

DePaul Law Review

Volume 70 Issue 2 *Winter 2020*

Article 2

No Moral Panic: Public Health Responses to Illicit Fentanyls

Daniel Ciccarone M.D.

Follow this and additional works at: https://via.library.depaul.edu/law-review

Part of the Law Commons

Recommended Citation

Daniel Ciccarone M.D., *No Moral Panic: Public Health Responses to Illicit Fentanyls*, 70 DePaul L. Rev. 229 (2022)

Available at: https://via.library.depaul.edu/law-review/vol70/iss2/2

This Article is brought to you for free and open access by the College of Law at Via Sapientiae. It has been accepted for inclusion in DePaul Law Review by an authorized editor of Via Sapientiae. For more information, please contact digitalservices@depaul.edu.

NO MORAL PANIC: PUBLIC HEALTH RESPONSES TO ILLICIT FENTANYLS

Daniel Ciccarone, M.D., M.P.H.*

Abstract/Summary

Overdose deaths due to illicit fentanyl represent a historic crisis-one full of challenges. But this era is also one of historic opportunity to rebalance our drug policies in favor of demand reduction (including treatment) and away from failed prohibitionist policies, reorienting to a healthier society resilient to problematic drug use.

I. A Drug Crisis of Historic Proportion

For the first time in 100 years, life expectancy at birth has gone down in the United States three consecutive years from 2014 to 2017.¹ In 1919, mortality rates increased because of the ravages of World War I and the great influenza pandemic.² Because these events disproportionately affected young people, life expectancy went down correspondingly. While the effects of the current COVID-19 pandemic are unfolding-the full brunt of its effects on mortality and morbidity will be unveiled over several years—we are plagued by another scourge: drug poisoning that is disproportionately affecting young people and decreasing total life expectancy.³ According to the latest formal data from the U.S. Centers for Disease Control and Prevention (CDC), there were 67,367 drug overdose deaths in the United States in 2018, a tripling in rate from 6.1/100,000 US population in 1999 to 20.7/100,000 in 2018 (239% increase).⁴ Since the beginning of the opioid epidemic, over 750,000 Americans have died from drug poisoning.⁵ Annual deaths due to drug overdoses now exceed deaths due to car accidents,

^{*} Professor, Department of Family and Community Medicine, University of California San Francisco.

^{1.} Sherry L. Murphy et al., *Mortality in the United States, 2017*, NCHS DATA BRIEF. No. 328, at 1 (Nov. 2018); Steven H. Woolf & Heidi Schoomaker, *Life Expectancy and Mortality Rates in the United States, 1959-2017*, 322 JAMA 1996, 1998 (2019).

^{2.} NCHS, NAT'L VITAL STATS. SYS., Drug Overdose Deaths in the United States, 1999–2018, https://www.cdc.gov/nchs/data/databriefs/db356_tables-508.pdf#3.

^{3.} Woolf & Schoomaker, supra note 1, at 1999.

^{4.} Holly Hedegaard et al., *Drug Overdose Deaths in the United States*, 1999–2018, NCHS DATA BRIEF NO. 356, at 1 (2020).

^{5.} Id.

gun violence, and even HIV at the height of the 1990s' HIV epidemic.⁶

A. The triple wave epidemic

The triple wave epidemic of overdose deaths stems from three classes of opioids: prescription opioid pills ("semi-synthetic opioids" in Figure 1), heroin, and synthetic opioids other than methadone.⁷ Figure 1 shows three waves of opioid mortality, each wave cresting on top of the one before it. In the first wave, overdoses related to opioid pills started rising in the year 2000 and have steadily grown through 2016.8 The second wave saw overdose deaths due to heroin, which started increasing clearly in 2007, surpassing the number of deaths due to opioid pills in 2015.9 The third wave of mortality has arisen from fentanyl, fentanyl analogues and other illicit synthetic opioids in the drug supply, climbing slowly at first, but dramatically after 2013.10 Data from 2017 show synthetic opioid deaths continuing to rise, reaching a peak of over 28,000, while opioid pill and heroin overdose deaths leveled off, albeit at very high levels of approximately 15,000 deaths in each category.¹¹ It is important to note that the latest provisional data from the CDC shows the third wave-deaths due to fentanyls-continuing to rise with 48,729 deaths attributed to synthetic opioids in the 12-month period through July of 2020; an 48% increase from the 12month period August 2018 through July 2019.12

^{6.} Josh Katz, Drug Deaths in America Are Rising Faster Than Ever, N.Y. TIMES (June 5, 2017), https://www.nytimes.com/interactive/2017/06/05/upshot/opioid-epidemic-drug-overdose-deaths-are-rising-faster-than-ever.html.

^{7.} Daniel Ciccarone, The triple wave epidemic: Supply and demand drivers of the US opioid overdose crisis, 71 INT'L J. DRUG POL'Y 183, 183–85 (2019).

^{8.} NATIONAL CENTER FOR HEALTH STATISTICS, *supra* note 2.

^{9.} Id.

^{10.} Id.

^{11.} Holly Hedegaard et al., *Drug Overdose Deaths in the United States*, 1999–2017, NCHS DATA BRIEF NO. 329, at 4 (2018).

^{12.} Provisional Drug Overdose Death Counts, CDC, NAT'L CTR. HEALTH STATS., https:// www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm (last updated Feb. 17, 2021) (last visited Feb 24, 2021).





B. Understanding fentanyls

Opioids are placed in three classes, based on their relationship to opium: natural, semi-synthetic and synthetic.¹³ Natural opioids, often called "opiates," are derived from opium, a gum extract of the poppy ovary; examples include morphine and codeine.¹⁴ Semi-synthetics are derived from opium derivatives, such as morphine or thebaine (examples include well-known pharmaceutical opioids, such as hydromorphone and oxycodone, as well as illicit heroin, i.e., diacetyl morphine).¹⁵ Synthetic opioids have no relationship to opium-based products and are produced in pharmaceutical facilities.¹⁶ Examples include fentanyl and methadone. Another way to classify opioids is by their mechanism of action at the mu-receptor of the nervous system: agonist, partial agonist, and antagonist.¹⁷ Many pain medications as

^{13.} Kimberly D.L. Parks et al., *The Pharmacology of Opioids, in* The ASAM PRINCIPLES OF ADDICTION MEDICINE 135 (Abigail J. Herron & Timothy K. Brennan eds., 3d ed. 2020).

^{14.} Id. at 135.

^{15.} Id. at 136.

^{16.} Id.

^{17.} Id. at 138-42.

well as most opioids with abuse potential are full mu-agonists.¹⁸ By triggering the mu-receptor, they induce pain relief, as well as euphoria.¹⁹ Partial agonists are just that: weaker stimulators of the mu-receptor. A good example of a partial agonist is the medication buprenorphine, considered an excellent choice in treating opioid use disorder.²⁰ Antagonists are essentially blockers of the mu-receptor, and thus trigger no effect, except perhaps dislocating an agonist from mu binding and reversing its effect; the overdose reversal agent naloxone is a good example of this action.²¹

Fentanyl and its chemical cousins, the fentanyl analogues, are synthetic opioids.²² Mother chemical fentanyl is a powerful agonist with potency by volume a hundred times that of morphine and forty times that of heroin.²³ As a medication, fentanyl is successfully used in surgery, obstetrics, and end-of-life care²⁴; it has both short-acting and long-acting forms²⁵ which, when used correctly, are tremendously useful. The street drug fentanyl that is fueling the current overdose crisis is an illicitly manufactured product. According to the Drug Enforcement Administration (DEA), illicit fentanyl is mostly coming from China or Mexico.²⁶ There is Estonian and Russian production as well, but those products do not come to the U.S.²⁷ There have been waves of fentanyls transported into the U.S. for three decades, the last one in the Chicago region occurred in 2006; however, the most recent wave, beginning in 2014, is the longest lasting and nationwide.²⁸

My research team and I have the privilege of doing some research in street-based settings, talking to persons who use drugs and observing heroin, fentanyl, and other drug use. This research helps gain a rich cultural understanding of drug use, along with gaining the perspective of those most affected by the vicissitudes in supply and the

24. Suzuki & El-Haddad, supra note 22, at 108.

25. Id.

26. U.S. Dep't Just., Drug Enforcement Admin., 2016 National Drug Threat Assessment Summary vii (2016).

27. Sarah G. Mars et al., *Illicit fentanyls in the opioid street market: desired or imposed?*, 114 ADDICTION J. 774, 775 (2019).

28. Daniel Rosenblum et al., The Rapidly Changing US Illicit Drug Market and the Potential for an Improved Early Warning System: Evidence from Ohio Drug Crime Labs, 208 DRUG & ALCOHOL DEPENDENCE 1, 1–2 (2020).

^{18.} Id. at 139-40.

^{19.} Parks et al., supra note 13, at 136-39.

^{20.} Id. at 141-42.

^{21.} Id. at 144.

^{22.} Joji Suzuki & Saria El-Haddad, A review: Fentanyl and non-pharmaceutical fentanyls, 171 DRUG & ALCOHOL DEPENDENCE 107, 107 (2017).

^{23.} Daniel Ciccarone, *Fentanyl in the US heroin supply: A rapidly changing risk environment*, 46 INT'L J. DRUG POL'Y 107, 108 (2017).

structural risks that are imposed on them. From a public health perspective, we are interested in understanding both imposed risk as well as behavioral risk taking. These understandings better inform interventions to reduce the negative health outcomes. We have written extensively on fentanyl supply, risk, and perception.²⁹ Among our findings: fentanyls are a supply side phenomenon that were not driven by demand from heroin users;³⁰ most street-based fentanyls are not sold as is,³¹ they are sold as fentanyl-adulterated or -substituted heroin (FASH)³²; fentanyl adulteration is occurring unbeknownst to users and low-level dealers³³; FASH is the norm in the areas of the country with the highest overdose rates (i.e., the Midwest and New England regions);³⁴ the fentanyl component of FASH is unpredictable and under constant change;³⁵ and as fentanyl supply changes, overdose risk changes.³⁶ It is important to note that the cryptic nature of FASH and the resultant vicissitudes in heroin and fentanyl potency are likely driving overdose (more so than sheer potency alone). Fentanyls may be here to stay; the continued presence of this deadly chemical class over the last five years is evidence of its durable supply.³⁷

II. PARADOXES OF PROHIBITION

A. The failure of drug prohibition

Drug policy is roughly divided into two poles: demand reduction and supply reduction. As noted, FASH is a supply-side imposition into the US drug market.³⁸ Since it is supply-sided, then why not simply "turn off the tap"? Attempting to decrease the problem by curtailing

- 32. Ciccarone et al., Heroin uncertainties, supra note 29, at 147.
- 33. Id. at 149.
- 34. Ciccarone, supra note 7, at 186
- 35. Mars et al., supra note 27, at 775-76.
- 36. Rosenblum et al., *supra* note 28, at 3–7.

^{29.} Sarah G. Mars et al., *The Textures of Heroin: User Perspectives on "Black Tar" and Powder Heroin in Two U.S. Cities*, 48 J. PSYCHOACTIVE DRUGS 270, 276–77 (2016); Daniel Ciccarone et al., *Heroin uncertainties: Exploring users' perceptions of fentanyl-adulterated and -substituted 'heroin'*, 46 INT'L J. DRUG POL'Y 146, 147, 149, 152 (2017); Ciccarone, *supra* note 23, at 107; Sarah G. Mars et al., *Sold as Heroin: Perceptions and Use of an Evolving Drug in Baltimore*, *MD*, 50 J. PSYCHOACTIVE DRUGS 167, 168 (2018); Sarah G. Mars et al., *Toots, tastes and tester shots: user accounts of drug sampling methods for gauging heroin potency*, 15 HARM REDUCTION J. 1 (2018); Mars et al., *supra* note 27, at 774; Ciccarone, *supra* note 7, at 183; Rosenblum et al., *supra* note 28.

^{30.} Mars et al., supra note 27, at 774-779.

^{31.} Mars et al., Sold as Heroin, supra note 29, at 174.

^{37.} U.S. Drug Enforcement Agency, DEA Intelligence Report: Fentanyl Flow to the United States 2–4 (2020).

^{38.} Mars et al., supra note 27, at 779.

supply does not work as well as desired, and in fact, having an excessive supply focus can have paradoxical results.

Supply control, including prohibition of drugs and the corollary penalization of drug use, has been the leading force in U.S. drug policy for over a hundred years.³⁹ The founding father of such prohibitionist efforts, which began in the 1920s, was Henry Anslinger. President Richard Nixon famously coined the term "war on drugs" to highlight his administration's efforts to curb the drug problem in the early 1970s. There is an extensive critical literature on the societal outcomes of this so-called war on drugs. I want to focus on one paper that is highly relevant to the current crisis.



FIGURE 2. MORTALITY RATES FROM UNINTENTIONAL DRUG OVERDOSES.

(A and B) Mortality rates for (A) individual drugs and (B) all drugs. Detailed data for individual drugs are only available from 1999 to 2016, although additional data for all drugs are available since 1979 (this area is grayed out). The exponential equation and fit are shown for all drugs. (Synth Opioids OTM: synthetic opioids other than methadone. This category includes fentanyl and its analogs.) From Jalal H, Buchanich J, Roberts MS, Balmert LC, Zhang K, Burke DS. Changing dynamics of the drug overdose epidemic in the United States from 1979 through 2016, Science 21 Sep 2018:Vol. 361, Issue 6408,

^{39.} David T. Courtwright, Dark Paradise: A History of Opiate Addiction in America 1, 2 (2001).

eaau1184. DOI: 10.1126/science.aau1184. Reprinted with permission from AAAS.

Science, a journal published by the American Association for the Advancement of Science (AAAS), is the "premier global science weekly" reporting on advances in scientific understandings in the world.⁴⁰ Hawre Jalal and colleagues reported the results of their analysis of thirty-eight years (1978–2016) of U.S. drug mortality data.⁴¹ They found an exponential growth in the drug-related death rate over this time period (Figure 2). This exponential increase in drug-related death rate was not defined by any specific class of drugs. Each era has its problematic drug defined by supply or by cultural desire, but there may be underlying drivers of problematic drug use leading to death that are independent of the class of drug that continue to get worse over time. Rising mortality due to opioids, including fentanyls, is only the latest manifestation of this multi-decade phenomenon. There is no doubt, however, that the triple wave has made the situation much worse.

The reasons for this "worst case" public health scenario involves two failures: first, that of drug prohibition to curb the problem, and second, the failure to address the underlying, root causes of problematic drug use.

There is a metaphor used in drug policy when discussing the paradoxical effects of many supply interventions: that of the "balloon," considering that attempts to restrict supply are like squeezing a balloon and, as we all know, that leads to the balloon popping out in an *unexpected* place. There are a number of solid academic analyses which discuss the challenges of our long-standing drug prohibitionist policies.⁴² One example highlights an unforeseen consequence of a large-scale supply intervention.⁴³ In the 1990s and 2000s, the U.S. supported intense efforts to reduce cocaine production in Colombia and its export to the United States.⁴⁴ These efforts included crop spraying and supply route interdiction, as well as arrest, extradition, and sup-

44. Id. at 279.

^{40.} AM. ASS'N ADVANCEMENT SCI., *Scientific Journals*, https://www.aaas.org/journals (last visited Mar. 10, 2021).

^{41.} Harwe Jalal et al., *Changing dynamics of the drug overdose epidemic in the United States from 1979 through 2016*, 361 SCIENCE 1218, 1218 (2018).

^{42.} ROBERT J. MACCOUN & PETER REUTER, DRUG WAR HERESIES: LEARNING FROM OTHER VICES, TIMES, & PLACES 21–22 (2001); PETER ANDREAS & ETHAN NADELMANN, POLICING THE GLOBE: CRIMINALIZATION AND CRIME CONTROL IN INTERNATIONAL RELATIONS 21 (2006).

^{43.} Daniel Ciccarone, Heroin in brown, black and white: Structural factors and medical consequences in the US heroin market, 20 INT'L J. DRUG POL'Y 277, 277–82 (2009).

ported killing of drug cartel leaders.⁴⁵ The goal was to negatively affect the historically high cocaine production at the time-at the height of which approximately 1,000 metric tons were estimated to be produced each year.⁴⁶ One unexpected result of this downward pressure on cocaine was the introduction of poppy and heroin production for the first time in Colombian history.⁴⁷ Prior research noted that "[t]he diversification of Colombian drug production and export to include heroin in addition to cocaine, with the resultant increase in heroin availability in the US, despite reduced supply from traditional sources, highlights a paradoxical effect of interdiction."48 The influx of new Colombian-sourced heroin into the U.S. led to a nationwide decrease in heroin price to historically low levels.49 The DEA's metric for success in controlling a drug's supply is increased price.⁵⁰ Despite multidecade efforts to control heroin into this country, whether from Afghanistan, Colombia, or Mexico, heroin prices have been pushed to generationally low levels.⁵¹

One under-recognized driver of drug mortality is demand and its under-treated root causes.⁵² The demand-side argument examines the structural factors that might be driving the triple wave overdose epidemic.⁵³ The "diseases of despair" analyses highlight the extraordinary rise in death rates among the middle-aged White population without a college degree in three related categories: drug poisoning, alcohol-related disease, and suicide.⁵⁴ The most compelling structural determinants for opioid-related use and mortality include an aging population with rises in reported pain and disability, economic distress, declining social cohesion and rising psychological malaise that may have led an at-risk population to seek opioids in the first place.⁵⁵ In this line of reasoning, increased prescription opioid supply is a "vector" of the opioid overdose epidemic with more proximal root

54. Elizabeth M. Stein et al., *The Epidemic of Despair Among White Americans: Trends in the Leading Causes of Premature Death*, 1999–2015, 107 AM. J. PUB. HEALTH 1541, 1545 (2017).

55. Dasgupta et al., supra note 52, at 182-86.

^{45.} Id.

^{46.} United Nations Office for Drug Control and Crime Prevention, Global Illicit Drug Trends 57 (2002).

^{47.} Ciccarone, supra note 43 at 279.

^{48.} Id. at 279.

^{49.} Daniel Ciccarone et al., Impact of South American heroin on the US heroin market 1993–2004, 20 INT'L J. DRUG POL'Y 392, 399 (2009).

^{50.} Id. at 392.

^{51.} Id. at 399-400.

^{52.} Nabarun Dasgupta et al., Opioid Crisis: No Easy Fix to Its Social and Economic Determinants, 108 Am. J. PUB. HEALTH 182, 183 (2018).

^{53.} Id. at 183.

causes that have worsened structural forces accompanied by generational hopelessness and despair.⁵⁶

B. Putting the genie "back in the bottle"

Using its authority under the Controlled Substances Act⁵⁷ and in response to the synthetic opioid overdose crisis, the DEA issued a temporary scheduling order in February 2018 placing all current and future fentanyl analogues, not already scheduled, in the Schedule 1 (most restricted) classification of drugs.⁵⁸ This emergency power was extended by the Temporary Reauthorization and Study of the Emergency Scheduling of Fentanyl Analogues Act until May 2021.⁵⁹ This amounts to a class-wide ban on manufacturing and supply of all members of this chemical family.

More than 1,400 fentanyl analogues have been synthesized as research chemicals and two hundred of these analogues have been studied pharmacologically.⁶⁰ The DEA's National Forensic Laboratory Information Service is actively tracking over sixteen analogues which have entered the illicit drug market.⁶¹ The public health concerns center on the illicit fentanyl agonists which have abuse potential and overdose risk due to their potency.⁶² It is important to keep in mind that chemical structure alone does not tell us if there are potential antagonists (like naloxone) and partial agonists (like buprenorphine) in the family of fentanyls that may be useful in treatment.⁶³ This is important because given the potency of illicit fentanyl, we need to explore new antagonists to reverse overdose and new treatments to address greater dependency. We need better, perhaps stronger or longer lasting, antagonists and partial agonists-and they may come from the fentanyl class. The class-wide ban will potentially inhibit: (1) clinical trials of novel beneficial fentanyls and (2) clinical understandings of

^{56.} Id. at 182-83.

^{57. 21} U.S.C. §§ 801–904.

^{58.} Schedules of Controlled Substances: Temporary Placement of Fentanyl-Related Substances in Schedule I, 83 Fed. Reg. 25 (proposed Feb. 6, 2018) (to be codified at 21 C.F.R. pt. 1308).

^{59.} Temporary Reauthorization and Study of the Emergency Scheduling of Fentanyl Analogues Act, S. 3201, 116th Cong. (2020).

^{60.} Nektaria Misailidi et al., Fentanyls continue to replace heroin in the drug arena: the cases of ocfentanil and carfentanil, 36 FORENSIC TOXICOLOGY 12, 12 (2018).

^{61.} U.S. Drug Enforcement Admin., Diversion Control Div., NFLIS Brief: Fentanyl and Fentanyl-Related Substances Reported in NFLIS, 2015–2016 12 (2017).

^{62.} Ciccarone, *supra* note 23, at 108.

^{63.} Fentanyl Analogues: Perspectives on Classwide Scheduling, Hearing Before the House Comm. on the Judiciary and Subcomm. on Crime, Terrorism, and Homeland Security, 116th Cong. 4 (2020), available at https://www.congress.gov/116/meeting/house/110392/witnesses/HHRG-116-JU08-Wstate-ComerS-20200128.pdf.

how fentanyls adversely affect health, such as why overdose events are so severe.

It is important to note that, as of the latest data, the currently active class-wide ban has not yet shown to be effective. For example, drug seizure data from the Ohio Bureau of Criminal Investigation's (BCI) crime lab from 2009 to 2018 (204,951 samples across 87 counties, providing 8,352 county-month observations) was used examine trends and the relationship between drug seizures and overdose at the county level.⁶⁴ Ohio has been exceptionally hard-hit by the opioid crisis, especially the third wave: fentanyls.⁶⁵ The drug seizure data analysis shows the number of fentanyl analogues by year: the only fentanyl analogue detected in 2015 was acetyl fentanyl; eight new analogues appeared in 2016, six more appeared in 2017, and seven new analogues appeared in 2018.66 Other non-fentanyl synthetic opioids are emerging: U-47700 in 2016, and U-48800, U-49900, and U-51754 in 2017. No decline in novel opioids over time was seen and the spillover to non-fentanyl synthetics is concerning.⁶⁷ However, it is important to note that the DEA class-wide scheduling only took effect in February 2018, so longitudinal study on the effects of this policy is needed.68

In a commentary published in the International Journal of Drug Policy in 2019, I argued that synthetic opioids may represent the "end of interdiction."⁶⁹ The challenge is in detecting illicit flows since, due to the very high potency of fentanyl, the volume relative to "traditional" drugs (like heroin) of smuggled shipments is low.⁷⁰ One paradox of supply control was demonstrated in the alcohol prohibition of the 1920s, which was termed the "Iron Law of Prohibition." This "law" predicts that drug weight and volumes go down, while potencies go up, due to supply control.⁷¹ During Prohibition, the illicit alcohol trade shifted from beer to high alcohol content liquors to avoid detection.⁷² We see evidence of this effect in the current triple wave opioid crisis as supply pressures on opioid pills, especially those illicitly mar-

70. Id.

71. Leo Beletsky & Corey S. Davis, *Today's fentanyl crisis: Prohibition's Iron Law, revisited*, 46 INT'L J. DRUG POL'Y 156, 157 (2017).

^{64.} Rosenblum et al., supra note 28, at 1-11.

^{65.} Id. at 2.

^{66.} Id. at 4.

^{67.} See generally id.

^{68.} Schedules of Controlled Substances: Temporary Placement of Fentanyl-Related Substances in Schedule I, 83 Fed. Reg. 25 (proposed Feb. 6, 2018) (to be codified at 21 C.F.R. pt. 1308).

^{69.} Ciccarone, supra note 7, at 186.

^{72.} Id.

keted, shifted the street market to higher potency heroin and then to even higher potency fentanyl.⁷³ The new "Iron Law" suggests that highly potent-by-volume drugs like fentanyl are expected due to the honing effects of interdiction.

Why is it so hard to get the fentanyl supply genie back in the bottle? In a recent publication, *The Future of Fentanyl*, Bryce Pardo and colleagues discuss the drivers of the synthetic opioid market in the U.S.: increased profitability, lack of regulatory capacity in the main source country, China, as well as technological advancements in purchasing (i.e., cryptocurrencies) and routing.⁷⁴ The change in source-country of our imported illicit opioids is important: from known criminal trafficking organizations within Afghanistan, Colombia, and Mexico, to new source-countries like China. In addition, moving from agriculturalbased drugs, such as poppy-derived heroin, to lab-based drugs, like fentanyls, makes the sourcing and routing more challenging to detect. In addition, the technology to produce fentanyls is mobile; if China were able to crack down on domestic illicit production, the supply balloon could squeeze production to another new source-country.

Making the class-ban on fentanyl permanent will also likely increase trends in federal prosecution of fentanyl trafficking. Sentencing commission data show dramatic increases in fentanyl trafficking offenders, disproportionately among persons of color, with 41% having no prior criminal record and 50% at the bottom of the distribution chain.⁷⁵ Over half of those charged/convicted did not know they were selling fentanyl.⁷⁶

C. No moral panic

Sociologists and criminologists talk about "moral panics" when society collectively acts out of instinct or fear.⁷⁷ We saw this pervasive fear-based reaction when HIV infection became an epidemic in the 1990s and those living with AIDS were shunned and treated prejudi-

^{73.} Ciccarone, supra note 7, at 189.

^{74.} Bryce Pardo et al., The Future of Fentanyl and Other Synthetic Opioids XV-XXVVIII (2019).

^{75.} Public Data Presentation for Synthetic Cathinones, Synthetic Cannabinoids, Fentanyl and Fentanyl Analogues Amendments, U.S. SENTENCING COMMISSION (Jan. 2018) https://www.ussc.gov/sites/default/files/pdf/research-and-publications/data-briefings/2018_synthetic-drugs.pdf; *Quick Facts: Fentanyl Trafficking Offenses*, U.S. SENTENCING COMMISSION, https://www.ussc.gov/sites/default/files/pdf/research-and-publications/quick-facts/Fentanyl_FY18.pdf (last viewed Mar. 12, 2021).

^{76.} Id.

^{77.} Chas Critcher, *Moral Panics*, CRIMINOLOGY & CRIM. JUST., OXFORD RES. ENCYCLOPE-DIAS (Mar. 29, 2017), *available at* https://oxfordre.com/criminology/view/10.1093/acrefore/ 9780190264079.001.0001/acrefore-9780190264079-e-155.

cially. In that era, stigma and shame were seen as political tools to restrain sexuality and "degay" the at-risk population.⁷⁸ Commonly believed, but irrational, fears of HIV infection through casual contact contributed to this.⁷⁹

The notion of moral panic often fits in describing our collective response to problematic drug waves. Caroline Acker summarizes this recurrent theme in her book, Creating the American Junkie: "In recent decades, one drug has succeeded another in the headlines, each accompanied by admonitions that it is uniquely addictive or likely to produce bizarre behavior."80 The response to each drug wave, more often than not, has emphasized punitive over therapeutic measures.⁸¹ Crack (cocaine bicarbonate) use was particularly demonized as a social "plague." Reinarman and Levine, in their edited volume, Crack in America, emphasize the misdirection inherent in these panics: "The crack scare, like previous drug scares and antidrug campaigns, promoted misunderstandings of drug use and abuse, blinded people to the social sources of many social problems (including drug problems), and constrained the social policies that might reduce those problems."82 Moral panics, by putting excessive focus on behavior and behavior change, tend to "blame the victim." Mannion and Small, in a recent essay, sum the issue well: "Blaming individuals and groups for the health needs they manifest leads to a focus on disciplinary power and, in so doing, ignores underlying biological and structural causes and puts undue and counter-productive pressure on the vulnerable."83

The moral panic over fentanyl leads to irrational claims, such as the fear that fentanyl cannot be touched or that fentanyl is being deliberately put into all substances, and subsequent responses, including a rise in tougher penalties for fentanyl use/possession/manufacture.⁸⁴ Fear, moral panic, and penalization of drug use all lead to stigma and marginalization of the affected population. The consequences of wide-

81. Id.

82. CRAIG REINARMAN & HARRY G. LEVINE, *Crack in Context: America's Latest Demon Drug, in* CRACK IN AMERICA: DEMON DRUGS AND SOCIAL JUSTICE 46 (Craig Reinarman & Harry G. Levine eds., 1st ed. 1997).

83. Russell Mannion & Neil Small, On Folk Devils, Moral Panics and New Wave Public Health, 8 INT'L J. HEALTH POL'Y & MGMT 678, 682 (2019).

84. MICHAEL COLLINS & SHEILA P. VAKHARIA, CRIMINAL JUSTICE REFORM IN THE FENTANYL ERA: ONE STEP FORWARD, TWO STEPS BACK 3–4 (2020).

^{78.} Gabriel Rotello, Sexual Ecology: AIDS and the Destiny of Gay Men 113–17 (1997).

^{79.} SIMON WATNEY, POLICING DESIRE: PORNOGRAPHY, AIDS, AND THE MEDIA 38–57 (3d ed. 1997).

^{80.} Caroline Jean Acker, Creating the American Junkie: Addiction Research in the Classic Era of Narcotic Control 1–12 (2002).

spread moral panic run counter to the goals of public health, which seeks to encourage individuals to come forward for prevention and treatment services. Instead, moral panic induces individuals to run and hide.

III. THE WAY FORWARD

I have lost too many colleagues, patients, and research participants to overdose. I understand the desire to act and the need to do something to reduce the carnage. But I also know the danger of moral panic and the stigmatizing effects of excessively punitive approaches and exuberant supply reduction approaches. By increasing stigma—a very powerful force in human nature—they are simply counterproductive to the goals of public health.

Fentanyls are likely here to stay. They are the new norm. Instead of fear, let us respond with a public health orientation of science, reason, and compassion.

In meeting with criminal justice leaders at various national meetings held by the National Institute of Justice, DEA, High Intensity Drug Trafficking Areas (HIDTAs) among others, they have stated that "[w]e are not going to arrest our way out of this." They, and leaders at the Office of National Drug Control Policy (ONDCP), have called for public health/public safety partnerships."⁸⁵ These shifts in political tone from leadership – and public perspective – favor treatment over incarceration.

Chauncey Parker, Executive Assistant District Attorney in the Manhattan District Attorney's Office and Director of the New York/ New Jersey HIDTA program often speaks of his "North Star" in tackling the fentanyl problem: *to reduce deaths*. So what strategies are most likely to reduce deaths?

- Offer treatment over punishment. Pre-arrest diversion⁸⁶ and other strategies to move individuals from prosecution to medical help for their substance use disorder have a growing evidence base of effectiveness.⁸⁷

^{85.} Community Oriented Policing Services & Police Executive Research Forum, Building Successful Partnerships between Law Enforcement and Public Health Agencies to Address Opioid Use 3–7 (2016).

^{86.} Jac Charlier, *Pre-Arrest Diversion (PAD): Emerging Issues and Example Policy Responses*, TASC CTR. HEALTH & JUST., https://www.centerforhealthandjustice.org/TascBlog/images/documents/Publications/Pre-ArrestDiversion-IssuesandPolicy_SlideShow.pdf (last visited Mar. 12, 2021).

^{87.} Henry J. Steadman & Michelle Naples, *Assessing the effectiveness of jail diversion programs for persons with serious mental illness and co-occurring substance use disorders*, 23 BEHAV. SCI. & L. 163, 163 (2005).

- Expand treatment for opioid use disorder. Medically assisted treatment (MAT) includes three medications, i.e., methadone, buprenorphine and extended-release naltrexone, shown to be medically effective and cost-effective.⁸⁸ A recent meta-analysis showed impressive reductions in mortality attributable to receipt of MAT.⁸⁹ Buprenorphine is one of the more efficacious from a public health standpoint as it can be prescribed by primary care providers, thus greatly expanding treatment availability. However, regulatory burdens, like mandatory prescriber training and DEA licensing inscribed in the DATA 2000 law authorizing its use, has led to lower levels of prescriber uptake.⁹⁰ The Mainstreaming Addiction Treatment Act of 2019, with House (H.R.2482⁹¹) and Senate (S.2074⁹²) versions, attempts to address the barriers inherent in the original legislation.
- Increase federal funding. Federal legislative efforts to address the opioid crisis, including the Comprehensive Addiction and Recovery Act (CARA)⁹³ and the Substance Use Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act (SUPPORT)⁹⁴ are quite helpful, yet much more is needed. Overdose deaths from all opioids have continued to rise: a 29% year-over-year increase through July 2020, according to CDC provisional data.⁹⁵
- Greater support for prevention. Harm reduction ideas and prevention technologies, once controversial, are gaining both evidence and acceptance.⁹⁶ The goal of harm reduction is to reduce deaths and other harms from drug use.⁹⁷ Because it is personcentric and non-judgmental, it can reduce stigma and lead to greater engagement with individuals who use drugs it can even

^{88.} Nora D. Volkow et al., *Medication-Assisted Therapies—Tackling the Opioid-Overdose Epidemic*, 370 New Eng. J. Med. 2063, 2065 (2014). More recent terminology is "medications for opioid use disorder" (MOUD).

^{89.} Jun Ma et al., *Effects of medication-assisted treatment on mortality among opioids users: a systematic review and meta-analysis*, 24 MOLECULAR PSYCHIATRY 1868, 1868 (2018).

^{90.} Kevin Fiscella et al., Buprenorphine Deregulation and Mainstreaming Treatment for Opioid Use Disorder: X the X Waiver, 76 JAMA PSYCHIATRY 229, 229 (2019).

^{91.} Mainstreaming Addiction Treatment Act of 2019, H.R. 2482, 116th Cong. (2019).

^{92.} Mainstreaming Addiction Treatment Act of 2019, S. 2074, 116th Cong. (2019).

^{93.} Comprehensive Addiction and Recovery Act, S. 524, 114th Cong. (2016) (enacted).

^{94.} SUPPORT for Patients and Communities Act, H.R. 6, 115th Cong. (2018) (enacted).

^{95. 12} Month-ending Provisional Number of Drug Overdose Deaths, CDC, NAT'L CTR. HEALTH STATS., https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm#dashboard (last updated Feb. 7, 2021) (last visited Mar. 5, 2021).

^{96.} Alison Ritter & Jacqui Cameron, A review of the efficacy and effectiveness of harm reduction strategies for alcohol, tobacco and illicit drugs, 25 DRUG ALCOHOL REV. 611, 618–19 (2006). 97. Dan Ciccarone, Henceforth harm reduction?, 23 INT'L J. DRUG POL'Y 16, 16 (2012).

serve as a bridge to treatment. Interventions, such as syringe service programs, are now supported by such leaders as former HHS Assistant Secretary Brett Giroir at the Department of Health and Human Services. Naloxone distribution, once quite controversial, is also endorsed by former U.S. Surgeon General Jerome Adams. Bolder ideas include supervised consumption services⁹⁸ and heroin-assisted treatment.⁹⁹

Surveillance of the drug supply, a possible element of a public health/public safety partnership, can potentially act as an early warning system alerting front-line responders and those who use drugs to dangerous changes in supply.¹⁰⁰ Another emerging approach includes drug checking. Heroin users who used fentanyl immunoassay test strips to check for fentanyl had greater odds of positive changes in behavior.¹⁰¹

IV. CONCLUSION

At this moment we are still working on yesterday's problem. The fourth wave of the opioid crisis sees a shift in use patterns to include methamphetamine and cocaine with dramatically rising curves in stimulant-related deaths.¹⁰² To end the multi-decade, multi-generational exponential increase in drug mortality, we need bold, creative, and perhaps novel responses. There is growing evidence that we need to address the socioeconomic determinants of health if we are to "fill in the cracks" of society that the waves of drug supply fall into.¹⁰³

In collaboration with Josh Katz at the *New York Times*, thirty experts were asked to think "big, but realistically, about solutions. Imagine you had \$100 billion to spend over five years — a little less than current federal domestic H.I.V./A.I.D.S. spending — to address the

^{98.} Chloé Potier et al., Supervised injection services: what has been demonstrated? A systematic literature review, 145 DRUG & ALCOHOL DEPENDENCE 48, 48–68 (2014).

^{99.} Beau Kilmer et al., Considering Heroin-Assisted Treatment and Supervised Drug Consumption Sites in the United States vi–xii (2018).

^{100.} Ciccarone, supra note 7, at 187; Rosenblum et al., supra note 28, at 8.

^{101.} Nicholas C. Peiper et al., Fentanyl test strips as an opioid overdose prevention strategy: Findings from a syringe services program in the Southeastern United States, 63 INT'L J. DRUG POL'Y 122, 122 (2019).

^{102.} Berkshire District Attorney's Office, "Fourth Wave of the Opioid Epidemic: Polysubstance Use" Hosted by Berkshire District Attorney's Office and the Berkshire Opioid Addiction Prevention Collaborative, MASS. (Aug. 21, 2020), https://www.mass.gov/news/fourth-wave-of-theopioid-epidemic-polysubstance-use-hosted-by-berkshire-district-attorneys (last viewed Mar. 5, 2021).

^{103.} Dasgupta et al., supra note 52, at 186-87.

opioid crisis. Where would you put that money?"¹⁰⁴ The composite answer was a revelation: a comprehensive and balanced plan including harm reduction, treatment, demand reduction (including community development), and supply reduction.¹⁰⁵ This schematic has been turned into policy platforms for a number of top political figures—its implementation could signal the end of an unfortunate era.

^{104.} Josh Katz, *How a Police Chief, a Governor and a Sociologist Would Spend \$100 Billion to Solve the Opioid Crisis*, N.Y. TIMES (Feb. 14, 2018), https://www.nytimes.com/interactive/2018/02/14/upshot/opioid-crisis-solutions.html. 105. *Id.*