Drugs of Abuse
Prevention, Early Intervention and Treatment

Sharon Levy, MD, MPH

Director, Adolescent Substance Abuse Program
Center for Adolescent Substance Abuse Research
Boston Children's Hospital

Supported by:
The Substance Abuse and Mental Health Services Administration
SAMHSA Grant Number: TI020267

Overview

- Epidemiology: What's out there
- Prevention and intervention: An overview
- Working together: Treatment professionals and policy makers

The New York Times

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An Alarming New Stimulant, Sold Legally in Many States

By ABBY GOODNOUGH and KATIE ZEZIMA

Dr. Jeffrey J. Narmi could not believe what he was seeing this spring in the emergency room at Schuylkill Medical Center in Pottsville, Pa.: people arriving so agitated, violent and psychotic that a small army of medical workers was needed to hold them down.

They had taken new stimulant drugs that people are calling "bath salts," and sometimes even large doses of sedatives failed to quiet them.

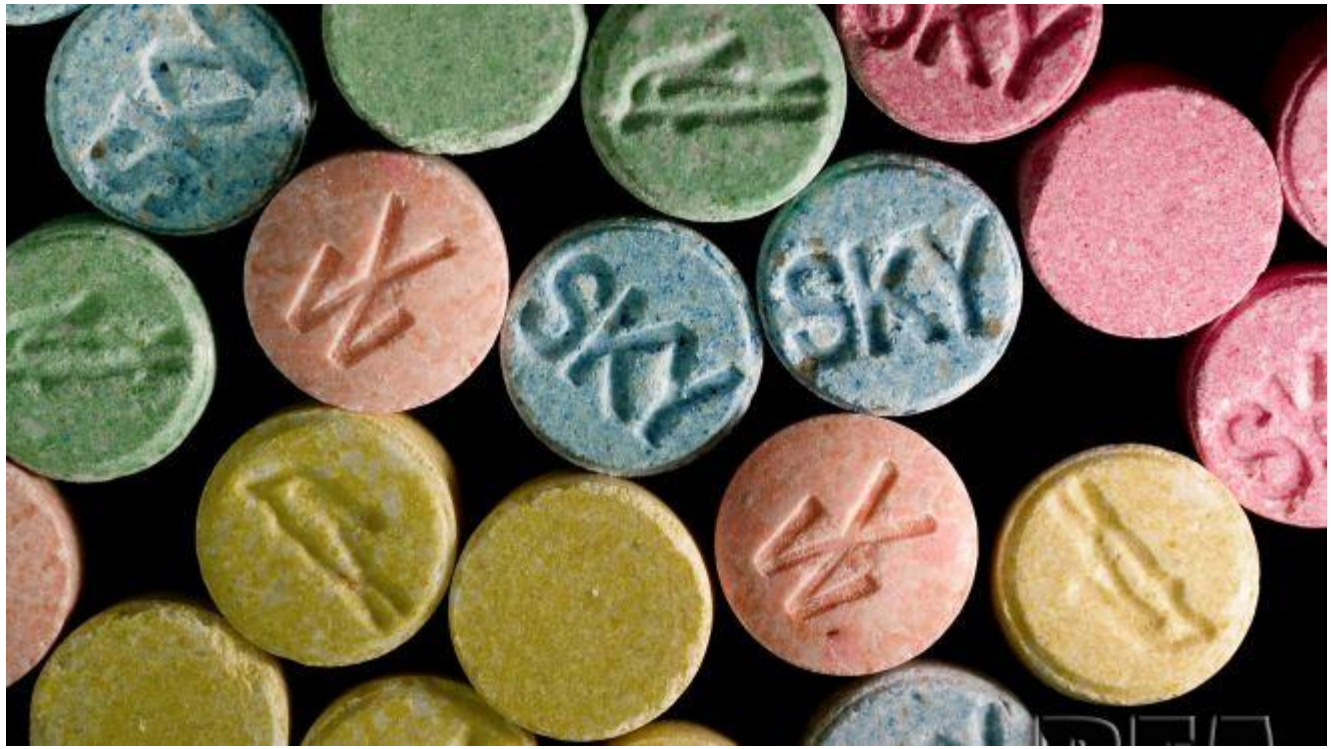
pletely disconnected from reality and in a very bad place."

Similar reports are emerging from hospitals around the country, as doctors scramble to figure out the best treatment for people high on bath salts. The drugs started turning up regularly in the United States last year and have proliferated in recent months, alarming doctors, who say they have unusually dangerous and long-lasting effects.

Though they come in powder

Drug 'Molly' is taking a party toll in the United States

Published September 30, 2013
Reuters



Ecstasy pills, which contain MDMA as their main chemical, are pictured in this undated handout photo courtesy of the United States Drug Enforcement Administration (DEA). (REUTERS/U.S. DEA/Handout via Reuters)

The Challenges of Dealing with Emerging Psychoactive Substances

"The synthetic drug market is extraordinarily dynamic, with new substances replacing the known compounds in a product almost as soon as the first compounds are identified."

The NIDA (National Institute on Drug Abuse) 17th Annual International Forum in 2012 focused on the growing public health problem of new and emerging psychoactive substances

http://international.drugabuse.gov/meetings/international-forum/executive-summaries/2012-nida-international-forum

- New NIDA Emerging Drug Trends site http://www.drugabuse.gov/drugs-abuse/emerging-trends
- Community Epidemiology Work Group (CEWG) reports on NIDA website
- DEA Drug Fact Sheets (DEA website): http://www.justice.gov/dea/druginfo/factsheets.shtml
- American Association of Poison Control Centers website http://www.aapcc.org'

Take Home Message #1

- Emerging substances appear routinely on the drug market and can spread quickly, making it challenging to “keep up”.
- But ….

Substances Used By 12th Graders - 2011

	Lifetime (%)	Past 30-days (%)
Alcohol (any)	70.0	40.0
Alcohol (been drunk)	51.0	25.0
Any drug	49.9	25.2
Marijuana/Hashish	45.5	22.6
Any drug other than MJ	24.9	8.9
Amphetamines	12.2	3.7
Inhalants	8.1	1.0
Hallucinogens	8.3	1.6
Cocaine	5.2	1.1
Heroin	1.4	0.4
Other Narcotics*	13.0	3.6

*includes Percocet, OxyContin, Vicodin

Johnston LD et al. Monitoring the Future - National results on adolescent drug use: Overview of key findings, 2012. www.monitoringthefuture.org

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Take Home Message #2

- Use of “emerging substances” is relatively rare, and generally indicates a significant disorder. The “old reliables” of alcohol and marijuana are perennial favorites.
- **Prevention and early intervention** strategies should focus on alcohol and marijuana use by teens and young adults.
- Enforcing marijuana laws, underage drinking laws, campus alcohol policies, and providing substance-free recreational opportunities for teens and adolescents are CRITICAL for preventing substance use disorders in the community.

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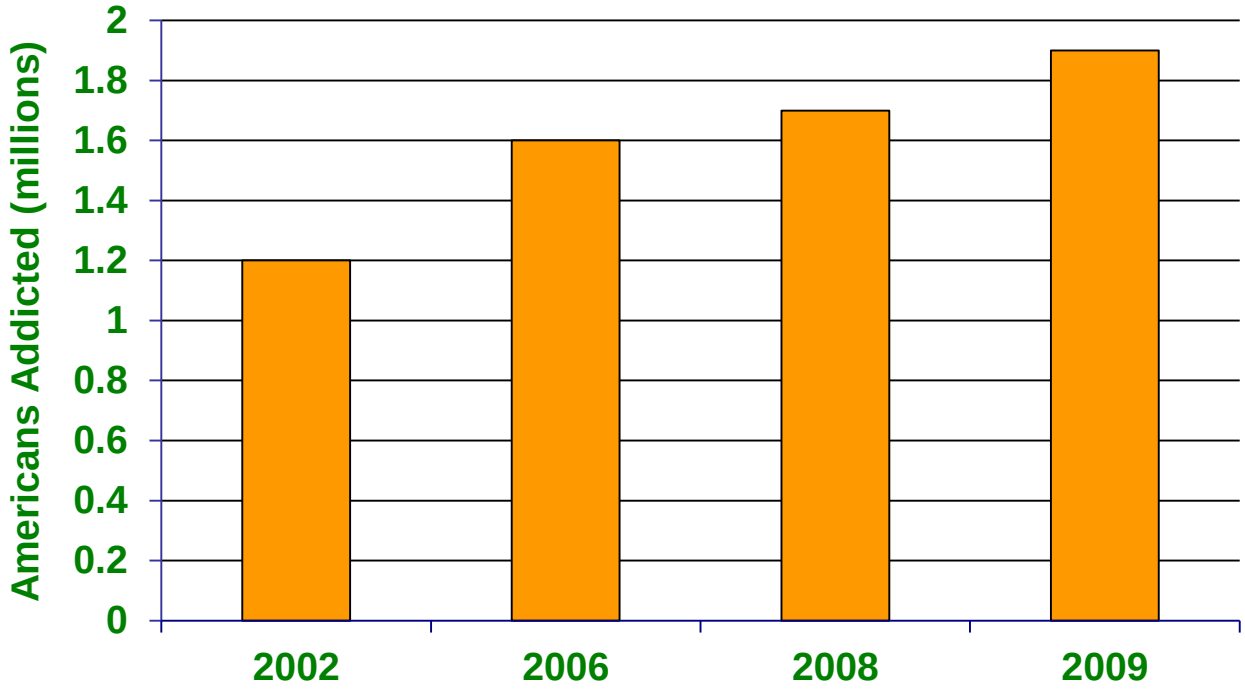
Epidemiology

Misuse of narcotic pain medications has **increased** dramatically in the past 10 years, in conjunction with the development of newer, stronger medications.



Substance Abuse and Mental Health Services Administration (SAMHSA) Office of Applied Studies. Substance Use Treatment Need among Adolescents: 2003-2004. National Survey on Drug Use and Health (NSDUH) 2009.

Reasons for Opioid Misuse

Easy to get from medicine cabinet	62%
Available everywhere	52%
Not illegal	51%
Easy to get through other people's prescription	50%
Can claim you have a prescription if caught	49%
Cheap	43%
Safer to use than illegal drugs	35%
Less shame attached to using	33%
Easy to purchase over the Internet	32%
Fewer side effects than street drugs	32%
Parents don't care as much if you get caught	21%

Partnership for a Drug-Free America. The Partnership Attitude Tracking Study (PATS): Teens in grades 7 through 12 2005; May 16, 2006

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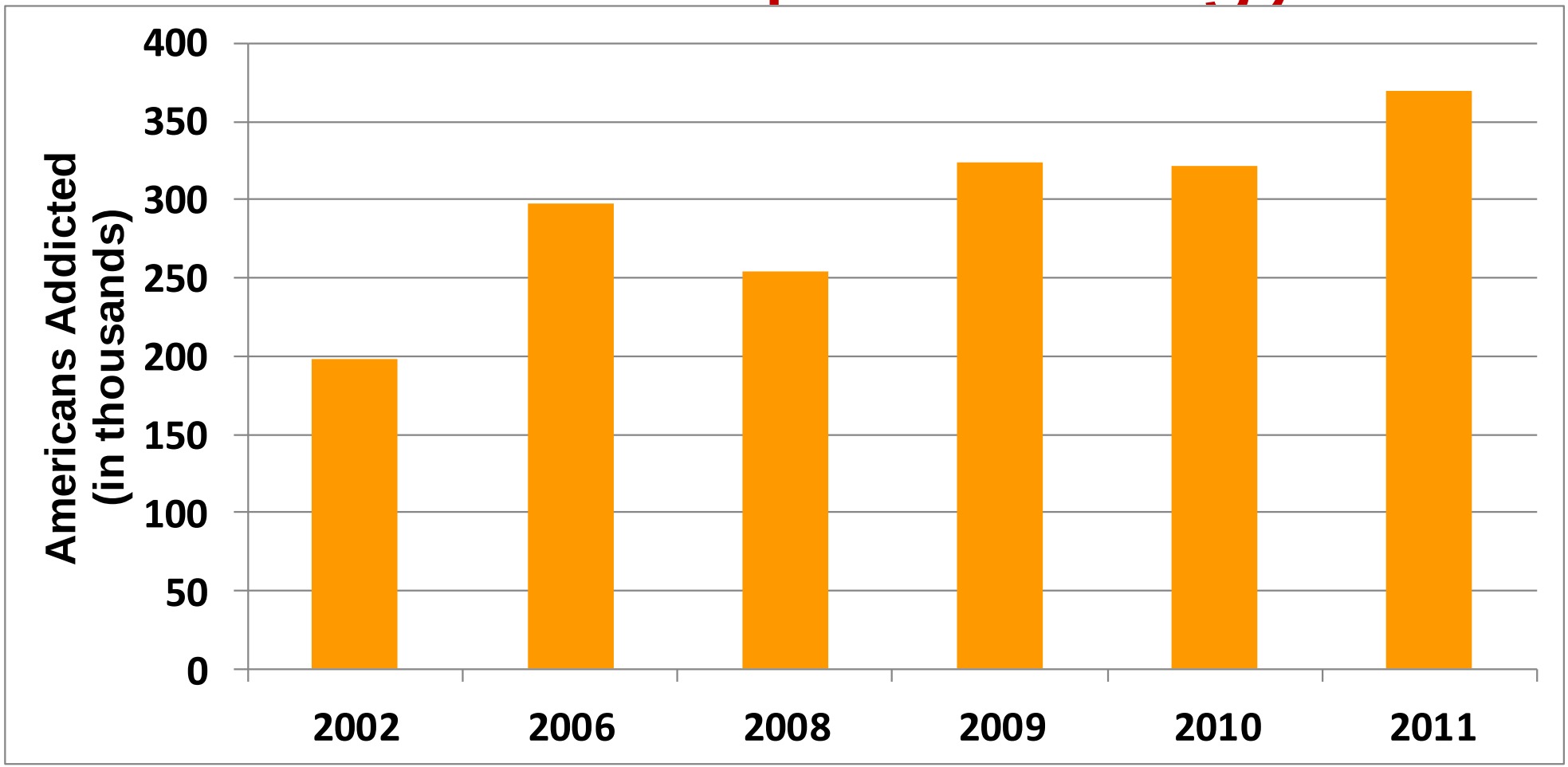
Heroin

- Heroin (di-acetyl morphine) rapidly crosses the blood brain barrier where it is metabolized to morphine, resulting in very rapid delivery of morphine to the central nervous system.
- Because it is potent and relatively inexpensive, individuals who have become addicted to opioids may switch to heroin to combat tolerance
- Increased purity of heroin since the 1990's has made snorting or smoking practical alternatives to injecting and lowering the barrier to initiate use.

Heroin Epidemiology



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Overview of Treatment for Opioid Addiction

Non-pharmacologic	Pharmacologic
Residential treatment	**Detox** methadone, buprenorphine, clonidine, "comfort meds"
Intensive outpatient/partial	
12 step fellowships	**Antagonist therapy** naltrexone PO or IM
Individual or group therapy	
Family therapy	**Agonist therapy** methadone, buprenorphine
Therapeutic school/community	

Opioid dependence is a chronic, relapsing neurological condition; patients who remain in long term treatment generally do best. Supportive therapy combined with medications seems to produce the best outcomes. Most efficacy studies have been done with adults and little is known about the effects of treating developing adolescents with opioid agonists.

Opioid Agonist Options

Methadone – very limited options for patients under 18

- Schedule II
- Can only be prescribed through “methadone clinics”; very few can take patients under 18 years old.
- Methadone programs are highly structured, which offers an advantage for patients, especially with limited social support

Buprenorphine – FDA indication for treating patients > 16

- Schedule III
- Can be prescribed from physician offices
- Combination product (with naloxone) limits misuse potential
- Antagonist properties may be therapeutically useful
- Safer than methadone in overdose
- Mildly reinforcing which may support medication adherence

DATA 2000

- Allows office based opioid dependence treatment (OBOT)
- Any physician may apply for a waiver to prescribe buprenorphine for opioid dependence after completing 8 hours of training
- Expands treatment options for adolescents who have limited access to methadone programs
- Physicians may prescribe a 30-day medication supply to stable patients, resulting in fewer clinic visits (compared to daily methadone) and less impact on school and other activities
- To date, few pediatricians have obtained waivers. Some teens may get treatment from adult providers, though there is often a gap in treatment services for younger teens.

Take Home Message #3

- Opioid addiction is a medical condition and should be treated by clinicians.
- There are effective medication treatments for opioid addiction.
- Medication is only ONE component to effective treatment for opioid dependent adolescents. Stable housing environment, psychosocial support and treatment for co-occurring disorders are also critical.
- Best outcomes are achieved by partnering physicians, counselors, social workers and law enforcement.

Maggie

- Maggie is a 15 year old girl who is referred for evaluation of opioid use after she was picked up by the police for breaking into a parked car and found to have 22 oxycodone pills in her purse.
- Maggie's parents are helping her to fight the charge because they believe the police did not have the proper documentation to search her purse and they are trying to get the entire case dropped.

Maggie

- Parents with good intentions may incidentally enable their children by trying to protect them from consequences that they fear will be too severe or damaging to their future.
- In cases like these, parents may inadvertently reinforce their child's behavior.
- Whenever possible, encourage parents to partner with the judicial system rather than fight against it.

Maggie

- After a parent guidance meeting, Maggie's parents work with their lawyer to request support from the judge.
- The court mandates the following:
  - $500 fine
  - 6 months probation, including drug testing and monthly meetings with a probation officer
  - Ongoing participation in drug treatment
- Maggie's record will be sealed if she does not have further incidents while on probation.

NOTE: Parents of course do not have control over the decisions made by the court and physicians should be careful to remind them of this during counseling. In our experience, most judges and probation officers are receptive to reasonable requests from parents may have more input with a collaborative rather than oppositional approach.

Take Home Message #4

- Collaboration between parents, medical providers and the court system results in best outcomes for adolescents with substance use disorders.
- A critical role for the court system is using leverage to insure that adolescents comply with recommendations and get the treatment they need.

Take Home Message #5

The Adolescent Substance Abuse Program at Boston Children's Hospital can help!

For an appointment call

617-355-2727