



Preventing Prescription Drug Abuse among Adolescents: The Role of Poison Control Centers

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Our Presenters



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**PREVENTING PRESCRIPTION
DRUG ABUSE AMONG
ADOLESCENTS: THE ROLE
OF THE POISON CENTER**



What we'll do today:

- ① Define the problem of prescription medicine abuse within a local and national context
- ① Address adolescent perceptions and attitudes related to prescription drug use and misuse
- ① Learn about poison centers and how they prevent and treat poisonings related to prescription drugs
- ① Review resources that you can use to educate about adolescent prescription drug misuse

Defining the problem



- **Rx drug abuse** = when someone takes a drug for reasons or in ways or amounts not intended by a clinician or when a drug is taken by someone other than the person for whom it's prescribed.
- **“Adolescent”**= 12-19 year olds
- Commonly abused classes of Rx drugs:

Opioids: for pain

CNS depressants: for anxiety and sleep disorders

Stimulants: for ADHD and narcolepsy

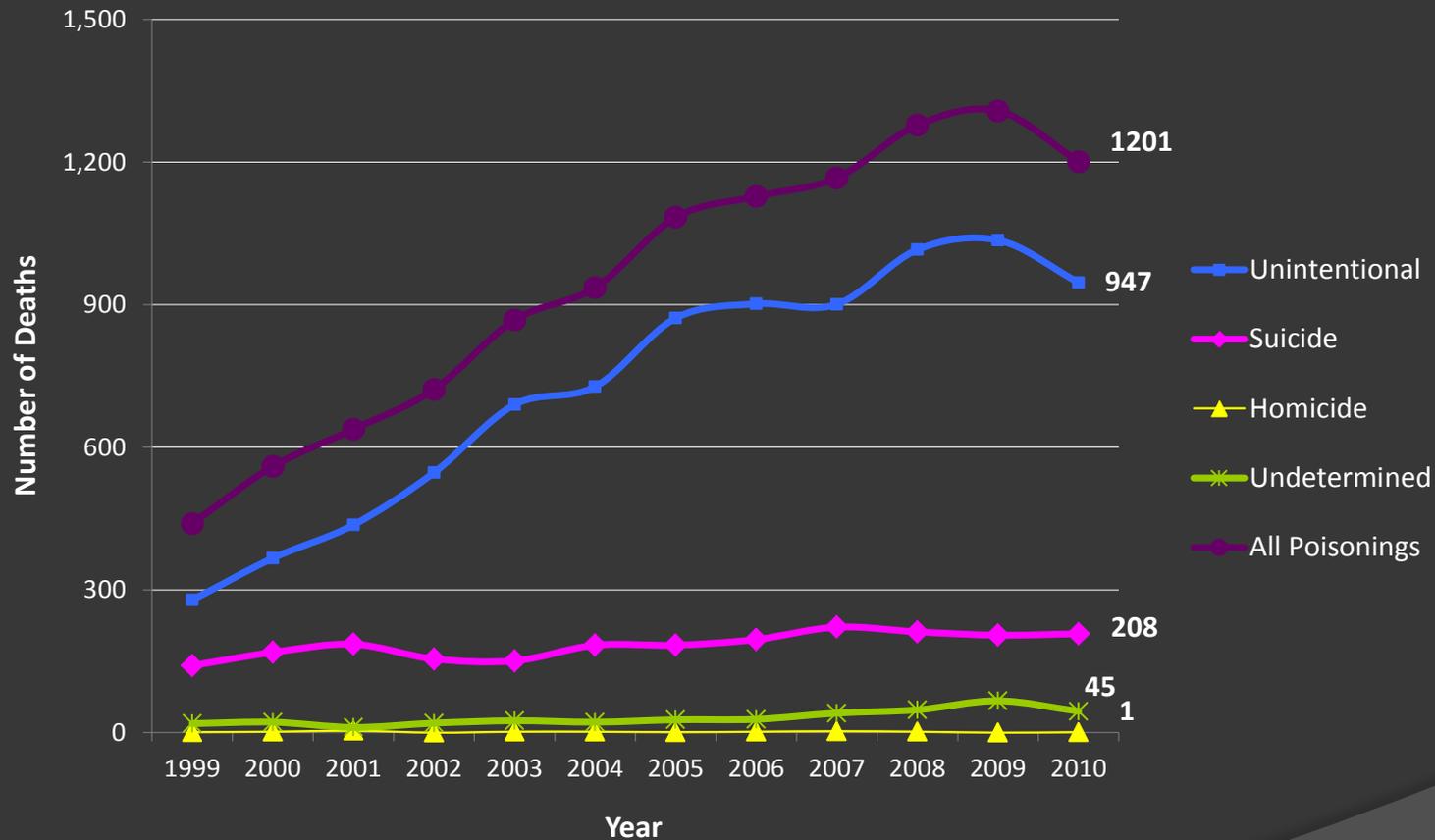


Commonly abused drug classes

	Generic Name	Brand Name Examples
opioids	Hydrocodone	Vicodin®
	Oxycodone	OxyContin®
	Oxymorphone	Opana®
	Hydromorphone	Dilaudid®
	Fentanyl	Duragesic®
CNS depressants	Diazepam	Valium®
	Alprazolam	Xanax®
stimulants	Methylphenidate	Ritalin® Concerta®
	Amphetamines	Adderall®

Source: National Institute on Drug Abuse

Poisonings in NC



Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2010
Analysis by Injury Epidemiology and Surveillance Unit



The impact of prescription drugs on NC deaths

- Prescription and over-the-counter drugs contributed to over 3/4 of deaths from unintentional poisonings (2007).
- 56% of deaths were related to opioids (2007).



Why focus on adolescents?

- 
- From 2000-2009, the poisoning death rate among teens 15-19 nearly doubled (*CDC MMWR Vol. 61, No. 15*).
 - The percentage of poisoning deaths among 15-19 year olds that were related to prescription drugs increased from 30% in 2000 to 57% in 2009 (*CDC MMWR Vol. 61, No. 15*).
 - The peak risk for extramedical use of prescription pain relievers is found to occur at 16 (*Archives of Pediatrics and Adolescent Medicine, published online May 7, 2012*).
 - In North Carolina, nearly 1 in 4 high school seniors have self reported extramedical use of a prescription drug at least once or more in their lifetime (*NC Youth Risk Behavior Survey 2011*).

Calls to Carolinas Poison Center

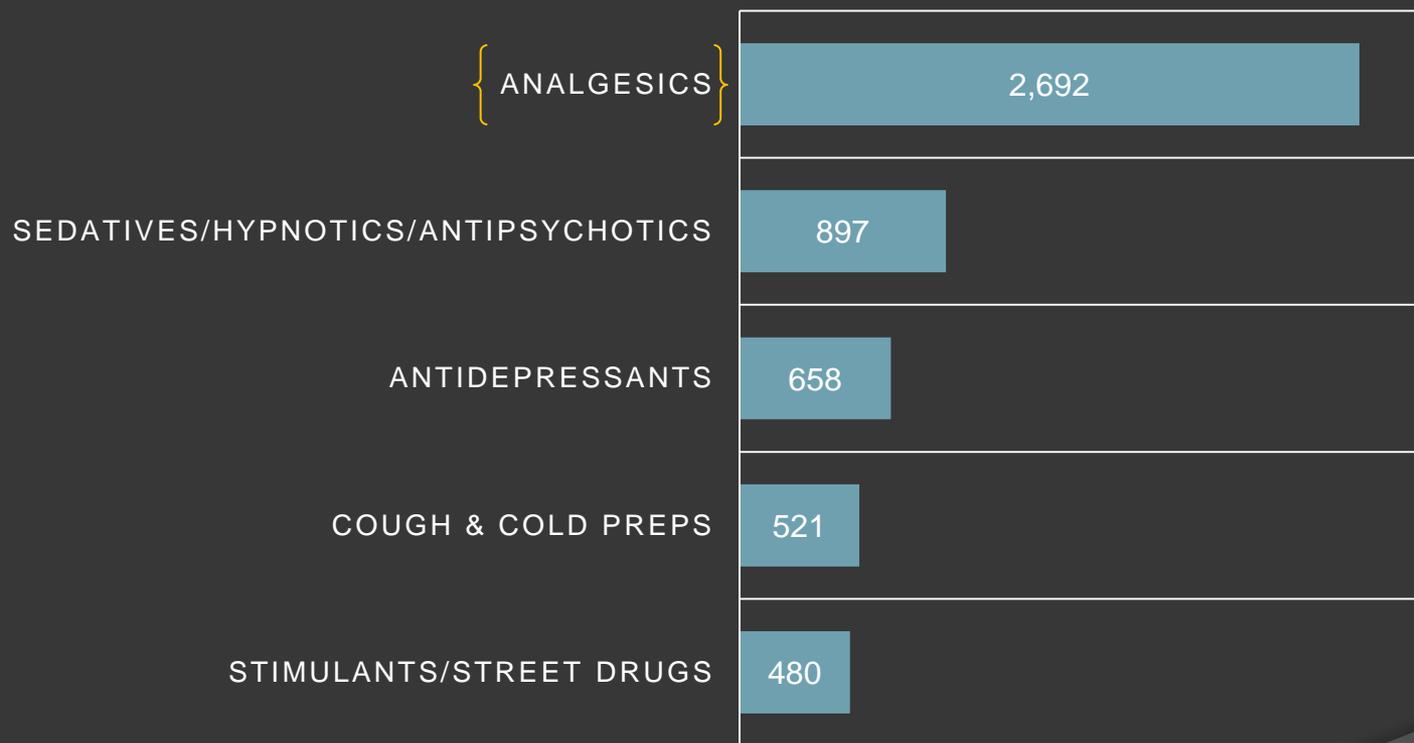


- 43,527 calls received about some type of pain reliever (all ages, 2011-2012/information and exposure calls)
- 6,137 calls concerning prescription pain medications containing opioids (all ages, 2011-2012)
- One out of every four calls in 2012 to the Carolinas Poison Center concerning a 15-19 year old was about a pain reliever (like Vicodin®), antidepressant (like Prozac®), or stimulant (like Adderall®).



5 commonly called about pharmaceutical categories - 2012

calls concerning 13-19 year olds



Types of drug related calls about adolescents that Carolinas Poison Center receives



- A mother calling because she found an unidentified pill in her 13 year-old son's room
- A relative calling because he feared his 13 year-old niece was abusing cough and cold medicine that he bought for her
- A teen calling because her 18 year-old friend took higher doses of her own anti-depressant
- A doctor calling when his 19 year-old patient was hallucinating after taking an unknown substance



How do we reduce adolescent injury
and death related to prescription drug
exposures?

NC's strategic approach

The Six Goals of Preventing Injuries and Violence





Campaign target timeline

- Year One – audience assessment (2012)
- Year Two – campaign implementation (2013)
- Year Three – campaign evaluation (2014)

Goal 2: Research and Evaluation

Carolinas Poison Center adolescent focus groups

- one group male rising 7th/8th graders
- one group female rising 7th/8th graders
- one group male/female rising 10th/11th graders
- range of 8-12 participants each





Assessment Objectives

Carolinas Poison Center focus
groups

- ⦿ Explore attitudes and perceptions of prescription drugs:
 - in the home
 - as prescribed by physicians
 - use among family/friends
 - medical/non-medical use
- ⦿ Explore awareness of prescription drugs as potentially fatal poisons
- ⦿ Explore awareness of Carolinas Poison Center and its services



Conclusions

12-13 year olds

Were less sure of whether Rx drugs were being misused at school.

Interested in education about Rx drug misuse.

Not always clear about the difference between OTC/Rx drugs.

36% of younger adolescents reported awareness of misuse at school.



Conclusions

15-16 year olds

More were aware that Rx drugs were being misused at school.

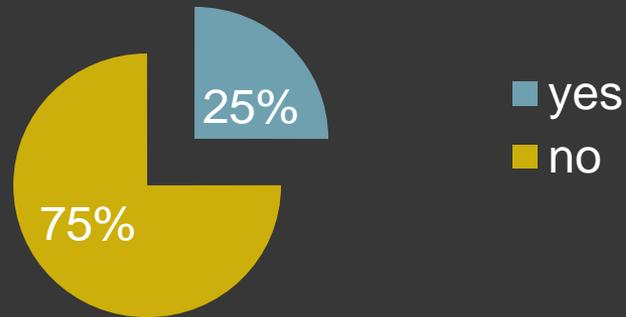
Disinterested in education about Rx drug misuse.

Seemed to be more clear about the difference between OTC/Rx drugs.

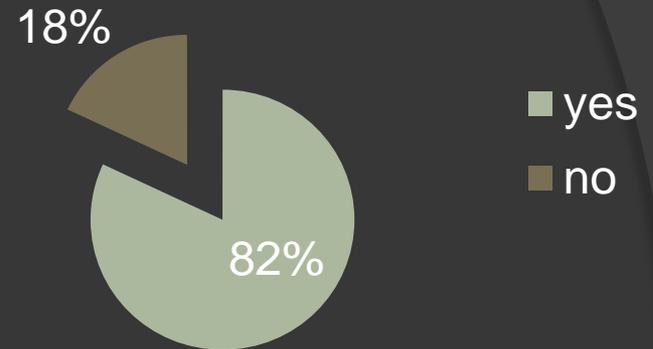
75% of older adolescents reported awareness of misuse at school.

Conclusions *analysis*

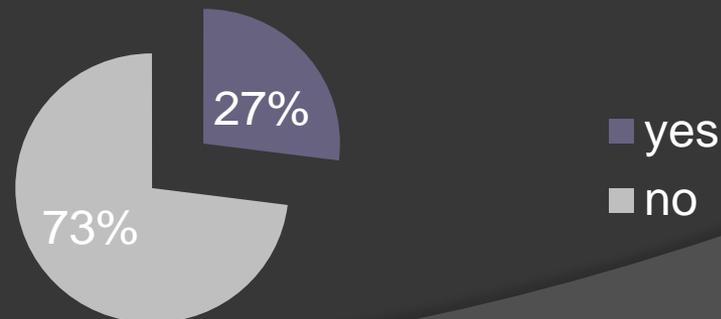
Have your parents talked to you about Rx drug misuse?



Are Rx drugs safer than illicit drugs?



Would you call the Poison Center for an Rx drug concern?



older adolescent respondents only

Verbatim

"I think prescription drugs are the hard-to-say ones."

"By the tenth grade, either you're going to do it, or you're not."

"Kids at my school take Ambien® just to mess themselves up."

"Kids know the consequences [of non-medical use], but they just want to be cool."

"If it's prescribed by a doctor, it must be safer."

"I hear more about marijuana and alcohol than I do prescription drugs."

"If it says 'as needed', that can be confusing."

"Some people have major pain, but some people abuse them [Rx drugs]."



Goal 3: **Messaging**, Policy, and Environmental Change

- In April 2013, Carolinas Poison Center launched a comprehensive, multi-media campaign targeting adolescents 12-16 years old concerning Rx drug misuse.
 - www.SharingPillsCanKill.com
 - Teen Posters
 - Teen Magnet
 - Teen PSA
 - Parent Rack Card
 - Teen Pack



SHARINGPILLS.CANKILL.COM

Poisoning deaths among 15 to 19-year-olds have nearly doubled in the last decade. It's one of the fastest growing causes of death among teens. And the poison fueling this terrible trend may shock you: prescription drugs. Pain relievers, antidepressants, stimulants and other pills dispensed by a doctor for a family member or friend can be deadly if shared or misused in other ways.

Carolinas Poison Center is available 24/7 to help with your questions and concerns. Nurses and pharmacists handle all calls confidentially and free of charge. Please put this number in your phone: 1-800-222-1222.

[CLICK HERE](#)
to order free materials about preventing prescription medicine abuse for you or someone you know.

SHARING PRESCRIPTION PILLS CAN KILL A FRIENDSHIP.

Carolinas Poison Center can help if someone has accidentally or intentionally:

- taken another person's medicine
- taken too much of his or her own medicine



AWARENESS SAVES LIVES.

Painkiller abuse is second
only to marijuana abuse among people ages 12 or older.³

Sharing Pills Can Kill

Campaign print collateral



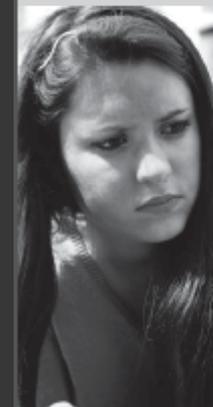
**PRESCRIPTION
DRUG ABUSE
AMONG
TEENS**

OFTEN BEGINS AT HOME

LUCKILY, SO DOES

[AWARENESS]

A growing cause of death among teens is prescription drug misuse. Tragedy happens when medication is taken incorrectly and when friends share pills. Most parents are unaware of this epidemic and that deadly drugs are often obtained in a home medicine cabinet. Carolinas Poison Center has a confidential, 24-hour help line staffed by experts who can answer your questions about prescription drug abuse and your child. **Awareness saves lives.**



NEARLY TWICE AS MANY TEENS ARE DYING FROM POISONINGS THAN A DECADE AGO...AND MANY OF THOSE DEATHS ARE RELATED TO PRESCRIPTION DRUGS.*

**POISON
Heip**
1-800-222-1222

poisonexpertsoncall.org

 Carolina HealthCare System

* CDC, MORTALITY AND MORBIDITY WEEKLY REPORT, VOL. 41, NO. 19

**SHARING PILLS CAN KILL, BUT
AWARENESS SAVES LIVES.**

**POISON
Heip**
1-800-222-1222



CALL CAROLINAS POISON CENTER FOR MEDICATION HELP.

SHARINGPILLSCANKILL.COM

SHARE HER CUTE SHOES, NOT HER PRESCRIPTION PILLS.

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POISON Heip
1-800-222-1222

SHARING PILLS CAN KILL.

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SHARE YOUR HISTORY NOTES, NOT YOUR PRESCRIPTION PILLS.

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SHARING PILLS CAN KILL.

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DON'T MAKE A BIG MISTAKE BEFORE THE BIG GAME.

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Sharing Pills Can Kill

Campaign [online collateral](#)

IT'S OK WHEN THEY SHARE
THEIR HISTORY NOTES,
NOT THEIR
PRESCRIPTION
PILLS.



MISUSE OF PRESCRIPTION
PILLS IS A GROWING CAUSE
OF DEATH AMONG TEENS
TODAY. LEARN MORE AT
SHARINGPILLSCANIKILL.COM

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Carolin's HealthCare System



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PILLS IS A GROWING CAUSE
OF DEATH AMONG TEENS
TODAY. LEARN MORE AT

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POISON
Help
1-800-222-1222



Carolin's HealthCare System



Sharing Pills Can Kill [PSA](#)





Goal 3: Messaging, Policy and Environmental Change

coverage saturation

- Two 2-month print/video runs across North Carolina
- Ads published in regional magazines with a combined readership of over 300,000
- PSA video spot played 306 times on cable TV
- Time Warner Cable “email takeover”
- Nearly 700,000 impressions of PSA spot running as online news segment sponsorships on major local network news sites
- Sent toolkits (posters/magnets/rack cards) to 287 pediatric offices, hospitals, and schools across the state.

Goal 2: Research and Evaluation

calls concerning 13-19 yo's
pre and post intervention

Drug Category	NC only		All PCs	
	2012	2013*	2012**	2013*
Analgesics	17.32%	15.24%	17.24%	18.59%
Sedatives/hypnotics/antipsychotics	5.77%	5.24%	6.26%	7.32%
Antidepressants	4.23%	2.49%	5.85%	5.64%

Percentage of calls to total call volume for that age group

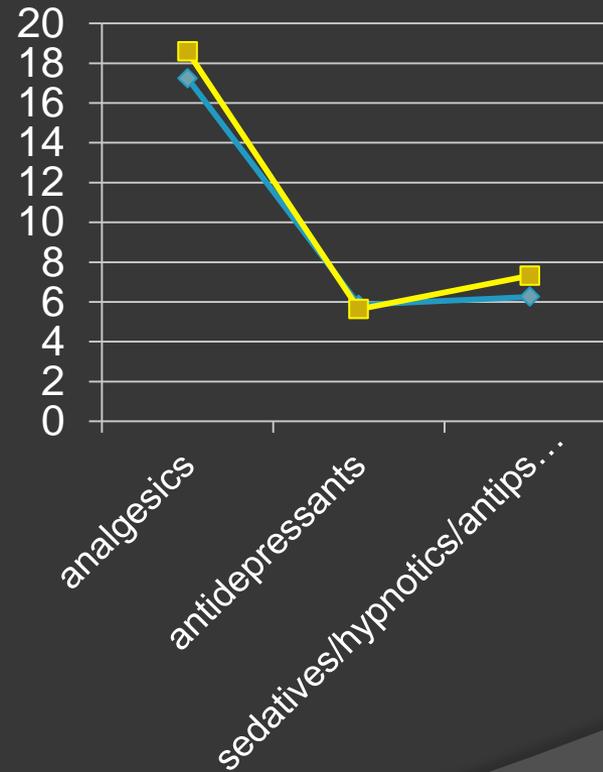
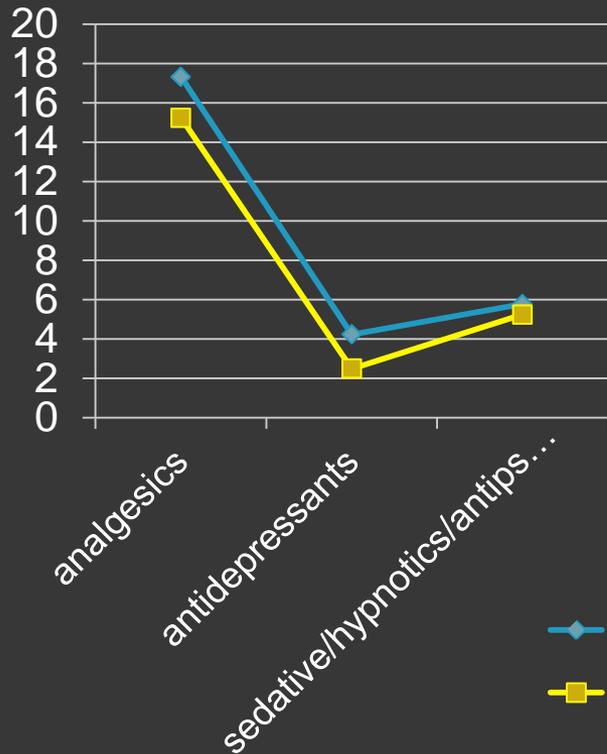
*Estimated as of 1/27/2014; based on dataset that has not yet been closed.

**Derived from Table 22, 2012 AAPCC NPDS Annual Report. Single substance exposures account for 89% of all human exposure cases.

Goal 2: Research and Evaluation

calls concerning 13-19 yo's

% of calls to total





Goal 2 – Research and Evaluation

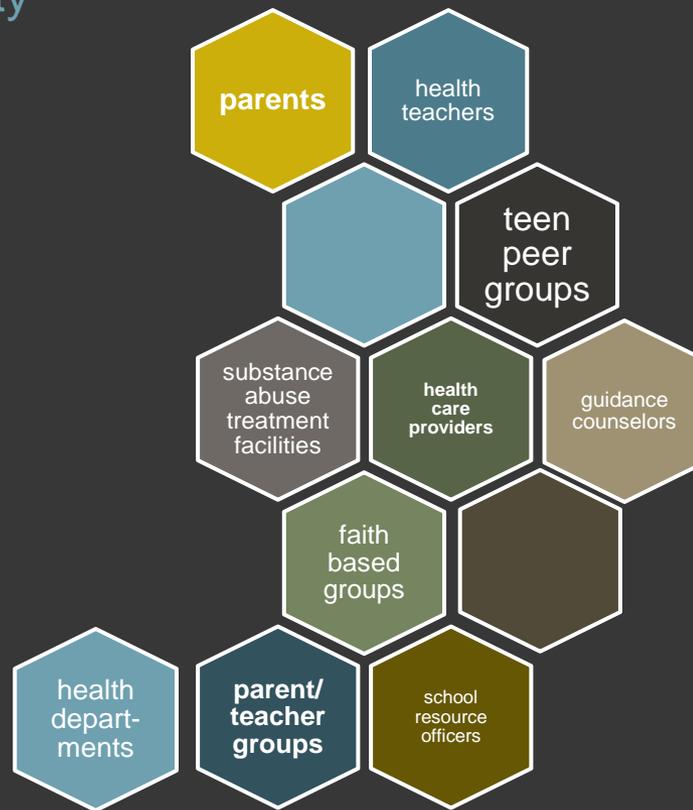
Pilot pediatric clinic evaluation

- Carolinas Poison Center working with UNC Injury Prevention Research Center (IPRC) to measure success of teen/parent outreach at pediatric clinic setting.

Did education piece or point of contact visit with physician impact behavior change or prompt parental discussion among teens regarding Rx misuse?

Recommendations

Goal 5: Building the Injury Prevention Community





Recommendations

(Cont.)

5 Things You Can Do

1. Collaborate with substance abuse treatment centers to integrate Rx drug misuse as part of their drug education, especially their outreach efforts with schools.
2. Work with school resource officers (police officers) who are assigned to primary and secondary schools to promote awareness through classroom discussion, assemblies, and drug education awareness events.
3. Contact your poison center and speak with an educator about how you can partner with each other: 1-800-222-1222.
4. Become a part of parent/teacher organizations in your community to drive awareness of this issue. Many schools sponsor education sessions for parents and children.
5. Help teens become ambassadors of Rx medicine safety. Host your own medicine safety event, send out a press release, or find out if your community has teen advisory boards.



Recommendations

(Cont.)

- Consider targeting younger adolescents (rising middle school students/middle school students) for outreach.
- Promote your local poison center as a place to get help.

Poll Question



America's Poison Centers (PCs)

- 56 PCs in the U.S.; provide free, expert information and treatment advice, 24/7, through the national Poison Help line: **1-800-222-1222**
- Cover of 100% of U.S. population; 150 languages.
- \$1 spent on PCs saves \$13.39 in HC costs and lost productivity.
- Provide extensive educational and preventive outreach through educators.
- National Poison Data System (NPDS)- the only near real-time comprehensive poisoning surveillance database in the US.



“Making Connections”-

<http://poisonhelp.hrsa.gov/resources/videos/making-connections/index.html>

U.S. Department of Health & Human Services www.hhs.gov

Increase font size A A English | Español Search

THIS SITE ALL HRSA SITES

POISON Help
1-800-222-1222

1-800-222-1222

When accidents happen with chemicals, medicine, or household items, call **Poison Help**. Get help right away from a local poison expert.

If someone is unconscious or has trouble breathing, call 911.

Home Poison Info **Resources** What Can You Do? Poison Centers The Poison Help Line FAQs [Share](#) [Print](#)

Resources

Resources Programs Materials **Videos** Audio Ringtone External Links

Making Connections

Watch this short video to learn why you should program the toll-free Poison Help number into your phone.

[Watch the video on YouTube](#)



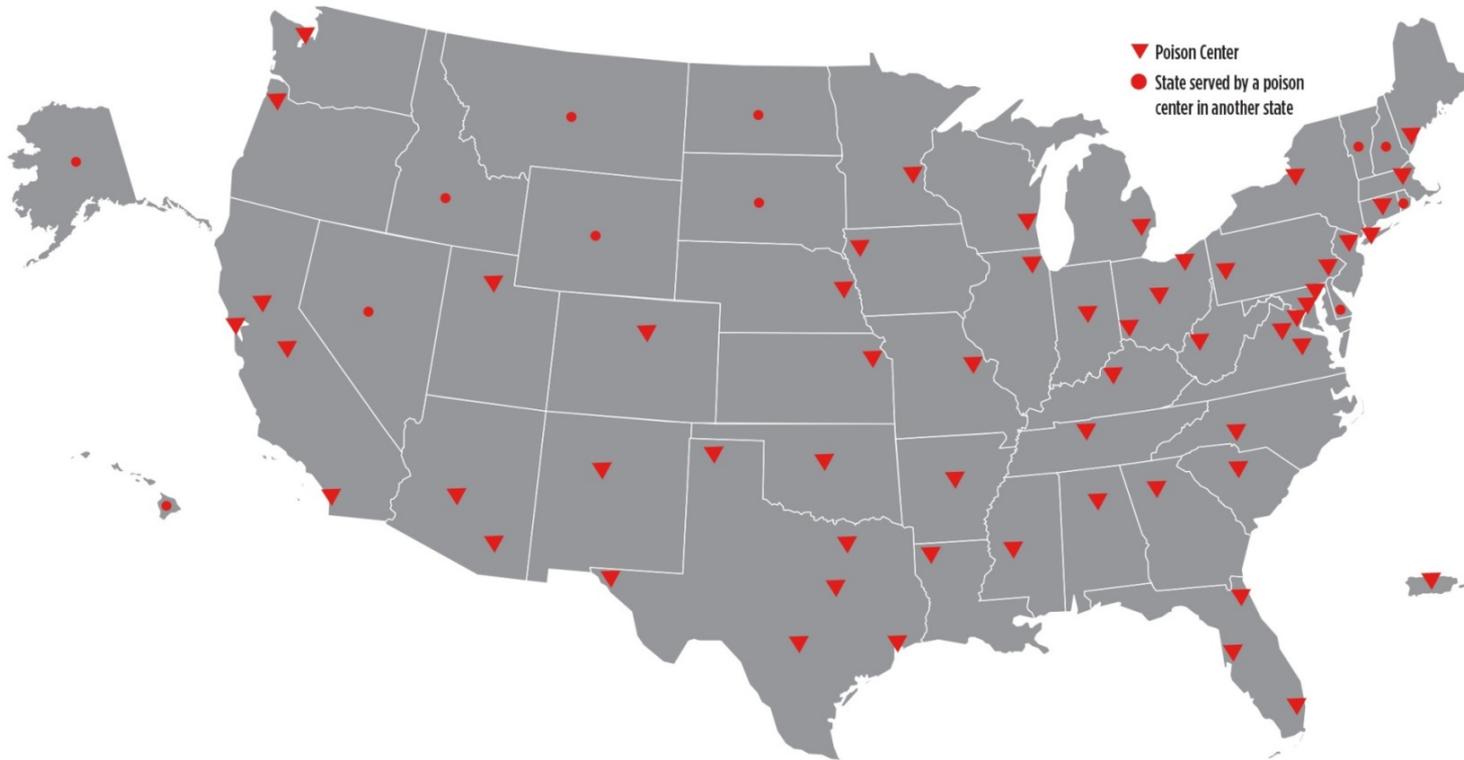
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Poison Centers Nationwide
[Find a Poison Center](#)

Poison Help Ringtone
[Download Ringtone](#)

Free Poison Help Materials
[Make a Request](#)

United States Poison Centers

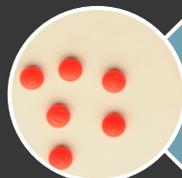


For more information about poison centers, visit www.aapcc.org.

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How Poison Centers can help treat drug-related exposures



If someone has taken an unknown pill



If someone has intentionally or unintentionally taken more medicine than prescribed



If someone has mixed alcohol or other drugs with pills



If someone is seeking more information about signs of drug abuse or is seeking prevention information



AAPCC NPDS 2012 Data

- PCs managed 3.3 million cases; a new case every 10 seconds.
- 2.2 million human exposures; about 7% are 13-19 year olds.
- About 50% of all reported human exposures involve pharmaceuticals, 62% of exposures in 13-19 year olds.

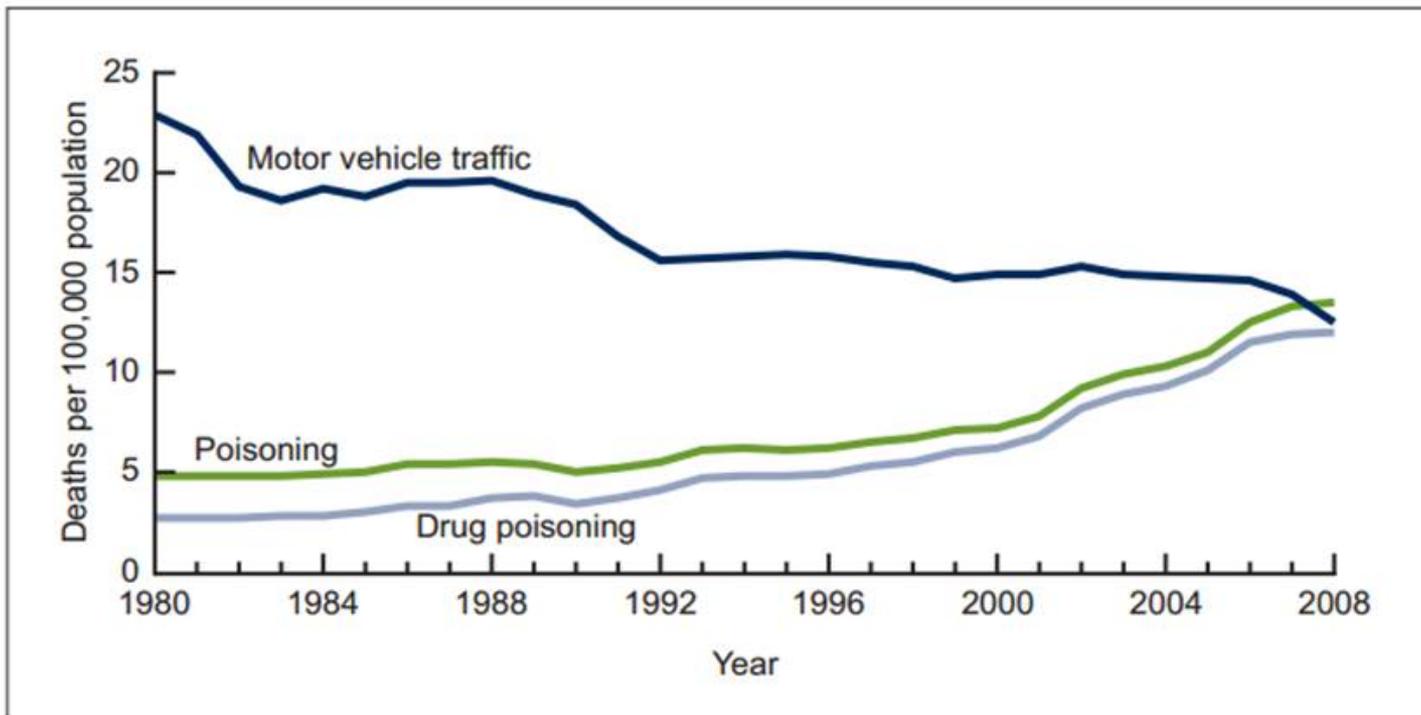
From AAPCC NPDS 2012 Annual Report		
Top 5 substance categories involved in all human exposures*	Top 5 substance categories involved in human exposures <6yrs**	Top 5 substance categories involved in human exposures 13-19 years**
Analgesics (12%)	Cosmetics, personal care products (14%)	Analgesics (17%)
Cosmetics, personal care products (8%)	Analgesics (10%)	Antidepressants (6%)
Household cleaning substances (7%)	Household cleaning substances (10%)	Sedative, hypnotics, antipsychotics (6%)
Sedatives, hypnotics, antipsychotics (6%)	Foreign bodies, toys, miscellaneous (7%)	Stimulants and street Drugs (6%)
Foreign bodies toys, miscellaneous (4%)	Topical preparations (6%)	Cold and cough preparations (6%)

* Based on total case mentions, table 22
 ** Based on single substance exposures, table 22. Single substance exposures account for 89% of all human exposure cases.

Interested in poison center data? Visit <http://www.aapcc.org/data-system/>.

Poisoning is now the leading cause of death from injuries in the United States and nearly 9 out of 10 poisoning deaths are caused by drugs.

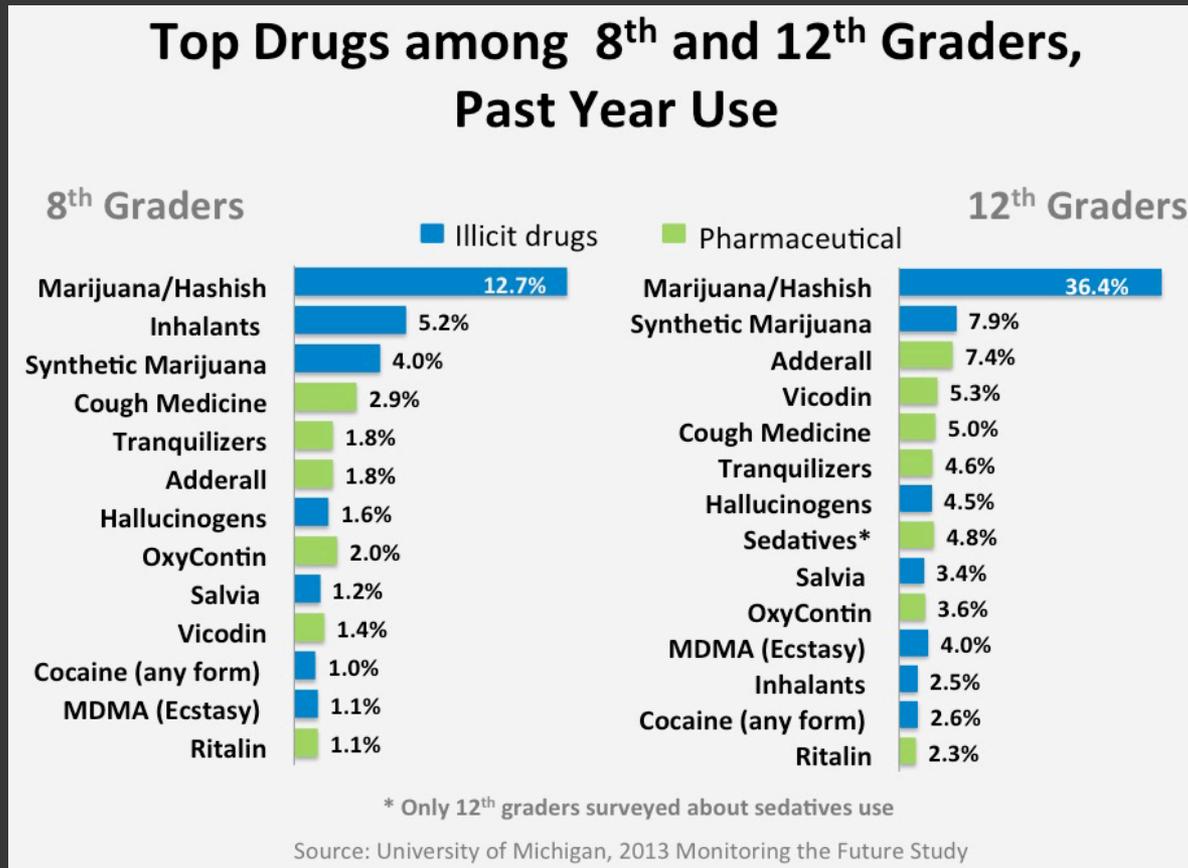
Figure 1. Motor vehicle traffic, poisoning, and drug poisoning death rates: United States, 1980–2008



NOTE: In 1999, the *International Classification of Diseases, Tenth Revision (ICD-10)* replaced the previous revision of the ICD (ICD-9). This resulted in approximately 5% fewer deaths being classified as motor-vehicle traffic-related deaths and 2% more deaths being classified as poisoning-related deaths. Therefore, death rates for 1998 and earlier are not directly comparable with those computed after 1998. Access data table for Figure 1 at http://www.cdc.gov/nchs/data/databriefs/db81_tables.pdf#1.

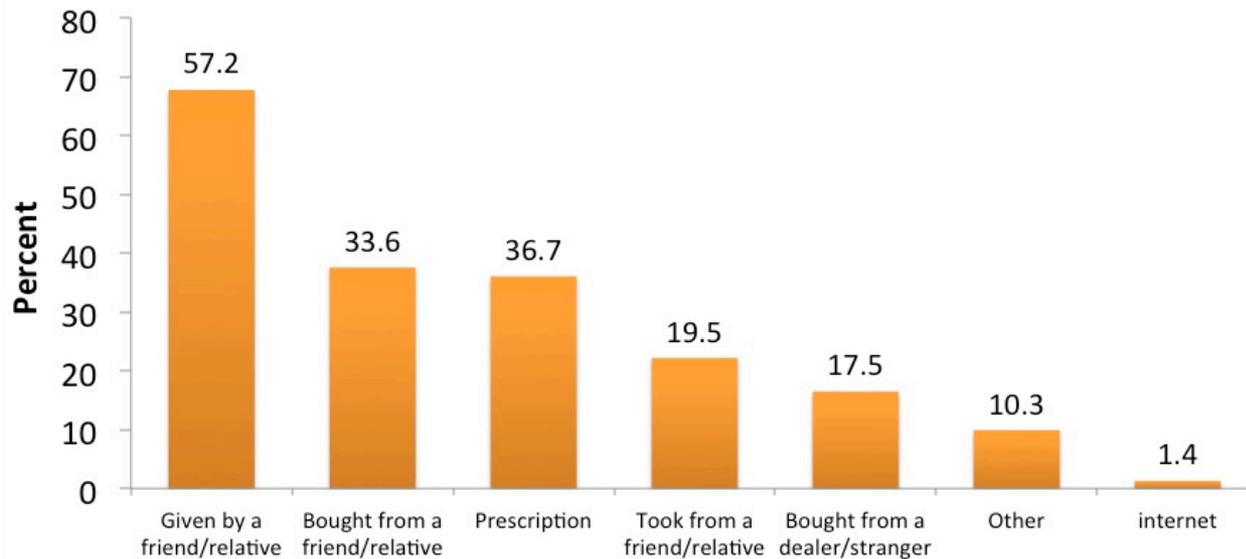
SOURCE: CDC/NCHS, National Vital Statistics System.

- “In 2013, 21.5 percent [of 12th graders] indicate use without a doctor's orders of at least one prescription drug in their lifetime.”- 2013 Monitoring the Future Study
- “[In 2011,] 20.7% of students had taken prescription drugs without a doctor’s prescription one or more times during their life.”- 2011 Youth Risk Behavior Surveillance System



Where are adolescents getting Rx drugs?

Source of Prescription Narcotics among Past Year Non-medical Users, 12th Grade[§]



[§] Categories are not mutually exclusive

Source: University of Michigan, 2013 Monitoring the Future Study



Poison Centers' Efforts

- Partner with health departments, departments of education, other state agencies, etc.
- Provide trainings to school nurses, teachers, and support staff.
- Collaborate to develop media campaigns- billboards, audio/video ads, bus wrap ads, etc.
- Participate in crime prevention and drug prevention coalitions.
- Provide data on PC calls to the media and local drug control officials to create awareness about local and regional emerging drug trends, often before national data are available.
- Promote the use of community drug take-back programs to encourage proper disposal of old or unneeded medications.
- Promote safe Rx medication use and storage messaging at health fairs and community events.
- Work with substance abuse treatment centers.
- Promote over-the-counter (OTC) medication literacy to promote the safe and appropriate use of all medications, early on. See <http://www.scholastic.com/otcliteracy/>.

Connecting to resources

Resources available by:

- ◉ Visiting <http://www.aapcc.org/centers/> to find your poison center.
- ◉ Calling your Poison Center and asking to speak to an educator: 1-800-222-1222
- ◉ Viewing online: www.SharingPillsCanKill.com
- ◉ Viewing online: <http://poisonhelp.hrsa.gov/resources/videos/making-connections/index.html>

Questions?

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https://www.surveymonkey.com/s/_prescriptdrug_020414