Digital Therapeutics for Suicide Prevention

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Promoting a public health approach to suicide prevention

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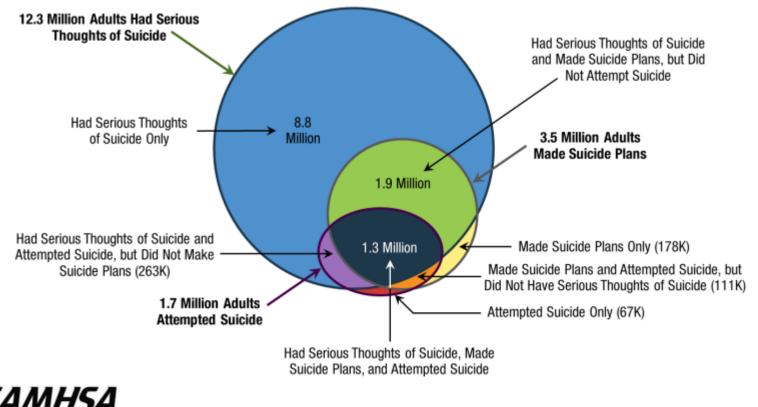
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In 2021, 12.7 M Adults had serious thoughts and 1.7 M attempted

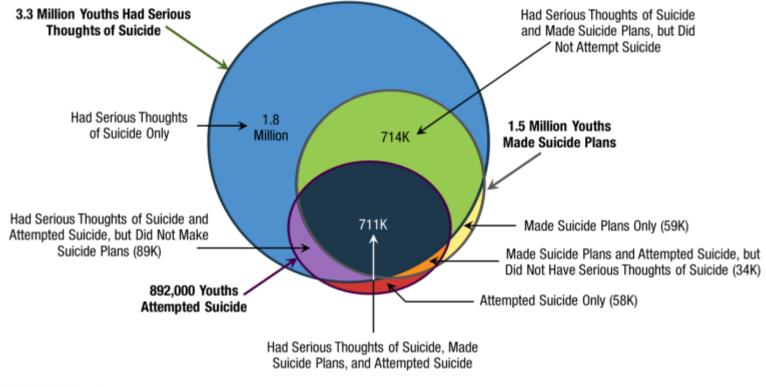


National Survey on Drug Use and Health, 2021



Services Administration

In 2021, 3.3 M youths age 12–17 had serious thoughts and 892K attempted





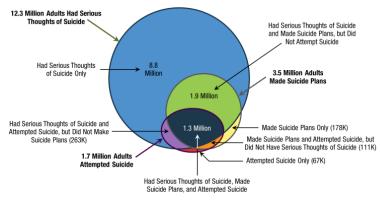
National Survey on Drug Use and Health, 2021



In the US in 2021

2.7 M Adults had serious thoughts and 1.7 M attempted

3.3 M youths age 12–17 had serious thoughts and 892K attempted

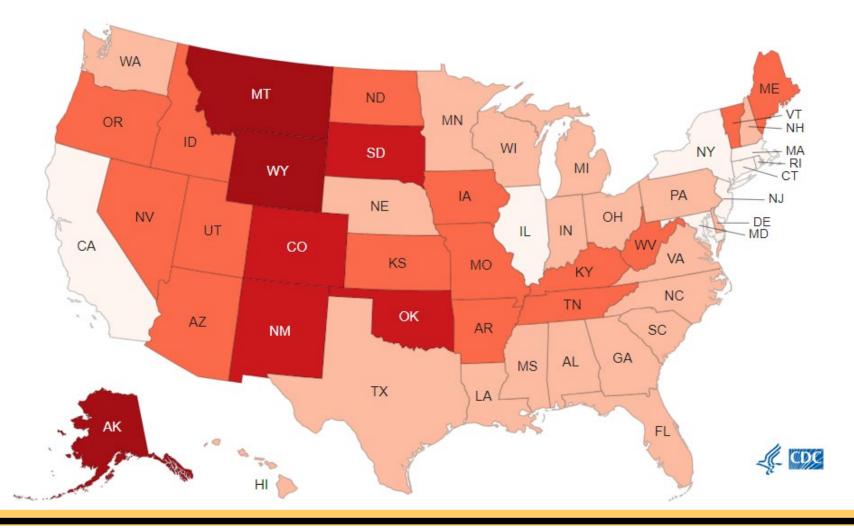




National Survey on Drug Use and Health, 2021



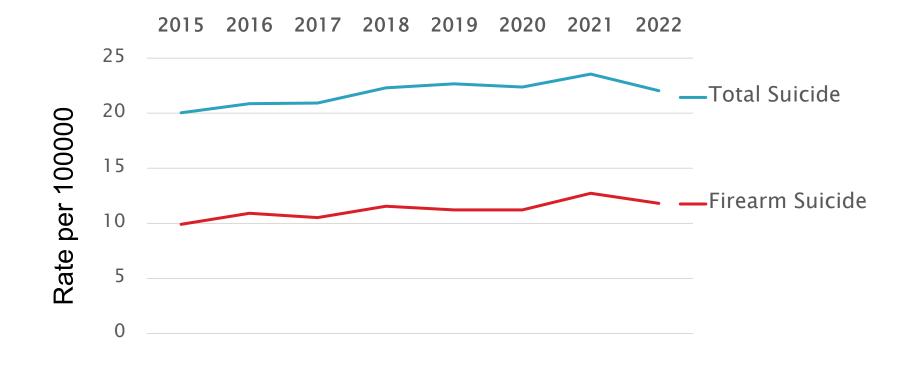
Colorado #6 in 2021





In 2022, US suicides were up 2.6% Colorado was down 6.5%

Fatalities for 10–18 and 19–24 year olds, lowest in years





Access to care is poor

- After an ED visit, only 50% of patients attend scheduled outpatient appointments
- > 30% receive no MH care at all in the first month
- Even if they do, the individual they see will probably not be trained in suicide care



But most people have a smart phone



988 launched July 16, 2022
Colorado Crisis Line 844–493–TALK
700 calls per day in 2022
Now 1000 calls a day





.....leaders in 24/7 support

What about digital approaches?

- 2018 review of mobile health technology for suicide prevention found none of the apps demonstrated ability to decrease SI
- 2020 review of 145 RCTs of digital therapeutics for anxiety, depression, smoking and SI found no convincing evidence of benefit for any outcome

Melia R, et al. JMIR Mhealth Uhealth. 2020 Jan 15;8(1) Goldberg SB et al. PLOS Digital Health 2022



Are there potential harms?

- Simon et al compared care management to on-line DBT skills training to TAU
- Population individuals with frequent SI on PHQ9, item 9
- ▶ N=18,842
- Outcome time to first DSH
- On-line DBT skills training was significantly worse
 - CM similar to TAU (HR 1.07)
 - DBT skills significantly worse than TAU (HR 1.29)

JAMA. 2022;327(7):630-638. doi:10.1001/jama.2022.0423



Oui Therapeutics Aviva

Aviva delivers many evidence based practices

- Embeds BCBT and CT-SP protocols in 12 interactive smart phone sessions, 10-20 min
- Patients choose their own avatar
- Helps the patient identify their own warning signs
- Walks them through safety planning, lethal means counseling and self-management strategies including sleep





Oui Therapeutics Aviva

Aviva delivers many evidence based practices

- Encrouages adoption of more flexible thoughts, beliefs, and expectations
- Includes daily reminders
- Designed to be prescribed and operate in tandem with "usual care".
- Can start while patients are in the hospital and follow them into outpatient care.





Oui Therapeutics Aviva

- Currently studying Aviva under an FDA IDE
- Funding from Oui and NIH multiple mechanisms
- Randomized double blind trial
- Compares Aviva to an active control
- 6 investigational sites
 - Allen and Novick, UCHealth
 - Simpson and Winston at Denver Health
- > 391 patients, currently 45 in Colorado
- Adults recently hospitalized because of a suicide attempt or SI with intent and an SSI score >= 5
- Primary outcome is time to first suicide attempt

