



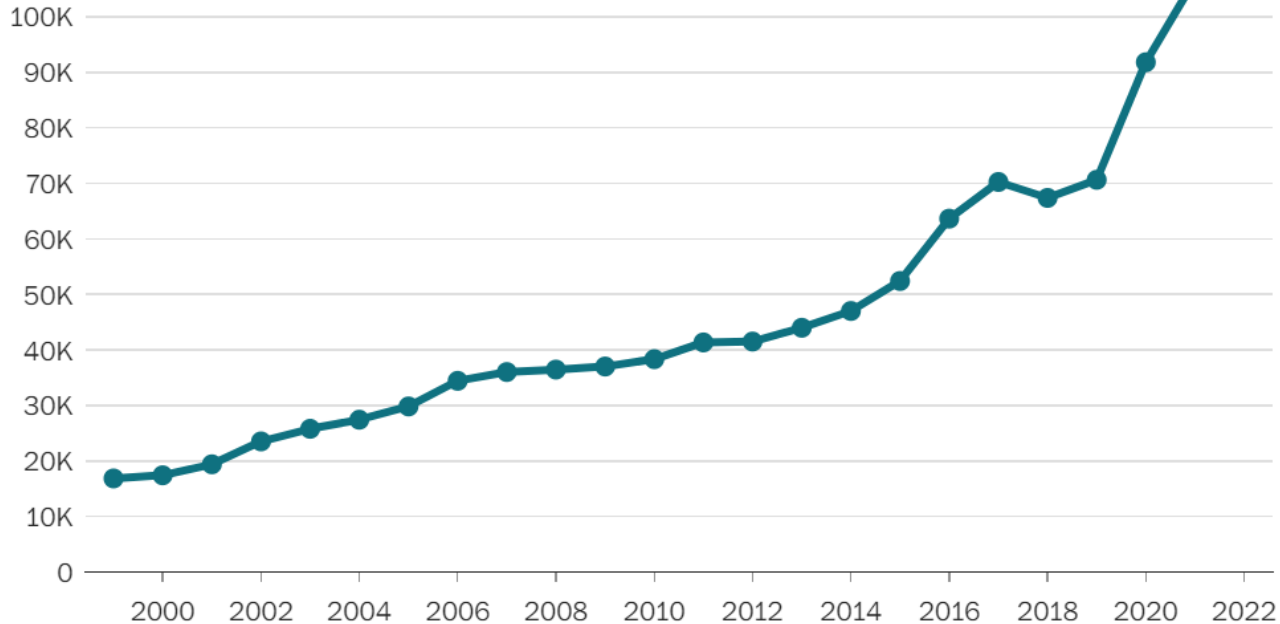
# Discussion of “The Downward Spiral,” by Greenwood, Guner, & Kopecky

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## Deaths due to overdoses are not abating

Annual fatal overdoses have steadily risen for two decades. More than 100,000 Americans per year are dying.

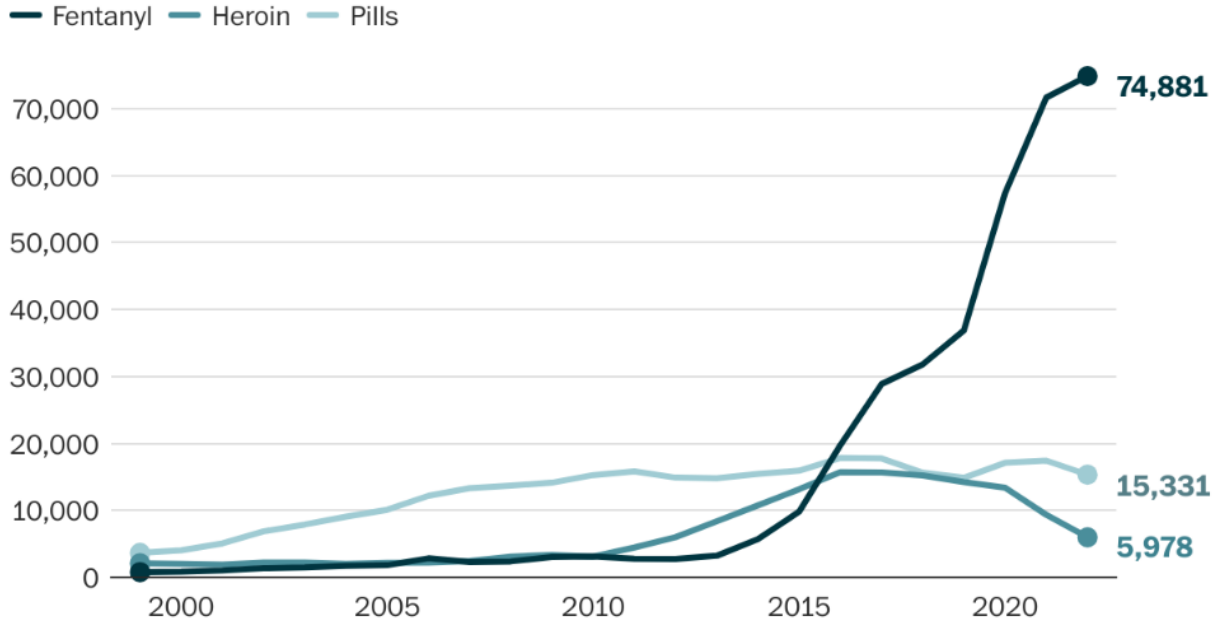


Source: [Centers for Disease Control & Prevention](#)

PAUL WALDMAN / THE WASHINGTON POST

## The three deadly waves of the opioid epidemic

As prescription pills dwindled, addicted users turned to heroin and fentanyl, driving historic numbers of overdose deaths.

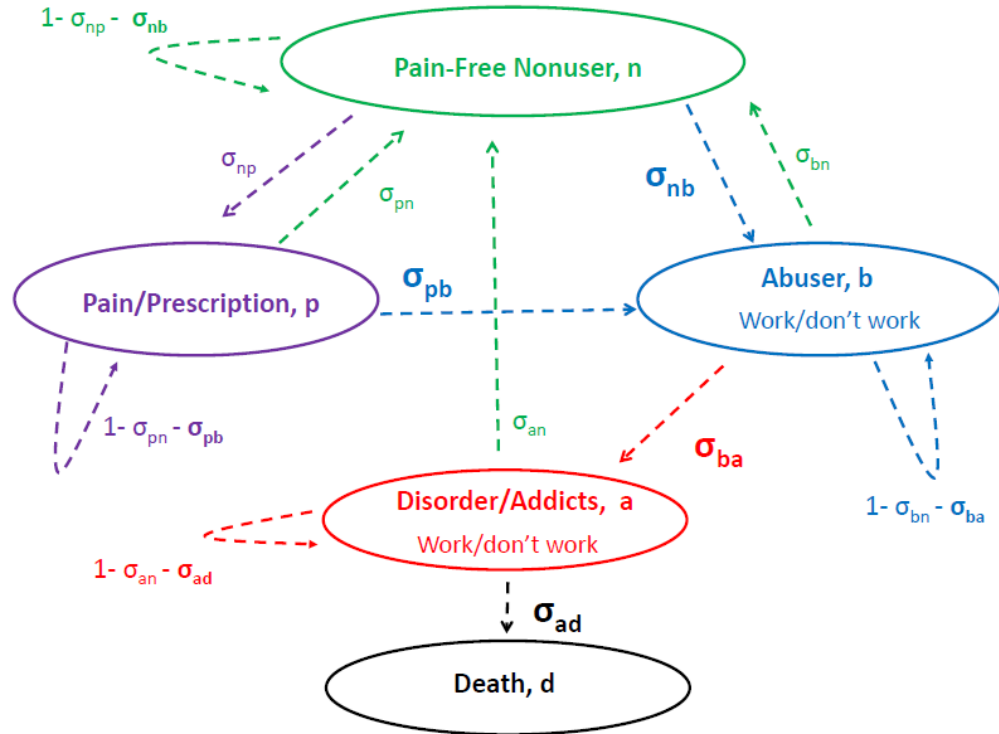


Note: 2022 death data is provisional

Source: CDC mortality data

STEVEN RICH / THE WASHINGTON POST

# Greenwood, Guner, & Kopecky's Model



# Nice Features of the Model

- Model captures dynamics of addiction that reasonably approximate prior economic models and also how addiction experts think about addiction
  - Previous use increases marginal utility of current consumption; “Addiction” state characterized by  $pr(\text{death}) > 0$  and utility loss from opioid consumption
- Supply side showing up through changes in prices and “misinformation”

# Some Challenges for the Model

- Limited data to set and calibrate model parameters
- “At the apex of my addiction, *all* moments were the present moment. ... Future rewards or adverse consequences were not salient.” (Kristen Smith, J Subs Abuse Treatment 2022)
- Fentanyl is increasing mortality due to misuse, even without addiction
- Misinformation about addiction risk – what else is this parameter capturing?
- Cross-state validation check might be overstating mortality predictions

# Price Elasticity Too High?

- Prices matter a lot in the model, since it's calibrated to a price elasticity of -0.95.
  - Mixed evidence on effects of Medicare Part D:
    - Increases in overall prescriptions, and <65 opioid deaths (Powell, et al 2020), increase in opioid use among >65 (Soni 2018)
    - No effect on opioid use among elderly (Sabety et al. 2021)
  - No evidence that Medicaid expansions led to increases in:
    - Opioid use (Baicker et al. 2017)
    - Opioid deaths (Averett et al., 2019, Goodman-Bacon & Sandoe 2017, Kravitz-Wertz et al. 2020)

# Illegal Market Prices

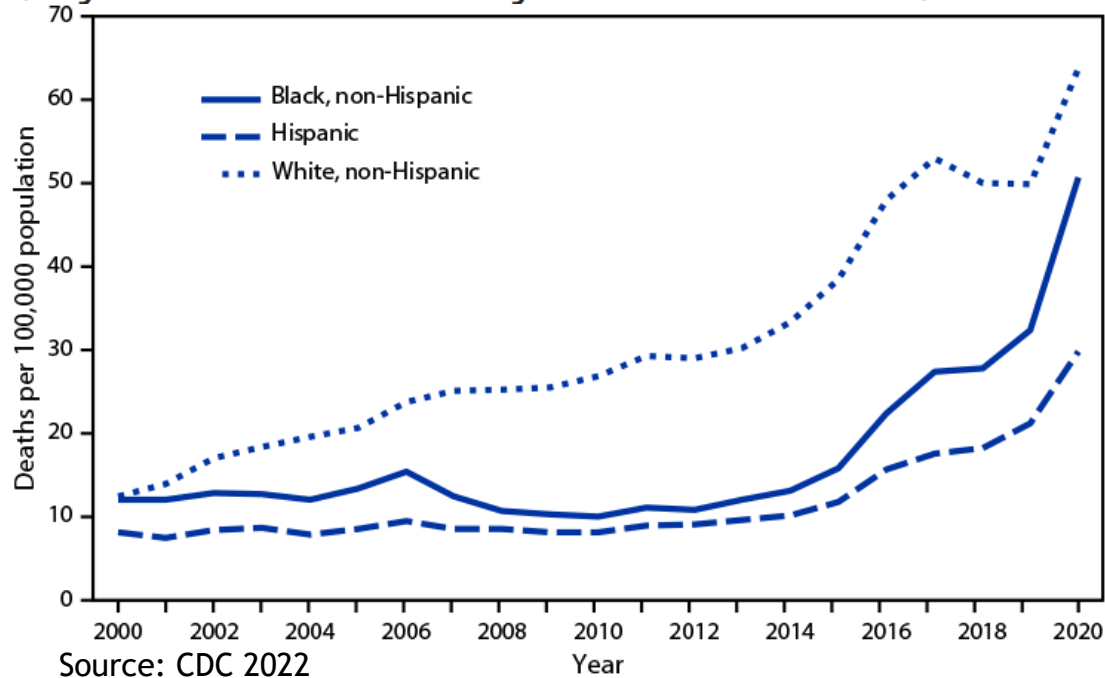


Figure 6: Price of Illegal Opioids. Source: *Economic Report of the President, 2020*.



# Where is Race?

*QuickStats*: Death Rates for Drug Overdose\* Among Persons Aged 25–44 Years, by Race and Ethnicity<sup>†</sup>— United States, 2000–2020



# What Should We Do to End the Opioid Crisis?

- Broad agreement among addiction experts: a suite of policy changes are needed
  - Promote non-opioid pain treatment alternatives
  - Increased funding and regulations to support better access to treatment
  - Harm reduction policies, e.g., Naloxone availability
  - Targeting the fentanyl supply chain
- Also strong bipartisan public support for policies like addiction treatment centers and broad Naloxone availability

# How Should Economists Engage on Opioid Crisis?

- Dilemmas abound in choices around opioids; the model is helpful for illuminating trade-offs of different options
- Set up models to inform key features of current policy debates, e.g., access to addiction treatment
- My experience: language and labels matter a lot
  - Perhaps avoid “Abuser” and “Addict”
- Talk to decision scientists in public health with similar methods



# Thank you!