Overview of Mental Health Medications for Children and Adolescents

Module 7 Miscellaneous Medications

Medications That Can Produce Anxiety Symptoms

- * Anticonvulsants (carbamazepine, ethosuximide)
- * Antidepressants (bupropion, SSRIs, TCAs)
- * Antibiotics (cephalosporins, ofloxacin, isoniazid)
- * Antiparkinson drugs (levodopa)
- * Bronchodilators (albuterol, theophylline)
- * Corticosteroids (prednisone, methylpredisone)

Medications That Can Produce Anxiety Symptoms

- Decongestants (pseudoephedrine, phenylephrine)
- * NSAIDs (ibuprofen, indomethacin)
- Stimulants (amphetamines, caffeine, methylphenidate)
- * Thyroid hormones (levothyroxine)

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Medication-Induced Anxiety Symptoms

- Abrupt withdrawal of CNS depressants (alcohol, benzodiazepines, barbiturates)
- Medication toxicity
 - * Anticholinergics* Antihistamines (diphenhydramine)

Drugs that can cause psychosis

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Antipsychotics Anticholinergics Steroids Hormones Benzodiazepines Psychostimulants Anticonvulsants

Herbal Medicine

- * Juniper (hallucinations)
- * Ma Huang (psychoses and mania)
- * Ginseng (mania and insomnia)
- * Echinacea (CNS stimulation)
- St John's wort (enhanced SSRI and/or MAOI activity)

Drugs that can cause Depression

- * Narcotics
- Beta blockers
- * Accutane
- ★ Estrogens

Generation Rx

- * Partnership Attitude Tracking Survey (2007)
- * 1 in 5 teens abuse prescription medications
- * 1 in 10 teens abuse OTC cough medicine
- * 1 in 4 teens know someone who uses OTC cough medicines to get high
- * Monitoring the Future (2008)
 - * Prescription opioid abuse among 12th graders 9.2%
 - * Past year OTC cough and cold medication abuse
 - * 8th graders 3.6%
 - * 10th graders 5.3%
 - * 12th graders 5.5%

Dextromethorphan (DXM) is...

- ... a safe and effective ingredient approved by FDA in 1954 and found in well over 100 over-the-counter cough medicines.
- * ... the most widely used cough suppressant in the U.S.
- ...also being abused by taking extreme—sometimes as much as 20 to 50 times beyond the recommended dose—amounts of cough medicine to get high.

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More Than 100 Cough & Cold

Remedies Contain DXM





Sample of Products with DXM

- * Alka-Seltzer Plus Cold & Cough medicine
- * Coricidin HBP Cough and Cold
- * Delsym medicines*
- * Dimetapp DM
- * Mucinex medicines*
- * PediaCare cough medicines
- * Robitussin cough medicines
- * Sudafed cough medicines

* TheraFlu cough medicines* Triaminic cough syrups

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- Tylenol Cough and Cold medicines
- Vicks 44 Cough Relief medicines
- Vicks NyQuil and Dayquil medicines*
- * Zicam
 - * Generic/store brands
 - *certain products

The "High"

- * Mild distortions of color and sound
- * Strong visual hallucinations
- * "Out-of-body" sensations
- * Confusion
- * Slurred speech
- * Loss of motor control

The "Lows"

- * Delusions
- * Panic attacks
- * Memory problems
- * Blurred vision
- * Stomach pain, nausea, and vomiting
- High blood pressure and rapid heart beat
- * Numbness of fingers and toes
- * Drowsiness and dizziness
- * Fever and headaches
 - * Rashes and itchy skin
- * Loss of consciousness

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Side Effects Can Be Worsened if...

- $\boldsymbol{\ast}$ The medicine contains additional ingredients that treat more than just cough;
- * Abuse happens with alcohol or illegal drugs;
- st DXM is abuse in combination with prescription drugs and/or other medications.

Cough medicine abuse Slang

- * Dex or DXM
- * Robo
- * Triple Cs or CCC
- * Skittles
- * Roboing
- Robo-tripping Robo-fizzing
- - * Skittling
- * Syrup or Tussin





Why the Internet?



- * There are many web sites and online communities that advocate and promote the abuse of DXM-containing cough medicine;
- * Some serve as dangerous online drug dealers, with kids being able to purchase large amounts of pure DXM.

Web sites provide information about...

- * How to achieve a high based on user's height and weight;
- * How to combine DXM-containing medicines with other drugs, alcohol, etc., and what effects are to be expected at specific dosage levels.

Postings on Social Networks * Detailed instructions and conversations about DXM abuse; * Blogs and videos with postings of how and when kids will take DXM-containing cough medicines; * Footage of kids while

"high."

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Reasons for Abuse

- * Academics studying for test or major project
- * Athletic competitions
- * Weight loss
- * Enhance the effect of alcohol or other drugs

Pharming Parties or Trailmixing

- * Everyone brings prescription or OTC drugs
- * Pills placed in bowl
- * Everyone grabs a handful of pills
- * Alcohol may or may not be involved



Diphenhydramine Abuse

Nytol

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- * High doses used for sleep or as sedative
- * Hallucinations can occur at doses of 150-700 mg
- * Can produce severe arrhythmias and add to sedative effect of other drugs or alcohol







