INFORMATION SHEET 1.8 – RISK AND PROTECTIVE FACTORS

Many factors influence the likelihood that an individual will develop a substance abuse or related behavioral health problem. Effective prevention focuses on reducing the factors that put people at risk of substance abuse and strengthening those factors that protect people from the problem.

According to the National Research Council and Institute of Medicine's 2009 report, *Preventing Mental, Emotional, and Behavioral Disorders among Young People: Progress and Possibilities*, **risk factors** are certain biological, psychological, family, community, or cultural characteristics that *precede* and are associated with a *highe*r likelihood of behavioral health problems. Whereas **protective factors** are characteristics at the individual, family, or community level that are associated with a *lower* likelihood of problem outcomes.**Error! Bookmark not defined.**

The study of risk and protective factors is evolving. We know more about risk and protective factors that occur in childhood and early adulthood than for middle age and older adulthood. What we do know to-date is important for prevention:

- Different age groups have different risk and protective factors.
- Some risk and protective factors overlap between age groups.
- Risk and protective factors tend to be correlated and have cumulative effects and are predicative of multiple issues.

One person or agency cannot adequately impact a problem alone, so it makes sense to look for opportunities to work with other disciplines to address shared risk and protective factors.

Multiple Contexts**Error! Bookmark not defined.**

Individuals have certain biological and psychological characteristics that make them vulnerable to, or resilient in the face of, potential behavioral health problems. Risk factors at the individual level include genetic predisposition to addiction or exposure to alcohol prenatally; protective factors might include positive self-image, self-control, or social competence.

But individuals don't exist in isolation. They are part of families, communities (youth are a part of schools), and society. A variety of risk and protective factors exist within each of these contexts or domains. For example:

- In **families**, risk factors include child abuse and maltreatment, inadequate supervision, and parents who use drugs and alcohol or who suffer from mental illness; a protective factor would be parental involvement.
- In **communities**, risk factors include neighborhood poverty and violence; protective factors might include the availability of faith-based resources and afterschool activities.
- In **society**, risk factors can include norms and laws favorable to substance use, as well as racism and a lack of economic opportunity; protective factors include policies limiting

availability of substances or laws protecting marginalized populations, such as youth who identify as lesbian, gay, bisexual, transgender or queer/questioning (LGBTQ).

In prevention, we need to address the constellation of factors across these contexts that influence both individuals and populations—targeting just one context is unlikely to do the trick.

For example, a strong school policy forbidding alcohol use on school grounds will likely have little impact on underage drinking in a community where parents accept underage drinking as a rite of passage or where alcohol vendors are willing to sell to young adults. A more effective—and comprehensive—approach might include school policy plus education for parents on the dangers of underage drinking, or a city ordinance that requires alcohol sellers to participate in responsible server training.

Examples of Research-Based Risk Factors for Substance Abuse

The following table, compiled by the National Research Council and Institute of Medicine, shows research-based risk factors for several behavioral health disorders at the individual, family, and school/community level during specific stages of development from early childhood through young adulthood.[Error! Bookmark not defined.] There is other research on risk factors throughout the lifespan.

RISK FACTORS: Early Childhood			
	Individual	**Family**	**Community (school)**
Substance Abuse	• Difficult temperament	• Cold and unresponsive mother behavior • Parental drug/alcohol use	
Depression	• Temperament: inhibited, socially reticent and easily upset • Dysthymia (chronically low mood) • Insecure attachment • Hostile to peers, socially inhibited		• Poor academic performance in early grades
Anxiety	• Behavioral inhibition	• Marital conflict • Negative events	• Specific traumatic experiences • Negative events • Lack of control or mastery experiences

RISK FACTORS: Middle Childhood			
	Individual	**Family**	**Community (school)**
Substance Abuse	• Poor impulse control • Low harm avoidance • Sensation seeking • Lack of behavioral self-control • Aggressiveness • Anxiety • Depression • Attention deficit/hyperactivity disorder • Antisocial behavior • Early persistent behavior problems • Early substance use	• Permissive parenting • Parent-child conflict • Low parental warmth • Parental hostility • Harsh discipline • Child abuse/maltreatment • Parents/siblings model drug use • Parents have favorable attitude towards alcohol and/or drugs • Inadequate supervision • Low parental aspirations for child • Lack of or inconsistent discipline	• School failure • Low commitment to school • Peer rejection • Deviant peer group • Peer attitudes toward drugs • Alienation from peers • Laws and norms favorable toward alcohol and drug use • Availability of and access to alcohol • Extreme poverty for antisocial children
Depression	• Temperament: apathy • Negative cognition about self and negative explanatory and inferential style • Anxiety • Dysthymia (chronically low mood) • Insecure attachment • Disengagement, involuntary and emotion-focused coping • Poor social skills: impulsive, aggressive, passive, and withdrawn	• Parental depression • Poor parenting: rejection, lack of parental warmth, high hostility, harsh discipline, high maternal negative affect • Child abuse/maltreatment • Loss • Marital conflict or divorce • Aversive family environment	• Peer rejection and poor quality peer relationships • Stressful life events • Poor grades/ achievements • Poverty • Stressful community events, such as interpersonal conflict, separation, and loss (violence)
Anxiety	• Behavioral inhibition • Disgust sensitivity • Cognitive development allows cognitive errors	• Parental anxiety • Parental over-control • Rejection • Anxious child-rearing • Parents model, prompt, and reinforce threat appraisals and avoidant behavior • Martial conflict; poor marital adjustment • Negative life events	• Specific traumatic experiences • Negative events • Lack of control or mastery experiences

RISK FACTORS: Adolescence			
	Individual	**Family**	**Community (school)**
Substance Abuse	• Negative emotionality (propensity towards negative emotions) • Behavioral disengagement coping (giving up) • Conduct disorder • Favorable attitudes toward drugs • Rebelliousness • Early substance use • Antisocial behavior	• Substance abuse among parents • Lack of adult supervision • Poor attachment with parents	• School failure • Low commitment to school • Not college bound • Aggression toward peers • Associating with drug-using peers • Societal/community permissive norms about alcohol and drug use
Depression	• Female gender • Early puberty • Difficult temperament: inflexibility, low positive mode, withdrawal, poor concentration • Negative cognitions such as low global self-worth, perceived incompetence, negative explanatory and inferential style • Anxiety • Dysthymia (chronically low mood) • Insecure attachment • Disengagement, involuntary and emotion-focused coping • Poor social skills: communication and problem-solving skills • Extreme need for approval/social support	• Parental depression • Parent-child conflict • Poor parenting: rejection, lack of parental warmth, high hostility, harsh discipline, high maternal negative effect • Child abuse/ maltreatment • Single-parent family (girls) • Divorce • Marital conflict • Family conflict • Aversive family environment	• Peer rejection and poor quality peer relationships • Stressful events • Self-generated stressors • Poor grades/ achievement • Poverty and low SES • Community-level stressful or traumatic events • Stressful community events, such as interpersonal conflict, separation, and loss (violence)
Anxiety	• Behavioral inhibition • Disgust sensitivity • Cognitive development allows cognitive errors	• Marital conflict • Family conflict	

RISK FACTORS: Young Adulthood			
	Individual	**Family**	**Community (school/work)**
Substance Abuse	• Lack of commitment to conventional adult roles • Antisocial behavior	• Leaving home	• Attending college • Substance-using peers
Depression	• Early-onset depression and anxiety • Negative cognitions • Need for extensive social support	• Parental depression	• Decrease in social support accompanying entry into a new social context
Anxiety	• Childhood history of untreated anxiety • Childhood history of poor physical health • Childhood history of sleep and eating problems • Poor physical health	• Spousal conflict • Single parenthood	• Negative life events

Examples of Research-Based Protective Factors

Protective factors can reduce the negative impact of risk factors. Prevention is not just about eliminating a risky of harmful behavior; it is also about supporting protective factors—like resilience and development assets—and striving to optimize well-being.

The following table, compiled by the National Research Council and Institute of Medicine, shows the factors that affect healthy development at the individual, family, and school/community levels during specific stages of development from early childhood through young adulthood.[Error! Bookmark not defined.] There is other research on protective factors throughout the lifespan.

PROTECTIVE FACTORS: Early Childhood		
Individual	**Family**	**Community (school)**
• Attention regulation • Appropriate emotional inhibitions and expression • Early mastery and intrinsic motivation • Executive functioning, planning, and problem solving • Secure attachment • Functional language • School attendance and appropriate conduct • Initiating interactions and appropriate conduct • Understanding of self and others' emotions	• Reliable support and discipline from caregivers • Responsiveness • Protection from harm and fears • Affection • Opportunities to resolve conflict • Support for development of new skills • Reciprocal interactions • Experience of being respected • Stability and consistency in caregiver relationship • Adequate income • Ability to provide adequate nutrition, childcare, safe housing, health care • Higher parental education • Cognitive stimulation in the home • Parental low economic stress	• Support for early learning • Access to supplemental services, such as feeding, and screening for vision and hearing • Stable, secure attachment to child-care provider • Low ratio of caregivers to children • Regulatory systems that support high quality of care

PROTECTIVE FACTORS: Middle Childhood		
Individual	**Family**	**Community (school)**
• Learning to read and write a language • Learning basic mathematics • Attending and behaving appropriately at school • Following rules for behavior at home, at school, and in public • Getting along with peers in school • Making friends with peers • Empathy and acceptance of other children's emotional expressiveness • Preference for pro-social solutions to interpersonal problems • Realistic control attributions • Self-efficacy	• Time in emotionally responsive interactions with children • Consistent discipline • Language-based, rather than physically based, discipline • Extended family support • Parental resources, including positive personal efficacy, adaptive coping, self-views high on potency and life satisfaction	• Positive teacher expectancies • Perceived teacher support • Effective classroom management • Positive partnering between school and family • Culturally relevant pedagogy • High academic standards, strong leadership, concrete strategies to promote achievement

PROTECTIVE FACTORS: Adolescence		
Individual	**Family**	**Community (school)**
• Positive physical development (good health habits, good health risk management skills) • Positive intellectual development (life, school, vocational skills; critical and rational thinking; cultural knowledge and competence) • Positive psychological and emotional development (self-esteem and self-regulation; coping, responsibility, problem-solving; motivation and achievement; morality and values) • Positive social development (connectedness to peers, family, community; attachment to institutions)	• Physical and psychological safety • Appropriate structure (limits, rules, monitoring, predictability) • Supportive relationships with family members • Opportunities to belong (sociocultural identity formation, inclusion) • Positive social norms (expectations, values) • Support for efficacy and mattering • Opportunities for skill building • Integration of family, school, and community efforts	• Physical and psychological safety • Appropriate structure (limits, rules, monitoring, predictability) • Supportive relationships • Opportunities to belong (sociocultural identity formation, inclusion) • Positive social norms (expectations, values) • Support for efficacy and mattering • Opportunities for skill building • Integration of family, school, and community efforts

PROTECTIVE FACTORS: Young Adulthood		
Individual	**Family**	**Community (school/work)**
• Identity exploration in love, work, and world view • Subjective sense of adult status in self-sufficiency, making independent decisions, and becoming financially independent • Future orientation • Achievement motivation	• Balance of autonomy and relatedness to family • Behavioral and emotional autonomy	• Opportunities for exploration in work and school • Connectedness to adults outside of family

INFORMATION SHEET 1.9 – SHARED RISK AND PROTECTIVE FACTORS

In 2012, SAMHSA's Center for the Application of Prevention Technologies (CAPT) reviewed literature concerning risk and protective factors for substance abuse and mental health disorders. Existing research and data suggest that there are a number of common or *shared* risk and protective factors throughout life that impact both substance abuse and mental health outcomes.

The four examples provided in this section illustrate only some of the shared risk and protective factors for childhood through young adulthood. There are other shared risk and protective factors for those age groups and for adulthood and older adulthood.

The tables below highlight two examples of **shared risk factors**. Note that each table has its own list of references separate from this overall document.

SHARED RISK FACTOR: Poor Grades/Achievement	
Definition	This indicator includes poor grades, poor/low academic performance or achievement, and school failure.
Risk Factor for	Poor grades/achievement is a risk factor for: depression[1]; substance abuse[2,3,4]; binge drinking in adulthood[5]; drug use among boys (related to IQ decline from age 11 to 18)[3]; adolescent drug use/abuse[3]; and increased alcohol and drug use between 7th and 9th grades.[6]
Age Group(s)	Early childhood through adolescence
References	1. National Research Council and Institute of Medicine. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities* (O'Connell, M. E., Boat, T., & Warner, K. E., Eds.) Washington, DC: National Academies Press. 2. Wright, D., & Pemberton, M. (2004). *Risk and protective factors for adolescent drug use: Findings from the 1999 National Household Survey on Drug Abuse* (DHHS Publication No. SMA 04–3874, Analytic Series A–19). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. 3. Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, *112*(1), 64-105. 4. National Institute on Drug Abuse. (2003). *Preventing drug use among children and adolescents: A research-based guide for parents, educators, and community leaders* (2nd ed). Bethesda, MD: National Institutes of Health. 5. Courtney, K. E., & Polich, J. (2009). Binge drinking in young adults: Data, definitions, and determinants. *Psychological Bulletin, 135*(1), 142-156. 6. Chassin, L., Pitts, S. C., & Prost, J. (2002). Binge drinking trajectories from adolescence to emerging adulthood in a high-risk sample: Predictors and substance abuse outcomes*. Journal of Consulting and Clinical Psychology, 70*(1), 67-78.

SHARED RISK FACTOR: Family History of Substance Use Disorders	
Definition	Family history of substance use disorders can include, but is not limited to, exposure during childhood to: parental substance abuse; parental alcoholism; growing up in a household in which there is substance abuse; family drug behavior; parental and/or sibling modeling of drug/alcohol use
Risk Factor for	Co-occurring disorders;[1,2] non-comorbid major depressive episode;[3] non-comorbid substance use disorder;[3] comorbid PTSD and substance use disorder;[3] comorbid PTSD and major depressive episode;[3] alcohol, cocaine, or opioid dependence;[3] mood and anxiety disorders;[4] family history of substance abuse is a risk factor for lifetime alcohol use;[5] current alcohol use;[5] current binge drinking;[5,6] lifetime marijuana use;[5] current marijuana use;[5] increased alcohol and drug use between 7th and 9th grades;[6] early onset of drinking and persistence of alcohol use disorders;[7] substance abuse.[1,8,9] * *comorbid = a disease that occurs simultaneously with another; co-occurring*
Age of Exposure	Youth (Infancy through Adolescence) and Young Adulthood
References	1. National Research Council and Institute of Medicine. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities* (O'Connell, M. E., Boat, T., & Warner, K. E., Eds.) Washington, DC: National Academies Press. 2. Missouri Department of Mental Health, Division of Comprehensive Psychiatric Services. (n.d.). *CPS facts: Co-occurring disorders in adults* [PDF]. Retrieved from https://dmh.mo.gov/docs/mentalillness/cooccurringadults.pdf 3. Kilpatrick, D. G., Ruggiero, K. J., Acierno, R., Saunders, B. E., Resnick, H. S., & Best, C. L. (2003). Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the National Survey of Adolescents. *Journal of Consulting and Clinical Psychology*, *71*(4), 692-700. 4. Douglas, K. R., Chan, G., Gelernter, J., Arias, A. J., Anton, R. F., Weiss, R. D., Brady, K., Poling, J., Farrer, L., & Kranzler, H. R. (2010). Adverse childhood events as risk factors for substance dependence: Partial mediation by mood and anxiety disorders. *Addictive Behaviors, 35*(1), 7-13. 5. Harris Abadi, M., Shamblen, S. R., Thompson, K., Collins, D. A., & Johnson, K. (2011). Influence of risk and protective factors on substance use outcomes across developmental periods: A comparison of youth and young adults. *Substance Use & Misuse*, *46*(13), 1604-1612. 6. Chassin, L., Pitts, S. C., & Prost, J. (2002). Binge drinking trajectories from adolescence to emerging adulthood in a high-risk sample: Predictors and substance abuse outcomes. *Journal of Consulting and Clinical Psychology, 70(*1), 67-78. 7. Chassin, L., Flora, D. B., & King, K. M. (2004). Trajectories of alcohol and drug use and dependence from adolescence to adulthood: The effects of parent alcoholism and personality. *Journal of Abnormal Psychology, 113*(4), 483-498. 8. Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin, 112*(1), 64-105. 9. Weitzman, M., Rosenthal, D. G., & Liu, Y. H. (2011). Paternal depressive symptoms and child behavioral or emotional problems in the United States. *Pediatrics, 128*(6), 1126-34.

The following tables highlight two examples of **shared protective factors**. Note that each table has its own list of references separate from this overall document.

SHARED PROTECTIVE FACTOR: Parental Support and Bonding	
Definition	This indicator includes, but is not limited to: parents as a source of social support, parent and family bonding, relationship with the main caregiver, bonding to a family with healthy beliefs and clear standards, meaningful opportunities to contribute to the family, family connectedness, child attachment to parent, and recognition/ acknowledgement of efforts to bond with or contribute to the family. See also the protective factors of parental encouragement, and of positive parental involvement and reinforcement.
Protective Factor for	Substance use/abuse[1,4]; problem alcohol use in adulthood[2]; lifetime mood and anxiety disorders[2]; drug use and initiation of drug use[3]; suicidal thoughts[4]; smoking initiation[5]
Age Group(s)	Youth and young adults
References	1. Wright, D., & Pemberton, M. (2004). *Risk and protective factors for adolescent drug use: Findings from the 1999 National Household Survey on Drug Abuse* (DHHS Publication No. SMA 04–3874, Analytic Series A–19). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. 2. Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., … Udry, J. R. (1997). Protecting adolescents from harm: findings from the National Longitudinal Study on Adolescent Health. *JAMA, 278*(10), 823-832. 3. Douglas, K. R., Chan, G., Gelernter, J., Arias, A. J., Anton, R. F., Weiss, R. D., Brady, K., Poling, J., Farrer, L., & Kranzler, H. R. (2010). Adverse childhood events as risk factors for substance dependence: Partial mediation by mood and anxiety disorders. *Addictive Behaviors, 35*(1), 7-13. 4. Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin, 112*(1), 64-105. 5. Fleming, C. B., Kim, H., Harachi, T. W., & Catalano, R. F. (2001). Family processes for children in early elementary school as predictors of smoking initiation. *Journal of Adolescent Health, 30*(3), 184-189.

SHARED PROTECTIVE FACTOR: Participation in Social Activities	
Definition	Participation in social activities includes, but is not limited to, regular participation in organized school, neighborhood, or community sports, arts, or clubs outside of regular school and/or work hours. See also the protective factors of volunteering and participation in religious/spiritual activities.
Protective Factor for	Substance abuse;[1,2] lifetime mood and anxiety disorders;[3] stress and depression;[4] alcohol and marijuana use;[2] depression & anxiety[2]
Age Group(s)	Youth through adulthood
References	1. Wright, D., & Pemberton, M. (2004). *Risk and protective factors for adolescent drug use: Findings from the 1999 National Household Survey on Drug Abuse* (DHHS Publication No. SMA 04–3874, Analytic Series A–19). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. 2. Benson, P. L., Scales, P. C., Hamilton, S. F., & Sesma, A., Jr. (with Hong, K. L., & Roehlkepartain, E. C.). (2006). Positive youth development so far: Core hypotheses and their implications for policy and practice. *Search Institute Insights & Evidence, 3*(1), 1–13. 3. Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. Psychological Bulletin, 112(1), 64-105. 4. Douglas, K. R., Chan, G., Gelernter, J., Arias, A. J., Anton, R. F., Weiss, R. D., Brady, K., Poling, J., Farrer, L., & Kranzler, H. R. (2010). Adverse childhood events as risk factors for substance dependence: Partial mediation by mood and anxiety disorders. *Addictive Behaviors. 35*(1), 7-13.

INFORMATION SHEET 1.10 – DEVELOPMENTAL PERSPECTIVE

A developmental approach to prevention helps to ensure that interventions have the broadest and most significant impact. Risk and protective factors and their potential consequences and benefits are organized according to defined developmental periods. This enables practitioners to match their prevention and promotion efforts to the developmental needs and competencies of their audience. It also helps planners align prevention efforts with key periods in peoples' development, when they are most likely to produce the desired, long-term effects.

Stages of Development

Preventing behavioral problems begins with an understanding of how young people develop and how the challenges they face and overcome interact to produce changes in their mental and physical health over their lifetimes. As children grow, they progress through a series of developmental periods. Each of these periods is associated with a set of developmental competencies: cognitive, emotional, and behavioral abilities children need to adapt to new challenges and experiences.

Developmental competencies are critical, particularly as young people mature and begin to take on adult roles and responsibilities. The likelihood individuals will gain these competencies depends on the other competencies they have already mastered, and the risk and protective factors they encounter at each developmental stage.

Windows of Opportunity

When addressing risk and protective factors, timing is critical. Half of all behavioral disorders appear during adolescence. The first symptoms of most behavioral health disorders typical occur two to four years before diagnosis. In the case of substance abuse disorders, for example, initial symptoms appear around age fourteen—about four years before these symptoms progress to the point of a diagnosable disorder.

If we can intervene during these windows of opportunity— during the period between the time when symptoms can be first detected and disorders can be diagnosed—we are more likely to prevent the onset of the disorder and produce lasting and long-term impacts. And if we can intervene even sooner, to promote healthy lifestyles, our potential for reducing the toll of behavioral health problems on individuals, communities, and society is even greater.

Matching Interventions to Developmental Phase

Certain risk and protective factors are more common and influential during particular developmental periods. So it is important to match prevention and promotion efforts to the developmental needs and competencies of the population group the intervention will focus on.

Consider the following scenarios:

> **Scenario 1:** A prevention and wellness committee of an urban elementary school reviews recent efforts to reduce substance abuse and improve behavioral health. The committee decides to address identified gaps in programming for kindergartners by implementing a program that focuses on healthy decision-making and critical-thinking skills.
>
> **Scenario 2:** A community-wide substance abuse coalition identifies underage drinking as a primary focus for its prevention efforts; coalition members are concerned about alcohol being served at community events and that adults buy alcohol for minors. To address these problems, the coalition decides to implement Across Ages, an evidence-based intervention designed to increase protective factors for high-risk students by matching youth with older adult community mentors.

In both scenarios, the intentions are good but the developmental appropriateness is questionable since neither intervention matches the developmental phase of the population it serves, nor addresses the risk and protective factors most influential during that phase of development.

In the first scenario, the intervention addresses competencies that children develop later in life, during their middle-childhood and adolescence. A more appropriate intervention might be one that targets kindergarten teachers, helping them to provide better support for their students' behavioral health. In the second scenario, the intervention targets individual-level behavior change. A more effective approach might be to reduce social access to alcohol—by enforcing bans on serving and selling alcohol to minors.

Matching Interventions to Setting

It's also important to consider the "where" of an intervention. Children develop competencies in a range of settings. In just one day, a child might move from his home to school, then to afterschool day-care, then on to a neighborhood park to play with friends. Each of these settings plays a role in a child's development. As individuals progress through their youth and into adulthood, the significance of setting in shaping behavioral health evolves. For example, when individuals are very young, immediate family members play a key role in shaping development. But as children mature, their friends and peers become significantly more influential, which introduces new risk and protective factors in and out of school.