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#### **Did You Know?**

Did you know Canada is now the highest opioid consumer in the world?



The RADARS<sup>®</sup> System Annual Scientific Meeting encourages prescription drug abuse experts, representatives from the pharmaceutical industry, medical professionals, and federal regulatory agencies to discuss current trends in prescription drug abuse research and to develop strategies to ensure the safe and proper use of prescription medications.

Where: Westin Georgetown 2350 M Street, NW Washington, DC

Tuesday, May 5, 2015 International Pre-Symposium Emerging Global Trends in Prescription Drug Misuse 2:00pm - 6:00pm

Networking Welcome Reception 6:00pm - 8:00pm

Wednesday, May 6, 2015 Main Annual Conference Bending the Curve of Prescription Drug Abuse 8:30am - 3:30pm

Please RSVP by Friday, April 24, 2015. Please note that space is limited and we ask that you register early to guarantee your attendance.

Register now! www.medicacommunications.com/RADARS/



## RADARS<sup>®</sup> System Ninth Annual Scientific Meeting International Pre-Symposium: Emerging Global Trends in Prescription Drug Misuse Tuesday, May 5<sup>th</sup> 2015, Westin Georgetown, Washington, D.C.

Last year's inaugural international pre-symposium, Monitoring Prescription Drug Abuse Across the Globe, was a great success. Building on this momentum, we are pleased to offer an international pre-symposium as part of this year's meeting.

This year's international pre-symposium, Emerging Global Trends in Prescription Drug Misuse, will highlight RADARS<sup>®</sup> System international data updates along with our featured presentations. Concluding the day will be a panel discussion followed by a networking welcome reception.

#### **Featured Presentations**

International Surveillance: Importance of Context – Canada, Australia and United Kingdom Edward M. Sellers, MD, PhD, FRCPC, FACP



Dr. Sellers is an internationally recognized clinical neuropsychopharmacologist. He is Professor Emeritus of Pharmacology, Medicine and Psychiatry, University of Toronto and has published more than 600 papers and garnered more than 25,000 citations. He is a member of the WHO Expert Advisory Committee on Drug Dependence and numerous Scientific Advisory Boards including Chairing the Scientific Advisory Panel on Opiate Abuse of Health Canada. Dr. Sellers is currently the President of and a Principal in DL Global Partners. DL Global Partners is an international consortium of consultants, key opinion leaders and services that work with biopharmaceutical and device companies targeting diseases of the central nervous system.



## Data from the United Kingdom National Internet Surveys on Prescription Medicine Misuse Paul Dargan, MD



Dr. Paul Dargan is a Consultant Physician and Clinical Toxicologist and Clinical Director at Guy's and St Thomas' NHS Foundation Trust, London, UK. He is also a Reader in Toxicology at King's College London. He has an active research and teaching programme with a focus on recreational drug toxicity, self-poisoning and heavy metal toxicity. His research in the recreational drugs field involves work on classical recreational drugs, new psychoactive substances and the misuse of prescription medicines. He has published over 220 peer-reviewed papers and numerous book chapters. He sits on the Advisory Council on the Misuse of Drugs (ACMD) and the Scientific Committee of the European Monitoring Centre for Drugs and Drugs Addiction (EMCDDA). He is an expert adviser to a number of other bodies including the US Food and Drug Administration (FDA) and the World Health Organisation (WHO).

## Prescription Drugs as Part of Overdose Deaths in Norway Thomas Clausen, MD



Thomas Clausen is a professor at the University of Oslo, SERAF, Norwegian Centre for Addiction Research and Institute of Clinical Medicine.

Thomas Clausen is an MD with clinical background and research focused towards opioid dependence, overdose prevention and treatment outcomes in the field of addiction medicine. During the academic year of 2014-15 Professor Clausen is a visiting Fulbright Scholar at the Alcohol Research Group, in Emeryville, California. He has a current appointment as a National Expert to the European Monitoring Centre for Drugs and Drug Addiction for Norway, and an ongoing collaboration with the WHO to investigate alcohol use and health outcomes using data from the Study on Global AGEing and Adult Health (SAGE).



#### **RADARS®** System Ninth Annual Scientific Meeting

### **Bending the Curve of Prescription Drug Abuse**

Wednesday, May 6<sup>th</sup> 2015, Westin Georgetown, Washington, D.C.

Year after year the RADARS<sup>®</sup> System annual meeting continues to bring industry and regulatory experts as well as researchers together to discuss the latest in prescription drug abuse. This year is no exception and will include:

- RADARS<sup>®</sup> System data updates from 2014
- Presentations on the many facets of the changing landscape of prescription opioid abuse
- Emerging prescription drugs of abuse in the United States and the United Kingdom

#### **Featured Presentations**

The New Changing Landscape of Prescription Opioid Abuse: Implications for Patients and Pain Physicians Michael Weaver, MD, FASAM



Dr. Michael Weaver is a Professor in the Department of Psychiatry and Medical Director of the Center for Neurobehavioral Research on Addictions (CNRA) at The University of Texas Health Science Center Medical School at Houston.

He received his M.D. degree from Northeast Ohio Medical University, and completed Residency in Internal Medicine and a Clinical Research Fellowship in Addiction Medicine at Virginia Commonwealth University (VCU) Health System, and he is Board-certified in both Internal Medicine and Addiction Medicine. Prior to coming to The University of Texas in 2014, Dr. Weaver was the

Medical Director for the VCU Substance Abuse Consult Service and the Medical Director of the Primary Care Pain Clinic at VCU, as well as the Medical Director of the Virginia Health Practitioners' Monitoring Program, which monitors impaired health care providers for the state Department of Health Professions.

Risk of More Serious Outcomes in ED Visits Involving Benzodiazepines and Their Combination with Opioids and Alcohol

#### **Charles Day**

Mr. Day is a statistician with SAMHSA's Center for Behavioral Health Statistics and Quality, where he works on the Ambulatory Care Services Team. Prior to joining SAMHSA in 2011, he worked for the National Agricultural Statistics Service for 12 years as a statistician and for the Internal Revenue Service for 15 years as an economist and a statistician. He holds Master's degrees in both Statistics and Computer Science from George Mason University.



The Changing Landscape of Drug Abuse: Intertwined Epidemics of Prescription Opioids and Heroin Dan Ciccarone, MD, MPH



Dr. Ciccarone is Professor of Family and Community Medicine at the UCSF School of Medicine. Dr. Ciccarone's long-term research objective is to combine ethnographic and epidemiological methodologies to explore the intricate socio-behavioral-medical issues of medication adherence, access to care and risk taking, particularly related to drug use and drug users. His work, including collaborations, has been published in JAMA, NEJM, PLoS Medicine, AJPH, IJDP and other peer-reviewed journals.

His current research is exploring the different medical consequences of use of various sources and forms of heroin. The US has recently entered a new heroin epidemic, fueled by the recent opioid pill epidemic and new source-forms of heroin. His team is exploring the economic, anthropological, historical, clinical and public health dimensions of this crisis. As a member of the UCSF Academy of Medical Educators his teaching tackles difficult issues – social marginalization, sexuality, race and substance abuse.

# Emerging Data on Prescription Medicine Misuse in the United Kingdom David Wood, MD



Dr. David Wood is a Consultant Physician and Clinical Toxicologist at Guy's and St Thomas' NHS Foundation Trust and King's Health Partners, London UK and an honorary senior lecturer at King's College London, London, UK. In addition, he is an accredited clinical pharmacologist and a trustee of the British Pharmacological Society. He has a clinical, academic and research interest in the epidemiology of use and acute harms associated with the use of classical recreational drugs and novel psychoactive substances ("bath salts" or "legal highs"). Included in this is work studying the non-medical use of prescription and over the counter medication in the UK. He is

also a co-opted member of the UK Advisory Council on the Misuse of Drugs (ACMD) Diversion and Illicit Supply of Medicines Working Group.

## Featured Publication by RADARS<sup>®</sup> System



RADARS<sup>®</sup> System featured in New England Journal of Medicine

Trends in Opioid Analgesic Abuse and Mortality in the United States.

Dart RC, Surratt HL, Cicero TJ, Parrino MW, Severtson SG, Bucher Bartelson B, Green JL. Trends in opioid analgesic abuse and mortality in the United States. N Engl J Med 2015 Jan 15;372(3):241-8.



After decades of rising opioid abuse, a recent RADARS<sup>®</sup> System study shows that abuse rates are decreasing. Results from the publication, "Trends in Opioid Analgesic Abuse and Mortality in the United States" featured in the *New England Journal of Medicine* show that beginning in 2010 abuse rates in four different programs began to plateau and then decline from 2011-2013. Results suggest that through federal, state, and local interventions, the United States may be making progress in controlling the abuse of prescription opioids.

RADARS<sup>®</sup> System investigated the trends of six prescription opioids: oxycodone, hydrocodone, hydromorphone, fentanyl, morphine, and tramadol. Through data from drug-diversion investigators, poison centers, substance-abuse treatment centers and college students, multiple perspectives of abuse and diversion were investigated. The rates of opioid diversion and abuse flattened or decreased from 2011-2013 in four out of five programs; non-medical use did not change significantly in the college student population. The number of opioid-related deaths rose and fell in a similar pattern.

## **RADARS®** System in the news

This study received an overwhelming response by national media outlets and was featured on CNN, Fox News, Huffington Post, Reuters and more!







## **Regulatory News**



### **Abuse-deterrent formulated Hysingla ER (hydrocodone bitartrate) now available** January 26, 2015

Hysingla ER is the first and only hydrocodone product to be recognized by the FDA as having abuse-deterrent properties that are expected to deter misuse and abuse via chewing, snorting and injection.



## **FDA approves new formulation of Zohydro ER (hydrocodone)** January 31, 2015

The new formulation of Zohydro ER will be re-formulated with BeatTek, a technology designed to provide abuse-deterrent properties without changing release properties. Although the product was approved, it was not given abuse-deterrent labeling. However, further labeling changes may be requested by the end of the year.

## **New Drug Applications**



FDA has granted final approval of its Abbreviated New Drug Application for buprenorphine HCI sublingual tablets, the generic version of Reckitt Benckiser's Subutex March 6, 2015



FDA accepts New Drug Application for Teva Pharmaceutical's hydrocodone bitartrate extended-release tablets formulated with Teva's proprietary abuse deterrence technology (CEP-33237) February 25, 2015

**FDA accepts Collegium's New Drug Application for abuse-deterrent opioid Xtampza** February 17, 2015

**FDA accepts New Drug Application for Pfizer's extended-release oxycodone hydrochloride and naltrexone hydrochloride (ALO-02) with abuse-deterrent formulation** February 13, 2015



Inspirion Delivery Technologies' MorphaBond ER New Drug Application accepted by FDA for abuse-deterrent formulation of morphine February 10, 2015



## **Recent RADARS® System Publications and Presentation**

RADARS<sup>®</sup> System strives to share knowledge and data with research colleagues, medical and public health officials, policy makers, regulatory agencies and pharmaceutical companies. RADARS<sup>®</sup> System data are shared at industry and regulatory events around the world and published in peer-reviewed journals.

## **Featured Presentation:**

Innovations in Rx Technology: A Session on Abuse Deterrent Formulations

CADCA National Leadership Forum Dr. Richard Dart MD February 2015

Watch the presentation

## Manuscripts:

Prescription opioids (substitution medications and pain medication) in patients looking for Opioid Agonist Treatment in Northern and Southern Italy, using a 18-month survey methodology. Heroin Addiction and Related Clinical Problems

Maremmani I, Guareschi M, Deruvo G, Somaini L, Maremmani AGI, Green J, McBride K, Dart RC. Prescription opioids (substitution medications and pain medication) in patients looking for Opioid Agonist Treatment in Northern and Southern Italy, using a 18-month survey methodology. Heroin Addict Relat Clin Probl March 2015;17(1):33-42.

**Conclusion:** In Italy, in patients requesting Opioid Agonist Treatment, the most frequent primary substance of abuse and the most frequently used substance in the previous 30 days was to be heroin. As in many other countries, the use of prescription opioids is rising, especially if we consider heroin and prescription substitution medications together.

#### <u>Trends in Abuse and Misuse of Prescription Opioids among Older Adults</u> Drug and Alcohol Dependence

West NA, Severtson SG, Green JL, Dart RC. Trends in abuse and misuse of prescription opioids among older adults. Drug Alcohol Depend 2015 Jan 31.

**Conclusion:** Recent linear increases in rates of death and use of prescription opioids with suicidal intent among older adults have important implications as the U.S. undergoes a rapid expansion of its elderly population.

#### **Trends in Opioid Analgesic Abuse and Mortality in the United States** New England Journal of Medicine

Dart RC, Surratt HL, Cicero TJ, Parrino MW, Severtson SG, Bucher Bartelson B, Green JL. Trends in opioid analgesic abuse and mortality in the United States. N Engl J Med 2015 Jan 15;372(3):241-8.

See page 6 for further details.

## **Posters and Oral Presentations:**

### American Association for the Treatment of Opioid Dependence, Inc. (AATOD) March 28, 2015 – April 1, 2015

RADARS<sup>®</sup> System Abstracts presented:

#### Use of Opiates to Get High in Patients Seeking Opiate Addiction Treatment: Europe and the U.S.

Somaini L, Maremmani I, Martinez EM, Fonseca F, Touzeau D, Guareschi M, Deruvo G, Walcher S, Bucher Bartelson B, Green JL, McBride KE, Rosenblum A, Parrino M, Dart RC. Use of opiates to get high in patients seeking opiate addiction treatment: Europe and the U.S. American Association for the Treatment of Opioid Dependence National Conference. Atlanta, GA. March 2015.

#### Age and Gender Distribution among Patients Entering Treatment for Opioid Addiction

Lavery SA, Martinez EM, Bucher Bartelson B, Guareschi M, Touzeau D, Walcher S, Deruvo G, Somaini L, Fonseca F, McBride KE, Green JL, Maremmani I, Rosenblum A, Parrino M, Cicero TJ, Dart RC. Age and gender distribution among patients entering treatment for opioid addiction. American Association for the Treatment of Opioid Dependence National Conference. Atlanta, GA. March 2015.

### <u>Reductions in prescription opioid abuse among enrollees into opioid treatment programs. American</u> <u>Association for the Treatment of Opioid Dependence National Conference.</u>

Fong C, Rosenblum A. Reductions in prescription opioid abuse among enrollees into opioid treatment programs. American Association for the Treatment of Opioid Dependence National Conference. Atlanta, GA. March 2015.

## Upcoming RADARS<sup>®</sup> System Conference Attendance: April – June

#### DOMESTIC:

#### Society for Academic Emergency Medicine (SAEM). San Diego, CA. May 2015.

#### RADARS<sup>®</sup> System Abstracts to be presented:

#### Reduced Street Price and Quantity Discounts for Diverted Extended Release OxyContin and Opana Following Crush Resistant Reformulation

Lebin JA, Murphy DL, Severtson SG, Dart RC. Reduced street price and quantity discounts for diverted extended release OxyContin and Opana following crush resistant reformulation. Society for Academic Emergency Medicine Annual Meeting. San Diego, CA. May 2015.

#### Prescription Opioid Exposures and Outcomes among Older Adults

Hatten BW, West NA, Severtson SG, Green JL, Dart RC. Prescription opioid exposures and outcomes among older adults. Society for Academic Emergency Medicine Annual Meeting. San Diego, CA. May 2015.

### Comparative Rates of Mortality and Severe Medical Effect Among Commonly Prescribed Opioid Analgesics: Calls to US Poison Centers Reporting Opioid Overdose Due to Intentional Abuse and Misuse Exposures

Murphy DL, Lebin JA, Severtson SG, Dart RC. Comparative rates of mortality and severe medical effect among commonly prescribed opioid analgesics: calls to US poison centers reporting opioid overdose due to intentional abuse and misuse exposures. Society for Academic Emergency Medicine Annual Meeting. San Diego, CA. May 2015.

# College on Problems of Drug Dependence (CPDD) Annual Meeting. Phoenix, Arizona. June 2015.

RADARS® System Abstracts to be presented:

#### An Online National Survey and the Crime Survey for England and Wales: Are the data comparable?

Green JL, Dargan PI, Wood DM, Besharat AC, Martinez EM, Dart RC. An Online National Survey and the Crime Survey for England and Wales: Are the data comparable? 77th Annual Meeting of the College on Problems of Drug Dependence. Phoenix, AZ. June 2015.

#### A comparison of attempted suicide rates by methylphenidate exposure in adult and adolescent populations

McRae EM, Le Lait MC, West N, Dart RC. A comparison of attempted suicide rates by methylphenidate exposure in adult and adolescent populations. 77th Annual Meeting of the College on Problems of Drug Dependence. Phoenix, AZ. June 2015.

#### Prescription opioid death rates are greater for females than males

Iwanicki JL, LeLait MC, Severtson SG, Bucher-Bartelson B, Dart RC. Prescription opioid death rates are greater for females than males. 77<sup>th</sup> Annual Meeting of the College on Problems of Drug Dependence. Phoenix, AZ. June 2015.

#### **INTERNATIONAL:**

# XXXV Annual International Congress of the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT). St. Julian's, Malta. May 2015.

#### RADARS<sup>®</sup> System Abstracts to be presented:

## Benzodiazepines and 'Z Drugs': Reported Reasons for Non-Medical Use in an Online National Survey in the UK

Wood DM, Besharat AC, Martinez EM, Green JL, Dargan PI. Benzodiazepines and 'Z drugs': reported reasons for nonmedical use in an online national survey in the UK. XXXV International Congress of the European Association of Poisons Centres and Clinical Toxicologists. St. Julian's, Malta. May 2015.

#### Prescription Opioids: Reported Reasons for Non-Medical Use in an Online National Survey in the UK

Dargan PI, Martinez EM, Besharat AC, Green JL, Wood DM. Prescription opioids: reported reasons for non-medical use in an online national survey in the UK. XXXV International Congress of the European Association of Poisons Centres and Clinical Toxicologists. St. Julian's, Malta. May 2015.

## Chronic Pain and Non-Medical Use of Opioids, Benzodiazepines, and Pregabalin in an Online National Survey in the United Kingdom

Dargan PI, Wood DM, Besharat AC, Martinez EM, Green JL. Chronic pain and non-medical use of opioids, benzodiazepines, and pregabalin in an online national survey in the United Kingdom. XXXV International Congress of the European Association of Poisons Centres and Clinical Toxicologists. St. Julian's, Malta. May 2015.

## Pregabalin, Gabapentin and Baclofen: sources of drug acquisition for non-medical use in an online national survey in the UK

Wood DM, Besharat AC, Dargan PI, Martinez EM, Green JL. Pregabalin, Gabapentin and Baclofen: sources of drug acquisition for non-medical use in an online national survey in the UK. XXXV International Congress of the European Association of Poisons Centres and Clinical Toxicologists. St. Julian's, Malta. May 2015.

#### Perception of prescription drug safety in an online national survey in the United Kingdom

Wood DM, Dargan PI, Besharat AC, Martinez EM, Green JL. Perception of prescription drug safety in an online national survey in the United Kingdom. XXXV International Congress of the European Association of Poisons Centres and Clinical Toxicologists. St. Julian's, Malta. May 2015.

#### **EAPCCT Cont.**

## Trends over time in population rates of intentional misuse and self-harm mentions with buprenorphine, methadone, and oxycodone as reported to poison centres in Germany, Italy and the United Kingdom.

Bucher Bartelson Becki, Desel H, Schaper A, Davanzo F, Sesana F, Campbell A, Cooper G, Thompson J, Johnson DJG, Green JL. Trends over time in population rates of intentional misuse and self-harm mentions with buprenorphine, methadone, and oxycodone as reported to poison centres in Germany, Italy and the United Kingdom. XXXV International Congress of the European Association of Poisons Centres and Clinical Toxicologists. St. Julian's, Malta. May 2015.

## 36th Annual Scientific Meeting Canadian Pain Society (CPS). Charlottetown, Prince Edward

#### Island, Canada. May 2015.

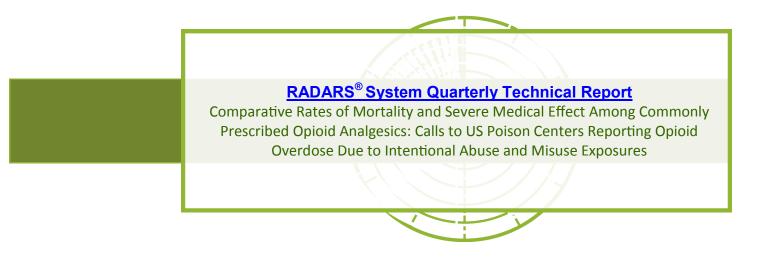
RADARS<sup>®</sup> System Abstracts to be presented:

#### Trends in Tramadol Use and Abuse reported to the Ontario Poison Centre

Austin E, Thompson M, Hudson H, Bernabeo D, Johnson DJG, Dart R. Trends in tramadol use and abuse reported to the Ontario Poison Centre. The Canadian Pain Society 36<sup>th</sup> Annual Scientific Meeting. Charlottetown, Prince Edward Island, Canada. May 2015.

#### Transborder trafficking of prescription opioids in Canada and the United States

Dart RC, Severtson SG, Green JL, Dasgupta N, Ellis MS, Cicero TJ. Transborder trafficking of prescription opioids in Canada and the United States. The Canadian Pain Society 36th Annual Scientific Meeting. Charlottetown, Prince Edward Island, Canada. May 2015.



#### RADARS<sup>®</sup> System in Social Media – Get Connected!



Follow us at <u>@RADARS</u> System. You can find news relating to prescription drug surveillance and abuse in the US and abroad. RADARS<sup>®</sup> System tweets include publication announcements, conference attendance, program updates and more.



Publication and conference attendance news can be found on our LinkedIn site (<u>www.linkedin.com/company/radars-system</u>).



Visit <u>www.RADARS.org</u> for active links to presentations, conference and manuscript abstracts.

#### **Contact Information**

Account, Subscription, Program or Data Inquiries:

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## **RADARS<sup>®</sup> System Mission Statement**

The RADARS<sup>®</sup> System provides timely, product specific and geographically-precise data to the pharmaceutical industry, regulatory agencies, policymakers and medical/ public health officials to aid in understanding trends in the abuse, misuse, and diversion of prescription drugs.

## Rocky Mountain Poison and Drug Center and Denver Health and Hospital Authority

The RADARS<sup>®</sup> System is a governmental nonprofit operation of the Rocky Mountain Poison and Drug Center (RMPDC), an agency of Denver Health. The RMPDC has been in operation for more than 50 years, making it one of the oldest poison control centers in the nation. Denver Health 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.



Did you know President Obama's fiscal year 2016 budget includes \$133 million in funding for key agencies and departments to treat opioid disorders and prevent overdose deaths?



RADARS<sup>®</sup> System • 777 Bannock Street • Mail Code 0180 Denver, CO 80204-4507 Questions or comments?

Email the RADARS<sup>®</sup> System at <u>business@radars.org</u>.

Visit us at www.RADARS.org

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