Estimates of Substance Use Disorders among Students in Grades 8, 9 and 11 by prevention regions

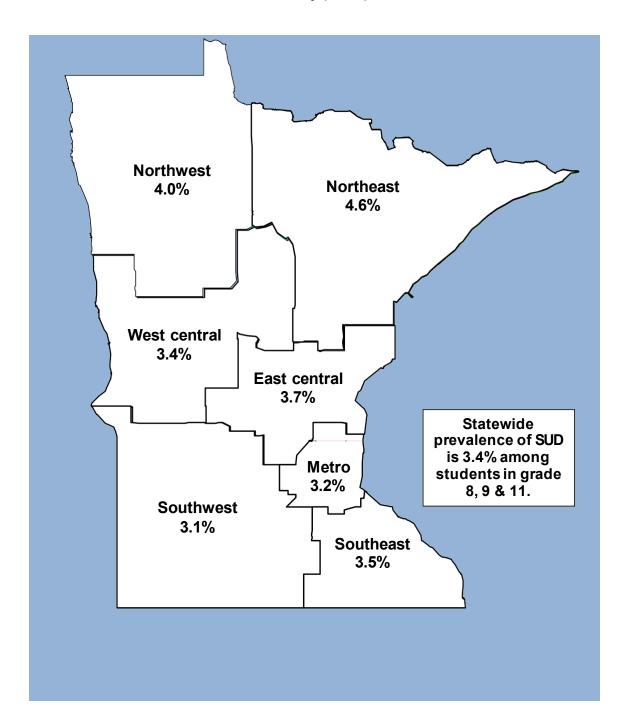
Data from 2019 Minnesota Student Survey

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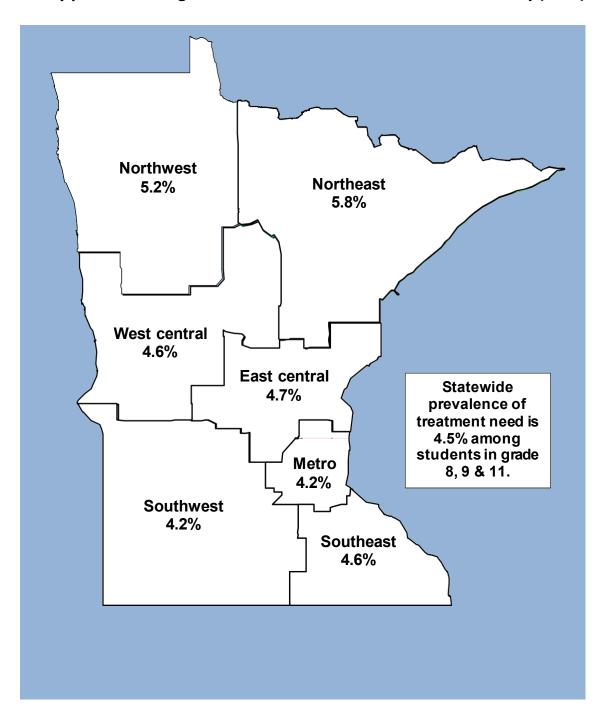
May 2020

# Prevalence of substance use disorders\* (SUD) among students in grades 8, 9 and 11 by prevention regions: Data from the 2019 MN Student Survey (MSS)



<sup>\*</sup> MSS asked questions about symptoms of SUD listed in DSM-5 except the withdrawal symptom. Following DSM-5 diagnostic criteria, students with two or more symptoms were estimated to have an SUD.

### Prevalence of treatment need\*for SUD among students in grades 8, 9 and 11 by prevention regions: Data from the 2019 MN Student Survey (MSS)



<sup>\*</sup>Treatment need is defined as either meeting the DSM-5 criteria for substance use disorders (SUD) or having been treated for an alcohol or drug problem during the past year.

#### **Technical Note**

#### Introduction

The Minnesota Student Survey (MSS) is a statewide school-based survey conducted every three years by an interagency team consisting of four state agencies (Education, Health, Human Services, and Public Safety).

MSS is not a sample-based but census-like survey where all the public schools are invited to participate. The survey was administered among students in grades 5, 8, 9 and 11. This report used data from students in grade 8, 9 and 11 who were asked questions measuring the substance use disorder (SUD) and the treatment history.

#### Questionnaires and Administration

There were three levels of questionnaires: Level 1 for 5<sup>th</sup> graders, level 2 for 8<sup>th</sup> graders and level 3 for 9<sup>th</sup> and 11<sup>th</sup> graders. The topics include school climate, educational engagement, health and nutrition, bullying/harassment, adverse childhood experiences, emotional and mental health, substance use and other health risk behaviors.

The survey is anonymous and participation is voluntary. Parents are informed in advance about the administration and offered an opt-out option. The survey administration occurs during the first half of the year of administration, usually from January to June. The participating schools can schedule their administration anytime during this period.

In 2019, all surveys were administered online, using the web-based survey. Only Juvenile Correctional Facilities could choose to administer the survey on paper.

#### Participation Rates

In 2019, 81% of public school districts had at least one school in the district participating in the survey. A total of 170,128 students-- approximately 64% of the statewide student population enrolled in the four grades-- participated. The grade specific participation rates are 66% for fifth graders, 68% for eighth graders, 66% for ninth graders, and 54% for eleventh graders.

#### <u>Prevention Regions and the List of Counties</u>

Northeast: Aitkin, Carlton, Cook, Itasca, Koochiching Lake, Saint Louis

East Central: Benton, Chisago, Isanti, Kanabec, Mille Lacs, Morrison, Pine, Sherburne,

Stearns, Wright

Metro: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Washington

**Southeast:** Dodge Fillmore, Freeborn, Goodhue, Houston, Mower, Olmsted, Rice, Steele, Wabasha, Winona

**Southwest**: Big Stone, Blue Earth, Brown, Chippewa, Cottonwood, Faribault, Jackson, Kandiyohi, Lac Qui Parle, Le Sueur, Lincoln, Lyon, Martin, McLeod, Meeker, Murray, Nicollet, Nobles, Pipestone, Redwood, Renville, Rock, Sibley, Swift, Waseca, Watonwan, Yellow Medicine

**West Central:** Cass, Clay, Crow Wing, Douglas, Grant, Otter Tail, Pope, Stevens, Todd, Traverse, Wadena, Wilkin

**Northwest:** Becker, Beltrami, Clearwater, Hubbard, Kittson, Lake of the Woods, Mahnomen, Marshall, Norman, Pennington, Polk, Red Lake, Roseau

#### Prevalence of SUD by Prevention Regions

The prevalence of substance use disorder (SUD) is related to various socio-demographic factors. In general, male students than females, minorities, especially American Indians and students with multiple racial/ethnic background compared to whites, students in grade 11 than younger students and students from low- income household than their more affluent counterparts are more likely to have an SUD. The variation in the prevalence of SUD across prevention regions should be put into context of any difference in the student population on these socio-demographic factors across the regions.

The table below shows the socio-demographic distribution of the students participated in the survey by prevention regions. Gender distribution did not vary much across regions. Northeast region had the lowest proportion of 11<sup>th</sup> graders (26%) whereas the proportions of 11<sup>th</sup> graders ranged between 28% and 30% in the other regions.

Metro region had the lowest proportion of white students (61%) whereas Northwest region had the highest proportion of American Indian students (8%) or students with multiple racial/ethnic background (11%). Although not as much, Northeast and West Central regions also had higher proportion of American Indians (4% and 3% respectively) compared to the rest of the state. Northwest and Southwest regions had the highest proportion of students who were getting free or reduced-price lunch at school.

Even when the socio-demographic factors were included in the analysis, the prevalence of SUD and treatment need among students in the Northeast region was found consistently higher compared to the metro region.

## Socio-demographic distribution of students in grades 8, 9, and 11who participated in the 2019 MSS and the prevalence of SUD/treatment need by prevention region

	Northwest	Northeast	West	East	Southwest	Southeast	Metro
	(N=4,878)	(N=6,214)	Central	Central	(N=11,221)	(N=10,950)	(N=66,917)
			(N=7,679)	(N=17,516)			
	%	%	%	%	%	%	%
Gender							
Female	50.9	49.6	49.6	50.2	48.7	50.4	50.4
Grade							
8	35.9	35.7	32.0	36.2	33.5	39.8	35.9
9	36.2	37.9	38.0	35.0	36.3	32.5	36.5
11	28.0	26.4	30.0	28.8	30.2	27.8	27.6
Race/Ethnicity							
White	75.2	82.7	82.4	83.5	73.7	73.5	60.8
AIAN	8.4	3.7	2.7	1.1	0.9	0.6	0.5
Asian	1.1	1.0	1.0	2.0	2.8	4.1	10.5
Black	2.0	1.8	3.0	4.6	4.4	5.9	11.1
Hispanic	2.4	0.8	3.2	2.5	10.5	8.1	7.2
NHPI	0.3	0.3	0.2	0.1	0.2	0.3	0.2
Multiple <sup>1</sup>	10.6	9.5	7.4	6.2	7.5	7.5	9.7
Get a free or reduced-price lunch at school	27.3	25.1	25.9	19.6	27.3	23.9	23.3
SUD	4.0	4.6	3.4	3.7	3.1	3.5	3.2
Treatment Need	5.2	5.8	4.6	4.7	4.2	4.6	4.2

<sup>&</sup>lt;sup>1</sup> All students who selected more than one of the six answering options (white, American Indian, black, Asian, Hispanic, Native Hawaiian/Pacific Islander) are included in "Multiple" category. This new way of categorization is due to the changes in questions asking about race and ethnicity in 2019.