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RADARS[®]

SYSTEM

News

Researched Abuse, Diversion, and Addiction-Related Surveillance (RADARS[®]) System

VOLUME 1, ISSUE 2

OCTOBER 2006



Diversion of Tramadol

“The Diversion of Ultram[®], Ultracet[®], and Generic Tramadol HCl,” by James A. Inciardi, Ph.D., Theodore J. Cicero, Ph.D., Alvaro Muñoz, Ph.D.,

Edgar H. Adams, Sc.D., Anne Geller, M.D., Edward Senay, M.D., and George E. Woody, M.D., all of whom are members of the RADARS System scientific advisory board (SAB), was recently published in the *Journal of Addictive Diseases*. This manuscript provides an overview of the diversion of tramadol and reports some key findings regarding tramadol diversion rates from 2002 to 2004.

Ultram[®] was originally approved by the Food and Drug Administration (FDA) in 1994 as a non-scheduled drug based on data suggesting that the abuse potential for the drug was relatively low. Although the FDA agreed to release tramadol as a non-scheduled drug, it did require that abuse, and later diversion, rates be monitored to track the drug's misuse. As noted in this article, from first quarter 2002 to second quarter 2004, “the number of tramadol diversions was consistently lower [than comparison prescription drugs] over the nine quarter period,” and “[o]verall, diversion investigators did not consider tramadol to be a problem in their respective jurisdictions.”¹ The National Survey of Drug Use and Health (NSDUH) reports the number of people who used tramadol for non-medical reasons at least once in their life as 52,000 (2002) and 186,000 (2003).¹ While these numbers are increasing, they are still far less than those who report lifetime non-medical use of hydrocodone and oxycodone.¹ Although the results of this study suggest that the diversion of tramadol continues to be far lower than that of hydrocodone and oxycodone, the authors

point out that this may be due to the low participation rates of police and regulatory agencies in this survey.

Since diversion rates continue to be fairly low, tramadol is still a non-scheduled drug, however debates over the scheduling of tramadol continue. Richard C. Dart, M.D. Ph.D., Director of the Rocky Mountain Poison and Drug Center (RMPDC) and Executive Director of the RADARS System noted that “there is no question that the mechanism of action of tramadol probably involves opioid pathways, but the lack of information regarding tramadol is remarkable.” Dr. Inciardi added that “tramadol has never been particularly popular on the street among abusers, evidenced by the fact that the street price for the drug is typically the same as the pharmacy price, and *less* than the Internet price.”

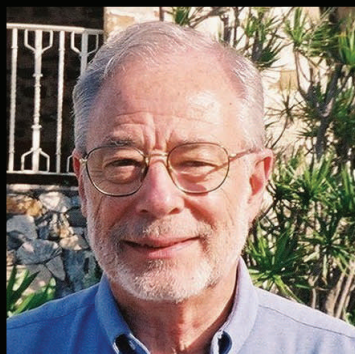
In 2006, tramadol was added to the list of monitored substances tracked by the RADARS System. By using RADARS System data gathered from its four signal detection systems, and with the continued research by the SAB members, the RADARS System may be able to inform public policy makers and, as Richard Dart, M.D., Ph.D. notes, “The RADARS System will likely have a significant and major effect on future regulatory decisions regarding tramadol in the United States.”

1. Inciardi, JA., Cicero, TJ, Munoz, A, Adams, EH, Geller, A, Senay EC, Woody, GE. The Diversion of Ultram[®], Ultracet[®], and Generic Tramadol HCl. *Journal of Addictive Diseases*. 2006; 25(2): 53-58.



Did You Know?

The U.S. Drug Enforcement Administration (DEA) has revised its rules for prescribing morphine. Prescriptions for a 90-day supply can now be given to patients.



James A. Inciardi Ph.D.

Dr. Inciardi is also the author of the book *The War on Drugs III: The Continuing Saga of the Mysteries and Miseries of Intoxication, Addiction, Crime, and Public Policy* published by Allyn and Bacon in 2002.

Principal Investigator *Of the Drug Diversion System*

James A. Inciardi, Ph.D., the principal investigator of the RADARS System's Drug Diversion System, has research, clinical, field, and teaching experience in the areas of HIV/AIDS, substance abuse, and criminal justice.

In addition to being a principal investigator for the RADARS System and serving as a member of the scientific advisory board, Dr. Inciardi is also the director of the Center for Drug and Alcohol Studies at the University of Delaware and is a professor in the department of Sociology and Criminal Justice at the University of Delaware.

Dr. Inciardi is (and has been) the principal investigator of numerous CDC, CSAT, and NIDA-funded projects; he is a recipient of

a NIDA Merit Award. He has published 52 books and is the author/editor of more than 450 articles, chapters, and books in the areas of substance abuse, criminology, criminal justice, history, folklore, public policy, HIV/AIDS, medicine, and law.

- Dr. Inciardi's past appointments include:
- Chair of the NIDA/NIH Drug Abuse/AIDS Research Review Committee;
 - Member of the National Academy of Sciences Committee on Opportunities in Substance Abuse Research;
 - Member of the U.S. Sentencing Commission Task Force on Drugs and Violence;
 - Member of the National Academy of Sciences Committee on Substance Abuse and Mental Health Issues in AIDS Research.

Drug Diversion System *Of the RADARS System*

What is the Drug Diversion System?

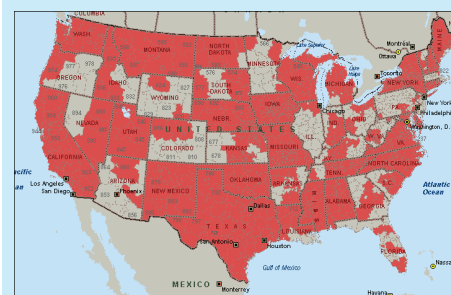
The Drug Diversion System is a data gathering source which surveys over 300 police and regulatory agencies from local and state jurisdictions across the United States.

What populations are included in the Drug Diversion System?

This signal detection system captures data from police and regulatory jurisdictions which serve rural, urban, and suburban populations.

What does the Drug Diversion System monitor?

This signal detection system tracks the channeling of regulated pharmaceuticals to the illegal marketplace including incidences of illegal sale by physicians and pharmacists; theft, forgery, or alteration of prescriptions; robbery or theft from drug manufacturers, distributors, and pharmacies; theft of institutional drug supplies; residential burglaries; and illegal Internet sales.



**Drug Diversion Coverage Area
Second Quarter 2006**

The Drug Diversion System gathers information from all 50 states, including the Virgin Islands and Puerto Rico (not shown). The information from this system enables the RADARS System to identify trends in specific geographic areas and possibly impact local and national drug policies.



Did You Know?

We have a total of 4 signal detection systems: 1) Drug Diversion System, 2) Key Informant Network System, 3) Poison Control Center System, and 4) Methadone Clinics System—American Association for Treatment of Opioid Dependence (AATOD). Each system will be spotlighted in future newsletters.



Recent Publications

Using RADARS System Data

- ◆ Inciardi, JA., Cicero, TJ, Munoz, A, Adams, EH, Geller, A, Senay EC, Woody, GE. The Diversion of Ultram®, Ultracet®, and Generic Tramadol HC1. *Journal of Addictive Diseases*. 2006; 25(2): 53-58.
- ◆ Smith, MY., Dart, RC, Hughes, A, Geller, A, Senay EC, Woody, GE, Colucci, S. Clinician Validation of Poison Control Center (PCC) Intentional Exposure Cases Involving Opioids. *The American Journal of Drug and Alcohol Abuse*. 2006; 32: 465-478.
- ◆ Inciardi, JA., Surratt, HL, Kurtz, SP, Burke, JJ. The Diversion of Prescription Drugs in Health Care Workers in Cincinnati, Ohio. *Substance Use & Misuse*. 2006; 41: 255-264.

For information on current publications and events, please visit www.radars.org

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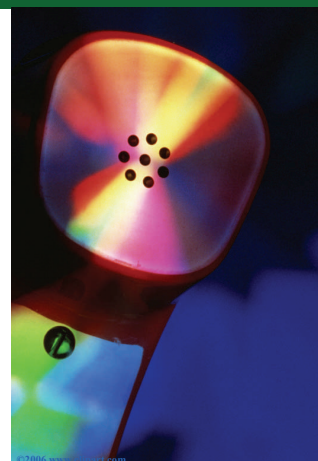
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RADARS[®] SYSTEM Mission Statement

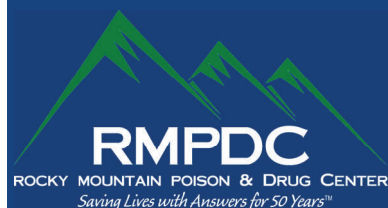


The RADARS System provides timely and geographically-specific data to the pharmaceutical industry, regulatory agencies, policy makers and medical/public health officials to aid in understanding trends in the abuse, misuse, and diversion of prescription drugs in the United States.

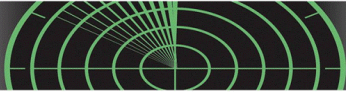


RMPDC and Denver Health

The RADARS System is an independent operation of the Rocky Mountain Poison and Drug Center (RMPDC), an agency of Denver Health and Hospital Authority (DHHA). The RMPDC has been in operation for 50 years, making it one of the oldest poison control centers in the nation. DHHA is the safety net hospital for the City and County of Denver and is the Rocky Mountain region's academic Level I trauma center and includes Denver Public Health, Denver's 911 emergency medical response system, nine family health centers, 12 school-based clinics, NurseLine, correctional care, Denver CARES, the Denver Health Medical Plan, and the Rocky Mountain Center for Medical Response to Terrorism, Mass Casualties and Epidemics.



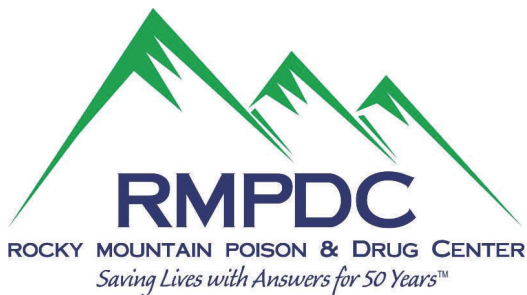
RADARS[®] S Y S T E M



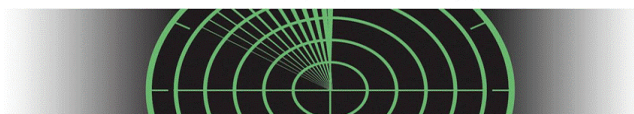
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