



Medication Abuse Prevention: 2016 Resource Guide



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Neonatal Abstinence Syndrome

The amount of prescription painkillers prescribed and sold in the U.S. increased nearly four times from 1999 to 2010 (CDC), yet there has not been an overall change in the amount of pain that Americans report. (Chang, H., American Journal of Emergency Medicine, 2014). Prescription and over-the-counter (OTC) medications are the most commonly abused substances after marijuana and alcohol for Americans over the age of 13 (National Institute on Drug Abuse). In 2013, the Youth Risk Behavior Survey (YRBS) found that nearly 18 percent of U.S. high school students had taken prescription medications without a prescription at least once. Teens and young adults are especially at risk of abusing prescription medications because they are widely available, free or inexpensive, and falsely believed to be safer than illicit drugs.

This resource guide provides links to organizations, programs, publications, and resources focused on prescription drug overdose prevention among youth and young adults. It is divided into six sections: (1) Organizations, (2) Policy and Legislation, (3) Current Prevention Programs and Resources, (4) Publications, (5) Children's Safety Network (CSN) Webinars, and (6) Neonatal Abstinence Syndrome Publications. Each item in this resource guide includes a short description and a link to the resource itself. Descriptions of organizations, reports, guides, toolkits, campaigns, websites, and initiatives are, in most cases, excerpted from the resources themselves, while descriptions of research studies are excerpted from the study abstracts.

Organizations

American Association of Poison Control Centers (AAPCC)

AAPCC represents the nation's 55 regional poison control centers (PCCs), which provide free, expert information and treatment advice, 24 hours a day, seven days a week, 365 days a year, through the national Poison Help line—1-800-222-1222. Each year, U.S. poison control centers answer more than 3 million calls about drug, consumer product, animal, environmental, and food poisoning. AAPCC accredits PCCs, coordinates national-level poison education and prevention programs and collaborations, and operates the National Poison Data System (NPDS).

<http://www.aapcc.org>

Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control (NCIPC)

The CDC, NCIPC researches the best ways to prevent violence and injuries, using science to create real-world solutions to keep people safe, healthy, and productive. The NCIPC produces and disseminates data reports and other useful publications on the topic of prescription drug overdose prevention.

<http://www.cdc.gov/drugoverdose/index.html>

Community Anti-Drug Coalitions of America (CADCA)

CADCA is a membership organization representing those working to make their communities safe, healthy, and drug-free. CADCA has members in every U.S. state and territory as well as internationally.

<http://www.cadca.org>

Harm Reduction Coalition

The Harm Reduction Coalition is a national advocacy and capacity-building organization that works to promote the health and dignity of individuals and communities who are impacted by drug use.

<http://harmreduction.org>

Health Resources and Services Administration (HRSA) Poison Help

HRSA funds the Poison Help telephone line. The website provides tips to prevent poisoning, emergency checklists, and information on what to do in the event of poisoning.

<http://poisonhelp.hrsa.gov>

Institute for Safe Medication Practices (ISMP)

ISMP works to prevent medication errors and promote medication safety. The website has newsletters, webinars, tools, and more.

<http://www.ismp.org>

National Institute on Drug Abuse (NIDA)

NIDA has information on different types of substances as well as information about how to prevent prescription drug misuse and abuse.

<http://www.drugabuse.gov>

Office of National Drug Control Policy (ONDCP)

ONDCP coordinates drug control policies and activities across the Federal government, produces the annual National Drug Control Strategy, and works with the President to create strong policies to prevent drug abuse. The website has information on policies, research, prevention, treatment and recovery, grants, and more.

<https://www.whitehouse.gov/ondcp>

The Partnership for Drug Free Kids

The Partnership for Drug Free Kids works to prevent adolescent substance abuse by reaching out to families and teens. The website has information, tools, and opportunities to prevent substance abuse and provides help to teens and young adults who are struggling with substance abuse.

<http://www.drugfree.org>

Prescription Drug Monitoring Programs (PDMPs) – PDMP Center of Excellence and Training and Technical Assistance Center

The PDMP Center of Excellence and the PDMP Training and Technical Assistance Center at Brandeis University work with federal and state governments and agencies, universities, health departments, and medical and pharmacy boards to prevent prescription drug abuse to optimize utilization of state PDMPs.

<http://pdmpexcellence.org>

<http://pdmpassist.org>

Substance Abuse and Mental Health Services Administration (SAMHSA)

SAMHSA uses a public health approach to combat prescription drug misuse and abuse, focusing on early intervention, prevention, treatment, and recovery support services. Their website provides data, publications, funding opportunities, and news related to substance abuse and mental health.

<http://www.samhsa.gov/prescription-drug-misuse-abuse>

Policy and Legislation

National Alliance for Model State Drug Laws (NAMSDL)

The National Alliance for Model State Drug Laws (NAMSDL) is a resource for governors, state legislators, attorneys general, local prosecutors, drug and alcohol professionals, health professionals, community leaders, the recovering community and others striving for comprehensive and effective state drug and alcohol laws, policies, regulations and programs.

<http://www.namsdl.org/index.cfm>

Network for Public Health Law (NPHL)

The Network for Public Health Law provides information, training, and technical assistance to health officials, legislators, and other stakeholders on legal approaches to preventing drug abuse.

https://www.networkforphl.org/topics_resources/topics_resources/drug_overdose_prevention_and_harm_reduction

Prescription Drug Overdose: State Laws | CDC

This resource is designed to provide a picture of some of the legal and regulatory strategies states have used to address prescription drug misuse, abuse, and overdose.

<http://www.cdc.gov/drugoverdose/policy/laws.html>

The Prevention of Prescription Drug Abuse in the Workplace (PAW)

The PAW Technical Assistance Center provides a weekly update to its listserv on peer-reviewed studies, news articles, and government reports focusing on preventing prescription drug abuse. Subscription information and archives of the listserv are available on their webpage.

<http://publichealth.hsc.wvu.edu/icrc/prevention-of-prescription-drug-abuse-in-the-workplace>

Prevention of Prescription Drug Overdose and Abuse | National Conference of State Legislatures (NCSL)

This webpage includes information and links about examples of state laws and recent legislation that aims to prevent deaths and injuries from prescription drug abuse, overdose and misuse.

<http://www.ncsl.org/research/health/prevention-of-prescription-drug-overdose-and-abuse.aspx>



Current Prevention Programs and Resources

CDC Guideline for Prescribing Opioids for Chronic Pain (2016)

The Centers for Disease Control and Prevention (CDC)

Prescription Drug Monitoring Programs published new guidelines for prescribing opioids for chronic pain.

<http://www.cdc.gov/drugoverdose/prescribing/guideline.html>

The Medicine Abuse Project

The Medicine Abuse Project is a campaign of The Partnership for Drug-Free Kids. The campaign provides information, toolkits, and resources about preventing medication misuse and abuse geared towards parents and caregivers, law enforcement officials, health care providers, educators and others.

<http://medicineabuseproject.org>

Monitoring the Future (MTF) | National Institutes of Health (NIH) and University of Michigan (2015)

Since 1975 the MTF survey has measured drug, alcohol, and cigarette use and related attitudes among adolescent students nationwide. Survey participants report their drug use behaviors across three time periods: lifetime, past year, and past month. Overall, 41,551 students from 377 public and private schools participated in the 2015 Monitoring the Future survey. The survey is funded by NIDA, a component of NIH, and conducted by the University of Michigan.

<http://www.drugabuse.gov/related-topics/trends-statistics/monitoring-future>

National Safety Council (NSC) Poison Prevention Page

This webpage from the National Safety Council provides information and resources about prescription medication overdose prevention with specific resources for employers.

<http://www.nsc.org/learn/NSC-Initiatives/Pages/prescription-painkiller-epidemic.aspx>

National Survey on Drug Use and Health (NSDUH)

NSDUH provides national and state-level data on the use of tobacco, alcohol, illicit drugs (including non-medical use of prescription drugs) and mental health in the U.S. NSDUH is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), an agency in the U.S. Department of Health and Human Services.

<https://nsduhweb.rti.org/respweb/homepage.cfm>

National Prescription Drug Take Back Day

Sponsored by the U.S. Department of Justice, National Prescription Drug Take-Back Day offers a safe, legal way for people to dispose of unused prescription drugs. The website includes information on Prescription Drug Take-Back Day, information on drug disposal, and more.

http://www.deadiversion.usdoj.gov/drug_disposal/takeback/index.html

Opioids Fact Sheet | National Association of State Alcohol and Drug Abuse Directors (NASADAD) (2015)

The fact sheet provides information on trends in use and admissions to treatment, the effects of opioid use, effective treatment services, and key federal programs and agencies.

<http://nasadad.wpengine.com/2015/02/opioid-fact-sheet>

Opioid Overdose Prevention Toolkit | SAMHSA

This toolkit, sponsored by SAMHSA, equips communities and local governments with material to develop policies and practices to help prevent opioid-related overdoses and deaths. It addresses issues for first responders, treatment providers, and those recovering from opioid overdose.

<http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit-Updated-2014/SMA14-4742>

Prescription Drug Overdose Data Overview | CDC

This webpage has information on overdose deaths by state, prescribing data, and prescription drug overdose data.

<http://www.cdc.gov/drugoverdose/data/index.html>

Prescription Drug Overdose: Prevention for States | CDC

Prescription Drug Overdose: Prevention for States is a program that helps states combat the ongoing prescription drug overdose epidemic. The purpose of Prevention for States is to provide state health departments with resources and support needed to advance interventions for preventing prescription drug overdoses.

http://www.cdc.gov/drugoverdose/states/state_prevention.html

Prescription Painkiller Overdoses in the U.S. | CDC (2011)

This November 2011 issue of Vital Signs from the Centers for Disease Control and Prevention covers the epidemic of prescription painkiller overdoses in the U.S. The publication identifies prescription painkiller overdoses as a public health epidemic and discusses at-risk groups, the availability of prescription painkillers, and what can be done.

<http://www.cdc.gov/VitalSigns/pdf/2011-11-vitalsigns.pdf>

Prevention Boost State Program | CDC

Prescription Drug Overdose Boost for State Prevention (Prevention Boost) is a CDC funding initiative that began in 2014. It equips states with resources and scientific assistance to prevent prescription opioid overdoses by addressing the inappropriate prescribing that fuels the epidemic.

<http://www.cdc.gov/drugoverdose/states/boost.html>

Project Lazarus

Project Lazarus is a secular public health non-profit organization established in 2008 in response to extremely high drug overdose death rates in Wilkes County, North Carolina. Project Lazarus enables overdose prevention by providing technical assistance to create and maintain community coalitions. It helps coalitions create locally tailored drug overdose prevention programs and connect them to state and national resources.

<http://projectlazarus.org>

Safe Use Initiative | Federal Drug Administration (FDA)

The Safe Use Initiative from the FDA works to create and facilitate public and private collaborations within the healthcare community. The goal is to reduce preventable harm by identifying specific, preventable medication risks and developing, implementing and evaluating cross-sector interventions.

Initiative: <http://www.fda.gov/Drugs/DrugSafety/SafeUseInitiative/default.htm>

Report: <http://www.fda.gov/downloads/Drugs/DrugSafety/UCM188961.pdf>

Stop Medicine Abuse

The prevention campaign StopMedicineAbuse.org and its Five Moms initiative works to alert parents and members of the community about the problem of teen abuse of over-the-counter (OTC) cough medicines containing dextromethorphan (DXM).

<http://stopmedicineabuse.org>

When Parents Talk about Prescription Drug Abuse, Kids Listen (with Infographic) | Children's Safety Network (2014)

This January 2014 blog post and infographic discuss the importance of talking to your children about prescription drug abuse.

<http://www.childrenssafetynetwork.org/blog/when-parents-talk-about-prescription-drug-abuse-kids-listen-infographic>

Publications

Adolescents' Nonmedical Use of Prescription Medications and Other Problem Behaviors | Journal of Adolescent Health (2009)

This study examines adolescent nonmedical use of prescription medications (NUPM) and other problem behaviors. The study found that there are different subtypes of nonmedical users of prescription medications.

<http://www.sciencedirect.com/science/article/pii/S1054139X09001402>

Adolescent Prescription ADHD Medication Abuse Is Rising Along with Prescriptions for These Medications | Pediatrics (2009)

The purpose of this study was to better understand the trend for prescription attention deficit/hyperactivity disorder (ADHD) medication abuse by teenagers. The study found that poison control center calls related to teenaged victims of prescription ADHD medication abuse rose 76%, which is faster than calls for victims of substance abuse generally and teen substance abuse. The annual rate of total and teen exposures was unchanged.

<http://pediatrics.aappublications.org/content/124/3/875>

Alcohol, Tobacco, and Prescription Drug Use by Teens Declines; Level of Youth with Major Depressive Episodes Remains High | SAMHSA (2015)

The Substance Abuse and Mental Health Services Administration's (SAMHSA) latest National Survey on Drug Use and Health (NSDUH) report shows progress in reducing some forms of substance use – especially among adolescents. The level of current nonmedical users of prescription pain relievers decreased from 3.2 percent in 2002 to 1.9 percent in 2014 among adolescents aged 12 to 17. Although the survey shows nonmedical pain reliever use continues to be the second most common type of illicit drug use, the percentage of people aged 12 or older in 2014 who were current nonmedical users of pain relievers (1.6 percent) was lower than in most years since 2002, and about the same as in 2013.

<http://www.samhsa.gov/newsroom/press-announcements/201509100930-0>

The Association between Non-Medical Prescription Drug Use, Depressive Symptoms, and Suicidality among College Students | Addictive Behaviors (2012)

Given the prevalence of non-medical prescription drug use (NMPDU) among college students, this study explored the association between general and specific NMPDU, depressive symptoms, and suicidality. Depressive symptoms and suicidality were significantly associated with greater odds of any NMPDU, with painkiller use (especially for females) representing the greatest correlate among college students. Results suggest that students may be inappropriately self-medicating psychological distress with prescription medications.

<http://www.sciencedirect.com/science/article/pii/S0306460312000615>

Attention-Deficit/Hyperactivity Disorder and Substance Abuse | American Association of Pediatrics (2014)

Attention- deficit/hyperactivity disorder (ADHD) and substance use disorder are inextricably intertwined. Children with ADHD are more likely than peers to develop substance abuse disorders. Treatment with stimulants may reduce the risk of substance use disorders, but stimulants are a class of medication with significant abuse and diversion potential. The objectives of this clinical report were to present practical strategies for reducing the risk of substance use disorders in patients with ADHD and suggestions for safe stimulant prescribing.

<http://pediatrics.aappublications.org/content/134/1/e293.full.pdf>

CDC Grand Rounds: Prescription Drug Overdoses — A U.S. Epidemic | CDC Morbidity and Mortality Weekly Report (MMWR) (2012)

This report discusses the problem of medication overdoses, prevention strategies, and the national response.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6101a3.htm>

Combinations of Prescription Drug Misuse and Illicit Drugs among Young Adults | Addictive Behaviors (2013)

This study found that young adults in nightlife scenes combine prescription drugs with illicit drugs, sexual minorities have higher odds of combining prescription drugs with other drugs, and males have higher odds of combining prescription drugs with illicit drugs.

<http://www.sciencedirect.com/science/article/pii/S0306460313004279>

Coping and Emotion Regulation Profiles as Predictors of Nonmedical Prescription Drug and Illicit Drug Use Among High-Risk Young Adults | Drug and Alcohol Dependence (2013)

Deficits in the ability to organize, integrate, and modulate emotions, thoughts, and behaviors when dealing with stress have been found to be related to the onset and escalation of substance use among adolescents and young adults. This study shows how coping and emotion regulation profiles predict distinct patterns of substance use. Results provide the groundwork for additional investigations that could have significant prevention and clinical implications for substance-using high-risk young adults.

<http://www.drugandalcoholdependence.com/article/S0376-8716%2813%2900037-9/abstract>

The Cultural Influence of Adolescent Prescription Drug Abuse | Journal of Human Behavior in the Social Environment (2015)

Although the Monitoring the Future Study of 2013 showed a slow decline in prescription drug use among adolescents, a disproportionate number of adolescents are still abusing these substances. Medications, stored in medicine cabinets in the home, are some adolescents' prime source of securing substances for drug use. At-risk youth, without a resilient constitution (i.e., the ability to resist drug use), fall prey to the prolific environmental influences that saturate communities across the U.S. Healthy beliefs and clear standards, promoted by parents and teachers, in conjunction with familial and community bonding, lowered the prevalence of prescription drug abuse among youth. Adolescents who were bonded to prosocial peers and who rejected substance abusing peer pressure were less likely to abuse prescription medications.

<http://www.tandfonline.com/doi/abs/10.1080/10911359.2014.969124>



Data Sources Regarding the Nonmedical Use of Pharmaceutical Opioids in the U.S. | Reviews in Health Care (2014)

Recent increases in the nonmedical use of pharmaceutical opioids and the adverse outcomes associated with them have stimulated a large amount of research and data collection on this public health problem. This work offers a systematic categorization of data sources regarding the nonmedical use of pharmaceutical opioids in the U.S. It is hoped that the categorization of data sources will facilitate ongoing research, analysis, and evaluation of this public health problem by serving as a guide for researchers, policy makers, and others who seek data regarding the nonmedical use of pharmaceutical opioids in the U.S.

<http://journals.edizioniseed.it/index.php/rhc/article/view/883>

Decline in Drug Overdose Deaths after State Policy Changes – Florida, 2010-2012 | CDC MMWR (2014)

During 2003–2009, the number of deaths caused by drug overdose in Florida increased 61.0%, from 1,804 to 2,905, with especially large increases in deaths caused by the opioid pain reliever oxycodone and the benzodiazepine alprazolam. In response, Florida implemented various laws and enforcement actions as part of a comprehensive effort to reverse the trend. This report describes changes in overdose deaths for prescription and illicit drugs and changes in the prescribing of drugs frequently associated with deaths in Florida after these policy changes.

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6326a3.htm?s_cid=mm6326a3_w

Diversion of Prescription Stimulant Drugs among 10–18-Year-Olds | Current Opinion in Psychiatry (2015)

Public health concern regarding the nonmedical use of prescription stimulants among youth has generated the need for increased understanding of diversion, which is the illegal sharing and selling of prescription drugs. Although the understanding of nonmedical use of stimulants has increased, the same cannot be said of diversion behavior among youth. The aim of this article is to use data from the National Monitoring of Adolescent Prescription Stimulants Study, which assessed prescription stimulant use among 10–18 years old across 10 U.S. cities to report on prescription stimulant diversion among those who misused those medications. Findings indicate that more than one half (52%) of youth had engaged in one of the three forms of diversion (incoming only, outgoing only and both incoming and outgoing diversion).

<http://journals.lww.com/co-psychiatry/pages/articleviewer.aspx?year=2015&issue=07000&article=00006&type=abstract>

Emergency Department Visits Involving Attention Deficit/Hyperactivity Disorder Stimulant Medications | Substance Abuse and Mental Health Services Administration (SAMHSA) (2013)

This 2013 report from SAMHSA shows that the number of emergency department visits involving attention deficit / hyperactivity disorder (ADHD) stimulant medications more than doubled from 13,379 visits in 2005 to 31,244 in 2010. The study by the Substance Abuse and Mental Health Services Administration (SAMHSA) finds that the greatest rates of increase in emergency department visits involving ADHD stimulant medications occurred among those aged 18 and older, while the level among those under 18 remained largely unchanged during this period.

<http://www.samhsa.gov/data/sites/default/files/DAWN073/DAWN073-sr073-ADD-ADHD-medications.htm>



Epidemic: Responding to America's Prescription Drug Abuse Crisis | Executive Office of the President (2011)

This report presents an overview of the Obama Administration's response to the prescription drug abuse crisis in the U.S. The plan expands upon the Administration's National Drug Control Strategy and includes four major focus areas for reducing prescription drug abuse.

http://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/rx_abuse_plan.pdf

Examining Rural/Urban Differences in Prescription Opioid Misuse among US Adolescents | The Journal of Rural Health (2015)

This study examines differences in prescription opioid misuse (POM) among adolescents in rural, small urban, and large urban areas of the U.S. and identifies several individual, social, and community risk factors contributing to those differences.

<http://onlinelibrary.wiley.com/doi/10.1111/jrh.12141/abstract>

Examining Sequences of Adolescent Substance Use Initiation Involving Over-the-Counter (OTC) Drug Abuse | Journal of Child & Adolescent Substance Abuse (2015)

Over-the-counter (OTC) drug abuse among adolescents is an increasingly visible and meaningful trend in the U.S., but little research has been done to contextualize OTC drug abuse. This study examined a large sample of 152,678 middle school and high school adolescents in an attempt to understand sequences of OTC drug abuse initiation, and the sociodemographic and risk factor-related precursors thereof.

<http://www.tandfonline.com/doi/abs/10.1080/1067828X.2013.812528>

Extra-medical Use of Prescription Pain Relievers by Youth Aged 12 to 21 Years in the U.S. | Archives of Pediatrics and Adolescent Medicine (2012)

The objective of this study was to identify when youth are most likely to start using prescription pain relievers to get high or for other unapproved indications outside the boundaries of what a prescribing physician might intend (i.e., extra-medical use). The study found that the estimated peak risk of starting extra-medical use of prescription pain relievers occurs in mid-adolescence, well before the college years. The age at peak risk is 16 years, when an estimated 2 to 3 percent become new incident users.

<http://archpedi.jamanetwork.com/article.aspx?articleid=1149400>

Emergency Department Visits Involving Attention Deficit/Hyperactivity Disorder Stimulant Medications | SAMHSA (2013)

This 2013 report from SAMHSA shows that the number of emergency department visits involving attention deficit / hyperactivity disorder (ADHD) stimulant medications more than doubled from 13,379 visits in 2005 to 31,244 in 2010. The study finds that the greatest rates of increase in emergency department visits involving ADHD stimulant medications occurred among those aged 18 and older, while the level among those under 18 remained largely unchanged during this period.

<http://www.samhsa.gov/data/sites/default/files/DAWN073/DAWN073/sr073-ADD-ADHD-medications.htm>

Factors Associated with Substance Use in Adolescents with Eating Disorders | Journal of Adolescent Health (2014)

The purpose of this study was to examine the prevalence and potential risk factors associated with substance use in adolescents with eating disorders (EDs). Co-morbid substance use in adolescents with EDs is an important issue. Interventions targeting high-risk groups reporting regular substance use or substance use disorders are needed.

<http://www.sciencedirect.com/science/article/pii/S1054139X14000603>

The Facts Hurt: A State-By-State Injury Prevention Policy Report | Trust for America's Health (TFAH) (2015)

The Facts Hurt: A State-By-State Injury Prevention Policy Report, released by TFAH and the Robert Wood Johnson Foundation (RWJF), ranks states on 10 key injury-prevention indicators, including prescription drug overdose. The report also includes a report card of 10 key indicators of leading evidence-based strategies that help reduce injuries and violence. The indicators were developed in consultation with top injury prevention experts from the Safe States Alliance and the Society for the Advancement of Violence and Injury Research (SAVIR).

<http://healthyamericans.org/reports/injuryprevention15>

The Five Factor Model of Personality and the Non-Medical Use of Prescription Drugs: Associations in a Young Adult Sample | Personality and Individual Differences (2013)

Personality traits are associated with illicit drug use and substance use disorders. Non-medical use of prescription drugs (NMUPD), the use of medications without a physician's prescription, is increasingly prevalent among young adults. Research suggests that dimensions of the five factor model of personality are predictive of NMUPD, but this has yet to be explored in young adults. The study examined these relations and found that neuroticism and openness to experience were predictors of NMUPD, while conscientiousness acted as a protective factor.

<http://www.sciencedirect.com/science/article/pii/S019188691300247X>

Frequency of Prescription Pain Reliever Nonmedical Use: 2002-2003 and 2009-2010 | Internal Medicine (2012)

Public health consequences associated with the nonmedical use of prescription pain relievers such as oxycodone, hydrocodone, and methadone have dramatically increased over the last decade. In 2009, 15,597 people died of overdoses involving these drugs—a 109% increase since 2002. Prior studies examining prescription pain reliever overdose deaths found that nonmedical use was common among decedents before death. Understanding trends in the frequency of nonmedical use can help identify populations at greatest risk for overdoses.

<http://archinte.jamanetwork.com/article.aspx?articleid=1203519>

From RX to Heroin | Medicine Abuse Project (2015)

Nearly half of young people who inject heroin start by abusing prescription drugs. To explain how the transition happens, the Medicine Abuse Project developed an infographic that follows the journey of a teen from prescription abuse to heroin to recovery.

<http://medicineabuseproject.org/rx-to-heroin>

High Risk and Little Knowledge: Overdose Experiences and Knowledge among Young Adult Nonmedical Prescription Opioid Users | International Journal on Drug Policy (2014)

The findings of this study suggest that many young adult nonmedical prescription opioid users are at high risk of both fatal and non-fatal overdose. There is a pressing need to develop innovative outreach strategies and overdose prevention programs to better reach and serve young prescription opioid users and their network contacts. Prevention efforts addressing risk for accidental overdose, including opioid safety/overdose reversal education and naloxone distribution, should be tailored for and targeted to this vulnerable group.

<http://www.sciencedirect.com/science/article/pii/S0955395914002060>

Increases in Drug and Opioid Overdose Deaths — U.S., 2000–2014 | CDC MMWR (2016)

The U.S. is experiencing an epidemic of drug overdose (poisoning) deaths. Since 2000, the rate of deaths from drug overdoses has increased 137%, including a 200% increase in the rate of overdose deaths involving opioids (opioid pain relievers and heroin). CDC analyzed recent multiple cause-of-death mortality data to examine current trends and characteristics of drug overdose deaths, including the types of opioids associated with drug overdose deaths.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm>

Intentional Misuse of Over-the-Counter (OTC) Medications, Mental Health, and Polysubstance Use in Young Adults | Journal of Community Health (2013)

This study examined the intentional misuse of OTC medications, the non-medical use of prescription drugs, the use of alcohol and illicit drugs, and psychological factors in two samples of young adults (ages 18–25) from different areas of the U.S. Results suggest that a considerable minority of young adults are jeopardizing their health with the misuse of OTC medications as part of a pattern of polysubstance use.

<http://link.springer.com/article/10.1007/s10900-013-9811-9>

Interpretation of Pharmaceutical Warnings among Adolescents | Journal of Adolescent Health (2008)

This study examined adolescents' interpretations of and preferences for warning symbols and statements related to pharmaceuticals with teratogenic properties. Comprehension of medical warning symbols and statements among adolescents is an important public health issue. Those involved in adolescent health education and research have considerable theoretical and practical tools for approaching the development and evaluation of such warning messages. Understanding how warnings are interpreted can lead to more effective communication efforts and reduce risk.

<http://www.sciencedirect.com/science/article/pii/S1054139X07006428>

Leftover Prescription Opioids and Nonmedical Use among High School Seniors: A Multi-Cohort National Study | Journal of Adolescent Health (2013)

The objective of this study was to (1) estimate the proportion of nonmedical users of prescription opioids (i.e., used prescription opioids in the past year without a doctor's orders) who used leftover medications from their own previous prescriptions; (2) assess substance use behaviors as a function of diversion source; and (3) identify the sources for these prescribed opioids. Findings indicate that enhanced vigilance is needed when prescribing and monitoring prescription opioids among adolescents to reduce leftover medications and nonmedical use.

[http://www.jahonline.org/article/S1054-139X\(12\)00350-3/abstract](http://www.jahonline.org/article/S1054-139X(12)00350-3/abstract)

The Legal High: Factors Affecting Young Consumers' Risk Perceptions and Abuse of Prescription Drugs | Journal of Public Policy & Marketing (2015)

The purpose of this study is to examine some key adolescent perceptions of prescription drug abuse (PDA), the incremental role of nonlinear effects, and their interaction effects with demographic variables. The results show that the effects of adolescent anxiety, the need to be popular, being a "good teen," and the use of other restricted substances have both nonlinear effects and interaction effects with demographic characteristics on PDA risk perceptions and PDA itself. Perceptions of the risk of PDA partially mediate these effects. The authors offer implications of the pattern of results for consumer welfare and public policy.

<http://journals.ama.org/doi/abs/10.1509/jppm.14.073>

Medical and Nonmedical Use of Prescription Opioids among High School Seniors in the U.S. | Archives of Pediatrics and Adolescent Medicine (2012)

The objective was to determine the prevalence of medical and nonmedical use of prescription opioids among high school seniors in the U.S. and to assess substance use behaviors based on medical and nonmedical use of prescription opioids. The study found that nearly one in every four high school seniors in the U.S. has ever had some exposure to prescription opioids either medically or non-medically.

<http://archpedi.jamanetwork.com/article.aspx?articleid=1149408>

Medication-Assisted Treatment: An eBook for Parents & Caregivers of Teens & Young Adults Addicted to Opioids | Partnership for Drug-Free Kids (2016)

Medication-assisted treatment may be helpful for teens or young adults addicted to opioids such as prescription painkillers or heroin. This eBook will help you learn more about medication-assisted treatment – what it is, how it's used, where to find it and how you can best support a child through treatment.

<http://www.drugfree.org/resources/medication-assisted-treatment-ebook>



A National Action Plan for Child Injury Prevention: Reducing Poisoning Injuries | CDC (2012)

Around 128,000 children visited emergency departments for poisoning-related injuries in 2010; half of them were teens. Prescription drug misuse and abuse among teens has reached epidemic proportions and is now a serious public health threat. In 2010, more than 7% of young people 12-17 years old reported using prescription drugs for non-medical reasons in the past year. More concerning, the prescription drug death rate more than doubled among this age group from 1999-2008. The National Action Plan discusses strategies to prevent prescription drug poisoning among children.

http://www.cdc.gov/safecommunity/pdf/NAP_Poison_v9Final.pdf

National Drug Control Strategy | Office of National Drug Control Policy, Office of Public Affairs (2014)

This document provides an evidence-based plan for real drug policy reform, spanning the spectrum of effective prevention, early intervention, treatment, recovery support, criminal justice, law enforcement, and international cooperation.

http://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/ndcs_2014.pdf

Non-Medical Use of Prescription Medications among Middle School Students: A Qualitative Analysis | Journal of Substance Use (2014)

Non-medical use of prescription medication (NMUPM) has surpassed all other drugs abused by adolescents with the exception of marijuana. For this study, 25 middle school students participated in in-depth interviews about their experience with NMUPM. Middle school students did not recognize prescription medications as potentially dangerous when used non-medically compared to using street drugs. Obtaining prescription medications for non-medical purposes was perceived as relatively easy and parents, friends' parents and friends were major sources for obtaining them. Practitioners can use these results to inform healthcare professionals, pharmaceutical companies, parents and adolescents of the prevalence and serious risks involved with NMUPM.

<http://informahealthcare.com/doi/abs/10.3109/14659891.2014.900581>

Non-Medical Use of Prescription Opioids and Prescription Opioid-Related Harms: Why So Markedly Higher In North America Compared to the Rest of the World? | Addiction (2013)

This paper aims to identify possible system-level factors contributing to the marked differences in the levels of non-medical prescription opioid use (NMPOU) and prescription opioid (PO)-related harms in North America compared to other global regions. Scientific literature and information related to relevant areas of health systems, policy and practice were reviewed and integrated. Differences in the organization of health systems, prescription practices, dispensing and medical cultures and patient expectations appear to contribute to the observed inter-regional differences in non-medical prescription opioid use and prescription opioid-related harms, although consistent evidence and causal analyses are limited.

<http://onlinelibrary.wiley.com/doi/10.1111/add.12224/abstract>

**Opioid Abuse and Depression in Adolescents:
Results from the National Survey on Drug Use
and Health | Drug and Alcohol Dependence
(2015)**

This study investigated the association of major depressive episode (MDE) with non-medical prescription opioid use (NMPOU) and opioid abuse/dependence among adolescents aged 12 to 17. The study found that MDE occurs commonly in adolescents and is associated with NMPOU and opioid abuse/dependence. In terms of population attributable risk, which is a function of both the prevalence and the strength of the association, MDE is an important risk factor for NMPOU among adolescents and opioid abuse/dependence among adolescents with NMPOU. Preventive and clinical programs to decrease NMPOU and opioid abuse/dependence among adolescents should consider the prominent role of depression.

<http://www.sciencedirect.com/science/article/pii/S0376871615002057>



Opioid Overdose Rates and Implementation of Overdose Education and Nasal Naloxone Distribution in Massachusetts: Interrupted Time Series Analysis | British Medical Journal (2013)

The purpose of this study was to report the impact of state supported Overdose Education and Naloxone Distribution (OEND) programs between 2006 and 2009 in 19 communities in Massachusetts with high numbers of opioid overdose deaths. The study found that communities with low levels of OEND training had 27% lower opioid overdose deaths compared to communities with no training. Communities with high levels of OEND training had 46% lower opioid overdose death rates compared to communities with no training.

<http://www.bmjjournals.org/content/346/bmj.f174.full.pdf>

The Over-the-Counter-High: A Story of OTC Medicine Abuse | AAPCC (2013)

Melanie Sawyer began abusing over-the-counter medicine at the age of 14. After suffering through the debilitating effects of OTC medicine addiction, she finally found redemption through rehabilitation. Now 22 years old, Melanie seeks to share her story in hopes that others can learn the devastating impact easily accessible, inconspicuous over-the-counter medicine can have on a young life.

<https://aapcc.wordpress.com/2013/04/22/the-over-the-counter-high-a-story-of-otc-medicine-abuse>

Prescription Drugs, Drugged Driving and Per Se Laws | Injury Prevention (2012)

The 2007 National Roadside Survey found that the prevalence of drugs in weekend nighttime drivers in the U.S. was 16.4%—higher than 12.3% who tested positive for alcohol—bringing attention to the large potential for drugged driving. Research and public attention related to drugged driving was stimulated by the Office of National Drug Control Policy in its 2010 National Drug Control Strategy, encouraging all states to enact per se drugged driving laws. [Per se drugged driving laws “make it illegal to drive with amounts of specified drugs in the body that exceed set limits” (GHS).] This article focuses on the impact of this trend on prescribed medicines and how their identification among drivers can be successfully managed under traditional impairment and per se drugged driving laws.

http://injuryprevention.bmjjournals.org/content/early/2012/09/27/injprev-2012-040498.short?g=w_injuryprevention_ahead_tab

Prescription Drug Misuse among Homeless Youth | Drug and Alcohol Dependence (2014)

A sample of 451 homeless youth recruited from drop-in centers in Los Angeles, CA provided information on substance use, mental health, service utilization, trauma, and sexual risk behavior. Homeless youth report high rates of prescription drug misuse (PDM), and access these medications most frequently from friends and family. PDM among homeless youth clusters with other risk factors, including hard drug use, unprotected sex, and suicidal ideation. Surprisingly, foster care history was associated with decreased PDM.

<http://www.sciencedirect.com/science/article/pii/S0376871614000660>

Prescription Drug Misuse and Gender | Substance Use & Misuse (2014)

This study used data from the 2010 National Survey on Drug Use and Health, a sample representative of the non-institutionalized population of the U.S. Logistic regression models were estimated to examine the relationship between gender, prescription drug misuse, strain, and depression. The findings indicated that females were at an increased risk for prescription drug misuse.

<http://informahealthcare.com/doi/abs/10.3109/10826084.2014.880723>

Prescription Drug Overdoses: A Review | Journal of Safety Research (2012)

This review categorizes and summarizes literature on the topic dating from the first published reports through 2011 using a traditional epidemiologic model of host, agent, and environment. The review found that the epidemiology of prescription drug overdoses differs from the epidemiology of illicit drug overdoses. Incomplete understanding of prescription overdoses impedes prevention efforts.

<http://www.sciencedirect.com/science/article/pii/S0022437512000540>

Prescription Drug Use by Adolescents: What We Are Learning and What We Still Need to Know | Journal of Adolescent Health (2009)

In this editorial, Dr. Lloyd Johnston discusses the prevalence of adolescent prescription drug use and what needs to be learned about it in order to prevent abuse.

<http://www.sciencedirect.com/science/article/pii/S1054139X09003656>

Prescription Medication Sharing Among Adolescents: Prevalence, Risks, and Outcomes | Journal of Adolescent Health (2009)

For this study 594 adolescents throughout the U.S. were interviewed. One in five reported sharing prescription medication. Of these, less than half received instructions, many delayed professional care, few informed providers, and a third reported experiencing side effects. The study suggests that efforts to reduce medication sharing prevalence and risks among adolescents may be justified.

<http://www.sciencedirect.com/science/article/pii/S1054139X09002353>

Prescription Opioid Analgesic Use among Adults: U.S., 1999–2012 | CDC National Center for Health Statistics (NCHS) (2015)

From 1999–2002 to 2003–2006, the percentage of adults aged 20 and over who used a prescription opioid analgesic in the past 30 days increased from 5.0% to 6.9%. From 2003–2006 to 2011–2012, the percentage who used an opioid analgesic remained stable at 6.9%.

<http://www.cdc.gov/nchs/data/databriefs/db189.htm>

Prescription Opioids in Adolescence and Future Opioid Misuse | Pediatrics (2015)

Legitimate opioid use is associated with an increased risk of long-term opioid use and possibly misuse in adults. The objective of this study was to estimate the risk of future opioid misuse among adolescents who have not yet graduated from high school. The study found that use of prescribed opioids before the 12th grade is independently associated with future opioid misuse among patients with little drug experience and who disapprove of illegal drug use. Clinic-based education and prevention efforts have substantial potential to reduce future opioid misuse among these individuals, who begin opioid use with strong attitudes against illegal drug use.

<http://pediatrics.aappublications.org/content/early/2015/10/21/peds.2015-1364>

Primary Care Behavioral Interventions to Prevent or Reduce Illicit Drug Use and Non-medical Pharmaceutical Use in Children and Adolescents: A Systematic Evidence Review for the U.S. Preventive Services Task Force | Annals of Internal Medicine (2014)

Drug use among youths is associated with negative health and social consequences. Even infrequent use increases the risk for serious adverse events by increasing risk-taking behaviors in intoxicated or impaired persons. The body of evidence was small, and there were heterogeneous measures of outcomes of limited clinical applicability. Trials primarily included adolescents with little or no substance use. Evidence is inadequate on the benefits of primary care-relevant behavioral interventions in reducing self-reported illicit and pharmaceutical drug use among adolescents.

<http://annals.org/article.aspx?articleid=1840852>

Sharp Rise in Emergency Department Visits Involving ADHD Medications | SAMHSA (2013)

A February 2013 report done by the Substance Abuse and Mental Health Services Administration (SAMHSA), shows that the number of emergency department visits involving attention deficit/hyperactivity disorder (ADHD) stimulant medications more than doubled from 13,379 visits in 2005 to 31,244 in 2010. Findings suggest rates of increase in emergency department visits involving ADHD stimulant medications occurred among those aged 18 and older, while the level among those under 18 remained largely unchanged during this period.

<http://www.samhsa.gov/newsroom/press-announcements/201301240645>

Trends and Geographic Patterns in Drug-Poisoning Death Rates in the U.S., 1999–2009 | American Journal of Preventive Medicine (2013)

The goal of the study was to use small-area estimation techniques to produce stable county-level estimates of age-adjusted death rates (AADR) associated with drug poisoning for the U.S., 1999–2009, in order to examine geographic and temporal variation. Only 3% of counties had drug-poisoning AADRs greater than 10 per 100,000 per year in 1999–2000, compared to 54% in 2008–2009. Drug-poisoning AADRs grew by 394% in rural areas compared to 279% for large central metropolitan counties, but the highest drug-poisoning AADRs were observed in central metropolitan areas from 1999 to 2009.

<http://www.sciencedirect.com/science/article/pii/S074937971300490X>

Usability of the Massachusetts Prescription Drug Monitoring Program in the Emergency Department: A Mixed Methods Study | Academic Emergency Medicine (2016)

Prescription Drug Monitoring Programs (PDMPs) are underutilized, despite evidence showing that they may reduce the epidemic of opioid related addiction, diversion and overdose. This study evaluated the usability of the Massachusetts (MA) PDMP by emergency medicine providers (EPs), as a system's usability may affect how often it is used. The study found that the complicated processes of gaining access to, logging in, and using the MA PDMP are barriers to preventing its more frequent use. All states should evaluate the PDMP usability in multiple practice settings including the ED, and work to improve provider enrollment, login procedures, patient information input, prescription data display, and ultimately, PDMP data integration into electronic medical records.

<http://onlinelibrary.wiley.com/doi/10.1111/acem.12905/abstract>

Using Poison Center Exposure Calls to Predict Prescription Opioid Abuse and Misuse-Related Emergency Department Visits | Pharmacoepidemiology & Drug Safety (2013)

Prescription drug abuse is a critical problem in the U.S. and has been linked to more deaths than automobile accidents. Poison centers (PCs) have the potential to act as sentinel reporting entities for prescription drug abuse and misuse due to near-real-time data reporting and abundant coverage in the U.S. Data on prescription opioid drug abuse from the Researcher Abuse, Diversion and Addiction-Related Surveillance (RADARS) System PC program correlates well with emergency room data from the Drug Abuse

Warning Network (DAWN). Due to timeliness of data, geographic coverage and strong associations with other warning systems, PC data can be used for sentinel reporting on prescription drug abuse and misuse in the U.S.

<http://onlinelibrary.wiley.com/doi/10.1002/pds.3533/abstract>



Variations in Parental Monitoring and Predictions of Adolescent Prescription Opioid and Stimulant Misuse | Addictive Behaviors (2015)

This study examined relations between adolescents' family structures, social ties, and drug-related attitudes, and their misuse of prescription opioids and stimulants. Different relationships were anticipated for the substances based on prior research highlighting varying motivations for their use. Parental monitoring and warmth predicted adolescents' social ties and individual differences associated with drug use, and both variables predicted prescription opioid and stimulant misuse. Contrary to previous research, for adolescents aged 12 to 14, high levels of parental monitoring, while positively associated with attitudes and social ties, also predicted higher rates of prescription stimulant misuse when combined with low levels of parental warmth.

<http://www.sciencedirect.com/science/article/pii/S0306460315000234>

Vital Signs: Overdoses of Prescription Opioid Pain Relievers – U.S., 1999–2008 | CDC MMWR (2011)

Overdose deaths involving opioid pain relievers (OPR), also known as opioid analgesics, have increased and now exceed deaths involving heroin and cocaine combined. This report describes the use and abuse of OPR by state. The report found that the epidemic of overdoses of OPR has continued to worsen. Wide variation among states in the non-medical use of OPR and overdose rates cannot be explained by underlying demographic differences in state populations but is related to wide variations in OPR prescribing.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6043a4.htm>

Vital Signs: Risk for Overdose from Methadone Used for Pain Relief – U.S., 1999–2010 | CDC MMWR (2012)

Methadone accounts for only two percent of the painkiller prescriptions in the U.S. and it is tied to more than 30 percent of painkiller overdose deaths. "There have been about 4 million prescriptions for methadone each year, and about 5,000 Americans die from methadone overdoses each year," said Dr. Thomas Frieden, Director of the U.S. Centers for Disease Control and Prevention.

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6126a5.htm?s_cid=mm6126a5_w

What Americans Believe About Opioid Prescription Painkiller Use | National Safety Council (NSC) (2015)

These slides from NSC talk about beliefs surrounding opioid painkiller use and abuse in the U.S. based on results from a national poll.

<http://www.nsc.org/NewsDocuments/031115-Public-Opinion-Poll.pdf>

CSN Webinars

Health Outcomes among Children Associated with Prescription Drug Misuse or Abuse (2012)

This archived webinar, presented in January 2012 by Dr. Len Paulozzi, covers an overview of the prescription misuse and abuse problem, health outcomes in children by stage of development (prenatal and neonatal, young children 0-6 years, and adolescents 10-19 years), and prevention strategies.

<http://www.childrenssafetynetwork.org/webinar/prescription-drug-abuse-prevention-learning-circle-session-2-health-outcomes-among-children->

Legal and Policy Approaches to Reducing Prescription Drug Overdose (2012)

This July 2012 webinar focuses on a range of policy initiatives to reduce prescription opioid medication abuse and the experiences of one state in developing and implementing rules to prevent opioid abuse. First, Corey Davis of the Network for Public Health Law provides a brief overview of some of these initiatives, including prescription monitoring programs, "Good Samaritan" laws, and laws intended to increase the availability and use of naloxone, a drug that can reverse opioid overdose. Second, Kristi Weeks of the Washington Department of Health discusses the challenges and opportunities of implementing Washington's rules for managing chronic non-cancer pain with opioids, including working with providers, stakeholders and the Legislature.

<http://www.childrenssafetynetwork.org/webinar/prescription-drug-abuse-prevention-learning-circle-session-6-legal-and-policy-approaches-red>

Overview of the Opioid Addiction Epidemic (2013)

This webinar was presented by Dr. Andrew Kolodny, Chief Medical Officer of Phoenix House, a nonprofit addiction treatment organization and President of Physicians for Responsible Opioid Prescribing (PROP). In the webinar, Dr. Kolodny discusses factors that led to sharp increases in opioid overdose deaths and opioid addiction. He also discusses strategies for bringing the epidemic under control.

<http://www.childrenssafetynetwork.org/webinar/overview-opioid-addiction-epidemic>

Prescription Drug Abuse and Co-Occurring Psychological Disorders in Young Adults (2013)

This webinar, presented by Jonathan Beazley LMFT LADC, a clinician, explores the available research on rates of comorbidity between prescription drug use and other psychiatric disorders and offers a clinical perspective on these issues. The webinar helps participants to understand the prevalence of the problem of prescription drug abuse, the prescription drugs being abused, associated co-occurring disorders, and how to effectively intervene with at-risk young adults.

<http://www.childrenssafetynetwork.org/webinar/prescription-drug-abuse-and-co-occurring-disorders>

Prescription Drug Abuse Prevention with Melissa Heinen (2011)

This webinar, presented by Melissa Heinen, is the result of a collaboration between the Children's Safety Network (CSN) and Salus Consulting, LLC. It examines the levels of prevention, passive vs. active interventions, different Injury and Violence Prevention (IVP) programs, and the roles of IVP and Maternal and Child Health (MCH) staff in preventing prescription drug abuse.

<http://www.childrenssafetynetwork.org/webinar/prescription-drug-abuse-prevention-dec-2011>

Preventing Misuse and Abuse of Prescription Stimulants among Students (2012)

This presentation by Kenneth Hale, Bryan Ashton, and Jessica Hughes Wagner showcases two University-based efforts designed to prevent the misuse and abuse of prescription stimulants: The Ohio State social norms campaign and the University of Texas at Austin's evidence-based, health communications campaign. It reviews available resources for prescription drug abuse prevention (with a focus on those relating to prescription stimulants), explores students' perspectives on this issue, describes a student government response, outlines the development of a health communication campaign, and draws from the growing body of literature about the misuse of prescription stimulants.

<http://www.childrenssafetynetwork.org/webinar/preventing-abuse-prescription-stimulants-among-students>

Preventing Prescription Drug Abuse among Teens and Young Adults (2012)

This webinar describes strategies for preventing prescription drug abuse among teens and young adults. Guest speakers include: Dr. Patricia Schram of the Adolescent Substance Abuse Program at Children's Hospital Boston; Michelle Lipinski, Principal of the North Shore Recovery High School; and Joanne Peterson, Founder and Executive Director of Learn to Cope.

<http://www.childrenssafetynetwork.org/webinar/preventing-rx-drug-abuse-among-teens-and-young-adults>

Protecting Children's Safety: How Prescription Monitoring Programs Can Assist (2012)

Prescription Monitoring Programs (PMPs) have been described by the Office on National Drug Control Policy and other federal agencies as "among the most promising resources in reducing the diversion and illicit use of prescription medications." In this webinar, John Eadie, former director of the Prescription Monitoring Program Center of Excellence discusses PMPs and how to partner with them.

<http://www.childrenssafetynetwork.org/webinar/protecting-childrens-safety>

The Role of Prescription Drug Monitoring Programs in Protecting Children and Youth (2014)

John Eadie, former director of the Prescription Drug Monitoring Program (PDMP) Center of Excellence and his colleague, Tom Clark, provide an update on PDMP developments between 2012 and 2014, share information about how to contact your states' PDMP, and give examples of the types of information that may help you protect children and youth in your community and state.

<http://www.childrenssafetynetwork.org/webinar/role-prescription-drug-monitoring-programs-protecting-children-and-youth>

Two Perspectives on Preventing Prescription Drug Abuse among Youth and Young Adults: Injury Prevention and Substance Abuse (2012)

This webinar features Alan Dellapena, Injury and Violence Branch Head, North Carolina Division of Public Health and Geoff Miller, Associate Director, Office of Substance Abuse, State of Maine. Both presenters discuss the problem of prescription drug abuse and showcase their states' prescription drug abuse prevention programs.

<http://www.childrenssafetynetwork.org/webinar/two-perspectives-preventing-prescription-drug-abuse>

Neonatal Abstinence Syndrome (NAS)

Identification of Early Developmental Deficits in Infants with Prenatal Heroin, Methadone, and Other Opioid Exposure | Clinical Pediatrics (2014)

This study examined development in infants following prenatal heroin, methadone, and opioid exposure, which adversely affects central and autonomic nervous systems. Prenatal heroin, methadone, and other opioid exposure is associated with weaknesses in language and cognition. This information has important public health implications, drawing attention to an otherwise healthy infant population which may benefit from early intervention services.

<http://cpj.sagepub.com/content/early/2014/09/03/0009922814549545.abstract>

Implementation of a Statewide Surveillance System for Neonatal Abstinence Syndrome — Tennessee, 2013 | CDC MMWR (2015)

In Tennessee, the rising incidence of NAS and its associated public health burden created an urgent need for timelier incidence figures to drive policy and prevention efforts. Beginning January 1, 2013, the Tennessee Department of Health (TDH) made NAS reporting mandatory. A total of 921 cases were reported in 2013, with the most cases clustered in eastern Tennessee; 63% of cases occurred to mothers who were reported to be using at least one substance prescribed by a health care provider, and 33% of cases occurred among women using illicit or diverted substances. The first year's surveillance results highlight the need for primary prevention activities focused on reducing dependence/addiction among women of childbearing age and preventing unintended pregnancy among female opioid users.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6405a4.htm>

Increasing Incidence of the Neonatal Abstinence Syndrome in U.S. Neonatal ICUs [Intensive Care Units] | New England Journal of Medicine (2015)

The incidence of NAS is known to have increased during the past decade. However, recent trends in the incidence of the syndrome and changes in demographic characteristics and hospital treatment of these infants have not been well characterized. The study evaluated trends in incidence and health care utilization and changes in infant and maternal clinical characteristics.

<http://www.nejm.org/doi/full/10.1056/NEJMsa1500439>

Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Care | Association of State and Territorial Health Officials (ASTHO) (2014)

A report describes two trends receiving significant public health, medical, and political attention: an increase in the prevalence of prescription opioid abuse and an increase in the incidence of NAS. The report presents an extensive literature review and provides examples of how states are taking steps to address the gaps in knowledge regarding NAS through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.

<http://www.astho.org/Prevention/NAS-Neonatal-Abstinence-Report>

Prenatal Substance Abuse: Short- and Long-term Effects on the Exposed Fetus | Pediatrics (2013)

Prenatal substance abuse continues to be a significant problem in this country and poses important health risks for the developing fetus. The primary care pediatrician's role in addressing prenatal substance exposure includes prevention, identification of exposure, recognition of medical issues for the exposed newborn infant, protection of the infant, and follow-up of the exposed infant. This report provides information for the most common drugs involved in prenatal exposure: nicotine, alcohol, marijuana, opiates, cocaine, and methamphetamine.

<http://pediatrics.aappublications.org/content/131/3/e1009.long>

Reducing Neonatal Abstinence Syndrome (NAS): Tennessee's Experience | Children's Safety Network (2012)

The number of U.S. babies born addicted to the class of drugs that includes prescription painkillers. This syndrome has nearly tripled in the past decade. These babies experience longer, often medically complex and costly initial hospitalizations. In 2009, the estimated cost for total hospital charges for NAS was \$720 million for 13,539 babies. This webinar features Dr. Michael D. Warren, Director, Division of Family Health and Wellness, Tennessee Department of Health, who discusses the scope of this problem and Tennessee's unique approach to developing and implementing strategies to reduce the incidence of NAS.

<http://www.childrenssafetynetwork.org/webinar/prescription-drug-abuse-prevention-among-teens-and-young-adults-reducing-neonatal-abstinence>

Review of the Assessment and Management of Neonatal Abstinence Syndrome | Addiction Science & Clinical Practice (2014)

This systematic review examines available evidence for neonatal abstinence syndrome (NAS) assessment tools, non-pharmacologic interventions, and pharmacologic management of opioid-exposed infants. Non-pharmacologic interventions, particularly breastfeeding, may decrease NAS severity. Opioid medications such as morphine or methadone are recommended as first-line therapy, with phenobarbital or clonidine as second-line adjunctive therapy. Further research is needed to determine best practices for assessment, non-pharmacologic intervention, and pharmacologic management of infants with NAS in order to improve outcomes.

<http://www.ascpjournal.org/content/9/1/19>



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