

# Mental Health and Substance Use Disorders: Impact of COVID-19

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# COVID-19 and Mental Health

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anguish  
heartache  
loss  
disappointment  
grief  
misery  
agony  
suffering  
pain  
mourning  
woe  
despair  
depression  
sad  
sadness  
sorrow  
melancholy  
heartbreak  
letdown



# COVID and Mental Health

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The rates of Depression and Anxiety have **tripled** compared to 2,019 as reported by the U.S. Center for Disease Control and Prevention

“These rates were higher than what we've seen after other large-scale traumas like September 11th, Hurricane Katrina and the Hong Kong unrest.”<sup>1</sup>



<sup>1</sup>Catherine Ettman, lead author of the BU School of Public Health Study, <https://www.bu.edu/articles/2020/depression-rate-has-tripled-among-us-adults>.

# Impact of COVID-19 on Mental Health

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## Problem Statement

COVID–19 pandemic causing:

- Unemployment, economic instability, and loss of stable housing
- Social and physical isolation
- Food insecurity

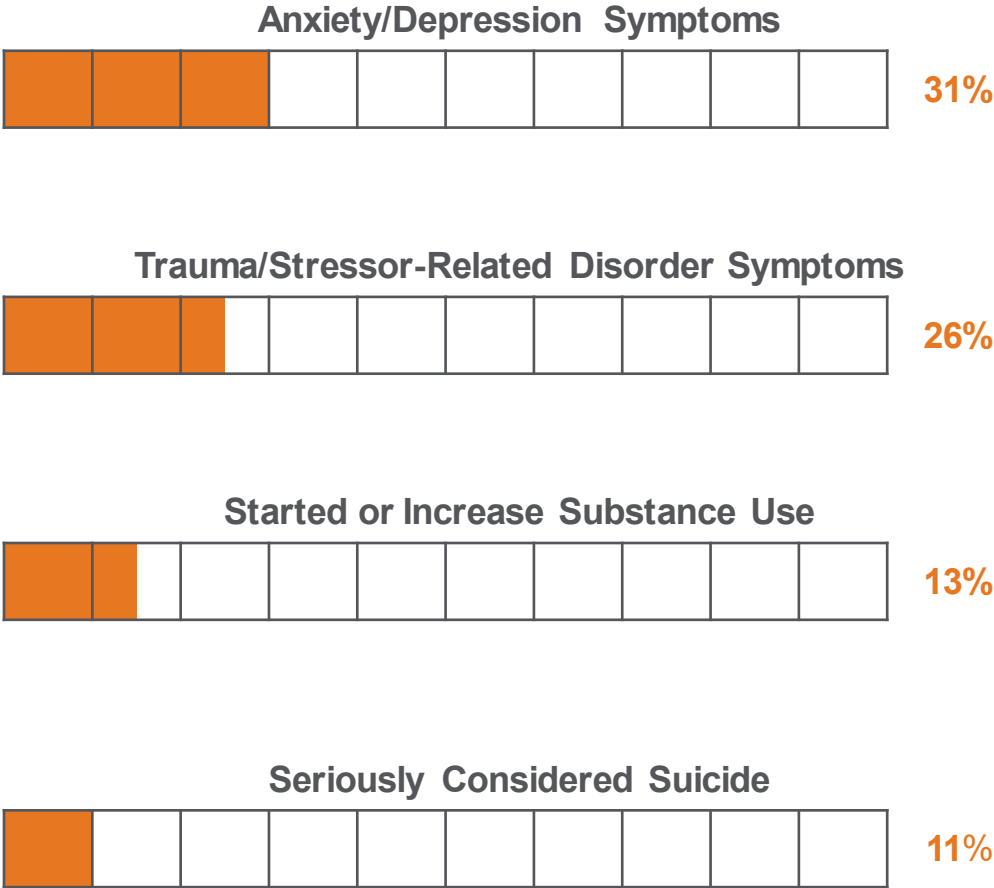
Resulting in:

- Increase presentation of psychological distress – including anxiety, depression and post traumatic stress disorder (PTSD)
- Leading to “deaths of despair”
- Increases in violence or suicide
- Increase in domestic violence/child abuse



Petterson, Steve et al. "Projected Deaths of Despair During the Coronavirus Recession," Well Being Trust. May 8, 2020. [WellBeingTrust.org](https://www.wellbeingtrust.org/).

# 40% of US Adults Reported Struggling with Mental Health or Substance Use (CDC)



June 2020. CDC.gov



# CDC Morbidity and Mortality Report

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“More than **2 in 5 US residents** report struggling with mental or behavioral health issues associated with the coronavirus disease 2019 (COVID-19) pandemic, including anxiety, depression, increased substance use, and suicidal thoughts.”

- 31% reported symptoms of depression and/or anxiety
- 13% reported starting or increasing substance use
- 11% reported contemplating suicide

Symptoms disproportionately affected certain groups:

- 74.9% of those age 17-24 reported depression and/or anxiety
- 51% of those aged 25-54 reported depression and/or anxiety
- 52% of Hispanic responders reported depression and/or anxiety
- 54% were essential workers
- 66% were unpaid adult caregivers
- 66% had less than a high school diploma

Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic — United States, June 24–30, 2020, <https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm>



# COVID, Depression, and Death

Most affected:

- Preexisting mental health conditions
- Young adults aged 18-24
- Low-income individuals
- Persons of color
- Persons with Asian ethnicity
- Those close to someone who suffered or died from COVID



<https://www.scientificamerican.com/article/the-surprising-mental-toll-of-covid>

# Impact of COVID-19 on “Deaths of Despair”

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According to the Centers of Disease Control and Prevention (CDC), “Across the United States, more people are dying from so-called ‘**deaths of despair**’— suicide, drug and alcohol poisoning, and alcoholic liver disease—than at any other point in recorded history.”<sup>1</sup>

The COVID pandemic is predicted to cause 75,000 “deaths of despair.”<sup>2</sup>



<sup>1</sup> [www.willitsnews.com/2020/05/25/deaths-of-despair-the-other-covid-19-crisis-that-is-killing-americans](http://www.willitsnews.com/2020/05/25/deaths-of-despair-the-other-covid-19-crisis-that-is-killing-americans)

<sup>2</sup> Petterson, Steve et al. “Projected Deaths of Despair During the Coronavirus Recession,” Well Being Trust. May 8, 2020. [WellBeingTrust.org](http://WellBeingTrust.org).

[https://wellbeingtrust.org/wp-content/uploads/2020/05/WBT\\_Deaths-of-Despair\\_COVID-19-FINAL-FINAL.pdf](https://wellbeingtrust.org/wp-content/uploads/2020/05/WBT_Deaths-of-Despair_COVID-19-FINAL-FINAL.pdf)



# Contributing Factors

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## Loneliness and Social isolation

- High risk for suicide

## Job Loss and Income Insecurity

- Increased depression, anxiety, distress and low self esteem

## Worry and stress leading to Depression and Anxiety

- Women > Men ( 57% vs 50%)
- Difficulty sleeping and/or eating
- Increases in Alcohol consumption and substance use

## Homelessness and fear of eviction

## Food Insecurity

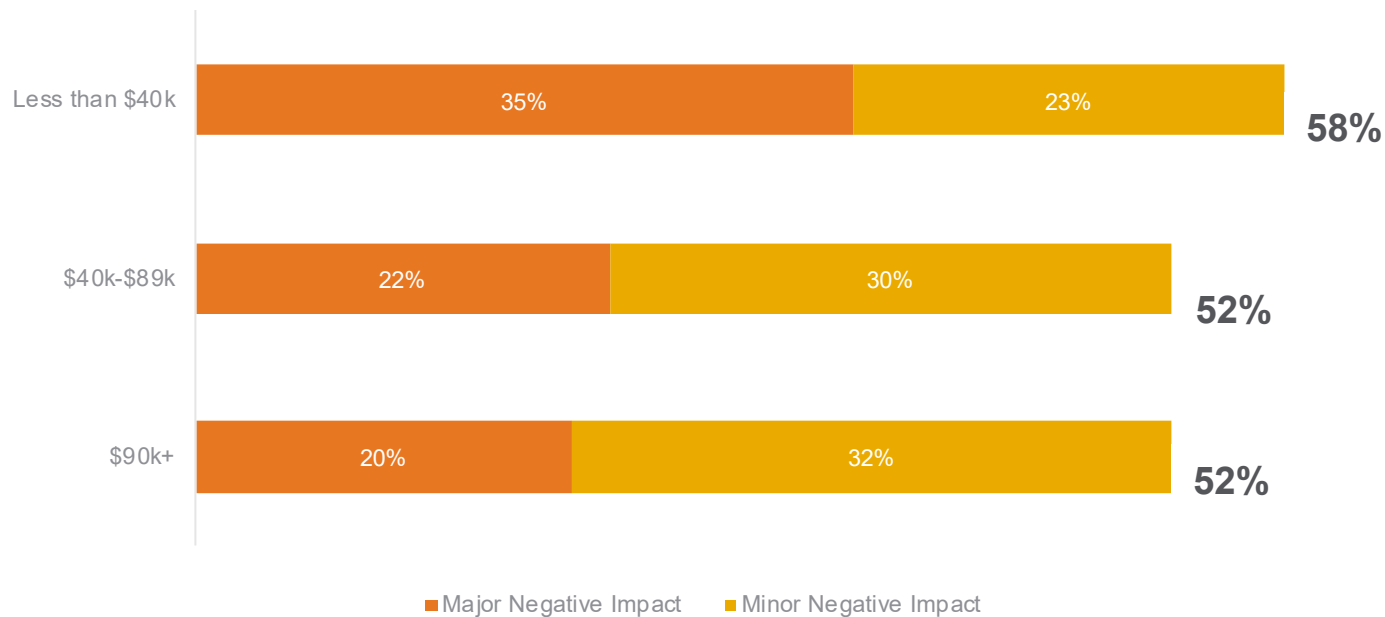
## Burn out of Front-Line worker



<https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use>

# 58% Lower-Income Mental Health Negatively Impacted

Percent of adults who say worry or stress related to the coronavirus has had a negative impact on their mental health, by household income



# Mental Health Disorders Trending

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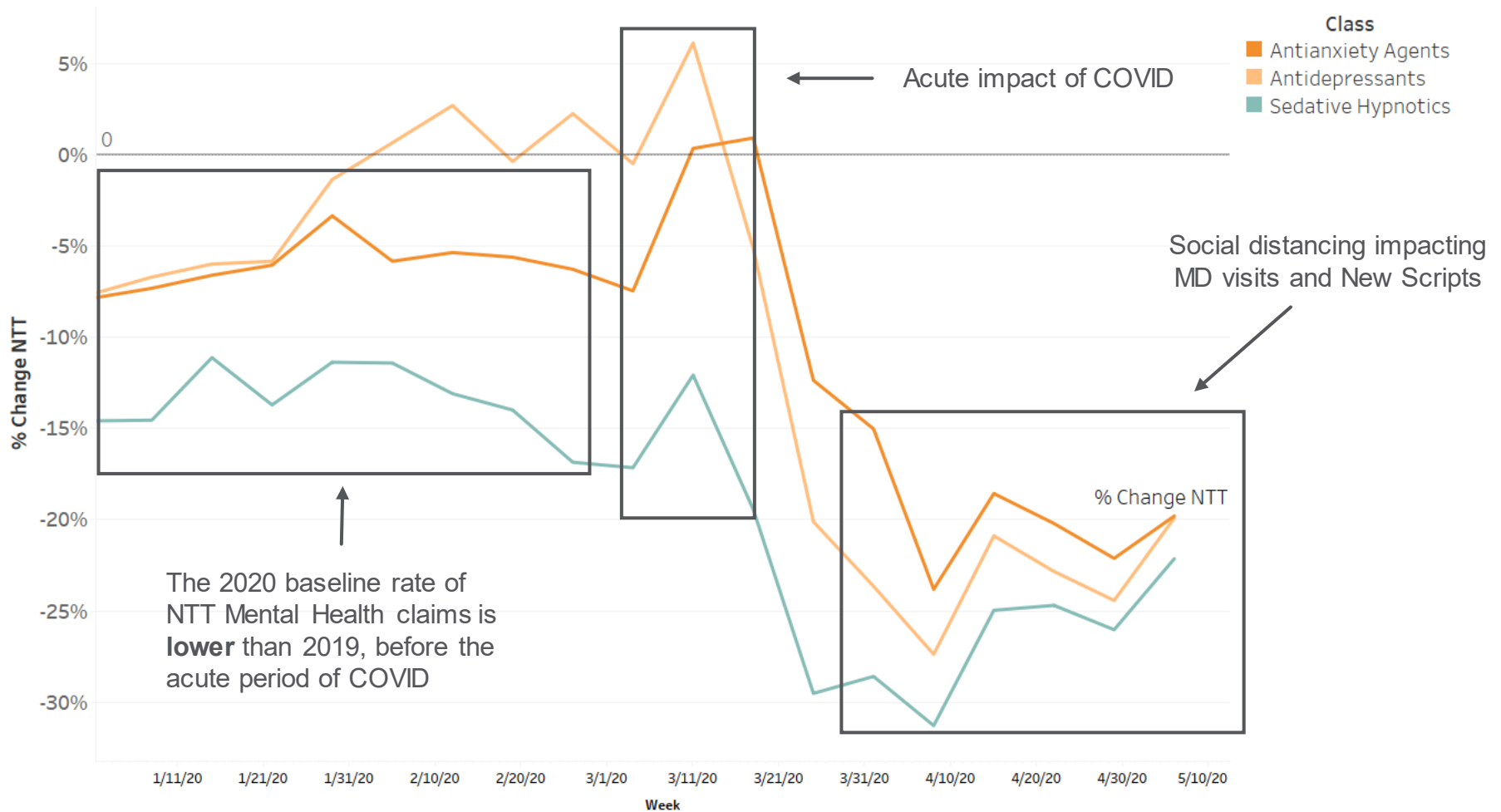
## Mental Health Concerns:

- Psychological, physical and financial aspects of ongoing COVID-19 crisis have significant negative impact on Americans' mental health
- Analysis from Express Scripts PBM in April 2020 showed number of weekly prescriptions for antidepressant, antianxiety and anti-insomnia medications jumped 21% between 2.15 and 3.15.2020, peaking in week ending 3.15.2020, when national emergency was declared
- 78% of all antidepressant, antianxiety and anti-insomnia prescriptions filled during week ending 3.15.2020 were for new prescriptions
- Largest increase for antianxiety medications – increase of 34.1% from Feb 2020 to March 2020. Decline was 12.1% from 2015 to 2019.
- Seriously mentally ill patients need help in mitigating risk from COVID-19 and knowing when to seek medical care.



<https://www.wsj.com/articles/more-people-are-taking-drugs-for-anxiety-and-insomnia-and-doctors-are-worried-11590411600>

# New to Therapy (NTT) Anti-Anxiety Claims Show the Largest Spike at the Onset of COVID - Percent Change 2019 v. 2020



New to Therapy Insights, Optum Rx 6.8.2020  
**OPTUM**<sup>®</sup>

# Children and Adolescents during COVID Mental Health Concerns

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What factors contribute to CA vulnerability:

- Developmental age and stage
- Educational status
- Presence of special needs
- Intrafamilial violence
- Overuse of the Internet and social media
- Pre-existing MH condition
- Social and Economic inequality
- Home confinement and uncertainty
- Parent/guardian isolation because of a COVID infection



# ER visits related to MH concerns April – October 2020 versus 2019 (CDC)

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**Ages 5 – 11                      ↑                      24%**

**Ages 12 – 17                      ↑                      31%**

# Jan 24, 2021 - New York Times

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*New York Time: Surge of student suicides pushes Las Vegas schools to reopen*

“Firmly linking teen suicides to school closings is difficult but rising mental health emergencies and suicide rates point to the toll the pandemic lockdown is taking.”

- 18 suicides over 9 months of closure – double the 9 in the previous year
- March 16 – June 30: **6 suicides**
- July 1 – Dec 31: **12 suicides**
- Youngest was **9 years old**
- One student left a note saying he had:  
• *“nothing to look forward to”*



<https://www.nytimes.com/2021/01/24/us/politics/student-suicides-nevada-coronavirus.html>

# Jesus Jara- the Clark County superintendent

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“I feel **responsible**, They’re all **my kids**.

When we started to see the uptick in children taking their lives, we knew it wasn’t just the Covid numbers we need to look at anymore.

Kids are googling '**how to suicide.**' You get the alerts –  
**you get four or five a day.**

We **have to** find a way to put our hands on our kids,  
**to see them, to look at them.”**

They’ve got to start seeing some movement, some **hope.”**



# Jan 26, 2021 – CNN

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“4 teen girls charged in Walmart stabbing death of 15-year-old girl streamed on Facebook Live, Lake Charles, Louisiana

Attackers were 12, 13 and 14 years old

“Saturday’s killing was the **third homicide** in Calcasieu Parish within a six-month period **involving children**. **The youngest child involved in one of the slayings was 11**. The oldest was 16.”

# Adverse Outcomes – Suicidality & Violence

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## Lessons from the Past:

- SARS outbreak in China in 2003 saw suicide increase in older people in China.

## Concerning Spike in Gun Sales:

- Gun sales in the US have significantly increased during the COVID-19 pandemic
- In March 2020, more than 2.5 million firearms were sold, including 1.5 million handguns. This is an 85% increase in gun sales from March, 2019 and the highest total ever recorded.

## Suicidality & Violence:

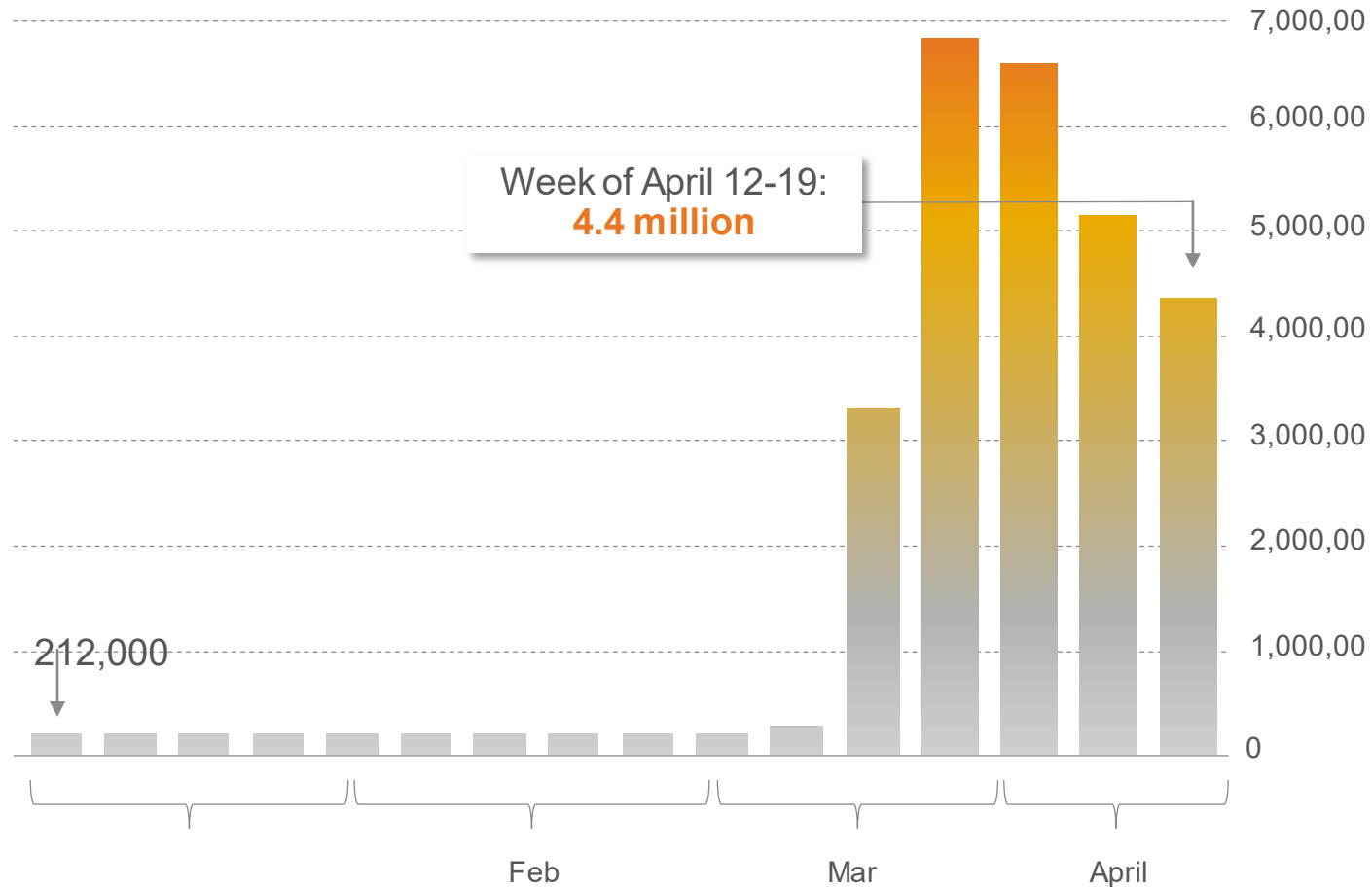
- Individuals who buy handguns have a 22-fold higher rate of firearm-assisted suicide in the first-year vs those who don't purchase a handgun.
- Domestic violence and child abuse are being underreported, most likely due to sheltering in place and schools not being in session.

Rebekah Mannix, MD, MPH; Lois K. Lee, MD, MPH; Eric W. Fleegler, MD, MPH Boston Children's Hospital & Harvard Medical, Boston, MA. <https://www.acpjournals.org/doi/10.7326/M20-1678>

# Recent studies found a 1-point increase in unemployment rates increases suicide rates by about 1 – 1.6%.<sup>1</sup>

New jobless claims in the US still surging

Record number of Americans apply for coronavirus-related unemployment benefits



Sources: <sup>1</sup>Unemployment claims continue to mount, with 2.1 million filed last week – New York Times, 5.28.2020  
<https://www.nytimes.com/2020/05/28/business/unemployment-stock-market-coronavirus.html>

Graph: Bureau of Labor Statistics



# Substance Use Disorders & COVID-19



# COVID-19 and Substance Use

## How to Cope

anguish  
heartache  
loss  
disappointment  
grief  
misery  
agony  
suffering  
pain  
mourning  
despair  
woe  
depression  
sad  
sadness  
melancholy  
letdown  
sorrow  
heartbreak



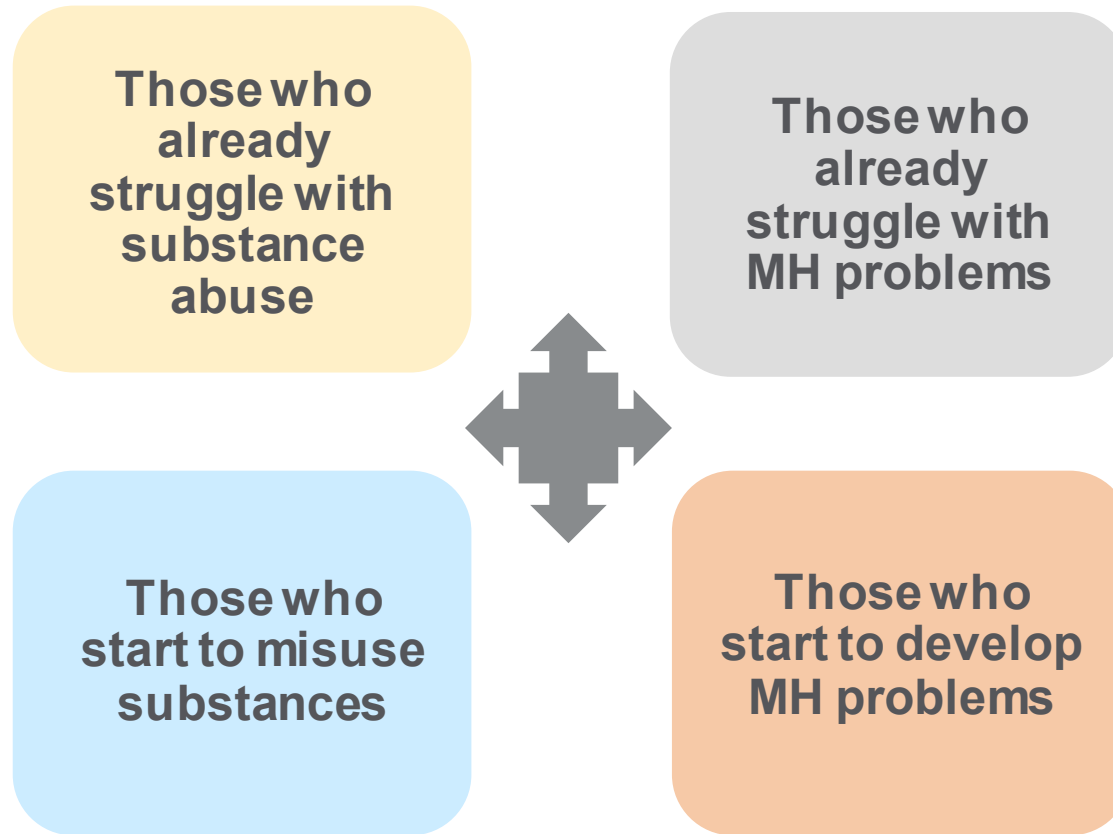
13.3%

People **increased** or **started** using substances to cope

June 2020

# Covid-19 & Substance Use

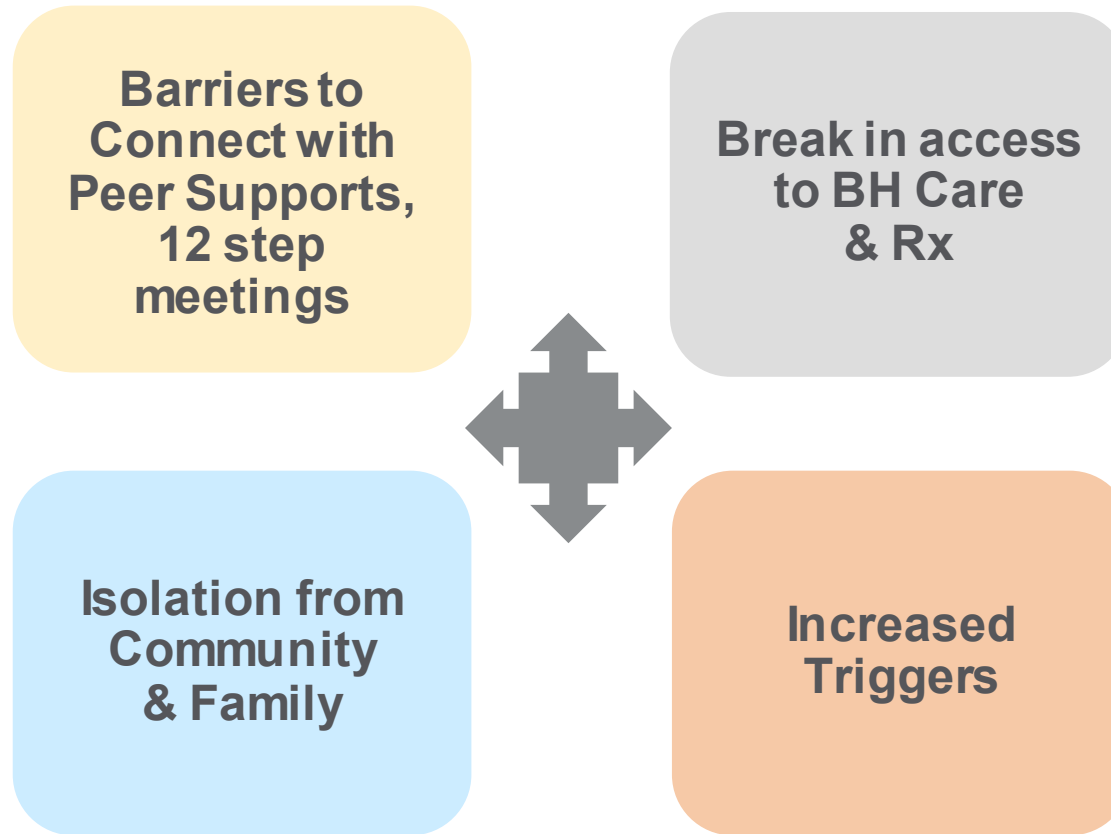
## An Individual's Experience



# SUD and MH related factors

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## Human Centered Impacts



# Substance Use

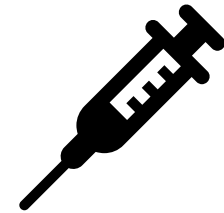
## Reported Levels of Use

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**1 out of 4**  
binge drinking at  
least once in the  
past week

**1 out of 5**  
prescription drugs  
for non-medical  
reasons



**1 out of 7**  
illicit drugs



# Alcohol use data

National Institute on Alcohol Abuse and Alcoholism

**95,000**

People die from  
alcohol-related  
causes annually  
(261 per day)



Alcohol misuse cost  
the U.S. **\$249**  
**billion** (2010)



Alcohol is the  
**3<sup>rd</sup> leading**  
preventable cause  
of death in the  
U.S.

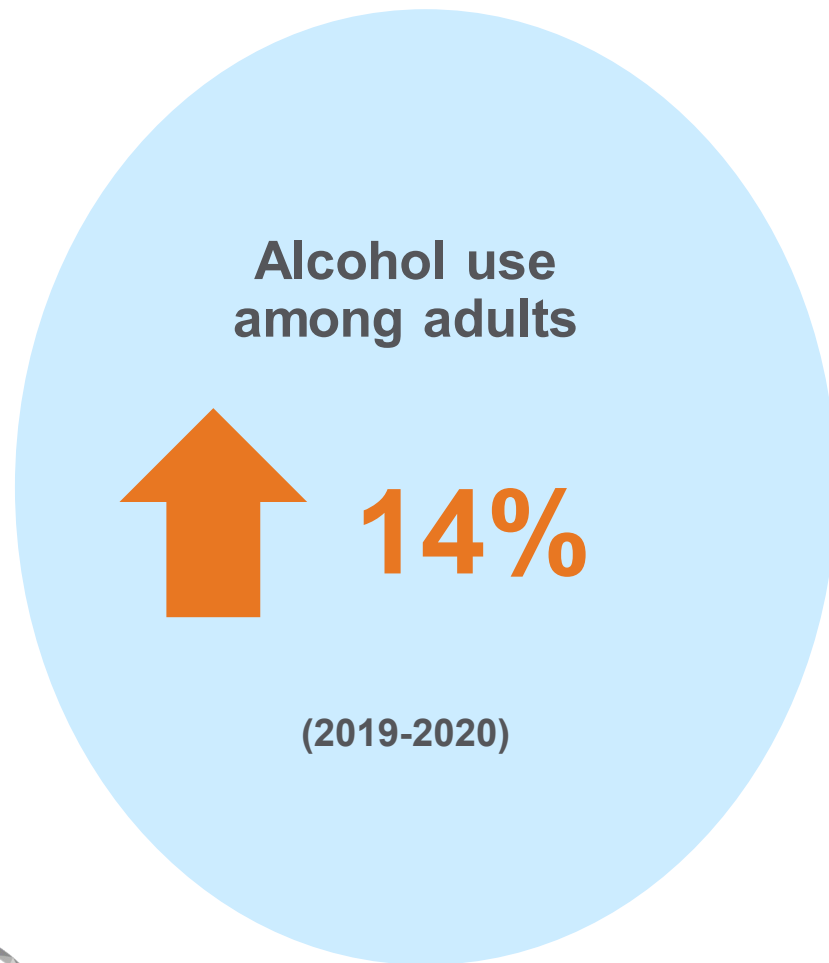


More than **10%**  
of U.S. children live  
with a parent with  
alcohol problems  
(2012)



# Alcohol use on the rise

JAMA Network Open



## Women

Days of heavy drinking



More adverse consequences from drinking

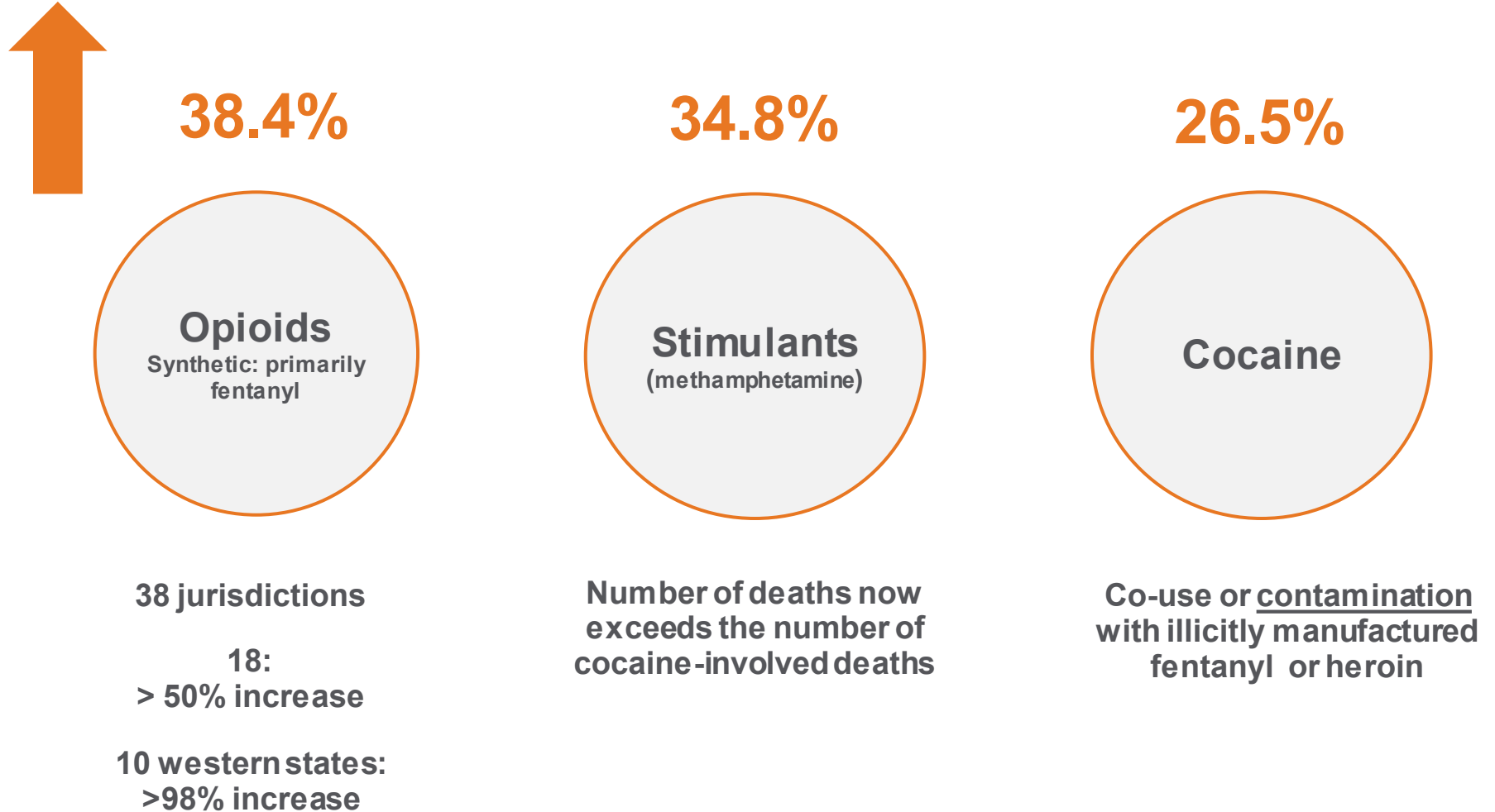
“Quarantinis” & “Virtual Happy Hours”

# Alcohol sales on the rise & changing

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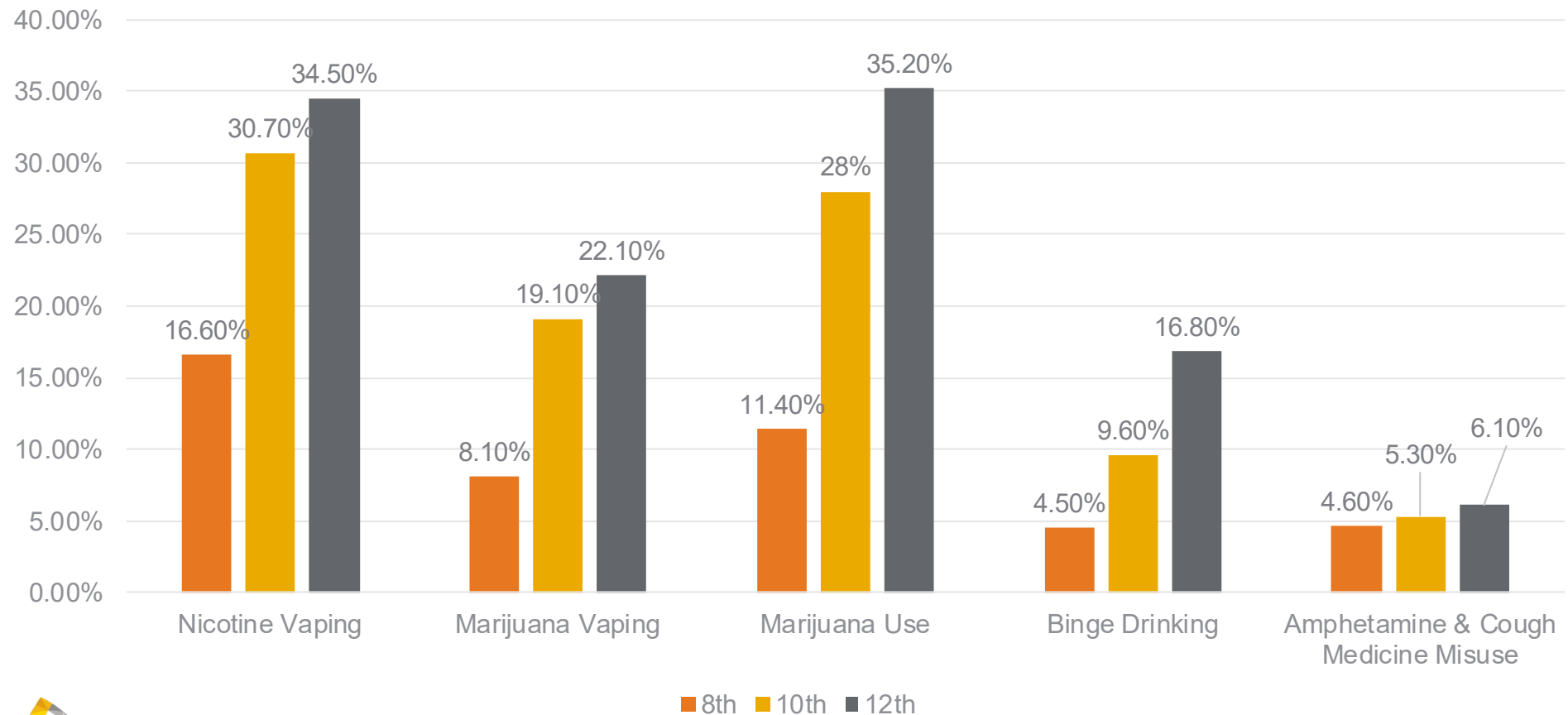
**CDC: Over 81,000 drug overdose deaths** occurred in the United States in the 12 months ending in May 2020, the **highest number of overdose deaths ever** recorded in a 12-month period



# Monitoring the Future Survey

Annual drug use survey 8<sup>th</sup>, 10<sup>th</sup>, 12<sup>th</sup> graders

## 2020 Data



<https://www.drugabuse.gov/drug-topics/related-topics/trends-statistics/infographics/monitoring-future-2020-survey-results>

# How does SUD impact COVID outcomes?

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People with SUD are at **increased risk of contracting COVID**  
(Especially African Americans)

- 73 million patients, 360 hospitals
- 7.5 million had lifetime hx of SUD diagnosis (10.3%)
- Those with SUD significantly **over-represented** among those with COVID (15.6 %)
- Those with lifetime hx were **1.5 x** more likely to have COVID
- Risk of COVID was **highest** among those who had received a SUD diagnosis **within the past year**

<https://www.drugabuse.gov/about-nida/noras-blog/2020/10/new-evidence-substance-use-disorders-covid-19susceptibility>



# How does SUD impact COVID outcomes?

People with SUD are at **increased risk** of **contracting COVID**



Cannabis  
**5.3 x**

Cocaine  
**6.5 x**

Alcohol  
**7.8 x**

Tobacco  
**8.2 x**

Opioid  
**10.2 x**



<https://www.drugabuse.gov/about-nida/noras-blog/2020/10/new-evidence-substance-use-disorders-covid-19susceptibility>

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# How does SUD impact COVID outcomes?

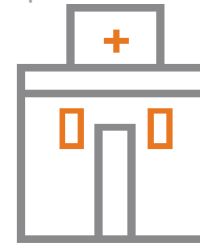
People with **lifetime** SUD are at increased risk of **worse outcomes from COVID**

Especially African Americans: 13% died vs 8.6% Caucasians

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**41% vs 30%**  
Hospitalization



**9.6% vs 6.6%**  
Death



# Complex factors related to SUD

## Medical

- Chronic substance use can **weaken the body & immune system**, increase susceptibility to infection
- Slowed breathing from opioids or damaged **lungs** from smoking can lead to low blood oxygen, impacts **brain and heart function**



## Behavioral

- Interact with others to obtain substances (**break social distancing**)



- Reluctant to seek care because of **stigma**
- May receive **sub-standard care** or be rejected for care
- **Delayed care** can increase risk of adverse outcomes



# African Americans

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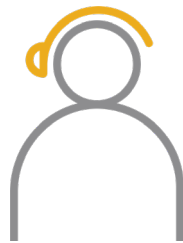
- Although African Americans misuse opioids at similar rates to Caucasians, there is a **disproportionate** number of **COVID-19** diagnoses among **African Americans**
- As a result of **social, health and economic disparities**, African Americans have **higher rates of comorbidities** that increase susceptibility to COVID:
  - Hypertension
  - Diabetes
  - Cardiovascular disease
  - Kidney disease



# How can we mitigate the COVID MH and SUD challenges

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- Identify those at risk
- Strengthen community prevention & intervention strategies
- Enhance wellness and harm reduction approaches
- Address health inequity, SDOH, and disparities
- Improve connections to supports and engagement with services through telehealth & digital tools
- Integrate behavioral and physical health services



<https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/returning-to-resilience-the-impact-of-covid-19-on-behavioral-health>

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