

Unmet Need for Mental Health Services among Idaho Youth, 2023

Nathaniel J. Williams, PhD, LCSW
James Beauchemin, PhD, LCSW
Nallely Vega, LMSW
Boise State University

Executive Summary

Objective: The purpose of this report is to provide estimates of unmet need for mental health services among Idaho youth with serious emotional disturbance (SED) in 2023. Data on unmet need inform quality improvement efforts of the Idaho Youth Empowerment Services (YES) system. Using two methodologies, the authors generated estimates of unmet need for mental health services within two populations: (1) *all* Idaho youth who have SED, and (2) Idaho youth with SED who came into contact with the YES system from July to December 2022.

Method: The first methodology used synthetic estimation procedures to generate Idaho county-level estimates of (1) youth SED prevalence, and (2) prevalence of unmet need for mental health services among youth with SED. These estimates incorporated aggregate 2017-2021 Idaho county population data from the American Community Survey of the US Census Bureau, and prevalence and service utilization data from the 2001-2004 US National Health Interview Survey ($N=29,265$; Simpson et al., 2009). The second methodology analyzed survey responses and linked administrative data from a population-representative sample of 621 Idaho families whose children came into contact with the YES system from July to December 2022 and who had demonstrated need for mental health services. These analyses examined receipt of mental health services after contacting the system and youth sociodemographic characteristics across 7 Idaho Department of Health and Welfare (IDHW) regions. Analyses were weighted to account for sampling probability and survey non-response.

Results: Results of the synthetic estimation procedure indicated 5.9% ($N=28,581$) of Idaho youth ages 0-18 years likely experience SED. Across Idaho's 44 counties, estimated SED prevalence ranged from 5.1% to 7.2%. Among Idaho youth with SED, an estimated 53.8% ($N=15,369$) likely experience unmet need for mental health services; rates of unmet need for mental health services among youth with SED ranged from 53.1% to 55.3% across counties. Results from the analysis of linked family survey and administrative data indicated 4.5% (95% CI=3.1%-6.5%) of Idaho youth who came into contact with the YES system in 2022 likely had unmet need for mental health services in the 6 months following their initial assessment (i.e., *initial* unmet need). Across the 7 IDHW regions, percentages of initial unmet need varied from 3.5% to 9.1%. Among *all* youths with SED who came into contact with the YES system in 2022, 10.2% (95% CI=8.0%-13.0%) likely had unmet need for mental health services in the 6 months following *either* an initial or follow-up assessment (i.e., *total* unmet need). Across IDHW regions, percentages of total unmet need ranged from 5.8% to 16.5%. Youths of Hispanic origin were significantly more likely than non-Hispanic White youth to experience unmet need for mental health services (14.7% versus 8.17%, respectively, $p=0.048$).

Conclusions and Recommendations: It is estimated that 28,581 Idaho youth (5.9%), ages 0-18, experience SED and of these, 15,369 (53.8%) likely experience unmet need for mental health services. Among Idaho youth with SED who came into contact with the YES system in 2022, 4.5% are estimated to have experienced unmet need for mental health services following their initial assessment and 10.2% are estimated to have experienced unmet need for mental health services at any time after contacting the system. The estimates of unmet need among youth who came into contact with the YES system are likely conservative as they do not take into account youth who received services but not in a dosage appropriate to their needs. Idaho State should take steps to improve the accessibility of mental health services for youths with SED as well as rates of sustained engagement once youth and families enter the YES system.

Date of Report: July 31, 2023

The purpose of this report is to provide estimates of unmet need for mental health services among Idaho youth who experience serious emotional disturbance (SED). As defined in US federal and Idaho State code, SED is a condition in which youth, ages 0 to 18 years, experience a mental disorder that causes significant impairment in their daily life (see Box 1). Under terms specified by the Jeff D. Settlement Agreement, the State of Idaho is required to develop and implement an accessible and comprehensive array of community-based mental health services that meet the needs of children with SED. To fulfill this goal, the Idaho Department of Health and Welfare (IDHW) developed a system-of-care for children with SED called Youth Empowerment Services (YES). Beginning in 2023, IDHW contracted with Boise State University to better understand the potential need for mental health services within the YES system as well as the extent to which youths with SED in Idaho experience unmet need for mental health services. This report represents the first assessment of unmet need for youth mental health services completed by Boise State University as part of the 2023 contract. In recognition of the different ways unmet need for mental health services can be defined, and in recognition of the different youth populations to which the criteria for unmet need can be applied, this report has two primary aims, as determined by the Department:

- (1) To generate county-level estimates of unmet need for mental health services among *all* Idaho youth with SED, and
- (2) To generate regional estimates of unmet need for mental health services among Idaho youth with SED who came in contact with the YES system in 2022.

Box 1. Definitions of Serious Emotional Disturbance

U.S. Substance Abuse and Mental Health Services Administration

Pursuant to section 1912(c) of the Public Health Service Act, as amended by Public Law 102-321 "children with serious emotional disturbance" are persons:

- a. From birth up to age eighteen (18),
- b. who currently or at any time during the past year,
- c. have had a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within the Diagnostic and Statistical Manual of Mental Disorders (DSM),
- d. that resulted in functional impairment which substantially interferes with or limits the child's role or functioning in family, school, or community activities.

Idaho Statute

"Serious emotional disturbance" means a diagnostic and statistical manual of mental disorders (DSM) diagnosable mental health, emotional or behavioral disorder, or a neuropsychiatric condition which:

- a. results in a serious disability,
- b. requires sustained treatment interventions, and
- c. causes the child's functioning to be impaired in thought, perception, affect or behavior.

A disorder shall be considered to "result in a serious disability" if it causes substantial impairment of functioning in family, school or community that is measured by and documented through the use of a standardized instrument approved by the department and conducted or supervised by a qualified clinician.

Target Populations

This report distinguishes between two populations for whom unmet need for mental health services can be assessed. These populations are overlapping and are shown in Figure 1. The first, larger population includes *all* youth who experience SED in Idaho. This population includes all youth who meet SED criteria, regardless of whether or not they come into contact with a mental health professional. A considerable number of population-representative studies conducted in the US indicate that approximately half of youths with SED (47-56%) do not access any type of mental health service (Burns et al., 1995; Merikangas et al., 2010; Olfson et al., 2015; Simon et al., 2015; Simpson et al., 2009). The

second, smaller population is a subset of all youth who experience SED: this sub-population includes only those youth who come into contact with a mental health professional. In this

Figure 1 TARGET POPULATIONS



report, we focus specifically on Idaho youth who come into contact with the YES system. These two populations are different in size but may also differ in other important ways that influence whether and how they access mental health services. This report provides estimates of unmet need for mental health services among both populations.

Method

The two aims of this report were met using two different methodologies. Aim 1 required the estimation of unmet need for mental health services among *all* youth with SED in Idaho. This aim was addressed using synthetic estimation methods which combined county-level data on Idaho's youth population and characteristics with prevalence and service utilization data generated from the nationally-representative US National Health Interview Survey (Simpson et al., 2009). Aim 2 required the estimation of unmet need for mental health services among Idaho youth with SED who came into contact with the YES system in 2022. This aim was addressed using linked family survey and administrative data from an Idaho population-representative sample of 621 families whose children came into contact with the Idaho YES system from July to December 2022.

Defining Unmet Need

The concept of unmet need incorporates two elements. First, it must be established that a need for mental health services is present. This requires the use of clinical criteria and assessments to confirm the presence of a mental disorder and impairment requiring treatment. Second, a standard of 'met need' must be defined and it must be shown that this standard was not met for persons who have 'unmet need.' Importantly,

standards for assessing unmet need can vary in (1) the intensity of services that must be delivered before a need is considered 'met' (i.e., the number, duration, or frequency of service contacts required for a need to be considered 'met'), and (2) the time frame over which service contacts are assessed. For example, a youth might experience unmet need for mental health services immediately after making initial contact with the service system (as evidenced by failing to receive services after completion of an initial/intake assessment); or, they might experience unmet need several weeks or months after having initially engaged in services (i.e., premature dropout; failure to sustain engagement).

In this report, we use a conservative definition of 'met need' for mental health services. We consider a youth's need for mental health services to be met if there is evidence the youth had at least one contact with a mental health professional. Depending on the analysis, this contact must have occurred within either 6 months or 12 months. For many youths with SED, a single contact with a mental health professional in 6 or 12 months will not suffice to meet their needs. However, this conservative approach reduces the risk of overestimating unmet need for mental health services and we believe it is appropriate for planning purposes.

In addition to examining whether or not youths had at least one contact with a mental health professional, for youths who came into contact with the YES system, we also consider when this contact (or lack of contact) occurred in relation to their initial contact with the YES system. For Idaho youths with SED who made contact with the YES system, we distinguish between two types of unmet need:

- (a) **Initial unmet need** = evidence the youth received an *initial* mental health assessment that

established the need for mental health services (i.e., engaged the YES system) and the youth did not access mental health services in the following six months,

- (b) **Total unmet need** = evidence the youth had *either* an *initial* or *follow-up* assessment that established the need for mental health services, and did not access mental health services in the following six months.

Additional details are provided below.

Aim 1: Estimation of Idaho SED Prevalence and Unmet Need for Mental Health Services among all Youth with SED (Synthetic Estimation)

We relied on well-established synthetic estimation methods (Holzer et al., 1981; Konrad et al., 2009; Levy & French, 1977) to generate county-level estimates of the number and percentage of Idaho youth who have SED as well as the number and percentage of Idaho youth with SED who have unmet need for mental health services. Synthetic estimates combine descriptive data about a population (i.e., the number and distribution of characteristics among Idaho youth, ages 0 to 18 years, within each of Idaho's 44 counties) with prevalence data from population-representative studies of health and service utilization to estimate the percentage of a target population likely to experience a specific condition or outcome. In this study, we obtained data on Idaho's youth population from the American Community Survey (ACS) of the US Census Bureau. The ACS provides State- and county-level population estimates by specific characteristics, notably insurance status. In order to accurately estimate population

characteristics in counties with low population density, the ACS aggregates data over 5-year periods; these estimates are called 5-year estimates. We used county-level ACS 5-year estimates which aggregated data from 2017 to 2021 as they were the most recent available. Data from ACS Table B27010 included estimates of the total number of youth ages 0 to 18 years in each Idaho county, as well as the distribution of youth by type of insurance coverage. Insurance types included: (a) privately insured (i.e., via private commercial insurance), (b) publicly insured via Medicaid or other public program (e.g., Children's Health Insurance Program, CHIP), and (c) uninsured. These population data formed the basis for our estimates of SED prevalence and unmet need among youth with SED.

To estimate the number and percent of youth with SED in each Idaho county, as well as the number and percent of youths with SED who had unmet need for mental health services, we combined the population data from the ACS with data on risk for SED and unmet need for mental health services from the National Health Interview Survey (NHIS) conducted by the US Centers for Disease Control and Prevention. The NHIS is a nationally-representative survey of non-institutionalized adults and children in the US conducted annually by the US National Center for Health Statistics. It is described as the principal source of information on the health of the US civilian, noninstitutionalized population and includes valid and reliable measures of child and youth mental health as well as mental health service utilization. We relied on the most recently published data that included the information required to generate our estimates. Simpson et al. (2009) analyzed data from the 2001-2004 NHIS and reported on mental health status, mental health service utilization, and predictors of these

outcomes, for a nationally-representative sample of $N=29,265$ US youths, ages 4 to 17 years old. Their analysis showed that the one factor most strongly related to both risk of experiencing SED and level of unmet need for mental health services was the youth's insurance status, coded in three categories which matched the ACS population data (privately insured, publicly insured, uninsured). Numerous other studies have shown that youth insurance status is among the most robust and important predictors of both SED and unmet need for mental health services (Burns et al., 1997; Kataoka et al., 2002; Rol et al., 2013; Simon et al., 2015; Simpson et al., 2009); this is true among youth living in both rural and urban areas (Pasli & Tumin, 2002). Simpson et al. (2009) defined SED using a validated cut score on a standardized measure of youth mental health symptoms and functioning reported by the youth's caregiver (i.e., the Strengths and Difficulties Questionnaire; Goodman, 2001; Ringeisen et al., 2015). They considered a youth's need for mental health services 'met' if the youth had at least one contact with a mental health professional within the last 12 months (as reported by caregivers). Based on these definitions, they generated SED prevalence estimates by type of youth insurance as well as rates of unmet need for mental health services by type of youth insurance. We applied these estimates to Idaho county-level data from the ACS to generate synthetic estimates of SED prevalence and unmet need for mental health services among youth with SED.

Aim 2: Estimation of Unmet Need for Mental Health Services among Idaho Youth with SED who Came into Contact with the YES System

(Linked Family Survey & Administrative Data)

We used linked Idaho family surveys and administrative data to generate estimates of unmet need for mental health services among youth with SED who came into contact with the YES system. Survey data were collected by the Idaho Department of Health and Welfare (IDHW) in February and March of 2023 as part of the annual Idaho YES family survey. Full details are available elsewhere (Williams et al., 2023), but briefly, surveys were mailed to a stratified random sample of 6,000 parents/caregivers of Idaho youth who came into contact with the YES system from July to December 2022. The survey asked about youth and caregivers' use of mental health services within the last six months, their perceptions of the services they received, and youth outcomes. In total, 1,076 Idaho caregivers responded to the 2023 YES family survey (response rate = 21%). Responses to these surveys were linked to administrative data on youth sociodemographic characteristics and de-identified. De-identified data was shared with Boise State University for analysis.

The de-identified database included several variables used to generate estimates of unmet need for mental health services among youth with SED who came into contact with the YES system. The variables were as follows:

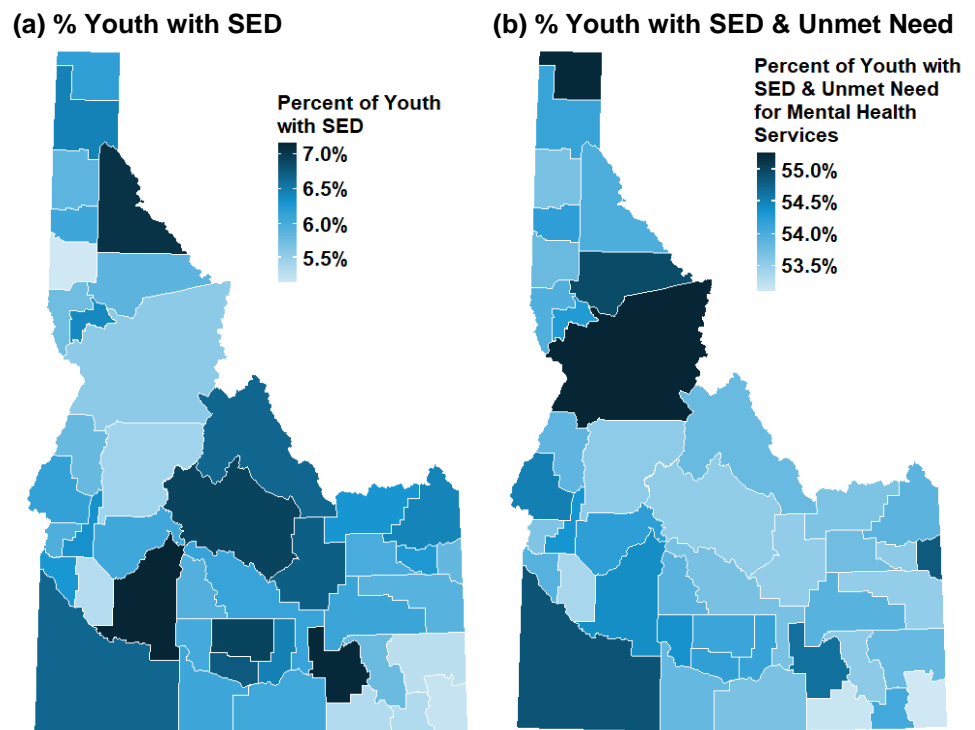
Youth CANS. Within Idaho's YES system, the Child and Adolescent Needs and Strengths (CANS) assessment is used at intake into services and tri-annually thereafter to assess each youth's mental health and treatment needs. The CANS is completed by a clinician in partnership with the caregiver and youth. Ratings are made on 120 items assessing the youth's strengths and needs across

multiple domains including mental health symptoms, functional impairment, and risk behaviors (e.g., self-harm). From these ratings, an overall score (ranging from 0 to 3) is generated which indicates the youth's overall level of need for mental health services. CANS scores of 0 indicate minimal or no evidence of need for mental health intervention, whereas scores of 1 or higher indicate the presence of one or more mental health needs that warrants intervention.

The de-identified database included the most recent CANS score (completed from July to December of 2022) for each of the 1,076 youths whose caregivers responded to the YES family survey. These CANS scores were used to limit the analytic sample to only those youth who had SED and a likely need for mental health services as indicated by a CANS score of 1 or more. After applying these inclusion criteria, the analytic sample included 621 youths.

Receipt of Mental Health Services. The first question on the YES family survey asked caregivers whether their youth had participated in *any* mental health services with a provider during the last six months (yes/no). Youths with a CANS of 1 or higher whose caregivers indicated 'yes' they had participated in any mental health services with a provider were considered to have 'met' need for our analysis. Youths with a CANS of 1 or higher whose caregivers indicated 'no' they had no received any mental health services within the last six months were considered to have 'unmet need' for mental health services. As noted above, this represents a highly conservative estimate of unmet need for mental health services since the receipt of *any* services may include only a single

Figure 2 PERCENT (%) OF IDAHO YOUTH WITH SERIOUS EMOTIONAL DISTURBANCE (SED) AND UNMET NEED FOR MENTAL HEALTH SERVICES



Note: Estimates based on synthetic estimation procedures incorporating (1) aggregate 2017-2021 Idaho county population data on youth population by insurance status from the American Community Survey of the US Census Bureau (Table ID: B27010), and (2) prevalence estimates developed by Simpson et al. (2009) from the US National Health Interview Survey.

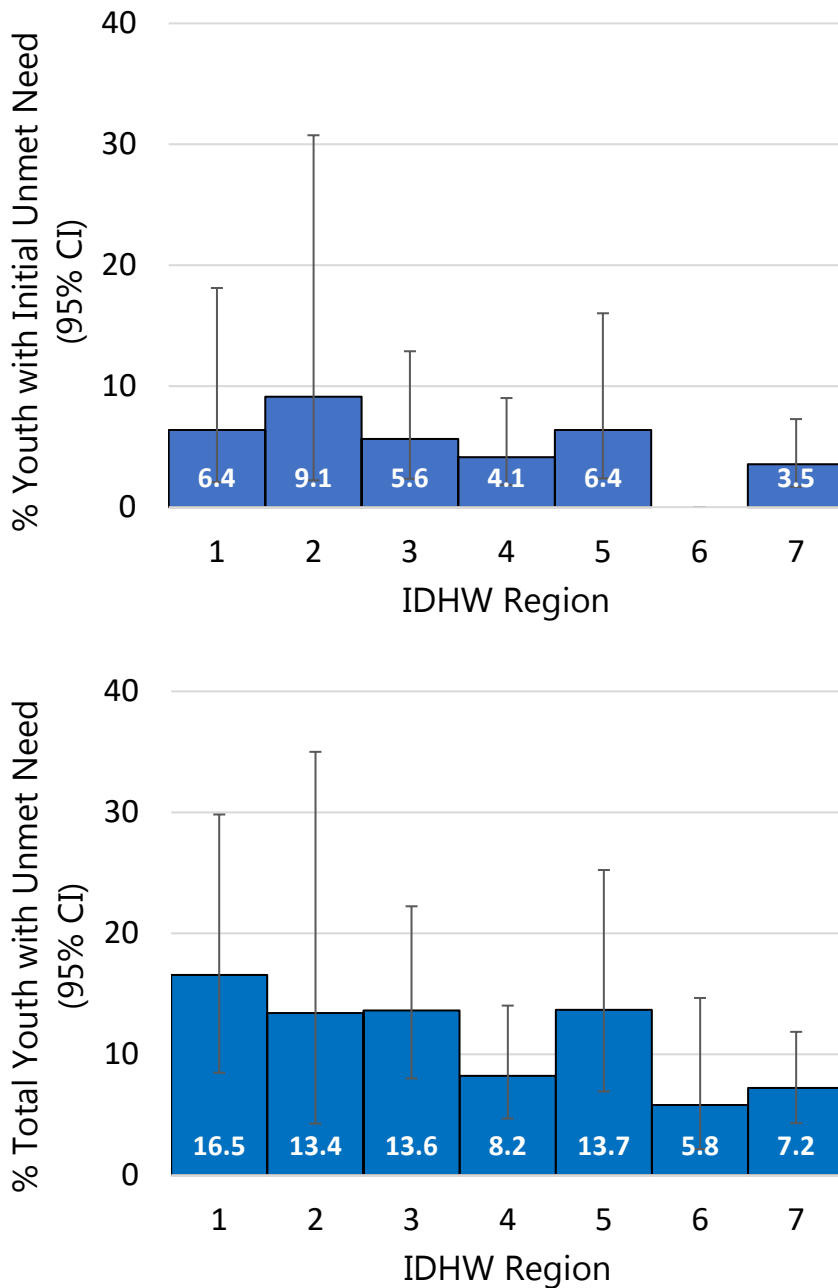
contact, which is unlikely to meet the needs of youths with CANS of 2 or 3. Furthermore, evidence from other questions on the family survey suggested many families experienced inadequate access to services even if they were able to see a provider at least once in the last six months.

Type of CANS Assessment. In addition to information on youths' CANS scores, the de-identified database also included the *type* of CANS assessment completed: initial assessment (youth's first CANS completed at first contact with the YES system), follow-up assessment (completed on a tri-annual basis following the initial assessment for as long as the youth remained in services), or discharge assessment (completed when youth exit care).

Given the potentially important difference between a youth's failure to engage in treatment after their initial assessment versus after they have been involved in services for some time, we used the information on type of CANS assessment to generate two indicators of unmet need for mental health services among youth with SED who came into contact with the YES system.

We defined **initial unmet need** for mental health services as youths who failed to receive mental health services after their initial CANS (i.e., CANS ≥ 1 , assessment type = initial, receipt of services = 'no'). We defined **total unmet need** as youths who failed to receive mental health services after *either* an initial or follow-up CANS (i.e., CANS ≥ 1 , assessment type = initial,

Figure 3 PERCENT (%) OF IDAHO YOUTH WITH SED WHO EXPERIENCED UNMET NEED FOR MENTAL HEALTH SERVICES AFTER CONTACT WITH THE YES SYSTEM



Note: N = 621. Initial unmet need is defined by not receiving mental health services within 6 months after the initial CANS assessment ≥ 1 . Total unmet need is defined as not receiving mental health services within 6 months of either an initial or follow-up CANS assessment ≥ 1 .

receipt of services = 'no'). Given the lack of standardized procedures across providers for when discharge CANS are administered and the few number of discharge CANS in the sample (2% of observations), we

treated discharge assessments as follow-up assessments for purposes of these analyses.

Youth sociodemographic characteristics. The de-identified database included administrative data

on youth gender, race, ethnicity, age, and IDHW region.

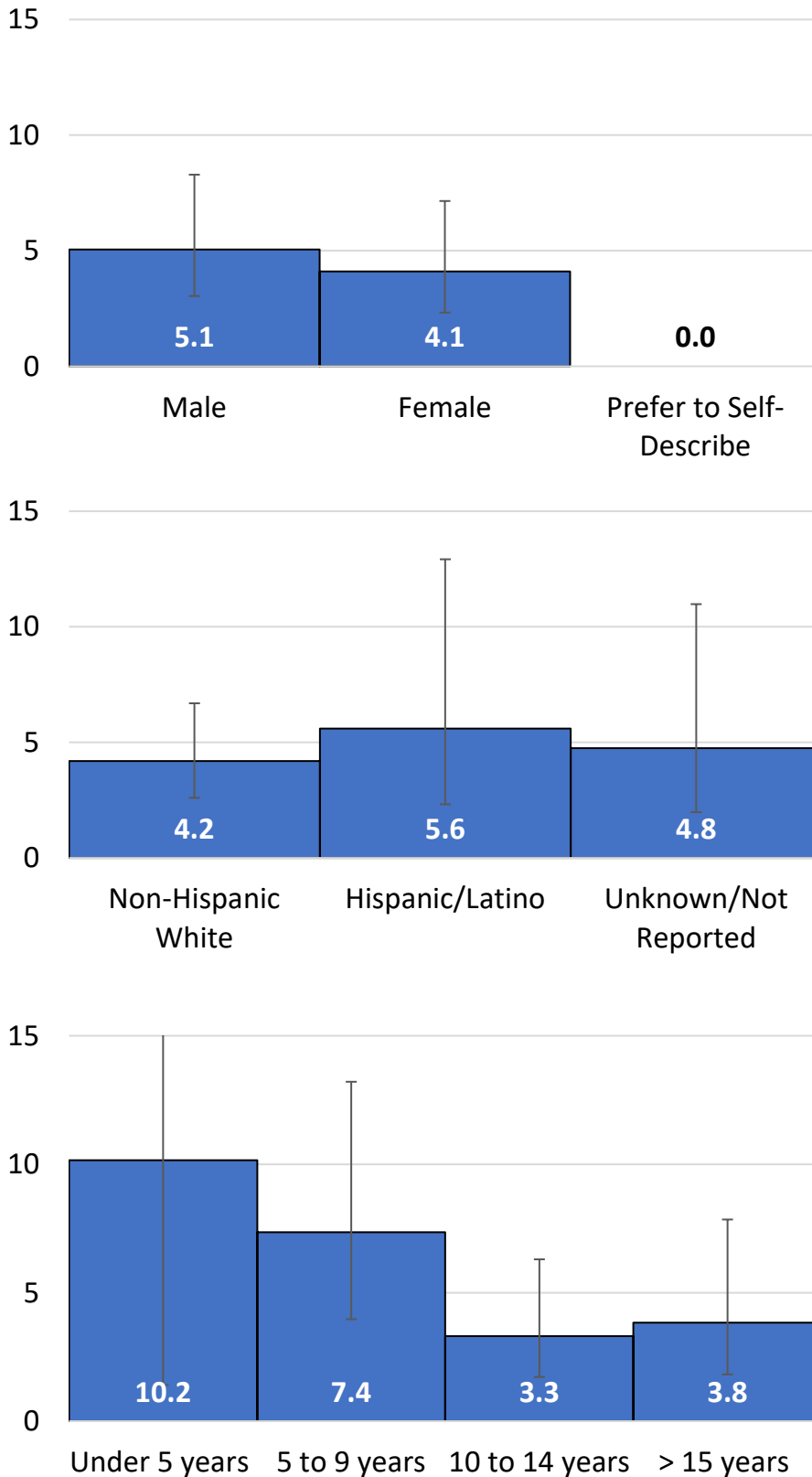
Analysis. In order to generate Idaho population estimates, all analyses were weighted to account for the complex survey sampling design and survey nonresponse. Descriptive statistics estimated the statewide percentage of Idaho youth with SED who came into contact with the YES system in 2022 and had unmet need for mental health services in the 6 months following their initial assessment (i.e., *initial* unmet need) as well as the percentage of Idaho youths who had unmet need for mental health services in the 6 months following either an initial or follow-up assessment (i.e., *total* unmet need). Bivariate analyses (chi-square tests of independence) examined whether rates of initial and total unmet need varied across IDHW regions and by youth sociodemographic characteristics (e.g., were rates of initial or total unmet need higher among boys versus girls or Hispanic versus Non-Hispanic White youths).

Results

Youth SED Prevalence and Unmet Need for Mental Health Services among All Youth with SED (Aim 1)

Results of the synthetic estimation procedure indicated 5.9% (N=28,581) of Idaho youth, ages 0 to 18 years, likely experience SED, based on aggregate population data from 2017 to 2021. Figure 2a shows the prevalence of SED by Idaho county; across the 44 counties, rates of SED ranged from 5.1% to 7.2%. These estimates are consistent with meta-analyses of SED prevalence from population-representative community samples of youth in the US (Williams et al., 2018).

Figure 4a RATES OF INITIAL UNMET NEED FOR MENTAL HEALTH SERVICES AMONG IDAHO YOUTH WITH SED WHO CAME INTO CONTACT WITH THE YES SYSTEM BY YOUTH CHARACTERISTIC, (CONTINUED NEXT PAGE)



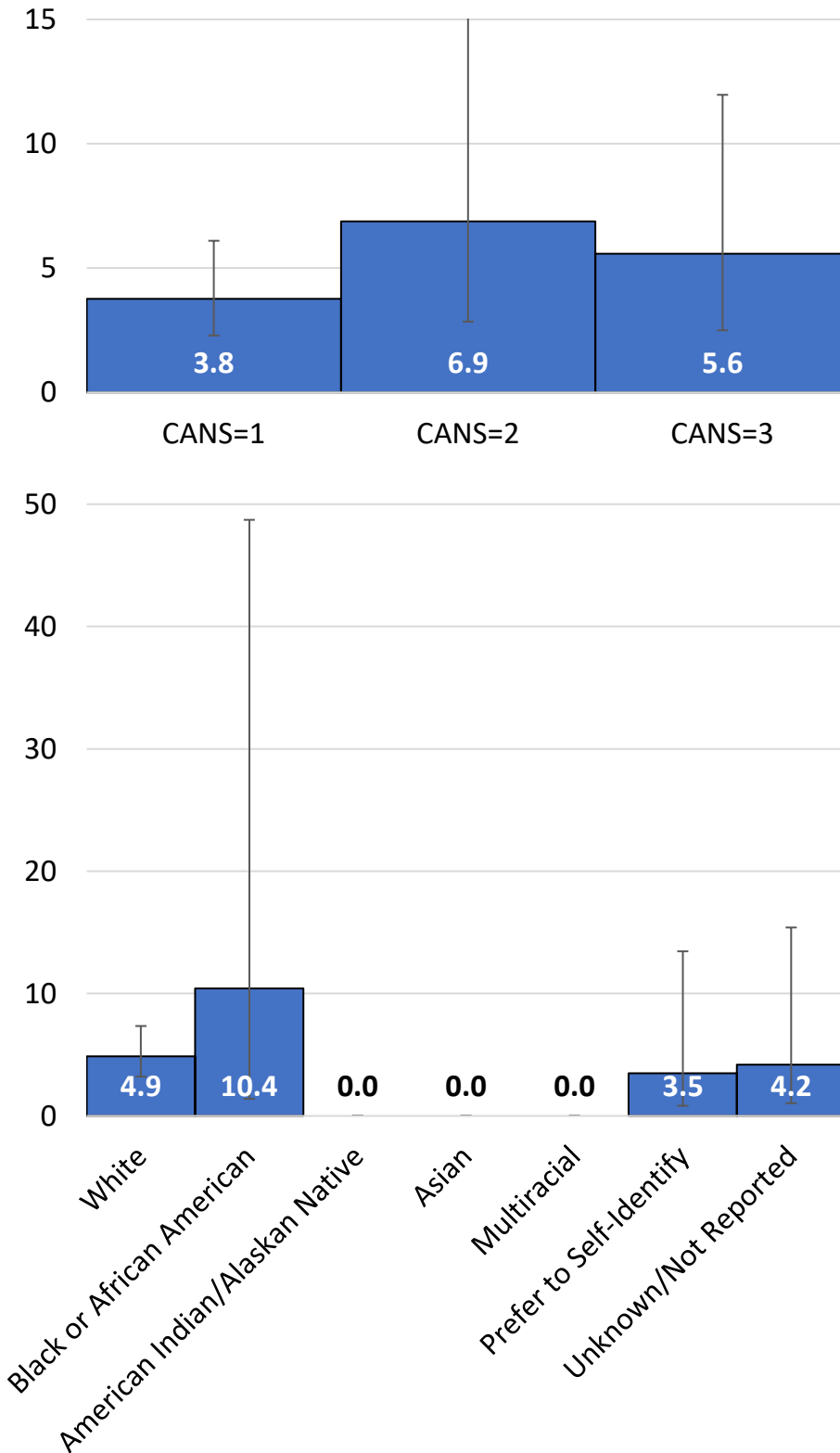
Note: N = 621. Initial unmet need is defined by not receiving mental health services within 6 months after the initial CANS assessment ≥ 1 .

Among Idaho youth with SED, an estimated 53.8% (N=15,369) likely experience unmet need for mental health services. Across Idaho counties, estimated rates of unmet need for mental health services among youth with SED ranged from 53.1% to 55.3% (see Figure 2b). Among youth with SED, rates of unmet need for mental health services were highest in Idaho County (IDHW Region 2), Boundary County (Region 1), and Clearwater County (Region 1); rates of unmet need were lowest in Bear Lake County (Region 6), Oneida County (Region 6), and Ada County (Region 4). In general, counties with higher population densities tended to have lower rates of unmet need for mental health services. Appendix 1 provides a complete list of estimated SED prevalence and unmet need for mental health services among youth with SED in Idaho’s 44 counties.

Initial and Total Unmet Need for Mental Health Services among Youth with SED who Entered the YES System (Aim 2)

Of the 1,076 Idaho youths whose caregivers responded to the 2023 YES family survey, 621 youths, representing a sub-population of 6,789 Idaho youths, were eligible and included in the analyses of unmet need (i.e., had received a CANS score ≥ 1). Of these, 4.5% (95% CI = 3.1% - 6.5%) experienced initial unmet need for mental health services, defined as failing to receive mental health services within six months following their initial CANS assessment. Figure 3 shows the rates of initial unmet need across IDHW’s 7 regions; rates varied from 3.5% (Region 7) to 9.1% (Region 2). We were unable to estimate the level of initial unmet need in Region 6 because all survey respondents from Region 6 who had an initial CANS reported that they received services

Figure 4b RATES OF INITIAL UNMET NEED FOR MENTAL HEALTH SERVICES AMONG IDAHO YOUTH WITH SED WHO CAME INTO CONTACT WITH THE YES SYSTEM BY YOUTH CHARACTERISTIC



Note: N = 621. Initial unmet need is defined by not receiving mental health services within 6 months after the initial CANS assessment ≥ 1.

within six months (0% reported unmet need).

A higher percentage of youths, 10.2% (95% CI = 8.0% – 13.0%), experienced unmet need for mental health services in the 6 months following either an initial or follow-up assessment (i.e., *total* unmet need). Figure 3 shows the rates of total unmet need among youth with SED who entered YES services across IDHW’s 7 regions. Rates ranged from 5.8% (Region 6) to 16.5% (Region 1).

In addition to examining rates of initial and total unmet need across IDHW regions, we also tested whether youth characteristics of gender, ethnicity, race, and age were associated with higher likelihood to experience unmet need. Figures 4a and 4b show rates of initial unmet need by youth characteristics. None of the youth characteristics were statistically significantly associated with rates of initial unmet need.

Figures 5a and 5b show rates of total unmet need by youth characteristics. One youth characteristic, ethnicity, was related to rates of total unmet need. Youths of Hispanic origin had significantly higher rates of total unmet need for mental health services than youths identified as Non-Hispanic White (14.7% versus 8.17%, respectively, $p=0.048$). Youths whose ethnicity was not reported also exhibited higher rates of unmet need for mental health services (14.8%) than Non-Hispanic White youths.

To test whether the relationship between youth ethnicity and total unmet need might be explained by a confounding variable, we estimated a multivariable logistic regression model that included youth ethnicity, gender, race, age, IDHW region, and CANS. Including these other variables makes it so that comparisons between Hispanic and Non-Hispanic youth are held constant across all levels of the other variables. Results of this analysis

indicated youth ethnicity was still significantly associated with the likelihood of experiencing total unmet need for mental health services. After adjusting for all other youth characteristics, youths of Hispanic origin who came into contact with the YES system experienced significantly higher rates of unmet need for mental health services than Non-Hispanic White youth (16.2% vs. 7.7%, $p=0.016$).

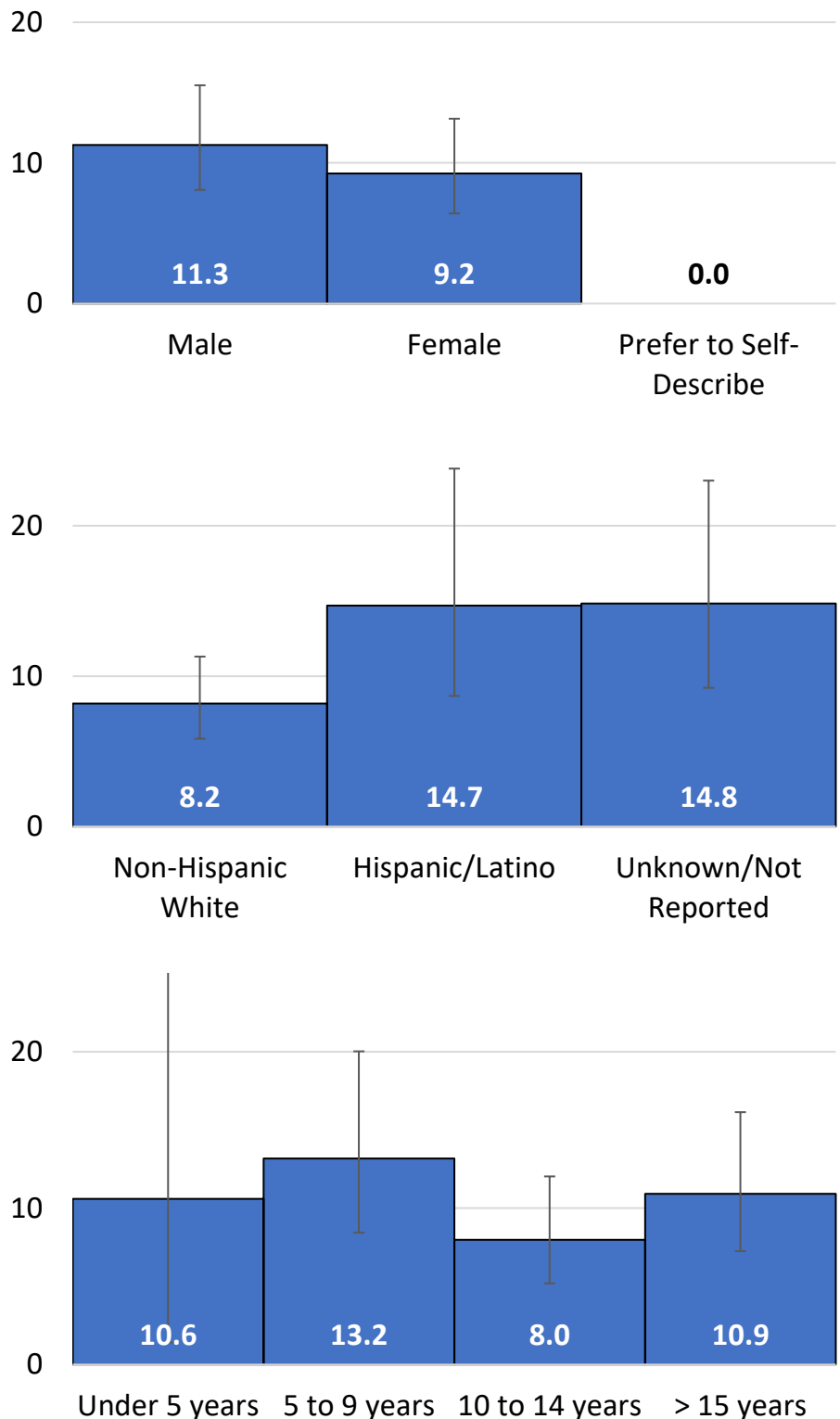
Conclusion

This report estimated rates of unmet need for mental health services among (1) *all* Idaho youth with SED, and (2) among Idaho youth with SED who came into contact with the YES service system. With regard to *all* Idaho youth, it is estimated that 28,581 Idaho youth (5.9%), ages 0-18, experience SED. Furthermore, of these, 15,369 (53.8%) likely experience unmet need for mental health services. Variation was observed across Idaho counties in rates of SED and rates of unmet need for mental health services among youths with SED.

With regard to Idaho youth with SED who came into contact with the YES system in 2022, it is estimated that 4.5% experienced unmet need for mental health services following their initial assessment and 10.2% experienced unmet need for mental health services after either an initial or follow-up assessment. There was variation across IDHW Regions in rates of total unmet need for mental health services. In addition, youths of Hispanic origin had significantly higher rates of unmet need for mental health services than youths of Non-Hispanic White origin.

These estimates provide benchmarks for monitoring progress toward meeting the needs of Idaho youth with SED. Idaho State should take steps to improve the accessibility of mental health services for youths with SED and rates of sustained

Figure 5a RATES OF TOTAL UNMET NEED FOR MENTAL HEALTH SERVICES AMONG IDAHO YOUTH WITH SED WHO CAME INTO CONTACT WITH THE YES SYSTEM BY YOUTH CHARACTERISTIC, (CONTINUED NEXT PAGE)



Note: N = 621. Total unmet need is defined as not receiving mental health services within 6 months of either an initial or follow-up CANS assessment ≥ 1 .

treatment engagement once youth and families enter the YES system. ■

References

Burns BJ, Costello EJ, Angold A, et al. (1995). Children’s mental health service use across service sectors. *Health Affairs*, 14, 147-159.

Burns BJ, Costello EJ, Erkanli A, et al. (1997). Insurance coverage and mental health service use by adolescents with serious emotional disturbance. *Journal of Child and Family Studies*, 6, 89-111.

Goodman R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(11), 1337-1345.

Holzer C, Jackson DJ, Tweed D. (1981). Horizontal synthetic estimation. *Evaluation & Program Planning*, 4, 29-34.

Konrad TR, Ellis AR, Thomas KC, et al. (2009). County-level estimates of need for mental health professionals in the United States. *Psychiatric Services*, 60(10), 1307-1314.

Kataoka SH, Zhang L, Wells KB. (2002). Unmet need for mental health care among US children: Variation by ethnicity and insurance status. *American Journal of Psychiatry*, 159(9), 1548-1555.

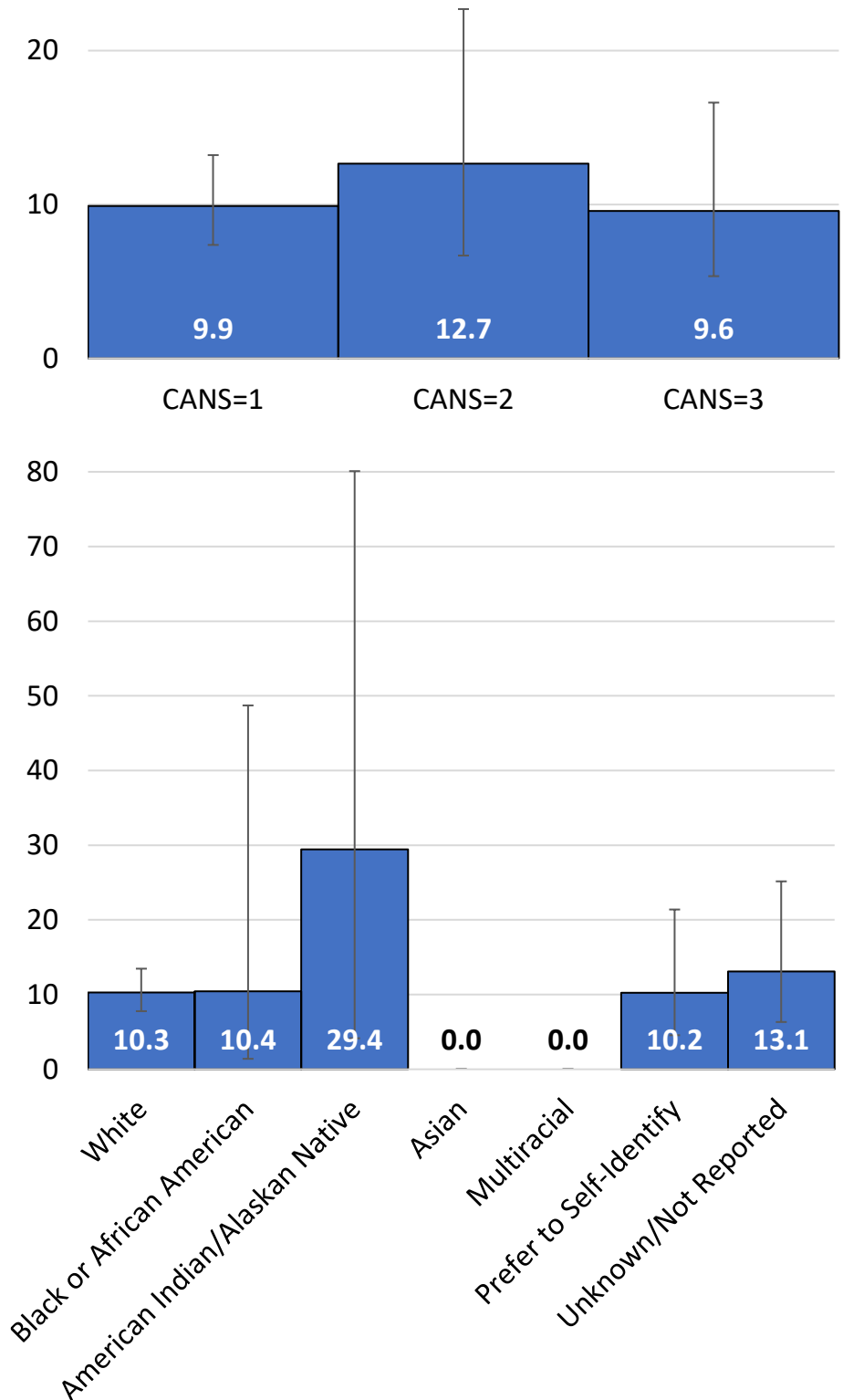
Levy PS, French DK. (1977). Synthetic estimation of state health characteristics based on the health interview survey. In *Vital and health statistics (Series 2, No. 75, DHEW Publication No. 78-1349)*. Washington, D.C.: U.S. Government Printing Office.

Merikangas KR, He JP, Brody D, et al. (2010). Prevalence and treatment of mental disorders among US children in the 2001-2004 NHANES. *Pediatrics*, 125, 75-81.

Olfson M, Druss BG, Marcus SC. (2015). Trends in mental health care among children and adolescents. *New England Journal of Medicine*, 372, 2029-2038.

Pasli M, Tumin D. (2022). Children’s unmet need for mental health care within and

Figure 5b RATES OF TOTAL UNMET NEED FOR MENTAL HEALTH SERVICES AMONG IDAHO YOUTH WITH SED WHO CAME INTO CONTACT WITH THE YES SYSTEM BY YOUTH CHARACTERISTIC



Note: N = 621. Total unmet need is defined as not receiving mental health services within 6 months of either an initial or follow-up CANS assessment ≥ 1.

outside metropolitan areas. *Pediatrics & Neonatology*, 63(5), 512-519.

Ringeisen H, Aldworth J, Colpe LJ, et al. (2015). Estimating the prevalence of any impairing childhood mental disorder in the national health interview survey. *International journal of methods in psychiatric research*, 24(4), 266-274.

Roll JM, Kennedy J, Tran M, Howell D. (2013). Disparities in unmet need for mental health services in the United States, 1997–2010. *Psychiatric Services*, 64(1), 80-82.

Simon AE, Pastor PN, Reuben CA, et al. (2015). Use of mental health services by children ages six to 11 with emotional or behavioral difficulties. *Psychiatric Services*, 66, 930-937.

Simpson GA, Cohen RA, Bloom B, et al. (2009). The impact of children's emotional and behavioural difficulties on their lives and their use of mental health services. *Paediatric and perinatal epidemiology*, 23(5), 472-481.

Williams NJ, Beauchemin J, Vega N. (2023). *Idaho youth empowerment services (YES) family survey results, 2023*. Report to the Idaho Department of Health and Welfare, Division of Behavioral Health. Boise, ID: Boise State University.

Williams NJ, Scott L, Aarons GA. (2018). Prevalence of serious emotional disturbance among US children: A meta-analysis. *Psychiatric Services*, 69, 32-40.

Appendix 1

Estimated SED Prevalence and Unmet Need for Mental Health Services by Idaho County

County	IDHW Region	Total Youth Population Ages 0-18 (N)	N Youth with SED	% Youth with SED	N Youth with SED & Unmet Need	% Youth with SED & Unmet Need	% Total Youth Population with SED & Unmet Need
Kootenai County	1	40,224	2,364	5.9%	1,269	53.7%	3.2%
Bonner County	1	9,775	631	6.5%	342	54.2%	3.5%
Boundary County	1	2,871	177	6.2%	98	55.2%	3.4%
Shoshone County	1	2,840	201	7.1%	108	54.0%	3.8%
Benewah County	1	2,219	135	6.1%	73	54.2%	3.3%
Nez Perce County	2	9,529	548	5.8%	296	54.0%	3.1%
Latah County	2	8,678	447	5.1%	240	53.8%	2.8%
Idaho County	2	3,441	192	5.6%	106	55.3%	3.1%
Clearwater County	2	1,455	86	5.9%	47	55.0%	3.2%
Lewis County	2	868	56	6.4%	30	54.3%	3.5%
Canyon County	3	67,204	4,224	6.3%	2,278	53.9%	3.4%
Payette County	3	6,905	412	6.0%	221	53.7%	3.2%
Gem County	3	4,619	293	6.3%	159	54.3%	3.4%
Owyhee County	3	3,215	214	6.7%	118	54.9%	3.7%
Washington County	3	2,480	153	6.2%	83	54.5%	3.4%
Adams County	3	710	41	5.8%	22	53.9%	3.1%
Ada County	4	120,105	6,378	5.3%	3,405	53.4%	2.8%
Elmore County	4	7,601	544	7.2%	296	54.4%	3.9%
Valley County	4	2,045	111	5.4%	60	53.6%	2.9%
Boise County	4	1,336	81	6.1%	44	54.2%	3.3%
Twin Falls County	5	25,672	1,559	6.1%	839	53.8%	3.3%
Cassia County	5	8,051	487	6.0%	261	53.7%	3.2%
Jerome County	5	7,720	522	6.8%	283	54.2%	3.7%
Minidoka County	5	6,562	424	6.5%	230	54.2%	3.5%
Blaine County	5	5,543	339	6.1%	182	53.7%	3.3%
Gooding County	5	4,438	267	6.0%	145	54.4%	3.3%
Lincoln County	5	1,504	104	6.9%	56	54.1%	3.8%
Camas County	5	320	19	5.9%	10	53.9%	3.2%
Bannock County	6	24,009	1,388	5.8%	744	53.6%	3.1%
Franklin County	6	4,833	258	5.3%	140	54.1%	2.9%
Power County	6	2,573	184	7.1%	100	54.7%	3.9%
Caribou County	6	2,037	107	5.3%	58	53.8%	2.8%
Bear Lake County	6	1,861	97	5.2%	52	53.1%	2.8%
Oneida County	6	1,259	67	5.3%	36	53.2%	2.8%
Bonneville County	7	38,919	2,301	5.9%	1,232	53.5%	3.2%
Madison County	7	15,817	991	6.3%	531	53.6%	3.4%
Bingham County	7	15,382	937	6.1%	505	53.9%	3.3%
Jefferson County	7	10,855	650	6.0%	349	53.7%	3.2%
Fremont County	7	3,354	216	6.4%	116	53.9%	3.5%
Teton County	7	2,809	164	5.8%	90	54.8%	3.2%
Lemhi County	7	1,560	104	6.7%	56	53.8%	3.6%
Custer County	7	758	53	6.9%	28	53.5%	3.7%
Butte County	7	626	42	6.7%	23	53.5%	3.6%
Clark County	7	226	14	6.3%	8	53.7%	3.4%
State Total, Idaho		484,808	28,581	5.9%	15,369	53.8%	3.2%

Note: Counts and percentages are based on synthetic estimation procedures incorporating (1) aggregate 2017-2021 Idaho county population data from the American Community Survey of the US Census Bureau (Table ID: B27010), and (2) prevalence and risk estimates developed by Simpson et al. (2009) from the US National Health Interview Survey. IDHW = Idaho Department of Health and Welfare. SED = serious emotional disturbance. Counties are sorted by youth population size within Idaho Department of Health and Welfare (IDHW) regions.