuals evading prosecution and that zero-tolerance or limit of quantitation laws are a much more pragmatic way to enforce DUID legislation.

Information obtained from ICADTS Reporter
Fall 2008 Vol. 19, No. 4

THE "CSI EFFECT" IS REALLY THE "TECH EFFECT": COPING WITH THE NEW FORENSIC REALITY

Film and television have long found fodder in courtroom dramas. However, in recent years the media's use of the courtroom as a vehicle has not only proliferated, it has changed its focus. Now many media representations of the courtroom are based on actual cases and an apparent fascination with our criminal justice process. *Court TV* now makes live "gavel to gavel" Internet coverage of ordinary trials available on a subscription basis.

But then the media also clouds the line between real trials and pure fiction. The blurring of reality begins with the so-called crime magazine television shows, such as *48 Hours Mystery*, *American Justice*, and even *Dateline NBC* on occasion. These shows portray actual cases but only after editing and narrating for dramatic effect.

A next level of reality distortion about the criminal justice system includes the extremely popular crime fiction television programs. *Law and Order* is everywhere on television now and promotes its plots as "ripped from the headlines," as it replicates some issue in an actual case that was widely disseminated in the rest of the media.

However, the most popular courtroom portrayals, whether actual or edited or purely fictional, have been about the use of new science and technology to solve crimes. *CSI* has been called the most popular television show in the world. It is so popular that it has spawned other versions of itself that dominate the traditional television ratings. Its success has also produced similar forensic dramas, like *Cold Case*, *Bones*, *Numb3rs*, and many others.

Many prosecutors, judges and journalists have claimed that watching television programs like *CSI* have caused jurors to wrongfully acquit guilty defendants when no scientific evidence is presented. As one prosecutor complained, "jurors . . . expect us to have the most advanced technology possible, and they expect it to look like it does on television." These complaints are based primarily on anecdotes without any empirical support.

Working with Professors Gregg Barak and Young Kim of Eastern Michigan University, we undertook the first empirical study to determine whether this so-called "CSI Effect" exists. The complete results of the study were recently published in the *Vanderbilt Journal of Entertainment and Technology Law* and are available online at <http://law.vanderbilt.edu/publications/journal-entertainment-technology-law/archive/index.aspx>.

We set out to answer three basic questions: do jurors expect prosecutors to present scientific evidence?; do jurors demand scientific evidence as a condition for a guilty verdict?; are juror expectations and demands for scientific evidence related to watching law related television shows?

We surveyed 1,027 persons called for jury duty in Washtenaw Circuit Court between June and August of 2006. The anonymous survey was administered prior to jury selection or any preliminary instruction and jurors were assured that it was unrelated to their potential selection as a juror. First we asked about their television watching habits in six categories of crime related shows and whether they believed those shows accurately portrayed the criminal justice system. Next we asked them what types of evidence, both scientific and non-scientific, they expected the prosecutor to present in several different case scenarios.

We wanted to find out not only if jurors expected scientific evidence but also whether they would demand to see scientific evidence before they would find a defendant guilty. To do so, we asked them for their probable verdict in case scenarios with various types of evidence. So that they would be in a similar legal position, we gave them the standard presumption of innocence and reasonable doubt instructions. We also obtained demographic data about the jurors for analysis purposes.

Do these modern jurors really expect the prosecution to present more scientific evidence? Our survey indicates that they do. Indeed, 46.3% of jurors expect to see some kind of scientific evidence in every criminal case. But these jurors' expectations were not just blanket expectations for scientific evidence but rather the expectations for particular kinds of scientific evidence seem to be rational.

What does *CSI* have to do with these expectations? In fact, they may be more discriminating jurors. *CSI* watchers as a group have higher expectations about scientific evidence that is more likely to be relevant to a particular crime than non-*CSI* watchers, and they have lower expectations about evidence that is less likely to be relevant to a particular crime than do non-*CSI* watchers.

So jurors do have high expectations for scientific evidence. The more important question is whether those expectations will result in an acquittal if they are not met. Do jurors demand to see scientific evidence before they will find a defendant guilty? The results may surprise you. Where the jury hears the testimony of the victim or other witnesses but gets no scientific evidence more would find the defendant guilty than not guilty in every kind of case, except a rape case. On the other hand, if the prosecutor is relying on circumstantial evidence, jurors *will* demand some kind of scientific evidence before they will return a guilty verdict.

So is this all because of *CSI*? All that television watching must be the cause of these demands for scientific evidence, right? In fact, our survey did *not* find that watching *CSI* had a significant impact on whether jurors were likely to acquit a defendant without scientific evidence.

We concluded that, generally, juror expectations that they will be presented with scientific evidence are high

and that jurors' demand for scientific evidence as a condition of guilt is high in all rape cases, and in all other types of cases that rely on circumstantial evidence but there apparently is no "CSI Effect" that results in acquittals.

Well if it is not watching *CSI*, what caused the increased expectations and demands? Blaming *CSI* or similar television shows for this effect is just too simplistic. We suggest that a broader "tech effect" of changes in our culture may more likely account for these increased expectations and demands of jurors.

This is an amazing technological age. The last thirty years have brought about such scientific discoveries and developments that some justifiably have called it a technology revolution. At the same time, new technology has been used to create another revolution in information availability and transmission. These developments in science and information are not only contemporaneous; they feed off of each other. The information technology system uses its media to grab scientific discoveries and quickly make them part of our popular culture. Ordinary people know, or at least think they know, more about science and technology from what they have learned in the media than they ever learned in school. Every week, this new scientific and information age comes marching through the courtroom door in the psyche of almost every juror that claims a seat in the box.

Perhaps jurors are right in expecting much more from the prosecution today than they have in the past. Our legal system demands proof beyond a reasonable doubt before the government is allowed to punish alleged criminals. Where there is an available scientific test that would produce evidence of guilt or innocence, and the prosecution chooses not to perform that test and present its results to the jury, it may not be unreasonable for the jury to have a doubt about the strength of the government's case. Jurors appear to have decided that today it is "reasonable" to expect more from the prosecution in the way of scientific evidence than they have expected in the past.

How should the prosecution respond to these findings? The obvious answer is to get the evidence the jury wants. That will take a major commitment to increase law enforcement resources by equipping investigating agencies with the modern forensic science equipment that jurors know is available and providing significant increases in forensic science personnel that will enable the results of forensic testing to be available in a timely manner. Public crime laboratories must be brought up to modern standards and the police must have enough laboratories and personnel to meet the demands of our criminal justice system.

How are we meeting this challenge? Not very well. In Michigan, it was even proposed last year that two of the state crime laboratories be closed as a budget cutting measure. The last federal study was based on 2002 reports

and indicated that at that time state labs ended the year with over 500,000 backlogged requests for forensic services—a more than 70% increase in the backlog of requests compared to the beginning of the year. They found that about 1,900 additional FTEs would have been needed to achieve a 30-day turnaround for all 2002 requests for forensic services. Based on starting salaries for analysts or examiners in these labs, the estimated cost of the additional FTEs exceeded \$70.2 million at that time.

A second suggestion for law enforcement is less expensive but more difficult. Prosecutors need to find better ways to address these expectations and demands of jurors, especially when those expectations are not rational or relevant to a particular case. When scientific evidence is not relevant, prosecutors need to find better ways of explaining the lack of relevance to jurors. This may necessitate the use of anticipatory, negative evidence, such as having an investigator or an expert explain why certain types of evidence are not possible or reasonable under the circumstances.

Everyone in the criminal justice system needs to adapt to this new jury. Most importantly attorneys must understand, and address, the fact that jurors come into the courtroom filled with a great deal of knowledge about the criminal justice system and the availability of scientific evidence. And they are usually right.

The criminal justice system must find ways to adapt to, rather than fight against, this "tech effect." It may take a paradigm shift and it may cost a lot of money. But unless that happens, juries may well conclude that there is "reasonable doubt" that the criminal justice system is doing its job. If the government does not respond, it is placing the safety and security of our citizens in peril.

Information obtained from *The Green Light News* - August 2008
Prosecuting Attorneys Association of Michigan

Nearly One-half of Youths Who Have Ever Misused Prescription Pain Relievers Have Also Used Two or More Illicit Drugs

Approximately one-tenth of U.S. youths ages 12 to 17 reported using non-prescribed pain relievers at least once in their lifetime, according to an analysis of data from the National Survey on Drug Use and Health. These youths were significantly more likely than those who did not use non-prescribed pain relievers to also report poly-drug use. For example, 49% of youths who used non-prescribed pain relievers also reported using two or more illicit drugs at least once in their lifetime, compared to 4% of youths who did not use non-prescribed pain relievers. Previous research has found a similar relationship between nonmedical use of prescription stimulants and use of other illicit drugs.

Information obtained from Cesar Fax
October 20, 2008, Vol. 17, Issue 42

Oregon Drug Evaluation Classification Program
Oregon State Police
255 Capitol Street NE 4th Floor
Salem, Oregon 97310

The "NW Evaluator" is edited and published by the Oregon Drug Evaluation Classification Program and the Oregon State Police Patrol Services Division. It is available online at www.oregon.gov//ODOT/TS/dre.shtml. All materials appearing in the NW Evaluator are in the public domain and may be reproduced without permission. Citation of the source is appreciated.



**15TH ANNUAL IACP
"Drugs, Alcohol, &
Impaired Driving Conference"**

**August 8 – 10, 2009
Little Rock, Arkansas**

For more information, visit the conference website at www.decp.org