



March 10, 2017

**Department of Health and Human Services
Prescription Drug Abuse Advisory Committee**



Welcome and Introductions of Attendees

Alan Dellapenna, Head, Injury and Violence Prevention Branch, Chronic Disease and Injury Section, Division of Public Health

Sarah Potter, Chief of Community Wellness, Prevention and Health Integration, Division of Mental Health/DD/SAS

Please share with us...

- **Your name**
- **Your organization/affiliation**



Update: Division of MH/DD/SAS – SAMSHA Grants (Ongoing and Pending applications)

- **SPF-Rx and SPF-SIG**
 - **Sarah Potter**, Chief of Community Wellness, Prevention and Health Integration, Division of Mental Health/DD/SAS
- **MAT and Opioid STR/Cures Act**
 - **DeDe Severino**, Interim Section Manager, Addictions and Management Operations, Division of Mental Health/DD/SAS





*NC Opioid State Targeted Response Grant
Application (SAMHSA)*

DeDe Severino, Interim Section Manager, Addictions and
Management Operations, Division of Mental Health/DD/SAS



NC Opioid STR

- Section 1003 of the 21st Century Cures Act established an account for a total of \$1 billion (\$500 million in FY 2017 and \$500 million in FY 2018) for prevention, treatment and recovery services, related programming and activities.
- The funding opportunity can be described as a hybrid – combination of block and discretionary grants, as there is a specific allocation amount for each state/territory, only SSAs are eligible applicants, but states must apply.



NC Opioid STR

- Amount available to NC: \$15,586,724 for FFY17, and an additional \$15,586,724 for FFY18.
- Amounts for states were derived from a formula based on unmet need for opioid use disorder treatment and drug poisoning deaths.
 - 80% of the funds **must** be spent for OUD treatment and recovery support services;
 - 5% **limit** on administrative/infrastructure costs to administer the grant;
 - Remaining 15% can be used for prevention activities
- Application was submitted 02.17.17



NC Opioid STR

- Much interest in this initiative, input and feedback was received from over 35 groups, individuals and sister agencies within DHHS
- Topical areas included in the application:
 1. Marketing – Improve Public Perception
 2. Training – Improve Workforce Development and Retention
 3. Treatment – Improve Patient Engagement, Retention and Outcomes
 4. Accessibility – Improve Engagement, Retention and Outcomes
 5. Prevention – Increase Awareness and Reduce Use/Misuse



- Topical areas, cont.,
 6. Controlled Substances Reporting System (CSRS) – Prevent Use and Misuse, Intervene Through Integration and Analytics
 7. ECHO – Improve Workforce and Accessibility to MAT in Rural Areas
 8. Augment/Enhance Other Current Strategies
- States expect to be notified of funding in mid to late April
- Copy of the grant is located at <https://www.ncdhhs.gov/divisions/mhddsas/grants>
- Questions – dede.severino@dhhs.nc.gov

Dr. Ruth E. Winecker, Chief Toxicologist, Division of Public Health

OCME: Fentanyl and Its Analogues





HEROIN AND FENTANYL

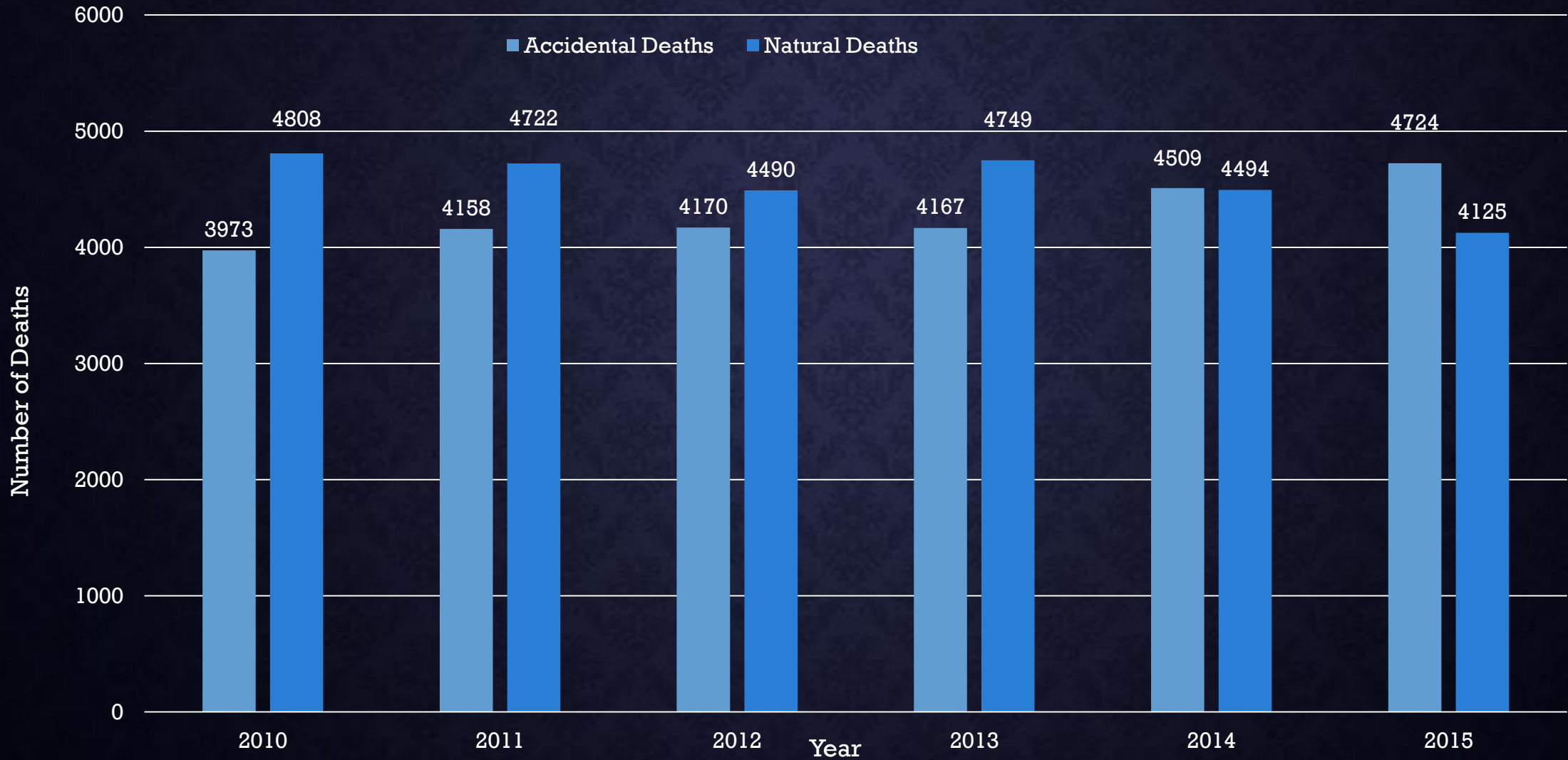
Historical Perspective and a Look to the Future

Ruth E. Winecker, Ph.D. F-ABFT
Chief Toxicologist, NC-OCME
ruth.winecker@dhhs.nc.gov

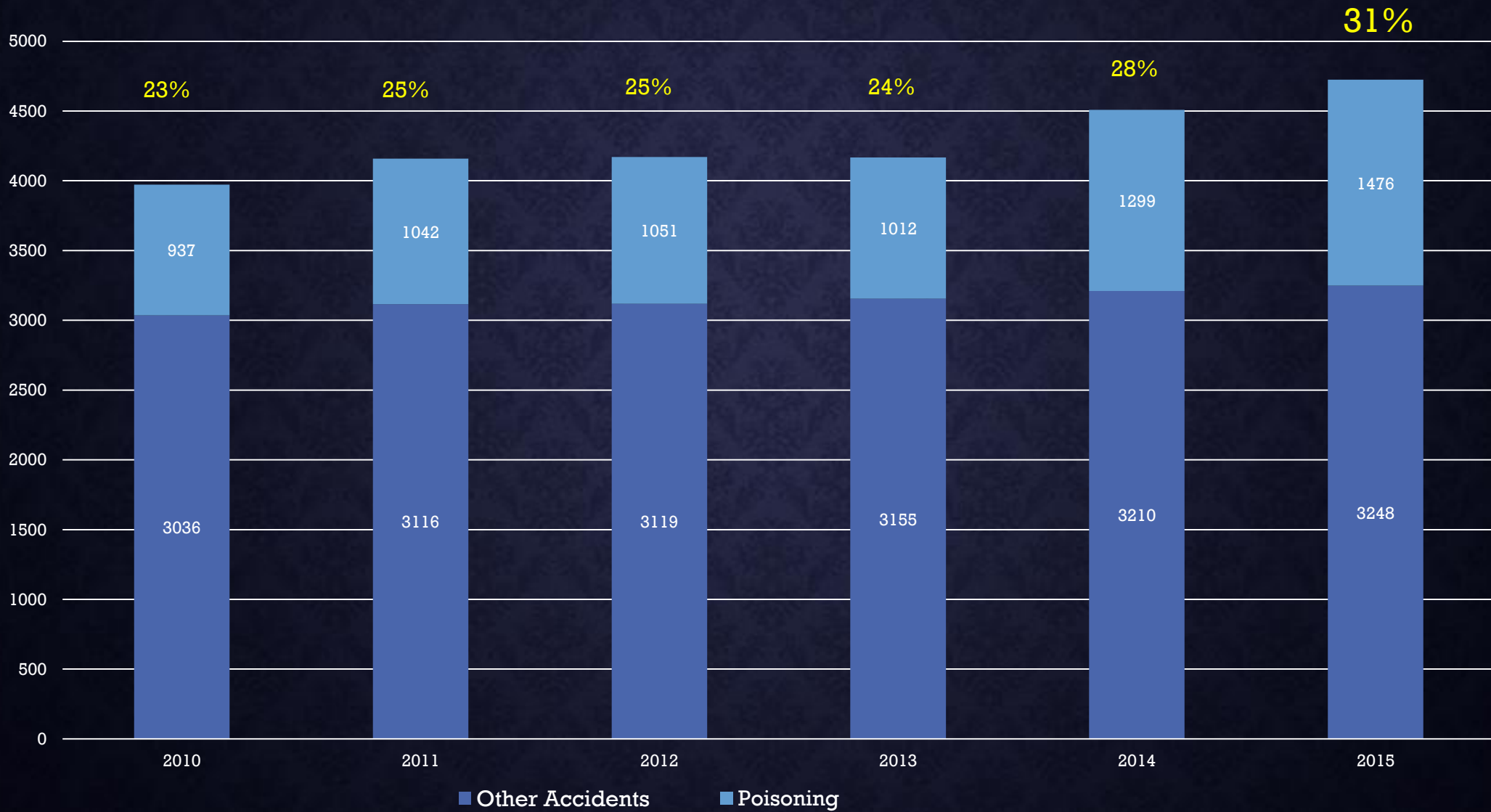
Alison Miller, MA
Epidemiologist, NC-OCME
alison.miller@dhhs.nc.gov

TOP FIVE DRUGS CAUSING DEATH 2000-2015

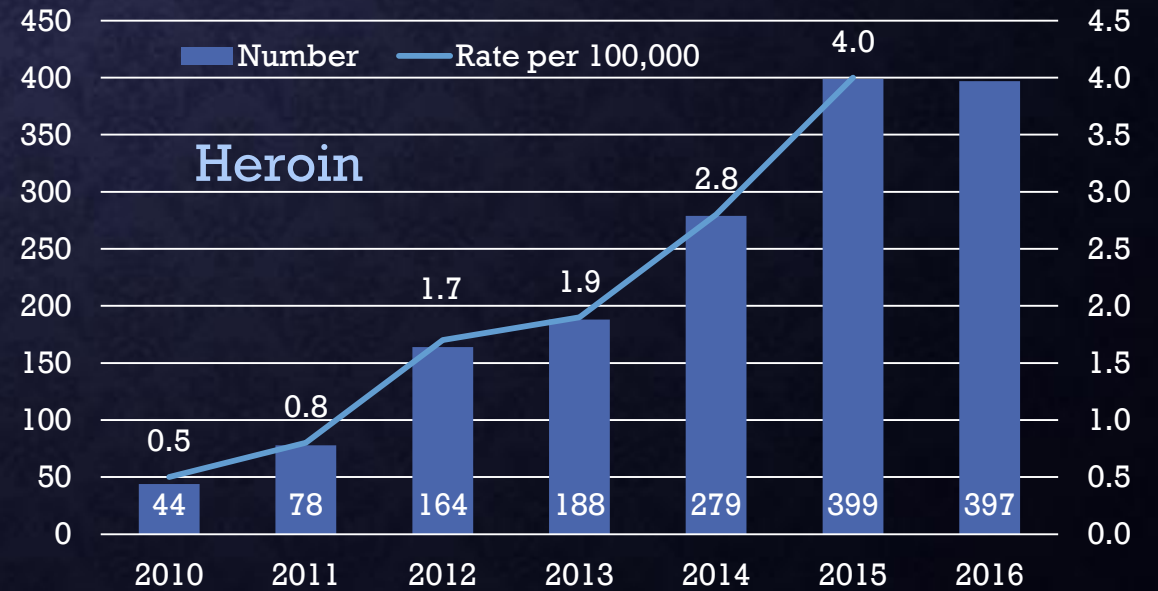
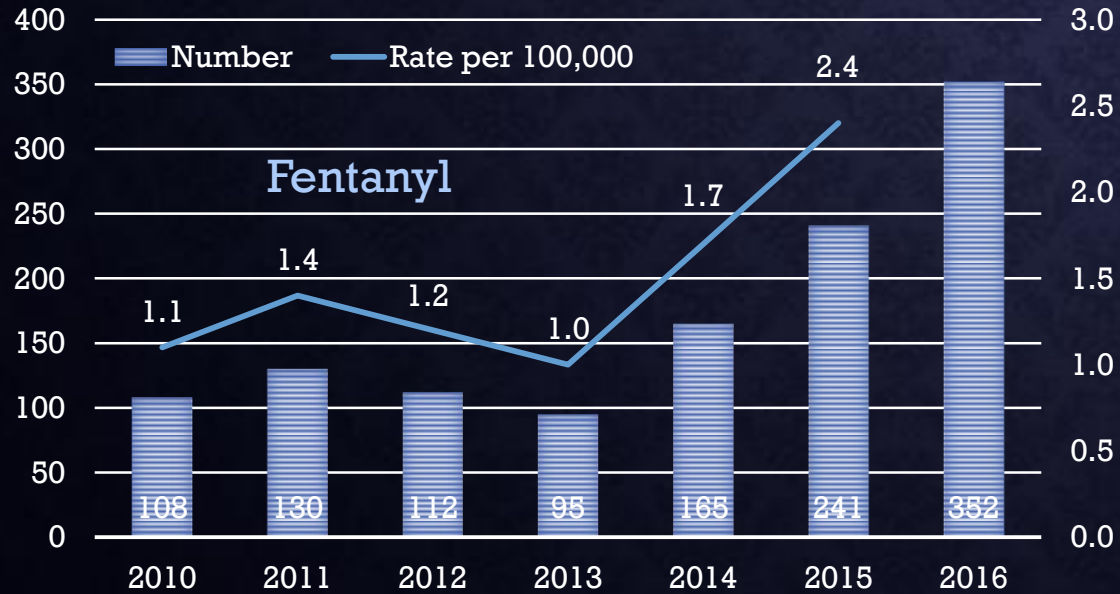
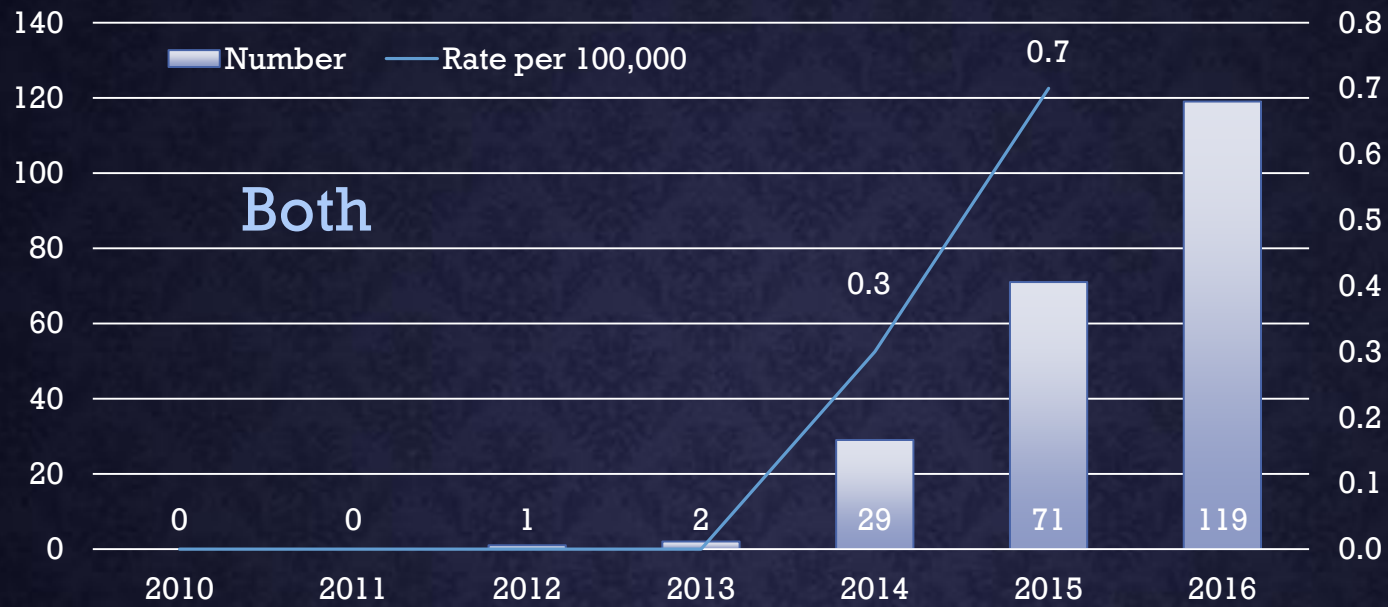
YEAR	1st	2nd	3rd	4th	5th
2000	Methadone	Cocaine	Morphine	Oxycodone	Ethanol
2001	Methadone	Cocaine	Oxycodone	Morphine	Heroin
2002	Methadone	Cocaine	Oxycodone	Morphine	Heroin
2003	Methadone	Cocaine	Morphine	Oxycodone	Heroin
2004	Methadone	Cocaine	Morphine	Oxycodone	Fentanyl
2005	Cocaine	Methadone	Hydrocodone	Oxycodone	Fentanyl
2006	Methadone	Cocaine	Oxycodone	Fentanyl	Morphine
2007	Methadone	Cocaine	Oxycodone	Fentanyl	Morphine
2008	Methadone	Oxycodone	Cocaine	Fentanyl	Morphine
2009	Methadone	Oxycodone	Cocaine	Fentanyl	Morphine
2010	Methadone	Oxycodone	Cocaine	Fentanyl	Morphine
2011	Methadone	Oxycodone	Cocaine	Oxymorphone	Fentanyl
2012	Cocaine	Oxycodone	Methadone	Heroin	Fentanyl
2013	Oxycodone	Methadone	Heroin	Cocaine	Oxymorphone
2014	Heroin	Cocaine	Oxycodone	Fentanyl	Methadone
2015	Heroin	Cocaine	Oxycodone	Fentanyl	Oxymorphone



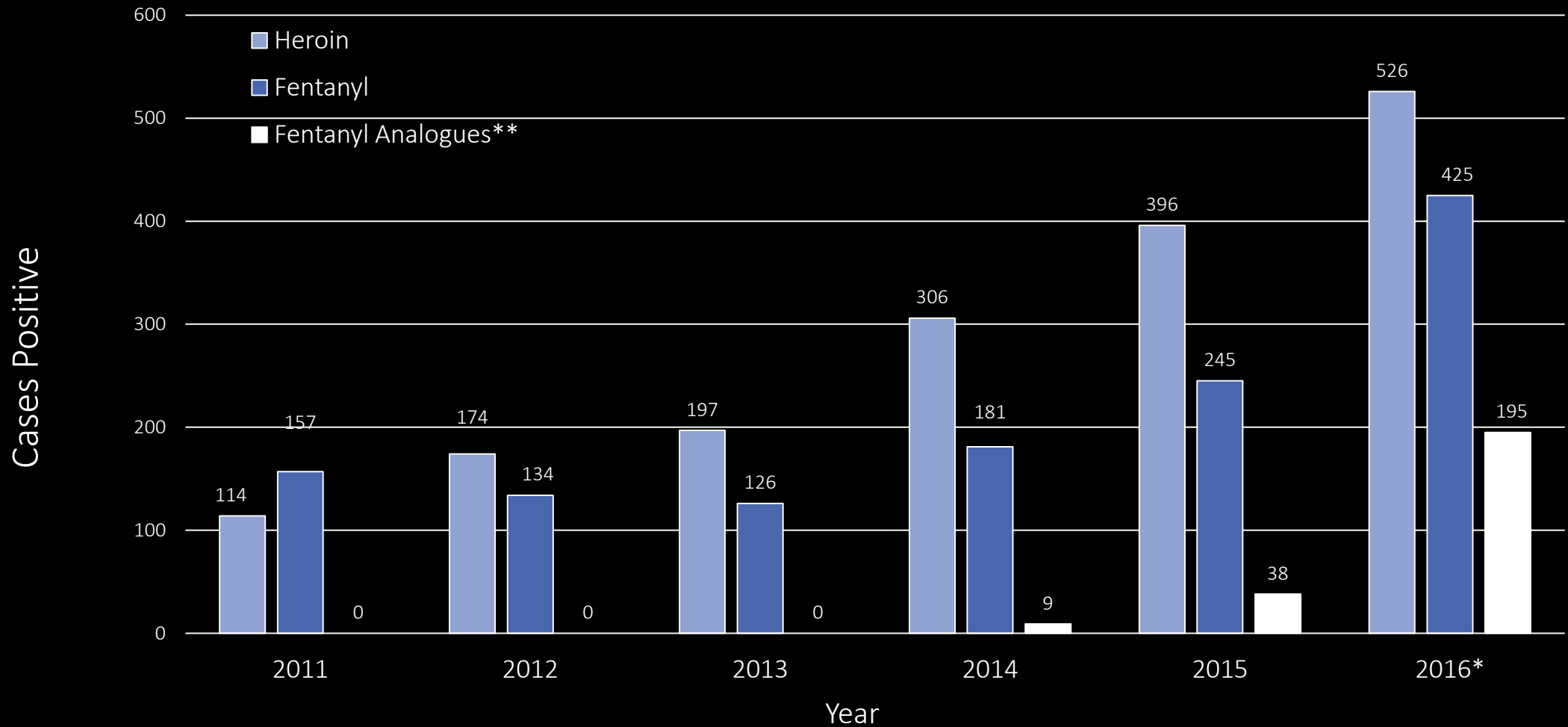
ACCIDENTAL VS. NATURAL DEATHS 2000-2015



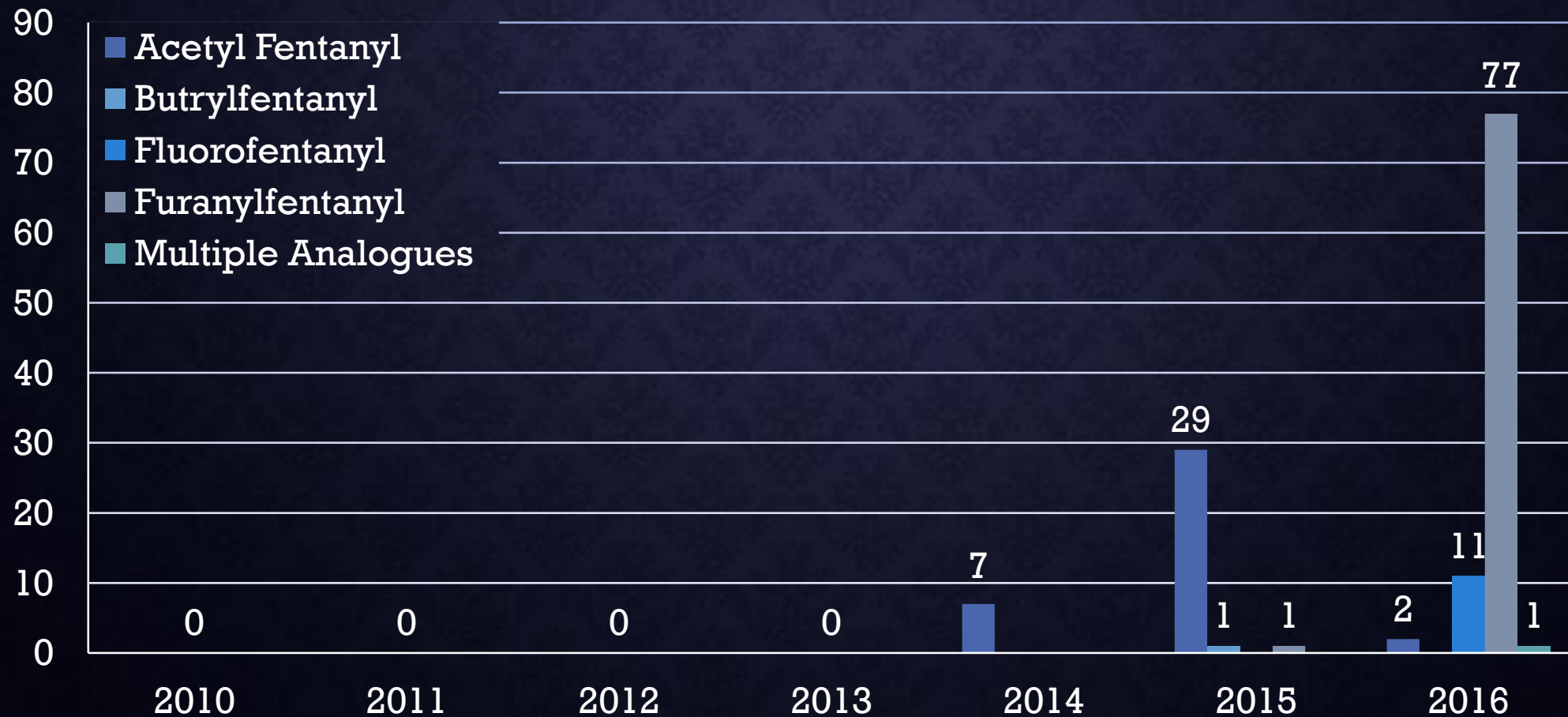
ACCIDENTAL DEATHS 2000-2015



TOTAL CASES POSITIVE



DEATHS ATTRIBUTED TO FENTANYL ANALOGUES IN NORTH CAROLINA, 2010 – 2016*



TEST VOLUME OPIOIDS CLASS

Year	2011	2012	2013	2014	2015	2016
Mitragynine	0	0	2	29	27	95
Loperamide	0	0	6	25	46	68
Buprenorphine	95	101	46	104	98	68
Methadone	659	669	501	370	341	325
U-4770	0	0	0	0	0	137
Tramadol	75	79	93	103	111	103
Fentanyl	382	337	282	416	522	937
Fentanyl Analogues	0	0	0	23	87	412
Opiates*	1338	1456	1504	1832	1959	2005
Total Results (all tests)	43,423	42,543	43,300	44,269	48,410	54,948

HOW DID WE GET HERE?

- Fentanyl and analogues are just the latest in a long string of compounds that have been introduced to the illicit drug market in the last 10 years.
- Commonly referred to as “research chemicals,” synthetic drug chemists have rediscovered old drugs from patents or modified existing drugs to change their structure so that they are exempt from current controlled substances scheduling.
- The swiftness with which these new drugs are developed is staggering and challenges the abilities of forensic laboratories.
- Today, all drug classes are represented in the new compounds being sold online and in more traditional drug supply chains.



SOME COMMON NPS DRUGS SEEN BY NC-OCME

- **Synthetic Cannabinoids:** commonly referred to as Spice or K2, these compounds mimic the effects of marijuana
- **Cathinones/Piperazines:** commonly referred to as bath salts, plant food and Flakka; these compounds mimic the effects of methamphetamine and MDMA (Ecstasy/Molly)
- **Anxiolytics:** all NPS in this class are classical benzodiazepines these include delorazepam, etizolam
- **Hallucinogens:** mimic the effects of classic hallucinogen-dissociative drugs. Examples include PCP and ketamine analogues as well as the NBOMe series
- **Synthetic Opioids:** This group of compounds is designed to mimic the effects of morphine, oxycodone, heroin and other common prescription opiates/opioids. Some are similar in chemical structure to existing compounds (e.g., fentanyl) while others are more novel (e.g., U-47700)

SCREENING TECHNIQUE CHANGES

- 2000- added a fentanyl immunoassay
- 2008- added an oxymorphone specific immunoassay to screen for Opana overdoses
- 2010-shelved immunoassays as too limited/expensive and developed a LC-ion trap-MS screening technique to detect 10 opioids, 9 benzodiazepines, cocaine metabolite, gabapentin/pregabalin
- 2016-added six designer opioids to the LC-ion trap-MS screen
- 2017-plan to add 22 new designer fentanyl analogues to the screen

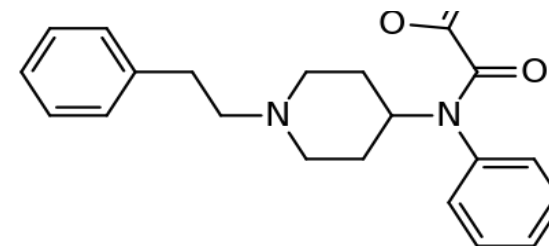
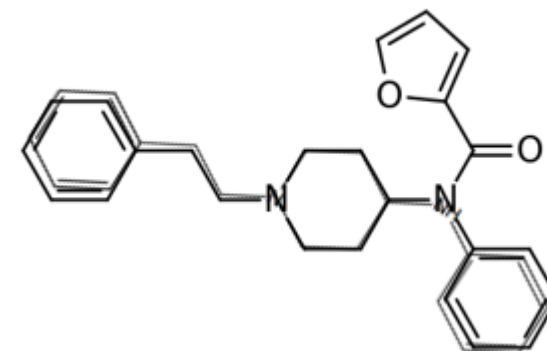
NEW DRUGS DETECTED BY TRADITIONAL SCREENING METHODS

- The Organic Bases screen has been employed by the laboratory for 30 years
- Unlike the LC-ion trap-MS screen this test does not screen for a specific set number of drugs but instead will detect any basic organic compound that is present at sufficient concentration to register a response on the detectors (GC-NPD and GCMS)
- Most new drugs detected then require development and validation of a quantitative confirmation assay

Drug Class	2011	2012	2013	2014	2015	2016
Fentanyl Analogues	0	0	0	1	3	5
Other Opioids	0	0	2	0	0	1
Designer Benzodiazepines	0	0	0	0	1	2
Cathinones (“bath salts”)	5	9	1	1	1	5

THE CHALLENGE

- September 2015
 - Death of a 20 year old female
 - Traditional toxicology tested negative except for 4-ANPP , also known as despropionyl fentanyl
- November 2015
 - Obtained powder from death scene and analyzed
 - Large peak without a database match
 - Tentatively identified as furanylfentanyl
- March 2016
 - Certified reference material available
 - Method development and validation
- June 2016
 - Toxicology report certified



NOT SO FAST

12 CBS12.com 73°

NEWS WEATHER SPORTS TRAFFIC CONSUMER FEATURES HEALTHWATCH HWE 2017 STATION

ADVERTISEMENT **Dr. Fuhrman's Health Oasis** Smart Nutrition. Superior Health. **Food Is The Most Powerful Medicine. LEARN MORE**

China's fentanyl ban a 'game-changer' for opioid epidemic

by Vincent Crivelli | Friday, February 24th 2017

SEARCH **NEW YORK POST**

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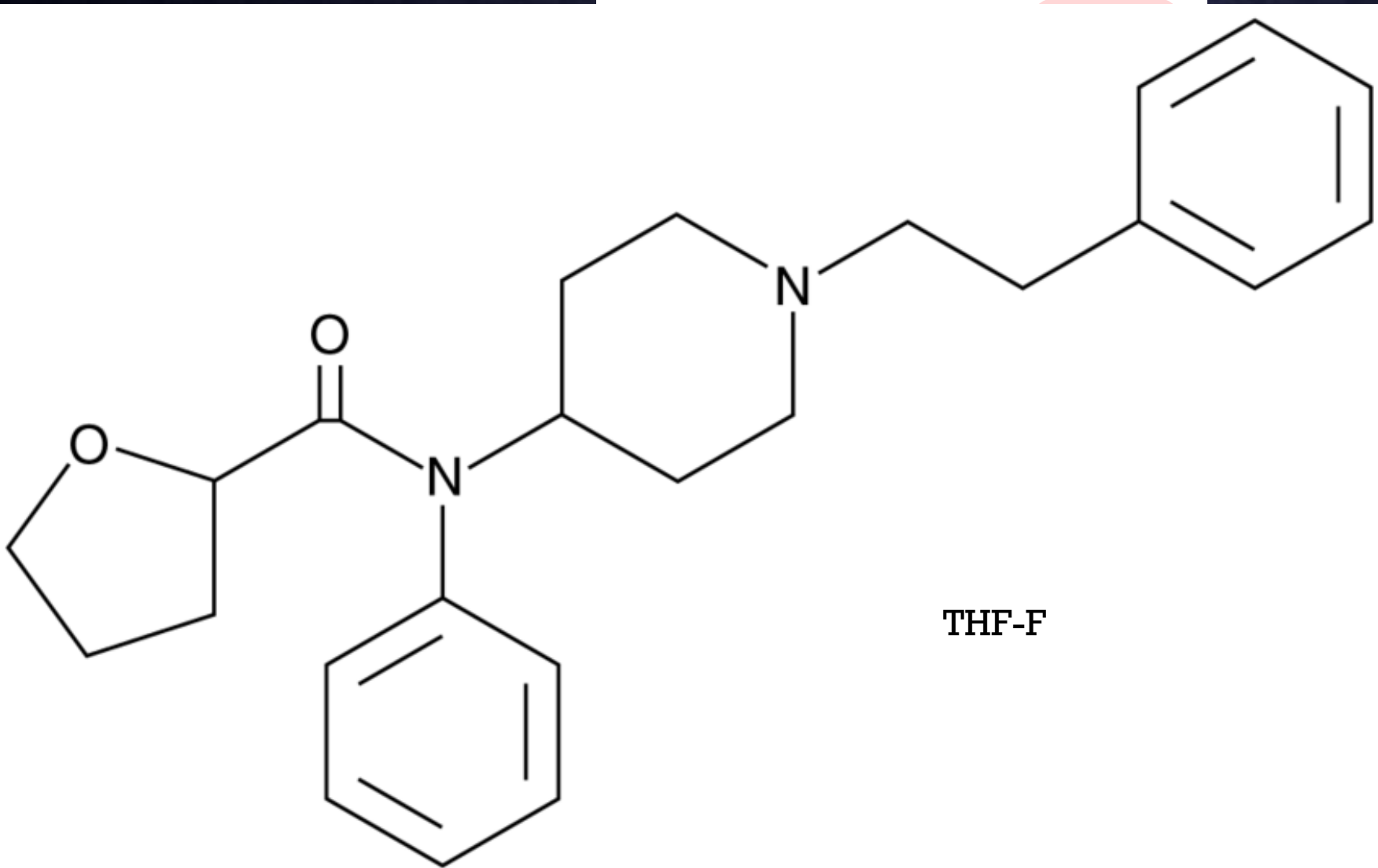
LIVING

China bans drug so deadly it's considered a terrorist threat

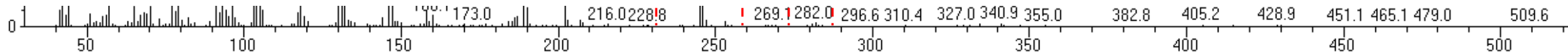
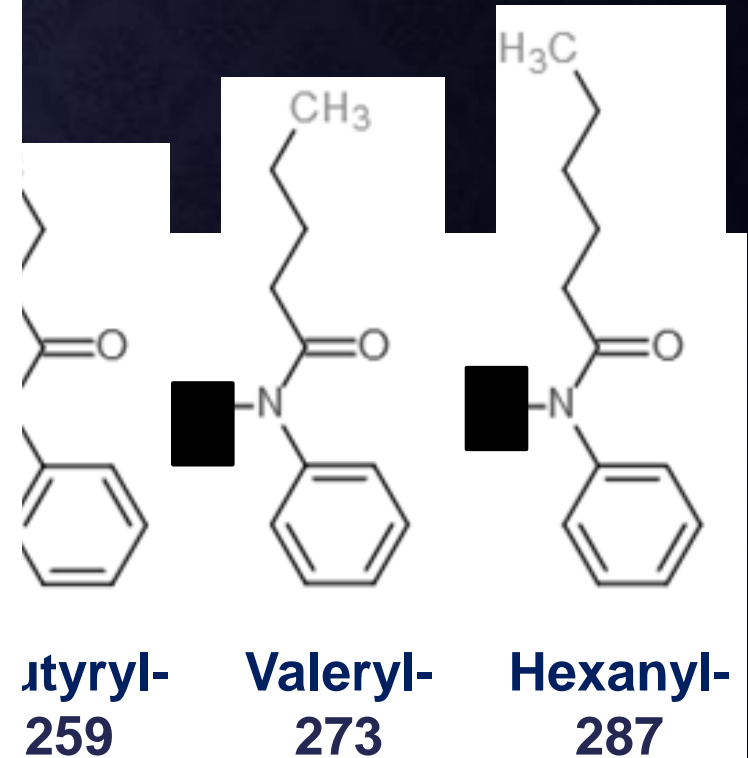
By Associated Press February 16, 2017 | 8:11pm



Identification of *some* new fentalogs



THF-F





CONCLUSIONS

- Current screening techniques are capable of detecting >400 drugs, poisons and chemicals.
- The NC-OCME toxicology lab is well positioned to identify new synthetic opioids as they appear in the decedent population.
- Challenges include procuring certified reference materials and development and validation of confirmation testing in a timely basis.
- Increases in the total number of overdose deaths and number of drugs detected per case overwhelms the lab's resources.
- Data requests can be accomplished on the OCME website.
 - <http://www.ocme.dhhs.nc.gov/annreport/index.shtml>

Donnie Varnell, Judy Billings, Melissa Larson

Spotlight: Drug Take Back and Law Enforcement Assisted Diversion



PDAAC LAW ENFORCEMENT SPOTLIGHT

Investigator Donnie Varnell
Dare County Sheriff's Office
336-338-1507
Donnie.varnell@darenc.com



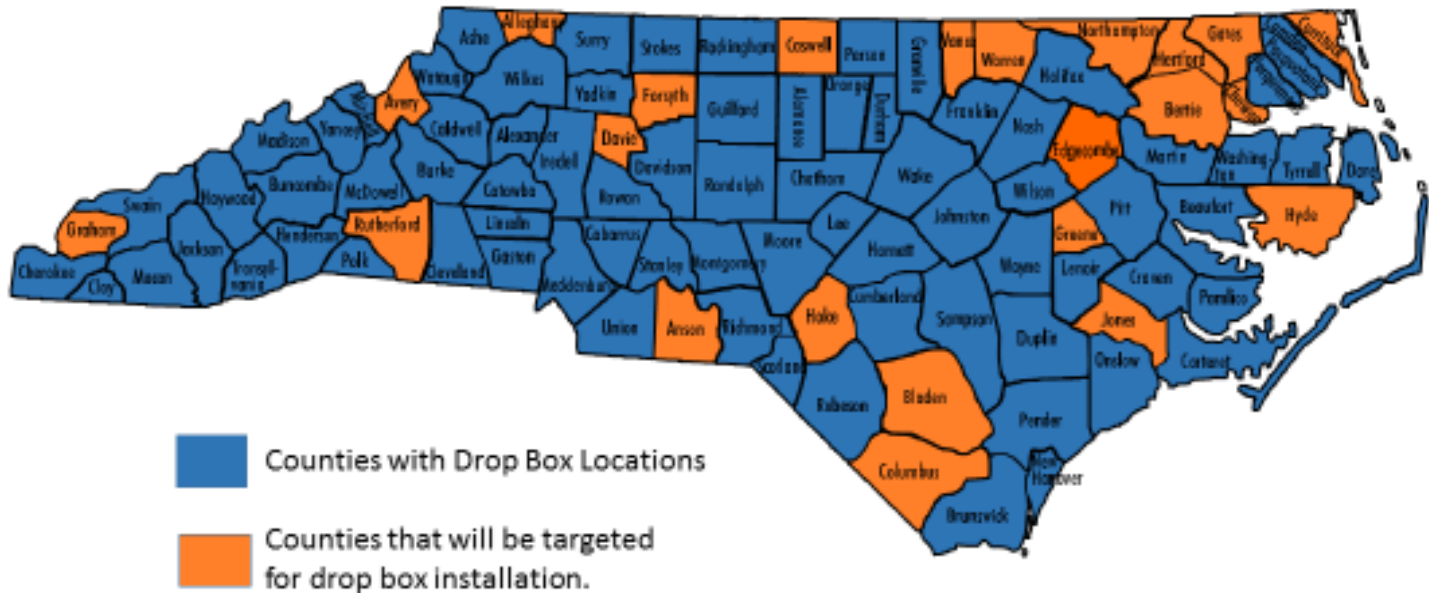
- ▶ Enforcement Trends
 - ▶ SEP & Naloxone
 - ▶ Strategies

PDAAC (MARCH 17TH)
LE SPOTLIGHT





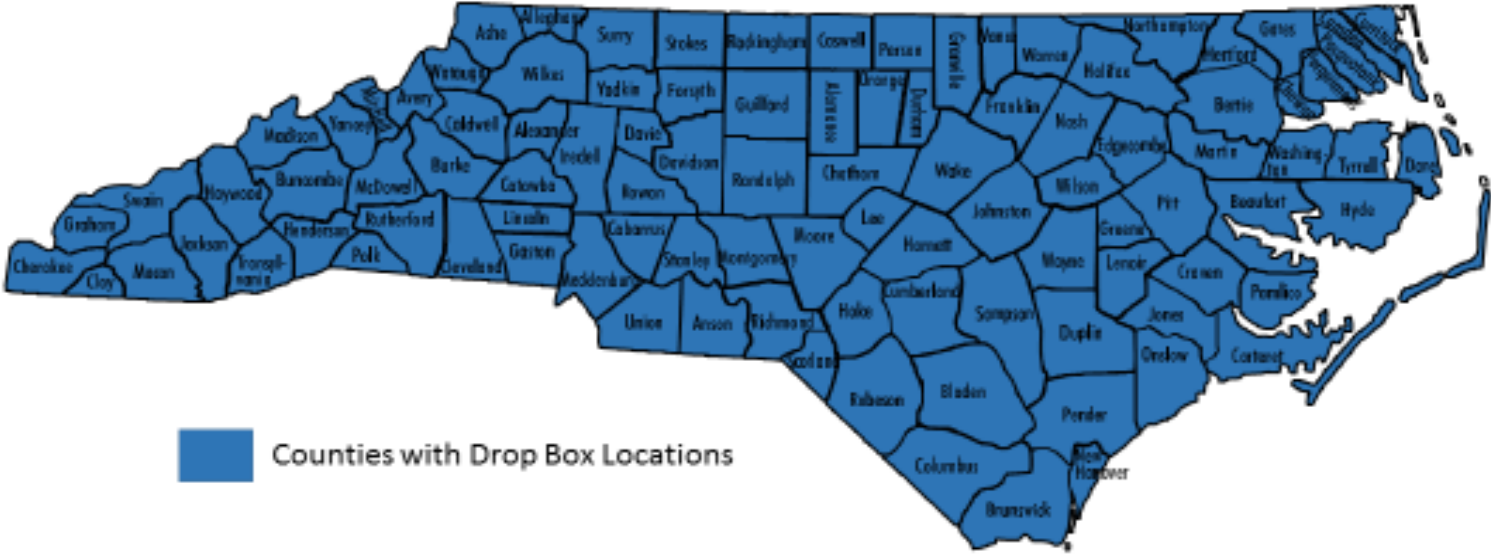
Counties with Drop Boxes October 2016



SBI Purchase of Drop Boxes

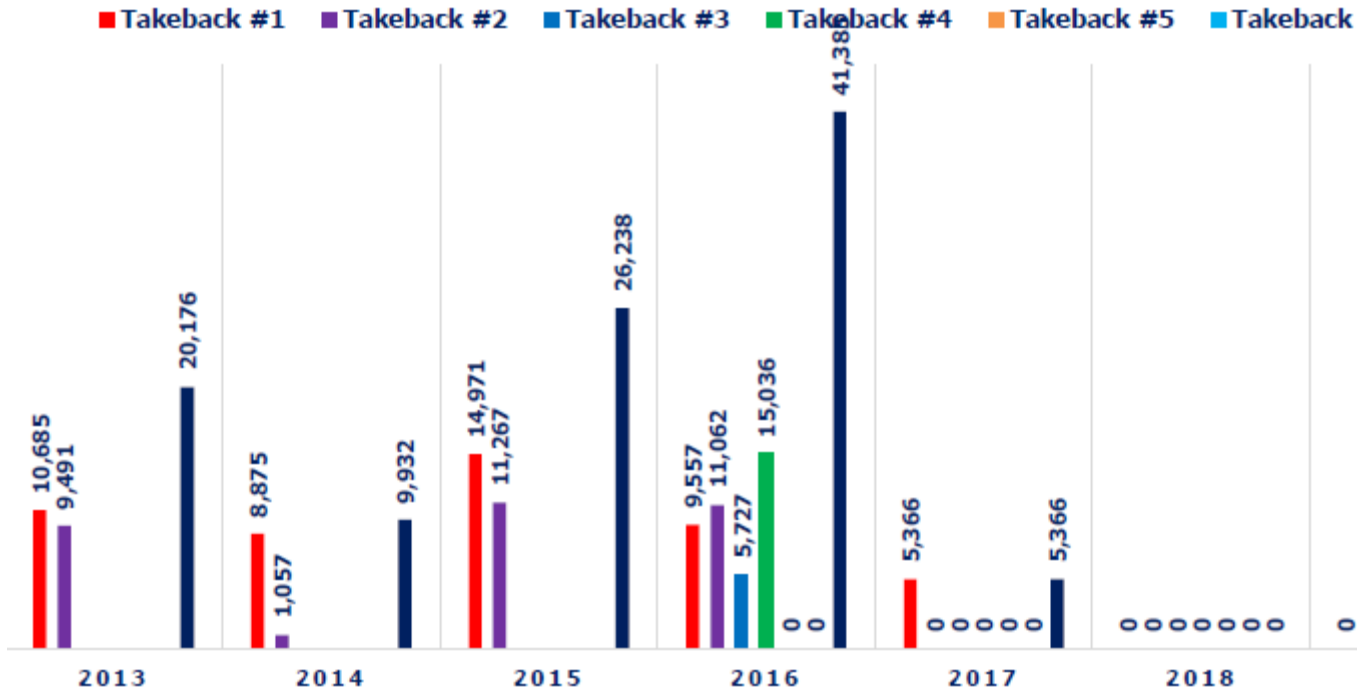


2017 Counties with Drop Boxes



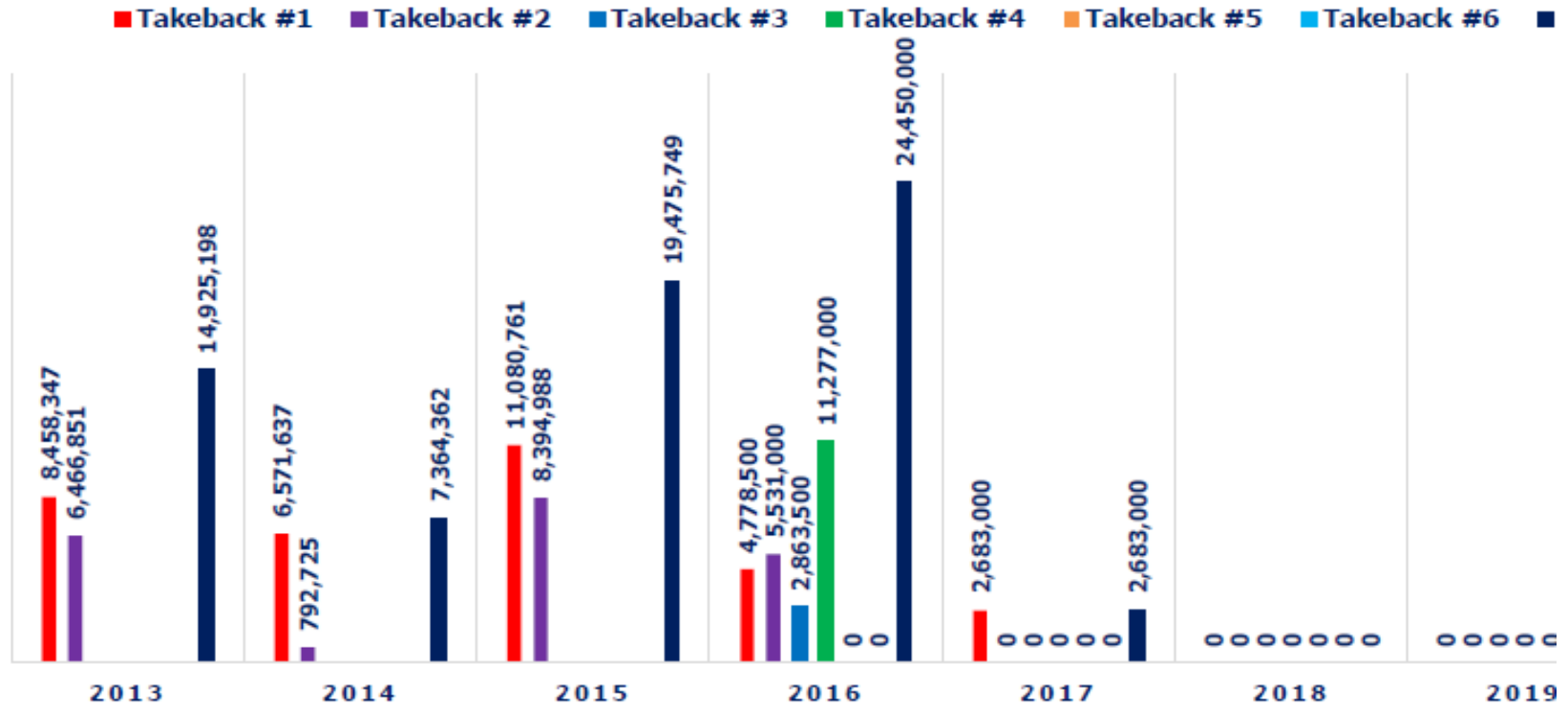
Collection From LEAs By Year

OMD BY POUNDS 2013 - 2020



Collection from LEAs-Dosage Units

OMD BY DOSAGE UNIT 2013 - 2020



CHALLENGES

- Obtaining RE-OCCURRING Funding from Legislature
- Education
- Manpower

John Stancil, NC Division of Medical Assistance (Moderator)
Dr. Anuradha Rao-Patel, NC Blue Cross Blue Shield

Learn, Explore, and Clarify: *Health insurers and opioids*



LEARN, EXPLORE, AND CLARIFY: HEALTH INSURERS AND OPIOIDS

Anuradha Rao-Patel, MD, CPC

PROPRIETARY & CONFIDENTIAL

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BlueCross BlueShield
of North Carolina

1. INTRODUCTIONS AND BACKGROUND
2. BCBSNC CURRENT PROCESSES
3. FUTURE AND ONGOING
CONSIDERATIONS
4. OPEN FAUCET, MIRROR, AND
SANDBOX ANALOGIES
5. DISCUSSION AND QUESTIONS

1. PHARMACY
2. CARE MANAGEMENT
3. PROVIDER OUTREACH
4. PREVENTION OF FRAUD AND
DIVERSION
5. OTHER

1. COLLABORATIVE RELATIONSHIPS
2. ADHERENCE
3. REDUCTION OF WASTE AND FRAUD
4. CDC GUIDELINES
5. EDUCATION

OPEN FAUCETS



SANDBOXES AND MIRRORS



THANK YOU FOR YOUR TIME!

You'll just
keep crashing
if you never
take your
eyes off the
rearview mirror.
-Leo Christopher

PDAAC Workgroup Time

**RETURN at
12:05PM**



Workgroup Name	DHHS Facilitators	Meeting Room
Prevention and Public Awareness, <i>Group A: Community</i>	Nidhi Sachdeva Sarah Potter	Pine Room (Building 1 – 5505, 1 st Floor) Call Option: 919-431-2020
Prevention and Public Awareness, <i>Group B: Law enforcement</i>	Melinda Pankratz Donnie Varnell	Reaves Room (Building 1 – 5505, 1 st Floor) Call Option: 1-641-715-3680 Participant code: 131286#
Intervention and Treatment	Smith Worth Dede Severino	Cardinal Room B (yonder)
Professional Training and Coordination	Anna Stein Sara McEwen Alex Asbun	Cardinal Room A (Here)
Core Data and Surveillance	Scott Proescholdbell Anna Perry	Sparrow Room (same floor, down hall)





BREAK and Transition!



Announcements and News

- **Scott Proescholdbell, Epidemiologist, Injury and Violence Prevention Branch, NC Division of Public Health**
- **PDAAC Website: <https://sites.google.com/view/ncpdaac>**



Wrap Up and Thank you!

Nidhi Sachdeva, Injury Prevention Consultant, Injury and Violence Prevention Branch, NC Division of Public Health

- **2017 Opioid Misuse and Overdose Prevention Summit**
 - www.OpioidPreventionSummit.org
 - June 27-28, 2017, at McKimmon's Center in Raleigh
 - **REGISTER!**
 - Call for vendors and sponsors

- **THANK YOU!!**

(Please return your name badges, take food, and travel safely!)

