



# Health Outcomes among Runaway and Homeless Youth – Does Place Matter?

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## Background

- Although youth living in rural areas experience homelessness at similar rates to those living in urban areas, most research and interventions with homeless youth have focused on urban contexts.
- Runaway youth and homeless youth are at risk for adverse physical and mental health outcomes, yet little is known about the unique needs of homeless youth from different geographic regions.
- Geographic differences in the health needs of homeless youth could have important implications for policy and interventions.

## Objective

We sought to assess geographic differences in health outcomes among runaway and homeless youth.

## Methods

### Data

We conducted a secondary data analysis using responses of 8<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> graders from the 2019 Minnesota Student Survey ( $n=10,757$ ) who had experienced some form of housing instability in the prior year.

- Housed runaway:** Youth who had run away at least once in the prior year, but denied any other form of homelessness ( $n=5,180$ ; 48%)
- Family homeless:** Youth who had been homeless, but always accompanied by an adult in the prior year ( $n=4,491$ ; 42%)
- Unaccompanied homeless:** Youth who had experienced unaccompanied homelessness in the prior year ( $n=1,086$ ; 10%)

A youth was considered *homeless* if they indicated that they had: “stayed in a shelter, somewhere not intended as a place to live, or someone else’s home because you had no other place to stay.”

### Measures

We examined 5 health indicators:

- Self-reported sub-optimal health:** Current poor, fair or good health
- Depressive symptoms:** PHQ-2 score  $\geq 3$  (past 2 weeks)
- Suicide attempts:** Attempted suicide (past year)
- Sexual partners:**  $\geq 2$  sexual partners (past year)
- Vaping:** Used a vape or e-cigarette at least once (past 30 days)

### Analysis

We conducted multifactor analysis of variance (ANOVAs) for each of the 5 health indicators:

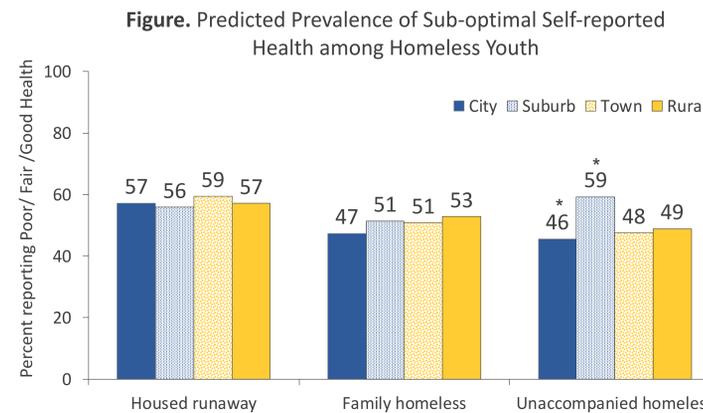
- Initial models examined interactions between geographic region and housing status.
- Final, parsimonious models retained housing status and geographic region, but dropped their interaction term when not significant. Analyses were stratified by housing status to probe significant interactions.

## Sample Characteristics

	%
Geographic region	
City	13
Suburb	43
Town	26
Rural	18
Assigned sex, Female	52
Race/ethnicity	
Asian, Non-Hispanic (NH)	8
Black, NH	8
Hispanic	8
White, NH	57
Multiple Race NH	14
Receives free/reduced price lunch <sup>a</sup> , Yes	38

## Results

### Self-reported Sub-optimal Health



**Note.** Analyses control for age, grade, race/ethnicity, biologic sex, free & reduced-price lunch.

### Interaction models

- The effect of housing status on mental health did not vary by geographic region (interaction,  $p>0.05$ ).

### Parsimonious models

- Runaway youth and unaccompanied homeless youth were more likely to report a suicide attempt in the past year and have a positive PHQ-2 depression screen than those who had faced family homelessness.
- Across regions, about half of youth reported depressive symptoms and approximately one-third reported having attempted suicide ( $p>0.05$ ).

### Interaction models

- The effect of housing status on self-rated health varied by geographic region (interaction,  $p=0.003$ , see **Figure**).

### Predicted probabilities, stratified by housing status

- Unaccompanied homeless youth in suburban areas reported higher likelihood of poorer overall health compared to unaccompanied youth in urban areas ( $p=0.002$ ).
- Runaway youth and youth experiencing homelessness with their family had similar rates of self-reported overall health across locations ( $p>0.05$ ).

### Mental Health

	Depressive symptoms (PHQ-2 score $\geq 3$ )	Suicide attempt (past year)
<b>Housing status</b>	$p<0.001$	$p<0.001$
Housed runaway	52.6 <sup>a</sup>	41.2 <sup>a</sup>
Family homeless	34.2	22.1
Unaccompanied homeless	54.4 <sup>a</sup>	45.8 <sup>a</sup>
<b>Geographic region</b>	$p=0.590$	$p=0.450$
City	48.4 <sup>b</sup>	36.7 <sup>b</sup>
Suburb	46.3 <sup>b</sup>	36.0 <sup>b</sup>
Town	46.4 <sup>b</sup>	37.4 <sup>b</sup>
Rural	47.2 <sup>b</sup>	35.4 <sup>b</sup>

**Note.** Analyses control for age, grade, race/ethnicity, biologic sex, free & reduced-price lunch. Items that share a superscript do not differ significantly ( $p > .05$ ).

### Risk Behaviors

	$\geq 2$ sexual partners (past year)	Vaping (past 30 days)
<b>Housing status</b>	$p<0.001$	$p<0.001$
Housed runaway	22.0	45.6
Family homeless	12.9	24.0
Unaccompanied homeless	30.8	51.3
<b>Geographic region</b>	$p=0.007$	$p=0.002$
City	20.8 <sup>a</sup>	37.7
Suburb	19.9 <sup>a,b</sup>	39.5 <sup>a</sup>
Town	24.1 <sup>a,c</sup>	43.3 <sup>b</sup>
Rural	23.0 <sup>a,b,c</sup>	40.7 <sup>a,b</sup>

**Note.** Analyses control for age, grade, race/ethnicity, biologic sex, free & reduced-price lunch. Items that share a superscript do not differ significantly ( $p > .05$ ).

### Interactions models

- The effect of housing status on engagement in the examined risk behaviors did not vary by geographic region (interaction,  $p>0.05$ ).

### Parsimonious models

- Unaccompanied homeless youth reported the highest prevalence of risk behaviors. Youth facing family homelessness had the lowest risk among the housing groups. Runaway youth had intermediate levels.
- With regards to geographic region:
  - Young people from towns were more likely to have  $\geq 2$  sexual partners than those from suburbs.
  - Youth from rural communities were more likely to report having used an e-cigarette in the prior 30 days than those from cities.

## Discussion

- Our findings suggest that **runaway and homeless youth from different geographic regions face similar health risks**, with subtle differences with respect to self-reported health and risk behaviors.
- Despite the high burden of health risk faced across all geographic regions, **most resources for homeless youth are concentrated in urban areas**, leaving those living outside of cities without needed support.
- Our findings **highlight important differences in health between subtypes of unstably housed youth**, with unaccompanied homeless youth and runaway youth generally faring the poorest.

### Limitations

- This study is a secondary data analysis of cross-sectional data
- The Minnesota Student Survey does not capture students who may not be enrolled in public schools or were absent on the day of administration.

### Future Directions

- Tailored clinical and community interventions to meet the unique needs of homeless and runaway youth across geographic regions are critical.
- Additional research is needed regarding best practice for identifying and intervening to support youth and families who may be at risk for or experiencing running away or homelessness.

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