



Medication Safety: Online Resources

ADAI

ALCOHOL &
DRUG ABUSE
INSTITUTE

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INTRODUCTION

Many prescription and non-prescription drugs have abuse potential. This review provides information about online educational materials for various classes of drugs. Internet searches were conducted to identify information that was deemed to be of reasonable quality. This is not a complete inventory of all sites, rather it focuses on representative national sites as well as ones specific to Washington State. Information is provided describing: the intended audience; the main message of the site; and the quality, types and ways in which information is presented. The mission and funding sources of the organizations sponsoring the websites are described. This is particularly important when manufacturers of medications are providing funding regarding safety of their products. The intent here is not to endorse these webpages, but to provide information about a range of available online medication safety resources.

Drug categories described:

- General medication safety resources
- Stimulants
- Sedatives
- Opioids
- Dextromethorphan
- Loperamide

Other related information:

- WA State Medication Disposal
- WA State Recovery Helpline
- WA Stop Overdose

This report was produced by the Alcohol and Drug Abuse Institute, University of Washington, with support from the Washington State Department of Social and Health Services, Division of Behavioral Health and Recovery.

GENERAL MEDICATION SAFETY RESOURCES

Partnership for Drug-Free Kids- Above the Influence

<http://abovetheinfluence.com/drugs/prescription/#facts>

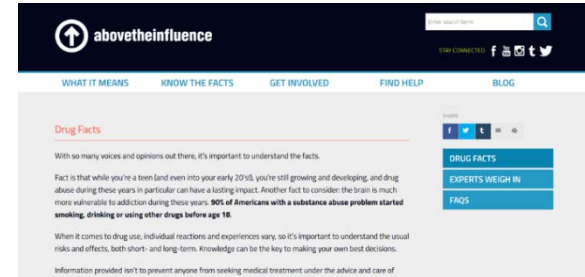
Audience: Teens

Main Message: It is important to understand drug facts

Quality/Types/Presentation of Information: Text heavy, with citations, 10th grade level

Mission: We are committed to helping families struggling with their son or daughter's substance use. We empower families with information, support and guidance to get the help their loved one needs and deserves. And we advocate for greater understanding and more effective programs to treat the disease of addiction.

Funding: Corporations, government grants, individuals and foundations.



National Institute on Drug Abuse (NIDA)

<https://www.drugabuse.gov/publications/research-reports/misuse-prescription-drugs/summary>

Audience: Adults

Main Message: The physical and mental effects of medication use and abuse

Quality/Types/Presentation of Information: Mostly text with some pictures and graphics, 14th-15th grade level

Mission: NIDA is the lead federal agency supporting scientific research on drug use and its consequences. Our mission is to advance science on the causes and consequences of drug use and addiction and to apply that knowledge to improve individual and public health.

Funding: Federal



Consumer Healthcare Products Association- Educational Foundation Know Your OTCs

<http://www.knowyourotcs.org/>

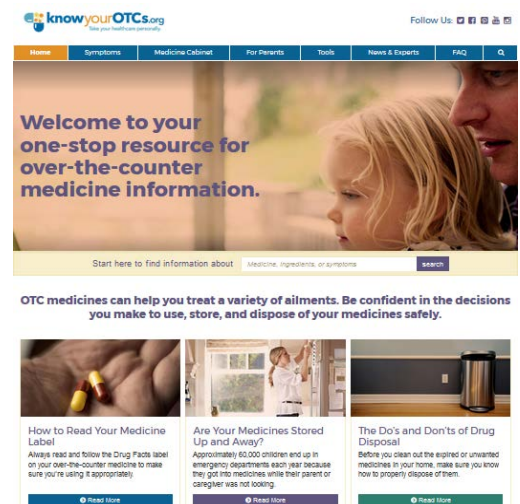
Audience: Consumers of over-the-counter medicines

Main Message: Be confident in the decisions you make to use, store, and dispose of your medicines

Quality/Types/Presentation of Information: Easy to digest, concise website written at 11th grade reading level without citations. Provides general information on how to read medicine labels and store and dispose of medicines in addition to specific information on individual OTC medicine safety

Mission: Empower self-care by preserving and expanding choice and availability of consumer healthcare products

Funding: CHPA represents more than 80 manufacturer member companies and 155 associate member companies. Manufacturer members manufacture or market OTC medicines and dietary supplements, including contract and private label manufacturers.



PRESCRIPTION STIMULANTS

Stimulant medications include methylphenidate (Ritalin and Concerta) and dextroamphetamine (Dexedrine and Adderall). They are prescribed to treat ADHD in children and adults and narcolepsy in adults. These medications are commonly misused by young adults for the purpose of enhancing study and test performance. A 2014 survey found that nearly one in every five college students have misused prescription stimulants. Stimulant abuse carries risk of dependence, withdrawal and overdose. Side effects, especially when taken in large doses, can include increases in heart rate, blood pressure, body temperature, and anxiety and paranoia. Long-term stimulant abusers have increased risk of heart attack and stroke.

Partnership for Drug-Free Kids

The screenshot shows the website for Adderall. At the top, there is a navigation bar with links: Get Help & Support, Learn, Get Involved, Read Our Blog, About Us, Medicine Abuse Project, JOIN US, and DONATE. Below the navigation bar, the title "Adderall" is displayed. The main content area features a photograph of several blue and white capsules. To the right of the image, there is text: "Know the facts about Adderall and connect with help and support to keep your child safe." Below this, there are sections titled "What are some slang terms?" (listing terms like Beams, black beauties, dexies, pep pills, speed, and uppers) and "What is it?" (explaining that Adderall is a combination of amphetamine and dextroamphetamine). A call to action at the bottom right says "Struggling with your child's substance use? We're here to listen and help you find answers. Get personalized help now >>>".

Adderall: <http://drugfree.org/drug/adderall/>

The screenshot shows the website for Ritalin. At the top, there is a navigation bar with links: Get Help & Support, Learn, Get Involved, Read Our Blog, About Us, Medicine Abuse Project, JOIN US, and DONATE. Below the navigation bar, the title "Ritalin" is displayed. The main content area features a photograph of two white, round tablets. To the right of the image, there is text: "Know the facts about Ritalin and connect with help to keep your child safe." Below this, there are sections titled "What are some slang terms?" (listing terms like Kibbles and bits, Pineapple) and "What is it?" (explaining that Ritalin is methylphenidate, a medication prescribed for children, teens and adults with an abnormally high level of activity or with attention-deficit hyperactivity disorder (ADHD)). A call to action at the bottom right says "Struggling with your child's substance use? We're here to listen and help you find answers. Get personalized help now >>>".

Ritalin: <http://drugfree.org/drug/ritalin/>

Audience: Parents

Main Message: Know the facts to keep your child safe

Quality/Types/Presentation of Information: Text based fact sheet, 10th grade level

Mission: We are committed to helping families struggling with their son or daughter's substance use. We empower families with information, support and guidance to get the help their loved one needs and deserves. And we advocate for greater understanding and more effective programs to treat the disease of addiction.

Funding: Corporations, government grants, individuals and foundations.

Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD)

<http://www.chadd.org/Understanding-ADHD/For-Parents-Caregivers/Teens/Medication-Abuse-and-Diversion.aspx>

Audience: Parents and Teens

Main Message: What is medication diversion and how do you prevent it?

Quality/Types/Presentation of Information: Text based, written at 10th grade level

Mission: CHADD improves the lives of people affected by ADHD

Funding: Membership dues, conferences, advertising, governmental and pharmaceutical grants, donations and interest.

The screenshot shows the CHADD website page for Medication Abuse and Diversion. The header includes the CHADD logo and navigation links: Register, Login, Donate, Join, and Donate. The main content area features a section titled "Medication Abuse and Diversion" with a sub-section for "Teens". The text explains that when properly prescribed and administered, medications approved for the treatment of ADHD have been shown to be highly safe and effective. It also notes that parents of children and teenagers who have been prescribed medications for the treatment of ADHD are rightly concerned about the appropriate use and possible abuse of these medications. A call to action at the bottom right says "Struggling with your child's substance use? We're here to listen and help you find answers. Get personalized help now >>>".

National Institute on Drug Abuse (NIDA): Stimulant ADHD Medications

<https://www.drugabuse.gov/publications/drugfacts/stimulant-adhd-medications-methylphenidate-amphetamines>

Audience: Adults

Main Message: The physical and mental effects of stimulant use and abuse

Quality/Types/Presentation of Information: Mostly text with some pictures and graphics, 14th-15th grade level

Mission: NIDA is the lead federal agency supporting scientific research on drug use and its consequences. Our mission is to advance science on the causes and consequences of drug use and addiction and to apply that knowledge to improve individual and public health.

Funding: Federal

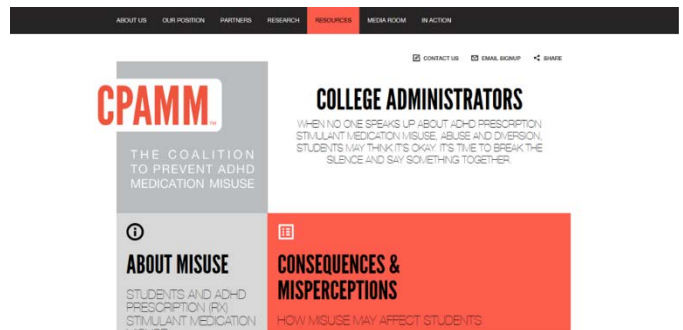


The Coalition to Prevent ADHD Medication Misuse



Research

<http://www.cpamm.org/research/>



College Administrators

<http://www.cpamm.org/resources/collegedadmin/>

Audience: Parents, college administrators and college students

Main Message: Research and information to encourage speaking up about ADHD prescription stimulant medication misuse, abuse and diversion

Quality/Types/Presentation of Information: Infographics with citations, very visual presentation with thoughtfully placed text, 6th grade level

Mission: We strive to be a trusted source of information on the issue of ADHD prescription stimulant medication misuse, abuse and diversion, with a primary focus on college students. CPAMM will use its knowledge to make a difference and help prevent the nonmedical use of these medications.

Funding: SHIRE Pharmaceutical Community

National Coalition Against Prescription Drug Abuse (NCAPDA)

<http://ncapda.org/education/drugs/stimulants/>

Audience: Parents and community members

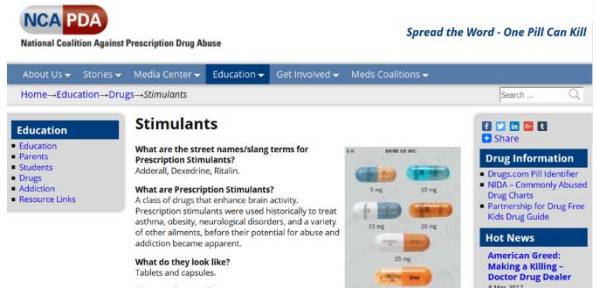
Main Message: Spread the word, one pill can kill

Quality/Types/Presentation of Information: One page mostly text fact sheet with a useful medication picture and links, 10th grade level

Mission: NCAPDA was founded to prevent the impact of prescription drug abuse/misuse through community education, policy change and legislative advocacy at the local, state and national levels

Funding: Fidelity Investments, Fog City Entertainment, John H

Wright Photography, Mothers with a Purpose, Richard and Donna Corn and the Paul DeVincenzi Family



PRESCRIPTION SEDATIVES (BENZODIAZEPINES, MUSCLE RELAXANTS, SLEEP AIDS, ETC.)

Prescription sedatives – sometimes called depressants or hypnotics - are drugs that slow down the activity of the central nervous system, including the brain. Some examples of prescription sedatives are benzodiazepines (Xanax, Valium, Klonopin, etc.), prescription sleep aids (Ambien, Lunesta, etc.), muscle relaxants, and barbiturates. When taken at appropriate doses, sedatives can be useful in treating anxiety, sleep disorders, and seizures. However, sedatives are dangerous when taken in high doses or with alcohol or other sedatives, and can lead to overdose or death. Sedatives can also cause dependence and withdrawal when taken for long periods of time or in high doses.

Patient Education Center – Harvard Medical School: Sedative, Hypnotic or Anxiolytic Drug Use Disorder

<http://www.patienteducationcenter.org/articles/substance-abuse-depressants-or-sedative-hypnotic-drugs/>

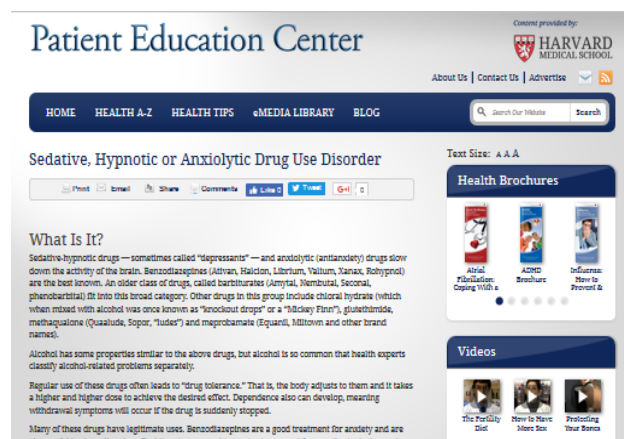
Audience: Patients

Main Message: Patients taking sedative, hypnotic, and anxiolytic medications should be aware of their risks, especially risks of dependence and overdose, which are greater when taken in high doses and with other sedatives including alcohol

Quality/Types/Presentation of Information: Text heavy webpage at around an 11th grade reading level with no citations. The website includes what sedative, hypnotic, and anxiolytic medications are, their risks, symptoms of dependence, how a doctor would diagnose sedative, hypnotic, or anxiolytic use disorder, prevention information, and treatment information

Mission: To provide multimedia access to reliable and relevant health information at and beyond the point of care

Funding: Harvard Medical School



National Institute on Drug Abuse (NIDA): Facts on CNS Depressants

https://teens.drugabuse.gov/sites/default/files/peerx/pdf/PEERx_Toolkit_Depressants.pdf

Audience: Students, parents, educators, and the general public

Main Message: When taken as directed, CNS depressants can be safe and helpful, but when people take someone else's prescription drugs or take the drugs for entertainment or pleasure, they may experience dangerous consequences

Quality/Types/Presentation of Information: Two page text-heavy fact sheet written at about an 11th grade reading level with no citations. Facts on types of CNS depressants, how they are abused, how they affect the brain, negative effects, information on dependence and withdrawal, treatment for addiction to CNS depressants, and what to do if you or someone you know is abusing or misusing prescription drugs

Central nervous system (CNS)—the brain and spinal cord—depressants slow down (or “depress”) the normal activity that goes on in the brain. Doctors often prescribe them for people who are anxious or can't sleep. When taken as directed, they can be safe and helpful. But when people take someone else's prescription drugs or take the drugs for entertainment or pleasure, they may experience dangerous consequences.

CNS depressants can be divided into three primary groups:

Type	Conditions They Treat	Street Names
Barbiturates	• Seizure disorders • Surgical procedures	Barbs, reds, red birds, phenies, tooies, yellows, or yellow jackets
Benzodiazepines	• Acute stress reactions • Panic attacks • Convulsions • Sleep disorders	Candy, downers, sleeping pills, or tranks
Sleep Medications		

Partnership for Drug-Free Kids: Prescription Sedatives & Tranquilizers

<http://drugfree.org/drug/prescription-sedatives-tranquilizers/>

Audience: Parents, educators, and mentors

Main Message: Know the facts about prescription sedatives/tranquilizers and keep your child safe

Quality/Types/Presentation of Information: Webpage written at a 10th grade reading level. Includes an overview, how the drugs are used, what the risks are, what the signs of use are, a list of brand names/slang terms, and links to next steps (secure and dispose of medicine properly, talk with your kids, and get one-on-one help)

Partnership for Drug-Free Kids

Prescription Sedatives & Tranquilizers

Know the facts about prescription sedatives and tranquilizers and connect with help and support to keep your child safe.

What are some slang terms?
Quaaludes, Xanax, Valium, Xanaxin, Alivan, Barbita, Downers
See table below for a more complete list.

What are they?
Prescription medications that act as central nervous system depressants. Barbiturates and tranquilizers are prescription.

What do they look like?
Multi-colored tablets and capsules; some can be in liquid form.

How are they used?
Medically, barbiturates are prescribed for acute anxiety, tension and sleep disorders. Benzodiazepines are prescribed for anxiety, acute stress reactions, and panic attacks. When misused, they are swallowed or injected.

What do young people hear about it?
Prescription sedatives and tranquilizers can cause euphoria.

What are the risks?
These drugs slow normal brain function, which may result in slurred speech, shallow breathing, sluggishness, fatigue, disorientation and lack of coordination or dilated pupils. Higher doses cause impaired memory, judgment and coordination, irritability, paranoia, and thoughts of suicide. Some people can become agitated or aggressive. Using prescription sedatives and tranquilizers with other substances — particularly alcohol — can slow breathing, or slow both the heart and respiration, and possibly lead to death.

National Institute for Drug Abuse (NIDA) for Teens: Prescription Depressant Medications

<https://teens.drugabuse.gov/drug-facts/prescription-depressant-medications>

Audience: Teens

Main Message: Prescription depressants carry risk of dependence and addiction which are increased when misused

Quality/Types of Information Presented:

Text, bullets, and charts written at a 9th grade reading level with citations and references to other sections of NIDA for more information. Includes sections on prescription depressant misuse, what happens to your brain and body when you use prescription depressants, overdose information, information on the addictive nature of depressants, facts about teens using prescription depressants, and information on what to do if some-one you know needs help.

NIDA for TEENS

Prescription Depressant Medications

What is prescription depressant abuse?

Alcohol and Barbiturates, Red Pills, Phenies, Tooies, Yellow Jackets, Xanax, Valium, Xanaxin, Alivan, Barbita, Downers, Sleeping Pills, or Tranks, Antinax, or Candy Pills

Depressants, sometimes referred to as central nervous system (CNS) depressants or tranquilizers, slow down the normal activity that goes on in the brain and spinal cord. Doctors often prescribe them for people who are anxious or can't sleep.

When prescription depressants are taken as prescribed by a doctor, they can be relatively safe and helpful. However, dependence and addiction are still potential risks. These risks increase when these drugs are misused. Taking the drugs to get “high” can cause paranoia, and even dangerous problems.

Depressants can be divided into three primary groups: barbiturates, benzodiazepines, and sleep medications.

Type	Conditions They Treat
Barbiturates	• Seizure disorders
Benzodiazepines	• Acute stress reactions
Sleep Medications	• Sleep disorders

PRESCRIPTION OPIOIDS

Opioids help reduce pain signals in the brain and are often prescribed following surgery or injury, or in certain health conditions for pain management for. Commonly prescribed opioids include codeine, morphine, oxycodone, hydrocodone, methadone, and fentanyl. Opioids can be helpful in managing short-term pain, but carry serious risks and side effects, including risk of addiction and overdose, including death. There is poor evidence for the effectiveness for opioids for chronic non-cancer pain. Risks are greater with prolonged use and when opioids are taken with alcohol or sedative medications, such as benzodiazepines (i.e. Xanax or Valium), muscle relaxants (i.e. Soma or Flexeril), hypnotics (i.e. Ambien or Lunesta) or stimulant drugs (licit and illicit). Opioid use disorder and overdose are at record high levels across the United States and in Washington. In Washington State alone, 718 people died from overdoses involving opioids in 2015.

Washington Health Alliance and the Dr. Robert Bree Collaborative: Opioid Medication & Pain: What You Need to Know

<http://wahealthalliance.org/wp-content/uploads.php?link-year=2017&link-month=01&link=Opioid-Medication-Pain-Fact-Sheet-revised.pdf>

Audience: Patients looking to reduce pain

Main Message: Opioids are strong prescription medications and carry substantial risk compared to non-opioid pain treatments, including risk of addiction and overdose

Quality/Types/Presentation of Information: Two page text-based information sheet at a 5th grade reading level with citations. Information on non-opioid pain treatment alternatives, warnings about opioid medications, facts and figures about the opioid epidemic and teen opioid abuse, and recommendations for keeping kids and teens safe from opioid medication.

Washington Health Alliance

Mission: To build a strong alliance among patients, doctors, hospitals, purchasers, health plans and others to promote health and improve quality and affordability by reducing overuse, underuse and misuse of health care services

Funding: Membership fees and grants from organizations focused on improving health care

Bree Collaborative

Mission: To provide a mechanism through which public and private health care stakeholders can work together to improve quality, health outcomes, and cost effectiveness of care in Washington State

Funding: WA State funding

Washington Health Alliance
Leading health system improvement

DR. ROBERT BREE COLLABORATIVE

Opioid Medication & Pain: What You Need to Know

If you've had an injury, surgery or major dental work, you are likely to have pain. Pain is a normal part of life and healing. Talk with your doctor about how you can get the most effective pain relief with the least risk.

NON-OPIOID PAIN TREATMENTS HAVE FEWER RISKS
For pain that will likely be gone in a week or two, it is always best to start with non-opioid pain treatments. Opioids may help control pain at first, but they are usually not necessary. Consider other options that may work just as well but have far fewer risks.

- Over-the-counter pain relievers
- Physical therapy
- Exercise
- Professional help coping with the emotional effects of pain

OPIOIDS ARE STRONG PRESCRIPTION MEDICATIONS
Opioids can be the right choice for treating severe pain, such as from cancer or immediately after major surgery. However, medications such as Vicodin, Percocet and OxyContin are very powerful and can be deadly. Even if you take them as directed, ALL opioids have serious side effects such as addiction and overdose.

OPIOIDS ARE CHEMICAL COUSINS OF HEROIN AND ARE HIGHLY ADDICTIVE
You can build up a tolerance to opioids over time, so you need to take more and more to get the same relief. The higher the dose, the more dangerous opioids are. You can even become addicted after a short time.

Commonly prescribed opioids:

- Codeine
- Dilaudid
- Fentanyl
- Hydrocodone (Vicodin)
- Hydromorphone
- Methadone
- Meperidine
- Morphine
- MS Contin
- Oxycodone (Opana)
- Oxycodone (OxyContin)
- Percocet

These are only some of the prescription opioids. If you get a prescription for pain, ask your doctor if it is an opioid.

If you are prescribed an opioid for short-term pain:

- The prescription should only be for a three- to seven-day supply (often this is as few as 10 pills).
- Take the lowest dose possible for the shortest period of time.
- Always talk with your doctor about managing your pain better **without** taking prescription opioids.

www.WashingtonHealthAlliance.org www.BreeCollaborative.org

U.S. Centers for Disease Control and Prevention (CDC) & the American Hospital Association (AHA):

Prescription Opioids: What You Need to Know

<https://www.cdc.gov/drugoverdose/pdf/aha-patient-opioid-factsheet-a.pdf>

Audience: Pain patients

Main Message: Patients should know about the risks and side effects of opioid use

Quality/Types/Presentation of Information: 2-page fact sheet written at a 10th grade reading level with no citations. Sections for risks and side effects, things that increase those risks, options for alternatives to opioid medication, and how to mitigate associated risks.

U.S. Centers for Disease Control and Prevention (CDC)

Mission: To protect America from health, safety and security threats, both foreign and in the U.S.

Funding: Federal

American Hospital Association (AHA)

Mission: To advance the health of individuals and communities

Funding: Primarily member dues (hospitals, health care systems, and other providers of care) but also funded by businesses and other organizations that share an interest in objectives of AHA including pharmaceutical companies

PRESCRIPTION OPIOIDS: WHAT YOU NEED TO KNOW

Prescription opioids can be used to help relieve moderate-to-severe pain and are often prescribed following a surgery or injury, or for certain health conditions. These medications can be an important part of treatment but also come with serious risks. It is important to work with your health care provider to make sure you are getting the safest, most effective care.

WHAT ARE THE RISKS AND SIDE EFFECTS OF OPIOID USE?

Prescription opioids carry serious risks of addiction and overdose, especially with prolonged use. An opioid overdose, often marked by slowed breathing, can cause sudden death. The use of prescription opioids can have a number of side effects as well, even when taken as directed.

IS UP TO 1 IN 4 PEOPLE? receiving prescription opioids has been in a primary care setting struggling with addiction. *Taking too many

- Tolerance—meaning you might need to take more of medication for the same pain relief
- Physical dependence—meaning you have symptoms of withdrawal when a medication is stopped
- Increased sensitivity to pain
- Constipation
- Nausea, vomiting, and dry mouth
- Sleepiness and dizziness
- Confusion
- Depression
- Low levels of testosterone that can result in lower sex drive, energy, and strength
- Itching and sweating

RISKS ARE GREATER WITH:

- History of drug misuse, substance use disorder, or overdose
- Mental health conditions (such as depression or anxiety)
- Sleep apnea
- Older age (65 years or older)
- Pregnancy

Avoid alcohol while taking prescription opioids. Also, unless specifically advised by your health care provider, medications to avoid include:

- Benzodiazepines (such as Xanax or Valium)
- Muscle relaxants (such as Soma or Flexalid)
- Sedatives (such as Ambien or Lunesta)
- Other prescription opioids

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

American Hospital Association

U.S. Centers for Disease Control and Prevention (CDC): Pregnancy and Opioid Medication

https://www.cdc.gov/drugoverdose/pdf/pregnancy_opioid_pain_factsheet-a.pdf

Audience: Pregnant women taking opioid pain medication

Main Message: Women who take opioid pain medications should be aware of the possible risks during pregnancy

Quality/Types/Presentation of Information: 2-page bulleted fact sheet at an 11th grade reading level with citations. Sections explaining what opioid pain medications are, the possible risks to the fetus or newborn, what to do if you find out you're pregnant while taking opioids, and information about breastfeeding while taking opioids.

Funding: Federal

PREGNANCY AND OPIOID PAIN MEDICATIONS

Women who take opioid pain medications should be aware of the possible risks during pregnancy.

WHAT ARE OPIOID PAIN MEDICATIONS?

Opioid pain medications are prescribed by doctors to treat moderate to severe pain. Common types are codeine, oxycodone, hydrocodone, and morphine.

Think to your provider before starting or stopping any medications to help you understand all of the risks and make the safest choice for you and your pregnancy.

ARE OPIOID PAIN MEDICATIONS SAFE FOR WOMEN WHO ARE PREGNANT OR PLANNING TO BECOME PREGNANT?

Think about your pregnancy history:

- Resected Ovarian Remnant Syndrome (RORS), which causes irregular, intense, burning, stabbing, throbbing, and/or aching pain
- Heart tube defects, serious problems on the development for newborns of the heart's main artery
- Congenital heart defects, problems affecting how the heart's blood flows
- Cardiomyopathy, both sides of developing baby's abdomen (only) or where the ribcage and outside of the body through the baby's torso
- Stillbirth, the loss of a pregnancy after 20 or more weeks
- Preterm delivery, a birth before 37 weeks

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

AMERICAN HOSPITAL ASSOCIATION

Washington State Department of Health: Take as Directed: Prescription Pain Medicine

<http://www.doh.wa.gov/YouandYourFamily/PoisoningandDrugOverdose/TakeAsDirected>

Audience: Pain patients, older adults, parents, and teens

Main Message: People should know how to prevent poisoning and overdose

Quality/Types/Presentation of Information: Text based website at a 10th grade reading level with no citations. Links to webpages for pain patients, older adults, parents, teens, FAQs, and resources

Mission: To protect and improve the health of people in Washington State

Funding: Federal, state, and fee supported

Washington State Department of Health

Home | Newsroom | Publications | About Us

You and Your Family | Community and Environment | Licenses, Permits and Certificates | Data and Statistical Reports | Emergencies

You and Your Family > Poisoning and Drug Overdose > TakeAsDirected

Poisoning and Drug Overdose

Opioid Misuse and Overdose Prevention

TakeAsDirected

Data Summary

For Healthcare Providers

For Older Adults

For Pain Patients

TakeAsDirected

Prescription Pain Medicine

On this webpage, prescription pain medicine means 'opioid' medicine such as methadone, Oxycodone® or Vicodin®. Healthcare providers are prescribing more pain medicine. Along with this increase came unintended consequences.

More Resources

- Education Materials
- More Resources

American Academy of Family Physicians (AAFP) and the AAFP Foundation: Safe Use, Storage, and Disposal of Opioid Drugs

<https://familydoctor.org/safe-use-storage-and-disposal-of-opioid-drugs/>

Audience: Patients

Main Message: Patients should be aware of how to safely use, store, and dispose of opioid drugs

Quality/Types/Presentation of Information: In-depth, text-based website written at a 7th grade reading level with non-academic citations

AAFP

Mission: To improve the health of patients, families, and communities by serving the needs of members with professionalism and creativity

Funding: Physician member fees

AAFP Foundation

Mission: To advance the values of Family Medicine by promoting humanitarian, educational, and scientific initiatives that improve the health of all people

Funding: Individual and corporate donations and grants including those from pharmaceutical companies



Turn the Tide Rx - An Initiative of the U.S. Surgeon General, Public Health Foundation Enterprises, and 100 Million Healthier Lives: About Opioids

<http://turnthetiderx.org/for-patients/>

Audience: Pain patients

Main Message: Opioids can be helpful for a short time but they have serious risks

Quality/Types/Presentation of Information: Text heavy website written at a 13th grade reading level with no citations. Sections on managing pain, overdose and addiction risk, side effects, and how to safely take, store, and dispose of opioids.

Surgeon General of the United States

Mission: To provide Americans with the best scientific information available on how to improve their health and reduce the risk of illness and injury

Funding: Federal

Public Health Foundation Enterprises

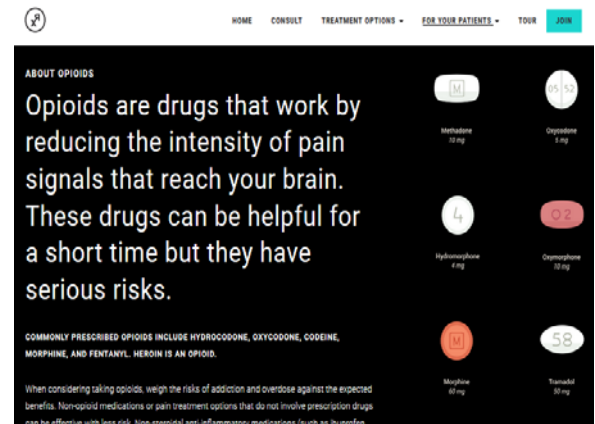
Mission: To enable population health initiatives to improve the health and well-being of our communities

Funding: Government and private contracts and donations

100 Million Healthier Lives

Mission: 100 million people living healthier lives by 2020

Funding: Institute for Healthcare Improvement (IHI) funded through fee-based programs and services as well as through private donations including those from pharmaceutical companies



UC Davis Health System & UC Davis Center for Design in the Public Interest: UC Davis Opioid Patient Education Video

https://youtu.be/yzAID2p_Ycg

Audience: Patients taking opioid medication

Main Message: Patients should be aware of the purpose, risks, side effects, and safe use practices of opioid medications

Quality/Types/Presentation of Information: Easy to digest educational video on the purpose, risks, side effects, and safe use practices of opioid medications. Video length: 7min 37sec

UC Davis Health System

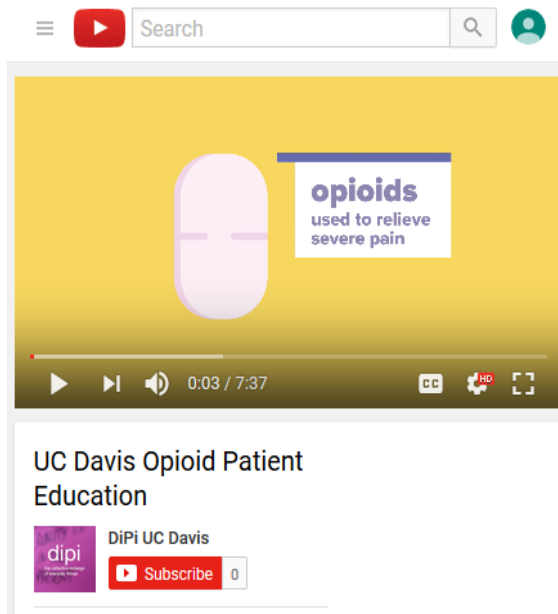
Mission: To improve lives and transform health care by providing excellent patient care, conducting groundbreaking research, fostering innovative, inter-professional education, and creating dynamic, productive partnerships with the community

Funding: Federal and state, private foundations, and the pharmaceutical and biotechnology industries

UC Davis Center for Design in the Public Interest

Mission: To create accessible, user-centered design outcomes both for and with a diverse cross-section of the public

Funding: UC Davis Office of Research



DEXTROMETHORPHAN (DXM)

Dextromethorphan is the active ingredient in some over-the-counter cough syrups. It is an effective cough suppressant that can be used by children, adolescents and adults. When taken in large doses it can cause intoxication, confusion, dizziness, drowsiness, impaired physical coordination, slurred speech, blurred vision, rapid heartbeat, hallucinations, nausea and vomiting. Recent surveys show that as many as one in 30 teens have used DXM to get high.

Partnership for Drug-Free Kids

<http://drugfree.org/drug/dxm/>

Audience: Parents

Main Message: Know the facts about DXM to keep your child safe

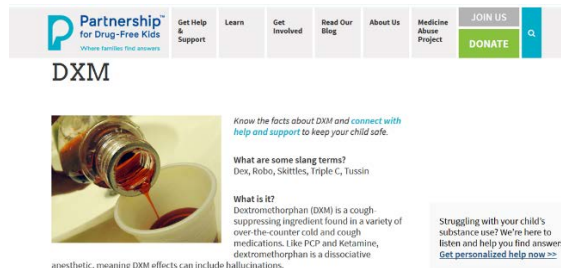
Quality/Types/Presentation of Information: One page fact sheet, mostly text, 10th grade level

<https://www.drugfree.org/download/preventing-teen-over-the-counter-cough-medicine-dxm-abuse/>

Audience: Parents

Main Message: Preventing teen over-the-counter cough medicine abuse

Quality/Types/Presentation of Information: Five page guide, mostly text, 7th grade level



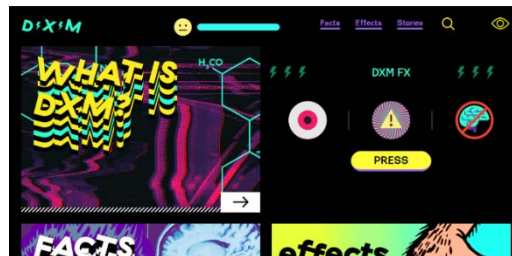
Partnership for Drug-Free Kids & the Consumer Healthcare Products Association

<http://whatisdxm.com/>

Audience: Teens

Main Message: Draw your own conclusions about DXM

Quality/Types/Presentation of Information: Very visually based webpage with colorful graphics and video stories from people who have abused DXM, 6th-12th grade level



Stop Medicine Abuse

<http://www.stopmedicineabuse.org>

Audience: Parents and community members

Main Message: Learn about teen medicine abuse

Quality/Types/Presentation of Information: Very easy to navigate web page, good visual/text balance, 10th grade level

Mission: Stop Medicine Abuse is a prevention campaign working to alert parents and members of the community about the problem of teen abuse of over-the-counter (OTC) cough medicines containing dextromethorphan (DXM)

Funding: Consumer Healthcare Products Association



Community Anti-Drug Coalition of America

<http://www.preventrxabuse.org/facts-tools/cough-medicine-abuse-at-a-glance/#.WQjrVMZIDIU>

Audience: Parents

Main Message: Help prevent medicine abuse

Quality/Types/Presentation of Information: One page cough medicine abuse overview, mostly bulleted text, 9th grade level

Mission: Preventing alcohol, tobacco and other drug abuse

Funding: Governmental grants, corporate and individual contributions



LOPERAMIDE (IMODIUM)

Loperamide (Imodium) is an over-the-counter medication used to control diarrhea. Recently, there has been an increase in loperamide misuse and abuse with individuals attempting to treat opiate withdrawal symptoms or to attain a euphoric effect with extremely high doses of loperamide. If taken as directed, loperamide has low safety risks. However, if taken in high doses, loperamide becomes dangerous. High dose loperamide can cause serious heart problems that can lead to death. Online medication safety information related to loperamide appears to be limited to FDA and news stories, perhaps given the very recent emergence of misuse of this drug.

U.S. Food and Drug Administration (FDA) Drug Safety Communication on Loperamide

<https://www.fda.gov/drugs/drugsafety/ucm504617.htm>

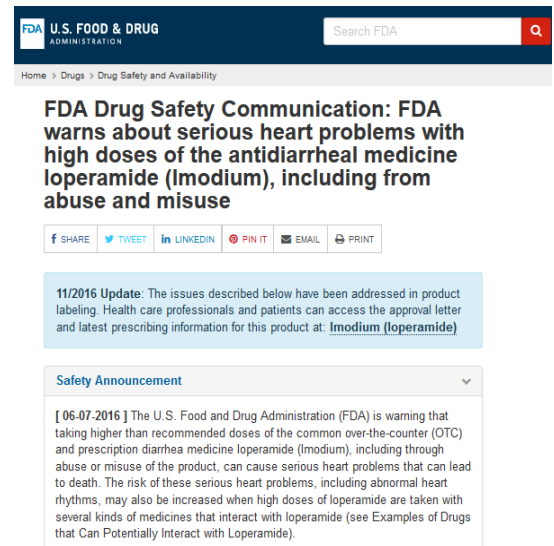
Audience: Patients, consumers, and health care professionals

Main Message: Taking higher than recommended doses of loperamide (Imodium) through abuse or misuse of the product can cause serious heart problems that may lead to death

Quality/Types/Presentation of Information: Text heavy webpage at around a 15th grade reading level with citations. Sections include the safety announcement, examples of drug interactions, facts about loperamide, additional information for patients and consumers, and a summary of data on loperamide.

Mission: Protecting the public health by assuring the safety, efficacy and security of human and veterinary drugs, biological products, medical devices, our nation's food supply, cosmetics, and products that emit radiation

Funding: Federal



The screenshot shows the FDA's official website with a search bar at the top. The main heading reads "FDA Drug Safety Communication: FDA warns about serious heart problems with high doses of the antidiarrheal medicine loperamide (Imodium), including from abuse and misuse". Below the heading are social media sharing options for Facebook, Twitter, LinkedIn, Pinterest, Email, and Print. A blue box contains an "11/2016 Update" stating that issues have been addressed in product labeling. A "Safety Announcement" section is expanded, showing a date of "06-07-2016" and a warning that taking higher than recommended doses of loperamide can cause serious heart problems, including abnormal heart rhythms, especially when taken with other drugs.

National Public Radio (NPR): Getting High from This Drug for Diarrhea Can Be Fatal

<http://www.npr.org/sections/health-shots/2016/05/03/476615084/getting-high-from-this-drug-for-diarrhea-can-be-fatal>

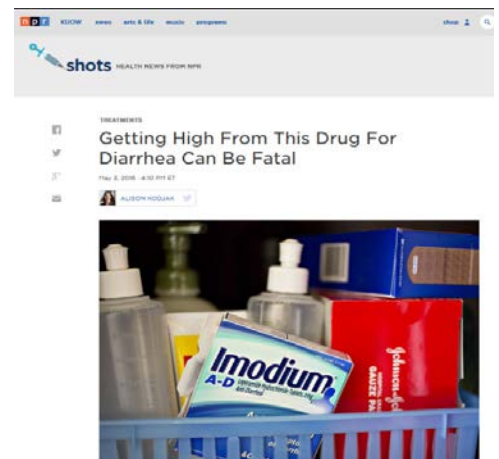
Audience: The general public

Main Message: Getting high on loperamide can be fatal

Quality/Types/Presentation of Information: Brief text-based article written at a 13th grade reading level with references and interviews with experts. Includes information on the dangers of abusing loperamide, summarizes two case studies, provides an overview of the reasons people are turning to it, and the effects of loperamide at higher doses.

Mission: To work in partnership with Member Stations to create a more informed public – one challenged and invigorated by a deeper understanding and appreciation of events, ideas and cultures

Funding: Individuals, corporations, colleges/universities, foundations, and federal, state, and local governments



The screenshot shows the NPR website's "shots" section. The article title is "Getting High From This Drug For Diarrhea Can Be Fatal". The author is Alison Hodara. Below the text is a photograph of a pharmacy basket containing several boxes of Imodium A-D (loperamide) and other medications.

American Addiction Centers: Extreme Dangers of Using High-Dose Imodium for Opiate Withdrawal

<http://americanaddictioncenters.org/prescription-drugs/imodium-ad-for-opiates/>

Audience: Families or individuals seeking help for loperamide abuse and/or opioid withdrawal

Main Message: High-dose loperamide is dangerous and people attempting to manage withdrawal symptoms on their own with loperamide should seek professional help

Quality/Types/Presentation of Information: In-depth text heavy webpage written at a 9th grade reading level with no citations. Includes an overview of what loperamide is, how it's improperly used to manage opiate withdrawal, how to treat loperamide overdose, and clinical alternatives to treating opioid withdrawal



The screenshot shows the American Addiction Centers website. The main heading is "Extreme Dangers of Using High-Dose Imodium for Opiate Withdrawal". The page includes a "Table of Contents" with links to "What is Imodium?", "How Imodium is Used to Manage Opiate Withdrawal", "Treating an Overdose", and "Clinical Alternatives of Opiate Withdrawal". The text explains that between 26.4 and 36 million people use opioids globally, and high-dose loperamide can be dangerous. It also mentions that the National Institute on Drug Abuse (NIDA) notes that people are not only using illicit opiate drugs but also prescription medications like Vicodin. The page includes a "Get Help Today" button and a "We're Here For You" banner with the phone number 888-966-7458.

Mission: To provide quality, compassionate, and innovative care to adults struggling with addiction and co-occurring mental health disorders

Funding: For-profit drug treatment provider

WASHINGTON STATE MEDICATION DISPOSAL, OVERDOSE PREVENTION, & RECOVERY HELPLINE

Washington Poison Center: Take Back Your Meds

<http://www.takebackyourmeds.org/>

Audience: The public

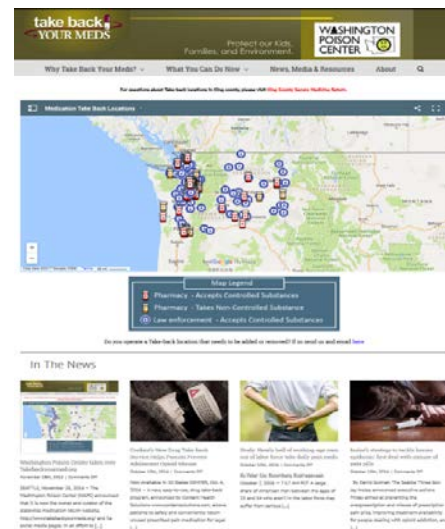
Main Message: Dispose of medications safely to reduce drug abuse, accidental poisonings, and harm to the environment

Quality/Types/Presentation of Information:

Easy to understand website with an interactive map of medication take back locations and simple text based sections on why it's important to safely dispose of medications and how to do so.

Mission: To prevent harm from poisoning through expertise, collaboration, and professional and public education

Funding: The Washington State Department of Health and public and private grants, contracts, and donations



Center for Opioid Safety Education (COSE) at the Alcohol & Drug Abuse Institute (ADAI): Stop Overdose

www.stopoverdose.org

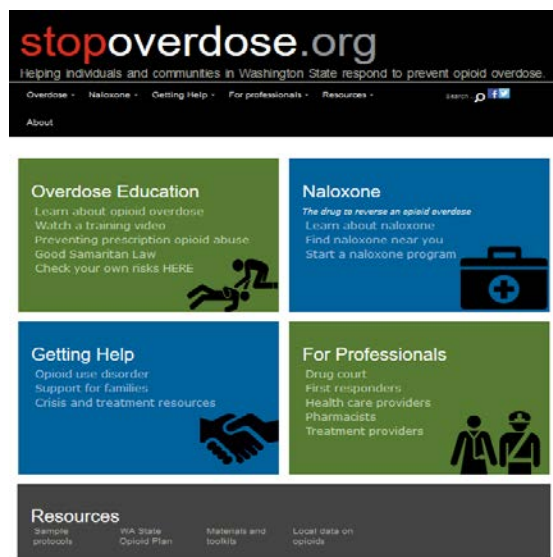
Audience: General public, professionals, and community organizations who want to learn how to prevent and respond to overdose

Main Message: Individuals and communities should know how to prevent and respond to overdose

Quality/Types/Presentation of Information: Text based website written at a 7th grade reading level with visual aids and videos. Website includes overdose education (articles, training videos, interactive overdose risk assessment and overdose education materials, and locator information) and treatment resources for opioid use disorder. Smartphone compatible.

Mission: To reduce fatalities from opioid overdose

Funding: WA State Department of Social and Health Services - Division of Behavioral Health and Recovery



Washington Recovery Helpline

<https://www.warecoveryhelpline.org/>

Audience: People who need crisis intervention and referrals for issues related to substance abuse, mental health, and problem gambling

Main Message: Call this line to receive crisis intervention and referrals

Quality/types of Information and Presentation

Text heavy website written at a 12th grade reading level with no citations. Includes information on the help line, recovery resources, marijuana information, and a section for teens

Mission: To connect people in physical, emotional, and financial crisis to services that will be of help

Funding: WA State Department of Social and Health Services - Division of Behavioral Health and Recovery, United Way of King County, King County Veterans and Human Services Levy, Washington State, WIN211, and a number of cities in Washington State



Reach Us Now
866.789.1511
206.461.3219 (TTY)
Language interpretation available
recovery@crisisclinic.org

Help for Teens
Teen Link a confidential
teen-oriented help line
Every evening 6-10 PM
866.833.6546
866teenlink.org
teenlink@crisisclinic.org

Washington Recovery Help Line
24-Hour Help for Substance Abuse, Problem Gambling & Mental Health
Call 866.789.1511

The WA Recovery Help Line, a service of [Crisis Clinic](#), is a 24-hour crisis intervention and referral line for those struggling with issues related to mental health, substance abuse, and problem gambling. Professionally trained volunteers and staff provide confidential support and referrals to detox, treatment, and recovery support groups. Resources for former patients of the Seattle Pain Clinics can be found at the [Department of Health's continuously updated website](#). Additional information on local crisis lines can be found at the [Division of Behavioral Health and Recovery's website](#).

The Washington Recovery Help Line is the new consolidated help line for substance abuse, problem gambling and mental health, as authorized and funded by [The Washington State Department of Social and Health Services' Division of Behavioral Health and Recovery](#). The Recovery Help Line is a service of [Crisis Clinic](#) and serves residents in Washington State.

This report was produced by the Alcohol and Drug Abuse Institute, University of Washington, with support from the Washington State Department of Social and Health Services, Division of Behavioral Health and Recovery.

Citation: Banta-Green CJ, Vick K, Arthur J. Medication Safety: Online Resources. Alcohol & Drug Abuse Institute, University of Washington, May 2017. URL: <http://adai.uw.edu/pubs/pdf/2017medicationsafetyresources.pdf>