

# Prescription and Over the Counter Drug Use : What's Happening to Our Kids?

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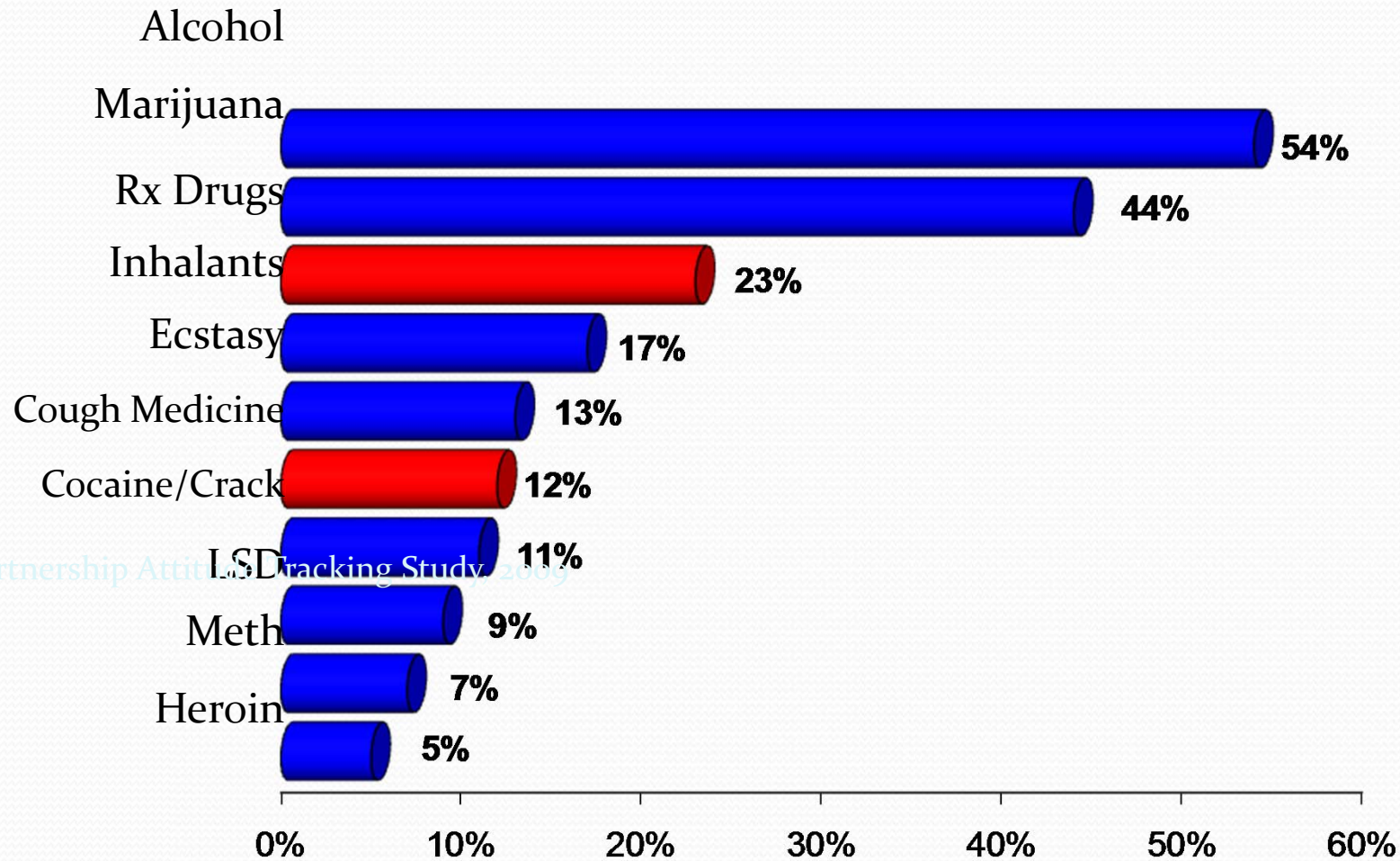
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## Statistics are alarming

- 8/10 who misuse prescription drugs steal, buy or simply ask for them from friends or relatives (Partnership for Drug Free America)
- 1/10 abused prescription drugs in their lifetime (National Survey on Drug Use and Health)

# National Drug & Alcohol Scene



Partnership Attitudes Tracking Study 2009



# Pharming “punch bowl” party

- Everyone invited has to steal something from parents’ medicine cabinet
- Pain pills, Xanax, antidepressants-whatever
- No one knows what they are getting
- Crush or snort for better high

# “Pharm” is not the course you took on medications

Parent should be watching on internet for

- “Trail mix”: bowls and baggies of random pills
- Setting up parties for “Pharming”
- Sharing recipes for drug combinations
  - Online -Kids and teens can easily order non-prescribed medications from an online drug seller



# Self medicating anxiety, etc.

- Self medicating anxiety increases risk of SUDs,
- Social phobia more common
- 2-5x higher rate of developing alcohol or drug problem if self medicated anxiety (N=34,653 adults)
- Teens prescription drug misuse comorbid with depression, anxiety, alcohol and drug disorders

# “Teens become addicted to oxycodone the 3<sup>rd</sup> time they take it” (Shram, 2011)

Childrens Hospital, Boston Center for Adolescent Substance Research

- Anyone can become addicted to opioids
- Use Suboxone for teens addicted to opioid for 12 months and then taper
- Strict program with parental involvement
- Weekly drug screens
- Education on opioid dependence
- Therapy
- Parents need education about danger of prescription drugs
- Study found they less likely to abuse opioids if parents checked homework, if had frequent praise from parents and if strong disapproval of marijuana from parents.

# Heath Ledger

- Opiate pain killers
- Benzodiazepines (2)
- Sleeping medications (2)
  
- All were legally prescribed

Overdose deaths more and more common

- January 22, 2008, 4:42 pm **The Death of Heath Ledger**
- By [SEWELL CHAN](#) Heath Ledger (Photo: Bryan Bedder/Getty Images)
- Updated, 10:17 p.m. | The actor [Heath Ledger](#) was found dead Tuesday afternoon in an apartment in Manhattan, according to the New York City police. Some signs pointed to an accidental overdose or a suicide, although no note was found, police sources said. Mr. Ledger was 28.

# Real Danger

**“Abusing prescription (RX) and over-the-counter (OTC) drugs can be just as dangerous, addictive and even deadly as using ‘street’ drugs”**

# Troubling Indicators of Medicine Abuse

- **Unintentional drug poisoning** now second leading cause of **accidental death** in US, after car crashes
- Emergency room visits related to Rx/OTC abuse now almost **equal to ER visits** due to all “street drugs”
- Rx drugs are now the most **commonly abused** drugs among **12-13 year olds**

# Teen perceptions of safety



among users, there's a lack of consequence

Rx-OTC are seen as sanitized, sanctioned, and safe

## Sanitized

Created in a medical laboratory for healing purposes

- created in a medical laboratory for healing purposes
- regulated ingredients

## Sanctioned

Accepted by society as a "positive"

- broad legal use
- accepted by society as a "positive"

## Safe

Certified by FDA

- certified by FDA
- end game of misuse isn't known

# What about parents' perceptions?

- **Street drugs** are generally considered **more dangerous**
- Parents are **less familiar with “pills”** – they often have no frame of reference since these types of drugs of abuse didn't exist in their youth
- There's a **lack of urgency** around Rx/OTC

# Rx New Step in Drug Ladder

heroin,  
meth, crack



cocaine



shrooms,  
ecstasy



Prescription / over-the-counter drugs  
(Rx/OTC)



liquor,  
marijuana



cigarettes,  
beer/wine



Rx abusers are more likely to add a 3<sup>rd</sup> rung in the progression

# Oxycontin OP



- Increased Dopamine at lower dose in younger mice exposed to Oxycontin. When re-exposed as adults, also more sensitive
- Now more difficult to abuse as of July 2011
- Demand for 30 mg pills higher, more abuse of Opana, and rise in heroin use
- Old 80 mg sold for \$80 on street, 30 mg OP sells for \$20-30
- Purdue Pharma required to conduct clinical trials on new formulation

# Other opioid, benzo, barbiturate, AAP abuse by teens

- Fentanyl patch- attempt to heat up the patch to increase the high
- Vicodin and Lortab – get Tylenol overdose
- Xanax bars –bought on street
- Order Fioricet online
- Seroquel –”quell”
- Most common in Monitoring the Future Study :Vicodin, Oxycontin, Codeine, Percocet (2010)



# Stats

- NYC 4.7 % teens grade 7-12 used opioids in last 30 days
- Rate of prescription drug abuse rising at much higher rate than illicit drugs (Manchikanti, 2007)
- Most teens misuse more than 1 drug. (79.8% )
- Most teens misuse alcohol as well 74.3%
- Over ½ mix prescription drugs with illicit drugs (59%)
- “accentuate the high or counteract effects” (CASA 2005)
- Use to relieve anxiety, increase focus, help sleep, lose weight, relieve pain.. .. Or to get high!

# Rationale for teens sharing RX drugs (n=210)

- Got it from family member 66%
- Have prescription but ran out 64.8%
- Have same problem as the person who gave me the prescription 60.5%
- Want something strong for pain or headache 43.3%
- Have an emergency 39%
- Got it from someone who knows medicine 28.1%
- Need help sleeping 21.9%
- Want to relax or feel good. 12.9%
- AAP, 2003



# Stimulant abuse

Adderall short acting abused in teens and young adults

Can cause cardiovascular problems/ sudden death.

If snorted, produce euphoria similar to cocaine

Stock pile to take in larger dose prior to test

Facilitate partying..

Show unconcern for risk

55% college sample had used prescription stimulant illegally.

# Epidemic: Responding to America's Prescription Drug Abuse Crisis (ONDCP)



- Goal is to reduce use of prescription
- pain killers by 15 % in 5 years
- Physicians who prescribe opioids will have education on proper prescription practices
- Media campaign
- Push for prescription drug databases in every state (35 states , 8 more to start)
- Enforcing laws against pill mills.

# Pill mills

- 85% of oxycodone is sold in Florida.
- People come from out of state and resell the pills illegally.
- Doctors bought 89% of the Oxycodone sold to practitioners last year (32.2 million doses Jan-June 2010)
- 1000 pain clinics sold the drugs
- State was called “Oxy Express”
- Doctors now barred from dispensing narcotics and addictive medicines in their office
- Doctor charged with murder after patient died of overdose (56 deaths from clinic owned by these 2 doctor
- Starting RX drug monitoring –paid for by private funds

# Over the Counter Drug Abuse



# Dextromethorphan

- **DXM, CCC, Triple C, Skittles, Robo, Poor Man's PCP**
- **Robitussin, Coricidin, powder**
- **7,988 ED visits from non medical use of DXM in 2008**

# Dextromethorphan

- Robo , DM
  - May act as serotonin reuptake inhibitor, some results similar to NMDA
  - Metabolized by liver
- Dissociative, psychedelic, cough suppressant
- Originally in Romilar, tabs removed in 1973 but liquid still available
- 9-2010 DEA held met to consider making a scheduled drug, voted 9-15 not to do so.

# Stats

- 176 million bottles in 2009
- 2% use by 12-17 year olds
  - See Dextroverse web site
- 5 deaths attributed, though many other problems/PSA
- OD – muscle spasm, cardiac arrest, seizures, delirium

# Dosage for the mostage

- 300 mg DXM == light buzz, similiar to 50-100yg lsd
- 600 mg DXM == stronger, similiar to 100-250 ug lsd
- 900 mg DXM == very strong, full spectrum of hallucinations equivalent to 300-600yg lsd
- Contact DM – 30 mg in each tab, taken over an hour, with food, users recommend alcohol, marijuana concurrently



For the more creative..



# DRANK

- Melatonin, valerian root, and
  - rose hips (check out website)
- Other similar anti energy drinks
  - Dream water has melatonin, tryptophan, and GABA (free shipping)





## Can be mixed

- Dextromethorphan OTC products can be mixed with soda or sports drinks to create concoctions dubbed "Syrup,"

"Purple Drank", "Lean." "Sizzurp", "Sirrp",  
"Purple oil", "Urrple Durrple", "Purple stuff",  
"(Dat) Drank", "Purple Tonic", "Texas Tea"  
"Memphis Mud", and "Sir".



# Bad News Bath Salts

Banned now in a lot of communities

Active ingredient is mephedrone

Altered chemical structure of cathinone

Chemically similar to stimulant in Khat  
(Norpseudoephedrine, can be made from  
ephedrine) Mixed in water, and drunk, can  
be inhaled, can be injected

White Horse, Cloud Nine, Zoom, White  
Rush, Ivory Wav Sold as 'novelty  
collectibles' about \$20 per packet





# Effects

Delirium with agitation

Sleeplessness

Vivid, dreamlike hallucinations

Fearfulness, leading to violence

Amnesia about using

Tachycardia

seizure/tremor

Rhabdomyolysis

(MMWR May 20, 2011)



# Treatment

Low-dose Antipsychotics (Penders & Gestring, 2011)

Low-dose Benzodiazepines



# Demographics

MMWR report May 20, 2011 from  
Michigan

35 reports –

20-29 22

30-39 5

40-49 6

over 50 2

# Spice

- K<sub>2</sub>
- Redball
- Cahoots
- Blowout
- Spike 99



## Readily available

- Illegal in 13 states
- DEA temporarily banned 5 chemicals used in this product
- Receptors 10x more receptive to this than THC
- 20-30\$ for a 5 Gram bag





Close-up of Spice Showing Mixed Herbal Material  
Photo by Erowid, © 2009 Erowid.org



# Effects

- Marijuana-like
  - Chemical is HU-2 , some contains synthetic cannabinoids (though not detected in testing)
  - Seizures, vomiting, tachycardia, elevated BP, vomiting
- Military banned, now say they have test
- Little information about how it affects body

# CASA Report 2010

- TEENS REGULARLY USING SOCIAL NETWORKING SITES LIKELIER TO SMOKE, DRINK, USE DRUGS

Compared to teens that spend no time on social networking sites in a typical day, teens that do are:

Five times likelier to use tobacco;

Three times likelier to use alcohol; and

Twice as likely to use marijuana.

- (70% of teens use these networking sites)

# TEENS WHO WATCH SUGGESTIVE TEEN PROGRAMMING AT INCREASED RISK OF SUBSTANCE ABUSE

- This year's survey explored teen TV viewing habits in relation to teen substance abuse. One-third of teens (32 percent) watch teen reality shows like *Jersey Shore*, *Teen Mom*, or *16 and Pregnant* or teen dramas like *Skins* or *Gossip Girl* in a typical week.
  - Compared to teens who do not watch suggestive teen programming, teens who typically watch one or more such programs per week are:
    - Twice as likely to use tobacco;
    - Almost twice as likely to use alcohol;
    - More than one-and-a-half times likelier to use marijuana;
    - Twice as likely to be able to get marijuana within a day or less; and
    - More than one-and-a-half times likelier to be able to get prescription drugs without a prescription within a day or less.



And...

- Teens whose parents do not agree completely with each other on what to say to their teen about drinking alcohol are twice as likely to use alcohol, than teens whose parents agree completely on what to say about drinking.



And..

- Teens who agreed with any of the following statements – “If a friend of mine uses illegal drugs, it’s none of my business,” “I should be able to do what I want with my own body,” or “It’s not a big deal to have sex with someone you don’t care that much about” – are three times likelier to use marijuana, twice as likely to drink alcohol, and much more likely to smoke cigarettes, compared to teens who disagreed with the statements.



# More from CASA

- For the fifth straight year, more than 60 percent of high school students say they attend schools where drugs are used, kept or sold on school grounds.
- Forty-two percent of 12- to 17-year olds report knowing at least one friend or classmate who uses illegal drugs, like acid, ecstasy, methamphetamine, cocaine or heroin, a 24 percent increase since 2007.



# Partnership for Drug Free America

- Drug Fact Sheet for Prevention of Prescription Drug Abuse
- <http://www.drugfree.org/wp-content/uploads/2010/10/Preventing-Teen-Abuse-of-Prescription-Drugs-Fact-Sheet-2draft-Cephalon-sponsored.pdf>
- Abusing to get high, to cope, to give them focus to study, to cope with stress, to “manage their lives”
- Sell them among themselves, rarely get from internet or from pharmacists

## Preventing Teen Abuse of Prescription Drugs FACT SHEET

THE PARTNERSHIP  
AT DRUGFREE.ORG

### WHAT IS PRESCRIPTION DRUG ABUSE?

The use of prescription medication to create an altered state, to get high, or for reasons—or by people—other than those intended by the prescribing doctor.

### HOW MANY TEENS ARE DOING THIS?

According to research conducted by The Partnership at Drugfree.org (as well as other reputable national studies) as many as one in five teens say they have taken a prescription drug without having a prescription for it themselves. This behavior cuts across geographic, racial, ethnic and socioeconomic boundaries.

### WHY ARE SOME TEENS DOING THIS?

For a variety of reasons. To party and get high, in some cases, but also to "manage" or "regulate" their lives. They're abusing some stimulants such as Ritalin and Adderall to give them additional energy and ability to focus when they're studying or taking tests. They're abusing pain relievers like OxyContin and tranquilizers such as Xanax to cope with academic, social or emotional stress. They're abusing prescription amphetamines to lose weight, or prescription steroids to bulk up.



### WHAT ARE THE RISKS?

There are both acute (immediate) and longer term risks. In the short term, overdosing (especially on prescription pain relievers) can be fatal, as can mixing prescription drugs with over-the-counter medication and/or alcohol. In the longer term, prescription opioids (pain relievers) and other prescription medicines are potentially addictive. Coming to rely at a young age on prescription medicine (or any drug) to "manage" your life risks establishing a learned, lifelong pattern of dependency and limitation and prevents learning coping skills.

### WHERE ARE TEENS GETTING THESE PRESCRIPTION DRUGS?

The vast majority of teens abusing prescription drugs are getting them from the medicine cabinets of friends, family and acquaintances. Some teens traffic among themselves – handing out or selling "extra" pills of their own, or pills they've acquired or stolen from classmates. A very small minority of teens say they get their prescription drugs illicitly from doctors, pharmacists or over the internet.

### ARE PARENTS EDUCATING THEIR CHILDREN ABOUT THE RISKS OF THIS BEHAVIOR?

Research conducted by The Partnership at Drugfree.org shows that parents are not communicating the risks of prescription drug abuse to their children as often as they talk about illegal drugs. This is partly because some parents are unaware of the behavior (it wasn't as prevalent when they were teenagers), and partly because those who are aware of teen abuse of medicine tend to underestimate the risks just as teens do. Finally, a recent study by The Partnership at Drugfree.org showed that 28% of parents have themselves taken a prescription drug without having a prescription for it themselves. This is not necessarily abuse, but it sets a dangerous example for kids – that the recommended dosage of prescriptions need not be strictly followed.

### WHAT SHOULD PARENTS DO?

1. Educate yourselves – drugfree.org has lots of support, tools, resources and answers.
2. Communicate the risks of prescription drug abuse to your kids. Children who learn a lot about the risks of drugs are up to 50% less likely to use drugs.
3. Safeguard your own medicines. Keep prescription medicine in a secure place, count and monitor the number of pills you have.

Learn more at [www.drugfree.org](http://www.drugfree.org)

The development of this fact sheet was sponsored by Cephalon, National Supporter, Parent Resources | © 2010



## 2 things to

- Talk to kids..
- Safeguard medicines- lock them up, count and monitor pills, get rid of unused pills

# What kind of lock box to recommend?



**LOCK UP YOUR MEDS!**

**LOCK+MED Medication Lock Box**

**SAFETY**  
Secure place to store your meds

**PRIVACY**  
Your meds are your own business!

**SECURITY**  
Secure combination lock box

**\$18.99**  
plus Tax + S&H

**Perfect for:**

- Home
- School
- Work
- Travel

**Great for:**

- Pain pills
- Anxiety meds
- Insulin syringes
- Anti-depressants
- Sleeping pills
- Other strong medications

• Restrict access to prescription meds  
• Have peace of mind knowing your meds are safe

• PATENT PENDING

**Products for Medication Security**  
Lucrio, LLC, P.O. Box 13166, Pittsburgh, PA 15243  
[www.lockmed.com](http://www.lockmed.com) • (888) 458-2746



# Community Model Programs

PACT 360

A community program that educates parents on why teens use drugs and alcohol, what you can do to protect them, how to communicate with them, monitor their activities, spot drug/alcohol use, and what you should do when you find it

Meth 360, Parents 360, Kids 360

Supports local prevention programs.

Partnership for Drug Free America

<http://pact360.org/>

**PACT360** Community Education Programs  
Helping Parents & Educators Address Substance Use, Abuse, and Youth

THE PARTNERSHIP  
FOR COMMUNITY EDUCATION

HOME PARTNERSHIP SERVICES YOUTH SERVICES LEADERSHIP COMMUNITY TRAINING MATERIALS ABOUT

### Parents360

Parents360 (Parents, You Matter) is designed to help parents understand, prevent, and address drug and alcohol issues. The program provides information, educated parents of teens and helps about drug use, drugs and alcohol, what parents can do to protect their children from a community with high rates, monitor their activities, and drug and alcohol use, and what a parent should do when they find it.

[LEARN MORE](#)

**PARENTS, YOU MATTER!**  
Drugs/Alcohol,  
Your Teen  
and YOU

**About PACT360**

To bring new prevention efforts to local communities across the country, the Partnership developed a series of community education programs that address concerns, engage parents and educators about the dangers of drugs and alcohol in today's ever-changing landscape. Join the PACT360 — a collection of research-based substance abuse prevention education programs — that are aimed to give parents the tools they need to successfully prevent, reduce or address drug and alcohol use by their children.

#### WHAT IS PACT360?

- Educate communities
- Engage parents
- Educate teens

**PACT 360 Program**

# Play Healthy

Get the Facts about Health Risks from Steroids, Stimulants, and GHB

**TV messages**



**PLAY HEALTHY AWARDS**

**Contest**

The Partnership at Drugfree.org in cooperation with Major League Baseball (MLB) invites you to nominate youth coaches and student athletes who are extraordinary people they have inspired others to give it their all, made the team under a big dog salute or shown complete character and integrity both on and off the field. You tell us.

Each winner — one youth coach and one student athlete — will receive an exciting trip for themselves and one special guest to New York City!

To nominate a coach or athlete [click here](#)



**get the facts**

**What Are Performance Enhancing Substances?**



Guide to download:

<http://playhealthy.drugfree.org/SignUp.aspx>

Parents and Coaches: focus on steroids and performance enhancing drugs; e.g. GHB

<http://playhealthy.drugfree.org/>



# Time To Act Website

- [www.drugfree.org/timetoact](http://www.drugfree.org/timetoact)
- Dynamic, interactive site that allows parents to follow one of two tracks – What to do if:
  - *I think my child is using*
  - *I know my child is using*



# Iowa Longitudinal Study

- 7 session ISFP: youth and parent skill building, then family session.
- Universal interventions targeting substance use in early adolescent samples have potential to lower prescription misuse later in adolescence and young adulthood

# Cases... if time

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## Resources

- National Center for Addiction and Substance Abuse at Columbia University (CASA)
  - [www.casacolumbia.org](http://www.casacolumbia.org)
- National Institute of Drug Abuse (NIDA)
  - [www.teensdrugabuse.gov](http://www.teensdrugabuse.gov)
- [www.theantidrug.org](http://www.theantidrug.org)