



**ARSH**

# Non-pharmaceutical Fentanyl: Canadian Fentanyl Trends Moving to the US

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# Acknowledgements

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# RADARS<sup>®</sup> System Mosaic Approach

**College  
Survey**

**Early  
Experimenters**

**Poison  
Center**

**Acute Events**

**OTP  
Opioid Tx  
Program**

**Patients in  
Treatment**

**SKIP  
Survey of Key  
Informant Pts**

**Patients in  
Treatment**

**Drug  
Diversion**

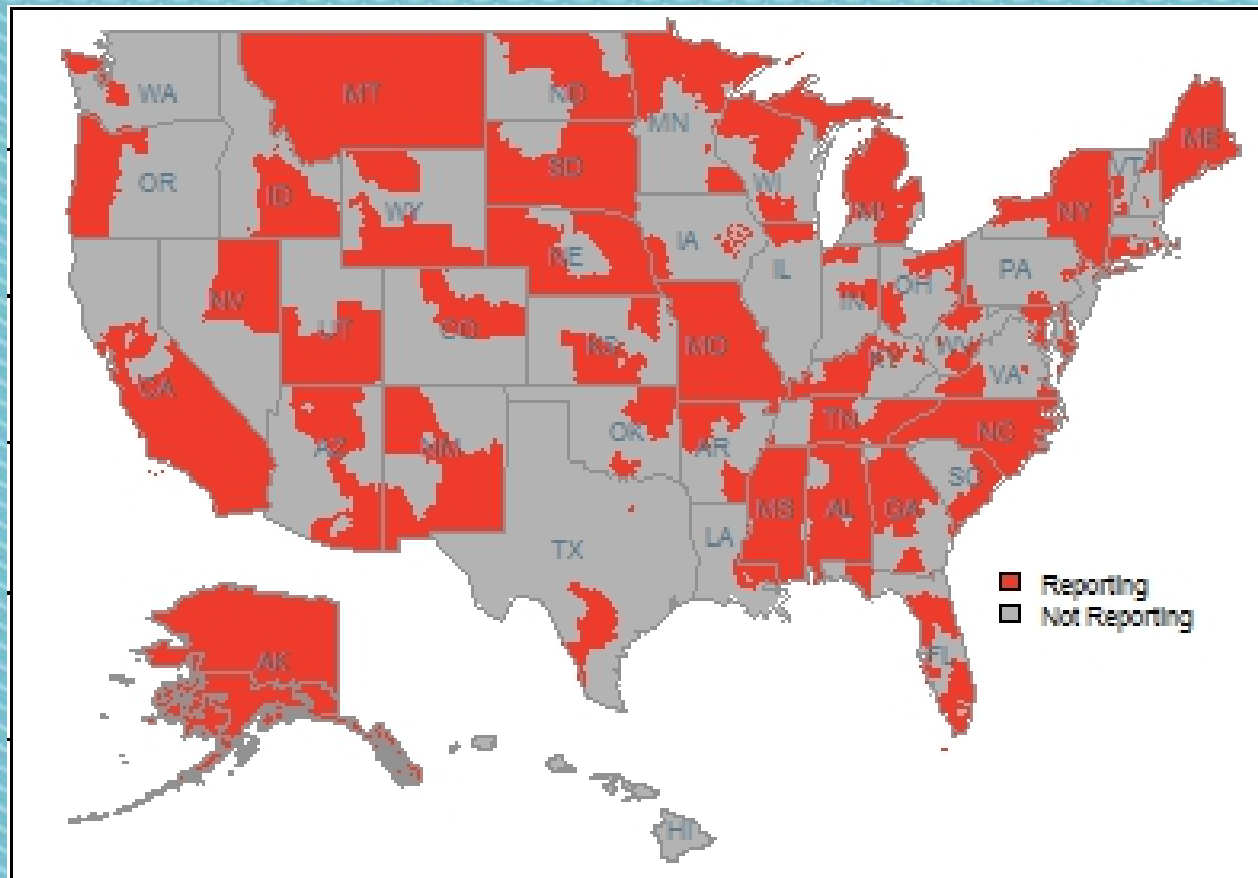
**Criminal Justice/  
Law Enforcement**



# Drug Diversion Program

- Number of new cases of pharmaceutical diversion investigated by law enforcement units or reported to state regulatory boards
- **Coverage**  
260 reporters from 49 states
- **Reporting Timeframe**  
3 months in arrears

# 3-Digit ZIP Codes Reporting to Drug Diversion for 2015



# Targeted Drugs

- Amphetamine
- Buprenorphine
- Cannabinoids
- Fentanyl
- Hydrocodone
- Hydromorphone
- Methadone
- Methylphenidate
- Morphine
- Oxycodone ER
- Oxycodone IR
- Oxymorphone
- Sufentanil
- Tapentadol
- Tramadol

# Questionnaire

- Case counts for each targeted drug
- Dosage size and form
- Other diverted drugs
- Open-ended responses to a question about new drug trends

# Non-pharmaceutical fentanyl

- Acetyl fentanyl and other analogues
- 50 to 100 times more potent than morphine
- Blood tests do not distinguish from pharmaceutical fentanyl
- Legal status depends on the analogue

# Reports of non-pharmaceutical fentanyl

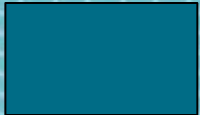
## Key



Powder alone or combined with heroin

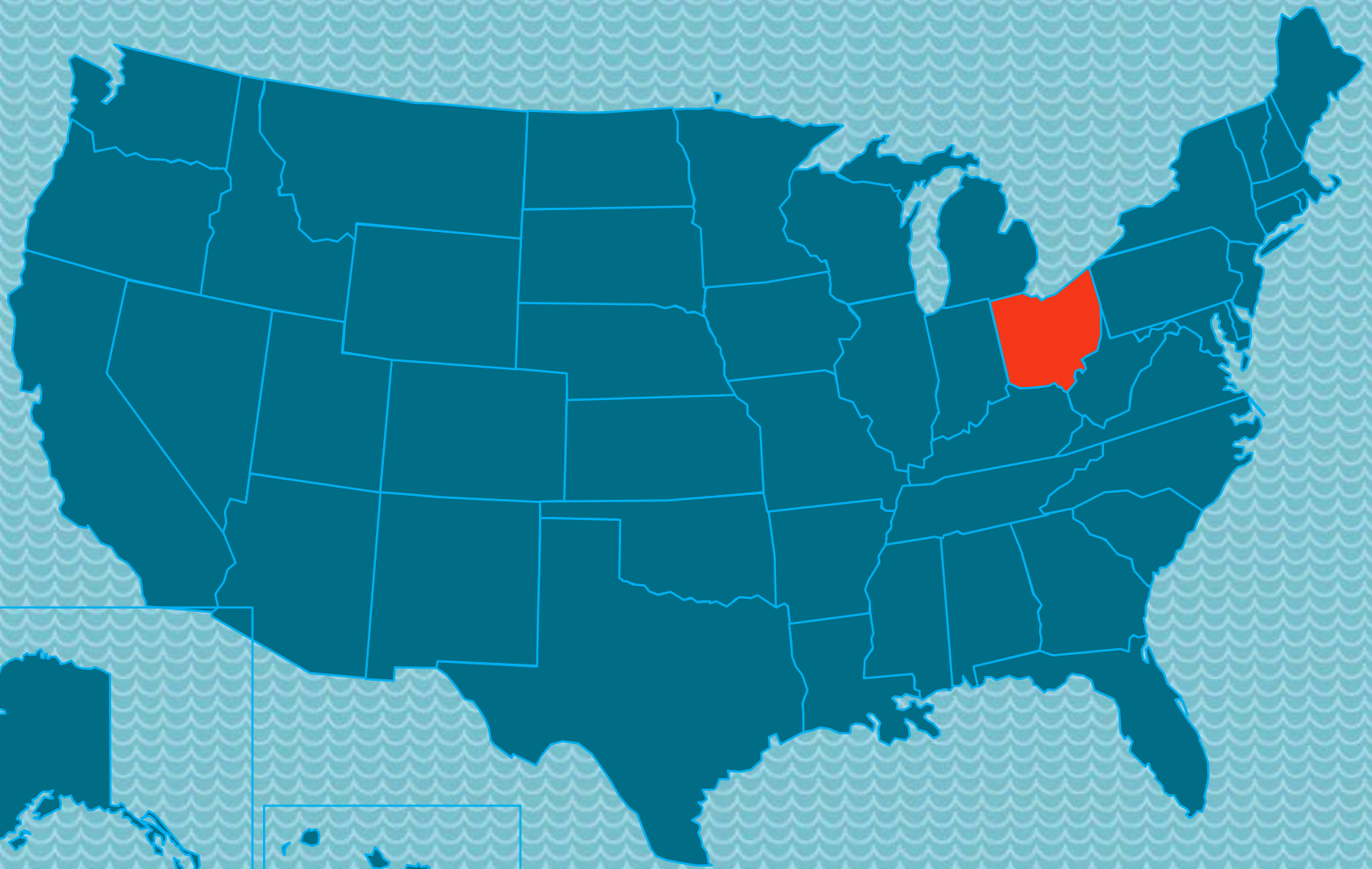


Sold as prescription medications (pills)



No reports of NPF

# 3Q 2014

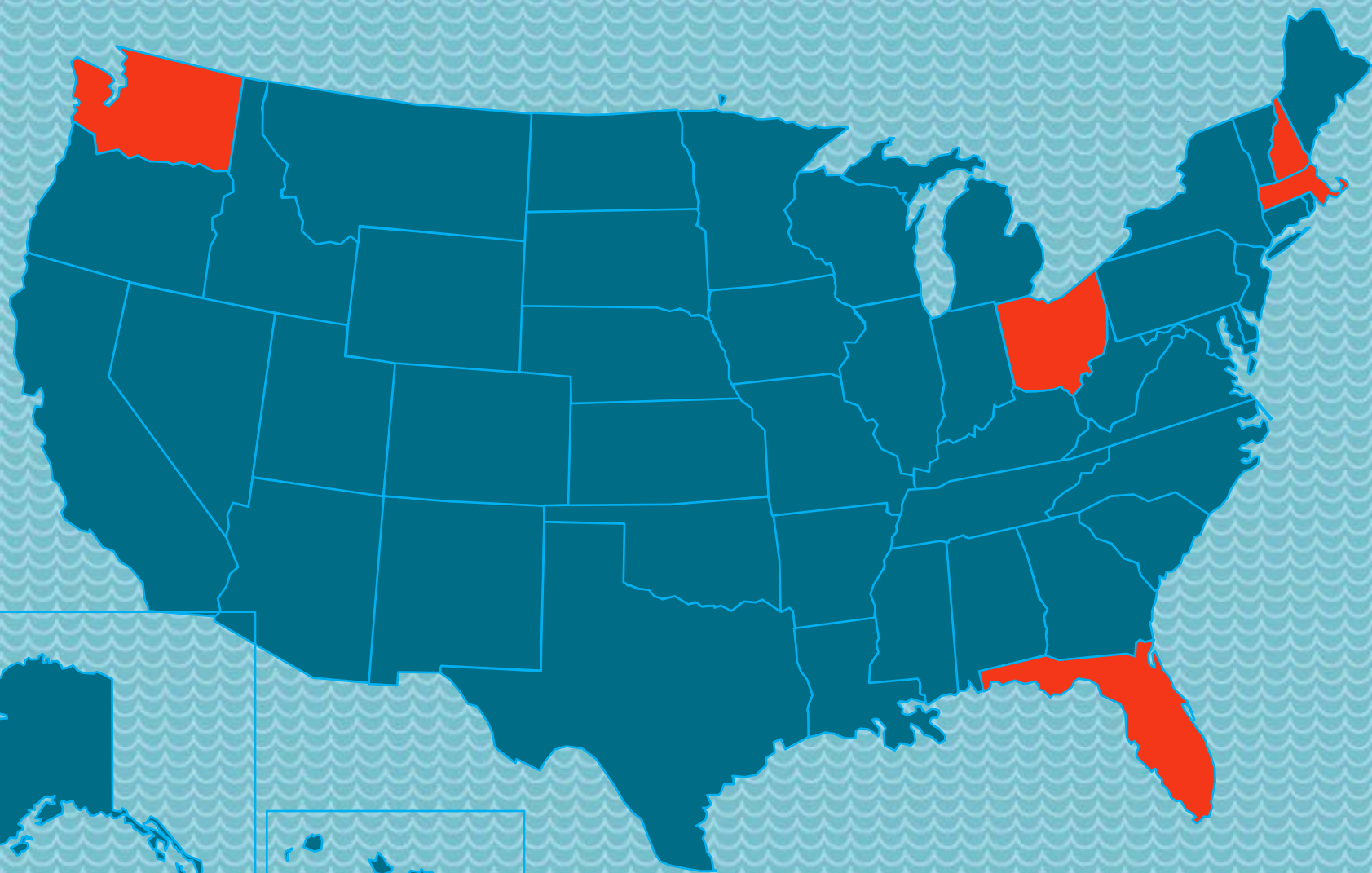


Alaska



Hawaii

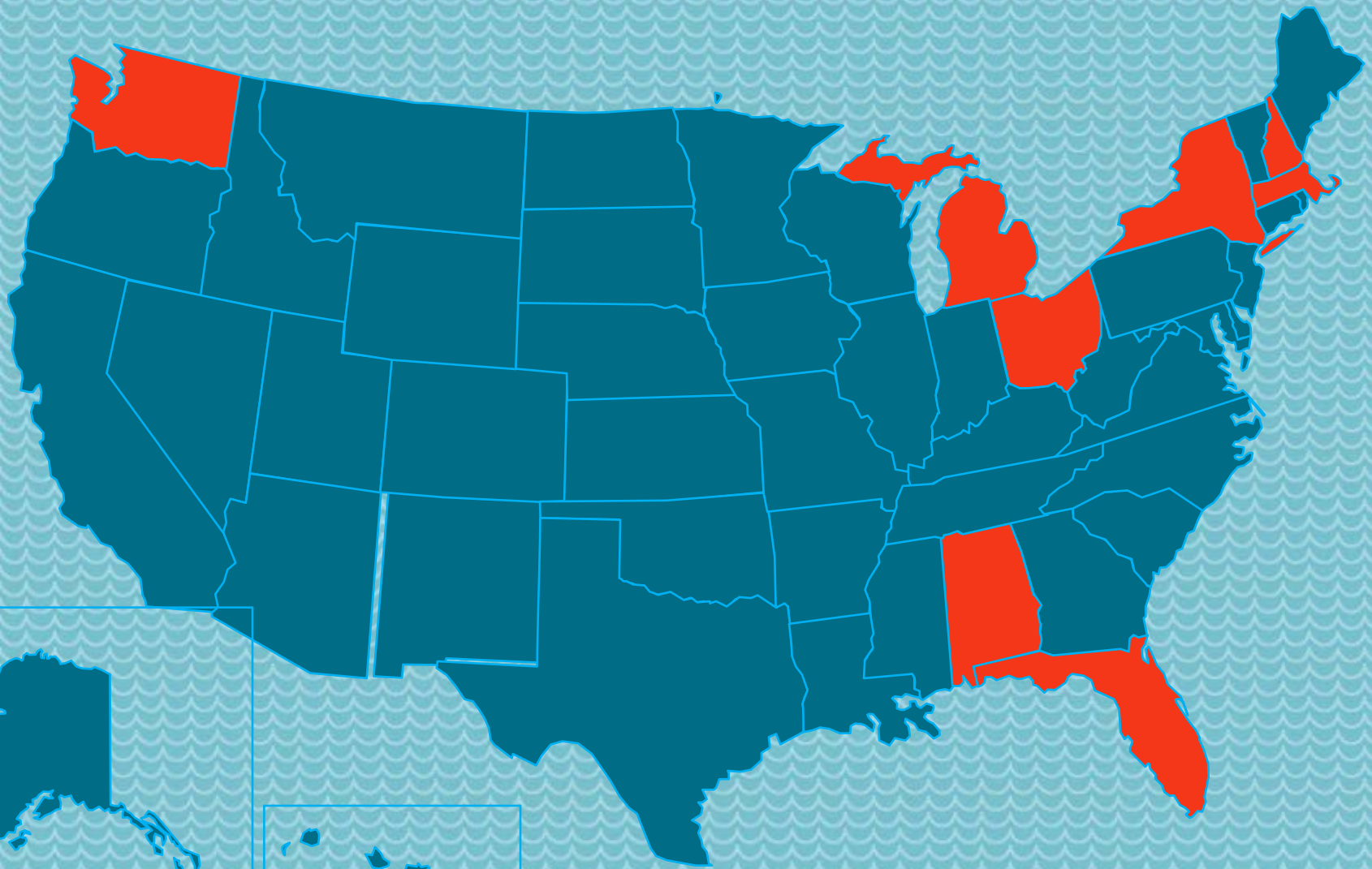
# 4Q 2014



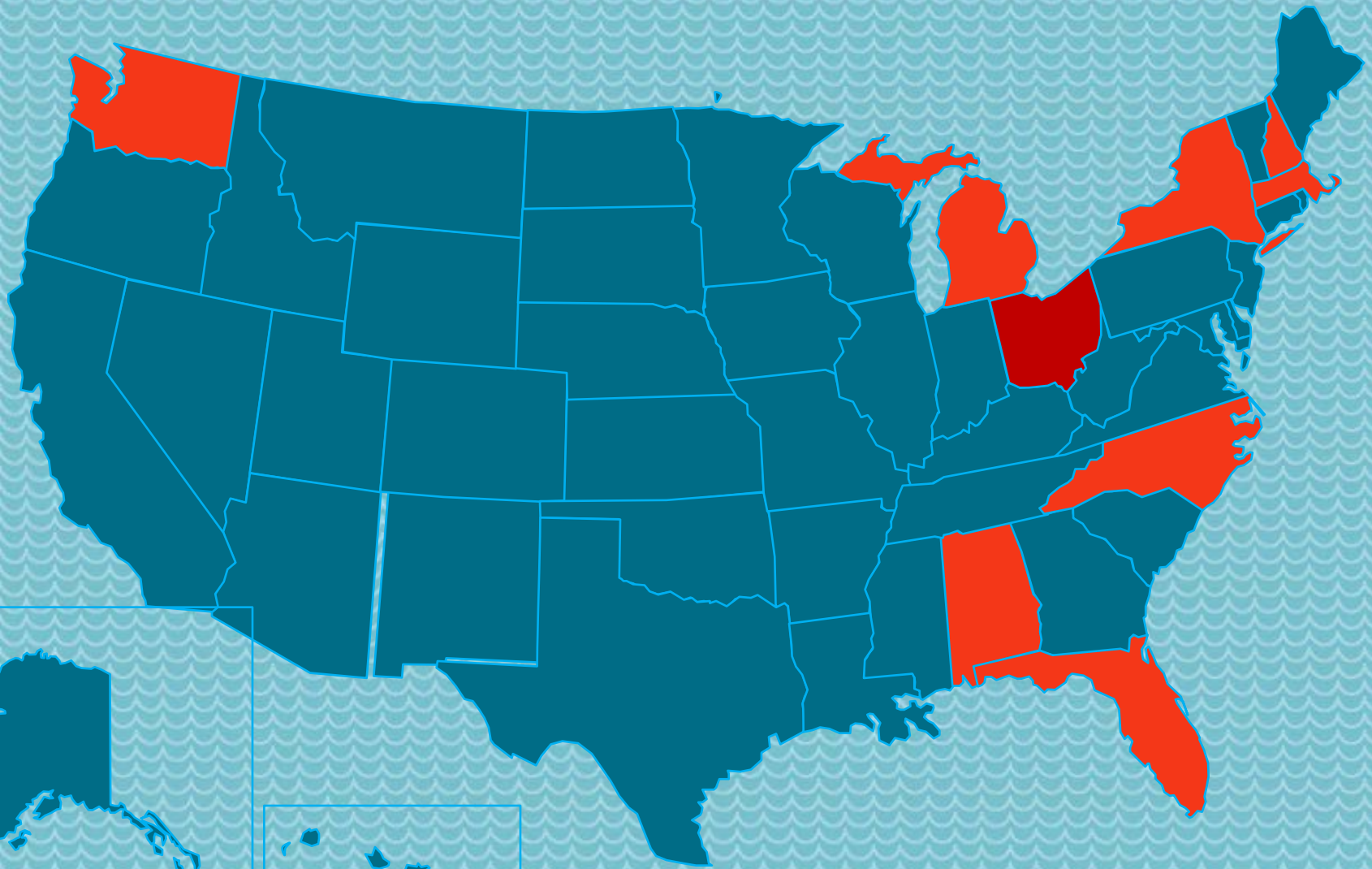
## Alaska

## Hawaii

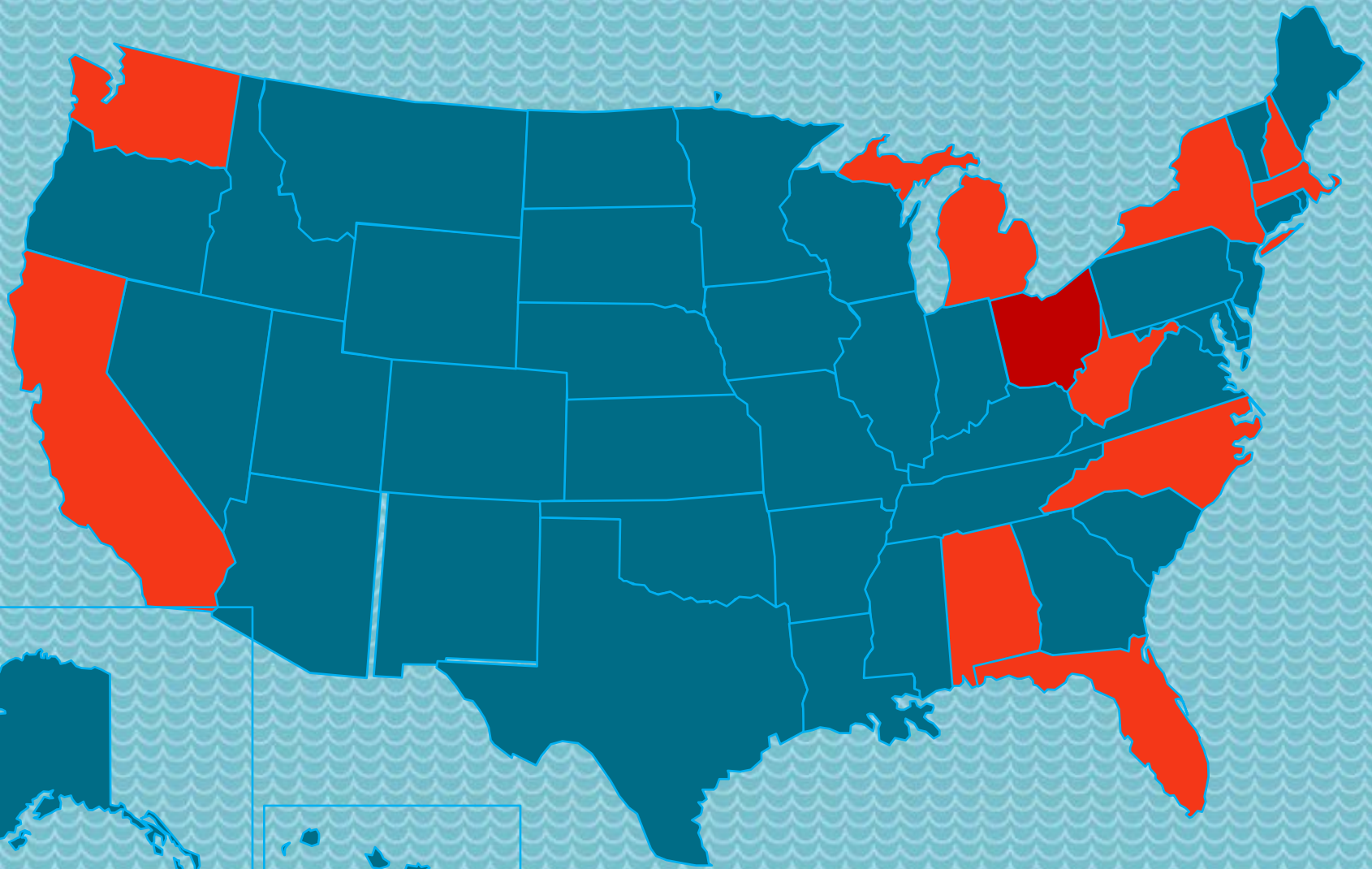
# 1Q 2015



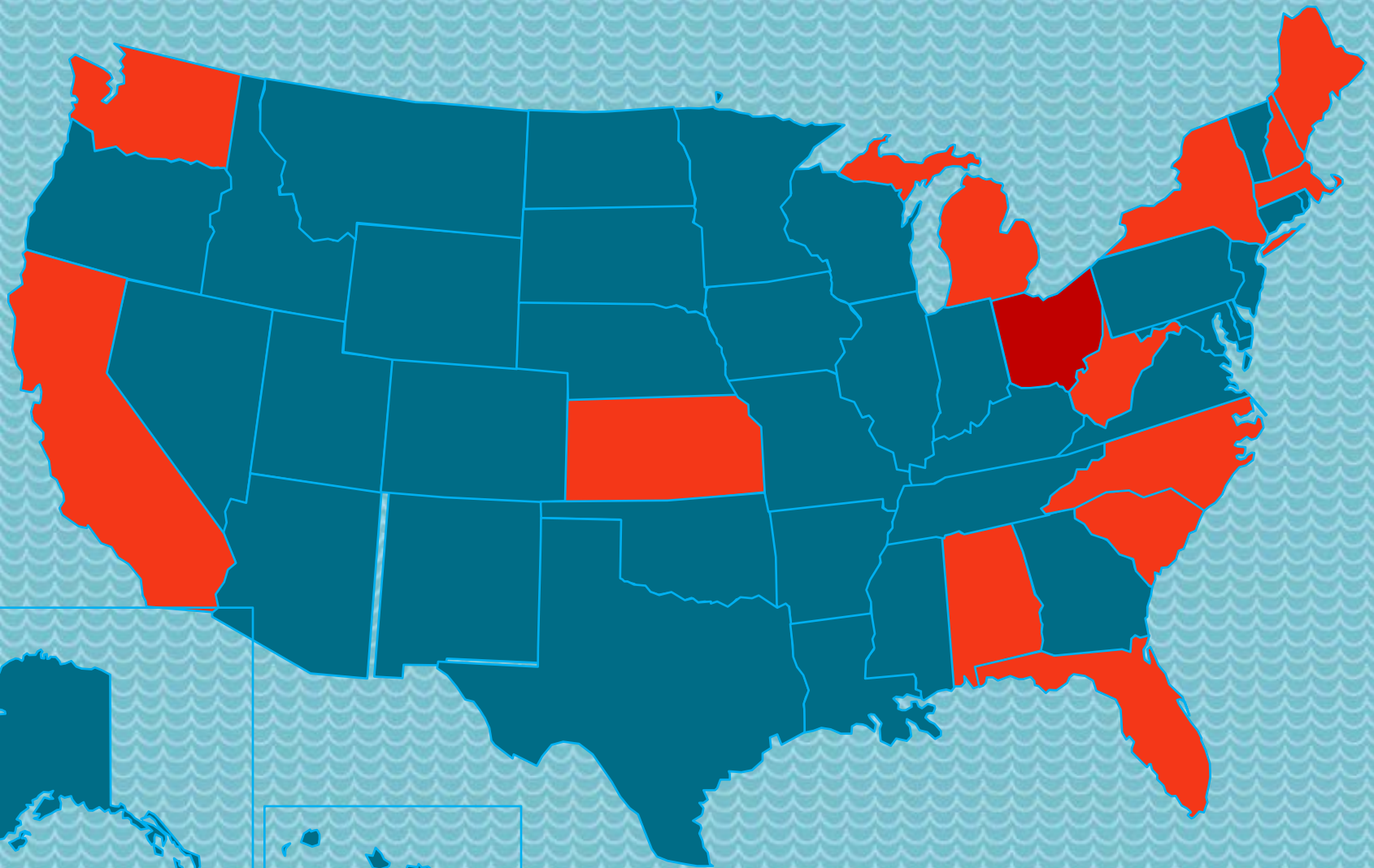
# 2Q 2015



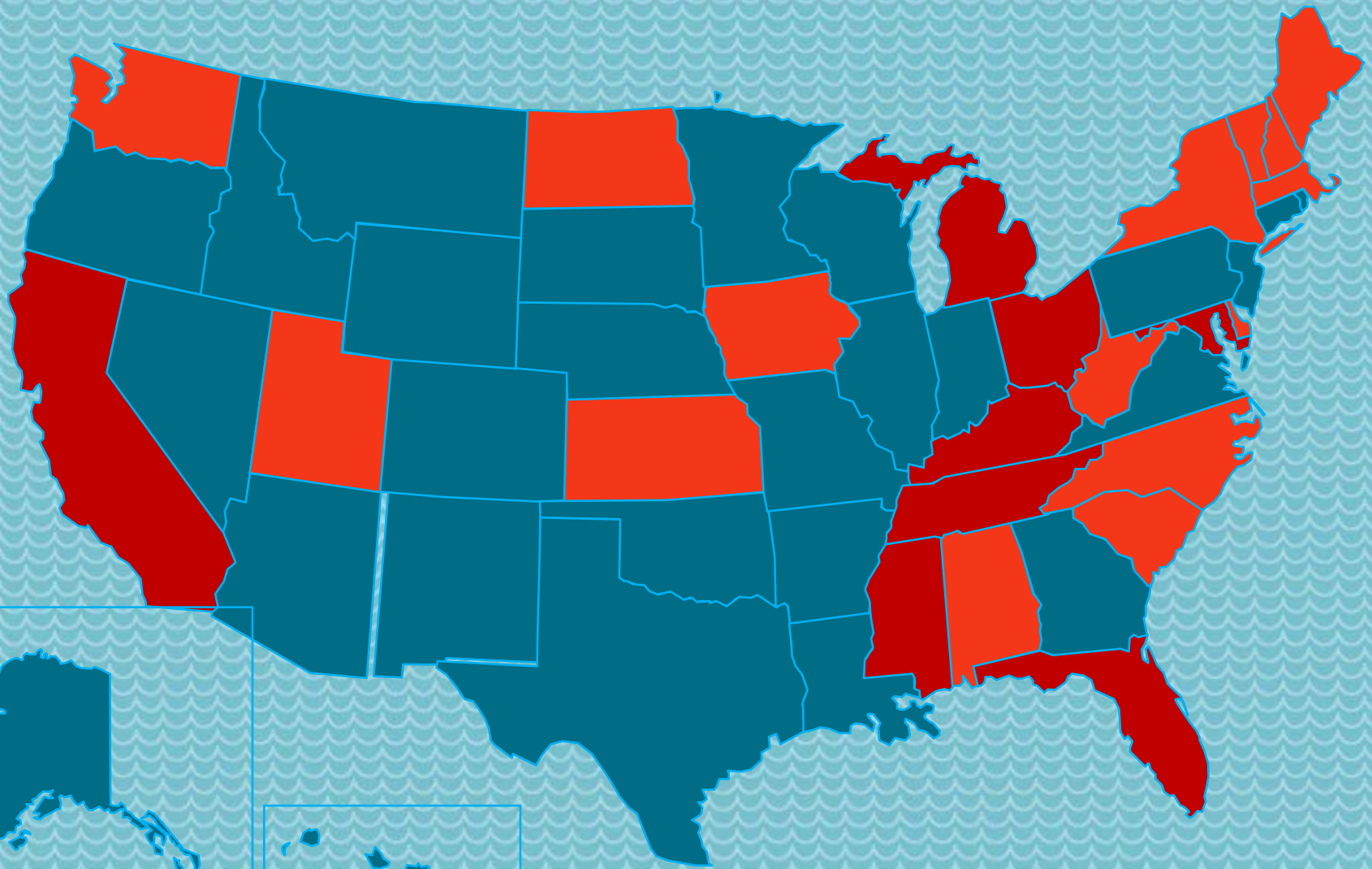
# 3Q 2015



# 4Q15

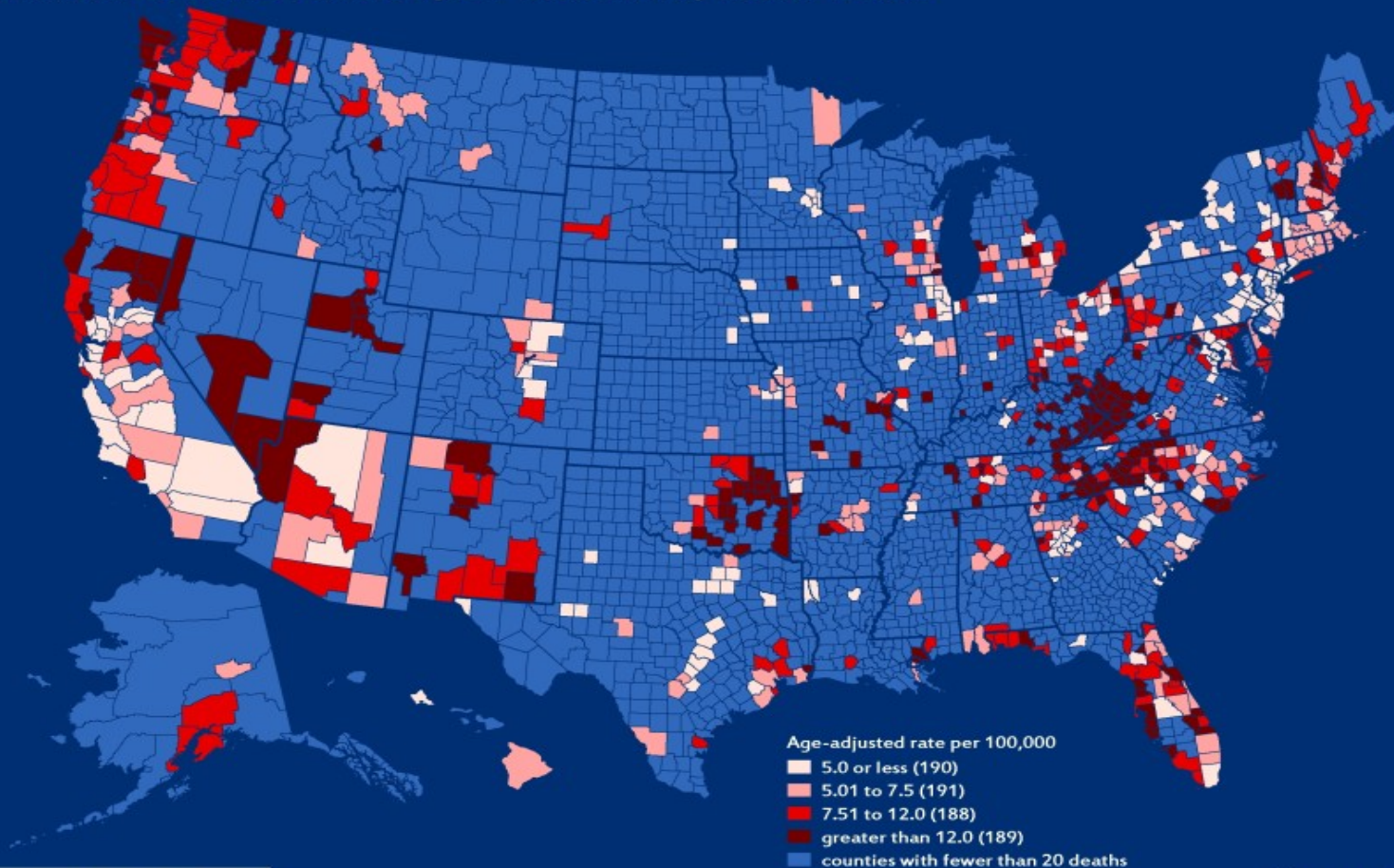


# 1Q 2016



# NPF follows the opioid epidemic

## DRUG POISONING DEATHS INVOLVING HEROIN AND OTHER OPIOID DRUGS, BY COUNTY, 2006-2010

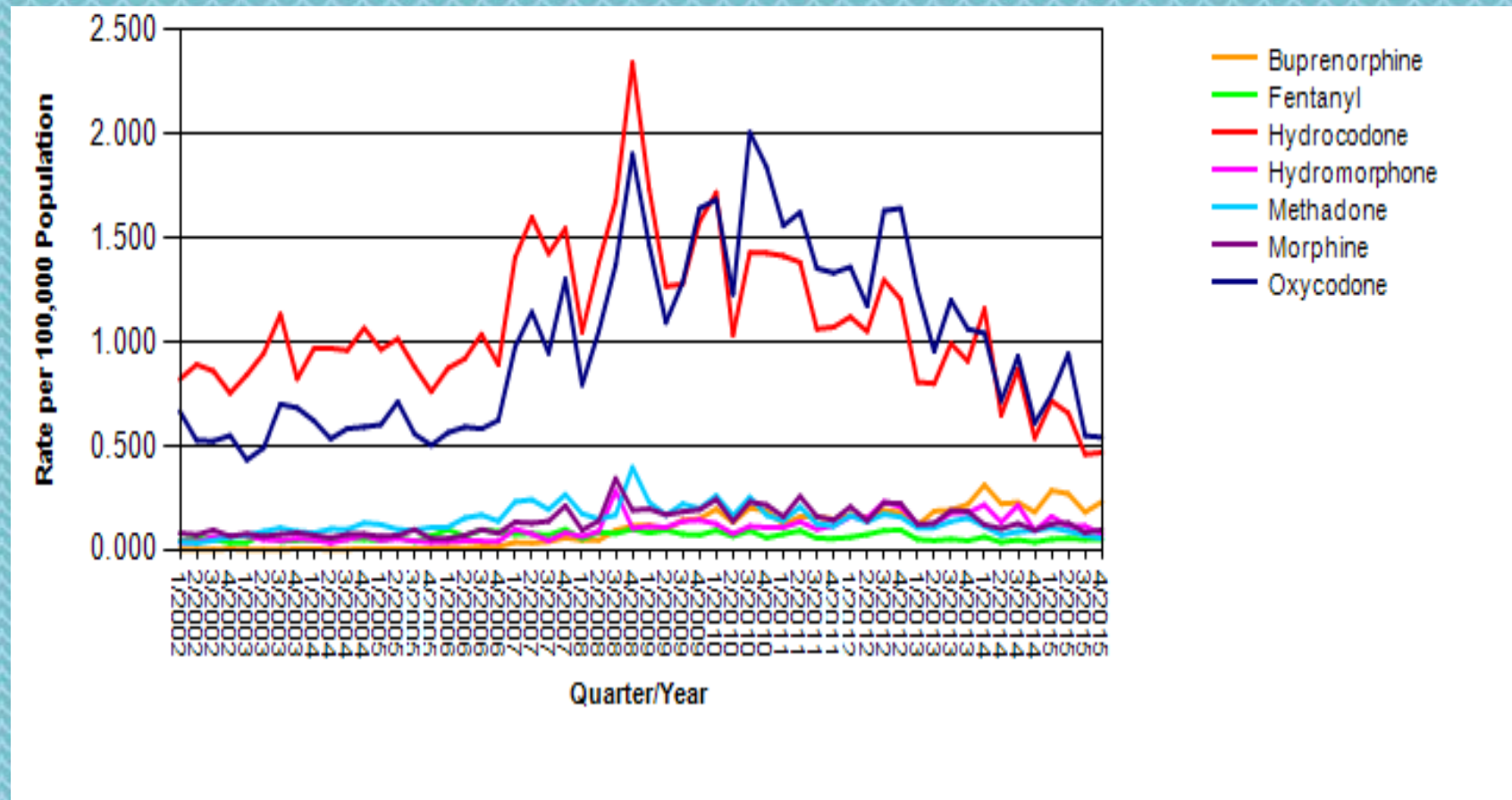


#DrugPolicyReform

Source: CDC

# 2015 Drug Diversion Rates (per 100,000 pop)

## No change in Rx fentanyl diversion



# National Drug Threat Assessment

## Primary Heroin Trafficking Routes 2008–2010



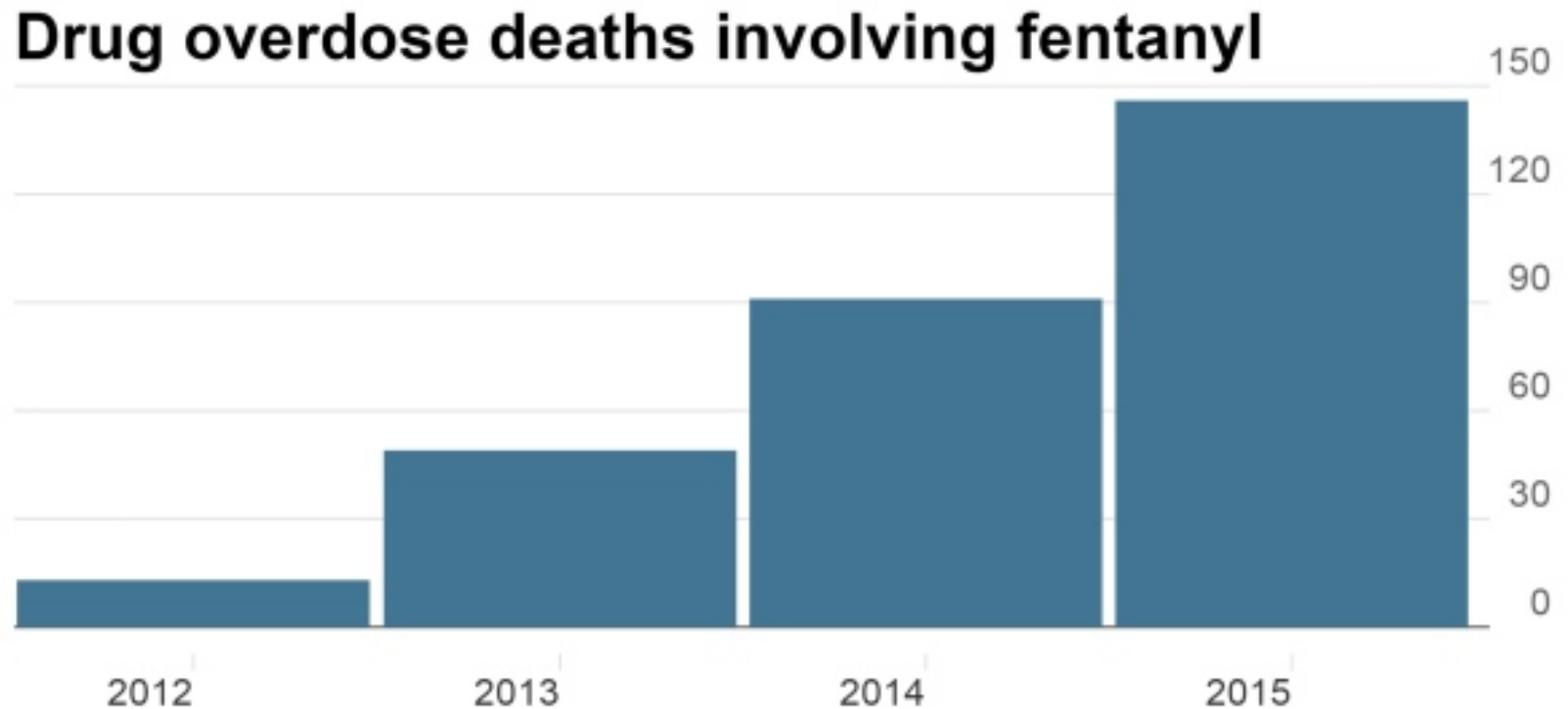
## MAJOR DRUG SMUGGLING ROUTES THROUGH NORTH AMERICA



# 2012: New NPF Trafficking



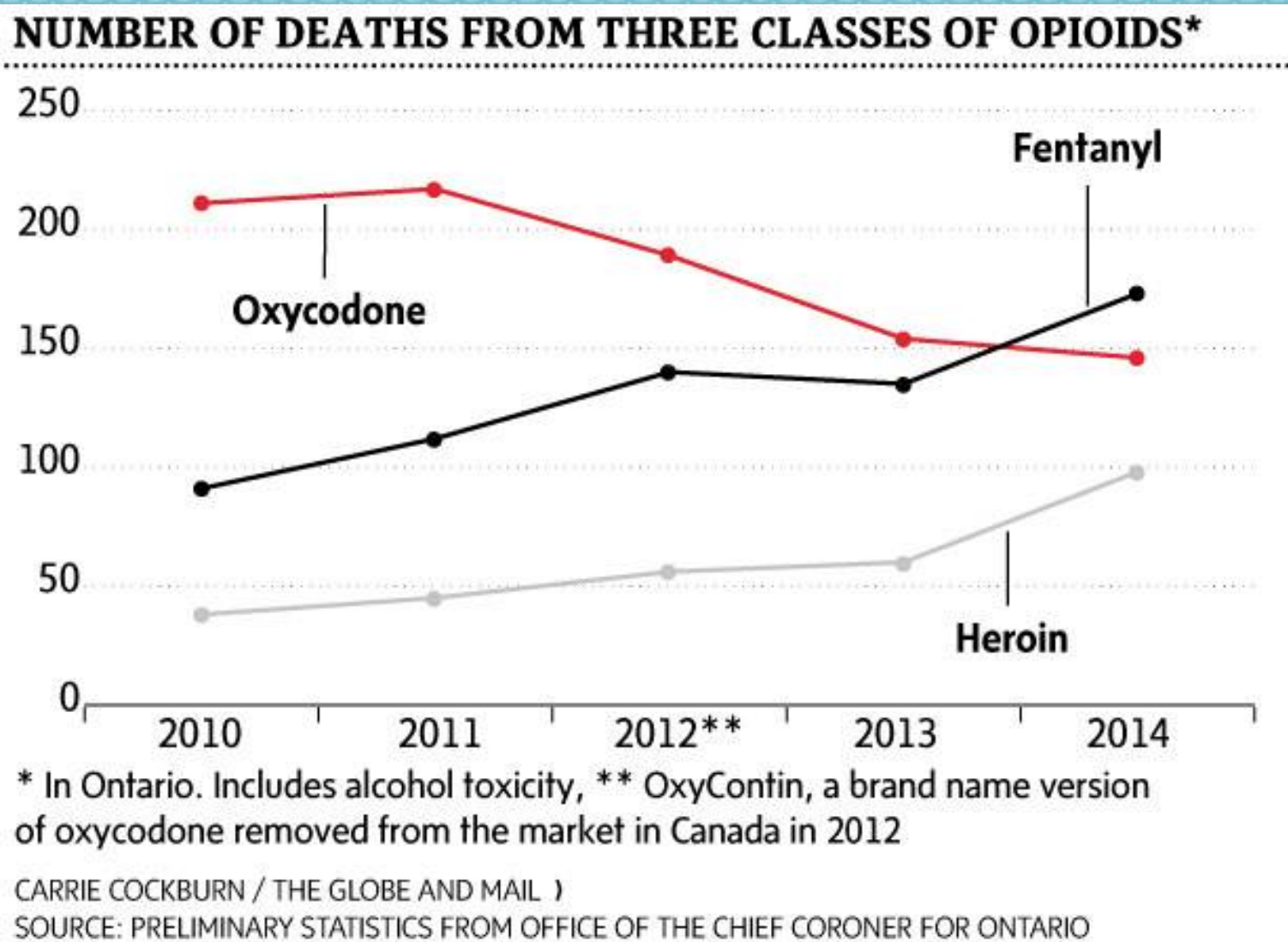
# Fentanyl OD Deaths in BC



Source: B.C. Coroner's Service

Made with Chartbuilder

# Fentanyl OD Deaths in Ontario



# Canada NPF Market

- **High volume Chinese trade through Vancouver**
- **No searches of parcels under 30 grams in weight**
- **Distant from Mexico heroin sources**

# Timeline

- **1981 first fentanyl analogue Schedule 1**
- **Fentanyl-laced heroin / fentanyl powder:**
  - 2012 British Columbia**
  - Apr 2013 Maine**
- **Fake prescription medications:**
  - May 2013 Montreal**
  - Sep 2013 Louisiana, Rhode Island**
- **2013-2015 Escalating overdose deaths**

# Timeline (continued)

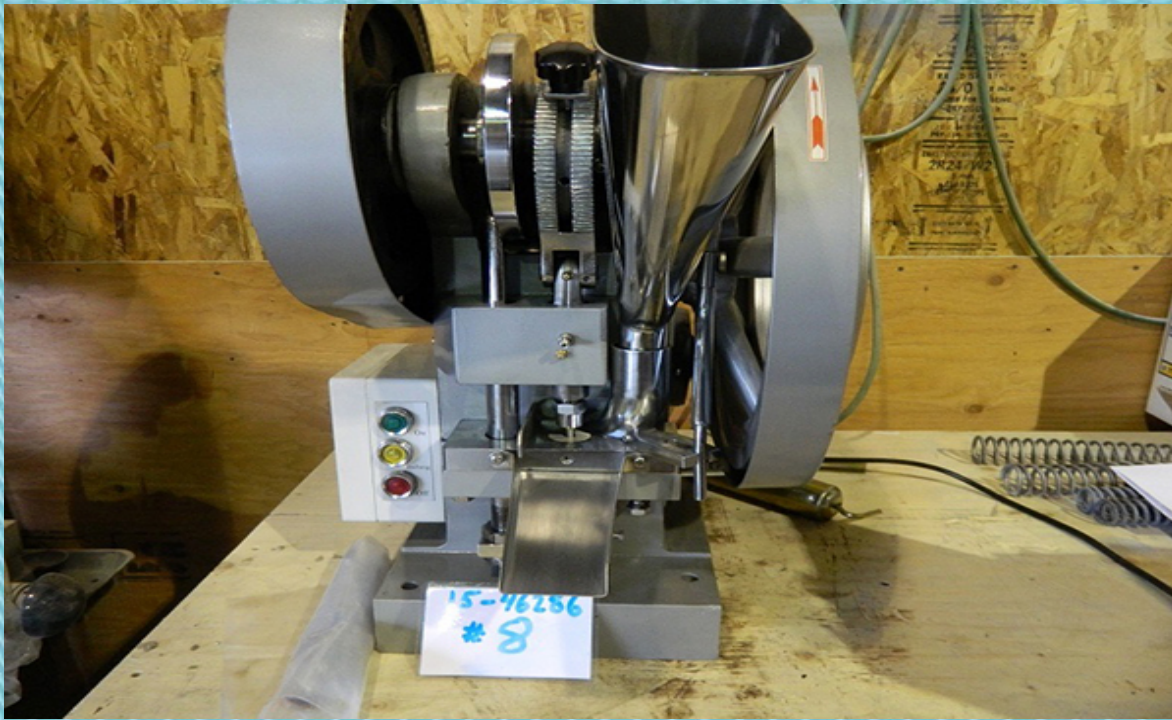
## Public health actions:

<b>Jun 2013</b>	<b>CCENDU (Canada) warning</b>
<b>Feb 2014</b>	<b>CCENDU fake pill warning</b>
<b>Dec 2014</b>	<b>Alberta warning</b>
<b>Mar 2015</b>	<b>US DEA warning</b>
<b>May 2015</b>	<b>US DEA: acetyl fentanyl Sched 1</b>
<b>Oct 2015</b>	<b>China outlaws manufacture of fentanyl analogues</b>
<b>Oct 2015</b>	<b>CDC warning / clinical guidelines</b>
<b>Apr 2016</b>	<b>US DEA fake pill warning</b>

# **NPF pill press businesses**

- **Pill press equipment and NPF supplied by Chinese**
- **Internet ordering and in-country pill pressing**
- **Found in BC, Alberta, Ontario and Quebec in Canada**
- **In the US so far: Los Angeles, New York, Ohio, Seattle**

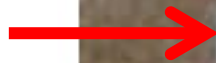
**Pill press plus 1K NPF = \$100,000**  
**Street value = \$20,000,000**



**Real**



**Fake**



COUNTERFEIT  
Authentic on top / Counterfeit on bottom



**Counterfeit  
Xanax  
with  
Fentanyl**



# **2016: latest threat is W-18**

- **A powerful synthetic analgesic, W-18 may be many times stronger than fentanyl.**
- **Police in Edmonton, Alberta, rushed to warn the public and emergency departments about W-18 after they seized four kilograms of the drug in powder form.**
- **Canada has moved to add W-18 to Schedule I.**

# W-18

- **DEA agents in South Florida intercepted an international priority mail package with more than 1,000 blue fentanyl pills and other drugs, including W-18, that were shipped from an inmate in a prison near Montreal.**
- **Canada law enforcement found that Chinese companies are acquiring expired patents to reproduce new synthetic substances for sale on the international market.**

# Conclusion

- **Canada and US have different but complementary drug trafficking routes**
- **Illicit drug trade adapts to Rx opioid misuse trends and control measures**

## **Most worrisome:**

- **high potency illicit fentanyl analogues are easily camouflaged and transported**
- **mass produced counterfeit Rx products**

# **Public health policy issues**

- **International cooperation**
- **Systematic surveillance, including Rx counterfeits and substitutes**
- **Law enforcement efforts to control illicit trade**
- **Prevention measures targeted to young people**
- **Pain management treatments that work**
- **Treatments with low abuse liability**
- **Access to opioids for patients that need them**
- **Drug treatment access**
- **Harm reduction, including needle exchange, safe injection sites, and OD reversal**

# Thank you

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