Understanding and Addressing Adversity as a Risk Factor for Substance Abuse in Young People

An Informational Guide for Prevention-Oriented Professionals

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Introduction

This Resource Guide was developed to assist professionals in their efforts to incorporate an understanding of childhood adversity and its impact into broad-based efforts to prevent substance use problems in young people. It is designed to be of benefit to persons addressing this issue from different vantage points, including administrative and programmatic professionals, along with policymakers, researchers, educators, and advocates. Adversity, for the purposes of this Guide, refers to the constellation of detrimental events and circumstances that can jeopardize the healthy development and well-being of young people, including child exposure to: maltreatment by caregivers; household dysfunction; victimization in school and community settings; and negative social determinants such as poverty, inequality, and the experience of discrimination and social exclusion. These perilous elements have been shown to increase risks–not only for substance abuse–but also for somatic and mental health problems, academic challenges, high risk behavior, and potential involvement in the justice system. For this reason, the Guide places a strong emphasis on the importance of cross-sector collaboration along the spectrum of child and family serving systems in order to support programs, polices, and practices that are designed to produce safe and nurturing environments for young people (from a prenatal stage to late adolescence) in the various settings in which they live, learn, grow, and play.

Chapter 1 demonstrates the value of addressing childhood adversity as a vital component of any systemic effort to prevent or reduce substance use and abuse in young people. It offers an overview of: the different types of detrimental events and circumstances that can imperil child well-being and their prevalence in American society; the impact that adversity-induced toxic stress can have on child development and functioning and the associated trajectory linking it to substance abuse (SA) and other negative outcomes; considerations for better understanding youth behavior within the context of such experiences; and data demonstrating the heightened risk of SA problems for persons with a history of exposure to such experiences.

Chapter 2 provides an overview of prevention categories, couched in a public health model that emphasizes a developmental, ecological approach to addressing modifiable risk and protective factors of relevance to efforts to prevent substance use *and* to reduce or mitigate the impact of adversity. Examples are provided of evidence-based practice models targeting young people from prenatal/infancy to late adolescence, with varying levels of risk. These programs emphasize elements such as: supporting nurturing caregiving and secure attachment; reducing family conflict; enhancing positive family functioning; creating connections to caring adults;

supporting children & families involved in out-of-home placement; promoting self-regulation, problem-solving skills, positive coping strategies, and improved executive function; developing social, emotional, and relational skills; fostering positive school environments; providing intensive early childhood education for children in poverty; and creating opportunities and rewards for pro-social involvement.

Because children spend such a large portion of their time in educational settings, **Chapter 3** is designed to illustrate strategies that can be employed to create a *full school environment* that is understanding of, and responsive to, the needs and challenges of children impacted by adversity so that a safe, healing, and supportive educational setting is available to help these students to succeed. Information is provided on: the neurocognitive impact of adversity as it relates to a child's ability to learn and function in a school setting; the importance of moving away from punitive discipline practices and towards positive behavioral supports; and the value of a multi-tiered approach that involves teachers, administrators, other school staff, families, and community members. Examples are offered of school systems that have implemented compassionate, adversity-informed strategies, along with links to resources for obtaining additional information.

Chapter 4 highlights ways in which prevention-oriented professionals can infuse an adversity-informed focus into broader planning efforts in order to prevent substance use problems in young people. The bulk of this Chapter is dedicated to providing suggestions and resources that may be helpful in applying an adversity lens to the SAMHSA Strategic Prevention Framework (SPF). Information is provided on: numerous data sources and systems for tracking different types of adversity; strategies for raising awareness of adversity and its impact; broadening coalitions/partnerships to emphasize the development of nurturing environments; resources for evidence-based policies, practices, and programs; and considerations for evaluating the success of adversity-ameliorating efforts within the context of substance abuse prevention work. Beyond the framework of the SPF, examples are also offered of states and localities that have been striving to work collaboratively across sectors to mitigate exposure to negative circumstances and to enhance healthy youth development.

Finally, a **Technical Supplement**, geared primarily towards research-oriented professionals and clinicians, is presented to review various issues involved in screening for adverse childhood experiences and to present information on some of the instruments that have been developed for this purpose. The supplement explores: the use of screening and diagnostic instruments for both epidemiological and clinical assessment purposes; examples of retrospective versus contemporary screenings for adversity; different response formats; developmental appropriateness of screening; and an overview of some common instruments, including content, format, and reliability.

Chapter 1: Overview of Childhood Adversity and Associated Risks for Substance Abuse

Purpose of this Chapter

This initial chapter is intended to lay the groundwork for demonstrating the relevance and vital importance of addressing child adversity as part of any systemic effort to prevent or reduce substance use and abuse in young people. Specifically, the chapter covers: an overview of different types of potentially-preventable adversities and their prevalence in American society; the impact that adversity-induced toxic stress can have on child development and functioning and the associated trajectory linking it to substance abuse (SA); considerations for better understanding youth behavior within the context of such experiences; and data demonstrating the heightened risk of SA problems for persons with a history of exposure to such events and circumstances.

What is Childhood Adversity and How Common is it?

For the purposes of this Informational Guide, we use the term "adversity" to capture the wide range of experiences and environmental conditions that research has shown can have a detrimental impact on the healthy growth and development of children and which can contribute to disproportionate risks for various negative outcomes, including substance abuse. We will begin by looking at different types of adverse events and circumstances, and their prevalence in our society.

Maltreatment: Children who are mistreated by parents and caregivers may experience a range of feelings, such as fear, shame, self-blame, anger, confusion, uncertainty, anxiousness, and mistrust. [i,ii] Notably, child maltreatment is associated with an increased risk for a host of difficulties, including: physical, mental, and substance use problems; impaired academic performance; and involvement with the justice system. [iii,iv] There are various forms of maltreatment, as outlined below.

- *Physical Abuse:* Although the *legal* definition of child abuse varies somewhat from state-to-state, it is generally considered to be abuse when a parent/caregiver "commits an act that results in physical injury to a child or adolescent, such as red marks, cuts, welts, bruises, muscle sprains, or broken bones." [v] It is important to note that such actions are considered abuse regardless of whether there is a deliberate *intent* to harm the child or if the parent is lashing out in anger/frustration.

- *Sexual Abuse:* As defined by the National Child Traumatic Stress Network, "child sexual abuse includes a wide range of sexual behaviors that take place between a child and an older person or alternatively between a child and another child/adolescent. Behaviors that are sexually abusive often involve bodily contact, such as sexual kissing, touching, fondling of genitals, and intercourse. However, behaviors may be sexually abusive even if they do not involve contact, such as of genital exposure ("flashing"), verbal pressure for sex, and sexual exploitation for purposes of prostitution or pornography."[vi] Perpetrators of sexual abuse may use methods besides physical force (e.g., threats, deception, manipulation, other types of coercion) to commit such acts.

- *Emotional Abuse:* There are a range of actions that may be considered emotional abuse, including: verbal assaults (e.g., belittling, ridiculing, shaming); ignoring; rejection; terrorizing (e.g., threats of harm and creating a climate of fear); isolation (e.g., blocking the child's access to healthy socialization opportunities); and intentional corruption (e.g., promoting the child's engagement in anti-social activity).[vii,viii,ix] Although it may not be as readily apparent as physical forms of abuse, the long-term impact of emotional abuse can be devastating, as it "erodes and corrodes a child"[x] and his or her sense of self.

- *Neglect:* Child neglect entails the failure of a parent or caregiver to provide for a child's needs despite having the resources to do so (or being able to access help to do so).[xi] A child's needs may be neglected on many levels, including: physical (e.g., not providing proper food, clothing, hygiene, or abandoning the child); medical (denial or delay of health care); emotional (e.g., inadequate nurturing, isolation, exposure to maladaptive environments); educational (e.g., failure to ensure school attendance, or not meeting special education needs); and inadequate supervision (e.g., leaving a child alone who is not of an age or developmental level to be safe; exposure to hazards; leaving a child with an unfit caregiver).[xii]

Note: For readers interested in accessing specific state laws/policies related to child maltreatment, please visit the Child Welfare Information Gateway at: https://www.childwelfare.gov/can/defining/state.cfm

Exposure to Disruptive Household Dynamics: There are a variety of other circumstances within the home environment that—while not necessarily targeted at the child—can also contribute to a general lack of safety and stability, thereby impeding a young person's overall sense of security. Examples include:

- *Poor household/family management*, characterized by unclear expectations, inconsistent supervision or application of household rules, highly negative communication patterns, and a lack of family bonding/engagement in pro-social activity.[xiii]

- The presence of *domestic violence* in the home, either between the child's parents/caregivers or other individuals within the household. Domestic violence occurs between individuals in an intimate relationship, reflects a pattern of behavior designed to manifest control over one's partner, and can include physical, sexual, and/or emotional abuse or threats.[xiv] The witnessing of such behavior can be extremely frightening for a child, and it also models very unhealthy patterns of interpersonal relations.

- *Substance use and abuse in the family*, potentially creating chaotic household dynamics marked by disruption and instability. Additionally, caregivers with substance use problems have a much greater likelihood of engaging in inconsistent, neglectful, and/or abusive parenting practices.[xv]

- *Incarceration of a caregiver*, which can present a constellation of challenges including: family disruption, stigma, concern for the well-being of the parent, and potential loss of household income and parental rights.[xvi]

- *Serious mental illness of a caregiver*, which can create household instability and interfere with the quality of parenting practices, including risks for negative and disengaged parenting.[xvii]

Exposure to Violence in External Settings: Outside of the home, children may be exposed to an array of experiences and circumstances that can create fear and mistrust, impede well-being, block opportunities for positive social interaction, and substantially hinder their ability to navigate freely through (and utilize the resources of) those settings, including[xviii]:

- *Community violence*, either through the direct experience of being victimized (e.g., robbed, threatened, harmed), or through the witnessing of such acts against others.

- *School violence*, in the form of bullying, cyber-bullying, threats, and physical harm, again either as a direct victim or as a witness to the perpetration of such offenses against others.

Negative Social Determinants: Children are greatly impacted by the physical and social environments in which they live, learn, grow, and play, [xix] and the presence of societal disparities can contribute to deprivation and limited access to those conditions, services, and supports that foster optimum health and development.[xx] Key examples include:

- *Poverty and income inequality*: Children living in impoverished conditions may face a range of chronic stressors related to: poor environmental conditions (e.g., pollutants, noise, crowding); low quality and/or insecure food and housing; lower quality and potentially unsafe schools and neighborhoods; and fewer opportunities for educational and occupational attainment.[xxi] Both poverty and relative economic inequality are associated with poorer outcomes for children in areas of academic achievement and somatic and behavioral health,[xxii,xxiii] and socioeconomic inequalities in health have been widening for decades in this country.[xxiv]

- *Racism, social exclusion, and other forms of discrimination and social injustice*: Members of groups that are systemically marginalized in a society often experience a disproportionate burden of exposure to unhealthy environmental conditions and stressors including: reduced access to resources; greater likelihood of poverty and its associated risks; social-psychological effects of encountering discriminatory social attitudes; and over-representation in correctional and other coercive systems.[xxv,xxvi, xxvii]

Other Types of Adversity: The listing above is not intended to be all-inclusive, but rather it represents some common types of *potentially malleable* areas of child adversity that can have a negative impact on healthy development and for which there are valuable prevention opportunities for mitigating their occurrence and/or impact. Other examples, which go beyond the scope of this guide, include exposure to war, terrorism, natural disasters, and serious chronic medical conditions/procedures.[xxviii]

Prevalence

Just how common of a problem is childhood adversity? Research indicates that it is much more widespread than one might imagine. Consider the following:

- Child protective services (CPS) agencies reported that there were 702,000 substantiated victims of child abuse and neglect in the U.S. in 2009, a rate of 9.3 victims per 1,000 children in the population.[xxix] The Congressionally mandated National Incidence Study (NIS) of Child Abuse and Neglect reflects rates of maltreatment that are higher than the CPS case numbers, because it tracks data from professionals working with children and families and includes incidents that may not be within the CPS system. The NIS study for the year 2005-2006 revealed that 2.9 million children were exposed to an endangerment standard of maltreatment, equating to one child out of every 25.[xxx]

- In FY 2012, an estimated 1,640 children died from abuse and neglect in this country, and more than 70% of these fatalities were of children under the age of 3.[xxxi]

- The National Child Traumatic Stress Network notes that as many as 1 in 4 girls and 1 in 6 boys experience some form of sexual abuse as minors, while also observing that this is a crime which is largely *under*-reported.[xxxii]

- The Office of Juvenile Justice and Delinquency Prevention's comprehensive *National Survey of Children's Exposure to Violence* found that more than a quarter of youth surveyed, 25.3%, had witnessed violence in their homes, schools, and communities within the past year.[xxxiii]

- The Child Witness to Violence Project reports that between 3 to 10 million children a year witness incidents of domestic violence against a caregiver in the U.S.[xxxiv]

- In 2008, there were 2.7 million minor-aged children in the United States (3.6% of children) with an incarcerated parent.[xxxv]

- A 2012 report from the Substance Abuse and Mental Health Services Administration noted that an annual average of 7.5 million young people under age 18 (10.5 percent of minors) live with a parent who has experienced an alcohol use disorder in the past year.[xxxvi]

- The 2007 National Survey on Drug Use and Health found that 8.3 million minor-age children live with at least one parent who abused or was dependent on alcohol or an illicit drug during the past year. [xxxvii]

- The Institute of Medicine estimates that at least 15 million children live in households with a parent who has major or severe depression.[xxxviii]

- Findings from the Centers for Disease Control and Prevention Youth Risk Behavior Surveillance for 2011 revealed that 20.1% of high school students nationwide had been bullied on school property during the 12 months before the survey.[xxxix]

- According to the U.S. Census' *Current Population Survey,* the poverty rate in 2012 for children under age 18 was 21.8%, or slightly more than *1 out of every 5* young people, (compared to a rate of only 13.7% for people aged 18-64, and 9.1% for those over 65.)[xl]

- In 2010, there were approximately 1.6 million homeless children in the United States, or 1 out of 45.[xli]

Potential Impacts of Child Adversity on Emotional and Behavioral Health

Contextual Experience of Adversity

A number of different factors can influence the way in which a child experiences and is impacted by misfortune. These elements may be *intrinsic* to the child (e.g., temperament, past experience) or *extrinsic* (e.g., the familial, social, cultural environments in which the child lives), and they can influence the way in which the young person appraises the situation, has expectations of safety/danger, and responds in the aftermath.[xlii]

The circumstances under which adversity occurs are highly relevant, including: the child's age and developmental stage; the relationship between the child and a perpetrator/abuser; whether or not a child who reveals abuse is believed/ supported/protected afterwards; and the extent of exposure (e.g., a single challenge or many; and short-term adversity versus that which is more chronic in nature). [xliii]

Research has shown that exposure to multiple forms of adversity (particularly of an interpersonal nature), over a prolonged period of time, can be particularly detrimental to the healthy development and functioning of a young person.[xliv] The following section of this chapter discusses the neurobiological impact of serious adversity in childhood and how it has a cascading effect on increasing the risk for substance use problems.

It is important to emphasize, however, that not all children who are exposed to adversity will develop behavioral health problems, and not all people who become addicted have a history of childhood adversity. From a prevention standpoint (which is the primary focus of this guide), it is critical to understand the extent to which *protective factors* (such as a caring adult, supportive resources, the presence of coping skills, etc.) may be present which can help to buffer the impact of negative experiences and circumstances.[xlv] Chapter 2 discusses practices that can help to reduce adversity and its associated risks, while also enhancing protection in order to strengthen a child's *resilience*, the capacity to maintain a healthy level of functioning despite the presence of various challenges.

Neurobiological Impact of Toxic Stress and the Trajectory Linking Adversity and Risk for Substance Use

As was mentioned earlier, adversity in childhood can have profound, lifelong effects on the health and wellbeing of an individual. These experiences and the contexts within which they

occur can literally become embedded into an individual's biology setting a malleable but persistent course of human development.[xlvi] Embedding of these experiences involves the interaction of genotypes with environmental experiences that trigger biological pathways that shape neural, endocrine, and immunological systems. Understanding and responding to these long term effects is an essential component of prevention and intervention programs in substance use.

It is now generally accepted that substance use disorders are moderately to highly heritable which means that genetics plays an important role in the development of mental health and substance use conditions.[xlvii] Increasingly we realize that one's genetic makeup increases the risk for disorder but, except in rare cases, no simple link between genetic vulnerability and the expression of mental health and or substance use conditions exist.[xlviii] It is the interaction of genetic vulnerability and environmental exposures that ultimately produce health or illness. Much is yet to be discovered regarding the exact biosocial mechanisms that mediate these outcomes. However, our knowledge with regard to these interactions is growing substantially as we begin to be better able to understand and measure an individual's genetic makeup and how these genes, either singly but more often multiply, interact with the environment to become part of the biological embedding that can strongly influence the life course.

A helpful paradigm for conceptualizing and investigating these interactions involves understanding the relationship between adverse developmental experiences and genetic predispositions on the course of development. Given the well-established links between adverse experiences and a host of health, mental health and addictions problems, the link between stress and development has been widely studied. As was mentioned earlier, adversity in childhood occurs at high prevalence and it is known to have long term impacts on healthy development. Severe adversity or persistent stress can act to cause dysregulation of the stress response system that has evolved to protect individuals in times of threat.

Allostasis is the normal process through which we become prepared to respond (flight, fight, or freeze) in the face of danger. Normal stress arousal involves first the release of adrenaline stimulated by the sympathetic nervous system followed by release of glucocorticoids under the control of the HPA axis (Hypothalamus, Pituitary and Adrenal). These mechanisms work to prepare the organism to confront the challenge that it is facing. In ordinary, acute stressful situations, feedback mechanisms operate to return the body to homeostasis following the stressful circumstance. However, if the stress is extreme and or persistent, the continued release of the glucocorticoids (cortisol in humans) can begin to reprogram neural and endocrine systems in ways that ultimately prove deleterious to health.[xlix] These effects appear to be particularly damaging when they occur earlier in development when basic neural architecture is being constructed. As might be expected, the biochemistry of these interactions is

complicated, involving several different neurological, endocrine and immunological pathways with multiple feedback systems that can further exaggerate the effects of stress.[l]

In addition to the hypothalamus, the hippocampus, amygdala and prefrontal cortex are also involved in regulation of the stress response. The hippocampus helps to control the hypothalamus, as well as being involved in memory formation. The amygdala is responsible for fear conditioning and emotional processes and impacts the autonomic and neuroendocrine systems. The pre-frontal cortex is involved in executive function, exerts control over a wide variety of other brain functions, and is responsible for various components of cognition.

When an individual is under severe or persistent stress, the normal mechanisms that return the biological system to its resting state are frustrated and high levels of stress hormones continue to circulate. Depending upon the age of the individual, these hormones and neurotransmitters cause structural changes in differing neural structures and other organs that are developmentally sensitive to their influences. This disruption is sometimes referred to as a "toxic stress response."[li]

Prenatal stress is thought to have effects on the dopamine system that modulates the reward centers of the brain. This type of stress may stimulate reward seeking.[lii] Early life postnatal stress also has been shown to impact the dopamine reward pathway, the HPA system, as well as brain structure.[liii] When alcohol or other drugs are available, the heightened sensitivity of the dopamine system seems to increase the reward seeking associated with use. Impacts on cortical development that occur later in the developmental sequence are thought to be related to sensation seeking, impulse control or other aspects of executive decision processes.

In adolescents, adults and older adults, the stress response itself can predispose use of alcohol or other drugs if they are available. Individuals exposed to early life adverse circumstances may, in turn, be particularly sensitive to stress arousal that might facilitate alcohol or drug seeking. Additionally, substance use in response to these stress systems may produce negative feedback loops that cause withdrawal symptoms, facilitating further use and ultimately addiction. Cortictropin releasing factor, a key byproduct of the HPA axis, appears to play an important role in mediating this response.[liv]

While some of the effects of adverse experiences appear to have direct effects on reward seeking and/or on the sensitivity to rewards, other alcohol or drug seeking behaviors are associated with changing emotions or behaviors. These states may be among the first consequences of early life adverse experiences and occur before any alcohol or other drug involvement occurs. The likelihood of conduct disorder, attention deficit hyperactivity disorder and oppositional defiant disorder diagnoses is increased by exposure to early childhood adverse events.[lv] These childhood disorders, that occur prior to any exposure to alcohol or drugs,

increase risk for early alcohol use in adolescence and subsequent alcohol use disorders later in life. Anxiety and depressive symptoms following exposure to perilous childhood events also increase the risk for substance use involvement. Both the direct influence of early trauma on an individual's reward centers in the brain, as well as the direct effects of adversity on the development of behavioral disorders, may predispose individuals to develop addictive conditions.

Adverse childhood experiences are also increasingly seen to modulate the effects of an individual's genotype. Several specific genes have been identified that appear to interact with adverse experiences to increase the risk of addictive behaviors. Therefore the effects of familial/genetic makeup may best be seen in the context of these adverse circumstances, or alternatively, in compensatory parental behaviors that can moderate or eliminate the effects of adversity.

While several specific genes have been investigated, the serotonin transmitter gene (5-HTTLPR) has been studied frequently and shown to interact with stress exposure to impact the likelihood of early drinking, which, in turn, predicts later drinking. Without maltreatment, approximately 8% of individuals with the susceptible serotonin genotype exhibit early alcohol use. With maltreatment, *over 30%* of individuals with the susceptible genotype were early drinkers. No one with the benign genotype who did not experience adversity was an early drinker, while over 20% of persons with this genotype who were maltreated initiated alcohol use early.[lvi] Several other specific loci have been shown to interact with negative childhood experiences to increase risk[lvii] and genome wide association studies that can better map multi-genic influences are emerging as preferred methods of analysis.[lviii]

While much remains to be learned about the process of biological embedding of early adverse and supportive experiences on the development of substance use conditions, it is increasingly clear that these experiences in combination with genetic vulnerability can predispose an individual to greater risk for substance use conditions. Interventions that have been shown to reduce the frequency of adverse events and/or to ameliorate their harmful influences – particularly for persons who are known to be at risk from their family history – should be incorporated into our prevention armamentarium. Screening for adverse events is a logical first step in this prevention process.

An Adversity-Informed Understanding of Behavior

As described above, prolonged activation of a toxic stress response can be extremely detrimental to child development. For professionals working with children and youth across diverse settings, it is important to understand the resulting impact that such exposure can have on a young person's behavior. Extreme adversity can disrupt the body's normal stress

response, causing a hypersensitivity to perceived threat (a flight/fight/freeze reaction) that may compel the young person to become either very aggressive/combative or numbed/withdrawn.[lix] Teachers or service providers that are unaware of challenges in the child's life, or who do not know the impact that adversity can have, may label such children as "oppositional," "attention-seeking," "trouble-makers," on one hand, or "unmotivated," "spacey," and "disinterested" on the other. In reality, the child is simply trying to cope in what to him/her is a very scary and unpredictable world while lacking the capacity to self-regulate in healthier ways. [lx]

The ability to regulate one's emotions is closely tied to "executive functions" (i.e., mental functions that support planning, decision-making, remembering details, managing time, etc.), which is another area of development that can be impaired by toxic stress.[lxi] Again, without a proper understanding, some adults may view young people with these challenges as "lazy," "disorganized," "impulsive," "inattentive," or "careless."

Children exposed to volatility may have a distrust of others, and this (understandable) suspicion could be misinterpreted as mere "aloofness." Without having experienced healthy interpersonal interactions, young people may have difficulty with establishing prosocial relationships marked by trust, appropriate boundaries, empathy, reciprocity, and accurate reading of other's emotions; and they can thus experience social isolation.[lxii]

Having an appreciation for the impact of adversity can help providers to move away from a blaming or deficit-based focus and instead work on developing key skills that will help these young people to succeed. Chapter 2 highlights a number of evidence-based prevention program models that enhance resilience and reduce risks for substance abuse; and it is not surprising that a common component to many of them includes helping children to develop social, emotional, and relational skills.

Data on Childhood Adversity & Substance Use

Data that is derived from different sources can serve to illuminate: (a) the extent to which adversity is associated with a heightened risk for substance use; and (b) the prevalence in substance use treatment settings of persons with significant histories of adverse experiences. While numerous studies have touched upon these issues, the examples offered below reflect research that has been done with very large sample sizes.

History of Adversity in Persons Served in Substance Abuse Treatment Settings: SAMHSA Center for Substance Abuse Treatment (CSAT) Data Sets

Substance abuse treatment programs funded through SAMHSA/CSAT are required to utilize a comprehensive assessment instrument, the Global Appraisal of Individual Needs (GAIN), and

GAIN General Victimization Scale

Has anyone ever:

a. Attacked you with a gun, knife, stick, bottle or other weapon?
b. Hurt you by striking or beating you to the point that you had bruises, cuts, or broken bones or otherwise physically abused you?
c. Pressured or forced you to participate in sexual acts against your will, including your regular sexual partner, a family member or friend?
d. Abused you emotionally; that is, did or said things to make you feel very bad about yourself or your life?
e. About how old were you the first time any of these things happened to you?

Did any of the previous things happen:

f. Several times or over a long period of time?
g. With more than one person involved in hurting you?
h. Where one or more of the people involved was a family member close family friend, professional or someone else you had trusted?
j. Where you were afraid for your life or that you might be seriously injured?
k. And result in oral, vaginal or anal sex?
m. And people you told did not believe or help you?

Are you currently worried that someone might:

n. Attack you with a gun, knife, stick, bottle or other weapon?
p. Hurt you by striking or beating or otherwise physically abuse you?
q. Pressure or force you to participate in sexual acts against your will?
r. Abuse you emotionally?

Scoring: Score is the sum of "yes" responses, plus 1 if age of first victimization is < 18. A GVS score of 1-3 = moderate severity, and 4-15 = high severity.

Source: Dennis, M.L., Titus, J.C., White, M., Unsicker, J., Hodgkins, D., 2003. Global Appraisal of Individual Needs (GAIN): Administration guide for the GAIN and related measures. V. 5 ed. Chestnut Health Systems, Bloomington, IL.

grantees collect and report data to the government on a quarterly basis. This evaluation process produces a sizable data set that is highly informative in illustrating key trends nationally among persons served in alcohol and drug treatment settings, including: outpatient; intensive outpatient; short-, moderate-, and long-term residential; corrections-based treatment; and continuing care post-treatment.

The GAIN includes a General Victimization Scale (GVS) that covers abusive events, certain contextual factors related to the abuse, and current fears of victimization. The shaded box to the left shows the items included on this 15-point scale.[lxiii]

Additionally, there are several other items included within the GAIN that touch upon broader areas of adversity that one might experience (e.g., homelessness; family behavioral health problems; and sources of stress.) This data serves to illuminate the constellation of challenges that young people in substance abuse treatment settings are facing in their lives.

The 2012 SAMHSA/CSAT data set reporting on the GAIN findings included information on 32,476 clients derived from information from 224 local grantee agencies. Selected findings are highlighted below:

- There were over 19,000 adolescents and transition-age youth (up to age 25) included in the data set. Among this subset:[lxiv1]
  - 34% had a past history of homelessness or running away;
  - 49% of the adolescent-age respondents were from single-parent homes;
  - 61% had moderate or high levels of severity on the General Victimization Scale;
  - 65% reported moderate to high levels of stress, with sources of stress including items such as: poor housing; insecure job/housing/transportation; death of someone close; major life changes; discrimination; witnessing something disturbing; etc.
  - Within the home environment, 25% reported weekly family problems within the past 90 days.
  - Regarding family history:
    - 66% had family problems with alcohol;
    - 57% had family problems with drug use; and
    - 39% had psychological problems among family members.
  - Additionally, 81% reported age of first use as being prior to age 15, highlighting the tremendous importance of early prevention efforts.

- Within the full data set across all age groups, 64% had moderate or high lifetime severity of victimization scores (45.3% high and 19% moderate) based on the General Victimization Scale. When crossing the victimization rating with other factors, it was found that individuals with *high severity* of victimization:
  - Had more severe substance problems: 58% had past-year dependence, compared to 32% for persons with low victimization severity; and
  - Had more co-occurring mental health problems: close to 80%, versus only 40% of persons with low victimization severity.

Collectively, the information from this data set reflects a notable pattern among substance abuse treatment recipients of: (a) high rates, and multiple types, of stressors and adversity; (b) family/household problems which are commonplace; and (c) enhanced levels of clinical problems associated with more severe victimization.

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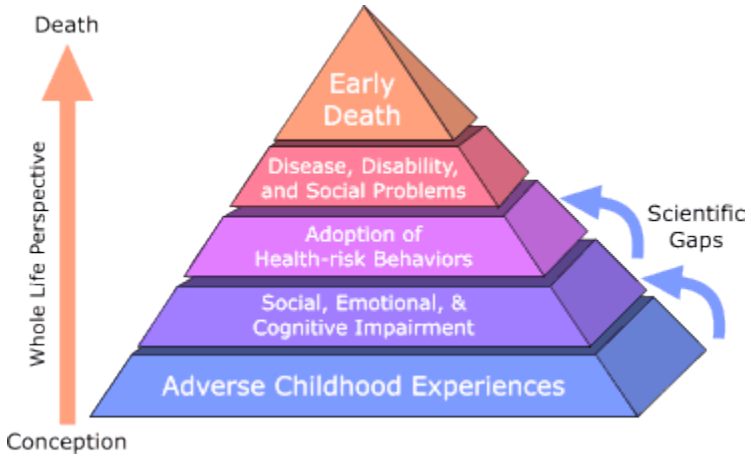
[1] Note: The total *n* for each category of data from which the percentages are presented varies somewhat depending on the number of responses collected/reported. Individuals interested in the precise *n* for each item can pull up the summary research data at www.gaincc.org/slides .

The Adverse Childhood Experiences (ACE) Study

A landmark research effort that has had a tremendous impact on the field's understanding of the prevalence and cumulative impact of adversity in childhood is the ACE Study. The Centers for Disease Control and Prevention (CDC) and the Preventative Medicine Department of the Kaiser Health Plan in San Diego County undertook this large-scale endeavor to explore the connection between adverse experiences in childhood and adult health and well-being. The initiative began in the mid 1990's, and 17,337 adults in the Health Maintenance Organization (HMO) who agreed to participate in the study completed a confidential survey that contained questions about adversity that they had experienced in childhood, as well as items detailing their current health status and behaviors. This information was combined with results from their physical examination to establish the baseline data for the study, and the medical status of the participants continued to be tracked. The conceptual framework on which the study was predicated is represented in the diagram below:

The ACE Pyramid[lxv]



Demographically, participants represented an insured, middle class population that was 74.8% white. More than a third, 39.3%, possessed a college degree or higher, and another 35.9% had at least some college education. Because the individuals surveyed ranged in age from young adulthood to senior citizens, several birth cohorts were included in the study. [lxvi]

The questions related to adversity covered a range of areas, including:

- Child Abuse: Physical, sexual, and emotional;
- Child Neglect: Physical and emotional; and
- Household dysfunction: Related to a household member with mental illness, substance abuse, or incarceration; violence towards one's mother; and parental separation/divorce.

Counting the number of different types of detrimental events or circumstances a person had experienced, participants were given an "ACE score" based on one point per category. The researchers noted several key findings, including:

- **A history of adversity is common.** Nearly 64% of respondents reported at least 1 ACE, and approximately a fifth had at least 3. One in 8 participants (12.5%) had experienced *four or more.* [lxvii]

- **Different types of adversity are inter-related.** The presence of an ACE increased the likelihood of additional ACEs. For example, for a person who had witnessed their mother being battered, there was an 82% chance that *at least two other* ACES were also present. For persons with a history of emotional abuse, there was a 77% chance of *3 or more additional ACEs*. [lxviii]

- **There is a graded relationship between the number of adversity types that one has experienced and the presence of a wide variety of health and social problems.** The ACE Score is used to gage the amount of stress during childhood, and the investigators found that—as the number of ACEs increased—so, too, did the risk for a wide range of problems that negatively impact health and well-being, including: mental health and substance use problems; heart, liver, and lung disease; HIV and other sexually transmitted diseases; and injuries. [lxix] This finding is significant because it highlights the idea that: (a) multiple stressors can present a cumulative burden on one's development and functioning, as discussed earlier with regard to "toxic stress;" and (b) adversity serves as a common risk factor for a broad spectrum of health and social problems. [lxx]

Specific to alcohol, tobacco, and illicit drug use, the ACE study presented the following findings:

Alcohol:

- Among ever-drinkers in the study[lxxi]:
  - Initiating alcohol use by age 14 was increased two to three-fold by individual ACEs; and
  - ACEs contributed to a 20-70% increased likelihood of alcohol initiation during mid-adolescence (age 15-17).
- Respondents with multiple ACEs in childhood—compared to those with none—had a two-fold to four-fold increased risk as adults for heavy drinking, self-reported alcoholism, and marrying an alcoholic, regardless of parental alcoholism.[lxxii]
- Of study participants with an ACE score ≥4, 16.1% asserted that they currently consider themselves to be alcoholics, versus only 2.9% of respondents with an ACE score of 0.[lxxiii]

- The researchers noted that: "The persistent graded relationship between the ACE score and initiation of alcohol use by age 14 for four successive birth cohorts dating back to 1900 suggests that the stressful effects of ACEs transcend secular changes, including the increased availability of alcohol, alcohol advertising, and the recent campaigns and health education programs to prevent alcohol use."[lxxiv]

Tobacco[lxxv]

- There was a graded relationship between the number of ACEs and smoking behavior in participants, in areas including: early use of tobacco (by age 14); ever smoked; current smoker; and heavy smoker.
- Among individuals with an ACE score ≥5, 21.1% had early initiation of smoking, compared to only 5.5% of those with an ACE score of 0.

Illicit Drug Use[lxxvi]

- There was a strong graded relationship between one's ACE score and: initiation of drug use in all 3 age categories of inquiry (i.e., ≤14; 15-18; and ≥19); drug use problems; drug addiction; and intravenous drug use.
- Each type of adversity increased the likelihood of early initiation (by age 14) by two- to four-fold.
- Respondents with an ACE score of at least 5 were seven to ten times more likely to report drug use problems, addiction, and intravenous drug use than were persons with an ACE score of 0.

We have highlighted substance use related findings, but as noted earlier, there was also a strong graded relationship between ACE exposure and a wide range of somatic and mental health problems, as well. The magnitude of the findings from this study were so notable that it has galvanized diverse child and family serving sectors to pay greater heed to the effects of adversity and the importance of creating safer environments for our children. As ACE study co-principle investigator Vincent Felitti, MD commented, "These are numbers that an epidemiologist sees once in a life time, once in a career."[lxxvii] For preventionists, this study illuminates the value of coordinated efforts to reduce a common risk factor (adversity) in order to reap benefits across a wide range of domains.

Additional Examples of Key Research Findings

Other large-scale studies have similarly produced findings of elevated rates of substance use problems among persons with histories of childhood adversity. For example:

- The National Survey of Child and Adolescent Well-Being (NSCAW) found that more than a third of those adolescents with a report of abuse or neglect had a substance use problem, three times as likely as those without a report of abuse or neglect.[lxxviii]

- Researchers found that in a large representative sample of young people (n=12,748) from the National Longitudinal Study of Adolescent Health, youth who had experienced multiple types of maltreatment were 1.8 times as likely to report binge drinking behavior.[lxxix]

- Comparing a sample of individuals with known child abuse who had been removed from their home with a control sample revealed that the maltreated children had rates of alcohol use that were 7 times those of controls and, on average, they began to drink two years earlier.[lxxx] Of course, early age of onset predicts later alcohol dependence problems.

- Other research derived from the Adolescent Heath Survey confirms the relationships between childhood adversity and early onset of drinking and binge drinking.[lxxxi]

- Longitudinal research based on data from the Johns Hopkins Perinatal Study, in combination with the Pathway to Adulthood Study, National Survey of Drug Abuse, and adult reporting on the Conflict Tactics Scale, demonstrated a heightened life-time risk of substance use for children from abusive family environments in areas including: drug cravings & dependence; drug dealing; earlier initiation of drug use; and increased medical and functional impairments.[lxxxii]

Summary of Key Points

- There are several kinds of adversity that can deleteriously impact the behavioral health of young people, including: child maltreatment; various types of household disruption and dysfunction; exposure to school and community violence; and negative social determinants such as poverty, inequality, and discrimination.

- Exposure to adverse events and circumstances is a prevalent problem among America's children.

- These adverse events, along with other key features of individuals and the environments in which they live, can become biologically embedded and have a long term effect on human development.

- Dysregulation of the response to stress that can occur as a result of detrimental experiences can: (a) facilitate drug seeking; (b) sensitize individuals' responses to drugs of abuse; and (c) complicate withdrawal, supporting ongoing addiction.

- Screening for adverse events and identification of familial risk factors should be core elements of prevention and treatment strategies.

- Self-regulation, executive function, and relational skills can all be impaired as a result of toxic stress. An awareness of this phenomenon can help child-serving professionals to better understand affected children's behaviors, as well as the need to foster healthier coping strategies and to strengthen social, emotional, and relational abilities.

- A significant percentage of persons in substance abuse treatment settings have histories of victimization, family/household problem behavior, and other notable stressors. Additionally, among persons in treatment, higher rates of victimization are associated with more severe substance abuse and co-occurring mental health problems.

- Exposure to a greater number of different categories of childhood adversity is linked to a heightened risk for the use of tobacco, alcohol, and illicit drugs, as well as the risk for an early onset of use by age 14.

- Adversity serves as a common risk factor for multiple negative outcomes, highlighting the benefit of efforts across diverse sectors and settings to prevent its occurrence and/or buffer its effects.

- Because many forms of child misfortune are preventable, and because the presence of protective factors can serve to mitigate the impact of adversity that does occur, there are tremendous possibilities to improve child outcomes through various preventive strategies, as will be outlined in subsequent chapters.

Additional Resources:

Below is a listing of user-friendly resources for readers with an interest in learning more about certain issues broached in this chapter.

- *Child Welfare Information Gateway:* Funded through the Administration for Children and Families, this on-line resource contains a wide range of information related to child abuse and neglect, including strategies to protect children and strengthen families, as well as materials related to foster care and adoption. The website is: https://www.childwelfare.gov/

- *The National Center for Children in Poverty (NCCP):* Operated out of the Mailman School of Public Health at Columbia University, NCCP is a nonpartisan, public interest research organization that focuses on: family economic security; strong, nurturing families; and healthy child development. The website contains a variety of publications and informational resources on this topic. Please see: http://www.nccp.org/

- *The Harvard Center for the Developing Child:* This center is dedicated to advancing the understanding and use of science-based approaches to improve outcomes for children. The website contains a variety of informational resources on child brain development, the neurobiological impact of toxic stress, and the benefits of reducing child adversity. Please see: http://developingchild.harvard.edu/

- *Zero to Three:* This national non-profit organization is dedicated to promoting a sound early start in life and contains informational resources for diverse audiences on fostering healthy development and nurturing environments for infants and toddlers. Please see: http://www.zerotothree.org/

- *The National Child Traumatic Stress Network (NCTSN):* This SAMHSA-funded initiative was established by congress in 2000 to raise the standard of care and improve access to services for traumatized children, their families, and communities throughout the country. In addition to funding a network of grant sites, NCTSN also provides a number of on-line resources that are designed to inform diverse national audiences about child trauma, its impact, and strategies for addressing this public health problem. To learn more, please go to: http://www.nctsnet.org/

- *Adverse Childhood Experiences Study:* The Center for Disease Control and Prevention (CDC) maintains information on its website about the ACE study, including methodology, findings, and a list of journal publications (by health outcome) that have been generated from the study. Please see: http://www.cdc.gov/ace/index.htm

- *Summary Analytic SAMHSA-CSAT Data Sets:* The GAIN (Global Appraisal of Individual Need) Coordinating Center maintains information on its website about the most recent

annual data briefing summary for the CSAT data set. To learn more, please see: http://www.gaincc.org/psychometrics-publications/samhsacsat-annual-briefing-book-slides/

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Chapter 2: Evidence Based Programs

Purpose of this Chapter

The first Chapter of this guidebook provided a framework for understanding different types of childhood adversity, their detrimental impact on healthy development, and the extent to which such peril heighten risks for a number of negative outcomes, including substance use. This Chapter explores a sampling of evidence-based prevention programs that can help to reduce risks for substance use problems in young people. The examples provided were selected for inclusion because they: (a) prevent or reduce certain types of adversity and toxic stress; and/or (b) enhance protective factors that are particularly important for young people who have been exposed to detrimental circumstances. An initial discussion is offered to clarify the levels of prevention referenced in the Chapter, as well as the diverse settings in which such activities may be executed.

Overview of Prevention Categories and Approaches

There are different ways to categorize preventive measures. A commonly-utilized framework within public health relates to the goals of a practice according to "stages of disease," with a continuum across primary, secondary, and tertiary prevention whereby[i]:

- **Primary** prevention consists of those activities that take place *prior* to the onset of a disorder. It is predicated on the identification of modifiable risk and protective factors, with strategies to minimize the former and enhance the latter. Primary prevention efforts may be further delineated by the level of risk of the targeted population, as discussed in more detail below;
- **Secondary** prevention aims to reduce the duration or progression of a disorder, typically through screening, early identification and referral to treatment; and
- **Tertiary** prevention focuses on minimizing the impact of an illness on functioning, and helping to prevent or delay further complications.

The principle objective of this document is to highlight opportunities for the ***primary*** prevention of substance use problems in young people by addressing risks associated with exposure to adversity. At the same time, prevention and treatment are part of an integrated public health response to behavioral health conditions. *Technical Appendix A* is provided as an informational reference to provide a succinct overview of instruments that screen for trauma and its impact that can be used for both epidemiological and treatment purposes.

Primary Prevention: Universal, Selected, and Indicated Levels

In its seminal 2009 report on *Preventing Mental, Emotional, and Behavioral Health Disorders among Young People*, the Institute of Medicine (IOM) strongly emphasized the tremendous

opportunities that exist to improve child wellbeing via prevention activities that take place prior to the onset of a disorder. Three levels of primary prevention were delineated, based upon the degree of risk of the population being served:[ii]

- *Universal* prevention programs are those that are targeted to a general population, without regard to risk levels of the individuals included;
- *Selective* interventions are those that are provided to a particular group because one or more factors increase the vulnerability of those individuals to certain negative outcomes; and
- *Indicated* prevention efforts are those that are targeted to persons exhibiting problems, but not yet reaching the diagnostic level of a disorder.

The evidence-based practices that are presented later in this Chapter include models at all three levels, reflecting opportunities to positively impact the lives of children at varying degrees of current risk. It is worth noting that there may be certain elements of some of the indicated prevention models that perhaps straddle into the realm of treatment. However, as SAMHSA observes its *Description of a Good and Modern Addictions and Mental Health Service System,* such a system ideally would be comprised of a seamless continuum of care across the prevention, treatment, and recovery spectrum,[iii] and, in this context, the boundaries between treatment and prevention may appropriately be blurred.

A Developmental, Ecological Approach

Young people are exposed to different forms of risks—and can benefit from varying types of protective elements—at different times and across the diverse domains of their lives. For this reason, practices to prevent behavioral health problems and promote emotional well-being tend to be focused on particular developmental phases.[iv] Examples are thus offered in this Chapter for models that span a prenatal/infancy stage, all the way through late adolescence.

Similarly, such activities can target children and youth in differing ecological settings, such as the individual, family, school, community, and societal levels. Ideally, within a given community, there would be a tapestry of services and supports that can mitigate adversity and enhance the well-being of young people at their various life stages and spanning the array of settings in which they live, grow, learn, and play. Fortunately, research over the past few decades has yielded evidence of a variety of effective models administered in a range of environments including: homes, child care, early education centers, classrooms, afterschool programs, and various community settings. [v]

Risk and Protective Factors

The cornerstone of prevention programming entails the identification of modifiable *risks*—elements that increase the likelihood of a negative outcome—and *protective factors*, which

buffer the impact of those risks and help to foster more positive outcomes in the face of adversity.

The Federal Administration for Children, Youth, and Families (ACYF) sponsored a review of protective factors that are of particular importance to the children that they serve: homeless and runaway youth; children exposed to domestic violence; victims of child abuse and neglect; youth engaged with the foster care system; and pregnant and parenting youth. For this group of young people experiencing various types of adversity, the research yielded 10 protective factors with especially strong evidence for enhancing resilience and promoting healthier outcomes: [vi]

- **Individual Level:** Self-regulation skills, relational skills, problem-solving skills, and involvement in positive activities
- **Relational Level:** Parenting competencies, positive peers, and caring adults
- **Community Level:** Positive community environment, positive school environment, and economic opportunities

Because adversity in early childhood can impede the development of executive function as discussed in Chapter 1, it is not surprising that self-regulation and problem-solving skills surface as two particularly important protective factors for these young people.

Research has also shown that there is a constellation of risk and protective factors that can influence substance use in young people across diverse domains. The chart below provides a snapshot of some of these elements, many of which also address childhood adversity.[vii,viii,ix,x]

Domain	Risks	Protection
Individual	• Poor impulse control • Poor executive function • Favorable attitudes towards drug use and anti-social behavior	• Good self-regulation • Strong social competency and interpersonal skills • Coping and problem-solving skills • Ability to resist negative social influence
Family	• Family conflict/violence • Poor family management • Child maltreatment • Use of harsh or inconsistent discipline • Parental engagement in (and/or attitudes favorable towards) substance use or anti-social behavior • Lack of parental involvement	• Responsive caregiving • Reinforcing interactions • Caregiver/child bonding; secure attachment • Stable structures and consistent, positive norms • Consistent, non-harsh discipline • Positive family communication • Positive linkage between caregivers and schools

	and monitoring • Family poverty, relative deprivation, & inequality • Parental rejection	• Involved monitoring
School	• Negative school climate • Bullying • Punitive, non-supportive environment • Low commitment to school • Academic failure	• Opportunities and rewards for pro-social involvement • Resources for high-quality education and programming • Pro-social norms • High engagement with school community • Academic success • Interactive teaching, cooperative learning, & positive classroom management • Positive after-school opportunities
Community	• Community disorganization • Impoverishment • Unsafe environments • Community norms that are favorable towards substance use and anti-social activity	• Opportunities and rewards for pro-social involvement • The presence of mentors and caring adults • Physical and psychological safety • Strong social cohesion • Laws & norms favorable towards responsible behavior

With an interest in preventing the occurrence of adversity, it is important to consider what the research reveals about protective factors that help to buffer against risks for child maltreatment. The Center for the Study of Social Policy (CSSP) has developed a research-based Strengthening Families model of protection that includes five key protective factors against abuse: **parental resilience**, **social connections**, **concrete support in times of need**, **knowledge of parenting and child development,** and **social and emotional competence of children**.[xi] The Administration for Children and Families (ACF) advocates for a protective factors approach to preventing maltreatment and uses the 5 items in the Strengthening Families model, with one additional item: "**nurturing and attachment**," emphasizing the importance of secure emotional bonding between child and parent, and parent utilization of nurturing, caregiving practices. [xii]

Examples of Evidence-Based Program Models

The evidence based practices (EBP's) identified below contain elements that relate to either preventing/reducing adversity and toxic stress, and/or enhancing protective factors that

support resilience and healthy functioning. This listing is not intended to be an exhaustive compilation of all such EBP's, but rather it offers examples of several programs that meet this criteria while *also* producing outcomes related to a reduction in substance use. Examples are offered for programs that emphasize the following: reducing family conflict; fostering positive school environments; creating connections to caring adults; supporting children in out-of-home placement & their caregivers/families; promoting self-regulation & social/emotional skills; enhancing resilience for children with divorcing parents; supporting children and families in high-risk communities; and providing intensive early childhood education for children in poverty. Additionally, examples are offered of models to help parents with substance use problems to develop positive family management.

Preventing/Reducing Family Conflict and Enhancing Family Functioning

The programs listed under this heading include activities to reduce family conflict and improve positive family functioning. Some of these models are specifically family-based, while others are broader-level programs that also include a family strengthening component.

Nurse Family Partnership (NFP)

Brief Description: This program is designed for low-income women who are pregnant with their first child in order to generate positive outcomes for both mother and baby by emphasizing: good prenatal care; positive parenting that fosters healthy infant development; and improving opportunities for the mother. A nurse will begin visiting the home during pregnancy and continue until the child's second birthday. These 60 to 90 minute visits occur approximately every other week and involve: parent education on fetal/infant development with an emphasis on responsive, engaged caregiving; involving family, friends, and other sources of positive support for the mother in the pregnancy and early care of the child; and linking the mother and other family members with various types of health and social support based on need.

Risk and Protective Factors Addressed: Some factors addressed via NFP include[xiii]:

- *Risks:* neglectful parenting; family conflict/violence; low socio-economic status; lack of prenatal care; poor family management; and violent discipline
- *Protection:* fostering child/parent attachment; opportunities for pro-social parent/child engagement; and non-violent discipline

Outcomes: NFP has been evaluated extensively, including longitudinal follow-up studies on the well-being of mothers and children who received the program. Compared to control groups, NFP participants had:[xiv,xv,xvi]

- Reduced incidents of child maltreatment
- Fewer emergency room visits
- More responsive interaction between mother and child
- Better emotional health and school-readiness of the children at age 6

- Reduced use of substances and mental health problems at age 12
- Reduced risk of arrest, cigarette use, and alcohol consumption of children at age 15
- Better economic stability of the household, with higher levels of employment and less dependence on welfare

Level of Prevention: Selected

To Obtain More Information:

Nurse-Family Partnership National Service Office
Direct phone: 303-327-4240
Toll free: 866-864-5226
email: info@nursefamilypartnership.org
www.nursefamilypartnership.org/

Positive Action

Brief Description: This is a multi-faceted program that includes materials for schools, families, and community agencies based on a unifying concept that people feel good when they are taking positive actions in the physical, intellectual, social, and emotional areas of one's life. There is an array of informational kits that can be used alone, or in combination, in a cross-reinforcing manner. The family component is designed to improve family cohesion and parent-child bonding, and the overall program improves school success and reduces problem behaviors including violence and substance use. Program components have been used across diverse settings and contexts, with young people from kindergarten through high-school.[xvii]

Risk and Protective Factors: Among other factors, this program addresses:

- *Risks:* favorable attitudes towards anti-social behavior; lack of a positive connection to school; and family conflict
- *Protection:* pro-social behavior; skills to enable pro-social involvement; problem solving skills; family cohesion; and parent/child bonding

Outcomes: Examples of outcomes include:

- Improved family cohesion and parent-child bonding and reduced family conflict.[xviii]
- Reduced use of alcohol and drugs[xix]
- Improved academic performance[xx]

Level of Prevention: Activities at universal, selected, and indicated levels

For Additional Information:

Please refer to:

Carol Gerber Allred (program developer)
264 4th Avenue
Twin Falls, Idaho 83303-2347
(800) 345-2974
www.positiveaction.net

Guiding Good Choices

Brief Description: The program provides family skills-training for parents and their middle-school aged children based on a social development model to enhance positive parent-child interactions and to reduce risks for early substance use initiation. It consists of 5 interactive sessions (with skill-building exercises, video scenarios, guides for family activities, etc.) designed to strengthen family bonds, reduce family conflict, and present strategies to the youth for resisting drug and alcohol use.[xxi]

Risk and Protective Factors: Among other factors, this program model addresses:

- *Risks:* family conflict/violence; neglectful parenting; parent aggravation; and attitudes favorable towards anti-social behavior
- *Protection:* attachment to parents; opportunities for pro-social child/parent interaction; youth social skills and drug refusal skills development

Outcomes: Examples of outcomes for intervention group versus control group include:

- Improved parenting skills and positive parent-child relationships[xxii,xxiii]
- Reductions in alcohol, marijuana, and poly-substance use at 3.5 years post-intervention[xxiv,xxv]

Level of Prevention: Universal

For Additional Information:

Guiding Good Choices
Channing Bete Company, Inc.
Phone: (800) 477-4776
Email: custsvcs@channing-bete.com
Website: www.channing-bete.com/prevention-programs/guiding-good-choices

Strengthening Families Program: For Parents and Youth 10-14

Brief Description: This program is designed to enhance family resiliency processes in order to prevent substance use and other problem behaviors in middle school aged adolescents. It is a seven-session program that is held weekly for two hours. There are separate skill-building

break-out sessions for the parents and for the children, followed by a family session to practice those skills and work on positive family communication and interaction. Parents are taught about appropriate discipline and effective communication; children are taught personal and social interaction skills and strategies for dealing with peer pressure. The program is structured to include an average of eight-families within the sessions.

Risk and Protective Factors: Among other factors, this program model addresses:[xxvi]

- *Risks:* Family conflict; parental and child attitudes favorable toward drug use; poor family management; neglectful parenting
- *Protection:* opportunities for pro-social child/parent engagement; support for parents; increased attachment; non-violent discipline; child social skills and drug refusal skills.

Outcomes: Program participants, as compared to a control group, showed:

- An improvement in parenting behaviors targeted by the intervention, which positively impacted parent-child affective quality and overall child management at the one year follow-up.[xxvii,xxviii]
- Lower levels of initiation of substance use, 4 years post intervention. Contrasting participants in the program with non-participants: [xxix]
    - 26.4% fewer youth tried alcohol; 40.1% fewer had ever been drunk
    - 55.4% relative reduction in marijuana use
    - 34.8% fewer youth had tried cigarettes

Level of Prevention: Universal

Cost/Benefits: Researchers estimate a long-term benefit-cost ratio for the program to be 9.60 (i.e., $9.60 saved for every dollar invested).[xxx,xxxi]

For Additional Information:

Cathy Hockaday, Ph.D.
Iowa State University
Phone: (515) 294-7601
Email: hockaday@iastate.edu
Website: www.extension.iastate.edu/sfp

Positive Family Support-Family Check-Up

Brief Description: This model, developed by Tom Dishion, PhD at the University of Oregon, is a three-tiered program coordinated via middle school settings. The first level (universal) consists of a Family Resource Center run by a trained parent consultant that provides a structured

setting for school personnel and parents to work together. Content areas include positive parenting behaviors and pro-social family management, with weekly homework assignments designed to help the parent and child interact in ways that reinforce healthy family management techniques. At the second level (selected), called Family Check-Up, an interview and assessment session is offered to gage family-child interactions and motivate parents to engage in supportive services. Finally, the Family Intervention Menu (indicated level) addresses specific problem areas through an array of services designed to promote positive family functioning, communication, and problem-solving skills.[xxxii]

Risk and Protective Factors: Among other factors, this program model addresses:

- *Risks*: family conflict/violence; poor family management; child and family attitudes favorable toward anti-social behavior
- *Protection:* youth attachment to parents; opportunities for pro-social activity between child and parents; problem-solving skills

Outcomes: Examples of outcomes for participants, as compared to youth in control groups:

- Increases in youth self-regulation[xxxiii]
- Reductions in youth substance abuse by 9th grade[xxxiv]
- Reduced parent/child conflict through adolescence, and reductions in youth anti-social behavior by age 18.[xxxv,xxxvi]

Level of Prevention: Universal, selected, and indicated in a three-tiered model

For Additional Information:

Kevin Moore, Ph.D.
Child and Family Center at the University of Oregon
195 West 12th Avenue
Eugene, OR 97401-3408
Phone: (541) 346-4805
Kmoore2@uoregon.edu

Or see Blueprints description at:
http://www.blueprintsprograms.com/factSheet.php?pid=b16a457a3302d7c1f4563df2ffc96dccf3779af7

Related Resource: In 2012, the National Institute for Drug Abuse (NIDA) launched an on-line resource, "Family CheckUp: Positive Parenting Prevents Drug Abuse," that was also developed by the University of Oregon Child and Family Center. It includes information and sample videos that highlight parenting skills that are important for reducing risks for initiation/progression of substance use. It is available on-line at: http://www.drugabuse.gov/family-checkup

Creating a Positive School Climate

Several of the models listed earlier include school-based elements. The program below is an additional school-setting example which is specifically framed around the premise of creating a healthy and nurturing educational environment:

Caring School Community (CSC)

Brief Description: This elementary school (K-6) program is designed to promote positive youth development by creating a kind and supportive school environment to meet students' needs for emotional and physical safety, caring relationships, autonomy, and a sense of competence. The four components of the program are implemented over the course of the school year and include: (a) a forum for students and teachers to get to know one another and discuss issues that impact classroom climate; (b) the building of positive, cross-age relationships in the school; (c) activities to support communication at home and make connections between school learning and home experiences and perspectives; and (d) broad-based community-building activities to support positive connections between students, parents, teachers, and other school staff. Ideally, the program is implemented school-wide.[xxxvii]

Outcomes: Examples of outcomes for students in program schools versus non-program comparison schools include:

- Lower rates of self-reported alcohol and marijuana use[xxxviii]
- Reductions in disciplinary referrals[xxxix]
- Improvements in academic performance[xl]

Level of Prevention: Universal

For Additional Information:

Developmental Studies Center
http://www.devstu.org/caring-school-community

Reducing Risks Associated with Parent Divorce

Divorce can create stress for both parents and children. The program below is designed to enhance child coping and positive parent/child interaction.

New Beginnings: Intervention for Children of Divorce

Brief Description: The program is a group-based intervention for divorced mothers and their children (from elementary to high school age) that consists of 10 two-hour group sessions, as well as 2 individual sessions. The group sessions are designed to focus on those areas that

impact post-divorce adjustment on the part of the child, including: child coping strategies; positive mother-child relationship quality; reducing child exposure to parental conflict; and removing unnecessary barriers to contact between the child and non-custodial parent. Sessions are held in community-based settings and are led by two masters-level practitioners. Program skills are taught through presentations, role-playing, and videotapes.

Risk and Protective Factors: Among other factors, this program model addresses:

- *Risks:* Family transitions; parent stress; neglectful parenting; and family conflict
- *Protection:* Child problem solving skills; child/parent attachment; parent support; and opportunities for pro-social parent/child engagement

Outcomes: Examples of outcomes for participants as compared to the control group include:

- At six years post-intervention, youth in the program had lower rates of alcohol, marijuana, and poly-substance abuse[xli]
- Reduced levels of aggression and externalizing behaviors[xlii]

Level of Prevention: Selected

For Additional Information:

Sharlene Wolchik, PhD (program developer)
Prevention Research Center
Arizona State University
sharlene.wolchik@asu.edu

Enhancing Resilience within a Framework of Fostering Cultural Pride

Experiences of exclusion and discrimination are social determinants that have a negative impact on health and well-being. [xliii] Below are a couple of examples of programs designed to foster youth resilience within a broader context of developing pride in one's racial/cultural heritage.

Strong African American Families (SAAF)

Brief Description: The SAAF program is for African American families with children age 10-14. Participants meet weekly in a community-based setting for a two hour period over a seven-week period. During the first hour, youth and parents are in separate groups. Skill building for youth includes: setting positive goals; resisting engagement in high-risk behavior; understanding parent perspectives; and adaptive responses to experiences of racism. Parent sessions focus on: healthy communication with their children; monitoring child activity; and helping their children to develop adaptive responses to experiences of racism. The joint family

sessions include a focus on positive family interaction, improving communication, and celebration of cultural heritage and pride.

Risk and Protective Factors include:[xliv]

- *Risks:* positive attitudes towards substance use, parent stress, economic disadvantage, family conflict, racism
- *Protection:* problem-solving skills; clear standards for behavior; opportunities for pro-social parent/child engagement; parent support

Outcomes: Compared to the control group, Program participants demonstrated:[xlv]

- Reduced alcohol use
- Improved substance use resistance skills and future-oriented goals
- More positive parent/child communication

Level of Prevention: Universal

For More Information:

Center for Family Research, University of Georgia
Website: http://www.cfr.uga.edu/saaf1

Storytelling for Empowerment

Brief Description: This school-based model is designed to enhance sound decision-making, positive cultural identity, and goal setting for teens living in extremely impoverished communities with a high availability of ATOD. Although primarily targeted to Latino/a youth, there have been adaptations done with African American and Native American youth, as well. Bilingual activity books are structured to help youth learn about: multicultural historical figures and role models; skills for making informed decisions; and information about risks associated with ATOD. There are also storybooks that help to facilitate dialogues between parents and youth.

Outcomes: Among other outcomes, program participants demonstrated:

- An increased perception of risk about ATOD use[xlvi]
- A decrease in alcohol use, at one year follow-up[xlvii]

Level of Prevention: Selective

For Additional Information:

Annabelle Nelson, PhD
Email: annabelle@wheelcouncil.org

Phone: 928-214-0120
Website: http://www.wheelcouncil.org/

Support for Caregivers and Children in Out of Home Placement

Children involved in child welfare or other systems that entail out-of-home placement can experience significant disruption and uncertainty. The programs below are examples of models to enhance protective factors for such youth while also producing outcomes in reducing substance use.

KEEP Safe (Middle School Success)

Brief Description: The program is designed for children in foster care to begin during the summer prior to the time that the child enters middle school. There are two parallel tracks, each comprised of 6 group-based sessions, one for children and the other for foster parents. The groups are fairly small (roughly 7 people per group), and they meet twice weekly for 3 weeks. The youth sessions focus on: improving problem-solving and decision-making skills, setting goals, creating positive relationships with adults and peers, and developing confidence. The groups for the foster parents are structured to help maintain stability in the home and develop appropriate behavioral reinforcement techniques. Ongoing training and support are given to the foster parents and youth two hours a week during the first year of middle school.[xlviii]

Risk and Protective Factors include, among others:[xlix]

- *Risks:* Family conflict; poor family management; association with anti-social peers
- *Protection:* problem solving skills; opportunities and rewards for pro-social engagement with caregivers; social skills development

Outcomes: A research trial was conducted on girls receiving the program. Compared to the control group, the girls in the program demonstrated:

- Increase in pro-social behavior and decrease in substance use at 36-months post-baseline.[l]
- Increase in placement stability.[li]

Level of Prevention: Selective

For Additional Information:

Patricia Chamberlain of the Oregon Social Learning Center in Eugene, OR has worked on the development of this model and several others to enhance the well-being of young people in

foster care placement. To learn more about this work, please see: http://www.oslc.org/scientists/popups-scientist/chamberlain-pat.html

Multi-Dimensional Treatment Foster Care (MTFC)

Brief Description: In the MTFC model, youth are placed for 6-9 months with families in the community who have received extensive training and supervision. Interventions are provided in the MTFC family setting, as well as with the child's biological/aftercare family, in order to facilitate the youth's success in the community. Aftercare support is provided for up to a year following the youth's return to the biological/aftercare family. Emphasis is placed on: providing a consistent reinforcing environment; offering caring adult mentorship; developing academic skills; enhancing positive interpersonal and social skills; offering clear expectations and supervision; and providing opportunities for pro-social peer engagement.[lii] MTFC was originally developed for adolescents leaving psychiatric facilities and for those with chronic delinquency problems, as an alternative to a group home or other type of more institutional based setting. There have since been adaptations for pre-school-age children in the child welfare system (MTFC-P), and for other children in the traditional foster care system.

Risk and Protective Factors include:[liii]

- *Risks:* Aggressive behavior; poor family management; attitudes favorable towards anti-social norms
- *Protection:* problem solving skills, skills for social interaction, opportunities and rewards for prosocial engagement, attachment to caregivers, opportunities for prosocial engagement with caregivers

Outcomes include:

- In a study with 12-17 year old males, MTFC participants in contrast to the comparison group: [liv]
  - Spent 60% fewer days incarcerated during the year after referral
  - Had lower rates of self-reported tobacco, marijuana, and other drug use at the 18-month follow-up
- In a study with 13-17 year old girls, MTFC participants in contrast to the comparison group had better school attendance and homework completion [lv]
- A study of young adult women with former juvenile justice (JJ) involvement who had participated in MTFC as adolescents had lower rates of current drug use compared to the control group that had received "treatment as usual" in the JJ system.[lvi]

Level of Prevention: Indicated

For More Information:

Please see: http://www.mtfc.com/

Additional Examples of Models to Enhance Self-Regulation & Social/Emotional Skills

Several of the models summarized above include elements designed to enhance a child's self-control, problem-solving abilities, emotional regulation, and social, relational, and emotional skills. Below are some additional program examples that specifically focus on fostering resilience in one or more of these areas.

Curriculum-Based Support Group Program (CBSG)

Brief Description: This program is a support group model designed to enhance resiliency in young people ages 4-17 who are at an elevated risk for substance use, violence, and other negative outcomes due to various adverse circumstances (e.g., highly chaotic home settings, family conflict, environment that supports anti-social attitudes/behavior, etc.). CBSG provides participants with social and emotional support and teaches life skills to promote: coping strategies; healthy choices; anger management; positive goal setting; and skills to resist peer pressure. The intervention includes hour-long, topic-specific support group sessions that are provided weekly for 10-12 weeks, with 6-10 participants per group who are in the same age range. The program has been implemented in different types of settings (e.g., schools, shelters, community based organizations, etc.)

Risk and Protective Factors:

- *Risks:* child challenges with coping due to multiple stressors (e.g., chaotic household dynamics, family conflict, etc.); anti-social attitudes
- *Protection:* emotional support; opportunities to improve coping abilities, self-concept, anger management, and social skills

Outcomes: Program participants demonstrated[lvii,lviii,lix]

- Decrease in anti-social attitudes
- Increase in anti-substance abuse attitudes
- Reduction in inhalant use
- Improved coping and social skills

Level of Prevention: Selective and Indicated

For Additional Information:

Cathey Brown, M.Ed. (Developer)
Rainbow Days
214.887.0726
www.rdikids.org

LifeSkills Training (LST)

Brief Description: LST is a 3 year school-based program for middle-school students (15 sessions in the first year, and then 10 and 5 sessions respectively for the following two years.) Through the use of interactive teaching techniques, youth are guided in developing: (a) Self-Management Skills (making sound decisions, solving problems, reducing stress, considering consequences to behavior); (b) Social Skills (communicating effectively, interacting positively, displaying appropriate assertiveness); and (c) Resistance Skills (learning to identify and challenge common misconceptions about substance use).[lx]

Risk & Protective Factors include:

- *Risks:* attitudes favoring substance use and anti-social behavior
- *Protection:* Social skills development; problem solving skills; drug refusal skills

Outcomes: Compared to control groups, Program participants had:

- Reduced rates of fighting and delinquency[lxi]
- 28% lower rates of monthly smoking, six years post-intervention[lxii]
- 66% reduced rates of marijuana use[lxiii]

Level of Prevention: Universal

For Additional Information:

Please see: http://lifeskillstraining.com/index.php

Pax Good Behavior Game (PAX GBH)

Brief Description: PAX GBH combines the elements of two models, the Good Behavior Game and PeaceBuilders, to promote an elementary classroom environment that is conducive to learning while also fostering self-control and group cooperation. Children are assigned to heterogeneous teams that are rewarded for being on-task and engaging in appropriate behavior. Over time the game is played at different points during the day, and during different activities and settings, with the lessons of cooperation and good self-regulation being generalizable (e.g., to the playground, lunch room, etc.).

Risk & Protective Factors Include[lxiv,lxv]:

- *Risks:* Antisocial behavior; aggressive behavior; poor self-management
- *Protection:* Self-regulation, self-management, self-control. Opportunities and rewards for pro-social behavior; promoting positive involvement in school; collaboration skills

Outcomes: Compared to control groups, Program participants had:

- Reduced rates of conduct disorder, five years post intervention[lxvi]
- Better math and reading skills in 12th grade and a greater likelihood of graduating from high school[lxvii]
- Reduced rates of initiating tobacco, heroin, and cocaine by the 8th grade[lxviii]
- Reduced rates of alcohol, drug use, and regular tobacco use by early adulthood[lxix]

Level of Prevention: Universal

For More Information:

Contact: Dennis Embry, PhD
P.O. Box 31205 Tucson, AZ 85751
520-299-6770
info@paxis.org
http://goodbehaviorgame.org/

Coping Power Program

Brief Description: The Coping Power Program is designed for middle school aged children exhibiting aggressive behavior and their caregivers, and it takes place over a 15 to 18 month period. The Child Component consists of 34 group sessions and periodic individual sessions that are typically conducted in school-based settings. Children are taught skills in self-awareness, coping with anxiety and anger, identifying and solving problems, increasing social skills, recognizing and resisting peer pressure, and organization. The Parent Component consists of 16 group sessions in community locations, along with periodic home visits and individual contacts. The parent sessions focus on: improving family communication, establishing age-appropriate rules and expectations, stress management, identifying pro-social goals and rewarding positive child behavior, using appropriate consequences for negative behavior, and strategies for supporting the social-cognitive and problem-solving skills that the children are learning.

Risk and Protective Factors Include:[lxx]

- *Risks:* poor self-regulation and self-control, poor bonding with school, poor family management, and poor caregiver involvement with child
- *Protection:* problem-solving and conflict resolution skills, coping mechanisms, social skills development, parent social support, positive child-caregiver communication

Outcomes: Compared to individuals in the control group, Program participants had:[lxxi]

- Lower engagement in delinquent behavior
- Reduced rates of substance use

Level of Intervention: Selective

For More Information:

Please see: http://www.copingpower.com

Children & Families Living in High-Risk Communities

Exposure to community environments with high levels of crime and violence can have a negative impact on healthy youth development and increase risks for engagement in anti-social activity.[lxxii] Below is an example of a program specifically designed for young people in high-risk communities.

Linking the Interests of Families and Teachers (LIFT)

Brief Description: This model was developed by researchers out of the Oregon Social Learning Center to reduce risks for problem behavior among children living in high-crime communities. It targets young people in first and fifth grade and includes both school and family components. The school-based portion includes 20 one-hour sessions that are implemented over a 10 week period which emphasize: problem-solving; social skills training; and group cooperation activities (using the Good Behavior Game, referenced earlier). The parent management training segment of the model consists of six 2½-hour sessions held on a weekly basis with groups of 10-15 parents that focus on appropriate discipline techniques, positive reinforcement, problem solving, and the importance of parent involvement in the school.

Risk and Protective Factors include:

- *Risks:* exposure to violence and communities with anti-social norms/attitudes; family conflict
- *Protection:* enhanced problem solving and social skills development; positive parent-child interaction

Outcomes: Compared to the control group, program participants demonstrated:

- Decrease in aggressive behavior[lxxiii]
- A 10% reduced risk of initiating tobacco use and a 7% reduced risk of starting alcohol use by the 12th grade[lxxiv]

Level of Prevention: Selective

For More Information:

Please see the National Institute of Justice "Crime Solutions" overview for the program: http://www.crimesolutions.gov/ProgramDetails.aspx?ID=191

Connection to Caring Adults

Healthy development happens within the context of relationships, and positive connections to caring adults can be a positive buffer against the impacts of adversity. Below are examples of two different types of mentoring programs.

Big Brothers Big Sisters of America

Brief Description: Young people varying in age from elementary through high school are paired with a (screened) adult volunteer who serves as a mentor. Children and adults are matched based on areas of interest, and the goals identified by the parent/guardian at the time of enrollment. Pairs spend 3-5 hours a week together for a year or longer, and Program staff are involved on an on-going basis for monitoring.

Risk and Protective Factors include:[lxxv]

- *Risks:* Favorable attitudes towards drug use and anti-social behavior; family conflict; low attachment to school; extreme economic hardship
- *Protection:* opportunities and rewards for pro-social involvement; connection to a caring adult

Outcomes: Compared to the control group, youth in the Program were:[lxxvi]

- More confident about doing schoolwork
- 46% less likely to initiate drug use
- Less likely to hit someone
- 52% less likely to skip school

Level of Prevention: Selective

For Additional Information:

Please see: www.bbbs.org

Across Ages

Brief Description: This is a mentoring program for at-risk youth between the ages of 9-13 to enhance protective factors during the transition into middle school. There are four key components to the model: (a) pairing the adolescent up with a trained older adult (55+) mentor for at least 2 hours of mentoring per week; (b) monthly weekend recreational activities for the

child, family, and mentor; (c) 26 weekly classroom sessions (45 min) that focus on developing social skills and problem solving; and (d) 1-2 hours per week of community service, including visits to a nursing home.[lxxvii]

Risk and Protective Factors include:[lxxviii]

- *Risks:* Few positive adult role models; communities with limited opportunities for pro-social activity; lack of connection to school; impoverished environment
- *Protection:* Opportunities and rewards for pro-social activity; connection to caring adults; improved school bonding; improved problem solving skills

Outcomes: Compared to a control group, Program participants had:[lxxix]

- Better reactions to hypothetical scenarios involving alcohol and tobacco use
- Fewer days of missed school
- More positive attitudes towards school, their future, and elders

Level of Prevention: Selective

For Additional Information: Please see: http://www.acrossages.org

Providing Intensive Early Childhood Education for Children in Poverty

Chronic poverty exerts negative effects on child development, and researchers have found that very early intervention programs that support intellectual stimulation and growth can help to mitigate some of its detrimental effects. [lxxx] The example below is offered to demonstrate the long-term benefits that might be derived from this type of model:

Carolina Abecedarian Project

Brief Description: This unique program was designed for young children living in poverty to provide a highly enriched environment from early infancy until the child enters kindergarten. An experimental design was used to track a group of children who received this program in the 1970's, as compared to a control group who did not. All participants met poverty guidelines and the majority were multi-risk (with mothers typically being young, with less than a high school education, unmarried, and no reported income). Children received full-day, center-based educational child care on a year round basis that was characterized by high levels of positive adult-child interaction and developmentally appropriate educational games designed to enhance skills in language, cognition, and adaptive behavior. Nutrition and basic medical care services were also provided on-site.

Outcomes: Among other findings, participants in the program as compared to the control group showed:[lxxxi,lxxxii]

- At age 21: Enhanced academic achievement; increased likelihood of going to college; reduction in teenaged parenthood; and trends for reduced smoking and marijuana use. With regard to the latter:
    - 39% of the program group, versus 55% of the control group, described themselves as regular smokers; and
    - 18% of the program participants reported marijuana use in the past 30 days, as compared to 39% of individuals in the control group.

Level of Intervention: Selective

For Additional Information:

To learn more about the Abecedarian study, please see: http://abc.fpg.unc.edu/

Helping Parents with Substance Use Problems

Tremendous opportunities exist to break intergenerational cycles of negative behaviors and outcomes by creating linkages to family-centered prevention programming for households in which a person with addiction is the caregiver for minor-age children. An emphasis on positive parenting and family management is particularly important for this group, given the heightened risk for maltreatment by substance-using caregivers.[lxxxiii] See below for some examples of program models for parents with addiction issues.

Strengthening Families Program: [Note: An adapted version of this program (SFP:10-14) for *universal* populations was described earlier in this report. The program description below is a selected/indicated-level model.]

Brief Description: The SFP program was originally developed with funding by NIDA to be used with families in which the parent(s) has addiction issues. It is a 14-session group model designed to improve parenting skills, children's life skills, and positive family functioning. During the weekly 2-hour sessions, there are activities for the parents and children separately, and then together as a family, along with a family meal. Parenting skills that are taught include: problem solving; appropriate discipline; positive attention; clear communication; and substance use education. Life skills sessions for the children focus on: effective communication; understanding their feelings; problem-solving skills; positive social skills; and strategies to resist peer pressure. The combined family sessions include: structured family activities; opportunities to learn and practice communication skills and effective discipline; family meetings; and cross-reinforcement of positive behaviors in each other. Groups are structured around child age: SFP 3-5; SFP 6-11; and SFP 12-16. This model has been implemented in diverse settings with high-risk families, including drug treatment centers, schools, family and youth service agencies, child

protection and foster care agencies, homeless shelters, community mental health centers, housing projects, churches, and drug courts and prisons.[lxxxiv]

Risk and Protective Factors include:

- *Risks:* Family conflict; parental substance use; parent and child attitudes favorable toward drug use; poor family management; neglectful parenting
- *Protection:* opportunities for pro-social child/parent engagement; support for parents; increased attachment; non-violent discipline; child social skills and drug refusal skills.

Outcomes: Participants in the program had:[lxxxv, lxxxvi]

- Increases in positive parenting, parental involvement, and parental supervision
- Improved family organization, family cohesion, family communication, and family resilience
- Reductions in child behavior/conduct problems

Level of Prevention: Selective and indicated

For Additional Information:

Please see: http://www.strengtheningfamiliesprogram.org/contact.html

The Mothers and Toddlers Program (MTP) [A Relatively New, Promising Model]

Brief Description: The Mothers and Toddlers Program is an attachment-based intervention for women in substance abuse treatment who are caring for children ages birth to three that was recently developed at Yale University. Because many women with addiction have histories of trauma and experienced poor attachment to their *own* caregivers when they were young, these women may find it challenging to engage in responsive parenting to address the developmental and emotional needs of their children. The purpose of this 12-session weekly program is to improve the mother's reflective functioning abilities in order to improve the parent-child relationship and foster secure attachment. [lxxxvii]

Although this intervention is somewhat new, it is included in this document because of its significance as an attachment-theory based model, and its positive preliminary findings in improving maternal caregiving sensitivity.

For Additional Information:

Nancy Suchman, PhD; Yale University School of Medicine
http://medicine.yale.edu/psychiatry/people/nancy_suchman-3.profile

The Mothers and Toddlers Program
1 Long Wharf Drive
Suite 310
New Haven, CT 06511
(203) 285-1472

Recovery Coaches for Substance Abusing Parents

Brief Description: The State of Illinois has implemented a program to provide recovery coaches to work with families in which a child has been placed in foster care due to parental substance abuse. The Recovery Coach "works with the parent, child welfare caseworker, and substance abuse treatment agencies to (i) remove barriers to treatment, (ii) engage the parent in treatment, (iii) provide outreach to re-engage the parent if necessary, and (iv) provide ongoing support to the parent and family through the duration of the child welfare case."[lxxxviii]

Outcomes: Compared to the control group, Program participants showed the following:[lxxxix]

- The percentage of parents who accessed substance abuse treatment was 69% higher
- There was a 21% greater rate of achieving parental reunification with the child
- The percentage of children having a subsequent juvenile arrest was 53% lower

For More Information:

Please see: *The Illinois AODA Title IV-E Waiver Demonstration, Final Evaluation Report* available electronically at: http://cfrc.illinois.edu/pubs/rp_20120801_IllinoisAODAIV-EWaiverDemonstrationFinalEvaluationReport.pdf

The programs listed above provide a snapshot of the wide array of models that exist to enhance resilience and prevent/mitigate the impact of adversity, while also having an impact on substance use related outcomes. At the end of this chapter, under Resources, are links to several registries that one might use to learn more about evidence-based program models. For readers that are interested in *policy-level approaches* to mitigate the impact of adversity and create more nurturing environments for children and families, please see the discussion of programs/practices/policies that appears in Chapter 4.

Summary of Key Points

- Risk factors such as child maltreatment, family conflict, poor family management, limited parent/child bonding, and lack of parental involvement and monitoring *can* be prevented.

- Examples of key protective factors for young people exposed to adversity include: enhancing self-regulation, relational skills, and problem-solving abilities; parenting competencies; connections to caring adults; and engagement with positive school and community environments.

- There is a wide variety of program models that can mitigate adversity and enhance resilience for children at different developmental stages. Ideally, prevention-oriented communities would offer a broad continuum of such programs for the children and families who might benefit from them.

- Opportunities exist to enact prevention programming in various venues, including homes, schools, daycare, and diverse community settings.

- There are individual prevention programs that produce positive outcomes in *multiple* areas spanning substance use, academic performance, school engagement, behavior, parenting practices, and family management.

Resources

There are various lists and registries that groups can use to research evidence-based prevention programs and practices to improve outcomes for children and youth. For example:

- *SAMHSA's National Registry for Evidence-Based Programs and Practices (NREPP):* This searchable on-line database includes information on over 300 programs/practices that are of relevance to promotion, prevention, treatment, and recovery in mental health and substance abuse. Please see: http://www.nrepp.samhsa.gov/

- *Blueprints for Healthy Youth Development:* Funded by the Annie E. Casey Foundation, this on-line resource provides information about research-based programs to prevent

problem behavior and promote learning, emotional well-being, physical health, and positive relationships in young people. Please see: http://www.blueprintsprograms.com/

- *Excellence in Prevention Strategies List:* Excellence in Prevention is a collaborative endeavor supported by the following agencies: Oregon Addiction and Mental Health Services and Washington Division of Behavioral Health and Recovery. They have compiled a listing of both environmental strategies and direct services that are of relevance to the substance abuse prevention field, deriving information from a number of sources. Please see: http://www.theathenaforum.com/learning_library/ebp

- *STRYVE: Striving to Reduce Youth Violence Everywhere:* The Centers for Disease Control and Prevention (CDC) has developed a downloadable document, *Strategies to Help Communities Prevent Youth Violence*, offering evidence-based youth violence prevention activities that have been shown to reduce risks, increase buffers, and/or lower the occurrence of youth violence. Because of the various overlapping risk and protective factors for youth violence and youth substance abuse, many of the models highlighted have positive outcomes in both areas. Please see: http://vetoviolence.cdc.gov/stryve/strategy_pdf.html

- *Social Programs that Work:* The National Coalition for Evidence-Based Policy provides information on research-based programs addressing a range of social issues for children and adults in areas including, substance abuse, education, health, housing, crime, employment, and welfare, among others. Please see: http://evidencebasedprograms.org/

- *CrimeSolutions.Gov:* A project of the National Institute of Justice's Office of Justice Programs (NIJ/OJP), the website includes a searchable directory of evidence-based prevention and intervention programs and practices of relevance to criminal and juvenile justice, including substance abuse. Please see: https://www.crimesolutions.gov/

- *Maternal, Infant, and Early Child Home Visiting Models:* The Health Resources Services Administration (HRSA) provides funding for home visiting programs to improve parenting practices and strengthen healthy development for infants and toddlers. HRSA provides a review of different home visiting program models on its website at: http://mchb.hrsa.gov/programs/homevisiting/models.html

- *Promise Neighborhoods Research Consortium (PNRC):* The PRNC is funded by NIDA to promote broad-based improvements in well-being for persons living in high-poverty neighborhoods, capitalizing upon what is shown to be effective. The website contains information on evidence-based programs and policies, and examples of communities enacting such efforts. Please see: http://promiseneighborhoods.org/index.html

- *FindYouthInfo.gov:* This U.S. government website includes a searchable listing of evidence-based youth programs in areas including behavioral health, juvenile justice, teen pregnancy prevention, teen dating prevention, youth employment, school climate and more. Please see: http://www.findyouthinfo.gov/

Although this guide is designed to address *prevention* activities, prevention-oriented professionals often maintain linkages with the treatment community. The resource below provides helpful information related to *treatment* approaches for children exposed to trauma:

- *National Child Traumatic Stress Network (NCTSN) Empirically Supported Treatments and Promising Practices:* The SAMHSA-funded NCTSN maintains an on-line repository of resources for families, providers, and professionals working in diverse sectors. The attached link includes a description and listing of clinical treatment models and trauma-informed services: please see http://www.nctsnet.org/resources/topics/treatments-that-work/promising-practices

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Chapter 3: Creating Compassionate School Environments Informed by an Awareness of Child Adversity and its Impact

Introduction

More than 50 million students attend elementary and secondary school in the United States,[i] and this environment is where children spend a large portion of each day. Educational settings thus offer a rich opportunity to positively intervene in the lives of young people with services and supports that not only foster academic success, but also nurture positive social and emotional development.

As noted in Chapter 1, exposure to toxic stress can have a detrimental impact on children's neurocognitive development, creating challenges that include difficulties with executive function, self-regulation, and relational skills. These challenges in turn can impose barriers to full and productive engagement in a learning environment. It is not surprising then, that researchers have found that prolonged exposure to toxic stress can disrupt cognitive control and early learning, having a negative impact on children's performance in school.[ii]

The Justice Center of the Council of State Governments has documented a national trend whereby millions of students are suspended from school each year, most commonly for very minor infractions.[iii] Unfortunately, because children with a history of adverse experiences can have a difficult time navigating classroom and school settings, they are particularly vulnerable to punitive disciplinary action.[iv] As a further challenge, the students who are suspended and expelled are in turn disproportionately at risk for involvement in the juvenile justice system.[v] Punitive discipline is also counter-productive, as researchers have found that schools utilizing frequent punishment produce higher levels of aggressive social behavior than schools using other, more positive strategies.[vi]

Chapter 2 offered examples of various program models that help to prevent or ameliorate the impact of adversity and to foster youth resilience; and several of those programs are either school-based or are multi-modal practices that involve a school component. This chapter moves beyond specific programs to look at broader strategies that can be employed to create a full school environment that is understanding of, and responsive to, the needs and challenges of children impacted by adversity so that a safe, healing, and supportive educational setting is available to help these students to learn and to thrive. Such environments benefit *all* students, not only those with a history of exposure to toxic stress. This Chapter spotlights Washington State's Compassionate Schools Initiative as an example of the guiding principles that can be put in place within a school to help achieve these goals. Examples of system-wide efforts in other

areas are offered, as well, along with references for obtaining additional information on eliminating punitive discipline and fostering nurturing learning environments.

Washington State's Compassionate Schools Initiative

Washington incorporates an awareness of the prevalence and negative impact of child adversity into a wide range of initiatives. One such effort, the Compassionate Schools Initiative, fosters a systemic approach to developing strategies and infrastructure to support at-risk students and their families. These schools are providing professional development for their staff to develop faculty skills and meaningful support for struggling students. They are partnering with community stakeholders, families, and students to mitigate the negative effects of adversity and improve academic performance. The initiative is designed to support the development and improvement of a positive climate and culture within each school in order to achieve an optimal learning environment for all students. The goal of this approach is to support children in being resilient, self-regulated, and appropriately relational with adults and peers, as well as supporting executive function, physical and emotional health, academic achievement, and the necessary skills for a successful life.[vii]

In 2009, with support from a SAMHSA Mental Health Transformation Grant, the Washington State Office of the Superintendent of Public Instruction (OSPI) compiled an excellent guidebook for educators that outlines the components of this approach entitled, "*The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success.*" A key component of the compassionate schools effort is the provision of **training to teachers and staff** so that they have an informed understanding of: the types and prevalence of adversity that students may face in their lives; the impact that detrimental experiences can have on a child's functioning and behavior; and ways to promote calming and a sense of security for students so that they are better able to learn. Creating a respectful and nurturing school environment benefits *all* students, not only those who have experienced adversity. The framework includes a set of resiliency-guided instructional principles and curricular domains in order to foster compassionate classrooms, as synthesized below:[viii]

Principles of Compassionate Instruction and Discipline in the Classroom

1. **Always Empower, Never Disempower:** Children who have been victimized often feel powerless to protect themselves (or those for whom they care) from harm.[ix] Although the teacher is, and should be, the one in control of the classroom, this first principle emphasizes the importance of teachers not getting into unnecessary power struggles with students. Classroom discipline should be calm, fair, consistent, and very respectful and should never entail yelling, threats, sarcasm, or belittling that may mimic emotionally abusive behavior to which they have been exposed.

2. **Provide Unconditional Positive Regard:** Children who have been exposed to various types of maltreatment may have difficulty trusting others, and they may also find it hard to see their own self-worth. A teacher can be a very positive element in a child's life as a caring adult who demonstrates consistent regard for the child, while also recognizing and reinforcing the child's strengths and positive attributes.

3. **Maintain High Expectations:** The framework is careful to include the principle of maintaining high expectations for all students, so that students with complex challenges do not feel as if the teacher has "given-up" on them or lacks confidence in their abilities. The guidebook emphasizes consistency, and limit-setting which is done in a way that is fair, proportional, and delivered in a very calm and respectful manner.

4. **Check Assumptions, Observe and Question:** Teachers are advised to be aware of their own assumptions. Problems such as maltreatment, domestic violence, and parental mental illness or substance abuse can impact families of all demographic backgrounds. It is therefore important for teachers to not make blanket assumptions, but to instead be careful observers of the behavior of all of their students. When patterns of behavior emerge that may indicate a problem, the teacher will be in a better position to ask questions that can help to assure the safety of the child.

5. **Be a Relationship Coach:** Social skills development is an important part of growth and learning for a child, but young people who have not been exposed to models of healthy interpersonal dynamics may have difficulty in this regard. Trust, empathy, and reciprocal warmth may be especially challenging for children who have been mistreated.[x] Teachers can foster growth in this area by modeling respectful behavior, establishing a classroom setting in which bullying /harassment between students is not allowed, and providing opportunities for students to engage in cooperative activity together.

6. **Provide Guided Opportunities for Helpful Participation:** Giving children opportunities to take part in activities in which they can be helpful serves to reinforce their sense of self-worth, while also promoting pro-social engagement and connection with the school community.

The Washington approach to creating a compassionate school setting entails the incorporation of the six above-listed principles within three core curriculum domains, discussed below:

Domains of a Compassionate Curriculum:

1. **Safety, Connection, and Assurance:** Children who have been exposed to toxic levels of stress can have a difficult time feeling safe; and perceived threats can trigger a fight-flight-freeze response. [xi] At the same time, children who do not have a history of positive connections with others can have a difficult time: trusting others; making connections; and being attuned to the signals of others in order to accurately read and appropriately respond to those cues. [xii] Teachers can help to foster safety and improve attunement. Goals for instruction within this domain include: providing students with opportunities to feel safe and assured; helping students to be able to identify those triggers that might initiate a flight-fight-freeze response; in collaboration with the teacher, helping students learn to remove the trigger or to respond to it differently; and improving children's skills at reading the cues of others in order to respond appropriately.

2. **Improving Emotional and Behavioral Self-Regulation:** Toxic levels of stress in childhood can disrupt the normal stress response, causing these children to operate at high levels of arousal/fear, making it difficult for them to manage their emotions and behaviors. Attempts at coping may cause some children to behave aggressively and for others to withdraw, either of which impedes their ability to fully engage in learning.[xiii] Compassionate teachers can help students to better understand and modulate their emotional responses. The goals for instruction within this domain include: helping students to better identify and differentiate between their feelings; to link those feelings to external and internal experiences; to safely express those feelings; to be mindful of their responses to those emotions; to modulate their behavioral response to those emotions in ways that help them to succeed in the classroom; and to return to a more comfortable state following an experience of fear arousal.

3. **Competencies of Personal Agency, Social Skills, and Academic Skills:** Childhood adversity can negatively impact the development of executive function, mental processes that allow people to plan, organize, act strategically, and make informed decisions.[xiv] Fortunately, teachers can make a positive difference in helping children to develop their abilities in the areas of personal agency (belief that one can accomplish goals), social skills (knowing how to interact with others in acceptable ways), and academic skills (cognitive skills needed to analyze, problem solve, process, and communicate in order to do well in school).

In addition to the guiding principles and domains outlined above, the Washington Compassionate Schools Initiative includes two other key areas of emphasis:

- **Self-Care:** Teachers are taught to recognize signs of "compassion fatigue" and burnout, and are encouraged to develop a "self-care action plan" to proactively ensure that they are attending to their own needs, which in turn allows them to better serve their students. The guide includes a self-care checklist with suggestions for maintaining well-being.

- **Creating Community Partnerships:** In order to best meet the needs of their students, the schools develop partnerships with a wide range of local entities (e.g., before and after school programs, early childhood education centers, somatic and behavioral health service centers, homelessness services, family resource centers, drop-out prevention programs, a student assistance program for youth with substance use problems, family literacy programs, etc.). A *Compassionate Schools Coordinator* serves the important role of fostering this network and helping to manage the process of referring and linking families to the various services and supports that might be helpful to them and their children. This component of the framework is vital because it extends support beyond the domain of the school, with a connection to diverse resources that can benefit the family unit as a whole.

For More Information:

The complete guidebook "*The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success"* is available for free download. It is an excellent resource for educators that want to create a nurturing school community, and teachers will find a number of user-friendly examples of strategies for incorporating the principles of this initiative into a classroom setting. The website link that includes this document also has a 12 minute video clip describing why the guidebook was developed and how teachers can use it. Please see: http://www.k12.wa.us/CompassionateSchools/HeartofLearning.aspx

Additional Examples of Creating Adversity-Informed Schools

Massachusetts: Massachusetts has benefited from the work of advocates who have sought to raise awareness of the prevalence of adverse childhood experiences and the detrimental impact that such events and circumstances can have on a child's ability to succeed in school. A Trauma and Learning Policy Initiative (TPLI), which is a partnership of the non-profit Massachusetts Advocates for Children and Harvard Law School, worked with educators, families, and other stakeholders to develop a vision for promoting school-wide sensitivity to

adversity and its impact. This work includes a *"Flexible Framework"* of six key areas that TPLI recommends be incorporated into a comprehensive school-wide approach:[xv]

- *Leadership:* Commitment of leaders at the school and district level to support the effort
- *Professional Development:* Training to be made available to all teachers and staff to help them gain the knowledge and skills necessary to create a supportive school setting
- *Access to Resources & Services*: Ensuring that students are able to access mental health and other services to better meet student's needs
- *Academic & Non-Academic Strategies:* Employing diverse strategies to help students gain the skills and abilities to enable them to participate in and benefit from the learning environment
- *Policies, Procedures, and Protocols:* Enacting measures that ensure and support an adversity-informed school community
- *Collaboration with Families:* Actively involving families in the school community and encouraging their engagement with their children's education

Massachusetts Resources: The TPLI has created two comprehensive guidebooks, which are available for free download from the Massachusetts Advocates for Children Website:

- *Helping Traumatized Children Learn*, published in 2005
- *Helping Traumatized Children Learn, Vol. 2, Creating and Advocating for Trauma-Sensitive Schools,* published in 2013

Please see: http://www.massadvocates.org/trauma-learning.php

San Francisco HEARTS Initiative: The University of California at San Francisco (UCSF), in collaboration with the San Francisco Unified School District, developed HEARTS (Healthy Environments and Response to Trauma in Schools) to create more supportive school environments for children experiencing adversity. The effort was first implemented in 2009 in a few high-poverty schools, and it is continuing to expand. The multi-tiered approach includes: training for school leaders, teachers, and other staff on creating adversity-aware and sensitive school settings; general skill-building for all students on enhancing coping skills; specialized skill-building for more at-risk groups of students; increased availability of specialized care for children in need; psycho-educational supports and skills building opportunities for parents/caregivers; and targeted efforts to improve policies and procedure to advance positive behavior supports and reduce the use of punitive discipline such as out-of-school suspension for children with behavioral problems. For more information, please see: http://coe.ucsf.edu/coe/spotlight/ucsf_hearts.html

ALIVE Program in New Haven, CT Schools: ALIVE (Animated Learning by Integrating and Validating Experience) is an interesting example of a collaborative partnership to support

students who have been exposed to adversity. The Foundation for the Arts and Trauma, in collaboration with the public school system and the United Way in New Haven, established ALIVE to help identify and reduce the impact of toxic stress that students may be experiencing. Areas of focus include: helping students to develop coping skills, emotional literacy, and empathic skills; providing opportunities for stress reduction sessions; professional development and support for teachers; using arts, drama, music and poetry to assist students with self-expression and enhancing self-worth; and making counselors available for youth needing additional behavioral, emotional, or academic support. For more information, please see: http://www.ptsdcenter.com/aliveschoolprograms.html

In 2013, the Mayor of New Haven announced a new Community Resilience Initiative to address the problem of childhood adversity on a wide scale, including the expansion of the ALIVE initiative to reach more schools in the city. For more information, please see: http://www.cityofnewhaven.com/NewsYouCanUse/readmore.asp?ID=%7BF881F228-240B-4FA5-897A-81FA34442FF1%7D

Additional Resources

Video on Lincoln High School Health Center: Walla Walla, Washington is a community that has been engaged in a number of resiliency-enhancing efforts over the past several years. This video spotlights efforts underway at Lincoln High School to replace a culture of punitive discipline with one that is adversity-informed and responsive to the complex needs of its students, including the establishment of a school health center next door that works to address the youth's physical and mental health needs. Please see: http://acestoohigh.com/2012/03/05/walla-walla-troubled-teens/

TraumaSensitiveSchools.Org: Operated by the Trauma and Learning Policy Initiative in Massachusetts, this website includes resources, information, and links to news stories related to schools working to create healthier environments for students exposed to adversity. Please see: http://traumasensitiveschools.org/

ACESTooHigh.org: This website has resources related to child adversity and examples from the field of work being done in different sectors to address this problem, including work in educational settings. Please see: http://acestoohigh.com/

School Discipline Guidance Package: The Office of Civil Rights (OCR) in the U.S. Department of Education released this guidance package on school discipline in 2014. The intent is help schools move away from punitive discipline practices (e.g., suspensions, expulsions) that push children away from the school, and instead focus on strategies that can promote school safety

while also enhancing student development and academic success. This issue is one of concern for OCR, because suspension, expulsion, corporal punishment, and school-referred arrests are disproportionately utilized with children of color and children with disabilities. The following link provides access to a variety of resources including: information on the supportive school discipline initiative; guiding principles; data on use of punitive practices; resources for obtaining TA from DOE on improving school climate; a compendium of school laws and regulations by states; and archived webinars on creating supportive discipline strategies. Please see:http://www2.ed.gov/policy/gen/guid/school-discipline/index.html

FixSchoolDiscipline.Org: A California-based initiative led by advocates for children's education, the website includes information and resources for school leaders, educators, parents, students, and the broader community about strategies for eliminating harsh school discipline practices and replacing them with supportive policies that hold students accountable while also creating an improved, more supportive school climate. Please see: http://www.fixschooldiscipline.org/about-2/

School-Wide Positive Behavioral Intervention and Supports (PBIS): PBIS is a framework that focuses on creating supports or systems that assist school personnel in successfully implementing effective strategies at the school, district, and/or state levels, via a data-driven, team-led approach that includes on-going monitoring and professional development. Many school systems will use the PBIS framework when working towards the use of supportive, proactive strategies to foster appropriate student behaviors (versus reliance on reactive punitive discipline) in order to create a more positive school culture. The U.S. Department of Education has a technical assistance center dedicated to the implementation of PBIS which includes information for its application in schools, along with involvement of families and communities. Please see: https://www.pbis.org/

"The School Discipline Consensus Report: Strategies from the Field to Keep Students Engaged in School and Out of the Juvenile Justice System:" This 2014 report from The Council of State Governments' Justice Center looks at the overuse of punitive discipline practices (and the negative outcomes for youth subjected to them), while outlining positive alternative approaches that include policies and practices to improve school climate, better address the behavioral health needs of students, and reduce risks for involvement with juvenile justice. A free download of this report may be obtained at: http://knowledgecenter.csg.org/kc/system/files/The_School_Discipline_Consensus_Report.pdf

StopBullying.gov: This Government website contains useful information for diverse stakeholders (including parents, educators, and community members) on understanding different types of bullying and how to address them. Please see: http://www.stopbullying.gov/

Summary of Key Points

- Adversity and toxic stress can disrupt emotion regulation, executive function, and relational skills, which in turn can impede a child's ability to fully engage in the learning process and succeed in school.

- Because children spend a large portion of their time in educational settings, schools provide an excellent venue for offering resiliency-enhancing strategies to foster healthy youth development.

- Punitive discipline is over-utilized in U.S. schools. Adversity-exposed children with poor self-regulation are particularly vulnerable to such practices. Schools can create healthier climates for *all* students by replacing punitive discipline with positive alternatives that foster healthy development and prosocial behavior.

- Educational settings can be structured to be "adversity-informed" by engaging in strategies including: providing training to teachers and staff on the prevalence of childhood adversity, its impact, and techniques to support positive coping; structuring opportunities for students to strengthen social, emotional, and relational skills building; creating partnerships with families and community groups to facilitate the linkages with resilience-enhancing services and supports; crafting policies/procedures that foster a safer, more nurturing school environment; and providing access to behavioral health treatment services for children who may need them. These activities benefit *all* students.

- Models exist, such as those in Washington State and Massachusetts, to provide a road-map for other states that are interested in enacting state-wide efforts to create adversity-informed, nurturing school systems.

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Chapter 4: Incorporating an Understanding of Childhood Adversity into Substance Abuse Prevention Planning Efforts

Purpose of this Chapter

This Chapter highlights ways in which prevention-oriented professionals can infuse an adversity-informed focus into broader planning efforts in order to prevent substance use problems in young people. The bulk of this Chapter is dedicated to providing suggestions and resources that may be helpful in applying an adversity lens to the SAMHSA Strategic Prevention Framework (SPF). Beyond the SPF, examples are also offered of states and localities that have been striving to work collaboratively across sectors to mitigate exposure to negative circumstances and to enhance healthy youth development.

Infusing a Childhood Adversity Focus into the Strategic Prevention Framework

SAMHSA's Strategic Prevention Framework (SPF) provides a platform to help states, territories, and tribes (hereinafter referred to as "states"), in partnership with local communities, to build and enhance sustainable prevention practices within a public health framework. The SPF includes five key elements: assessing needs; building capacity; engaging in strategic planning; implementing effective strategies; and evaluating outcomes.[i] Although the initiative was originally developed for the purposes of preventing negative consequences associated with substance use, the scope has recently been expanded to incorporate the broader prevention of mental, emotional, and behavioral (MEB) health problems.[ii]

States and communities have been utilizing the SPF model for many years to foster effective, data-driven prevention efforts. The discussion below offers some suggestions for ways in which jurisdictions may incorporate a focus on adverse childhood experiences within their broader SPF activities.

Data Collection

Within the SPF, jurisdictions typically collect epidemiological data to highlight the prevalence of problem substance use behavior, its negative consequences, consumption patterns, associated risk and protective factors, and available resources within the community to address the problem.[iii] As discussed in Chapter 1, exposure to adversity in childhood is a risk factor for both early initiation and high use of tobacco, alcohol, and other drugs. [iv,v,vi,vii] Accessing data on the

scope and manifestation of different types of child adversity is thus worthwhile to help inform broad prevention-based efforts.

As noted earlier in this document, there is a wide range of experiences and circumstances that can contribute to toxic stress in young people, including, for example: abuse, neglect, household dysfunction, exposure to school and community violence, poverty/deprivation, and social inequality. Understanding the extent to which such problems are present in a given state/county/neighborhood can highlight patterns of common stressors impacting children/families/communities that might be targeted as a part of larger efforts to improve population-level well-being and positive behavioral health.

A number of different data sources can be used to gather such information. In many cases, states/communities may *already* be using certain systems to collect data on substance use and its consequences which can *also* be tapped for gathering information related to exposure to various types of adversity. For example:

- Emergency Room (ER) Data: Jurisdictions may already be accessing state/local data on the numbers of persons admitted to ERs for alcohol poisoning, drug overdose, or substance-involved motor vehicle accidents. ER data can *also* be helpful in illuminating the prevalence of domestic violence, community violence, and child maltreatment, as well as rates of involuntary hospitalization or suicide attempts that might be an indicator of parental mental illness in a given area. The ability to display ER data relative to other family descriptors is particularly helpful.

- Law Enforcement Records: SPF data may currently include arrests for drug possession/sales and impaired driving, along with citations for sales of alcohol and tobacco to minors. Law enforcement data can also be accessed for reports of domestic violence, child maltreatment, and youth victimization in community settings, as well as assessing the overall level of crime in a neighborhood.

- Youth/Student Surveys: State surveys can be a useful tool for gaging the prevalence of youth alcohol/tobacco/drug use, approval of such behavior, and association with substance-using peers. Such surveys can also be a mechanism to determine a child's exposure (or lack thereof) to nurturing conditions in the home, school, or community environment, as well as exposure to substance use and mental illness in the home. Questions can address overall feelings of safety and access to community resources such as parks and recreation programs. Some states, for example, survey students on their history of exposure to abuse, neglect, and household dysfunction to inform various

state planning efforts. [The listing provided below offers information about different survey instruments that may be of interest.]

- Justice System Data: In addition to state and local data that may already be used in SPF planning related to the numbers of youth in the juvenile justice system, justice system data can also be helpful in estimating the number of incarcerated individuals in the adult and juvenile justice system who are *parents to minor-aged children.* When aggregated on a neighborhood or community level, these data can help identify the rates at which children have parents who are incarcerated.

- Treatment Data: Similar to the issue of justice system involvement, it may be helpful for jurisdictions to know how many individuals in the state/locality who are in substance abuse and mental health treatment systems are also the *parents/caregivers of minor-age children.*

By understanding the constellation of factors that may put children in jeopardy (e.g., poverty, food and housing insecurity, bullying, exposure to violence and toxic environments across the ecological model, etc.), communities are in a better position to take targeted steps to improve their well-being on a population level. Below is a listing of a variety of data sets, search systems, survey instruments, and data analysis tools that jurisdictions can use to assess needs and resources at the state or local level and/or to compare the status of a given region against national averages.

Youth Risk Behavior Surveillance System: This system includes a national school-based Youth Risk Behavior Survey (YRBS) that is conducted by the CDC. Additionally, some states and school districts collect YRBS data that supplements the national sample drawn by the CDC thereby providing information on smaller areas than would be available from the statewide survey. The YRBS is administered to students and it is designed to capture data on various health risks to young people. In addition to data on alcohol, tobacco, and drug-related behaviors, which most states and communities are already using in their SPF efforts, there are *also* items on the standard questionnaire that illuminate youth's exposure to various types of adverse experiences including: being threatened or injured with a weapon; being injured in a physical fight; being bullied or cyber-bullied; skipping school due to safety concerns; being forced to have sex; and experiencing physical or sexual dating violence.[viii] Such data can serve to illuminate areas of focus for interventions to promote safety. States and districts can also add to the standard questions, which a jurisdiction might consider if there are additional types of adversity that it wishes to track. The CDC website includes information about the survey, results and trends, and it also provides web-based tools to compare results from a given state

or large district with the U.S. as a whole. Please see: http://www.cdc.gov/HealthyYouth/yrbs/index.htm

Evidence2Success: The Annie E. Casey Foundation has developed assessment tools designed to help communities identify risk and protective factors for their young people. Surveys include a Youth Experience Survey for Middle School, a Youth Experience Survey for High School, and a Childhood Survey that is completed by the parents of children from birth to age 8. Included within the youth surveys are questions related to housing composition/stability, experiences of bullying, ability to self-regulate, closeness to caregivers, caregiver involvement with school, feelings of fear/anxiety, and neighborhood characteristics (e.g., crime, cohesiveness, violence, drugs). The high school survey also includes questions related to experiences of racial discrimination, experiences of dating violence, and adult household member involvement with drug use and criminal activity. The parent survey for young children includes questions about various developmental milestones, as well as questions related to: the child's ability to self-regulate, parent/child reciprocal warmth, family conflict/violence, parent aggravation, violent discipline, neglect, emotional abuse, community disorganization, maternal substance use during pregnancy, and parent history of mental illness/substance use/anti-social behavior. For communities taking part, Casey will produce profiles of data combined by school, neighborhood, or city. Please see: http://www.aecf.org/work/evidence-based-practice/evidence2success/

Communities That Care Youth Survey: The survey is a community needs assessment tool that provides community leaders with estimates of risk and protective factors for youth across different domains. In addition to questions related to substance use, school performance, and peer group behaviors, there are also various questions that are of relevance for gaging youth exposure to potentially unhealthy environments, including questions related to: family management practices, household conflict, high levels of transition (i.e., lack of stable housing/schooling), parent/child relationship, family history of anti-social behavior, and parental attitudes that promote anti-social activity and substance use. This survey is in the public domain. Please see: http://www.communitiesthatcare.net/

Adverse Childhood Experiences (ACE) Module in the Behavioral Risk Factor Surveillance System (BRFSS): The BRFSS is a nationwide surveillance system sponsored by the CDC in cooperation with states in which telephone-based surveys are used to elicit information on health risk behaviors among adults. There is a core set of questions, along with optional question-sets that states may also choose to use. Data can be viewed at either the state level or at the level of metropolitan areas of 500 or more respondents. States use BRFSS data to support and evaluate ongoing projects, monitor public health trends and needs, identify risks, assess health care access, and provide training opportunities in epidemiology. In 2009, the CDC

added an optional ACE module to collect data on childhood experiences of adversity related to abuse, neglect, and exposure to household dysfunction (domestic violence; and household presence of mental illness, addition, or incarceration). States can choose to add this module for an additional cost. Please see: http://www.cdc.gov/brfss/

County Health Rankings Data: Compiled by the Robert Wood Johnson Foundation and the University of Wisconsin for all counties in the nation, the datasets include health information, as well as data on child poverty, children in single parent households, community safety/violence, housing shortages, unemployment, food insecurity, and homicide. Please see: http://www.countyhealthrankings.org

National Survey of Children's Health (NSCH): This phone based survey (sponsored by the CDC's National Center for Health Statistics) is administered to parents/caregivers of children under the age of 18. In addition to several indicators related to general health, there are a variety of questions related to: parent/child interaction; the child's engagement in pro-social activity; family functioning (e.g., including parent/child communication, indicators related to the parent feeling overwhelmed/angry by the child or by parenting); the child's exposure to domestic violence, parent incarceration, parental mental illness or substance use, community violence, economic deprivation, and discrimination; the presence of other caring adults/mentors in the child's life; and community conditions. The *Data Resource Center* at *Oregon Health and Science University* (with funding from CDC and HRSA), provides convenient on-line access to these data which can be examined at the state level (as well as nationally and by HRSA Region) with customizable search features that allow states to see how they compare to the national average for various indicators. Please see: http://www.childhealthdata.org/about/drc

American Community Survey (ACS): The ACS is an ongoing survey conducted by the U.S. Census Bureau that generates estimates on social, economic, housing, and demographic status (including issues related to the number of children living in poverty, persons using food stamps, etc.). Data users can access these estimates down to small levels of geography (e.g., by county, school district, congressional district, metropolitan area, census tract, etc.). The ACS can be accessed at: http://www.census.gov/acs/www/ . Additionally, the Census Bureau has e-tutorials and occasionally hosts free educational webinars on how to use their various data sets and report generation tools. These educational opportunities may be found at: http://www.census.gov/mso/www/training/

The Child Trends DataBank: This resource examines more than 100 indicators that focus on risks, and positive developments, for children. The site summarizes research related to the importance of such factors to child development, along with trends over time. The data are also arrayed by subgroup. Links are provided for given indicators to different state, local, and

international data sources. Please see: http://www.childtrends.org/databank/#sthash.OvydHnKS.dpuf

Annie E. Casey Foundation Kids Count: The Kids Count Data Book is available on line and provides information on child well-being in the areas of: (1) economic well-being; (2) education; (3) health; and (4) family and community, with data provided at the national level and for each of the states. For some states data are available at the county level, as well. This information can be helpful to states that are interested in seeing how their state fares in certain key areas of child well-being, as well as to compare sub-state areas by use of the county data. To access this information, please see: http://www.aecf.org/resources/the-2013-kids-count-data-book/

Map My Community: A resource available via the federal FindYouthInfo site, this interactive on-line tool allows users to search for federally funded programs within a given locality (by zip code) from multiple federal departments on a wide range of youth topics. The tool can be helpful for communities wanting to assess the presence of different types of programming in order to gage resource availability and establish relationships with or among local providers. Please see: http://findyouthinfo.gov/maps/map-my-community

The National Center on Family Homelessness: The Center's website offers information on the numbers of homeless children in every state, along with data related to risks for child homelessness, and state level planning and policy activities. Please see: http://www.homelesschildrenamerica.org/index.php

State Baby Facts: The Zero to Three® website includes fact sheets for D.C. and the 50 states about the status of infants, toddlers, and families within the framework of good health, strong families, and positive early learning experiences. Data are included on poverty, maltreatment, and use of public assistance programs, among other indicators, and comparisons are offered for each state to the national averages. Please see: http://www.zerotothree.org/public-policy/state-community-policy/infant-and-toddler-state-fact-sheets.html

National Violent Death Reporting System (NVDRS): Instituted by the CDC in 2002, NVDRS is a surveillance system that aggregates data on violent deaths in participating states, including information about homicides perpetrated by an intimate partner, as well as child maltreatment fatalities. As of mid-2014, there are 18 states participating. This information can help states to better understand the magnitude, characteristics, and trends related to violent death to help inform prevention strategies. Please see: http://www.cdc.gov/violenceprevention/nvdrs/index.html

DiversityDataKids.Org: The Institute for Child, Youth and Family Policy (ICYFP) at Brandeis University's Heller School for Social Policy and Management has created an online data and

analysis tool that allows users to assess wellbeing and equity among the U.S.'s diverse child population. Users can create customized profiles, rankings and maps related to health, education, social, and economic indicators in order to make data visual and understandable. It also features a neighborhood-level child opportunity index, developed in partnership with the Kirwan Institute for the Study of Race and Ethnicity at Ohio State University that allows users to view interactive maps of the opportunities that are available to children within subareas of communities. Resources often have strikingly different availability by race/ethnicity. Please see: http://www.diversitydatakids.org/

Child Welfare Outcomes Report Data*:* The Children's Bureau at ACF maintains a data system that features a custom report builder to access the most current Child Welfare Outcomes data before the full report is published. The website provides information on the States in reported cases of maltreatment, rates of entry into foster care, and numbers of adoptions. Please see: http://cwoutcomes.acf.hhs.gov/data/overview

Health Indicators Warehouse: This government site allows users to search a wide range of topics and indicators to find information on databases that include a variety of health indicators. The site can be accessed at: http://www.healthindicators.gov/

Community Commons: This site provides an online tool that allows communities to identify target populations at the census tract level, while reviewing and mapping conditions that impact well-being, including health needs and social determinants. Please see: http://www.communitycommons.org/chi-planning/?km_TfHA-news=TIA-tool

The National Center for Children in Poverty (NCCP): NCCP is operated by the School of Public Health at Columbia University. Its website contains user-friendly tools that include, for example: a basic needs budget calculator to determine the funds needed to meet basic needs for varying numbers of adults and children within a given county; a young child risk calculator to determine the number of young children in a state with select risks including poverty, teenage parents, residential insecurity, etc.; along with information on state profiles of social policies in place that can help to mitigate risks for low-income individuals. Please see: http://www.nccp.org/

Civil Rights Data Collection: The Office of Civil Rights (OCR) in the U.S. Department of Education maintains an on-line Civil Rights Data Collection center that allows users to search and compare data across multiple school systems and districts, and to compare state data with national averages. Localities can access data related to school suspensions, expulsions, use of corporal punishment, and school-referred arrests, as applied to students in different racial groups and for students with disabilities. It is useful data for jurisdictions wishing to ensure that discriminatory practices are not happening on a systemic level within the

school/district/state, as well as establishing base rates for these school problems. Please see: http://ocrdata.ed.gov/

"Choosing and Using Child Victimization Questionnaires:" This OJJDP Crimes Against Children informational bulletin provides a very helpful overview of the purpose, use, scope, and issues addressed in questionnaires that can be employed to assess children's exposure to victimization. It includes listings of surveys related to: exposure to community violence; child maltreatment; sexual assault; peer victimization; witnessing domestic violence; and multi-dimensional victimization instruments. The bulletin may be accessed at: http://www.unh.edu/ccrc/pdf/Choosingandusingquestionaires.pdf

Building Prevention Capacity

SAMHSA notes that there are several ways in which jurisdictions might build upon their prevention capacity, including, for example: raising awareness; strengthening and expanding collaborations/partnerships; improving organizational resources; and developing the prevention workforce. [ix] States and localities are already engaged in this important process through the SPF. Below are some suggestions for ways in which attention to child adversity might be incorporated into those broader efforts.

Raise Awareness of the Prevalence and Impact of Child Adversity: Community members may not be aware of how *common* different types of adversity are, and of the various negative outcomes that such experiences can produce. Providing information and training can help to fill this knowledge gap.

- The Adverse Childhood Experiences (ACE) study discussed in Chapter 1 has produced compelling data. Its findings related to increased tobacco, alcohol, and drug use in both minors and adults who have been exposed to maltreatment and household dysfunction can help to "make the case" for the relevance of adversity to substance abuse prevention. In addition to the readily-available information on the ACE findings on the CDC website, the study's co-principle investigators Robert Anda, MD, MS and Vincent Felitti, MD both do trainings and presentations on ACEs and can be contacted at: http://acestudy.org/speakers

- SAMHSA's CSAT grantee dataset, also discussed in Chapter 1, is another source of data that can help to connect-the-dots for community representatives between detrimental events and circumstances in childhood and addiction. The CSAT data reflects a notable pattern among substance abuse treatment recipients of: (a) high rates, and multiple

types, of stressors and adversity; (b) family/household problems which are commonplace; and (c) more significant clinical problems associated with more severe victimization. [A summary of the research data is available at www.gaincc.org/slides].

- Seeing state and local data on the numbers of children exposed to challenges such as maltreatment, domestic violence, poverty, food or housing insecurity, parental addiction, mental illness, or incarceration, and victimization in school and community settings can better illuminate for communities the extent of problems collectively affecting its young people.

- Short informational videos can offer an impactful method of raising awareness. *Through our Eyes: Children, Violence, and Trauma- Introduction,* for example, is an eight-minute video produced by the Office for Victims of Crime that discusses how different types of adversity impact young people, including the long-term negative effects on their well-being. It also highlights signs that a child may have been exposed to violence, as well as the high societal costs associated with child maltreatment. The video includes direct accounts from people who had such experiences in childhood and the impact that it has had on them. Please see: http://www.youtube.com/watch?v=z8vZxDa2KPM

Raise Awareness of the Value of Focusing on Early Childhood: Because substance use problems in young people tend to emerge in adolescence, this is the age group upon which a number of substance abuse prevention efforts are directed. Such efforts are necessary and important to protect the behavioral health of middle and high school age youth. For a state or community that has an interest in reducing adversity-related risk factors, it is *also* vital to invest in initiatives that are much farther upstream, especially considering that many young people are exposed to adversity well prior to (and continuing into) adolescence. [x]

- Chapter 2 offered a variety of examples of program models for young people across the age spectrum that reduce substance use. By informing stakeholders of some of the programs targeting early childhood through early elementary school years, program options for younger children may be incorporated into broader prevention efforts.

- Educate community partners about the impact of toxic stress on brain development in very young children and the heightened risks for various problems, including substance use. Consider some of the following user-friendly resources:

    - *How Brains are Built: The Core Story of Brain Development*: In an accessible and visually engaging format for public audiences, this 4-minute animated graphic

explains how adults and communities help children to build healthy brains, and how that process can be derailed by toxic stress. This video was developed by the Alberta Family Wellness Initiative, with input from the Harvard Center for the Developing Child and the Frameworks Institute. Please see: http://www.albertafamilywellness.org/resources/video/how-brains-are-built-core-story-brain-development

- *Early Adverse Experiences and Brain Development: Implications for Prevention, Intervention, & Reducing Long Term Risk:* In this educational webinar, presenter Johanna Bick, Ph.D., of the Laboratories of Cognitive Neuroscience at Boston Children's Hospital and Harvard Medical School provides an overview of how adverse experiences shape brain development in early childhood, specifically affecting neural systems that underlie emotion- regulation and cognitive functioning. The speaker discusses how prevention and early intervention efforts can support healthier, more normative neuro-developmental trajectories in at-risk individuals and the implications for reducing the risk for long-term behavioral health difficulties. The archived presentation may be accessed at: http://www.nasmhpd.org/Meetings/Webinar_Early%20Adverse%20Experiences%20and%20Brain%20Development.aspx

- The Harvard Center for the Developing Child has an on-line media center with a number of short informational videos on early childhood brain development, problems that result from toxic stress, and strategies for promoting positive social and emotional development. Please see: http://developingchild.harvard.edu/resources/multimedia/#videos

Broaden Coalitions/Partnerships: If not already doing so, jurisdictions may wish to reach out to new allies in order to expand the scope of opportunities for enhancing resilience and child well-being, including: domestic violence programs; homelessness services; child care; early childhood education; supports for runaway youth; maternal and child health; child protective services; child abuse prevention organizations; social justice advocacy organizations, etc. During planning efforts, these groups can articulate the particular complexities that confront the children they serve and can become sensitive to other risks associated with their clients' adverse experiences.

Working with multiple partners has the additional benefits of: (a) providing expanded opportunities for cross training that can strengthen diverse workforces interested in child and family well-being; (b) offering new venues for potential data-sharing arrangements; and (c)

enhancing funding opportunities that may be available for broadly deployed networks that impact healthy child and youth development.

There is a growing movement towards creating "community resiliency efforts" in which an array of diverse partners come together to collectively create more nurturing environments for children, families, and the community at large.[xi] An SPF-funded community might consider broadening its coalition focus in order to address substance abuse prevention within a wider context of promoting healthy development and child/family resilience. For example, there are communities that are collectively striving to: create more positive school climates; offer training for diverse sectors (law enforcement, family court, Head Start, etc.) on the importance of understanding and mitigating adversity; screen for trauma at public health clinics; break cycles of intergenerational abuse; and create greater opportunities for resilience-enhancing pro-social activities.[xii,xiii,xiv] Below are some resources that may be of interest to communities that wish to embrace a broad approach to fostering child well-being and resilience.

- *ACES Connection:* This website has been established as a "community of practice" to share examples of efforts that are underway in localities across the country to try to raise awareness of the prevalence and impact of child adversity, and to employ collective efforts to create more nurturing environments. Please see: http://acesconnection.com/

- *ACESTooHigh.*org: This website has resources related to child adversity and examples from the field of work being done in different sectors to address this problem. Please see: http://acestoohigh.com/

- *DoSomething.org:* This website provides a link for young people to get involved in projects and campaigns to make a positive difference in a variety of issues that may be of importance to them in order to "Make the world suck less," as the youth-oriented tagline reads. Areas include bullying prevention, discrimination, homelessness, poverty, and many others. Please see: https://www.dosomething.org/

- *Building Community Commitment for Safe, Stable, Nurturing Relationships and Environments:* This 2014 guide from the CDC offers tips for communities that are interested in creating a shared vision and collective action to foster more nurturing environments for children. It can be accessed at: http://www.cdc.gov/violenceprevention/pdf/efc-building-community-commitment.pdf.pdf A companion piece on *Promoting Positive Community Norms* speaks to ways in which communities can support safe and stable relationships. Please

see: http://www.cdc.gov/violenceprevention/pdf/efc-promoting-positive-community-norms.pdf.pdf

- *Nurturing Environments: Evolving a Nurturing Society*: Prevention researchers Anthony Biglan, PhD and Dennis Embry, PhD maintain this blog in which they share research-based information on practices that can help to foster more nurturing environments (that produce improved behavioral health outcomes) in the various places where people live, learn, work, and play. Please see: http://nurturingenvironments.org/?page_id=551

- *Preventing Youth Violence: Opportunities for Action*: This 2014 publication by the CDC offers suggestions for ways that diverse sectors of the community can collectively work to promote healthy youth development and reduce risks for youth violence. Please see: http://www.cdc.gov/violenceprevention/youthviolence/pdf/opportunities-for-action-companion-guide.pdf

Strategic Planning and Implementing Effective Programs, Policies, and Practices

Within the SPF framework, states and communities are asked to: look at the data that has been collected; create a logic model illustrating problem areas and associated risk and protective actors influencing those problems; and then gather information on evidence-based strategies that can impact those elements and which are feasible and appropriate given the jurisdiction's resources and target population.[xv] States and communities have been doing this work for many years through the SPF, and have implemented a number of strategies to address substance use problems and to reduce consumption.

For areas that want to infuse an adversity focus into their efforts, there are some options to consider. For any given problem, there will be a range of individual/family/peer/community risk and protective factors at play. By engaging in broad-based data collection and creating adversity-informed partnerships, as described earlier, communities may become more sensitive to the value of mitigating toxic stress (e.g., maltreatment, family conflict, negative school settings) *in addition* to other environmental strategies (e.g., reducing the availability of ATOD) that have traditionally been targets of prevention efforts. Similarly–because children exposed to toxic stress can have impaired executive function, self-regulation, and relational skills–the enhancement of coping strategies, problem-solving and decision-making abilities, social/emotional skills, and positive relationships are important protective factors to include in the prevention repertoire.[xvi,xvii,xviii]

Programs: Chapter 2 provided several examples of evidence-based program (EBPs) models that have demonstrated substance-use-related outcomes, while also preventing/mitigating certain types of adversity and/or enhancing key protective factors that are vital for enhancing resilience in adversity-exposed young people. Ideally–to have the greatest impact–communities should have a wide range of such programs available, in diverse settings and addressing different developmental stages. [xix] For example, a given locality may have a concern with adolescent drug and alcohol use. In addition to strategies that specifically target adolescents, the community may *also* want to employ *long-term prevention* efforts by implementing EBPs for very young children (e.g., Nurse Family Partnership) that can help to prevent substance use problems in the *future generation of adolescents*.

Practices: Beyond formal programs, states and localities can also engage in practices that will help to get research-guided information into the hands of community members that will help to foster more nurturing environments for young people. Informational resources can be shared throughout the community. For example:

- Providers who work with children and families throughout a service system can be provided with evidence-informed practice guidelines. For example:

    - *2014 Prevention Resource Guide: Making Meaningful Connections*: Available through the Administration for Children and Families (ACF) Child Welfare Information Gateway, this guide was developed to support service providers in their work with parents, caregivers, and their children to strengthen families and prevent maltreatment. It includes information about protective factors to reduce the risk of abuse and neglect, tools to build awareness and develop community partnerships, and strategies for enhancing a community's support for families. It is available for free download at: https://www.childwelfare.gov/pubs/guide2014/guide.pdf

    - *The Learning Center for Child and Adolescent Trauma, Continuing Education*: This on-line resource is available through the National Child Traumatic Stress Network. It includes free webinar-based informational training on a number of trauma-related topics, with free continuing education credits available from the National Association of Social Workers and the American Psychological Association. To access this resource, please go to: http://learn.nctsn.org/index.php

- A number of research-based tips have been developed for caregivers that can help them to manage stress and engage in more positive parenting practices. Such resources may

be available on-line or as print fact sheets. These resources can be disseminated through a range of community settings (e.g., pediatricians' offices, libraries, family centers, WIC offices, daycare centers, via links on community websites, etc.). Examples include:

- *2014 Prevention Resource Guide: Making Meaningful Connections, Tip Sheets for Parents & Caregivers:* These tip sheets are produced in English and Spanish to help caregivers on a wide range specific parenting topics (e.g., bonding with your baby, managing stress, dealing with temper tantrums, connecting with your teen, caring for a child with developmental delays, making healthy connections with your family, etc.). [The tip sheets appear at end of the document which can be accessed at: https://www.childwelfare.gov/pubs/guide2014/guide.pdf]

- *Essentials for Parenting Toddlers and Preschoolers*: This free online resource from the CDC is designed to help parents of 2 to 4 year olds develop positive relationships with their young children, encourage good behavior, and skillfully address common challenges exhibited by this age group, such as whining and tantrums. Please see: http://www.cdc.gov/parents/essentials/index.html

- *Zero to Three®, Parent Brochures and Guides:* Zero to Three®, is a national nonprofit organization that provides parents, professionals and policymakers with information on how to nurture early development. The parent brochures series includes developmentally-specific tips for fostering healthy development from birth to age 3. Please see: http://www.zerotothree.org/about-us/areas-of-expertise/free-parent-brochures-and-guides/

- *Children and Domestic Violence Fact Sheet Series (2013):* The National Child Traumatic Stress Network has created a series of 10 fact sheets created for parents whose children have been affected by domestic violence. These user-friendly fact sheets offer insights to support resilience and recovery. Please see: http://www.nctsn.org/content/resources

- *Little Kids, Big Questions*: Zero to Three® with support from MetLife, has produced a series of 12 informational podcasts for parents of infants and toddlers. These easy to understand podcasts feature interviews with experts that focus on the application of research on early childhood development to parents' daily interactions with their baby/ toddler in order to support nurturing parenting practices and healthy emotional development of the child. Please see:

http://www.zerotothree.org/about-us/funded-projects/parenting-resources/podcast/

- Finally, as the CDC notes in its work to prevent youth violence, EVERY adult in a community can play a role in fostering healthy development in young people by:
  - Being a mentor, tutor, or volunteer at schools or youth-serving organizations to guide youth and model pro-social behavior;
  - Providing meaningful and appropriate opportunities for youth to participate in businesses or social/civic groups so they can develop their interests, skills, and talents; and
  - Recognizing and praising youth for their involvement in pro-social activity in the community. [xx]

Policies: There are a number of policies and regulations that can help to curb access and consumption of substances, including, for example: creating limits on commercial availability by managing outlet density and days and hours of alcohol sales; strengthening the enforcement of laws prohibiting sales of alcohol and tobacco to minors; the use of sobriety checkpoints; social hosting ordinances; advertising restrictions; and blood alcohol concentration laws.[xxi,xxii] The substance abuse prevention community has done an excellent job of advancing policies to implement these types of environmental strategies over the past two decades. SPF-funded states and communities that want to broaden their policy portfolio to address toxic stress in young people may *also* want to consider some of the following strategies to foster healthier environments across diverse domains:

- Provide support for publicly-funded substance abuse treatment programs to include evidence-based parent skills training for clients with minor-age children as a part of the service package.[xxiii]

- Coordinate mental health and addiction services with family-based services for adults with minor-age children to support positive family functioning and enhance child resilience.[xxiv]

- Provide training to all levels of child welfare agency staff about the kinds of traumatic history that can undermine a parent's ability to safely care for his/her child and tailor effective case planning accordingly. By including trauma screening and assessment for parents involved in substantiated cases of abuse or neglect, staff can then better understand possible underlying causes of their maltreatment behaviors and intervene appropriately. Screening these parents for substance abuse and mental health problems will also facilitate the provision of family-based treatment as needed and increase the effectiveness of child protection programs and family well-being.[xxv]

- Craft child welfare policies to require that interventions for maltreated children address the full range of their developmental needs, instead of focusing solely on physical safety. [xxvi]

- Increase access to affordable housing through tenant-based rental assistance, providing families with greater stability.[xxvii]

- Support the provision of high quality, educational childcare for low-income children beginning in early infancy in settings that are safe, healthy, emotionally supportive, and cognitively stimulating and that utilize staff who are well-trained to provide such care.[xxviii]

- Facilitate the participation of homeless children in early childhood programs by providing transportation to programs, or by providing services in easily accessible locations.[xxix]

- Provide support for school-based health centers so that children have access to quality preventative and treatment services, including both somatic and behavioral health care.[xxx]

- Enact living wage ordinances to help transition low-income workers out of poverty.[xxxi] A number of states and cities have already enacted minimum age requirements that exceed the Federal minimum wage in recognition of the fact that the current Federal rate is not sufficient to meet the basic needs of workers, particularly those with children.

- Enact paid family leave programs following the birth of a child to support parent/child bonding and time to attend to well-baby care.[xxxii]

- To support opportunities for parent-child interaction in low-income families, states can exempt single parents receiving Temporary Assistance to Needy Families (TANF) from work requirements until the youngest child reaches one year, and states can reduce TANF work requirements to 20 hours per week for single parents with children under age 6.[xxxiii]

- Enact state-level Earned Income Tax Credits (EITC) or Child Tax Credits that provide a refundable tax credit for low-income families that are working, thereby reducing poverty for low-income working families and improving family well-being.[xxxiv]

- For state and county child welfare systems: provide sufficient funding to allow for manageable caseloads; ensure that case workers are given appropriate supervision,

mentoring, and professional development opportunities; and enact and adhere to on-going quality review and improvement practices.[xxxv]

- Change school policy to replace punitive disciplinary practices with strategies that teach and reinforce pro-social behavior, which will reduce emotional and behavioral problems and improve academic performance.[xxxvi, xxxvii]

- Provide supports to enhance the well-being of children of incarcerated parents via: mentoring programs; opportunities for maintaining contact and visitation when appropriate; and re-entry supports that include skill building for positive parenting practices and housing supports.[xxxviii]

- State and Local child welfare agencies can implement a protective factors framework to strengthen families' abilities to care for and nurture their children to reduce the likelihood of future maltreatment.[xxxix]

- School systems can reduce bullying by establishing codes of conduct for positive behaviors that are expected in the school setting and by providing teachers with training and tools to stop bullying in order to create safer environments for all children to learn.[xl]

Evaluating Efforts

SPF-supported jurisdictions are asked to collect, analyze, and report data on their efforts, including an evaluation related to their 5-step planning process. [xli] Engaging in coalition building and cross-sector collaboration geared toward reducing adversity and enhancing the well-being of young people can be a very challenging endeavor. Jurisdictions that take on this challenge should document their efforts and successes related to: raising awareness among diverse stakeholders of the prevalence and impact of child adversity; forming new partnerships to increase the collective impact by creating more nurturing environments for children and youth; targeting key protective factors along the developmental continuum that can mitigate the impact of adversity; providing tools to parents to enhance positive caregiving; and enacting a tapestry of policies, practices, and programs to improve safety and well-being for young people.

Communities that target young children as part of a substance abuse prevention initiative may find it difficult to gage their "success" within the span of only a couple of years if their ultimate goal is demonstrating reductions in substance use. However, given our understanding regarding the long term impacts of reducing child adversity and building resilience, it is possible to use outcome measures that document progress in these domains with the predicted long term benefits in reducing substance involvement gleaned from the research literature. It is

therefore important to identify *shorter-term* and *intermediate outcome measures* to show progress. For example, are the rates of risk factors such as maltreatment, use of harsh discipline, poor family management decreasing? Are protective factors including parent/child bonding, opportunities for pro-social family activities, and enhanced child self-regulation, coping, and problem-solving skills increasing? Even though the longer-term reductions in substance abuse for these young people may not be realized for several years, tracking improvements in these proximal outcomes can demonstrate the effectiveness of the strategy. Some of the data systems highlighted earlier can be used to assess these outcomes.

It is also important to document the efforts to develop the collaborations with child serving agencies. Information about forming effective teams that help to increase the long term sustainability of quality interventions is available in the literature as are measures to assess important variables in coalition development and functioning.[xlii] Assessing these factors can both document successful strategies and help teams reflect on their development relative to important dimensions of team functions (e.g., new member integration, participation, community buy-in, team expertise, attitudes and leadership for sustainability). [xliii]

Efforts in Substance Abuse Prevention within the Broader Context of Child Well-Being: Case Examples

There has been a growing trend towards cross-sector collaboration and an approach to problems such as substance abuse within a larger framework of fostering healthy child and youth development. Below are a few examples of initiatives that are underway (supported via diverse funding streams) to advance such efforts.

Examples of Anti-Drug Coalitions that are Addressing Adversity

Below are some examples of community anti-drug coalitions that have expanded their focus to address a broader range of adverse circumstances impacting the children and families in their localities, in addition to targeting alcohol, tobacco, and other drugs (ATOD):

Berks County Community Prevention Partnership: This organization in Reading Pennsylvania provides an excellent example of the development of a community coalition in response to community needs and preferences. The coalition was originally founded as a 'partnership of partnerships'[xliv] with the support of the CSAP community partnership grant in 1991. The initial goal of the coalition was to provide a forum within which the community could come to understand and work to solve problems with alcohol, tobacco and other drugs. The partnership involved diverse elements of the community, including those that are currently a part of the drug-free community coalitions. It therefore represented a broad community base of youth,

parent, business, governmental, religious, educational, and other local entities concerned with community well-being. The coalition was focused initially on substance use issues.

Early in its development the coalition quickly learned that the ATOD problems were interwoven with other community concerns and that prevention of ATOD and related problems would best be accomplished through a comprehensive approach. As a first step, the coalition recognized those youth who were involved in anti-social activities that would bring them to the attention of the juvenile justice authorities were also at high risk for substance use. Working with the county bar association, the coalition launched a 7th grade delinquency prevention program that was enabled through the participation of the education system. As the prevention platform expanded beyond a narrow target on ATOD issues, other funding opportunities became available.

Simultaneously with the delinquency prevention program, the coalition identified teen pregnancy as another threat to the healthy development of both teen moms and their children. The coalition therefore established a mentoring program, *Parents Supporting Parents,* in which teen parents received support and guidance from other parents on positive child-rearing strategies.

As described in Chapter 2, the *Nurse Family Partnership (NFP)* is an evidence based program that has been shown to effectively assist first time, low income mothers in managing their pregnancy and bonding with their children. It has demonstrated outcomes in reducing child abuse and neglect while also promoting greater financial independence of the women served, and improved overall functioning for her children. As the coalition became involved with both delinquency and teen pregnancy, the NFP program was added to their repertoire to reduce the level of adversity that children would experience, which is now known to ultimately reduce the likelihood of later substance use disorders.

Subsequently, the coalition launched the *Parents as Teachers (PAT) Early Childhood Home Visitation Program* as a supplement to the NFP. PAT is an evidence-based, voluntary home visitation program that works with low income families who have children age 0-5 to improve parenting practices and provide early detection of developmental delays and other health issues. Like the NFP, PAT has been shown to reduce child abuse rates. Additionally, it improves school readiness. Both of these programs therefore directly reduce child adversity and also build family resilience to the adverse circumstances that they may encounter. Finally, the *Parent Partner Program* works with families that are involved in child serving systems to help them more effectively utilize these services with the goal of improving parent/child interaction and, ultimately, child well-being. As such, it enhances the effectiveness of treatment and support programs, supplementing and amplifying the program's effectiveness in addressing sources of family stress and conflict.

The Berks County Community Prevention Partnership is thus a prime example of an anti-drug coalition that sought to diagnose the causes of substance use conditions and realized that common forms of adversity – particularly those related to early parent/child interaction – increase the likelihood of later substance use, as well as a host of other health and behavior problems. Conversely, children whose risk for adversity is reduced, and/or whose resilience is enhanced, will ultimately be healthier, more productive, and less likely to use drugs. The coalition recognized than an attractive feature of these primary prevention programs is their broad scale impact on a wide range of health and behavioral outcomes. Given their broad goals and community partnerships, community coalitions like those in Berks County are excellent venues within which to build integrated primary prevention efforts using both skill-based and environmental strategies.

Other Coalitions: On a smaller scale, other examples surface of anti-drug coalitions striving to address broader goals, including a focus on the negative impact of adversity. For example:

- *Coffee County Anti-Drug Coalition:* This coalition in Tennessee has joined with the Centerstone Community Mental Health Programs to sponsor the fourth annual Building Strong Families conference. The conference"…brings together local, regional and national experts to address topics ranging from the effects of prenatal substance abuse on brain development, secondary trauma, suicide prevention, co-occurring disorders, clinician self-care to the role of ethics in healthcare."[xlv] As with the Berks County coalition, participation in the conference underlines the broad determinants of health including both prevention and treatment.

- *Moab Community Action Coalition:*[xlvi] This anti-drug coalition uses the Communities That Care approach for designing preventive interventions to best meet the needs of Moab County, Utah. As such it embraces a risk and protective factor framework in which family stress, poverty, mental illness and family conflict are all recognized as antecedents for poor health and behavioral health outcomes. Similarly, protective factors are identified including parental competence, safe neighborhoods, and good family functioning that help to buffer the effects of risk. The Communities that Care approach nicely maps onto the SPF, which further guides the work of the Moab coalition.

State & County Examples

Mobile, Alabama: Mobile County has utilized funding from the 20% prevention set aside of the Substance Abuse Prevention and Treatment Block Grant (SAPT BG) to support the strength-

based “Staying Connected to Your Teen” program, which has become a highly effective component of the Drug Education Council’s Chemical Abuse Prevention Program (CAPP).

The Staying Connected with your Teen model includes classes for youth and their parents/caregivers designed to: improve communication skills; foster healthy family management practices; reinforce pro-social family bonding and attachment; and decrease youth attitudes and behaviors that favor alcohol, tobacco and other drug use.

Referrals for participation come from both the Juvenile Court system and from the Mobile County Public School System. CAPP representatives receive positive feedback from parents who often share with staff that they have begun to use some of the learned communication skills and family strengthening activities, and that they feel hopeful that the program has made a positive difference in their families. These anecdotal examples are validated by the results of the pre- and post-test surveys completed by the youth and their parents. Participants consistently score higher on post program surveys in areas related to communication skills and family bonding and attachment. They also show a decrease in attitudes and behaviors that favor youth use of alcohol, tobacco and other drugs and an increase in perceptions of risk/harm for using these substances.

The "Staying Connected to Your Teen" program has had significant buy-in from partners and stakeholders in the county. The Alabama Department of Mental Health Division of Substance Abuse Services, the Mobile County Public School System, the Children’s Policy Councils, and the Juvenile Court have been strong supporters of the program, and these entities have a shared appreciation for the benefits of this family strengthening model.

Utah: Utah, across its different child-serving systems, supports a variety of evidence-based programs/frameworks referenced earlier in this guide that are designed to reduce adverse childhood experiences and enhance healthy development, including, for example: Guiding Good Choices, Nurse Family Partnership, Strengthening Families, and Positive Behavioral Interventions and Supports (PBIS), in addition to Medicaid-supported School-Based Mental Health services. The state has also opted to add the optional ACE module to its Behavioral Risk Factor Surveillance System (BRFSS) in order to collect data related to exposure to trauma and adversity during childhood.

Various local coalitions in the state are seeking to address trauma as a risk factor for drug or alcohol use. The diverse federal funding streams available to local communities has required the Utah Division of Substance Abuse and Mental Health (DSAMH) to raise awareness about the benefit of braiding services and how addressing common indicators is in a community's best interest. It is difficult for local communities to sustain efforts for each of the issues they face. The Utah DSAMH has helped its system identify the different disciplines' desired outcomes, so

each area can find common indicators shared by the multiple sectors. Many of the substance abuse prevention programs also have positive effects on mitigating mental health problems and adverse childhood experiences.

On a broader level, the state has been working to create bridges across systems for mutual benefit. The state's "Prevention by Design" program, for instance, has fostered a linkage between prevention efforts in substance use and mental illness. The Prevention by Design program broadened the scope of coalitions and the substance abuse prevention system by providing a small amount of mental health funding to address a MH-related prevention goal. The program also helped mental health professionals learn a public health approach to prevention by giving them the opportunity to implement the Strategic Prevention Framework (SPF) model. Statewide priorities and risk and protective factors were identified, then measured at to the community level where local coalitions identified the factors they could address to meet the state's mental illness prevention goals (which ended up being a suicide prevention goal). It was during this project that "ACE" became a well-known acronym and area of focus in the substance abuse prevention system. Many of the substance abuse prevention coalitions learned that some of the programs they were implementing to reduce substance abuse issues were actually addressing a broader spectrum of negative outcomes for youth.

The Utah DSAMH collaborates with human services and the health department on several prevention programs that have focused on adversity. Almost all of the coalitions are multi-dimensional and address various topics, including physical and sexual abuse of children, as well as other adverse childhood experiences. DSAMH partners with the Department of Children and Family Services (DCFS) on using ACE data and other epidemiological data to determine specific needs for its parenting classes. DSAMH also works on Systems of Care and has inter-agency staffing for/with children and families who are involved with multiple systems. DSAMH is committed to advancing prevention and early intervention, with the hope is that implementing such services and strengthening collaborative partnerships will result in fewer youth experiencing adversity, increased pathways to healthy development, and the prevention not only of substance abuse, but several other negative outcomes, as well.

Montana: There has been growing momentum in Montana to raise awareness of the findings of the Adverse Childhood Experiences (ACE) study and to create adversity-informed systems and communities.

Training for substance abuse preventionists on ACE resulted from a previous Center for the Application of Prevention Technologies (CAPT) training held in 2012 in Reno, Nevada. Montana sent two representatives to the training, who subsequently encouraged the state to bring ACE training to the substance abuse prevention staff in Montana. For the ACE training, a range of staff were invited to attend, including: substance abuse prevention professionals; key staff from

mental health, the Veteran's Administration, Tribal Relations and the Montana Department of Public Health & Human Services (DPHHS) Home Visiting programs; and child abuse/neglect prevention professionals.

Concurrently, several DPHHS divisions were holding discussions and trainings on ACE specific to their work. For example, for the past few years, Children's Mental Health has been focusing on ACE and the need for trauma-informed care. Montana Child and Family Services and the Public Health and Safety Division sponsored in-service training for their staff and explored strategies to increase adversity awareness. The Adult Mental Health and Emergency Medical Services staff were also being trained in trauma-informed care. The Early Childhood Bureau of Human and Community Services provided training to the early childhood Best Beginning's Councils and have begun weaving "ACE-informed" training into the childcare quality measures. The Montana DPHHS has formed an internal high-level working group to connect the ACEs and trauma-informed work across the agency. In 2012, Montana started collecting data related to youth exposure to trauma through the ACE module of the Behavioral Risk Factor Surveillance System (BRFSS). There is a movement in Montana toward helping communities become ACE informed, and later this year (2014), ACE Master Training will be offered to communities so that they can develop locally driven plans.

Currently, Montana DPHHS is partnering with ChildWise, a local coalition, to provide ACE Master Training (Train the Trainer) to 25 trainers. The purpose is to create a cadre of ACE Master Trainers who can aid state and local programs in using the ACE study to inform state and local programs toward breaking down the silos and collectively working more efficiently to deliver services and programs. A steering committee has been created to guide the ACE Master Training that includes representatives from: mental health treatment, substance use prevention and treatment, juvenile justice, community coalitions, a physician, a psychologist, media, state staff, local public health agency officials, and law enforcement. Montana is finding that the ACE language is something that everyone can relate to and explain, thus creating a common ground for dialogue.

Since May of 2013, the ChildWise Institute held two statewide ACE Summits with several hundred participants in attendance. These two summits resulted in a stronger partnership with the National Native Children's Trauma Center at the University of Montana. In early June 2014, 800 participants, primarily educators, were provided an entry-level ACE training at the Montana Behavior Institute training as in-service for educators and school personnel. Further, ACEs were incorporated into the indicators in Montana's Strategic Prevention Enhancement grant, and written into its Partnership for Success (PFS) grant needs assessment.

In Montana, the intent is to develop capacity to address detrimental childhood events across the continuum of care, informed by science and utilizing a strengths and resiliency framework.

The ultimate goal is to decrease the intergenerational transmission of adverse childhood experiences by interventions across the lifespan that begin prenatally.

New York State: The activities and accrued benefits of prevention programming span several different systems. Statewide coordination of prevention planning requires both relationships among the individuals who staff these concerns, as well as a common data base that can be used to help guide these efforts. A common data base, in turn, relies upon a common set of definitions regarding data elements, which is critical to effective interaction among the teams who lead prevention efforts.

New York State provides an excellent example of efforts to develop these partnerships and construct a common data base from existing individual data systems with the hope of providing a unified framework for strategic state action. The work summarized here was led by the state substance abuse authority that had a formal, institutional commitment to prevention activities following their participation in a 2012 SAMHSA sponsored policy academy. The policy academy was designed to foster cross-sector collaboration and infrastructure development to better support behavioral health related prevention efforts for children. Representatives from the SA authority, along with representatives of the state mental health, child welfare, education, health and the governor's Council on Children and Families were joined by representatives of Erie County and the Native American community who participated in the academy.

As part of the academy, the New York group was impressed with the strength of the science regarding the prevention of mental, emotional and behavioral disorders and the degree to which the representatives of the various components of state government did not share a common understanding of the methods or concepts underlying these preventive interventions. They concluded that advancing the prevention agenda in New York would require a "realignment of policies, language and constructs currently in place"[xlvii] in each state agency. In order to address these issues, the group set out to explore definitional differences between the agency representatives which ultimately resulted in an effort to investigate the development of a common data base that could be used to assess risk factors and health status. Additionally, they explicitly used a developmental framework for the work noting that adverse events have long term impacts on neural structures with subsequent behavioral health risks. As such, they sought indicators that could be used both to monitor the health status of young people but that also reflect early childhood experience. Finally, they noted the weaknesses inherent in using only agency collected data and suggested that long term state plans include the use of formal epidemiological surveys.

The workgroup's goal involved recommending specific improvements in "New York State's data infrastructure to support integration of service planning and monitoring across agencies for Mental, Emotional and Behavioral (MEB) health promotion and disorder prevention…" (p. 2).[xlviii]

In support of the goal they developed a series of recommendations regarding aggregation of existing data and enhancement of some ongoing surveys to help address gaps in the state's information. The following table summarizes the indicators that were identified as potentially available for inclusion in the integrated data base.

Proposed Archival Indicators for NYS Planning and Evaluation Data

Indicator	Source	Geographic Level
Poverty –Children in Food Stamp Households	Public Assistance	Zip Code
Poverty – Children eligible for S-CHIP	Health	County
Poverty – Children below 185% Poverty Level	Census	Zip Code
Violence- Hospital Discharge Diagnosis Intentional Injury	Health	Zip Code
Violence- Emergency Cases Intentional Injury	Health	Zip Code
Violence – Arrests (Adult and Child)	Criminal Justice	Sub-county
Family Dysfunction		
Children in Foster Care	Child and Family Services	Zip Code
Preventive Services Openings	CFS	County
Indicated Child Abuse/Maltreatment	CFS	Zip Code
Total Child Abuse/Maltreatment	CFS	Zip Code
Dissolution of Marriage	Health/Census	Zip Code
Parental Substance Abuse- Treatment Data	SA Authority (OASAS)	Zip Code
Parents with Social Security Disability	Public Assistance	Not Available
Substance Involvement		
Accidents Involving Alcohol	Motor Vehicles	Sub-county
Alcohol Density Outlets	Liquor Authority	Zip Code
Treated Prevalence		
Children with MH/SA Diagnosis/MH Medications	Medicaid Data	Zip Code
Population/Adults with MH/SA Diagnosis/Medications	Medicaid Data	Zip Code
Children 0-5 with MH Diagnosis	OMH – Biennial Survey	
Education Indicators		
School Lunch Program Enrollment	Ed Dept (DOE)	School
Chronic Absenteeism K-3	DOE	School
Math and Reading Scores Grade 3,6	DOE	School
Special Education Services Age 4-10	DOE	School
Suspensions/Expulsions	DOE	School
High School Drop Out	DOE	School

The suggested indicators that measure adverse circumstances and other risk factors, as well as health/academic status, are available in state data sets with many also available at sub-county levels for planning and evaluation purposes.

The group also identified data that is most reliably collected through surveys, and it is pursuing collaborations among the Education and Substance Use Authorities to enhance existing survey content to better address issues related to MEB prevention and promotion. They intend to add data elements to the Biennial Youth Risk Behavior Survey; and some candidate items for the expanded survey are:

- Student perceptions of school environment regarding safety
- Percent of students with high academic expectations
- Perceived availability of social-emotional supports
- Perceived level of bonding to school and community
- Suicide Risk and Protection factors
- Adverse Childhood Experiences (ACE) data
- Percentage of youth in grades 9-12 reporting the use of alcohol during the past 30 days
- Prevalence of youth ages 12-17 using non-medical use of narcotic painkillers in the past year
- Percentage of youth in grades 9-12 reporting binge drinking (5 drinks or more for men during one occasion, and 4 or more drinks for women during one occasion) during the past month.

New York City and New York State are in the process of expanding the use of Positive Behavioral Interventions and Supports (PBIS). These interventions use whole school, measurement-informed strategies to create consistent school environments with an emphasis on reinforcing positive behaviors. They have been shown to have broad range benefits on academic performance, disciplinary problems and special education placements. As part of these initiatives, data are collected and monitored to measure progress. These data are aggregated centrally and would be an excellent source of information regarding school-based indicators. Additionally, the DOE in collaboration with the Labor Department is assembling a longitudinal data base at the person level to integrate academic performance data with labor force participation data. These data will be useful in understanding the relationship between these two key indicators of human capital and will likely permit long term cost/benefit analyses of school based programming on human productivity. Ultimately, the data set may be expanded to include other data systems where individuals can be identified (e.g., corrections) to more completely understand the societal impact of differing social policies and programs.

At this writing (mid 2014), the workgroup continues to meet. Members look forward to implementing the education based indicators as part of their Kids Count program administered by the Governor's Council on Children and Families.

One of the ancillary benefits of the workgroup process has been the development of working relationships among the departments that did not exist prior to this project. Members feel optimistic that with these relationships, the continuing realization of the importance and interlocking nature of behavioral problems and the collaborative data sets may provide the foundation for greater interagency coordination in policy and practice applications.

Toward a Vision of Cross-Sector Prevention Programming to Foster Child Well-Being

Broad scale impact is one of the great advantages of prevention interventions. Skill based interventions, for example, can have long term effects across a wide spectrum of outcomes including academic achievement, pro-social behaviors, stable interpersonal relationships, obesity, drug and alcohol use, sexual behavior, criminal involvement, etc.[xlix] Ironically, the broad scale benefits that accrue to prevention programs also creates challenges. Since education, child welfare, health, mental health, substance use, and juvenile justice outcomes are all in the prevention wheelhouse, funding and data collection associated with such efforts are also spread across a range of human service programs and regulatory agencies.

Additionally, programming in one sector may generate benefits in another (e.g., school-based models to enhance social-emotional learning can have preventive effects that reduce behavioral health and juvenile justice related problems). Similarly, although multiple sectors may stand to gain from various prevention models, those "wins" can come at very different points in time.[l] With Nurse Family Partnership, for example, reductions in child maltreatment will be seen in the near-term, but the benefit of decreasing risks for juvenile arrest will not be evident until the infants in the program have reached adolescence. Finally, individual sectors may have much more narrowly-articulated missions (e.g., academic success, reduced delinquency, etc.) than a broader-based goal towards "safe, healthy, well-developed children and youth," even though the latter would help to generate the former.

For this reason, it is vital that state and local systems move beyond a partitioned approach to planning, funding, and evaluating prevention-based efforts and instead work collaboratively to ensure that children and families get the services and supports that they need to thrive. Prevention researchers Biglan, Flay, Embry, and Sandler argue that collective efforts to foster "nurturing environments"[li] for young people can serve to generate positive outcomes across diverse domains for the collective benefit of our society's human capital. An awareness of the detrimental impact of child adversity, and the tremendous short and long-term gains to be realized by preventing exposure to peril, can serve as a unifying area of focus to advance such efforts.

Summary of Key Points

- There are numerous data sets that can be accessed that include measures of stressors such as abuse, neglect, household dysfunction, exposure to school and community violence, poverty/deprivation, and social inequality. Understanding the extent to which such problems are present in a given state/county/neighborhood can help to illuminate patterns of common stressors impacting children/families/communities that can be

targeted as a part of larger efforts to improve population-level well-being and positive behavior health.

- Community members may not be aware of how *common* different types of adversity are, and of the various negative outcomes that such experiences can have throughout the life course. Summarizing the rates of adversity both from the research literature and from local data, and systematically disseminating this information, can help to fill this knowledge gap.

- If not already doing so, local substance use prevention coalitions may wish to reach out to new partners in order to expand the scope of opportunities for enhancing resilience and child well-being, including programs working in: domestic violence; homelessness services; child care; early childhood education; supports for runaway youth; maternal and child health; child protective services; child abuse prevention organizations; social justice advocacy organizations, etc.

- When reviewing possible program models, planners should not limit consideration solely to initiatives targeting adolescents. There are some excellent models for very young children and their parents that have strong evidence regarding long-term benefits in reducing substance abuse. These strategies can mitigate the rates and consequences of adversity early in life that will ultimately improve adolescent and adult outcomes.

- A number of resources exist to help caregivers positively navigate the challenges of parenting. These valuable tools can benefit the family unit as a whole and promote more nurturing adult/child relationships.

- When exploring environmental strategies, consider policies to promote child and family well-being in addition to policies designed to limit access to substances. These are complementary environmental strategies that will mutually enhance desired substance use outcomes.

- Communities that target young children as part of a substance abuse prevention initiative may wish to identify *shorter-term* and *intermediate outcome measures* to assess their progress in impacting the variables known to predict reduced substance involvement throughout the lifespan. For example, risk factors (e.g., maltreatment, use of harsh discipline, poor family management), as well as protective factors (e.g., improved self-regulation, coping and problem-solving skills) can be assessed in the short to intermediate term and are known to predict long term reductions in substance use.

- Prevention-based efforts that enhance healthy child and youth development will generate benefits across numerous sectors, including education, health, behavioral health, child welfare, and juvenile justice.

- Working collaboratively across diverse child and family serving sectors can serve to minimize the siloing of efforts, funding, data collection, and workforce development that can impede the execution of broad-based prevention strategies. Awareness of the negative impact of adversity and toxic stress on outcomes across these various sectors can powerfully focus efforts for states and communities committed to enhancing the wellbeing of children and families.

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Technical Supplement A: Screening and Assessment Related to Adversity and its Impact

Purpose of the Technical Supplement

This Supplement is geared primarily towards research-oriented professionals and clinicians. It is clear from the preceding material that adverse experiences, particularly in childhood, can have a lifelong impact on behavioral and general health conditions. It appears that, from a developmental perspective, cognitive and mental health consequences are some of the earliest effects of adversity. Substance use conditions follow as children enter developmental stages in which substances become available. Later life health problems related to mental illnesses and substance use conditions, as well as other behavioral health manifestations of early toxic stress, follow and comprise some of the chronic illnesses that undermine our human capital and drive health care expenditures. Effective preventive interventions to help reduce exposure to detrimental events and circumstances, as well as to increase resilience to their negative consequences, are therefore very important. Screening tools that reliably detect adverse events are an important part of the prevention/treatment process.

The purpose of this technical appendix is to review various issues involved in screening for adverse childhood experiences and to present information on some of the instruments that have been developed for this purpose. Given the significance of exposure to perilous events and circumstances, it should be no surprise that a large number of screening instruments exist. They vary considerably in their specific features, but also share many commonalities in the content that is addressed. For example, Roy and Perry identify over 40 assessment instruments in their 2004 review. [i] In addition to Roy and Perry, at least three other excellent reviews of these instruments are available.[ii, iii, iv] Information from these reviews, as well as the primary literature, form the basis for the following discussion.

The Purpose of Measurement

Screening and diagnostic instruments have been developed for two major purposes. The first is **epidemiological and/or needs assessment work** where they are employed to examine specified populations to determine the rates at which individuals have experienced adverse childhood events. Epidemiological data can then be used to help understand the developmental course and covariates of childhood stress or adversity either through prospective follow-up of individuals over time or, more frequently, through retrospective assessment of childhood experience by adults. Epidemiological data can either conform to

current diagnostic classification systems (often related to post traumatic stress conditions) or use more dimensional approaches to measure health and adaptation.

The second major use of screening instruments involves **assessment in clinical or child-serving settings** where the goal is to determine the existence, nature and extent of traumatic/adverse experiences so that appropriate actions can be initiated to ameliorate the effects of the trauma and/or further assess sequelae that may follow from it. Some instruments may be useful for either of the two applications, and program evaluation data also may be collected from clinical applications to help determine the effectiveness of treatment.

Time Frame for Measurement

Another important dimension on which instruments vary is the time frame that they address. Here the primary difference involves *retrospective recall* of detrimental childhood experiences versus more *contemporary* assessments. For example, among the best known assessments of child adversity is the Adverse Childhood Experiences (ACE) instrument that was used in the CDC/Kaiser study[v]. It was employed on an adult sample of individuals who were asked to recall and report experiences of misfortune from their childhood. At least 20 other screening instruments employ the retrospective recall approach. Other instruments address more contemporary adverse or traumatic experiences that can be used with children and/or adolescents. The Trauma Events Screening Inventory (TESI)[vi], for example, is a 15-item scale that may be administered by a clinician in a clinical interview, or utilize parental report of traumatic events for children.

Retrospective instruments are often used to help assess the long term impacts of adverse experiences by correlating a reported history of trauma with current health status. Contemporary reporting can be used in either treatment or epidemiological settings to identify individuals at risk who can then be followed to map the course of impairments associated with the trauma, with or without treatment interventions. Contemporary assessment is very important in longitudinal research.

Content of the Screeners

As noted earlier, a wide variety of screening instruments exist for use with children and adolescents. Most of these instruments, however, include questions that address a core set of negative events. They nearly invariably involve measures of physical abuse and neglect, emotional abuse and neglect, and sexual abuse as a key set of concerns. The number of specific items addressing each of these domains–and, relatedly, the ways in which these concepts are operationalized–vary across instruments. In addition to these core items, content often includes exposure to misfortune in the form of community violence, witnessing domestic

violence, medical trauma, the experience of natural disasters, trauma related to war, school violence, terrorism and traumatic grief.[vii]

Several of the screening procedures, particularly those used in population epidemiological surveys, are informed by the diagnostic criteria elaborated by the American Psychiatric Association.[viii] For example, the screening instruments that are employed as part of the Child and Adolescent Psychiatric Assessment (CAPA)[ix] for epidemiological research include the *extreme stressors*[x] used in the diagnosis of post-traumatic stress disorder (PTSD). Additionally the CAPA also includes other low magnitude events.[xi] The extreme stressors often involve grave bodily injury to self or important others, assault, as well as natural disasters and war. The low magnitude conditions involve: interpersonal disruptions, such as parental divorce or loss of a best friend; as well as social disruptions associated with moving or income loss. The CAPA includes vulnerability measures that address the degree to which compensatory mechanism may help to ameliorate or exacerbate the impacts of stressors such as parental psychopathology, family relationship problems, and family environmental problems like poverty.

Additionally, in epidemiological studies of PTSD, which is an organizing construct for much adversity/trauma measurement literature, specific clusters of symptoms are also included (e.g., re-experiencing the event, avoidance/numbing and hypervigilance/arousal). These later measures introduce *assessment of the consequence* of traumatic exposure into the measurement. The most comprehensive studies of population traumatic exposure[xii] use these more elaborate measurement techniques but begin with a screen of adverse events followed by measures of their consequences. It is also important to note that the DSM V modifies some of the criteria that were included in these earlier instruments, principally by dropping the requirement of acute fear or terror to the traumatic event and the addition of several symptoms related to self-blame or disparagement.[xiii] Since the DSM V appeared in May 2013, none of the screening instruments reviewed strictly conform to the new standards, however they continue to be largely consistent with the new definitions. Also, some specific concerns relate to the application of adult PTSD criteria to children, as discussed by van den Heuvel and Seedat.[xiv]

Response Method

Another dimension on which screening instruments differ is the methods that are employed to gather the information. Many of the diagnostically oriented screeners employ trained interviewers and/or computer generated self-report instruments to accommodate the complex branching of questions that are needed for diagnostic interviews. Even without the complexity of diagnosis, several instruments are designed to be administered by professional interviewers (e.g., Early Trauma Inventory.[xv]) Perhaps the most common types of screening instruments are

designed to be self-administered. These typically employ structured response alternatives and can be completed privately, which is believed to increase the accuracy of reporting embarrassing or other stigmatized experiences (e.g., sexual abuse). A third type of interview format requires a trained clinician to conduct the interview and would most generally be used in treatment environments (e.g., Children's PTSD Inventory[xvi]). In addition to these three formats, some screening instruments are designed for collateral reports – typically parents. These are often appropriate when younger children are the population of interest who would have difficulty understanding or reporting traumatic events (e.g., TESI-PRF-R[xvii]). Depending upon the purposes of the screening, the age of the respondent, and the particular circumstances of the assessment, differing response formats will be appropriate.

Developmental Appropriateness

The developmental stage of the individuals being screened also has direct implications for the selection of a screening tool. This is most clearly the case for young children who either may lack adequate verbal skills and/or who may lack the conceptual framework to understand adult notions of abuse or neglect. Additionally, the developmental challenges that are confronted at differing periods also may interact with the likelihood of traumatic experience. Adolescent risk taking, for example, may increase the likelihood of experiencing adversity. The Anatomical Doll Questionnaire[xviii], designed for children 2-7, involves a semi-structured child interview employing anatomical dolls in which interviewers observe children's responses to the dolls. It is designed to assess child sexual abuse.

Some Commonly Used Screening Instruments

The Adverse Childhood Experiences Interview (ACE) – The Family Health History component of the ACE study questionnaire includes 68 questions addressing various types of child abuse/neglect and childhood exposure to dysfunction in the home setting. This is a retrospective assessment instrument asking adults to report adversities experienced during the first 18 years of their life. It combines maltreatment and household dysfunction variables that are conceptualized separately in other screening instruments. Major dimensions include (test-retest reliability kappa coefficients[xix]):

- Psychological Abuse (.66)
- Physical Abuse (.55)
- Sexual Abuse (.69)
- Household Dysfunction
  - Substance Abuse (.75)
  - Mental Illness (.51)
  - Interpersonal Violence (.77)
  - Criminal Behavior (.46)

- Overall ACE Score (.64)

The ACE is scored by summing the number of areas in which an individual reported an adverse experience. Normative data are available from the original sample of approximately 17,000 adult members of the Kaiser/Permanente health plans in San Diego. Cut-off scores (typically 4 event categories) have been related to increased likelihood of adult mental and general health problems, as well as substance use. The validity of the constructs assessed in the ACE questionnaire have been confirmed by other longitudinal research involving early childhood adversity, while the retrospective nature of the principal ACE samples remains a concern regarding the independence of current health status and recall of childhood experiences.

Childhood Trauma Questionnaire (CTQ): Like the ACE questionnaire, the CTQ is a retrospective instrument that addresses the common dimensions of childhood abuse and neglect. Seventy- and 28-item versions of the questionnaire have been developed. It is appropriate for use with individuals aged 12 and older, but is not used for younger children or for parental collateral reports. The CTQ uses a five point Likert response scale varying from 'Never True' to 'Very Often True' for each of the referent maltreatment items. The 28-item version of the CTQ has been demonstrated to measure the common five factors in child maltreatment – physical abuse and neglect, emotional abuse and neglect, and sexual abuse through confirmatory factor analyses of widely varying clinical and normative samples[xx] suggesting its applicability across differing populations. The subscales that comprise the longer instrument were found to have good internal consistency (range .81- to .95) and test-retest reliability over a four month retest interval (.79 to .86).[xxi] Normative data are available to assist in the interpretation of the scale score data.

National Child Traumatic Stress Network (NCTSN) – UCLA-PTSD-RI: As part of the national data base maintained by the NCTSN, the UCLA-PTSD-RI instrument is used to collect information regarding the children served. This instrument is used by clinicians in a self-report format for school age children. It includes child/adolescent (age 7+) and parent versions. As was discussed earlier, the UCLA-PTSD-RI works within the DSM diagnostic framework and includes the information required for a DSM –IV diagnosis of PTSD. As such, it includes a review of traumatic events consistent with A-criteria from the DSM. The UCLA Trauma History Profile adapted for the NCSTN client data system[xxii] provides the item referents for the trauma profile. This screen is completed by the service provider at admission to the NCSTN site using multiple informants. The screen includes the following, extensive catalogue of lifetime traumatic experiences:

- Sexual Abuse/Maltreatment
- Sexual abuse/Rape
- Physical abuse/Maltreatment

- Physical assault
- Emotional abuse/psychological maltreatment
- Neglect
- Domestic violence
- War/terrorism/political violence (inside and outside USA measured separately)
- Illness/Medical Trauma/Accident
- Natural Disaster
- Kidnapping
- Traumatic loss/Bereavement/Separation
- Forced displacement
- Impaired caregiver
- Extreme personal/interpersonal violence
- Community violence
- School violence
- Other trauma

Each of the references is scored as having occurred, being suspected, or having not occurred. Following the lifetime trauma screen, symptom questions measuring reaction to the traumatic experience are administered. These symptoms reference the last month and are therefore targeting current PTSD symptoms. For persons who report multiple traumas, they are asked to consider the one that is currently most troublesome. The PTSD symptom scale assesses the frequency of each of 17 symptoms that are organized to map the B (Intrusion), C (Avoidance) and D (Arousal) components of the diagnostic algorithm. A frequency response scale is employed using a 4 point response scale (from 0=Never to 4=most of the time) with symptom referents.

Recent data[xxiii] indicates that these scales have moderate to strong internal consistency with Chronbach's alphas ranging from .67 for criterion D measures to .90 for the overall symptom scale. A similar range of reliabilities were found across the age, sex and racial/cultural sub-groups in the analysis. Additionally, moderate to strong correlations exist between the PTSD-RI scales and the symptom scales in the Trauma Symptom Checklist for Children – Alternative[xxiv] (TSCC-A), indicating the convergent if not discriminant validity of the symptom items. The TSCC-A tool measures post-traumatic stress, anger, anxiety, depression, and dissociation. Criterion reference validity of the UCLA-PTSD-RI was demonstrated by differential specificity and sensitivity with reference to persons with and without independently diagnosed PTSD using DSM III criteria.[xxv] The UCLA-PTSD-RI therefore yields measures of lifetime traumatic exposure and the current degree to which reaction to trauma continues to cause psychological distress.

The Global Assessment of Individual Needs (GAIN): The GAIN is a large data collection structure and resulting data set that is used extensively by the substance use community.[xxvi] It contains two scales that measure victimization and adversity related stress. Normative data

from treatment and other populations are available for these data. Additionally, as reported elsewhere in this document, these scales have been used to characterize individuals in treatment with regard to the frequency and severity of adverse experiences.

The General Victimization Scale is included in the GAIN. It is a self-report, 15-item scale composed of two components. The first assesses whether the individual was ever attacked, beaten, sexually assaulted or emotionally abused, and if any of those events occurred prior to the age of 18. The second involves a series of questions addressing the frequency of these acts, relationship of perpetrators, life threatening nature of the attack, if it resulted in oral/anal/vaginal sex, and if the victim did not receive help from others. Finally, the third component accesses the degree to which the individual fears that these threats may reoccur. Each of the items is scored either yes or no, with the overall score composed of the total number of affirmative responses. It is an internally consistent scale with alphas of .82 for adolescents and .86 for adults. The authors suggest interpretive cut off scores of none, moderate (1-3) and high (4-15), which discriminated among adolescents who had been physically attacked, sexually abused, or emotionally abused. The cutoff scores also clearly differentiated the groups on substance use, general mental distress, traumatic stress index (to be discussed below) and the general conflict tactic scale.

The Traumatic Stress Scale (TSS) is also included in the GAIN battery of measures. It is a count of past year symptoms or memories that are associated with trauma exposure. As such, it addresses the reactions to traumatic stress and can be used in diagnostic algorithms much as the UCLS-PTSD-RI index. It is based on the Mississippi Scale for Combat Related PTSD.[xxvii] The TSS was developed through use of item response theory analysis of the 35-item Mississippi scale to develop a briefer version comprised of 13 items that use a yes-no format. Norms and confirmatory factor analysis are reported by Dennis and colleagues.[xxviii] The 13-item scale references the last 12 months and includes a range of symptoms of distress, including wishing for death, nightmares, numbing, hopelessness, alcohol use as a coping mechanism, explosive outbursts, sleep problems, and guilt, among others. The thirteenth item references the duration of these reactions for longer than 3 months.

Juvenile Victimization Questionnaire:[xxix] This tool is a 34-item measure that was developed to gage common types of adversity experienced by children and adolescents. It was developed on a national sample of children and adolescents using a random digit telephone survey. It is designed to be used in an interview format for youth from 8-17, with a caregiver version for children under 8. The original version measures victimization during the last year including being exposed to:

- Conventional Crime (e.g., robbery)
- Physical assault

- Property victimization
- Child maltreatment
- Sexual victimization
- Sexual assault
- Peer or sibling victimization
- Peer or sibling assault
- Witnessing or indirect victimization

The internal consistency reliabilities vary from .35 to .80, which largely reflects the number of items in each scale. Test-retest reliability showed good agreement between re-test trials at the item level (.79 to 1.00) with the mean kappa coefficient (mean .59 with a range from .22 to 1.00). Construct validity was assessed by examining the correlations between the JVS items and scales with the Trauma Symptoms Checklist which yielded significant but moderate correlations with anxiety, depression and anger scales of the TSCC[xxx] as would be predicted from victimization. Normative data are also presented in Finkelhor,[xxxi] as is the full instrument with scoring instructions.

Child Abuse and Trauma Scale:[xxxii] This 38-item self-report scale is for individuals considered to be at risk of childhood trauma. It measures the retrospective frequency of toxic stress by using a 4 point frequency response format (*from* 0=Never *to* 4=Always).The CATS is composed of 3 subscales measuring sexual abuse, punishment and neglect/negative home environment. The instrument was developed on a sample of adolescents in psychiatric inpatient care and later examined with college student respondents. Normative data are available. The overall scale in internally consistent (alpha =.80), with a test/retest reliability of .89 over a six week period. Subscale internal consistency was less impressive (e.g., Punishment = .63). Construct validity has been demonstrated through correlations with dissociation in both the clinical and college samples.

Traumatic Events Screening Inventory for Children (TESI-C): The TESI-C is a semi-structured screening scale for use by clinicians or trained interviewers for use with children aged 4-14. A parental version is also available. The 15-item child version reviews a series of potentially traumatic events with probes following report of an event to ascertain information such as, age when it occurred, frequency, treatment related to the event, who was involved, etc. Additionally, each positive item is probed for the respondent's and interviewer's sense of threat, and the respondent's sense of extreme fear, helplessness and horror. Items are generally arranged in order of increasing potential sensitivity to the respondent beginning with accidents, proceeding through natural disaster, illness, hospitalization, parental separation, attack, threat of grave harm, kidnapping, witnessing violence, family member incarceration and on to sexual abuse. High inter-rater reliability is obtained in the use of the measures (.73-1.00).[xxxiii] Test-retest correlations range from 0.5 to 0.7 over a two to four month period for the

parental version. Test-retest reliabilities for specific items ranged from .83 for sexual abuse to near 0 for the exposure to natural disaster. Parent child agreement on specific items ranged from .64 to .79[xxxiv] which also supports the convergent validity of the measures.

This brief review of some commonly used instruments highlights the approaches that have proven useful in identifying detrimental events and circumstances in childhood. Both retrospective and contemporary screening instruments are available. Retrospective tools are useful for exploring the association of recalled trauma and adult health status. Contemporary screening is helpful in identifying individuals or groups who are at risk, both for clinical applications, as well as for prospective research documenting the longitudinal effects of early childhood trauma. Many instruments are available in both self-report and collateral report versions with both self-report and interviewer/clinician administered versions. While the instruments vary in the specific events assessed, all involve physical and sexual abuse, as well as physical and emotional neglect. Most of those reviewed here have evidence of reliability and validity, although significant variation among sub-scales and individual item reliability is common. Finally, the instruments vary considerably in the degree to which they conform to the DSM classification system for PTSD with some, such as the UCLA instrument and the CAPA, highly tailored to produce DSM diagnoses while others, like the ACE questionnaire focus more on the overall quantity of different detrimental experiences.

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