

Of Speedballs and Goofballs: Stimulants and the 4th Wave of The Opioid Crisis

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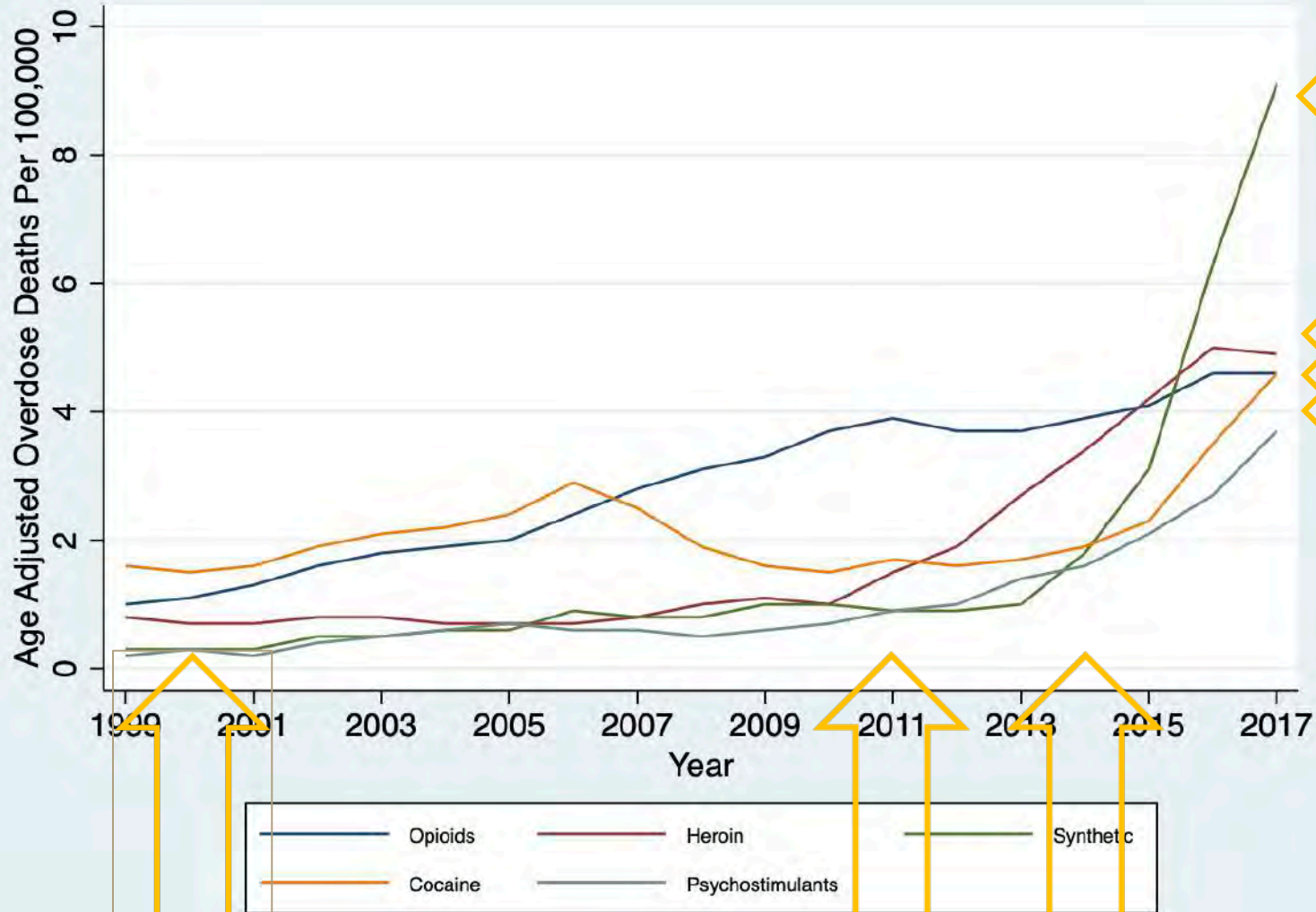
HEROIN IN TRANSITION (“HIT”) STUDY

- NIH: National Institute of Drug Abuse (DA037820)
- Multi-methodological study: quantitative and qualitative aims
 - Supply changes >> medical consequences including OD
 - Ohio Crime Lab drug seizure data
 - Ethnographic: New drug forms and user perceptions, adaptation, etc.

PUBLICALLY AVAILABLE DATA:

- Centers for Disease Control and Prevention, National Center for Health Statistics
 - US Drug Enforcement Administration
 - Other academic literature
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THE OPIOID WAVE



RISE IN STIMULANT DEATHS

- Increases in the age-adjusted death rate, 1999-2016):
 - Cocaine-attributed: increased from 1.4 to 3.2 per 100,000 population
 - Psychostimulant-attributed: increased from 0.2 to 2.4
 - Largely driven by methamphetamine [1].
- Deaths continued to rise sharply between 2016 and 2017, by 34% for cocaine and 33% for psychostimulants [2].

1. Centers for Disease Control and Prevention, 2018 Annual surveillance report of drug-related risks and outcomes-- United States. 2018.

2. Scholl, L., et al., Drug and Opioid-Involved Overdose Deaths — United States, 2013–2017. MMWR. Morbidity and Mortality Weekly Report, 2019. 67(5152): p. 1419-1427.

WHAT IS DRIVING THE INCREASE?

- Increase in supply?
 - Changes in production
 - Purity/Potency
 - Contamination eg with synthetic opioids
 - Increase in use?
 - Increase in numbers of users
 - Increases in co-use of stimulants and opioids
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Ohio Crime Lab Study

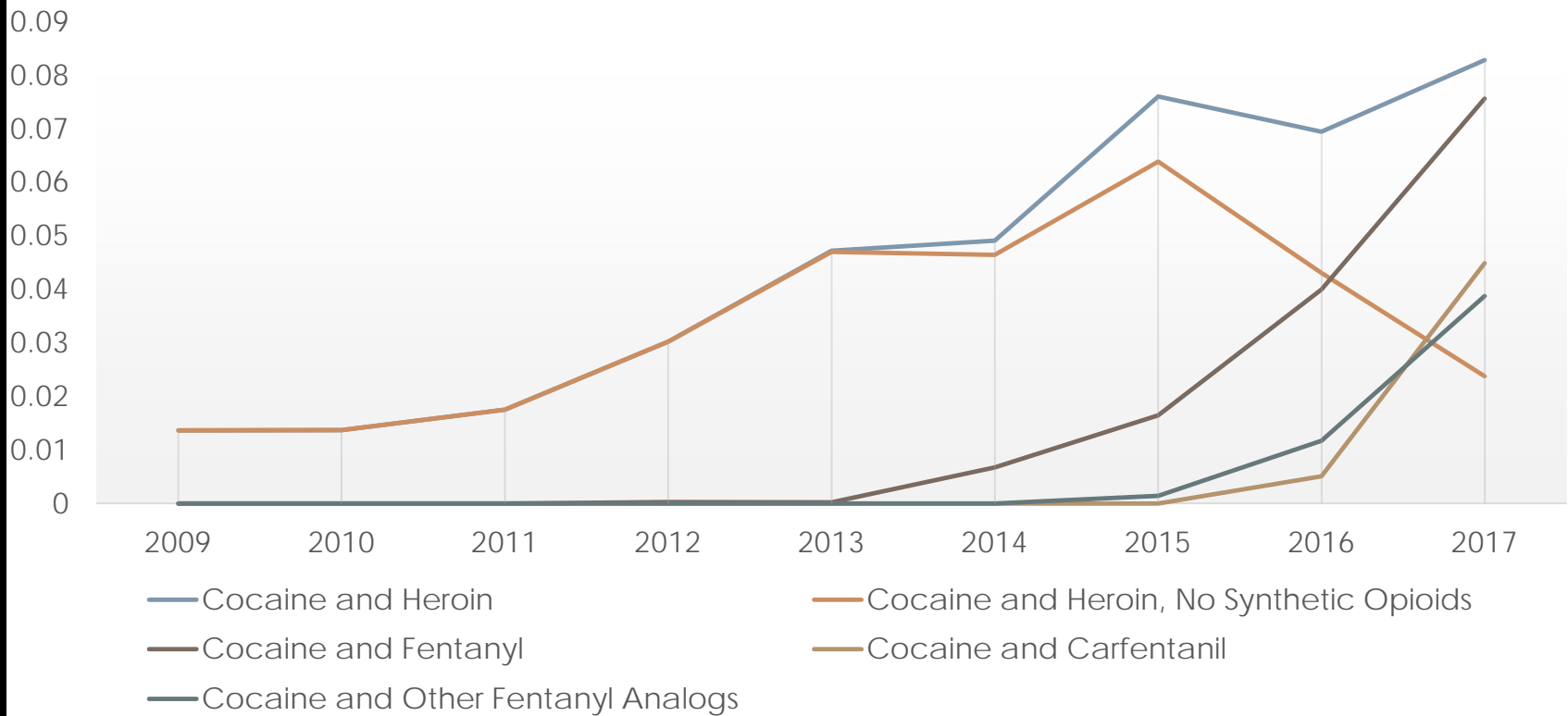
DRUG SEIZURE DATA

- Three Ohio Bureau of Criminal Investigation labs:
 - Data obtained through multiple FOIA requests
 - Lab tests completed between 1.1.2009 and 12.31.2017
 - Final sample: 204,951 samples across 87 counties
 - 8,352 county-month observations
 - Categories: fentanyl, fentanyl analogs, heroin, prescription opioids, cocaine, meth/amphetamines, benzodiazepines, synthetic cannabinoids, MDMA and other designer drugs
- Caveats: private crime labs; no Hamilton County

Acknowledge: Dennis Cauchon, Harm Reduction Ohio, for obtaining the BCI data

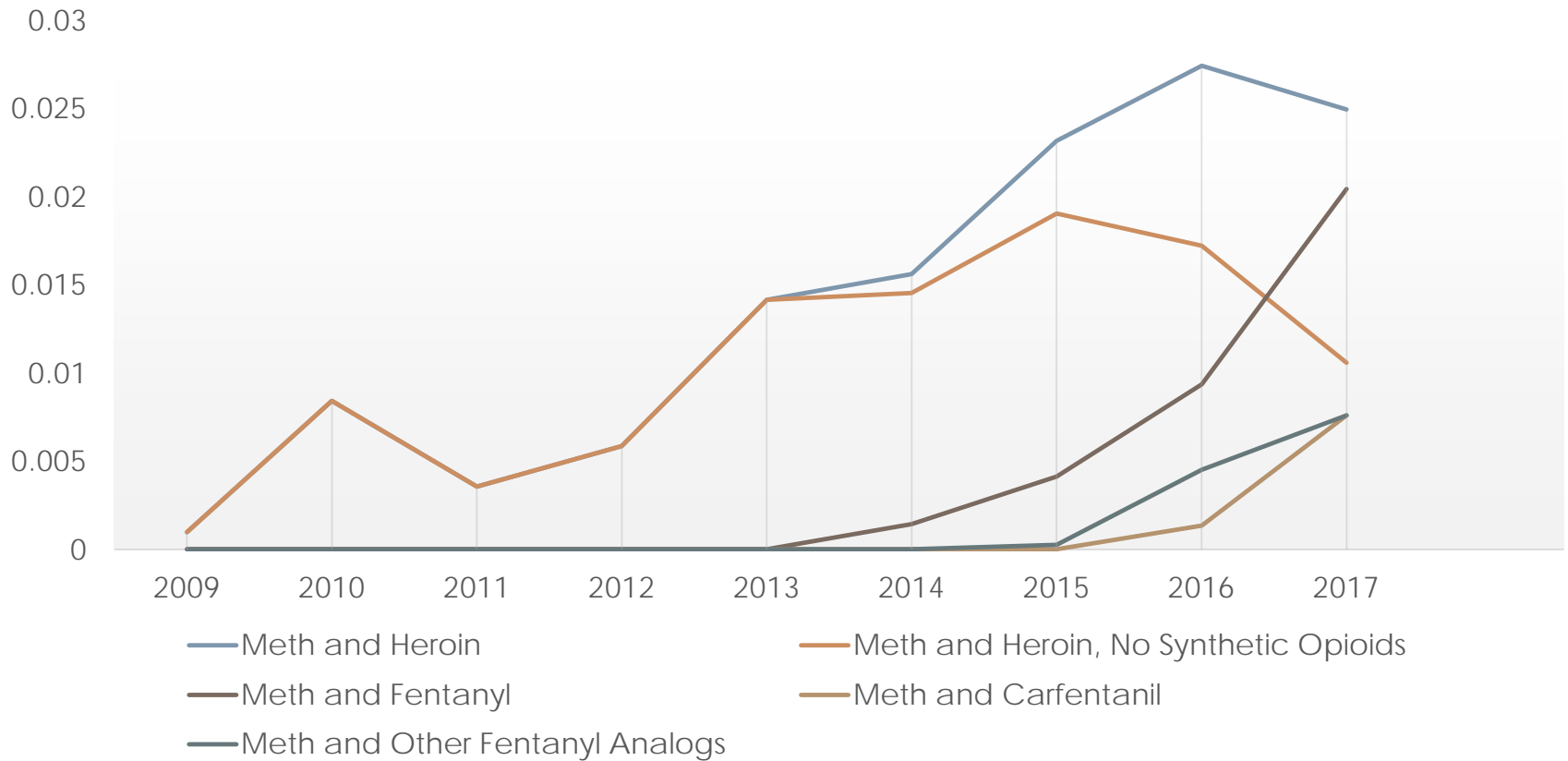
CRIME LAB STUDY RESULTS

Fraction of Cocaine Positive Lab Tests that Include Opioids



CRIME LAB STUDY RESULTS

Fraction of Meth Positive Lab Tests that Include Opioids



STIMULANT-FENTANYL CONTAMINATION

- Meaningful levels?
 - 8% cross contamination for cocaine
 - 3% for methamphetamine
 - Caveat: no purity measurements
 - Contamination: accidental or purposeful?
 - Pre-dates fentanyl era (ie heroin in cocaine)
 - Co-use is high; so perhaps is co-dealing
-

INCREASE IN USE?

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SPEEDBALLS AND GOOFBALLS

- “Speedball”: co-use of heroin and amphetamine
 - Traditional
 - Makes sense
 - Well-liked
- “Goofball”: Co-use of heroin and methamphetamine
 - Unusual historically
 - Physiologically challenging
 - Requires exploration



Ethnographic Study

ETHNOGRAPHIC METHODS

- “Hotspot study” where our team of researchers goes to visit areas in the country where significant changes in the drug supply or overdoses have been reported
 - West Virginia: Charleston, Nitro, Ripley, Huntington
 - Sept 2017 and Sept 2019
 - 48 participants
- Our aims are to understand the experiences and beliefs of the users themselves, to observe first hand the drugs currently being used
 - Helps build explanatory models but not conclusive
- **Methods: TED-X talk:**
<https://www.youtube.com/watch?v=R7z6qPvL1iY>



West Virginia

Photos: D. Ciccarone and J. Ondocsin

METHAMPHETAMINE IS BACK

- Supply has changed since about 2015:
 - Less: 'Shake and Bake' – locally made
 - More: Mexican-sourced 'Ice'
 - Less expensive
 - Possibly of high
 - Polysubstance de



Photo: D'Ciccarone

ICE OVER HEROIN

- 'Ice' has become a popular alternative or addition to heroin. For those who used it, including Julie, suffering from scoliosis-induced chronic pain—there was both a pain-management and market-based rationale:

"If I can get heroin, that's all I want just for the pain. Now, if I don't have the money or can't get [heroin], I'll get Ice. Because it's so much easier, it's cheaper. [...] And even if I'm feeling the pain, it gives me the energy that I can at least get something accomplished."



Photo: D Ciccarone

Speedball

THE ~~GOOFBALL~~ IS BACK

- The combination of meth and heroin/fentanyl is resurgently popular.
 - Rediscovered since about 2015.
 - Called 'speedball'; 'goofball' term is unheard of here
- Those who like it say it is a "fantastic feel"
 - Fentanyl is strong enough to meet meth
- Those who don't say it's a bit of a 'fight' between the 'up' and 'down' physiological feelings

THE VARIETIES OF Speedball

- The combined use of 'heroin' and meth is part of a spectrum of meth use:
 - From none to occasional (don't like but if free)
 - to casual (like but not dependent)
 - to regular use (in combination with heroin)
 - to reducing heroin use.



Photo: D Ciccarone

- Rebecca, 30s, preferred methamphetamine to heroin but also liked to inject both together:

A: I like heroin and stuff like that but it's not my choice preference. And actually mixing it with meth is the better buzz, believe it or not.

Q: How do you decide on a given day?

A: Just what we feel like. ...if the dope sickness is not bad we'll choose meth because then you can fend off the dope sickness ...by being high on meth you won't feel it.



Photo: D Ciccarone

RESPONSES TO FENTANYL

- Meth and speedball injection can be seen as *organic responses* to the fentanyl overdose epidemic
 - Some like fentanyl but most accept it and adjust to it
 - Meth use is popularly construed as:
 - Helping to decrease heroin/fentanyl use/need
 - Helping with heroin withdrawal symptoms
 - Protecting for OD when in combination with heroin/fentanyl
 - Useful to reverse OD in a pinch

ON SPEEDBALLS AND GOOFBALLS: SUMMARY

- Co-use:
 - Methamphetamine and the speedball are back
 - Supply may be driving this
 - But may be the result of fentanyl prohibition
 - Adaptive responses are also important:
 - Meth be substituting for heroin and reducing fentanyl exposure
 - Fentanyl is still the problem (folks should not be dying from meth)



Living
2 Pray
4 Wisdom
2 Love myself
2 Know 2 Love
U-Living 2 Learn
The Music 2 express
My Love 4U-2U
UR the 1 right here
that I AM 2 Love
there is no greater
Purpose
I can conceive
Come N2 my Love
May we Create
the Spirit of Peace
give Peace 2 the World
if all goes back
to GOD

Siddhān Sila
78

CRISIS RESPONSE

- Firstly, don't panic
 - Stigma remains our biggest enemy
- The rise in stimulants shows a failure of public policy
 - Address root causes over single drugs and supply

FOCUS ON FENTANYL

- Deaths are largely being driven by fentanyl exposure
 - Overdose prevention
 - Harm reduction
 - Treatment
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Photo: D Ciccarone

TEST THE LETTUCE



Photo: D Ciccarone



20 Seconds

Harm Reduction Tips

Resources

Stats

Good Samaritan Law

GO SLOW



Fentanyl is here

ACKNOWLEDGEMENTS

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👉 NIH/NIDA funding: R01DA037820

👉 Photo credits: Dan Ciccarone, Jeff Ondocsin





Photo: D Ciccarone