

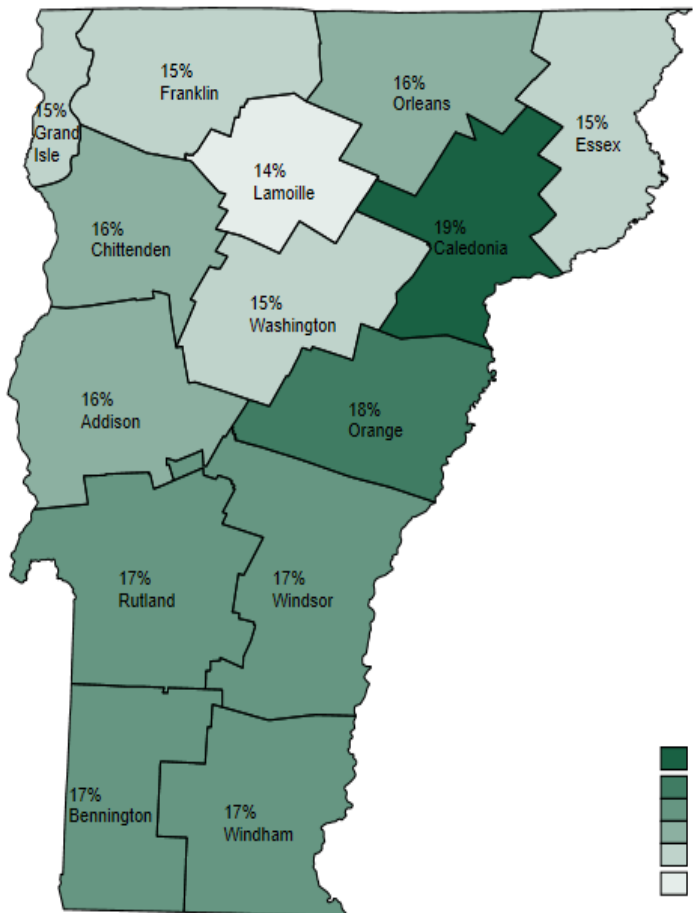
Background

Several government and professional agencies declared that America’s youth are in the midst of a mental health crisis,^{1,2} which intensified during the COVID-19 pandemic. Support for this assertion mainly comes from self-report data from youth or their parents.³⁻⁵ In this data brief we describe the prevalence of depression, anxiety, conduct disorder, and suicide ideation/attempts/intentional self-harm related diagnoses among Vermont children, adolescents and young adults by Vermont county.

Approach/Methods

We used data from the Vermont Health Care Uniform Reporting and Evaluation System (VHCURES),⁶⁻⁷ Extract #3008 to identify 122,535 patients aged 0-21 years old with at least one Vermont ZIP Code in 2022 with at least one month of medical insurance eligibility. We classified diagnoses using the Clinical Classifications Software Refined (CCSR v.2022.1) created by the Healthcare Cost and Utilization Project (H-CUP) of the Agency for Healthcare Research and Quality.⁸ County prevalence was compared to state prevalence using proportion tests with a significance level of $p < .01$. These data are not comparable to previous years’ data.

Percent of Patients Aged 0-21 with 1 or More Mental Health Diagnoses, 2022

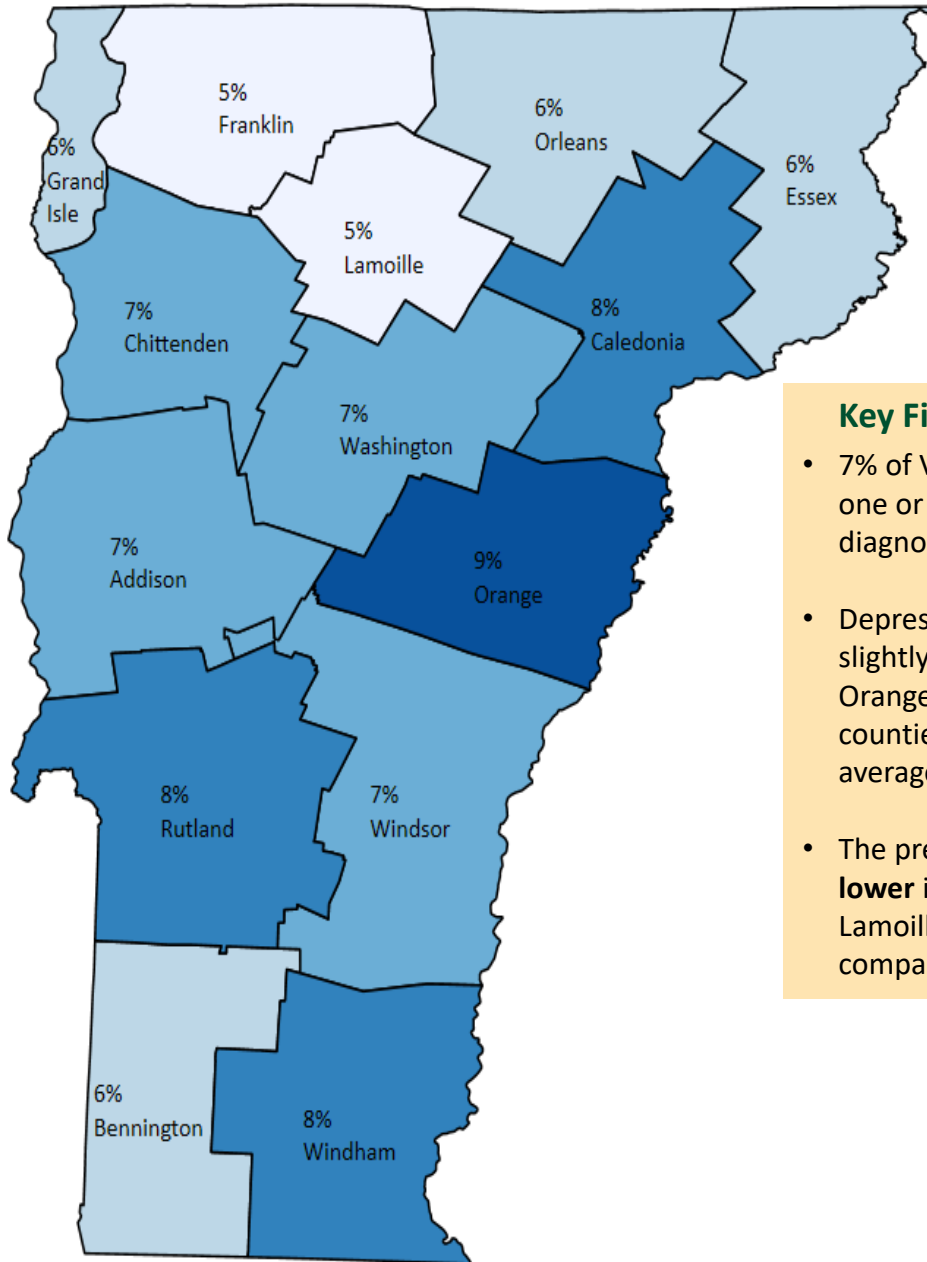


- ### Key Findings
- 16% of Vermonters aged 0-21 had one or more diagnoses of depression, anxiety, conduct disorder, and/or diagnoses for suicide/self-harm.
 - Prevalence of these diagnoses in Caledonia, Orange, and Rutland counties was slightly **higher** than the state average.
 - Prevalence of these diagnoses in Franklin, Lamoille, and Washington counties was slightly **lower** than the state average.

Patient county determined by the first VT ZIP Code in the patient eligibility record in 2022.
Data displayed may be masked in accordance with data use agreement with the Green Mountain Care Board
SOURCE: VHCURES Extract #3008

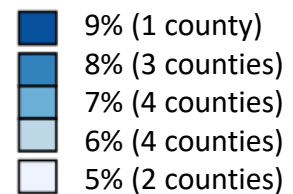
Depression by County

Percent of Patients Aged 0-21 with 1 or More Diagnoses Classified as Depressive Disorders 2022



Key Findings

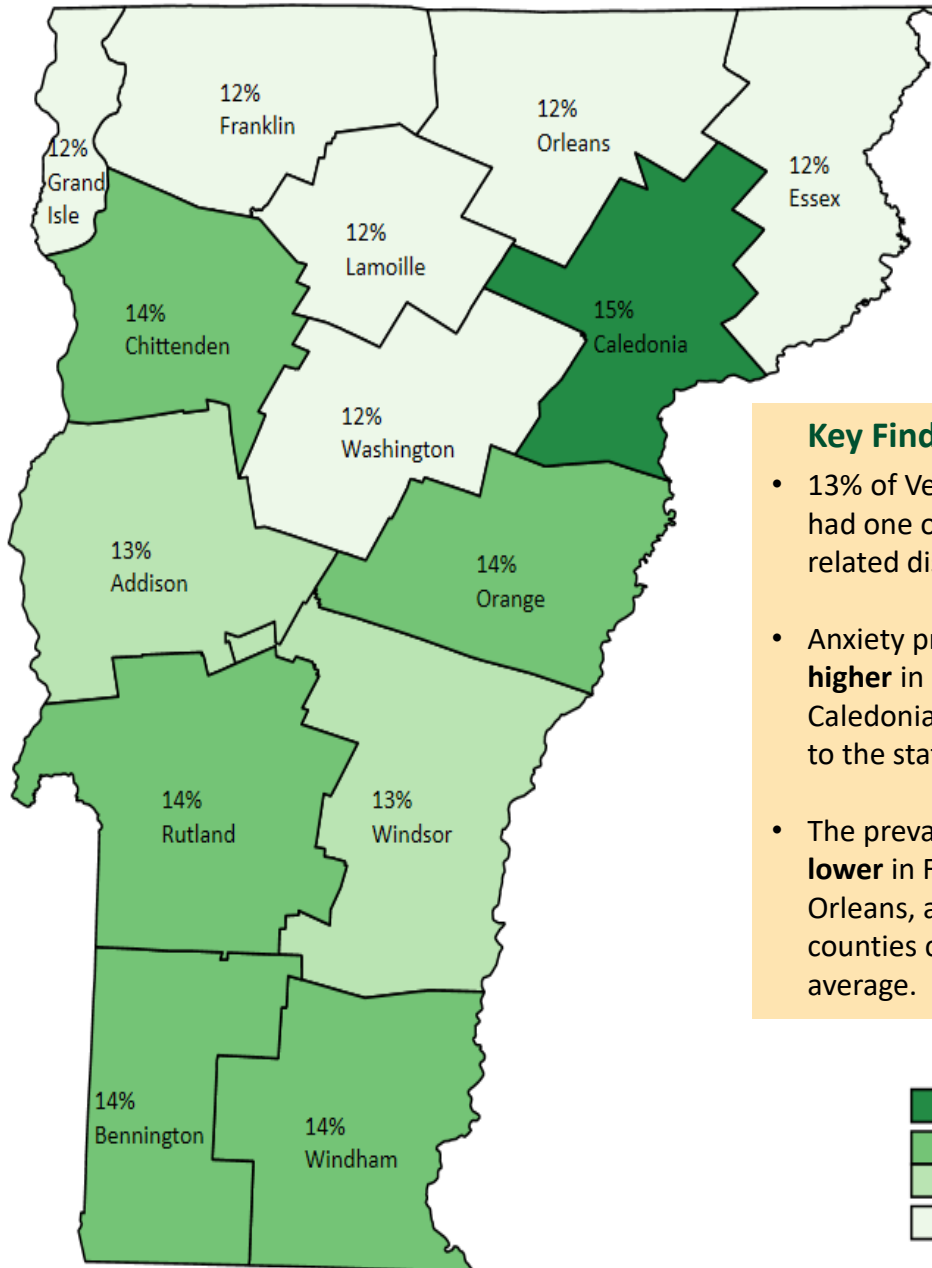
- 7% of Vermonters aged 0-21 had one or more depressive disorder diagnoses.
- Depression prevalence was slightly **higher** in Caledonia, Orange, Rutland, and Windham counties compared to the state average.
- The prevalence was slightly **lower** in Bennington, Franklin, Lamoille, and Orleans counties compared to the state average.



Patient county determined by the first VT ZIP Code in the patient eligibility record in 2022.
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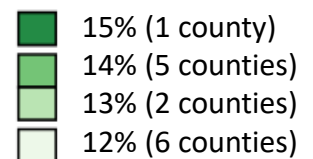
Anxiety by County

Percent of Patients Aged 0-21 with 1 or More Diagnoses Classified as Anxiety/Fear-Related Disorders 2022



Key Findings

- 13% of Vermonters aged 0-21 had one or more anxiety/fear-related disorder diagnoses.
- Anxiety prevalence was slightly **higher** in Bennington and Caledonia counties compared to the state average.
- The prevalence was slightly **lower** in Franklin, Lamoille, Orleans, and Washington counties compared to the state average.



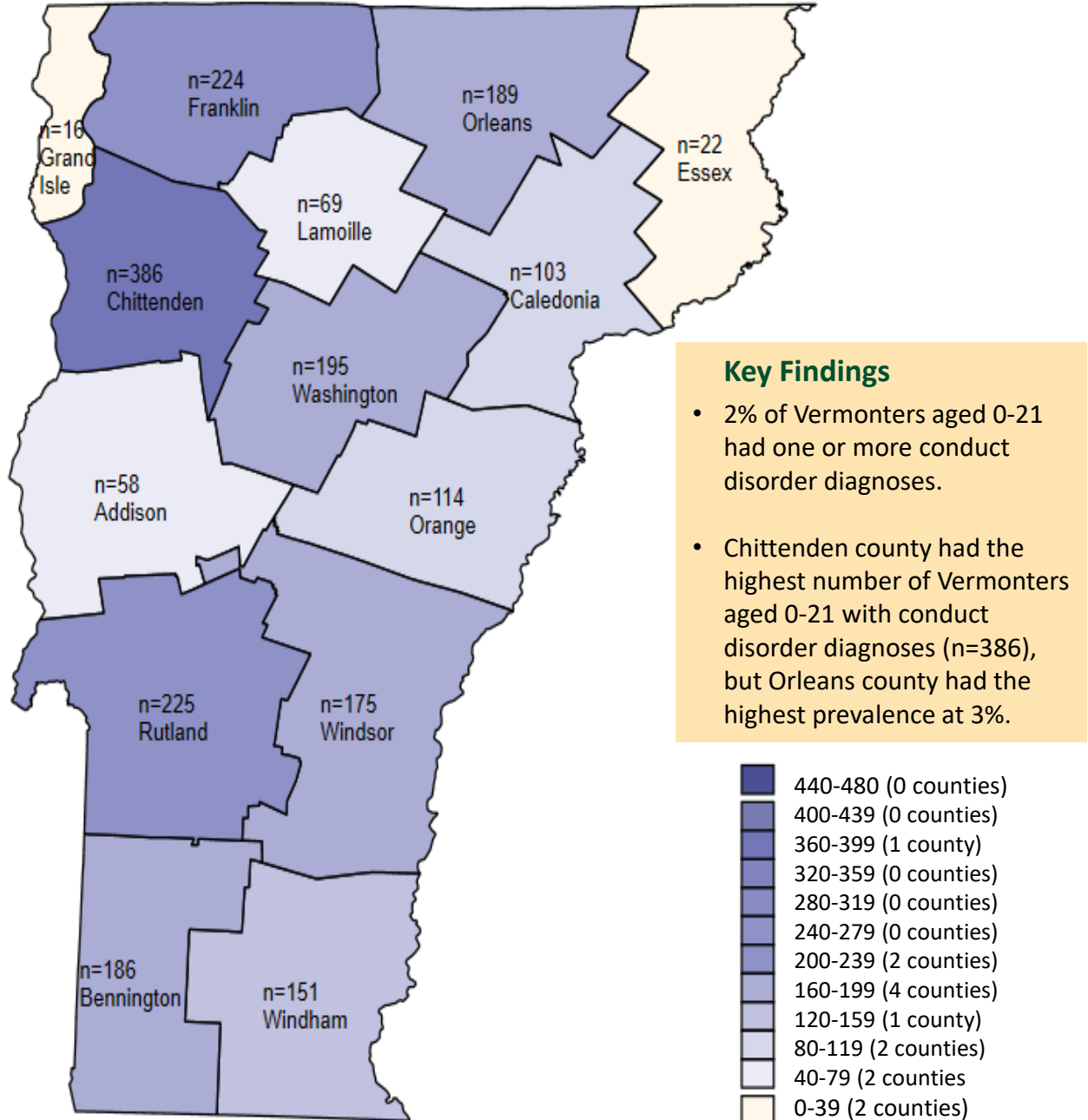
Patient county determined by the first VT ZIP Code in the patient eligibility record in 2022.

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SOURCE: VHCURES Extract #3008

Conduct Disorder by County

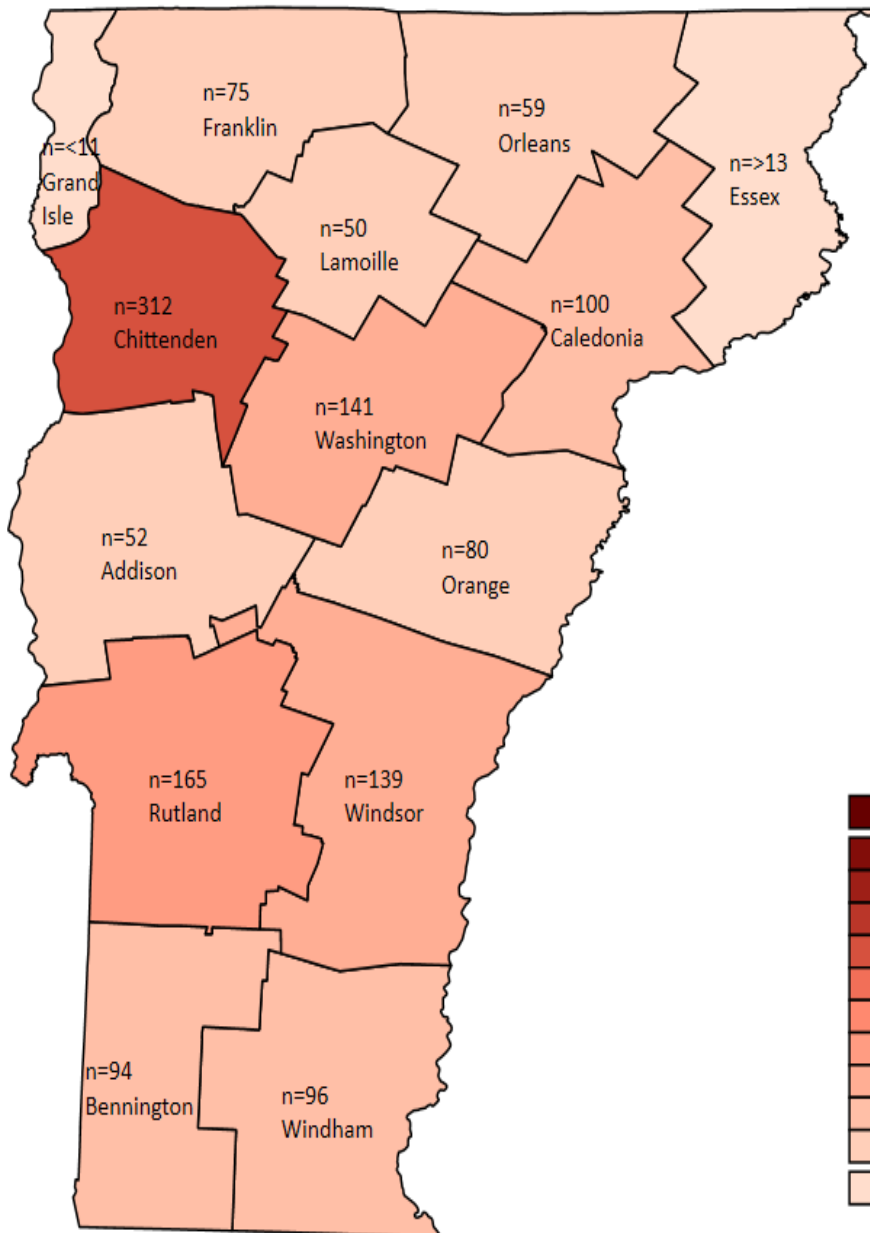
Number of Patients Aged 0-21 with 1 or More Diagnoses
Classified as Conduct Disorder
2022



Patient county determined by the first VT ZIP Code in the patient eligibility record in 2022.
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SOURCE: VHCURES Extract #3008

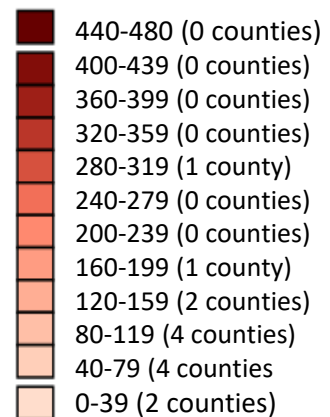
Suicidal Ideation, Suicide Attempt, and Intentional Self-Harm by County

Number of Patients Aged 0-21 with 1 or More Diagnoses Classified as Suicidal Ideation/Attempt/Intentional Self-Harm
2022



Key Findings

- 1% of Vermonters aged 0-21 had 1 or more suicidal ideation/attempt/intentional self-harm diagnoses.
- Chittenden county had the highest number of Vermonters aged 0-21 with suicidal ideation, suicide attempts, and intentional self-harm diagnoses (n=312), but Caledonia and Orange counties had the highest prevalence at 1.5%.



Suicidal Ideation/Attempt/Intentional Self-Harm Diagnosis may be initial diagnoses or subsequent diagnoses in 2022

Patient county determined by the first VT ZIP Code in the patient eligibility record in 2022.

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SOURCE: VHCURES Extract #3008

How is Vermont Addressing the Youth Mental Health Crisis?

- The [Vermont State Health Improvement Plan](#) includes investments to integrate mental health disorder prevention into primary care and to implement *Zero Suicide* in health care systems.
- The [Vermont Department of Health](#) in coordination with the [Department of Mental Health](#) has a [5-year Garrett Lee Smith Youth Suicide Prevention](#) grant aimed at reducing suicide deaths among Vermont Youth aged 10-24 by expanding prevention efforts, reducing access to lethal means, improving social connectedness, and implement Umatter suicide prevention for schools.
- The [Vermont Department of Health](#) and [Department of Mental Health](#) are engaged in a new prevention effort called [Facing Suicide VT](#) to coordinate statewide prevention efforts, expand suicide prevention efforts including the Zero Suicide program, recovery and support groups, and to support suicide awareness and support training and suicide prevention programs.
- [Vermont's Area Health Education Centers](#) work to train and retain healthcare workers and improve healthcare access in the state. Their recent [Extension for Community Healthcare Outcomes](#) (ECHO) session focused on pediatric mental health presentation and treatment in the primary care setting.
- The Department of Mental Health, [Agency of Education](#), and the [Center for Health and Learning](#) developed a comprehensive model school protocol for suicide prevention and postvention. [Vermont Model School Protocol for Suicide Prevention.pdf](#)
- The [Vermont Child Health Improvement Program](#) is engaged in several efforts to improve child, adolescent, and young adult mental health.
 - [Child Health Advances Measured in Practice Network](#) works with practices to improve depression screening, treatment, and referrals among adolescents and young adults.
 - The [Vermont Child Psychiatry Access Program](#) connects primary healthcare providers with clinical social workers and psychiatrists for free consultations about mental health diagnosis and treatment plans.
 - The [Firearms and Suicide Prevention Evaluation Team](#) examines the impact of different suicide training programs in Vermont.

These are just some of Vermont's statewide initiatives. For more information, use the links above.

Summary

Estimating the county-level prevalence of depression, anxiety, conduct disorder, and suicidal ideation/intentional self-harm diagnoses is important to inform future quality improvement efforts at primary care practices across Vermont. We found county-level variation in prevalence of depression and anxiety diagnoses, with slightly lower prevalence in more northern rural counties. Prevalence of conduct disorder or suicidal ideation/intentional self-harm diagnoses were low for all counties as anticipated, with minor variation across counties.

Supplemental Table

Table. Percent and Number of Patients Aged 0-21 with One or More Diagnoses of Depressive Disorders, Anxiety/Fear-Related Disorders, Conduct Disorders, and/or Suicidal Ideation/Attempt/Intentional Self-Harm Diagnoses, 2022

County	Depressive Disorders		Anxiety/Fear-Related Disorders		Conduct Disorders		Suicidal Ideation/Attempt/Intentional Self-Harm		Patients in County
	N	%	N	%	N	%	N	%	N
Addison	427	7%	839	13%	58	0.9%	52	0.8%	6,345
Bennington	437	6%	1,056	14%	186	2.5%	94	1.3%	7,359
Caledonia	536	8%	1,014	15%	103	1.5%	100	1.5%	6,759
Chittenden	1,918	7%	3,995	14%	386	1.3%	312	1.1%	29,288
Essex	91	6%	167	12%	22	1.6%	>13	>1.0%	1,407
Franklin	518	5%	1,205	12%	224	2.2%	75	0.7%	10,185
Grand Isle	79	6%	166	12%	16	1.2%	<11	<1.0%	1,378
Lamoille	295	5%	635	12%	69	1.3%	50	0.9%	5,490
Orange	466	9%	764	14%	114	2.1%	80	1.5%	5,420
Orleans	367	6%	738	12%	189	3.0%	59	1.0%	6,211
Rutland	967	8%	1,652	14%	225	1.9%	165	1.4%	11,866
Washington	834	7%	1,521	12%	195	1.6%	141	1.1%	12,485
Windham	643	8%	1,154	14%	151	1.8%	96	1.2%	8,352
Windsor	704	7%	1,332	13%	175	1.8%	139	1.4%	9,990

Mental, Behavioral and Neurodevelopmental body system categories defined by Clinical Classification

Software Refined developed by the Agency for Healthcare Research and Quality.

Patients may have diagnoses in more than one category.

Suicidal Ideation/Attempt/Intentional Self-Harm Diagnosis may be initial diagnoses or subsequent diagnoses in 2022.

Patient county determined by the first VT ZIP Code in the patient eligibility record in 2022.

Data displayed may be masked in accordance with data use agreement with the Green Mountain Care Board (see Data Source)

SOURCE: VHCURES Extract #3008

Notes

- Age is based on insurance eligibility records, not age at any visit dates during the year. Children, adolescents, and young adults with multiple ages more than 1 year apart over the year are excluded.
- ZIP Code is based on the insurance eligibility records. Children, adolescents, and young adults are identified as Vermont patients if they have at least one Vermont ZIP Code in the year. Patients were assigned to counties based on their first Vermont ZIP Code in the year.
- Diagnoses used for inclusion in the CCSR v.2022.1 can be found on the [H-CUP website](#). We reviewed both inpatient and outpatient medical claims diagnosis in 2022. Patients with medical insurance eligibility but without any medical claims with diagnoses were coded as not having depressive disorder, anxiety/fear-related disorder, conduct disorder or suicidal ideation, suicide attempts, and intentional self-harm diagnoses.
- The Vermont Health Care Uniform Reporting and Evaluation System (VHCURES) data are under the stewardship of the Green Mountain Care Board (GMCB). The analyses, conclusions, and recommendations from the VHCURES data are solely those of the study authors and are not necessarily those of the GMCB. The GMCB had no input into the study design, implementation, or interpretation of the findings.

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