

# EVERYTHING YOU EVER WANTED TO KNOW ABOUT THE CONNECTICUT POISON CONTROL CENTER, POISONINGS & SUICIDES



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3/14/2013

[Poisoncontrol.uchc.edu](http://Poisoncontrol.uchc.edu)

Facebook CTPCC

# Overview

- CPCC services
- Poisoning across the lifespan
- Data
- Suicide by poisoning
- Poisoning trends




National Poison Prevention Week March 17 – 23, 2013

# Connecticut - 33,000 calls/year



# Toll-Free National Telephone Number

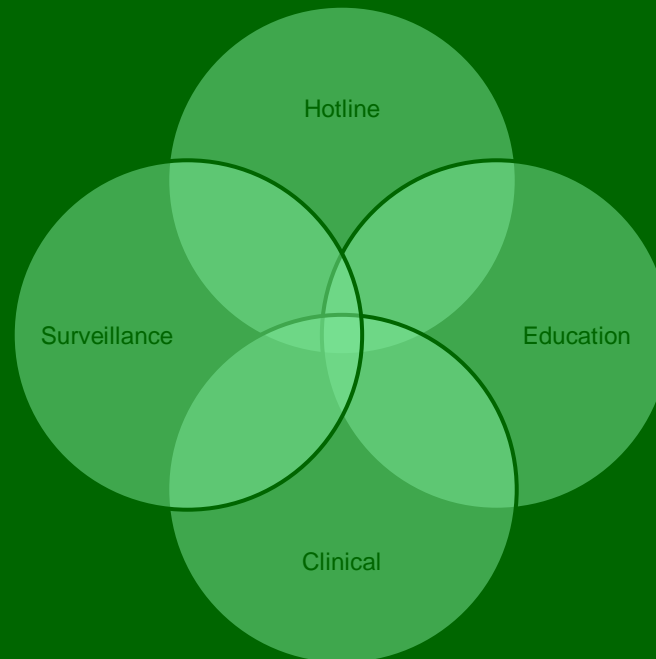




What images come to mind when you think of a poisoning happening? What poison is involved? Who is being poisoned?

# Connecticut Poison Center Mission

To protect the public health by providing toxicology-related patient care, information and education for the people of Connecticut and their health care providers.



# The Basics

- 24/7/365
- Free
- Confidential
- Interpreters & TDD lines & relay
- Expert advice
  - ▣ Specialists in poison information (MD, RN, PharmD)
  - ▣ Medical Toxicologists on call & bedside
  - ▣ Over 200 years combined experience

# The Basics

- Perform telephone triage
- Take poisoning exposure calls
- Take poison information calls
- Provide immediate treatment advice

Who calls us?

What do they call about?

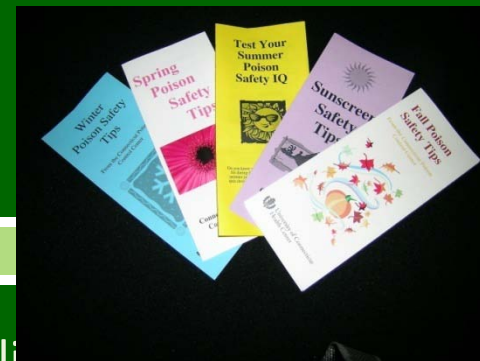




# The Basics

- What to expect when you call
- Plan of treatment
  - ▣ case-tailored and age-specific
  - ▣ follow-ups done if patient is symptomatic or the case warrants it
  - ▣ nearly 70% of cases are managed at home, preventing unnecessary ambulance trips and hospital visits
    - 90% of non-health care managed at home
- HIPAA
- 1983 CT mandate
  - ▣ Existence of poison center
  - ▣ Reporting poisonings to the poison center

# Education



Community-based Education Specialist

Materials: [poisoncontrol.uchc.edu](http://poisoncontrol.uchc.edu)

Collaborations

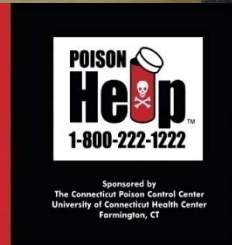
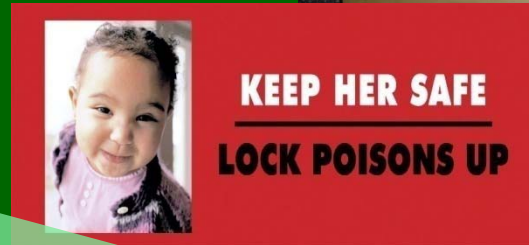
Media Interviews

National Poison Prevention Week

Public Education Programs

- ❑ Presentations
- ❑ Buzz box loan program
- ❑ Health fair to -go kits
- ❑ Video loan program
- ❑ Poison Safety Helper Program
- ❑ Specific curriculum/CE for EMS/Fire, 911 dispatchers, school nurses, parents, senior centers, child care providers

**Facebook** [www.facebook.com/CTPCC](http://www.facebook.com/CTPCC)



Live FB Chat 3/20/2013

**BATH SALTS?**

**PLANTS?**

**CHEMICALS?**

Join the LIVE Facebook  
Chat on March 20, 8 p.m.

# Inhalant Abuse Training 4/4/2013

Connecticut Inhalant Task Force  
Is Proud To Present A Free Training Opportunity

Inhalants:

Nothing To Sniff At

Thursday April 4, 2013

9:00 am - 12:00 noon

5 Brookside Drive, Wallingford, CT

\*\* Bonus Session: 12:00 noon – 1:00 p.m. \*\*


Registrations must be received by  
Monday April 1

Registration should be sent by e-  
mail to: [ctinhalantinfo@aol.com](mailto:ctinhalantinfo@aol.com).

In your e-mail, please provide the  
name, title & organization  
of each registrant.

# Surveillance Activities: Data

- National Poison Data System (NPDS)
  - ▣ Real time auto upload of data
  - ▣ All poison centers in U.S.A.
  - ▣ Thresholds set
  - ▣ Maintain surveillance for toxic terrorism (chemical, biological and radiological)



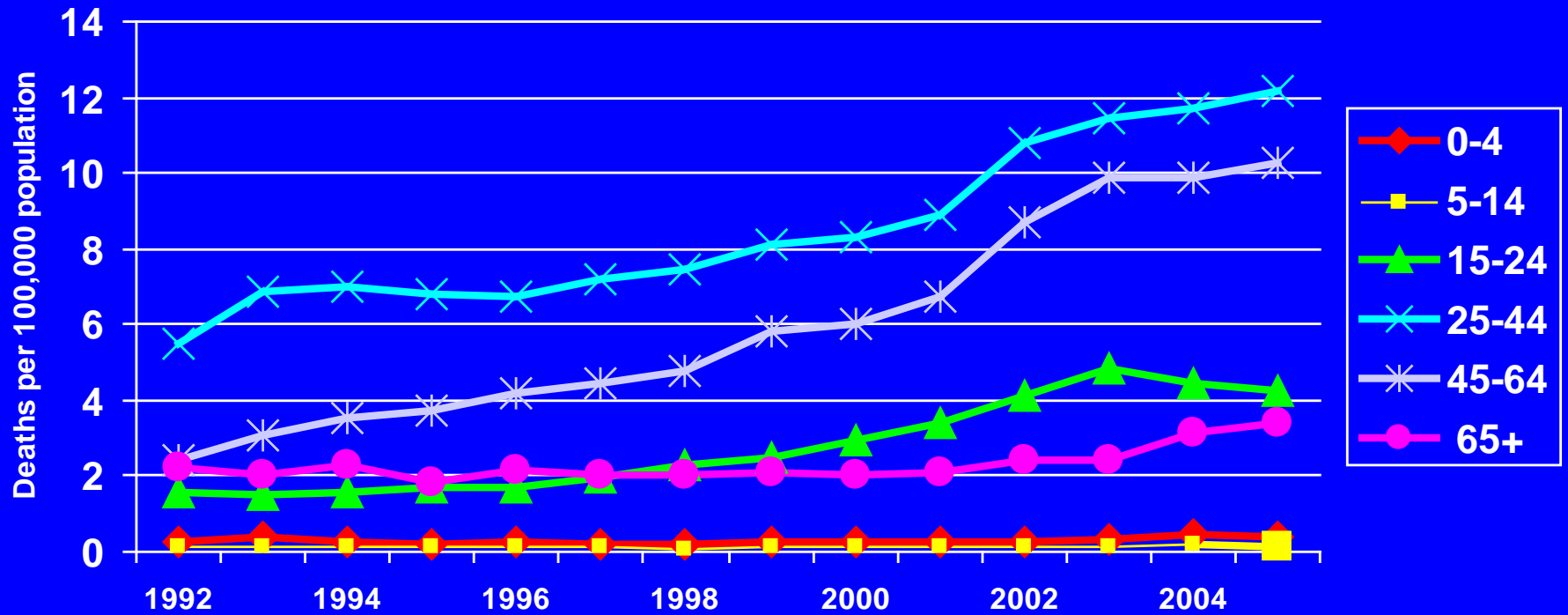
Who gets poisoned and what does poisoning look like across the lifespan?

# Poisoning Statistics



- Nearly 2.5 million people report an exposure to poisonings
- 51% younger than 6-years-old
- 38% younger than 3-years-old
- More than 70% of all poisoning deaths occur in adults ages 20-59
- Males 35-44 account for the greatest number of drug-related poisoning deaths

# Poisoning Statistics





# Poisoning Across the Lifespan

- **Children** under 6 years tend to be very curious. They often take a lick, a taste, or a touch of a poison. Usually the amount they get into is small and does not have a serious negative effect on their bodies.
- Typical call: My 2 year old just drank some dish soap.



**KEEP HER SAFE**  

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**LOCK POISONS UP**



Sponsored by  
The Connecticut Poison Control Center  
University of Connecticut Health Center  
Farmington, CT

# Poisoning Across the Lifespan

- **Teens/young adults** are more likely to try to hurt themselves. More suicidal callers in this age group. Also experimenting.
- They show increasing rates of inhalant abuse and abuse of prescription & over-the-counter drugs.
- Typical call: A school nurse reports that an 8<sup>th</sup> grader is having symptoms after drinking 3 highly caffeinated beverages.



# Poisoning Across the Lifespan

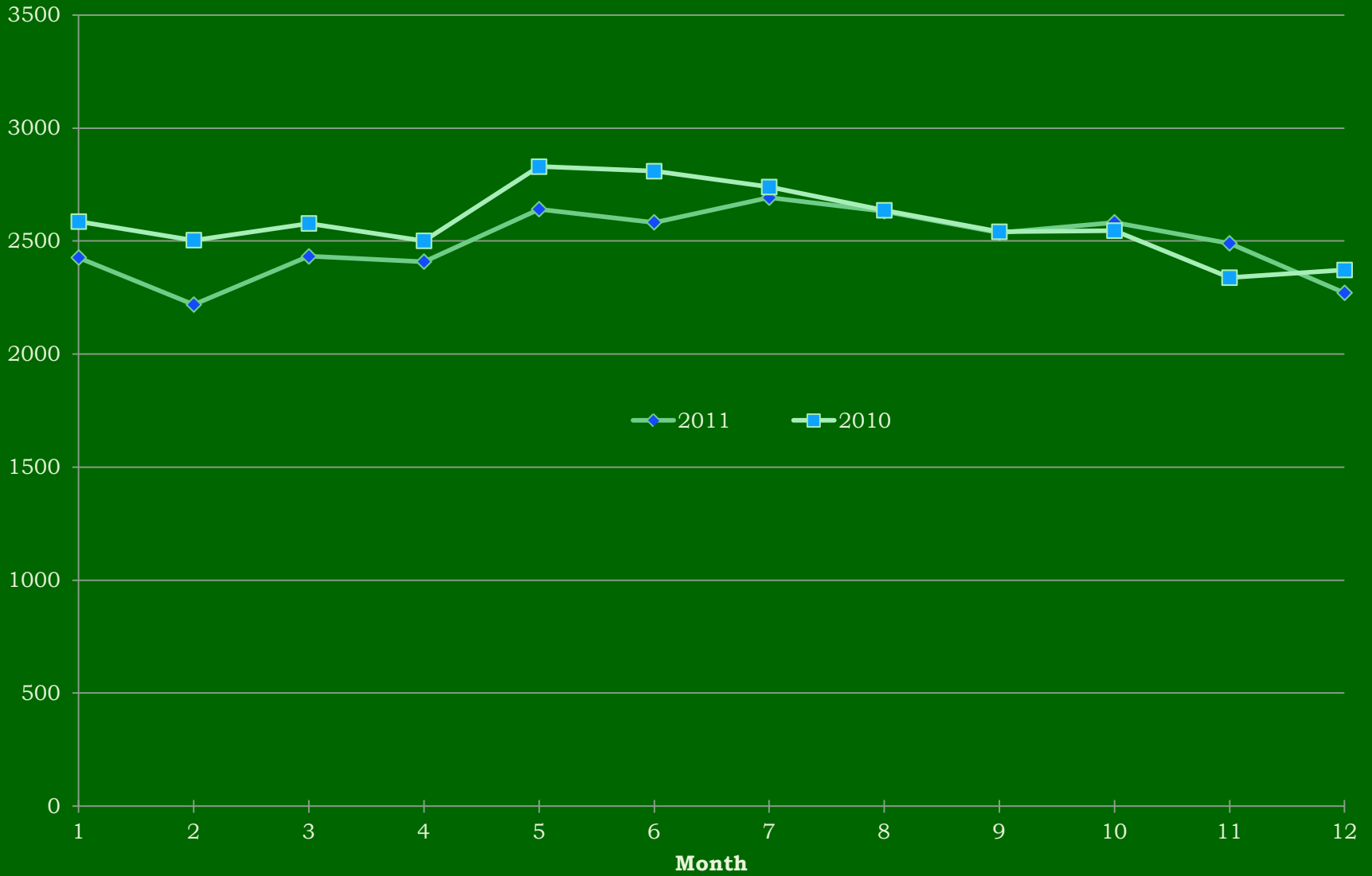
- **Adults** suffer more intentional poisonings and tend to make more serious mistakes with more potent poisons than children do.
- Typical call: A man was exposed to pesticides on a windy day while applying them to the golf course he works at.
- Typical call: A 42 year old woman had back pain and took 2 of her sister's prescription pain pills.

# Poisoning Across the Lifespan

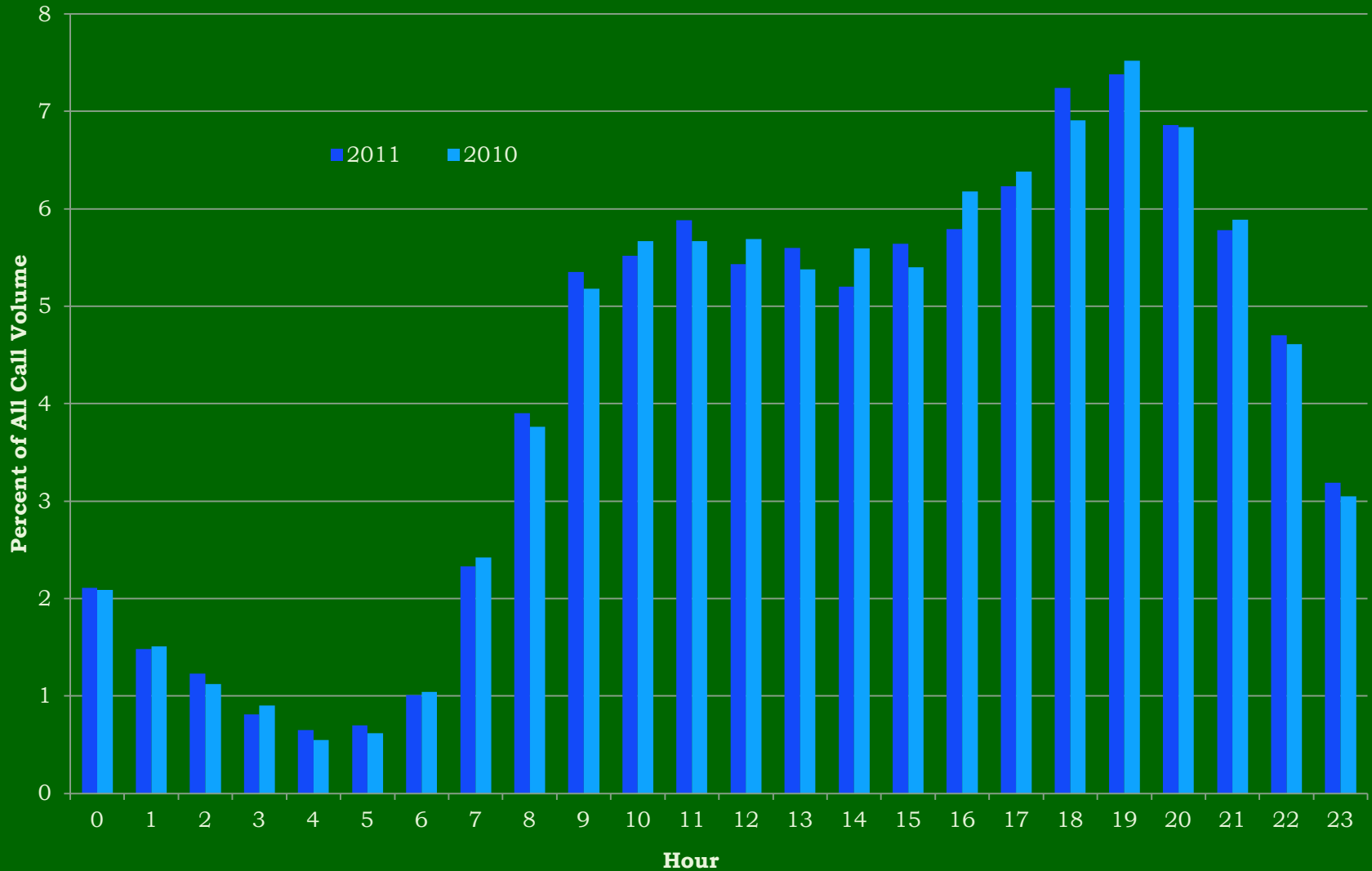
- Older adults/Seniors tend to be involved with medication and product errors and misuse.
- Typical call: An 89 year old took his wife's daily medications instead of his own.



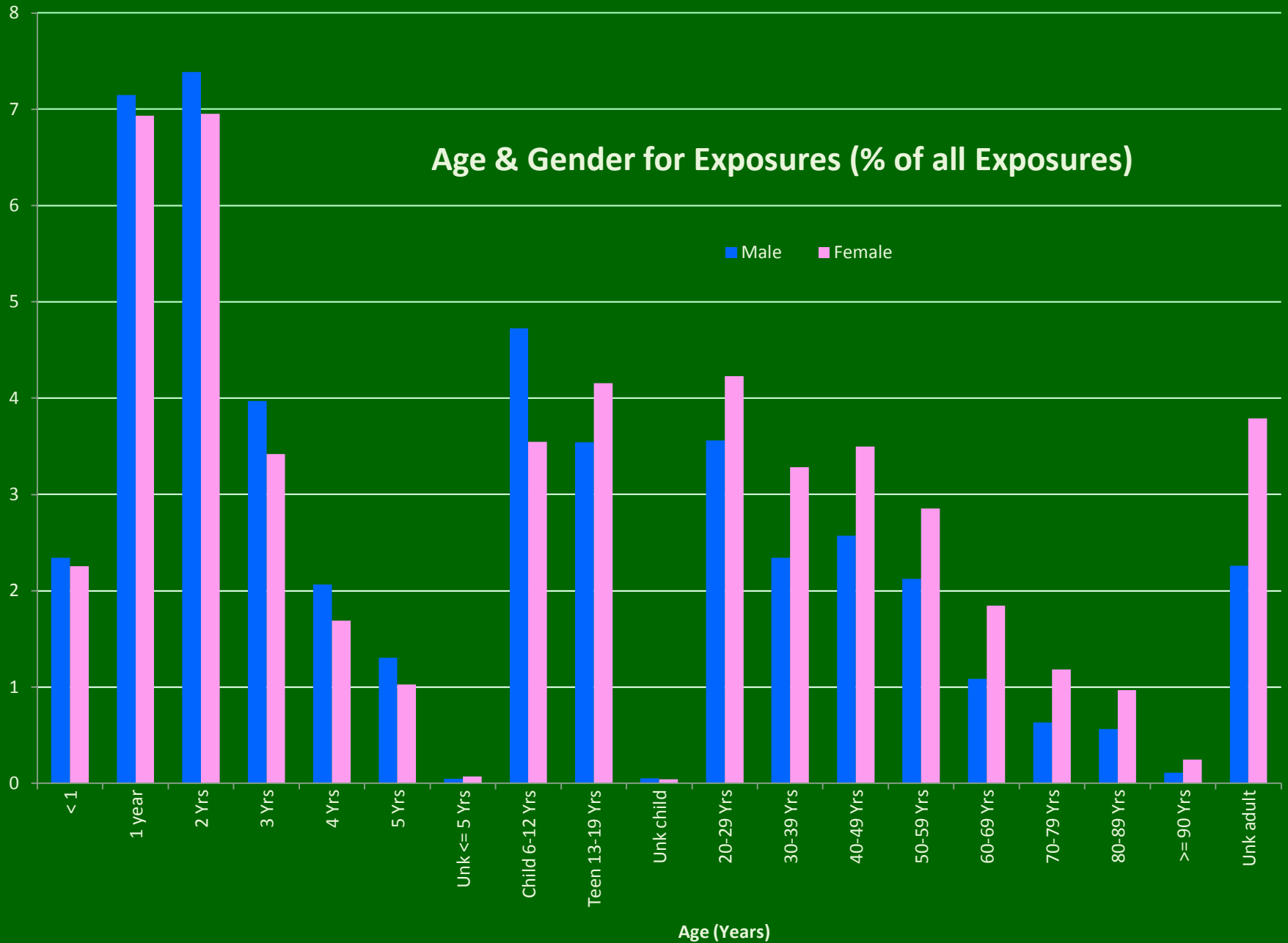
# CPCC Monthly Call Volume

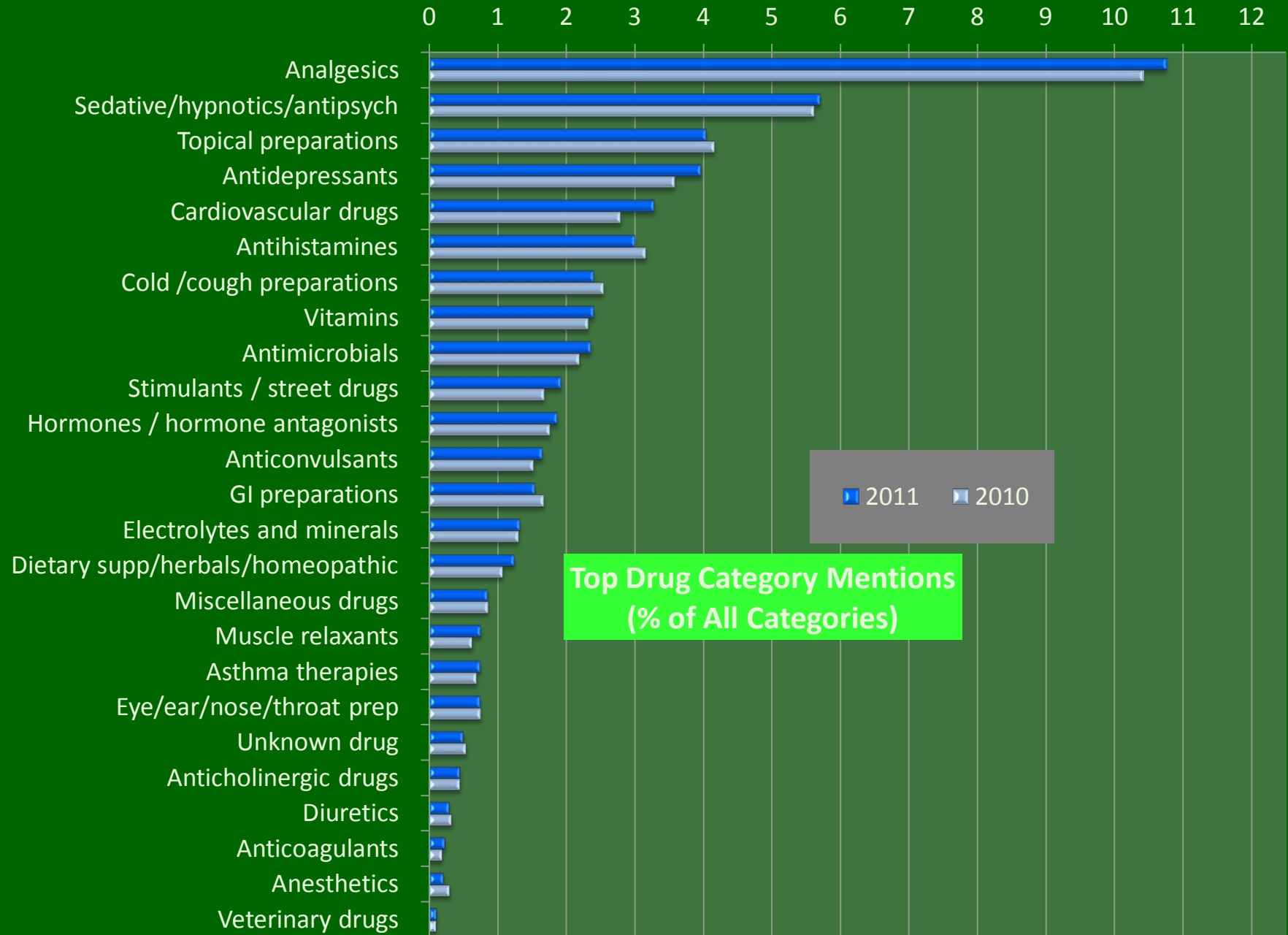


# Hourly Distribution of Total Call Volume

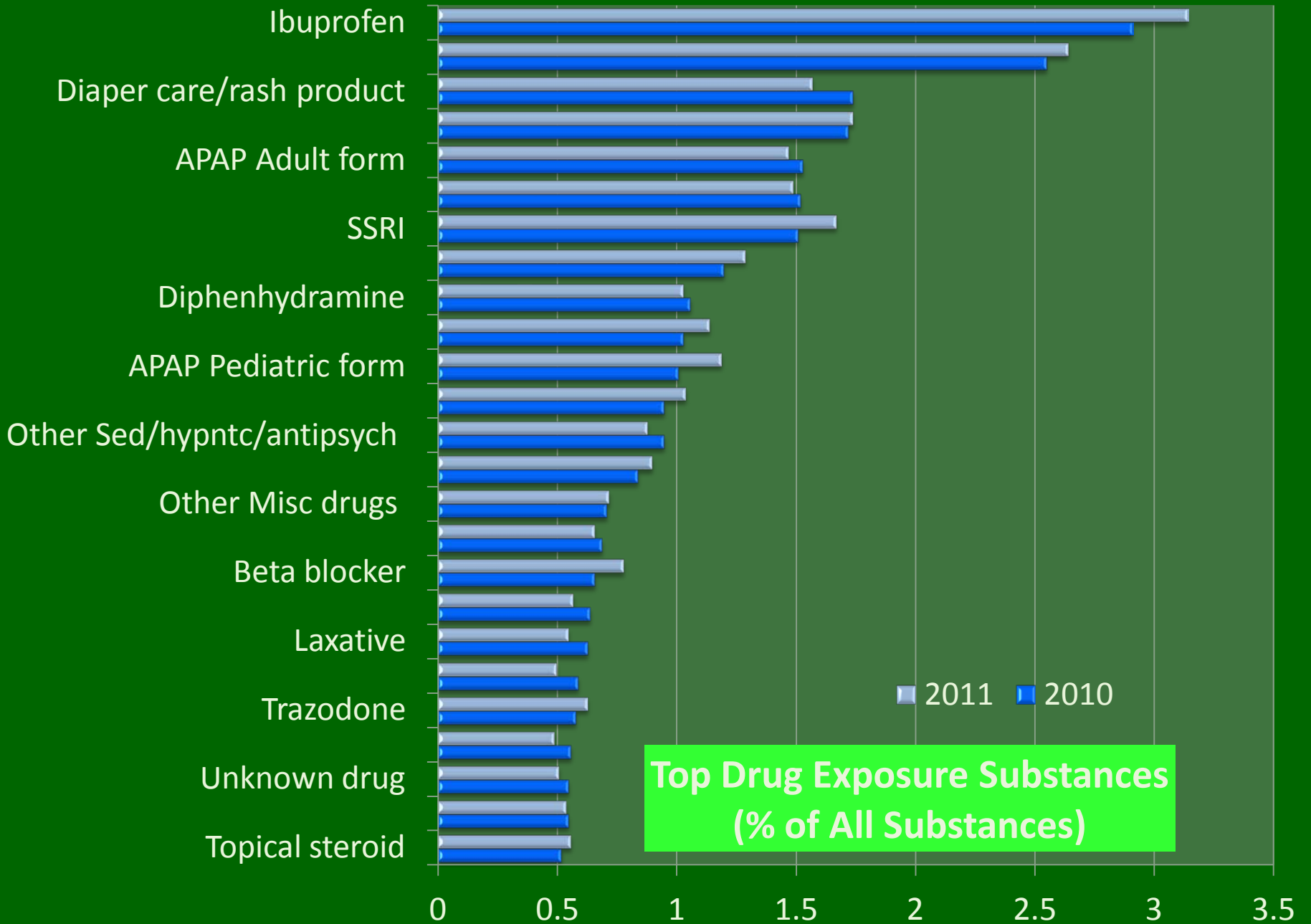


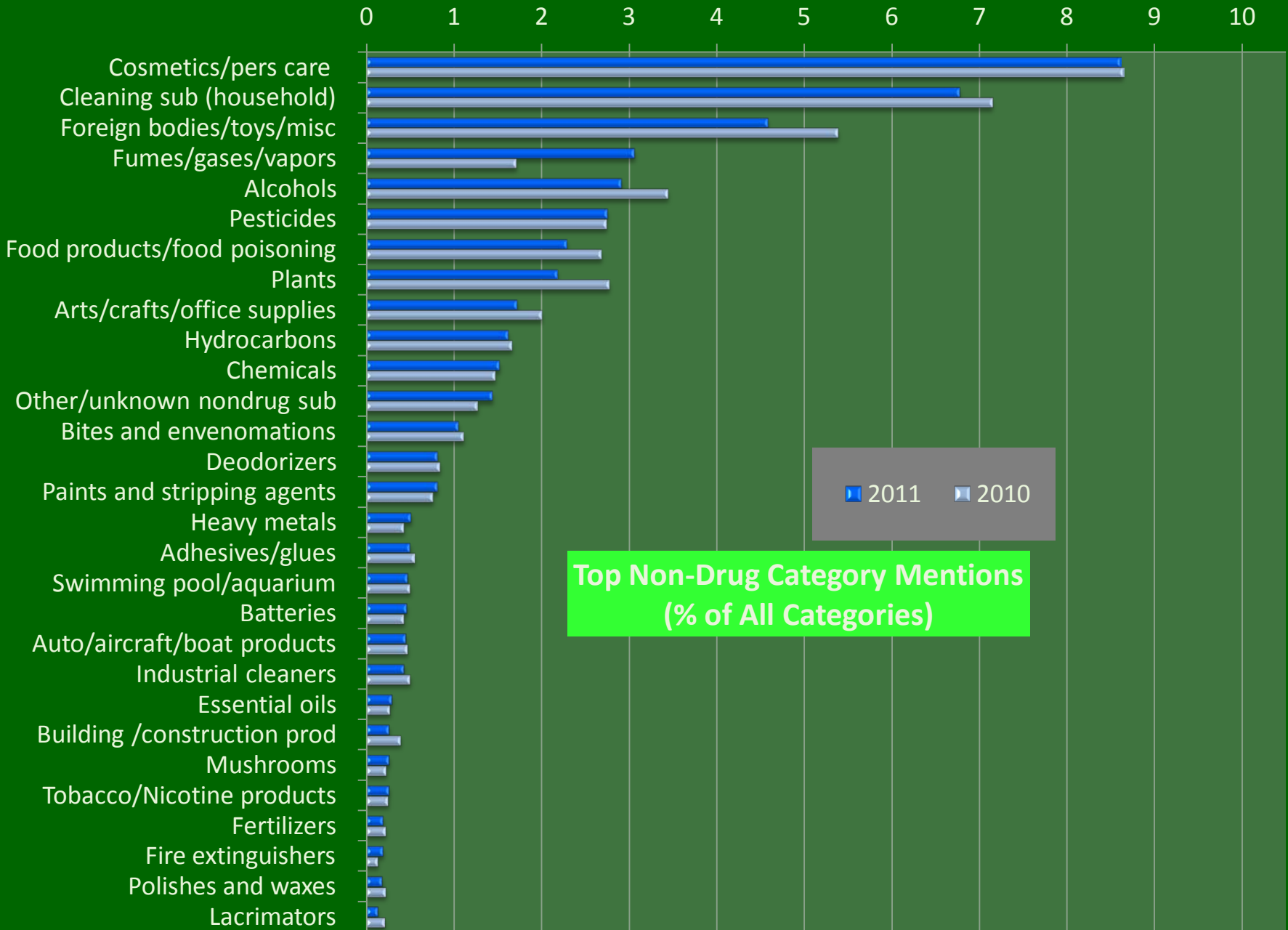
# Age & Gender for Exposures (% of all Exposures)

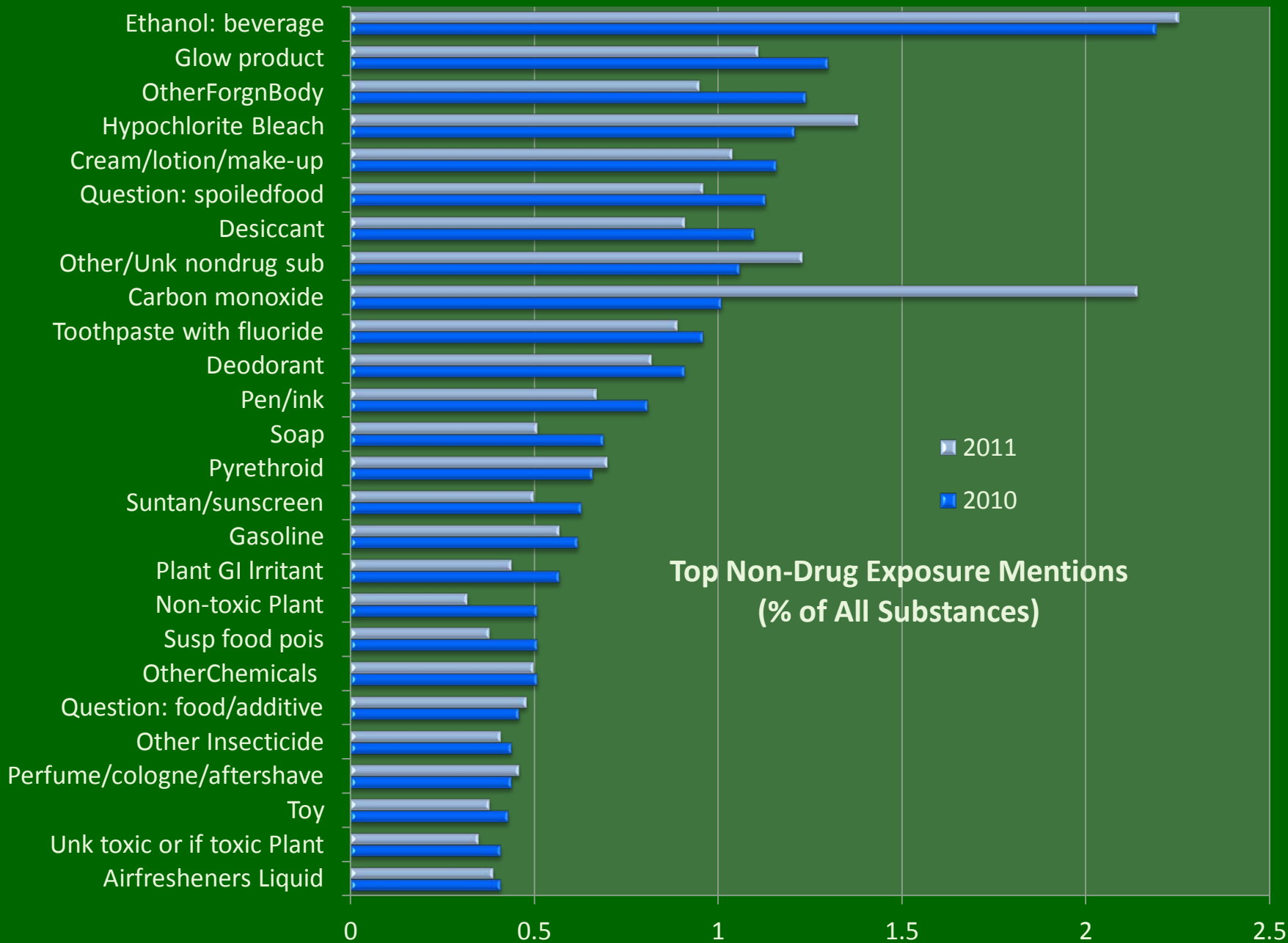












# Intentional Poisoning

# Definitions

- Suspected suicidal: An exposure resulting from the inappropriate use of a substance for self destructive or manipulative reasons.
- Intentional Misuse: An exposure resulting from the intentional improper or incorrect use of a substance for reasons other than the pursuit of a psychotropic effect.
- Intentional Abuse: An exposure resulting from the intentional improper or incorrect use of a substance where the victim was likely attempting to gain a high, euphoric effect or some other psychotropic effect.  
Recreational use of a substance for any effect should be coded here.
- Intentional Unknown: An exposure that is determined to be intentional but the specific motive is unknown.

# 2012 Reason by Age

Display: 032 Rpt AAPCC - Reason by Age (Adults in Decades) (3)

Search Name:

Location: Network Database

Search

Clear

Distinct rows only

1) Active Report Tab | 2) Case Information | 3) Patient / Caller | 4) Substance / Exposure | 5) Clinical Effects 1 | 6) Clinical Effects 2 | 7) Therapy / Outcome | 8) Scenario

## Toxicall® - Toxic Exposure Surveillance System (TESS) Reason by Age (Adults in Decades)

	<6	6-12	13-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	>=90	Unk Child	Unk Adult	Unknown	Missing/ Invalid	Total
<b>Unintentional</b>																
General	9,581	845	248	167	129	133	130	87	61	80	31	4	218	7	1	11,722
Environmental	253	124	108	90	102	91	71	47	17	9	1	7	257	18	0	1,195
Occupational	0	0	16	94	69	47	30	15	1	0	0	0	71	0	0	343
Therapeutic error	679	474	270	215	179	249	271	237	187	164	37	5	289	10	0	3,266
Misuse	66	210	238	246	178	189	171	117	76	39	9	3	317	13	0	1,872
Bite / sting	22	20	18	28	24	24	17	22	5	6	0	0	42	30	0	258
Food poisoning	115	25	36	70	41	27	42	19	14	4	0	1	80	11	0	489
Unknown	4	3	3	4	3	1	1	1	1	0	0	0	3	1	0	25
<b>Subtotal</b>	<b>10,720</b>	<b>1,701</b>	<b>937</b>	<b>914</b>	<b>725</b>	<b>761</b>	<b>733</b>	<b>545</b>	<b>362</b>	<b>302</b>	<b>78</b>	<b>20</b>	<b>1,277</b>	<b>90</b>	<b>1</b>	<b>19,166</b>
<b>Intentional</b>																
Suspected suicide	1	25	606	517	347	430	339	92	27	12	4	1	64	12	0	2,477
Misuse	13	101	126	125	66	61	56	32	8	6	2	1	67	1	0	665
Abuse	0	5	173	168	77	59	44	13	7	0	0	1	46	14	0	607
Unknown	2	32	40	17	7	7	9	10	3	2	0	1	17	3	0	150
<b>Subtotal</b>	<b>16</b>	<b>163</b>	<b>945</b>	<b>827</b>	<b>497</b>	<b>557</b>	<b>448</b>	<b>147</b>	<b>45</b>	<b>20</b>	<b>6</b>	<b>4</b>	<b>194</b>	<b>30</b>	<b>0</b>	<b>3,899</b>
<b>Other</b>																
Contamination / tampering	20	13	12	12	25	10	6	8	4	0	0	0	38	4	0	152
Malicious	6	9	27	13	8	3	7	3	0	0	0	0	7	3	0	86
Withdrawal	1	1	3	4	2	6	2	1	0	0	0	0	5	0	0	25
<b>Subtotal</b>	<b>27</b>	<b>23</b>	<b>42</b>	<b>29</b>	<b>35</b>	<b>19</b>	<b>15</b>	<b>12</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>7</b>	<b>0</b>	<b>263</b>
<b>Adverse reaction</b>																
Drug	20	20	45	82	50	82	78	36	35	31	8	0	67	4	0	558
Food	18	7	6	17	13	12	8	6	0	2	0	0	12	0	0	101
Other	15	8	16	22	9	18	14	13	5	5	1	1	23	0	0	150
<b>Subtotal</b>	<b>53</b>	<b>35</b>	<b>67</b>	<b>121</b>	<b>72</b>	<b>112</b>	<b>100</b>	<b>55</b>	<b>40</b>	<b>38</b>	<b>9</b>	<b>1</b>	<b>102</b>	<b>4</b>	<b>0</b>	<b>809</b>
<b>Unknown</b>																
Unknown reason	7	21	18	20	15	32	34	13	6	6	1	0	21	8	0	202
<b>Subtotal</b>	<b>7</b>	<b>21</b>	<b>18</b>	<b>20</b>	<b>15</b>	<b>32</b>	<b>34</b>	<b>13</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>21</b>	<b>8</b>	<b>0</b>	<b>202</b>


# Intentional, Suspected Suicide ages 6-19, 2000-2012



## Self-Inflicted Injuries: CT ED Non-Admissions & Inpatient Discharges Percent Change 2001 & 2011

Method	2001	2011	% Change
Poisoning	2854	3213	13%
Hanging*	83	147	77%
Cut	1077	1424	32%
Other	345	895	159%
<b>Total</b>	<b>4481</b>	<b>5801</b>	<b>29%</b>

\*Includes strangulation/suffocation



Source: CT Hospital Association/CHIME Data



CTPC Data

Method	2001	2011	% Change
Self- Inflicted Poisoning	2574	3724	45%



# Think means restriction!

- Their own rx, otc, illegal drugs – or someone else's
  - ▣ Tylenol
  - ▣ Rx opioids, fentanyl patches
  - ▣ Synthetics like K2, bath salts, etc
- Products/chemicals already in the home/work
  - ▣ Toxic alcohols
  - ▣ Hand sanitizer
  - ▣ “Detergent suicide”
  - ▣ Creative chemists
- Carbon monoxide



# Ethylene Glycol / Methanol

Toxic (higher) alcohols that are often ingested in suicidal intentions

- ❑ Ethylene glycol in radiator fluid and antifreeze forms oxalic acid and is renal toxic ; has sweet taste

Antidote antizol, alcohol IV

Hemodialysis

- ❑ Methanol in windshield washer fluid forms formic acid causing blindness

Antidote antizol, alcohol IV

Hemodialysis

- ❑ Symptoms: inebriation and gastritis



# Rotten Egg Odor: Hydrogen Sulfide Suicides

- Initially reported from Japan in 2008
- More than 1000 victims
- Some mass events with use in apartment bathroom
- Recent deaths in RI, NJ, CT



# Rotten Egg Odor

- “Detergent” suicide
  - ▣ In Japan, Sunpole toilet cleaner + bath salts
  - ▣ In U.S.A., bath sulfur replaced by insecticide
- Strong acid + calcium polysulfides = H<sub>2</sub>S
  - ▣ Acids: Lysol Disinfectant, various toilet bowl cleaners, Kaboom, tile cleaners
  - ▣ Sulfurs: pesticides, fungicides, some latex paints, artist oil paints, some dandruff shampoos, spackling paste

(U) On 23 February 2010, a Los Angeles County sheriff's deputy found a vehicle parked near a remote stretch of Lake Hughes Road in Castaic. A woman in the back seat appeared to be non-responsive, and computer printouts, warning of hazardous chemicals, had been taped over the car's windows. The victim, a resident of West Covina, had recently been reported missing. The deputy notified the Santa Clarita Valley sheriff's station, which dispatched a HazMat squad.<sup>2</sup>

(U) On 12 February 2009, a San Jose, California 911 dispatcher received a call about an attempted suicide by an 18-year-old male. First responders found two pans containing an unidentified chemical mixture on a bedroom table. Because it was not immediately identified, staff at Santa Clara Valley Medical Center, where the victim had been transported, closed the emergency room for nearly five hours as approximately 100 persons believed to have been exposed to the chemical underwent decontamination procedures. The victim never regained consciousness and died on 14 February 2009.<sup>3</sup>

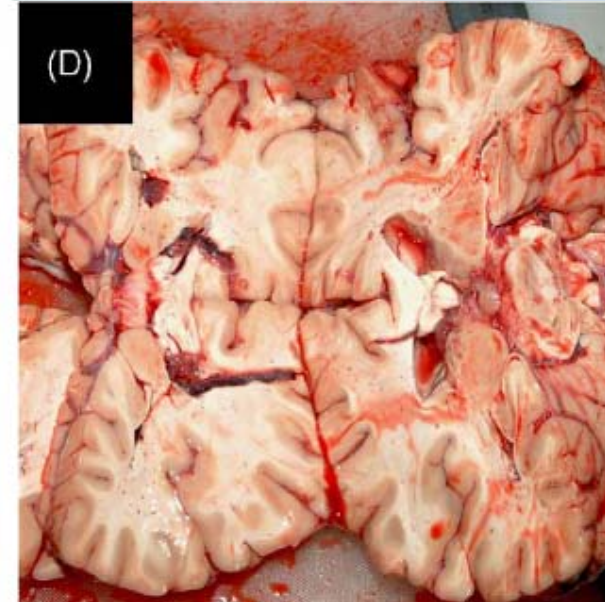
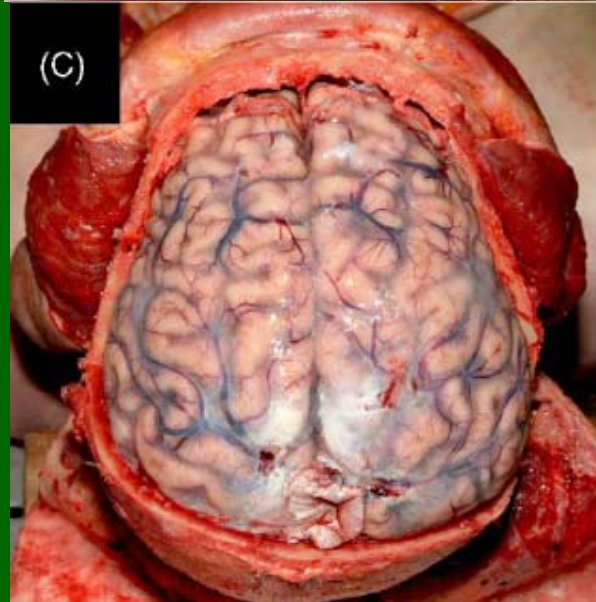
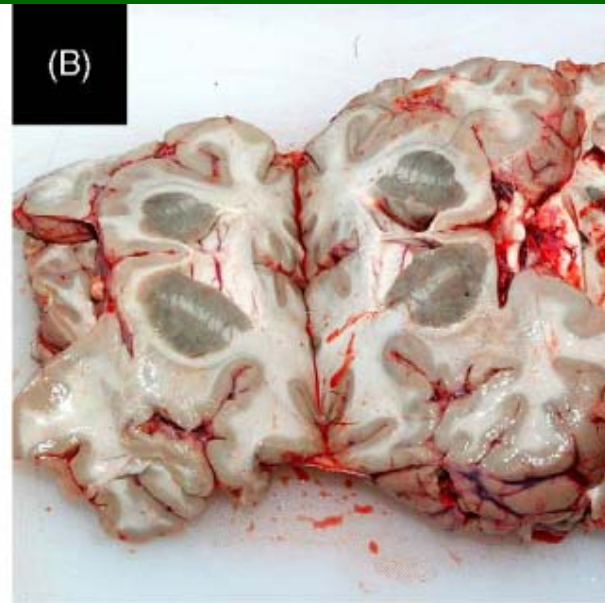
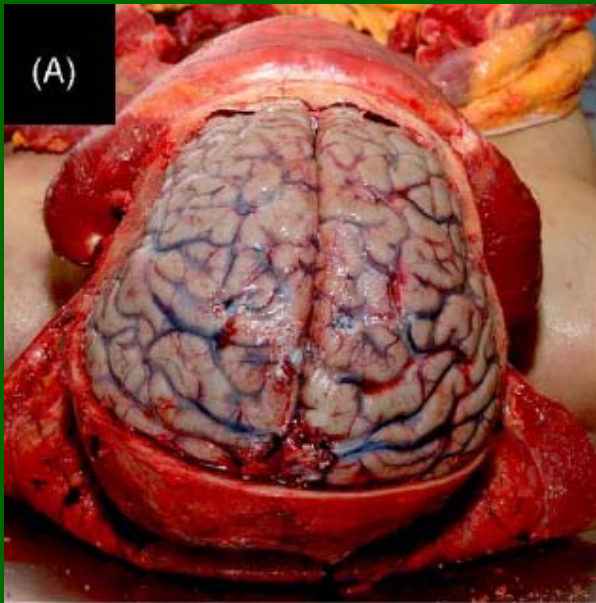
# Rotten Egg Odor: Situational Awareness

- Note
- Tape
- Buckets/Trays
- HazMat sign
- Odor
- Fogged windows





# Rotten Egg Odor: Autopsy Findings



# K2/Spice

- What is it actually? Synthetic cannabinoids
  - ▣ Synthetic version (herbal substitute) of marijuana
  - ▣ Mixture of herbs sprayed with synthetic compound similar to THC
  - ▣ Not detectable in drug tests
  - ▣ Really, who knows?
- Prevalence?
  - ▣ In CT: 155+ cases since May 2010 (mostly teens, young adults)
  - ▣ In U.S. – Over 7,000 calls 2011 (3,000 in 2010)





# K2/Spice



- What is it marketed as?
  - ▣ Frequently sold as incense
  - ▣ Labeled not for human consumption
- Where can I get it?
  - ▣ Smoke shops
  - ▣ Gas stations/convenience stores
  - ▣ Head shops



# K2/Spice



- What is the hoped for effect?
  - ▣ Similar to marijuana, relaxed, euphoria, distortion of time
- What is the actual effect?
  - ▣ Symptoms: fast heart rate & BP, confusion, nausea & vomiting, agitation, hallucinations, and seizures
- What is the appeal?
  - ▣ Users prefer marijuana – but will use synthetic marijuana products while on probation, or before work drug screenings
  - ▣ Popular in the military, treatment settings, etc

# K2/Spice



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# Synthetic Cannabis: Street Names

Spice	Genie	Zohai
Blaze	Ex-ses	K2
Fake Pot	Spike 99	Fire
Yucatan	Dream	Fusion

# Bath Salts



- What is it actually?

- ▣ Synthetic drug similar to natural cathinone psychostimulants - various possibilities: MDPV (Methylenedioxypropylamphetamine) or Mephedrone (methylnmethcathinone) or other
- ▣ Really, who knows?

- Prevalence?

- ▣ CT – 20 calls
- ▣ Louisiana PC over 200 calls, banned
- ▣ Nationwide – Over 6,000 calls 2011 (304 in 2010)

White powder, pills or capsules

Odor: fishy

Price: \$20 for 300 mg

Dosage:

light: 50-100 mg

common: 150-200 mg

heavy: 300+ mg



# Bath Salts



- What is it marketed as?
  - ▣ Marketed as a legal cocaine, but symptoms & cravings more closely aligned with methamphetamines
  - ▣ Most say not for human consumption
  - ▣ Labeled as bath salts or plant food

- Where can I get it?

Head shops

Internet

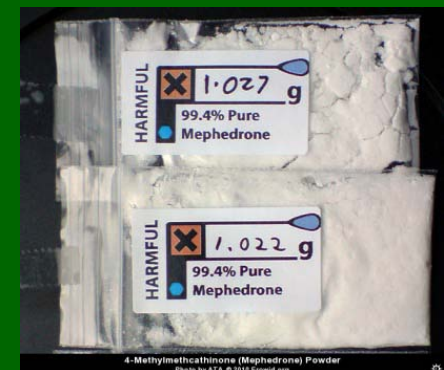
Gas stations/convenience stores



# Bath Salts



- What is the hoped for effect?
  - ❑ Stimulant effects – burst of energy, euphoria,, mood lift, increased alertness, sociability, creativity
  - ❑ Increase HR & BP
- What is the actual effect?
  - ❑ Symptoms: delusions, hypertensive episode, seizure, agitation, hyperthermia, extreme paranoia, psychosis that can last 48 hours (+)
  - ❑ In some cases, symptoms lead to combativeness, assaults or suicide attempts
- What is the appeal?
  - ❑ “Legal” cocaine
  - ❑ Perception that it is safer?



4-Methylmethcathinone (Mephedrone) Powder  
Photo by ATFA, © 2010 Erowid.org

# Bath Salts Common Names



Meow Meow	Vanilla Sky	Ivory Wave
Meph	Blast Salt	MDPV
Diablo	White Lady	Bliss
Blue Silk	Legal Cocaine	Bloom
MCat	Bubbles	4-MMC



# “SMILES”

What is it actually?

- 2C-I is a synthetic drug & falls into the broad category of phenylethylamines. It is a hallucinogenic amine and has the rush (think cocaine, meth) as well as hallucinogenic properties (think ecstasy, lsd).
- Usually sold as a white powder but can be in pill form; often mixed with candy or chocolate

What is the appeal?

2C-I-NBOMe = 25i-NBOMe = 25i

# “SMILES”

- Prevalence
  - ▣ Emerging, 2(?) CT poison center cases
  - ▣ Media links it to two deaths in North Dakota and implicated in TV actor’s recent death
- What is the hoped for effect?
  - ▣ Auditory and visual hallucinations, giddiness, relaxation and empathy
- What is the actual effect?
  - ▣ (Preliminary) nausea, increase heart rate/arrhythmias, seizures, renal failure, “bad trips”