



**Department  
of Health**

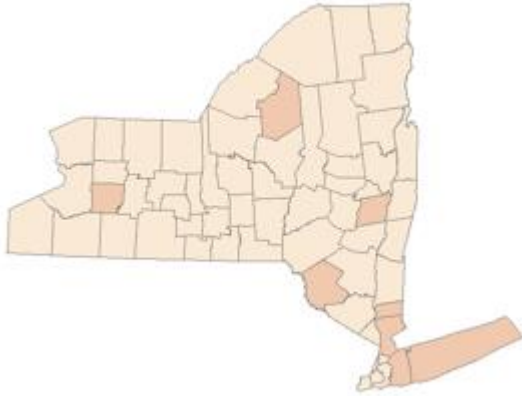
# **Addressing the Opioid Epidemic**

## **New York State Department of Health**

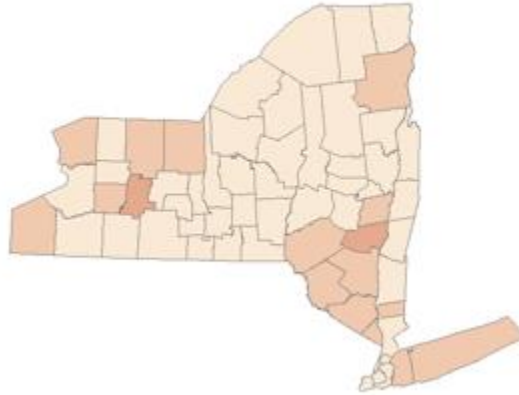
**Kitty Gelberg, Ph.D., MPH**

**Director, Bureau of Occupational Health & Injury Prevention**

1999

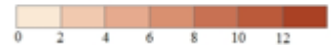


2002

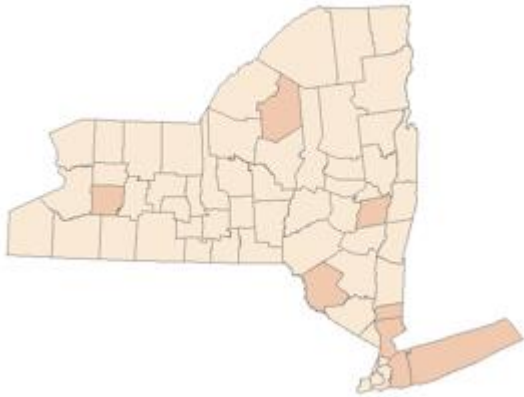


## County of Death due to Opioids Rate per 100,000 Residents

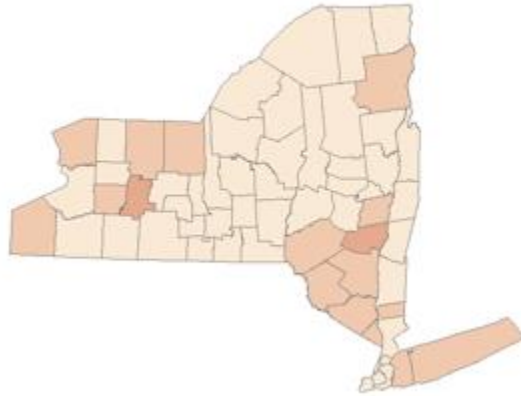
Opioid Deaths per 100,000 Residents



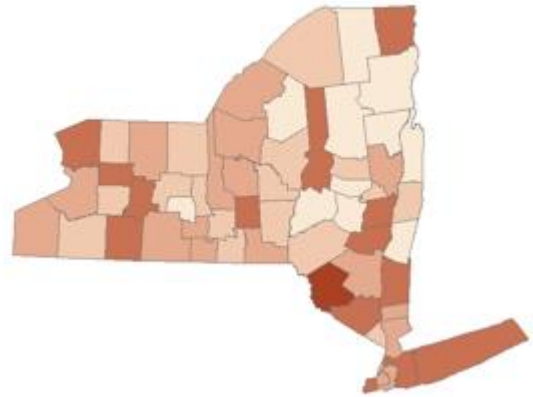
1999



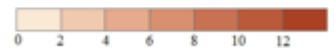
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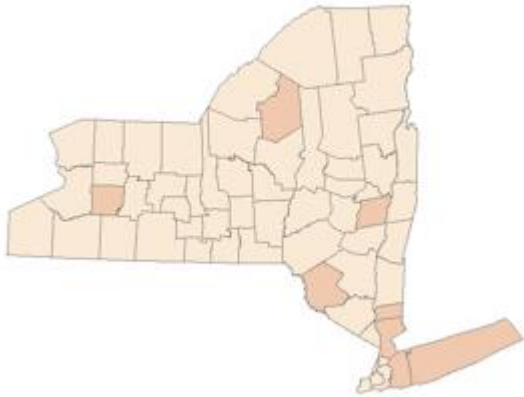
2008



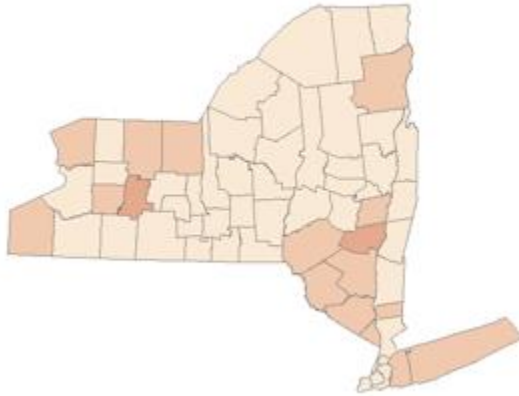
Opioid Deaths per 100,000 Residents



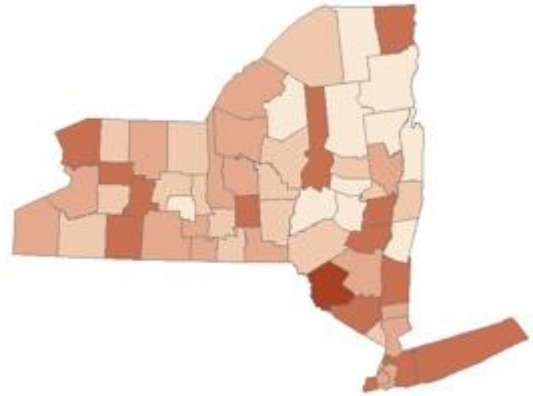
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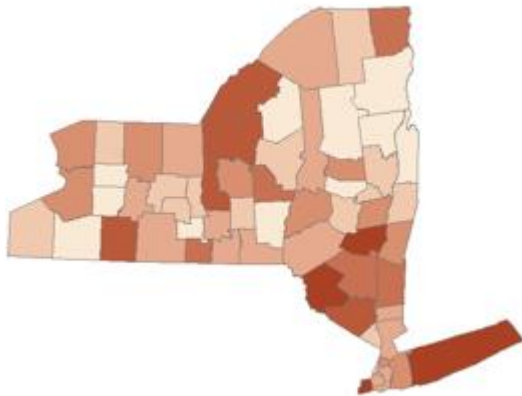
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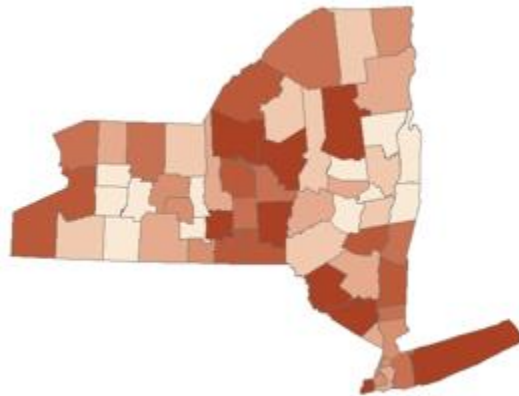
2008



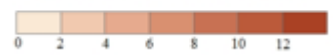
2011



2014

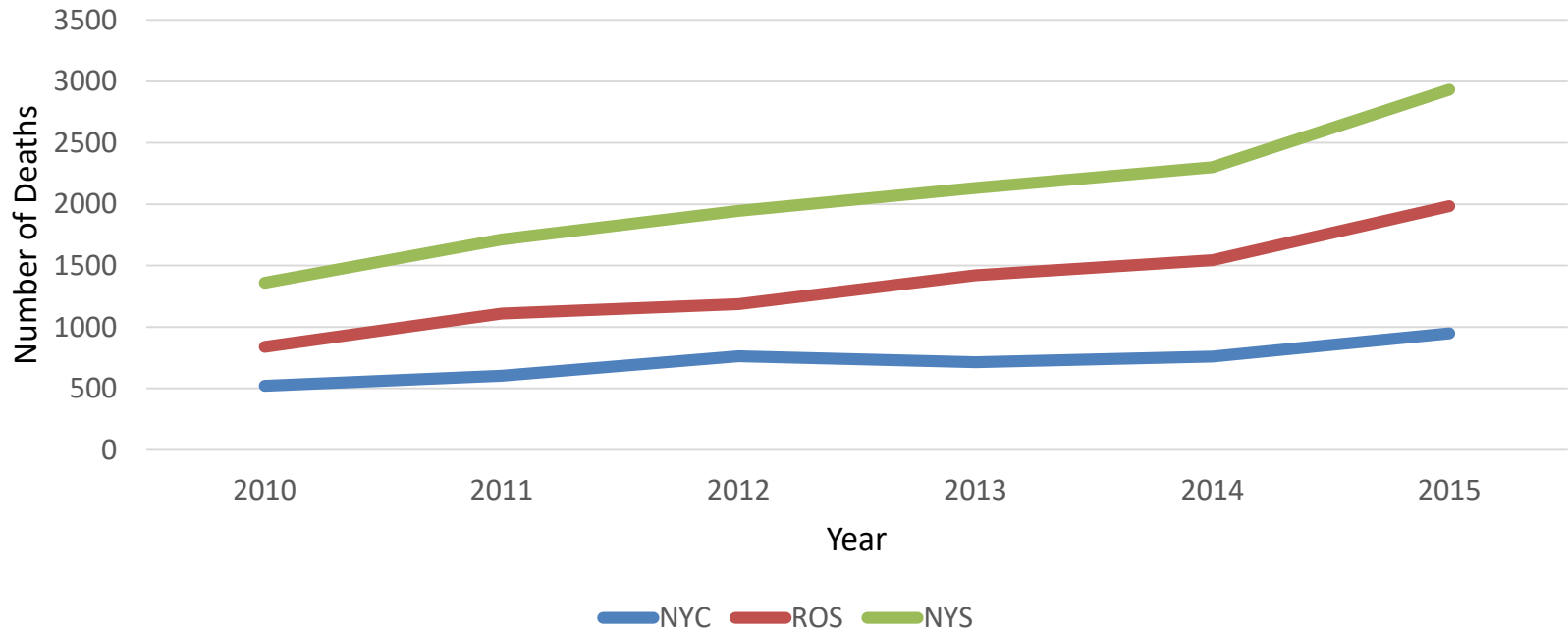


Opioid Deaths per 100,000 Residents



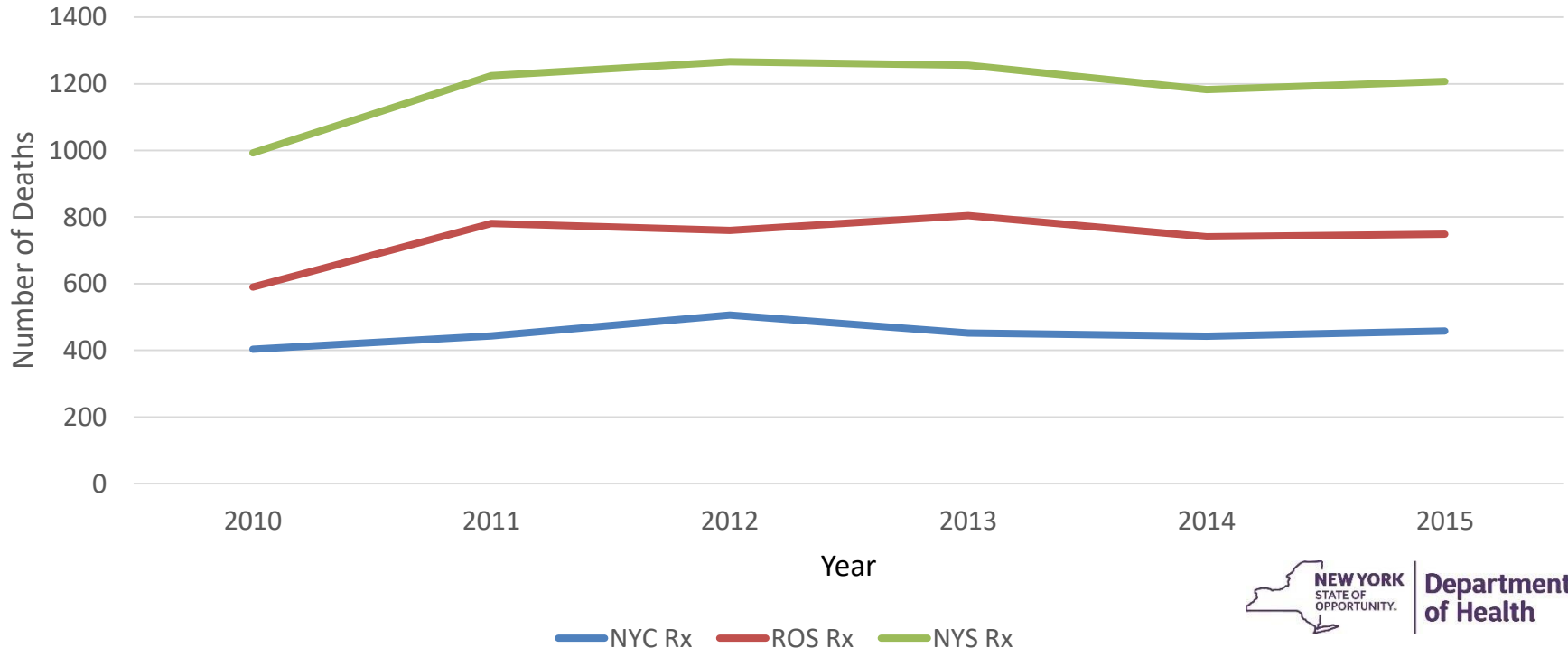
Department of Health

# NYS – Opioid Epidemic



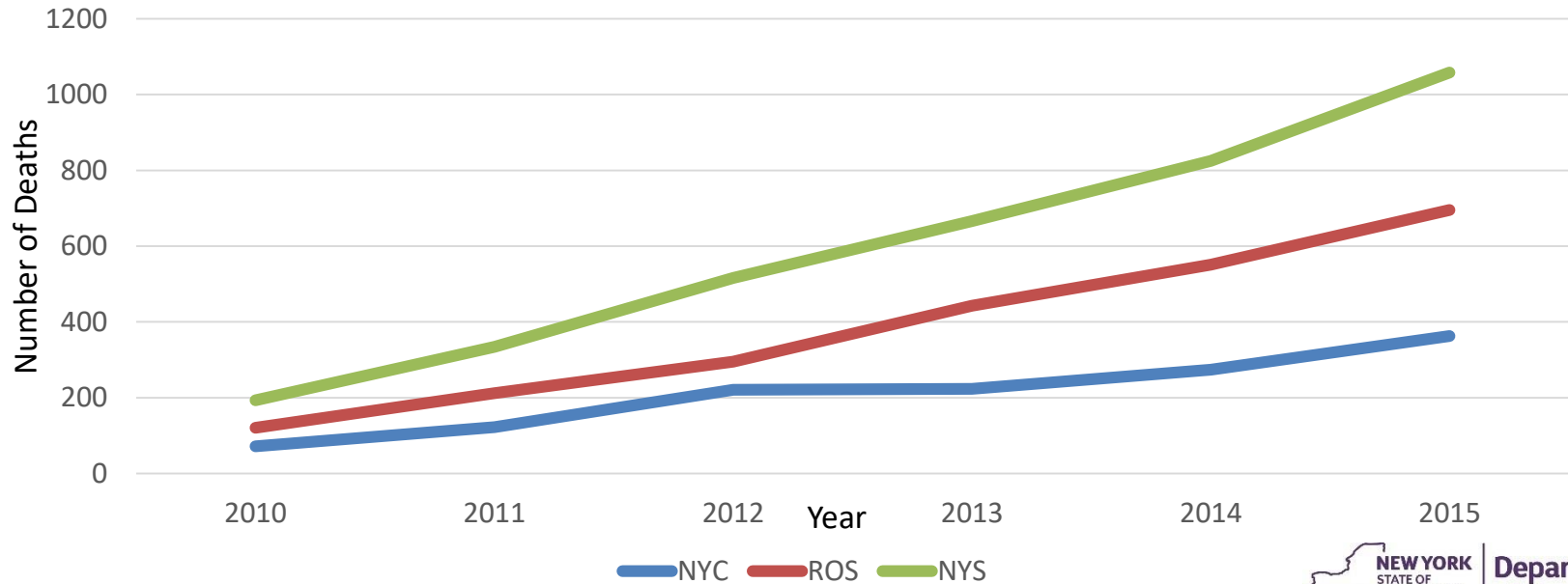
# Epidemic #1: Prescription Opioids

Number of Prescription Drug Deaths, NYS



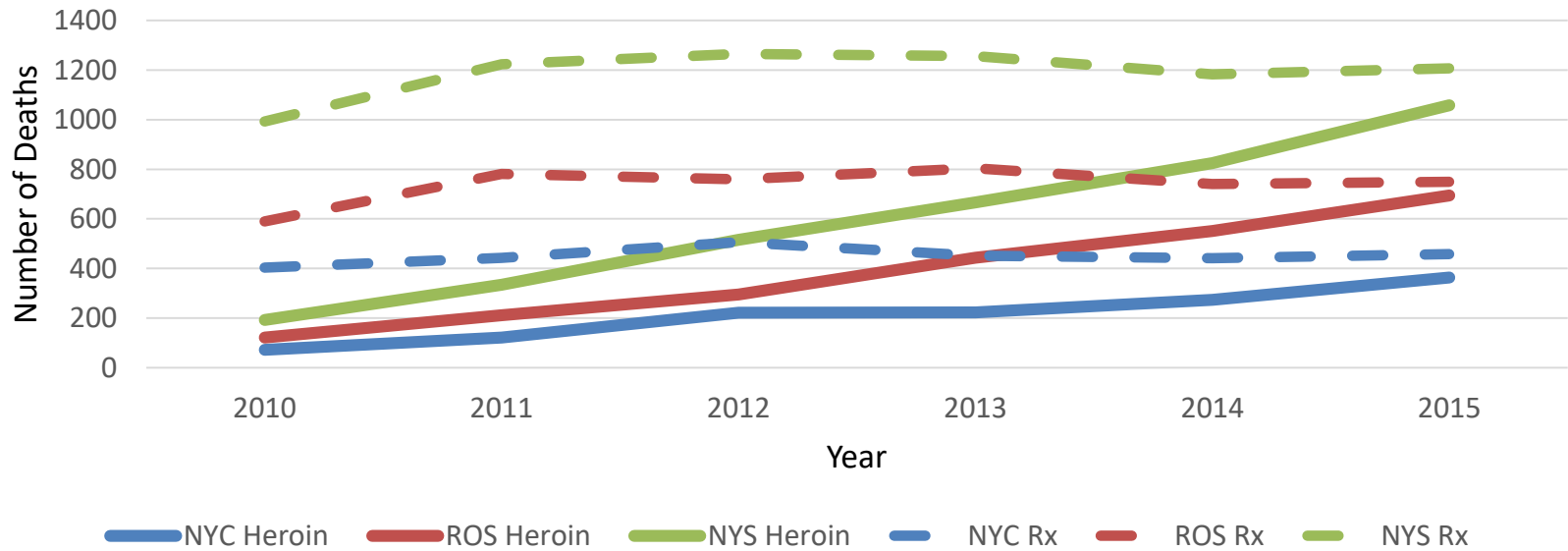
# Epidemic #2: Heroin

## Number of Heroin Deaths, NYS



# Prescription Drugs and Heroin Deaths

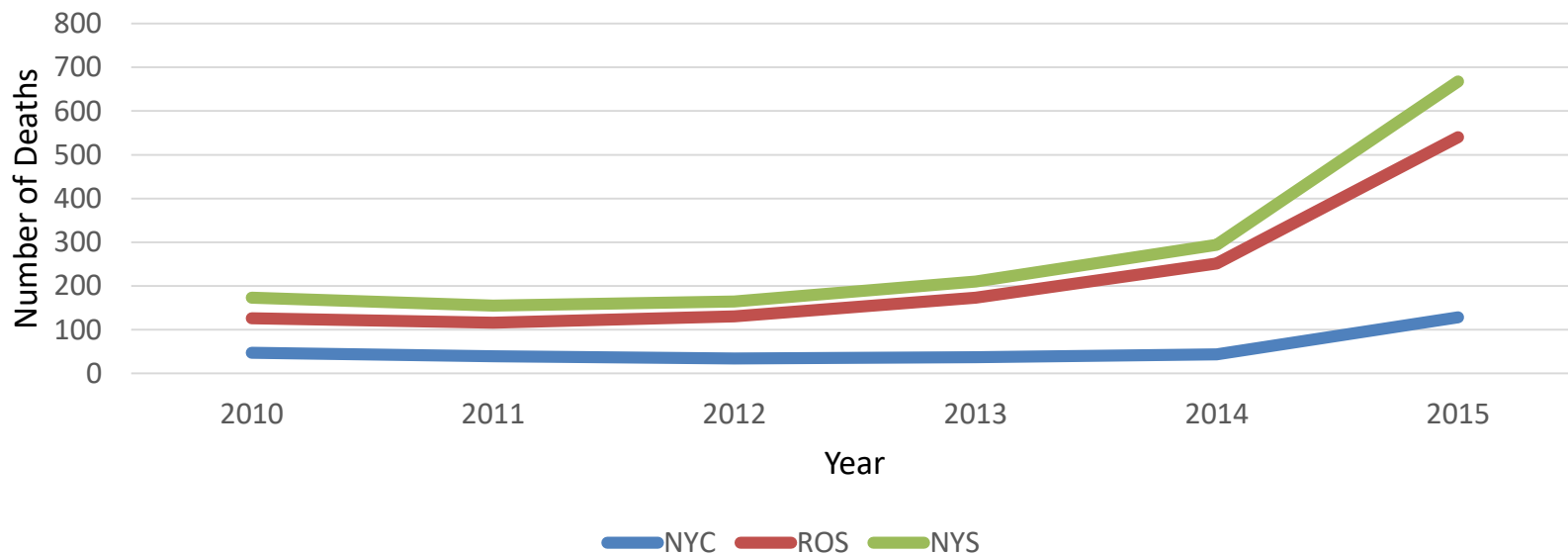
Number of Prescription and Heroin Deaths, NYS





# Epidemic #3: Synthetic Drugs (Fentanyl)

Number of Synthetic Drug Deaths, NYS





# USING DRUGS?

## FENTANYL IS IN NYC

Fentanyl is a dangerous opioid that's showing up in heroin, cocaine and street pills marked as Xanax®



### YOU CAN'T SEE, TASTE OR SMELL FENTANYL



**USE WITH SOMEONE ELSE:** If you overdose, you want someone around to help.



**TAKE TURNS:** Don't use at the same time, and be prepared with naloxone. Have a phone on hand in case you need to call 911.



**TEST YOUR DRUGS:** Use a small amount first to see how strong your drugs are. Even a tiny amount of fentanyl can cause an overdose.



**CARRY NALOXONE:** More than one dose of naloxone may be needed to reverse a fentanyl overdose.



**AVOID MIXING DRUGS:** Mixing drugs—including alcohol—increases your risk of overdose.



*“Substance Use Disorders actually change the circuitry in your brain. They affect your ability to make decisions, and change your reward system and your stress response. That tells us that addiction is a **chronic disease** of the brain, and we need to treat it with the same urgency and compassion that we do with any other illness.”*

**DOH Infrastructure**

**Build Local Health  
Department  
Capacity**

**Prescriber Education**

**Opioid-Related Data**

**Enhancing and  
Maximizing the  
PMP**

**Increase Access to  
Buprenorphine**

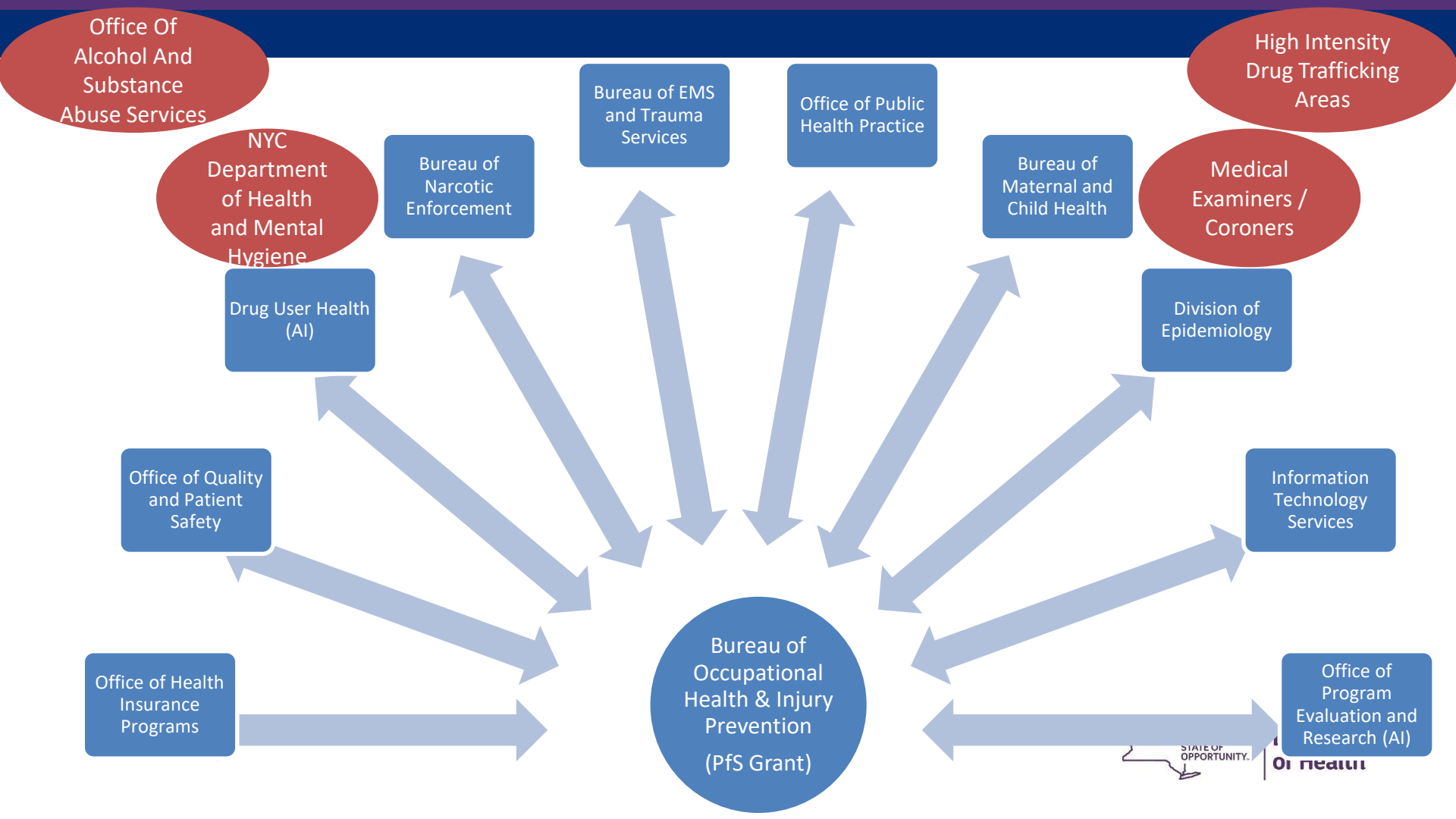
**Increase Access to  
Naloxone and  
Naloxone Policy  
Evaluation**

**Syndromic  
Surveillance**



# DOH Infrastructure

- Identify, coordinate and monitor opioid overdose activities occurring within DOH



Office Of Alcohol And Substance Abuse Services

High Intensity Drug Trafficking Areas

NYC Department of Health and Mental Hygiene

Bureau of Narcotic Enforcement

Bureau of EMS and Trauma Services

Office of Public Health Practice

Bureau of Maternal and Child Health

Medical Examiners / Coroners

Drug User Health (AI)

Division of Epidemiology

Office of Quality and Patient Safety

Information Technology Services

Office of Health Insurance Programs

Bureau of Occupational Health & Injury Prevention (PfS Grant)

Office of Program Evaluation and Research (AI)

# Build Local Health Department Capacity

- Funding 3 counties based on opioid burden, size of county and geographic location
- Erie, Onondaga, Sullivan
- Identifying strategies to implement through broad based County coalitions



# PRIMARY PREVENTION

# Prescriber Education

- Engage providers in improving opioid prescribing practices

# Grant and NYS Legislative Mandate



WHO: ALL NYS Prescribers

WHAT: Education on CDC Guidelines

WHEN: March 2016 – August 2017

WHO: Prescribers with DEA number and medical residents prescribing under a facility DEA number

WHAT: 8 topics - at least 3 contact hours of CME

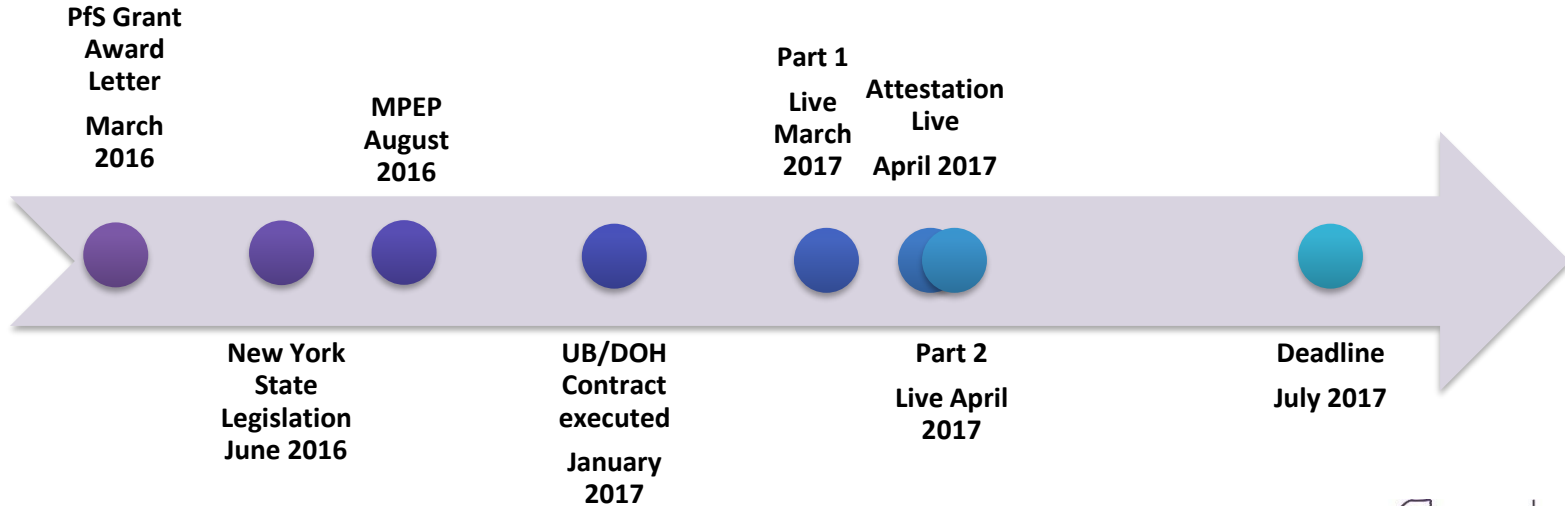
WHEN: Must be completed by July 1, 2017, and then every 3 years

# Partnership

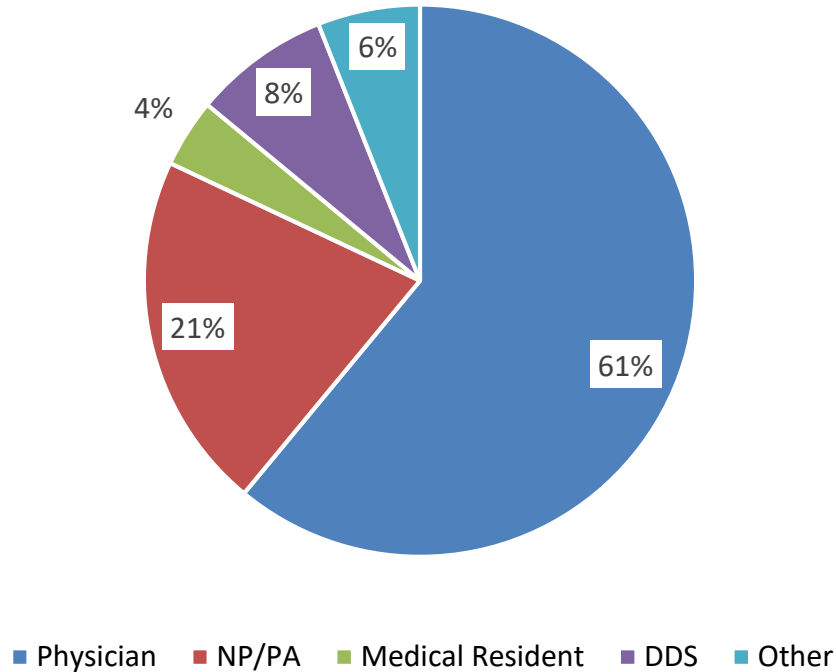
## NYSDOH

Bureau of Narcotic Enforcement  
Prevention for States Program  
Office of Health Insurance Programs  
**University at Buffalo (SUNY)**

Medicaid Prescriber Education Program  
Opioid Prescriber Training Program



### Percent Registrations by Profession Type



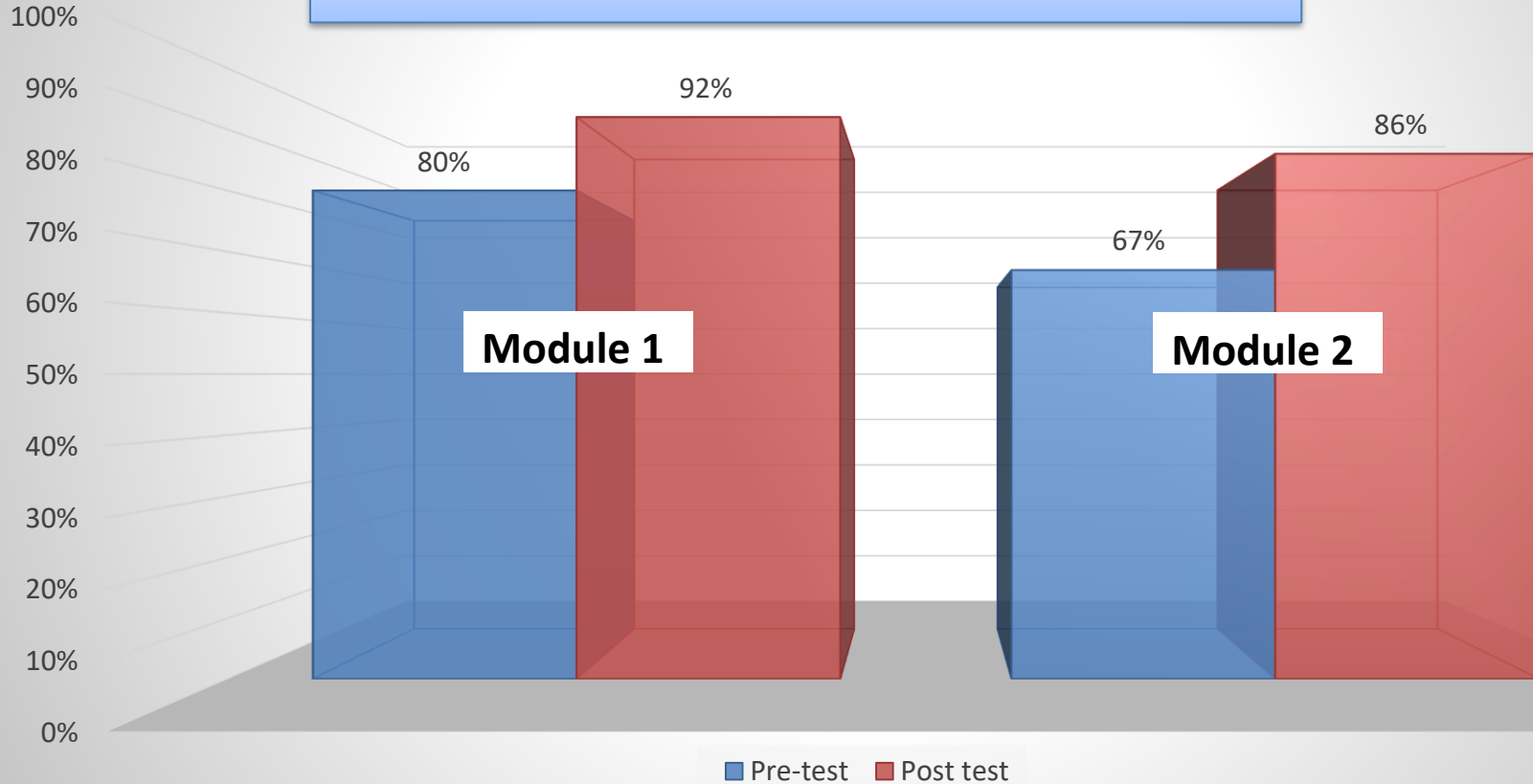
Type	Number*
Physician	9,269
NP and PA	3,397
Medical Resident	776
DDS	1,160
Other	1,303
<b>TOTAL</b>	<b>15,547</b>

\*Registered for NYSDOH sponsored program

# Test Score Improvement

**Module 1: Acute Pain, Chronic Pain, Federal/State Regulations**

**Module 2: Addiction, Palliative Care, End-of Life Care**



*“Very well done, thought provoking course. THIS is the GOLD standard for pain control education as it is succinct and immediately applicable to clinical practice.”*

# Opioid-Related Data

- Develop/Distribute County Level Reports (NYS Legislation)
- Analyze multiple new datasets
- Develop Website / Data Dashboard
- Reports



# Opioid-Related Data

- <http://www.health.ny.gov/statistics/opioid/>

## Opioid-related Data in New York State

In response to the growing opioid public health crisis and recommendations to improve the timeliness of reporting opioid-related data, the New York State Department of Health (NYSDOH) Opioid Prevention Program provides opioid-related data to support statewide prevention efforts. These efforts include improving timely opioid overdose reporting to key stakeholders. This information is a valuable tool for planning and can help identify where communities are struggling, help tailor interventions, and show improvements.

This website is designed to provide comprehensive and useful data and information regarding opioid use and misuse. New resources will be added often. Please check back frequently.

## New York State Opioid Summary Reports

- [Opioid Poisoning, Overdose and Prevention: 2015 Report to the Governor and NYS Legislature](#) (PDF, 2.5MB, 57pg.)

## New York State County Opioid Quarterly Reports

In accordance with the recommendations of the New York State Heroin and Opioid Task Force and 2016 legislation, the NYSDOH is **providing opioid overdose information (deaths, emergency department (ED) visits, and hospitalizations) by county in quarterly reports**. The reported cases are based on the **county of residence**. Opioids include both prescription opioid pain relievers such as hydrocodone, oxycodone, and morphine, as well as heroin and opium. These reports do not fully capture the burden of opioid abuse and dependence in New York State. Furthermore, the reports are not considered complete by the NYSDOH and should be used and interpreted with caution, because subsequent reports may contain frequencies for a quarter which differ from the previous report as they reflect additional confirmations and updates.

- [County Opioid Quarterly Report For New York State Counties](#) - Published April 2017 (PDF, 2.6MB, 137pg.)

# Erie County: Opioid overdoses and rates per 100,000 population (data as of March, 2017)

Indicator	Location	Jul-Sep, 2015		Oct-Dec, 2015		2015 Total		Jan-Mar, 2016		Apr-Jun, 2016		Jul-Sep, 2016	
		Number	Crude Rate	Number	Crude Rate	Number	Crude Rate	Number	Crude Rate	Number	Crude Rate	Number	Crude Rate
<b>Deaths<sup>1</sup></b>													
All opioid overdoses	Erie	54	5.9	58	6.3	238	25.8	95	10.3	27	2.9	4	0.4
	NYS excl. NYC	378	3.4	371	3.3	1,520	13.5	425	3.8	241	2.1	61	0.5
Heroin overdoses	Erie	18	2.0	21	2.3	67	7.3	27	2.9	6	0.7	1	0.1
	NYS excl. NYC	188	1.7	182	1.6	698	6.2	178	1.6	108	1.0	29	0.3
Overdoses involving opioid pain relievers <sup>2</sup>	Erie	46	5.0	49	5.3	212	23.0	86	9.3	25	2.7	2	0.2
	NYS excl. NYC	244	2.2	253	2.2	999	8.9	309	2.7	168	1.5	34	0.3
<b>Outpatient emergency department visits<sup>3</sup></b>													
All opioid overdoses	Erie	222	24.1	201	21.8	921	99.8	457	49.5	275	29.8	143	15.5
	NYS excl. NYC	1,269	11.3	1,142	10.2	4,612	41.0	1,730	15.4	1,760	15.7	1,520	13.5
Heroin overdoses	Erie	181	19.6	148	16.0	723	78.4	374	40.5	225	24.4	97	10.5
	NYS excl. NYC	895	8.0	787	7.0	3,240	28.8	1,280	11.4	1,272	11.3	1,060	9.4
Opioid overdoses excluding heroin <sup>2</sup>	Erie	41	4.4	53	5.7	198	21.5	83	9.0	50	5.4	46	5.0
	NYS excl. NYC	374	3.3	355	3.2	1,372	12.2	450	4.0	488	4.3	460	4.1
<b>Hospitalizations<sup>3</sup></b>													
All opioid overdoses	Erie	58	6.3	44	4.8	203	22.0	70	7.6	40	4.3	33	3.6
	NYS excl. NYC	512	4.6	435	3.9	1,873	16.7	469	4.2	478	4.3	446	4.0
Heroin overdoses	Erie	18	2.0	15	1.6	57	6.2	35	3.8	14	1.5	18	2.0
	NYS excl. NYC	157	1.4	161	1.4	619	5.5	203	1.8	191	1.7	194	1.7
Opioid overdoses excluding heroin <sup>2</sup>	Erie	40	4.3	29	3.1	146	15.8	35	3.8	26	2.8	15	1.6
	NYS excl. NYC	355	3.2	274	2.4	1,254	11.2	266	2.4	287	2.6	252	2.2

<sup>1</sup> Indicators are not mutually exclusive. Decedents and patients may have multiple substances in their system. Thus, overdoses involving heroin and overdoses involving prescription opioid pain relievers will not add up to the overdoses involving all opioids.

<sup>2</sup> This indicator includes pharmaceutically and illicitly produced opioids such as fentanyl.

<sup>3</sup> Indicators related to hospitalizations and emergency department data used ICD-9-CM codes prior to Oct 1st, 2015. ICD-10-CM codes are used from Oct 1st, 2015 and thereafter. Changes should be interpreted with caution due to the change in codes used for the definition.

s: Data for indicators related to hospitalizations and emergency departments are suppressed for confidentiality purposes if there are less than 6 discharges.

### Erie County: Unique clients admitted to OASAS-certified chemical dependence treatment programs (data as of January, 2017)

Indicator	Jan-Mar, 2015	Apr-Jun, 2015	Jul-Sep, 2015	Oct-Dec, 2015	2015	Jan-Mar, 2016	Apr-Jun, 2016	Jul-Sep, 2016
Unique clients admitted for heroin	898	862	924	883	2,630	857	948	932
Unique clients admitted for any opioid (incl. heroin)	1,420	1,309	1,423	1,322	4,139	1,266	1,391	1,381

OASAS: Office of Alcoholism and Substance Abuse Services

<sup>1</sup> The number of unique clients admitted per year does not equal the sum of the unique clients admitted each quarter. This is because an individual client can be admitted to treatment in more than one quarter during the year.

<sup>2</sup> Clients may have heroin, other opioids, or any other substance simultaneously recorded as the primary, secondary and tertiary substance of abuse at admission.

s: Data for indicators are suppressed for confidentiality purposes if there are less than 6 clients.

### Erie County: Naloxone administration reports (data as of February, 2017)

Indicator	Location	2015					2016				
		Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Total	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Total
<b>Emergency Medical Services (EMS) naloxone administration reports <sup>1</sup></b>											
Naloxone administration report by EMS	Erie	37	66	45	40	188	80	36	32	18	166
	NYS excl. NYC	1,045	1,551	1,507	1,464	5,567	1,658	1,929	1,743	1,457	6,787
<b>Law enforcement naloxone administration reports <sup>2</sup></b>											
Naloxone administration report by law enforcement	Erie	25	60	69	67	221	138	73	45	47	303
	NYS excl. NYC	142	243	260	317	962	400	398	381	339	1,518
<b>Registered Community Opioid Overdose Prevention (COOP) program naloxone administration reports <sup>2</sup></b>											
Naloxone administration report by registered COOP program	Erie	6	54	85	65	210	116	54	25	36	231
	NYS excl. NYC	52	130	158	148	488	250	248	218	136	852

<sup>1</sup> Numbers displayed in the table represent only naloxone administration events reported electronically, therefore, actual numbers of events may be higher. The numbers for NYS excl. NYC do not include Suffolk county.

<sup>2</sup> Numbers displayed in the table represent only naloxone administration reports submitted by law enforcement and registered COOP programs to the NYSDOH AIDS Institute. The actual numbers of naloxone administration events may be higher.



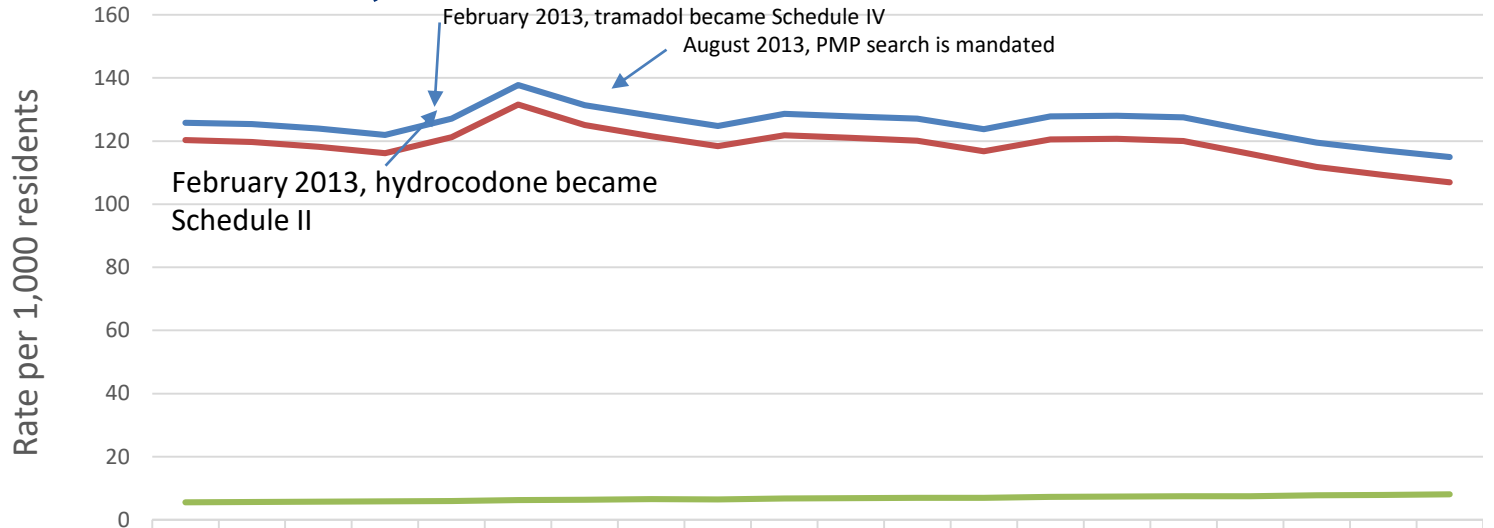
# Enhancing and Maximizing the Prescription Monitoring Program

- Mobile Responsive Website
  - Improve PMP infrastructure to support proactive reporting through increased access for users of mobile technology
- Electronic Health Record Integration (pilot)
  - Increase ease for providers to access PMP and integrate into daily workflows

# Other Factors Influencing Opioid Trends

Event	Implementation Date
Risk Evaluation and Mitigation Strategy (REMS) for long-acting opioids received FDA approval	July 9, 2012
I-STOP legislation signed by Governor Cuomo (Bill S7637)	August 27, 2012
Updates to the Controlled Substance Schedule	February 23, 2013
I-STOP Registry Review Mandated	August 27, 2013
Opioid Prescriber Education Program	September 1, 2013
Electronic Prescribing of all Controlled Substances	March 27, 2015
CDC Guideline for Prescribing Opioids for Chronic Pain – United States – 2016 released	March 15, 2016
Governor Cuomo signs legislation to combat the heroin and opioid crisis	June 22, 2016
7-day opioid supply limit for opioid naïve patients	July 22, 2016

# Opioid prescription quarterly rates\* per 1,000 residents

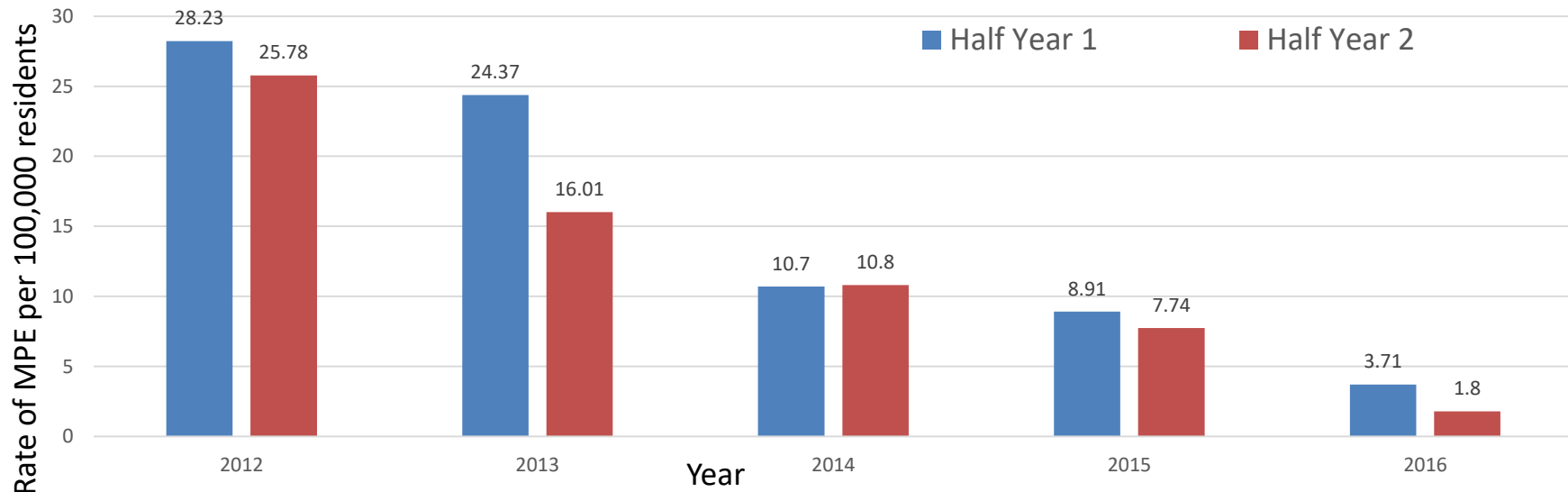


	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
All opioids	125.81	125.38	123.96	121.94	127.15	137.79	131.38	128.04	124.8	128.59	127.78	127.13	123.71	127.77	128.03	127.47	123.36	119.5	117.03	114.96
Opioids excluding treatment	120.33	119.74	118.23	116.11	121.21	131.59	125.06	121.51	118.35	121.86	120.99	120.13	116.78	120.54	120.72	120.04	116	111.75	109.21	106.94
Opioids for treatment	5.48	5.64	5.73	5.83	5.93	6.2	6.33	6.53	6.45	6.74	6.8	6.99	6.93	7.23	7.31	7.43	7.74	7.75	7.82	8.02

- Opioids for treatment refers to Buprenorphine for substance use disorder (SUD) treatment
- 2012-2015 state population data was obtained from the US Census Bureau
- 2016 state population was obtained from The Nielsen Company (formerly Claritas)



# Six-month multiple-provider episode rate\* per 100,000 residents



- \*Multiple-provider episode is defined as a resident filling a opioid prescription from five or more prescribers at five or more pharmacies within 6 months;
- Buprenorphine for substance use disorder (SUD) treatment was excluded in the rate calculation
- 2012-2015 state population data was obtained from the US census Bureau
- 2016 state population was obtained from The Nielsen Company (formerly Claritas)



# SECONDARY PREVENTION



# Increase Access to Buprenorphine

- Identification of buprenorphine providers in NYS
- Increase providers trained to prescribe buprenorphine trainings
- Mentoring support for new prescribers
- Academic detailing to providers
- Co-location of services in HUBS

# A Multi-Systemic Approach to Address Opioid Overdose

Community Programs

Law Enforcement

Firefighters

Basic Life Support EMS

School Settings

Corrections & Parole

Pharmacy



# Benefits of Buprenorphine (Medication Assisted Treatment)

## Reduce or stop opioid use

- Preventing drug withdrawal
- Blocking the effects of heroin if taken
- Preventing the powerful craving that continues for some people long after detoxification

## Improve patients' general health and well-being

- Reduce mortality (Overdose, etc.)
- Reducing transmission of blood-borne viruses
- Improving adherence to other medications/therapies (HIV, HCV, Diabetes, HT,)
- Providing stability to meet responsibilities (work, childcare, maintain housing, legal, etc.)

## Improve well-being & equity of communities

- Reduce drug-related crime & recidivism
- Increases access points for meaningful engagement with services
- Increases options for service providers
- Decreased use of EMS, ED, crisis services
- Increased quality of life, stability, productivity



*“My reason for getting on suboxone was because in the last 6 months I have had 6 overdoses. They are putting fentanyl in the heroin—every time I get a bag I’m dropping. When I got out of rehab (I was) still having the cravings and I did not want to go back to that lifestyle. I got on the suboxone, because I was on it before. And it really helped me out a lot. I can keep a job, I see my kids, everything falls into place.”*



# Buprenorphine Initiatives NYS

- CME Webinars: *Buprenorphine; Prescribing Opioids; Co-prescribing naloxone*
- Buprenorphine Working Group
- Material creation: best practices and fact sheets
- Academic Detailing / Targeted Provider Education
- Facilitating mentoring
- Buprenorphine waiver training

# Drug User Health Hubs

## *Established 2016*

- Outpatient ambulatory care programs for drug users
- Enhance local providers understanding and ability to provide services to substance
- Provide on-site medically assisted treatment – buprenorphine.
- Prevent overdoses; provide care post overdose.
- Law Enforcement Assisted Diversion (LEAD): Low level offenders are diverted to SEP for care services instead of being arrested.

# Drug User Health Hubs Core Elements



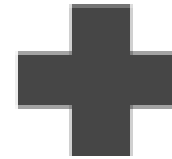
**Syringes**



**Buprenorphine**



**Naloxone**



**Hepatitis C Care**

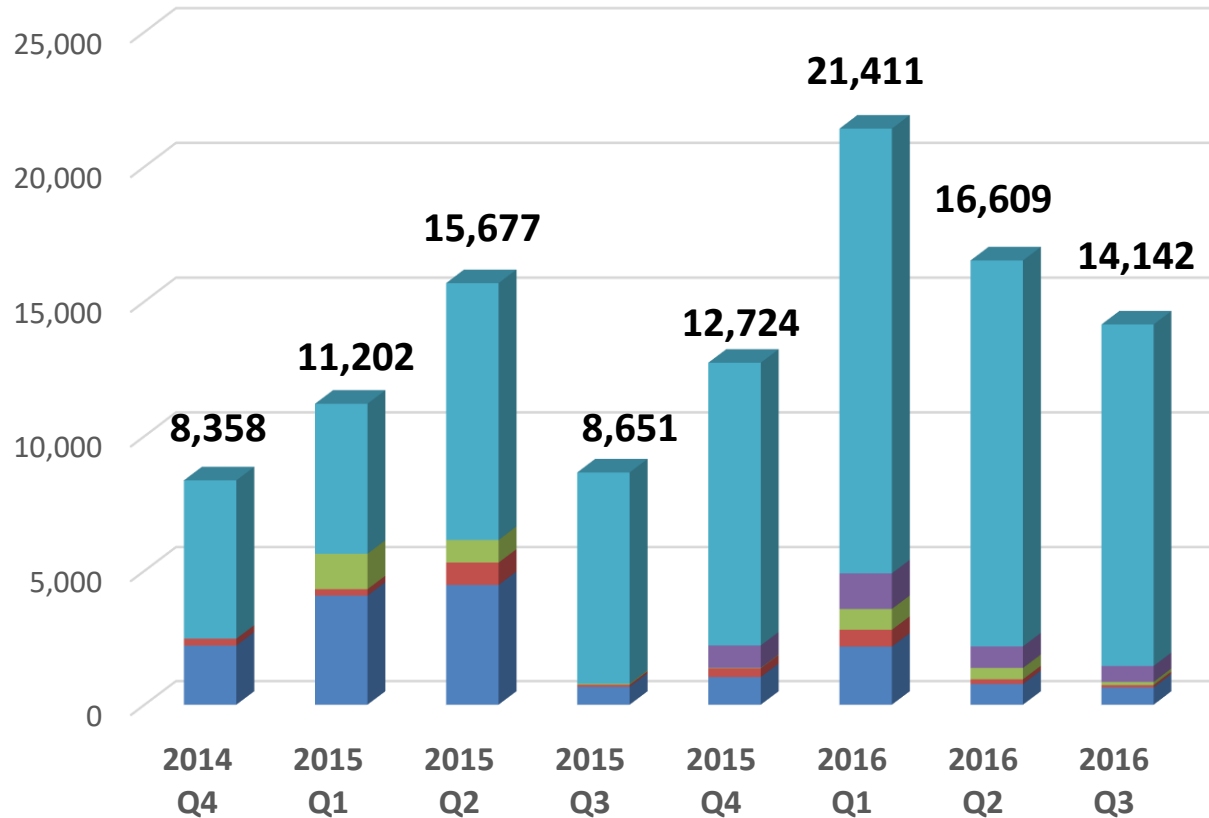
# TERTIARY PREVENTION



# Increase Access to Naloxone & Naloxone Policy Evaluation

- Law Enforcement
  - Qualitative study examining attitudes towards drug users, compassion fatigue, vicarious trauma, understanding the Good Samaritan Law
- Pharmacies
  - Availability, Cost

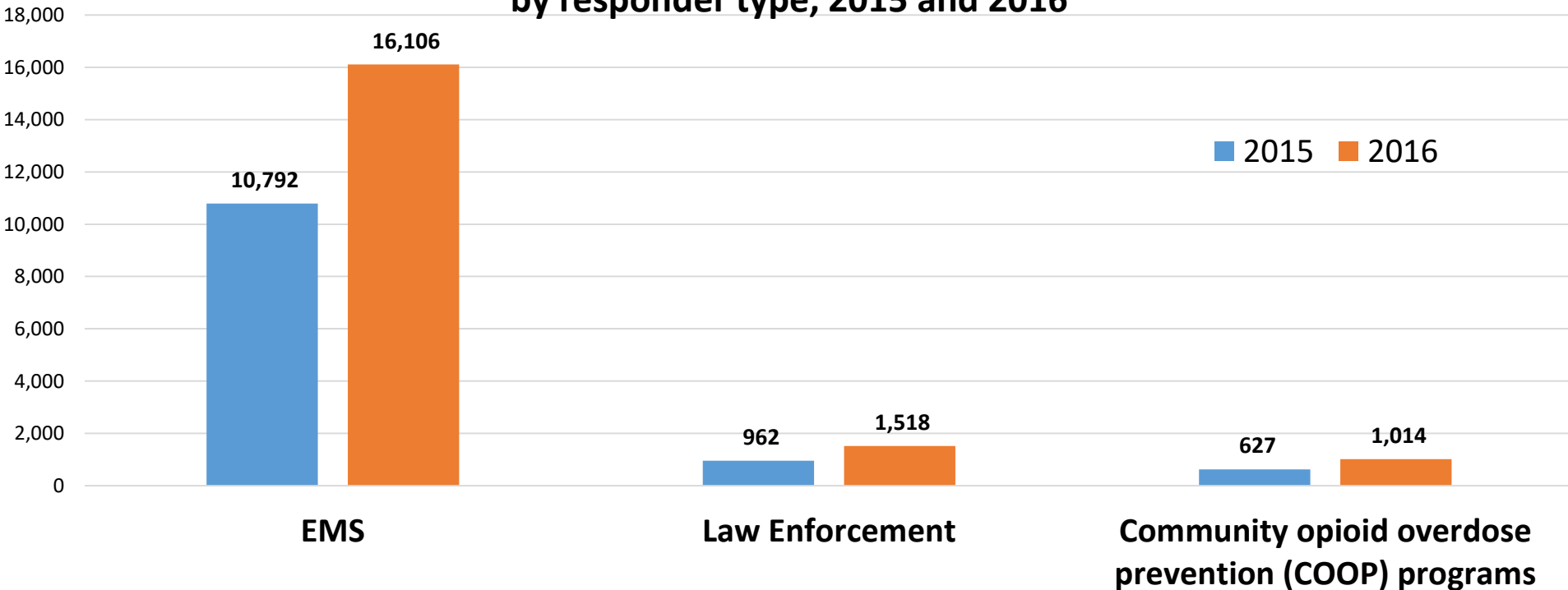
## Overdose Responders Trained: Oct 1, 2014-Sept 30, 2016



Community Responders	82,922
School	3,563
EMS	3,532
Fire Fighters	2,622
Law Enforcement	16,045
<b>TOTAL</b>	<b>108,684</b>

*Note: Data reported by registered programs.*

## Total naloxone administrations for New York State, by responder type, 2015 and 2016



**Note 1:** Emergency medical services (EMS) data as of May 2017. Law enforcement data as of February 2017. Community opioid prevention (COOP) program data as of February 2017.

**Note 2:** EMS totals represent only naloxone encounters that were reported electronically, therefore, the actual numbers of events may have been higher.

**Note 3:** EMS totals do not yet comprehensively include reports from naloxone encounters that occurred in Suffolk County.

**Note 4:** Law enforcement totals do not yet comprehensively include reports from law enforcement agencies in New York City and Nassau County.

**Note 5:** Law enforcement and COOP program totals represent only naloxone administration reports submitted by law enforcement and registered COOP programs to the NYSDOH AIDS Institute.

The actual numbers of naloxone administration events may have been higher.

# OTHER INITIATIVES

# Syndromic Surveillance

- Rapid Reporting System
  - Daily reports of overdoses in Emergency Departments identified in the Chief Complaint field
  - 136 hospitals in NYS
  - Identify clusters

# Syndromic Surveillance

- Working on defining opioid overdose syndrome
- Reviewing the quality of the syndrome
- Planning use of the syndrome
  - Alert community partners to enhanced overdose risk
  - Identify communities needing increased training, access to naloxone/buprenorphine

## Space-Time Permutation Model


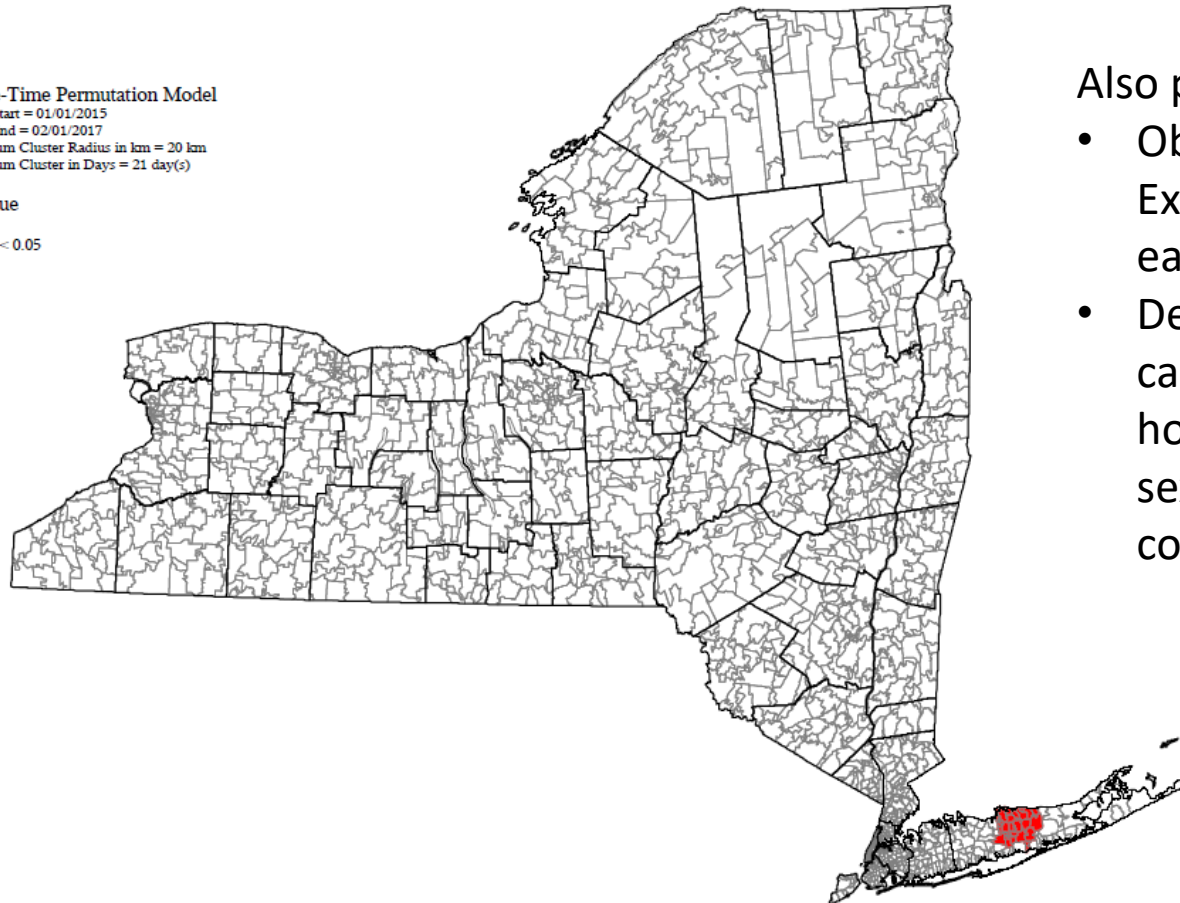
Study Start = 01/01/2015

Study End = 02/01/2017

Maximum Cluster Radius in km = 20 km

Maximum Cluster in Days = 21 day(s)

## P-Value

 p < 0.05

SatScan  
results  
provided to  
program

Also provided with:

- Observed # vs. Expected # for each zip code
- Details on each case including hospital, day, age, sex and chief complaint

# QUESTIONS?

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