COVID-Related Distress, Mental Health, and Substance Use in Youth and Young Adults
Andrea Villanti, PhD, MPH
Associate Professor
Vermont Center on Behavior and Health
Department of Psychiatry
Larner College of Medicine, University of Vermont

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• The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health, the Food and Drug Administration, or HRSA.

http://www.med.uvm.edu/behaviorandhealth/home
Our goal is to understand the impact of state-level policies and communication campaigns on substance use beliefs and behaviors in young Vermonters.
Study team

• **UVM**
  – Vermont Center on Behavior and Health
    • Andrea Villanti, PhD, MPH
    • Julia West
    • Kate Peasley-Miklus, PhD
    • S. Elisha Lepine

• **Co-Investigators**
  – UVM
    • Valerie Harder, PhD
    • Alexandra Potter, PhD
    • Jeff Priest, PhD
  – JHSPH
    • Meghan Moran, PhD

• **Health Department**
  – ADAP
    • Megan Trutor
    • Chelsea Carman
  – Commissioner’s Office
    • Shayla Livingston
  – Communication
    • Nancy Erickson
    • Kathleen Horton
  – HPDP
    • Christie Vallencourt
    • Rhonda Williams
  – Health Surveillance
    • Jen Hicks
    • Maria Roemhildt
    • Amanda Jones
    • Jeffrey Trites
NIH funded research study

“Perceptions and Problems Associated with Vaping in Youth and Young Adults”
National Institute on Drug Abuse
R21DA051943 (Villanti)
04/01/2020 – 03/31/2022

• Three waves of data collection:
  – Wave 4 (September 2020)
  – Wave 5 (December 2020)
  – Wave 6 (March 2021)
What PACE offers

- **Rapid and flexible**
  - Add or remove questions to align with new policies or communication activities

- **Complement existing data**
  - National and statewide surveys
  - Sub-studies or randomized experiments within the cohort on topics of interest

- **Peer crowds segmentation**
  - Developing and evaluating marketing campaigns

- **Inform and support**
  - Substance use policies and campaigns
  - Shared access to data
  - Protocol for developing reports and other scientific products
PACE Vermont tracks in real-time

2018: Marijuana possession policy
2019: E-cigarette excise tax, Ban on online e-cigarette sales
2020: Onset of COVID-19 pandemic
Wave 4 – COVID & mental health

• 21 items on COVID-related stress adapted from the:
  – COVID-19 Exposure and Family Impact Survey for Adolescents and Young Adults
  – National Institutes of Health’s Coronavirus Health Impact Survey

• Mental health screening
  – Depressive symptoms (PHQ-2)
  – Generalized anxiety disorder symptoms (GAD-2)

• Past 30-day substance use
  – Cigarettes
  – Electronic vapor products
  – Alcohol
  – Marijuana
Wave 4 participants

- Data collected in **September 2020**

- 874 Vermont youth and young adults
  - 212 youth ages 12-17
  - 662 young adults ages 18-25

- **Characteristics:**
  - 71% female
  - 94% cisgender
  - 82% white, 7% non-white/other, 11% Hispanic
  - 67% straight/heterosexual
  - 67% currently enrolled in school/degree program
COVID-related stressors

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<thead>
<tr>
<th>Since the start of the COVID-19 pandemic, how much have the following things in your life been difficult for you?</th>
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<tr>
<td><strong>Cancelling of important events</strong></td>
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<td><strong>Changes in daily activities</strong></td>
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<td><strong>Financial (money) problems for you or your family</strong></td>
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<th>Since the start of the COVID-19 pandemic, to what degree have you been concerned about the following?</th>
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<td><strong>Stability of your living situation</strong></td>
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<td><strong>Impact of COVID-19 on your school or work</strong></td>
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<td><strong>Whether your food would run out</strong></td>
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In general, how has the COVID-19 pandemic affected each of the following? (Percent reporting made it “a little” or “a lot” worse)

- Physical
- Mental
- Social

Wave 4, Preliminary data
Overall COVID distress

Overall, how much distress have you experienced related to COVID-19?

Wave 4, Preliminary data
Fall 2019 vs. Fall 2020: Mental health

Depressive symptoms (PHQ-2)

- Fall 2019: 13.7%
- Fall 2020: 20.3%

- Fall 2019: 18.5%
- Fall 2020: 25.0%

Anxiety symptoms (GAD-2)

- Fall 2019: 24.3%
- Fall 2020: 35.3%

- Fall 2019: 28.4%
- Fall 2020: 42.2%

Waves 3 and 4, Preliminary data
Analyses of the subsample of participants completing both waves showed that:

- Overall COVID distress was associated with a 32% higher odds of depressive symptoms at Wave 4 (OR 1.32, 95% CI 1.10-1.59) controlling for Wave 3 depressive symptoms and other covariates.

- There was not an analogous relationship between overall COVID distress and anxiety symptoms at Wave 4.
Fall 2019 vs. Fall 2020: Substance use

Past 30-day substance use in Vermont youth and young adults

- Cigarette: Fall 2019 = 12%, Fall 2020 = 11%
- Electronic vapor product: Fall 2019 = 20%, Fall 2020 = 21%
- Alcohol: Fall 2019 = 52%, Fall 2020 = 57%
- Marijuana: Fall 2019 = 29%, Fall 2020 = 24%

Waves 3 and 4, Preliminary data
Percentage of youth and young adult past 30-day users reporting change in substance use since the start of the COVID-19 pandemic

Wave 4, Preliminary data
Possible relationships in young people

COVID-related stressors → Overall COVID distress → Depressive symptoms → Past 30-day cigarette use

Overall COVID distress → Anxiety symptoms → Past 30-day EVP use

Wave 4, Preliminary data
Discussion

• Significant negative impacts of the COVID-19 pandemic on distress and physical, emotional, and social wellbeing in Vermont youth and young adults.

• COVID-related stressors were positively correlated with overall COVID distress and findings detail increases in anxiety and depressive symptoms in youth and young adults in the fall of 2020, compared to a similar sample a year earlier.

• Strong positive correlations between overall COVID distress and these mental health symptoms.
• Sizeable proportion of past 30-day youth and young adults substance users reported increases in substance use since they learned about the coronavirus pandemic

• Depressive symptoms were positively correlated with past 30-day cigarette use and vaping, controlling for potential confounders.

• Importantly, where there were differences by age group in COVID-related stressors, young adults reported a greater impact of these stressors on their lives, compared to youth.
Implications

• Our findings support that COVID is a mental health crisis for young people, in addition to being a physical health crisis.

• Early and sustained intervention efforts will be needed to minimize the long-term harms of the COVID-19 pandemic on mental health.

• Our study suggests that broad intervention efforts will likely be needed for all youth and young adults, though more intensive efforts may be needed for young adults who may bear a disproportionate burden of the social, economic, and mental health impacts and upheaval of the pandemic.
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