Oregon CYSHCN Health Status and Quality of Life

Oregon Title V CYSHCN Needs Assessment Chapter 2

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Introduction

Children and youth with special health care needs (CYSHCN) are more than just their health condition or conditions; they are children, first and foremost. Assuring access to high quality health care and related services maximizes their quality of life (QOL) and well-being (WB). QOL and WB are interdependent concepts and influenced by multiple factors, including cognitive, emotional, social, and physical functioning; sense of community and social integration; and family socioeconomic and employment status (Coleman et al., 2022). Although many definitions of both concepts exist, there is no universally accepted definition of either (Coleman et al., 2022). Therefore, we relied on a commonly used definition by the World Health Organization, to present findings: "*Quality of life is an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns"* (WHO, n.d.).

One way that the Maternal and Child Health Bureau-funded Systems and Policy Research Network for CYSHCN differentiates QOL and WB for CYSHCN is that QOL refers to the individual child and WB refers to the family unit. In this chapter, we present findings that describe the health status of Oregon CYSHCN and QOL-related concepts, such as adverse childhood experiences and child flourishing (Coleman et al., 2022). Chapter 3 of our 2025 needs assessment will describe the well-being of families of Oregon CYSHCN.

Findings

We used the National Survey of Children's Health (NSCH) as the primary source of data to describe CYSHCN QOL (supplemented with other data sources, such as Oregon's Student Health Survey). NSCH sample sizes for some communities of interest (such as CYSHCN who are Asian or Black/African American, who live in rural Oregon, who experience poverty, or who are uninsured) were too small (<30) to calculate reliable estimates. In these cases, findings cannot be generalized to the community of interest. We included placeholders for these communities in exhibits when sample sizes were too small, and we describe contextually meaningful differences where appropriate.

Overall Health Status

A child's overall health and QOL are inextricably linked, particularly for CYSHCN. NSCH (2021-22) results show that fewer CYSHCN report "excellent" or "very good" health than children without special health care needs (Exhibit 1). Only two-thirds of families of CYSHCN with more social complexity than CYSHCN with low social complexity reported that their child's health is excellent or very good compared to CYSHCN overall.

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Exhibit 1. Percent of Oregon CYSHCN Overall Health Status

	Overall Health		
	Excellent or very good	**Good**	**Fair or poor**
CYSHCN status			
CYSHCN	78.1%	17.9%	**
Not CYSHCN	94.4%	4.9%	.70%
Complexity			
More medically complex CYSHCN	74.9%	20.6%	**
More socially complex CYSHCN	65.8%	24.0%	**
Race and ethnicity			
Asian NH	75.0%	**	**
Black NH	**	**	**
Latino, Hispanic	68.6%	23.3%	**
White NH	79.2%	18.0%	2.8%
Other/Multiracial NH	84%	**	**
Income based on Federal Poverty Level			
0-99%	73.8%	22.2%	**
100-199%	67.2%	27.4%	**
200-399%	78.5%	17.2%	4.3%
400% FPL or greater	85.7%	11.0%	**
Geographic Status			
Metropolitan Statistical Area	77.5%	18.4%	4.1%
Not Metropolitan Statistical Area	82.6%	**	**

Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

We disaggreated results by three broad communities of interest:

- **Economic Status:** Fewer caregivers of CYSHCN whose families' household income is at 100-199% of the federal poverty line (FPL) report that their child's health is very good or excellent compared to other income groups (Exhibit 1).

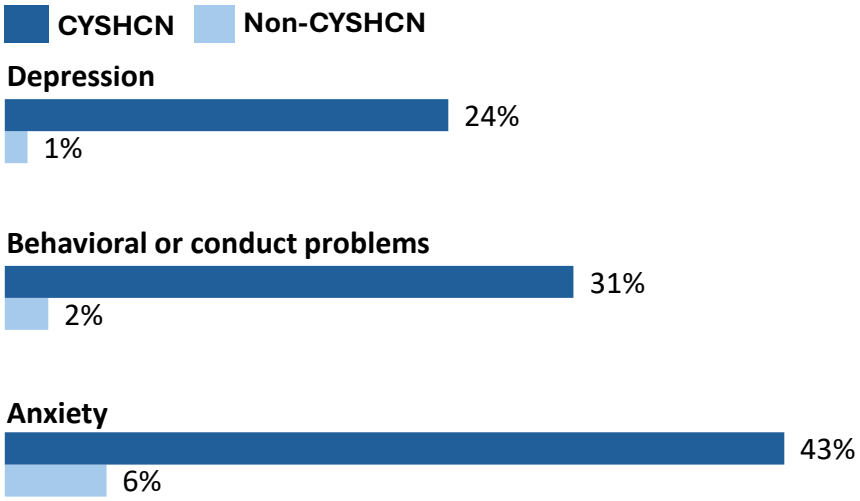
- **Geographic Status:** Families of Oregon CYSHCN who live in non-metropolitan statistical areas (i.e. rural) Oregon more often report that their child has very good or excellent health than CYSHCN who live in urban areas (Exhibit 1).
- **Social communities:** A smaller percentage of families of Hispanic/Latino CYSHCN reported that their child experiences excellent or good overall health compared to families of CYSHCN from White, Multiracial, and Asian communities (Exhibit 1). The largest difference is between families of Hispanic/Latino CYSHCN and White CYSHCN (68.6% vs 79.2% respectively). For families of CYSHCN who identify as Asian, Black, or Multiracial we often lacked sufficient data (n<30) to describe their overall health status.

Mental and Behavioral Health Status of CYSHCN

Children who experience good mental health have a positive QOL and can function well at home, in school, with peers, and in their communities (CDC, 2024c). Many ongoing behavioral, developmental, and emotional health conditions begin in childhood, such as anxiety disorders, attention-deficit/hyperactivity disorder, depression and other mood disorders, eating disorders, and post-traumatic stress disorders. Without appropriate treatment and supports, these conditions can negatively impact QOL. In this section, we describe the state of mental and behavioral health conditions among Oregon CYSHCN statewide and then disaggregate the results by our communities of interest.

Generally, Oregon CYSHCN more often reported experiencing anxiety, behavior or conduct problems, and depression compared to children and youth without special health care needs (Exhibit 2). NSCH (2021-22) estimates indicated that nearly eight times as many CYSHCN, ages 3-17 years, currently have or had anxiety, compared to same-aged peers without special health care needs. Thirteen times as many CYSHCN, ages 3-17 years, currently have or had behavioral or conduct problems, and fourteen times as many CYSHCN experienced depression, compared to their same-age peers without special health care needs.

Exhibit 2. Percent of Oregon Children with Mental and Behavioral Health Conditions by Special Health Care Need Status

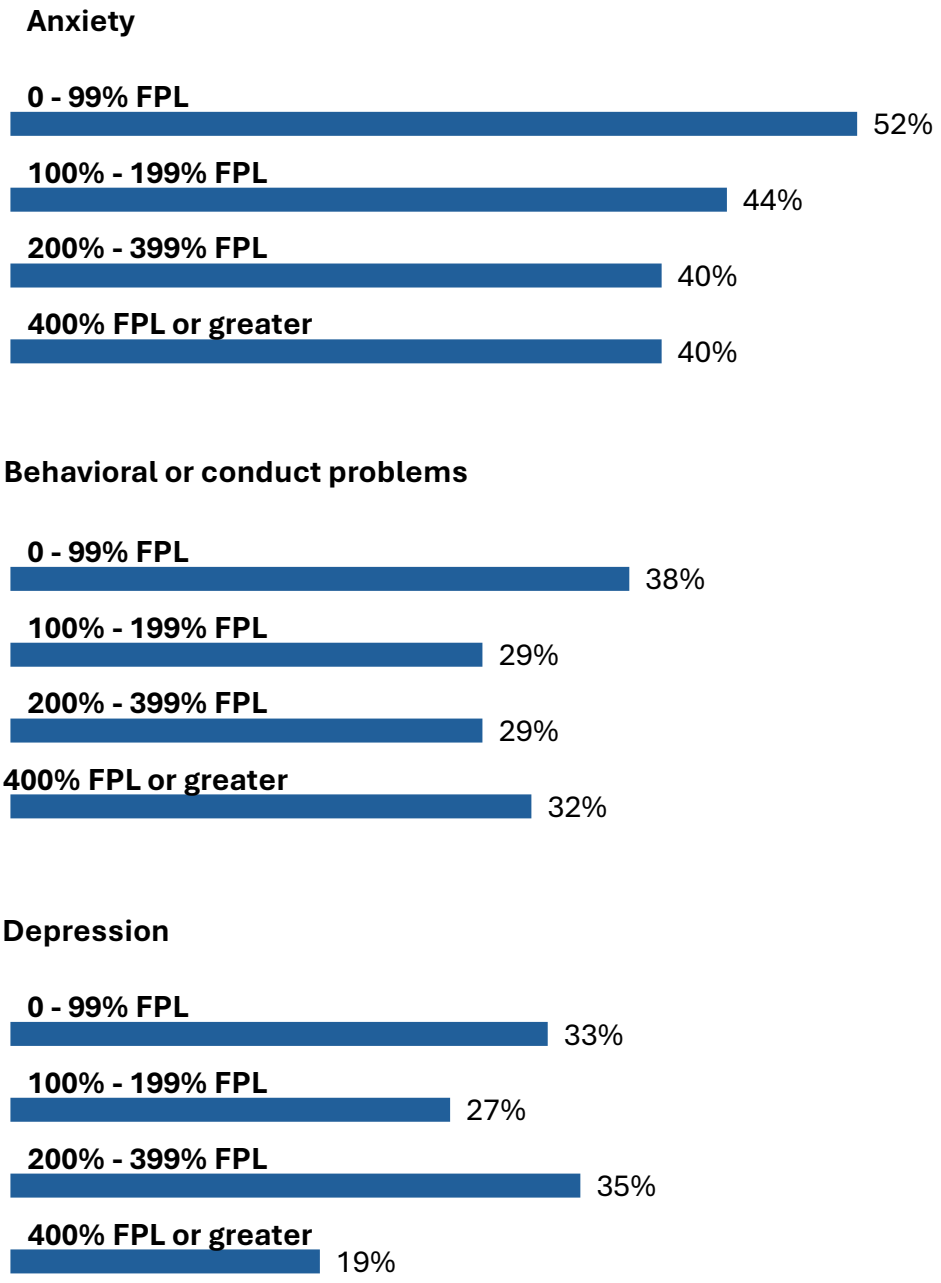


Data Source: OCCYSHN Analysis of NSCH 2021-2022

We disaggreated results by three broad communities of interest:

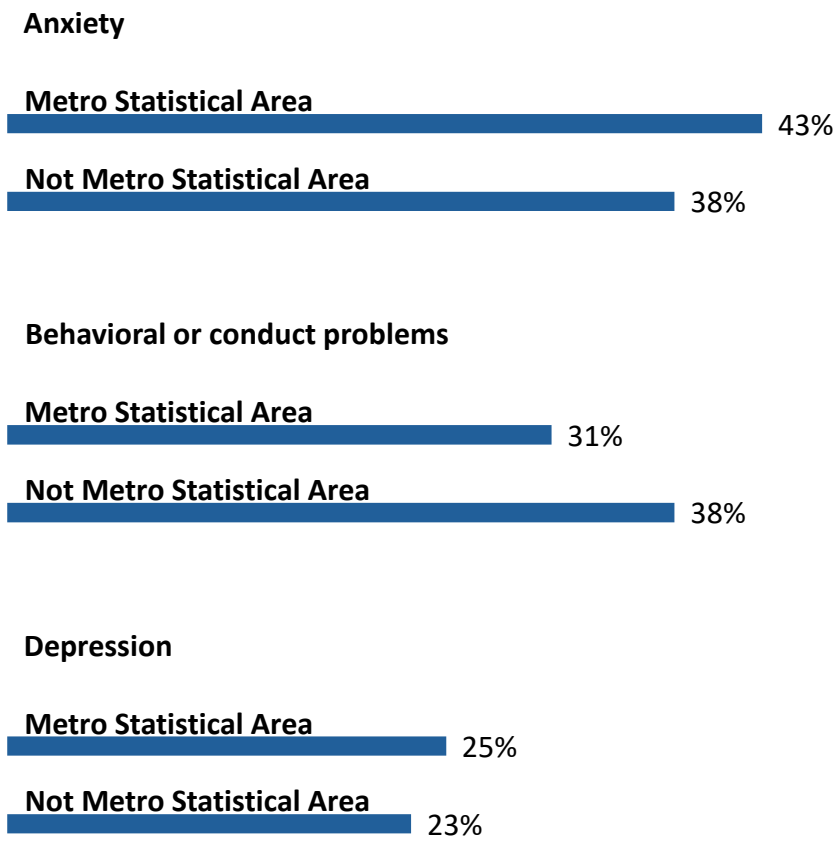
- **Economic Status:** Oregon CYSHCN whose families' household income is at 0-99% FPL most often reported that their child experiences mental and behavioral health conditions, compared to same-aged peers whose families' household income is at 100% FPL or greater (Exhibit 3). Nearly 1.8 times as many CYSHCN, ages 3-17 years, whose families' household income is at 0-99% FPL, currently have or had depression compared to same-aged peers whose families' household income is 400% FPL or greater.
- **Geographic Status:** Estimates show that a higher percentage of CYSHCN, ages 3-17 years whose family lives in urban areas, experience anxiety compared to same-aged peers whose family lives in rural areas (43% and 38% respectively) (Exhibit 4). However, the opposite is true for children who experience behavioral or conduct problems; results show that CYSHCN, ages 3-17 years living in rural areas, are 1.2 times more likely to have behavioral or conduct problems than same-aged peers living in urban areas (CAHMI, 2024).
- **Social communities:** Among the communities for which sufficient data are available, the largest percentage point difference is between CYSHCN, ages 3-17, who currently have or previously had anxiety and are Hispanic Latino compared to White children. Those who are Hispanic/Latino were less likely to report anxiety than White children (31% and 48% respectively)(Exhibit 5). The prevalence of CYSHCN who identify as Hispanic/Latino and Multiracial experience behavioral or conduct problems, and depression, are similar to their White peers

Exhibit 3. Percent of Oregon CYSHCN with Mental and Behavioral Health Conditions by Economic Status



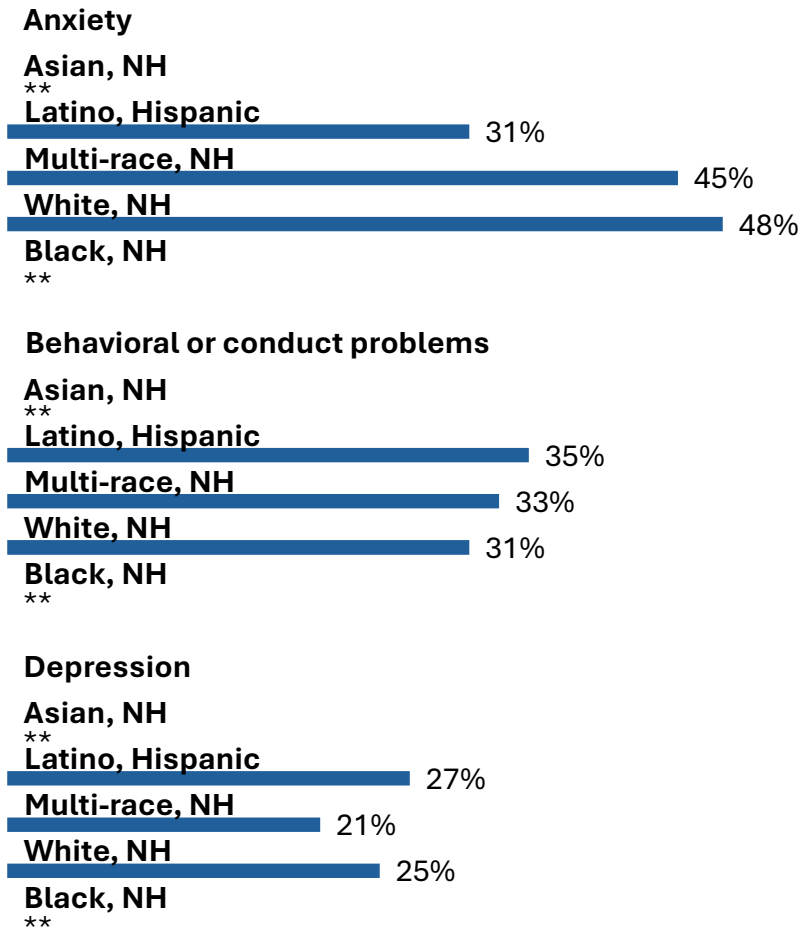
Data Source: OCCYSHN Analysis of NSCH 2021-2022

Exhibit 4. Percent of Oregon CYSHCN with Mental and Behavioral Health Conditions by Geographic Status



Data Source: OCCYSHN Analysis of NSCH 2021-2022

Exhibit 5. Percent of Oregon CYSHCN with Mental and Behavioral Health Conditions by Social Communities

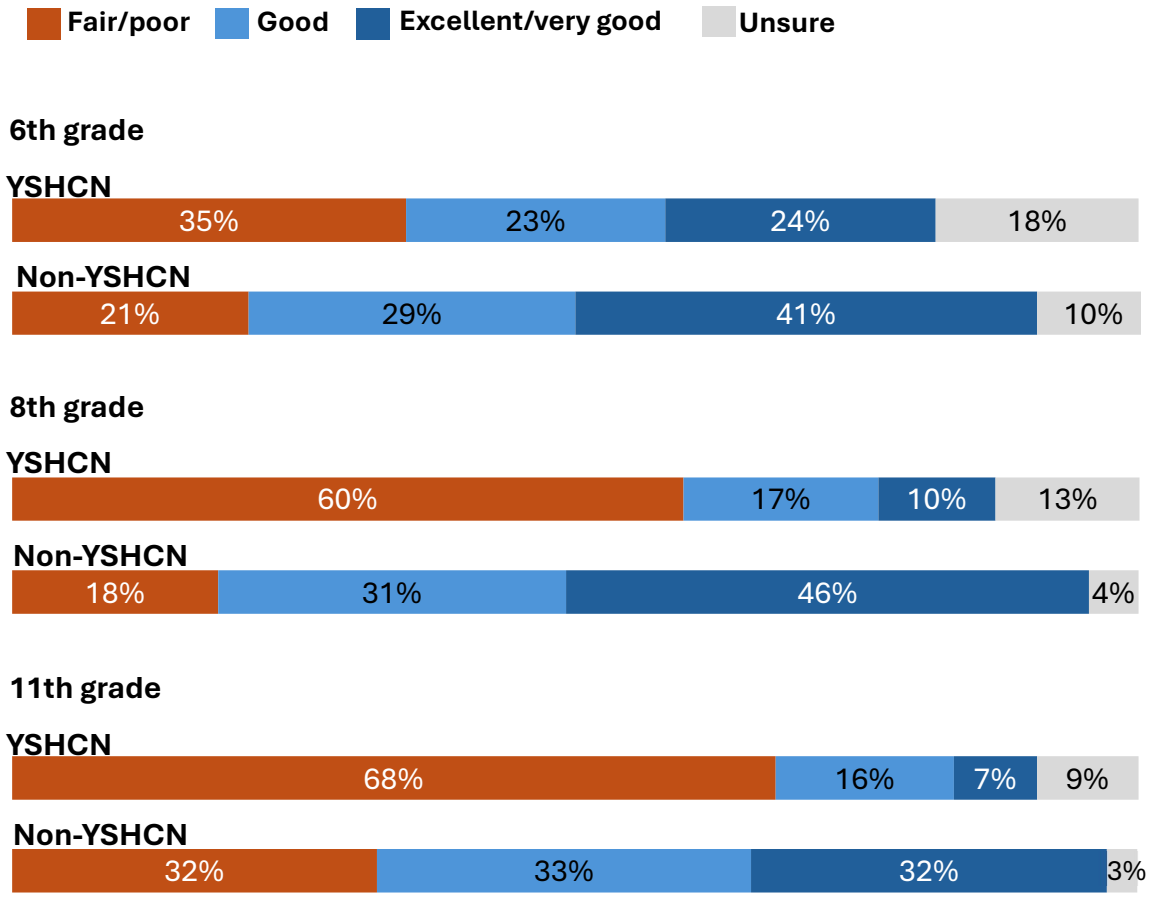


Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Mental and Behavioral Health Status of Youth with Disabilities

Youth who experience disabilities are members of the CYSHCN population. Oregon's Student Health Survey collects data from students in the 6th, 8th, and 11th grades who experience disabilities. Results suggest that students with disabilities more often report fair/poor emotional and mental health compared to students without disabilities (Oregon Student Health Survey, 2022). More than two-thirds of 11th graders and nearly two-thirds of 8th graders with disabilities reported fair/poor emotional and mental health (Exhibit 6). This is more than two times as many 11th graders, and more than three times as many 8th graders, without disabilities. Although more 6th graders with disabilities report fair/poor emotional and mental health (35%) than 6th graders without (21%), the difference is not as great.

Exhibit 6. Percent of Oregon YSHCN and Non-YSHCN Students' Emotional and Mental Health Status by Grade Level



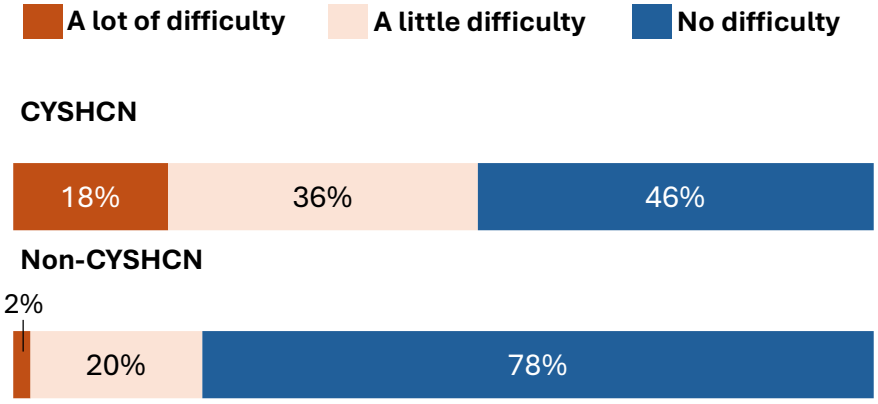
Data Source: Oregon Student Health Survey 2022

Social Health

Children who possess social skills can develop and maintain positive relationships with peers and adults (Gadsen, Ford, & Breiner, 2016). Basic social skills include showing empathy and concern for the feelings of others, cooperation, and sharing, all of which are positively associated with children's success both in school and in nonacademic settings (Gadsen, Ford, & Breiner, 2016). In this section, we describe the ways in which CYSHCN engage with peers and adults to support their social health.

Developing healthy friendships is essential to QOL for children, so that they feel a sense of community and social connection with same-age peers. Oregon CYSHCN, ages 6-17 years, often have more difficulties making and keeping friends compared to their same-aged peers without special health care needs (Exhibit 7). NSCH (2021-22) results show that CYSHCN were 9 times more likely to have "a lot of difficulty" in making or keeping friends compared to their same-age peers without special health care needs.

Exhibit 7. Percent of Oregon Children with Difficulty in Making or Keeping Friends by Special Health Care Needs Status

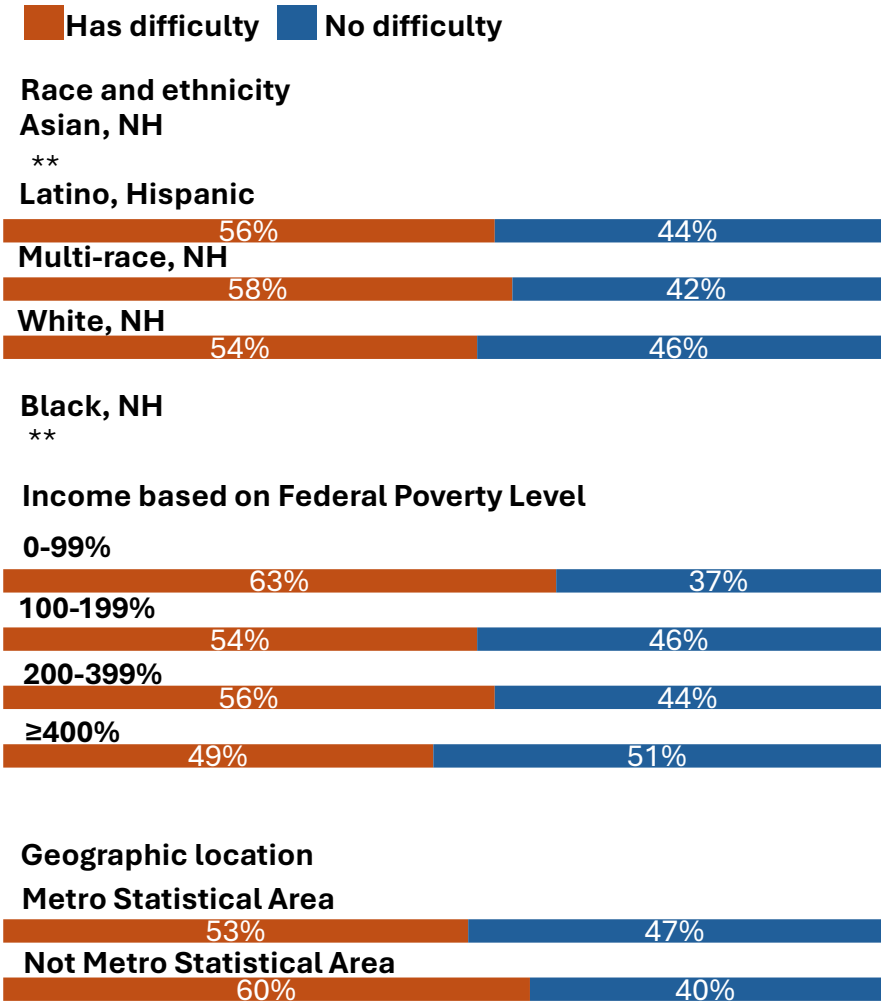


Data Source: OCCYSHN Analysis of NSCH 2021-2022

We disaggreated results by three broad communities of interest:

- **Economic Status**: A greater proportion of CYSHCN, whose family household income is at 0-99% FPL, have a hard time making friends or keeping friends compared to CYSHCN whose family household income is above the FPL (Exhibit 8). CYSHCN, ages 6-17 years, whose family household income is at 0-99% FPL are 1.28 times more likely to have difficulty making or keeping friends compared to same-age peers whose family household income is at 400% FPL or greater.
- **Geographic Status:** A slightly greater proportion of CYSHCN living in rural areas have trouble making or keeping friends compared to those living in urban areas (Exhibit 8).
- **Social Communities:** More than half of CYSHCN in three racial and ethnicity groups experienced difficulty making or keeping friends (Exhibit 8).

Exhibit 8. Percent of Oregon CYSHCN with Difficulty in Making or Keeping Friends by Communities of Interest



Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Children often develop social skills through spending time with other children in school, recreation, and other activities. Results of analysis of NCI survey data (2021-22) suggest that fewer children with I/DD spend time with other children who do not have developmental disabilities. Fifteen percent of families with I/DD children reported that their child does not spend time with children who do not have developmental disabilities (NCI, 2021-22).

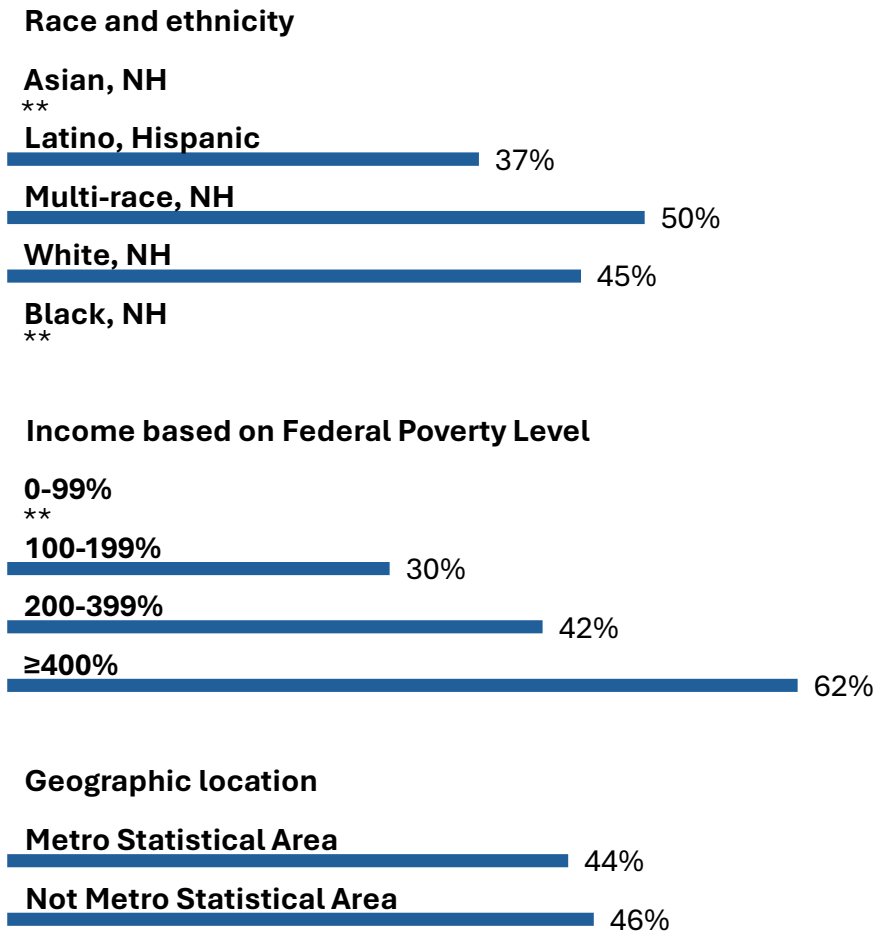
Participation in Sports Teams or Lessons

Engagement in sports teams or lessons offer opportunities for children to get physical activity and build social connections with their peers. Results of analysis of NSCH (2021-22) show that fewer Oregon CYSHCN, ages 6-17 years, (44%) participate in sports teams or lessons compared to same-age peers without special health care needs (51%).

We disaggreated results by three broad communities of interest:

- **Economic Status**: CYSHCN in families with lower household income were less likely to participate in sports teams or lessons than CYSHCN in other income groups (Exhibit 9). Only about one-third of CYSHCN ages 6-17 years, whose family household income is at 100-199% FPL, participated compared to 62% of same-age peers whose family household income is at 400% FPL or greater. We lack a sufficient sample size (n<30) to estimate the prevalence of CYSHCN, whose family household income is at 0-99% FPL, that participated in sports teams or lessons.
- **Geographic Status:** About 45% of CYSHCN living in rural areas, and living in urban areas, participated in sports teams or lessons compared to those living in urban areas (Exhibit 9).
- **Social Communities** Among the communities for which sufficient data are available, fewer Hispanic/Latino CYSHCN participated in sports teams or lessons (37%) compared to their same-age White (45%) and Multiracial (50%) peers (Exhibit 9).

Exhibit 9. Percent of Oregon CYSHCN Engaged in Sports Teams or Lessons by Communities of Interest



Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Participation in Clubs or Organizations

Children who are involved in clubs or organizations through their schools and local communities provide opportunities to explore their interests and develop social connections with same-age peers. A similar proportion of Oregon CYSHCN, ages 6-17 years, participate in clubs or organizations as their same-age peers without special health care needs (37% and 40% respectively).

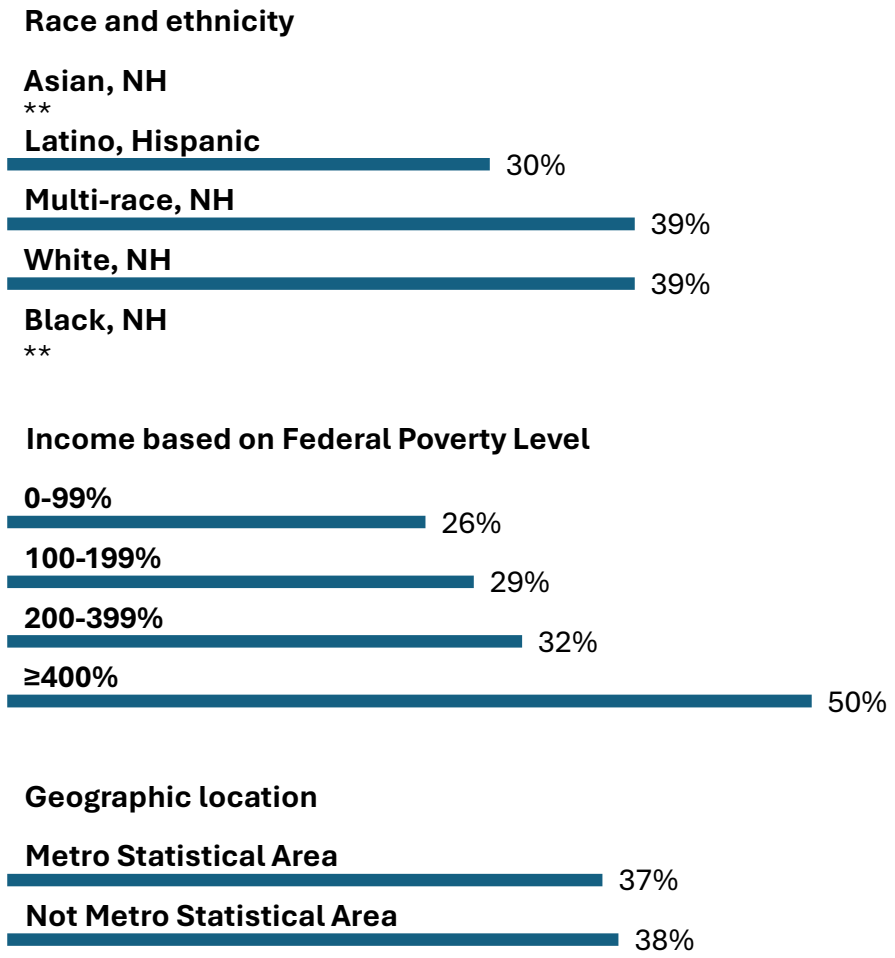
We disaggregated results by our three communities of interest:

- **Economic Status:** Of the four household income groups, CYSHCN whose family household income is at 0-99% FPL have the smallest proportion of CYSHCN participating in clubs or organizations (Exhibit 10). These CYSHCN are half as likely to

participate in clubs or organizations compared to same-age peers whose family household income is at 400% FPL or greater (Exhibit 10).

- **Geographic Status:** Similar estimates are reported in the participation of clubs or organizations between CYSHCN living in urban and rural areas (Exhibit 10).
- **Social Communities**: Among the communities for which sufficient data are available, a smaller proportion of Hispanic/Latino CYSHCN participate clubs or organizations compared to their same-age White and Multiracial peers (Exhibit 10).

Exhibit 10. Percent of Oregon CYSHCN Who Participate in Clubs or Organizations by Communities of Interest



Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Participation in Community Service or Volunteer Work

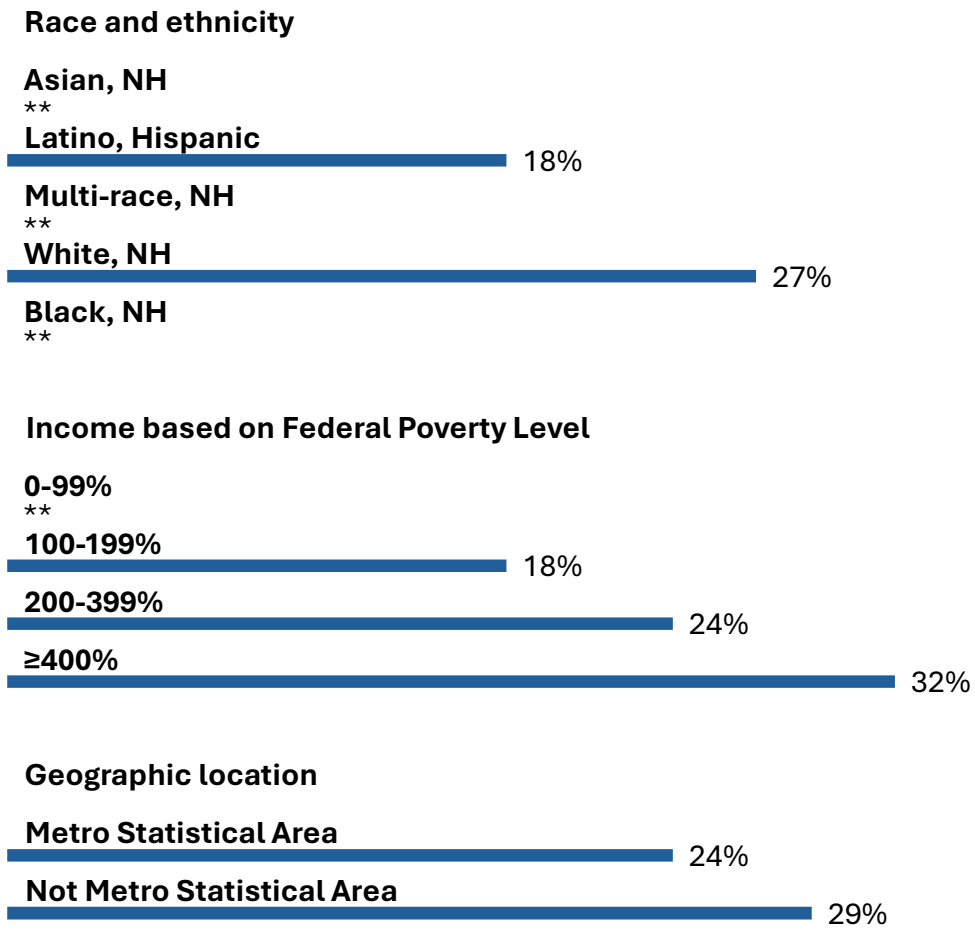
Community service or volunteer work provides youth with opportunities to learn how to support and give back to their local communities. Oregon CYSHCN, ages 6-17 years,

participate in community service or volunteer work similarly to same-age peers without special health care needs. Estimates show that 30% Oregon CYSHCN, ages 6-17 years, participate in community service or volunteer work at school, church, or in the community, compared to 25% of same-age peers without special health care needs.

We disaggregated results by our three communities of interest:

- **Economic Status:** Results of analysis of NSCH (2021-22) show that CYSHCN, ages 6-17 years, whose family household income is at 100-199% FPL, were roughly half as likely to participate in community service or volunteer work compared to same-age peers whose family household income is at 400% FPL or greater (Exhibit 11).
- **Geographic Status:** A slightly greater proportion of CYSHCN living in rural areas participated in community service or volunteer work compared to those living in urban areas (Exhibit 11).
- **Social Communities:** Among the communities for which sufficient data are available, fewer Hispanic/Latino CYSHCN participated in community service or volunteer work compared to their same-age White peers (Exhibit 11).

Exhibit 11 Percent of Oregon CYSHCN Who Participate in Community Service or Volunteer Work by Communities of Interest.



Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Results of analysis of NCI data (2021-22) show that children with I/DD needs frequently participate in their community. Over three-fourths (79%) of families whose children experience I/DD reported that their child participated in activities in their community. These families described several factors that made it hard for their child to participate in activities within their community, such as experiencing stigma (33%), lack of support staff (33%), cost (32%), and lack of transportation (13%).

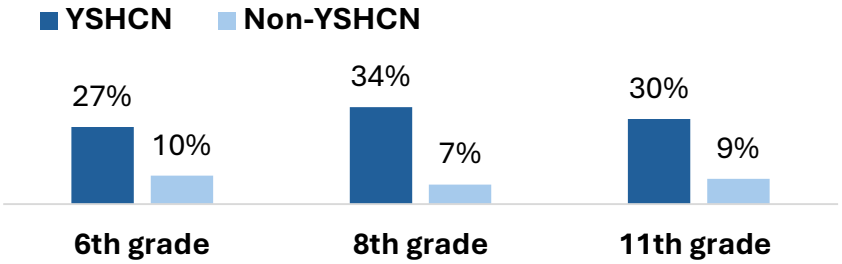
Suicide and Self-Harm

Over the past decade, suicide attempts and mortality rates among children have increased in the United States, and suicide is now the eighth leading cause of death in children aged 5–11 children (NIMH, 2021). Numerous factors are associated with suicidal and harmful behaviors among youth (NIMH, 2021). These factors include poor mental health, substance use issues, having problems with family, school, or peers, and experiencing traumatic events (NIMH,

2021). In Oregon, the state has seen a 26% reduction in the youth suicide rate between 2018 and 2021 (OHA, 2022). Oregon's state ranking also has moved from the 11th highest in 2018 to the 22nd highest in 2021 (OHA, 2022). However, nearly all decreases are for youth who identify as White. Suicide deaths among Black and African American, American Indian, Alaska Native, Asian, Hispanic, and Multiracial youth have remained similar or have increased (OHA, 2022). In this section, we highlight findings related to suicide and self-harm that pertain to Oregon CYSHCN.

Results of analysis of Oregon's Student Health Survey (2022) show that students with disabilities were more likely to report that they have purposely harmed themselves[1] at least once or more in the past year compared to students without disabilities (Exhibit 12). Youth with disabilities who were in the 8th grade are 5 times more likely to report that they have harmed themselves on purpose compared to same-grade level peers without special health care needs.

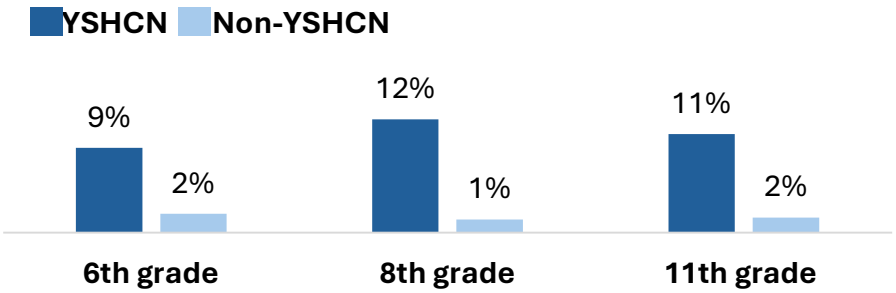
Exhibit 12. Percent of Oregon YSHCN and Non-YSHCN Who Report Self-Harm At Least Once in the Past Year by Grade Level.



Data Source: Oregon Student Health Survey 2022

Results of analysis of Oregon's Student Health Survey (2022) also show that students with disabilities were more likely to attempt suicide at least once in the past year compared to students without disabilities (Exhibit 13). Students with disabilities were at least four times more likely than students without disabilities to report attempting suicide.

Exhibit 13. Percent of Oregon YSHCN and Non-YSHCN Who Report Suicide Attempt At Least Once in the Past Year by Grade Level



Data Source: Oregon Student Health Survey 2022

[1] The survey item asks, "During the past year, did you do something to purposefully hurt yourself without wanting to die, such as cutting or burning yourself on purpose?"

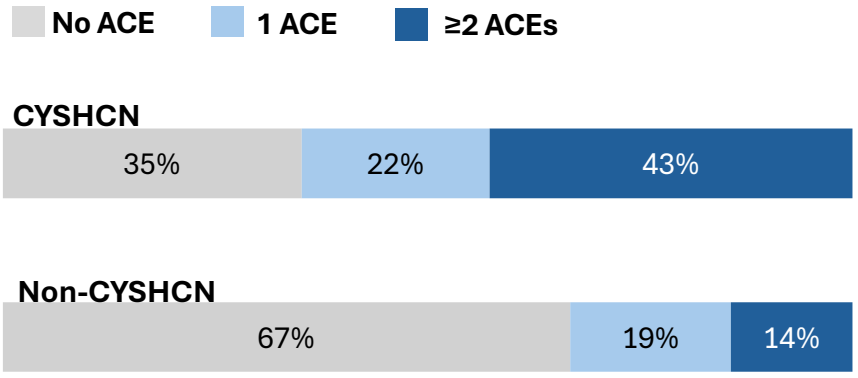
During the COVID-19 pandemic, more children reached the point of mental health crisis than before the pandemic (Hoffmann & Duffy, 2021). From mid-March 2020 to October 2020, results of analysis of CDC surveillance data showed that the proportion of emergency department (ED) visits by children due to mental health concerns increased by 24% among children aged 5–11 and by 31% among adolescents aged 12–17 (Hoffmann & Duffy, 2021). ED visits for suspected suicide attempts among girls aged 12–17 were 50.6% higher in February–March 2021 than during the same period in 2019 (Hoffmann & Duffy, 2021). Oregon Family-to-Family Health Information Center (ORF2FHIC) Parent Partners told us that they frequently received calls from families of young CYSHCN about suicide during the COVID-19 pandemic. One Parent Partner shared that the frequency of calls related to suicide have declined since transition to endemic levels of COVID-19 in 2024:

"....the biggest shift I found during COVID was very young children considering suicide, and I am not seeing that as much now that kids are back in school. I mean, there are still mental health issues that we get called about, but I'm not getting 4 calls about suicide of kids under the age of 12 in one week anymore, and that was really drastic. I think I've gotten one call about a kid considering suicide this year [in 2024]." – Parent Partner at ORF2FHIC

Adverse Childhood Experiences (ACES)

Adverse childhood experiences, or ACES, are traumatic events that occur in childhood (< 18 years). Preventing ACES can lower the risk for health conditions such as depression, asthma, cancer, and diabetes in adulthood (CDC, 2021). The NSCH (2021-22) uses a composite measure of 11 items to surveil the prevalence of ACES among children (CAHMI, 2024). NSCH (2021-22) estimates show that Oregon CYSHCN are about three times as likely to experience two or more ACES than children without special health care needs (Exhibit 14) (CAHMI, 2024).

Exhibit 14. Percent of Oregon Children with Adverse Childhood Experiences by Special Health Care Need Status



Data Source: OCCYSHN Analysis of NSCH 2021-2022

Results of analysis of NSCH (2021-22) show that older Oregon CYSHCN tend to experience more ACES than younger age groups (Exhibit 15). Estimates indicate that differences in number of ACES experienced by CYSHCN who identify as female compared to male are small (Exhibit 15). Below, we describe results by our communities of interest:

- **Economic Status:** A greater percentage of CYSHCN whose families' household income is below 200% FPL experienced two or more ACES than those who meet or exceed the 200% FPL. CYSHCN aged birth-17 years whose families' household income is 0-99% FPL were 2.2 times more likely to experience at least 2 or more ACES than same-age peers whose families' household income is 400% FPL or greater (Exhibit 15).
- **Geographic Status:** A greater percentage of CYSHCN who live in rural areas experienced two or more ACES than those who live in urban areas. CYSHCN aged birth-17 years who live in rural areas are 1.3 times more likely to experience 2 or more ACES compared to their same-age peers living in urban areas (Exhibit 15).
- **Social Communities:** A greater percentage of CYSHCN who Hispanic/Latino or Multiracial experienced two or more ACES than CYSHCN who are White (Exhibit 15). We lack sufficient sample sizes (n<30) to estimate the prevalence of ACES experienced by CYSHCN in Asian and Black communities.

Exhibit 15. Percent of Oregon CYSHCN with Adverse Childhood Experiences by Age, Sex, and Communities of Interest.

	ACES Composite		
	None	**One ACE**	**2 or more ACES**
Age group (years)			
0-5	52.7%	25.3%	22.0%
6-11	34.7%	24.0%	41.3%
12-17	31.1%	19.7%	49.2%
Biological sex			
Male	36.5%	21.9%	41.6%
Female	33.8%	22.4%	43.9%
Race and ethnicity			
Asian NH	59.8%	**	**
Black NH	**	**	**
Latino, Hispanic	32.2%	**	49.6%
White NH	37.0%	24.4%	38.6%
Other/Multiracial NH	32.4%	16.9%	50.7%
Income based on Federal Poverty Level			
0-99% FPL	**	24.4%	59.7%
100-199% FPL	27.3%	14.2%	58.6%
200-399% FPL	37.4%	20.1%	42.5%
400% FPL or greater	46.1%	27.2%	26.7%
Geographic location			
Metropolitan Statistical Area	36.1%	22.6%	41.4%
Not Metropolitan Statistical Area	28.2%	18.3%	53.5%

Data Source: OCCYSHN Analysis of NSCH 2021-2022

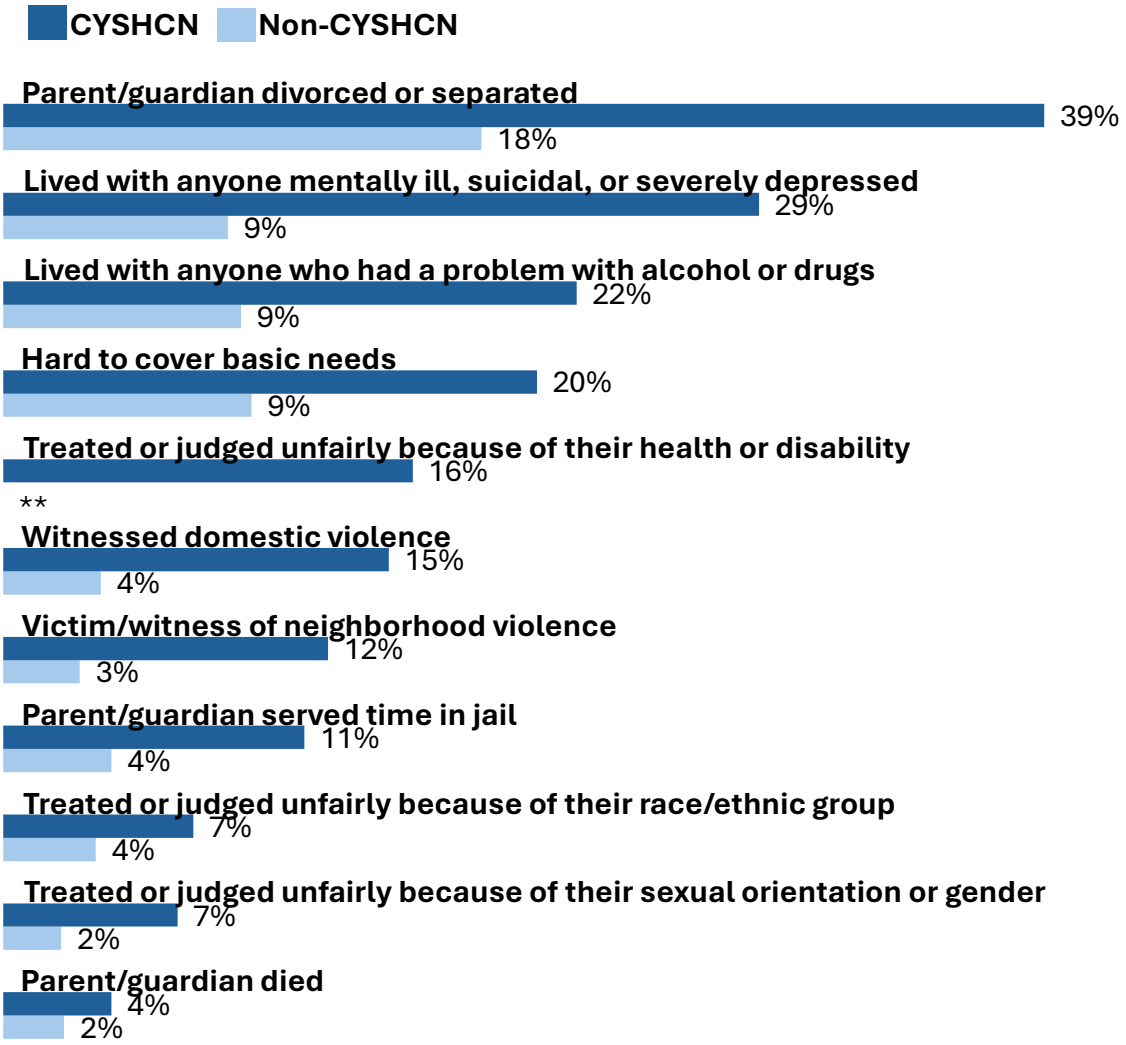
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Individual ACE components

The most frequently reported ACEs for Oregon CYSHCN are: parental/guardian divorce or separation; lived with anyone who experienced mental illness, suicidality, or severe depression; lived with anyone who experienced substance use disorder; and had trouble

covering basic needs (Exhibit 16). CYSHCN were at least twice as likely as non-CYSHCN to experience these four adverse experiences.

Exhibit 16. Percent of Oregon Children by Individual Adverse Childhood Experiences and Special Health Care Need Status



Data Source: OCCYSHN Analysis of NSCH 2021-2022

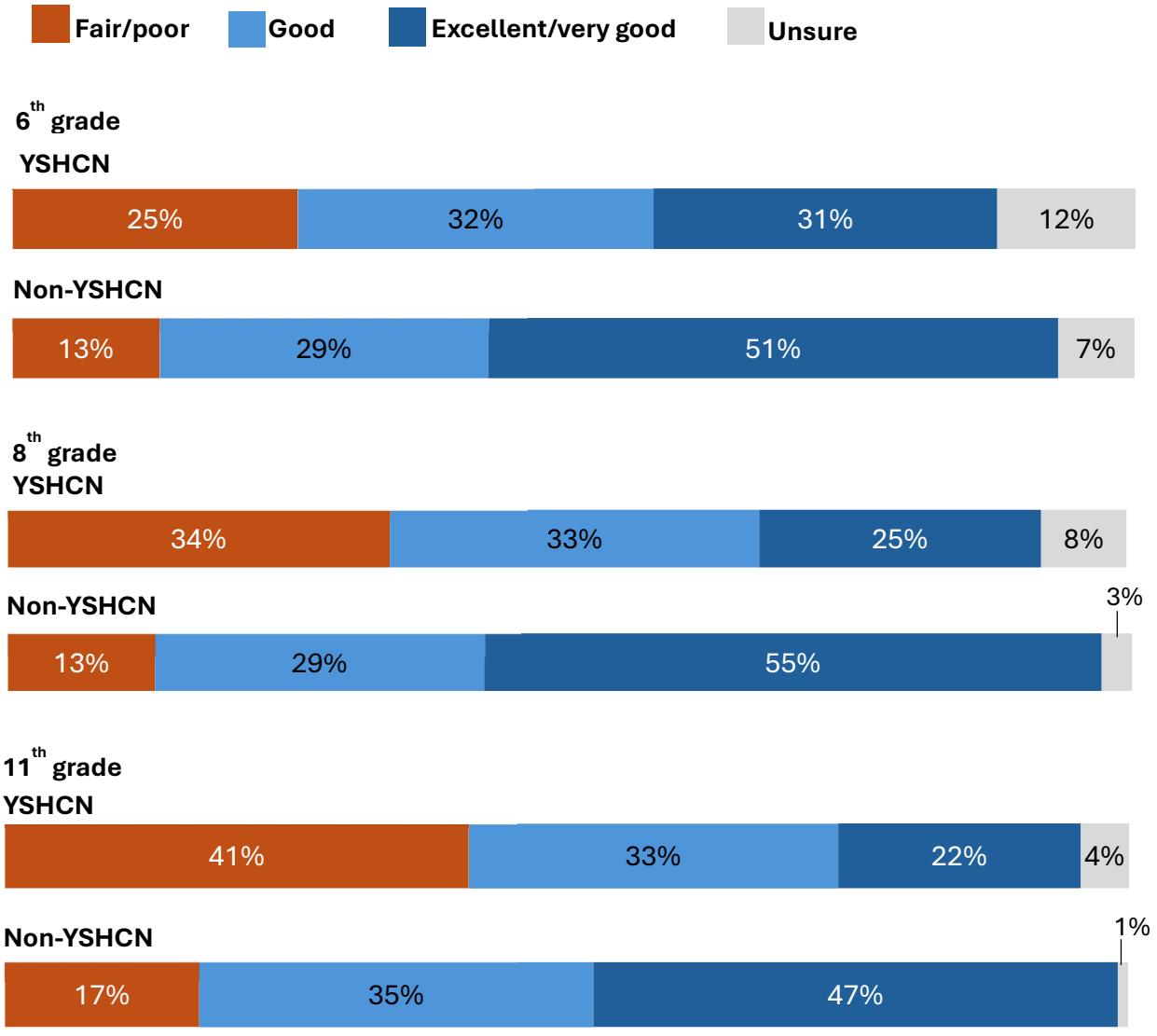
Physical Health

For all children, having good physical health ensures healthy growth and development through childhood and adolescence. Often, there are several indicators to having good physical health. For example, getting adequate exercise and sleep are important for preventing disease and promoting mental health and well-being. However, children participating in sedentary behaviors or unhealthy habits, such as using technology with increased screen time, can make it difficult to achieve good physical health. In this section, we describe the physical health status of CYSHCN and the factors that affect physical health.

Physical Health Status of Youth with Disabilities

Results of analysis of Oregon's Student Health Survey (2022) data show that students with disabilities more often reported that their physical health is fair/poor compared to those without disabilities (Exhibit 17). For example, YSHCN in the 8th grade are 2.6 times more likely to report that their physical health is fair/poor compared to their same-grade peers without special health care needs (Oregon Student Health Survey, 2022). Similar results exist for students with disabilities in 11th (2.4 times more likely) and 6th (1.9 times more likely) grades compared to their same-age peers without disabilities (Exhibit 17).

Exhibit 17. Percent of Oregon YSHCN and Non-YSHCN Students' Physical Health Status by Grade Level



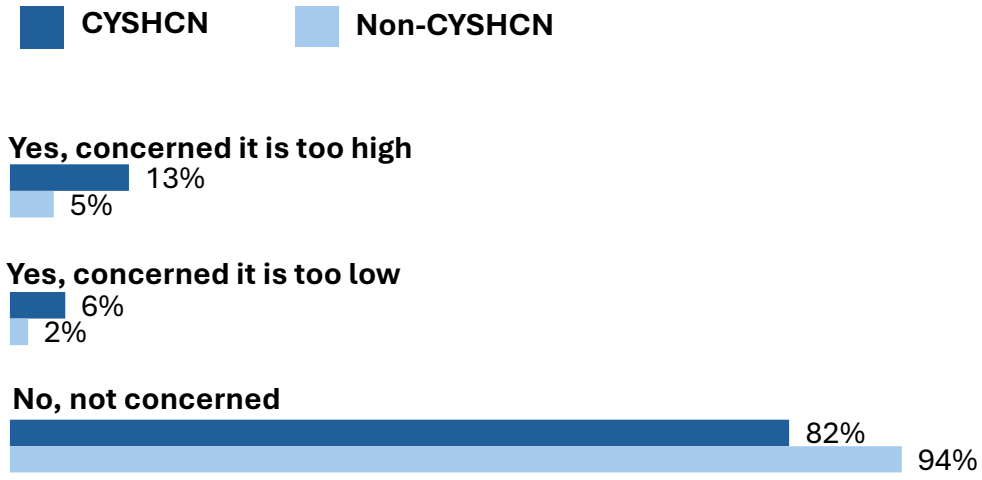
Data Source: Oregon Student Health Survey 2022

Family Concern About Child's Weight

Children who are either overweight or underweight are more likely to be at risk for developing health problems. Oregon families of CYSHCN are more likely to be concerned with their

child's weight compared family peers who do not have a child with special health care needs (Exhibit 18). Although estimates are 13% or lower, they show that families of CYSHCN, ages birth-17 years, are 2.6 times more likely to say their child is overweight compared to families of same-age peers without a special health care need. Additionally, estimates reveal that 3 times as many families of CYSHCN say their child is underweight compared to same-age peers without a special health care need.

Exhibit 18. Percent of Oregon Families with Concerns on Child's Weight by Special Health Care Need Status



Data Source: OCCYSHN Analysis of NSCH 2021-2022

We disaggregated results by our three communities of interest and found that:

- **Economic Status:** Families of CYSHCN with a household income at 100-199% FPL were most likely to be concerned that their child is overweight; estimates show that families of CYSHCN, ages birth though 17 years, with a household income at 100-199% FPL are 2.7 times more likely to be concerned their child is overweight than family peers whose household income is 400% FPL or greater. We were unable to make similar comparisons for underweight concerns due to insufficient sample sizes (n<30).
- **Geographic Status:** Thirteen percent of families of CYSHCN living in an urban area were concerned that their child is overweight, while 6% of these families are concerned that their child is underweight. We lack a sufficient sample size (n<30) to estimate the prevalence of concern with their child's weight among families who live in rural areas.
- **Social Communities:** Twelve percent of White families of CYSHCN were concerned that their child is overweight, while 7% of White families were concerned that their child is underweight. We lack sufficient sample sizes (n<30) to estimate the prevalence of concern with their children's weight among families who identify as Asian, Black, Hispanic/Latino, or Multiracial.

Sleep

Lack of sleep on a regular basis for children can lead to increases in some types of health problems such as hypertension, injuries, obesity, and depression (CAHMI, 2024). The American Academy of Sleep Medicine (AASM) provides guidelines for the appropriate number of hours of sleep needed per day for children of all ages (Exhibit 19). About two-thirds (68%) of Oregon CYSHCN meet the AASM guidelines compared to nearly three-fourths (74%) of same-age peers without special health care needs.

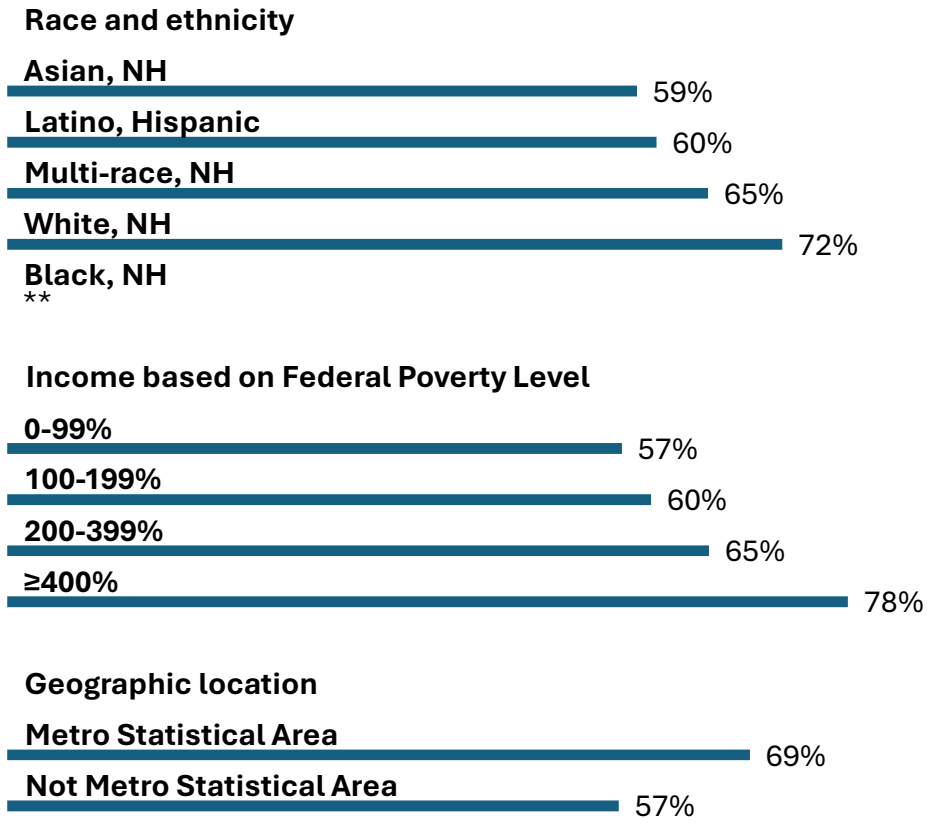
Exhibit 19. American Academy of Sleep Medicine Guidelines on Sleeping Age-Appropriate Hours.

Age of child	Hours of sleep per day
4 months to 12 months	12 to 16 hours (including naps)
1 to 2 years	11 to 14 hours (including naps)
3 to 5 years	10 to 13 hours
6 to 12 years	9 to 12 hours
13 to 18 years	8 to 10 hours

We disaggregated results by our three communities of interest and found that:

- **Economic Status:** Of the four household income groups, CYSHCN, ages 4 months - 17 years, whose family household income is at 0-99% FPL have the smallest proportion of CYSHCN of getting appropriate hours of sleep per day (Exhibit 10). Results of analysis of NSCH (2021-22) show that 57% of CYSHCN whose family household income is at 0-99% FPL get the appropriate hours of sleep per day, compared to 78% of same-age peers whose family household income is at 400% FPL or greater (Exhibit 20).
- **Geographic Status:** A smaller proportion of CYSHCN who live in rural areas (57%) met the AASM guidelines on sleeping age-appropriate hours than CYSHCN who live in urban areas (69%)(Exhibit 20).
- **Social Communities:** A smaller proportion of CYSHCN from Asian (59%) and Hispanic/Latino (60%) communities met the AASM guidelines on sleeping age-appropriate hours than CYSHCN from Multiracial (65%) and White (72%) communities (Exhibit 20).

Exhibit 20. Percent of Oregon CYSHCN Meeting Sleeping Age-Appropriate Hours by Communities of Interest.



Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Exercise

Regular physical activity in childhood and adolescence is important for promoting lifelong health and well-being (CDC, 2024b). The CDC (2024b) recommends that children and adolescents 6-17 years need at least 60 minutes of physical activity every day. This includes activities that make their hearts beat faster, build muscles, and strengthen bones (CDC, 2024b). While CYSHCN may encounter challenges in meeting this recommendation due to health conditions, research shows that the participation of children with disabilities in sports and recreational activities promotes inclusion, optimizes physical functioning, and enhances overall QOL (Murphy, Carbone, & Council on Children with Disabilities, 2008).

Results of our analysis of NSCH (2021-22) data show that fewer Oregon CYSHCN, ages 6-17 years, get exercise, play sports, or participate in physical activities for at least 60 minutes per week compared their same-age peers without special health care needs (Exhibit 21). For instance, eighteen percent of CYSHCN got exercise everyday compared to 23.5% of their same-age peers without special health care needs. Below, we present results by our communities of interest:

- **Economic Status:** Across all income groups, the largest proportion of families reported CYSHCN getting at least 60 minutes of exercise 1 to 3 days per week (Exhibit 21). Of the four income groups, the largest proportion of CYSHCN, ages 6 - 17 years, to report getting exercise every day for at least 60 minutes are those in families with household income at 100-199% FPL (23.2%) followed by CYSHCN in families with household income at or above 400% FPL (19.7%).
- **Geographic Status:** A greater proportion of CYSHCN who live in rural areas (26.6%) exercised, played sports, or participated in physical activities every day for at least 60 minutes per week compared to those who live in urban areas (16.9%) (Exhibit 21). The greatest portion of CYSHCN who live in urban areas received at least 60 minutes of exercise 1 to 3 days per week (44.1%). The greatest portion of CYSHCN who live in rural areas receive at least 60 minutes of exercise 4 to 6 days per week (40.5%).
- **Social Communities:** The greatest portion of CYSHCN from White communities get physical exercise for at least 60 minutes 1 to 3 days per week (40.8%). This same pattern holds true for CYSHCN from Hispanic/Latino (49.3%) and Multiracial (37%) communities, although sample sizes are too small to make comparisons (Exhibit 21).

Exhibit 21. Percent of Oregon Children who Exercise, Play Sports, or Do Physical Activity for 60 Minutes by Special Health Care Need Status and Communities of Interest.

	Exercise, Play Sport, or Physical Activity for 60 Minutes			
	0 days	**1-3 days**	**4-6 days**	**Every day**
CYSHCN status				
CYSHCN	15.1%	41.5%	25.4%	18.0%
Non-CYSHCN	9.4%	36.0%	31.1%	23.5%
Race and ethnicity				
Asian NH	**	**	**	**
Black NH	**	**	**	**
Latino, Hispanic	**	49.3%	22.6%	**
White NH	15.2%	40.8%	26.6%	17.4%
Other/Multiracial NH	**	37.0%	22.8%	**
Income based on Federal Poverty Level				
0-99% FPL	17.6%	51.5%	18.6%	12.3%
100-199% FPL	17.4%	38.7%	20.7%	23.2%
200-399% FPL	18.2%	39.8%	27.9%	14.0%
400% FPL or greater	10.6%	40.7%	29.0%	19.7%
Geographic location				
Metropolitan Statistical Area	15.6%	44.1%	23.5%	16.9%
Not Metropolitan Statistical Area	11.5%	21.5%	40.5%	26.6%

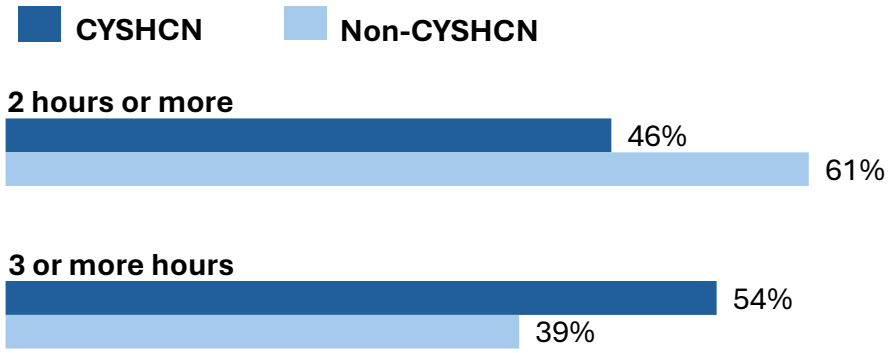
Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Screen Time

Spending more time on television, cellphones, or on the computer can increase the risk of having sedentary behaviors, sleep problems, and poor social-emotional health among children (AACAP, 2024). Oregon CYSHCN, ages birth through 17 years, often spent more time in front of a TV, computer, or cellphone than their same-age peers without special health care needs. The NSCH (2021-22) asks families, “On most weekdays, about how much time does this child usually spend in front of a TV, computer, cellphone or other electronic device watching programs, playing games, accessing the internet or using social media, not including schoolwork?” (CAHMI, 2024). Forty-six percent of CYSHCN spent two or more, and 54% spent three or more, hours per day in front of screens. These results show that CYSHCN, ages birth through 17 years, were 1.4 times more likely to spend 3 or more hours in front of a

TV, computer, or cellphone compared to their same-age peers without special health care needs (Exhibit 22).

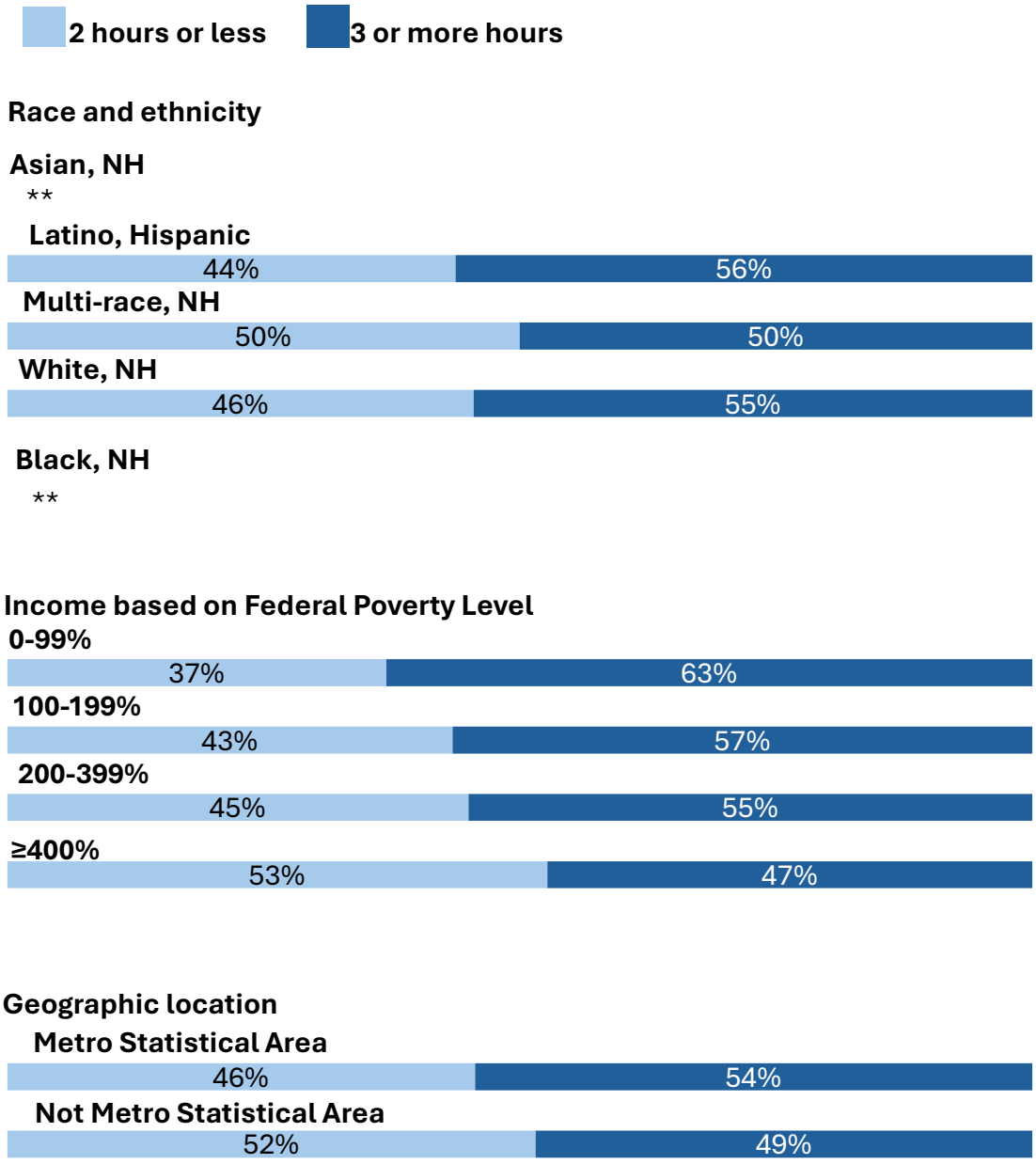
Exhibit 22. Percent of Oregon Children That Spend Time on Television, Cellphones, or Computers by Special Health Care Need Status



Data Source: OCCYSHN Analysis of NSCH 2021-2022

When we disaggregated results by our three broad communities of interest, we found that between 50% and 60% of CYSHCN in the geographic and social communities, for which we had sufficient sample sizes, spend three or more hours per day on screens. Household income groups had slightly more variation: CYSHCN whose family household income is at 0-99% FPL had the largest proportion (63%) of children in front of screens three or more hours per day of all of the income groups (Exhibit 23). CYSHCN whose family household income is 400% FPL or greater had the smallest proportion (47%) of children in front of screens three or more hours per day.

Exhibit 23. Percent of Oregon CYSHCN Who Spend Time on Television, Cellphones, or Computers by Communities of Interest.



Data Source: OCCYSHN Analysis of NSCH 2021-2022

Flourishing

Child flourishing is an important indicator of healthy development of children and is often associated with reductions in risky health behaviors and mental health problems in children and youth (Bethell, Gombojav, & Whitaker, 2019).[2] The NSCH (2021-22) uses a flourishing composite measure for children aged 6 months through 5 years, made up of four questions: How often: (1) is this child affectionate and tender, (2) does this child bounce back quickly when things do not go their way, (3) does this child show interest and curiosity in learning new things, and (4) does this child smile and laugh? (CAHMI, 2024). If a caregiver reports "Always" or "Usually" to these questions, then the child meets the flourishing item criteria. Results of our analysis of NSCH (2021-22) reveal that fewer Oregon CSHCN, aged 6 months – 5 years, meet all 4 flourishing items (59.9%), compared to same-age peers without special health care needs (82.8%) (Exhibit 24). Below, we describe the results by our communities of interest:

- **Economic Status**: Over three-fourths (78.1%) of CSHCN, ages 6 months – 5 years, from families with household incomes at 400% FPL or greater meet all 4 flourishing items, compared to 60% of same-age peers from household incomes between 200-399% FPL (Exhibit 24). For CSHCN whose family household income is below 200% FPL, we lack sufficient sample size (n<30) to produce reliable estimates.
- **Geographic Status:** Sixty percent of CSHCN, ages 6 months – 5 years, living in urban areas meet all 4 flourishing items (Exhibit 24). For CSHCN living in rural areas, we lack a sufficient sample size (n<30) to estimate the prevalence of flourishing.
- **Social Communities:** Sixty four percent of White CSHCN, ages 6 months – 5 years, meet all 4 flourishing items (Exhibit 24). We lack sufficient sample sizes (n<30) to estimate the prevalence of flourishing among children who identify as Asian, Black, Hispanic/Latino, or Mutliracial.

[2] Flourishing is a recognized concept that aims to measure quality of life for children; however, NSCH items that measure the construct do not represent well all CYSHCN. Other measures may better capture their quality of life and well-being. For instance, Willen, Williamson, & Walsh (2025) suggest that there is a need for qualitative understanding of flourishing that addresses sociocultural differences, structural factors, power dynamics, and legacies of social injustice.

Exhibit 24. Percent of Oregon Children Aged 6 Months – 5 Years Meeting Flourishing Criteria by Special Health Care Need Status and Communities of Interest.

	Flourishing Criteria		
	Meets 0 – 2 items	**Meets 3 items**	**Meets all 4 items**
CSHCN status			
CSHCN	**	31.0%	59.9%
Non-CSHCN	3.0%	14.1%	82.8%
Race and ethnicity			
Asian NH	**	**	**
Black NH	**	**	**
Latino, Hispanic	**	**	**
White NH	**	25.9%	63.6%
Other/Multi-racial NH	**	**	**
Income based on Federal Poverty Level			
0-99% FPL	**	**	**
100-199% FPL	**	**	**
200-399% FPL	**	**	60.0%
400% FPL or greater	**	**	78.1%
Geographic location			
Metropolitan Statistical Area	**	31.2%	59.6%
Not Metropolitan Statistical Area	**	**	**

Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Child Flourishing, Ages 6 -17 Years

The NSCH (2021-22) has a separate flourishing composite measure for children ages 6-17 years (CAHMI, 2024). This NSCH (2021-22) composite is made up of three questions: How often does this child: (1) show interest and curiosity in learning new things, (2) work to finish tasks he or she starts, and (3) stay calm and in control when faced with a challenge? (CAHMI,

2024). If a caregiver reports "Always" or "Usually," then the child meets the flourishing item criteria. Results of our analysis of NSCH (2021-22) reveal that Oregon CYSHCN, ages 6-17 years, are almost half as likely to meet all 3 flourishing items, compared to same-age peers without special health care needs (Exhibit 25). Below, we describe the results by our communities of interest:

- **Economic Status:** Across income levels, for which we had sufficient sample sizes, the largest proportion of CYSHCN, who met all three flourishing criteria, were those whose household income was 400% FPL or greater (36.7%) (Exhibit 25). The lowest proportion of CYSHCN meeting all three criteria were those whose household income was 100-199% FPL (27.5%)(Exhibit 25).
- **Geographic Status:** Only about one-third of CYSHCN who live in urban and rural areas met the three flourishing criteria (32.3% and 33.9% respectively)(Exhibit 25).
- **Social Communities:** CYSHCN from Multiracial communities had the highest percentage of children who met all three flourishing criteria (38.5%)(Exhibit 25). We lack sufficient sample size (n<30) for CYSHCN identifying as Asian or Black to produce reliable estimates.

Exhibit 25. Percent of Oregon Children Aged 6 – 17 Years Meeting Flourishing Criteria and by Special Health Care Need Status and Communities of Interest.

	Flourishing Criteria		
	Meets 0 – 1 items	**Meets 2 items**	**Meets all 3 items**
CYSHCN status			
CYSHCN	41.3%	26.3%	32.5%
Non-CYSHCN	15.1%	22.8%	62.1%
Race and ethnicity			
Asian NH	**	**	**
Black NH	**	**	**
Latino, Hispanic	43.0%	25.9%	31.1%
White NH	42.3%	25.3%	32.4%
Other/Multi-racial NH	40.6%	20.9%	38.5%
Income based on Federal Poverty Level			
0-99% FPL	47.0%	29.1%	**
100-199% FPL	38.5%	33.9%	27.5%
200-399% FPL	44.5%	20.2%	35.3%
400% FPL or greater	38.6%	24.7%	36.7%
Geographic location			
Metropolitan Statistical Area	41.1%	26.3%	32.3%
Not Metropolitan Statistical Area	40.1%	26.1%	33.9%

Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

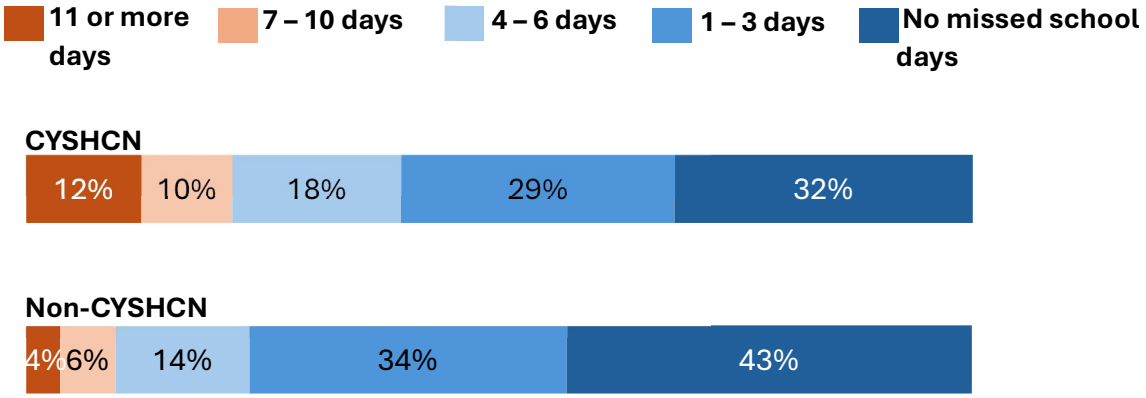
School Environment

The Standards for Systems of Care for CYSHCN (NASHP, 2020) identify education representatives as important members of a child's care team. Special Education programs provide essential services to CYSHCN and their families. In this section, we describe school-related outcomes for Oregon CYSHCN such as school attendance, level of school engagement, grade retention, and school safety.

School Attendance

Receiving an education is a fundamental right of all children in the U.S. Being able to attend school regularly is necessary both for the child to receive educational content and to participate in social interactions with peers that are typical for children ages 6 through 21 years old. Results of our analysis of NSCH (2021-22) show that three times as many Oregon CYSHCN, ages 6-17 years, missed 11 or more days of school, compared to same-age peers without special health care needs (Exhibit 26).

Exhibit 26. Percent of Oregon Children With Missed School Days by Special Health Care Need Status



Data Source: OCCYSHN Analysis of NSCH 2021-2022

We examined the percentage of CYSHCN who missed six or fewer days of school compared to those who missed seven or more days by our communities of interest.

- **Economic Status:** About one-quarter of CYSHCN, ages 6 – 17 years, who live in households with incomes less than 400% FPL missed seven or more days of school (Exhibit 27).
- **Geographic Status:** A slightly greater proportion of CYSHCN who live in rural areas miss seven or more days of school (24.4%) compared to CYSHCN who live in urban areas (21.5%) (Exhibit 27).
- **Social Communities:** A slightly greater portion of CYSHCN from Multiracial communities miss 7 or more days of school (24.4%) than CYSHCN from White communities (21.4%). For CYSHCN identifying as Asian or Black, we lack sufficient sample size (n<30) to produce reliable estimates.

Exhibit 27. Percent of Oregon CYSHCN with Missed School Days by Communities of Interest.

	Missed school days	
	6 days or fewer	**7 days or more**
Race and ethnicity		
Latino, Hispanic	77.0%	22.7%
White, non-Hispanic	78.6%	21.4%
Black, non-Hispanic	**	**
Asian, non-Hispanic	80.0%	**
Other/Multi-racial, non-Hispanic	75.6%	24.4%
Income based on Federal Poverty Level		
0-99% FPL	73.1%	26.9%
100%-199% FPL	75.9%	24.1%
200%-399% FPL	74.9%	25.1%
400% FPL or greater	83.7%	16.4%
Geographic Status		
Metropolitan Statistical Area	78.5%	21.5%
Not Metropolitan Statistical Area	75.6%	24.4%

Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Regular attendance also is important for school districts whose funding formulas are based on average daily attendance (ODE, 2024b). Oregon school districts are required to have at least 265 consecutive calendar days between the first and last instructional day of each school year at each grade level (OAR, 2018). The Oregon Department of Education (2024a) tracks chronic absenteeism, which is student attendance below 90% of their enrolled school days. Forty-one percent of students with disabilities were chronically absent during the 2023-2024 school year (ODE, 2024a). This equates to students with disabilities missing 26.5 or more of school.

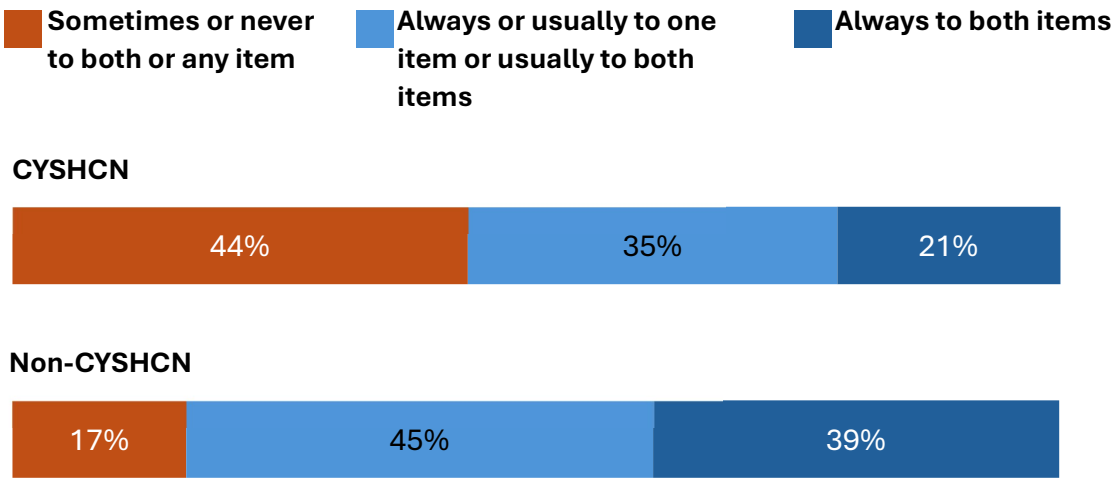
School Engagement

School engagement is a NSCH (2021-22) composite measure for children aged 6– 17 years, made up of two questions: How often 1) does this child care about doing well in school and 2)

does this child do all required homework? (CAHMI, 2024).[3] Families of CYSHCN who reported "always" to these questions have children who are "always" engaged in school. However, families of CYSHCN who report "usually" to both questions or report a combination of "always" and "usually" have children who are "usually" engaged in school. The remaining children who do not meet these criteria are "sometimes or never" engaged in school.

Results of our analysis of NSCH (2021-22) show that Oregon CYSHCN, ages 6-17 years, were 2.6 times as likely to "sometimes or never" engage in school, compared to same-age peers without special health care needs.

Exhibit 28. Percent of Oregon Children Engaged at School by Special Health Care Need Status



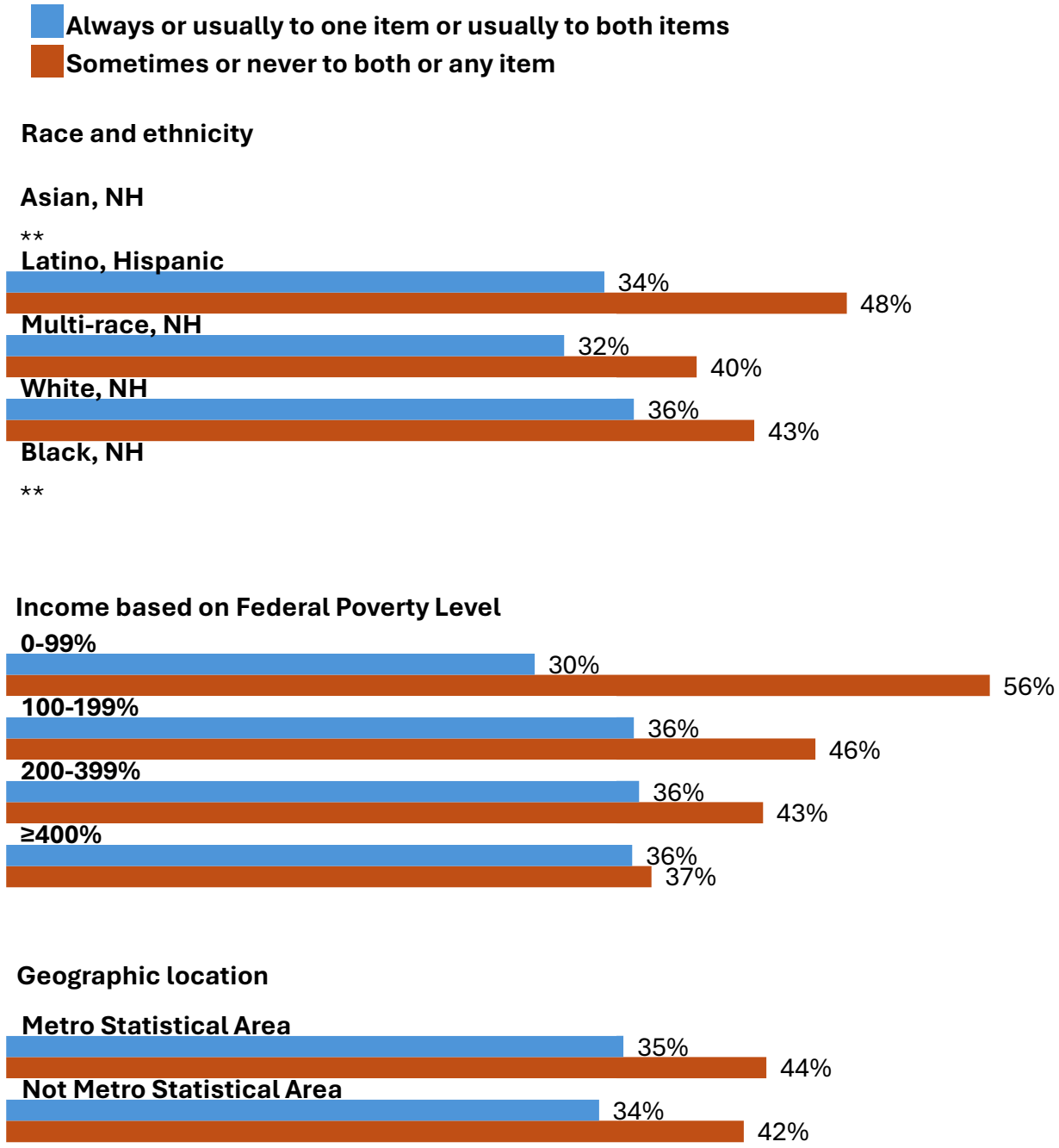
Data Source: OCCYSHN Analysis of NSCH 2021-2022

We disaggregated results by our communities of interest.

- **Economic Status:** Of the four income groups, the largest proportion of CYSHCN, ages 6 - 17 years, who were "sometimes or never" engaged in school were those in families with household income at 0-99% FPL (56%) followed by CYSHCN in families with household income at 100-199% FPL (46%)(Exhibit 29).
- **Geographic Status:** Similar portions of CYSHCN living in rural or urban areas were "sometimes or never" engaged in school (42% and 44% respectively) (Exhibit 29).
- **Social Communities:** Among the communities for which we had adequate sample sizes, the greatest portion of CYSHCN who were "sometimes or never" engaged in school were those from Hispanic/Latino communities (48%)(Exhibit 32). For CYSHCN identifying as Asian or Black, we lack sufficient sample size (n<30) to produce reliable estimates.

[3] School engagement may look differently for different CYSHCN communities. The NSCH composite measure may not well represent engagement in all CYSHCN communities.

Exhibit 29. Percent of Oregon CYSHCN Engaged at School by Communities of Interest.



Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Grade Repetition

Having a student repeat a grade in school, or grade retention, due to a lack of academic progress is a continued controversial practice in the U.S. (Warren, Hoffman, & Anderew 2014). Current research suggests that there is sparse and ambiguous evidence on the impacts of

retaining students on academic achievement (Warren, Hoffman, & Anderew 2014). The NSCH (2021-22) collected information from families of children, ages 6-17 years, about grade repetition through one question: Since starting kindergarten, has this child repeated any grades? (CAHMI, 2024). Results of our analysis of NSCH (2021-22) indicate that Oregon CYSHCN, ages 6-17 years, were three times more likely to repeat one or more grades in school, compared to same-age peers without special health care needs. Below, we disaggregate results by our communities of interest:

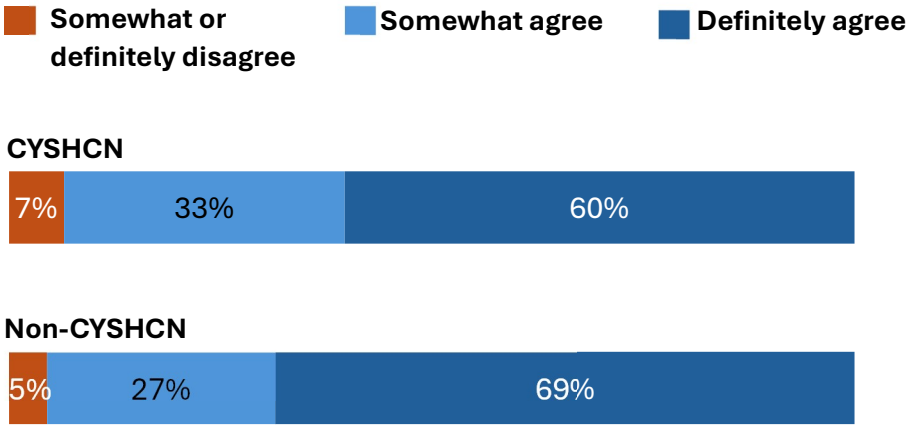
- **Economic Status:** Across all levels of family household income, we lack sufficient sample size (n<30) to estimate the prevalence of CYSHCN who repeated one or more grades in school.
- **Geographic Status:** Our estimates show that 6% of CYSHCN living in urban areas repeated one or more grades in school. For CYSHCN who live in rural areas, we lack sufficient sample size (n<30) to estimate the prevalence of CYSHCN who repeated one or more grades in school.
- **Social Communities:** Approximately 6% percent of White CYSHCN repeated one or more grades in school. For all other racial/ethnic groups, we lack sufficient sample size (n<30) to estimate the prevalence of CYSHCN who repeated one or more grades.

School Safety

Schools have a primary responsibility in ensuring that school environments are safe and welcoming for all students, especially for those with a special health care need. School activities for school-aged children should be safe from bullying, influence of substance use, and violence (NCSSLE, n.d). Some specific CYSHCN populations, such as those with I/DD needs, may have more trouble understanding safety protocols and experience difficulty in communicating their needs with others (CDC, 2024a).

The NSCH (2021-22) asked families if their child, ages 6-17 years, is safe at school (CAHMI, 2024). Nearly all families agreed (either definitely or somewhat) that their child was safe at school. However, we found that fewer families of CYSHCN (60%) reported they “definitely agree” that their child is safe at school, compared to families of same-age peers without special health care needs (69%) (Exhibit 30).

Exhibit 30. Percent of Oregon Families with Level of Agreement that Child is Safe at School by CYSHCN Status

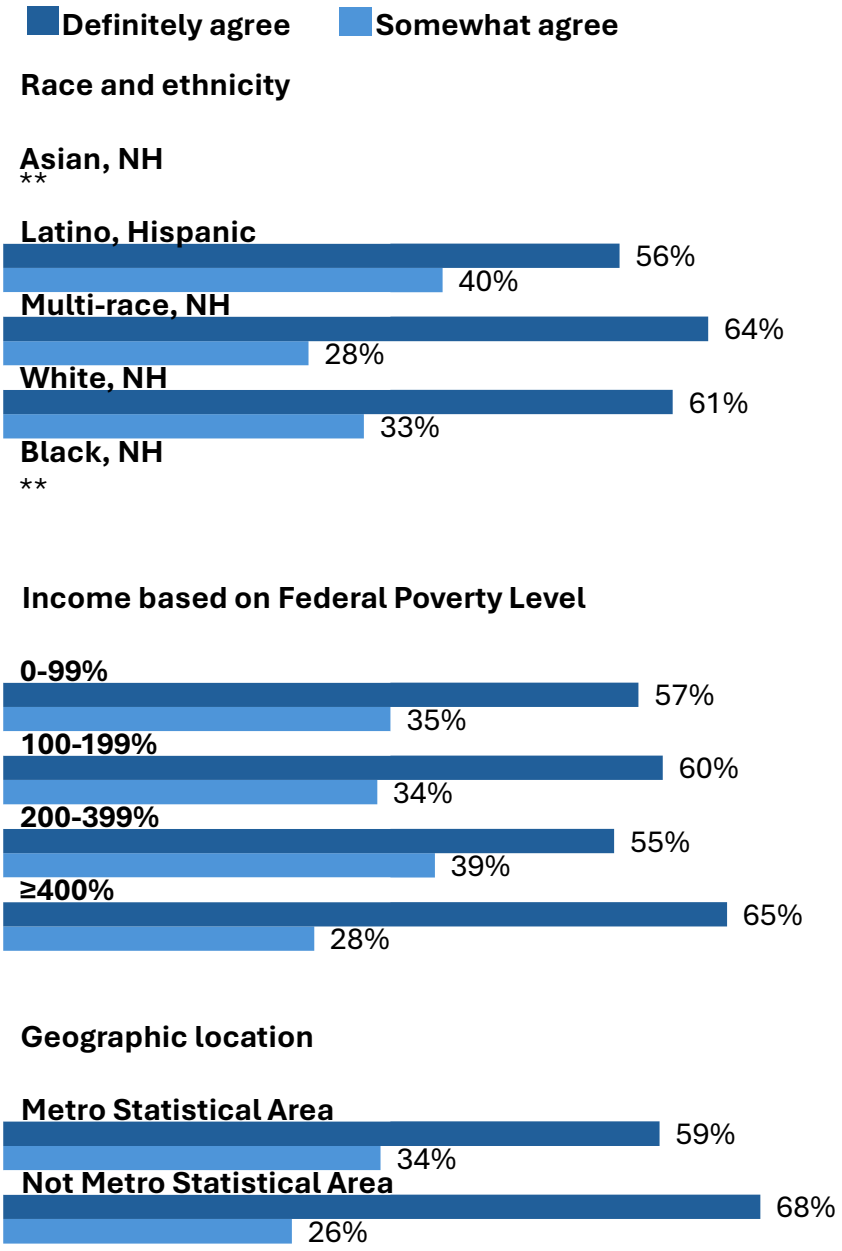


Data Source: OCCYSHN Analysis of NSCH 2021-2022

We disaggregated these results by communities of interest and found that:

- **Economic Status:** Across the four income groups, the greatest percentage of families who reported "definitely agree" that their child was safe at school were families with household incomes greater than or equal to 400% FPL (65%) followed by families with a household income at 100-199% FPL (60%)(Exhibit 31).
- **Geographic Status:** More families of CYSHCN, ages 6-17 years, living in a rural area (68%) reported that they "definitely agree" that their child goes to a safe school, compared to same-age peers living in urban areas (59%)(Exhibit 31).
- **Social Communities:** The greatest portion of families reported that they "definitely agree" their child goes to a safe school were those from Multiracial communities (64%) (Exhibit 31). A similar portion of families of CYSHCN from White communities (61%) also reported "definitely agree." For CYSHCN identifying as Asian or Black, we lack sufficient sample size (n<30) to produce reliable estimates.

Exhibit 31. Percent of Oregon CYSHCN Families with Level of Agreement that Child is Safe at School by Communities of Interest.



Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

About 50% of families of CYSHCN from Hispanic/Latino communities "definitely agree" that their child is safe at school. Our qualitative interviews with Latino parents provide further insights into this low percentage (Patterson et al., 2025). Latino parents we interviewed described that school environments were considered unsafe for their CYSHCN due to insufficient and unqualified educational staff members that can adequately care for their

child's needs (Patterson et al., 2025). For example, one Latino parent describes concerns about their child's school utilizing high school volunteers to care for their child with autism (Patterson et al., 2025). Another Latino parent expresses their worries about their school's competency to care for their child with special needs:

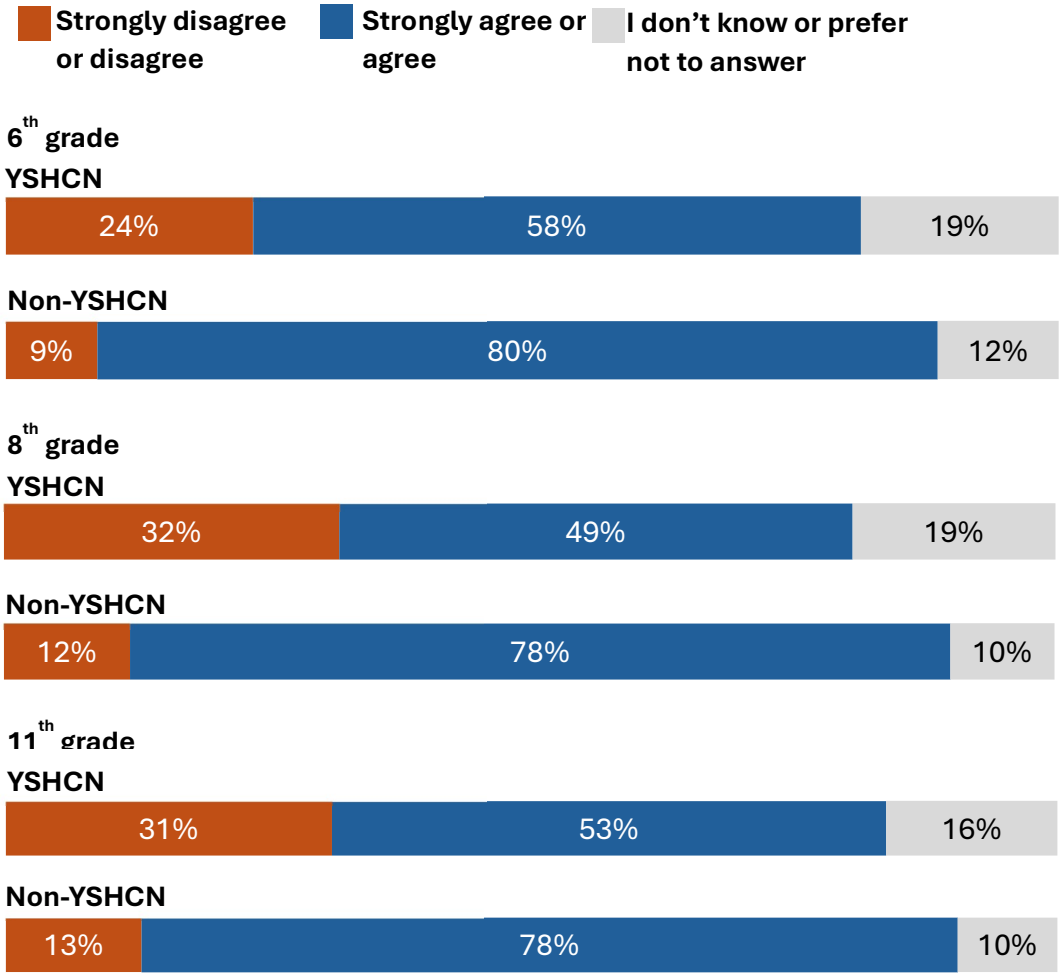
"Cuando mi hija estaba queriendo ir a la escuela el año pasado, yo sentía que la escuela no estaba segura porque el año antepasado de eso, se les ha salido un niño con autismo. Si mi niña va a la escuela y tienen ataques y tiene autismo, ella está la tipa de niña que, si ella mira un agujerito, ella va a ser la lucha para poder escapar. Y eso era mi miedo más grande. ¿Si ella se va, cuánto tiempo va a durar para que ellos se den cuenta que ella no está? Cuando yo hice esas preguntas [a la escuela], nadie me contestaba."
– Latino Parent of CYSHCN in rural Oregon

***Translation:** "When my daughter was wanting to go to school this last year, I felt that the school was not safe because the year before that, they had a child with autism who escaped. If my girl goes to school and she has seizures and she has autism, she is the type of child that if she looks at a little hole, she will be fighting to escape. And that was my biggest fear. If she leaves, how long will it take for them to realize she's gone? When I asked those questions [to the school], no one was answering me".*
– Latino Parent of CYSHCN in rural Oregon

YSHCN School Safety

Oregon's Student Health Survey (2022) asked students to what extent they feel safe at school. Results of our analysis of these data show that fewer students with disabilities feel safe at school compared to students without disabilities (Exhibit 32). For instance, youth in the 6th and 8th grades are 2.7 times more likely to report that they "strongly disagree or disagree" that they feel safe at school, compared to same-grade level peers without special health care needs. Similar results exist for students in the 11th (2.4 times more likely) grade compared to their same-age peers without disabilities (Exhibit 32).

Exhibit 32. Percent of Oregon YSHCN and Non-YSHCN with Level of Agreement of Being Safe at School by Grade Level.

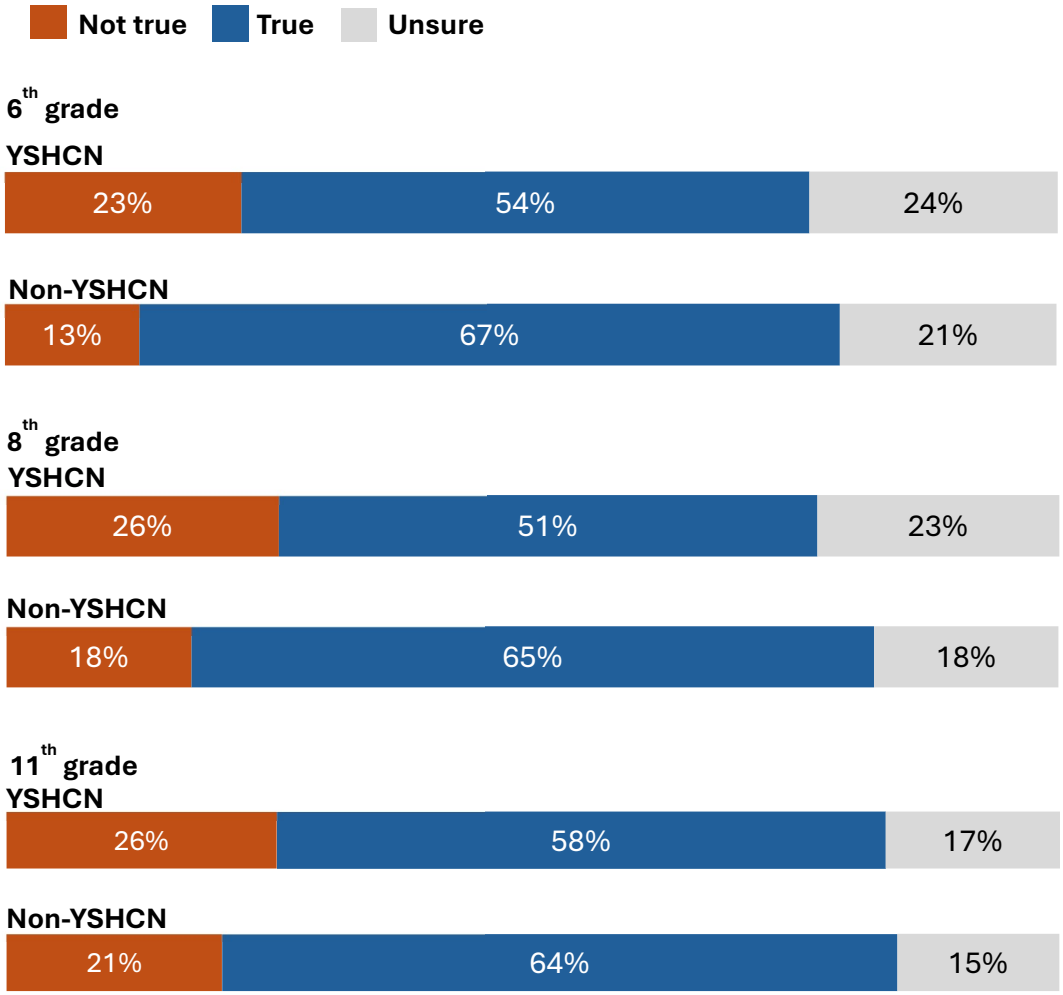


Data Source: Oregon Student Health Survey 2022

Relationship between YSHCN and Education Staff

Educational staff may play an important role in fostering a child's feeling of safety at school. Oregon's Student Health Survey (2022) asked students to what extent they have a teacher or adult in the school that cares about them. Results of analysis of the Student Health Survey (2022) show that students with disabilities are more likely to report "not true" in having a teacher or adult at the school that cares about them compared to students without special health care needs (Exhibit 33). YSHCN in the 6th grade are 1.8 times likely to state "not true" in having a teacher or adult in the school that cares about them compared same-grade level peers without special health care needs. Results are attenuated for students with disabilities in the 11th (1.2 times more likely) and 8th (1.4 times more likely) grade compared to their same-grade peers without disabilities (Exhibit 33).

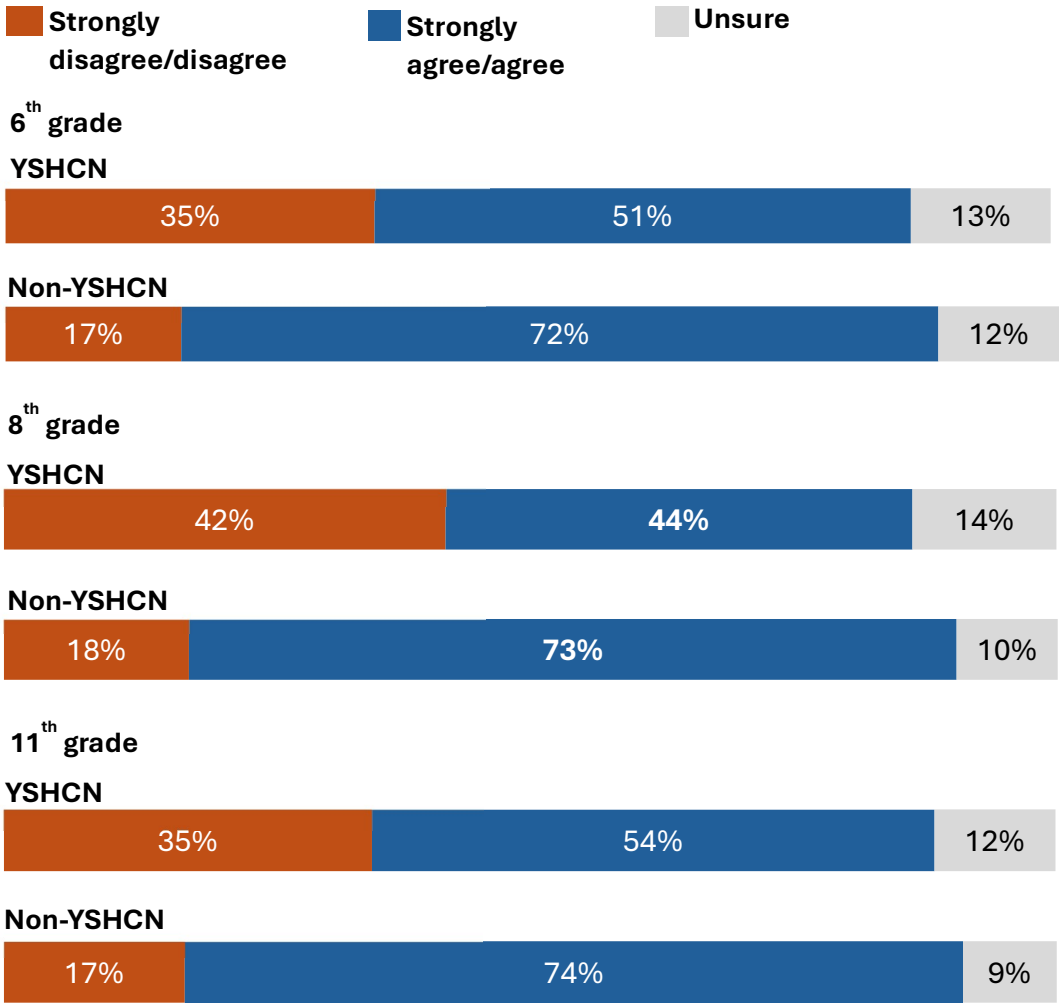
Exhibit 33. Percent of Oregon YSHCN and Non-YSHCN Who Report That a Teacher or Another Adult in their School Really Cares About Them by Grade Level



Data Source: Oregon Student Health Survey 2022

Oregon's Student Healthy Survey (2022) also asked students to what extent they find it easy to talk with teachers and other adults at the school. Results of our analysis show that fewer students with disabilities have an easy time talking with teachers and other adults at school compared to their peers without special health care needs (Exhibit 40). YSHCN in the 8th grade were more than two times as likely to have reported that they "strongly disagree or disagree" that they do not have an easy time talking with teachers and other adults at the school compared to same-grade level peers without special health care needs. We found similar results for students with disabilities in 11th (2.1 times more likely) and 8th (2.1 times more likely) grades compared to their same-grade level peers without disabilities (Exhibit 34).

Exhibit 34. Percent of Oregon YSHCN and Non-YSHCN Who Report That it is Easy to Talk with Teachers and Other Adults at School by Grade Level.



Data Source: Oregon Student Health Survey 2022

Access to Student Spaces

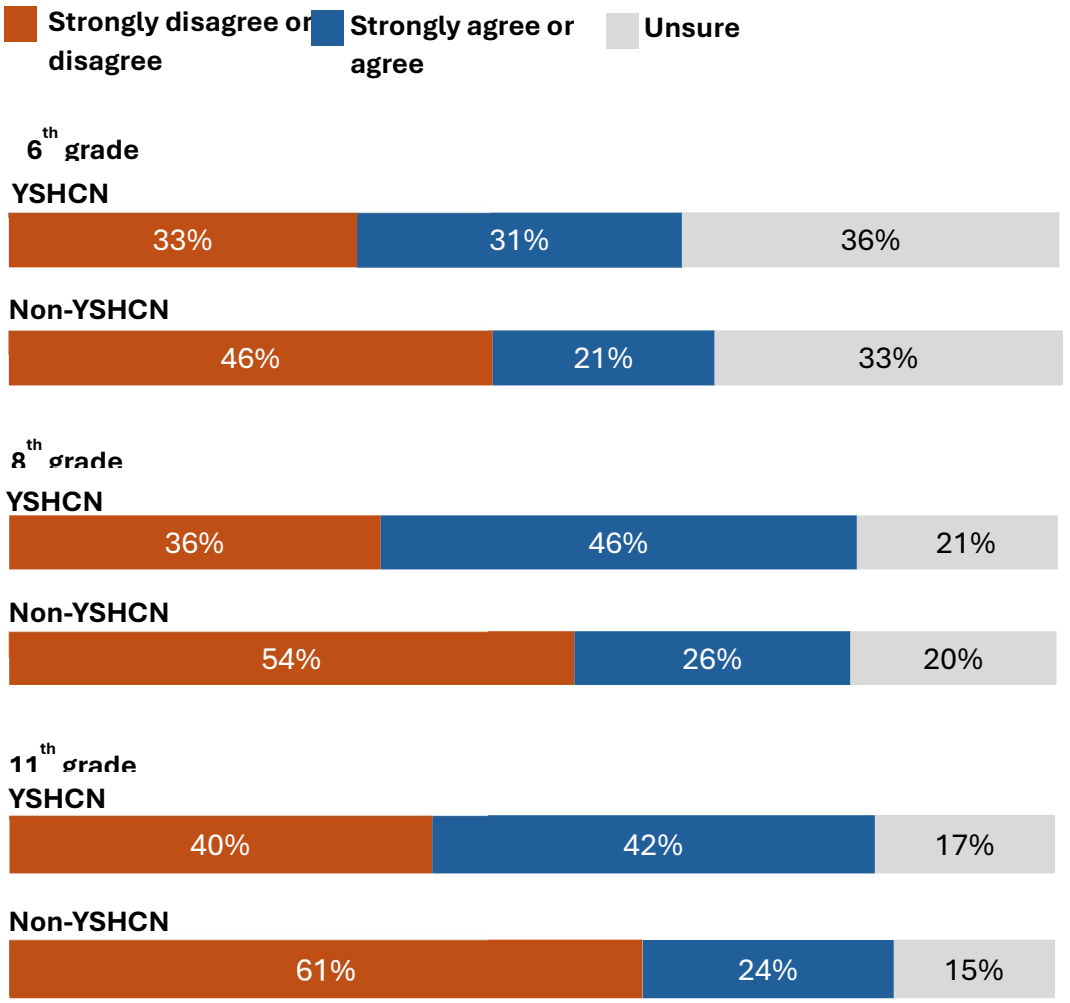
For some youth, accessing a student group or space where they can meet other students with whom they identify is an important resource to build community and to feel safe at school. The Oregon Student Health Survey (2022) asks 6th graders about accessing a student group or space at school where they can meet other students like themselves. Over one-quarter (29%) of YSHCN in the 6th grade reported that there is a student group or space at school (Oregon Student Health Survey, 2022).

School Culture

Oregon's Student Health Survey (2022) asked students if there is conflict or tension based on race, culture, religion, gender, sexual orientation, or ability at school (Exhibit 35). Results of our analysis of the survey data show that students with disabilities are more likely to report

that there is conflict or tension at school based on these characteristics compared to students without disabilities. YSHCN in the 11th and 8th grades are 1.8 times more likely to report that there is conflict or tension based on social characteristics at school compared to their peers without special health care needs. Similar results exist for students with disabilities in 6th (1.5 times more likely) grade (Exhibit 35).

Exhibit 35. Percent of Oregon YSHCN and Non-YSHCN Who Report Conflict or Tension at School by Grade Level.



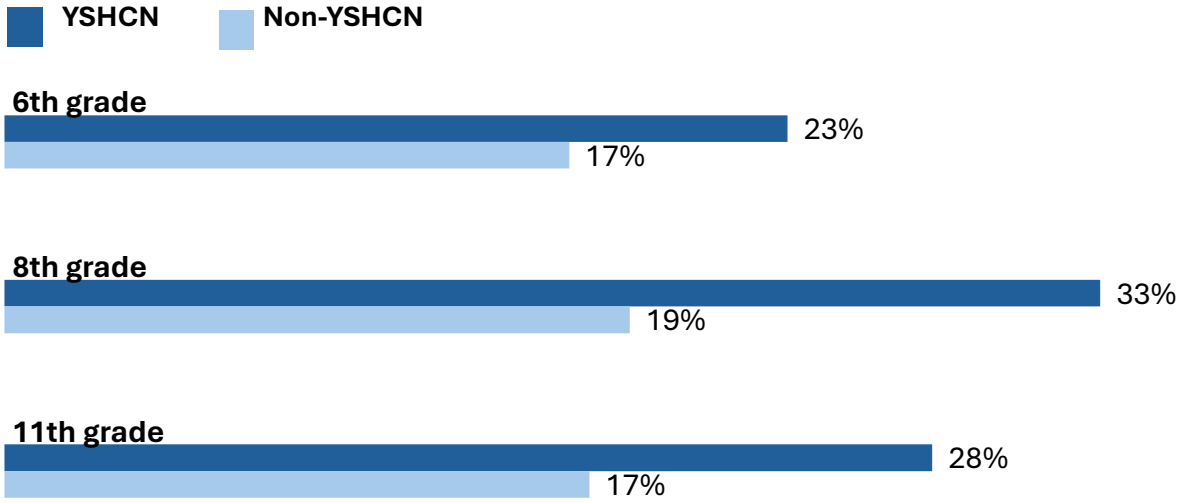
Data Source: Oregon Student Health Survey 2022

Witnessing Violence at School

Oregon's Student Health Survey (2022) asked students about witnessing physical, emotional, or sexual harm at school. Results of our analysis of these data showed that students with disabilities are more likely to report that they have witnessed someone being physically, emotionally, or sexually harmed at school compared to students without special health care needs (Exhibit 36). YSHCN in the 8th grade are 1.7 times more likely to say that they have witnessed someone being physically, emotionally, or sexually harmed at school, compared to peers without special health care needs. Similar results exist for students with disabilities in

11th (1.6 times more likely) and 6th (1.4 times more likely) grades compared to their same-grade peers without disabilities (Exhibit 36).

Exhibit 36. Percent of Oregon YSHCN and Non-YSHCN who report Witnessing Someone Being Harmed at School by Grade Level.



Data Source: Oregon Student Health Survey 2022

Bullying

Bullying is unwanted, aggressive behavior characterized by a real or perceived power imbalance between individuals (U.S. DHHS, n.d.). Power means physical strength, access to embarrassing information, racial or class privilege, or popularity (U.S. DHHS, n.d.). Acts of bullying can happen in-person or online, and those who engage in bullying exploit their power to control or harm others (U.S. DHHS, n.d.). Those who bully may also display defiant and delinquent behaviors, experience poor school performance, and have an increased risk of dropping out of school or bringing weapons to school (U.S. DHHS, n.d.). In addition, those who are bullied feel anxious, depressed, isolated and report low self-esteem (U.S. DHHS, n.d.)

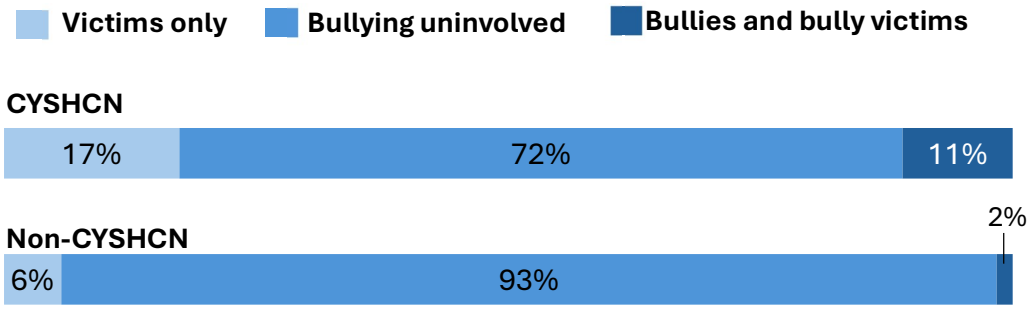
The NSCH (2021-22) collected information from families on bullying behavior for children (CAHMI, 2024). The NSCH (2021-22) asked families two questions: During the past 12 months, how often: 1) was this child bullied, picked on, or excluded by other children and 2) did this child bully others, pick on them, or exclude them (CAHMI, 2024). Response options for these questions were: almost every day, 1-2 times per week, 1-2 times per month, 1-2 times in the past 12 months, or never in the past 12 months. Using methodology and criteria from Reisert and colleagues (2023), we categorized children and their experiences with bullying into the following three groups: Bully and bully-victims, victims only, and bullying uninvolved (Exhibit 37).

Exhibit 37. Reisert et al. (2023) Methodology for Identifying Children who are Bully and Bully-Victims, Victims only, and Bullying Uninvolved.

Child Group	Criteria
Bully and Bully-Victims	Children who have bullied others at least 1-2 times per month are classified as bullies. This group is made up of both exclusive bullies and bully-victims.
Victims only	Children who are bullied at least 1-2 times per month and do not meet criteria of "bullies and bully-victims" group are classified as victims. This group only includes children who are exclusive victims.
Bullying uninvolved	Children who did not meet criteria of a "bully and bully-victim" or "victim only" are classified as bullying uninvolved.

Results of our analysis of NSCH (2021-22) show that Oregon CYSHCN, ages 6-17 years, were almost seven times more likely to be bullies and bully victims compared to same-age peers without special health care needs (Exhibit 38). However, three times as many Oregon CYSHCN, ages 6-17 years, were likely to be victims of bullying as same-age peers without special health care needs (Exhibit 38).

Exhibit 38. Percent of Oregon Children Engaged in Bullying Behavior by Special Health Care Need Status.



Data Source: OCCYSHN Analysis of NSCH 2021-2022

We disaggregated these results by our communities of interest:

- **Economic Status:** CYSHCN aged 6-17 years whose family household income is at 200-399% FPL were 1.5 times more likely to be bullies and bully victims, and 0.8 times likely to be victims of bullying only, compared to same-age peers whose family household income is at or above 400% FPL (Exhibit 39). For CYSHCN whose household income is below 200% FPL, we lack sufficient sample size (n<30) to estimate the prevalence of bullies and bully-victims and victims of bullying only.
- **Geographic Status:** Ten percent of CYSHCN, ages 6-17 years, were bullies and bully victims among those who live in urban areas, however 17.9% of these CYSHCN were victims of bullying only (Exhibit 39). For CYSHCN who live in rural areas, we lack

sufficient sample size (n<30) to estimate the prevalence of bullies and bully-victims, and victims of bullying only.

- **Social Communities:** Eleven percent of White CYSHCN, ages 6-17 years, were bullies and bully victims, and 17.6% of these CYSHCN were victims of bullying only (Exhibit 39). Among CYSHCN who identify as Asian, Black, Hispanic/Latino, and Multiracial, we lack sufficient sample size (n<30) to estimate the prevalence of children who were bullies and bully victims and victims of bullying only.

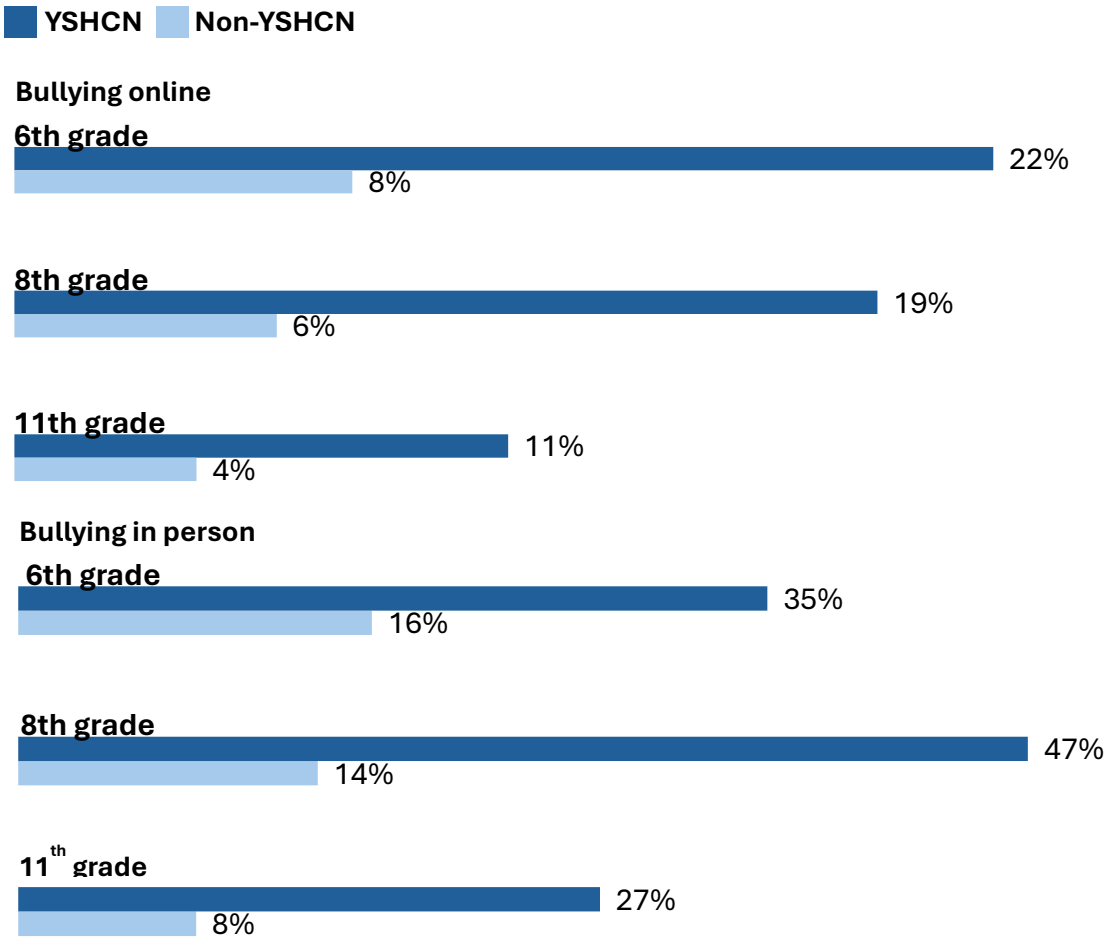
Exhibit 39. Percent of Oregon CYSHCN Engaged in Bullying Behavior by Communities of Interest.

	Bullying Behavior		
	Victims-only	**Bullying uninvolved**	**Bullies and bully-victims**
Race and ethnicity			
Asian NH	**	90.8%	**
Black NH	**	**	**
Latino, Hispanic	**	74.5%	**
White NH	17.6%	71.0%	11.4%
Other/Multi-racial NH	**	66.7%	**
Income based on Federal Poverty Level			
0-99% FPL	**	64.1%	**
100-199% FPL	**	73.7%	**
200-399% FPL	19.1%	72.3%	8.6%
400% FPL or greater	21.4%	72.7%	5.9%
Geographic Status			
Metropolitan Statistical Area	17.9%	72.1%	10.0%
Not Metropolitan Statistical Area	**	68.0%	**

Data Source: OCCYSHN Analysis of NSCH 2021-2022
*Notes. NH = Non-Hispanic. ** There is an insufficient sample size to produce a reliable estimate.*

Findings from the APANO survey of Vietnamese Caregivers of CYSHCN and Oregon's Student Health Survey (2022) are consistent with these results. Vietnamese caregivers of CYSHCN more often reported that they are "very concerned" about their child being bulled at school compared to their peers without special health care needs (Gallarde, et al., 2025). Additionally, results of our analysis of the Student Health Survey (2022) show that students with disabilities are more likely to report bullying at school or online than students without disabilities (Exhibit 40). YSCHN in 8th grade are 3.4 times more likely to experience bullying at school, and 3.2 more likely to experience bullying online, compared to same-grade level peers without special health care needs. Similar results exist for students with disabilities in 11th (bullying in person: 3.4 times more likely; bullying online: 2.8 times more likely) and 6th (bullying in person: 2.2 times more likely; bullying online: 2.8 times more likely) grades compared to their same-grade peers without disabilities.

Exhibit 40. Percent of Oregon YSHCN and Non-YSHCN Who Experience Bullying Online and Bullying In-person by Grade Level.



Data Source: Oregon Student Health Survey 2022

Summary

Our findings suggest that Oregon CYSHCN most often and consistently experience challenges with their quality of life, especially those whose family household income is less than 200% FPL, those living in rural areas, and those who are Hispanic/Latino.

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