

# Northwest Evaluator

The Pacific Northwest  
Drug Recognition Expert Newsletter



## INSIDE

Coordinator Comments  
Page 1

U.S. Prescription Drug  
Abuse Detailed

Nutmeg High

Methamphetamine Cost Society  
Page 3

MDMA in Turtle-Shaped  
Chocolates and in Psilocybe  
Mushrooms

Alcohol's Effect on the Brain  
Is Rapid, Detrimental

Smoking Impedes Brain's  
Recovery from Alcohol Damage  
Page 4

Wastewater Used to Map  
Illicit Drug Use  
Page 5



## COORDINATOR COMMENTS by Senior Trooper Michael Iwai

The 2009 Oregon Drug Recognition Expert School was held in Monmouth, Oregon, from April 27 through May 8, 2009. There were 18 DRE students representing city, county and state law enforcement that attended this year's school, which went well. Officer Robert Hayes from the Albany Police Department served as the Course Manager and received many compliments from the students and instructors alike. Officer Hayes' ability to manage the additional responsibility, extra time, and dealing with a campus that had closed due to the "Swine Flu" did not go unnoticed by other senior DRE instructors. Officer Hayes continuously displayed professionalism, dedication, and was instrumental with the success of the 2009 DRE School.

The overall class average for the DRE Pre-School was 92.4%, which included one perfect score of 100%. All 18 students passed the DRE School final test with two students scoring 99%. Combining the Pre-School final, five quizzes, and the DRE School final test, the overall class average was 93.4%. The student with the highest individual school average was 96.9%.

DRE Field Certification Training was held in late May and early June at ODOT Region #1 Headquarters in Portland, Oregon. In eight days, 128 drug evaluations were conducted with 14 rule outs and a toxicology confirmation rate of 91.2%. Furthermore, several DREs were able to complete drug evaluations for re-certification. An additional day was added to each week of certification training to allow for the administration of the DRE Final Knowledge Examination, which proved beneficial. To date, all 18 students have passed the DRE Final Knowledge Examination and 12 have certified through Oregon's DECP and the IACP. The remaining six DREs have their progress certification logs circulating among DRE instructors for final signatures.

As a result of the hard work and dedication by the students and instructors of the Oregon Drug Evaluation and Classification Program, Oregon continues to be a national leader in impaired driving.

To all the instructors that helped during the 2009 DRE School and Certification Training; thank you for a job well done. Besides, Officer Robert Hayes, Albany Police Department, special recognition and appreciation need to be given to the following for their dedication and continued support during the 2009 DRE School and Field Certification Training:

Sr. Trooper Ken Snook, Oregon State Police (Asst Course Manager)  
Laura Steward, Oregon State Police  
Officer Darke Hull, Portland Police Bureau

(Continued from Page 1 – Coordinator Comments)

**Chuck Hayes, International Association of Chiefs of Police  
Dr. Karl Citek, Pacific University School of Optometry  
Dr. Mark Pedemonte, Pacific University  
Deputy District Attorney Jody Vaughan, Deschutes County District Attorney's Office  
Lynn Howard, Oregon State Police Crime Laboratory  
Terry Sevey, Oregon Military Academy  
Leann Linson, ODOT Region #1 Headquarters  
Brenda Triplett-Coleman, ODOT Region #1 Headquarters**

**As of July 1, 2009, there are DRE policies and procedures in effect. Please visit the Oregon State Police website, [www.oregon.gov/OSP/PATROL/drug\\_recognition\\_prg.shtml](http://www.oregon.gov/OSP/PATROL/drug_recognition_prg.shtml) (Patrol Services/DRE), and/or the Transportation Safety Division of the Oregon Department of Transportation website, [www.oregon.gov//ODOT/TS/dre.shtml](http://www.oregon.gov//ODOT/TS/dre.shtml), for a copy of the Oregon Drug Evaluation and Classification Program Policies and Procedures. Please become familiar with the DECP Policies and Procedures. In addition, if you have not already done so, please complete the Oregon DECP Acknowledgment Form and return it to Laura Steward at GHQ.**

**I am sure most of you are aware of the recent Regional and Allied DRE Coordinator selections. There are several reasons why the change was necessary and I will share a few with this writing. First, it identifies DREs that carry more responsibility and are easily identified for reporting requirements. Second, it provides a checks and balances for a Program that has over 200 DREs. Lastly, it provides some additional recognition to the working DREs that have contributed for years and in some cases, since the birth of the DRE Program in Oregon.**

**Please utilize your Regional or Allied Coordinator for immediate DRE issues and concerns. In addition, please forward your completed reports, overtime reimbursement and DRE re-certification forms to your appropriate coordinator. Furthermore, keep your Regional or Allied Coordinator informed on any SFST refreshers, DITEP, DID, or other related training your providing to your agencies and communities.**

**The Regional and Allied Coordinators have been broken down based on geographical location and all have been assigned counties of responsibility. All DREs selected bring experience, knowledge, and a commitment to the Program. In the near future, all Regional and Allied DRE Coordinators will schedule a meeting to discuss areas of concern, ideas for improvement, and/or any other questions you may have. If you are interested in the Regional or Allied Coordinator position please submit your letter of interest with a signature from your department head and forward it to the Oregon DECP office. It will be kept on file for two years.**

**Please contact me at [Michael.Iwai@state.or.us](mailto:Michael.Iwai@state.or.us) or Laura Steward at [Laura.Steward@state.or.us](mailto:Laura.Steward@state.or.us) if you have any questions regarding the DRE policies and procedures or Regional/Allied Coordinators.**

**Here are some upcoming DRE training opportunities:**

**August 21, 2009, DITEP (Train-the Trainer), ODOT Region #2 Building B, Salem, Oregon**

**September 21-25, 2009, DRE/SFST Instructor School, Oregon Public Safety Academy, Salem, Oregon**

**As always, stay safe and continue having an impact on impaired driving in your communities.**

## U.S. PRESCRIPTION DRUG ABUSE DETAILED

It's the second leading cause of accidental death in the nation, and it's happening right here in Montana. The Office of National Drug Control Policy released a report on prescription drug abuse, which shows it's a major health concern in the state.

The recent report says prescription drug abuse costs public and private medical insurers just over \$72 billion a year. The report also shows pharmaceutical abuse is the result of hundreds of deaths across the nation.

The 2009 National Prescription Drug Threat Assessment was prepared by the National Drug Intelligence Center and the Drug Enforcement Administration. The report shows between 2001 and 2005 accidental deaths involving prescription drug abuse went up by 114%.

The report found in 2005 over 8,500 deaths nationwide involved prescription pain medication. The report also pointed out prescription drug abuse is most prevalent among people between the ages of 18 to 25--from 2003 to 2007 about 6% of this age group reported non-medical prescription drug use in the past month.

Drug experts also say controlled prescription drugs are often more readily available than heroin in all drug markets.

The ONDCP Director says prescription drug abuse is similar to the threat of illicit drug such as cocaine and heroin. ONDCP also says in 2006, the last year for which data is available, drug-induced deaths in the United States were higher than gun-related deaths and ranked second to car accidents.

The Drug Enforcement Administration said prescription drug abuse often leads to the use of harder drugs.

Information obtained from KPAX-TV - Online

---

### NUTMEG HIGH

The nutmeg high was popular in past generations of drug users (60's, 70's and 90's) its current popularity exists because its component chemicals bear resemblance to MDMA; there are intrepid cooks out there who distill nutmeg into safrole and myristicin in an effort to synthesize MDMA, one of our DAR instructors (Jack Meier) actually took down a safrole conversion lab some years back--the guy was trying to make Ecstasy). Anyway, nutmeg can be prepared in any number

of ways to elucidate and extract the safrole and myristicin in it. Nutmeg oils or nutmeg pastes are spread on bread or whipped into a "milkshake." The effects are slow to come on and they are slow to wear off. The physical experience and symptoms are weakly similar to what is seen with people who use Jimson Weed. The effects are scopolamine-like. The two chemicals (safrole and myristicin) can inhibit the MAO, an enzyme that regulates the activities of dopamine and serotonin. The euphoria that's experienced probably comes from the MAO inhibition. The ultimate high would be considered very weak as compared to potent (and deadly) highs from Jimson Weed and Morning Glory.

The "nutmeg" high can last for up to 24 hours. Most people who are able to later describe what they experienced seem to best remember the nausea and vomiting that resulted. Most claim that they slept a lot and had very vivid and bizarre dreams. Some say that peripheral colors and background noise/sounds were all exaggerated and stimulating. Someone under the influence of pureed nutmeg would present in DAR as under the influence of a hallucinogen. Expect very dilated pupils, fast pulse and fast clock. Piloerection would be noticeable too.

The chemicals in nutmeg, if extracted are regulated substances, in some states it might be a misdemeanor to possess them. Safrole is on our watch list as an optional pre-cursor chemical in the production of MDMA. Some super labs in Mexico (Texas border areas) have found large caches of safrole being used to launch MDMA synthesis.

Information obtained from MEDTOX Journal  
Government Public Safety Issue  
January 2009

---

### Methamphetamine Cost Society an Estimated \$23.4 Billion in 2005; Majority of Costs Related to Addiction, Premature Death, Crime, & Criminal Justice

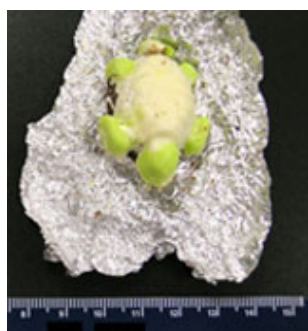
Methamphetamine cost the United States an estimated \$23.4 billion in 2005, according to the first national estimate of the economic burden of meth use. The majority (71%) of these costs--an estimated \$16.6 billion--were related to the "intangible burden that addiction places on dependent users and to premature mortality." The costs associated with processing offenders for the possession and sale of meth, meth-induced violent and property crimes, and

parole and probation violations for meth offenses represent 18%, or an estimated \$4.2 billion, of the total costs. Other costs associated with methamphetamine use include child endangerment, lost productivity, drug treatment, health care, and harms resulting from production. According to the authors, "it is probably not the recreational meth user who imposes the greatest burden on our society, but rather those who become addicted, engage in crime, need treatment or emergency assistance, cannot show up for work, lose their jobs, or die prematurely." It should be noted that indicators show that methamphetamine use has been declining in recent years, after peaking in 2005.

Information obtained from CESAR FAX  
April 27, 2009, Vol. 18, Issue 16

### MDMA IN TURTLE-SHAPED CHOCOLATES AND IN *PSILOCYBE* MUSHROOMS NEAR PORTLAND, OREGON

The Oregon State Police Portland Metro Forensic Laboratory (Clackamas) recently received two turtle-shaped chocolates wrapped in aluminum foil, suspected to contain MDMA (see Photo 1). The exhibit, along with marijuana, psilocin mushrooms, and LSD, was seized by the Lake Oswego Police Department in Lake Oswego, Oregon, incident to a traffic stop. The chocolates had a brown center portion and a white/green candy coating. Analysis of the chocolates (total net mass 14.8 grams) by UV and GC/MS indicated MDMA (not quantitated, but a moderate loading based on the TIC) in the center portion. Analysis of the psilocin mushrooms also indicated MDMA at significant levels (based on the TIC). No visible powder was present, suggesting that the mushrooms were infused with a liquid containing MDMA. This is the first submission of chocolates containing MDMA to the state's laboratory system.



Information obtained from Microgram Bulletin  
April 2009

### Alcohol's Effect on the Brain is Rapid, Detrimental

Researchers at Heidelberg University in Germany have found that it takes only six minutes for a change in brain cells to occur after drinking the equivalent of about three glasses of beer or two glasses of wine, Science Daily reported June 15.

Researchers gave 15 healthy subjects (eight male and seven female) enough alcohol to produce a blood alcohol level of 0.05 to 0.06 percent – sufficient to impair driving but not severe intoxication.

Using magnetic resonance spectroscopy (MRS), the researchers found that the concentration of creatine, a substance that protects brain cells, decreased as the amount of alcohol increased. Choline, a component of cell membranes, was also reduced. Lead author Armin Biller of Heidelberg's Department of Neuroradiology said that the reduction in choline probably indicated that alcohol triggered changes in the composition of cell membranes.

The researchers also found that the day after the subjects had consumed alcohol, their brain metabolism had reverted to what it had been prior to the experiment. However, Armin warned that, "The brain's ability to recover from the effect of alcohol decreases or is eliminated as the consumption of alcohol increases. The acute effects demonstrated in our study could possibly form the basis for the permanent brain damage that is known to occur in alcoholics. This should be clarified in future studies."

The study found no differences between male and female subjects, suggesting that the brains of female and male subjects reacted to alcohol consumption the same way.

This study was published online in the Journal of Cerebral Blood Flow & Metabolism.

Information obtained from Join Together  
Research Summary June 22, 2009

### SMOKING IMPEDES BRAIN'S RECOVERY FROM ALCOHOL DAMAGE

Heavy drinkers can partly recover from alcohol-related brain damage with sustained abstinence, but new research shows that this process can be slowed if patients continue to smoke cigarettes, Science Daily reported May 11.

MRI studies show that individuals who quit drinking but continue smoking experienced less improve-

ments in blood flow in brain regions like the frontal and parietal cortices, which are often damaged by heavy drinking.

The brain’s frontal lobes are involved in learning, short-term memory, reasoning, planning, problem solving, and emotional control, while the parietal lobes are involved in attentional regulation and visuospatial processing, according to researcher Anderson Mon of the University of California at San Francisco.

“At one week of abstinence, both smoking and nonsmoking ... patients had similar frontal and parietal gray matter perfusion (blood flow); and both groups had lower perfusion than normal controls,” said Mon. “However, after five weeks of abstinence, frontal and parietal gray matter perfusion of the nonsmoking ... patients recovered to normal control levels, whereas the smoking ... group essentially showed no recovery.”

The research suggests that patients who can handle quitting both alcohol and smoking simultaneously should be encouraged to do so in order to speed up their cognitive recovery.

The study was published online in the journal Alcoholism: Clinical and Experimental Research.

Information obtained from The DWI Court Reporter  
Volume II Issue 1, May 2009

### WASTEWATER USED TO MAP ILLICIT DRUG USE

A team of researchers has mapped patterns of illicit drug use across the state of Oregon using a method of sampling municipal wastewater before it is treated.

Their findings provide a one-day snapshot of drug excretion that can be used to better understand patterns of drug use in multiple municipalities over time. Municipal water treatment facilities across Oregon volunteered for the study to help further the development of this methodology as a proactive tool for health officials.

Applying analytical methods advanced at Oregon State University, researchers from the University of Washington, McGill University and OSU collected single-day samples from 96 municipalities across Oregon and tested the samples for evidence of methamphetamine, cocaine, and "ecstasy" or MDMA.

The study, published this week in the journal *Addiction*, reports a demonstration of this methodology conducted by UW drug epidemiologist Caleb Banta-Green, OSU chemist Jennifer Field, OSU toxicologist Daniel Sudakin, McGill spatial toxicolo-

gist Daniel Sudakin, McGill spatial epidemiologist Luc de Montigny, OSU faculty research assistant Laura Power and OSU graduate student Aurea Chiaia.

"This work is the first to demonstrate the use of wastewater samples for spatial analyses, a relatively simple and cost-effective approach to measuring community drug use," said Banta-Green, lead author of the paper. "Current measures of the true prevalence of drug use are severely limited both by cost and methodological issues. We believe these data have great utility as a population measure of drug use and provide further evidence of the validity of this methodology."

"Municipalities across the state generously volunteered to help us test our methods by collecting samples more or less simultaneously, providing us with 24-hour composite influent samples from one day -- March 4, 2008," said Field, who led the laboratory analyses of the samples.

Using these samples from 96 municipalities, representing 65 percent of Oregon’s population, the researchers calculated the presence, measured as index loads, of three stimulant drugs: methamphetamine, 3,4-methylenedioxymethamphetamine (MDMA, or ecstasy), and benzoylecgonine (BZE, a cocaine metabolite).

They found that the index loads of BZE were significantly higher in urban areas and below the level of detection in some rural areas. Methamphetamine was present in all municipalities, rural and urban. MDMA was at quantifiable levels in less than half of the communities, with a significant trend toward higher index loads in more urban areas.

Researchers said the study validates wastewater drug testing methodology that could serve as a tool for public health officials. Officials could, for example, use the methodology to identify patterns of drug abuse across multiple municipalities over time.

The research team underscored, too, that data used for this study are inadequate as a complete measure of drug excretion for a community or entire state. The team looked at a single day, mid-week sample, for instance. Results might be altered depending on the day or time of year the sample was gathered.

"We believe this methodology can dramatically improve measurement of the true level and distribution of a range of illicit drugs. By measuring a community’s drug index load, public health officials will have information applicable to a much larger proportion of the total population than existing measures can provide," said Banta-Green.

Information obtained from Science Daily  
July 16, 2009

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](http://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](http://www.decp.org)***