# what Went Wrong?

The Analysis of the Impacts of COVID-19 on the Mental Health of Individuals and How to Prevent a Future Mental Health Crisis.

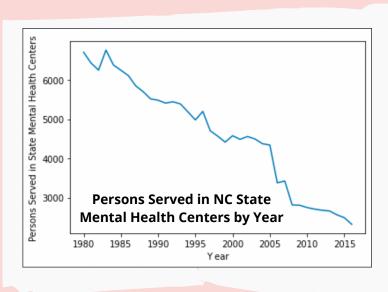


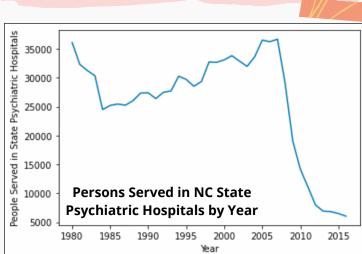
### INCREASE IN NC SUICIDAL RISK

A study in North Carolina focusing on the impacts of COVID-19 among residents observed a massive 40% increase in the percentage of people at suicidal risk in the year 2020.

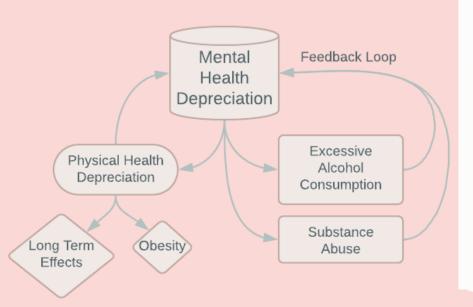
### Were we inadequately prepared?

The graph indicates a steep decline in the number of persons served in North Carolinian State Mental Health Centers and Psychiatric Hospitals as we approached the start of the pandemic. This raises an important question that requires further investigation. What measures can be taken to prevent a mental health crisis in the future?





### **FEEDBACK LOOP**



#### **COVID - The Instigator**

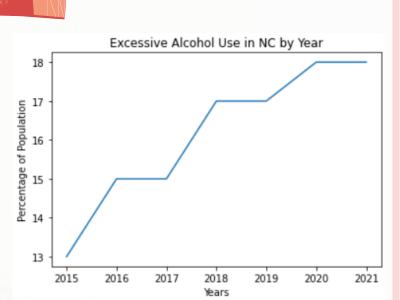
Depreciating mental health has a dangerous feedback loop where people might resort to excessive alcohol consumption and substance abuse that further aggravates the problem. COVID-19 pushed many people over the edge and forced them into this inescapable cycle.

### COVID-19 STRESSORS

A study aimed at identifying COVID-19 related exposure, stress, and mental health in low-income communities in North Carolina identified job exposure, lost job/income, and increased home responsibilities as the most significant behavioral impactors.



The percentage of adults showing symptoms of Depressive Disorder in North Carolina increased to 35% in 2021 from 19% in 2018–2019. There was also a nearly 40% increase in anxiety and a 40% increase in suicidal risk observed in the year 2020 as compared to previous years.



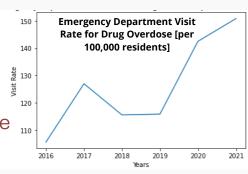
#### **A Hidden Effect**

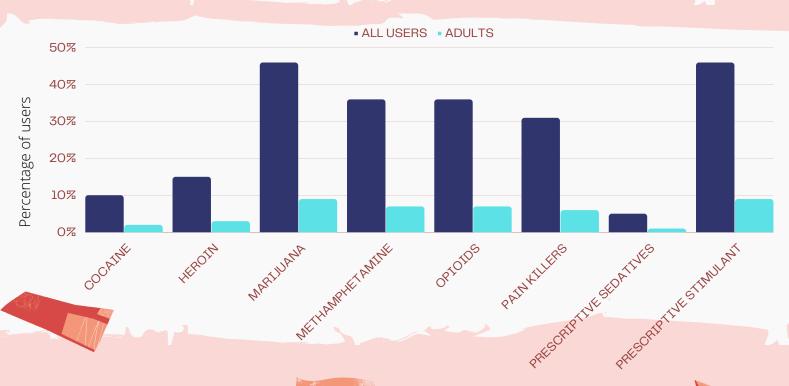
Substance abuse has became even more prominent since the start of COVID. The number of users across NC have reached unexpectedly high numbers, and the increased amount of teenagers that are participating in substance abuse have been alarmingly high. The leading substance being abused is Alcohol.

## 1700 DEATHS FROM OVERDOSE

### PER MONTH

1700 North Carolina residents died from a drug overdose EVERY MONTH in 2020. The Emergency Department visit rate for drug overdose has increased by 29% in the last 2 years.

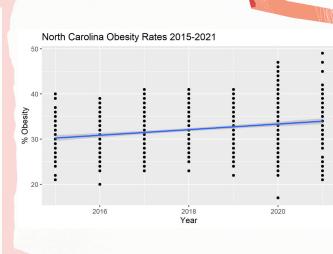




#### **Physical Health**

The obesity rate in North Carolina was 33% in 2020. There has been a steady increase in the obesity rates, with the greatest increase being seen in the year 2020 in the graph on the right.

This increase was likely due to the quarantine and isolation measures that were necessary to mitigate the spread of COVID-19 in its first year.



### SO WHAT DID GO WRONG?

We can infer from the given information that the feedback loop played a crucial role in the decline of people's mental health state. With the number of workers eligible to provide mental health support decreasing year by year, there were already few resources for people to reach out to with the onset of COVID. Substance abuse prevented users from escaping the cycle of their worsening mental health. With the rise of COVID rose new barriers to mental well-being.

### References

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- 2. Mental Health in North Carolina: https://www.kff.org/statedata/mental-health-and-substance-use-state-fact-sheets/northcarolina/
- 3. **Drug Abuse Statistics:** https://drugabusestatistics.org/
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- disjunctive.area\_name&disjunctive.year&disjunctive.variable

7. Substance Use Data: https://www.countyhealthrankings.org/app/north-carolina/2020/downloads

For more information about the code we used to generate the visualizations and infer data, visit: https://github.com/yuvrajjain2003/nc-

mental-health-covid19 Infographic by Aarjav Jain, Andy Dong, Erin Ma, Nick Wherthey, Yuvraj Jain