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Addressing the Fentanyl Crisis: Practice Considerations for School-Based Activities

Overview



Understand	Understand the common problems and impact surrounding the opioid epidemic.
Present	Present our project goals, description, and evaluation strategy.
Uncover	Uncover common themes in our findings of the current research.
Propose	Propose the MTSS Framework as a tool for implementing holistic school-based strategies for youth.
Unpack	Unpack SBIRT and WellScreen as a school-based intervention.
Consider	Consider recommendations for school administrators and law enforcement based on the current literature.
Look	Look at the challenges of implementing substance use prevention programming into school-based settings.
Learn about	Learn about the needs for future research on this topic.

The Problem



Opioid Crisis

- Fentanyl is a significant public health crisis affecting millions of adults and youth nationwide.
- Approximately 85% of overdose deaths involve illicitly manufactured Fentanyl, heroin, cocaine, or methamphetamine (CDC, 2022a).
- In 2020, about 56,000 overdose-related deaths involved synthetic opioids (CDC, 2022b)

Potency

- Fentanyl is a potent synthetic opioid that is highly dangerous.
- Fentanyl is up to 50 times stronger than heroin and 100 times more potent than morphine (CDC, 2022; Muller & Ceron, 2022).
- Fentanyl's highly addictive properties, and high potency, even in small doses, make it a dangerous opioid with a high probability of lethality or, at minimum, the occurrence of lifelong negative consequences on adolescent's quality of life, health, academic performance, and legal issues.

Lethality

- As with other illicit substances, the manufacturing of Fentanyl, and combination with other lethal substances, makes the drug extremely lethal (CDC, 2022a).
- These drugs have a high mortality rate at low levels of consumption.

The Problem

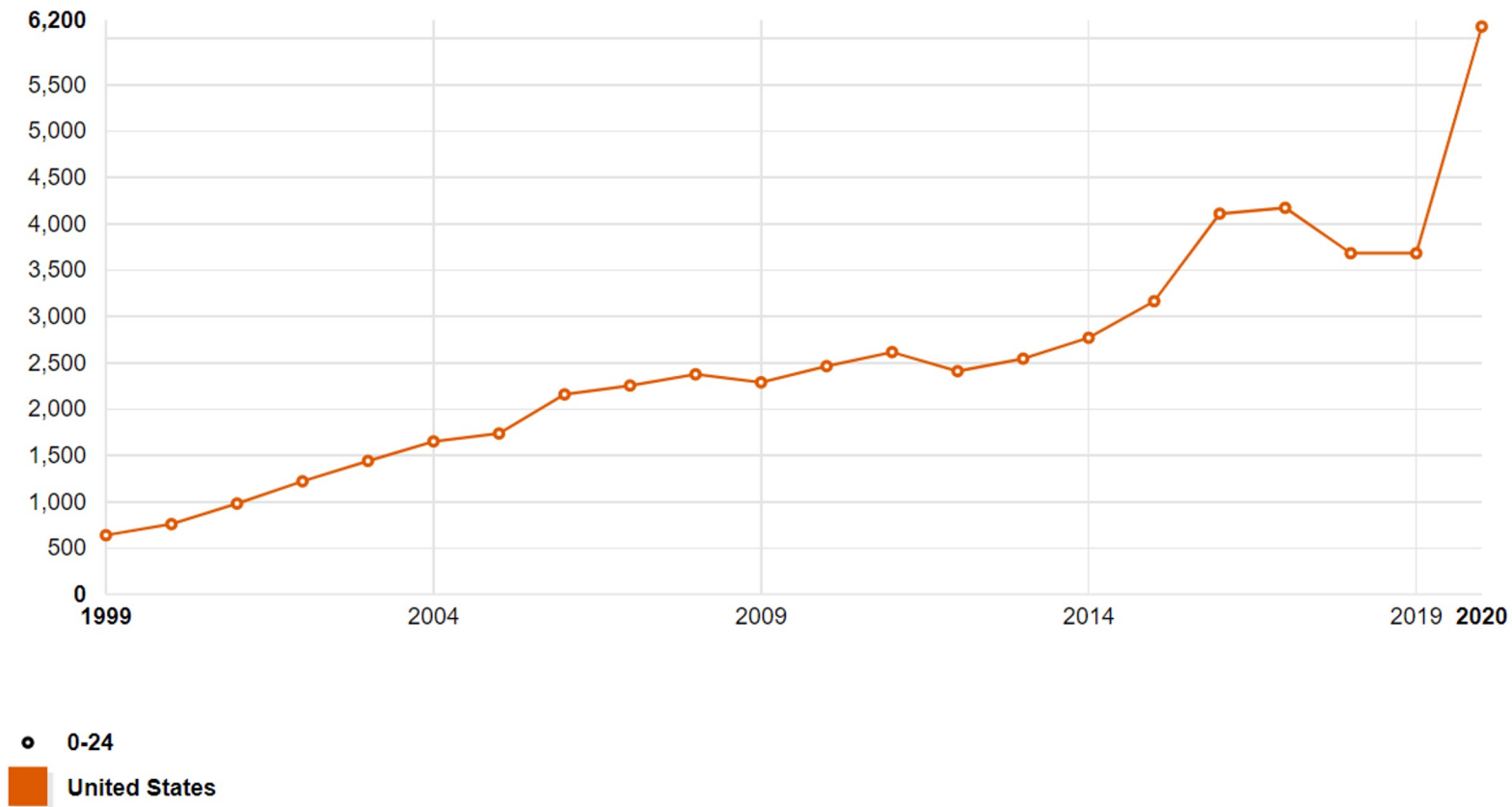


Mixing Opioids: Fentanyl and Xylazine

- There is an emerging threat of fatality when combining Fentanyl with Xylazine.
- Xylazine is a drug initially intended as a veterinary tranquilizer, often mixed with Fentanyl.
- Medical complications of combining lethal drugs create lifesaving emergency necessities.
- The combination of these lethal drugs is a severe emerging trend increasing overdose deaths (Peng, 2023).

Consumption in the youth population

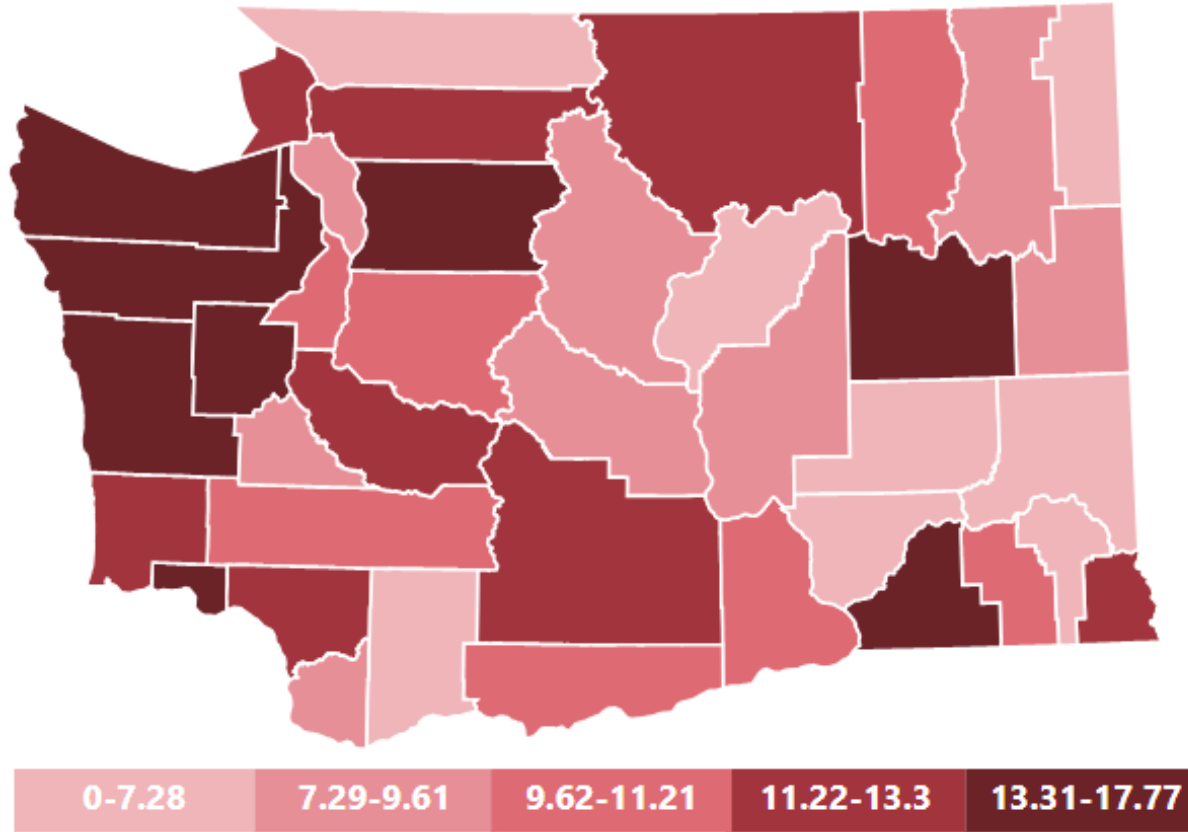
- Opioid deaths have increased by about 500% among those ages 15-24 National Center for Drug Abuse Statistics (N.D.).
- Between 2019 and 2020, there was a 94% increase in O.D. deaths due to Fentanyl in youth (Knopf, 2022; Miranda, 2022).
- Need to address the fourth wave of the opioid crisis (Breitenbucher et al., 2023).



Scope of the Problem

Opioid overdoses for people ages 0-24 has significantly increased in the last 20 years, and in 2019 became a crisis fueled by the synthetic opioid Fentanyl.

Age-Adjusted Rate of Opioid Overdose Deaths by County per 100,000
Population, 2016-2020



Scope of the Problem – WA

From 2016-2020 there have been 8,675 fatal overdoses in Washington, of those 4,197 were due to Opioids. 1,466 were specifically due to Synthetic Opioids.

“Schools play a critical role in upstream prevention – as adolescents spend most of their day in school – and states, districts, and the federal government have begun taking action.” - Harris & Rich, 2022, p.201

The seriousness of the Fentanyl crisis demands immediate attention

- School-based prevention and intervention activities address the current opioid crisis should include:
 - Opioid misuse educational programs,
 - Evidenced-based screening
 - Linkages to opioid treatments
 - Narcan/Naloxone distribution
 - Fentanyl testing programs
- The goal of the project is to provide feasible practice recommendations for school-based programming.

Project Description

Rooted in evidence-based research, these considerations aim to increase the effectiveness and impact of school-based activities combating the Fentanyl epidemic.

This study describes a continuum of overdose prevention and intervention activities currently being practiced in educational settings.

Evaluation Strategy

With the goal to understand what is known concerning addressing the opioid and fentanyl crisis within our country, our team sought to identify existing successes, challenges, and recommendations.

Conducted a Qualitative Cross-Case Analysis using existing literature both empirical and public data sets (e.g., EBSCO, DOJ, SAMHSA, CDC)

We've reviewed what's been done, what instruments they used, and findings.

We conducted contextual stripping, identified general themes, delineated variation within the themes (across studies), created a "thematic profile", and created differentiation displayed in a grid (see Table 1)

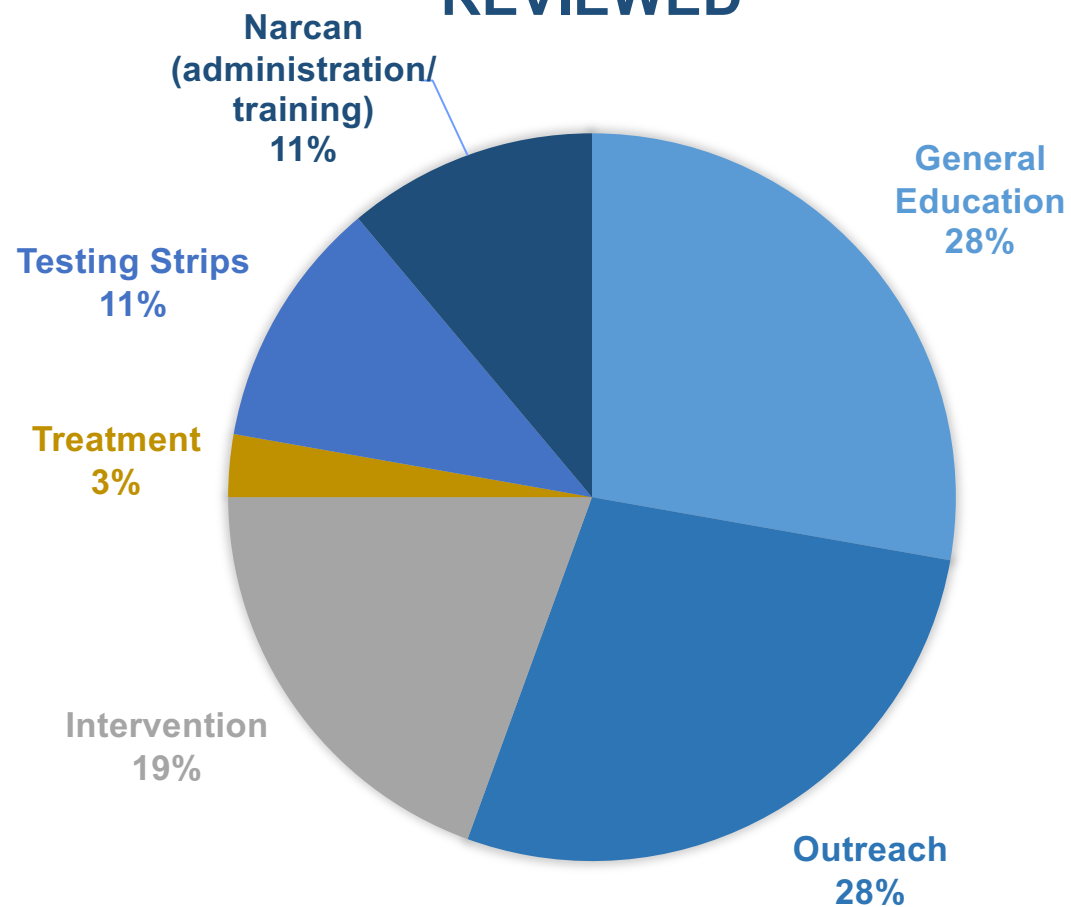
The analysis covered literature on general education, outreach, school-based interventions, referral to treatment, Narcan/naloxone, testing strips as harm reduction.

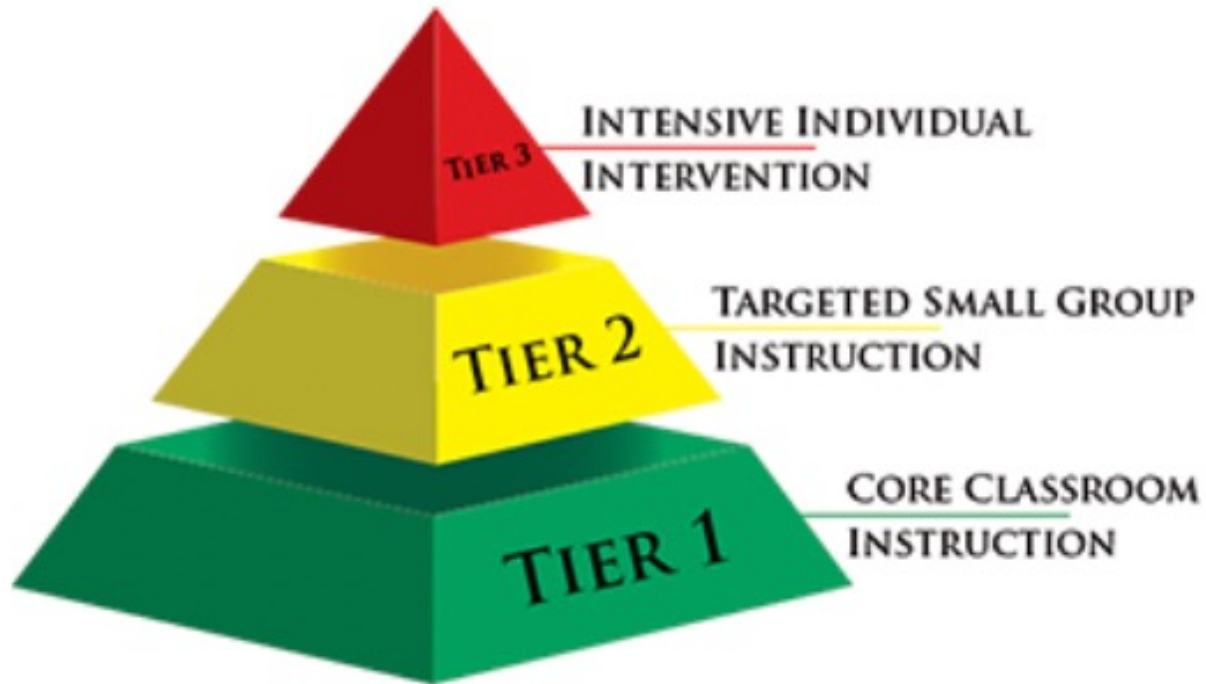
Table 1: Cross-Case Analysis

Author (Year)	General Education	Outreach	Intervention	Treatment	Testing Strips	Narcan (administration/ training)
Abdelal et al. (2022)						X
Berardi et al. (2021)	X		X			X
Bergeria et al. (2019)						
Bozat-Emre et al. (2018)						
Bozat-Emre et al. (2018)				X		X
Carson & Lane. (2021)	X	X				
Eisman et al. (2022)	X		X			
Evans et al. (2020)	X	X				
Gaiha et al. (2021)	X	X				
Goldman et al. (2019)			X		X	
Haegerich et al. (2019)	X	X	X		X	X
Harris & Rich (2022)		X	X			
Knopf. (2022)						
Krieger, Goedel, et al. (2018)					X	
Krieger, Yedinak, et al. (2018)					X	
McMahan et al. (2022)	X		X			
Miley et al. (2022)	X	X				
Murray et al. (2022)	X					
Rigg & Menendez (2018)		X				
Salas-Wright et al. (2019)		X				
SAMHSA (2019; 2022)	X	X				
Welsh et al. (2019).		X	X			

Findings

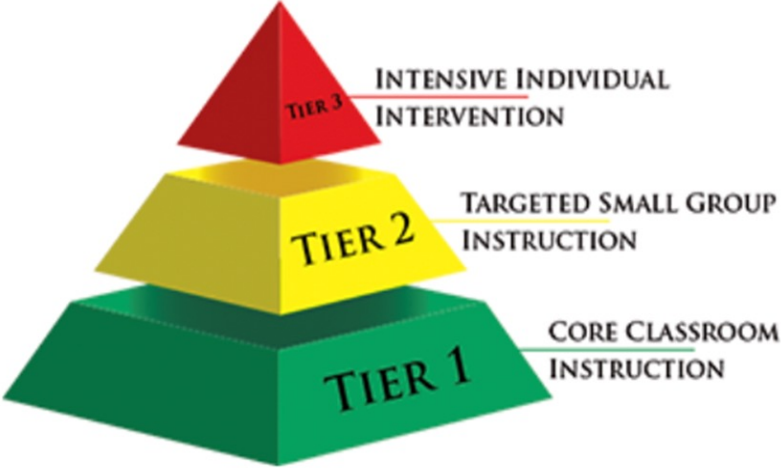
FIGURE 1: FREQUENCY OF STRATEGIES REVIEWED





**An Effective
School-Based
Response
Requires a
Multi-tiered
System of
Support (MTSS)**

Applying Opioid Overdose Prevention Activities to the MTSS Framework



MTSS Framework	Definition	Ex. Activity
Tier 1 School Wide Intervention	<ul style="list-style-type: none"> Prevention Services for all Promoting mental health awareness and practices 	<ul style="list-style-type: none"> SAMSHA Family Flyers HOPE Curriculum Universal Screening Narcan Training & Availability
Tier 2 Short-Term Targeted Interventions	<ul style="list-style-type: none"> Prevention of risk factors Providing timely supports to reduce the progression of mental health concerns Support at-risk students thru coordination of services through school support teams 	<ul style="list-style-type: none"> SBIRT / WellScreen Groups Testing Strips
Tier 3 Long-Term Intensive Interventions	<ul style="list-style-type: none"> Respond to acute crisis or ongoing mental health challenges Long-term solutions to traumatic events, self-harm, eating disorders, suicide risk Individual basis and management 	<ul style="list-style-type: none"> Administering Narcan Case Management Individual Counseling

Tier 1: General Education

- School-based programs are common and essential for addressing the current fentanyl epidemic impacting youth in America.
- The average student is at risk or will be at risk for alcohol and substance use, violence, or mental health issues at least once during school (SAMHSA, 2019).
- SAMHSA acknowledges educators' impact in preventing substance use and misuse, especially when partnered with families to send strong, consistent messaging about drug use (2022).

Project Highlight: **HOPE**

Health and Opioid Prevention Education (HOPE) Curriculum



Tier 2 Short-Term Targeted Interventions

- Prevention of risk factors
- Providing timely supports to reduce the progression of mental health concerns
- Support at-risk students thru coordination of services through school support teams

Project Highlight: WellScreen



ASSESS & IDENTIFY

- Screen patients using tablet enabled, evidence-based assessments to identify individuals at-risk of drug dependence
- Integrated Brief Opioid Overdose Knowledge[®] assessment
- 10 minute screen + immediate report of results for patient and practitioner



EDUCATE & INTERVENE

- On-demand, evidence-based education module to increase knowledge of opioids, opioid overdose risk, and opioid overdose response



CONNECT & FOLLOW

- Integrated treatment locator through partnership with National Association of Addiction Treatment Providers
 - Only public & licensed, accredited private treatment facilities included
 - Patient matching based on criteria completed in screener
 - Electronic referral
- 60-Day follow-up screen with comparison to initial screen results

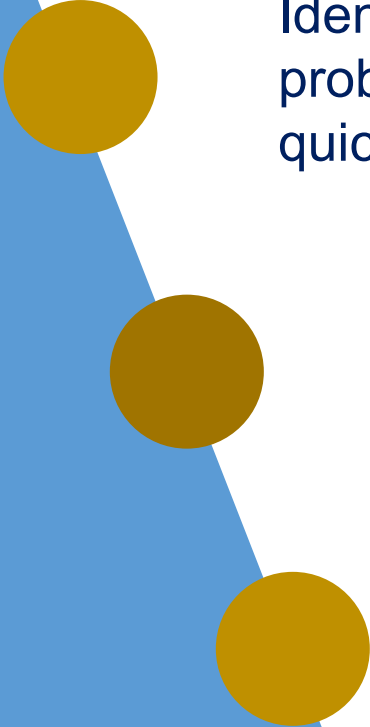
WHAT IS SBIRT

Screening, Brief Intervention, and Referral to
Treatment

What is SBIRT?

SAMHSA defines SBIRT as a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders (SUDs) as well as those who are at risk of developing them.

SBIRT:



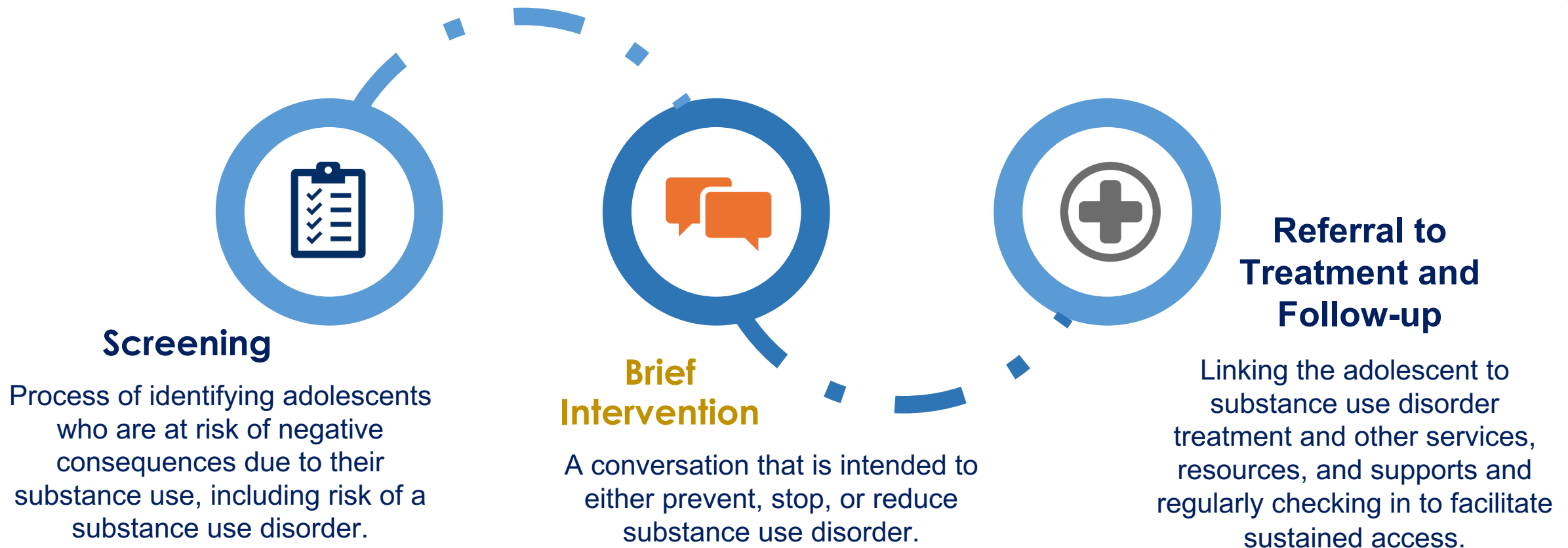
Identifies potentially problematic substance use quickly

Integrated in a wide variety of settings

Increasingly used in behavioral and medical treatment and prevention/ early intervention settings, but new for many practitioners

Overview from “35,000 Feet”

Screening, Brief Intervention and Referral to Treatment (SBIRT) is one of the leading ways to help reduce the impact of alcohol and substance use.



Why SBIRT?

SBIRT is simple, brief, and cost-effective.

- ▣ Considerable evidence demonstrates the efficacy and cost-effectiveness of SBIRT for at-risk alcohol use among adults, and its effectiveness for illicit or prescription drug use is mixed but promising.
- ▣ A growing body of evidence indicates that SBIRT is also effective as a prevention and early identification approach to reduce youth substance use, underage drinking, marijuana (cannabis) use, and opioid use.

Government Agency and Medical and Professional Association Recommendations

- SBIRT is endorsed by many professional associations and government agencies:

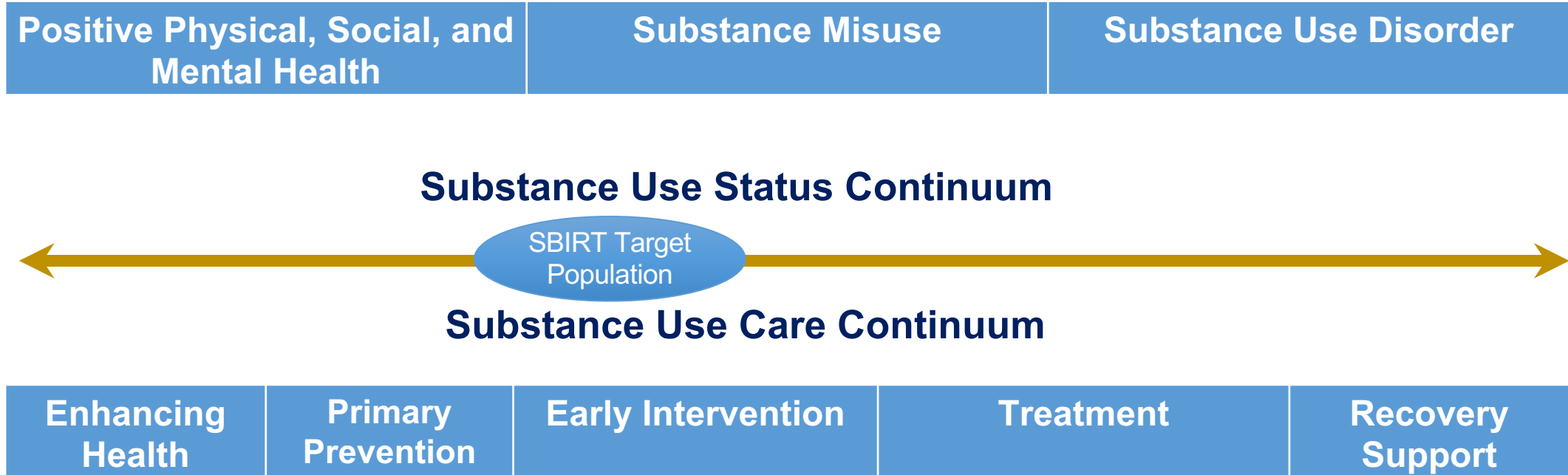


- SBIRT is mandated through statutes:

- **Patient Protection and Affordable Care Act** - deemed “essential services” required of all health plans starting in 2014
- **Early Periodic Screening, Diagnosis, and Treatment (EPSDT)** - all states are required to provide Medicaid-eligible children with screening and assessment of physical and mental health, including substance use

New Target Populations

- Primary focus of substance abuse treatment has been persons with more severe substance use.
- SBIRT targets those with non-dependent substance use and provides effective strategies for intervention prior to the need for more specialized treatment.
- BOOK can be used when a client endorses that they are using opioids.



SBIRT in Schools

- **Screening** — Students are assessed for risky substance use behaviors using standardized screening tools
- **Brief Intervention** — a mental health professional engages a student showing risky substance use behaviors in a short conversation, providing feedback and advice
- **Referral to Treatment** — a mental health professional provides a referral to brief therapy or additional treatment to students who screen in need of additional services

Benefits of SBIRT

Substance abuse

SBIRT may reduce alcohol and drug use significantly

Morbidity and mortality

SBIRT reduces accidents, injuries, trauma, emergency department visits, depression, drug-related infections and infectious diseases

Health care costs

Studies have indicated that SBIRT for alcohol saves up to \$20 for each \$1.00 expended

Other outcomes

SBIRT may reduce work-impairment, reduce DUIs, and improve neonatal outcomes

Benefits of SBIRT for Practice

Increases school personnel awareness of substance use issues.

Offers a more systematic approach to addressing substance use (less of a “judgment call”).

Findings from Duval Schools

Data from 2016-2022

Initial screening of students indicated that the majority of students were at-risk of a substance-use disorder

Screening	Total	Fail (initial)	Rate (Initial)	Fail (Follow-up)	Rate (Follow-up)
CRAFT	1067	574	54%	152	14%

**Definition of failures: CRAFT Risk level of moderate and above for any substance*

Fail rates did not differ by gender, although two-thirds of the students screened were male

Excel Print					
Gender	Total	Fail (initial)	Rate (initial)	Fail (followup)	Rate (followup)
Male	694	372	54%	104	15%
Female	373	202	54%	48	13%
TOTAL	1067	574	54%	152	14%

NOTE: Includes screenings where the initial screening took place during the time period in question and where a follow-up screening has been conducted (follow-up screening could take place at any time).

Definition of failures:

- CRAFT: Risk level of moderate and above
- ASSIST: Risk level of moderate and above for any substance
- BOOK: score below 70%
- PHQ: Risk level of moderate and above
- Stress: Risk level of moderate and above

For screenings that included a CRAFFT module

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Race	Total	Fail (initial)	Rate (initial)	Fail (followup)	Rate (followup)
White	423	233	55%	57	13%
Black	394	213	54%	65	16%
Asian	36	18	50%	3	8%
American Indian or Alaska Native	10	7	70%	2	20%
Pacific Islander	2	0	0%	0	0%
Other	187	92	49%	21	11%
Multiple	15	11	73%	4	27%
TOTAL	1067	574	54%	152	14%

NOTE: Includes screenings where the initial screening took place during the time period in question and where a follow-up screening has been conducted (follow-up screening could take place at any time).

Definition of failures:

- CRAFFT: Risk level of moderate and above

Initial Fail Results Were Significantly Higher for Students Who Identified as AI/AN or Multiple Ethnicities – Those Students Also Had the Highest Reduction of Fail Rates

Practice Findings

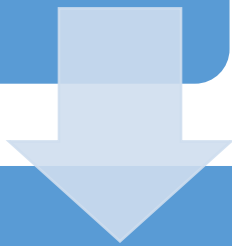
- 1067 Screens Administered
- More than half (54%) scored Moderate to High Risk
- No Significant Disparities/Differences by Gender
- More than 70% of AI/AN and Multiple Ethnicity Students scored Moderate to High Risk
- Large (50-35%) Reductions in Risk Scores Across Populations
 - AI/AN and Multiple Ethnicity Students had approximately 50% reductions in risk scores at follow-up
- Implications
 - Early identification coupled with culturally sensitive interventions of risk reduced risky behaviors across populations

Tier 3: Intensive Interventions

- Respond to acute crisis or ongoing mental health challenges
- Long-term solutions to traumatic events, self-harm, eating disorders, suicide risk
- Individual basis and management

Project Highlight: All Schools Should have Narcan/Naloxone Readily Available

The rise in fentanyl overdoses has created the need and urgency for Narcan to be readily available, distributed, and administered promptly; otherwise, the overdose may be lethal



All teachers, nurses, school-based mental health professionals, and administrators should be trained on the administration of Narcan to reduce the effects of an overdose on campus

Study Findings and Recommendations

- Brief, practical, and scalable programing shows potential promise as an intervention among high-risk populations.
- Young adults demonstrate a high willingness to use fentanyl testing strips, suggesting possible value as a harm-reduction strategy.
- Researchers, law enforcement, and first responders have implemented protocols and trainings to increase the likelihood that Narcan will be available to those in need.
- Trends suggest an overall decrease among student participation in school-based programs, especially among vulnerable youth populations.
- States that have policy that reinforces prevention curriculum in schools appears to have a modest relationship to decreasing SUD disorders among youth.

Recommendations for Law Enforcement:

R.E.A.C.T

- **R**elationship building between law enforcement and our youth and schools.
- **E**ducating the youth about the dangers of Fentanyl and Xyzaline.
- **A**ctive involvement of first responders to address lifesaving strategies for high-potency drugs such as fentanyl and Xyzaline that are highly likely to cause an overdose.
- **C**ritically rethinking law enforcement's role beyond the arrest and detection to address emergency lifesaving measures for dangerous drugs.
- **T**raining to maintain subject matter expertise on narcotics, including the physical and chemical properties, identification and recognition, and investigation of illicit drugs. Understanding the chemical properties of drugs is essential because some illegal drugs are highly potent and life-threatening.

Recommendations For School Administrators

- **Statewide requirements for prevention programming are essential to reduce SUDs among adolescents.**
 - In a study looking at the relationships between the strength of high-school-based prevention programs and the prevalence of SUDs among youth ages 14-17, researchers found that rates of alcohol and tobacco abuse/dependence were significantly lower in states that required alcohol and tobacco prevention programs in schools (Welsh et al., 2019).
 - Reinforcing alcohol prevention curricula in schools appears to have a modest relationship with decreased rates of youth alcohol use disorders (Welsh et al., 2019).
 - However, policy statements don't necessarily reflect what is implemented in each state.
-

The Challenges

Receiving School-Based Services

Since 2002, overall participation in prevention programming has been declining (Salas-Wright et al., 2019).

School-based participation decreased significantly from 48% in 2002-2003 to 40% in 2015-2016 (Salas-Wright et al., 2019).

Most significant declines are seen among Latino youth, females, youth from rural areas, and low SES backgrounds (Salas-Wright et al., 2019).

Federal funding for prevention programs decreased by about 50% between 2005 and 2015, which may be a cause for these rates (Salas-Wright et al., 2019).

Ongoing Training for Educational Programs.

School-based prevention strategies.

Conclusion

- Any one strategy taken alone is insufficient in addressing the current crisis.
- Educational administrators and communities must work together to employ a comprehensive approach to prevent fentanyl poisoning in school-aged youth.

Future Research and Work

Impact

- Increased rigorous research on the effectiveness of school-based prevention programs (Carson & Lane, 2021; Evans et al. 2020, Haegerich et al., 2019).

Implementation Barriers

- Address implementation barriers by increasing training for staff and administrators with special attention on adequately targeting knowledge, skill building, and the impact they can have (Harris & Rich, 2022).

Intervention Training

- Increase availability and training for administering Narcan and rapid fentanyl testing strips

Role of Law Enforcement

- Increase collaborative approaches with law enforcement by keeping law enforcement up-to-date on the physical and chemical properties, identification and recognition, and investigation of illicit drugs.

Thank You!

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