Prevention Research and Practice – a Collaborative Dance to Build Statewide Prevention Capacity and Resilience

National Prevention Network Conference

August 24, 2021

Washington State Health Care Authority

Welcome and Hello!

Brittany Cooper, PhD

Associate Professor, Human Development, Washington State University
brittany.cooper@wsu.edu

Sarah Mariani, CPP

Substance Use Disorder Prevention & Mental Health Promotion Section Manager, WA State Health Care Authority
Current President of National Prevention Network
sarah.mariani@hca.wa.gov

Kevin Haggerty, PhD

Director of the Social Development Research Group Endowed Professor of Prevention at the University of Washington School of Social Work
haggerty@uw.edu

Margaret Soukup

School-Based SBIRT Program Manager
King County Public Health
Margaret.Soukup@kingcounty.gov

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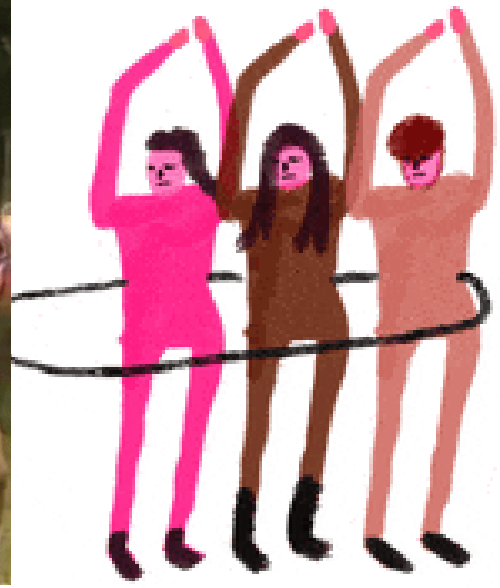
A Collaborative Dance?

Option A



Option B

Option C

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Today's Objectives

To discuss:

- 1. The formation and evolution of the Washington State Prevention Research Subcommittee (PRSC) model,
- 2. The perspectives of state agency representatives, prevention researchers, and prevention providers on key elements that have maintained its success overtime, and
- 3. Recent examples of how the structure, function, and collaborative approach resulted in tangible products that leverage cutting-edge understanding of prevention research to meet current state prevention practice and advocacy needs.

Prevention Research Subcommittee (PRSC)

- The PRSC meets quarterly and aims to provide a forum for prevention researchers, policymakers, and practitioners to identify and address emerging and evolving substance use disorder prevention and mental health promotion service and research needs in Washington State by:
  - Supporting evaluation of prevention services
  - Assisting in defining evidence-based criteria
  - Advocating for prevention funding
  - Establishing collaborations to initiate new and share existing research
  - Promoting implementation science through collaborative knowledge exchange

https://theathenaforum.org/PRSC

Prevention Research Subcommittee (PRSC)

Washington State Health Care Authority

Why are we all invested in the PRSC?

Washington State Prevention Research Sub-Committee Meeting in March 2021

Washington State Health Care Authority

HCA DBHR and the PRSC

The Washington State Health Care Authority Division of Behavioral Health and Recovery (HCA DBHR) and the Prevention Research Sub-Committee (PRSC)

- DBHR's work is in alignment with PRSC’s interest of translating research into action.
- Real-world implementation and evaluation is more meaningful to researchers.
- DBHR provides programmatic lens including through the prevention services advisory workgroup and consultation with prevention providers who have their “boots on the ground.”
- Collaboration allows DBHR the ability to make state-wide policy decisions, guide the prevention system, and target limited resources.

Washington State Health Care Authority

PRSC Statewide Initiatives

- Statewide Initiatives:
  - Washington State Young Adult Health Survey (YAHS)
  - COVID Student Survey (CSS)
  - Evidence-Based Program Directory Project
  - Policy Efforts (i.e. Research Briefs, Cannabis THC potency)
  - Evaluation
  - Training Support (i.e. PTTC, CTC, SFP)

Examples of Statewide Initiatives

Washington State Young Adult Health Survey (YAHS)

- Background:
  - Motivated by the passage of Initiative 502 in 2012, the survey began in 2014 before recreational marijuana stores opened their doors.
- Main objectives:
  - Monitoring trends in marijuana use patterns and consequences
  - Implementing new rules required by Initiative 502
  - Assessing the impact of Initiative 502
- Partners:
  - HCA DBHR
  - State Epidemiological Outcomes Workgroup member agencies and partners
  - University of Washington

Washington State Health Care Authority

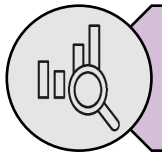
COVID Student Survey (CSS)

- Background:
  - The survey was designed to examine student needs and health risks during the COVID-19 pandemic to provide school leaders with a view into areas in which students may need support.
- Main Objectives:
  - Wellbeing survey to assess how students are doing, what's going well, what's been challenging, and what potential needs are
  - Provide feedback to state/regions and districts/principals to inform needs
- Partners:
  - HCA DBHR
  - Department of Health
  - Office of Superintendent of Public Instruction
  - University of Washington

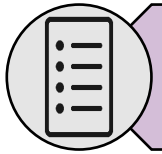
Evidence-Based Program Workgroup

- Background:
  - DBHR supports different lists of prevention programs that communities use for program identification and selection.
  - Programs on the lists came from various sources. These sources have differing definitions of “evidence” and vary in their level of rigor for categorizing evidence.
- Main Objectives:
  - The Evidence-Based Program Directory project provides the opportunity to use uniform definitions, methodology, and rigor to identify and select evidence-based programs.
- Partners:
    - HCA DBHR
    - Washington State University (WSU)
    - University of Washington (UW)
    - Washington State Institute for Public Policy (WSIPP)

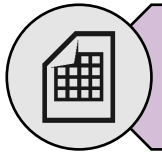
Evidence-Based Program Directory Project



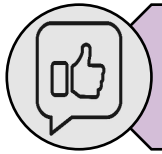
#1: Identify effective prevention programs for outcomes of interest using data-based risk and protective factors approach.



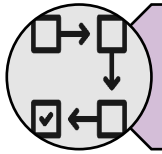
#2: Develop criteria to evaluate programs on DBHR program lists.



#3: Develop program directory to capture program information on all programs on the program lists.



#4: Review programs and make recommendations on programs to maintain/remove from the program lists.



#5: Recommend a process to formally review programs to be included on DBHR program lists and/or directory.

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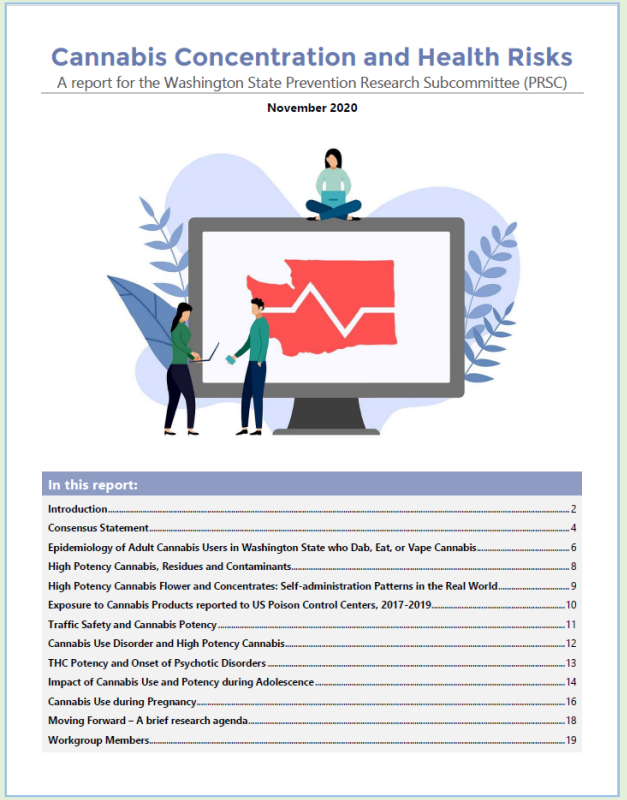
Cannabis Concentration and Health Risks

Consensus Statement and Report

https://adai.uw.edu/wordpress/wp-content/uploads/2020/11/Cannabis-Concentration-and-Health-Risks-2020.pdf

University of Washington
and Washington State University Workgroup
for the Prevention and Research Sub Committee (PRSC)



Cannabis Concentration and Health Risks

A report for the Washington State Prevention Research Subcommittee (PRSC)

November 2020

In this report:

WA Prevention Research Subcommittee (PRSC) Workgroup

Joint University of Washington and Washington State University Workgroup:

Beatriz Carlini (Chair)
Celestina Barbosa-Leiker
Carrie Cuttler
Julia Dilley
Caislin Firth
Kevin Haggerty
Jason Kilmer
Michael McDonell
Nephi Stella
Denise Walker
Dale Willits

With:

Sara Broschart, *WA State Liquor and Cannabis Board*
Trecia Ehrlich, *WA State Liquor and Cannabis Board*
Kristen Haley, *WA State Department of Health*
Christine Steele, *WA State Health Care Authority, Division of Behavioral Health & Recovery*
Liz Wilhelm, *Prevention WINS*

The content expressed herein do not reflect the official position of these agencies. No official support or endorsement for the opinions described in this document is intended or should be inferred.

Beatriz Carlini, Caislin Firth, and Sharon Garrett (editors)
Erinn McGraw and Meg Brunner (graphic design)

University of Washington, Alcohol & Drug Abuse Institute

ADAI | ALCOHOL & DRUG ABUSE INSTITUTE

UNIVERSITY of WASHINGTON

WASHINGTON STATE UNIVERSITY

Cannabis Concentration Workgroup

Prevention Research Sub Committee (PRSC)

Main Goal:

Consensus Statement on Health Risks of Non-Medical Use of High Potency (High THC-Concentration) Cannabis

- Is high potency cannabis more detrimental to health than lower potency cannabis?
- Are marginalized and/or vulnerable populations disproportionally affected by high potency cannabis use?

In a not distant past . . .

In a not distant land . . .

Average Potency = 3–8% THC

High Potency > 10% THC

And then market forces redefined cannabis . . .

Why Concentration Matters

Manufactured products have THC concentrations of 60-90%

Hash oil

Shatter

Wax

Honeycomb

Budder

CO2 oil

Why Concentration Matters

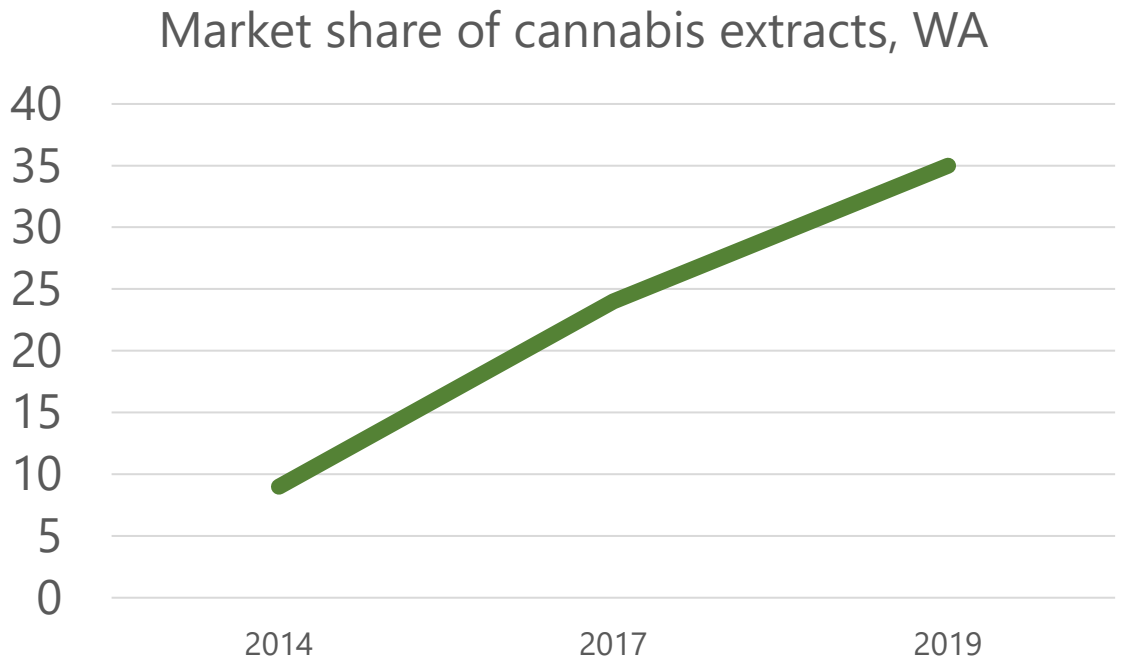
Sales of cannabis concentrates are increasing in WA

A nearly **ten-fold increase** in sales from extracts

(from $3.95 million in 2014 to $311 million in 2017).

Why?
Extracts are Cheaper and Shelf-Stable

Legalization = Mass production



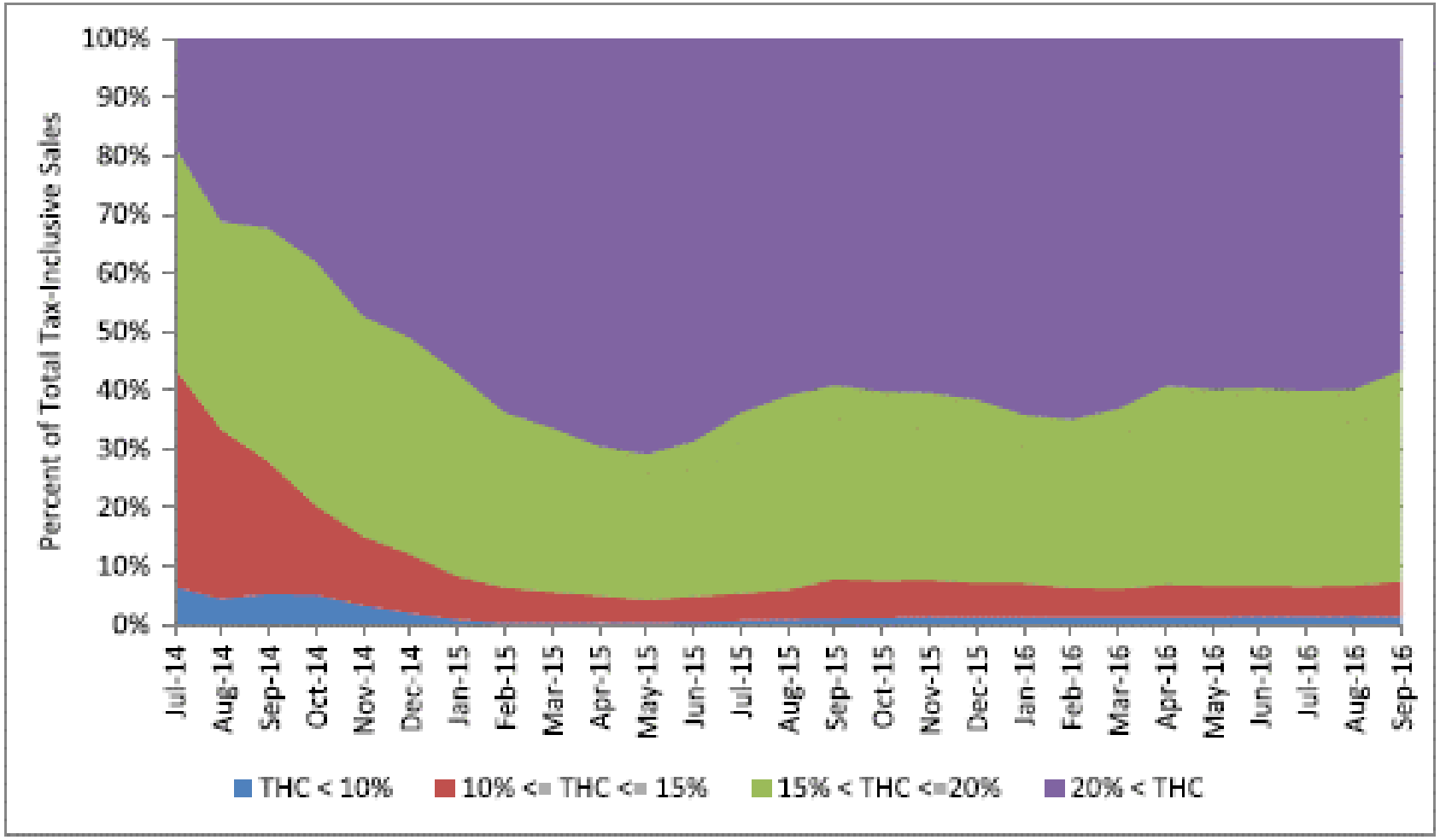
Kilmer, Beau, Steven Davenport, Rosanna Smart, Jonathan P. Caulkins, and Gregory Midgette, After the Grand Opening: Assessing Cannabis Supply and Demand in Washington State. Santa Monica, CA: RAND Corporation, 2019. https://www.rand.org/pubs/research_reports/RR3138.html.

Firth CL, Davenport S, Smart R, Dilley JA. How high: Differences in the developments of cannabis markets in two legalized states. Int J Drug Policy. doi:10.1016/j.drugpo.2019.102611

WA State House Commerce and Gaming Commission work session. Sep 15, 2020. https://www.tvw.org/watch/?eventID=2020091004

Why Concentration Matters

Flower with less than 10% THC has vanished from the WA market



Smart R, Caulkins JP, Kilmer B, Davenport S, Midgette G. Variation in cannabis potency and prices in a newly legal market: evidence from 30 million cannabis sales in Washington state. *Addiction*. 2017;112(12):2167-2177.

Health Risks and Consequences

Higher potency increases risk of CUD

Takeaway:

Use of cannabis with high THC concentration (or high potency) increases the chances of developing Cannabis Use Disorder (CUD) or addiction to cannabis, particularly among young people.

Context:

- ✓ These studies have been conducted by observing people over time (prospectively or retrospectively.)
- ✓ It is not ethical to conduct studies that randomize people to different concentrations of cannabis to ascertain risk of addiction overtime.
- ✓ The scientific knowledge related to the higher potential of addiction of crack (vs. cocaine) or fentanyl (vs. heroin) are also observational in nature.

Health Risks and Consequences

Dose-response relationship
Negative impact of cannabis use during adolescence

Take Away:

Strong evidence exists on the detrimental impact of THC use during adolescence.

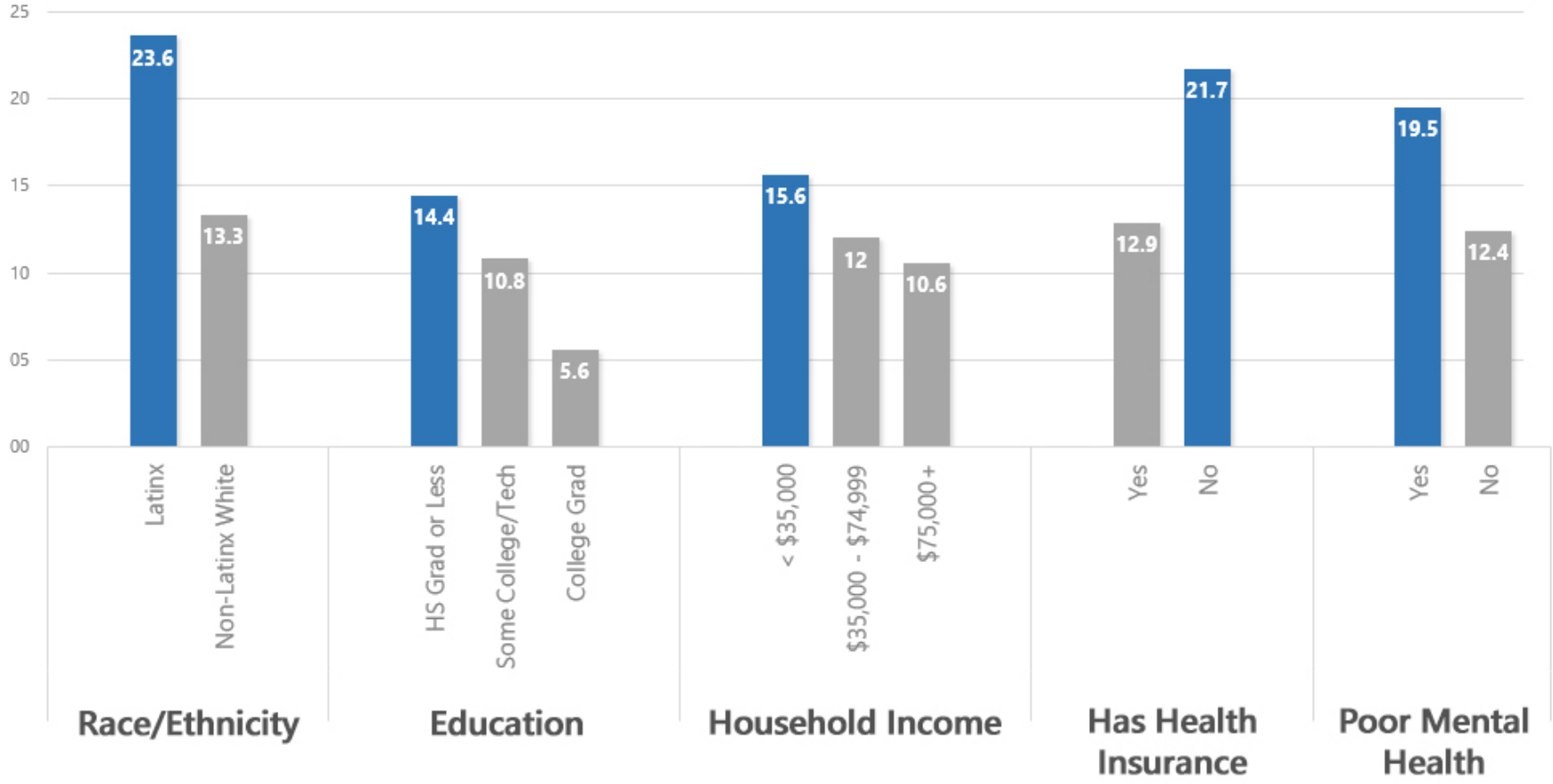
- This impact can be modeled in adolescent rodents, providing an opportunity to study the response of the developing brain and explore treatment approaches.
- Available evidence suggests a dose-response relationship, where negative impacts are higher with highly potent THC and/or more frequent use.

Context:

Human studies suggest that limiting the availability of high-potency cannabis may reduce the number of individuals who develop CUD and the risk of mental health disorders.

Who is Most Affected?

People who dabbed cannabis in the past 30 Days (%) were more likely to be Latinx, have less education, a lower household income, no health insurance, and poorer mental health



Caislin Firth, PhD, University of Washington
Data Source: 2015-2017 WA Department of Health, Behavioral Risk Factor Surveillance System (BRFSS)

Consensus Statement

…..research available to date documents that THC content of cannabis products contributes to adverse health effects in a dose-response manner. This increased risk imposed from using higher potency cannabis products is particularly concerning for young users and those with certain pre-existing mental health conditions. These harms are likely to disproportionately affect marginalized populations (low income, minorities) who choose high potency products because of their lower costs, ease and discrete nature of use, glamorization of its use through social media and advertising, and perception of safety

https://adai.uw.edu/wordpress/wp-content/uploads/2020/11/Cannabis-Concentration-and-Health-Risks-2020.pdf

Example of Local Initiative

King County

Best Starts for KIDS

School-Based SBIRT

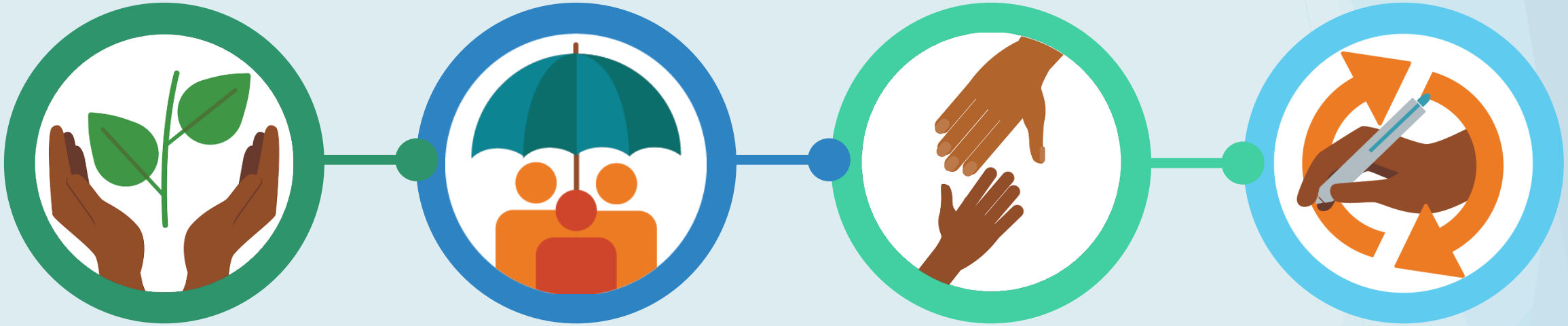
King County MIDD
Supporting behavioral health and recovery

Margaret Soukup, MFT

Seattle Children's
HOSPITAL • RESEARCH • FOUNDATION

August, 24, 2021

PRINCIPLES



PROMOTION

PREVENTION

EARLY INTERVENTION

POLICY & SYSTEMS CHANGE

STRATEGIES AND INVESTMENTS

- Investing Early (P-5)
- Sustaining the Gain (5-24)
- Communities Matter
- Homelessness Prevention
- Data and Evaluation

Sustaining the Gain

from kindergarten through college and career

School-based Screening, Brief Intervention, and Referral To services (SBIRT)

Screen

+

Intervene

+

Refer

Screening:

Self Directed Universal screening using the *Check Yourself-SB* Tool.

Brief Intervention:

School interventionist connects with students, (and their caregivers when needed) using Motivational Interviewing principles.

Referral:

Students with identified need for support may referred to resources.

King County

Best Starts for KIDS

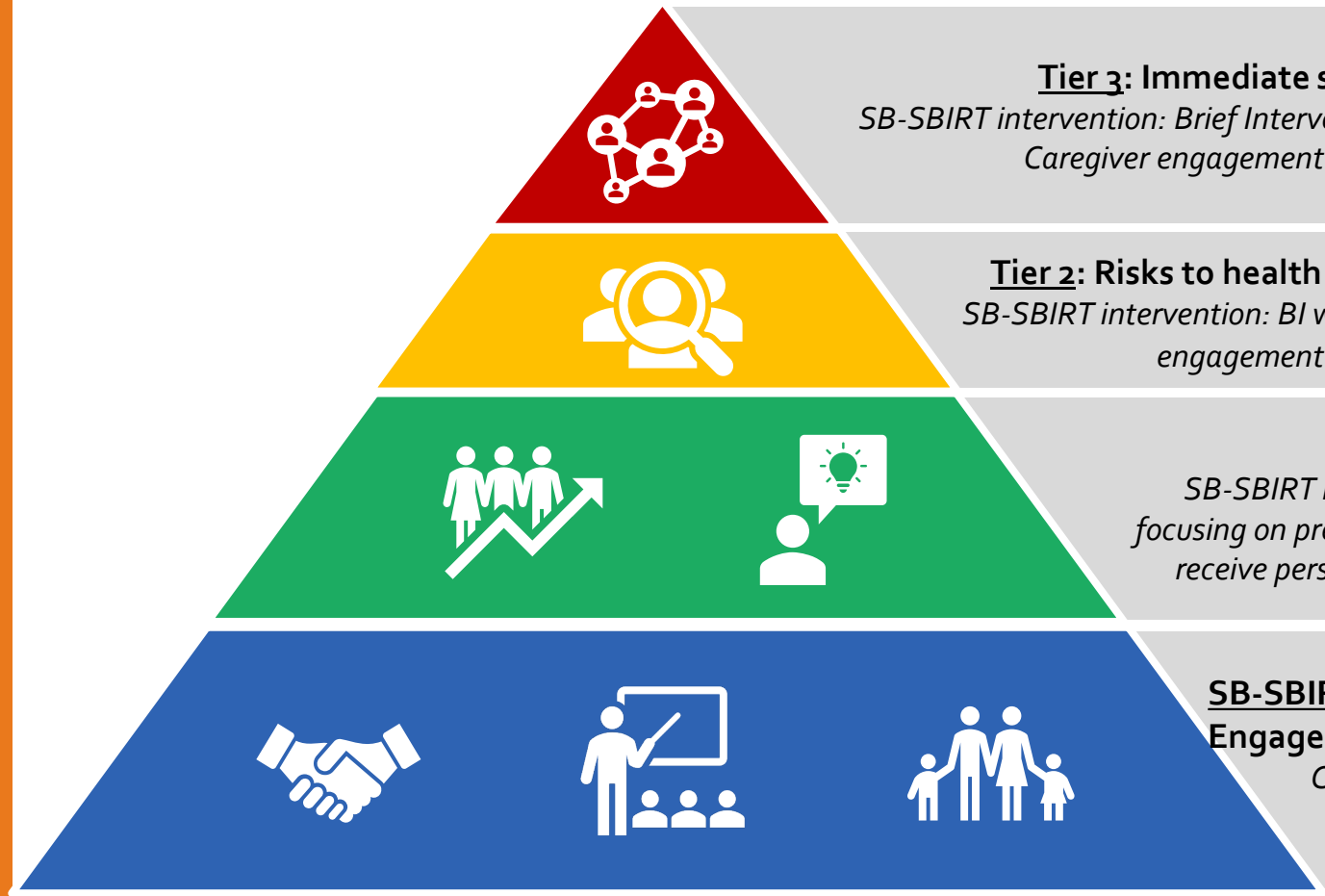
School-Based: SBIRT Overview

Objectives:

- Ensure students have the supports they need to thrive by: promoting resilience and protective factors and preventing or delaying the onset of substance use.
- Create a clear, coordinated and integrated system of social-emotional care.
- Expand model to High School and College Students

Introduction
Continued

SB-SBIRT Support Within a Tiered Framework



<u>Tier 3</u>: Immediate safety concerns endorsed at screening
SB-SBIRT intervention: Brief Intervention (BI) with student ≤1 day of screening. Caregiver engagement and referral to services/supports as needed.

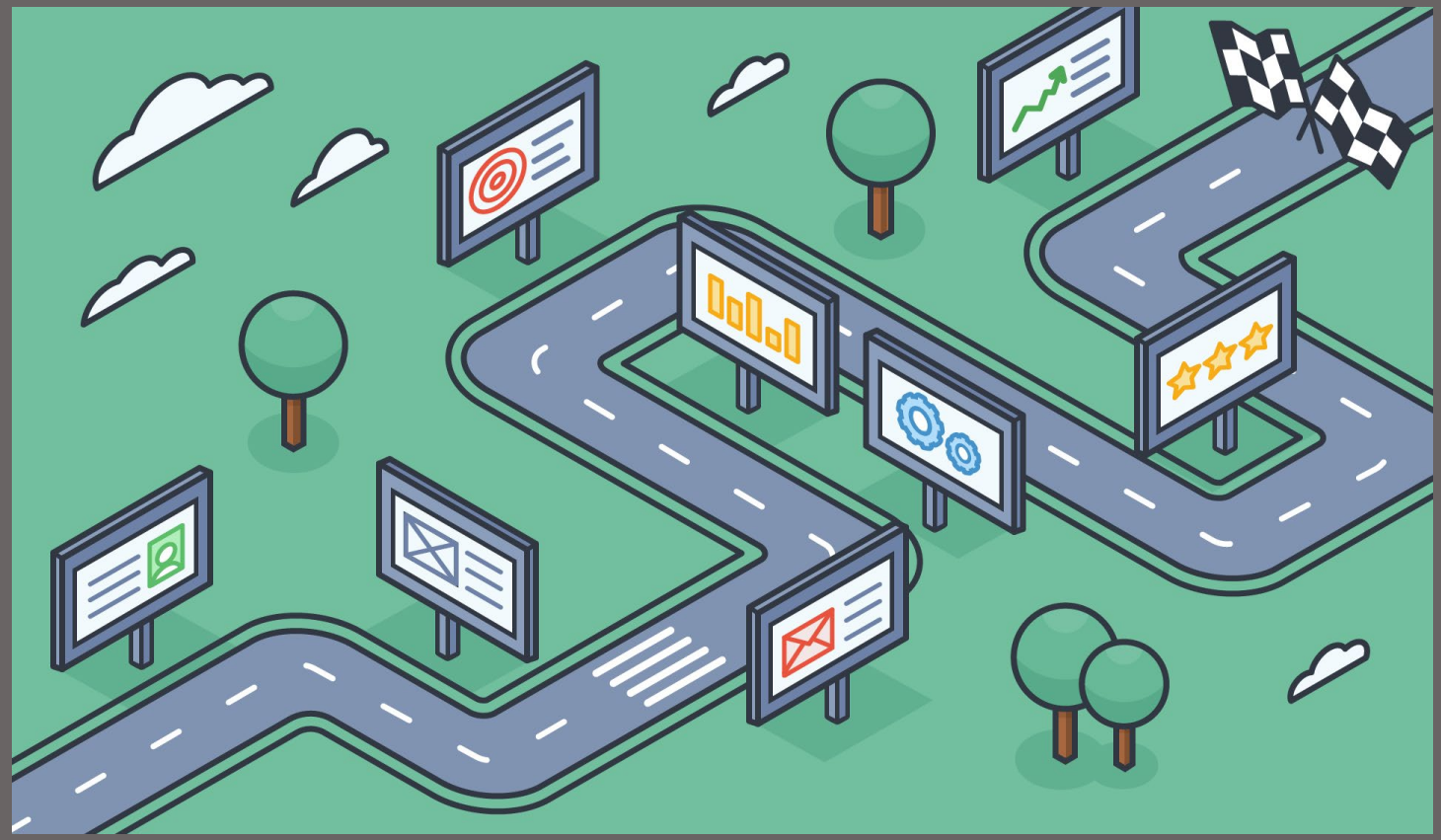
<u>Tier 2</u>: Risks to health and well-being endorsed at screening
SB-SBIRT intervention: BI with student (timing not specified). Caregiver engagement and referral to services/supports as needed.

<u>Tier 1</u>: No risks endorsed at screening
SB-SBIRT intervention: School-wide or group activities focusing on prevention and health promotion. All students receive personalized feedback as part of Check Yourself.

<u>SB-SBIRT Foundation</u>: Community Engagement
Communication with caregivers, families and community-based organizations to share information about SB-SBIRT.

IMPLEMENTATION CONSIDERATIONS

- Preparation Beforehand
  - District Level
  - School Level
- Implementation
  - Before Screening
  - During Screening
  - Triage After Screening
- Brief Intervention
- Referral To (if needed)



What to expect

Your responses to these questions will help us understand if you may need or want more support.

Someone has explained to you how your answers will be kept private and in what situations they could be shared. Please follow-up with them if you have any questions. The support team at your school may follow-up with you about your

I accept

I decline

S: Screening

Check Yourself-SB Overview

About Me

- Age & grade
- Goals
- Race/ethnicity, language
- Gender
- Romantic attraction
- Supports

My Health & Safety

- Experiences at home
- Bullying and safety at school
- Sleep
- Getting along with others
- Substance use and intention to use
- Somatic symptoms (aches & pains)

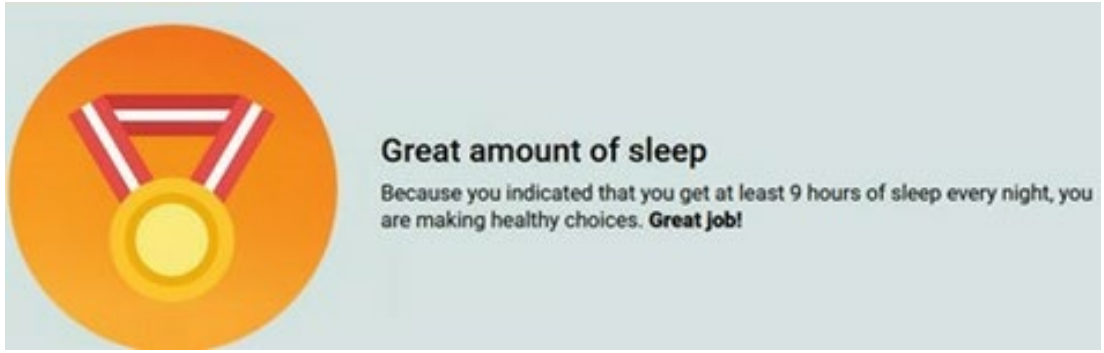
My Stress & Coping

- Coping skills & protective factors
- Anxiety symptoms
- Depression symptoms
- Self harm & suicidal ideation
- Connection to adults at school

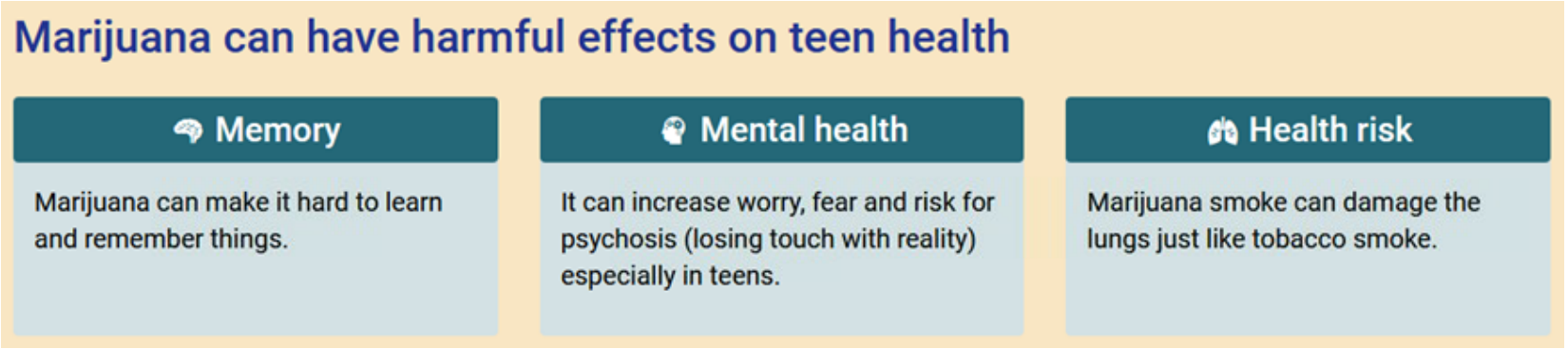
Check Yourself- SB Feedback

Key components of feedback:

- Education
- Comparisons to peer behavior
- Risks and benefits
- Tips for behavior change



Adolescents who are not engaging in risk behaviors receive positive reinforcement.



The Time

- Average of **30 mins** per classroom: including computer set up, instruction, screening, personalized info, debrief
- Sorting / Triaging meeting has been taking us about **60 mins** on average
  - Identifying Students
  - Assigning to Staff
  - Notes/Background Info

Triage or Sorting

SB-SBIRT Risk Categorization

SB-SBIRT uses a tiered follow-up structure that prioritizes students who endorse risk factors. The below algorithm was used to categorize students as Tier 1, Tier 2, or Tier 3 based on the risk factors endorsed. All students received personalized feedback and answered questions about protective factors and relevant context such as goals, home life, and coping strategies.

Levels	Tier 1 Personalized Feedback/No Flag	Tier 2 Brief Intervention	Tier 3 Immediate BI + referral
Screening Criteria	• Reports low sleep only • Reports e-cig/cig use only • Reports intention to use e-cig/cig in the next year **All students regardless of behaviors endorsed see feedback on:** • Tips for improved sleep • Info that most teens don't drink or use marijuana and the risks of alcohol and marijuana use • Info about the harms of vaping on your health • Tips to prevent depression, why checking your mood is important	• Reported using substances (other than e-cigs/cigs) in the past school year • Reported frequent aches & pains • Depression symptoms (PHQ-2 +) • Anxiety symptoms (GAD-2 +) • Wants to speak with a counselor confidentially in the next few weeks. • Reports intention to use marijuana or alcohol in the next year (maybe or likely to use) • Feels harassed/threatened in some way in the past year • Reports experiencing any symptoms from trauma more than 1 month ago	• Endorses self-harm or suicidal thoughts • Reports experiencing any symptoms from trauma over the past month • Feels harassed/threatened in some way in the past year and that their safety is currently at risk • Wants to speak with a counselor confidentially asap
Relevant Context	• Biggest supports • Best qualities • Goals • Has trusted adult • Coping strategies • Sleep hours • Home life – food or housing insecurity, safety issues • Knowing if the student is already receiving services (mental health)		

SO... WHAT HAPPENED?!?

Findings
Continued

Youth Connection with Adults at School

Is anyone better off?

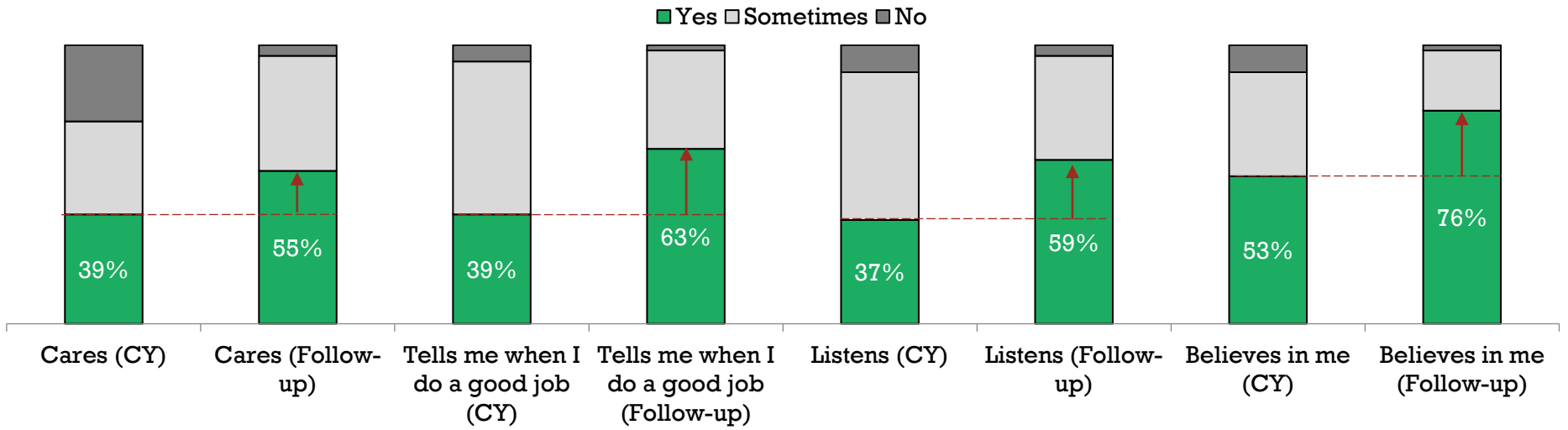
One of the protective factors asked about in the Check Yourself screening tool is youth connection with adults at school, a measure of students' external supports. The school connection scale is composed of four questions, drawn from an existing validated survey of student external supports and internal factors called the Student Resilience Survey.[1] In order to understand whether SB-SBIRT is an appropriate model of support for middle school students' health and wellbeing, we assessed whether students reported higher connection with adults at school after participating in the program. Student responses on each of the school connection questions improved after participation in BI and half of the participants reported higher connection with adults at school after SB-SBIRT.

52% of youth reported higher school connection after participating in SB-SBIRT.

22% reported the highest possible score for school connection at baseline.

Change in Youth Responses to School Connection Scale Questions (Baseline to Follow-up) (n=65)

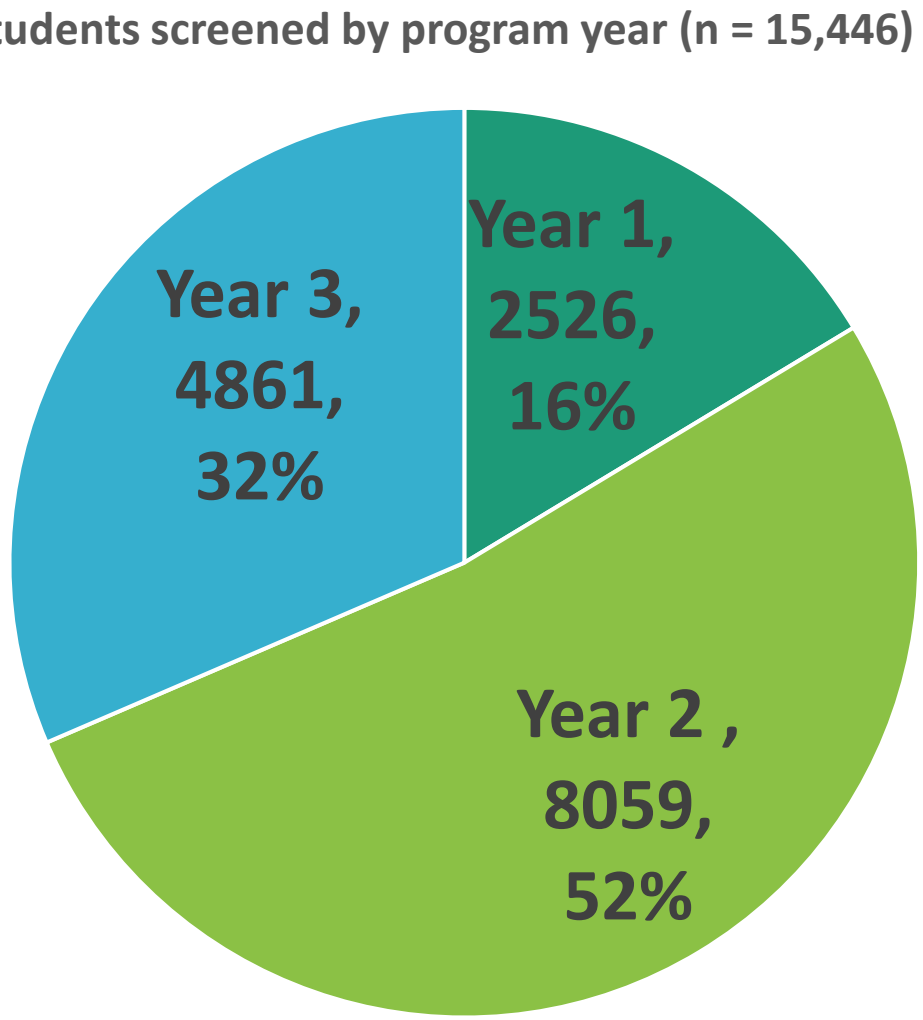
At school there is an adult who…



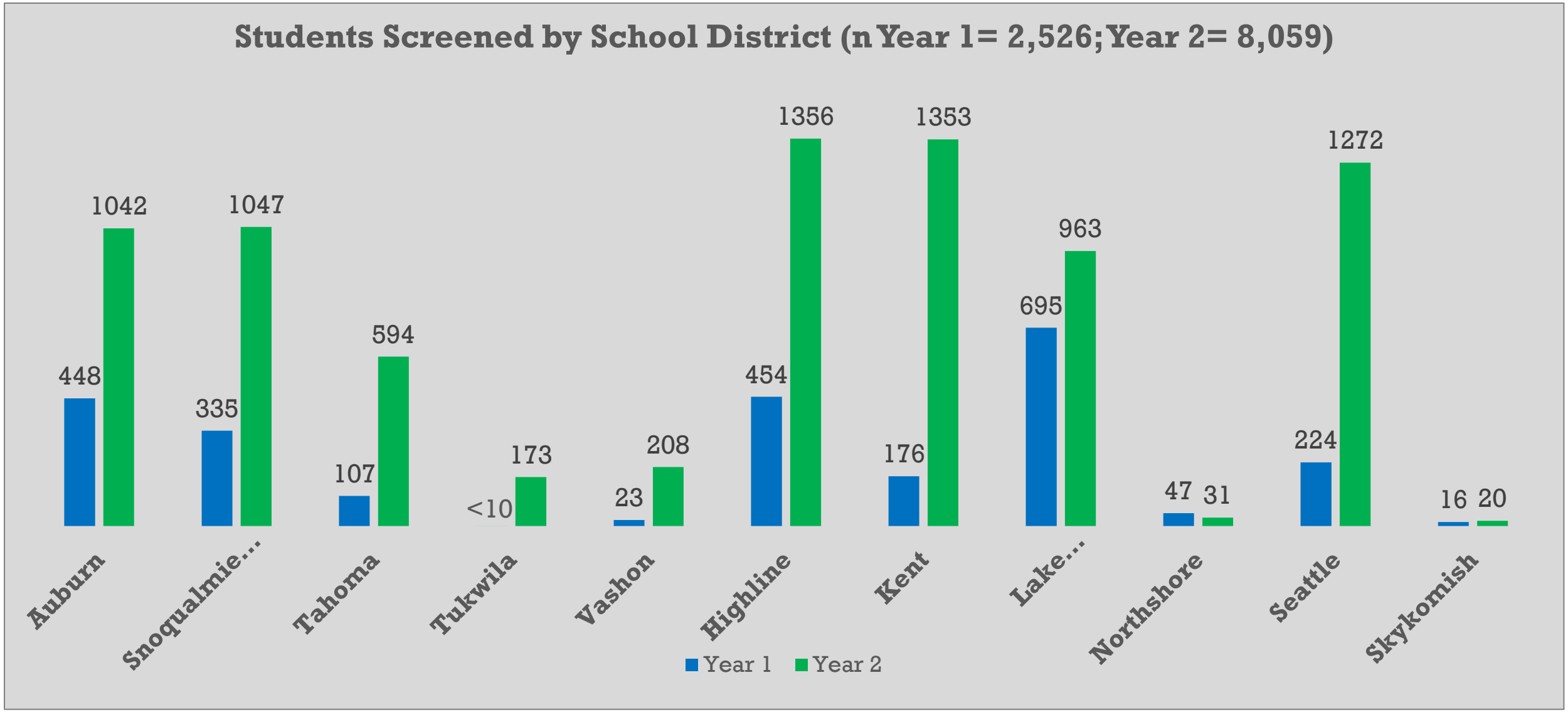
Data Source: Youth Post-BI Survey (n=65)

[1] Bereya et al. The student resilience survey: psychometric validation and associations with mental health. Child Adolesc Psychiatry Ment Health (2016) 10:44. OI 10.1186/s13034-016-0132-5

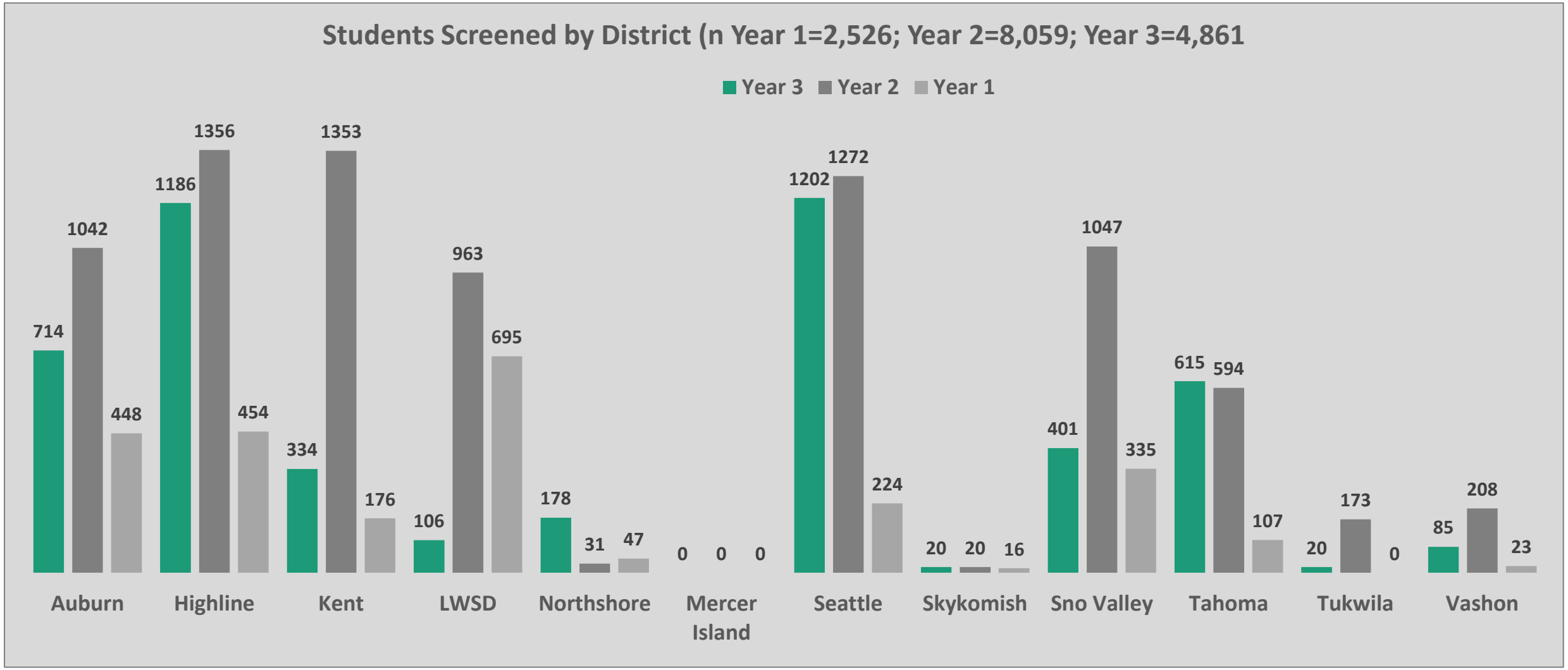
Over 15,000 have students participated in SB-SBIRT to date



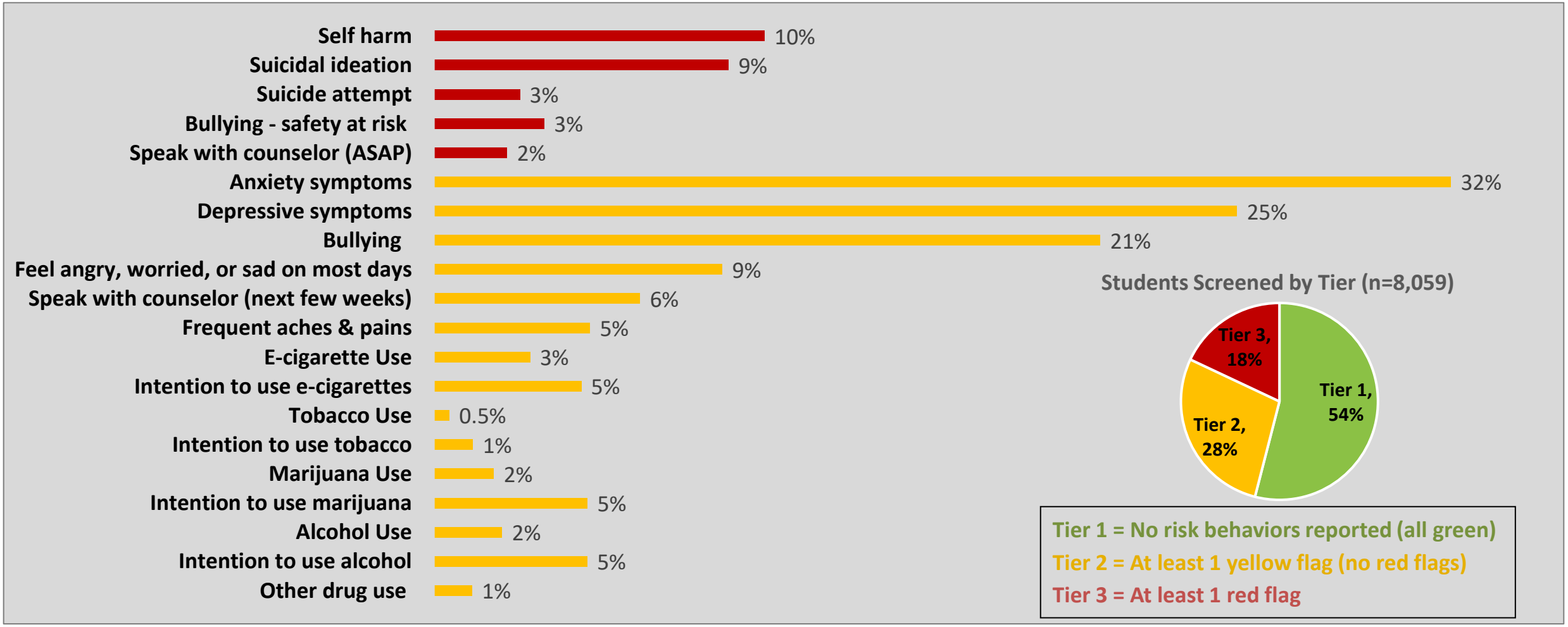
8,059 STUDENTS SCREENED USING CHECK YOURSELF-SB DURING 2019-2020 SCHOOL YEAR



4,861 Students Screened Using Check Yourself-SB during 2020-2021 School Year

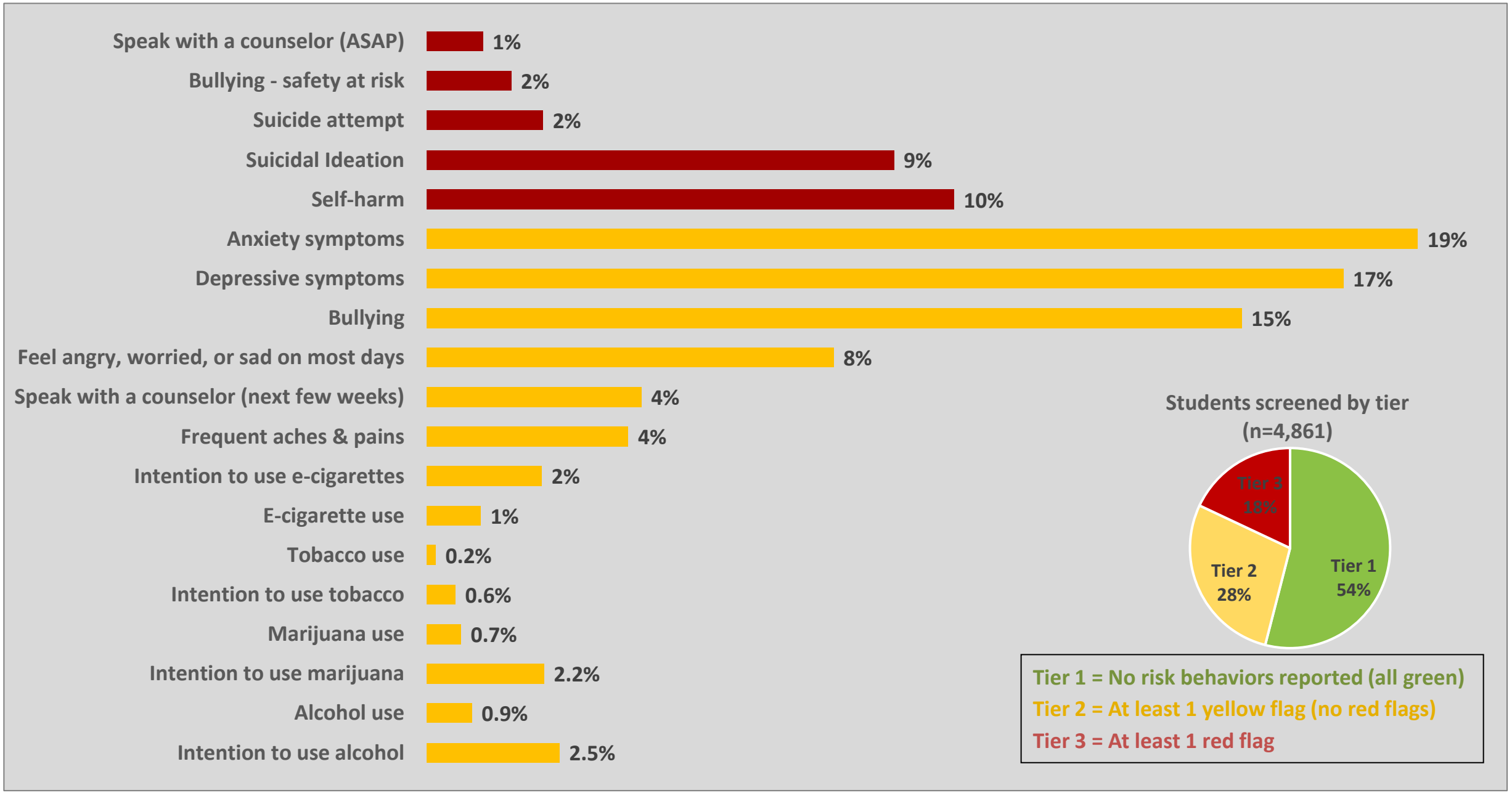


Students Who Endorsed Risk Factors During Screening (n = 8,059)



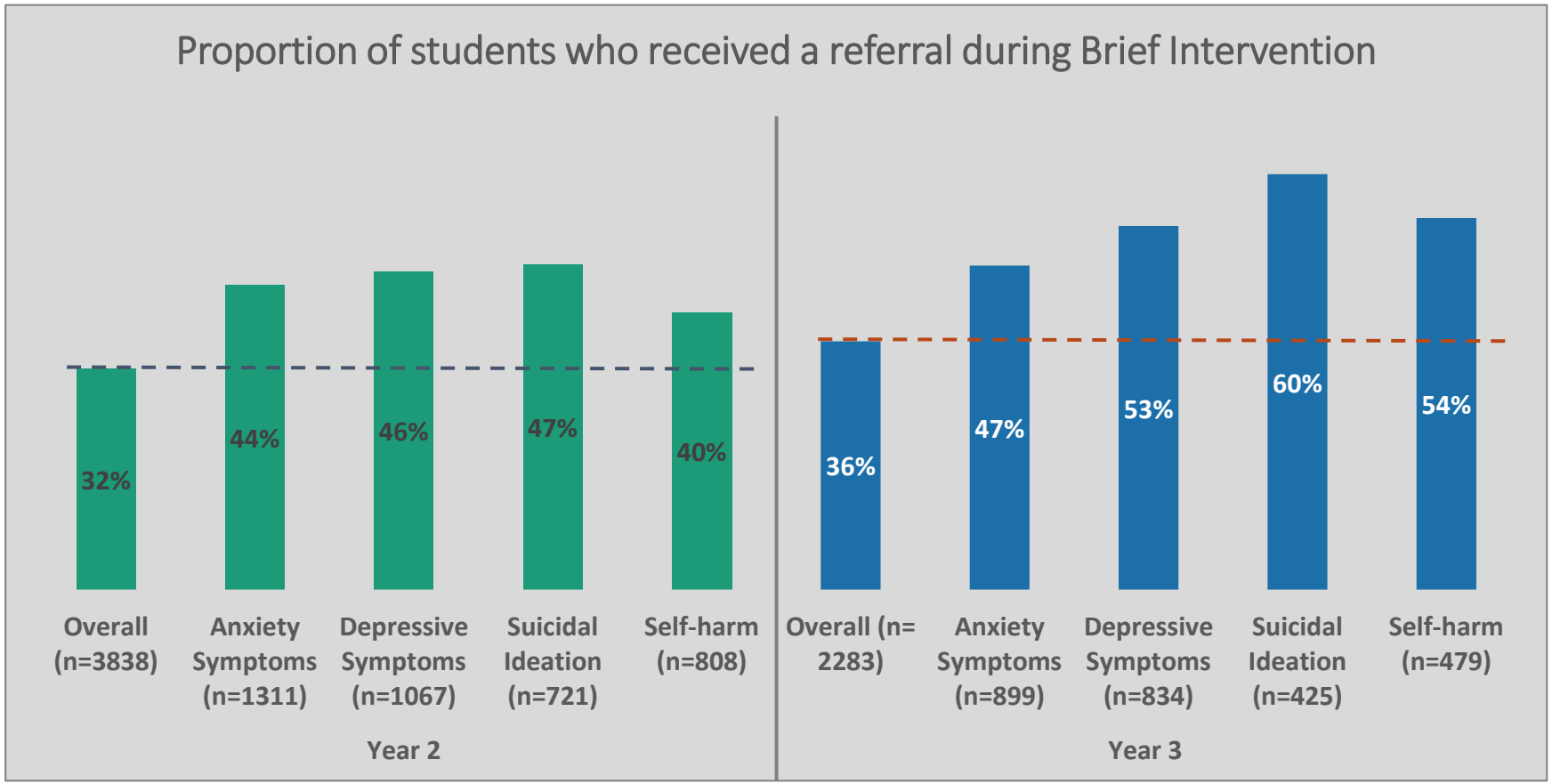
- **Students who reported suicidal ideation (748)** also frequently reported depressive symptoms (75%), anxiety symptoms (72%), bullying (54%), and self-harm (53%)
- **Students who reported anxiety symptoms (2,581)** also reported depressive symptoms (59%), feeling angry, sad, or worried on most days (23%), and suicidal ideation (21%)

Students Who Endorsed Risk Factors During Screening (n = 4,861)

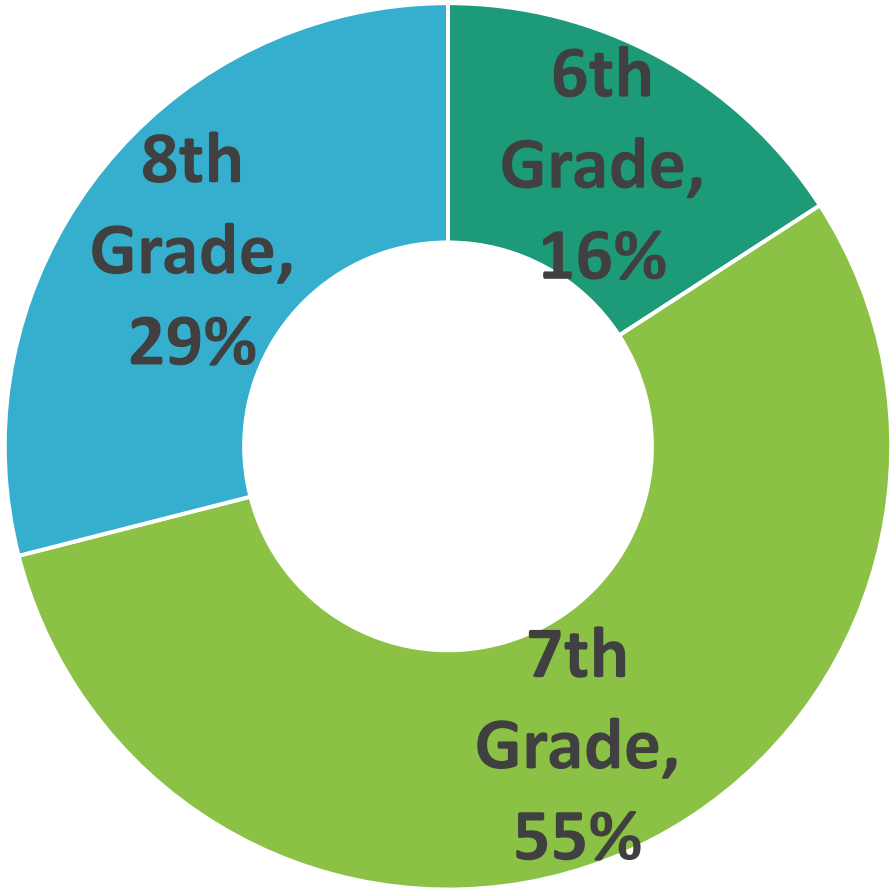


Referrals Provided

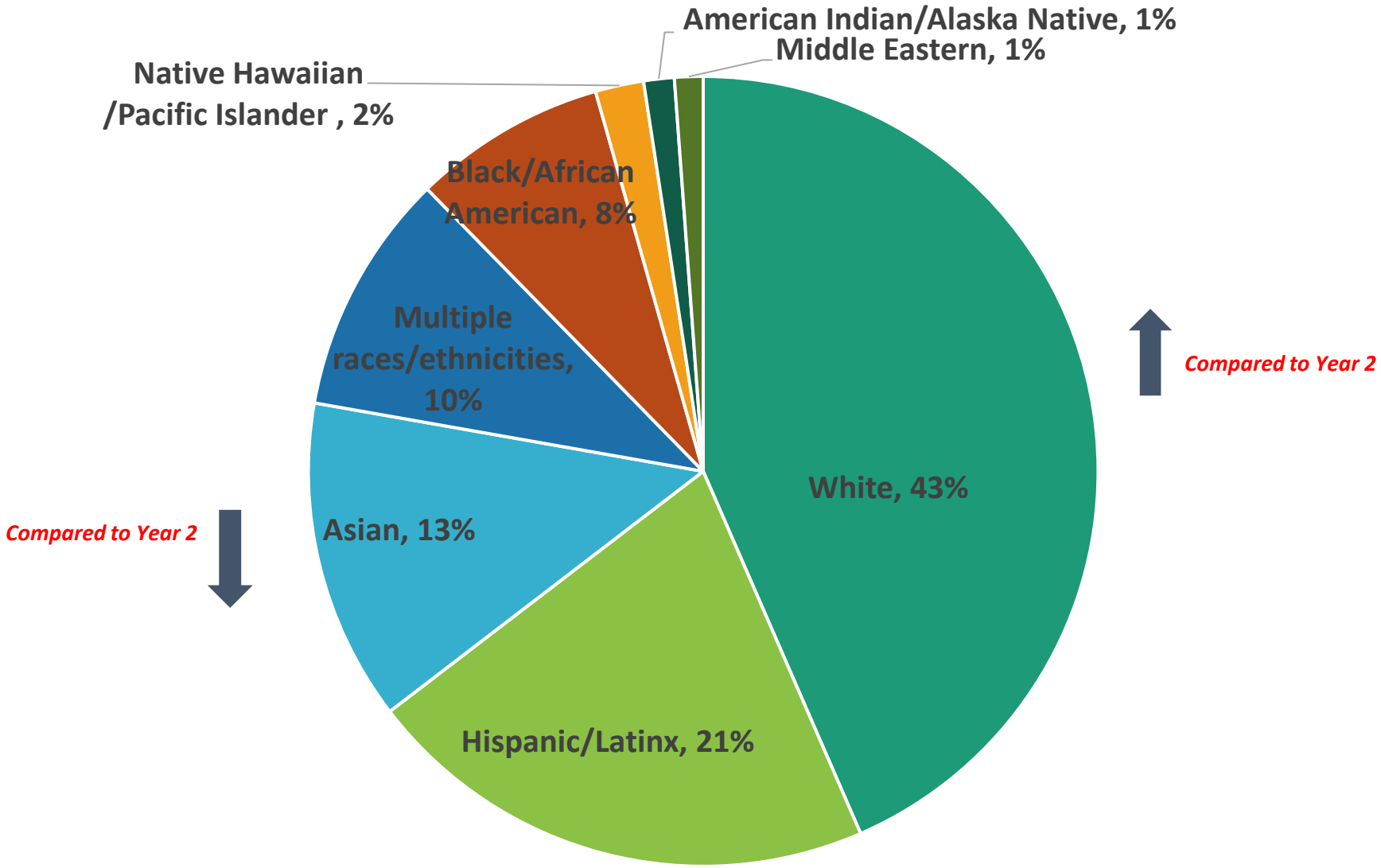
A higher proportion of students who endorsed anxiety symptoms, depressive symptoms, suicidal ideation or self-harm received a referral during BI.



Students Who Participated in the SB-SBIRT Program in Year 3 Were in:

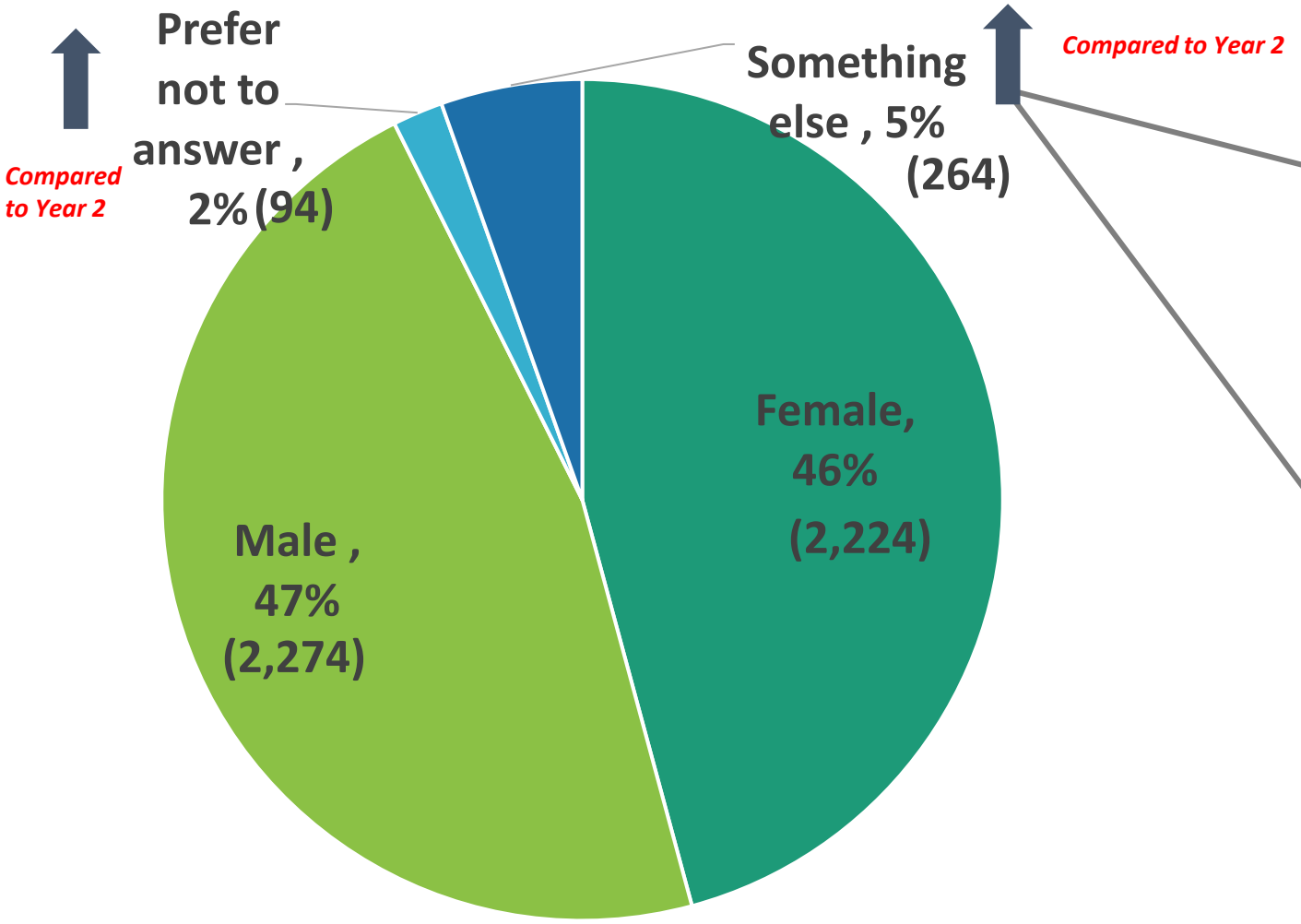


Students Who Participated in the SB-SBIRT Program in Year 3 Identified their Race or Ethnicity as:



*Race/ethnicity was unknown for 65 students. This includes student responses that did not indicate a race or ethnicity and those who did not answer this question in Check Yourself.

Students Who Participated in the SB-SBIRT Program in Year 3 Identified their Gender as:



Questioning Gender Identity	99 (2%)
Transgender and Non-binary	98 (2%)
Something else fits better (wrote in answer)	67 (1%)

Mental Health Trends Data

This programmatic data was collected as part of the King County school-based SBIRT initiative at participating middle schools during 2019-2020 and 2020-2021 school years.

- Year 2 (2019-2020) school year includes data from 11 King County school districts: Auburn, Highline, Kent, Lake Washington, Northshore, Seattle, Snoqualmie Valley, Skykomish, Tahoma, Tukwila and Vashon.

- Year 3 (2020-2021) school year data includes data from 11 King County school districts: Auburn, Highline, Kent, Northshore, Lake Washington, Seattle, Snoqualmie Valley, Skykomish, Tahoma, Tukwila, and Vashon.

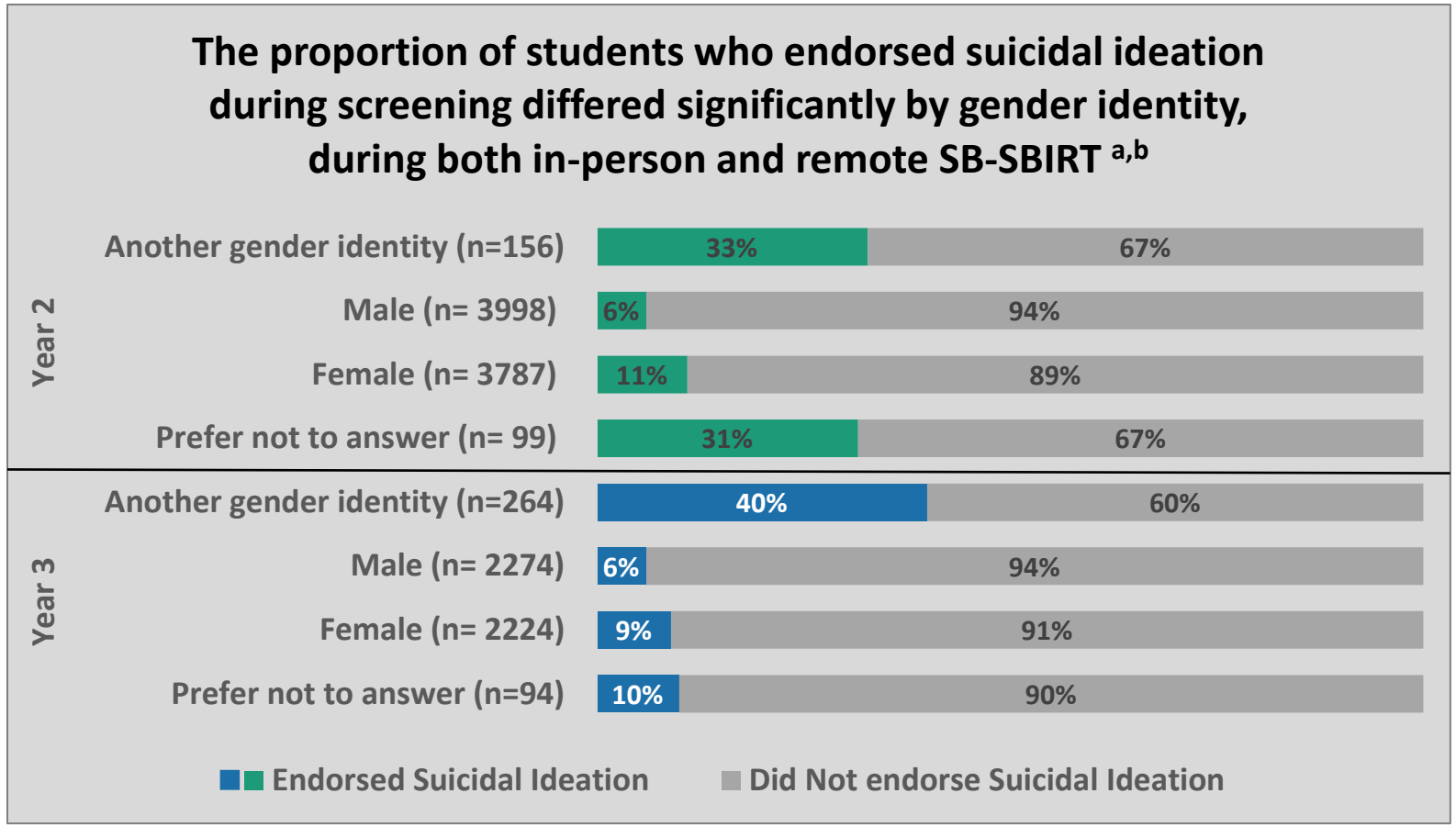
Strengths:

- We have collected both pre-COVID and post-COVID data.
- Many students participated in SB-SBIRT in Years 2 and 3 (8,059 and 4,681 respectively) making our sample size very large.

Limitations:

- Quantitative data may not tell us why trends exist.
- Referral connection data was reported by interventionists who conducted BI and may not be complete.
- Year 3 data includes both remote and in-person SB-SBIRT administration.

Suicidal Ideation and Student Gender



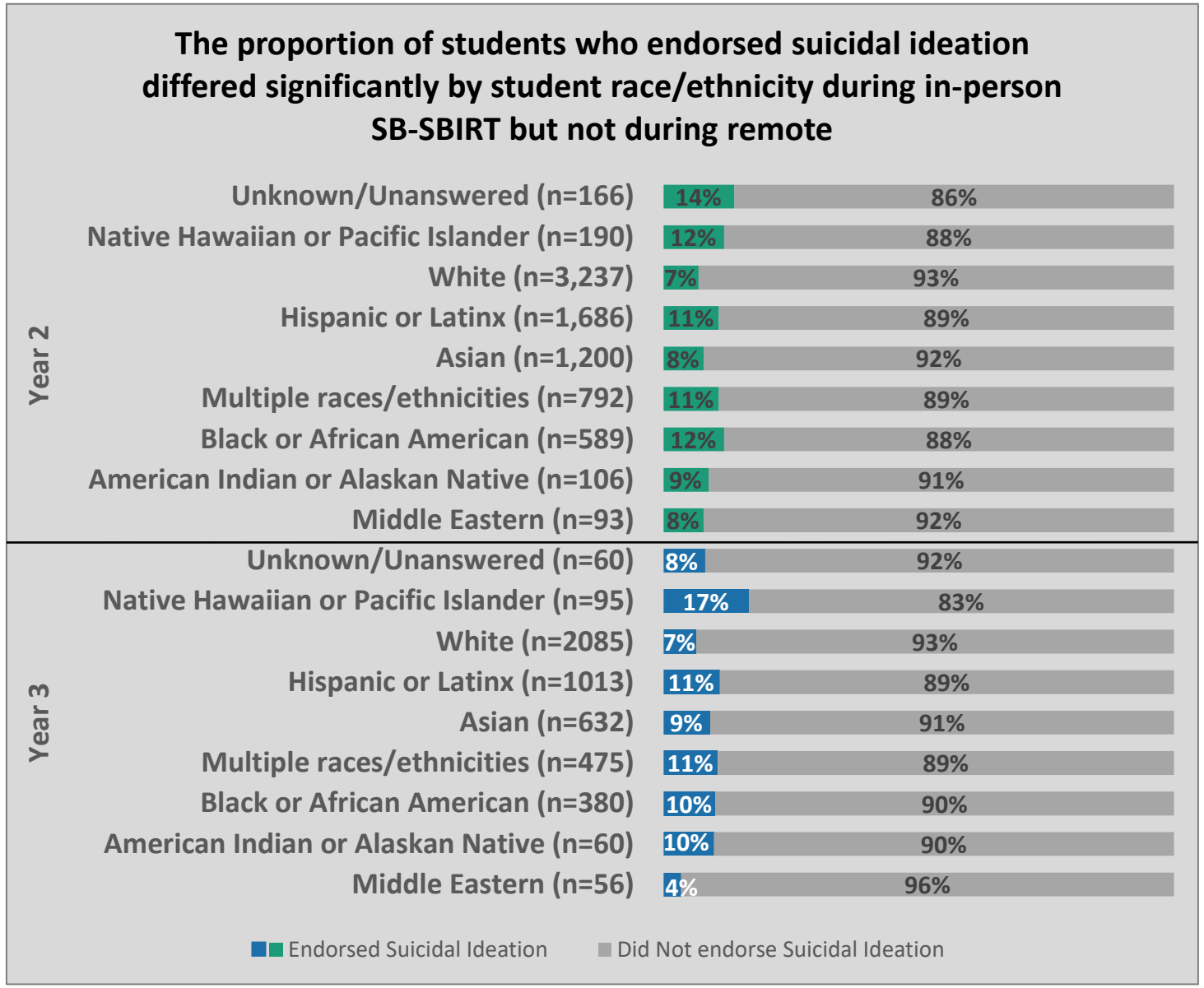
The overall proportion of students who endorsed suicidal ideation did not change in Year 3

- **9%** of students endorsed suicidal ideation
- **The rate of suicidal ideation was higher in gender diverse youth than among all students who participated in SB-SBIRT in both Year 2 and Year 3.**

[a] *"Another gender identity" includes: transgender, non-binary, questioning, and "something else fits better". These were grouped to maintain privacy.*

[b] *Gender data was missing for 19 students in the in-person sample (n=8,059) and 5 students in the remote sample (n=4,861).*

Suicidal Ideation and Student Race/Ethnicity



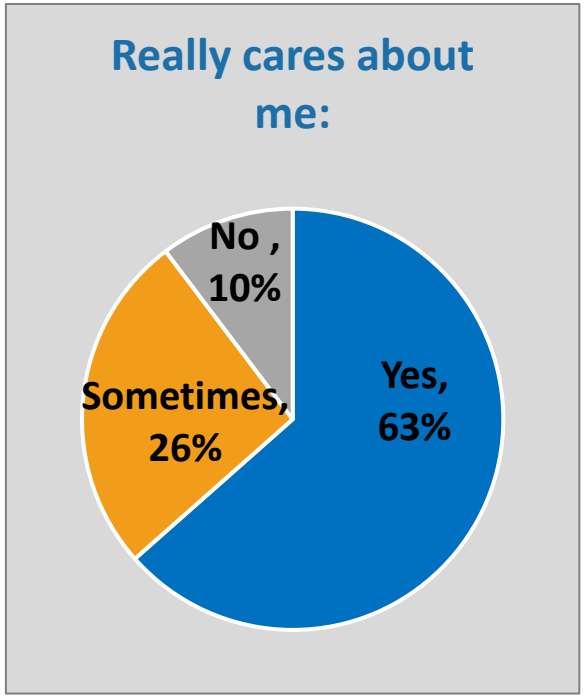
Suicidal ideation was higher in students who identified as:

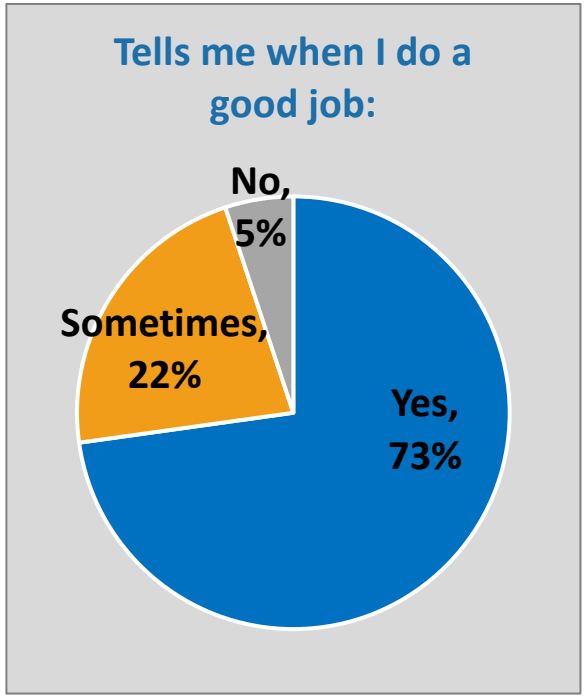
- ***Native Hawaiian or Pacific Islander***
- ***Black or African American***
- ***Hispanic or Latinx***
- ***Multiracial***

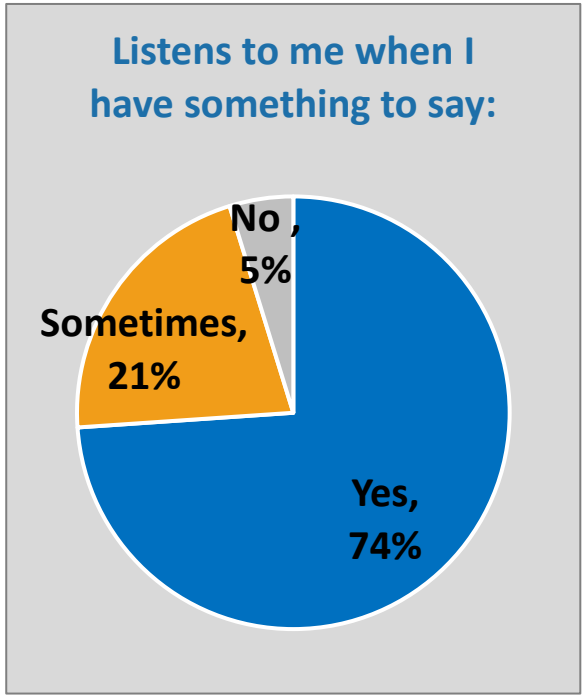
In Year 3, a significantly higher proportion of students who identified as Native Hawaiian or Pacific Islander endorsed suicidal ideation (17%) compared to the overall proportion of students who endorsed suicidal ideation (9%).

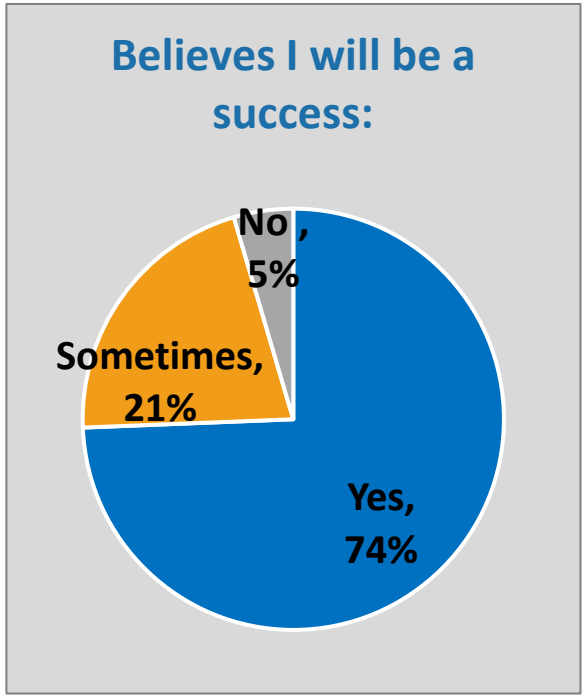
Student Protective Factors: Connection with Adults at School

At school there is an adult who…



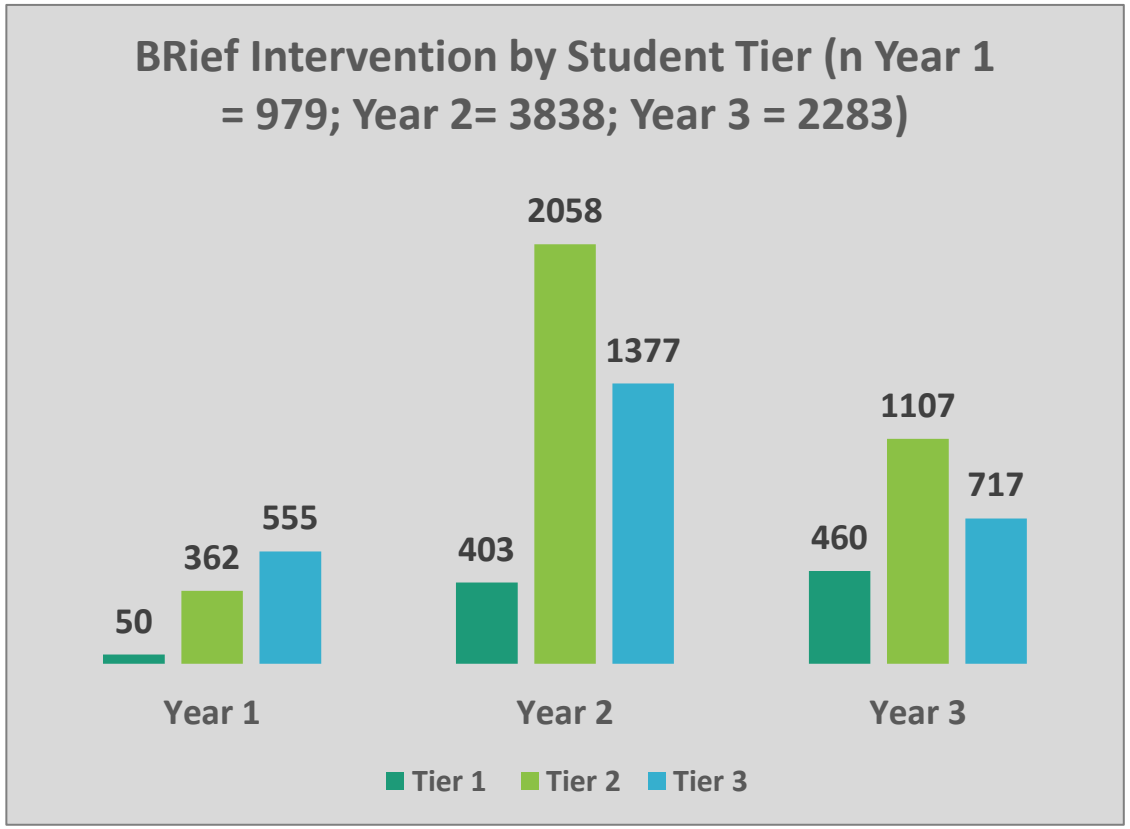






2,283 Students Received Brief Intervention (47% of all students screened)

98% of Tier 3 and **89% of Tier 2** students received Brief Intervention



Brief Intervention Timing:

90% of students who endorsed suicidal ideation received BI within 1 day of screening (82% in Year 2)

91% of Tier 3 youth received BI within 2 days of screening (85% in Year 2)

77% of Tier 2 youth received BI within 14 days (75% in Year 2)

Unknown Student Needs Identified During SB-SBIRT

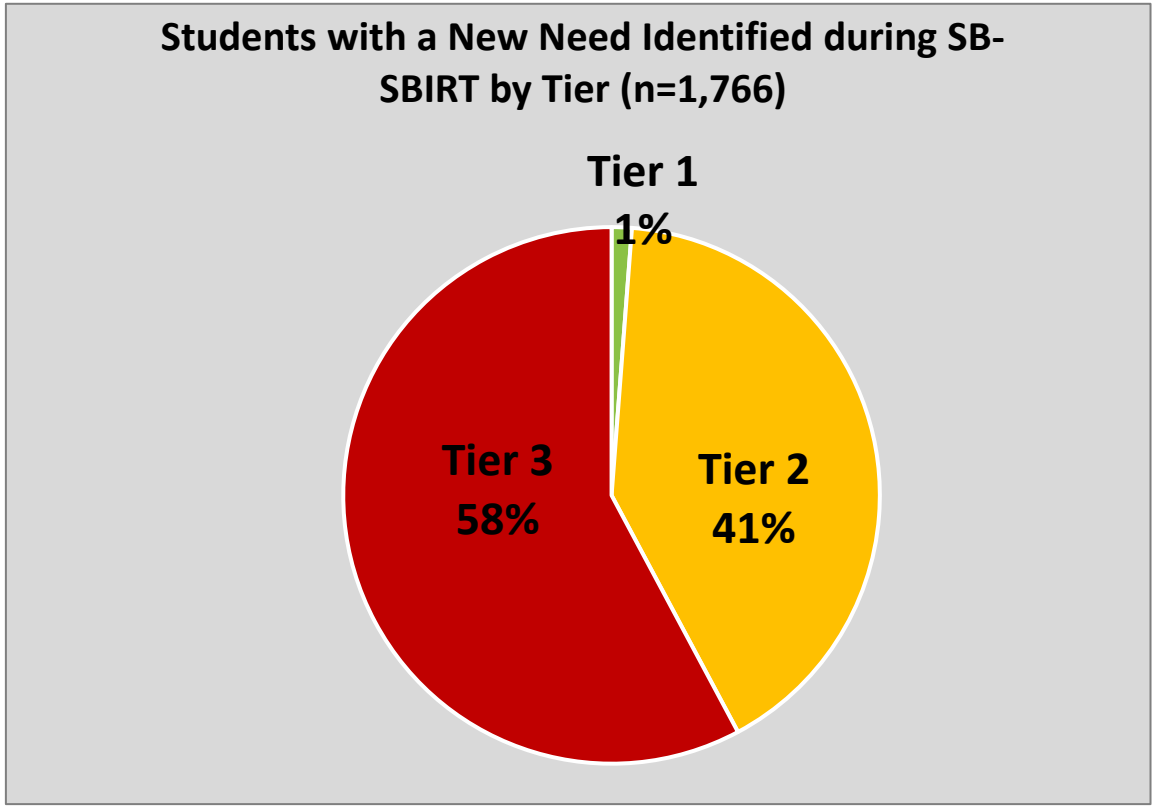
1, 766 students (46% of students who received BI; 22% of all screened) had a new need identified.

956 students (54% of all with a new need identified) had 2 or more new needs identified during SB-SBIRT.

Students who had a new need identified reported lower connection with adults at school than those who did not have a new need identified.

Top Five Risk Factors Identified:

- Anxiety symptoms (33%)
- Bullying or harassment (25%)
- Suicidal ideation (20%)
- Depressive symptoms (19%)
- Self-harm (19%)



Looking Ahead to Year 4: Completing the Outcome Evaluation

- Final year of Program Evaluation activities
- Continuing student, caregiver, and staff surveys
- Reflection events with students, caregivers, and staff on program data and findings
- BSK final report: December 2021
- Outcome Evaluation final report December 2022

Discussion and Q&A