Prevention & Demand Reduction Handbook

Denying or Delaying Substance Use in Communities - An Evidence-Based Best Practice Guide

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Welcome to the handbook that’s here to shake up the substance use narrative: 'Prevention & Demand Reduction: Denying or Delaying Substance Use in Communities - An Evidence-Based Best Practice Guide'. This is a call to action against the uninspired acceptance of drug use as a rite of passage. Let's face it, the notion that saying 'no' is passé has overstayed its welcome.

In a society that often whispers ‘yes’ in the ears of our youth, it’s time we crank up the volume on the ‘no’. Not a finger-wagging, fun-spoiling ‘no’, but an empowering, choice-driven ‘no’ that opens the door to health and potential. This guide arms you with evidence-based practices that are as solid as they are effective. It’s about equipping communities with the facts and tools they need to make choices that favour well-being over substance use.

We’re here to dismantle the myth that drug experimentation is inevitable. With clear, evidence-backed strategies, we aim to assist all who care for best practice health and well-being to build their resilient communities that don't just survive but thrive without the ‘white-anting’ and even wrecking ball of substance use. So, let’s stop normalising what should never be ‘normal’ and start prioritising health, informed choices, and a future unfettered by dependency.

Join us as we push back against the tide of drug trivialisation, normalisation with sound evidence, wisdom, and a touch of common sense. Let’s make the protective, resilience empowering of ‘no’ the most powerful word in our community’s vocabulary.

I. Introduction to Drug Abuse Prevention

A. Understanding Drug Abuse and Its Impact

Drug abuse presents a significant challenge to societies worldwide, with use increasing by 23% in just a decade. **Drug abuse** encompasses a range of behaviours, from the underage use of legal substances like tobacco and alcohol to the use of illegal drugs such as marijuana and heroin. It also includes the misuse of legally obtained substances like inhalants, prescription medications, and over-the-counter drugs. Drug abuse has severe consequences, impacting individuals, families, and communities, affecting homes, schools, and communities.

The negative consequences of drug abuse are wide-ranging and can include:

- **Health problems:** Addiction, overdose, mental health disorders, and physical health issues are common consequences of drug abuse.
- **Social problems:** Drug abuse contributes to crime, violence, family and/or relationship breakdown, homelessness, and unemployment.
- **Economic problems:** Drug abuse burdens healthcare systems, law enforcement and insurance agencies, and social services. It also leads to lost productivity and reduced economic growth.

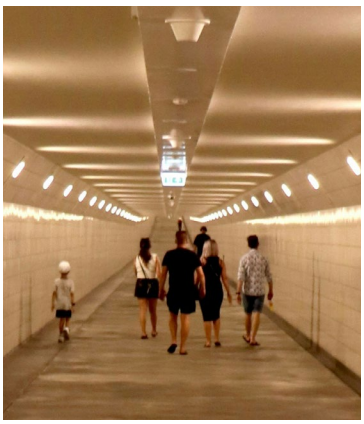
Children are particularly vulnerable to drug abuse and its consequences. They are often targeted as consumers and exploited in the production and trafficking of drugs. The United Nations Convention on the Rights of the Child (CRC) explicitly recognises the right of children to be protected from the illicit use of drugs.

Article 33 of the CRC calls on States Parties to take all appropriate measures to protect children from the illicit use of drugs and prevent their exploitation in the drug trade.

It is everyone's responsibility to protect children from the harmful effects of drugs. This includes:

- **Parents and families:** Providing a loving and supportive environment, setting clear expectations, and openly communicating about the dangers of drug use are crucial.
- **Schools:** Implementing evidence-based drug education programs that promote abstinence, address risk factors, and build resilience in students.
- **Communities:** Creating safe and healthy environments, providing access to recreational activities, and supporting families and individuals struggling with drug abuse.
- **Governments:** Developing and implementing comprehensive drug policies that prioritise prevention, early intervention, treatment, and only as an interim measure harm reduction.
- **Media:** Reporting responsibly on drug issues and avoiding sensationalism or glamorisation of drug use.

Working together, communities can create a protective shield around children, empowering them to make healthy choices and reach their full potential.



B. The Importance of Prevention

Preventing drug abuse is crucial due to the significant negative impacts it has on individuals and society. **Prevention** efforts aim to address the issue before it escalates into more severe problems, emphasising health promotion over illness repair or long-term well-being.

A significant portion of drug-use-related problems is preventable. Therefore, shifting the focus from drugs to the individual and the community through preventative measures is crucial. This involves targeting all ages of development, starting as early as pregnancy and continuing throughout life.

Effective drug abuse prevention aims to:

- **Strengthen protective factors:** Building resilience, promoting healthy lifestyles, and fostering supportive environments can help individuals resist drug use.
- **Empower individuals:** Providing individuals with the knowledge, skills, and support they need to make healthy choices is essential.
- **Reduce risk factors:** Addressing factors such as poverty, social exclusion, and trauma can decrease vulnerability to drug abuse.
- **Delay uptake of drugs, particularly by those under 28 years old:** This is crucial due to the vulnerability of the developing brain to the harmful effects of drugs.
- **Promote abstinence from illicit drug use:** While harm reduction strategies have their place, the ultimate goal should be to prevent drug use altogether.

Evidence-based, data-driven interventions are key to effective prevention. This involves investing in research and evaluation to avoid ineffective or counterproductive strategies. Collaboration between governments, health agencies, educators, and communities is also crucial.

C. Overview of Prevention Approaches

KEY TAKEAWAY:

Prevention approaches are diverse, ranging from:

1. **Information and education campaigns,**
2. **School-based programs,**
3. **Family-based programs,**
4. **Community-based programs, and**
5. **Environmental and policy-level interventions.**

These programs may employ various strategies like media campaigns, interactive workshops, policy changes, and community mobilisation.

Prevention approaches for drug abuse encompass a comprehensive range of strategies aimed at reducing risk factors and enhancing protective factors across various settings and stages of life. These approaches are grounded in research and are designed to address the complex interplay of individual, family, peer, school, and community factors that influence drug use behaviours.

1. Information and Education Campaigns

A. Public Education and Public Health Campaigns

- Large-scale efforts to raise awareness about drug risks and consequences
- Often utilise multiple media channels (TV, radio, print, social media)
- Focus on providing factual information and correcting misconceptions
- May target general population or specific demographic groups

Public education and health campaigns play a crucial role in drug prevention. These campaigns aim to provide accurate information about drugs, their effects, and potential consequences. For instance, the "Your Room" website by NSW Health offers detailed information about methamphetamine, including its different forms, street names, methods of use, impacts, and legal status. Such resources help to educate the public and dispel myths surrounding drug use.

These campaigns are particularly important given the prevalence of drug use among young people. The 2016 Monitoring the Future Survey revealed that:

- By the end of high school, six out of every ten students (61%) have consumed alcohol (more than just a few sips), and about a quarter (23%) have done so by 8th grade.
- Nearly half (46%) of 12th graders and one in eleven (9%) 8th graders in 2016 reported having been drunk at least once in their life.
- Annual prevalence of marijuana use among 12th graders has held quite steady for several years, increasing by a non-significant 0.7% to 35.6% in 2016.

B. Mass Media Campaigns

- Can reach large audiences quickly and cost-effectively
- Often employ emotional appeals or fear-based messaging
- May use celebrity endorsements or personal testimonials
- Effectiveness can vary; most successful when part of broader prevention efforts

Mass media campaigns are a common educational strategy for prevention, targeting either the community broadly or more specific audiences. These campaigns can be particularly effective when they present a balanced picture of drug use, discussing both the reasons people use drugs and information about potential harms. It's crucial that these campaigns present information about the prevalence of harms to ensure the information is credible.

The effectiveness of these campaigns can be significant. Research has shown that for each dollar invested in prevention, a savings of up to $10 in treatment for alcohol or other substance abuse can be seen.

C. Tailored Information for Specific Populations

- Culturally sensitive approaches for diverse communities
- LGBTQI+-specific information addressing unique risk factors and experiences
- Materials in multiple languages for linguistically diverse groups
- Age-appropriate content for different developmental stages

Tailored information is crucial for reaching diverse populations effectively. For instance, the Inquiry received evidence that those with lower levels of educational attainment and literacy skills face particular difficulties navigating service systems and accessing information and support. Organisations like Literacy for Life, which delivers literacy education to adults in Indigenous communities across Australia, work with cohorts who have low levels of engagement with health services about managing chronic disease and preventive health care.

2. School-Based Programs

A. Drug Education Integrated into School Curriculum

- Typically starts in elementary school and continues through high school
- Focuses on age-appropriate information about drug effects and risks
- Often includes interactive elements like role-playing and group discussions

School-based drug education in NSW aims to provide students with protective strategies and the development of skills to make appropriate decisions throughout life. This education is crucial as early intervention with risk factors (e.g., aggressive behaviour and poor self-control) often has a greater impact than later intervention by changing a child's life path away from problems and toward positive behaviours that empower a more productive and far less trouble littered future.

B. Skills Training

- Self-control and emotional regulation techniques
- Communication and assertiveness skills
- Social problem-solving and decision-making skills
- Stress management and coping strategies

Prevention programs for elementary school children should target improving academic and social-emotional learning to address risk factors for drug abuse, such as early aggression, academic failure, and school dropout. Education should focus on skills such as self-control, emotional awareness, communication, social problem-solving, and academic support, especially in reading.

C. Academic Support Programs

- Tutoring and remedial education to improve academic performance
- Study skills training and time management techniques
- Programs to increase school engagement and reduce dropout rates

For middle or junior high and high school students, prevention programs should increase academic and social competence with skills including study habits and academic support, communication, peer relationships, self-efficacy and assertiveness, drug resistance skills, reinforcement of antidrug attitudes, and strengthening of personal commitments against drug abuse.

D. School Policies and Rules

- Clear, consistently enforced policies on substance use
- Procedures for addressing violations and supporting affected students
- Training for teachers and staff on identifying and responding to drug use

Prevention programs should include teacher training on good classroom management practices, such as rewarding appropriate student behaviour. Such techniques help to foster students' positive behaviour, achievement, academic motivation, and school bonding.

3. Family-Based Programs

A. Parenting Skills Training

- Communication techniques for discussing drugs with children
- Effective discipline and boundary-setting strategies
- Methods for monitoring children's activities and peer associations
- All aided by a sober and objective perspective on their children – being alert and discerning, not suspicious and distrusting

Family-based prevention programs should enhance family bonding and relationships and include parenting skills; practice in developing, discussing, and enforcing family policies on substance abuse; and training in drug education and information. Parental monitoring and supervision are critical for prevention of drug abuse. Ensure you don't have 'rose coloured glasses' when coming to your child and their attitudes, actions and behaviours. These skills can be enhanced with training on rule-setting, techniques for monitoring activities, praise for appropriate behaviour, and moderate, consistent discipline that enforces defined family rules.

B. Family Bonding Activities

- Structured family time to strengthen relationships
- Collaborative problem-solving exercises
- Activities to improve family communication and cohesion

Family bonding is the bedrock of the relationship between parents and children. Bonding can be strengthened through skills training on parent supportiveness of children, parent-child communication, and parental involvement.

C. Drug Education for Parents/Caregivers

- Information on current drug trends and warning signs
- Guidance on how to talk to children about drugs at different ages
- Resources for seeking help if drug use is suspected or confirmed

Drug education and information for parents or caregivers reinforces what children are learning about the harmful effects of drugs and opens opportunities for family discussions about the abuse of legal and illegal substances.

D. Family Therapy Interventions

- Professional-led sessions to address family dynamics
- May involve multiple family members or focus on parent-child relationships
- Can address co-occurring issues like mental health or trauma

Brief, family-focused interventions for the general population can positively change specific parenting behaviour that can reduce later risks of drug abuse.

4. Community-Based Programs

A. Programs Targeting Key Transition Points

- Interventions focused on transitions to middle school, high school, or college
- Address increased risk factors associated with these life changes
- Often involve peer mentoring or support groups

Prevention programs aimed at general populations at key transition points, such as the transition to middle school, can produce beneficial effects even among high-risk families and children. Such interventions do not single out risk populations and, therefore, reduce labelling and promote bonding to school and community.

B. Multi-Component Programs

- Combine school, family, and community interventions for synergistic effects
- May involve coordinated efforts between schools, local organisations, and government agencies
- Often more effective than single-component programs

Community prevention programs that combine two or more effective programs, such as family-based and school-based programs, can be more effective than a single program alone.

C. Community-Wide Messaging

- Consistent anti-drug messages across multiple settings (schools, clubs, faith organisations, media)
- Community events and activities promoting drug-free lifestyles
- Local media campaigns reinforcing prevention messages

Community prevention programs reaching populations in multiple settings—for example, schools, clubs, faith-based organisations, and the media—are most effective when they present consistent, community-wide messages in each setting.

5. Environmental and Policy Interventions

A. Law Enforcement

- Strict enforcement of minimum drinking age laws
- Crackdowns on tobacco and alcohol sales to minors
- Increased policing in high-risk areas for drug activity

B. Workplace Drug Policies

- Drug-Free workplace programs and employee assistance programs
- Pre-employment and random drug testing in certain industries
- Education and support for employees struggling with substance use

C. Community Mobilisation Efforts

- Neighbourhood watch programs focused on drug activity
- Community coalitions to address local drug issues
- Youth-led anti-drug initiatives and peer education programs

6. Targeted Interventions

A. Programs for Specific High-Risk Groups

- Interventions for children of substance-abusing parents
- Modelling involvement with therapeutic communities
- Programs for youth in the juvenile justice system
- Outreach to homeless or street-involved youth

B. Setting-Specific Interventions

- Prevention focused approaches at music festivals or nightlife venues
- Campus-based programs for college students
- Sports team-based interventions for student athletes

C. Early Interventions for At-Risk Youth

- Screening and brief interventions in primary care settings
- Mentoring programs for vulnerable youth
- After-school programs in high-risk neighbourhoods

Prevention programs can be designed to intervene as early as preschool to address risk factors for drug abuse, such as aggressive behaviour, poor social skills, and academic difficulties.

Table: Types of Prevention Programs and Key Components

Program Type	Key Components	Target Audience
School-Based	AOD (Alcohol & Other Drug) education, skills training, Resilience Building. Teacher Training/Equipping and academic support	Students (elementary to high school)
Family-Based	Parenting skills, family bonding, drug education	Parents and children
Community-Based	Multi-component interventions, consistent messaging in Public Square (government, education, health, media) One Focus – One Message and One Voice – Prevention	General population, specific communities
Targeted Interventions	Tailored programs for high-risk groups	At-risk youth, specific settings

These prevention approaches utilise various methods including interactive workshops, counselling services, peer support programs, policy changes, and technology-based interventions. They aim to reach individuals across different developmental stages, from early childhood through adolescence and into adulthood.

Effective prevention incorporates multiple components and addresses modifiable risk and protective factors at the individual, family, school, and community levels. Many programs combine two or more approaches (e.g., school and family-based interventions) for greater impact.

Prevention efforts strive to:

- Delay or prevent initial drug use
- Reduce harms associated with use
- Strengthen protective factors (e.g., strong family bonds, academic success)
- Mitigate risk factors (e.g., early aggressive behaviour, poor self-control)
- Provide accurate information about drug effects and consequences
- Develop life skills that support healthy decision-making
- Create environments that discourage drug use
- Connect individuals to support services when needed

Overall, a comprehensive approach to drug use and/or abuse prevention recognises the complex nature of substance use issues and employs a variety of strategies to create a multi-layered defence against drug abuse across different contexts and throughout the lifespan.

II. Foundations of Prevention Science

A.
Risk and Protective Factors

Risk Factors are characteristics or conditions that increase the likelihood of drug abuse. As defined by the National Institute on Drug Abuse, "Factors associated with greater potential for substance uptake or abuse are called 'risk' factors, while those associated with reduced potential for abuse are called 'protective' factors."

These can be found across various domains of a person's life; some key risk factors include:

1. Early aggressive behaviour
2. Lack of parental supervision
3. Adverse Childhood Experiences
4. Parental/Guardian Substance use
5. Meaninglessness
6. Poor social coping skills
7. Academic failure
8. Availability of substances in the community
9. Poverty

On the other hand, protective factors are characteristics or conditions that decrease the likelihood of drug abuse. These factors can help buffer or moderate the impact of risk factors. Some important protective factors include:

1. Resilience Building
2. Strong anti-drug messaging in community and family
3. Actively developed impulse control and emotional regulation in family and other teaching/learning environments
4. Parental monitoring, support and encouragement with sustainable values and boundary setting
5. Academic competence
6. Anti-drug use policies in schools
7. Strong neighbourhood attachment

1. Defining Risk and Protective Factors

It's crucial to understand that risk factors are not deterministic. The presence of risk factors doesn't guarantee drug abuse, just as the absence of risk factors doesn't ensure abstinence. Instead, risk factors operate probabilistically, increasing the likelihood of negative outcomes.

Protective factors, conversely, are characteristics or conditions that decrease the likelihood of drug abuse. These factors can directly lower the probability of substance abuse or mediate and moderate the effects of risk factors.

2. Domains of Risk and Protective Factors

Risk and protective factors exist across multiple domains of an individual's life. The National Institute on Drug Abuse identifies five key domains:

Table: Domains of Risk and Protective Factors

Domain	Risk Factors	Protective Factors
Individual	Early aggressive behaviour, poor impulse control	Positive temperament, emotional self-regulation skills
Family	Lack of parental supervision, family history of substance abuse	Strong parent-child bond, consistent discipline
Peer	Association with drug-using peers	Involvement with prosocial peer groups
School	Academic failure low commitment to school	Positive school climate, opportunities for school involvement
Community	Drug availability, poverty	Strong neighbourhood attachment, community norms against drug use

Again, it's crucial to understand that the presence of risk factors does not guarantee that an individual will engage in drug abuse, nor does the presence of protective factors ensure that they won't.

The impact of risk and protective factors can vary depending on several factors:

1. Age: The potential impact of specific risk and protective factors changes with age. For example, risk factors within the family have greater impact on a younger child, while association with drug-abusing peers may be a more significant risk factor for an adolescent. (NIDA)
2. Developmental stage: Early intervention with risk factors, such as aggressive behaviour and poor self-control, often has a greater impact than later intervention. This is because early intervention can change a child's life trajectory away from problems and toward positive behaviours.
3. Individual characteristics: The effect of risk and protective factors can differ based on a person's age, gender, ethnicity, culture, and environment.
4. Messaging, Modelling and Language – from immediate environments are positive and consistent with no passive or active promotion or favourability toward substance use.
5. Cumulative effect: Risk factors tend to have a cumulative impact. The more risk factors that are present and the longer they persist over time, the greater the subsequent developmental impact.

Prevention programs based on this understanding aim to enhance protective factors while reducing or reversing risk factors. Effective programs should:

1. Address all forms of drug use and abuse (specifically with children and those supervising them), including underage use of legal substances, illegal drugs, and misuse of prescription medications.
2. Target the specific type of drug abuse problem in the local community.
3. Address risks specific to population characteristics such as age, gender, and ethnicity to improve effectiveness.
4. Strengthen identified protective factors within the individual, family, peer, school, and community domains.

Prevention science is fundamentally based on the understanding of risk and protective factors that influence drug abuse behaviours. This framework, developed over decades of research, provides a nuanced approach to understanding and preventing substance abuse.

3. Developmental Perspective

The impact of risk and protective factors varies across different developmental stages. This developmental perspective is crucial for understanding when and how to intervene effectively.

A. Early Childhood

In early childhood, family-related factors tend to have the strongest influence. Poor parenting practices, family conflict, and parental substance use are significant risk factors at this stage. Conversely, secure attachment, consistent discipline, and parental warmth serve as powerful protective factors.

B. Middle Childhood

As children enter school, academic and social factors become increasingly important. Academic failure and social rejection are key risk factors, while school bonding and social competence act as protective factors.

C. Adolescence

During adolescence, peer influences become particularly salient. Association with drug-using peers is a strong risk factor, while involvement in prosocial activities can be protective. However, it's important to note that earlier risk factors continue to exert influence, often indirectly by shaping the adolescent's peer group choices.

4. Cumulative and Interactive Effects

Risk and protective factors don't operate in isolation. Their effects are often cumulative and interactive:

A. Cumulative Effects

The more risk factors an individual is exposed to, the greater their likelihood of engaging in drug abuse. This concept is sometimes described using the "snowball" analogy, where risk factors accumulate over time, potentially leading to an "avalanche" of problems if not addressed.

B. Interactive Effects

Risk and protective factors can interact in complex ways. For example, strong parental support (a protective factor) might mitigate the risk posed by living in a high-crime neighbourhood (a risk factor).

5. Implications for Prevention Programs

Understanding risk and protective factors has profound implications for the design, implementation, and evaluation of substance abuse prevention programs. This knowledge forms the cornerstone of evidence-based prevention strategies.

A. Multi-component Interventions

The multi-faceted nature of risk and protective factors necessitates comprehensive, multi-component prevention programs. These interventions target multiple domains simultaneously to create a synergistic effect.

- Family-focused components: These may include parent training programs that enhance parenting skills, improve family communication, and strengthen family bonds. For example, the Strengthening Families Program (SFP) is a well-established intervention that works with both parents and children to reduce family-related risk factors and enhance protective factors.
- School-based components: These often involve social-emotional learning curricula, which teach skills like self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The Life Skills Training program is a prime example, shown to reduce substance use by enhancing personal and social competence.
- Peer-focused components: These might include peer leadership programs or initiatives that promote positive peer norms. A number of programs including *No Brainer*, and *Not Even Once* programs, for instance, includes interactive activities that challenge misconceptions about peer drug use.
- Community-level components: These can involve policy changes, media campaigns, or community mobilisation efforts. The Communities That Care (CTC) prevention system is an example of a comprehensive community-based approach that has shown significant effects in reducing youth substance use.

Research has shown that multi-component programs tend to be more effective than single-component interventions. For instance, a meta-analysis by Tobler et al. (2000) found that comprehensive programs that combined school, family, and community components had larger effect sizes in preventing substance use compared to programs that focused on a single domain.

B. Developmental Timing

The timing of prevention interventions is crucial, with early intervention often yielding the most substantial and long-lasting effects.

- Early Childhood Interventions: Programs that target risk factors in early childhood, such as aggressive behaviour or poor impulse control, can have cascading positive effects. The Good Behavior Game, implemented in first and second grade classrooms, has shown long-term effects on reducing substance use disorders in young adulthood.
- Middle Childhood Programs: Interventions during this period often focus on enhancing social competence and academic engagement. The Seattle Social Development Project, which began in elementary school, showed positive effects on substance use and other outcomes into adulthood.
- Adolescent-focused Programs: While early intervention is ideal, adolescence remains a critical period for prevention efforts. Programs like Project Towards No Drug Abuse have shown effectiveness in reducing substance use among high-risk adolescents.
- Transition Programs: Interventions that target key developmental transitions (e.g., from elementary to middle school, or middle to high school) can be particularly effective. The Keepin' it REAL program, implemented during the transition to middle school, has shown significant effects on reducing substance use.

Longitudinal studies have demonstrated the long-term impact of well-timed interventions. For example, Hawkins et al. (2005) found that a comprehensive intervention beginning in elementary school led to lower rates of substance use disorders at age 21.

C. Tailored Interventions

Prevention programs are most effective when tailored to address the specific risk and protective factors present in a given population or community.

- Community Needs Assessments: Tools like the Communities That Care Youth Survey can help identify the most salient risk and protective factors in a specific community, allowing for targeted intervention efforts.
- Modifiable Risk Factors: Programs should focus on risk factors that are amenable to change. For instance, while genetic predisposition is a risk factor for substance abuse, it's not directly modifiable. However, programs can target related factors like impulsivity or stress reactivity.
- Strengthening Protective Factors: Interventions should also aim to enhance identified protective factors. For example, if strong school attachment is identified as a key protective factor in a community, programs might focus on improving school climate and increasing opportunities for positive school involvement.
- Local Drug Use Patterns: Prevention efforts should be tailored to address the specific substances that are problematic in a given community. For instance, communities with high rates of prescription opioid misuse might benefit from programs that include components on safe medication storage and disposal.

Research has shown that tailored interventions can be more effective than generic approaches. For example, a study by Komro et al. (2008) found that a community-based prevention program tailored to local risk factors was more effective in reducing alcohol use among adolescents compared to a general health education curriculum.

D. Cultural Considerations

The effectiveness of prevention programs can vary significantly across different cultural contexts, making cultural adaptation a crucial consideration.

- Cultural Adaptation vs. Cultural Grounding: While some programs can be effectively adapted from one cultural context to another, others may need to be developed from the ground up within a specific cultural context. For example, the Strong African American Families program was developed specifically for rural African American families, incorporating culturally relevant themes and practices.
- Language and Communication Styles: Programs should be delivered in the preferred language of the target population and should use culturally appropriate communication styles. This goes beyond mere translation to include cultural nuances and idioms.
- Cultural Values and Norms: Prevention messages and strategies should align with the cultural values and norms of the target population. For instance, programs for Latino youth might emphasise familismo (the importance of family) as a protective factor.
- Community Involvement: Involving community members in program development and implementation can enhance cultural relevance and community buy-in. The Keepin' it REAL program, for example, was developed with extensive input from Mexican American youth and has shown effectiveness in this population.

Research has demonstrated the importance of cultural adaptation. A meta-analysis by Griner and Smith (2006) found that culturally adapted mental health interventions were four times more effective than interventions without cultural adaptation.

E. Enhancing Protective Factors

While reducing risk factors is crucial, enhancing protective factors is equally important for effective prevention.

- Family Bonding: Programs that strengthen family relationships can be powerful protective tools. The Guiding Good Choices program, for instance, focuses on enhancing family management practices and parent-child bonding.
- School Engagement: Interventions that improve academic engagement and school climate can enhance this key protective factor. The Positive Action program, which promotes positive behaviours in schools, has shown effects on both academic achievement and substance use prevention.
- Social and Emotional Competence: Programs that enhance social-emotional skills can provide protection against multiple negative outcomes, including substance abuse. The Humpty Dumpty Dilemma and PATHS (Promoting Alternative Thinking Strategies) curriculum is an example of a program that builds these foundational skills.
- Community Attachment: Initiatives that foster community cohesion and provide opportunities for prosocial involvement can enhance this protective factor. The Adolescent Transitions Program, which includes a community component, has shown effectiveness in reducing substance use.
- Positive Identity Development: Programs that promote positive identity formation and self-efficacy can be protective against substance use. The Project Venture program, developed for American Indian youth, uses outdoor experiential learning to promote positive identity development and has shown effectiveness in reducing substance use.

Research has increasingly recognised the importance of enhancing protective factors. A study by Catalano et al. (2002) found that programs that addressed both risk reduction and promotion of protective factors showed the strongest effects on multiple youth outcomes, including substance use.

6. Challenges and Future Directions

While the risk and protective factor framework has been instrumental in advancing prevention science, several challenges and areas for future research remain:

A. Gene-Environment Interactions

Emerging research is exploring how genetic factors interact with environmental risk and protective factors to influence substance use outcomes. E.g. (R.E.C.I.P.E component of Humpty Dumpty Dilemma Resilience Coaching project).

B. Resilience

More research is needed to understand why some individuals thrive despite exposure to multiple risk factors. Understanding the mechanisms of resilience could inform more effective prevention strategies. i.e. World Resiliency Day Platform.

C. Dynamic Nature of Risk

Risk and protective factors are not static. They can change over time and in response to interventions. Future research needs to better capture these dynamic processes.

D. New Risk Factors

As society changes, new risk factors may emerge. For instance, the role of social media and digital technology in shaping substance use behaviours is an area of growing concern and research.

Brief Summary

The risk and protective factor framework provide a comprehensive foundation for understanding and preventing substance abuse. By identifying and addressing these factors across multiple domains and developmental stages, prevention science aims to reduce the likelihood of drug engagement and abuse and promote healthy development. However, this field continues to evolve, incorporating new findings and adapting to changing societal contexts to enhance the effectiveness of prevention efforts.

B. Developmental Stages and Drug Uptake and/or Abuse

- The impact of specific risk and protective factors can shift across different **developmental stages**.
- For instance, family-related risk factors hold greater influence during childhood, while peer influence becomes more significant during adolescence.
- The timing of interventions should align with these developmental stages to maximise their effectiveness.

Research has consistently shown that major transitions in children's lives serve as critical risk periods for drug abuse. These transitions, characterised by significant changes in physical development or social situations, create heightened vulnerability for problem behaviours, including substance abuse.

1. Entering School

The transition from home to school environment marks the first major shift in a child's life, typically occurring around age 5-6.

Risk Factors:

- Separation anxiety from parents/caregivers
- New social pressures and expectations
- Potential exposure to older children with risky behaviours
- Increased independence and decision-making opportunities

Impact on Drug Abuse Risk: While direct drug use is rare at this age, this transition can set the stage for future vulnerabilities. Children who struggle with this transition may develop behavioural issues or social difficulties that could increase their risk for substance abuse later in life.

2. Elementary to Middle/Junior High School

This transition, usually occurring around age 11-13, involves significant academic and social changes.

New Challenges:

- Interacting with a wider, more diverse peer group
- Navigating complex social hierarchies
- Facing increased academic expectations and workload
- Dealing with emerging puberty-related physical and emotional changes

This stage is crucial as it often coincides with the onset of puberty and increased peer influence. The National Survey on Drug Use and Health indicates that some children begin experimenting with substances as early as age 12 or 13.

- Peer pressure becomes more significant
- Desire for social acceptance may lead to risky behaviours
- Academic stress may drive some students to use stimulants or other substances
- Early physical maturation in some children may lead to association with older peers, increasing exposure to substances

3. Early Adolescence

This stage, typically spanning ages 13-15, is critical in terms of drug abuse risk.

Key Characteristics:

- Increased independence from family
- Greater emphasis on peer relationships
- Continued physical and emotional changes due to puberty
- Developing personal identity and values

Drug Abuse Initiation: Early adolescence is often when children first encounter opportunities for drug use. The types of substances they might be exposed to include:

1. Tobacco: Often one of the first substances tried due to relative ease of access
2. Alcohol: Frequently obtained from home or through older peers
3. Inhalants: Household products may be abused due to their accessibility
4. Marijuana: Increasingly common as the first illicit drug used by adolescents
5. Prescription drugs: Misuse of family members' medications or obtained through peers

Data from the Monitoring the Future survey shows that by 8th grade (typically age 13-14):

- Approximately 24.5% of students have tried alcohol
- About 18.4% have used marijuana
- Around 10.5% have smoked cigarettes

4. Entering High School

The transition to high school (ages 14-15) presents additional challenges and risks.

New Pressures and Exposures:

- Increased academic demands and competition
- More complex social structures and pressures
- Greater availability of drugs within school and community settings
- Exposure to older peers who may already be using substances
- More unsupervised time and social engagements

Impact on Drug Use: High school often sees an escalation in substance use patterns:

- Experimentation may progress to regular use
- Poly-drug use becomes more common
- Binge drinking emerges as a significant risk

According to the 2019 National Survey on Drug Use and Health:

- 29.2% of 12th graders reported using alcohol in the past month
- 22.3% reported using marijuana in the past month
- 5.7% reported misusing prescription drugs in the past year

5. Late Adolescence

This period, typically ages 17-19, often involves significant life changes, particularly for those moving away from home for college or work.

Unique Risks:

- Lack of parental supervision
- New social environments with different norms
- Increased personal freedom and decision-making
- Academic and career pressures

College-Specific Risks:

Substance abuse, especially alcohol, remains a major public health concern on college campuses:

- According to the National Institute on Alcohol Abuse and Alcoholism, about 54.9% of full-time college students ages 18-22 drank alcohol in the past month
- 36.9% reported binge drinking in the past month
- 9.6% reported heavy alcohol use

Non-College Paths: Young adults not attending college face different but equally significant risks:

- Work-related stress
- Financial pressures
- Potential exposure to substance use in workplace settings

6. Young Adulthood

As individuals enter their early to mid-20s, new life transitions present additional stressors and risks.

Key Transitions:

- Entering the full-time workforce
- Marriage or long-term partnerships
- Financial independence
- Potential parenthood

Impact on Substance Use: These transitions can either increase or decrease substance use risk:

- Work-related stress may lead some to use substances as a coping mechanism
- Marriage and parenthood often lead to decreased substance use for many
- Financial pressures may contribute to stress-related substance use

According to the 2019 NSDUH:

- 39.7% of young adults aged 18-25 reported past-month alcohol use
- 23.0% reported past-month marijuana use
- 6.6% reported past-month illicit drug use other than marijuana

Age of Onset and Progression

Understanding the typical age of onset and progression of substance use is crucial for developing effective prevention and intervention strategies.

Early Onset (Before Age 13)

- Associated with higher risk of developing substance use disorders
- Often begins with easily accessible substances: alcohol, tobacco, inhalants
- May indicate presence of other risk factors (e.g., family history, trauma, mental health issues)

Adolescent Progression (Ages 13-17)

Typical progression pattern:

1. Alcohol and tobacco experimentation
2. Marijuana use
3. Other illicit drugs or prescription drug misuse

However, it's crucial to note that most youth do not progress beyond initial experimentation. Factors influencing progression include:

- Genetic predisposition
- Mental health status
- Peer influence
- Family environment
- Community factors (drug availability, social norms)

Late Adolescence and Young Adulthood (18-25)

- Peak period for substance use initiation and escalation
- Highest rates of substance use disorders
- Transition to more "adult" patterns of use (e.g., regular drinking vs. binge drinking)

Patterns of Drug Initiation

Drug initiation patterns vary based on several factors:

1. Gender Differences

- Boys generally receive more drug offers and at younger ages
- Girls may be more influenced by romantic partners in drug initiation
- Motivations for use may differ: boys more likely to use for sensation-seeking, girls more for weight control or self-medication

2. Race and Ethnicity

Patterns vary significantly:

- Some minority groups show lower rates of substance use (e.g., Asian Americans)
- Some show higher rates for specific substances (e.g., higher alcohol use among Native Americans)
- Socioeconomic factors often intersect with race/ethnicity in influencing drug use patterns

3. Geographic Location

Urban vs. rural settings influence drug availability and initiation:

- Urban areas: Greater variety of substances available, potentially easier access
- Rural areas: Limited variety but potentially higher rates of alcohol and prescription drug misuse

4. Other Circumstances and settings

Locations:

- Schools: Often site of first exposure, especially for tobacco and marijuana
- Homes: Particularly for alcohol and prescription drugs
- Parks/Streets: Common for illicit drug offers
- Parties: High-risk settings for multiple substance exposures

Offerings (invitations to substance use):

- Peers: Most common source of drug offers for adolescents
- Older siblings: May provide access and "mentoring" in substance use
- Parents: Particularly for alcohol, may inadvertently model problematic use

Understanding these patterns and risk periods is essential for developing targeted prevention and intervention strategies. It's clear that a one-size-fits-all approach is insufficient; prevention efforts must be tailored to specific developmental stages, demographic factors, and environmental contexts to be most effective.

Prevalence and Recent Trends

Recent data from various sources provide insights into current prevalence and trends:

1. **Global Prevalence:** According to Hall et al. (2019), around 4% of the global adult population used marijuana in 2015.

2. **Regional Variations:**

- Higher use in North America and high-income countries in Europe and Oceania
- Lower use in low- and middle-income countries
- Increasing use in low- and middle-income countries since 2015
- Consistently low use in Asia

3. **Age Patterns:**

- Historically, use peaked in late 20s and declined from age 30
- Since 2008 in the USA, use has extended longer into the 30s

4. **THC Content:** Increased from around 5% to more than 15% in the USA and Europe in recent decades

5. **US Trends** (Compton et al., 2019, NSDUH data 2002-2017):

- Marijuana use increased from 10.4% to 15.3%
- Daily/near daily use increased from 1.9% to 4.2%
- Prevalence of marijuana use disorders remained stable at around 1.5%

6. **Adolescent Use** (Monitoring the Future survey, USA):

- Lifetime use among grade 12 students:
  - » Peaked in 1979 at 60.4%
  - » Declined to 32.6% in 1992
  - » Increased to 49.6% in 1997
  - » 43.7% in 2019

7. **European Trends:**

- Past year prevalence among young adults (up to 34 years) varies:
  - » 10% in Belgium
  - » 22% in France

8. **Australian Data:**

- Approximately 12% of 14-17-year-olds used cannabis in the previous year

The data presented here underscores the importance of early intervention and ongoing prevention efforts throughout adolescence and young adulthood.

C. Evidence-Based Prevention: Core Principles

Evidence-based prevention relies on scientific research to identify effective strategies:

- Prevention programs should aim to reduce risk factors and enhance protective factors.
- Programs should be tailored to address the specific drug abuse problems present in the community.
- Programs should be customised to cater to the unique characteristics (age, gender, ethnicity) of the target population.

Evidence-based prevention is a cornerstone of modern drug abuse prevention efforts, relying on rigorous scientific research to identify and implement effective strategies. This approach has evolved through decades of study and has crystallised around several core principles that guide the development, selection, and implementation of prevention programs.

Table: Core Principles of Evidence-Based Prevention

Principle	Description	Key Considerations
1. Risk and Protective Factors	Focus on enhancing protective factors and reducing risk factors	Consider age-specific impacts of factors
2. Community-Specific Approaches	Address local drug abuse problems and risk factors	Target modifiable factors
3. Population-Specific Customisation	Tailor programs to audience characteristics (age, gender, ethnicity)	Consider cultural relevance
4. Comprehensive Approach	Address multiple levels of influence	Integrate individual, family, and community-level interventions
5. Interactive Methods	Use interactive, skill-based approaches	Focus on cultivating social competencies
6. Program Intensity and Duration	Implement sufficiently intensive and long-lasting programs	Balance intensity with feasibility
7. Booster Sessions	Include follow-up sessions to reinforce content	Plan for long-term engagement
8. Evidence-Informed Foundations	Use scientific evidence while allowing for adaptation	Balance fidelity with flexibility
9. Continuous Monitoring	Regularly assess program implementation and outcomes	Use data to guide ongoing improvements
10. Dissemination of Findings	Share results in accessible, translational ways	Consider needs of different stakeholders

These core principles of evidence-based prevention provide a robust framework for developing, implementing, and evaluating drug abuse prevention programs.

1. Risk and Protective Factors

This approach forms the foundation of modern prevention science. It recognises that drug abuse doesn't occur in a vacuum, but rather results from a complex interplay of influences. Risk factors increase the likelihood of drug abuse and can include things like family history of substance abuse, lack of parental supervision, poverty, and early aggressive behaviour. Protective factors, on the other hand, reduce this likelihood and may include strong family bonds, academic success, and involvement in extracurricular activities.

The dynamic nature of these factors is crucial to understand. What puts a child at risk at age 8 might be different from what puts a teenager at risk at 16. For younger children, family-related factors like parental substance abuse or lack of nurturing might be most impactful. As children enter adolescence, peer influences and community factors may become more significant.

Effective prevention programs work to minimise risk factors where possible and to strengthen protective factors. This might involve teaching parents effective monitoring and communication skills, helping children develop social competencies, or working to change community norms around substance use.

2. Community-Specific Approaches

This principle recognises that one size does not fit all when it comes to prevention. Different communities face different drug-related challenges. An affluent suburban community might be dealing primarily with prescription drug abuse among teens, while an inner-city neighbourhood might be grappling with heroin use.

Effective prevention efforts start with a thorough community assessment to understand the specific nature of the local drug problem. This involves gathering data from multiple sources - law enforcement, schools, healthcare providers, and community members themselves. Only by understanding the unique contours of the local drug landscape can prevention efforts be appropriately targeted.

Moreover, this principle emphasises focusing on modifiable risk factors. While some risk factors (like genetic predisposition) can't be changed, others (like school climate or community norms) can be. By identifying and targeting these modifiable factors, prevention efforts can have the greatest impact.

3. Population-Specific Customisation

This principle takes the idea of tailoring even further, recognising that even within a community, different groups may need different approaches. Age is a critical factor here - prevention messages and strategies that work for elementary school children will likely be ineffective or even counterproductive for high school students.

Gender is another important consideration. Research has shown that boys and girls may have different risk factors for drug use and may respond differently to various prevention strategies. For instance, girls might be more influenced by body image concerns, while boys might be more susceptible to peer pressure to appear "tough."

Ethnicity and cultural background also play a crucial role. Prevention efforts need to be culturally sensitive and relevant. This goes beyond mere translation of materials into different languages. It involves understanding cultural values, norms, and practices that might influence substance use behaviours or responses to prevention efforts.

4. Comprehensive Approach

This principle recognises that drug abuse is a complex problem that can't be addressed through single, isolated interventions. Instead, it calls for a multi-faceted approach that addresses multiple levels of influence.

At the individual level, this might involve education about the risks of drug use and training in refusal skills. At the family level, it could include parenting skills training and family therapy. School-based programs might focus on creating a positive school climate and implementing evidence-based curricula. At the community level, efforts might include media campaigns, policy changes, and environmental strategies (like reducing alcohol outlet density).

The idea is that these multiple components work synergistically, reinforcing each other to create a comprehensive web of prevention that's more effective than any single strategy alone.

5. Interactive and Skill-Based Methods

This principle moves away from traditional, didactic approaches to prevention that simply provide information about the dangers of drug use. While knowledge is important, research has consistently shown that information alone is not enough to change behaviour.

Instead, this principle emphasises interactive methods that actively engage participants. This might involve role-playing exercises to practice refusal skills, group discussions about perceived norms around substance use, or hands-on activities to build self-efficacy.

The focus on skill development is crucial. Effective programs teach and allow practice of concrete skills like decision-making, stress management, and effective communication. By building these general competencies, prevention programs equip individuals with tools that can help them navigate a variety of life challenges, not just decisions around drug use.

6. Program Intensity and Duration

This principle recognises that meaningful change takes time and sustained effort. Brief, one-shot prevention programs, while perhaps better than nothing, are unlikely to have lasting effects.

More effective are programs that involve multiple sessions over an extended period. This allows for the introduction of concepts, practice of skills, and reinforcement of learning over time. It also allows the program to address multiple topics in depth, rather than trying to cram everything into a single session.

The exact optimal "dose" of prevention may vary depending on the program and the target population. However, many effective programs involve at least 10-15 sessions, and some extend over multiple years.

7. Booster Sessions

Related to the principle of program intensity and duration is the concept of booster sessions. These are follow-up sessions conducted some time after the main program has concluded.

Booster sessions serve several important functions. They reinforce the key messages and skills taught in the original program, helping to counteract the natural decay of effects over time. They also provide an opportunity to address new challenges that may have arisen since the original program. Moreover, booster sessions can be tailored to the developmental stage of the participants. For instance, a program delivered in elementary school might have boosters in middle school that address the new social pressures and opportunities for substance use that emerge in adolescence.

8. Evidence-Informed Foundations

This principle strikes a balance between rigorous adherence to scientific evidence and the need for flexibility in real-world implementation. It recognises that while research evidence should guide prevention efforts, it shouldn't be applied rigidly without consideration of local context.

The term "evidence-informed" (as opposed to "evidence-based") acknowledges that prevention practitioners often need to adapt programs to fit their specific circumstances. This might involve modifying a program to be culturally appropriate for a particular community, or adjusting the delivery method to fit within school scheduling constraints.

However, this principle also emphasises the importance of understanding the core components of effective programs. When adaptations are made, care should be taken to preserve these essential elements that are thought to drive the program's effectiveness.

9. Continuous Monitoring and Evaluation

This principle emphasises that implementing a prevention program is not a "set it and forget it" proposition. Instead, ongoing monitoring and evaluation are crucial to ensure that the program is being implemented as intended and is having the desired effects.

Process evaluation looks at how the program is being delivered.

- Are all components being implemented?
- Is the program reaching its intended audience?
- Are participants engaged?

This type of evaluation can help identify and address implementation challenges early on. Outcome evaluation assesses whether the program is achieving its goals. This might involve measuring changes in knowledge, attitudes, and behaviours related to substance use. It's important to have a clear logic model that outlines how the program activities are expected to lead to these outcomes.

This principle also emphasises the importance of using evaluation results for continuous improvement. If certain aspects of the program aren't working as intended, they should be modified. If new community needs emerge, the program should evolve to address them.

10. Dissemination of Findings

This final principle recognises that for prevention science to advance, knowledge must be shared. This goes beyond simply publishing results in academic journals (although that's important too).

Effective dissemination involves translating findings into formats that are accessible and useful to various stakeholders. For policymakers, this might mean brief policy briefs that highlight key findings and their implications. For practitioners, it could involve practical guides or training materials that show how to implement evidence-based strategies.

This principle also emphasises the importance of two-way communication. Researchers should not just disseminate their findings to communities, but should also learn from the experiences and insights of those implementing prevention programs on the ground.

Finally, this principle recognises the importance of building capacity for prevention within communities. This might involve training local practitioners in evaluation methods, or working with community organisations to help them understand and apply prevention research findings.

Core Elements of Effective Research-Based Prevention Programs

Over recent years, numerous research-based prevention programs have demonstrated their effectiveness through rigorous testing. These programs have been evaluated using robust experimental designs across diverse communities, settings, and populations. The gold standard for such research involves comparing an experimental group (which receives the intervention) to a control group (which does not), allowing researchers to isolate the effects of the program.

As communities seek to implement prevention programs, they should consider three core elements that contribute to program effectiveness:

1. **Structure**
2. **Content**
3. **Delivery**

Let's examine each of these elements in detail:

1. Structure

Structure refers to how a prevention program is organised and constructed. It encompasses three key aspects:

A. Program Type: Several types of programs have proven effective in preventing drug abuse:

- School-based programs: These were the first to be fully developed and tested, and have become the primary approach for reaching all children. They leverage the school environment to deliver prevention messages and skills training.
- Family-based programs: These have shown effectiveness in reaching both children and their parents across various settings. They often focus on improving family dynamics and communication.
- Media and computer technology programs: These are emerging as effective tools for reaching individuals at both community and personal levels. They leverage modern technology to deliver prevention messages and interactive content.
- Multicomponent programs: Research indicates that combining two or more effective programs (e.g., family and school programs) can yield even better results than single programs alone.

B. Audience: Programs are often designed to target specific audiences. For example:

- Universal programs: Aimed at the general population (e.g., all youth)
- Selective programs: Targeted at subgroups with higher risk (e.g., middle school students)
- Indicated programs: Focused on high-risk individuals (e.g., high-risk youth and their families)

Programs may also be tailored for specific demographics such as urban or rural populations, racial and ethnic minorities, or different age groups.

C. Setting: This describes where the program takes place. While programs are typically designed for primary settings (e.g., schools for children), there's a growing trend of implementing programs in alternative settings. For instance, a family-based program might be conducted in a school, or a school-based program might be delivered through a youth organisation like Boys/Girls Clubs.

2. Content

Content refers to what is actually delivered in the program. It comprises four main components:

A. Information: This includes facts about drugs and their effects, as well as relevant laws and policies. However, it's crucial to note that information alone has not been found effective in deterring drug abuse. It needs to be combined with other components for maximum impact.

B. Skills Development: This involves training to build and improve behaviours in key areas such as:

- Family communication
- Social and emotional development
- Academic and social competence in children
- Peer resistance strategies for adolescents

C. Methods: These are oriented toward structural change. Examples include:

- Establishing and enforcing school rules on substance abuse
- Enforcing existing laws, like those on tobacco sales to minors

D. Services: These might include:

- School counselling and assistance
- Peer counselling
- Family therapy
- Health care

The content is designed to reduce modifiable risk factors and strengthen protective factors associated with drug abuse.

3. Delivery

Delivery encompasses how the program is selected or adapted, implemented, and evaluated in a specific community. It involves several key aspects:

A. Program Selection: Communities need to match effective research-based programs to their specific needs. This often involves a structured review of existing programs, identifying gaps based on community risk and protective factors, and drug-related issues.

B. Adaptation: This involves tailoring a program to fit the needs of a specific population or setting. It's crucial to maintain the core elements of the program while addressing community needs. Some programs have been scientifically adapted for specific populations, such as the Life Skills Training Program for inner-city minority youth.

C. Implementation: This refers to how the program is actually delivered, including:

- Number of sessions
- Methods used
- Program follow-up

Research has shown that implementation quality can significantly impact a program's effectiveness in preventing drug abuse.

D. Interactive Methods: The use of interactive methods is emphasised as particularly effective.

E. Booster Sessions: Appropriate booster sessions help reinforce earlier program content and skills, maintaining the program's benefits over time.

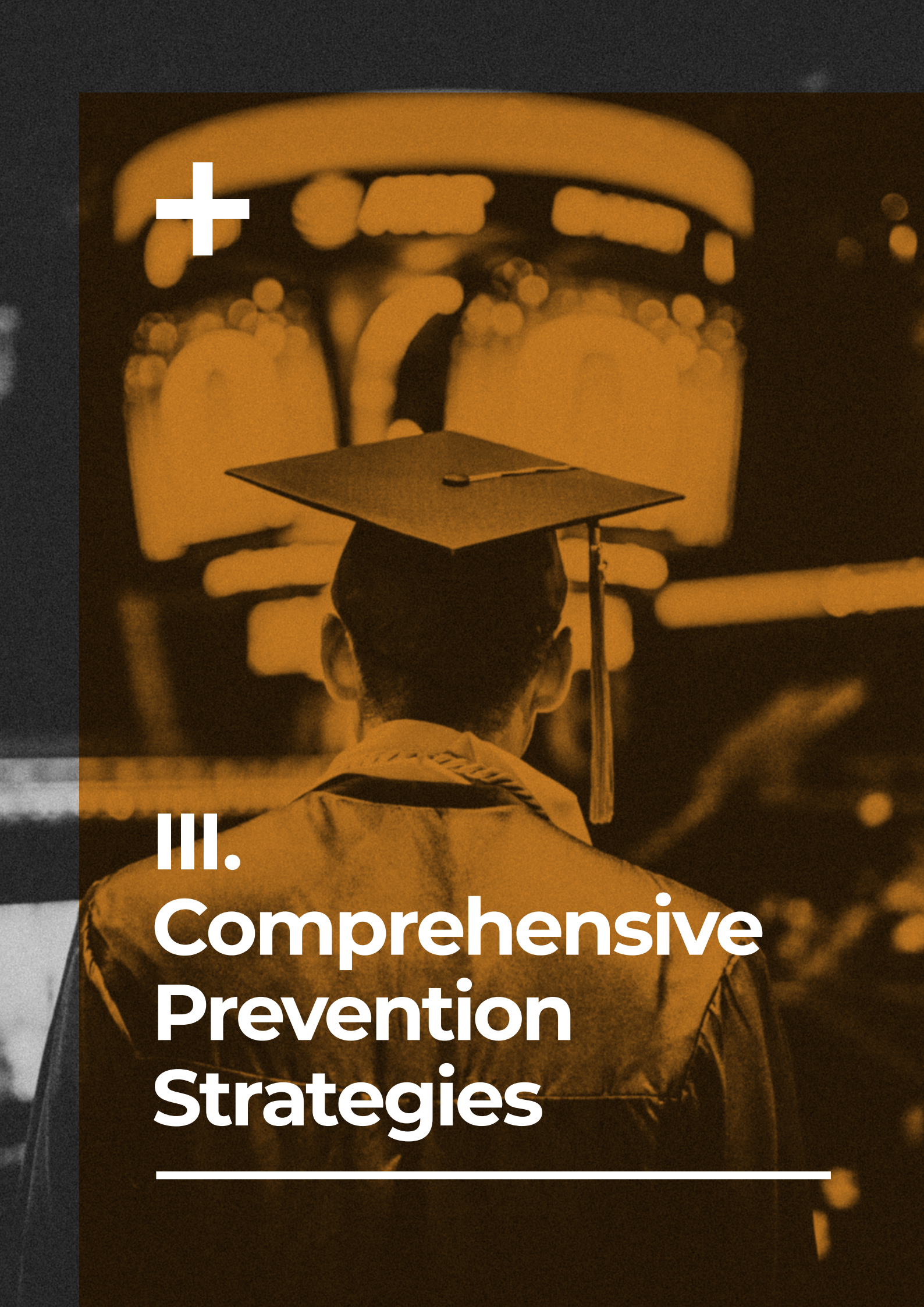
F. Evaluation: Ongoing evaluation is crucial to ensure the program is meeting its objectives and to guide any necessary adjustments.

Table: Core Principles of Evidence-Based Prevention

Core Element	Component	Description	Examples
Structure	Program Type	The overall approach and design of the program	• School-based programs • Family-based programs • Media and computer technology programs • Multicomponent programs (combining two or more approaches)
	Audience	The target population for the program	• Universal: All youth • Selective: Middle school students • Indicated: High-risk youth and their families • Specific demographics: Urban/rural, racial/ethnic minorities, age groups
	Setting	Where the program takes place	• Primary settings: Schools, homes • Alternative settings: Youth organisations (e.g., Boys/Girls Clubs) • Multiple settings for multicomponent programs

Core Element	Component	Description	Examples
Content	Information	Facts and data provided to participants	• Drug trends • Drug effects • Drug abuse symptoms • Drug laws and policies
	Skills Development	Training to build and improve behaviours	• Family communication • Social and emotional development • Academic and social competence • Peer resistance strategies
	Methods	Approaches oriented toward structural change	• Establishing and enforcing school rules on substance abuse • Enforcing existing laws (e.g., tobacco sales to minors) • Changing community norms • Home drug-testing; curfews
	Services	Additional support provided to participants	• School counselling and assistance • Peer counselling • Family therapy • Health care

Core Element	Component	Description	Examples
Delivery	Program Selection	Process of choosing appropriate programs	• Structured review of existing programs • Identifying community needs and gaps • Matching programs to community risk /protective factors
	Adaptation	Tailoring programs to specific populations/ settings	• Culturally adapting programs (e.g., for rural environments) • Modifying for specific populations (e.g., boys only) • Maintaining core elements while addressing community needs
	Implementation	How the program is actually delivered	• Number of sessions • Methods used • Program follow-up • Use of interactive methods • Inclusion of booster sessions
	Evaluation	Assessing program effectiveness	• Comparing experimental group to control group • Measuring changes in drug use behaviours • Assessing impact on risk and protective factors



III. Comprehensive Prevention Strategies

A. School-Based Prevention Programs

- Schools offer a strategic setting to reach a large population of youth.
- **Universal programs,** like Resiliency and Life Skills Training, target all students in a particular setting, such as a classroom or entire school.
- **Tiered programs,** such as the **Early Risers "Skills for Success" program**, are designed to address the specific needs of groups of students deemed to be at higher risk.
- School-based programs often incorporate interactive techniques to enhance engagement and learning, such as peer discussions, role-playing, and skill-building activities.

School-based drug prevention programs offer a strategic setting to reach a large population of youth during their formative years. Schools provide an ideal environment to implement universal prevention efforts that target all students, as well as more targeted interventions for higher-risk groups. Research has demonstrated that well-designed and properly implemented school-based programs can be effective in reducing substance use among students.

Goals and Focus

- Aims to prevent and/or delay uptake of substance use by young people
- Focuses on skills development and building capacity for healthier decision-making
- In primary school, focuses on building life skills and resilience
- In secondary school, strengthens skills/resilience and provides education about legal and illegal drugs

Types of School-Based Programs

School-based prevention programs generally fall into two main categories:

1. Universal programs - Target all students in a particular setting (e.g. classroom, grade level, or entire school)
2. Tiered/selective programs - Designed to address needs of specific higher-risk groups

Universal programs like Life Skills Training (LST) are provided to all students regardless of risk level. Tiered programs like Early Risers "Skills for Success" offer more intensive interventions for students deemed to be at elevated risk.

Key Components of Effective Programs

Research has identified several components that tend to be present in the most effective school-based prevention programs:

- Provide clear and accurate information about drugs and impact on developing body and brain – understanding the practical negative outcomes of substance use beyond health and well-being including loss of or damaged relationships and future potential
- Interactive techniques to enhance engagement (e.g. peer discussions, role-playing, skill-building activities)
- Comprehensive approach addressing multiple risk and protective factors
- Sufficient program intensity and duration
- Age-appropriate information and skills
- Focus on social norms / cultural sensitivity and relevance
- Develop interpersonal skills
- Improve life and social skills (e.g. decision-making, self-esteem, resisting peer pressure)
- Well-trained implementers
- Most effective when implemented in late primary and early secondary school
- Should be combined with other interventions like parent education and family support programs

Evidence of Effectiveness

Numerous studies have demonstrated the potential effectiveness of school-based prevention programs in reducing substance use among youth:

- A meta-analysis of 207 universal school-based prevention programs found mean effect sizes ranging from 0.05 to 0.16 for reducing alcohol, tobacco and other drug use outcomes (Tobler et al., 2000).
- Systematic review of 58 studies evaluating school-based drug prevention programs found significant positive effects on marijuana use both in the short-term ($d = 0.136$, $p < 0.01$) and long-term ($d = 0.219$, $p < 0.01$).
- For all illicit drug use outcomes combined, significant positive effects are found in both the short-term ($d = 0.141$, $p < 0.01$) and long-term ($d = 0.208$, $p < 0.001$).

Program Examples with Evidence of Effectiveness

Life Skills Training (LST) Program:

- Universal middle school program
- Teaches drug resistance, self-management, and general social skills over 3-year curriculum
- Multiple studies have found significant reductions in marijuana and other illicit drug use
- Botvin et al. (1995) found 44% reduction in drug use 6 years after program completion
- Review found mixed results, with 2/3 of rigorous studies showing non-significant effects

Project ALERT:

- Universal middle school program
- Focuses on motivating students to resist drug use and teaching resistance skills
- Ellickson et al. (2003) found 24% reduction in past month marijuana use
- Our review found mixed short-term effects, with limited long-term impact

The Strengthening Families Program: For Parents and Youth 10–14 (SFP 10–14):

- Universal family-based program for middle school students and parents
- Teaches parenting skills and youth life/social skills
- Spoth et al. (2002) found significant reductions in marijuana initiation

Program Characteristics Associated with Effectiveness

Our review identified several program characteristics associated with greater effectiveness in reducing illicit drug use:

- Interactive approaches using social influence or competency enhancement (Mean ES = 0.14-0.22)
- Higher program intensity (10-19 sessions)
- Use of booster sessions
- Delivery by peers or professionals rather than teachers
- Implementation in middle school years

Table: key characteristics of effective school-based prevention programs

Characteristic	More Effective	Less Effective
Approach	Interactive social influence/ competency enhancement	Non-interactive knowledge-based
Intensity	10-19 sessions	<10 sessions
Boosters	Included	Not included
Provider	Peers/professionals	Teachers
Target grade	Middle school	Elementary/ high school

Cost-Effectiveness

Research has demonstrated the potential cost-effectiveness of school-based prevention programs:

- A cost-benefit analysis of LST estimated $38 saved for every $1 spent on the program (Aos et al., 2004)
- For each dollar invested in prevention, up to $10 in treatment costs may be saved

Implementation Challenges

Despite evidence of effectiveness, school-based programs face several implementation challenges:

- Maintaining program fidelity
- Securing adequate resources and time
- Integrating programs into existing curricula
- Sustaining programs long-term
- Reaching highest-risk youth who may not attend school regularly

School-based drug prevention programs offer a promising approach for reaching large numbers of youth. Well-designed interactive programs that teach social and behavioural skills have demonstrated effectiveness in reducing substance use, particularly when implemented in middle school with adequate intensity. However, more research is needed on strategies to enhance implementation quality and program sustainability in real-world settings. Combining school-based programs with family and community interventions may help reinforce prevention messages and maximise impact.

Analysis of Drug Education Implementation in NSW Schools

1. Curriculum Integration

Drug education in New South Wales (NSW) is strategically integrated into the Personal Development, Health, and Physical Education (PDHPE) syllabus. This integration is a critical component of the educational framework, designed to equip students with the necessary knowledge and skills to navigate drug-related challenges. The primary goals of this integration are to enhance students' understanding of both legal and illegal substances and to strengthen their resilience and decision-making capabilities. By embedding drug education within the PDHPE syllabus, NSW schools take a holistic approach that aligns with broader educational and health objectives, ensuring a consistent and structured delivery of essential life skills across all school levels. This integration not only addresses immediate educational needs but also provides a long-term strategy for reducing drug-related harm among young people.

2. Syllabus Flexibility

The flexibility of the PDHPE syllabus is one of its most significant strengths, allowing schools to tailor drug education content to their unique community needs. This adaptability enables schools to address specific local drug issues and cultural contexts, making the education more relevant and impactful for students. For example, schools in areas with higher incidences of particular substance use can emphasise those topics, ensuring that students receive pertinent and timely information.

However, this flexibility also presents challenges, such as ensuring consistency and quality of education across different schools. There is a risk that without clear guidelines, the quality of drug education may vary significantly, potentially leading to gaps in students' knowledge and understanding. Therefore, while flexibility allows for customisation, it must be balanced with oversight and support to maintain a high standard of education across the state.

3. Resilience Building and Values Clarifying Programs

For example the Values 4 Life or the Life Ready Program, or No Brainer Ripped Off and Humpty Dumpty Dilemma should be mandatory initiative for students in Years 11 and 12, focusing on alcohol and other drugs (AOD) education. This program is designed to prepare students for the challenges they may face outside the school environment, particularly as they transition into adulthood. The effectiveness of these programs is heavily dependent on their implementation by individual schools, which can vary widely. Some schools may successfully engage students with relevant and interactive content, while others may struggle with resources or staffing, leading to less impactful delivery.

Feedback from various stakeholders has highlighted mixed results, with some students perceiving the program as less relevant compared to their immediate academic pressures. To improve its impact, there is a need for continuous evaluation and adaptation of the program, incorporating feedback from educators and students to ensure it meets the evolving needs of young people. This may include enhancing the engagement strategies used in the program and ensuring that educators are adequately prepared and supported to deliver this critical content effectively.

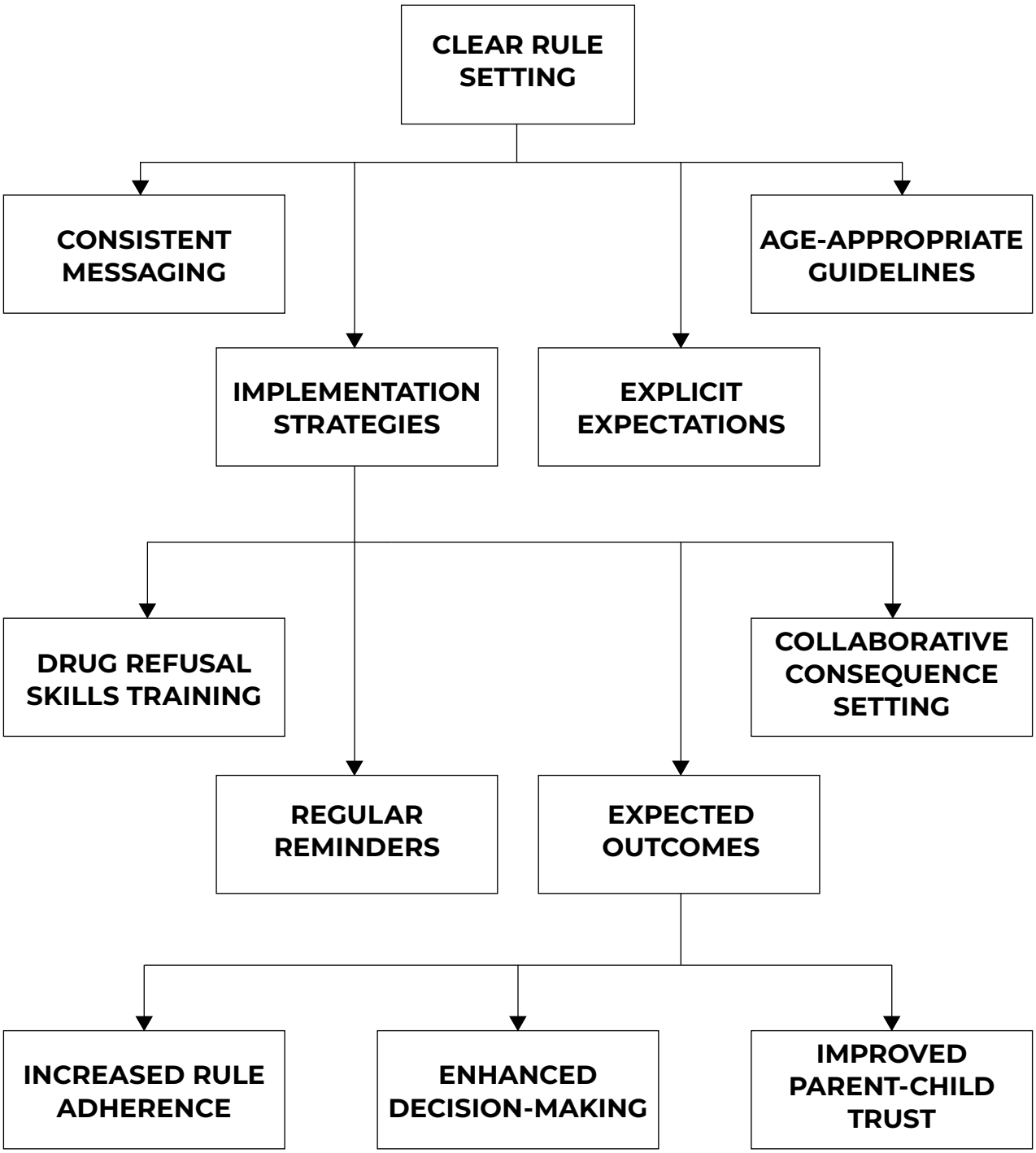
B. Family-Focused Interventions

- Family-focused interventions recognise the crucial role of family dynamics in drug abuse prevention.
- Programs like the **Strengthening Families Program** work with both youth and their parents to develop positive parenting skills, improve communication, and strengthen family bonds.
- These programs can be implemented in various settings, including homes, schools, and community centres.

Family-focused interventions represent a crucial approach to drug abuse prevention, recognising the fundamental role that family dynamics play in shaping children's attitudes and behaviours toward substances.

1. Core Principles of Family-Focused Interventions

A. Rules & Consequences



Key Components

1. **Clear Communication:** Repeatedly telling children that you do not want them to use tobacco, alcohol, or illicit drugs. This isn't a one-time conversation but an ongoing dialogue.

2. **Collaborative Approach:** Rather than imposing rules unilaterally, involving children in defining consequences. This strategy:
   - Increases buy-in from youth
   - Promotes responsibility for behaviour
   - Helps children understand the reasoning behind rules

3. **Consequence Implementation:**
   - Be prepared for rule testing
   - Follow through consistently
   - Use appropriate, predetermined consequences

Practical Example

Example of how rules can be leveraged in peer pressure situations:

> When offered a cigarette, your son can say, "If my mom caught me smoking, I'd be grounded!"

This approach:

- Shifts blame to the parent
- Provides an easy out in peer situations
- Reinforces the existence of clear consequences

B. Individual Time

This principle emphasises the importance of one-on-one interactions between parent and child.

Type of Interaction	Examples	Benefits	Implementation Tips
Daily Routines	• Drive to school • Folding laundry • Bike rides	• Regular communication opportunities • Natural, low-pressure environment	• Use these moments for casual check-ins • Be fully present • Listen more than you speak
Planned Activities	• One-on-one outings • Shared hobbies • Special parent-child time	• Strengthens bond • Creates positive associations • Builds trust	• Schedule regularly • Let child choose activities sometimes • Keep phones away
Crisis Availability	• Offering rides when needed • Being available late at night • Having backup adults available	• Provides safety net • Shows unconditional support • Prevents dangerous situations	• Ensure child knows you're always available • Have backup plans • Never shame them for asking for help

Key Aspects

1. **Timing Flexibility:** using various moments throughout the day, indicating that quality individual time doesn't always need to be formally scheduled. E.g. driving in car, or watching TV together and challenging the content for discussion.

2. **Privacy Importance:** the value of conversations without anyone else hearing or interrupting, highlighting the need for true one-on-one interaction.

3. **Consequence Implementation:** Parents are advised to:
    - Be available any time children need to leave a place where alcohol or drugs are present
    - Have backup plans (responsible adults) when they can't be immediately available

C. Positive Role Modelling

"Children learn what they see" - underlining the crucial nature of modelling appropriate behaviours.

Components of Effective Role Modelling:

1. **Personal Behaviour Modelling:**
    - If consuming alcohol, demonstrate moderation
    - Never suggest substances as a coping mechanism
    - Show healthy stress management techniques:
        - » Exercise
        - » Music
        - » Talking with friends

2. **Extended Role Model Network:**

- Involve other adults as positive influences
- Specifically mentions grandparents as potential reinforcers of values
- Suggests using technology to bridge physical distances for role model relationships

D. Promotion of Healthy Activities

This principle focuses on providing constructive alternatives to substance use.

Sports Benefits: • Physical health • Teamwork skills • Time management Examples: • Team sports • Individual athletics • Recreational leagues	**Creative Pursuits** Benefits: • Self-expression • Stress relief • Cognitive development Examples: • Art classes • Music lessons • Drama clubs
Community Service Benefits: • Social awareness • Empathy development • Taking focus off self • Resume building Examples: • Volunteering • Youth groups • Community projects	**Paid Work** Benefits: • Responsibility • Financial literacy • Time management Examples: • Babysitting • Lawn care • Summer camps

By thoroughly implementing these core principles, family-focused interventions create a comprehensive approach to substance abuse prevention that goes beyond simple "don't do drugs" messaging to create a supportive, engaging environment that naturally reduces the likelihood of substance abuse.

Table: **Core Principles of Family-Focused Interventions**

Strategy	Description	Implementation Tips
Rules & Consequences	Clear communication of expectations regarding substance use	• Tell children explicitly that you don't want them to use tobacco, alcohol, or illicit drugs • Involve children in defining consequences • Be prepared to follow through consistently
Individual Time	One-on-one interactions to strengthen parent-child bond	• Create opportunities for private conversations • Use everyday moments (car rides, chores) • Listen actively and without interruption
Positive Role Modelling	Demonstrating healthy coping mechanisms and attitudes	• Model moderate alcohol use if you drink • Show healthy stress management • Involve other positive adult role models
Healthy Activities	Engaging children in constructive pursuits	• Encourage sports participation • Facilitate involvement in youth clubs • Support volunteer opportunities

2. Age-Specific Approaches

Family interventions must be tailored to different age groups:

Preschoolers (Ages 3-5)

- Use everyday opportunities to discuss substance-related topics
- Keep explanations brief and age-appropriate
- Focus on teaching good decision-making skills

Elementary School (Ages 6-10)

- Distinguish between "good" and "bad" drugs
- Regularly reinforce anti-drug messages
- Offer praise for smart choices regarding substances

Middle School (Ages 11-14)

- Help nurture interests in positive activities
- Get to know children's friends and their parents
- Practice role-playing to resist peer pressure

High School (Ages 15-18)

- Connect substance use to potential impacts on future goals
- Maintain appropriate boundaries while allowing independence
- Stay informed about current drug trends

3. Communication Strategies

Effective family interventions heavily rely on open, honest communication. Key statistics support this approach:

- 80% of children believe parents should have input on their alcohol consumption decisions
- Only 10% of 12-year-olds report trying alcohol, but this jumps to 50% by age 15

4. Implementation Settings

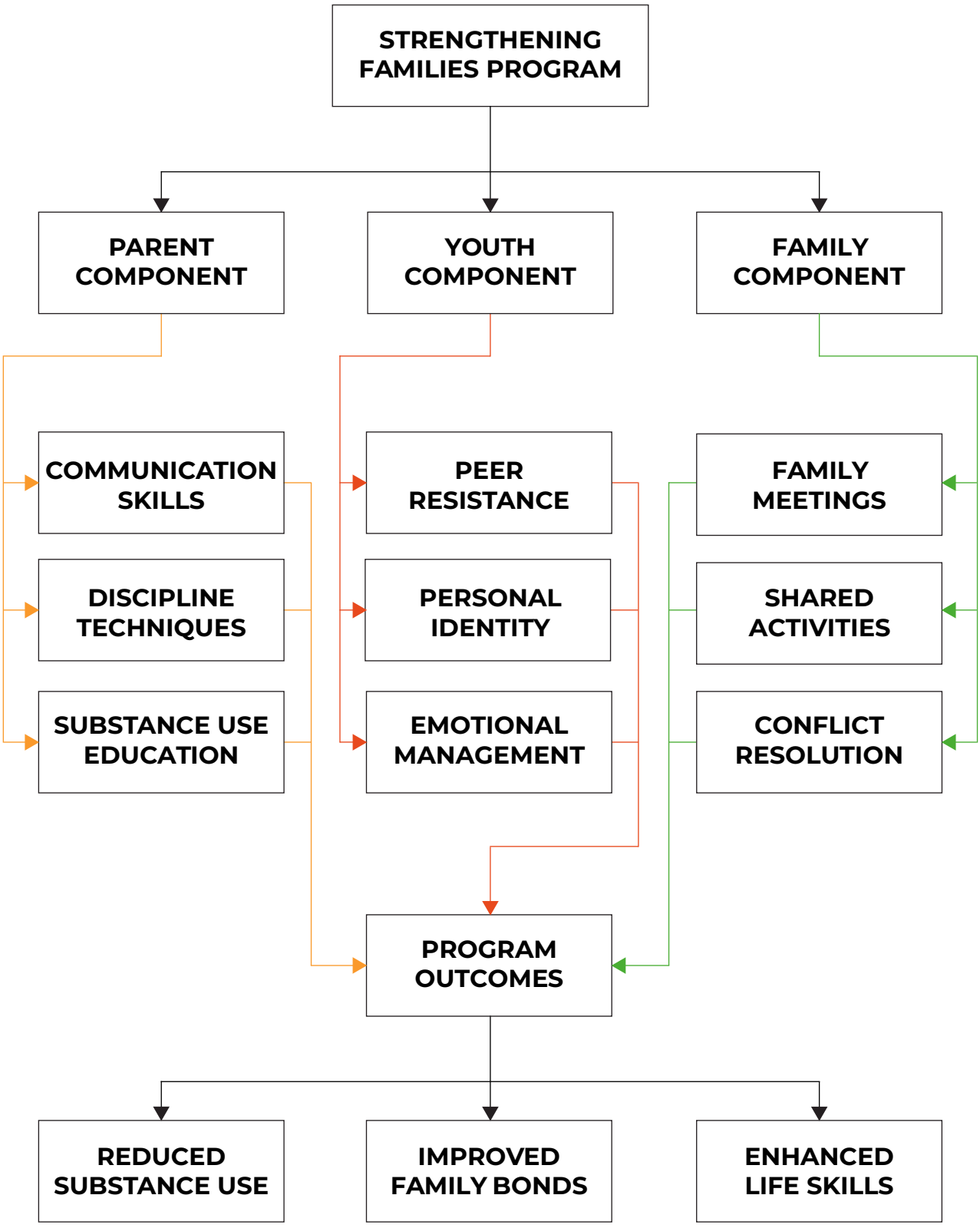
Family-focused interventions can be delivered in various contexts:

1. Home-based programs
2. School-integrated approaches
3. Community centre initiatives
4. Combined settings (multicomponent programs)

5. Evidence-Based Program Example: Strengthening Families

The Strengthening Families Program represents one of the most comprehensive and effective family-focused interventions for substance abuse prevention. Through its multi-faceted approach, this program addresses the complex dynamics of family relationships while building resilience against drug use.

Program Structure



Parent Skills Training

At its core, the program recognises that parents need support and education to effectively prevent substance abuse in their children. Parents learn to establish appropriate boundaries while maintaining warm, supportive relationships. This delicate balance creates an environment where children feel both loved and guided.

A typical parent training session might involve:

1. Learning to give clear, specific directions instead of vague commands
2. Practicing active listening techniques to improve parent-child communication
3. Developing strategies for consistent discipline that's neither too harsh nor too lenient

For instance, parents might role-play scenarios where they practice remaining calm while enforcing household rules about curfews or homework completion. These skills directly translate to more effective conversations about substance use prevention.

Youth Skills Development

Young participants don't just sit and listen to lectures about avoiding drugs. Instead, they engage in interactive activities designed to build their decision-making abilities and self-esteem. Through age-appropriate exercises, youth learn to:

- Recognise and resist peer pressure
- Develop healthy friendships
- Set and work toward personal goals
- Handle stress and emotions without turning to substances

A middle school student in the program might participate in an activity where they practice different ways to say "no" to offers of alcohol or drugs, building confidence in their ability to handle real-world situations.

Family Skills Training

Weeks 1-2
Foundation Building • Family meetings • Active listening practice • Identifying family strengths
Weeks 3-4
Communication Enhancement • 'I' statements • Family problem-solving • Expressing feelings safely
Weeks 5-6
Boundary Setting • Creating family rules • Consistent consequences • Positive reinforcement
Weeks 7-8
Conflict Resolution • Negotiation skills • Compromise techniques • Win-win solutions

The Strengthening Families Program empowers families by bringing parents and children together to practice their new skills. These joint sessions transform the theoretical knowledge into practical family habits. Families might engage in:

1. Structured family meetings where everyone has a voice
2. Fun activities that build positive associations with family time
3. Problem-solving exercises that tackle real family challenges

During these sessions, families might work together to plan a drug-free family event or create a family mission statement that emphasises their commitment to healthy choices.

Implementation Settings

The program's versatility allows it to be implemented in various settings:

1. Schools - Often integrated into after-school programs
2. Community centres - Reaching families in their own neighbourhoods
3. Churches - Utilising existing community connections
4. Mental health centres - Supporting families already seeking help

Long-term Impact

The effectiveness of the Strengthening Families Program extends far beyond immediate substance abuse prevention. Families who complete the program often report:

1. Improved communication that lasts for years
2. Stronger family bonds that help children navigate adolescence
3. Enhanced problem-solving skills that benefit all areas of life
4. Greater resilience in facing life's challenges

A particularly powerful aspect of the program is its ability to break intergenerational cycles of substance abuse. When parents learn new skills and perspectives, they not only help their current children but also set the stage for healthier future generations.

Adaptation and Evolution

While maintaining its core principles, the Strengthening Families Program has evolved to meet changing needs. Modern iterations might include:

1. Online components for increased accessibility
2. Culturally adapted versions for different communities
3. Age-specific modifications for various developmental stages

6. Key Success Factors

Several critical elements for effective family interventions:

1. Consistency in rule enforcement
2. Regular praise and positive reinforcement
3. Availability during critical moments
4. Proactive rather than reactive approaches

Some Do Not's

- ***Reacting in anger to shocking statements***
- ***Assuming children know how to handle temptation***
- ***Talking without listening***
- ***Demanding compliance without clear model or credo***
- ***Making up information when unsure***

7. Measuring Success

Improved Family Communication

A critical success indicator of family-focused interventions in drug abuse prevention is improved family communication. These programs are designed to open channels of dialogue between family members, making it easier to discuss sensitive subjects such as drug use. Enhanced communication fosters an environment of trust and understanding, where children feel comfortable sharing their concerns and experiences. This openness is crucial in identifying potential risks early and addressing them before they escalate. Good communication also allows parents to convey their expectations regarding substance use clearly, reinforcing family values and guidelines.

Stronger Parent-Child Bonds

Strengthening parent-child bonds is another key outcome of successful family interventions. These programs focus on building emotional and relational connections, providing a safe and supportive environment for children. A strong bond between parents and children serves as a protective factor against drug use, as children are more likely to seek guidance and support from their parents when faced with peer pressure or challenging situations. Additionally, a nurturing relationship can boost a child's self-esteem and resilience, reducing the likelihood of turning to drugs as a coping mechanism.

Enhanced Drug Refusal Skills in Youth

Family-focused interventions are effective in enhancing drug refusal skills among youth. By equipping young people with strategies to resist peer pressure, these programs empower them to make healthier choices. Parents play a pivotal role in this aspect by modelling refusal skills and offering opportunities for their children to practice these skills in safe environments. Through role-playing and open discussions about potential scenarios, children learn to assertively say no to drugs, which increases their confidence in real-life situations.

Increased Parental Monitoring and Involvement

Increased parental monitoring and involvement is a significant measure of success for these interventions. When parents are more engaged in their children's lives, it creates a structured environment that discourages drug use. Active involvement includes knowing who their children's friends are, being aware of their activities, and setting clear rules and expectations. This vigilance not only deters risky behaviours but also promotes healthier lifestyle choices. Research indicates that children with parents who are actively involved in their lives are less likely to experiment with drugs, as they feel accountable and supported.

Brief Summary

This comprehensive approach to family-focused interventions recognises that parents play a critical role in preventing substance use, and provides concrete, actionable strategies for implementation across different age groups and settings.

C. Community-Based Approaches

- Community-based approaches involve a collaborative effort among various stakeholders, including schools, law enforcement, healthcare providers, and community organisations.
- These approaches often use a **multi-component strategy**, combining multiple programs and initiatives to create a comprehensive and integrated prevention system.
- Examples include media campaigns, community coalitions, and policy changes aimed at reducing access to drugs or promoting healthy norms.

Overview and Key Components

Community-based prevention strategies represent a sophisticated, multi-layered approach to combating substance abuse that extends far beyond simplistic "just say no" messaging. These strategies recognise that effective drug prevention requires the coordinated efforts of multiple stakeholders, including schools, law enforcement, healthcare providers, religious institutions, and community organisations, all working in concert to create a comprehensive prevention ecosystem.

Comprehensive Assessment

At the heart of any effective community prevention strategy lies a thorough, methodical assessment process. Research has demonstrated that communities cannot simply implement generic prevention programs and expect success. Instead, they must first gain a deep understanding of their specific drug abuse landscape through rigorous evaluation of multiple factors.

First and foremost, communities must measure the nature and extent of drug abuse patterns and trends within their borders. This involves collecting data from multiple sources, including:

1. Public access data from national surveys such as the National Survey on Drug Use and Health and Monitoring the Future Study
2. Archival data from school systems, health departments, hospital emergency rooms, and law enforcement agencies
3. Ethnographic studies that use systematic, observational processes to describe behaviours in natural settings
4. Qualitative methods such as focus groups and key interviews with community officials

The Community Epidemiology Work Group (CEWG), pioneered by the National Institute on Drug Abuse, provides a model for this type of data collection and analysis. CEWG representatives from 21 U.S. cities meet biannually to share changing drug trends in their locations, using a standardised approach that other communities can adopt.

Beyond just measuring drug use itself, communities must also assess risk and protective factors. This includes examining elements such as poverty levels, family cohesion, school connectedness, and community disorganisation. The Communities That Care prevention operating system, developed at the University of Washington, offers an epidemiological approach to collecting this data, allowing communities to identify geographic areas with the highest levels of risk and the lowest levels of protective resources.

Understanding the community's culture and its relationship with drug abuse is another crucial element. This involves examining how cultural norms, values, and practices either contribute to or protect against substance abuse. For instance, some communities may have cultural practices that inadvertently normalise alcohol use among youth, while others may have strong cultural traditions that serve as protective factors.

An inventory of existing prevention efforts is also essential to avoid duplication and identify gaps. This includes evaluating current programs for their effectiveness, reach, and alignment with community needs. Communities should ask key questions such as:

- Were strict scientific standards used to test the programs during their development?
- Are the programs being carried out as designed?
- What percentage of at-risk youth is being reached by the program?

Finally, assessing community readiness is crucial for determining the appropriate next steps. Research has identified nine stages of readiness, ranging from "no awareness" to "professionalisation." A community in denial about its drug problem requires a very different approach than one that's already actively engaged in prevention efforts.

Multi-Level Implementation

Once assessment is complete, effective community prevention programs must operate at multiple levels simultaneously. This multi-level approach recognises that drug abuse is influenced by factors at various ecological levels, from individual characteristics to family dynamics to community-wide influences.

At the individual level, interventions might include counselling, mentoring programs, or life skills training. These programs aim to enhance protective factors such as self-esteem, problem-solving abilities, and drug resistance skills while addressing risk factors like early aggressive behaviour or poor social skills.

School-based programs form another crucial level of implementation. These have become the primary approach for reaching all children and typically include both universal programs for the general student population and targeted interventions for at-risk students. Effective school programs go beyond simple drug education to include elements like:

- Social and emotional learning
- Academic support
- School climate improvement
- Parent engagement

Family-focused initiatives represent another key level of implementation. These programs enhance family bonding and relationships while providing parents with the skills and knowledge needed to guide their children away from drug use. Research shows that family-based prevention programs should include:

- Parenting skills training
- Practice in developing, discussing, and enforcing family policies on substance abuse
- Drug education and information for both parents and children

Finally, community-wide messaging and policy changes create an environment that supports drug prevention. This might include media campaigns, changes to local ordinances, or initiatives to reduce the density of alcohol outlets in the community. Research has shown that carefully structured media interventions can be particularly effective - one study found that a targeted campaign reduced marijuana abuse by 27 percent among high sensation-seeking youth.

The most successful community prevention strategies integrate all these levels into a coherent, mutually reinforcing system. When individual interventions, school programs, family initiatives, and community-wide efforts all align to send consistent messages and provide consistent support, the impact can be far greater than any single approach alone.

Community Readiness Assessment

Research has identified nine stages of community readiness that guide prevention planning:

Readiness Stage	Community Response	Recommended Action
1. No Awareness	Relative tolerance of drug abuse	Create motivation through community leader meetings
2. Denial	"Not happening here, can't do anything"	Use media to identify and discuss the problem
3. Vague Awareness	Awareness exists, but no motivation	Connect drug issues to community concerns
4. Preplanning	Leaders aware, some motivation	Develop plans through coalitions
5. Preparation	Active, energetic leadership	Identify and implement research-based programs
6. Initiation	Data used to support prevention	Evaluate and improve ongoing programs
7. Stabilisation	Community supports existing programs	Institutionalise and expand programs
8. Confirmation/ Expansion	Support for improving programs	Extend reach to more populations
9. Professionalisation	Expect effective solutions	Implement multi-component programs

Evidence-Based Implementation Strategies for Community Drug Prevention

1. School Connectedness

Research indicates that students who feel connected to their school are:

- Less likely to engage in risky behaviours
- More likely to achieve better grades
- Better protected against substance abuse

School connectedness has emerged as a cornerstone of effective drug prevention strategies. When students feel that adults and peers at their school care about them and their learning, it creates a powerful protective factor against substance abuse. This connection goes beyond simple academic engagement; it encompasses a student's overall sense of belonging, safety, and support within the school environment.

Research consistently demonstrates that school connectedness acts as a significant protective factor through multiple mechanisms. When students feel connected to their school community, they develop stronger relationships with positive role models, both adults and peers, who reinforce healthy behaviours and attitudes. This social support network creates an environment where students are more likely to engage in productive activities and less likely to seek escape through substance use.

Moreover, school connectedness often leads to improved academic performance, creating a positive feedback loop. As students achieve better grades, their self-esteem and sense of purpose increase, further reducing the likelihood of turning to drugs or alcohol. The U.S. Department of Education has recognised the importance of this factor by developing the ED School Climate Surveys, a comprehensive tool that helps schools assess and improve their climate to foster greater connectedness.

2. Coalition Building

The Community Anti-Drug Coalitions of America (CADCA) exemplifies the power of coordinated community action in drug prevention. With over 5,000 community coalitions across all 50 states, CADCA has created a nationwide network of prevention advocates and practitioners. These coalitions bring together diverse stakeholders - from law enforcement and healthcare providers to educators and youth leaders - to create comprehensive, locally-tailored prevention strategies.

The success of CADCA lies in its ability to mobilise community volunteers - nearly 9,000 across the United States. These volunteers bring local knowledge, passion, and credibility to prevention efforts. They implement practical initiatives that may seem small in isolation but create significant impact when coordinated across a community. For instance, installing No Smoking signs at bus stops and schools not only restricts tobacco use in these areas but also sends a consistent message about community norms regarding substance use.

CADCA's approach emphasises the importance of youth leadership in prevention efforts. Through programs like the National Youth Leadership Initiative (NYLI), young people learn about drug prevention science and the Strategic Prevention Framework, enabling them to contribute meaningfully to prevention efforts. This youth engagement ensures that prevention strategies remain relevant and effective for their target audience.

3. Policy Implementation

Effective community-level policies include:

- Youth curfews
- Advertising restrictions
- Reducing density of alcohol outlets
- Raising cigarette prices
- Creating drug-free school zones

Effective community-level policies form the backbone of sustainable prevention efforts. These policies work by altering the environment in which young people make decisions about substance use. Youth curfews, for instance, reduce opportunities for nighttime substance use and create a community
expectation of supervision. Advertising restrictions limit young people's exposure to pro-drug messages and imagery, countering the normalisation of substance use.

One particularly effective policy approach involves reducing the density of alcohol outlets in communities. Research has shown a direct correlation between alcohol outlet density and various alcohol-related problems, including underage drinking. Communities that have successfully reduced outlet density through zoning regulations and licensing restrictions have seen measurable decreases in alcohol-related issues.

Economic approaches, such as raising cigarette prices through taxation, have proven remarkably effective in reducing youth smoking rates. Price elasticity studies indicate that young people are particularly sensitive to price increases, with a 10% price increase typically resulting in a 3-5% decrease in cigarette consumption among youth.

Creating drug-free school zones represents another evidence-based policy approach. These zones typically extend 1,000 feet around schools and carry enhanced penalties for drug offenses, creating both a legal and symbolic barrier to drug activity near educational institutions.

Impact Measurement and Evaluation

The effectiveness of community prevention efforts must be rigorously assessed through both structured program reviews and ongoing data tracking. Communities should establish baseline measurements across multiple indicators, including:

- Drug abuse prevalence among students, tracked through confidential surveys
- Academic indicators such as truancy rates and school suspensions, which often correlate with substance abuse
- Law enforcement data on drug-related arrests and incidents
- Healthcare data, particularly emergency room admissions related to substance use

For school-based prevention programs specifically, evaluation must go beyond simple outcome measures to assess implementation quality. Key questions include whether teachers have truly mastered both the content and the interactive teaching strategies required for effective prevention education. The level of student exposure to each content area must be tracked, as research indicates that insufficient exposure can render even well-designed programs ineffective.

Success Factors and Outcomes

Successful community-based approaches invariably share certain key characteristics. They begin with clear, measurable goals that provide direction and allow for meaningful evaluation. These efforts require long-term resources - both financial and human - as sustained prevention efforts typically show increasing effectiveness over time.

Leadership continuity proves crucial, as prevention efforts often face setbacks and require consistent champions to maintain momentum. This leadership must be coupled with broad community support, fostered through regular communication and demonstrated successes.

Regular evaluation and reassessment ensure that prevention efforts remain relevant and effective as community conditions change. This creates a feedback loop where data informs strategy refinement, leading to improved outcomes over time.

The research supports this comprehensive approach. Studies have shown remarkable success rates for carefully structured community interventions. A targeted mass media campaign achieved a 27% reduction in marijuana abuse among high sensation-seeking youth - a notoriously difficult demographic to influence. Perhaps most significantly, research consistently shows that community programs combining multiple effective approaches demonstrate enhanced effectiveness compared to single-program approaches, supporting the value of comprehensive, community-wide prevention strategies.

D. Environmental Strategies and Policy Interventions

- Environmental strategies and policy interventions focus on changing the context in which drug use occurs to make it less accessible, appealing, and acceptable.
- These strategies often involve collaboration among different sectors, including government, schools, law enforcement, and community organisations.
- Examples include enforcing laws related to underage drinking and tobacco sales, creating smoke-free environments, and reducing the density of alcohol outlets.

Environmental strategies and policy interventions are a critical component of comprehensive prevention efforts aimed at reducing substance use, particularly among youth. These strategies focus on modifying the broader context in which drug use occurs to make it less accessible, appealing, and socially acceptable.

1. Coordinated, Multi-Sector Approaches

Effective environmental strategies and policy interventions often require collaboration and coordination across multiple sectors, including government, schools, law enforcement, and community organisations. This coordinated, multi-sector approach is crucial for communicating consistent messages and shaping community norms around substance use.

The research literature emphasises the importance of reaching youth through multiple settings and sources to strongly impact social norms related to substance use. A study by Chou et al. (1998) found that programs engaging youth through school, work, religious institutions, and media could powerfully influence community-level norms and behaviours.

Community-based prevention programs that take this coordinated, multi-sector approach typically involve a combination of policy and regulatory development, mass media efforts, and broader community awareness campaigns. For example, programs may work to:

- Develop and enforce policies related to underage drinking, tobacco sales, and other substance use
- Implement mass media campaigns conveying prevention messages
- Engage a wide range of community stakeholders in awareness-raising activities

This comprehensive, cross-setting approach helps ensure that youth and the broader community receive consistent information, see substance use as less acceptable, and have fewer opportunities to access and use substances.

Chou et al. (1998) found that programs reaching youth through multiple sources significantly impacted community-level norms around substance use, concluding that a coordinated, multi-sector strategy is essential for maximising the effectiveness of environmental prevention efforts. Community-based programs that combine policy/regulatory, media, and awareness components are more likely to create meaningful and lasting changes in social contexts and norms around substance use (Palmgreen et al. 2001).

2. Examples of Environmental Strategies

Environmental strategies and policy interventions aimed at reducing substance use often involve a range of approaches targeting the broader social, physical, and regulatory contexts. Some commonly implemented examples include:

- **Enforcing Laws Related to Underage Drinking and Tobacco Sales**

  Strict enforcement of laws prohibiting the sale of alcohol and tobacco products to minors is a key environmental strategy. This helps reduce youth access to these substances and sends a clear message that underage use is unacceptable. Rigorous enforcement of laws, including through compliance checks and penalties for violations, has been shown to decrease rates of underage drinking and tobacco use.

- **Creating Smoke-Free Environments**

  Policies prohibiting smoking in public places, such as workplaces, restaurants, and other venues, are an effective way to denormalise tobacco use. Smoke-free laws not only protect people from secondhand smoke, but also reduce the social acceptability of smoking behaviours. Studies have found that comprehensive smoke-free policies can significantly lower smoking rates, especially among youth.

- **Reducing Alcohol Outlet Density**

  Limiting the number of alcohol retailers, bars, and other outlets in a given community is an environmental strategy that can reduce alcohol availability and consumption. Research demonstrates that higher concentrations of alcohol outlets are associated with increased alcohol-related problems, including drunk driving, violence, and underage drinking. Policy interventions that cap or reduce the density of alcohol outlets have been effective in curbing these issues.

- **Establishing Youth Curfews**

  Some communities have implemented youth curfew policies that restrict the hours when minors can be in public spaces without adult supervision. These policies aim to limit youth exposure to risky behaviours, including substance use, during late-night hours. Studies have found that well-enforced youth curfews can contribute to reductions in delinquency, violent crime, and substance use among adolescents.

- **Implementing Advertising Restrictions**

  Bans or limits on the marketing and promotion of alcohol and tobacco products, including restrictions on advertising, sponsorships, and other forms of promotion, can help decrease the social acceptability of these substances. Comprehensive policies curtailing alcohol and tobacco advertising have been linked to lower rates of use, particularly among youth.

- **Raising Prices of Substances**

  Increasing the prices of cigarettes, alcohol, and other substances through taxation and other means is an effective environmental strategy for reducing consumption. Higher prices make these products less affordable, especially for price-sensitive populations like youth and young adults. Research has consistently demonstrated that raising the cost of substances can lead to significant decreases in use.

- **Designating Drug-Free School Zones**

  Establishing designated drug-free areas around schools is another environmental approach to limiting youth access and use of substances. These zones, which may include increased penalties for drug offenses, aim to create safe, substance-free environments in the immediate vicinity of educational institutions.

3. Effectiveness of Environmental Strategies

Carefully designed and targeted environmental interventions have demonstrated effectiveness in reducing substance use. For example, a mass media campaign aimed at sensation-seeking youth was found to reduce marijuana use by 27% among this high-risk population (Palmgreen et al. 2001).

Community-level strategies that coordinate policy changes, enforcement, and public awareness can have a significant impact on shifting social norms and behaviours around substance use.

Table: Examples of Environmental Strategies and Policy Interventions

Strategy	Description	Outcomes
Enforcing Laws	Strict enforcement of laws related to underage drinking, tobacco sales, etc.	Reduced youth access and use
Smoke-Free Environments	Policies prohibiting smoking in public places	Denormalise tobacco use
Outlet Density Reduction	Limiting number of alcohol retailers in a community	Lower alcohol availability and consumption
Youth Curfews	Establishing restricted hours for youth to be in public spaces	Reduced youth substance use
Advertising Restrictions	Bans or limits on alcohol/ tobacco marketing and promotion	Decreased social acceptability
Price Increases	Raising taxes and prices on tobacco and alcohol products	Reduced use, especially among youth
Drug-Free Zones	Establishing designated areas around schools as drug-free	Limit youth access and use on campus

Environmental strategies and policy interventions play a vital role in comprehensive substance use prevention efforts. By addressing the broader social, physical, and regulatory contexts that influence substance use behaviours, these approaches can significantly impact community norms and reduce substance use, especially among youth populations.

IV. Target Populations and Tailored Interventions

A. Youth and Adolescents

- Interventions for youth and adolescents often focus on preventing or delaying the initiation of substance use.
- Programs may target risk factors such as peer pressure, media influences, and lack of knowledge about drugs and their effects.
- Strategies often involve interactive learning, skill-building activities, and social norming campaigns to promote healthy behaviours and attitudes.

Table: Comparison of Age-Specific Intervention Strategies

Age Group	Key Focus Areas	Primary Strategies	Exemplar Program	Effectiveness
Preschool (3-5)	Healthy habits, Medicine safety	Storytelling, Role-play	Early Risers "Skills for Success"	40% reduction in later substance use risks
Elementary (6-10)	Drug education, Consequence awareness	Interactive displays, Multimedia presentations	Caring School Community Program	59% reduction in alcohol use, 20% reduction in marijuana use
Middle School (11-14)	Peer pressure, Refusal skills	Role-playing, Social media literacy	Life Skills Training (LST)	Up to 75% reduction in drug use, effects lasting 6 years
High School (15-18)	Long-term consequences, Current trends	Career simulations, Structured debates	Project Towards No Drug Abuse (TND)	25% reduction in hard drug use at 1-year follow-up

Youth and Adolescents

Youth and adolescents represent a critical target population for substance abuse prevention efforts. The early years of life, particularly the transition from childhood to adolescence, are pivotal in shaping attitudes and behaviours related to substance use. Prevention programs targeting this age group aim to delay or prevent the initiation of substance use, address risk factors, and strengthen protective factors.

Age-Specific Interventions

Prevention efforts are carefully tailored to specific age groups to ensure developmentally appropriate messaging and strategies. This comprehensive approach recognises the unique needs, cognitive abilities, and social contexts of children and adolescents at different stages of development.

1. Preschoolers (3-5 years old)

Key Focus Areas

A. Building a foundation of healthy habits and decision-making skills
B. Teaching about medicine safety
C. Providing simple explanations about substance dangers
D. Encouraging positive choices

Strategies and Approaches

1.1 Healthy Habit Formation:

- Use storytelling and interactive play to introduce concepts of healthy living
- Incorporate songs and rhymes about good nutrition, exercise, and sleep habits
- Develop simple routines that reinforce healthy behaviours (e.g., hand washing, tooth brushing)

1.2 Medicine Safety Education:

- Use visual aids to distinguish between medicine and candy
- Role-play scenarios with trusted adults giving medicine
- Teach the "Ask First" rule before putting anything in their mouth

1.3 Substance Danger Awareness:

- Use age-appropriate books and videos to introduce the concept of harmful substances
- Explain how some things that look safe can be dangerous if misused
- Practice identifying household items that are safe to touch versus those that are not

1.4 Positive Choice Reinforcement:

- Implement reward systems for good decision-making
- Use praise and positive reinforcement consistently
- Encourage children to express their feelings about making choices

Effectiveness Data: A study by the National Institute on Drug Abuse (NIDA) found that early childhood interventions focusing on social-emotional learning and decision-making skills reduced later substance use risks by up to 40%.

2. Elementary School Students (6-10 years old)

Key Focus Areas

A. Distinguishing between beneficial and harmful drugs
B. Exploring consequences of substance use
C. Reinforcing prevention messages
D. Involving parents and schools

Strategies and Approaches

2.1 Drug Education:

- Use interactive displays to categorise medicines, vitamins, and harmful substances
- Introduce the concept of prescription vs. over-the-counter medications
- Discuss the proper use of common medicines (e.g., for headaches, colds)

2.2 Consequence Awareness:

- Use age-appropriate brain models to demonstrate how substances affect development
- Incorporate multimedia presentations on short-term and long-term health impacts
- Discuss real-life examples of how substance use affects daily activities and goals

2.3 Message Reinforcement:

- Implement regular "health and safety" discussions in classrooms
- Use repetitive, catchy slogans or mottos to reinforce key messages
- Integrate substance abuse prevention into various subjects (e.g., science, health, literature)

2.4 Parent and School Involvement:

- Organise parent-teacher workshops on substance abuse prevention
- Develop take-home activities that encourage family discussions
- Implement school-wide policies and programs promoting healthy lifestyles

Effectiveness Data: The Caring School Community Program, implemented in elementary schools, showed a 59% reduction in alcohol use and a 20% reduction in marijuana use among participants compared to control groups.

3. Middle School Students (11-14 years old)

Key Focus Areas

A. Addressing peer pressure and social influences
B. Providing accurate substance use risk information
C. Teaching refusal skills
D. Promoting healthy activities

Strategies and Approaches

3.1 Peer Pressure Resistance:

- Conduct small group discussions on social dynamics and peer influence
- Use social media literacy programs to analyse online peer pressure
- Implement peer-led initiatives promoting drug-free lifestyles

3.2 Risk Information Dissemination:

- Utilise interactive online platforms to deliver up-to-date drug information
- Invite recovering addicts or medical professionals for Q&A sessions
- Conduct science experiments demonstrating the effects of substances on the body

3.3 Refusal Skill Development:

- Organise regular role-playing workshops focusing on common pressure scenarios
- Teach assertiveness techniques through interactive exercises
- Use virtual reality simulations for practicing refusal skills in realistic settings

3.4 Healthy Activity Promotion:

- Organise after-school clubs and interest groups
- Implement school-wide fitness challenges or competitions
- Create mentorship programs pairing students with positive role models

Effectiveness Data: Resilience building and values strengthening affective domain education is a key. I.e. The Life Skills Training (LST) program, widely implemented in middle schools, has shown reductions in drug use of up to 75% among participants, with effects lasting up to 6 years post-intervention.

4. High School Students (15-18 years old)

Key Focus Areas

A. Exploring long-term consequences of substance use
B. Addressing substance use misconceptions
C. Providing current drug trend information
D. Reinforcing informed decision-making

Strategies and Approaches

4.1 Long-term Consequence Awareness:

- Use career simulation tools to demonstrate how substance use affects future opportunities
- Organise college and job fair events with substance-free policies highlighted
- Conduct financial literacy workshops incorporating the economic impact of substance use

4.2 Misconception Correction:

- Hold structured debates on topics like medical marijuana and prescription drug use
- Invite legal experts to discuss the complexities of drug laws and policies
- Use fact-checking exercises to analyse common drug myths and misinformation
- Use sporting or entertainment notables who can speak to best practice prevention for success

4.3 Current Trend Education:

- Implement regular "drug trend update" sessions using real-time data
- Use social media campaigns to disseminate information on emerging substances
- Organise student-led research projects on local substance use patterns

4.4 Informed Decision-Making Reinforcement:

- Implement decision-making frameworks in various academic subjects
- Use case studies and scenario analysis to practice critical thinking about substance use
- Organise peer counselling programs to support informed choices

Effectiveness Data: Project Towards No Drug Abuse (TND), designed for high school students, has shown reductions in hard drug use of up to 25% among participants, with effects maintained at 1-year follow-up.

This comprehensive, age-specific approach to substance abuse prevention recognises the evolving needs and challenges faced by young people as they grow. By tailoring interventions to each developmental stage, prevention efforts can more effectively equip children and adolescents with the knowledge, skills, and support needed to make healthy choices regarding substance use throughout their lives.

Emerging Trends and Challenges

Prevention efforts must adapt to emerging trends and challenges:

- Increased availability of e-cigarettes and vaping products
- Changing perceptions of marijuana due to legalisation efforts
- Rise of prescription drug misuse among youth
- Influence of social media on substance use attitudes and behaviours

Brief Summary

Primary Prevention efforts targeting youth and adolescents employ a range of strategies and approaches tailored to specific age groups and risk levels. Evidence-based programs have shown significant success in delaying or preventing substance use initiation, with some demonstrating long-term effects into adulthood. Continued research and adaptation of prevention strategies are necessary to address emerging challenges and maintain effectiveness.

B. Young Adults and College Students

- Interventions for young adults and college students may focus on addressing high-risk behaviours like binge drinking and prescription drug misuse.
- Strategies may include screening and brief interventions, social marketing campaigns, and environmental changes to reduce access to alcohol and drugs on campus.
- Programs may also target specific student groups identified as being at higher risk, such as athletes, members of fraternities and sororities, and students living in residence halls.

Young adults and college students represent a critical population for substance misuse prevention efforts. This demographic experiences unique risk factors (not least the active pro-drug lobby groups that are permitted in these space, i.e. 'Students for Sensible Drug Policy') and patterns of use that require tailored interventions. Recent data shows that 75% of college students reported alcohol use in the past year, with 25% using cannabis and 20% engaging in vaping. These rates often exceed those of non-college peers, highlighting the unique risk environment of college campuses.

Substance misuse in this population leads to numerous adverse outcomes, including annual deaths and injuries, reduced academic performance, and unfulfilled human potential. Many of these problems are preventable with effective, evidence-based strategies. However, the current landscape of campus prevention often involves professionals with multiple responsibilities, limited resources, and varied levels of preparation for their extensive duties.

The changing prevention landscape necessitates a comprehensive approach. While acknowledgment of the importance of comprehensive strategies has grown, and research has provided substantial evidence supporting various initiatives, many campuses face challenges such as reduced staffing, limited strategic planning, and decreased administrative support for prevention efforts. The evolution of substance misuse prevention on college campuses has been marked by several key developments:

Table: Evolution of College Substance Misuse Prevention

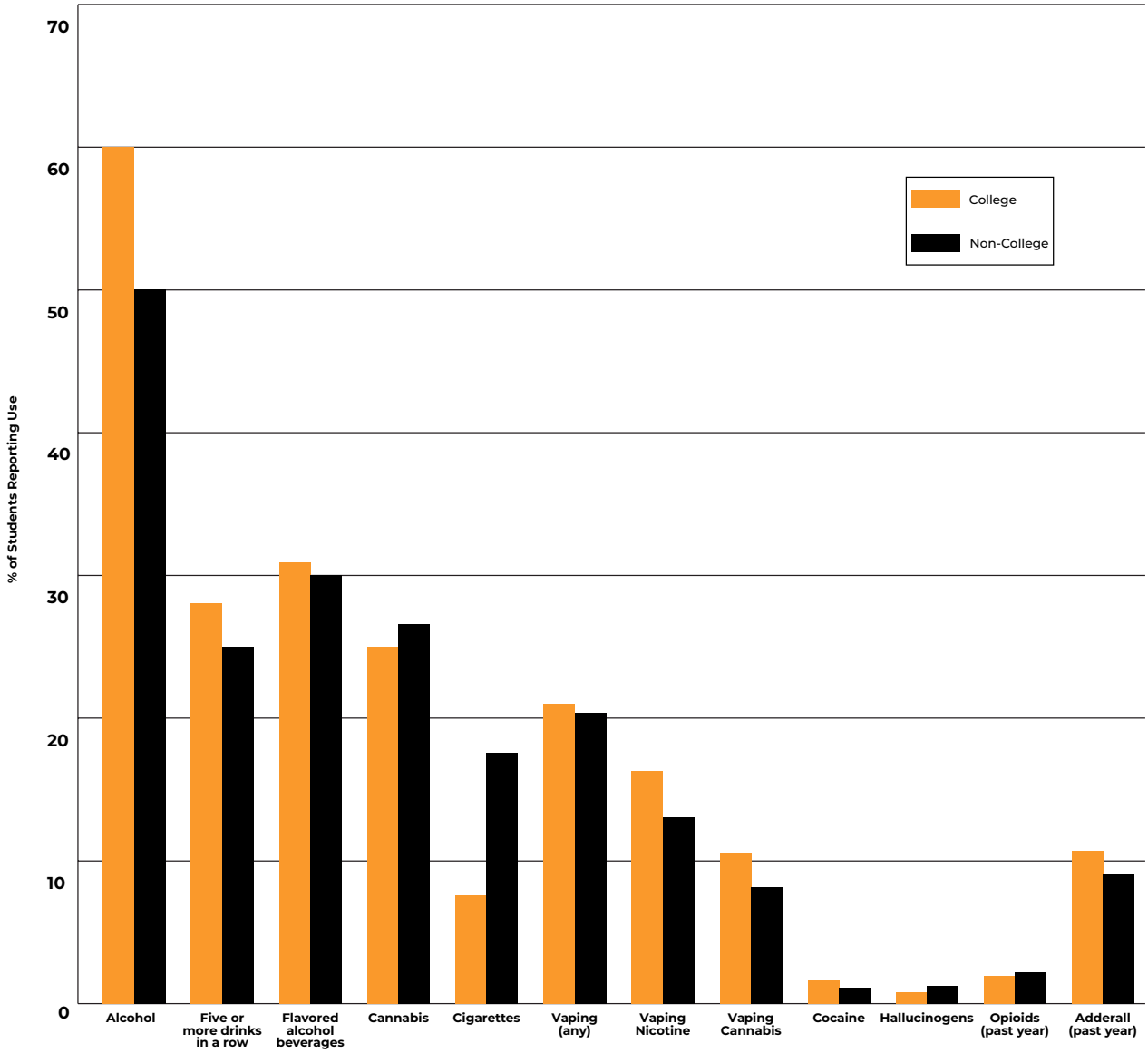
Era	Key Developments
1980s-1990s	Focus on education and awareness programs
2000s	Shift towards environmental management strategies
2010s	Emphasis on evidence-based practices and data-driven approaches
2020s	Integration of comprehensive, multi-level interventions

This progression reflects a growing understanding of the complex factors influencing substance use among college students. Modern approaches recognise the need to address individual, interpersonal, institutional, community, and policy-level influences simultaneously.

Drug Use Prevalence Among College Students

Drug use prevalence over 30 days varies between college students and their non-college peers of the same age.

Figure 1. College/non-college student past 30-Day drug use (2018)[15]



Source: Schulenberg, J. E., Johnston, L. D., O'Malley, P. M., Bachman, J. G., Miech, R. A. & Patrick, M. E. (2019). Monitoring the Future national survey results on drug use, 1975–2018: Volume II, College students and adults ages 19–60. Ann Arbor, MI: University of Michigan, Institute for Social Research. Retrieved from http://monitoringthefuture.org/pubs.html#monographs, as cited in PREVENTION WITH PURPOSE: A STRATEGIC PLANNING GUIDE FOR PREVENTING DRUG MISUSE AMONG COLLEGE STUDENTS, U.S. Department of Justice, Drug Enforcement Administration

2019 data reveals notable trends in substance use among college students:

- Alcohol remains the most widely used substance, with 75% of students reporting alcohol use.
- Cannabis is the second most common, with nearly 25% of full-time college students reporting use.
- Vaping has risen dramatically, with 20% reporting cannabis vaping and 25% reporting nicotine vaping.
- Nonmedical use of prescription stimulants like Adderall remains concerning, with 11% reporting use.
- Cocaine and hallucinogen use are less common but still present, with about 5% reporting use of each.

Notably, college students report higher rates of alcohol use, being drunk, MDMA use, cocaine use, amphetamine use, and vaping compared to their non-college peers. This highlights the unique risk environment of college campuses.

Gender Differences in Substance Use

Important gender differences emerge in substance use patterns among college students:

Substance	Men	Women
Being drunk	35.5%	40.3%
Daily cannabis use	12%	6%
Cigarette use	20.3%	12.2%
Nicotine vaping	33.7%	22.1%
Cocaine use	7.0%	4.3%

Women report higher rates of being drunk, while men report higher rates of daily cannabis use, cigarette smoking, vaping, and cocaine use. These differences underscore the need for gender-specific prevention approaches.

Risk and Protective Factors

Campus prevention efforts frequently face significant challenges, such as professionals juggling multiple responsibilities, limited resources, and varying levels of expertise. These obstacles necessitate a comprehensive approach that not only addresses these challenges but also tailors interventions to the specific needs of college students, ensuring they are evidence-based and impactful. Understanding the unique combination of risk and protective factors present on college campuses is essential for crafting effective prevention strategies.

Risk Factors	Protective Factors
Financial stress	Negative attitudes toward alcohol
High levels of life stress	Working 10+ hours per week
History of depression	Abstaining from alcohol in high school
Sensation-seeking personality	Religious commitment
Current use of alcohol, tobacco, or cannabis	Parental monitoring
Family history of depression	Perceived peer disapproval of substance use
Perceived high peer substance use (including pro-drug lobby groups on campus)	No family history of alcohol misuse
Family environment favourable to drinking/smoking	Involvement in service activities
Campus normalisation of substance use	Attending alcohol-free events/programming
Lack of parental supervision	Living in substance-free housing
Increased availability of alcohol/ drugs	
Living off-campus or in residence hall suites	

Racial/Ethnic Differences

Substance use patterns also vary by race and ethnicity:

- White students generally engage in higher risk alcohol and drug use compared to students of other ethnicities.
- White men in particular use substances more frequently and in greater quantities during and after college.
- Students of colour, especially at HBCUs, tend to consume alcohol and drugs less frequently and in lower quantities.
- However, students of colour may increase use when socialising in predominantly white environments.
- Students of colour also experience greater harms due to alcohol use compared to white students at the same institutions.

These racial/ethnic differences highlight the importance of culturally tailored prevention efforts.

Evidence-Based Prevention Strategies

Addressing substance misuse among college students necessitates a strategic and multidimensional approach that capitalises on various domains of expertise and knowledge. The distinct dynamics of college campuses present both challenges and opportunities for implementing effective prevention efforts.

Effective substance misuse prevention for college students is a multifaceted effort that requires a comprehensive approach across 8 key domains. Each domain encompasses specific areas of knowledge, skills, and practical applications.

1. Prevention Science
2. Substance Knowledge
3. Strategic Planning
4. Needs Assessment
5. Evaluation and Research
6. Program Management
7. Policy and Environmental Strategies
8. Leadership and Communication

Effective program management, coupled with rigorous evaluation and research, plays a vital role in refining these interventions and assessing their success. Implementing policy and environmental strategies can cultivate a supportive campus environment that reduces risks and enhances student well-being. Leadership and communication are essential to engaging stakeholders and nurturing a culture of prevention.

1. Prevention Science

Table 1: Prevention Science Domain

Knowledge	Skills	Applications
Behaviour change theories	Theory application	Designing theory-based interventions
Risk and protective factors	Factor analysis	Identifying campus-specific factors
Prevention principles	Strategic thinking	Developing comprehensive strategies
Developmental perspectives	Life-stage analysis	Tailoring interventions to college context

2. Substance Knowledge

Table 2: Substance Knowledge Domain

Knowledge	Skills	Applications
Pharmacology of substances	Substance effect recognition	Educating on health impacts
Current use trends	Data interpretation	Identifying emerging substance concerns
Physiological effects	Health impact assessment	Developing targeted health messages
Legal status and policies	Policy analysis	Advising on campus substance policies

3. Strategic Planning

Table 3: Strategic Planning Domain

Knowledge	Skills	Applications
Planning models (e.g., SPF)	Goal setting	Developing campus prevention plans
Stakeholder engagement	Collaborative leadership	Building campus-community coalitions
Resource allocation	Budgeting	Maximising prevention resources
Implementation science	Project management	Ensuring fidelity in program delivery

4. Needs Assessment

Table 4: Needs Assessment Domain

Knowledge	Skills	Applications
Assessment methodologies	Survey design	Conducting campus substance use surveys
Data analysis techniques	Statistical analysis	Interpreting campus use patterns
Qualitative research methods	Focus group facilitation	Gathering in-depth student perspectives
Epidemiological indicators	Trend analysis	Identifying high-risk groups or behaviours

5. Evaluation and Research

Table 5: Evaluation and Research Domain

Knowledge	Skills	Applications
Evaluation designs	Outcome measurement	Assessing program effectiveness
Research ethics	IRB processes	Ensuring ethical data collection
Data visualisation	Reporting	Communicating results to stakeholders
Evidence-based practice	Literature review	Identifying best practices for campus

6. Program Management

Table 6: Program Management Domain

Knowledge	Skills	Applications
Evidence-based programs	Program selection	Choosing appropriate interventions
Implementation strategies	Coordination	Managing multiple prevention initiatives
Staff training	Facilitation	Preparing staff/peers for program delivery
Continuous quality improvement	Process evaluation	Refining program implementation

7. Policy and Environmental Strategies

Table 7: Policy and Environmental Strategies Domain

Knowledge	Skills	Applications
Environmental prevention	Systems thinking	Identifying policy leverage points
Policy development process	Advocacy	Promoting health-supporting policies
Enforcement strategies	Collaboration with security	Enhancing policy compliance
Built environment influences	Space utilisation analysis	Creating substance-free spaces

8. Leadership and Communication

Table 8: Leadership and Communication Domain

Knowledge	Skills	Applications
Organisational culture	Change management	Fostering prevention-oriented culture
Health communication theories	Message design	Developing effective prevention campaigns
Stakeholder analysis	Relationship building	Engaging campus and community partners
Crisis communication	Media relations	Managing substance-related incidents

This organisational structure provides a framework for developing well-rounded prevention professionals and comprehensive campus programs. By addressing each domain, colleges can create multi-level interventions that address the complex factors influencing substance use among students.

A comprehensive needs assessment is critical to identify the unique risk factors and usage patterns present on each campus, ensuring that interventions are directly applicable and impactful. Effective interventions for college students include:

1. Screening and Brief Interventions: Identifying at-risk students and providing motivational counselling.

2. Social Norms Campaigns: Correcting misperceptions about peer substance use.

3. Environmental Prevention:

- Alcohol-free events and spaces on campus
- Substance-free housing options
- Limiting alcohol outlet density near campus
- Enforcing minimum drinking age laws

4. Policy Interventions:

- Campus alcohol and drug policies
- Increased enforcement of existing policies
- Parental notification policies for violations

5. Education and Skills Training:

- Alcohol-Edu and similar online courses
- Peer education programs
- Life skills training

6. Recovery Support:

- Collegiate recovery programs
- Sober living options

This holistic approach ensures that prevention efforts are comprehensive and aligned with the evolving landscape of substance misuse prevention on college campuses, ultimately reducing adverse outcomes and fostering both academic and personal success. When planning prevention strategies, it's crucial to evaluate your campus environment and identify the specific risk and protective factors that influence student behaviour. Consider what elements of your campus may lead to increased alcohol and drug misuse, as well as what factors help safeguard against it. These insights will guide your efforts throughout this process.

Beyond general campus-wide factors, it's essential to recognise subgroups of students who may be at elevated risk for substance misuse. Over the past two decades, researchers have pinpointed certain student demographics that are more prone to alcohol and drug use. However, because each campus has its unique characteristics, gathering data on substance use is vital. This data will help you understand usage patterns across different student subpopulations, allowing for more targeted and effective prevention measures.

C. High-Risk Groups

- Some populations experience a disproportionate burden of drug use and its related harms due to factors such as poverty, discrimination, trauma, and lack of access to resources.
- Effective prevention programs for high-risk groups require culturally tailored approaches that address the unique needs and challenges faced by these populations.
- Examples include programs for homeless youth, LGBTQIA+ youth, and youth involved in the juvenile justice system.

High-risk groups experience a disproportionate burden of drug use and related harms due to various factors such as poverty, discrimination, trauma, and lack of access to resources. Effective prevention programs for these populations require culturally tailored approaches that address their unique needs and challenges.

1. Athletes

College athletes consistently demonstrate higher rates of alcohol consumption compared to non-athletes. This trend is observed across all divisions of collegiate sports.

Key Statistics

- Athletes are more likely than non-athletes to consume alcohol frequently and heavily
- Division III athletes consume marijuana and amphetamines at higher rates than their Division I counterparts

Tailored Interventions

- Team-based interventions that leverage group dynamics and peer influence
- Involvement of coaches in prevention efforts
- Education on the impact of substance use on athletic performance
- Promotion of healthy coping mechanisms for stress and injuries

2. Fraternity and Sorority Students

Students involved in Fraternity & Sorority Life (FSL) consistently demonstrate higher rates of substance use and more permissive attitudes towards alcohol consumption.

Key Statistics

- FSL members drink alcohol more frequently and have more relaxed views on alcohol-related harms.
- Higher rates of nonprescription stimulant and pain medication use among FSL members
- Increased cannabis and hallucinogen use compared to non-FSL peers

Tailored Interventions

- Chapter-wide prevention programs
- Strict policy enforcement within Greek organisations
- Peer-led education initiatives
- Leadership training for FSL officers on substance use prevention

3. LGBTQIA+ Students

Students who identify as LGBTQIA+ face unique challenges that can contribute to higher rates of substance misuse and mental health issues.

Key Statistics

- Higher rates of depression, anxiety, and panic disorders among LGBTQIA+ students
- Increased substance misuse compared to heterosexual peers
- Female students with partners of both genders show higher substance misuse rates than males with partners of both genders

Tailored Interventions

- Creation of affirming campus environments
- Targeted outreach programs
- LGBTQIA+-specific support groups and counselling services
- Education on the intersection of identity, mental health, and substance use

4. Students with Mental Health Conditions

There is a strong correlation between certain mental health conditions and substance misuse among college students.

Key Statistics

- Depression is associated with higher cannabis use
- Anxiety is linked to increased cigarette use
- Panic disorders correlate with higher sedative use

Tailored Interventions

- Integrated mental health and substance use treatment programs
- Screening and early intervention for co-occurring disorders
- Stress management and coping skills training
- Education on the risks of self-medication

5. First-Year Students

First-year students are particularly vulnerable to substance misuse as they adjust to college life.

Tailored Interventions

- Comprehensive orientation programs on substance use risks and campus policies
- Parent communication strategies to maintain support systems
- Peer mentoring programs
- Alcohol-free social events and activities

6. Student Veterans

Student veterans may face unique challenges related to trauma and reintegration into civilian life.

Tailored Interventions

- Trauma-informed approaches to substance use prevention
- Peer support programs specifically for veterans
- Collaboration with campus veteran services
- Education on the interaction between PTSD, substance use, and academic performance

General Principles for Tailoring Interventions

When addressing substance misuse among high-risk groups, a one-size-fits-all approach is often ineffective. To create meaningful impact, prevention efforts must be carefully tailored to meet the unique needs, cultural contexts, and lived experiences of target populations. This section outlines eight key principles that form the foundation for developing and implementing successful, culturally-sensitive interventions.

These principles - ranging from consultation and partnership to continuous evaluation - provide a comprehensive framework for designing prevention programs that resonate with high-risk groups. While the effectiveness may vary depending on specific contexts, this framework offers a robust starting point for tailoring substance misuse prevention efforts to the diverse needs of high-risk populations.

Table: General Principles for Tailoring Interventions

Strategy	Key Actions
Consultation and Partnership Developing education resources in close collaboration with target populations ensures relevance and credibility	• Conducting focus groups with members of high-risk populations • Establishing advisory boards comprising representatives from target groups • Implementing participatory research methods to identify needs and preferences • Co-designing prevention materials and programs with community members For example, a study involving young Australian men who consumed MDMA and other drugs revealed that participants were skeptical of government messages that contradicted their own experiences. This underscores the importance of understanding and working within the cultural contexts that influence how target audiences relate to health education advice.
Community Embedding Integrating education efforts within community structures and social networks of high-risk groups	• Partnering with local organisations and community leaders • Utilising peer education models • Incorporating prevention messages into existing community events and activities • Adapting interventions to fit within the social norms and values of the community Research has shown that embedding education in the community can increase its effectiveness and sustainability.
Strengths-Based Approach Capitalising on the unique strengths and resilience factors of different populations	• Identifying and leveraging protective factors within high-risk groups • Promoting positive cultural identities and traditions • Emphasising skills and resources that can support healthy decision-making • Fostering community empowerment and self-efficacy This approach recognises that every community has inherent strengths that can be harnessed for effective prevention.

Strategy	Key Actions
Cultural Competence Tailoring information to accommodate differences in language, culture, and age within priority populations	• Translating materials into relevant languages • Using culturally appropriate imagery and examples • Considering age-specific communication styles and platforms • Addressing cultural beliefs and practices related to substance use Cultural competence ensures that prevention messages resonate with diverse populations and are not inadvertently offensive or alienating.
Health Literacy Building comprehensive health literacy beyond mere information provision	• Developing skills to access, understand, and apply health information • Addressing numeracy skills related to dosage and risk assessment • Improving critical thinking about health claims and misinformation • Enhancing communication skills to discuss health concerns with providers Enhancing health literacy helps individuals make informed decisions about their health and substance use.
Holistic Approach Recognising that information alone is insufficient and addressing broader social and environmental factors influencing substance use	• Implementing policy changes to support healthier environments • Addressing social determinants of health, such as poverty and discrimination • Providing access to mental health services and support systems • Creating opportunities for positive social engagement and personal development This approach acknowledges the complex interplay of factors that contribute to substance misuse among high-risk groups.

Strategy	Key Actions
Credibility Ensuring messages are perceived as authentic and aligned with the lived experiences of the target audience	• Using peer educators or respected community figures to deliver messages • Incorporating real-life stories and testimonials • Acknowledging the perceived benefits of substance use alongside risks • Being transparent about the sources and motivations behind prevention efforts Credible messages are more likely to be accepted and internalised by the target audience.
Continuous Evaluation Regularly assessing the effectiveness of interventions and adapting strategies based on feedback and outcomes	• Implementing ongoing monitoring and evaluation systems • Collecting both quantitative and qualitative data on program impact • Conducting periodic needs assessments to identify changing trends • Adjusting interventions based on evidence of effectiveness or lack thereof Continuous evaluation ensures that prevention efforts remain relevant and effective over time.

Table: Effectiveness of General Principles in Tailoring Interventions

Principle	Impact on Engagement	Impact on Behaviour Change	Long-term Sustainability
Consultation and Partnership	High	Moderate to High	High
Community Embedding	High	High	High
Strengths-Based Approach	Moderate to High	Moderate	Moderate to High
Cultural Competence	High	Moderate to High	Moderate
Health Literacy	Moderate	High	High
Holistic Approach	Moderate	High	High
Credibility	High	Moderate to High	Moderate
Continuous Evaluation	Moderate	Moderate to High	High

This table provides a general assessment of how each principle contributes to different aspects of intervention success. The impact levels (High, Moderate to High, Moderate) are based on trends observed in prevention research, but actual outcomes may vary depending on specific implementation and context.

V. Substance -Specific Prevention Strategies

A. Alcohol and Tobacco

- Alcohol and tobacco are among the most commonly used substances, and prevention programs for these substances often target youth and adolescents to prevent initiation and reduce prevalence.
- Strategies may include increasing taxes, restricting sales and marketing, and implementing public awareness campaigns about the health risks associated with their use.

Alcohol and tobacco remain two of the most widely used substances globally, with their use often beginning in adolescence. This section delves into the prevalence, effects, and prevention strategies for these substances, with a particular focus on youth and adolescents.

Tobacco Use Statistics and Trends

The initiation of tobacco use among youth remains a significant concern. Each day, more than 3,200 individuals under 18 smoke their first cigarette. This statistic underscores the ongoing challenge of preventing tobacco use initiation among adolescents.

In recent years, there has been a shift in tobacco consumption patterns among young people. The use of vaporisers and electronic cigarettes (e-cigarettes) has increased significantly. While the long-term health effects of these products are not fully understood, several concerns have been identified:

1. Nicotine addiction: E-cigarettes and vaporisers often contain nicotine, which is highly addictive.
2. Developmental impacts: Nicotine can harm the developing brain, particularly in adolescents.
3. Potential toxicity: Some e-cigarette flavours may be toxic to the lungs.
4. Safety concerns: There have been instances of exploding e-cigarette batteries causing injuries to users.

Prevention Strategies for Tobacco Use

Tobacco use remains a critical public health challenge, particularly among young people. Effective prevention strategies are essential in curbing initiation and reducing prevalence. A comprehensive approach involves multiple stakeholders, including parents, educational institutions, regulatory bodies, and the broader community.

- ***Parental Influence: Parents are pivotal in shaping their children's attitudes*** and behaviours towards tobacco use. By setting a positive example—either by not using tobacco products themselves or by actively seeking assistance to quit—parents can significantly influence their children's likelihood of adopting similar habits. Open communication about the dangers of tobacco, coupled with a supportive home environment, further empowers children to make healthy choices. Parents should be encouraged to engage in conversations about the risks of smoking and to highlight the benefits of staying tobacco-free.

- **Educational Programs:** Schools play a vital role in preventing tobacco use through the implementation of comprehensive educational programs. These programs should focus on teaching students about the health risks associated with tobacco use, as well as the social and economic implications. Interactive and engaging curricula that incorporate real-life scenarios and peer-led discussions can be particularly effective. By fostering critical thinking and reinforcing positive peer influences, schools can help deter tobacco use among students.

- **Smoking Cessation Support:** For young individuals who have already begun using tobacco products, access to smoking cessation resources is crucial. Providing tailored support, such as counselling, support groups, and cessation programs, can help young users quit. Schools, community centres, and healthcare providers should collaborate to offer accessible and age-appropriate resources that address the unique challenges faced by adolescents trying to quit tobacco.

- **Regulatory Measures:** Regulatory measures are essential in protecting minors from the influence of tobacco marketing and sales. Enforcing strict regulations on the sale of tobacco products to minors, as well as limiting advertising and promotion near schools and other youth-centric areas, can significantly reduce tobacco accessibility and appeal. Additionally, implementing age verification systems and restricting the availability of flavoured tobacco products that attract younger users are critical steps in regulation.

- **Prevention Programs Targeting Youth:** Prevention programs that specifically target youth and adolescents are key to reducing tobacco use initiation. These programs often include increasing taxes on tobacco products, which not only deter young users due to higher costs but also generate revenue that can be reinvested into public health initiatives. Restricting sales and marketing, combined with robust public awareness campaigns, raises awareness about the health risks of tobacco and encourages societal norms that favor non-smoking behaviours.

Alcohol Use Among Youth

Alcohol is the most widely used substance of abuse among America's youth and young adults. Underage drinking poses significant health and safety risks. A 2015 study revealed alarming statistics about alcohol use among young people aged 12 to 20:

- **Drank in prior month:** 7.7 million young people
- **Binge drinking:** 5.1 million young people
- **Heavy alcohol use:** 1.3 million young people

Binge drinking, defined as males consuming five or more drinks and females four or more drinks on a single occasion, occurred in alarming numbers, while heavy alcohol use, involving binge drinking on five or more days in the past month, also posed a serious concern. The risks associated with underage drinking are considerable, including an increased risk of injuries, a higher likelihood of sexual assaults, and elevated risks of death from car crashes, suicides, and homicides. Additionally, alcohol can interfere with normal adolescent brain development and increase the chances of developing a substance use disorder later in life.

Table: Prevention Strategies for Alcohol Use

Prevention Strategy	Description
Parental Influence and Monitoring	Parents play a critical role in shaping children's decisions about alcohol. Keeping alcohol monitored and locked at home, and ensuring children understand parental expectations can significantly impact their choices. Approximately 80% of children believe parents should influence their drinking decisions.
Clear Communication	Open, direct, and honest communication with children about the legal drinking age and the consequences of underage drinking encourages respect for parental rules and advice.
Providing Alternatives	Discussing strategies for refusing alcohol and avoiding risky situations empowers youth to make safer choices.
Early Intervention	Engaging with children about alcohol before they start drinking is crucial. Conversations should start early, as around 10% of 12-year-olds try alcohol, with this rising to 50% by age 15.
Policy Measures	Includes increasing taxes on alcohol and tobacco products, restricting sales to minors, and implementing marketing restrictions.
Public Awareness Campaigns	Educates the public about health risks associated with alcohol and tobacco use, with campaigns targeting youth and their parents.
School-based Programs	Implements evidence-based prevention curricula and provides support services for at-risk students.
Community Involvement	Engages local organisations in prevention efforts and creates alcohol and tobacco-free spaces for youth.
Healthcare Interventions	Screens for alcohol and tobacco use during routine medical visits, providing brief interventions and referrals to treatment when necessary.

Integrating these strategies and maintaining open communication between parents and children can significantly reduce the initiation and prevalence of alcohol and tobacco use among youth. A comprehensive approach not only supports healthier communities but also mitigates the long-term societal impacts of substance abuse.

	Tobacco	Alcohol
		
Other Name(s)	Smoke, bone, butt, coffin nail, cancer stick.	Beer, wine, wine cooler, malt liquor, booze.
Description	Tobacco contains nicotine, (amongst other toxins) one of the most highly addictive drugs used today. Teens who smoke cigarettes are much more likely to use marijuana than those who have never smoked. Teens now who have use vapes or e-cigarettes as delivery of various substances, including nicotine and cannabis resin are also more likely to smoke.	Alcohol is a drug that can interfere with brain development in youth and young adults. Alcohol poisoning (or overdose) results from drinking large amounts of alcohol in a short period of time, which can cause serious brain damage or death. Drinking at a young age also makes an alcohol use disorder more likely later in life.
How Consumed	Vapes, Cigarettes, cigars, and pipes are smoked. Some users prefer smokeless tobacco (chew, dip, snuff), which is placed inside the mouth between the lips and gum.	Orally.
Effects	Tobacco has many short- and long-term effects. They include addiction, heart and cardiovascular disease, cancer, emphysema, and chronic bronchitis. It can also cause spontaneous abortion, pre-term delivery, and low birth weight when pregnant mothers smoke.	Misusing alcohol can result in an alcohol use disorder, dizziness, slurred speech, disturbed sleep, nausea, vomiting, hangovers, impaired motor skills, violent behaviour, impaired learning, Foetal Alcohol Spectrum Disorders, respiratory depression, and, at high doses, death.

Source: GROWING UP DRUG FREE A PARENT'S GUIDE TO PREVENTION, U.S. Department of Justice Drug Enforcement Administration and U.S. Department of Education Office of Safe and Healthy Students (2017)

Alcohol And Tobacco Brief Summary

Alcohol, tobacco, and vaping prevention must be a priority due to their significant impact on public health. Excessive alcohol consumption leads to a range of health problems, including seven cancers, liver disease, cardiovascular issues, and an increased risk of accidents and injuries.

Tobacco use is a major cause of preventable diseases such as lung cancer, chronic obstructive pulmonary disease (COPD), and heart disease. Vaping, often perceived as a safer alternative, has been linked to respiratory illnesses and a growing number of other health risks and substance use engagement.

Additionally, these substances often serve as gateways to other forms of substance abuse, particularly among young people. Preventive measures are crucial to reduce the incidence of these health problems, alleviate the burden on healthcare systems, and promote healthier, longer lives for individuals. By prioritising prevention, we can foster healthier communities and improve overall public health outcomes.

B. Marijuana

- With changing perceptions and legalisation in some areas, marijuana use, particularly among youth, is an increasing concern.
- Prevention programs may target risk factors such as early initiation, peer influence, and misconceptions about the harms associated with marijuana use.
- Strategies may involve family-based interventions, school-based curricula, and media campaigns to provide accurate information and develop resistance skills.

Marijuana prevention strategies must address the complex landscape of changing perceptions, legalisation efforts, and increasing potency of cannabis products. Effective approaches target multiple risk factors across individual, family, school, and community domains.

1. Prevalence and Trends

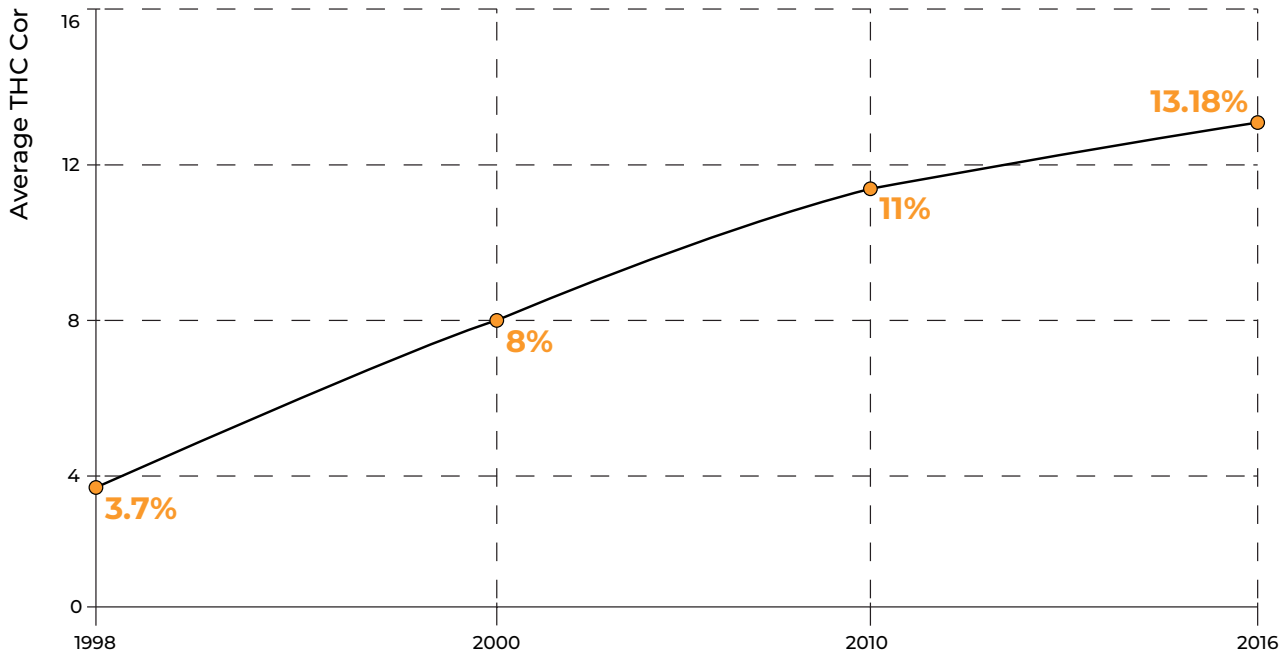
Marijuana remains the most widely used illicit drug among adolescents and young adults. Key statistics include:

- In 2019, 43.7% of U.S. 12th grade students reported lifetime marijuana use
- 38% of students in grades 9-12 had used marijuana at least once
- 7.5% of students first tried marijuana before age 13
- Past year prevalence among young adults (up to age 34) ranges from 10% in Belgium to 22% in France

The potency of marijuana has increased substantially over time:

- Average THC content rose from 3.7% in the early 1990s to 13.18% in 2016
- Some marijuana concentrates contain 40-80% THC

Table: Effects of Marijuana on Brain Function



2. Harms Associated With Youth Marijuana Use

Youth are particularly vulnerable to the negative effects of marijuana use, especially when use is heavy and chronic. The developing brain of adolescents and young adults (up to their twenties) is especially susceptible to the impact of marijuana's chemical components.

A. Effects on Brain Development

The endocannabinoid system plays a crucial role in neurodevelopment. Marijuana use during youth can disrupt this system, potentially altering normal brain communication mechanisms and epigenetic development.

Table: Effects of Marijuana on Brain Function

Brain Function	Impact of Marijuana Use
Learning and Memory	Impairment in cognitive processes critical to learning
Pleasure /Reward System	Alteration due to THC activation of brain's reward pathway
Appetite	Changes in normal appetite regulation
Motion/Motor Control	Impairment in coordination and motor skills
Sleep	Disruption of normal sleep patterns
Reproduction/Fertility	Potential impacts on reproductive functions

B. Short-Term Adverse Effects

Table: Short-Term Adverse Effects of Marijuana Use

Effects	Less Common Effects
Increased heart rate	Increased risk of heart attack
Altered sense of time	Nausea and vomiting
Increased anxiety/paranoia	Panic attacks
Slow reaction time	Psychosis (losing touch with reality)
Problems with balance and coordination	Hallucinations
Impaired driving	Delusions
Increased appetite	
Difficulty with thinking and problem solving	
Memory impairment	

C. Long-Term Effects

- Lung and breathing problems (particularly when smoked)
- Increased risk of stroke
- Poor academic performance
- Truancy
- Increased risk for social anxiety
- Suicidal ideation, attempts, and completion

D. Marijuana Use Disorder

- Youth who begin using marijuana at or before age 18 are 4 to 7 times more likely to develop a marijuana use disorder than adults who start later.
- Between 2012 and 2013, 3 in 10 marijuana users developed a marijuana use disorder.
- Withdrawal symptoms can include anxiety, insomnia, and depression.
- Treatment success rates for marijuana use disorder are low, with one study reporting only 8% of participants achieving sustained abstinence.

E. Psychotic Symptoms and Disorders

- Marijuana use is associated with higher risk and worsening outcomes of psychotic disorders like schizophrenia.
- Youth with psychoses who use marijuana typically experience earlier onset of first-episode psychosis.
- Stopping marijuana use can reduce the onset and occurrence of psychotic symptoms.

F. Personal and Social Harms

Table: Personal and Social Harms of Youth Marijuana Use

Area	Impact
Education	Lower high school completion and college graduation rates
Income	Lower income at age 25
Life Satisfaction	Lower levels of relationship and life satisfaction
Work	Antisocial behaviour in the workplace
Relationships	More interpersonal relationship conflicts
Mental Health	Higher rates of depression and suicide
Other Substance Use	Predictor of opioid use disorder in adulthood

G. Health Risks

- Marijuana can be contaminated with bacteria, viruses, and metals, posing additional health risks, especially for immunocompromised youth.
- While fatal overdoses directly tied to marijuana are rare, excessive consumption can lead to severe side effects and increased emergency room visits.

H. Prenatal Exposure

- Babies exposed to marijuana during pregnancy may experience poor birth outcomes such as low birth weight and brain development delays, which may have longer-term effects on the adolescent brain.

The use of marijuana during youth poses significant risks to brain development, mental health, academic achievement, and overall life outcomes. The long-lasting effects of early marijuana use underscore the importance of prevention and early intervention

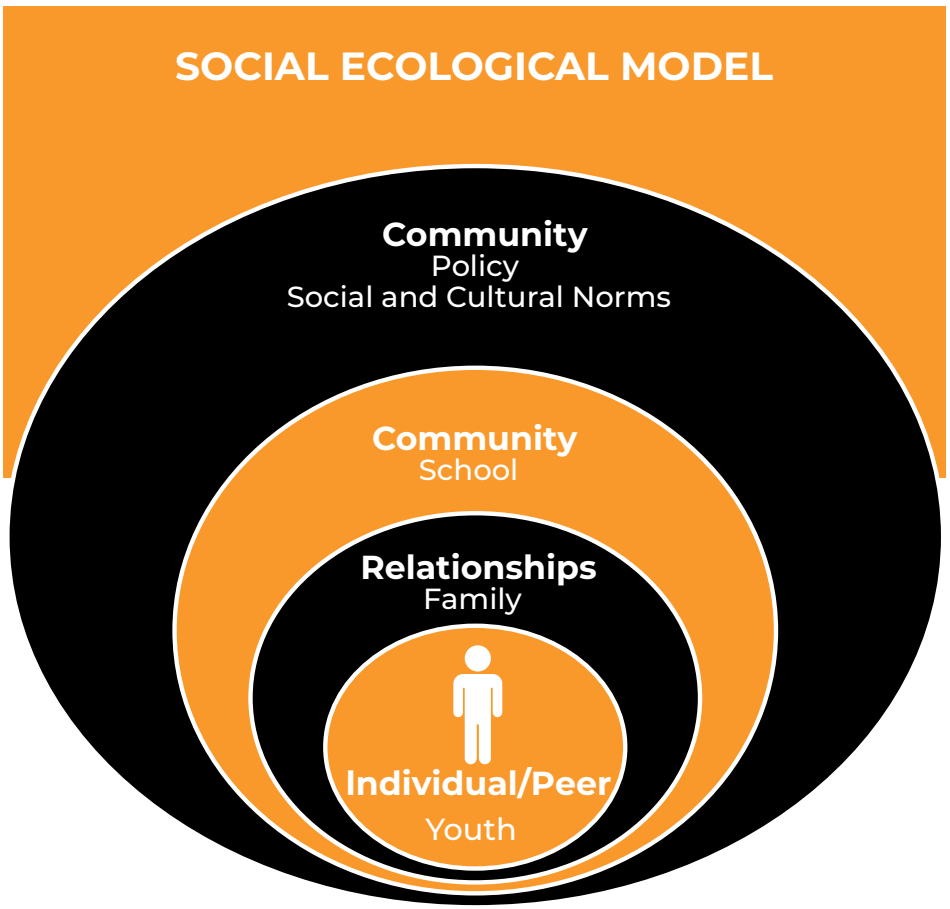
3. Risk and Protective Factors

Understanding the risk and protective factors associated with youth marijuana use is crucial for developing effective prevention strategies. These factors exist across multiple levels of influence, from individual characteristics to broader community contexts. The socio-ecological model (SEM) provides a valuable framework for comprehending how these factors interact and influence youth behaviour across different developmental stages.

Here's an overview of risk and protective factors for youth marijuana use, organised by socio-ecological levels:

Table: Risk and Protective Factors for Youth Marijuana Use

	Level	Risk Factors	Protective Factors
Socio-ecological Model	**Youth** Individual / Peer	• Early initiation • High sensation seeking • Aggression • Low perceived harm of marijuana use • Antisocial behaviour • Genetics • Perceptions of peer marijuana use • Association with substance-using peers	• Self-efficacy to refuse substances • Future college aspirations • Self-confidence • Involvement in sports and physical activity • Peer disapproval of marijuana use • Association with prosocial peers
	Relationships Family	• Family conflict • Poor parent-youth relationships • Parental acceptance of substance use • Parental or sibling substance use	• Parental monitoring • Restrictive marijuana-specific parental rules • Maternal affection • Perceived parental trust
	Community School	• Low policy enforcement • Out of school suspension • High absenteeism	• School belonging • School involvement • Authoritative school environment • School connectedness
	Community Policy, Social and Cultural Norms	• Widespread availability of marijuana • Greater marijuana outlet density • Exposure to marijuana marketing • Community disorganisation • Economic deprivation	• Prosocial opportunities (community sports, youth programs) • Community norms that discourage youth use • Effective marijuana policies and enforcement



Individual and Peer Factors

At the individual level, early initiation of marijuana use is a significant risk factor. Youth who begin using marijuana at a younger age are more likely to develop problematic use patterns later in life. High sensation-seeking tendencies and aggressive behaviours also increase the likelihood of marijuana use. Importantly, an individual's perception of the harm associated with marijuana use plays a crucial role; those who perceive lower risks are more likely to engage in use.

Genetics also contribute to an individual's susceptibility to marijuana use and developing use disorders. Recent studies have shown a distinction between genetic heritability for marijuana use and the development of marijuana use disorders, highlighting the complex interplay between genetic and environmental factors.

Peer influence is a powerful factor in youth marijuana use. The perception that peers are using marijuana is strongly associated with an individual's decision to use, even when this perception doesn't align with actual use rates. For instance, data shows that perceived levels of peer use among students aged 12 to 17 are greater than the actual rates of use. Conversely, peer disapproval of marijuana use serves as a protective factor, with a large percentage of students reporting that they believe their close friends would disapprove of trying or regularly using marijuana.

Family Factors: Family environments characterised by conflict and poor relationships with parents or caregivers increase the risk of youth marijuana use. Parental use and beliefs about marijuana strongly influence youth behaviour. Youth whose parents have ever used marijuana are about three times more likely to use marijuana than those whose parents have never used. Similarly, youth whose parents do not believe marijuana use is risky are 1.5 times more likely to use compared to youth whose parents hold more negative beliefs about marijuana use.

On the protective side, supportive family environments, high levels of parental monitoring, and clear rules prohibiting youth marijuana use can significantly reduce the likelihood of use. Positive family factors such as strong identification with parents/caregivers, displays of maternal affection, and perceived parental trust have been found to play a protective role in preventing youth marijuana use.

School Factors: The school environment plays a crucial role in influencing youth marijuana use. Authoritative school environments characterised by fair disciplinary practices and mutual respect between teachers and students tend to have lower levels of marijuana use among students. Conversely, less predictable school environments where rules are not clearly articulated or consistently enforced tend to have higher rates of use.

A school's approach to substance use violations also influences marijuana use rates. More remedial approaches to violations, such as counselling, have been found to result in less marijuana use when compared with more punitive measures like expulsion. Additionally, the level of connection students feel to their school, fellow students, and academics is associated with lower rates of marijuana use. Greater school connectedness is thought to create a sense of shared identity and belonging that reduces the role of marijuana use in achieving social status.

Community Factors: At the community level, the availability of marijuana, whether through medical or recreational channels, is a significant risk factor. Community disorganisation, economic deprivation, and other social determinants of health also contribute to increased risk of youth marijuana use. In areas where marijuana is legal, factors such as greater outlet density, more days and hours of sales, and exposure to marijuana marketing increase the risk of youth use.

Protective factors at the community level include prosocial opportunities like community sports and youth programs, as well as community norms that discourage youth use. Effective marijuana policies and their enforcement can also serve as protective factors by limiting youth access and exposure to marijuana.

4. Evidence-Based Prevention Strategies

The evidence base for marijuana prevention strategies has grown significantly in recent years, driven in part by the changing legal landscape surrounding cannabis use. Universal school-based programs have emerged as a cornerstone of prevention efforts, with a focus on building social competence and resilience among youth. These programs go beyond traditional drug education to equip students with the skills they need to navigate peer pressure and make informed decisions about substance use.

Family-focused interventions represent another critical component of comprehensive prevention efforts. By engaging parents and strengthening family dynamics, these programs create a supportive environment that can discourage youth marijuana use. The three highlighted programs - Focus on Families, Iowa Strengthening Families Program, and Preparing for the Drug-Free Years - have demonstrated particular promise in this area.

At the community level, frameworks like Communities That Care (CTC) offer a structured approach to mobilising local resources and implementing evidence-based prevention strategies. By empowering communities to assess their specific needs and select appropriate interventions, CTC and similar models can achieve meaningful reductions in adolescent marijuana use.

Screening and brief interventions provide a targeted approach to prevention and early intervention. These short-term interventions, often delivered in healthcare or educational settings, can help identify at-risk individuals and provide them with the motivation and skills to reduce their marijuana use. The flexibility of this approach allows it to be adapted to various contexts and populations.

Finally, media campaigns and public education efforts play a crucial role in shaping public perceptions and knowledge about marijuana. In the context of changing laws and attitudes, it is essential to provide accurate information about the risks associated with marijuana use, particularly for young people. Effective campaigns must address common misconceptions and clearly communicate the potential harms of early, frequent, and high-potency use.

Table: Evidence-based Prevention Strategies for Marijuana Use

Prevention Strategy	Description	Key Findings
Universal School-Based Programs	Interventions focusing on social competence and resilience	• More effective than usual curricula in preventing marijuana use • Programs teaching social-emotional competency reduced marijuana and other illicit drug use
Family Interventions	Programs involving parent training and family skill-building	Three effective programs: • Focus on Families • Iowa Strengthening Families Program • Preparing for the Drug-Free Years
Community-Level Approaches	Community coalition frameworks like Communities That Care (CTC)	• CTC implementation associated with reductions in adolescent marijuana use • 5-phase process for forming and guiding community coalitions
Screening and Brief Interventions	Short interventions (1-5 sessions) following screening	• Small but significant effects in reducing marijuana use • Effective in various settings (schools, colleges, health services) • Often use motivational interviewing and goal setting
Media Campaigns and Public Education	Providing accurate information about marijuana risks	Key messages: • Clarifying that legalisation doesn't mean marijuana is safe for youth • Explaining risks of early, frequent, and high-potency use • Addressing misconceptions about medical marijuana

5. Prevention in the Context of Legalisation

As marijuana legalisation spreads across states and nations, prevention efforts face significant new challenges. The changing legal landscape has profound implications for how we approach preventing harmful patterns of marijuana use, particularly among youth and young adults.

Changing Risk Perceptions and Normalisation

One of the most immediate impacts of legalisation is a shift in perceived risk and social norms around marijuana use. Fischer et al. (2020) note that legalisation has been associated with reduced perceived risk and increased normative acceptance of marijuana use among both young people and adults. This aligns with predictions from the Social Development Model (SDM), which theorises that liberalising marijuana laws changes key risk factors including social acceptability, perceived prevalence, and perceived risk (Kosterman et al., 2016).

These changing perceptions pose a significant challenge for prevention efforts, as perceived risk has historically been a key protective factor against youth substance use. Prevention messaging must now contend with increasingly permissive social attitudes that may downplay potential harms.

Increased Availability and Potency

Legalisation has also been associated with increased availability of marijuana and the emergence of higher potency products. Fischer et al. (2020) report that legalisation has led to:

- Reduced prices for marijuana
- Increased availability
- Higher potency products entering the market

Even more concerningly, some concentrated products now contain 40-80% THC (compared to 10-20% in regular marijuana). The proliferation of high-potency products is particularly worrying given evidence that very-high-potency THC products like butane hash oil have stronger associations with mental health problems and health risk behaviours compared to herbal cannabis (Chan et al., 2017).

Trends in Use and Harm

Studies from jurisdictions that have legalised marijuana show several concerning trends that highlight the importance of renewed prevention efforts:

1. Increased frequent use: A large epidemiological study combining data across geographic areas in the USA from 2011 to 2016 found state legalisation changes caused increases in frequent use (Reece & Hulse, 2020a).

2. Mental health impacts: The same study found that increases in frequent use caused by legalisation were associated with increases in mental health problems across large state populations (Reece & Hulse, 2020a).

3. Hospitalisations: Fischer et al. (2020) report increases in cannabis-related hospitalisations, including:
   - Emergency room visits
   - Trauma incidents
   - Calls to poison control centres
   - Cases involving children

4. Treatment seeking: Increases in treatment-seeking for cannabis use disorders have been observed (Fischer et al., 2020).

5. Road safety: Marijuana-related road fatalities have increased in association with legalisation (Fischer et al., 2020). This aligns with evidence that frequent marijuana use increases the risk of road accidents (Asbridge et al., 2012).

6. Intergenerational impacts: Increases in population rates of frequent adult marijuana use are predicted to increase rates of congenital damage to the next generation (Reece & Hulse, 2020b).

Prevention Strategies in Legal Contexts

Given these challenges, prevention efforts in contexts where marijuana is legal may need to shift focus. Key priorities may include:

1. Delaying onset of use until adulthood: Given the heightened risks associated with early-onset use, prevention efforts should emphasise the importance of delaying initiation until adulthood. Longitudinal studies have shown that daily marijuana use before age 17 predicts a range of adverse adult outcomes (Silins et al., 2014).

2. Promoting lower-risk use patterns: For adult users, prevention efforts may focus on encouraging less frequent use and avoiding high-potency products. There is increasing evidence that frequent use (monthly or more) may increase the risk of disorders and mental health problems (Reece & Hulse, 2020a).

3. Regulating product potency and marketing: Policy-level interventions may be needed to limit the availability of ultra-high potency products and restrict marketing that could appeal to youth.

4. Workplace interventions: Given concerns about occupational injuries, workplace-based prevention and screening efforts may become increasingly important. Smith et al. (2018) report that in Colorado, about 16% of workers in safety-sensitive occupations report frequent marijuana use.

5. Community-level interventions: Frameworks like Communities That Care, which address the cumulative effect of risk across multiple social contexts, may be adaptable to legal contexts (Scholes-Balog et al., 2020).

6. School-based programs: Universal school-based interventions focusing on social competence and resiliency have shown promise in preventing marijuana use (Faggiano et al., 2014; Hodder et al., 2017). These may need to be adapted to address the new risk environment created by legalisation.

7. Family interventions: Programs that strengthen family management practices and reduce family conflict have shown some effectiveness in preventing marijuana use (Gates et al., 2006). These may be particularly important in counteracting permissive community norms.

8. Screening and brief interventions: In health care and educational settings, screening combined with brief interventions (typically 1-5 counselling sessions) has shown promise in reducing marijuana use (Tanner-Smith et al., 2015; Carney et al., 2016).

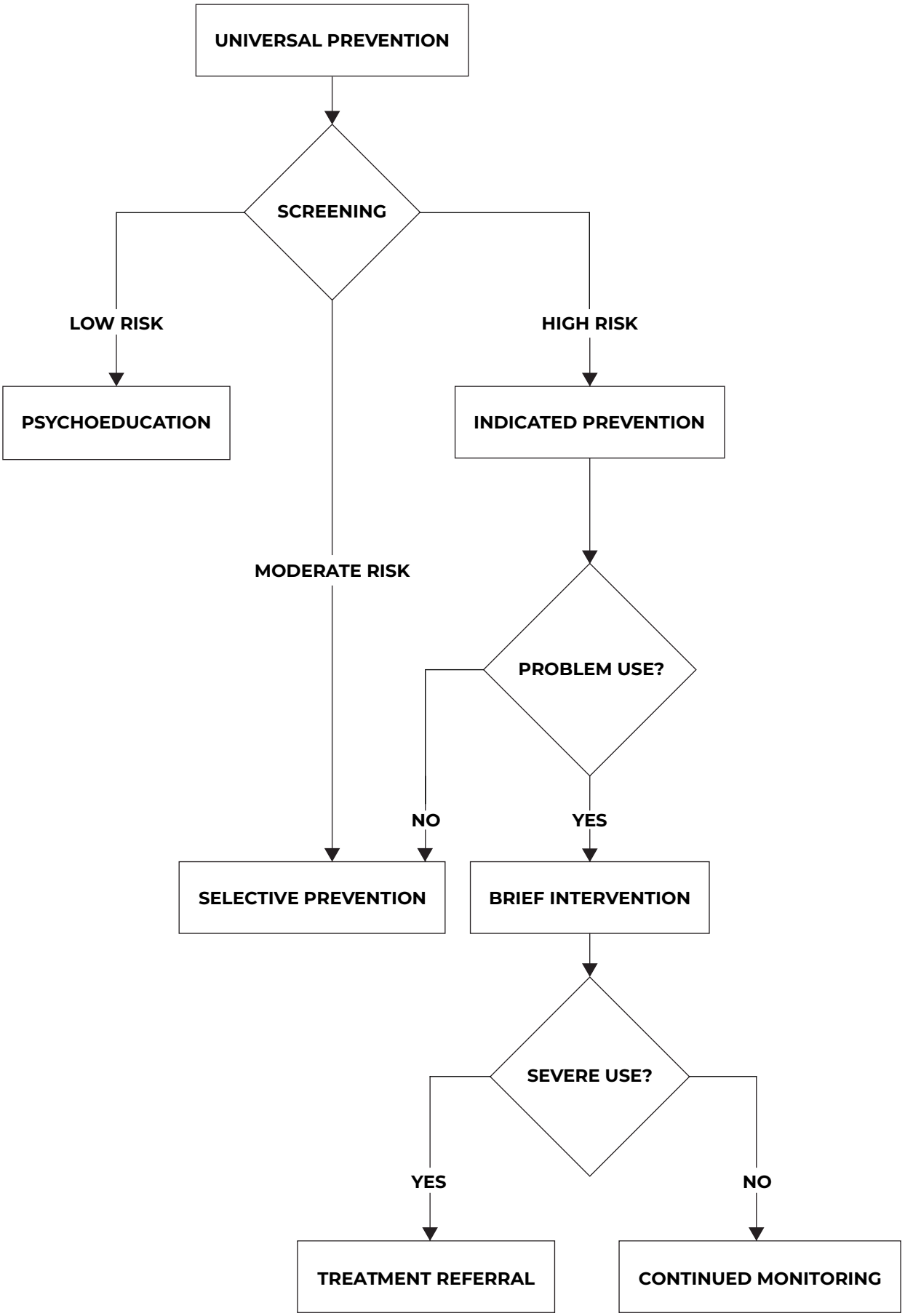
Prevention in the context of marijuana legalisation requires a shift in approach to address new challenges posed by increased availability, normalisation, and high-potency products. Legalisation brings significant public health concerns that must be proactively addressed. A comprehensive approach combining individual-level interventions, community-based strategies, and policy measures will be crucial to mitigating potential harms.

6. Stepped Care Prevention Model

A stepped care approach tailors interventions to individual risk levels:

1. Universal prevention (e.g., school curricula)
2. Selective prevention for at-risk groups
3. Indicated prevention for early users
4. Brief intervention for problematic use
5. Treatment for cannabis use disorders

Diagram: Efficient Allocation of Resources Based on Need



7. Identification Chart

Street Drug	**Cannabis** Marijuana cigarette (joint) and marijuana edibles 	**Cannabis** Marijuana extract concentrate 	**Synthetic Cannabinoids** K2/Spice 
Other Name(s)	Aunt Mary, BC Bud, Chronic, Dope, Gangster, Ganja, Grass, Hash, Herb, Joint, Mary Jane, Mota, Pot, Reefer, Sinsemilla, Skunk, Smoke, Weed, Yerba	Butane Hash Oil (BHO), Honey Oil, Wax, 710, THC Extractions, Budder, Dabs	Bliss, Black Mamba, Blaze, Bombay Blue, Fake Weed, Legal Weed, Genie, Zohai, Red X Dawn, Scooby Snax, Skunk
Description	Marijuana is an addictive mind-altering psychoactive drug. It is a dry mix of flowers, stems, seeds, and leaves (usually green or brown) from the cannabis sativa plant. The principal component in marijuana that is responsible for its euphoric effects is delta-9-tetrahydrocannabinol (THC).	A powerful substance made by extracting THC from marijuana. Some marijuana concentrates contain 40 to 80 percent THC. Regular marijuana contains THC levels averaging around 12 percent. One very dangerous way of extracting THC produces a sticky liquid known as “wax” or “dab” (it may resemble honey or butter).	Synthetic versions of THC (the psychoactive ingredient in marijuana), K2/Spice (and similar products) is a mixture of plant material sprayed with synthetic psychoactive chemicals. It is especially dangerous because the user typically doesn’t know what chemicals are used. Often, the small plastic bags of dried leaves are sold as potpourri or incense and may be labelled “not for human consumption.”
How Consumed	Smoked as a cigarette (a joint) or in a pipe or bong. Sometimes smoked in blunts (cigars emptied of tobacco and filled with marijuana and sometimes other drugs). Can be mixed with food (marijuana edibles) or brewed as tea. POSSIBLE RELATED PARAPHERNALIA: bong, pipe, roach clip, rolling papers.	The “wax” is used with vaporisers or e-cigarettes or heated in a glass bong. Users prefer using e-cigarettes or vaporisers because it is smokeless, odorless, and easy to hide. POSSIBLE RELATED PARAPHERNALIA: vaporiser, e-cigarette, bong.	Usually smoked in a joint, pipe, or e-cigarette. Can also be brewed into tea. POSSIBLE RELATED PARAPHERNALIA: bong, e-cigarette, pipe, roach clip, rolling papers.
Effects	Relaxation, loss of inhibition, increased appetite, sedation, and increased sociability. Can affect memory and ability to learn; also causes difficulty in thinking and problem solving. May cause hallucinations, impaired judgment, reduced coordination, and distorted perception. Also decreased blood pressure, increased heart rate, dizziness, nausea, rapid heartbeat (tachycardia), confusion, anxiety, paranoia, drowsiness, and respiratory ailments.	Marijuana concentrates have a much higher level of THC. The effects of using may be more severe than from smoking marijuana, both psychologically and physically.	Paranoia, anxiety, panic attacks, hallucinations, and giddiness. This addictive substance can also cause increased heart rate and blood pressure, convulsions, organ damage, and/or death.

Source: GROWING UP DRUG FREE A PARENT'S GUIDE TO PREVENTION, U.S. Department of Justice Drug Enforcement Administration and U.S. Department of Education Office of Safe and Healthy Students (2017)

Cannabis Chapter Brief Summary

Preventing cannabis use is a best practice due to its significant mental health impacts. According to growing research, cannabis use is linked to various mental health issues, including anxiety, depression, and psychosis. Regular cannabis use, especially among young people, can lead to poor school performance, increased risk of psychotic disorders, and long-term neuropsychological decline. By prioritising prevention, we can mitigate these risks and promote healthier, more productive lives for individuals and communities.

C. Opioids, Prescription Drugs and Stimulants

- The misuse of prescription drugs, particularly opioids, has emerged as a significant public health crisis.
- Prevention programs may target risk factors such as easy access to prescription medications, lack of awareness about the dangers of misuse, and the normalisation of prescription drug sharing.
- Strategies may include prescription drug monitoring programs, public awareness campaigns, and education for healthcare providers on responsible prescribing practices.

1. The Scope of the Problem

The opioid crisis has escalated to alarming proportions, representing one of the most pressing public health challenges of our time. In 2015, a staggering 33,000 people lost their lives to opioid overdoses, encompassing deaths from heroin, fentanyl, prescription pain relievers, and other opioids. This figure marks a dramatic increase from previous years, underscoring the critical need for robust prevention and intervention strategies.

Prescription drug misuse, defined as taking medication without a prescription for its euphoric effects or in a manner inconsistent with prescribed instructions, has become a significant contributor to substance use disorders. This issue is particularly prevalent with three categories of prescription medications:

A. Opioids (e.g., oxycodone, hydrocodone): These pain relievers are highly addictive and can cause severe respiratory depression, brain damage, or death when misused.

B. Depressants (e.g., benzodiazepines like Valium® or Xanax®): Used to treat anxiety or insomnia, these drugs can cause blurred vision, nausea, cognitive impairment, and memory issues when misused. They are particularly dangerous when combined with opioids or alcohol.

C. Stimulants (e.g., Adderall®, Ritalin®): Primarily used to treat attention deficit hyperactivity disorder (ADHD), misuse of these drugs can lead to elevated body temperature, irregular heartbeat, paranoia, and substance use disorders.

Substance misuse among college students presents a complex picture:

1. Opioids: While the nonmedical use of opioid-based drugs is relatively low among college students, it remains a concern. Use of OxyContin was reported at 1.4%, with Vicodin use slightly higher at 1.6% (2019). Gender differences are notable, with OxyContin use almost equal among college-age men and women (1.9% vs. 1.4%), but Vicodin use almost three times higher among men than women (2.3% vs. 0.8%).
2. Amphetamines: Nonprescription use of ADHD medications is more prevalent, with 11% of college students reporting Adderall use within 2019, and 1.3% reporting Ritalin use. Adderall use is higher among men, while Ritalin use rates are similar across genders.
3. Cocaine: Approximately one in 20 college students (5.3%) reported cocaine use in 2019, with higher rates among men (7.0%) compared to women (4.3%).
4. Hallucinogens: Similar to cocaine, about 5.2% of college students reported 2019 usage of hallucinogens. LSD (4.2%) and MDMA (4.4%) were the most commonly used, with higher rates among college men.

Table: Effectiveness of General Principles in Tailoring Interventions

Substance	2019 Overall Use	Men	Women
OxyContin	1.4%	1.9%	1.4%
Vicodin	1.6%	2.3%	0.8%
Adderall	11.0%	Higher	Lower
Ritalin	1.3%	Similar	Similar
Cocaine	5.3%	7.0%	4.3%
Hallucinogens	5.2%	Higher	Lower
LSD	4.2%	Higher	Lower
MDMA	4.4%	Higher	Lower

2. The Transition from Prescription Opioids to Heroin

A disturbing trend in the opioid crisis is the transition from prescription opioid misuse to heroin use. Approximately 80% of new heroin users report starting after misusing prescription opioids. This shift is largely attributed to the lower cost and easier accessibility of heroin compared to prescription opioids.

Heroin, an illegal opioid derived from morphine, is typically injected, smoked, or snorted. Its use among college students is extremely low, with less than 0.5% reporting past year use for both genders. However, the potential for increased use due to the transition from prescription opioids remains a significant concern.

3. Fentanyl and Other Synthetic Opioids

The rise of synthetic opioids, particularly fentanyl, has exacerbated the opioid crisis. Fentanyl is increasingly being mixed with heroin, leading to a rapid rise in overdose deaths. The potency and unpredictability of these synthetic opioids make them extremely dangerous, especially when users are unaware of their presence in the drugs they consume.

4. Risk Factors for Prescription Drug Misuse

Several key risk factors contribute to the misuse of prescription drugs:

A. Easy access to prescription medications
B. Lack of awareness about the dangers of misuse
C. Normalisation of prescription drug sharing
D. Misconceptions about the safety of prescription drugs compared to illicit drugs

5. Prevention Strategies

To address the opioid and prescription drug crisis, a multifaceted approach to prevention is necessary. Key strategies include:

A. Prescription Drug Monitoring Programs (PDMPs): These programs help track prescribing and dispensing of controlled prescription drugs to patients. They are designed to detect and prevent the diversion and abuse of prescription drugs at the retail level.

B. Public Awareness Campaigns: These initiatives aim to educate the public about the risks associated with prescription drug misuse and the proper use, storage, and disposal of medications.

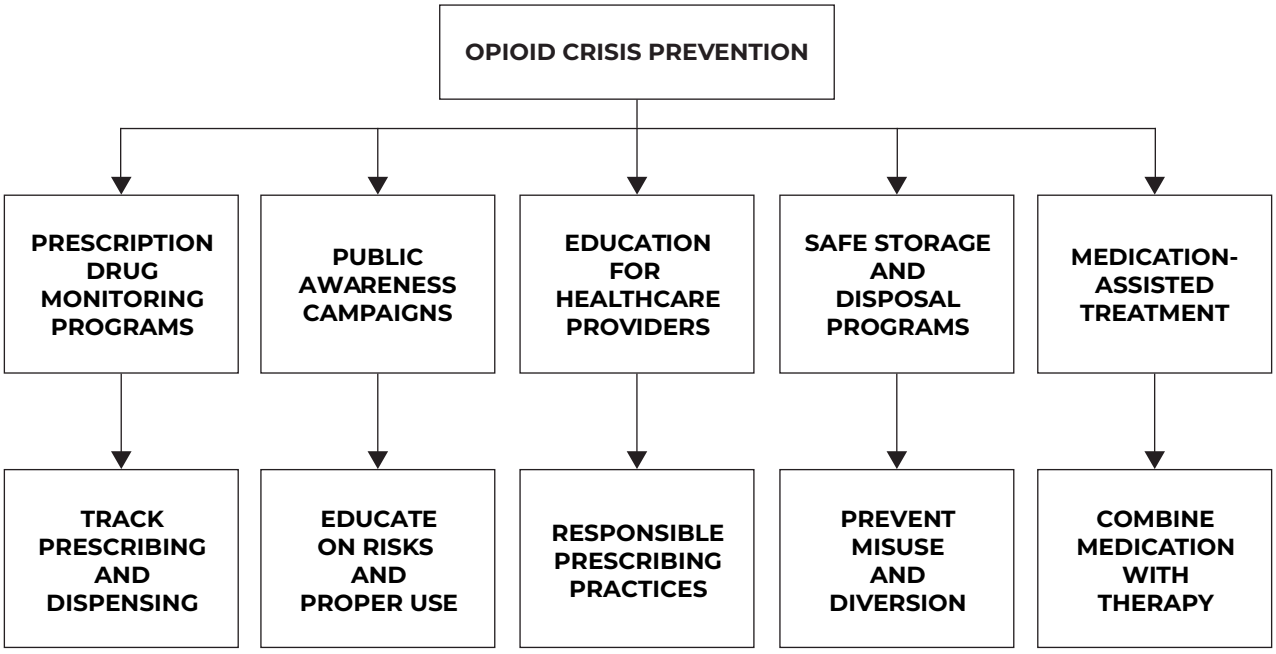
C. Education for Healthcare Providers: Training programs for healthcare providers focus on responsible prescribing practices, pain management alternatives, and early identification of substance use disorders.

D. Safe Storage and Disposal Programs: Encouraging the public to lock up prescription medications and properly dispose of unused drugs can help prevent misuse and diversion.

E. Medication-Assisted Treatment (MAT): Combining medications with counselling and behavioural therapies to treat substance use disorders.

F. Harm Reduction Strategies: These may include programs such as naloxone distribution and needle exchange services, which aim to reduce the negative consequences associated with drug use. These vehicles should be tasked toward the reduction and exiting from substance use, not simply the equipping, enabling and endorsing of ongoing drug use.

6. Identification Chart



A. Prescription Medication

Prescription Medication	**Opioid** Oxycodone prescribed as Tylox®, Percodan®, OxyContin® 	**Opioid** Hydrocodone prescribed as Vicodin®, Lorcet®, Lortab® 	**Central Nervous System Depressant** Prescribed as Valium®, Xanax®, Restoril®, Ativan®, Klonopin® 
Street Name(s)	Hillbilly Heroin, Kicker, OC, Ox, Roxy, Perc, Oxy	Hydro, Norco, Vikes	Benzos, Downers, Nerve Pills, Tranks, Barbs, Georgia Home Boy, GHB, Liquid X, Phennies, R2, Reds, Roofies, Yellows
Description	Semisynthetic opioid drug prescribed for pain. Comes in pill forms (including tablet or capsule).	Semisynthetic opioid drug prescribed for pain relief or as a cough suppressant. Comes in tablets, capsules, oral solutions, and syrups.	Drugs in this class (called Benzodiazepines) are used to relieve anxiety or help someone sleep.
How Consumed	Pills and tablets chewed or swallowed. Inhaling vapours by heating tablet on foil. Crushed and sniffed or dissolved in water and injected. POSSIBLE RELATED PARAPHERNALIA: needle, pipe.	Usually taken orally, in pill forms (including tablets and capsules) and syrups.	Comes in pills, syrups, and injectable liquids. Taken orally or crushed and snorted. POSSIBLE RELATED PARAPHERNALIA: needle, straw, or tube.
Effects	Relaxation, euphoria, pain relief, sedation, confusion, drowsiness, dizziness, nausea, vomiting, urinary retention, pupillary constriction, and respiratory depression. Overdose may result in stupor, changes in pupillary size, cold and clammy skin, cyanosis, coma, and respiratory failure leading to death. The presence of triad of symptoms such as coma, pinpoint pupils, and respiratory depression are strongly suggestive of opioid poisoning.	Relaxation, euphoria, pain relief, sedation, confusion, drowsiness, dizziness, nausea, vomiting, urinary retention, pupillary constriction, and respiratory depression. Overdose may result in stupor, changes in pupillary size, cold and clammy skin, cyanosis, coma, and respiratory failure leading to death. The presence of triad of symptoms such as coma, pinpoint pupils, and respiratory depression are strongly suggestive of opioid poisoning.	Effects include calmness, euphoria, vivid or disturbing dreams, amnesia, impaired mental function, hostility, irritability, sedation, hypnosis, decreased anxiety, and muscle relaxation. Can be addictive. Overdose may be fatal; signs can include shallow breathing, clammy skin, dilated pupils, weak but rapid pulse, and coma.

Source: GROWING UP DRUG FREE A PARENT'S GUIDE TO PREVENTION, U.S. Department of Justice Drug Enforcement Administration and U.S. Department of Education Office of Safe and Healthy Students (2017)

B. Street Drug

Street Drug	**Opioid** Heroin 	**Methamphetamine** Meth 
Other Name(s)	Big H, Black Tar, Chiva, Hell Dust, Horse, Negra, Smack, Thunder.	Meth, Speed, Ice, Shards, Bikers Coffee, Stove Top, Tweak, Yaba, Trash, Chalk, Crystal, Crank, Shabu.
Description	Heroin is a semisynthetic opioid substance. It comes in a white or brownish powder, or a black sticky substance known as "black tar heroin." Because it is often mixed (cut) with other drugs or substances, especially fentanyl in recent years, users typically do not know how much heroin and other substances are being used, creating the likelihood of overdose.	Meth is a stimulant that speeds up the body's system. "Crystal meth" is an illegally manufactured version of a prescription drug (such as Desoxyn® to treat obesity and ADHD) that is cooked with over-the-counter drugs in meth labs. It resembles pieces of shiny blue-white glass fragments (rocks) or it can be in a pill or powder form.
How Consumed	Injected, smoked, or sniffed/snorted. High purity heroin is usually snorted or smoked. POSSIBLE RELATED PARAPHERNALIA: needle, pipe, small spoon, straw, or tube.	Swallowed in pill form. In powder form, it can be smoked, snorted, or injected. Users may take higher doses to intensify the effects, take it more often, or change the way they take it. POSSIBLE RELATED PARAPHERNALIA: needle, pipe.
Effects	This highly addictive drug first causes a euphoria or "rush," followed by a twilight state of sleep and wakefulness. Effects can include drowsiness, respiratory depression, constricted pupils, nausea, flushed skin, dry mouth, and heavy arms or legs. Overdose effects include slow and shallow breathing, blue lips and fingernails, clammy skin, convulsions, coma, and possible death.	Meth is highly addictive and causes agitation, increased heart rate and blood pressure, increased respiration and body temperature, anxiety, and paranoia. High doses can cause convulsions, heart attack, stroke, or death.

Source: GROWING UP DRUG FREE A PARENT'S GUIDE TO PREVENTION, U.S. Department of Justice Drug Enforcement Administration and U.S. Department of Education Office of Safe and Healthy Students (2017)

Street Drug	**Stimulant** Cocaine 	**Stimulant** Khat 	**Other** Kratom 
Other Name(s)	Coca, Coke, Crack, Crank, Flake, Rock, Snow, Soda Cot	Abyssinian Tea, African Salad, Catha, Chat, Kat, Oat	Thang, Kakuam, Thom, Ketum, Biak
Description	Cocaine is usually a white, crystalline powder made from coca leaves. Cocaine base (crack) looks like small, irregularly shaped white chunks (or "rocks").	Khat is a flowering evergreen shrub, and what is sold and abused is usually just the leaves, twigs, and shoots of the Khat shrub.	Kratom is a tropical tree native to Southeast Asia. Consumption of its leaves produces both stimulant effects (in low doses) and sedative effects (in high doses).
How Consumed	Usually snorted in powder form or injected into the veins after dissolving in water. Crack cocaine is smoked. Users typically binge on the drug until they are exhausted or run out of cocaine. POSSIBLE RELATED PARAPHERNALIA: needle, pipe, small spoon, straw, or tube.	Typically chewed like tobacco, then retained in the cheek and chewed intermittently to release the active drug, which produces a stimulant-like effect. Dried Khat leaves can be made into tea or a chewable paste, and Khat also can be smoked and even sprinkled on food.	The psychoactive ingredient is found in the leaves from the kratom tree. These leaves are subsequently crushed and then smoked, brewed with tea, or placed into gel capsules.
Effects	Smoking or injecting creates an intense euphoria. The crash that follows is mentally and physically exhausting, resulting in sleep and depression for several days, followed by a craving for more cocaine. Users quickly become tolerant, so it is easy to overdose. Cocaine causes disturbances in heart rate, increased blood pressure and heart rate, anxiety, restlessness, irritability, paranoia, loss of appetite, insomnia, convulsions, heart attack, stroke, and/or death.	Effects are similar to other stimulants, such as cocaine, amphetamine, and methamphetamine.	Effects include nausea, itching, sweating, constipation, loss of appetite, tachycardia, vomiting, and drowsiness. Users also have experienced anorexia, weight loss, insomnia, frequent urination, hepatotoxicity, seizure, and hallucinations.

Source: GROWING UP DRUG FREE A PARENT'S GUIDE TO PREVENTION, U.S. Department of Justice Drug Enforcement Administration and U.S. Department of Education Office of Safe and Healthy Students (2017)

Opioids, Prescription Drugs & Stimulants Chapter

Brief Summary

‘Bad’ choices, escalation and subjugation

Prevention remains the absolute best practice when it comes to illicit drug use, and no more important than with stimulant use.

Stimulants impair judgment, leading to risky behaviours like unprotected sex, driving under the influence, or engaging in criminal activities, all of which have their own set of negative consequences. There's also a noted pattern where the use of one stimulant can lead to experimenting with or becoming addicted to others, escalating the cycle of substance abuse.

Outcomes include...

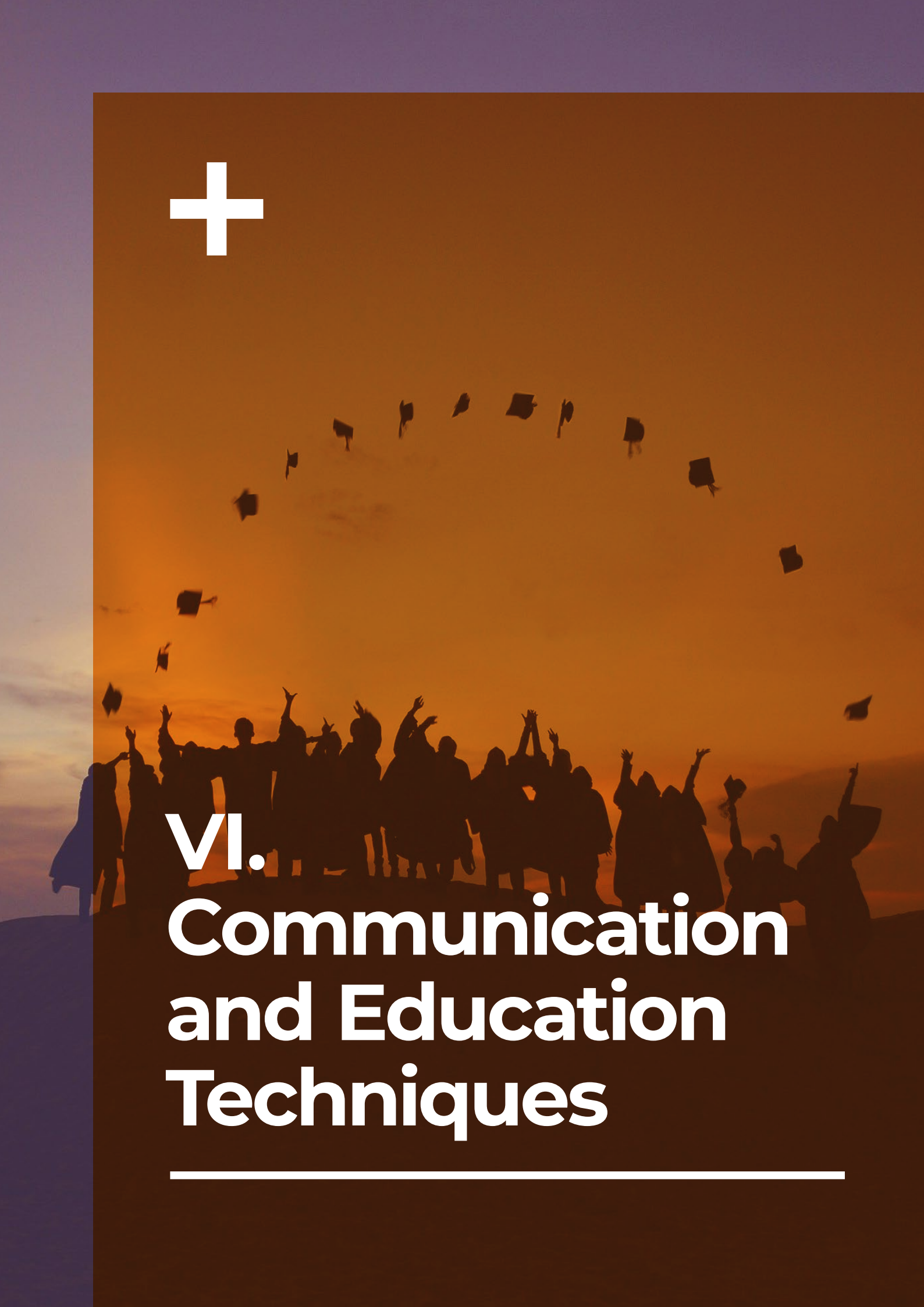
Health Risks:

Physical Health: Stimulants can lead to severe cardiovascular issues such as heart attacks, strokes, and hypertension. Long-term use can cause organ damage, especially to the liver, kidneys, and heart. Crystal meth, for instance, can lead to severe tooth decay, known as "meth mouth."
Mental Health: These drugs significantly increase the risk of mental health disorders. Chronic use can lead to paranoia, anxiety, depression, psychosis, and an increased risk of developing schizophrenia-like symptoms. MDMA can cause serotonin depletion, leading to depression after use.

Sustained Harms: Stimulants are highly addictive due to their impact on the brain's reward system. They increase dopamine levels, creating a cycle of dependency where users seek to replicate the initial high, often leading to tolerance and increased consumption. Long-term use can lead to permanent changes in the brain's structure and function, particularly in areas responsible for decision-making, impulse control, and memory. For instance, methamphetamine can cause significant damage to white matter, affecting cognitive functions. The risk of poisoning is high, especially with substances like cocaine and meth, which can be laced with other dangerous substances. Poisonings can lead to convulsions, respiratory failure, or death.

Social and Economic Consequences: Ongoing use can lead to dependency and/or addiction which devastate personal relationships, lead to job loss, financial ruin, and legal issues. Users might engage in criminal activities to sustain their habit. Thus the ripple effect on families and communities includes higher healthcare costs, crime rates, and social services burden grows.

Prevention efforts focus on education, reducing availability, and offering support for those at risk or already using to mitigate these adverse outcomes, whilst exiting stimulant use. This approach not only saves lives but also reduces the societal burden associated with drug-related harms.



VI. Communication and Education Techniques

A. Educational Communication and Advocacy Strategies

- Education is vital for raising awareness about drug effects, promoting informed decisions, and providing access to resources, emphasising the need for tailored, evidence-based communication strategies.
- Effective prevention requires audience-specific messaging, varied communication channels, and active student engagement combined with continuous evaluation to maximise impact.
- Advocacy focuses on driving health-enhancing environments, building networks of allies, and using persuasive materials to promote prevention goals and address emerging issues.
- Community-based education leverages lived experiences, cultural contexts, and inclusive student involvement to develop relevant, impactful initiatives that address drug-related challenges comprehensively.

Educational communication and advocacy strategies play a crucial role in preventing and minimising the harms associated with drug use, particularly crystal methamphetamine and other amphetamine-type stimulants (ATS). These strategies aim to educate the campus community and the general public about the effects of drugs, promote a culture of health and respect, and provide information on available resources and support services.

1. The Importance of Education

Education is widely recognised as a fundamental component in addressing drug-related issues. It serves multiple purposes:

A. Raising awareness about drug effects and signs of dependence

B. Providing information on available resources and support services

C. Promoting informed decision-making

D. Enhancing community understanding of drug-related issues.

The significance of education was emphasised by a witness with lived experience of ATS use, who stated: "It should be recognised that the only way to break the cycle of addiction and re-offending is through education, health and residential support services being on offer."

2. Key Components of Effective Educational Strategies

To develop and implement effective educational communication and advocacy strategies, prevention specialists should focus on the following components:

A. Audience-specific messaging: Tailor communication approaches to address the specific needs, learning styles, and cultural backgrounds of different target groups.

B. Varied communication channels: Utilise a mix of traditional and emerging media outlets, including social media, to reach diverse audiences effectively.

C. Student engagement: Involve students in message planning, delivery, and review to ensure relevance and effectiveness.

D. Evidence-based approaches: Incorporate principles and theories of effective communication and marketing to maximise impact.

E. Continuous evaluation: Implement ongoing outcome and process evaluation to assess the effectiveness of messaging and methods.

3. Developing Comprehensive Campaigns

Prevention specialists should orchestrate campaigns using varied communication strategies. This involves:

I. Utilising needs assessment and formative evaluation results to guide strategies and messages

II. Implementing pilot testing with target audiences to assess messages and strategies

III. Incorporating established and innovative marketing strategies

IV. Engaging specialists in fields of communication, marketing, advertising, and media

Educational Objective	Strategies
Prevent and delay drug use	• Provide information about drugs rather than against drugs • Focus on skill-building to reduce harm associated with use
Raise awareness about drug effects	• Educate about the nature and effects of crystal methamphetamine • Highlight signs of dependence
Increase knowledge of available resources	• Provide information on treatment options and support services • Educate about where to access information and support
Promote informed decision-making	• Offer balanced, factual information about drugs and their effects • Discuss reasons for drug use and contexts of use
Enhance community understanding	• Facilitate community-based education initiatives • Encourage open discussions about drug-related issues

4. Advocacy for Prevention

Prevention specialists are at the forefront of promoting health-enhancing environments on college campuses. Their role extends beyond simply educating; they must actively advocate for prevention needs, emerging issues, and long-term goals. This advocacy work requires a multifaceted approach, blending communication skills with strategic thinking.

A key aspect of successful advocacy is building a network of allies and supporters. These individuals become powerful voices for the cause, amplifying messages and lending credibility to prevention efforts. Prevention specialists identify and cultivate relationships with knowledgeable individuals, departments, and groups across campus who share a vested interest in student wellbeing.

Preparing persuasive materials is another crucial element of advocacy. This involves crafting compelling narratives, backed by data and real-world examples, that resonate with stakeholders and decision-makers. Effective advocates understand the importance of tailoring their message to different audiences, whether addressing student groups, faculty senates, or administrative boards.

Public speaking skills are indispensable in this role. Prevention specialists must be adept at communicating their ideas clearly and persuasively in various settings, from intimate committee meetings to large campus-wide events. They learn to adapt their tone, style, and content to suit the occasion and audience, ensuring their message has maximum impact.

5. Engaging with Media

In today's information-rich environment, savvy media engagement is essential for shaping public perception and disseminating crucial information about drug prevention and education. Prevention specialists develop a nuanced understanding of media relations, recognising the unique characteristics and demands of different platforms.

Traditional media outlets like campus newspapers, local TV stations, and radio programs remain important channels for reaching certain demographics. Simultaneously, the rise of social media and digital platforms has opened new avenues for engagement, particularly with younger audiences. Prevention specialists must stay abreast of emerging technologies and trends in media consumption to ensure their messages reach intended recipients.

Effective media engagement goes beyond simply distributing press releases. It involves building relationships with journalists and content creators, understanding the news cycle, and being prepared to offer expert commentary on drug-related issues as they arise. Prevention specialists learn to craft compelling storylines that capture media attention while conveying important educational content.

Outreach to various media sources is an ongoing process. This might involve pitching story ideas to campus media, participating in community radio discussions, or leveraging social media influencers to spread awareness. The goal is to maintain a consistent presence across multiple channels, reinforcing prevention messages and establishing the specialist as a trusted source of information.

6. Community-Based Education

Community-based education has emerged as a powerful tool in addressing drug-related issues on college campuses. This approach recognises that effective prevention and correctly tasked harm reduction strategies to assist people to exit, not just 'manage' their substance use, must be rooted in the lived experiences and earned resilience and cultural contexts of the communities they serve.

At the heart of community-based education is meaningful student engagement. Prevention specialists involve students at every stage of the process, from initial concept development to message delivery and program evaluation. This collaborative approach ensures that educational initiatives resonate with the target audience, addressing their specific concerns and experiences.

Pilot testing plays a crucial role in refining communication strategies. By gathering feedback from small groups of students, prevention specialists can identify potential gaps or misunderstandings in their messaging. This iterative process allows for continuous improvement, ensuring that educational content remains relevant and impactful.

Cultural humility is a cornerstone of effective community-based education. Prevention specialists strive to understand and respect the diverse backgrounds and perspectives within the campus community. This might involve collaborating with cultural organisations, adapting materials for different language groups, or addressing specific concerns within LGBTQ+ communities.

7. Broadening the Scope of Drug Education

The landscape of drug education on college campuses has evolved significantly in recent years. Modern approaches recognise the limitations of fear-based tactics and simplistic "just say no" messaging. Instead, prevention specialists are adopting more nuanced, evidence-based strategies that acknowledge the complex realities of drug use.

Today's drug education programs aim to equip students with the knowledge and skills to make informed decisions. This includes providing factual information about various substances, their effects, and potential risks. However, it goes beyond mere information transfer. Students can be informed about harm reduction strategies, recognising that while abstinence is ideal, some individuals may choose to engage. These vehicles should not be used to enable ongoing drug use or even experimentation.

Discussions now incorporate broader contexts surrounding drug use. This might include exploring social pressures, mental health connections, and the role of stress in substance use. By addressing these underlying factors, prevention specialists help students develop a more comprehensive understanding of drug-related issues.

Another key shift has been towards fostering open, non-judgmental dialogue about drugs. This approach encourages students to ask questions, share experiences, and engage critically with the topic. By creating safe spaces for these conversations, prevention specialists can dispel myths, address concerns, and promote healthier attitudes towards substance use.

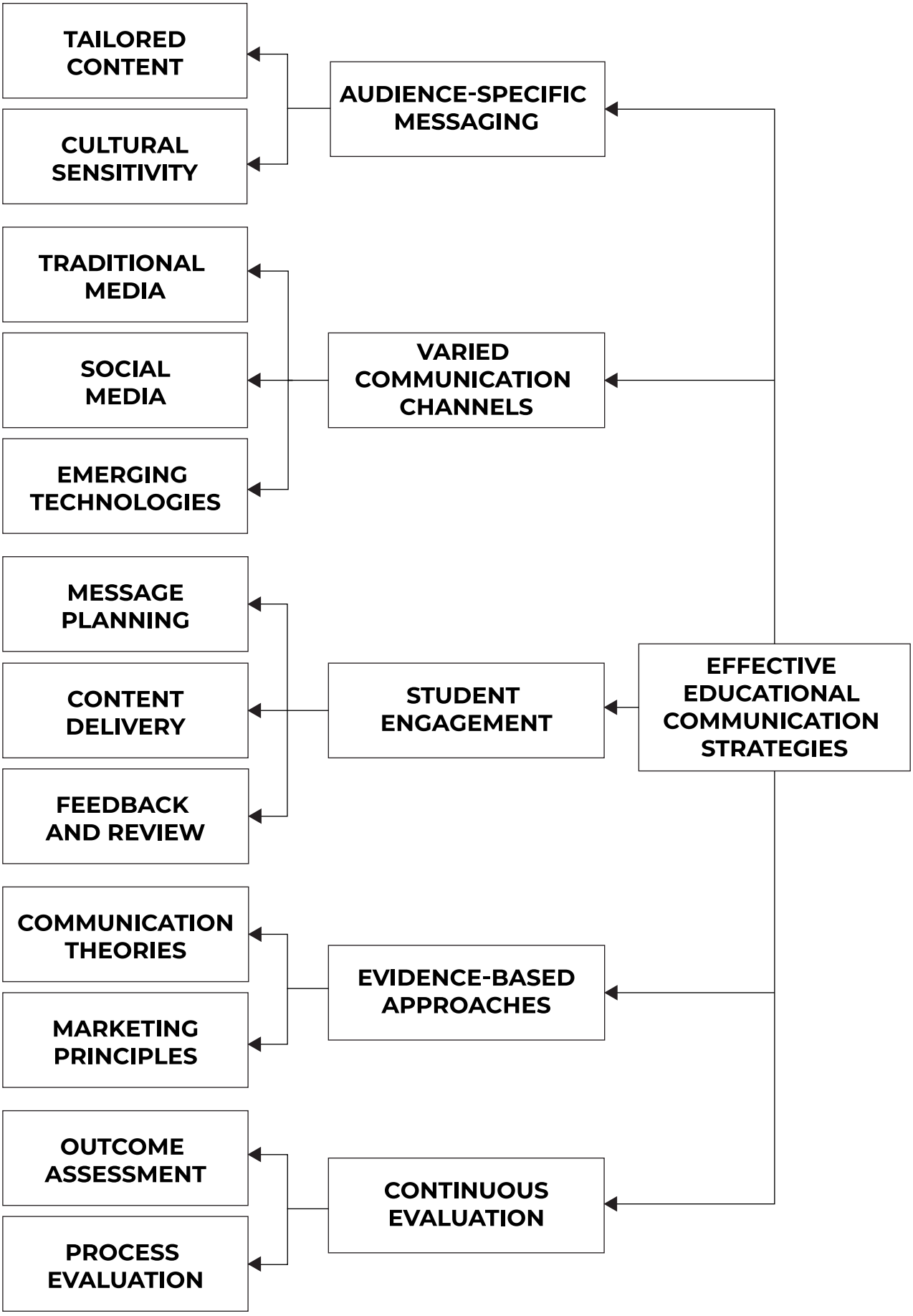
8. Addressing Knowledge Gaps

Despite ongoing education efforts, significant knowledge gaps persist within campus communities regarding drug use, particularly concerning substances like crystal methamphetamine. These gaps span various domains, from understanding the basic effects of drugs to recognising signs of dependence and knowing where to seek help.

Prevention specialists play a crucial role in identifying and addressing these knowledge gaps. This involves conducting regular assessments to gauge student awareness and understanding of drug-related issues. Based on these findings, educational initiatives can be tailored to target specific areas of misinformation or lack of knowledge.

One critical area of focus is improving awareness of available resources and support services. Many students remain unaware of the range of help available on campus, from counselling services to peer support groups. Prevention specialists work to increase visibility of these resources, ensuring that students know where to turn if they or a friend are struggling with substance use.

Education about treatment options is another vital component. Many individuals harbor misconceptions about addiction treatment, believing it to be ineffective or inaccessible. Prevention specialists strive to provide accurate information about various treatment modalities, success rates, and how to access care. This knowledge can be lifesaving, encouraging those in need to seek help early.


EFFECTIVE EDUCATIONAL COMMUNICATION STRATEGIES
AUDIENCE-SPECIFIC MESSAGING
TAILORED CONTENT
CULTURAL SENSITIVITY
VARIED COMMUNICATION CHANNELS
TRADITIONAL MEDIA
SOCIAL MEDIA
EMERGING TECHNOLOGIES
STUDENT ENGAGEMENT
MESSAGE PLANNING
CONTENT DELIVERY
FEEDBACK AND REVIEW
EVIDENCE-BASED APPROACHES
COMMUNICATION THEORIES
MARKETING PRINCIPLES
CONTINUOUS EVALUATION
OUTCOME ASSESSMENT
PROCESS EVALUATION

B. Government Advertising and Mass Media Campaigns

- Media campaigns play a crucial role in drug prevention, but their impact depends on whether they challenge drug-use normalisation or inadvertently promote it; clear objectives and consistent messaging are essential.
- Effective campaigns focus on tailored messages for defined demographics, balancing educational content with sensitivity to avoid stigmatisation or unintended interest in drug use.
- Adequate funding and resource allocation are vital for campaigns' success, with long-term and multi-faceted approaches showing the most sustainable results.
- Evaluating effectiveness requires targeting relevant audiences with credible, repeated messaging as part of a broader prevention strategy supported by complementary policies.

Government advertising, mass media, and educational campaigns serve as crucial tools in drug prevention strategies, leveraging various channels to disseminate information to large populations. The first issue is to identify if the media are being leverage to liberalise, trivialise, or normalise drug use, or are they working to challenge drug-use promotion narratives and campaigns. Increasingly in Harm Reduction only favouring jurisdictions, the manufactured consensus (using media both legacy and social media) is to create a, if not normalisation, then popularising of substance use. In these contexts the media is a liability to prevention efforts.

This contrast is very clear in Australia, where we have three substance categories, Tobacco, Alcohol and Illicit drugs. The public messaging – one focus, one message, one voice – for tobacco in the public square (government, policy, education, health and media) is QUIT. Cessation is the goal and gold standard. On the same drug policy platform, we see the messaging for alcohol is Be Responsible. Yet for illicit drugs its 'keep using – just don't die'.

A State Inquiry into public communications targeting substance use found (as with the QUIT campaign) do work, but it would appear the political and social will to drive this is key. See Public communications campaigns targeting drug and substance abuse.

Moving beyond broad, general-public messaging, contemporary prevention efforts demonstrate increasing sophistication in demographic segmentation. Campaigns now carefully consider age, gender, and cultural background in their design and implementation. This refinement in targeting represents a crucial advancement in the field of drug prevention communications. These approaches, while offering significant reach and cost-effectiveness, present both opportunities and challenges in their implementation and effectiveness.

Key Educational Objectives

Table: Educational Objectives of Drug-related Media Campaigns

Objective	Main Message
Warning	• Information about the dangers and associated risks of a range of illicit substances
Empowerment and Support	• Information about behaviours that will contribute to drug prevention • Information about where and how to seek support, counselling, and treatment for illicit drug use • Promoting the message that change is achievable
Correct False Normative Beliefs	• Challenging and/or correcting beliefs around the normalisation of drug use (e.g., a belief in exaggerated levels of drug use among peers)
Setting or Clarifying Social and Legal Norms	• Information that deglamourises drug use and related behaviour (e.g., drug driving) and explains the rationale for community norms and legal measures to influence attitudes and decision making
Setting Positive Role Models or Social Norms	• Promoting positive lifestyle and behaviours not associated with drug use

Source: Report of the Special Commission of Inquiry into crystal methamphetamine and other amphetamine-type stimulants, Volume 2, Professor Dan Howard SC

Evidence-Informed Content Development

Prevention messaging has been transformed by innovative delivery mechanisms. A notable example is the Cancer Institute NSW's groundbreaking approach through their Aboriginal Quit Smoking mini-series. This initiative, developed in partnership with the National Indigenous TV network, exemplifies the shift toward embedding prevention messages within entertainment platforms. Similarly, the Institute's 2015 community engagement strategy showcased the potential of social media, specifically focusing on promoting health awareness among Arabic and Chinese women.

Research has conclusively shown that drug education proves ineffective when solely focused on displaying the risks associated with drug use. The development of campaign content must navigate complex challenges. There exists a delicate balance between avoiding stigmatisation while also preventing the unintended normalisation of potentially harmful drug use. Evidence indicates that poorly conceptualised drug education programs may paradoxically increase levels of adolescent substance use. Furthermore, campaigns must be cautious as they might inadvertently create knowledge about or interest in drug use where none previously existed.

Resource Allocation and Campaign Sustainability

The effectiveness of media campaigns is intrinsically linked to their resource allocation. Inadequate funding has been identified as a significant factor in campaign failure. The current media environment, characterised by its increasingly fractured nature, poses additional challenges by potentially distracting from campaign messages. These obstacles underscore the critical importance of sustained, well-resourced efforts.

Media campaigns demonstrate optimal effectiveness when integrated into broader, comprehensive approaches. Successful prevention efforts typically involve multiple interventions and are complemented by policies that support opportunities for change. This holistic approach recognises that various risk factors influencing drug use exist outside an individual's control, necessitating a multi-faceted prevention strategy.

Effectiveness Evaluation

Media campaigns in drug prevention offer several advantages, including the ability to disseminate focused messages to large audiences repeatedly over extended periods at a relatively low cost per person. However, their effectiveness has shown considerable variation. Campaign messages may fall short or, in some cases, backfire. Additional challenges arise when content or format is not age-appropriate, or when campaigns attempt to address behaviours that audiences lack the resources to change.

Successful media campaigns in drug prevention consistently demonstrate several key characteristics:

1. They target clearly defined audiences with relevant and credible messages
2. Audiences receive frequent exposure to these messages
3. The campaigns are well-resourced and sustained over time
4. They form part of comprehensive approaches involving multiple interventions
5. They are supported by policies that facilitate behaviour change

While challenges exist, evidence suggests that well-designed, properly resourced, and strategically implemented campaigns can contribute effectively to broader prevention strategies.

VII. Implementation and Program Management

A. Strategic Planning for Prevention

- Effective prevention programs require careful planning to ensure they are aligned with the community's needs and resources.
- A strategic plan should include a comprehensive assessment of the drug problem in the community, an analysis of risk and protective factors, and a clear articulation of goals, objectives, and activities.
- The plan should also outline a plan for evaluation to assess the program's impact and guide continuous quality improvement efforts.

Strategic planning is a crucial step in developing effective drug abuse prevention programs for communities and college campuses. A well-constructed plan incorporates several key elements to ensure interventions are tailored to local needs, evidence-based, and sustainable.

Assessment of Drug Problems and Risk Factors

The planning process begins with a comprehensive assessment of drug abuse and related issues in the target population. This involves:

- Measuring current substance use levels
- Examining community risk factors (e.g. poverty, availability of drugs)
- Assessing protective factors (e.g. strong family bonds, academic achievement)
- Identifying gaps in existing prevention services

For college campuses, important factors to assess include:

- Rates of binge drinking and illicit drug use
- Percentage of students in high-risk groups (e.g. fraternities/sororities, athletes)
- Campus policies and enforcement practices
- Student perceptions of drug use norms

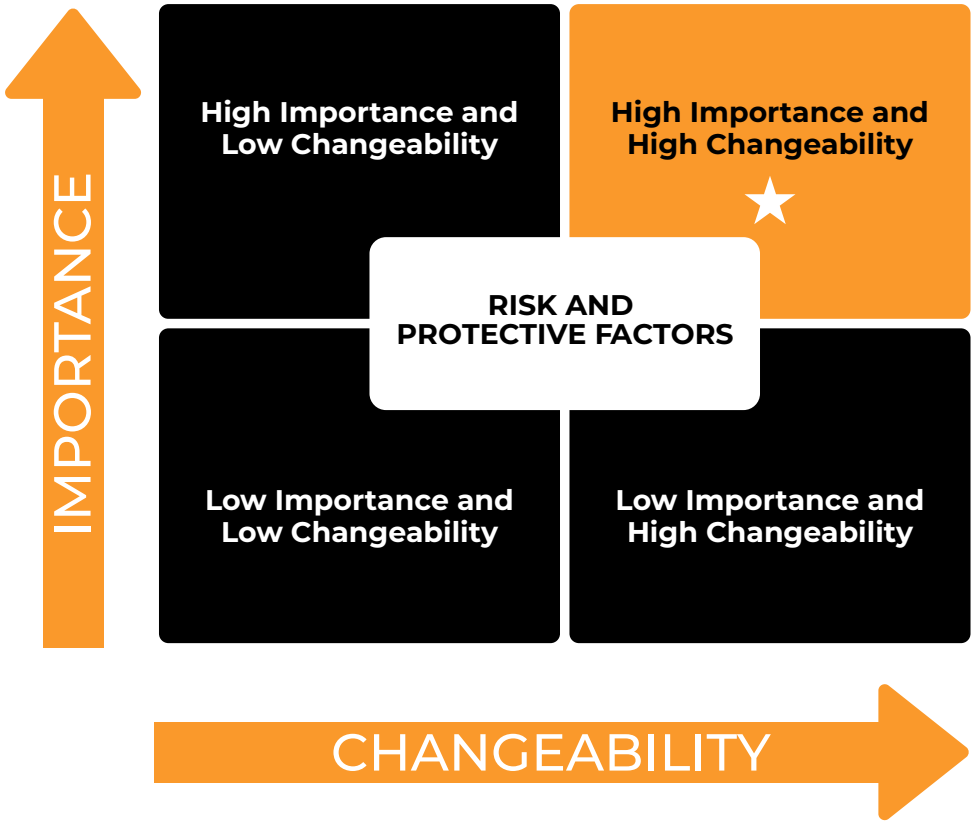
A thorough assessment provides critical data to guide program selection and design. For example, one study found that 39% of college students engaged in binge drinking in the past month. Armed with this type of baseline data, planners can set measurable goals for reducing high-risk behaviours.

Prioritising Risk and Protective Factors

With assessment data in hand, the next step is prioritising which risk and protective factors to address. Factors should be evaluated based on:

1. Importance - How much the factor contributes to substance abuse problems
2. Changeability - The community's capacity to influence the factor

Figure: Risk Factor Priority Matrix



Risk Factor Priority Matrix

High Importance, Low Changeability Consider long-term strategies	**High Importance, High Changeability** Top priority for intervention
Low Importance, Low Changeability Lowest priority	**Low Importance, High Changeability** Consider for quick wins

Source: How to Plan a Successful Drug Misuse Prevention Program on Your Campus

Planners should focus on factors that are high in both importance and changeability. For college prevention efforts, challenging misperceptions about peer alcohol use norms is often prioritised as it is both highly important and changeable through social norms interventions.

Selecting Evidence-Based Interventions

Once priority risk factors are identified, planners must select appropriate evidence-based interventions. Key criteria for selection include:

1. Evidence of effectiveness
2. Conceptual fit - addresses priority risk/protective factors
3. Practical fit - culturally relevant and feasible to implement

1. Evidence of effectiveness

Evidence-based interventions are those with peer-reviewed, rigorously evaluated empirical evidence of effectiveness. The best sources for finding such interventions are federal registries of model programs, such as NIAAA's College-AIM, which compiles evidence-based alcohol and other drug prevention programs for college campuses and rates them by efficacy. Another valuable resource is SAMHSA's Evidence-Based Practice Resource Centre. Evaluations published in peer-reviewed journals like the Journal of American College Health and the American Journal of Public Health can also provide information on new and emerging interventions.

It's important to note that these sources may not include interventions suitable for all problems or populations. For college students in particular, finding population-level studies of effectiveness can be challenging. In such cases, it may be more useful to look for pilot studies with promising results among small samples of college students that match your target population.

2. Conceptual fit - addresses priority risk/protective factors

An intervention has good conceptual fit if it directly addresses one or more of the priority factors driving a specific substance use problem and has been shown to produce positive outcomes for members of the focus population. To determine the conceptual fit of an intervention, planners should ask themselves, "Will this intervention have an impact on at least one of our campus's priority risk and protective factors?"

For example, screening and brief interventions, such as BASICS (Brief Alcohol Screening and Intervention for College Students), are effective at challenging students' beliefs about the prevalence of high-risk alcohol use on campus. If one of the identified risk factors is widespread misperception about heavy drinking, then BASICS may be a good fit conceptually.

3. Practical fit - culturally relevant and feasible to implement

An intervention has good practical fit if it is culturally relevant for the focus population, the campus has the capacity to support it, and it enhances or reinforces existing prevention activities. To determine the practical fit of an intervention, planners should ask themselves, "Is this intervention appropriate for our campus?"

Using BASICS as an example again, to determine practical fit, you would need to assess whether BASICS works with your student population and, more importantly, if you have the capacity to support it. BASICS requires training for facilitators and dedicated time to do the intervention. You would also want to make sure that BASICS is targeting a unique need among your student population and not replicating other prevention efforts.

For college substance abuse prevention, some interventions with strong evidence bases include:

A. Brief motivational interventions (e.g. BASICS)
B. Environmental strategies (e.g. policy enforcement)
C. Social norms marketing campaigns

A. Brief motivational interventions (e.g. BASICS)

BASICS, or Brief Alcohol Screening and Intervention for College Students, is a harm reduction program for college students who drink heavily. It is aimed at students who drink heavily and are at risk for alcohol-related consequences, both academic (e.g., failing classes) and personal (e.g., violence). The program uses a counsellor trained in motivational interviewing who provides data on campus-wide drinking rates, challenges a student's alcohol expectancies, and helps set new goals for alcohol use that are in line with the student's stated life aims.

B. Environmental strategies (e.g. policy enforcement)

Environmental strategies aim to change the campus and community context to reduce substance use. This can include stricter enforcement of existing alcohol policies or implementing new policies. These approaches have shown promise in reducing high-risk drinking and related harms on college campuses.

C. Social norms marketing campaigns

Social norms interventions aim to correct misperceptions about peer substance use, which can drive individual behaviour. These campaigns typically involve campus-wide marketing efforts that communicate accurate data about student substance use norms. They have been shown to be effective in reducing alcohol use among college students.

Planners should consult resources like NIAAA's CollegeAIM matrix, which rates over 60 college alcohol interventions based on effectiveness and cost. This comprehensive tool provides a systematic way to compare interventions across multiple dimensions, helping planners make informed decisions based on both evidence and practical considerations.

Developing a Comprehensive Approach

An effective prevention plan incorporates multiple, complementary strategies. Key considerations include:

- Widespread reach: Implementing environmental strategies with campus-wide impact

Strategies with widespread reach are essential for creating population-level change. Environmental approaches, such as policy changes or campus-wide education campaigns, can impact the entire student body. For example, implementing a medical amnesty policy that protects students from disciplinary action when seeking help for alcohol-related emergencies can reduce barriers to seeking help across the entire campus. Research has shown that such policies are associated with increased likelihood of students calling for help in alcohol-related emergencies, potentially saving lives.

- Multiple domains: Addressing individual, interpersonal, institutional, and community-level factors

Effective prevention plans operate across multiple levels of influence, as outlined in the socioecological model. This might involve combining individual-level interventions (e.g., BASICS) with interpersonal strategies (e.g., peer education programs), institutional changes (e.g., alcohol-free events), and community-level efforts (e.g., partnerships with local law enforcement).

- Cultural relevance: Tailoring approaches for different student subgroups

Recognising the diversity of the student population is crucial for developing effective prevention strategies. What works for one group may not be as effective for another. For instance, research has shown that certain ethnic minority groups may respond differently to social norms interventions due to varying cultural attitudes towards alcohol use. Planners should consider adapting evidence-based interventions to be culturally appropriate or developing targeted programs for specific high-risk groups (e.g., athletes, fraternity/sorority members).

Creating a Logic Model

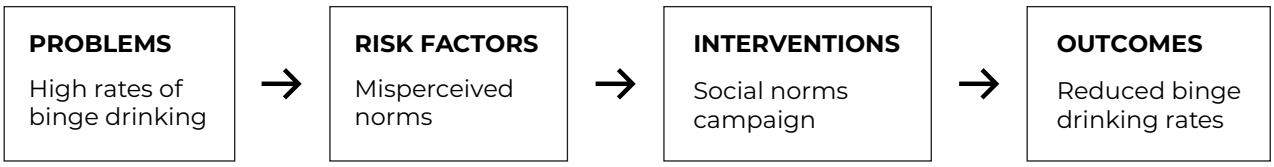
A logic model serves as a roadmap for the prevention plan, visually depicting the connections between:

Component	Description	Example
Problems and Related Behaviours	This component clearly articulates the substance use issues and associated behaviours identified in the community assessment. It should include quantitative data where possible.	"High rates of binge drinking among first-year students, leading to academic problems and personal injuries." "35% of first-year students report binge drinking in the past two weeks."
Risk and Protective Factors	This section outlines the specific factors identified as contributing to or protecting against the problem behaviours. These should be directly linked to the assessment findings.	"Risk factor: Misperceptions of peer drinking norms. Protective factor: Strong academic engagement."
Interventions	Here, the selected evidence-based strategies are listed, along with brief descriptions of how they will be implemented.	"Implementation of BASICS program for all sanctioned students, delivered by trained counsellors in two 50-minute sessions."
Anticipated Outcomes	Outcomes are the expected changes resulting from the interventions. These include both short-term and long-term outcomes.	Short-term: "Increased accurate perceptions of peer drinking norms." Long-term: "20% reduction in binge drinking rates among first-year students over three years."

By creating a detailed logic model, planners can clearly communicate the rationale behind their prevention strategy and establish a framework for evaluation. This visual representation helps stakeholders understand how different components of the plan work together to achieve the desired outcomes.

Here's an example logic model structure:

PREVENTION LOGIC MODEL



Implementation Planning

The strategic plan should outline concrete steps for implementing chosen interventions, including:

- Timelines

Planning timelines is crucial for effective implementation. This involves mapping out key milestones and deadlines for each phase of the intervention. For instance, when implementing a social norms campaign, the timeline might include dates for developing campaign materials, pre-testing with focus groups, launching the campaign, and conducting follow-up assessments. Timelines should be realistic, allowing for potential delays or adjustments as needed.

- Staffing and training needs

Identifying and preparing the right personnel is essential for program success. This includes determining the number of staff required, their roles and responsibilities, and any specialised training they may need. For example, implementing BASICS requires training counsellors in motivational interviewing techniques. The plan should outline how and when this training will be provided, as well as ongoing supervision and support for staff.

- Budget and resource allocation

A detailed budget should be developed, accounting for all aspects of the intervention. This includes costs for staffing, materials, training, evaluation, and any necessary equipment or technology. Resource allocation involves determining how existing campus resources can be leveraged and identifying any additional resources that need to be secured. For instance, implementing environmental strategies may require collaboration with campus facilities or local law enforcement, necessitating allocation of time and resources from these partners.

- Marketing and recruitment strategies

For interventions targeting specific student groups, a clear plan for outreach and recruitment is necessary. This might involve developing promotional materials, leveraging existing campus communication channels, or partnering with student organisations. The plan should consider how to effectively reach and engage the target population, taking into account their preferences and habits.

- Protocols for program delivery

Detailed protocols ensure consistency in program delivery across different implementers or time periods. This includes step-by-step guides for conducting interventions, handling common scenarios or challenges, and maintaining fidelity to the program model. For instance, a protocol for BASICS might outline the structure of each session, key talking points, and how to tailor the intervention to individual student needs.

For example, implementing a brief motivational intervention like BASICS requires planning for:

- Training counsellors in motivational interviewing techniques. This involves arranging for certified trainers to conduct workshops on motivational interviewing, possibly over several days. The plan should include follow-up coaching and assessment to ensure counsellors are applying the techniques effectively.

- Developing screening protocols to identify high-risk students. This might involve creating or adapting screening questionnaires, determining cut-off scores for high-risk drinking, and establishing procedures for administering the screening (e.g., during orientation, health centre visits, or as part of conduct sanctions).

- Creating a system for scheduling and tracking interventions. This could include setting up a dedicated scheduling system, determining how many interventions each counsellor can conduct per week, and creating a process for following up with students who miss appointments.

- Establishing procedures for collecting follow-up data. This involves determining when and how follow-up assessments will be conducted (e.g., 3 months post-intervention), what measures will be used, and how the data will be collected, stored, and analysed.

Evaluation Planning

Finally, the strategic plan must include a clear evaluation strategy to assess program implementation and outcomes. Key components include:

1. Process evaluation - Monitors program delivery and reach

   Process evaluation focuses on how the program is being implemented. It tracks factors such as the number of interventions delivered, characteristics of participants, adherence to program protocols, and any adaptations made during implementation. This information helps identify implementation challenges and areas for improvement.

2. Outcome evaluation - Measures changes in targeted risk factors and behaviours

   Outcome evaluation assesses the immediate or short-term effects of the intervention. This might include changes in knowledge, attitudes, or behaviours directly targeted by the program. For instance, an outcome evaluation of BASICS might measure changes in students' alcohol consumption patterns or use of protective strategies when drinking.

3. Impact evaluation - Assesses long-term effects on substance abuse rates

   Impact evaluation looks at broader, longer-term changes resulting from the intervention. This could include campus-wide reductions in binge drinking rates, decreases in alcohol-related injuries or academic problems, or changes in the overall campus culture around substance use.

Planners should identify specific, measurable indicators for each evaluation component. For a social norms campaign, indicators might include:

- Process: Number of students exposed to campaign materials. This could be measured through surveys asking about recall of campaign messages, tracking of social media engagement with campaign content, or counts of posters distributed across campus.

- Outcome: Changes in perceptions of peer drinking norms. This might be assessed through pre- and post-campaign surveys measuring students' estimates of how much and how often their peers drink.

- Impact: Reductions in binge drinking rates over time. This could be measured through annual surveys of student alcohol use, potentially as part of a broader health behaviour survey administered to a representative sample of students.

By developing a comprehensive strategic plan incorporating these elements, prevention professionals can maximise the likelihood of implementing effective, sustainable programs that measurably reduce substance abuse in their communities.

B. Building Community Readiness and Capacity

- Successful prevention efforts require community buy-in and support.
- Engaging stakeholders from various sectors, including community members, schools, law enforcement, healthcare providers, and policymakers, is essential to build consensus and ownership over the program's goals and strategies.
- Capacity building efforts might involve providing training, technical assistance, and resources to support program implementation and sustainability.

Building community readiness and capacity is a critical foundation for successful drug misuse prevention programs, particularly in college and community settings. This process involves assessing the community's current level of preparedness, engaging diverse stakeholders, developing strong prevention teams, and raising awareness to garner support and resources.

1. Assessing Community Readiness

Before implementing prevention programs, it's crucial to gauge the community's readiness to take action. Researchers have identified nine stages of community readiness, which is a framework used to evaluate and enhance a community's preparedness to tackle specific issues, such as drug abuse prevention. This model, developed by Plested et al. in 1999, categorises community readiness into distinct stages, each reflecting the community's level of awareness, motivation, and action regarding the issue at hand.

Here's a breakdown of the stages and their characteristics:

1. No Awareness: The community does not recognise drug abuse as a problem. There is a belief that it is not happening locally, or there is a sense of helplessness about addressing it.
2. Denial: There is some awareness of drug abuse, but the community lacks motivation to act. People may feel that nothing can be done or that it is not a significant issue.
3. Vague Awareness: Leaders and some community members are aware of the problem and show some motivation to address it, but there is no clear plan or direction.
4. Preplanning: Active leadership begins to emerge, with decision-making processes starting to take shape. The community starts to use data to support prevention actions.
5. Preparation: The community generally supports existing programs, and decision-makers are in favor of improving or expanding these initiatives.
6. Initiation: There is a knowledgeable understanding of the community's drug problem, and there is an expectation for effective solutions. Plans for prevention programming are developed through coalitions and community groups.
7. Stabilisation: Research-based programs are identified and implemented. Ongoing programs are evaluated and improved.
8. Confirmation/Expansion: Programs are institutionalised and expanded to reach more populations. Multicomponent programs are put in place for all audiences.
9. Professionalisation: The community has a high level of readiness, with well-established programs and a proactive approach to prevention.

The model provides a structured approach for communities to assess their current stage of readiness and offers strategic ideas for advancing to the next stage. This helps in creating targeted interventions that are more likely to be effective given the community's current state.

Table: Community Readiness and Action Framework for Drug Abuse Prevention

ASSESSING READINESS*		COMMUNITY ACTION
Readiness Stage	Community Response	Ideas
1. No awareness	Relative tolerance of drug abuse	Create motivation. Meet with community leaders involved with drug abuse prevention; use the media to identify and talk about the problem; encourage the community to see how it relates to community issues; begin preplanning.
2. Denial	Not happening here, can't do anything about it	
3. Vague awareness	Awareness, but no motivation	
4. Preplanning	Leaders aware, some motivation	
5. Preparation	Data used to support prevention actions	Work together. Develop plans for prevention programming through coalitions and other community groups.
6. Initiation	Community generally supports existing program	Identify and implement research-based programs.
7. Stabilisation	Community generally supports existing program	Evaluate and improve ongoing programs.
8. Confirmation/ Expansion	Decisionmakers support improving or expanding programs	Institutionalise and expand programs to reach more populations.
9. Professionalisation	Knowledgeable of community drug problem; expect effective solutions	Put multicomponent programs in place for all audiences.

Source: Preventing Drug Use Among Children and Adolescents, U.S. Department of Health and Human Services

2. Engaging Diverse Stakeholders

Engaging a broad range of stakeholders is key to unlocking a community's capacity for prevention. Prevention practitioners on campus need diverse partners to share information and resources, raise awareness of critical substance use problems, build support for prevention, and ensure that prevention activities reach multiple populations in multiple settings with multiple strategies. Potential stakeholders include:

- Campus leaders, higher education administrators, and student leaders are crucial for gaining institutional support and understanding the unique needs and perspectives of the student body. These individuals can provide valuable insights into campus culture and policies that may impact prevention efforts.

- Student affairs staff, fraternity and sorority life staff, and athletic coaches and staff are often on the front lines of student interaction and can play a vital role in implementing and reinforcing prevention strategies. They may also have direct experience with the challenges and opportunities related to substance misuse among specific student populations.

- Campus health and wellness staff possess expertise in health promotion and can provide valuable data on student health behaviours and trends. Their involvement ensures that prevention efforts are integrated with broader health and wellness initiatives on campus.

- Campus and local law enforcement can offer insights into the legal aspects of substance misuse and help coordinate enforcement efforts both on and off campus. Their involvement can also help bridge potential gaps between campus and community prevention strategies.

- Local medical centre staff can provide medical expertise and data on substance-related health issues affecting students and the broader community. They may also be able to offer resources for intervention and treatment.

- Local alcohol retailers and bar and restaurant owners are important stakeholders in addressing off-campus alcohol availability and consumption. Engaging these groups can lead to collaborative efforts to promote responsible serving practices and reduce high-risk drinking environments.

- Local prevention coalition members and local residents bring community perspectives and can help align campus prevention efforts with broader community initiatives. Their involvement can also help address town-gown relations and ensure that prevention strategies consider the impact on the surrounding community.

Stakeholders can be involved at different levels, ranging from no involvement to full collaboration. There are five levels of involvement:

1. **No involvement:** Stakeholders engage in separate activities, strategies, and policies.
2. **Networking:** Stakeholders share information during interagency meetings and communicate about existing programs, activities, or services.
3. **Cooperation:** Stakeholders support one another's programs, co-sponsor trainings, and exchange resources.
4. **Coordination:** Stakeholders serve together on event planning committees and implement programs and services together.
5. **Collaboration:** Stakeholders create formal agreements, develop common data collection systems, partner on joint fundraising efforts, and pool resources.

To engage new stakeholders, prevention practitioners can employ several strategies:

- Leverage existing contacts and connections by reaching out to individuals with overlapping interests. This might include campus staff members who have shown interest in prevention issues or local prevention coalitions.

- Attend and participate in campus meetings and events focused on academic success, student mental health and well-being, and community health. Use these opportunities to share data on how alcohol and other drug issues affect all aspects of student life.

- Ask partners to contact their networks to bring new and diverse partners to the table. Be explicit in requests for connections to specific students or campus leaders.

- Keep potential partners well informed about prevention activities and progress by sending out regular, brief updates. This helps maintain connections with stakeholders who may not currently have the capacity to be active in prevention efforts.

- Meet with key players, including campus and student leaders and local decision-makers. Prepare focused, data-driven presentations and be ready to answer questions openly and transparently. Seek their advice on potential collaborators for prevention efforts.

- Anticipate and address potential roadblocks by proactively addressing concerns of those who might oppose or hinder prevention efforts. This approach can help build a more robust and resilient prevention coalition.

3. Developing and Strengthening Resilience Building Teams

Creating a prevention task force or coalition is crucial for full collaboration. To build and strengthen your team:

A. Identify and fill gaps in representation

B. Build prevention knowledge through guest speakers and group trainings

C. Monitor and improve group structure and processes

D. Establish clear communication channels and decision-making procedures

A. Identify and fill gaps in representation

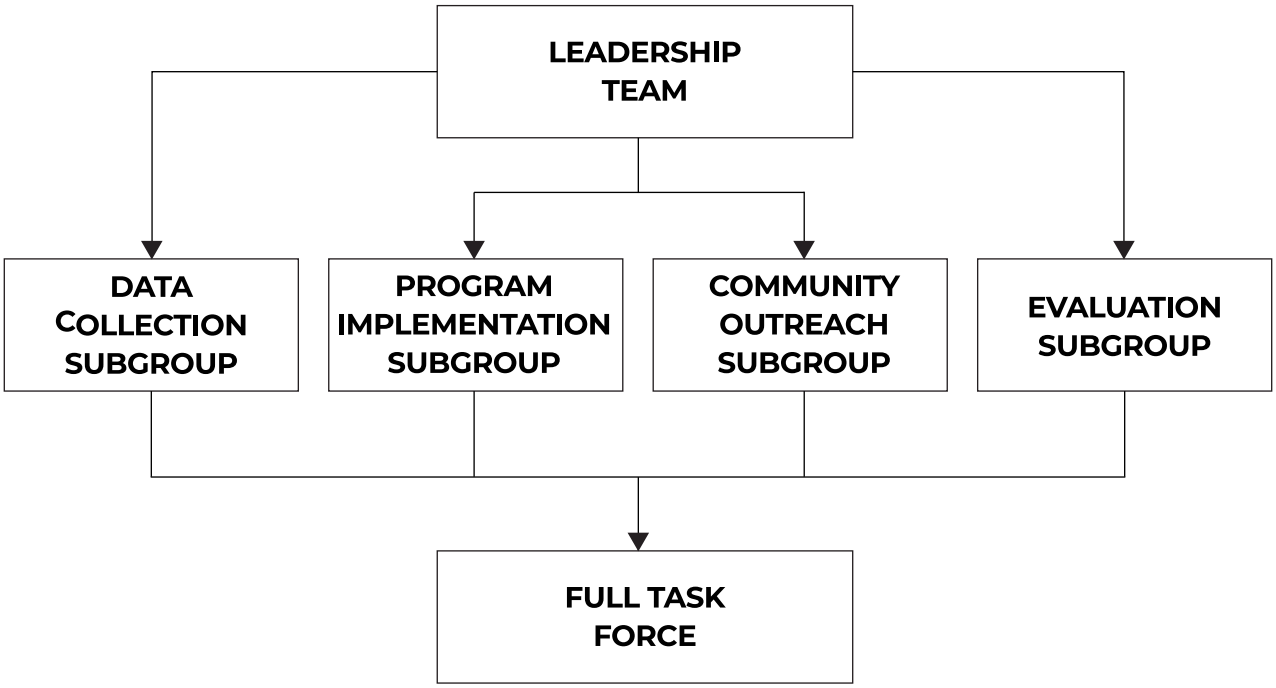
Once you have a team in place, carefully assess whether key campus and community groups are represented. Look for any missing perspectives that could be vital to the success of your prevention initiative. Before recruiting new members, ensure that your existing partners support additional recruitment. If current partners express reservations (e.g., "More people mean more opinions and conflict!"), take time to explain specifically why you want to bring each new partner on board. Consider creating a matrix of current members and their affiliations to visually identify any gaps in representation.

B. Build prevention knowledge through guest speakers and group trainings

A truly representative task force means that members will bring diverse insights and experiences to the table, as well as varied knowledge and perspectives on the priority problem being addressed. Use a variety of strategies to increase task force members' understanding of the problem and effective prevention strategies. This could include inviting guest speakers with expertise in specific areas of substance abuse prevention, organising group trainings on evidence-based practices, or arranging site visits to successful prevention programs at other institutions. Consider developing a "prevention 101" training module for new members to ensure everyone has a baseline understanding of key concepts and approaches.

C. Monitor and improve group structure and processes

Even the most well-informed group won't be productive unless it functions well. To help your team work together effectively, discuss and establish clear guidelines for how you will share leadership, make decisions, divide tasks, resolve conflicts, and communicate with one another, as well as with the broader community. Consider implementing a regular process evaluation to assess the effectiveness of your group's structure and processes. This could involve anonymous surveys of team members or periodic facilitated discussions to identify areas for improvement.



D. Establish clear communication channels and decision-making procedures

Develop a communication plan that outlines how information will be shared within the task force and with external stakeholders. This might include regular email updates, a shared online platform for document storage and collaboration, or scheduled briefings at each meeting. For decision-making, consider adopting a formal process such as consensus-building or majority vote, depending on the nature of your group and the decisions at hand. Document these procedures in a team charter or operating guidelines to ensure consistency and transparency.

4. Raising Community Awareness

Increasing public awareness of substance misuse issues can help garner resources and increase community readiness. Strategies include:

- **One-on-one meetings with public opinion leaders:** Identify key influencers on your campus, such as student newspaper opinion columnists or student social media influencers. Schedule individual meetings to share data on substance misuse issues and discuss potential prevention strategies. These conversations can help shape public discourse and build support for your initiatives.

- **Sharing information through task force members' networks:** Encourage task force members to disseminate information about prevention efforts through their own professional and social networks. Provide them with key talking points, data summaries, and shareable materials to ensure consistent messaging across different channels.

- **Submitting articles to student and local newspapers:** Develop a series of articles highlighting different aspects of substance misuse on campus and in the community. Include data from your campus assessments, personal stories (with appropriate permissions), and information about prevention efforts. Aim to publish regular updates to maintain visibility of the issue.

- **Utilising campus websites and social media outlets:** Work with your institution's communications department to feature substance misuse prevention information prominently on the campus website. Develop a social media strategy that includes regular posts about prevention efforts, campus policies, and resources for students. Consider creating a dedicated hashtag for your prevention campaign to track engagement and encourage student participation.

- **Hosting campus-wide events to discuss the problem:** Organise events such as town halls, panel discussions, or awareness weeks focused on substance misuse prevention. Invite diverse speakers, including experts in the field, student leaders, and individuals with personal experiences related to substance misuse. Use these events to share information, gather feedback, and build momentum for prevention efforts.

- **Convening focus groups for input on prevention plans:** Conduct a series of focus groups with different campus constituencies (e.g., students, faculty, staff, local community members) to gather input on proposed prevention strategies. Use structured discussion guides to ensure consistent data collection across groups. Analyse and incorporate this feedback into your prevention plans to ensure they address the needs and concerns of various stakeholders.

5. Building Momentum and Capacity

To move from awareness to action:

- **Meet face-to-face with stakeholders to discuss overlapping goals:** Schedule individual or small group meetings with key stakeholders to explore how substance misuse prevention aligns with their own objectives. For example, meet with academic affairs leaders to discuss how reducing substance misuse can support improved academic performance and retention rates. Prepare tailored presentations for each stakeholder group, highlighting relevant data and potential collaborative opportunities.

- **Invite stakeholders to prevention team meetings:** Once you've identified interested stakeholders, invite them to attend a prevention team or task force meeting. Keep your agendas focused and ensure you're only inviting stakeholders when you have something specific you want to share or would like their help with. This targeted approach respects their time and demonstrates the value of their participation.

- **Make specific requests for involvement based on stakeholders' strengths:** People are more likely to engage when asked to contribute in ways that highlight their expertise or interests. For example, ask a marketing professor to help develop a social media campaign, or invite student athletes to lead peer education sessions. Create a matrix of stakeholder skills and interests to help match them with appropriate tasks and roles within your prevention efforts.

- **Extend invitations to future prevention events and activities:** Maintain an ongoing calendar of prevention-related events and activities, and regularly invite stakeholders to participate. This could include awareness campaigns, training sessions, or community service projects. Even if someone can't help immediately, continued invitations keep them connected to your work and open the door for future involvement.

- **Maintain relationships by keeping stakeholders informed of progress:** Develop a regular communication strategy to keep all stakeholders, including those not actively involved, informed about prevention activities and progress. This could include monthly email updates, a quarterly newsletter, or an annual report summarising key achievements and upcoming initiatives. Use data visualisations and infographics to make these updates engaging and easily digestible.

6. Overcoming Challenges

Common challenges in building community readiness and capacity include:

- **Varying levels of interest and availability among stakeholders:** Recognise that stakeholders will have different capacities to engage with prevention efforts. Develop a tiered system of involvement that allows for varying levels of commitment, from occasional consultation to active leadership roles. Regularly reassess stakeholder engagement and be prepared to adjust roles as needed.

- **Resistance from naysayers or skeptics:** Anticipate potential opposition and prepare evidence-based responses to common criticisms of prevention efforts. Engage skeptics in constructive dialogue, acknowledging their concerns while presenting data and research that support your prevention strategies. Consider inviting vocal critics to participate in planning processes to ensure their perspectives are heard and addressed.

- **Limited resources and time constraints:** Conduct a thorough assessment of available resources, including funding, staff time, and in-kind contributions from partners. Prioritise prevention strategies based on their potential impact and resource requirements. Explore grant opportunities and partnerships with local businesses or foundations to expand your resource base.

- **Competing priorities within the community:** Recognise that substance misuse prevention may be one of many pressing issues facing your campus and community. Look for opportunities to integrate prevention efforts with other initiatives, such as mental health promotion or academic success programs. Develop messaging that highlights the interconnectedness of these issues and the potential for synergistic benefits.

To address these challenges:

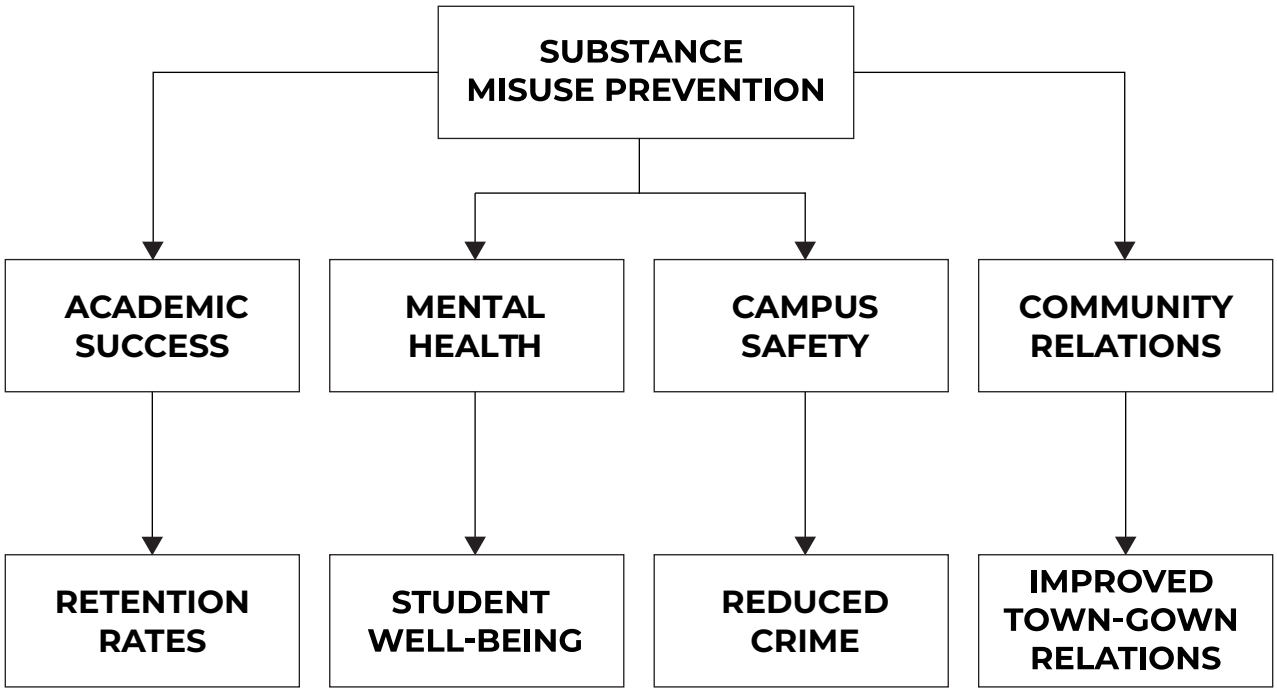
- **Tailor involvement requests to stakeholders' interests and capacity:** Develop a stakeholder engagement plan that matches specific tasks and roles to individual stakeholders based on their interests, expertise, and availability. Use a matrix to track stakeholder characteristics and potential contributions. For example:

Stakeholder	Area of Expertise	Level of Interest	Available Time	Potential Role
Prof. Smith	Public Health	High	5 hrs/month	Data Analysis
Student Gov	Student Outreach	Medium	2 hrs/week	Peer Education
Local PD	Law Enforcement	Low	Quarterly	Advisory Board

- **Address concerns of potential opponents proactively:** Develop a "Frequently Asked Questions" document that anticipates and addresses common concerns or criticisms of your prevention efforts. Use data and research to support your responses. Consider hosting a series of "listening sessions" to give skeptics a platform to express their concerns and collaborate on solutions.

- **Seek creative partnerships to maximise resources:** Look beyond traditional partners for prevention efforts. For example, explore collaborations with the computer science department to develop a mobile app for tracking substance use behaviours, or partner with the theatre department to create interactive performances about substance misuse prevention. These unconventional partnerships can bring fresh perspectives and additional resources to your efforts.

- **Demonstrate the interconnectedness of prevention efforts with other community priorities:** Create a visual representation of how substance misuse prevention relates to other campus and community goals. For example:



By systematically assessing and building community readiness and capacity, prevention practitioners can create a strong foundation for implementing effective drug misuse prevention programs. This process requires ongoing effort, clear communication, and a commitment to engaging diverse voices in the community. Regular evaluation of your capacity-building efforts, using both quantitative metrics (e.g., number of active stakeholders, resources secured) and qualitative assessments (e.g., stakeholder satisfaction surveys, focus group feedback), can help refine your approach and ensure continued progress towards your prevention goals.

C. Implementing Evidence-Based Programs

- Using evidence-based programs, or those shown to be effective through rigorous research, increases the likelihood of achieving desired outcomes.
- It's important to ensure that programs are implemented with fidelity, meaning they adhere to the core components and principles that have been shown to be effective.
- While fidelity is important, it's also crucial to adapt programs to fit the unique cultural, social, and environmental context of the community.
- Many evidence-based prevention programs are available, and selecting the right program depends on the specific needs of the target population, the community context, and available resources.

1. Selecting Appropriate Evidence-Based Programs

Selecting the right evidence-based program is crucial for successful implementation. This process involves carefully considering the specific needs of the target student population, the unique context of the campus community, and the available resources.

When choosing an intervention, it's essential to ensure that it aligns with the risk and protective factors identified during the assessment phase. The program should also fit well with the campus culture and be feasible to implement given the available resources. Additionally, there should be strong evidence demonstrating the program's effectiveness for the specific demographic you're targeting.

For example, if you're targeting sorority students, you might consider a program that uses motivational interviewing techniques and incorporates group-based facilitated conversations. Such an intervention could compare consumption data and beliefs about AOD (Alcohol and Other Drug) use from one sorority to all others on campus, followed by guided discussions about values and how they align with the group's AOD use.

Table: Criteria for Selecting Evidence-Based Programs

Criterion	Description
Evidence Base	Rigorous research demonstrating positive outcomes
Target Population	Matches demographic of intended recipients
Risk/Protective Factors	Addresses factors identified in needs assessment
Theory of Change	Clear rationale for how program creates impact
Implementation Requirements	Feasible given available resources and constraints
Cultural Relevance	Appropriate for campus population and context

2. Balancing Fidelity and Adaptation

Maintaining a balance between program fidelity and adaptation is a critical aspect of implementing evidence-based programs. Fidelity refers to the degree to which an intervention is implemented as intended, while adaptation describes how much and in what ways a program is changed to meet local circumstances.

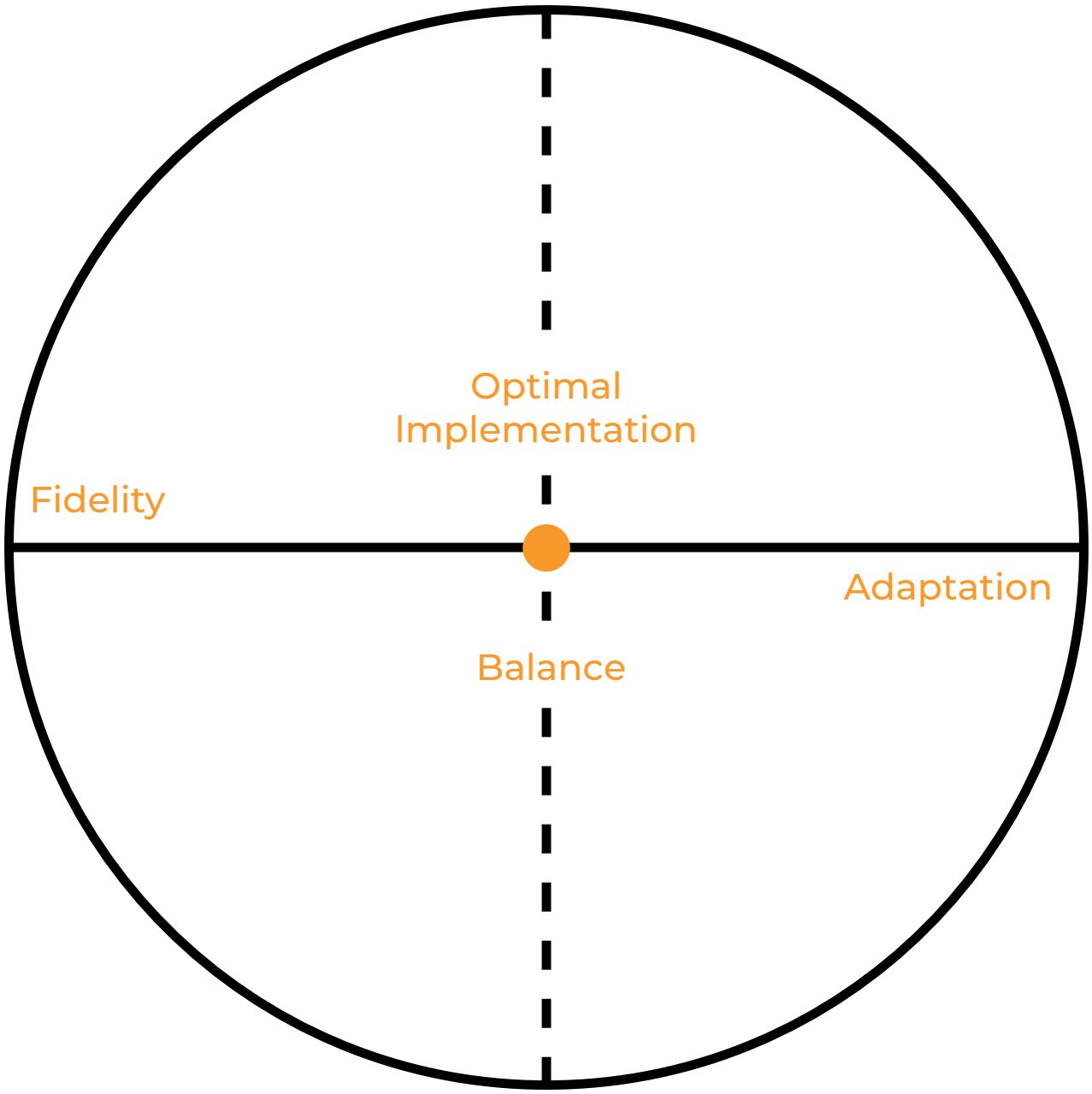
Evidence-based programs are defined as such because they consistently achieve positive outcomes. The greater your fidelity to the original intervention design, the more likely you are to reproduce these positive results. However, customising an intervention to better reflect the attitudes, beliefs, experiences, and values of your focus population can increase its cultural relevance.

When implementing with fidelity, it's important to:

- Preserve the setting as well as the number and length of sessions
- Preserve key intervention content: It's safer to add rather than subtract content
- Add new content with care: Consider intervention guidance and prevention research
- Identify the best possible candidate to deliver the intervention

For example, in the hypothetical sorority intervention mentioned earlier, if sorority leaders request changes such as reducing session length or adding content, you would need to carefully consider these requests. You might keep the intervention at two 60-minute sessions to maintain fidelity, welcome the addition of relevant values information, and consider training the Fraternity and Sorority Life dean in motivational interviewing principles if they're the best fit to work with this population.

When adapting programs, it's crucial to consult with the intervention developers. They can provide information on how the program has been adapted in the past, how well these adaptations have worked, and what core components should be retained to maintain effectiveness. It's also important to engage members of your focus population, as they can suggest ways to enhance the intervention materials to better reflect their concerns and experiences.



3. Implementation Supports

Successful implementation of evidence-based programs requires careful planning and ongoing support. Several key factors need to be considered:

A. Prevention History: The success of a prevention intervention depends on the target population's prior experiences with prevention efforts. If you've had success implementing prevention interventions with this student population in the past, your students will likely be more ready, willing, and able to support the implementation of a new intervention. However, if your student population has had a negative experience with—or doesn't fully understand the potential of—a prevention intervention, then it will be important to address these concerns early in the implementation process.

B. Leadership and Administrative Support: Prevention interventions assume many different forms and are implemented in many different settings. To be effective, interventions require the leadership of key student and staff groups and support from key stakeholders. This support is crucial for securing resources, overcoming obstacles, and integrating the program into existing campus structures.

C. Practitioner Selection: When selecting the best candidate to deliver a prevention intervention, consider professional qualifications and experiences, practical skills, as well as fit with your focus population. The right facilitator can make intervention participants feel comfortable and significantly impact the program's effectiveness. For instance, in the sorority intervention example, the Fraternity and Sorority Life dean might be an excellent choice if properly trained in the intervention techniques.

D. Training and Support: Pre- and in-service trainings can help practitioners responsible for implementing an intervention understand how and why the intervention works, practice new skills, and receive constructive feedback. Since most skills are learned on the job, it is also helpful to connect these practitioners with a coach who can provide ongoing support. This continuous professional development ensures that the program is delivered with high quality and fidelity.

E. Evaluation Plan: By closely monitoring and evaluating the delivery of an intervention, practitioners can make sure that it is being implemented as intended and improve it as needed. They can determine whether the intervention is working as intended and worthy of sustaining over time by assessing program outcomes. This ongoing evaluation allows for data-driven decision-making and continuous improvement of the program.

F. Action Plan: Your plan should include (1) all implementation tasks, (2) deadlines, and (3) person(s) responsible. By working with implementation partners to develop this plan, practitioners can make sure that everyone is on the same page, and no key tasks fall through the cracks. This detailed planning helps ensure smooth execution of the program and clear accountability for all aspects of implementation.

4. Engaging the Campus Community

Broad engagement is essential for sustaining prevention efforts over time. It's important to get others involved and invested in the prevention interventions. Strategies for engaging the campus community include:

- Finding concrete and meaningful ways for people to get involved: This could involve creating volunteer opportunities, forming student advisory boards, or integrating prevention activities into existing campus events and programs.

- Keeping cultural and public opinion leaders well informed: Regular updates and briefings to key campus influencers can help maintain support and visibility for prevention efforts.

- Getting the word out to the broader community through media and other publicity efforts: Utilise campus media channels, social media platforms, and events to raise awareness about the prevention program and its benefits.

You can ensure that these efforts go a long way toward producing positive outcomes by promoting both fidelity and cultural relevance, and anticipating and supporting the many factors that influence implementation. However, sustaining these outcomes over time requires ongoing community engagement and support.

5. Overcoming Implementation Challengesy

Implementing evidence-based programs on college campuses can present several challenges. Some common obstacles are:

- Limited resources (time, funding, personnel): Implementing research-based school and family programs often requires extensive human and financial resources.

- Resistance to change or new approaches: This may be particularly challenging if there's a lack of understanding about the potential benefits of prevention interventions.

- Competing priorities and initiatives: Prevention efforts must often compete with other campus priorities for attention and resources.

- Maintaining student engagement: This is crucial for attracting and keeping program participants interested and involved, especially when working with families in rural and poverty settings.

To address these challenges, there are several strategies that can help overcome barriers to participation and increase the likelihood of successful program implementation.

- Provide incentives to attract and retain program participants
- Offer maximal schedule flexibility to accommodate diverse student schedules
- Minimise time demands to reduce barriers to participation
- Offer free meals, transportation, and baby-sitting to support attendance
- Use personal contact to build relationships with participants
- Secure endorsement from important community leaders to increase credibility

6. Monitoring and Improving Implementation

Ongoing assessment of implementation quality is critical for program success. Coalitions formed during the community planning process often remain involved in overseeing program implementation. They continue to review progress and can play a crucial role in ensuring that the program stays on track and achieves its intended outcomes.

The responsibility for actual implementation generally resides within the local public or private community-based organisation in the educational, social service, or other local system implementing the programs. These organisations need to establish systems for regular monitoring and improvement of program delivery. By systematically collecting and reviewing data on program implementation and outcomes, prevention professionals can make data-driven decisions to enhance program delivery and ultimately improve student health and well-being.

D. Tactical Capacity

1. Tactical Capacity: The Missing Piece in Prevention Success

When it comes to substance misuse prevention, good intentions are everywhere. We invest in training, build coalitions, and implement evidence-based programs. But despite these efforts, many initiatives struggle to create lasting impact. Why? Because traditional capacity building, while essential, often stops short of what we really need - **tactical capacity.**

Why Traditional Capacity Building Falls Short

Traditional capacity building focuses on four key areas:

- **Knowledge** - Training professionals on risk factors, trends, and best practices.
- **Skills** - Developing expertise in planning, evaluation, and coalition building.
- **Resources** - Securing funding, personnel, and tools.
- **Infrastructure** - Establishing policies, partnerships, and organisational structures.

These elements are vital, but they only prepare us for action—they don't ensure success **in** action. Real-world prevention work is unpredictable. Community priorities shift, barriers arise, and engagement can wane. Without **tactical capacity—the ability to execute, adapt, and sustain prevention efforts** - even the best-laid plans can fall short.

Think about it. Have you ever seen a well-designed program stall due to lost momentum, community resistance, or funding gaps? These aren't knowledge or resource issues—they're execution challenges. And that's exactly what tactical capacity is designed to solve.

What is Tactical Capacity?

Tactical capacity is what turns great ideas into lasting impact. It's about ensuring prevention strategies don't just look good on paper but actually work in practice. It consists of four key elements:

1. **Strategic Execution** - Breaking large initiatives into actionable, achievable steps. This includes identifying and overcoming barriers before they derail progress.
2. **Situational Adaptability** - Being flexible enough to pivot when necessary, adjusting messaging, tactics, and engagement strategies as community needs evolve.
3. **Sustained Engagement** - Keeping stakeholders involved beyond the initial excitement by making participation easy, relevant, and rewarding.
4. **Precision and Alignment** - Ensuring that actions align with real community needs, not just best practices. This shifts the focus from **activity** to **impact.**

2. Tactical Capacity in Action: A Tale of Two Communities

Let's compare two communities launching the same substance misuse prevention program.

Community A

- Receives funding and training.
- Implements an evidence-based campaign.
- Faces resistance from some community members.
- Struggles to sustain engagement.
- Program loses traction over time.

Community B

- Receives the same funding and training.
- Builds tactical capacity by preparing for execution challenges.
- Adapts the campaign to align with local values and needs.
- Keeps engagement high by making participation accessible and rewarding.
- The program evolves over time, leading to lasting impact.

Both communities had knowledge, skills, and resources, but only Community B had **tactical capacity**. Their ability to execute, adapt, and sustain efforts made the difference.

How to Build Tactical Capacity

If we want to strengthen prevention efforts, we need to move beyond theory and focus on execution. Here's how:

- **Prioritise Execution Training** - Go beyond traditional training and practice real-world application through role-playing, problem-solving exercises, and scenario planning.
- **Develop Adaptive Thinking** - Train teams to anticipate resistance and adjust strategies without losing momentum.
- **Create Feedback Loops** - Regularly assess and refine initiatives based on real-time results, ensuring strategies stay relevant and effective.
- **Empower Teams to Make Decisions** - Give prevention professionals the authority and flexibility to adapt strategies when necessary.
- **Foster a Culture of Resilience** - Prevention work is tough. Build teams that can push forward despite obstacles and challenges.

The Future of Prevention Success

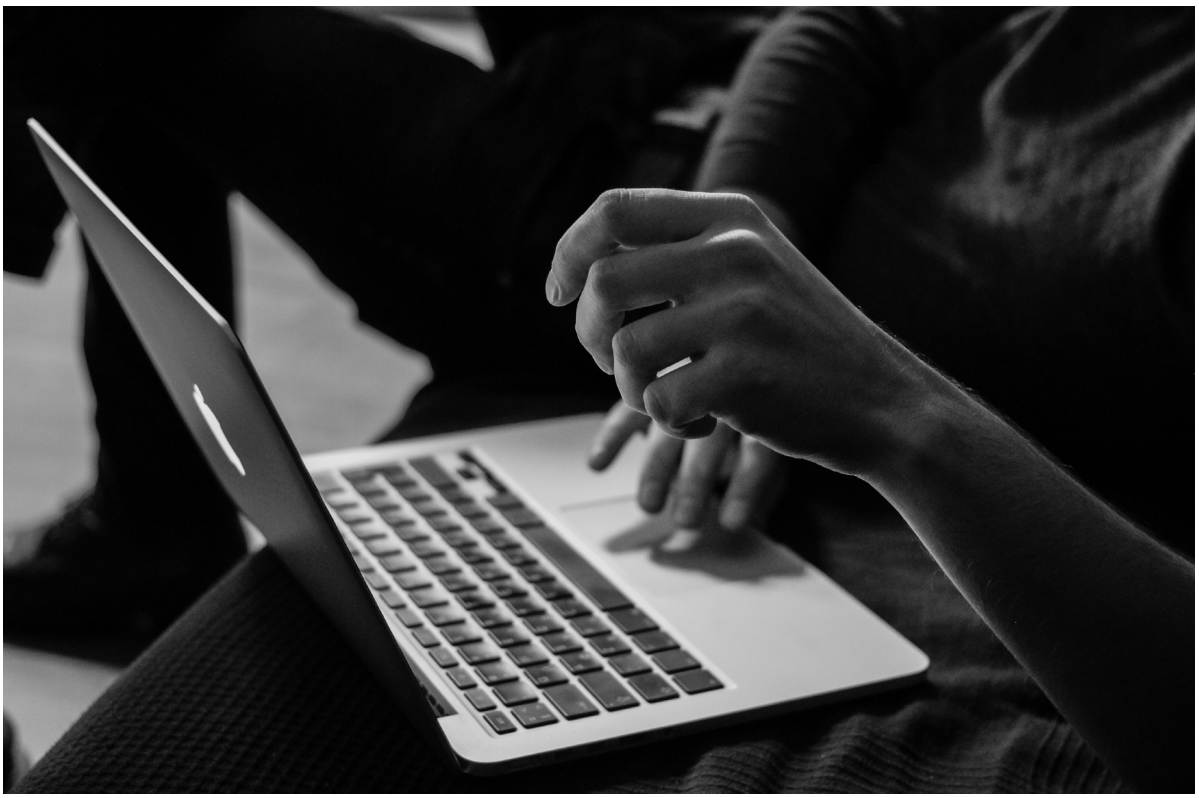
Tactical capacity is the missing piece in prevention success. Traditional capacity building lays the foundation, but tactical capacity ensures **execution, adaptation, and long-term impact.**

If we want real change in our communities, we must shift our focus from simply **learning** prevention strategies to **mastering** prevention execution.

So, what steps will you take to enhance tactical capacity in your work?

(Source: **Davis Closson – DJC Solutions, © 2025 used with permission**)

VIII. Evaluation and Quality Improvement



A. Types of Evaluation in Prevention

- Formative Evaluation: This initial step assesses readiness and potential challenges before implementing a program, ensuring a well-designed intervention for success.
- Process Evaluation: It monitors the implementation of an intervention, allowing for real-time adjustments to improve delivery and achieve intended outcomes.
- Outcome and Impact Evaluation: These evaluations measure short- and long-term changes, attributing them to the intervention, and provide evidence of its effectiveness.
- Continuous Quality Improvement (CQI): CQI involves ongoing assessments and improvements, fostering a culture of adaptation and learning in prevention efforts.

1. Formative Evaluation

Formative evaluation is a crucial first step in the evaluation process, occurring before a program or policy is implemented. Its primary goals are to assess the readiness of an organisation or community to implement the intervention, articulate a theory of change, and determine the extent to which an intervention can be evaluated reliably and credibly.

This type of evaluation helps to lay the groundwork for successful implementation and future assessments. It allows stakeholders to identify potential challenges and opportunities before the intervention begins, ensuring that the program or policy is well-designed and has the best chance of success. Formative evaluation can include activities such as needs assessments, stakeholder interviews, and literature reviews to inform the development of the intervention.

2. Process (Implementation) Evaluation

Process evaluation collects data about an intervention's implementation. It enables program managers and policy makers to assess whether an intervention was implemented as planned and whether it reached the intended audience.

Key aspects of process evaluation include:

- Documenting the extent to which intervention sessions were delivered as originally designed
- Tracking the number of participants
- Identifying the number of participants who did not complete the intervention
- Noting any adaptations made to the intervention

Process evaluation is particularly useful for improving an intervention's delivery and enhancing understanding of prevention outcomes. It allows for real-time adjustments to be made to the program or policy, ensuring that it remains on track to achieve its goals. For example, if process evaluation reveals that certain components of the intervention are not being implemented consistently, steps can be taken to address these issues before they impact the overall effectiveness of the program.

3. Outcome Evaluation

Outcome evaluation collects baseline data and data at defined intervals during and after full implementation of the intervention. It assesses short- and long-term outcomes related to the targeted behaviours. Outcome evaluation provides information to assess changes or improvements in attitudes and behaviours associated with the intervention.

Examples of outcome evaluation questions include:

- To what extent did students' attitudes toward the priority problem(s) change?
- To what extent did student rates of substance use behaviour specific to the priority problem(s) change?

Outcome evaluation is critical for determining whether an intervention is producing the desired results. It allows stakeholders to measure the actual impact of the program or policy on the target population. This type of evaluation often involves comparing data collected before the intervention (baseline) with data collected at various points during and after implementation. By tracking changes over time, outcome evaluation can provide evidence of the intervention's effectiveness and justify continued support or funding.

4. Impact Evaluation

Impact evaluation assesses an intervention's effectiveness in achieving its ultimate goals. It determines the extent to which changes in outcomes can be attributed to the newly implemented intervention. Impact evaluations often require:

- Strong data collected before policy passage for pre/post comparison
- Data from a similar jurisdiction without the policy implementation for comparison

It's important to note that impact evaluations of policy implementation can be challenging and may take many years to see changes in behaviour associated with a specific policy. This is particularly true for interventions aimed at preventing marijuana use among youth, as behavioural changes may not be immediately observable.

Impact evaluations are crucial for understanding the long-term effects of an intervention and determining whether the observed changes can be directly attributed to the program or policy. They often involve complex statistical analyses to control for other factors that might influence outcomes. While challenging to conduct, impact evaluations provide the strongest evidence of an intervention's effectiveness and can be instrumental in shaping future prevention efforts.

5. Continuous Quality Improvement (CQI)

While not a traditional form of evaluation, CQI is a systematic process that involves:

- Assessing program or practice implementation and short-term outcomes
- Involving program staff in identifying and implementing improvements
- Conducting quick assessments of program performance
- Timely identification of problems and potential solutions
- Implementation of small improvements to enhance treatment quality

CQI differs from process evaluation in that it's usually conducted by internal staff and involves shorter-term assessments. The CQI process typically follows these steps:

1. Identify a problem or issue needing improvement and a target improvement goal
2. Analyse the problem and its root causes
3. Develop an action plan to correct the root causes of the problem, including specific actions to be taken
4. Implement the actions in the action plan
5. Review the results to confirm that the issue and its root causes have been addressed and short- and long-term prevention outcomes have improved
6. Repeat these steps to identify and address other issues as they arise

CQI is an ongoing process that allows for rapid evaluation and improvement of interventions. It encourages a culture of continuous learning and adaptation, which is particularly valuable in the dynamic field of substance use prevention.

Flowchart: CQI Process

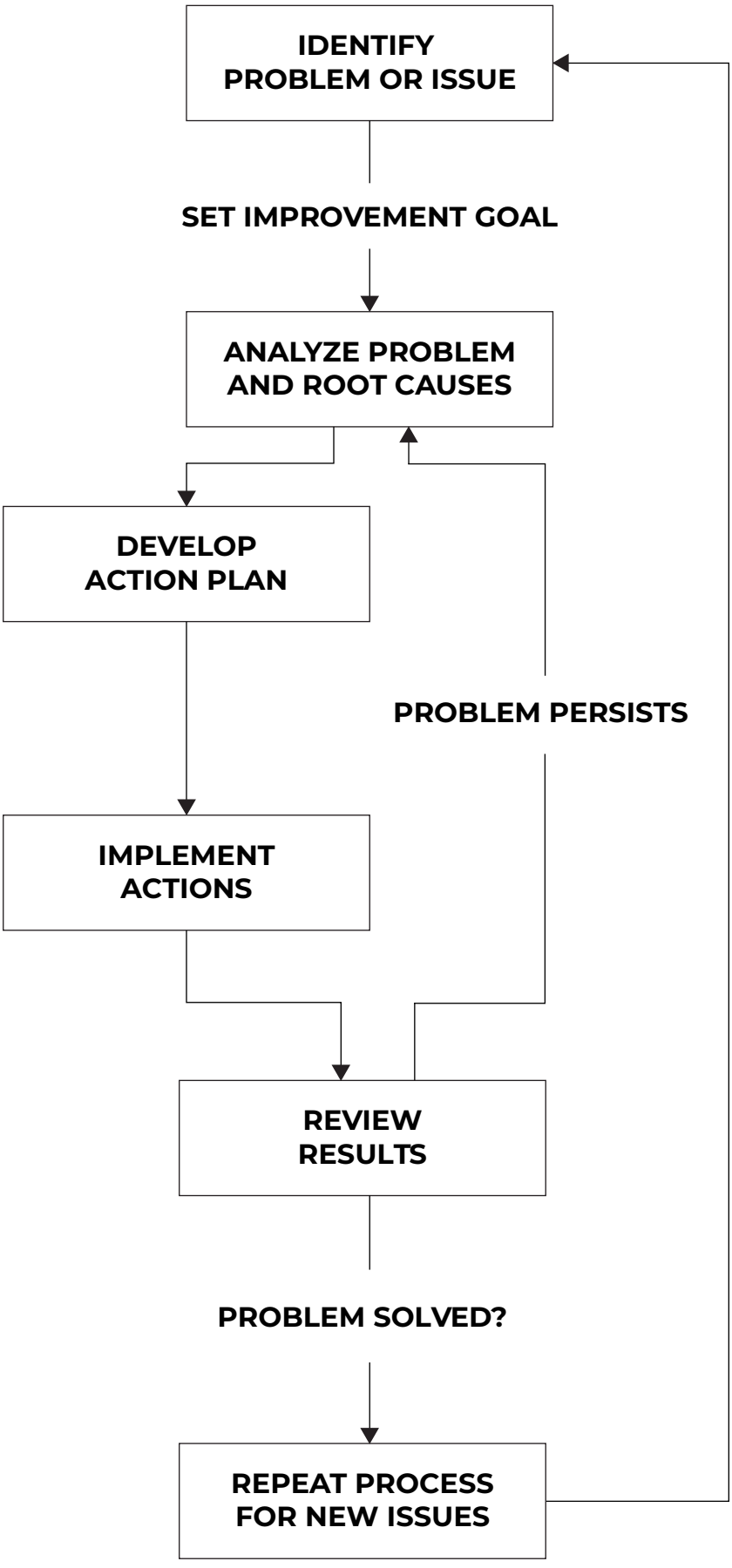


Table: Types of Evaluation

Evaluation Type	Timing	Key Focus	Example Questions/ Actions
Formative	Before implementation	Readiness, theory of change	Can this intervention be evaluated reliably?
Process	During implementation	Implementation fidelity, reach	How many people participated? What adaptations were made?
Outcome	During and after implementation	Short- and long-term changes	How did attitudes or behaviours change?
Impact	Long-term, after implementation	Attribution of changes to intervention	Can progress on goals be attributed to the intervention?
CQI	Ongoing	Rapid assessment and improvement	What small improvements can enhance quality?

6. Data Collection for Evaluation

When considering data collection for evaluation, both quantitative and qualitative methods are important. Quantitative data can be collected through various national surveys, each with its own specific focus and methodology. These national surveys provide valuable quantitative data on marijuana use among youth and young adults at various levels, from national to state and sometimes sub-state regions. They offer insights into trends, prevalence, and patterns of use, which are crucial for evaluating the effectiveness of prevention efforts.

Qualitative data collection, such as interviews or focus groups, is equally important. It provides context and allows evaluators to gain a deeper understanding of the quantitative data. For example, qualitative methods can help explain why a tax policy might affect one demographic group differently than others. Qualitative data can be collected from youth who use marijuana to better understand attitudes and perceptions of marijuana, such as why they use the product and how. It can also be collected during and after an intervention has been implemented to learn perspectives on what is and is not working.

7. Key Outcomes to Track in Marijuana Prevention Efforts

When evaluating marijuana prevention efforts, several key outcomes should be tracked. These outcomes provide a comprehensive picture of the intervention's impact on knowledge, attitudes, behaviours, and environmental factors related to marijuana use among youth and young adults.

- Knowledge of the harms of marijuana use: This outcome measures the level of awareness and understanding of the potential negative consequences of marijuana use. It can be assessed using questions from surveys like the Monitoring the Future Study, which asks about perceived harm of marijuana products among youth and young adults.

- Perceived social norms on marijuana use: This outcome focuses on how individuals perceive the prevalence and acceptability of marijuana use among their peers. It can be measured by the proportion of youth and young adults who overestimate the marijuana use rate among their peers, as captured in surveys like the National Survey on Drug Use and Health.

- Policy and enforcement efforts: This outcome tracks the implementation and enforcement of policies related to marijuana. Indicators may include the proportion of jurisdictions with public policies that establish a fee on each marijuana product sold, or the proportion of jurisdictions with comprehensive policies that require retail licenses to sell marijuana. Data can be collected from state or local policy tracking systems.

- Price of marijuana products: This outcome monitors the economic aspect of marijuana availability. It can be tracked through measures such as the amount of marijuana product taxes and fees. Resources like the NIAAA Alcohol Policy Information System may provide relevant data.

- Exposure to marijuana marketing: This outcome assesses the prevalence and nature of marijuana advertising and promotion. Indicators may include the density of stores selling marijuana products (data available from government bodies/organisations licensing marijuana retailers) and the number and content of marijuana advertisements (data available from state marijuana regulatory bodies).

- Initiation of marijuana use: This outcome measures the proportion of youth and young adults who report never having tried a marijuana product. Data can be collected from surveys such as the National Survey on Drug Use and Health, Youth Risk Behaviour Surveillance Survey, and Behavioural Risk Factor Surveillance System.

- Marijuana use prevalence: This outcome tracks the overall rates of marijuana use among youth and young adults. It can be measured through surveys like the National Survey on Drug Use and Health, Youth Risk Behaviour Surveillance Survey, and Behavioural Risk Factor Surveillance System.

- Sales of marijuana products: This outcome monitors the commercial aspects of marijuana distribution. Indicators may include sales of flavoured products reported in a community or the percent of marijuana sales composed of high potency products. Data sources could include tax data, commercial market databases, and retail establishments.

B. Designing and Conducting Evaluations

- Evaluation should be an integral part of program planning and implementation.
- Developing a clear evaluation plan with measurable objectives, appropriate data collection methods, and a realistic timeline is important.
- Ethical considerations, such as obtaining informed consent and protecting participant confidentiality, are crucial throughout the evaluation process.

Evaluating the impact of community prevention programs on drug abuse is a critical but challenging endeavour. A well-designed evaluation can provide valuable insights into program effectiveness, guide improvements, and justify continued support and funding. This section outlines key considerations and best practices for designing and conducting rigorous evaluations of drug abuse prevention initiatives.

1. Evaluation Design Considerations

When designing an evaluation, several key factors need to be considered to ensure the validity and reliability of the findings:

A. Baseline Data Collection: It's crucial to gather pre-intervention data to establish a starting point against which changes can be measured. This might involve conducting surveys of drug use prevalence among college students, assessing their attitudes toward substance use, and identifying community risk and protective factors before the prevention program begins.

B. Comparison Groups: Using control or comparison groups who do not receive the intervention helps isolate program effects from other environmental influences or natural maturation. For example, you might compare drug use rates among students who participated in the prevention program with those who didn't.

C. Longitudinal Follow-up: Tracking outcomes over time allows for assessment of both short-term and long-term program impacts. This might involve surveying participants immediately after the program ends, then again 6 months later, and perhaps even years down the line to see if effects are sustained.

D. Sample Size and Retention: Ensuring adequate sample sizes and minimising attrition strengthen the statistical power and validity of findings. It's important to start with a large enough sample to account for potential dropouts over time.

E. Mixed Methods: Combining quantitative and qualitative data collection provides a more nuanced understanding of program processes and outcomes. For instance, you might use surveys to collect numerical data on drug use rates, but also conduct interviews or focus groups to gain deeper insights into why the program did or didn't work for certain individuals.

2. Data Collection Methods and Instruments

A variety of data collection methods can be used in program evaluation. The choice of method should be guided by the evaluation questions, the type of data needed, and the resources available. Common methods include:

- Surveys: These can be used to collect large amounts of standardised data from program participants. For example, you might use the Youth Risk Behaviour Survey to assess drug use behaviours among college students.

- Interviews: These allow for in-depth exploration of participants' experiences and perspectives. You might conduct one-on-one interviews with program facilitators to understand implementation challenges, or with students to get detailed feedback on the program.

- Focus groups: These can be useful for gathering collective perspectives and generating discussion. You could hold focus groups with student leaders to get their thoughts on how to improve the program.

- Observational assessments: These involve direct observation of program activities. For instance, trained observers might sit in on prevention sessions to assess the quality of delivery and participant engagement.

- Administrative data: This might include school disciplinary records or campus police reports related to drug incidents.

Table: Data Collection Methods for Program Evaluation

Method	Strengths	Weaknesses
Surveys	• Can collect large amounts of data • Standardised questions allow for comparisons	• Response bias • Limited depth of information
Interviews	• In-depth information • Flexible, allows follow-up questions	• Time-consuming • Potential for interviewer bias
Focus Groups	• Group dynamics can yield rich insights • Efficient for gathering multiple perspectives	• Dominant personalities may skew results • Less suitable for sensitive topics
Observational Assessments	• Direct measure of behaviour • Can capture contextual factors	• Time-intensive • Observer presence may affect behaviour
Administrative Data	• Objective measures • Often available longitudinally	• May lack detail or context • Quality and completeness can vary

3. Implementation Fidelity Monitoring

Assessing program implementation fidelity is crucial for interpreting outcome data and identifying areas for improvement. Fidelity monitoring helps ensure that the program is being delivered as intended, which is essential for attributing any observed outcomes to the program itself.

Key components of fidelity monitoring include:

- Adherence to core program elements: This involves checking whether all essential components of the program are being delivered. For example, if a drug prevention program includes five key modules, are all five being implemented?
- Dosage (frequency and duration of sessions): This refers to whether the program is being delivered with the intended intensity. Are all sessions being conducted? Are they the right length?
- Quality of delivery: This assesses how well the program is being implemented. Are facilitators using the recommended teaching methods? Are they engaging participants effectively?
- Participant responsiveness: This looks at how participants are reacting to the program. Are students actively participating in discussions and activities? Are they completing assigned tasks?

Strategies for monitoring fidelity may include:

- Session checklists completed by facilitators after each session
- Independent observations of program delivery by trained staff
- Participant feedback surveys to gauge their experience and engagement
- Review of program records and attendance logs to track participation rates

4. Data Analysis and Interpretation

Once data has been collected, it needs to be analysed and interpreted to draw meaningful conclusions about the program's effectiveness. This process typically involves several steps:

- Data cleaning and preparation: This involves organising the data, checking for errors or inconsistencies, and preparing it for analysis.
- Descriptive analysis: This provides an overview of the data, including measures of central tendency (mean, median, mode) and dispersion (range, standard deviation). For example, you might calculate the average number of sessions attended by participants or the percentage of students who reported a decrease in drug use.
- Inferential analysis: This involves using statistical tests to determine whether observed differences or relationships are statistically significant. For instance, you might use a t-test to compare drug use rates between program participants and non-participants, or a regression analysis to examine the relationship between program attendance and changes in attitudes towards drug use.
- Subgroup analysis: This looks at whether the program had different effects for different groups of participants. For example, did the program work better for male or female students? For freshmen or seniors?

When interpreting results, it's important to consider:

- Statistical significance: This tells you whether the observed effects are likely due to chance or a real program impact.
- Effect sizes: This indicates the magnitude of the program's impact. Even if an effect is statistically significant, it may not be practically meaningful if the effect size is very small.
- Alternative explanations: Could other factors besides the program explain the observed changes? For example, a campus-wide policy change or a high-profile drug incident could influence drug use rates independently of your program.
- Consistency of findings: Do you see similar results across different measures or data sources? Consistent findings from multiple sources strengthen your conclusions.

5. Evaluation Questions

A comprehensive evaluation should address a range of questions about both the process and outcomes of the program. Here are some key questions to consider:

Process Evaluation Questions:

- What was accomplished in the program? This might include the number of sessions delivered, the number of students reached, and the types of activities conducted.
- How was the program carried out? This looks at the methods of delivery, any adaptations made to the original program design, and any challenges encountered during implementation.
- Who participated in it? This examines the characteristics of program participants, including demographics, risk factors, and reasons for participation.
- How much of the program was received by participants? This assesses the "dose" of the program received by each participant, such as the number of sessions attended or the amount of material covered.
- Was the program implemented as intended? This compares the actual implementation to the program plan, noting any deviations and the reasons for them.

Outcome Evaluation Questions:

- Did the program achieve what was expected in the short term? This might include immediate changes in knowledge, attitudes, or intentions related to drug use.
- Did the program produce the desired long-term effects? This looks at sustained changes in behaviour, such as reduced drug use rates over time.
- Is there a connection between the amount of program received and outcomes? This examines whether participants who engaged more fully with the program (e.g., attended more sessions) showed greater improvements.

6. Avoiding Common Evaluation Pitfalls

To enhance the rigor and validity of evaluation findings, community prevention programs should take several steps:

- Consult with evaluation experts early in the planning process: University faculty members or other local and state evaluation experts can provide valuable guidance on evaluation design and implementation.
- Use tested and validated data collection instruments: Whenever possible, use surveys or other tools that have been validated in previous research. This increases the reliability of your data.
- Establish clear baseline measures before program implementation: Without good pre-intervention data, it's difficult to determine whether the program had an impact.
- Employ appropriate comparison or control groups: This helps isolate the effects of your program from other factors that might influence outcomes.
- Monitor and document program implementation quality: This allows you to determine whether any lack of effects is due to program ineffectiveness or poor implementation.
- Ensure high retention rates for follow-up data collection: The more participants you retain for follow-up assessments, the more confident you can be in your findings.
- Use appropriate statistical methods for data analysis: Consult with statisticians or evaluation experts to ensure you're using the right analytical techniques for your data and research questions.

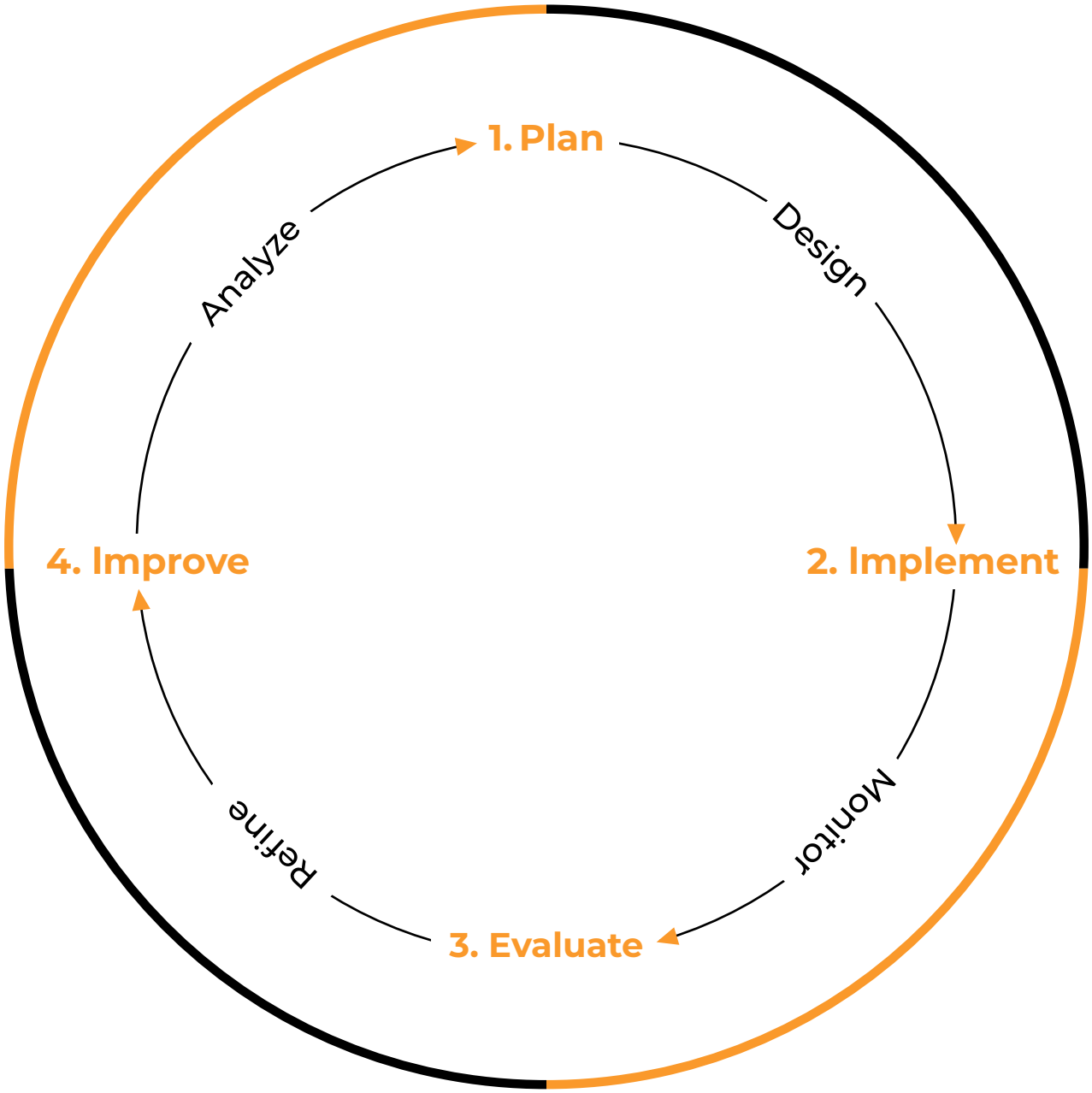
7. Continuous Quality Improvement

Evaluation should be viewed as an ongoing process that informs program refinement and adaptation. Regular review of evaluation data can help programs:

- Identify implementation challenges and develop solutions: For example, if attendance at prevention sessions is low, you might survey students to understand barriers to participation and adjust the program schedule or format accordingly.
- Recognise successful program components for potential expansion: If certain activities or modules seem particularly effective, you might consider expanding them or incorporating similar elements into other parts of the program.
- Adapt to changing community needs and emerging drug trends: Regular evaluation can help you stay responsive to shifts in the types of substances being used or new risk factors emerging in your campus community.
- Justify continued funding and support from stakeholders: Demonstrating program effectiveness through rigorous evaluation can help secure ongoing resources and buy-in from campus leadership and other stakeholders.

Program evaluation and continuous quality improvement are ongoing processes involving planning, implementation, assessment, and enhancement.

Diagram: Evaluation Cycle



IX. Future Directions and Emerging Trends

Brief look at some new challenges in substance use continue to emerge, such as:

- The legalisation of marijuana in some areas.
- The opioid epidemic.
- The rise of new psychoactive substances.

The various jurisdictional pushes for cannabis legalisation is a vote for legalising harm – especially on the basis that it is a 'soft drug'. This egregious mis-categorising s just the first of a long list of problematic issues. Permission models, particularly the highest public 'validation' of a behaviour, legalisation increase consumption, along with increasing all the attending risks, including negative impacts on public health. The increased health and mental health harms to all brains, but most concerningly the developing ones, particularly with high-potency cannabis is prevalent. This also has the potential for higher dependency and addiction rates, and all the harms that go with that.

The Challenge of New Psychoactive Substances - A Technical Update 2024: This report by the International Society of Substance Use Professionals (ISSUP) highlights the ongoing challenge posed by new psychoactive substances (NPS). NPS, also known as "designer drugs" or "legal highs," are constantly evolving to circumvent existing drug laws. The report emphasises the need for global cooperation to monitor and control these substances, improve forensic and toxicology tools, and address the health and legal challenges they present.

Use of the Dark Web and Social Media for Drug Supply (Chapter 7 of the World Drug Report 2023): This chapter from the United Nations Office on Drugs and Crime (UNODC) discusses how the dark web and social media have revolutionised drug distribution. It highlights the ease with which drugs can now be ordered online and delivered directly to consumers, cutting out intermediaries and shortening supply chains. The report also notes the challenges this poses for law enforcement and the need for innovative approaches to tackle online drug trafficking.

- WDR23_B3_CH7_darkweb.pdf
- The Challenge of New Psychoactive Substances – A Technical Update 2024 | International Society of Substance Use Professionals
- Legalising Harm

Closing Comment

Substance use and/or engagement creates an inevitable maelstrom of rippling harms and negative consequences in all the communities it touches. Regardless of assiduous efforts by pro-drug activists to trivialise and/or normalise substance use, this stark reality is indisputable. So, the 'storm' has been allowed to grow via neglect and ignoring of best-practice health and well-being pre and proscriptions; and even fuelled by the pop-culture imagery of pseudo-sophistication and the oh-so-tired branding of 'cool' that is the framing of drug use.

Ah, but once engaged especially by the developing brain demographic (12-30), the inevitability of 'high' or 'fun' chasing and the all too often growing dependency and addiction, that can follow, ensures this 'storm' continues to rage. This unfettered messy arena then demands attention and answers from time poor and resource short public health and safety policy makers; who are quickly duped into 'damage management' protocols that neither repair or even try to prevent these real harms.

Principle without pragmatism is inert – Pragmatism without principle is ineffective.

If only a principle devoid pragmatism determines policy interpretation and application, then we lose most context for change. Disconnected pragmatism never questions origins and roots – never interrogates the context, the 'why'. If the only assumption driving policy implementation is managing the 'fall out from a faux right to fun', not only is best-practice health and well-being excised from the discourse, but any challenge to that downward spiralling narrative goes with it.

As Cultural Anthropologist Dr K. J. Smith puts it... *"The pills eased the pain, dulled the mind, but did nothing to change the condition. Pills and thrills are the mark of an analgesic society – it 'feels' better, but it's only getting worse."*

However, this 'storm' is but a symptom – a noisy and gnarly one – but a symptom non-the-less of a far more serious problem.

Whilst an ever-morphing definition of 'trauma' or faux definition of right to freedom is the catch all answer from the pro-drug activists, it is far more systemic than these talking points for permission to engage would have you believe.

Prevention is an anthropologically founded *posture*, anchored to a belief and value system that enables a community – a society – to experience best practice for health, well-being, safety and productivity. Those who cannot, or will not, see the why and the best-practice are doomed to the default position of a cultural 'palliative care' mode for a demographic or even culture, we now believe most important 'human right' is the damage management of self-harm incurred in the pursuit of *fun*.

Prevention calls all of us to a higher standard, a better, stronger and more human place. Will we answer that call?

Shane Varcoe – Executive Director, Dalgarno Institute.

X. APPENDIX

Academic Support Programs: Programs designed to improve students' academic performance and engagement, which can serve as a protective factor against substance use. Examples include: tutoring, mentoring, study skills workshops.

Adaptation: Adaptation refers to modifying a prevention program to fit the specific needs of a particular community or population. When selecting a program, it's important to match it to the needs of the community and consider risk and protective factors. It is important to retain the core elements of a program when adapting it. SAMHSA recommends a six-step process for adaptation to ensure fidelity.

Adderall: Adderall is a combination of amphetamine and dextroamphetamine, which are central nervous system stimulants.

Administrative Support: Administrative support refers to the services and assistance provided by administrative professionals to ensure the smooth operation of an organisation, including tasks like scheduling, communication, and documentation.

Adolescent Transitions Program (ATP): A tiered program focused on prevention for middle school students.

Advertising Restrictions: Enacting advertising restrictions is an example of a community-based program typically included in coordinated, multi-sector approaches to prevention.

Age of Onset: The age of onset of substance use refers to the age at which an individual first uses a particular substance. Early initiation of substance use is associated with a higher risk of developing substance use disorders and other problems later in life. Prevention efforts often target younger individuals to delay or prevent the onset of substance use.

Alcohol Outlet Density: Reducing the density of alcohol outlets in a community is an example of a community-based program typically included in coordinated, multi-sector approaches to prevention.

AlcoholEdu: AlcoholEdu is an online educational program designed to educate students about alcohol use, its effects, and responsible drinking behaviours to reduce alcohol-related harm.

Amphetamine-type Stimulants (ATS): Amphetamine-type stimulants, including methamphetamine, are a major concern for policymakers, health professionals, and law enforcement.

AOD (Alcohol and Other Drug): AOD refers to the range of substances, including both legal and illegal drugs, that can affect mental and physical health.

Article 33 of the CRC: The only core UN human rights treaty that explicitly addresses substance use and the drug trade. Article 33 focuses on protecting children and adolescents from illicit substances and preventing their use in illicit production and trafficking.

Authoritative School Environment: An authoritative school environment is characterised by high expectations, supportive relationships, and consistent enforcement of rules, fostering a positive and effective learning atmosphere.

Baseline Data: Baseline data is the initial set of data collected before a program or intervention begins, used as a reference point to measure changes and evaluate outcomes.

BASICS (Brief Alcohol Screening and Intervention for College Students): BASICS is a harm reduction program for college students who drink heavily and are also at risk for alcohol-related consequences. This program utilises motivational interviewing to challenge a student's alcohol expectations and help set new goals for alcohol consumption that are compatible with the student's goals.

Behavioural Risk Factor Surveillance System (BRFSS): The BRFSS is a nationwide health-related telephone survey that collects data on risk behaviours, preventive health practices, and healthcare access, primarily related to chronic disease and injury.

Benzodiazepines: Benzodiazepines are central nervous system depressants that are commonly prescribed to relieve anxiety and as sleep aids. Misusing them can cause blurred vision, nausea, memory problems, and substance use disorder. If taken with opioids or alcohol, benzodiazepines can cause overdose and death.

Binge Drinking: Binge drinking is the consumption of an excessive amount of alcohol in a short period of time. It is often defined as 4 or more drinks for women and 5 or more drinks for men within about 2 hours. Binge drinking is associated with various health risks, including alcohol poisoning, injuries, and long-term health problems. It is a significant public health concern, especially among young adults.

Booster Sessions: Booster sessions are repeated interventions to reinforce the original prevention goals. Research shows that the benefits from middle school prevention programs diminish without booster programs in high school. They are typically delivered after the completion of a program, to reinforce the original prevention goals.

Brief Motivational Interventions: Brief motivational interventions are short, focused counselling sessions aimed at encouraging individuals to change unhealthy behaviours by enhancing their motivation and commitment.

Butane Hash Oil (BHO): Butane hash oil is a concentrated form of cannabis extract, produced using butane as a solvent, which results in a potent product commonly used in vaping and dabbing.

Capacity Building: Capacity building is a component of the Strategic Prevention Framework that focuses on strengthening a community's or campus's ability to take action to address prevention priorities.

Caring School Community Program: The Caring School Community Program is an educational initiative that promotes a nurturing school climate by fostering relationships and community-building activities among students, teachers, and parents.

CollegeAIM: CollegeAIM was developed by The National Institute on Alcohol Abuse and Alcoholism (NIAAA) as a toolkit to help colleges identify effective alcohol interventions that address issues related to harmful and underage drinking.

Collegiate Recovery Programs: Collegiate recovery programs provide support services and resources to college students in recovery from substance use disorders, helping them maintain sobriety while pursuing their education.

Communities That Care (CTC): A program that focuses on strengthening students' "sense of community" or connection to school. It consists of a set of mutually reinforcing classroom, school, and family involvement approaches that promote positive peer, teacher-student, and home-school relationships, and the development of social, emotional, and character-related skills. Research has shown that this sense of community has been pivotal to reducing drug use, violence, and mental health problems, while promoting academic motivation and achievement.

Community Anti-Drug Coalitions of America (CADCA): CADCA is an organisation that works with more than 5,000 community coalitions across the 50 states and several countries to help communities identify and address local issues. CADCA helps communities become safe, healthy, and drug free.

Community Coalitions: Community coalitions can hold community-wide meetings, develop public education campaigns, present data that supports the need for research-based prevention programming, and attract sponsors for comprehensive drug abuse prevention strategies. Community coalitions are most effective when their programming incorporates research-tested strategies and programs at the individual, school, and community levels. Having a supportive infrastructure that includes representatives across the community can reinforce prevention messages, provide resources, and sustain prevention programming.

Community Disorganisation: Community disorganisation refers to the breakdown of social structures and institutions within a community, leading to increased crime, instability, and a lack of social cohesion.

Community Epidemiology Work Group (CEWG): The Community Epidemiology Work Group is a network of epidemiologists that monitors drug abuse trends and patterns across different communities to inform public health responses.

Community Mobilisation Efforts: Bringing together community members, organisations, and resources to address substance use. These efforts aim to create a coordinated and comprehensive approach to prevention and intervention.

Community Readiness Assessment: Prevention planning usually starts with an assessment of drug abuse and other child and adolescent problems, including measuring the level of substance abuse in the community and examining other community risk factors, such as poverty. The assessment results can be used to raise community awareness of the nature and seriousness of the drug abuse problem. Identifying a serious level of risk in a community does not always translate into community readiness to take action. Researchers have identified nine stages of readiness that can guide prevention planning. Applying measures to assess readiness allows prevention planners to identify the critical steps needed to implement programs.

Community-based Approaches: Community-based programs typically include developing policies or enforcing regulations, mass media efforts, and community-wide awareness programs. Examples include establishing youth curfews, advertising restrictions, reducing the density of alcohol outlets in the community, raising cigarette prices, and creating drug-free school zones.

Competency Enhancement: Competency enhancement programs focus on increasing an individual's general social, cognitive and coping skills.

Coordinated Multi-sector Approaches: Many programs coordinate prevention efforts across settings, communicating consistent messages through schools, work, religious institutions, and the media. These programs, which reach youth through multiple sources, can strongly impact community norms. Community-based programs typically include developing policies, enforcing regulations, mass media efforts, and community-wide awareness programs. Examples include establishing youth curfews, enacting advertising restrictions, reducing the density of alcohol outlets in the community, raising cigarette prices, and creating drug-free school zones.

Cost-Benefit Analysis: Cost-benefit analysis is a systematic process of evaluating the economic pros and cons of a project or decision, helping to determine its overall value and feasibility.

CQI (Continuous Quality Improvement): Continuous Quality Improvement is an ongoing process of identifying, describing, and analysing strengths and weaknesses to improve organisational performance and outcomes.

Cultural Adaptation: Tailoring substance use prevention and treatment programs to meet the specific needs and cultural contexts of diverse populations. This may involve considering language, beliefs, values, traditions, and social norms to ensure the program is relevant and engaging for the target audience.

Cultural Competence: Cultural competence is a principle that underlies successful prevention work. Interventions that account for cultural differences can be more effective at preventing substance misuse. For example, Spanish-language manuals are available for the Strengthening Families program.

Cultural Grounding: Cultural grounding recognises the importance of cultural values, beliefs, and practices in shaping individual and community behaviour. It involves incorporating these cultural elements into substance use prevention and treatment efforts to enhance their relevance and effectiveness.

Culturally Tailored Approaches: Drug prevention strategies must incorporate a holistic, intersectional approach that considers different vulnerabilities in order to create equitable policies. For example, special efforts to recruit and retain rural parents in the Guiding Good Choices program have been successful in inhibiting alcohol and marijuana use.

Curriculum Integration: Curriculum integration is the process of combining subjects or thematic units to create a cohesive learning experience, enhancing students' understanding and application of knowledge.

Demand Reduction: Efforts to decrease the desire for and use of illicit substances. This approach involves a combination of strategies, including: prevention programs, treatment services, law enforcement measures aimed at reducing the supply of drugs.

Demand Reduction: Strategies to decrease the desire for illicit substances. These strategies often focus on prevention and treatment initiatives but can also include law enforcement measures to limit access and availability.

Demographic Segmentation: Demographic segmentation is the process of dividing a population into subgroups based on shared characteristics, such as age, gender, and ethnicity. This is a key consideration when developing prevention programs to improve their effectiveness.

Desoxyn: Desoxyn is a prescription medication containing methamphetamine, used to treat attention deficit hyperactivity disorder (ADHD) and obesity, under strict medical supervision.

Developmental Stages: Recognising that children and adolescents are not miniature adults and that their physical, cognitive, emotional, and social development significantly influences their susceptibility to substance use and appropriate interventions.

Dexedrine: Dexedrine is a prescription medication that contains dextroamphetamine.

Drug-free School Zones: Drug-free school zones can be created by instituting new policies or strengthening community practices at the community level to help prevent substance abuse.

Early Childhood Interventions: Programs focused on promoting healthy development and preventing risk factors for substance use during early childhood (typically birth to age 8). These interventions might involve parent education, early learning programs, or home visiting programs to support families and create nurturing environments.

Early Intervention: Addressing potential substance use problems as early as possible to prevent progression to more severe disorders. This may involve screening, brief interventions, or referral to specialised services.

Early Risers "Skills for Success" Program: Early Risers "Skills for Success" is a selective, multicomponent, preventative intervention for children at heightened risk for early onset of serious conduct problems, including the use of licit and illicit drugs. The program focuses on elementary school children with early aggressive behaviour. It is designed to deflect children from the "early starter" developmental pathway toward normal development by affecting positive change in academic competence, behavioural self-regulation, social competence, and parent investment in the child. Early Risers has two broad components: CORE and FLEX. CORE is a set of child-focused intervention components delivered continuously in school and over the summer for two or three years. It is implemented in tandem with FLEX, a family support and empowerment component tailored to meet family-specific needs and delivered through home visits. Recent findings reveal that program participants showed greater gains in social skills, peer reputation, prosocial friendship selection, academic achievement, and parent discipline than controls.

E-Cigarettes: E-cigarettes are electronic devices that heat a liquid (often containing nicotine) to produce an aerosol that the user inhales, commonly used as an alternative to smoking traditional tobacco products.

Ecological Levels: Ecological levels refer to the different layers of influence on an individual's behaviour, including individual, interpersonal, community, and societal factors.

Economic Deprivation: A range of economic, social, political, and individual factors, including economic deprivation, can influence a person's likelihood of drug use.

ED School Climate Surveys: ED School Climate Surveys are tools used by educational institutions to assess the quality and character of school life, focusing on factors like safety, relationships, and the learning environment.

Effect Size: Effect size is a statistical measure of the magnitude of an effect. In the context of prevention program evaluation, effect size can be used to determine the effectiveness of a program by comparing the outcomes of the intervention group to the outcomes of a comparison group.

Endocannabinoid System: The endocannabinoid system is a complex network of receptors and molecules in the body that helps regulate various physiological processes, including mood, appetite, and pain sensation.

Environmental Interventions: Strategies that focus on changing the physical, social, or economic environments to reduce opportunities for substance use or to promote protective factors. Examples include limiting access to alcohol or tobacco, providing safe and supervised recreational activities for youth, or addressing community-level poverty and unemployment.

Ethnographic Studies: Ethnographic studies involve in-depth research and observation of people and cultures in their natural environments to understand their behaviours, beliefs, and social interactions.

Evidence-Based Interventions: Evidence-based interventions are those that have been rigorously evaluated and shown to be effective in preventing or reducing substance misuse.

Evidence-Based Practice Resource Centre: The Evidence-Based Practice Resource Centre is a source of evidence-based interventions, including NIAAA's CollegeAIM.

Evidence-Based Practice: Using research findings and scientific data to inform decision-making in prevention, treatment, and other interventions related to substance use. This approach prioritises the use of programs and practices with proven effectiveness.

Evidence-Based Programs: To be effective, prevention programs need to incorporate the core elements identified by research, including appropriate structure and content, adequate resources for training and materials, and other implementation requirements. Researchers and practitioners must consider the structure, content, and delivery of a program when determining whether it is appropriate for use in a specific community. The content areas of a program should address modifiable risk factors and strengthen protective factors.

Familismo: Familismo is a cultural value emphasising the importance of family, close relationships, and strong family ties. It is often associated with Hispanic cultures but is also present in other cultural groups. Familismo can play a significant role in substance use prevention by promoting family involvement, support, and communication.

Family Bonding Activities: Engaging in activities that promote positive interactions and strengthen relationships within families. These activities can foster communication, trust, and support, creating a protective environment that reduces the risk of substance use among youth.

Family Dynamics: Family dynamics refer to the patterns of interaction and relationships among family members, influencing their behaviours, communication, and overall family functioning.

Family-Based Programs: Prevention and treatment programs that involve parents or caregivers in addressing substance use. These programs recognise the critical role of family dynamics, communication patterns, and parental support in influencing a child's risk for substance use.

Family-focused interventions: Brief, family-focused interventions for the general population can positively change specific parenting behaviour to reduce the risks of substance abuse. Prevention programs can strengthen protective factors among young children by teaching parents improved family communication skills, developmentally appropriate discipline styles, firm and consistent rule enforcement, and other family management skills. Research confirms the benefit of parents taking a more active role in their children's lives by talking with them about drugs, monitoring their activities, getting to know their friends, understanding their problems and concerns, providing consistent rules and discipline, and being involved in their learning and education. The importance of the parent-child relationship continues through adolescence and beyond.

Fentanyl: Fentanyl is a powerful synthetic opioid used medically for pain management but is also associated with a high potential for abuse and overdose in illicit use.

Foetal Alcohol Spectrum Disorders: foetal Alcohol Spectrum Disorders (FASD) are a group of conditions resulting from prenatal alcohol exposure, causing physical, behavioural, and cognitive impairments.

Fidelity: Fidelity refers to implementing a program as intended by the program developers. Maintaining fidelity, or sticking to a program's core components, helps ensure that the program is being implemented correctly.

Focus Groups: Focus groups are a method for gathering qualitative data by engaging a small group of individuals in a facilitated discussion about a particular topic.

Focus on Families: Focus on Families is a selective program designed to reduce drug use by parents receiving methadone treatment by teaching them skills for relapse prevention and coping. Parents also learn how to better manage their families to reduce their children's risk of future drug abuse.

Formative Evaluation: Formative evaluation is the process of assessing a program or intervention during its development to provide feedback and guide improvements before full implementation.

Fraternity & Sorority Life (FSL): Fraternity & Sorority Life refers to the collective organisations within colleges and universities that provide social, academic, and leadership opportunities for members.

Gender Differences: Research suggests that there are gender differences in patterns of substance use and the risk of developing substance use disorders.

Gene-Environment Interactions: Gene-environment interactions refer to the interplay between an individual's genetic predisposition and their environment in influencing their risk for substance use disorders. Certain genes might increase susceptibility to addiction, but environmental factors, such as stress, trauma, or exposure to substance use, can trigger or exacerbate these genetic vulnerabilities.

Genetics: Genetics is the study of heredity and the variation of inherited characteristics, focusing on genes, DNA, and the role they play in the biology of organisms.

Good Behavior Game: The Good Behavior Game is a classroom management strategy that promotes positive behaviour by rewarding students for adhering to rules and working together cooperatively.

Guiding Good Choices (GGC): A curriculum originally developed as part of the Seattle Social Development Project. The program consists of five 2-hour sessions and trains parents on: Creating opportunities for family involvement and interaction appropriate for their child's age. Setting clear expectations, monitoring their children, and implementing appropriate discipline. Teaching their children strategies to navigate peer pressure. Using effective approaches to handle family conflicts. Expressing positive feelings to strengthen family bonds.

HBCUs (Historically Black Colleges and Universities): HBCUs are educational institutions established before 1964 with the primary mission of educating African Americans, contributing to higher education diversity and inclusion.

Health Literacy: Health literacy is the ability to access, understand, and use health information to make informed decisions about one's health and well-being.

Heavy Alcohol Use: Heavy alcohol use is the consumption of large quantities of alcohol in a short period, often leading to negative health, social, and legal consequences.

High Sensation-seeking Youth: Some carefully structured and targeted media interventions have proven very effective in reducing drug abuse, for example, a mass media campaign targeting sensation-seeking youth reduced marijuana abuse by 27 percent among high sensation-seeking youth.

High-risk Groups: Drug prevention programs may focus on certain segments of the population who are at a statistically higher risk of drug abuse. These groups may have shared characteristics like age, ethnicity, location of residence, or socioeconomic background. Examples of high-risk youth include those in middle school, students with academic problems, dropouts, and youth from families receiving methadone treatment.

Holistic Approach: A holistic approach to drug use encompasses prevention, lifestyle training, treatment, and harm reduction. For example, drug treatment for young people can include residential rehabilitation, substitute prescribing, and needle exchange.

Hydrocodone: Hydrocodone is an opioid medication prescribed for pain relief, with a high potential for dependence and abuse if not used as directed.

Impact Evaluation: Impact evaluation assesses the long-term effects of a program. It is important to select a sample that is representative of the target population when conducting an impact evaluation.

Impact Measurement and Evaluation: Prevention programs should incorporate ongoing assessments to evaluate the effectiveness of prevention strategies. Using information obtained from these sources can help community leaders make sound decisions about programs and policies. Analysing this data before implementing new programs can also help establish a baseline for evaluating results. To be most informative, periodic assessments need to be made routinely.

Implementation Planning: Implementation is the stage of prevention planning that involves putting the plan into action. This includes carrying out activities to achieve the goals and objectives of the plan. Implementation requires careful coordination, communication, and monitoring to ensure

Indicated Programs: Indicated programs target individuals who are already engaging in substance abuse or other problem behaviour.

Inferential Analysis: Inferential analysis involves using statistical methods to draw conclusions and make predictions about a population based on a sample of data.

Inhalants: Inhalants refer to a diverse group of volatile substances that produce chemical vapours that can be inhaled to induce psychoactive effects. They are commonly found in household products, such as glues, paints, solvents, and cleaning agents. Inhalant abuse is particularly dangerous, as it can lead to serious health consequences, including sudden death. It is a significant concern, particularly among adolescents and young adults.

Iowa Strengthening Families Program: The Iowa Strengthening Families Program is a family-based intervention aimed at reducing substance abuse and improving family relationships among adolescents and their parents.

K2/Spice: K2/Spice refers to synthetic cannabinoids designed to mimic the effects of THC, often associated with unpredictable and potentially harmful effects.

Keepin' it REAL: Keepin' it REAL is a drug prevention program that uses culturally relevant narratives and skills training to help youth resist drug use and make healthy decisions.

Key Informant Interviews: Key informant interviews are in-depth discussions with individuals who have specialised knowledge about a particular topic or community, used to gather insights and inform research or policy.

Khat: Khat is a plant native to East Africa and the Arabian Peninsula, whose leaves are chewed for their stimulant effects, similar to amphetamines.

Klonopin: Klonopin is a prescription medication used to treat anxiety and seizure disorders, belonging to the benzodiazepine class, with potential for dependence.

Kratom: Kratom is a tropical tree whose leaves are used for their stimulant and sedative effects, with ongoing debates about its safety and potential for abuse.

Leadership Continuity: Leadership continuity ensures the seamless transition and consistency of leadership roles within an organisation, maintaining stability and progress.

LGBTQIA+ Youth: Drug prevention programs may tailor interventions to meet the needs of specific populations, such as the LGBTQI+ community.

Life Ready Program: Life Ready is a new program that has been observed to have issues in its delivery. The content and delivery of school-based programs is an important aspect of responding to illicit drug use.

Life Skills Training (LST) Program: The Life Skills Training program is a universal program for middle or junior high school students designed to address risk and protective factors by teaching general personal and social skills along with drug resistance skills and normative education. It is a three-year program that can be taught in either grades 6, 7, and 8 for middle school, or grades 7, 8, and 9 for junior high school. The program consists of 15 sessions in the first year, 10 booster sessions in the second, and five in the third year. It covers three major content areas: drug resistance skills and information, self-management skills, and general social skills. The program has been extensively tested over the past 20 years and was found to reduce the prevalence of tobacco, alcohol, and illicit drug use relative to controls by 50 to 87 percent. When booster sessions are combined, LST was shown to reduce the prevalence of substance abuse long-term by as much as 66 percent, with benefits still in place beyond the high school years. LST was originally tested predominantly with White youth, but several studies have shown that it is also effective with other populations.

Literacy for Life: A non-profit organisation with the primary mission of enhancing literacy levels among adult Aboriginal Australians, addressing the widespread issue of low literacy rates in these communities. The foundation employs the "Yes, I Can" campaign model to ensure culturally relevant and effective literacy education. This model involves training local community members as facilitators and coordinators, fostering Indigenous autonomy and leadership in the literacy improvement process.

Logic Model: A logic model is a tool used to illustrate the logic behind a program. They connect and communicate all elements of a prevention plan and guide evaluation efforts.

Longitudinal Follow-up: Longitudinal follow-up studies evaluate the impact of a program over a long time period.

Lorcet: Lorcet is a combination medication containing hydrocodone and acetaminophen, prescribed for pain relief but associated with risks of dependency and overdose.

Lortab: Lortab is a prescription medication combining hydrocodone and acetaminophen, used for pain management with potential for abuse and addiction.

Marijuana Legalisation: Marijuana legalisation refers to the process of removing legal prohibitions against cannabis use, often accompanied by regulatory frameworks for cultivation, sale, and consumption.

Marijuana Outlet Density: Marijuana outlet density refers to the number of cannabis retail locations within a specific area, influencing access, consumption patterns, and community impact.

Marijuana Use Disorder: The risk of developing marijuana use disorder can be reduced by prevention programs and community-based interventions such as social marketing campaigns targeting sensation-seeking youth.

Mass Media Campaigns: Campaigns that use mass media channels, such as television, radio, or the internet, to reach a broad audience with messages about substance use prevention.

MDMA: MDMA, commonly known as ecstasy, is a synthetic drug with stimulant and hallucinogenic properties, often used recreationally for its mood-enhancing effects.

Media and Computer Technology Programs: Media and computer technology programs are beginning to demonstrate effectiveness in reaching people at the community level as well as the individual level.

Medical Amnesty Policy: Medical amnesty policy provides protection from legal or disciplinary action for individuals seeking emergency medical help for drug or alcohol-related incidents.

Medication-Assisted Treatment (MAT): Medication-Assisted Treatment is the use of medications, alongside counselling nd behavioural therapies, to treat substance use disorders and support recovery.

Meta-analysis: A meta-analysis involves combining data from multiple studies to calculate an overall or ‘absolute’ effect size.

Methylin: Methylin is a brand name for methylphenidate, a medication used to treat attention deficit hyperactivity disorder (ADHD) by increasing attention and controlling behaviour.

Mixed Methods: Mixed methods involve integrating quantitative and qualitative research approaches to provide a more comprehensive understanding of a research problem.

Monitoring the Future Survey: The Monitoring the Future survey provides recent data on substance use in college-aged young adults, including patterns of marijuana use, nonmedical use of prescription drugs, cocaine, and newer trends, such as synthetic drugs, e-cigarettes, and hookah use. It also links educators, residence hall staff, counsellors, clinicians, and researchers who work with this age group to other information, as well as students and parents.

Motivational Interviewing: Motivational interviewing is a counselling technique that helps individuals explore and resolve ambivalence about behaviour change.

Multi-Component Interventions: Programs that combine multiple strategies to address substance use. These interventions might target individual behaviour, family dynamics, school environments, community norms, or policy change.

National Survey on Drug Use and Health (NSDUH): A large-scale national survey conducted annually in the United States to gather information about substance use and mental health. The survey provides data on prevalence, trends, and correlates of substance use across different age groups and demographic groups.

National Youth Leadership Initiative (NYLI): The National Youth Leadership Initiative is a program designed to empower young people to become leaders in their communities, focusing on skill development and civic engagement.

Needs Assessment: Needs assessments can assess problems and behaviours, such as the negative effects of drug misuse and patterns of consumption.

NIAAA: The National Institute on Alcohol Abuse and Alcoholism (NIAAA) is a federal agency that provides resources about alcohol-related issues. NIAAA's website offers pamphlets, fact sheets, brochures, and information about preventing alcohol misuse among college students.

Nicotine: Nicotine is a stimulant substance found in tobacco products, known for its addictive properties and role in tobacco dependence.

Normative Beliefs: Normative beliefs refer to the perceptions individuals hold about the expectations of others regarding their behaviour, influencing their actions and decisions.

NSDUH (National Survey on Drug Use and Health): A large-scale national survey conducted annually in the United States to gather information about substance use and mental health. The survey provides data on prevalence, trends, and correlates of substance use across different age groups and demographic groups.

Observational Assessments: Observational assessments involve systematically watching and recording behaviours or events in a natural setting to gather data and insights for research or evaluation.

Outcome Evaluation: Outcome evaluations assess the effectiveness of a program by examining whether there have been any changes in anticipated outcomes.

Oxycodone: Oxycodone is a prescription opioid pain reliever.

OxyContin: OxyContin is a brand name for a prescription medication containing oxycodone.

Parental Monitoring: Research confirms the benefit of parents taking a more active role in their children's lives by talking with them about drugs, monitoring their activities, and getting to know their friends.

Parental Notification Policies: Parental notification policies require schools or institutions to inform parents or guardians about specific issues, events, or decisions affecting their children.

Parenting Skills Training: Providing education and support to parents or caregivers on effective parenting practices, including communication, discipline, setting boundaries, and monitoring children's activities. This training can help parents create a supportive and structured home environment that reduces the risk of substance use among their children.

PATHS (Promoting Alternative Thinking Strategies): A universal family-plus-school program designed to reduce risk factors and enhance protective factors for elementary school children. It focuses on: Strengthening students' "sense of community" or connection to school. Promoting positive relationships among peers, teachers, and students. Developing social, emotional, and character-related skills.

Peer Education: Peer education is a method where individuals from similar age groups or backgrounds educate each other on topics like health, safety, and social issues, leveraging shared experiences and relatability.

Peer Influence: The impact of social networks and relationships on an individual's attitudes and behaviours related to substance use. Peer pressure, social norms, and the modelling of substance use by peers can all contribute to the initiation and continuation of use.

Peer Pressure Resistance: The Guiding Good Choices curriculum teaches parents how to teach their children peer coping strategies. Project ALERT uses participatory activities and videos to help students resist prodrug pressures.

Percodan: Percodan is a prescription medication that contains oxycodone.

Personal Development, Health, and Physical Education (PDHPE): PDHPE is an educational curriculum focusing on personal growth, health knowledge, and physical fitness, aiming to enhance students' overall well-being.

Policy Interventions: Policy interventions are strategic actions taken to influence and change public policy or regulations to address specific issues or improve societal outcomes.

Poly-Drug Use: The use of two or more substances simultaneously or within a specific timeframe. This can increase the risk of adverse effects and complicate treatment.

Preparing for the Drug-Free Years: The Guiding Good Choices curriculum was formerly known as Preparing for the Drug-Free Years.

Preplanning: Preplanning involves the process of organising and preparing strategies or actions in advance to ensure effective implementation and success of programs or events.

Prescription Drug Misuse: Prescription drug misuse involves using prescription medications in a manner not prescribed by a doctor. This can include taking higher doses, using the drug without a prescription, or using it for non-medical reasons. Misuse of prescription opioids, stimulants, and sedatives is a major public health concern.

Prescription Drug Monitoring Programs (PDMPs): PDMPs are state-run databases that track the prescribing and dispensing of controlled prescription drugs to prevent misuse and promote safe medication practices.

Prevention Coalition: A prevention coalition is a collaborative group of community members and organisations working together to prevent and address specific health or social issues.

Prevention Practitioner: Prevention practitioners are individuals who work to prevent or reduce substance misuse. They can work in various settings, such as schools, community organisations, and healthcare facilities. Prevention practitioners may be involved in planning, implementing, and evaluating prevention programs, as well as advocating for policies that support substance misuse prevention efforts.

Prevention Science: The study of effective strategies to prevent or reduce the onset and severity of substance use disorders. It draws on research from various disciplines to inform the development and implementation of evidence-based prevention programs.

Prevention Task Force: A prevention task force is a specialised team assembled to develop and implement strategies aimed at reducing risks or preventing undesirable outcomes in a community.

Price Elasticity: Price elasticity measures how the quantity demanded of a good or service changes in response to a change in its price, indicating consumer sensitivity to price variations.

Process Evaluation: Process evaluations can be used to assess a prevention program to determine if it was implemented as planned.

Program Fidelity: Program fidelity refers to implementing a program consistently. Core elements of a program help build an effective, research-based prevention program, so when adapting programs to match community characteristics it is important to retain core elements to ensure that the most effective aspects of the program remain intact.

Progression of Use: The progression of substance use describes how an individual's pattern of use changes over time. This can include an increase in frequency, quantity, or the type of substances used. The progression from experimental use to regular use to substance use disorder is a complex process influenced by multiple factors.

Project ALERT: Project ALERT is a two-year universal program for middle school students that reduces the onset and regular use of substances among youth. The 14-lesson program is designed to prevent drug use initiation and the transition to regular use. It focuses on alcohol, tobacco, marijuana, and inhalants, which are substances that adolescents typically use first and most widely. Project ALERT uses participatory activities and videos to help students establish nondrug norms, develop reasons not to use, and resist prodrug pressures. It has prevented marijuana use initiation, decreased current and heavy smoking, curbed alcohol misuse, reduced prodrug attitudes and beliefs, and helped smokers quit. The program has proven successful with high- and low-risk youth from a variety of communities.

Project Towards No Drug Abuse (TND): This program is designed to address a wide range of risk and protective factors by teaching general personal and social skills, along with drug resistance skills and normative education. This universal program has been extensively tested over the past 20 years and has been found to reduce the prevalence of tobacco, alcohol, and illicit drug use relative to controls by 50 to 87 percent. When combined with booster sessions, it was shown to reduce the prevalence of substance abuse long term by as much as 66 percent, with benefits still in place beyond the high school years. The program has shown success in elementary schools and communities and has three components: a behavioural parent training program, children's skills training program, and family skills training program.

Protective Factors: Protective factors are associated with a lower likelihood of developing substance misuse. These can include individual characteristics such as academic achievement and positive coping skills, as well as family characteristics like parental bonding, family cohesion, and parental monitoring.

Psychotic Symptoms: Psychotic symptoms are severe mental health symptoms that affect a person's thoughts and perceptions, often including hallucinations, delusions, and disorganised thinking.

Public Education Campaigns: Efforts to inform the public about substance use, its consequences, and available prevention and treatment resources. These campaigns may utilise various channels, such as print media, television, radio, social media, or community events.

Recovery Support: Recovery support encompasses services and resources provided to individuals recovering from substance use disorders, aimed at maintaining sobriety and improving their quality of life.

Resilience: The ability to adapt and cope effectively in the face of adversity, trauma, or stress. Resilient individuals are less susceptible to the negative effects of risk factors, including those associated with substance use.

Restoril: Restoril is a prescription medication used to treat insomnia, classified as a benzodiazepine with sedative effects, and potential for dependence.

Risk and Protective Factors: Prevention programs should address the type of drug abuse problem in the local community, target modifiable risk factors, and strengthen identified protective factors. Prevention programs should be tailored to address risks specific to population or audience characteristics, such as age, gender, and ethnicity. For instance, prevention programs for elementary school children should target improving academic and social-emotional learning to address risk factors for drug abuse, such as early aggression, academic failure, and school dropout.

Risk Factors: Risk factors can increase the likelihood of substance misuse. Some examples of risk factors are low impulse control, peer substance misuse, family history of substance abuse, and binge drinking.

Ritalin: Ritalin is a stimulant medication commonly prescribed for attention deficit hyperactivity disorder (ADHD), helping to improve focus and control behaviour.

SAMHSA: The Substance Abuse and Mental Health Services Administration (SAMHSA) provides analyses, costs, and contact information for several individual- and environmental-level strategies to reduce alcohol use by college students. SAMHSA has published materials about the Strategic Prevention Framework, including a guide and a document outlining the core competencies for prevention. SAMHSA also offers the Evidence-Based Practice Resource Centre to assist with the selection of evidence-based interventions.

School Connectedness: School connectedness refers to the sense of belonging and positive relationships students feel within their school environment, contributing to better academic and social outcomes.

School-Based Programs: Interventions implemented in educational settings to prevent or reduce substance use among students. These programs may include curriculum-based instruction, skills training, peer leadership programs, or changes to school policies and environments.

Screening and Brief Interventions: Screening and brief interventions involve identifying individuals at risk of substance abuse or related issues and providing short, targeted counselling to encourage healthier behaviours.

Seattle Social Development Project: A research project at the University of Washington aimed at understanding and promoting positive youth development. One of the programs associated with this project is Guiding Good Choices, which empowers parents to decrease risk factors and bolster family bonds.

Selective Programs: Selective programs target individuals or subgroups of the population whose risk of developing a disorder is significantly higher than average, for example, children of adult substance abusers.

Sensation Seeking: Sensation-seeking youth may be more susceptible to drug abuse and are often targeted in media interventions such as social marketing campaigns.

Sensation-seeking Personality: Sensation-seeking youth are often targeted for participation in media interventions and social marketing campaigns aimed at reducing drug abuse.

Skills Training: Teaching individuals specific skills to resist substance use, manage stress, build healthy relationships, or cope with challenging situations. Examples of skills training include: Social skills training, refusal skills training, coping skills training, decision-making skills training.

Social and Emotional Learning: Prevention programs for elementary school children should target improving academic and social-emotional learning to address risk factors for drug abuse.

Social Competence: Social competence is the ability to interact effectively with others, understanding social cues and behaviours, and forming positive relationships.

Social Development Model (SDM): The Social Development Model is a theoretical framework that explains how social interactions and relationships influence individual behaviour and development over time.

Social influence Approach: The social influence approach uses participatory activities and videos to help students establish nondrug norms, develop reasons not to use, and resist prodrug pressures.

Social Marketing Campaigns: Carefully structured and targeted media interventions, such as social marketing campaigns, have proven to be very effective in reducing drug abuse. For example, a mass media campaign targeting sensation-seeking youth reduced marijuana abuse by 27 percent among high sensation-seeking youth.

Socio-Ecological Model (SEM): The Socio-Ecological Model is a framework that considers multiple levels of influence on behaviour, including individual, interpersonal, community, and societal factors.

Socioeconomic Factors: Socioeconomic factors, such as poverty, unemployment, and lack of educational opportunities, are associated with a higher risk of substance use and related problems.

Stakeholder Engagement: Stakeholder engagement is important for building support and gathering information that can be used to inform prevention programs.

Statistical Significance: Statistical significance is a measure in statistics that indicates whether a result is likely due to chance or represents a true effect, often determined by a p-value.

Strategic Prevention Framework (SPF): The SPF serves as a robust guide for the meticulous planning and execution of prevention activities. At its core, the SPF is distinguished by its reliance on data and adherence to the principles of prevention science, ensuring that every action is informed and impactful. It is committed to achieving precise outcomes, with goals and objectives that are carefully crafted to be specific, measurable, achievable, relevant, and time-bound. Moreover, the SPF prides itself on cultural competence, addressing the unique needs of diverse populations with sensitivity and respect. This framework fosters collaboration, inviting stakeholders from all community sectors to engage in a unified effort. Its focus on sustainability builds enduring capacity, laying the foundation for long-term prevention success.

The Strengthening Families Program (SFP): SFP stands as a testament to research-driven innovation, crafted to endow parents with vital skills to mitigate risk factors while fostering profound familial connections. This comprehensive program unfolds through a series of enlightening sessions, where parents are expertly guided in crafting meaningful engagement opportunities tailored to their child's developmental stage. It emphasises the importance of establishing clear expectations, diligently monitoring children, and applying thoughtful discipline. Parents are also taught to equip their children with the resilience needed to gracefully handle peer pressure. The program further empowers families by offering strategies for resolving conflicts with poise and encourages the expression of positive emotions, all aimed at reinforcing the bonds that unite families in harmony and love.

Student Veterans: Student veterans are individuals who have served in the military and are pursuing education, often requiring tailored support services to address unique challenges and needs.

Subgroup Analysis: Subgroup analysis involves examining data within specific segments of a larger group to identify variations or specific trends in outcomes.

Substance Abuse Prevention: Substance abuse prevention programs should address all forms of drug abuse, alone or in combination. This includes underage use of legal drugs (such as tobacco or alcohol), the use of illegal drugs (such as marijuana or heroin), and the inappropriate use of legally obtained substances (such as inhalants), prescription medications, or over-the-counter drugs. It encompasses a wide range of strategies, including: public education campaigns, school-based programs, family-based programs, community-based programs, and policy interventions.

Substance Use Disorder: A medical condition characterised by a pattern of compulsive drug or alcohol use despite negative consequences. It is diagnosed based on specific criteria related to impaired control, social impairment, risky use, and pharmacological indicators.

Surveys: Surveys can be administered quantitatively to gather information from a large number of individuals.

Syllabus Flexibility: Syllabus flexibility refers to the adaptability of course content and structure to accommodate diverse learning needs, preferences, and circumstances.

Synthetic Cannabinoids: Synthetic cannabinoids are man-made chemicals designed to mimic the effects of THC, often associated with unpredictable and potentially harmful health effects.

Systematic Review: A systematic review is a process for identifying, appraising, and synthesising research evidence.

Targeted Interventions: Recent research suggests caution when grouping high-risk teens in peer group interventions for drug abuse prevention because such groups can reinforce substance abuse behaviours over time. Research is examining how to prevent such effects, with a particular focus on the role of adults and positive peers.

Technical Assistance: Technical assistance is the provision of expert support and guidance to organisations or individuals to enhance their skills, processes, or performance.

Tetrahydrocannabinol (THC): Tetrahydrocannabinol is the psychoactive compound found in cannabis, responsible for its mind-altering effects.

The United Nations Convention on the Rights of the Child (CRC): The most widely ratified human rights treaty globally, the CRC outlines the rights afforded to every child and adolescent, regardless of their circumstances.

Theory of Change: A theory of change outlines how the program is expected to lead to the desired changes. It is helpful to articulate a program's theory of change when sharing assessment findings with the community.

Tobacco: Tobacco is a plant whose leaves are processed and used in products like cigarettes and cigars, containing nicotine and associated with various health risks.

Town-Gown Relations: Town-gown relations refer to the interactions and relationships between a university or college and the surrounding community, often focusing on collaboration and mutual benefit.

Transition Programs: Services and supports to help individuals navigate transitions, such as moving from middle school to high school or from high school to college or work. These programs aim to reduce stress, enhance social connections, and provide guidance during these vulnerable periods.

Tylox: Tylox is a brand name for a pain relief medication combining oxycodone and acetaminophen, with potential for addiction and misuse.

Underage Drinking: Underage drinking refers to the consumption of alcohol by individuals below the legal drinking age, associated with various health and legal consequences.

Universal Programs: Prevention programs aimed at general populations at key transition points, such as the transition to middle school, can produce beneficial effects, even among high-risk families and children. Such interventions do not single out risk populations, which reduces labelling and promotes bonding to school and community.

Urban vs. Rural Settings: The prevalence and types of substance use can vary between urban and rural settings. Access to prevention and treatment services might also differ, contributing to disparities in outcomes.

Valium: Valium is a prescription medication used to treat anxiety, muscle spasms, and seizures, belonging to the benzodiazepine class with potential for addiction.

Vaping: Vaping is the act of inhaling vapor produced by an electronic cigarette or similar device, often containing nicotine or other substances.

Vaporisers: Vaporisers are devices that heat substances, such as cannabis or nicotine liquids, to produce vapor for inhalation, offering an alternative to smoking.

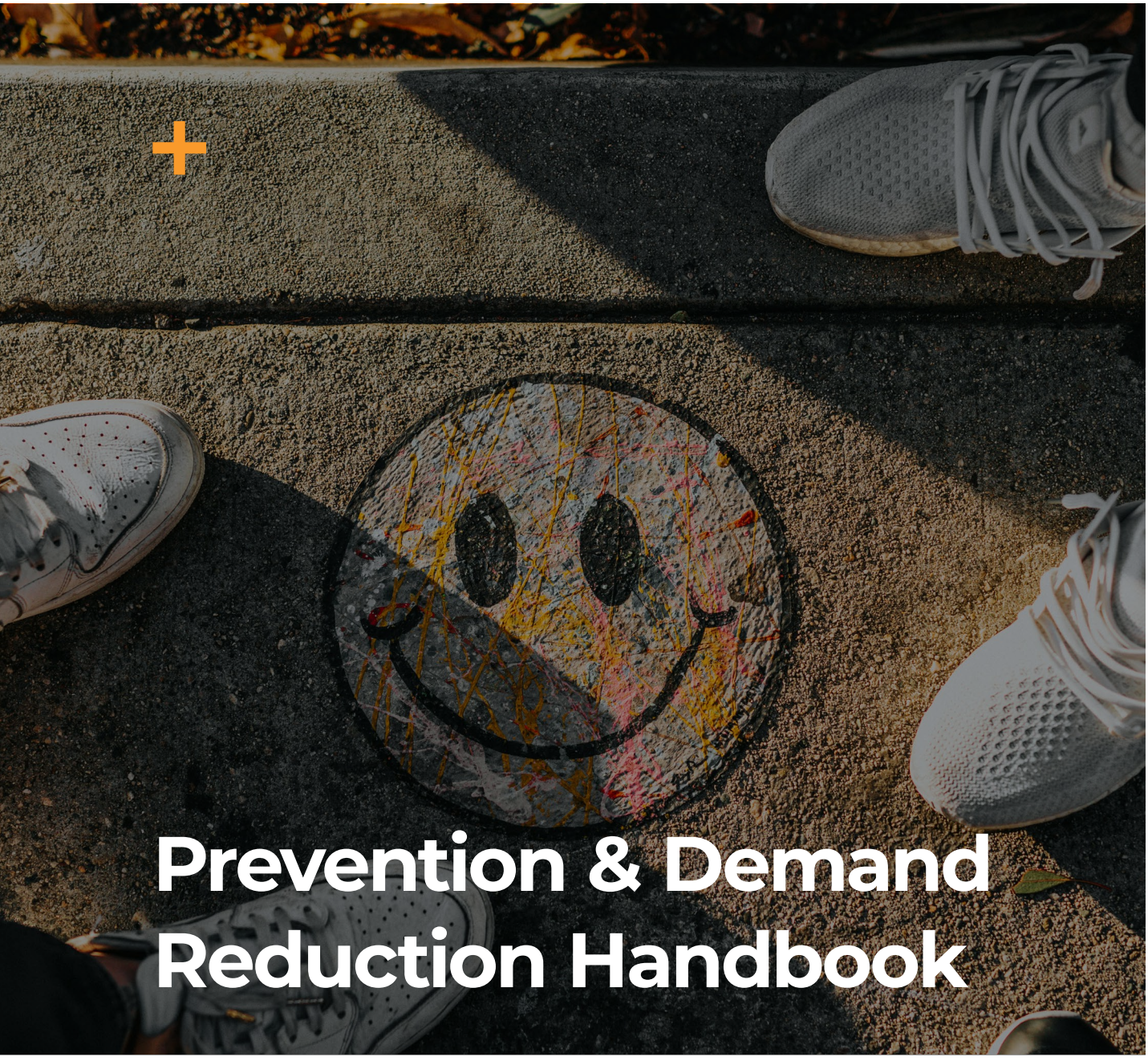
Vicodin: Vicodin is a prescription pain reliever containing hydrocodone and acetaminophen, known for its effectiveness and risk of addiction.

Xanax: Xanax is a brand name for the drug alprazolam, a benzodiazepine.

Your Room: Your Room is a comprehensive online resource created by NSW Health in collaboration with the Alcohol and Drug Information Service, aimed at educating the public about commonly used drugs in Australia. It serves as an informative platform offering a plethora of resources for education and prevention, alongside support services tailored for individuals and families grappling with substance use issues.

Youth Curfews: Establishing youth curfews is an example of a community-based program typically included in coordinated, multi-sector approaches to prevention.

Youth Risk Behavior Surveillance Survey: The Youth Risk Behavior Surveillance Survey is a national survey conducted by the CDC to monitor health-risk behaviours among youth, such as substance use and physical activity.



Prevention & Demand Reduction Handbook

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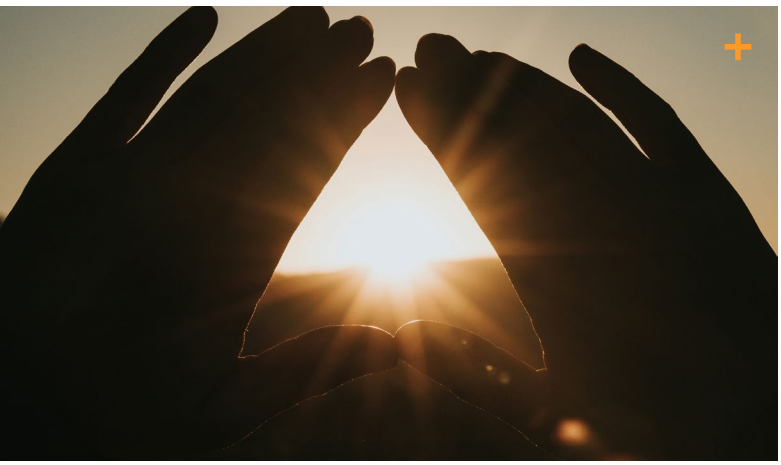

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