Dear Cape Cod and Islands Community:

On October 4th, 2013, a small group of dedicated behavioral health providers and consumers representing local agencies organized the first behavioral health summit on Cape Cod and the Islands to a sold-out crowd. The outcome of our summit was the creation of the Behavioral Health Provider Coalition of Cape Cod & the Islands (BHPCCCI) whose primary purpose is to facilitate opportunities for networking, communication, and sharing of knowledge between service providers in order to support an integrated and cohesive system of behavioral healthcare for residents of Cape Cod and the Island.

The BHPCCCI is proud to highlight these opportunities at our 7th Annual Behavioral Health Summit on Friday, November 1st at the Cape Codder Resort in Hyannis. This year's Summit showcases **"Adverse Childhood Experiences (ACEs): Restoring the Shaky Bridge"**

Presenters at this Year's summit will focus on building a resilient and trauma-informed community which means a commitment to engage people from all sectors—government, education, first responders, housing, health care and business—in common goals. First, is to understand how personal adversity affects the community's well-being. Second, is to institute resilience-building practices so that people, organizations and systems contribute to building advocacy for appropriate prevention and intervention services for those struggling with complex trauma in our community.

Please join us in welcoming our presenters and we hope you find today's agenda educational and informative. BHPCCCI thanks you for your participation as we move forward to improve the quality of care to our residents of Cape Cod and the Islands. If you would like to become a member of the BHPCCCI Coalition, please visit our website at www.bhpccapecod.org.

Respectfully,

Dan Gray and Diane Ofria
Co-Chair/s, Behavioral Health Provider Coalition of Cape Cod & the Islands

The BHPCCCI would also like to thank the following organizations for their continued support and commitment in making sure our Behavioral Health Summit is a success.

Cape Cod Healthcare · Cape Cod 5 Foundation · Duffy Health Center · Gosnold on Cape Cod (Prevention | Intervention Treatment | Recovery)

Cape & Islands Suicide Prevention Coalition · Outer Cape Health Services · Relief Home Health Services Inc. · vinfen (transforming lives together) · Whole Health Pharmacy

Summit Schedule - Friday, November 1st

Registration | 8:00 - 8:30 AM

Welcome and Introductions | 8:30 – 9:00 AM

Gold Sponsorship Introductions: Michael K. Lauf, President & CEO, Cape Cod Healthcare; Laura Newstead, EVP/Chief Human Resource Officer, Cape Cod Five Foundation; Heidi R. Nelson, FACHE, CEO, Duffy Health Center; Richard Curcuru, LICSW, President & CEO, Gosnold on Cape Cod,

Building a Resilient and Trauma-Informed Community|

- Video/Opening Statement/Panel discussion regarding public health and safety risks in our community.

Opening Statement| 9:00 – 9:15 AM

- **Senator Julian Cyr, State Senator, Cape and Islands District**

Panel Discussion | 9:15 – 10:20 AM

Trauma Informed Community Building - Bridging the Gap

Moderator: Raymond Tamasi
Panelist/s: Chief Frank Frederickson, Yarmouth PD; Bart Main, MD, Child/Adolescent Psychiatrist, CCHC/Kate Rudman, MD, Pediatrician, CCHC; Lin Grace Rohr, Director - Angel House Housing Assistance Corporation; Christina Caputo, Cape Cod Collaborative

Breakout Review | 10:20 – 10:30 AM – Review of breakout sessions

(10:30– 10:45 am – MORNING BREAK)

Morning Breakout Sessions | 10:45 – 12:00 PM

- *Breakout Session #1 – Presenter: Allison Sampson-Jackson, PhD, LCSW* - Resilience Action Plan Workshop
- *Breakout Session #2 - Presenter: Katie Everson, OT* – Reconnecting the Mind and Body: Interventions, Tools, and Tips Using Sensory Integration
- *Breakout Session #3 – Presenter/s: Patricia Cawley, LICSW, Duffy Health Center; Elizabeth Albert, MSW, Barnstable County Department of Human Services; Marta "Dikke" Hansen, LICSW, Outer Cape Health Services* - Community Health Centers Collaboration: How ACEs impacts human services on Cape Cod

Lunch | 12:00 – 12:50 PM

Afternoon Breakout Sessions – REPEAT OF MORNING SESSIONS | 1:00 - 2:15 PM

Excellence in Behavioral Health Service Award | 2:15 – 2:30 PM

Closing Keynote Speaker | 2:30 – 3:45 PM

"Looking at what's strong not what's wrong . . . The Resilience Story"

Allison Sampson-Jackson, PhD, LCSW - Certified Dare to Lead™ Facilitator, CEO of Integration Solutions, Inc.

Closing Remarks 3:45 - 4:00 PM

Opening Video & Presentation/Morning Panel Discussion | 9:00AM – 10:20AM **(1.25 hrs)**

https://vimeo.com/137282528

Building a Resilient and Trauma-Informed Community

"Community trauma" affects social groups or neighborhoods subjected to interpersonal violence, domestic violence, substance abuse and socioeconomic factors including poverty, unemployment, homelessness and lack of social support networks. Across the life span, exposure to adverse childhood experiences (complex trauma) is linked to a wide range of problems, including addiction, chronic medical conditions, depression and anxiety, self-harming behaviors, and other psychiatric disorders.

Building a resilient and trauma-informed community means a commitment to engage people from all sectors—government, education, first responders, housing, health care and business—in common goals. First, is to understand how personal adversity affects the community's well-being. Second, is to institute resilience-building practices so that people, organizations and systems contribute to building advocacy for appropriate prevention and intervention services for those struggling with complex trauma in our community.

Opening Statement – State Senator Julian Cyr | 9:00AM – 9:15AM

State Senator Cyr will discuss how he successfully secured appropriations totaling $7.34 million in the FY2020 budget for district and statewide programs including $740,000 in local initiatives to help Cape Cod, Martha's Vineyard and Nantucket and $6.6 million in statewide priorities. A majority of the spending will go to programs that provide housing, shelter, and mental health services for seniors and our most vulnerable citizens; fight the opioid crisis via funding evidence-based prevention and harm reduction programs; support critical public safety programs to help veterans, children, as well as victims and witnesses to violent crimes; promote economic development through employee ownership of small businesses and job training; and safeguard the environment.

"The final FY20 budget secures programs that help people in their darkest time, while making targeted investments to spur economic development and strengthen communities," said Senator Cyr. "Through this budget, we've been able to advance priorities that will make a difference for Cape Codders and Islanders, whether someone is homeless or housing insecure, lives with mental illness or addiction, hopes to sustain a small business, or seeks to steward our fragile environment."

Morning Panel Discussion | 9:15AM – 10:20AM

Trauma Informed Community Building - Bridging the Gap

Moderator: Raymond Tamasi
Panelist/s: Christina Caputo, Cape Cod Collaborative; Chief Frank Frederickson, Yarmouth PD; Bart Main, MD, Child/Adolescent Psychiatrist/Kate Rudman, MD, Pediatrician, CCHC; Lyn Grace Rohr, Angel House - Housing Assistance Corporation

Participant will be able to:

1. Verbalize the biggest challenges facing schools, law enforcement, healthcare and housing on Cape Cod and how personal adversity affects the community's well-being.
2. To understand the importance of collaborative relationships and involvement among agencies to foster resilience-building practices for prevention and intervention services.
3. To understand the consequences of trauma and adversity and the innovative steps our community can take to create a safer place to live, work and learn for those struggling with complex trauma.

Adverse Childhood Experience (ACE) Questionnaire

Finding your ACE Score ra hbr 10 24 06

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household **often** …
   Swear at you, insult you, put you down, or humiliate you?
   or
   Act in a way that made you afraid that you might be physically hurt?
   Yes No If yes enter 1 _____

2. Did a parent or other adult in the household **often** …
   Push, grab, slap, or throw something at you?
   or
   Ever hit you so hard that you had marks or were injured?
   Yes No If yes enter 1 _____

3. Did an adult or person at least 5 years older than you **ever**…
   Touch or fondle you or have you touch their body in a sexual way?
   or
   Try to or actually have oral, anal, or vaginal sex with you?
   Yes No If yes enter 1 _____

4. Did you **often** feel that …
   No one in your family loved you or thought you were important or special?
   or
   Your family didn't look out for each other, feel close to each other, or support each other?
   Yes No If yes enter 1 _____

5. Did you **often** feel that …
   You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
   or
   Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
   Yes No If yes enter 1 _____

6. Were your parents **ever** separated or divorced?
   Yes No If yes enter 1 _____

7. Was your mother or stepmother:
   Often pushed, grabbed, slapped, or had something thrown at her?
   or
   Sometimes or often kicked, bitten, hit with a fist, or hit with something hard?
   or
   Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?
   Yes No If yes enter 1 _____

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
   Yes No If yes enter 1 _____

9. Was a household member depressed or mentally ill or did a household member attempt suicide?
   Yes No If yes enter 1 _____

10. Did a household member go to prison?
    Yes No If yes enter 1 _____

Now add up your "Yes" answers: _____ This is your ACE Score

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

Adverse Childhood Experiences and the Lifelong Consequences of Trauma

Many people can identify a person in their lives who struggles with a chronic illness like heart disease, diabetes, or hypertension. Most people also know someone who struggles with mental illness, substance abuse, or relationships in general. Traditionally, the health care system would point to high-risk behaviors such as poor diet, drug use, or a sedentary lifestyle as the primary causal factors. Questions for patients have focused on "What's wrong with you?" rather than "What happened to you?" A 1998 study from the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente is leading to a paradigm shift in the medical community's approach to disease. This study of more than 17,000 middle-class Americans documented quite clearly that adverse childhood experiences (ACEs) can contribute significantly to negative adult physical and mental health outcomes and affect more than 60% of adults.[1,2] This continues to be reaffirmed with more recent studies.

Adverse childhood experiences include

- *Emotional abuse*
- *Physical abuse*
- *Sexual abuse*
- *Emotional neglect*
- *Physical neglect*
- *Mother treated violently*
- *Household substance abuse*
- *Household mental illness*
- *Parental separation or divorce*
- *Incarcerated household member*

Along with the original 1998 ACE Study, there are known predictive factors that make sense to include in the list of adverse experiences. These can be single, acute events or sustained over time. Examples include death of a parent and the detrimental effect of community violence and poverty, among others.[3] Adverse childhood experiences occur regularly with children aged 0 to 18 years across all races, economic classes, and geographic regions; however, there is a much higher prevalence of ACEs for those living in poverty.

While some stress in life is normal—and even necessary for development—the type of stress that results when a child experiences ACEs may become toxic when there is "strong, frequent, or prolonged activation of the body's stress response systems **in the absence of the buffering protection of a supportive, adult relationship."**[4,5] The biological response to this toxic stress can be incredibly destructive and last a lifetime. Researchers have found many of the most common adult life-threatening health conditions, including obesity, heart disease, alcoholism, and drug use, are directly related to childhood adversity. A child who has experienced ACEs is more likely to have learning and behavioral issues and is at higher risk for early initiation of sexual activity and adolescent pregnancy. These effects can be magnified through generations if the traumatic experiences are not addressed. The financial cost to individuals and society is enormous.[6]

Never before in the history of medicine have we had better insight into the factors that determine the health of an individual from infancy to adulthood, which is part of the **life course perspective**—a way of looking at life not as disconnected stages but as integrated across time.

What happens in different stages of life is influenced by the events and experiences that precede it and can influence health over the life span. An expanding body of convergent knowledge generated from distinct disciplines (neuroscience, behavioral science, sociology, medicine) provides child health care professionals the opportunity to reevaluate what care is needed to maximize the effect on a child's lifelong health. Importantly, an extensive body of research now exists demonstrating the effect of traumatic stress on brain development. Healthy brain development can be disrupted or impaired by prolonged, pathologic stress response with significant and lifelong implications for learning, behavior, health, and adult functioning.[4]

WHAT IS THE ROLE OF STRESS?

Stress in itself need not result in injury and is, by its nature, a subjective experience. Stress in a supportive environment may not be toxic. The perception of stress varies from child to child; serious threats may not disturb one child, while minor ones may be traumatic to another. This variability is multifactorial depending on a child's previous trauma, social-emotional support, and genetic predisposition.

Just as the stress of ambulation helps promote bone and muscle growth, a child needs to experience some emotional stress to develop healthy coping mechanisms and problem-solving skills. Experts categorize stress as *positive*, helping to guide growth; *tolerable*, which, while not helpful, will cause no permanent damage; or *toxic*, which is sufficient to overcome the child's undeveloped coping mechanisms and lead to long-term impairment and illness.[5]

Toxic stress response can occur when a child experiences strong, frequent, or prolonged adversity, such as physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, or the accumulated burdens of family economic hardship, in the absence of adequate adult support. This kind of prolonged activation of the stress response systems can disrupt the development of brain architecture and other organ systems and increase the risk of stress-related disease and cognitive impairment well into the adult years.

The National Child Traumatic Stress Network (NCTSN) definition of *traumatic stress* encompasses the physical and emotional responses of a child to events that threaten the life or physical integrity of the child or of someone critically important to the child (eg, parent, sibling). It is this out-of-control physiological arousal that is the hallmark of stress that becomes traumatic and can incite what is initially an adaptive response to the stressor that ultimately becomes maladaptive and destructive. While a single event like a natural disaster or an assault by a stranger may constitute toxic stress, the effects multiply when the trauma continues, whether by repetition of similar stresses (eg, an environment of domestic violence or parental drug abuse) or accumulation of disparate ones (eg, parental illness and a hurricane hits town). In other words, there is a dose-response relationship. The effect may be particularly severe when trauma involves the child's primary caregiving system. Termed *complex trauma* by the NCTSN, this reaction develops over time, as subsequent events reinforce the lessons learned previously.[7]

The effect of toxic stress resulting from trauma may not be immediately visible or appear as one would expect. In addition, some traumatic sources of toxic stress may not be readily apparent to the clinician. Psychological maltreatment can be traumatic and stressful.[8] Neglect can also be traumatic. Neglect is almost always chronic, as basic needs such as food, shelter, or emotional security are continually not being met. Neglect is often seen in conjunction with abuse and may be exceptionally severe; 71% of child maltreatment fatalities are due to neglect exclusively or in combination with another maltreatment type.[9]

For most children who have experienced trauma and toxic stress, the experiences began at an early age. As a result, the events may be remote and documented history is often buried among old records or nonexistent. Prenatal exposures that influenced brain development may not be detectable in obstetric records. Pediatricians should understand that presentations of attention deficits, emotional dysregulation, and oppositional behaviors may have their roots in early abuse or neglect or other sources of toxic stress. Recognition of the power of early adversity to affect the child's perceptions of and responses to new stimuli may aid the pediatrician or other clinician in appropriately understanding the causes of a child's symptoms.

THE BIOLOGY OF TRAUMA

The past few years have brought a dramatic improvement in our understanding of how a healthy brain develops and the effect, positive or negative, that a child's environment has on that process. Several systems—social/behavioral, neuroendocrine, and even genetic—are all influenced by early experiences and interact with each other as a child grows and develops. The ability of an individual to successfully overcome negative experiences from trauma depends on many factors related to the complex interaction between these systems. Several key observations have emerged from recent research.

- *The brain is not structurally complete at birth.*
  - Myelination, proliferation of synaptic connections, and development of glial and circulatory support systems all continue long after a child has entered the world. Nature gives children a chance to adapt to the specific needs presented by the environment into which they have been born.

  > Among other things, optimal development of the neuroendocrine system is dependent on adequate nutrition and absence of toxins like lead, mercury, alcohol, other drugs, and toxic stress.

- *Structural development is guided by environmental cues.*
  - An infant's brain adapts to what it sees, hears, and feels. Researchers have demonstrated critical periods for effective development of many brain systems.

  > Proper structural growth depends on a nurturing, loving, and stimulating environment, one that prepares the child for future circumstances.

- *Effective stimulation requires interaction with other people.*
  - Children can't be expected to provide their own high-quality stimulation. They learn from every person encountered—especially primary caregivers.

  > Other people must be present, attentive enough, and consistent or predictable enough to teach the lessons the developing brain needs. Stimulation from television, smartphones, or tablets does not replace interaction with people.

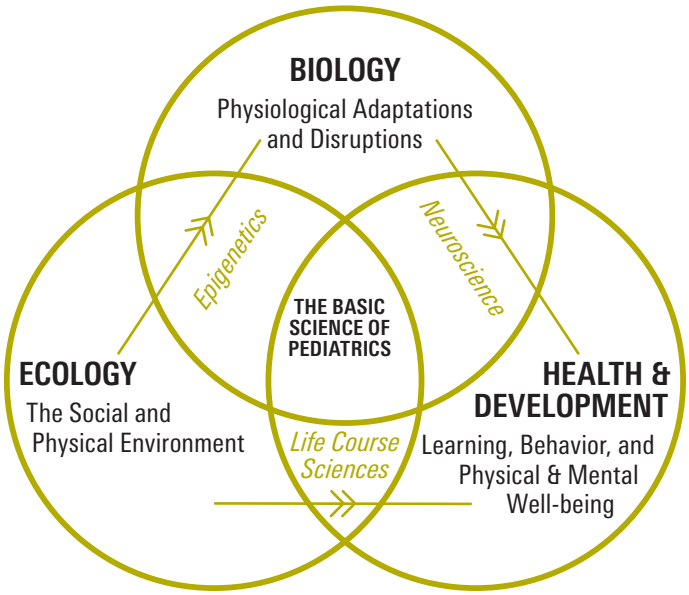
- ***Gene expression determines neuroendocrine structure and is strongly influenced by experience.***
  - Genetic research has identified a variety of alleles that appear to protect against, or predispose to, long-term sequelae of traumatic stress by varying the sensitivity of stress hormone receptors in the limbic system.[10,11,12] An increasing body of evidence points to the ability of early life experience to trigger epigenetic modifications, effectively altering brain structure by changing gene transcription.[13,14]

> One way, then, that early adversity can affect long-term change is by altering the way an individual's genetic blueprint is read, thus influencing the stress response.

- *The body's systems are mutually interactive.*
  - Social interactions (or the lack thereof) may affect neuroendocrine development, which can alter observed behaviors (Figure 1). Behavior, in turn, produces social feedback, which stimulates a neuroendocrine response (a physiological response) and, if severe, may cause modifications in brain structures (an anatomic response). Another word for this complex system of interactions is *learning*. When the body learns under conditions of extreme stress, epigenetic modifications in gene transcription can be produced and cause structural changes in the developing brain.[12,15] This process can operate both ways. The epigenetic modifications to gene transcription ultimately determine the brain's structure, which governs behavior. The behavior can result in interactions that reinforce or reactivate the stress response, causing additional negative modifications to the brain architecture. This interactive cascade of responses among social/behavioral, neuroendocrine, and genetic/epigenetic systems has recently been dubbed the ecobiodevelopmental model.[4]

> The more emotionally charged a learning situation is, the more likely it is to result in long-term modifications.

Figure 1.



EFFECT OF TRAUMA ON PARENTING ABILITY

Adults who have experienced ACEs in their early years can exhibit reduced parenting capacity or maladaptive responses to their children. The physiological changes that have occurred to the adult's stress response system as a result of earlier trauma can result in diminished capacity to respond to additional stressors in a healthy way. Adverse childhood experiences increase the chance of social risk factors, mental health issues, substance abuse, intimate partner violence, and adult adoption of risky adult behaviors. All of these can affect parenting in a negative way and perpetuate a continuing exposure to ACEs across generations by transmission of epigenetic changes to the genome.

RESILIENCE AND OTHER REASONS FOR OPTIMISM

Adverse experiences and other trauma in childhood, however, do not dictate the future of the child. Children survive and even thrive despite the trauma in their lives. For these children, adverse experiences are counterbalanced with protective factors. Adverse events and protective factors experienced together have the potential to foster resilience. Our knowledge about what constitutes resilience in children is evolving, but we know that several factors are positively related to such protection, including cognitive capacity, healthy attachment relationships (especially with parents and caregivers), the motivation and ability to learn and engage with the environment, the ability to regulate emotions and behavior, and supportive environmental systems,

Figure 1. *The basic science of pediatrics. An emerging, multidisciplinary science of development supports an ecobiodevelopmental framework for understanding the evolution of human health and disease across the life span. In recent decades, epidemiology, developmental psychology, and longitudinal studies of early childhood interventions have demonstrated significant associations between the ecology of childhood and a wide range of developmental outcomes and life course trajectories. Concurrently, advances in the biological sciences, particularly in developmental neuroscience and epigenetics, have made parallel progress in beginning to elucidate the biological mechanisms underlying these important associations. The convergence of these diverse disciplines defines a promising new basic science of pediatrics.*

including education, cultural beliefs, and faith-based communities.[16] The **protective factors framework** developed by Strengthening Families[16] as well as the **Essentials for Childhood** program from the CDC[17] provide more detail.

There are additional reasons for optimism. There now exist several evidence-based, effective clinical treatments to call on in intervening with children who have experienced trauma and adversity, including Trauma-Focused Cognitive-Behavioral Therapy[18] and Parent-Child Interactive Therapy.[19] Each of these programs includes attention to parenting ability and works on establishing behaviors that promote resilience in the child and parent. Proactive initiatives like home visitation programs for high-risk families, though not widely disseminated, have incredible promise for the prevention or mitigation of parent- and environment-mediated ACEs specifically because they are focused on critical periods in human development—prenatal through the first 2 to 3 years of life.[20]

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Please see the AAP Web site for the online version of this document as well as additional information at www.aap.org/traumaguide

The recommendations in this toolkit do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

Research Brief

Updated February 20, 2018*

February 2018 Publication #2018-03

The prevalence of adverse childhood experiences, nationally, by state, and by race/ethnicity

Vanessa Sacks, MPP, and David Murphey, PhD

Overview

A growing body of research has made it increasingly apparent that adverse childhood experiences (ACEs) are a critical public health issue. ACEs are potentially traumatic experiences and events, ranging from abuse and neglect to living with an adult with a mental illness. They can have negative, lasting effects on health and well-being in childhood or later in life.[1] However, more important than exposure to any specific event of this type is the accumulation of multiple adversities during childhood, which is associated with especially deleterious effects on development.[2] There is growing interest in understanding the prevalence of these experiences across different communities in the United States, and how to prevent and respond to them. One mechanism responsible for these effects—toxic levels of stress—can be substantially buffered by a stable and supportive relationship with a caregiver.

This brief uses data from the 2016 National Survey of Children's Health (NSCH) to describe the prevalence of one or more ACEs among children from birth through age 17, as reported by a parent or guardian. The data are representative at national and state levels. The study team estimated the national prevalence of eight specific ACEs and compared the prevalence of these ACEs across states. To examine prevalence differences by race/ethnicity and geography, we used the nine geographic divisions used by the U.S. Census Bureau.[3]

Key Findings

- Economic hardship and divorce or separation of a parent or guardian are the most common ACEs reported nationally, and in all states.
- Just under half (45 percent) of children in the United States have experienced at least one ACE, which is similar to the rate of exposure found in a 2011/2012 survey.[a] In Arkansas, the state with the highest prevalence, 56 percent of children have experienced at least one ACE.

[a] Child Trends reported on these data in an earlier publication: Adverse Childhood Experiences: National and State-level Prevalence. The Health Resources and Services Administration's Maternal and Child Health Bureau and the Child and Adolescent Health Measurement Initiative's Data Resource Center caution against making direct comparisons of 2016 data with those collected in earlier waves of the survey, because of design changes in 2016.

*See errata at https://www.childtrends.org/wp-content/uploads/2018/02/ACEsBriefErrata_2018.pdf

- One in ten children nationally has experienced three or more ACEs, placing them in a category of especially high risk. In five states—Arizona, Arkansas, Montana, New Mexico, and Ohio—as many as one in seven children had experienced three or more ACEs.
- Children of different races and ethnicities do not experience ACEs equally. Nationally, 61 percent of black non-Hispanic children and 51 percent of Hispanic children have experienced at least one ACE, compared with 40 percent of white non-Hispanic children and only 23 percent of Asian non-Hispanic children. In every division, the prevalence of ACEs is lowest among Asian non-Hispanic children and, in most divisions, is highest among black non-Hispanic children.

Adverse Childhood Experiences Can Have Profound Effects

ACEs can cause stress reactions in children, including feelings of intense fear, terror, and helplessness. When activated repeatedly or over a prolonged period of time (especially in the absence of protective factors), toxic levels of stress hormones can interrupt normal physical and mental development and can even change the brain's architecture. ACEs have been linked to numerous negative outcomes in adulthood, and research has increasingly identified effects of ACEs in childhood.[4,5] Negative outcomes associated with ACEs include some of society's most intractable (and, in many cases, growing) health issues: alcoholism, drug abuse, depression, suicide, poor physical health, and obesity. There is also some evidence that ACEs are linked to lower educational attainment, unemployment, and poverty.[6] In childhood, children who have experienced ACEs are more likely to struggle in school and have emotional and behavioral challenges.[7] Nevertheless, not all children who experience one of these adverse events (or even more than one) are negatively affected; much depends on the context in which they occur—particularly the context of positive relationships.

Research has found that the risk for negative outcomes increases with the number of ACEs; in other words, children who have experienced multiple ACEs are substantially more likely to be negatively affected than children who have experienced only one.[8,9] A seminal study published in the late 1990s by Felitti, Anda, and their colleagues (that first coined the term "adverse childhood experiences") found that adults who had experienced four or more ACES had a particularly high risk for negative physical and mental health outcomes, including some of the leading causes of death in the United States.[10] Subsequent studies have identified lower thresholds, ranging from one to three ACEs, as the tipping point at which risk increases greatly.[11,12] There are likely to be multiple factors that account for individual variation in response to adversity, including genetic predispositions and other biological characteristics, as well as contextual factors such as supportive adult relationships.

One of the most sobering findings regarding ACEs is preliminary evidence that their negative effects can be transmitted from one generation to the next.[13,14] Toxic stress experienced by women during pregnancy can negatively affect genetic "programming" during fetal development, which can contribute to a host of bad outcomes, sometimes much later in life.[15] Infants born to women who experienced four or more childhood adversities were two to five times more likely to have poor physical and emotional health outcomes by 18 months of age, according to one recently published study.[16]

Measurement of Adverse Childhood Experiences

There is no single agreed-upon list of experiences that encompass what we refer to as adverse childhood experiences. The original ACEs study asked a large sample of adults about seven childhood experiences: psychological, physical, and sexual abuse, as well as exposure in the home to substance abuse, mental illness and suicide, incarceration, or violence.[17] Since then, the list of ACEs used in one or more studies has been expanded to include physical and emotional neglect, parental separation and divorce, exposure to violence outside of the home, living in unsafe neighborhoods, homelessness, bullying, discrimination based on race or ethnicity, and experience of income insecurity.[18] One reason for the development of different ACEs measures that incorporate a broader set of experiences is that researchers and practitioners have sought to better capture the diverse experiences of children from different backgrounds, particularly children of color and those living in poverty. However, no list is likely to include all adversities and traumatic experiences that children may experience. Thus, researchers and practitioners should be aware that screening for ACEs does not substitute for comprehensive trauma screening and assessment, for which there are many well-validated tools.[19]

The 2016 NSCH includes nine ACEs; we report here on the prevalence of eight of those experiences.[b] The biggest difference between the list of ACEs in the NSCH data and other lists used in the research (or as part of the screening tools used to identify children with ACEs) is that the NSCH data do not explicitly ask parents to report on their child's experiences of abuse and neglect. Specifically, parents are asked about whether their child has ever:

1. Lived with a parent or guardian who became divorced or separated
2. Lived with a parent or guardian who died
3. Lived with a parent or guardian who served time in jail or prison
4. Lived with anyone who was mentally ill or suicidal, or severely depressed for more than a couple of weeks
5. Lived with anyone who had a problem with alcohol or drugs
6. Witnessed a parent, guardian, or other adult in the household behaving violently toward another (e.g., slapping, hitting, kicking, punching, or beating each other up)
7. Been the victim of violence or witnessed any violence in his or her neighborhood
8. Experienced economic hardship "somewhat often" or "very often" (i.e., the family found it hard to cover costs of food and housing)

[b] The ninth item that parents are asked to report on is how often their child was treated or judged unfairly because of his or her race or ethnicity. We do not include this ACE in this analysis, both because of the subjectivity of the question (what constitutes unfair treatment or judgement is open to different interpretations) and because parents may not be reliable reporters of their child's experience in this area (for example, parents may not be aware of the extent of their child's experiences of discrimination).

State-Level Variation in the Prevalence of Adverse Childhood Experiences

Table 1 shows the prevalence of one or more ACEs, according to parents' reports on their child, both nationally and by state. Nationally, 55 percent of children had experienced no ACEs. The percentage of children who had experienced no ACEs was significantly higher than the national average in three states: Maryland, Massachusetts, and Minnesota. At the national level, about one in ten children (10 percent) had experienced three or more ACEs. In five states—Arizona, Arkansas, Montana, New Mexico, and Ohio—as many as one in seven children had experienced three or more ACEs, a significantly higher ratio than the national average.

Table 1. Among Children from Birth through Age 17, Percentage Reported to Have Had Zero, One, Two, and Three or More ACEs, Nationally and by State

	0 ACEs	1 ACE	2 ACEs	3 to 8 ACEs
United States	**55**	**24**	**11**	**10**
AL	52	21	16	11
AK	56	22	8	14
AZ	52	18	12	18
AR	44	27	13	16
CA	59	25	8	7
CO	55	23	11	11
CT	58	24	8	11
DE	53	24	12	11
DC	54	24	11	11
FL	49	26	14	10
GA	53	21	13	13
HI	57	22	11	10
ID	50	27	9	14
IL	60	20	10	10
IN	54	23	11	12
IA	56	25	8	11
KS	56	23	8	13
KY	47	27	13	14
LA	48	25	12	14
ME	49	27	11	14
MD	61	25	9	5
MA	62	23	8	7
MI	55	24	11	10

Yellow shading = Percentage is higher than the national average at a statistically significant level.
Blue shading = Percentage is lower than the national average at a statistically significant level.
Red shading = Estimate should be interpreted with caution, because the relative confidence interval is greater than 120 percent.
See the "About the data used in this report" section for more information

Table 1 cont. Among Children from Birth through Age 17, Percentage Reported to Have Had Zero, One, Two, and Three or More ACEs, Nationally and by State

	0 ACEs	1 ACE	2 ACEs	3 to 8 ACEs
MN	63	21	7	9
MS	49	25	12	14
MO	54	20	13	13
MT	50	25	9	16
NE	58	22	8	11
NV	48	29	10	13
NH	58	22	12	7
NJ	59	23	11	7
NM	48	25	9	18
NY	55	31	10	5
NC	53	25	10	12
ND	60	25	8	8
OH	51	22	13	15
OK	49	28	11	13
OR	53	24	11	11
PA	54	25	10	10
RI	54	24	11	12
SC	53	23	14	10
SD	55	24	9	12
TN	53	23	11	12
TX	51	25	12	12
UT	60	24	7	9
VT	56	25	7	12
VA	59	22	8	11
WA	58	23	8	11
WV	50	25	11	14
WI	60	20	9	11
WY	54	21	12	13

Yellow shading = Percentage is higher than the national average at a statistically significant level.
Blue shading = Percentage is lower than the national average at a statistically significant level.
Red shading = Estimate should be interpreted with caution, because the relative confidence interval is greater than 120 percent.
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Economic Hardship and Parental Separation or Divorce Are the Most Common Adverse Childhood Experiences

While the accumulation of ACEs, rather than any particular ACE, is most strongly predictive of negative outcomes, policymakers and practitioners will want to understand the specific challenges facing children in their own states, in order to target limited resources for relevant interventions. By the same token, efforts that reduce the likelihood that any single ACE will occur are likely to make a difference for overall well-being.

Nationally—and in all 50 states and the District of Columbia—the two most common ACEs are economic hardship and the separation or divorce of a parent or guardian. About one-quarter of children have experienced at least one of these events. In West Virginia, one in three children have experienced economic hardship, compared to a rate of just one in five in Minnesota, New Hampshire, and North Dakota. In Arkansas and Kentucky, about one-third of children have dealt with parental separation or divorce, but just 18 to 19 percent have experienced the same in Illinois, Maryland, Massachusetts, and Utah.

Other ACEs—such as the death of a parent or guardian, or being the victim of or witnessing violence in the neighborhood—are more rare. Nationally, these experiences were identified for only three to four percent of children. However, these experiences are more common than the national average in a handful of states. For example, in Arkansas and Georgia, six percent of children have experienced the death of a parent or guardian. In Nevada and Hawaii, seven percent have been victims of, or have witnessed, violence in their neighborhood.

Table 2. Prevalence of Individual ACEs, Nationally and by State

	Hard to cover basics like food or housing somewhat or very often	Parent or guardian divorced or separated	Lived with anyone who has a problem with alcohol or drugs	Lived with anyone mentally ill, suicidal, or severely depressed	Parent or guardian served time in jail	Saw or heard parents or other adults slap, hit, kick, or punch in home	Parent or guardian died	Victim of or witness to violence in neighborhood
United States	**25**	**25**	**9**	**8**	**8**	**6**	**3**	**4**
AL	28	30	10	8	8	6	5	4
AK	22	27	13	11	9	7	4	5
AZ	27	32	16	10	13	11	3	6
AR	31	33	12	10	16	10	6	5
CA	22	22	7	6	6	3	2	2
CO	23	27	12	9	8	5	3	3
CT	24	25	8	8	6	4	3	4

Yellow shading = Percentage is higher from the national average at a statistically significant level.
Blue shading = Percentage is lower than the national average at a statistically significant level.
Red shading = Estimate should be interpreted with caution, because relative confidence interval is greater than 120 percent.
See the "About the data used in this report" section for more information.

Table 2 cont. Prevalence of Individual ACEs, Nationally and by State

	Hard to cover basics like food or housing somewhat or very often	Parent or guardian divorced or separated	Lived with anyone who has a problem with alcohol or drugs	Lived with anyone mentally ill, suicidal, or severely depressed	Parent or guardian served time in jail	Saw or heard parents or other adults slap, hit, kick, or punch in home	Parent or guardian died	Victim of or witness to violence in neighborhood
DE	24	25	8	7	10	7	3	6
DC	21	25	7	5	9	6	5	9
FL	27	30	8	5	11	7	4	5
GA	26	27	8	9	10	6	6	6
HI	24	22	10	5	5	10	2	7
ID	29	26	11	13	9	6	3	4
IL	23	19	8	8	6	6	3	4
IN	24	27	10	9	10	8	5	6
IA	25	23	9	10	6	5	2	5
KS	23	27	11	9	9	6	2	4
KY	27	33	12	10	15	7	3	3
LA	30	30	10	8	14	6	5	5
ME	31	30	11	14	6	8	2	6
MD	21	18	6	5	4	4	3	2
MA	23	19	6	7	4	3	4	2
MI	23	25	7	8	6	5	4	5
MN	21	20	9	7	6	5	2	5
MS	29	32	12	9	11	11	5	2
MO	26	28	10	12	9	7	5	4
MT	29	28	13	14	10	7	4	6
NE	24	22	9	10	8	5	2	4
NV	29	29	10	7	8	6	4	7
NH	20	24	9	9	4	4	4	2
NJ	23	21	7	6	5	4	2	3
NM	25	32	13	12	12	11	5	6
NY	26	20	5	5	4	4	3	3

Yellow shading = Percentage is higher from the national average at a statistically significant level.
Blue shading = Percentage is lower than the national average at a statistically significant level.
Red shading = Estimate should be interpreted with caution, because relative confidence interval is greater than 120 percent.
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Table 2 cont. Prevalence of Individual ACEs, Nationally and by State

	Hard to cover basics like food or housing somewhat or very often	Parent or guardian divorced or separated	Lived with anyone who has a problem with alcohol or drugs	Lived with anyone mentally ill, suicidal, or severely depressed	Parent or guardian served time in jail	Saw or heard parents or other adults slap, hit, kick, or punch in home	Parent or guardian died	Victim of or witness to violence in neighborhood
NC	30	26	10	8	10	7	3	4
ND	20	22	7	8	6	3	3	3
OH	31	28	11	9	11	8	4	5
OK	32	29	10	10	12	6	4	5
OR	29	25	11	10	7	6	2	3
PA	23	26	9	10	9	5	4	4
RI	25	26	8	10	6	5	4	7
SC	30	27	9	7	8	5	3	4
SD	25	24	12	8	10	6	1	4
TN	26	27	11	8	13	6	3	4
TX	28	27	11	7	9	7	4	4
UT	24	18	9	12	6	4	1	3
VT	25	24	12	11	6	5	3	3
VA	23	22	8	8	8	6	4	3
WA	23	23	10	11	5	4	2	2
WV	33	31	11	12	9	7	5	3
WI	23	23	8	9	9	6	3	4
WY	27	26	12	12	9	8	3	3

Yellow shading = Percentage is higher from the national average at a statistically significant level.
Blue shading = Percentage is lower than the national average at a statistically significant level.
Red shading = Estimate should be interpreted with caution, because relative confidence interval is greater than 120 percent. See the "About the data used in this report" section for more information.

Disparities by Race and Ethnicity Are Evident at National and Divisional Levels

Table 3 shows the national prevalence of specific ACEs by racial and ethnic group.[c] Regardless of race/ethnicity, economic hardship and the divorce or separation of a parent or guardian are the most common ACEs reported for children. For white children, the next-most common experiences are living with an adult with mental illness, and living with an adult with a substance use problem. For black non-Hispanic children, parental incarceration is the next-most common ACE; for Hispanic children, the next-most common are living with an adult with a substance use problem and parental incarceration. Black non-Hispanic children are the most likely to have experienced the death of a parent or guardian.

Table 3. Prevalence of Individual ACEs for Children in Various Racial/Ethnic Groups

	Hard to cover basics like food or housing somewhat or very often	Parent or guardian divorced or separated	Parent or guardian died	Parent or guardian served time in jail	Saw or heard parents or other adults slap, hit, kick, or punch in home	Victim of or witness to violence in neighborhood	Lived with anyone mentally ill, suicidal, or severely depressed	Lived with anyone with problem with alcohol or drugs
United States								
White, NH	22	23	3	7	5	3	9	10
Black, NH	37	35	7	16	9	7	6	8
Asian, NH	14	7	2	1	2	2	2	1
Other race, NH	31	27	4	11	7	6	11	12
Hispanic	29	28	3	8	6	4	6	9
All children	**25**	**25**	**3**	**8**	**6**	**4**	**8**	**9**

Yellow shading = Percentage is higher than white non-Hispanic children at a statistically significant level.
Blue shading = Percentage is lower than white non-Hispanic children at a statistically significant level.
Red shading = Estimate should be interpreted with caution, because the relative confidence interval is greater than 120 percent. See the "About the data used in this report" section for more information.
NH=Non-Hispanic

[c] At the state level, estimates of children in specific racial and ethnic groups who experienced specific ACEs are often not reliable. Those figures are not presented here.

The overall risk for ACEs is not shared equally by all children. Whether the data are examined at the national level or by the country's major geographic divisions, inequities by race and ethnicity are evident (see maps below). For example, at the national level, while 60 percent of white non-Hispanic children have had no ACEs, this is the case for only 49 percent of Hispanic children and 39 percent of black non-Hispanic children. In the United States as a whole and in every subdivision, Asian non-Hispanic children have the lowest prevalence of ACEs—nationally, more than three-quarters of these children have had no ACEs. In every division except the Pacific, black non-Hispanic children are more likely than white non-Hispanic children to have had at least one ACE. In every division except the West South Central and the East South Central, Hispanic children are more likely than white non-Hispanic children to have had at least one ACE. Nationally, and in the Mountain division, black non-Hispanic children, non-Hispanic children of other races, and Hispanic children are more likely than white children to have experienced two or more ACEs. Nationally, one in three black non-Hispanic children have experienced two to eight ACEs, compared to only one in five white non-Hispanic children.

Percentage of children with no ACEs

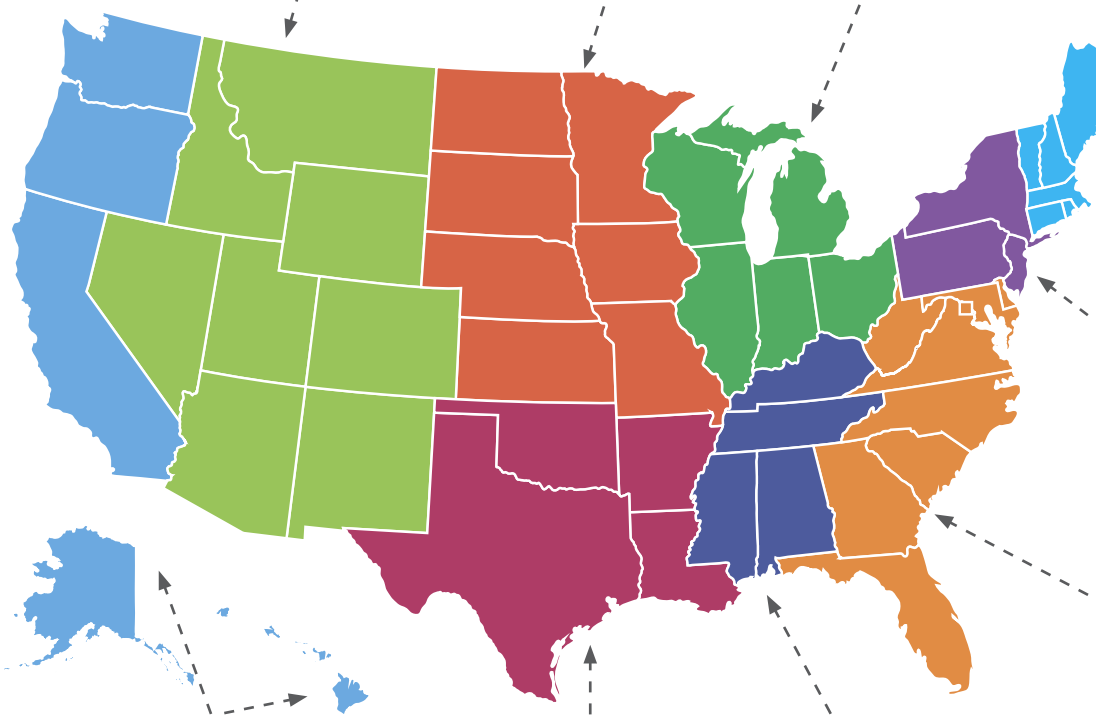
United States	
White NH	60%
Black NH	39%
Asian NH	77%
Other NH	51%
Hispanic	49%

Mountain	
White NH	59%
Black NH	36%
Asian NH	75%
Other NH	42%
Hispanic	46%

West North Central	
White NH	61%
Black NH	47%
Asian NH	77%
Other NH	34%
Hispanic	47%

East North Central	
White NH	60%
Black NH	38%
Asian NH	79%
Other NH	46%
Hispanic	52%

New England	
White NH	63%
Black NH	43%
Asian NH	80%
Other NH	63%
Hispanic	42%



Mid-Atlantic	
White NH	61%
Black NH	38%
Asian NH	76%
Other NH	53%
Hispanic	46%

South Atlantic	
White NH	59%
Black NH	41%
Asian NH	81%
Other NH	52%
Hispanic	48%

Pacific	
White NH	63%
Black NH	51%
Asian NH	75%
Other NH	59%
Hispanic	53%

West South Central	
White NH	58%
Black NH	28%
Asian NH	82%
Other NH	49%
Hispanic	47%

East South Central	
White NH	53%
Black NH	41%
Asian NH	81%
Other NH	51%
Hispanic	57%

NH=Non-Hispanic

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Blue shading = Percentage is lower than white non-Hispanic children at a statistically significant level.
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Percentage of children with 1 ACE

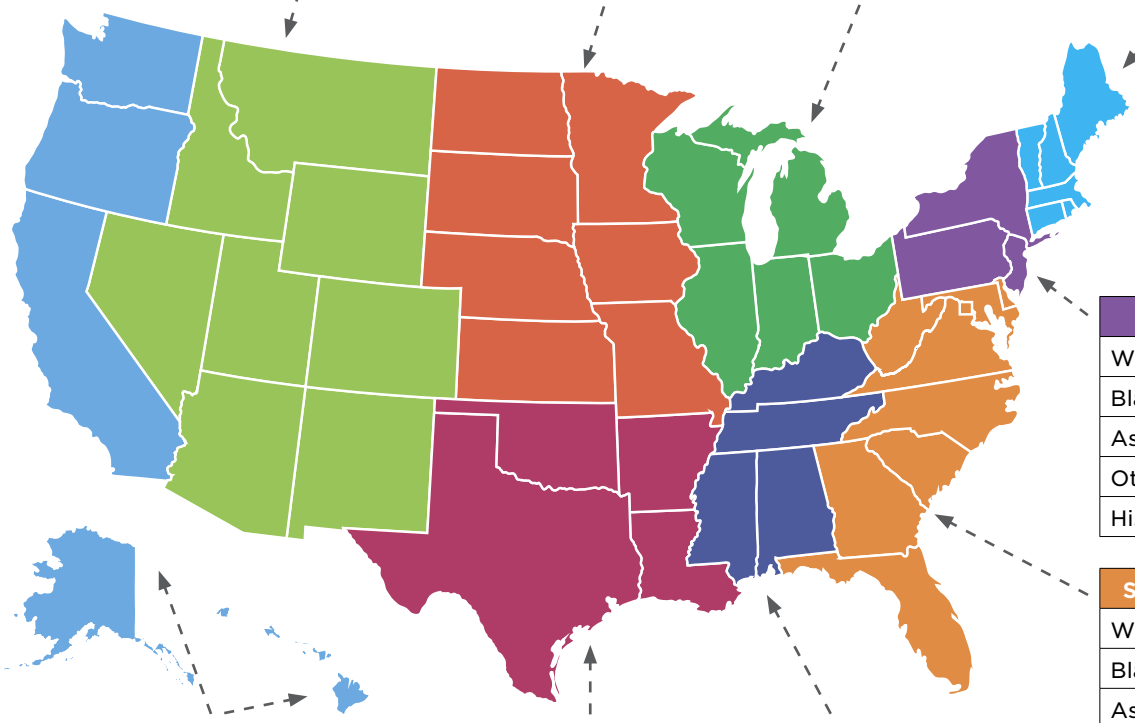
United States	
White NH	22%
Black NH	28%
Asian NH	18%
Other NH	23%
Hispanic	30%

Mountain	
White NH	22%
Black NH	19%
Asian NH	18%
Other NH	21%
Hispanic	26%

West North Central	
White NH	20%
Black NH	32%
Asian NH	16%
Other NH	27%
Hispanic	26%

East North Central	
White NH	21%
Black NH	24%
Asian NH	12%
Other NH	24%
Hispanic	26%

New England	
White NH	22%
Black NH	44%
Asian NH	11%
Other NH	17%
Hispanic	28%



Mid-Atlantic	
White NH	24%
Black NH	35%
Asian NH	21%
Other NH	26%
Hispanic	33%

South Atlantic	
White NH	22%
Black NH	29%
Asian NH	16%
Other NH	23%
Hispanic	27%

Pacific	
White NH	21%
Black NH	23%
Asian NH	21%
Other NH	19%
Hispanic	30%

West South Central	
White NH	20%
Black NH	24%
Asian NH	13%
Other NH	27%
Hispanic	33%

East South Central	
White NH	23%
Black NH	28%
Asian NH	16%
Other NH	15%
Hispanic	23%

NH=Non-Hispanic

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Percentage of children with 2 or more ACEs

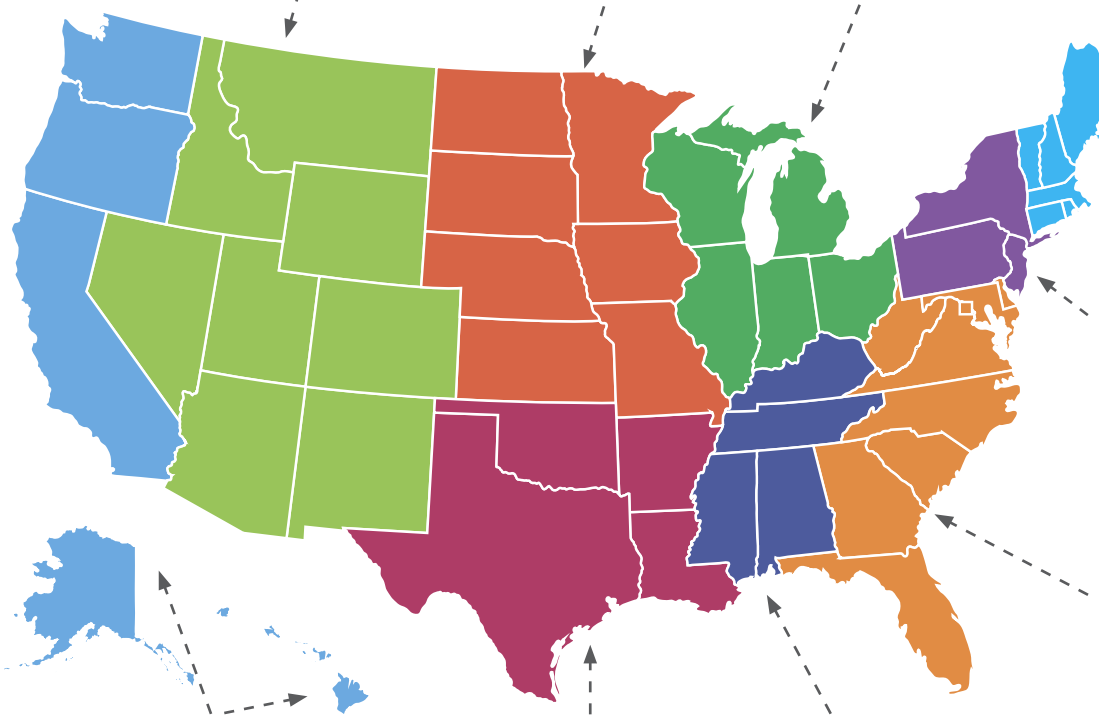
United States	
White NH	19%
Black NH	33%
Asian NH	5%
Other NH	26%
Hispanic	21%

Mountain	
White NH	19%
Black NH	46%
Asian NH	7%
Other NH	37%
Hispanic	28%

West North Central	
White NH	19%
Black NH	21%
Asian NH	7%
Other NH	39%
Hispanic	27%

East North Central	
White NH	19%
Black NH	38%
Asian NH	9%
Other NH	29%
Hispanic	22%

New England	
White NH	16%
Black NH	13%
Asian NH	10%
Other NH	20%
Hispanic	30%



Mid-Atlantic	
White NH	15%
Black NH	27%
Asian NH	3%
Other NH	22%
Hispanic	20%

South Atlantic	
White NH	20%
Black NH	30%
Asian NH	4%
Other NH	25%
Hispanic	24%

Pacific	
White NH	16%
Black NH	26%
Asian NH	4%
Other NH	22%
Hispanic	17%

West South Central	
White NH	22%
Black NH	48%
Asian NH	6%
Other NH	24%
Hispanic	20%

East South Central	
White NH	24%
Black NH	31%
Asian NH	3%
Other NH	33%
Hispanic	20%

NH=Non-Hispanic

Yellow shading = Percentage is higher than white non-Hispanic children at a statistically significant level.
Blue shading = Percentage is lower than white non-Hispanic children at a statistically significant level.
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Addressing Adverse Childhood Experiences

Over the past several years, researchers, policymakers, and practitioners have increasingly considered ways to prevent or otherwise address the negative effects of ACEs. For example, as of September 2017, 20 states had passed (or had pending) more than 40 bills that specifically mention ACEs, including legislation that establishes task forces to study ACEs and appropriation of funds for ACEs prevention.[20,21] One challenge for such efforts is the diversity of experiences that fall under the umbrella of ACEs—from poverty to parental incarceration to community violence—which suggests that no single strategy will be adequate. States and localities address ACEs in a variety of ways that are often tailored to specific issues in local communities, and aimed at addressing multiple problems across sectors. For example, the state of Washington established the ACEs Public-Private Initiative, a collaborative of public agencies, private foundations, and community organizations dedicated to studying and implementing policies and practices that may prevent ACEs. An evaluation found promising positive outcomes in some communities, while noting that all community networks struggled to achieve community-wide change and that no single model worked best for developing the capacity to address ACEs and build resilience.[22]

While preventing the initial occurrence of ACEs is a logical priority, many children who have already experienced negative effects from ACEs have treatment needs. The American Academy of Pediatrics recommends that pediatricians regularly screen young children for circumstances (including maternal depression, parental substance abuse, poverty, and community violence) that can lead to toxic stress.[23] If a child has experienced such adversities, health care providers can help the family address the immediate threat and reduce the likelihood of future exposure, and can make referrals to services and to evidence-based treatments that may mitigate the negative effects of the experience. However, the practice of screening for trauma, including ACEs, is not yet widespread among pediatricians.[24] The evidence for intergenerational transmission of the effects of ACEs also argues for interventions that work simultaneously with parents and children.[25]

Research indicates that several protective factors can prevent or ameliorate the negative effects of ACEs.[26] A positive, supportive relationship with one or more adults is of primary importance.[27] Studies show that children with secure attachment relationships with their caregiver(s) are better able to regulate their responses to upsetting situations, compared to children with less secure caregiver attachments.[28] In addition to supportive relationships, a child's own intrapersonal skills can be a buffer to the effects of ACEs. Children who have experienced ACEs but demonstrate adaptive behaviors, such as managing their emotions, are more likely to have positive outcomes.[29] Children and adults alike can help cultivate resilience—for example, through practicing self-care routines and strengthening key social and emotional skills such as empathy, self-regulation, and self-efficacy.[30]

Another way to support resilience is the use of trauma-informed approaches when working with children, youth, and families. The growing interest in understanding ACEs has been accompanied by an increase in the development and application of trauma-informed care (TIC). TIC describes a variety of approaches that acknowledge the impact of trauma, recognize its symptoms, respond to its effects through appropriate practices and policies, and prevent further traumatization.[31] Programs and organizations that use a trauma-informed approach may not necessarily treat the consequences of trauma directly, but instead train their staff to interact effectively with participants who have been affected. This may include supporting participants' coping skills and use of appropriate behavior management techniques.[32] TIC is increasingly used in systems and settings that involve young people and their families, including schools, the child welfare system, early child care and education settings, healthcare settings, and the juvenile justice system.[33, 34]

Conclusions

Despite increasing attention—and resources—devoted to preventing adverse childhood experiences and building resilient individuals and communities, ACEs remain common in the United States. Nearly half of all children nationally and in most states have experienced at least one ACE. It is difficult to generalize about the group of states in which children are more likely to have a high number of ACEs. However, among states highest on this measure, three (Arkansas, New Mexico, and Arizona) were among the ten states with the highest child poverty in 2016.[35] More robust, multiyear data will be available in the future as ongoing surveying boosts sample sizes.

Disturbingly, black and Hispanic children and youth in almost all divisions of the United States are more likely to experience ACEs than their white and Asian peers. To some extent, these racial disparities reflect the lasting effects of inequitable policies, practices, and social norms. Discriminatory housing and employment policies, bias in law enforcement and sentencing decisions, and immigration policies have concentrated disadvantage among black and Hispanic children, in particular, and leave them disproportionately vulnerable to traumatic experiences like ACEs.

Along with many other researchers, the study authors believe that the experience of racism can itself have toxic effects.[36,37] It may be useful, as some researchers have done, to distinguish between catastrophic (acute) stressors and routine (chronic) ones,[38] of which the experience of racism is an example. ACEs (including racism) can make people physically and mentally ill.[39] Nevertheless, we believe that the NSCH item asking parents whether their child has been unfairly treated on the basis of race or ethnicity may not adequately assess the full extent—personal, institutional, and systemic—of children's experience of racism. It may be challenging to accurately assess something with such pervasive (and historically embedded) effects that it may not even be remarked upon.[40] There is a need to better understand how both adversity and resilience play out in diverse populations. For example, some evidence suggests that nativity status could be one important factor influencing the effects of ACEs. Hispanic children in immigrant families seem to be buffered from exposure to ACEs, relative to their peers with two U.S.-born parents.[41]

A number of researchers recommend expanding the concept of ACEs to include community-level stressors.[42,43] These stressors may include unsafe neighborhoods, foster care arrangements, and bullying. Limiting surveys to household-level assessments of ACE exposure almost certainly results in underestimates.

The prospect of multigenerational effects stemming from the experience of childhood adversity underscores the urgency of applying a public-health approach to prevention. Such an approach would complement allied perspectives that address social determinants of health, and use intervention models that are explicitly two-generational: focusing simultaneously on the needs of adults (particularly parents) and children who have been exposed (or who are at risk of exposure) to ACEs. Fortunately, a growing number of programs show promise in this field.[44] In addition, overdue attention is being given to protective or promotive factors—both of which fall within the concept of resilience.[45,46] Adverse experiences do not necessarily lead to toxic levels of stress; here, the buffering role of social support and other protective factors is critical. The cultivation of supportive, protective conditions by parents, by children themselves, and by their broader communities provides an ambitious but essential public health agenda.

About the Data Used in This Brief

The National Survey of Children's Health (NSCH) was conducted in 2003, 2007, 2011/12, and 2016 in all 50 states and the District of Columbia. The 2016 National Survey of Children's Health was funded and directed by the Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB). The 2016 NSCH was significantly redesigned and differs from the prior survey cycles; therefore, comparisons cannot be drawn across all years of the survey. The survey uses an address-based sample that utilizes internet-based web and mailed paper data collection instruments fielded by the U.S. Census Bureau. One child in each household with children was randomly selected to be the focus of the study. A parent or guardian knowledgeable about the child answered questions about the child and themselves. The survey is representative of children under 18 years of age, both nationwide and within each state. A total of 50,212 surveys were completed.

The prevalence of ACEs described in this brief are derived from the following questions asked of parents:

- To the best of your knowledge, has this child EVER experienced any of the following?
  - Parent or guardian divorced or separated (Yes/No)
  - Parent or guardian died (Yes/No)
  - Parent or guardian served time in jail (Yes/No)
  - Saw or heard parents or adults slap, hit, kick, punch one another in the home (Yes/No)
  - Was a victim of violence or witnessed violence in his or her neighborhood (Yes/No)
  - Lived with anyone who was mentally ill, suicidal, or severely depressed (Yes/No)
  - Lived with anyone who had a problem with alcohol or drugs (Yes/No)
- SINCE THIS CHILD WAS BORN, how often has it been very hard to get by on your family's income—hard to cover the basics like food or housing? (Very Often, Somewhat Often, Rarely, Never)

Cases were not included in the analysis if any questions were left unanswered. Six percent of the sample did not answer any of the questions.

The relative confidence interval for each estimate presented in the tables is calculated by dividing the absolute 95 percent confidence interval by the estimate and multiplying by 100. If the relative confidence interval for a given estimate (for example, the percent of black non-Hispanic children with more than one ACE) is more than 120 percent, we suggest that the estimate be interpreted with caution, as it may not be reliable.

Differences between state and national estimates were tested for statistical significance by comparing the 95 percent confidence intervals. If the confidence intervals did not overlap, the differences are marked as significant in the tables.

Differences between the racial/ethnic groups were tested using logistic regression, with white non-Hispanic as the reference group.

Included in the "Other, Non-Hispanic" category are children reported as Hawaiian/Pacific Islander, American Indian/Alaska Native, two or more races, or another race not already listed. For children in these racial categories, there were not sufficient numbers in the 2016 NSCH sample to allow reliable estimates of ACEs for all states or Census divisions.

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Behavioral Health Provider Coalition
of Cape Cod and the Islands

Breakout Session #1 - Emerald Room

Resilience Action Plan Workshop

Presenter:

Allison Sampson-Jackson, PhD, LCSW

CEO • INTEGRATION SOLUTIONS, INC. • 1/1/2015 TO PRESENT

Responsible for providing supportive and effective consultation and training to human service organizations incorporating evidence based trauma informed care practices with the youth, families, and adults they serve. Engaged across national, state and local systems to transform care including: Department of Education, Department of Health, Department of Social Services, Department of Criminal Justice Services, Children's Services Act, Department of Juvenile Justice, and Department of Behavioral Health Services.

Trauma and Resilience Informed Care Decision Tree

Process for using with youth

1) Our goal is to educate all youth and families about Resilience and Adversity

- Using Stress and Early Brain Growth (WA), National Council's Trauma Infographic, and Getting Help in a Crisis Document
- **What is resilience?** Ability to bounce back, skills that help us keep healthy mentally and physically when hard things happen
- **What is thriving?** People who survive trauma are resilient. Individuals want to not to not only bounce back, but bounce forward.
- **What is trauma?** An event that happens that makes us feel emotionally or physically like our life is threatened and can result later in impacting our health (physically, emotionally, spiritually)
- **Teaching the "handy model":** Upstairs/Downstairs brain, "Flipping our Lid", and importance of "connecting", then "re-directing"

2) Educate all youth that because of how important resilience is. We educate everyone about resilience and help them figure out what resilience skills they already have and what skills they want to build.

Example: "Bounce Back" work in Minnesota
http://www.bouncebackproject.org/resilience/
http://www.bouncebackproject.org/five-pillars/

"Resilience is made up of five pillars:
self awareness, mindfulness, self care, positive relationships & purpose."

Frame:

"By strengthening these pillars, we in turn, become more resilient. Instead of experiencing an overwhelming downwards spiral when we encounter stress in our lives, these five pillars work together to lift us up out of the chaos we are feeling.
Obtaining and maintaining these skills takes practice. That is where Bounce Back comes in…

Our goal is to give everyone in the community – young & old – a set of tools that are quick, easy and simple to use that are proven to help make you feel better faster. We've all heard the saying "when life give you lemons, make lemonade." We also know that it's not quite that simple. Bounce Back hopes to give everyone the lemon squeezer and the pitcher so that making lemonade seems possible."

3) **Resilience interview skill and process (using the 42 resilience skills from Community Resilience Initiative)**

- Resilience Interview Page 1,3,& 4 can be used with all youth
- Full Resilience Interview can be utilized to start case planning for children who may have some at-promise behaviors (Tier 2)
- Reviewing resilience skills at beginning of each point of contact and the skills we are working to build becomes practice

Follow the Protocols that your department and/or program have set about which of the 4 pages of the ACEs and Resilience Interview Case Plan you will use and if you will be using the Supplemental Table

NOTE: You may identify a screening tool for trauma that is evidenced with the youth with whom you work and for the role in which you work with them. This tool can help build a strength based case plan addressing some of those needs.

42 Ways to Build Resilience

(Taken from the Resilience Trumps ACEs Poster and Card Games Developed in Walla Walla, www.ResiliencetrumpsACEs.org)

Resiliency Skills

- Showing empathy
- Critical thinking skills
- Helping appreciate cultural & ethnic heritage
- Developing sense of control
- Learning to accept help
- Hope
- Trust
- Sense of Belonging
- Learning Responsibility
- Teach Self Discipline
- Establish Consequences
- Model Problem Solving
- Sharing Something Important
- Accept Ownership for Behavior
- Work as a team
- Learn to show appreciation
- Master a Skill
- Assign a Responsibility
- Sense Triggers that create negative behavior
- Develop Communication Skills
- Helping a Friend
- Allowing Experience of Success or Failure
- Respect ability to make decisions
- Model appropriate behavior
- Learning to ask for help
- Acknowledge when you are wrong
- Learn to self advocate
- Give back to community
- Giving a choice
- Ability to Calm Self
- Verbally say "I love you"
- Express Feelings
- Experience Success
- Develop Friendships
- Develop Self Esteem
- Attach to Caring Adult
- Learn to Solve Problems

Specialized Resilience Skills for Parents

- Letting Child Know you are Available for Help
- Family Meetings
- Help a Child Learn to Express Feelings
- Clear Rules and Expectations
- Help child develop problem solving skills

Circle Skills that You Have Now
Tell A Story of How You Have Used This Skill

Behavior Wheel Work

"Responding to the Needs, not Reacting to the Behavior"

At- Risk Health Behaviors

Health Coping Behaviors with New Strategy

42 Ways to Build Resilience

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Specialized Resilience Skills for Parents

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- Help child develop problem solving skills

Circle Skills You Want to Build

RESILIENCE SKILL	Resources Needed to Build/Practice	Time Period You Want to Start Building This Skill

RESOURCES

Community Resilience Initiative

Can purchase Cards or Posters from their online store

https://criresilient.org/shop/

STRESS & EARLY BRAIN GROWTH
Understanding Adverse Childhood Experiences (ACEs)

What are ACEs?

ACEs are serious childhood traumas -- a list is shown below -- that result in toxic stress that can harm a child's brain. This toxic stress may prevent a child from learning, from playing in a healthy way with other children, and can result in long-term health problems.

Adverse Childhood Experiences can include:

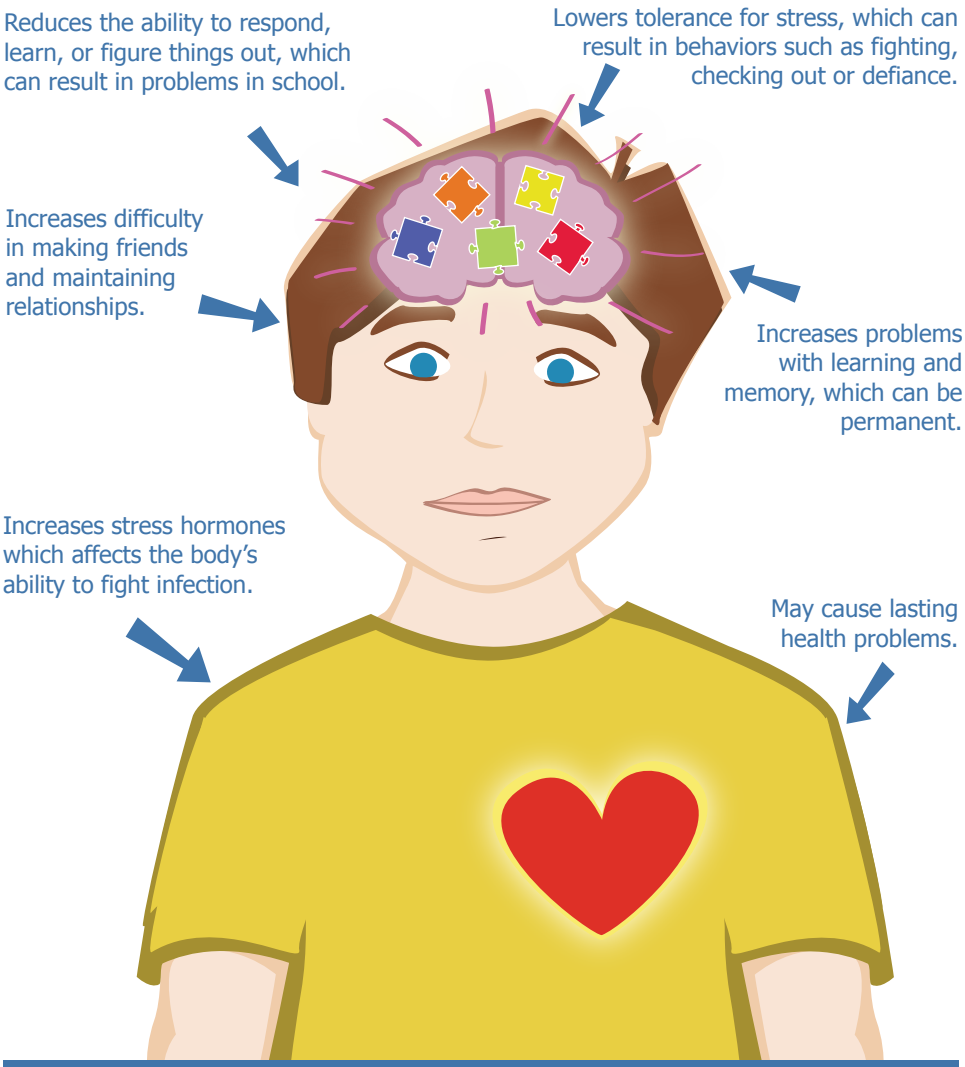
1. Emotional abuse
2. Physical abuse
3. Sexual abuse
4. Emotional neglect
5. Physical neglect
6. Mother treated violently
7. Household substance abuse
8. Household mental illness
9. Parental separation or divorce
10. Incarcerated household member
11. Bullying (by another child or adult)
12. Witnessing violence outside the home
13. Witness a brother or sister being abused
14. Racism, sexism, or any other form of discrimination
15. Being homeless
16. Natural disasters and war

Exposure to childhood ACEs can increase the risk of:

- Adolescent pregnancy
- Alcoholism and alcohol abuse
- Depression
- Illicit drug use
- Heart disease
- Liver disease
- Multiple sexual partners
- Intimate partner violence
- Sexually transmitted diseases (STDs)
- Smoking
- Suicide attempts
- Unintended pregnancies

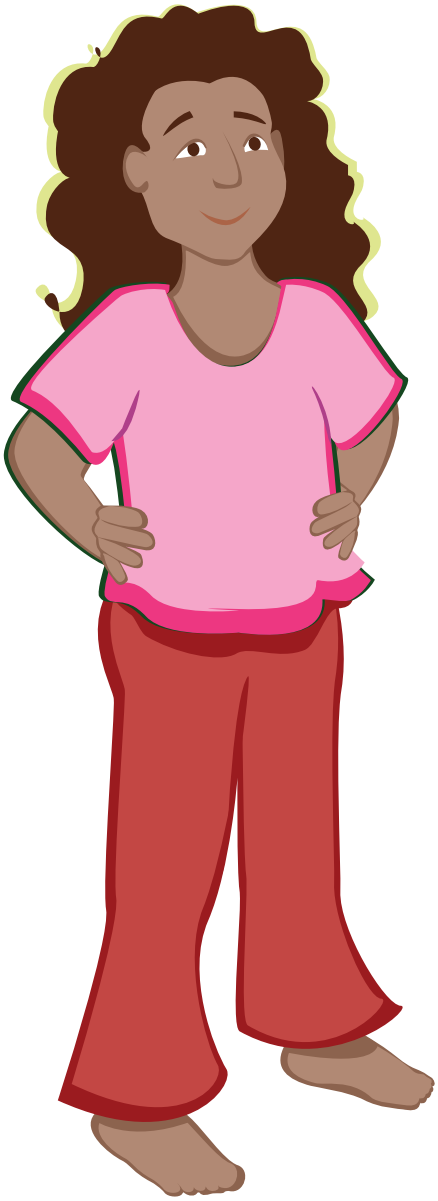
How do ACEs affect health?

Through stress. Frequent or prolonged exposure to ACEs can create toxic stress which can damage the developing brain of a child and affect overall health.



A Survival Mode Response to toxic stress increases a child's heart rate, blood pressure, breathing and muscle tension. Their thinking brain is knocked off-line. Self-protection is their priority. In other words:
"I can't hear you! I can't respond to you! I am just trying to be safe!"

The good news is resilience can bring back health and hope!



What is Resilience?

Resilience is the ability to return to being healthy and hopeful after bad things happen. Research shows that if parents provide a safe environment for their children and teach them how to be resilient, that helps reduce the effects of ACEs.

Resilience trumps ACEs!

Parents, teachers and caregivers can help children by:

- Gaining an understanding of ACEs
- Helping children identify feelings and manage emotions
- Creating safe physical and emotional environments at home, in school, and in neighborhoods

What does resilience look like?

1. **Having resilient parents**
Parents who know how to solve problems, who have healthy relationships with other adults, and who build healthy relationships with their children.

2. **Building attachment and nurturing relationships**
Adults who listen and respond patiently to a child in a supportive way, and pay attention to a child's physical and emotional needs.

3. **Building social connections**
Having family, friends and/or neighbors who support, help and listen to children.

4. **Meeting basic needs**
Providing children with safe housing, nutritious food, appropriate clothing, and access to health care and good education.

5. **Learning about parenting and how children grow**
Understanding how parents can help their children grow in a healthy way, and what to expect from children as they grow.

6. **Building social and emotional skills**
Helping children interact in a healthy way with others, manage their emotions and communicate their feelings and needs.

Resources:

ACES 101
http://acestoohigh.com/aces-101/

Triple-P Parenting
www.triplep-parenting.net/glo-en/home/

Resilience Trumps ACEs
www.resiliencetrumpsACEs.org

CDC-Kaiser Adverse Childhood Experiences Study
www.cdc.gov/violenceprevention/acestudy/

Zero to Three Guides for Parents
http://www.zerotothree.org/about-us/areas-of-expertise/free-parent-brochures-and-guides/

Thanks to the people in the Community & Family Services Division at the Spokane (WA) Regional Health District for developing this handout for parents in Washington State, and sharing it with others around the world.

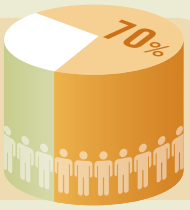
How to Manage Trauma

Trauma occurs when a person is overwhelmed by events or circumstances and responds with intense fear, horror, and helplessness. Extreme stress overwhelms the person's capacity to cope. There is a direct correlation between trauma and physical health conditions such as diabetes, COPD, heart disease, cancer, and high blood pressure.

TRAUMA CAN STEM FROM

HOW COMMON IS TRAUMA?

70% of adults in the U.S. have experienced some type of traumatic event at least once in their lives. That's **223.4 million people.**



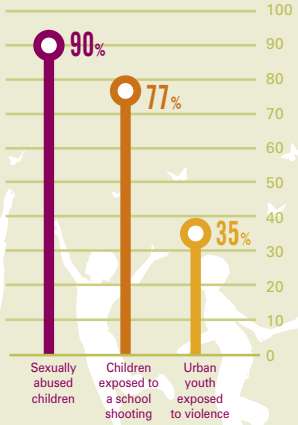
In public behavioral health, **over 90%** of clients have experienced trauma.

Trauma is a risk factor in nearly all behavioral health and substance use disorders.

In the United States, a woman is **beaten every 15 seconds,** a forcible rape occurs every 6 minutes.

More than **33% of youths** exposed to community violence will experience Post Traumatic Stress Disorder, a very severe reaction to traumatic events.

Nearly all children who witness a parental homicide or sexual assault will develop Post Traumatic Stress Disorder. Similarly, 90% of sexually abused children, 77% of children exposed to a school shooting, and 35% of urban youth exposed to community violence develop Post Traumatic Stress Disorder.



Post-traumatic stress disorder (PTSD) is a mental health condition that's triggered by a terrifying event. Symptoms may include flashbacks, nightmares and severe anxiety, as well as uncontrollable thoughts about the event.

People can and do recover from trauma

SYMPTOMS OF TRAUMA CHECKLIST

- Headaches, backaches, stomachaches, etc.
- Sudden sweating and/or heart palpitations
- Changes in sleep patterns, appetite, interest in sex
- Constipation or diarrhea
- Easily startled by noises or unexpected touch
- More susceptible to colds and illnesses
- Increased use of alcohol or drugs and/or overeating
- Fear, depression, anxiety
- Outbursts of anger or rage
- Emotional swings
- Nightmares and flashbacks — re-experiencing the trauma
- Tendency to isolate oneself or feelings of detachment
- Difficulty trusting and/or feelings of betrayal
- Self-blame, survivor guilt, or shame
- Diminished interest in everyday activities

HOW TO TALK TO YOUR DOCTOR

- Make your doctor aware that you have experienced trauma, past or recent
- Help them understand what is helpful to you during office visits, i.e., asking permission to do a procedure, staying as clothed as possible, explaining procedures thoroughly, or having a supporter stay in the room with you
- Ask for referrals to therapy and behavioral health support

HELPFUL COPING STRATEGIES

- Acknowledge that you have been through traumatic events
- Connect with others, especially those who may have shared the stressful event or experienced other trauma
- Exercise — try jogging, aerobics, bicycling, or walking
- Relax — try yoga, stretching, massage, meditation, deep muscle relaxation, etc.
- Take up music, art, or other diversions
- Maintain balanced diet and sleep cycle
- Avoid over-using stimulants like caffeine, sugar, or nicotine
- Commit to something personally meaningful and important every day
- Write about your experience for yourself or to share with others

ASK YOUR HEALTHCARE PROFESSIONAL ABOUT TREATMENTS

TRADITIONAL TREATMENTS

- Cognitive Behavioral Therapy
- Eye Movement Desensitization and Reprocessing (EMDR) Therapy
- Talk Therapy
- Exposure Therapy
- Group Therapy

ALTERNATIVE TREATMENTS

- Energy Processing
- Hypnotherapy
- Neuro-Linguistic Programming
- Massage Therapy
- Pet or Equine Therapy
- Trauma and Recovery Peer Support Groups
- Wellness Recovery Action Planning (WRAP)

NATIONAL COUNCIL
FOR COMMUNITY BEHAVIORAL HEALTHCARE

For more information, interviews, and research on trauma check out the National Council's magazine edition on the topic

www.TheNationalCouncil.org

Graphics based on art by E.M. Filson

Getting Help in a Crisis

From US.Reachout.com

Do you need help now?

If you are in immediate danger, call 911.

If you feel you are in a crisis and need to speak to someone now and you live in the United States, call:

- **Youth helpline Your Life Your Voice at 1-800-448-3000, run by Boys Town National Hotline (for everyone).**
- **National Suicide Prevention Lifeline** at 1-800-273-TALK (8255). Lifeline is a free, confidential, 24 hour hotline for anyone who is going through emotional distress or is in suicidal crisis.

Feel a little nervous about calling a helpline? Find out more about what you can expect.

Specific issues and other helplines

If you're in crisis, whatever the situation, you're not alone. Rest assured, help is out there; by reaching this page you're halfway there. If you need support at anytime, you can call any of the free confidential services on the chart below 24/7.

Child Abuse

If you are a victim of child abuse or know someone who is being abused, please call **the Child Help Line** at 1-800-4-A-CHILD (422-4453).

Rape, Abuse, Incest National Network (RAINN)

RAINN.org is a free, confidential and secure crisis hotline 24/7 for victims of sexual assault or violence as well as their friends and families. Call 1- 800-656- HOPE (4673)

National Dating Abuse Helpline

Loveisrespect.org is the ultimate resource to engage, educate and empower youth and young adults to prevent and end abusive relationships. Call 1-866- 331-9474

National Runaway Safeline

National Runaway Safeline is an anonymous and free 24 hour crisis line for anyone who might want to run-away from home or find themselves homeless. This hotline can also help if you want to come home if you are on the run or have a friend who is looking for help and is thinking about running away or is already on the run. Call 1-800-RUNAWAY (786-2929).

The Trevor Project

The Trevor Project focuses on crisis and suicide prevention efforts among lesbian, gay, bisexual, transgender and questioning (LGBTQ) youth, providing an accredited, nationwide, around-the-clock crisis and suicide prevention helpline.

Call at 1-866-4-U-TREVOR (488-7386).

Teen Line

A Teen-to-Teen hotline and community outreach program with over 10,000 teens contacting TEEN LINE each year by calling, texting or emailing. The line is open every night from 6-10pm PST to help adolescents address their problems in a confidential, anonymous and comfortable manner. Call at 1-800-852-8336

Substance Abuse and Mental Health Services Administration (SAMSHA)

Helpline provides 24-hour free and confidential treatment referral and information about mental and/or substance use disorders, prevention, and recovery in English and Spanish. Call 1-800-662-HELP (4357)

Poison

Poison Control at 1-800-222-1222. Poison control is a free, 24 hour hotline for anyone in need of medical information and resources for poisoning, including alcohol and household cleaners.

ReachOut

ReachOut.com does not provide counseling but the Get Help section can give you more information about how to help yourself generally or in a crisis; inluding how to find people to support you; what types of treatments options you might have; how you can help a friend on a lot of issues they might be dealing with. You might also want to read these fact sheets if you are worried about yourself or a friend.

- Crisis resources: Shelter, Food and Support Services
- Depression: causes, types and symptoms
- Experiencing Grief
- Suicidal thoughts: wanting to end your life
- When someone takes their own life
- When your friend is talking about suicide
- If your friend has taken pills or has done something to hurt him or herself
- Worried about a friend who is self-harming
- Coping with a stressful event
- Deliberate Self-harm
- Experiencing violence
- Intimate partner violence
- Helping a friend in a sexually abusive relationship

Abusive relationships

From US.Reachout.com

Resilience Case Planning Steps
Health Clinic Approach

Step One: Educating Clients/Families about Trauma and Resilience

- First Important Goal is to provide Education to youth and family members/caregivers about trauma and resilience research.
- When a youth/family comes in for an appt there needs to be a plan for an identified person in the clinic to provide this education
- Education sessions are about 15-20 minutes
- This session should be conducted in a quiet room away from the waiting room
- Page One and Two provide the content for this conversation
    - Adversity in Childhood is Common
    - These adversities can affect health and so we educate all clients about this health information
    - Review the National Council of Behavioral HealthCare Trauma Infographic
    - Review the Washington ACEs and Resilience Handout (designed for caregivers and youth)
    - Teach the Handy Model
    - Discuss Resilience (that people naturally work hard to bounce back and are resilient) and the idea of thriving
- "For this reason we offer the opportunity here to work with us to complete a Resilience and Thriving Action Plan, would you like to work on this with us?"
- If yes … then a decision must be made who will do Step Two and beyond (workflow)

Step Two: Gathering Resilience Skills

- Engage client in telling a story where they felt like he/she did well in her/his life
- Lay some of the cards on the table now of skills they have used and more skills that you want to help them explore (can they give an example of using that skill?)
- Client may need prompting and you may want to have an example ready of practicing resilience and thriving in your own life
- As the client tells the story, circle the skills you hear and review these with the client

Step Three: Behavior Wheel

- Every behavior (including health behaviors and at-risk health behaviors) meets a need
- Lots of times as people we try to just look at the behavior instead of maybe what we need and why we are using that behavior to get that need met
- In this exercise we want to look at behaviors that you might use to meet important needs in your life. Some of these behaviors might make your overall physical and mental health better or worse. If a behavior(s) is making your life harder or is creating a health risk, we want to try and figure out different ways to get those needs met
- Guide them through behavior wheel (with drawing in front of them)
    - Talk to me about a something you are doing that you think is a problem and wish you could change, but are having trouble doing so
        - Ex: Taking my medicine as prescribed, walking every day, practicing meditation, etc.
    - Place the "problem" in the circle
    - Now brain storm with them what do they "like" or "get out of" that behavior
        - Ex: I don't have the side effects, I don't like to walk I like to eat on the coach, too many thoughts are in my head … I don't like how being still and breathing feels
    - Help them translate this into needs
        - Ex: I want to feel calm, I want to feel safe, I want comfort
    - Then help them think of new behaviors that can meet these needs that they can try between now and next time you see them
        - Ex: Practice with a friend that makes them feel safe, what are comfort items they can use when they do the hard thing, who are their supports, can we reduce the time of each behavior as we start to get you use to it, join a group to practice these new behaviors
    - Are there resilience skills that will help them practice these behaviors
        - Pull back out your cards or look at the resilience list again

Step Four: (Possible) Connections between ACEs and Resilience

- Explore the table that links ACEs to Resilient Skills that are common needs
- Ask client if they would like to pick any resilient skills based on this information and their life experiences
- Client does not have to share and ACEs score
- Client can share a type of event that has happened if they want OR client can simply pick the resilience skills they think they would like to try based on this list
- Make a note of resilience skills they would like to practice

Step Five: Case Planning

- Now we move to the final step of putting this into a plan
- Review with client the resilience/thriving skills they already have (Step One)
    - Would they like to bolster this skill?
- Review the needs they identified from behavior wheel
    - Do they have a new healthy behavior they want to practice to meet this need a different way?
- Lay the cards out again, can they pick up to 3 skills they want to work on between now and the next time they meet with you?
- Insert these goals into the resilience case plan
- Select resources they will need to practice these skills
- Set target dates they want to aim for so that you can review it with them
- Do they have other social supports (people) they would like to share this plan with?

Behavioral Health Provider Coalition
of Cape Cod and the Islands

Breakout Session #2 – V.J. Room

Reconnecting the Mind and Body: Interventions, Tools, and Tips Using Sensory Integration

Presenter:

Katie Everson, OT/L

Occupational Therapist - June 2017 to Present
Cape Cod Hospital- Hyannis, MA
Occupational Therapist-Home Health (per diem) - January 2019 to Present
Relief Home Health-Hyannis, MA
Occupational Therapist-Inpatient (per diem) - July 2017 to Present
Spaulding Rehabilitative Network, East Sandwich, MA
Occupational Therapist (per diem) - June 2016 to Present
Genesis Rehab (SNF in South Yarmouth)

Reconnecting the Mind and Body: Interventions, Tools, and Tips using Sensory Integration

Presented by: Katie Everson MS, OTR/L

Objectives

1. Understand sensory processing and how it relates to trauma

2. Discuss the importance of therapeutic use of self for attachment and attunement

3. Learn interventions and adaptions for working with those who have been exposed to trauma

Occupational Therapy

Helping people across the lifespan participate in the things they want and need to do through the therapeutic use of everyday activities (occupations).

(AOTA, 2019)

Sensory Processing

- How our nervous system processes **non-harmful** stimuli from the environment or our body and codes them into responses
- Sensory Processing **Disorder** is defined as a neurophysiologic condition in which sensory input either from the environment or from one's body is poorly detected, modulated, or interpreted and/or to which atypical responses are observed.
  (STAR, 2018)

The Five Senses

1. Gustatory (Taste)
2. Tactile (Touch)
3. Auditory (Sound)
   a) Moro Reflex
4. Olfactory (Smell)
5. Visual

Triune Brain Theory

Lizard Brain	Mammal Brain	Human Brain
Brain stem & cerebelum	Limbic System	Neocortex
Fight or flight	Emotions, memories, habits	Language, abstract thought, imagination, consciousness
Autopilot	Decisions	Reasons, rationalizes

The Triune Brain in Evolution, Paul MacLean, 1960

Regulating Senses

1. Proprioception
2. Vestibular
3. Interoception
4. Neuroception

Self-Regulation vs. Co-regulation

Neuroception

* How neural circuits distinguish whether situations or people are safe, dangerous, or life threatening.

(Porges, 2004)

Interoception

* "Interoception is a sense that provides information about the internal condition of our body—how our body is feeling on the inside. Interoception allows us to experience many body sensations such as a growling stomach, dry mouth, tense muscles or racing heart. Awareness of these body sensations enables us to experience essential emotions such as hunger, fullness, thirst, pain, body temperature, need for the bathroom, sexual arousal, relaxation, anxiety, sadness, frustration and safety." (Mahler, 2019)

Vestibular

* Provides our brain with information about motion, head position, and spatial orientation; it also is involved with motor functions that allow us to keep our balance, stabilize our head and body during movement, and maintain posture

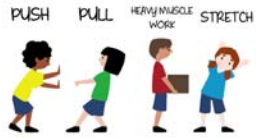
(Khan & Chang, 2013)

Proprioception

* Senses the position, location, orientation, and movement of the body muscles and joints. Proprioception provides us with the sense of the relative position of neighboring parts of the body and effort used to move body parts.

(STAR, 2018)

LET'S PLAY!



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Behavioral Health Provider Coalition
of Cape Cod and the Islands

Breakout Session #3 – Crystal Room

Community Health Centers Collaboration: How ACEs impacts human services on Cape Cod

Presenter/s:

Elizabeth Albert, MSW, Barnstable County Department of Human Services

Patricia Cawley, LICSW, Duffy Health Center

Marta "Dikke" Hansen, LICSW, Outer Cape Health Services

NATIONAL HEALTH CARE for the HOMELESS COUNCIL

The Bassuk Center ON HOMELESS AND VULNERABLE CHILDREN & YOUTH

Homelessness & Adverse Childhood Experiences

The health and behavioral health consequences of childhood trauma

FACT SHEET
February 2019

Purpose

This fact sheet was developed by the National Health Care for the Homeless Council and the National Network to End Family Homelessness, an initiative of The Bassuk Center on Homelessness and Vulnerable Children and Youth. The purpose is to ensure clinicians working with people experiencing homelessness understand the role of Adverse Childhood Experiences (ACEs) in health outcomes as well as the options for responding.

ACEs and Health Risks

Childhood trauma compromises neurological development and increases risk for immediate and long-term adverse health outcomes. The term ACEs originated in a 1998 Centers for Disease Control and Prevention and Kaiser Permanente study that documented significant associations between ACEs and negative health outcomes. In that study, 10 family-level ACEs were explored, and findings showed a graded relationship between the number of ACEs with health and behavioral health outcomes in adulthood.

Table 1: ACE Types and Classifications

Family-level ACES*	Community-level ACES**
Emotional abuse	Economic hardship
Physical abuse	Community violence
Sexual abuse	Bullying
Emotional neglect	Foster care
Physical neglect	Discrimination (e.g. racism, homophobia, etc.)
Household domestic violence	
Household mental illness	
Household substance use	
Parental separation or divorce	
Having a parent or family member incarcerated	
*Family-level ACEs: These are the ACEs from the 1998 Kaiser Permanente study that are sometimes referred to as conventional, original or traditional ACEs. These ACEs are experienced within the home or family.	
** Community-level ACES: These are adversities experienced outside the home. They often refer to structural and social adversities.	

Today, a significant evidence-base suggests that people with four or more ACEs are two to five times as likely to develop clinical depression, substance use disorders, suicidality, and numerous chronic health conditions including diabetes, cancer, cardiovascular, and respiratory diseases compared to people with no ACEs.[1-14] Although individuals with higher ACE scores are also more likely to engage in high-risk behaviors (e.g., substance use), research shows that even those who do not practice risky behavior but have ACEs are still at greater risk for poor health.

The impact of ACEs starts during childhood and continues as kids become adolescents and adults. Kids with high ACE scores are more likely to experience anxiety and depression as children, developmental delays, including negative cognitive and socio-emotional health issues, academic challenges, behavioral health issues, and specialized health needs.[15-19] ACEs also increase the likelihood of high school non-completion, not having a college degree, being unemployed as an adult, living below the poverty line, and experiencing homelessness.[20-23]

Most research has focused on the 10 ACEs from the Kaiser Permanente study, but some studies have also examined differences of associations between community-level adversities, family-level adversities, and negative health outcomes.[13, 24] According to a 2015 study, high family-level adversities were associated with negative physical and mental health outcomes, while community-level adversities were associated with substance use disorders and sexually transmitted infections.[25]

It's also possible that ACE combinations, timing, and patterns influence outcomes as well, suggesting intervention approaches that target the specific ACE experiences rather than cumulative risk may be worthwhile. A recent study suggested that different combinations of ACEs are associated with different risks for children's health.[18] For example, children experiencing poverty and parental mental illness were found to have the highest level of risk for special health care needs relative to children with no ACEs.[19] Similarly, another 2017 study found that timing and pattern of ACE exposure affect health outcomes as well.[19] For example, children who only experienced increasing ACE exposure between the years of 0-3 experienced outcomes similar to children with consistently high ACE exposure, regardless of cumulative difference. On the other hand, children with decreasing exposure exhibited higher resilience, supporting the idea of neuroplasticity or children's capacity to overcome adverse effects if given access to needed supports.[18]

ACEs and Homelessness

The associations between high ACEs and negative health outcomes are consistently seen for all populations and socio-economic levels. More than half of the general population experiences at least one ACE, over 25 percent experience two or more ACEs, and one in eight people experience four or more ACEs.[26] However, children living in poverty, including those experiencing homelessness, are more likely to carry high ACE scores, increasing their risk of developmental challenges and poor health and functioning. In fact, children who live below the Federal Poverty Line (FPL) are 5 times more likely to experience ≥4 ACEs than those who live in financially stable households.[27] Furthermore, research suggests that the health consequences of high ACE scores are often compounded by poverty, suggesting that children with high ACE scores who are also low-income experience worse outcomes in certain areas compared to people with high ACE scores who are higher income.[17,18,25,28]

The experience of housing-insecurity, defined as high housing costs, poor housing quality, unstable neighborhoods, overcrowding, and especially homelessness,[29] places children at risk of ACE exposure. Housing-insecure youth and families report instances of physical and emotional abuse, financial exploitation, and sex-trafficking while staying in shelters, on the streets, and "doubled-up" with acquaintances, family, or strangers.[30] Furthermore, children experiencing homelessness often have caregivers (i.e. adults experiencing homelessness) with untreated mental illness and substance use disorders - two additional ACEs. Among parents experiencing homelessness, the rate of major depressive disorders is higher than in the general population, and traumatic stress is nearly universal.[31] Research shows that untreated caregiver mental illness is often associated with child physical and emotional neglect (two ACEs) and predicts greater adverse health outcomes among children.[32] According to a 2015 study, "children at risk for neglect were significantly more likely to be from families experiencing housing unaffordability and housing instability, and their mothers reported higher maternal stress".[33] Additionally, 12.3 percent of caregivers within families experiencing homelessness struggle with substance use disorders, which often go untreated.[34] Finally, nearly 33 percent of children experiencing homelessness have a parent who is incarcerated - a family-level ACE that has also been documented to increase the risk of child homelessness.[35]

Health Care for the Homeless Perspective: Care for the Homeless, New York, NY

"Homelessness is not recognized as one of the ACEs, but children experiencing homelessness have everyday exposure to these risks." – Dr. Regina Olasin, Chief Medical Officer, Care for the Homeless

At Care for the Homeless in New York City, screening for and addressing Adverse Childhood Experiences are integrated into their core philosophy. With a service site located at a family shelter, they have found that almost every child they serve has at least 4 adverse childhood experiences by the time they are 18 months old. Dr. Regina Olasin, the Chief Medical Officer, sees this as an opportunity to provide interventions that mitigate the potential negative impact of ACEs. Through Cognitive Behavioral Therapy, parenting classes, resilience education, and the identification of soft-cognitive disabilities, they work to reduce the likelihood of obesity, depression, and other ACE-related health issues. Care for the Homeless uses the PRAPARE screening tool to assess social determinants of

health, which often intersect with adverse childhood experiences. Incorporating this screening tool allows providers to create a holistic care plan and to document the complexity of the children and adults they are serving. *"In recognizing the negative lifespan impact of Adverse Childhood Experiences on the health of individuals experiencing chronic homelessness don't we owe it to children to give them the best opportunity for a healthy, longer life?"*

Screening for ACEs

Despite the significant health, mental health, and behavioral health consequences of ACE exposure, research also suggests that the brain can be "rewired" by new experiences in a way that can mitigate various health risks – a process called neuroplasticity.[19] This means that early interventions are critical in supporting the healthy development and long-term well-being of children as they become adolescents and adults.

Research has shown that parental ACEs have the tendency to predict child ACEs, suggesting a need to care for both caregivers as well as kids. Given household mental illness and substance use are family-level ACEs that can lead to child neglect and maltreatment and predict poor health outcomes if untreated, effective interventions require that caregiver health, mental health, and behavioral health needs are met as well.

Table 2. Select tools available for screening for ACEs among children experiencing homelessness

Instrument	Screening Target	Time to administer	Modalities	Training	Cost	Link for more information
ACEs Survey: Parent/Caregiver	Children	10 questions, time not listed	Pen and Paper, Online	No, but a User Guide is available.	Free	https://www.magellanofwyoming.com/media/1608/ace_survey_2017_wraparound_user_guide.pdf
Family Map Inventories	Pregnant women and caregivers of children 0-5 years	45-60 minutes	Computerized, Pen and Paper, Online	On-site training in Arkansas, USA (6 hrs.)	Varies Free in AR	https://thefamilymaponline.azurewebsites.net/
Center for Youth Wellness ACE Questionnaire (CYW ACE-Q)	Children (0-12) and Teenagers (13-19)	2-5 minutes	Pen and Paper (Surveyor or self-report exist)	No, but a User Guide is available.	Free	https://centerforyouthwellness.org/cyw-aceq/
BRFSS ACE Module	Adults	11 questions, time not listed	Telephone	No	Free	https://www.cdc.gov/violenceprevention/acestudy/ace_brfss.html

Responding to ACEs

Recognizing that ACE exposure is often intergenerational, screening and intervening is intended to maximize the opportunity to break this cycle. It builds on the natural resilience of children and builds up protective factors that do exist in their networks. These responses to the prevalence and consequences of ACEs include primary prevention, exposure mitigation, and treatment for associated health, mental health, and behavioral health conditions.

Primary prevention: The best way to address childhood trauma may be to prevent it from happening in the first place. Some interventions focused on primary prevention require larger societal shifts that providers may not have the capacity to implement but could work for at local, state and federal levels. Other interventions are more feasible for implementation within service settings. These include interventions to address caregiver mental illness, substance use disorders, and other risk factors for childhood adversity. Another strategy is connecting caregivers to parenting classes and home visiting programs. Programs like Positive Parenting and Nurse-Family Partnerships can help to buffer children from negative consequences, though they do not directly

address the root cause of ACEs. Programs of this sort work to reduce child injuries, abuse, neglect, and maltreatment, as well as reducing domestic violence, and improve connection to other community services and supports.[36,37]

Promising Intervention: The Early Risers Program

Research is clear that positive parenting practices can buffer children from the negative health and social consequences of ACEs. *Early Risers* is one of few evidence-based parenting programs that has been tested with families experiencing homelessness, as opposed to stably-housed low-income families, using a randomized control trial. The program involves sessions meant to strengthen skills both for parents and children, focusing on helping caregivers effectively respond to and manage their children's behaviors.[38-40]

The Randomized Control Trial found that families in supportive housing that participated in Early Risers experienced:

- High attendance in and satisfaction with sessions, above typical rates for prevention programs
- Improvements in parenting self-efficacy (confidence in parenting), 2 yrs. after program enrollment
- Reductions in parents' report of children's depression, 2 yrs. after program enrollment
- Reductions in growth of child conduct problems, 3 yrs. after program enrollment
- Increased program effect for families with higher levels of baseline parental depression and higher levels of child behavior problems

Exposure Mitigation: Once children have been exposed to ACEs, there are interventions that can help to mitigate the effect of their experiences. A key starting point is to build on the resilience of children and adults through interventions that include teaching self-regulation skills.[41] It is also important to create interventions tailored to the specific ACEs and ACE combinations that the child has been exposed to, as they are more likely to have a greater effect on improving child health.[18] Building in support systems through connection to other services, such as Early Head Start or Head Start, and McKinney liaisons in school districts, can generate protective factors. No matter the intervention, it is important for all services and organizations to adopt trauma-informed care to prevent re-traumatization of children and families.

Treatment: There are effective treatment options for adults who have high ACE scores and have developed the associated conditions, including psychotherapy.[42] One of the most promising interventions is Trauma-Focused Cognitive Behavioral Therapy, which can be used for both adults and children to address the impact of trauma.[43] In addition to addressing the underlying trauma, looking at the co-occurring social determinants of health to address any current needs that may further complicate improving health as well as any experience that may result in re-traumatization. For children, additional psychotherapeutic techniques, including Parent Child Interaction Therapy, and Child Parent Psychotherapy, have shown promise in addressing ACE exposure.

Tools and Resources

There are a variety of tools available to assess for adverse childhood experiences. Providers are encouraged to review the following tools and resources to further explore how they can work to address ACEs among the people they serve. The ACE screening tool is the first step to identifying someone's ACE score.

- ACE Screening Tool: https://www.magellanofwyoming.com/media/2778/ace_survey_2017_parent-caretaker_final-508.pdf

There are also a variety of online resources that provide more information on how providers can address ACEs.

- Positive Parenting
    - Effective Strategies to Support Positive Parenting in Community Health Centers: https://www.apa.org/pi/prevent-violence/resources/positive-parenting.pdf

    - Promoting Positive Parenting: https://www.pa-fsa.org/Parents-Caregivers/How-PFSA-Helps-Parents/Promoting-Positive-Parenting
- Nurse-Family Partnership: https://www.nursefamilypartnership.org/
- Trauma-Focused Cognitive Behavioral Therapy
    - Trauma-Focused Cognitive Behavioral Therapy for Traumatized Children and Families: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4476061/
    - TF-CBT Certification Program: https://tfcbt.org/about-tfcbt
- Parent Child Interaction Therapy: https://www.nctsn.org/interventions/parent-child-interaction-therapy
- Child Parent Psychotherapy: https://www.nctsn.org/interventions/child-parent-psychotherapy
- Trauma-Informed Care
    - Trauma-Informed Care Webinar Training Series presented by the National Health Care for the Homeless Council: https://www.nhchc.org/training-technical-assistance/online-courses/trauma-informed-care-webinar-series/
    - Action steps using ACEs and trauma-informed care: a resilience model: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5409906
- Other Trauma Treatments and Interventions are available from the National Child Traumatic Stress Network: https://www.nctsn.org/treatments-and-practices/trauma-treatments/interventions

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Permanent Supportive Housing: A Solution-Driven Model

June 2019 *Home & Healthy for Good* Progress Report

Prepared by:

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About the Massachusetts Housing and Shelter Alliance

The Massachusetts Housing and Shelter Alliance (MHSA) is a nonprofit public policy advocacy organization with the singular mission of ending homelessness in Massachusetts.

Founded in 1988, MHSA represents nearly 100 community-based agencies statewide. MHSA works with these member organizations to educate the public about homelessness and solutions that will end it; advocate for the strategic use of resources based on research and best practices; advance innovative, cost-effective solutions to homelessness; and form partnerships with government, private philanthropy, business leaders and service providers to ensure that homelessness does not become a permanent part of the social landscape.

INTRODUCTION

Home & Healthy for Good (HHG) is a permanent supportive housing program for chronically homeless individuals. HHG is run by the Massachusetts Housing and Shelter Alliance and is funded by the Commonwealth of Massachusetts. HHG has provided chronically homeless adults with housing and supportive services, in accordance with the **Housing First model**, since the program began in 2006. **As of June2019, HHG has served 1,105 homeless individuals.**

HHG was created as a response to years of unsuccessful homelessness policy. For more than 30 years, emergency shelter has been Massachusetts' response to homelessness. While emergency shelters have indeed saved lives, shelters only provide temporary relief for the Commonwealth's most vulnerable residents — they do not offer homeless individuals a permanent place to live. In addition to shelters, homeless individuals often rely on expensive emergency room and hospital visits, the correctional system, and the streets to provide them with a place to stay. As a result, the costs associated with homelessness are significant. Homelessness is also associated with significant health concerns. Homeless individuals have disproportionately poor health outcomes and struggle with premature aging as a result of the instability associated with homelessness.

> Housing First: A Low-Threshold Model for Success

The Housing First model represents a paradigm shift in the way chronic homelessness is addressed. Often in traditional housing programs, homeless individuals are expected to move forward through a linear service delivery system, with housing saved as a "reward" for individuals who are compliant with other requirements – such as maintaining sobriety or finding employment. However, homeless individuals struggle to meet these demands when they are also dealing with the challenges and instability of homelessness. Housing First represents a shift toward "low-threshold" housing, in which the barriers to housing have been removed. Housing First programs recognize that homeless individuals can more easily maintain their sobriety, find employment, and achieve other health and life goals when they have a permanent place to live. Housing First tenants live in leased, independent apartments or shared living arrangements that are integrated into the community. Tenants have access to a broad range of comprehensive community-based services, including medical and mental health care, substance abuse treatment, case management, vocational training and life skills training. However, participants are not required to participate in services – there are no compliance requirements in order to enter or stay in the program. By removing these barriers to housing, individuals are given an opportunity to deal with the complex health and life issues they face as tenants, rather than as clients of a prescribed system of care.

> Creating a Housing First Initiative in Massachusetts

In Fiscal Year 2007, the Massachusetts Legislature included funding in the state budget for a statewide Housing First program for chronically homeless individuals, as a result of increasing evidence from around the country that indicated Housing First is a cost-effective model that decreases chronic homelessness. The FY07 budget allocated $600,000 to the Massachusetts Housing and Shelter Alliance (MHSA) to operate the Home & Healthy for Good (HHG) program. The funding for HHG has been increased over the years since 2007, and the program received $2.39 million in the FY19 state budget. The budget allocation for HHG is flexible, which means the funding can be used for housing subsidies, supportive services, or both.

Health challenges faced by homeless individuals include:

- Lack of transportation to hospitals, doctors' appointments and all forms of primary care

- Stress, which negatively affects other conditions

- Higher risk of physical and sexual violence

- Lack of privacy for medication administration

- Lack of places to safely keep medication, which increases potential for theft

- Lack of a safe, clean place to rest and heal during illness

- Lack of access to critical medical services, as a result of not having a permanent address

> Target Population

HHG serves chronically homeless adults. A chronically homeless person is defined by the federal government as "an unaccompanied homeless individual with a disabling condition who has either been continuously homeless for a year or more or has had at least four episodes of homelessness in the past three years."[1]

Historically, HHG tenants report that they are homeless for an average of 5 years prior to entering the program. About 65 percent of HHG tenants are coming directly from the emergency shelter system.

Chronically homeless individuals constitute about 10 percent of the homeless population yet consume more than half of homeless resources.[2] This subset of people suffers from complex medical, mental and addiction disabilities that are virtually impossible to manage in the unstable setting of homelessness. Housing provides individuals with stability, which allows them to address the complex issues and disabilities that affect them.

Disability Status

69% of HHG tenants report having a mental health disability

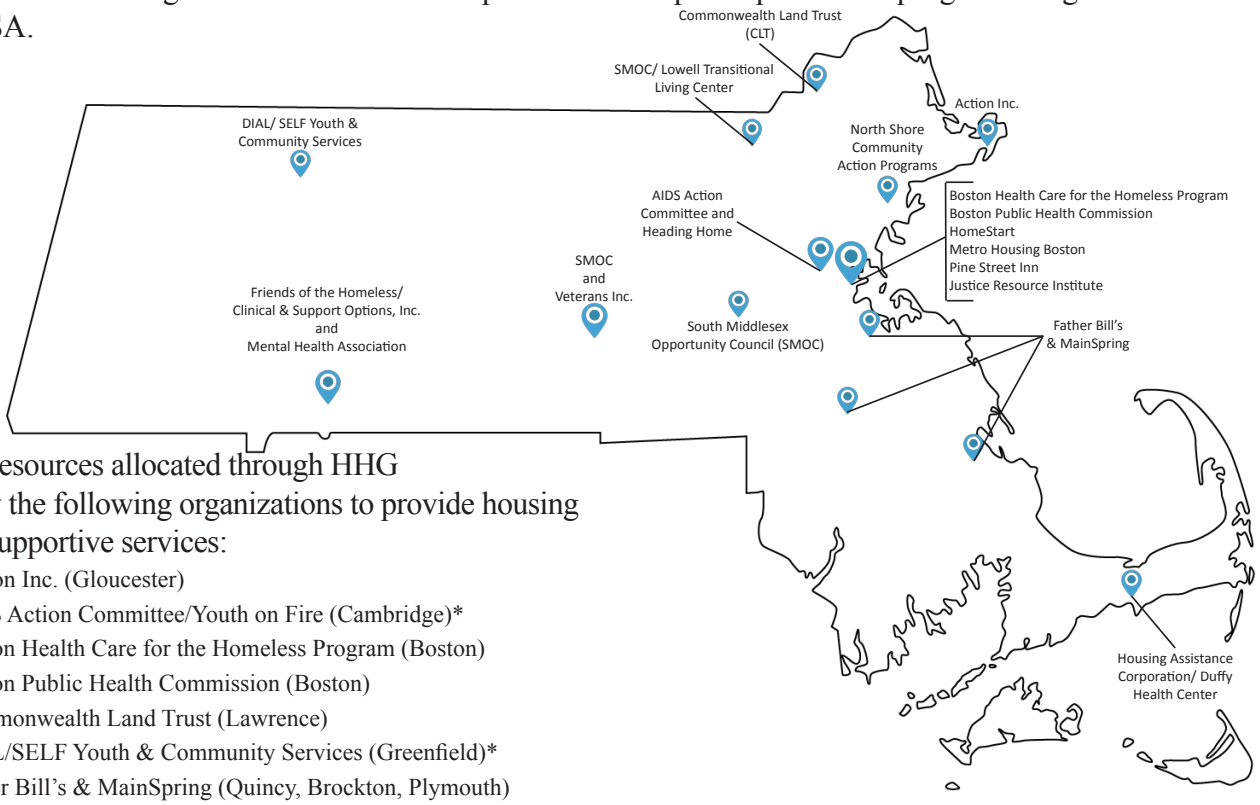
50% of tenants report having a physical health disability

25% of tenants report having a substance abuse disorder

48% report multiple disabilities

> Program Geography

In FY19, MHSA entered into a contract with DHCD to continue to administer the HHG program throughout Massachusetts. Eighteen homeless service providers now participate in the program as agencies subcontracted by MHSA.



The resources allocated through HHG allow the following organizations to provide housing and supportive services:

- Action Inc. (Gloucester)
- AIDS Action Committee/Youth on Fire (Cambridge)*
- Boston Health Care for the Homeless Program (Boston)
- Boston Public Health Commission (Boston)
- Commonwealth Land Trust (Lawrence)
- DIAL/SELF Youth & Community Services (Greenfield)*
- Father Bill's & MainSpring (Quincy, Brockton, Plymouth)
- Friends of the Homeless/ Clinical & Support Options, Inc. (Springfield)
- Heading Home (Cambridge)
- HomeStart (Boston)
- Housing Assistance Corporation/Duffy Health Center (Cape Cod)
- Justice Resource Institute (Boston)*
- Mental Health Association (Springfield)
- Metro Housing Boston (Boston)
- North Shore Community Action Programs, Inc. (Peabody)
- Pine Street Inn (Boston)
- South Middlesex Opportunity Council/Lowell Transitional Living Center (Framingham/Worcester/Lowell)
- Veterans Inc. (Worcester)

*Provider for LGBTQ Pilot Program

DEMOGRAPHICS

Most HHG participants are white, non-Hispanic, aged 35-61, and come from the state's emergency shelter system. This is to be expected given the demographics of the nationwide homeless population. Middle-aged white males are the most common demographic category among chronically homeless individuals.[3,4]

	Count	Percentage
GENDER		
Male	853	**77%**
Female	214	**19%**
Transgender	3	**<1%**
Gender not reported	35	**3%**

	Count	Percentage
AGE as of today		
18-24 years	39	**4%**
25-34	127	**11%**
35-44	260	**24%**
45-54	373	**34%**
55-61	228	**21%**
62+	69	**6%**
Age not reported	9	**1%**

	Count	Percentage
U.S. MILITARY VETERAN		
Yes	233	**21%**
No	872	**79%**
Veteran status not reported	9	**<1%**

	Count	Percentage
RACE		
White	787	**71%**
Black or African American	233	**21%**
American Indian or Alaska Native	14	**1%**
Asian	7	**1%**
Multi-Racial	3	**<1%**
Native Hawaiian or Other Pacific Islander	7	**1%**
Race not reported	54	**5%**

	Count	Percentage
ETHNICITY		
Hispanic/Latino	109	**10%**
Non-Hispanic/Latino	985	**89%**
Ethnicity not reported	11	**1%**

TOTAL COUNT: 1,105

Subpopulation Highlights

Young Adults

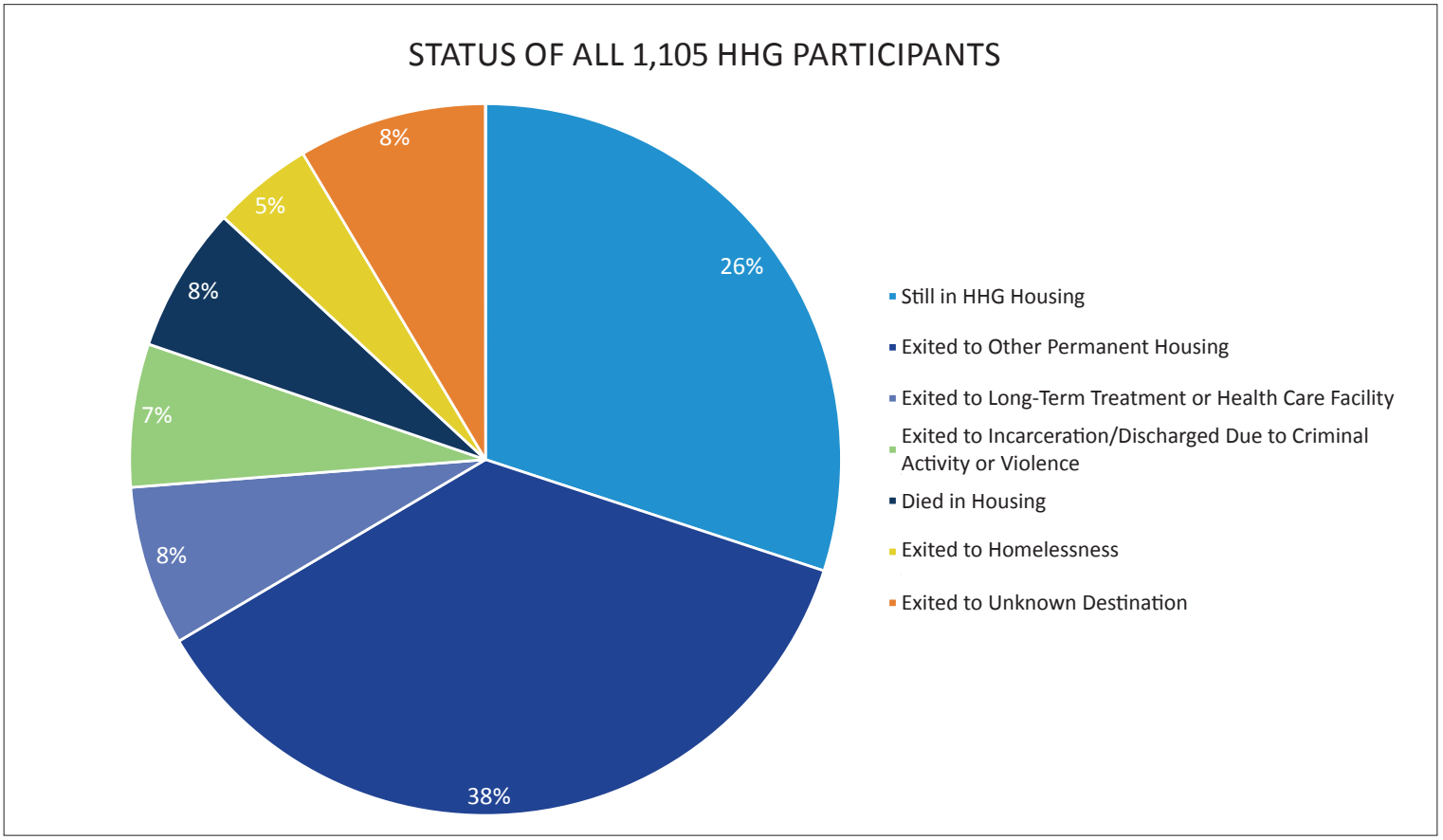
In FY14, MHSA launched a pilot program specifically targeting homeless young adults between the ages of 18 and 24 who identify as LGBTQ. This pilot provides up to 32 units of housing in the Boston, Cambridge, and Greenfield areas. Demographics for this pilot are not included above.

Veterans

Home & Healthy for Good has provided housing to 233 veterans since it began, which represents 21 percent of the total number of people served by HHG. As Massachusetts moves toward implementation of its new plan for ending veteran homelessness, various service planning and grantmaking bodies have identified HHG as a model for housing homeless veterans.

OUTCOMES

> Current Enrollment and Tenant Destinations



283 *individuals currently housed through HHG*

413 *individuals have exited HHG directly to other permanent housing*

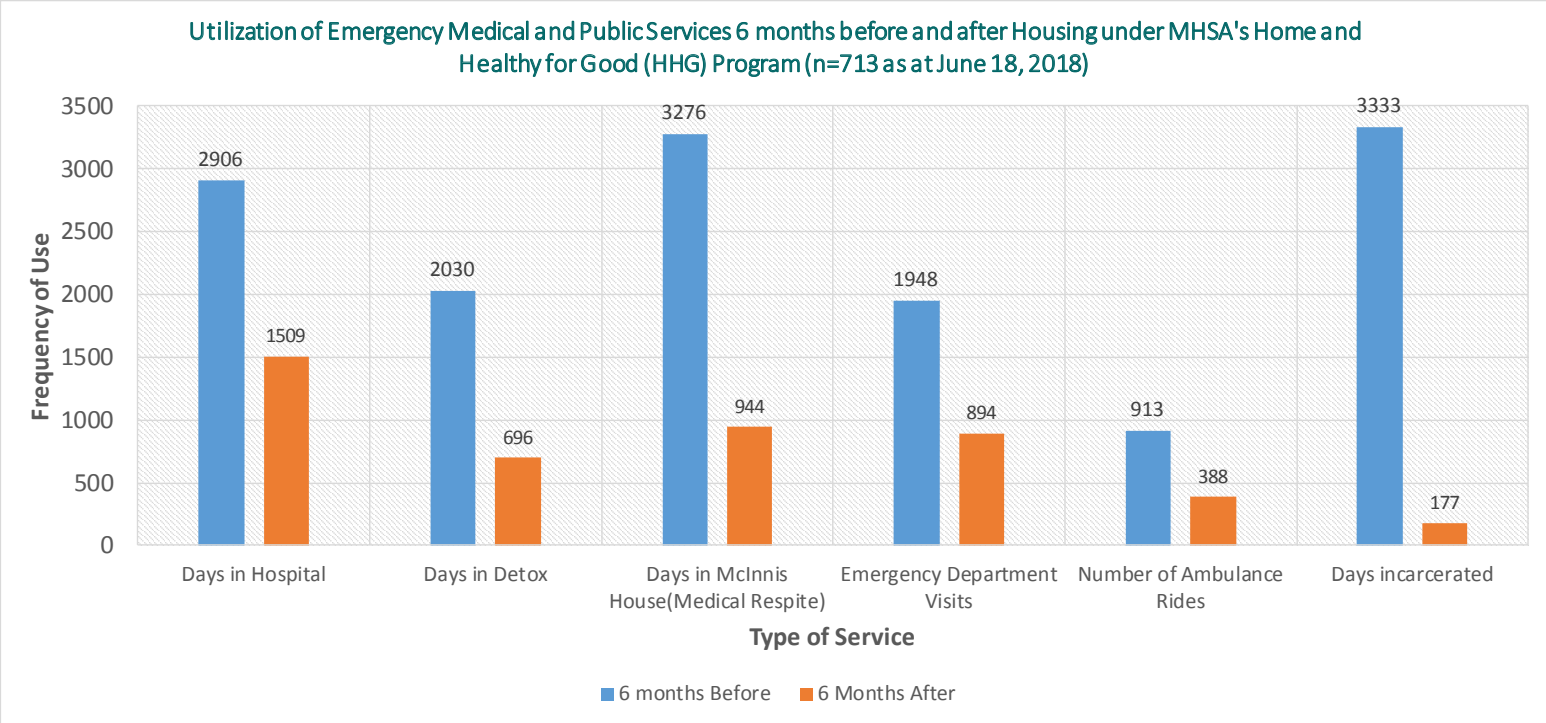
57 *individuals known to have returned to homelessness since 2006*

HHG has produced significant positive outcomes for participants, both during and after their enrollment in the program. **Since HHG was founded in 2006, 1,105 chronically homeless adults have been placed into permanent housing with supportive services, which have been provided by 18 service agencies across the Commonwealth.**

As demonstrated above, 63 percent of the total HHG population is either housed through HHG or left the program to move on to another type of permanent housing. An additional 8 percent of the population transitioned from HHG to long-term treatment or a more appropriate health care setting, and 8 percent of all tenants housed over the 12-year period died while in housing, many from chronic health conditions. Remarkably, only 57 individuals — 5 percent of HHG participants — are known to have recidivated to homelessness after obtaining permanent housing. As the chart above shows, 8 percent of clients exited to an "unknown" destination, meaning that the agencies providing supportive services and housing for those individuals were unable to confirm the exiting participant's destination. MHSA is working with the agencies in an effort to reduce the number of tenants exiting to "unknown" destinations.

> Public Service Usage Outcomes

UTILIZATION OF EMERGENCY SERVICES AMONG HHG CLIENTS



As shown above, HHG participants' self-reported emergency service usage decreases dramatically in the first 6 months of housing.

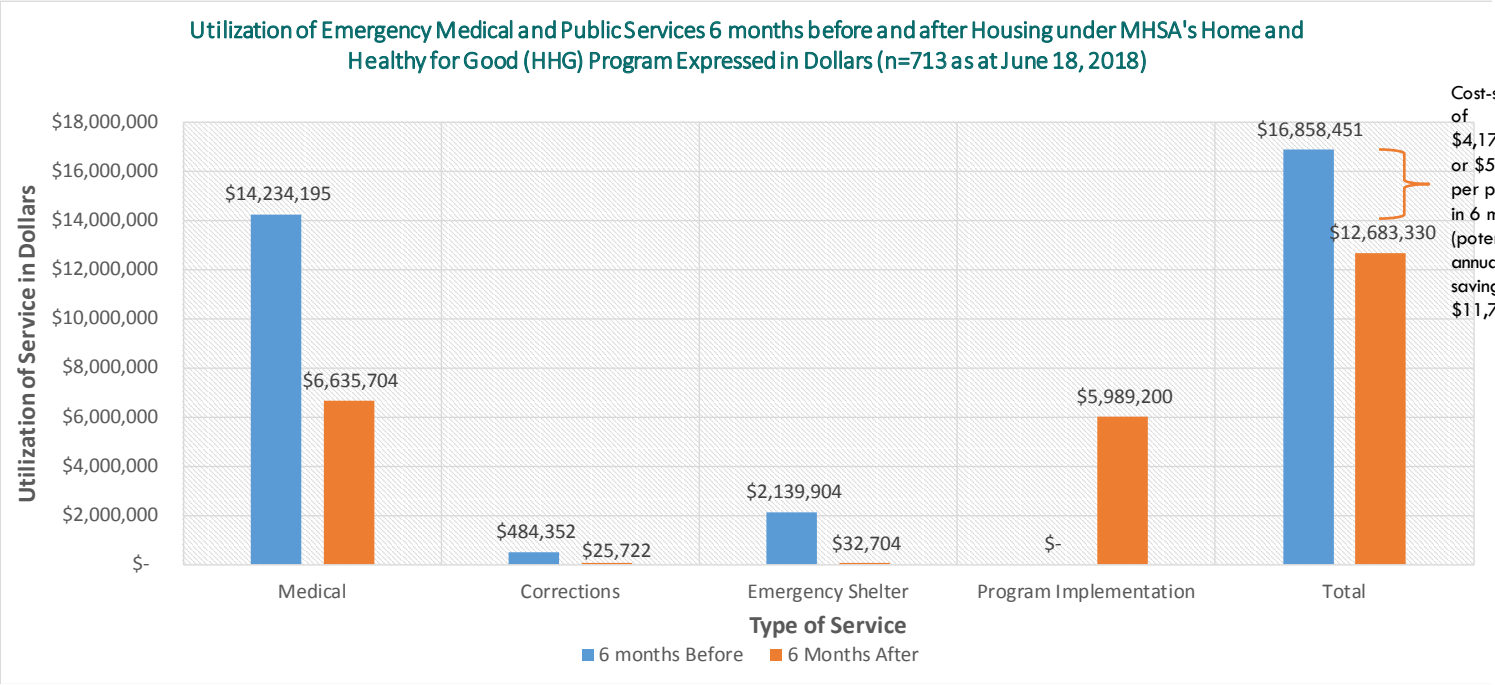
This decline in public service usage among previously high utilizers is indicative of the important physical and mental health stabilization process that occurs within the first several months that individuals are in housing. Once in housing, individuals are safer than they were on the streets or in shelter, experiencing fewer accidents and injuries that require immediate attention. With access to supportive services through HHG, formerly homeless individuals no longer need to rely on public emergency services as their primary sources of care. Instead, tenants are able to utilize mainstream systems of preventative and primary health care, better coordinate with mental health providers and maintain consistent permanent tenancy rather than using more costly public systems, such as emergency shelters and detox facilities.

The significance of this decrease in public service usage is twofold: it indicates an improvement in tenants' health and quality of life as a result of housing, and it also shows that HHG results in major cost savings, allowing money that would be spent on expensive emergency care to be allocated in other ways (for housing, more comprehensive year-round care, etc.). This data shows that housing is a cost-effective, yet humane, solution to homelessness — one that brings stability to individuals' lives, regardless of their health histories or personal challenges.

> Cost Savings Outcomes

MHSA estimates that HHG saves the Commonwealth **an annual $11,711 per housed tenant**.

UTILIZATION OF EMERGENCY SERVICES AMONG HHG CLIENTS
EXPRESSED IN DOLLARS



MHSA's cost savings estimates are based on HHG participants' self-reported usage of services in the six months before and the six months after entering housing. HHG tenants provide MHSA with the number of days spent in hospitals, detox, and respite care, as well as the number of emergency room visits and ambulance rides; these numbers are grouped into "medical services," and these costs are covered by Medicaid for the majority of HHG tenants. Participants also report the number of nights they have been incarcerated or in shelter in the six months before and after entering housing. Using these figures, MHSA estimates the average cost per person for the measured services in the year prior to entering HHG, as well as the estimated costs of these services in the year after entering housing.[6,7] The average annual cost of operating HHG, including housing and services, is shown above in light blue.

SUMMARY

Through *Home & Healthy for Good*, MHSA continues to demonstrate that **providing housing and supportive services to chronically homeless individuals through a Housing First model is less costly and more effective than managing their homelessness and health problems on the street or in shelter**. Results show a trend toward tremendous savings in health care costs, especially hospitalizations, when chronically homeless individuals are placed into housing with services. Improvements in quality of life and overall health outcomes indicate that Housing First is an effective intervention for chronically homeless individuals.

Ultimately, ending homelessness in Massachusetts will require more than one housing model, one line item or focusing on one target population. A long-term strategy to end homelessness will require a serious evaluation of how the state uses its resources and bold action on the part of policymakers. **An evaluation of homelessness spending must be based on empirical data, informed by results from innovative housing models and premised on the fact that resources are scarce and must be strategically allocated**. The results of *Home & Healthy for Good* will continue to play a critical role in influencing policy as the state moves toward permanent solutions to end homelessness.

"Housing gives you a lot more hope, a lot more ambition to move forward with your life."

- HHG tenant

"Going to school is easier because you have a place where you can come home and study."

- HHG tenant

"Nobody wants to be in the shelter ... shelter should be like a triage."

- HHG tenant

"The shelter really didn't have the facilities for someone to recuperate. People don't know what it is not to have a home and have different medical issues going on. I don't know what I would have done. I don't know if I'd still be alive."

- HHG tenant

Quick facts

1,105 *people housed through HHG since it began*

$11,711 *annual savings per tenant for the Commonwealth*

233 *veterans housed through HHG since its inception*

To learn more about MHSA, visit www.mhsa.net.

ABOUT THE DATA COLLECTION

As a condition of HHG's state funding, MHSA creates and files this report on the effectiveness of the HHG program, specifically in terms of cost-effectiveness and quality of life outcomes. HHG tenants are asked to consider participating in this research study when they first enter housing; refusal to participate in the research study component of HHG does not affect an individual's access to housing or supportive services. In order to conduct this research ethically, informed consent is obtained from those individuals who agree to participate and participants are asked to sign MassHealth's Permission to Share Information form so that Medicaid claims data could be analyzed.

All data in this report is the product of MHSA's research unless cited otherwise.

To measure the effectiveness of HHG, community support workers conduct interviews with tenants upon entry into housing and at approximately one-month intervals thereafter. The interviews are then submitted to MHSA and entered into a database. Since the fall of 2006, HHG community support workers and program managers have submitted more than 14,000 interviews to MHSA to create the current data set, which is used as the basis for this report.

> Follow-up Interviews

During each monthly interview, community support workers ask about the tenant's current source(s) of income; the tenant's health insurance coverage; whether or not the tenant has received medical care of any kind in the time since the previous interview; whether or not the tenant has spent any time in an emergency room, hospital, detox facility, emergency shelter or prison since the previous interview (and if so, how much time); the tenant's substance abuse status; the tenant's level of satisfaction with general quality of life, health and type of housing (responses to these questions are ranked on a scale from "very dissatisfied" to "very satisfied"); and how the tenant's life has improved since entering housing (answers range from "no improvement" to "much improvement"). Tenants have the option of refusing to answer any interview questions that they prefer not to answer. As interviews are completed, case and program managers submit them to MHSA and they are entered directly into an electronic database. This database is then used to create an estimated cost-benefit analysis, comparing pre- and post-housing emergency service usage, as well as to identify changes in life satisfaction and overall health.

> External Data Analysis

MassHealth (Medicaid) analysts reviewed billing claims data in March 2009 for 96 HHG participants who had Medicaid eligibility in both the year before and the year after moving into housing. MassHealth provided MHSA with actual Medicaid costs for these participants (including any medical service that was paid for by MassHealth, such as inpatient and outpatient medical care, transportation to medical visits, ambulance rides, pharmacy needs and dental care). The cost savings data resulting from this analysis was similar to the cost savings results contained within this report, which were calculated by MHSA for the entire HHG cohort (as of June 2018).

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Behavioral Health Provider Coalition
of Cape Cod and the Islands

Excellence in Behavioral Health Service Award

Patrick McGuire - Yarmouth Police Behavioral Health Clinician

Nomination From: Lieutenant Andrew O'Malley, Yarmouth Police Department

Describe specify impact this person has made in the field of behavioral health on Cape Cod and the Islands including why you think they are deserving of this recognition award:

Patrick was the first clinician hired by the Yarmouth Police Department. He was hired to bring his experience and knowledge to help enhance the quality of service that the Yarmouth Police could provide to those in the community suffering with mental health issues. Patrick hit the ground running in 2017 and hasn't stopped. He is out in the community, with officers, responding to calls for service as well as conducting in-home visits to provide services. Patrick has a never-ending source of energy when it comes to helping our officers and the community. Patrick has added a dimension to our police service that is recognized as the standard for other police departments to strive for. Patrick continues to represent the Yarmouth Police Department at community meetings and has been involved in developing procedures at the district court level. Patrick's contributions to the YPD Mental Health Response have been invaluable and more importantly he is helping those suffering from mental illness in our community receive the type of compassionate police service that they deserve.

Honorable Mention of Nominees

Tessandra de Alberdi - Executive Director Fairwinds Nantucket's Counseling Center
Beverly Costa-Ciavola - Neighborhood Health Support Coalition
Jean Moore – Posthumous nomination for Therapist, Cape Cod Human Services, Inc.
Jennifer Pare – Lead Community Care Coordinator at Champ House
Reneelynn Proctor – Case Manager, Cape Cod Healthcare PHO
Sarah Simonelli – Case Manager, Cape Cod Healthcare PHO

Behavioral Health Provider Coalition
of Cape Cod and the Islands

KEYNOTE SPEAKER

Allison Sampson-Jackson, PhD, LCSW

"Looking at what's strong not what's wrong . . . The Resilience Story"

Integrative Minds, Inc. is the vision of Dr. Allison Jackson. Allison is a social worker, Bachelors, Masters and PhD. She has focused her career on understanding trauma (Adverse Childhood Experiences) and more importantly how people bounce back from adversity. Her passion is enhancing individual and community resilience and is what brought forth her Non-Profit Integrative Minds, Inc. Allison is walking her own journey as a person of lived experience as well as being a professional who has provided services to "at-promise" youth and their families via the Department of Social Services, Public Mental Health Clinics, as well as within Juvenile Detention and Correctional facilities. In addition, she has provided crisis therapy services in residential facilities for youth and adults with varying mental health diagnoses as well as outpatient therapeutic services for military service men and women and their families.

For 13 years, Dr. Sampson-Jackson worked for Providence Service Corporation. During her time with Providence, she moved from working with children and families as a mentor, to the role of an in-home therapist, out-patient therapist, clinical supervisor, regional coordinator, Director of Continuing Education, Director of Evidence Based Replication, Regional Vice President of Clinical Operations for the East Division, National Trauma Informed Service Line Leader and National Vice President of Clinical Business Development and Healthcare Reform. In her final year with Providence, she co-led 17 National Trauma Informed Care Implementation Teams through the National Council of Behavioral Healthcare's Trauma Informed Learning Collaborative.

Today, Allison works independently as the CEO of Integration Solutions, Inc. as well as serving currently as the CEO of Integrative Minds, Inc. ... the non-profit arm of her work.

STRESS & EARLY BRAIN GROWTH
Understanding Adverse Childhood Experiences (ACEs)

What are ACEs?

ACEs are serious childhood traumas -- a list is shown below -- that result in toxic stress that can harm a child's brain. This toxic stress may prevent a child from learning, from playing in a healthy way with other children, and can result in long-term health problems.

Adverse Childhood Experiences can include:

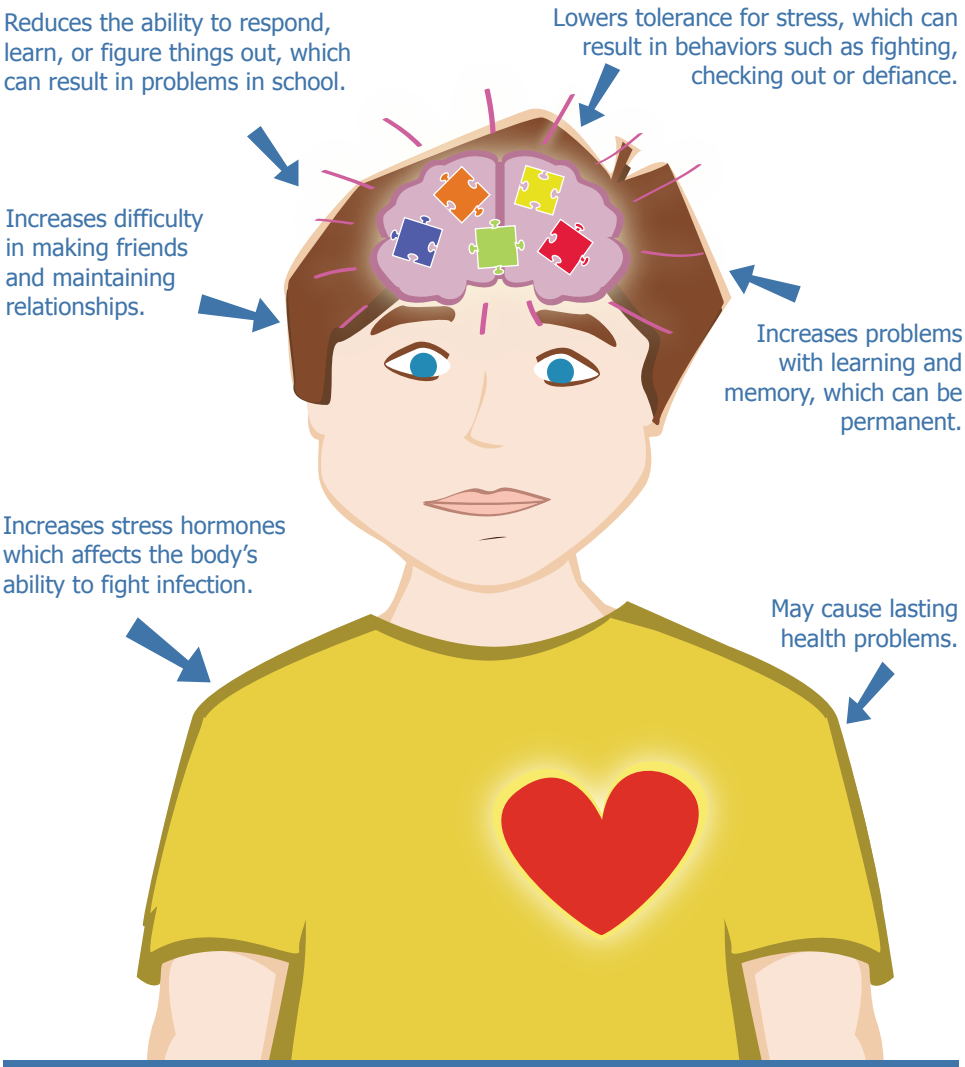
1. Emotional abuse
2. Physical abuse
3. Sexual abuse
4. Emotional neglect
5. Physical neglect
6. Mother treated violently
7. Household substance abuse
8. Household mental illness
9. Parental separation or divorce
10. Incarcerated household member
11. Bullying (by another child or adult)
12. Witnessing violence outside the home
13. Witness a brother or sister being abused
14. Racism, sexism, or any other form of discrimination
15. Being homeless
16. Natural disasters and war

Exposure to childhood ACEs can increase the risk of:

- Adolescent pregnancy
- Alcoholism and alcohol abuse
- Depression
- Illicit drug use
- Heart disease
- Liver disease
- Multiple sexual partners
- Intimate partner violence
- Sexually transmitted diseases (STDs)
- Smoking
- Suicide attempts
- Unintended pregnancies

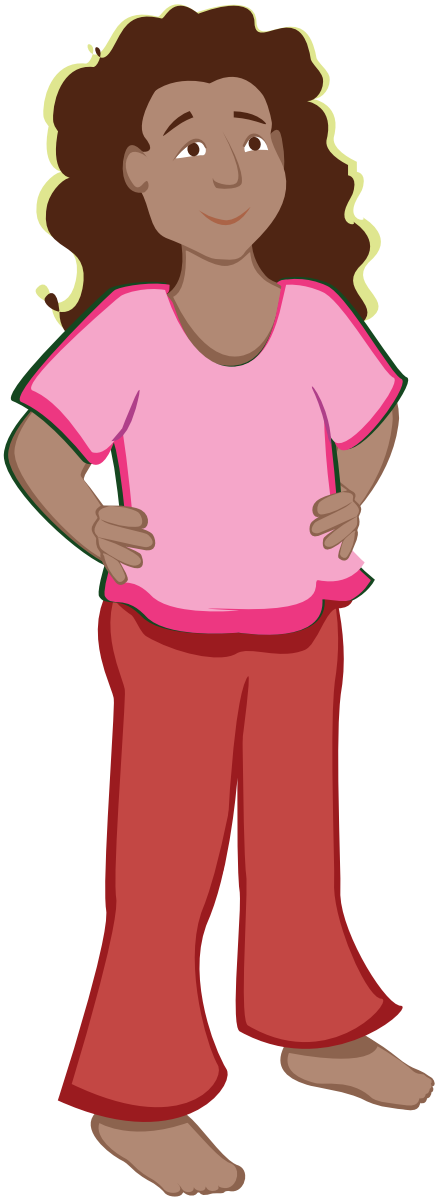
How do ACEs affect health?

Through stress. Frequent or prolonged exposure to ACEs can create toxic stress which can damage the developing brain of a child and affect overall health.



A Survival Mode Response to toxic stress increases a child's heart rate, blood pressure, breathing and muscle tension. Their thinking brain is knocked off-line. Self-protection is their priority. In other words:
"I can't hear you! I can't respond to you! I am just trying to be safe!"

The good news is resilience can bring back health and hope!



What is Resilience?

Resilience is the ability to return to being healthy and hopeful after bad things happen. Research shows that if parents provide a safe environment for their children and teach them how to be resilient, that helps reduce the effects of ACEs.

Resilience trumps ACEs!

Parents, teachers and caregivers can help children by:

- Gaining an understanding of ACEs
- Helping children identify feelings and manage emotions
- Creating safe physical and emotional environments at home, in school, and in neighborhoods

What does resilience look like?

1. **Having resilient parents**
Parents who know how to solve problems, who have healthy relationships with other adults, and who build healthy relationships with their children.

2. **Building attachment and nurturing relationships**
Adults who listen and respond patiently to a child in a supportive way, and pay attention to a child's physical and emotional needs.

3. **Building social connections**
Having family, friends and/or neighbors who support, help and listen to children.

4. **Meeting basic needs**
Providing children with safe housing, nutritious food, appropriate clothing, and access to health care and good education.

5. **Learning about parenting and how children grow**
Understanding how parents can help their children grow in a healthy way, and what to expect from children as they grow.

6. **Building social and emotional skills**
Helping children interact in a healthy way with others, manage their emotions and communicate their feelings and needs.

Resources:

ACES 101
http://acestoohigh.com/aces-101/

Triple-P Parenting
www.triplep-parenting.net/glo-en/home/

Resilience Trumps ACEs
www.resiliencetrumpsACEs.org

CDC-Kaiser Adverse Childhood Experiences Study
www.cdc.gov/violenceprevention/acestudy/

Zero to Three Guides for Parents
http://www.zerotothree.org/about-us/areas-of-expertise/free-parent-brochures-and-guides/

Thanks to the people in the Community & Family Services Division at the Spokane (WA) Regional Health District for developing this handout for parents in Washington State, and sharing it with others around the world.

Hand Model of the Brain-Dr. Dan Siegel

Make a fist with your thumb tucked inside your fingers. This is a model of your brain; your fist is the brain and your wrist and forearm are the spinal cord.

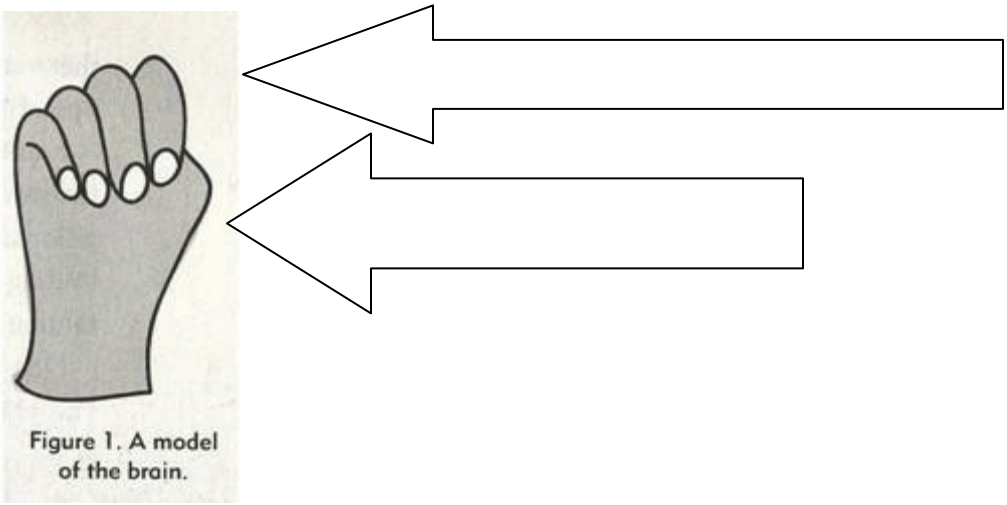


Figure 1. A model of the brain.

Your thumb, tucked in the middle of your fist, is the midbrain. This is where our emotions and memories are created and processed, as well as where the fight-or-flight reflex is triggered. The midbrain is our "emotional brain."

The back of your hand and fingers, encasing everything, is the cerebral cortex. This is where higher functioning occurs. This part of our brain allows us to think logically, act with kindness and empathy, and it houses our reasoning and problem-solving abilities. The cortex is our "rational brain."

The brain is set up to communicate with itself. It sends messages from section to section about what our bodies are feeling and needing. So, when a child screams, "NOOOO!" and lashes out to hit because he is angry, a parent's brain interprets this data as, "Hmm, I don't like this, and I need to be treated differently." Only we don't always react so calmly, right?

Take another look at your brain-fist. See where your fingernails are? This is the logic and reasoning part of the brain that kicks into gear when we have a problem to solve. But sometimes the emotional brain (thumb) and the rational brain (fingers) don't communicate so well. The emotions of the midbrain are simply too overwhelming, our fight-or-flight reflex triggers, and we "flip our lids." Now make all four of your fingers stand straight up. Flip.

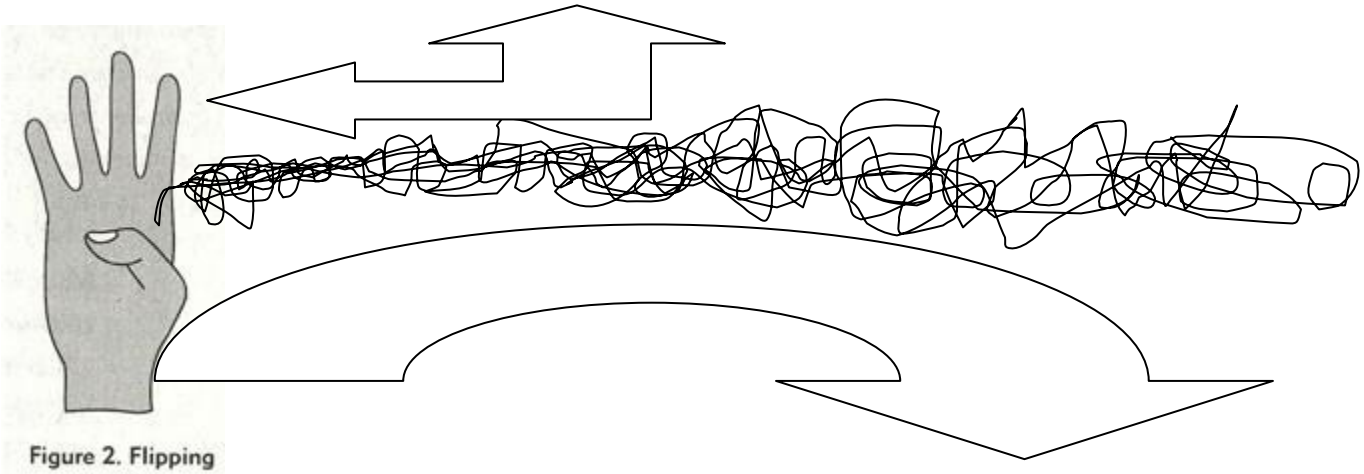


Figure 2. Flipping your lid.

See your fingertips now? See how far away from the midbrain they are? When we "flip our lids," our rational brains have a very poor connection with our emotional brains. Our feelings are intense, and we're not able to access the logical, problem-solving part of our brain. In order to restore our rational brain to its coherent state, we need to calm our anger and ease our fears (close fingers over thumb again).

Of course, our brains don't actually change shape like this, but this simple demonstration is a valuable tool in understanding how they function during emotionally charged situations. Both children and adults experience flipped lids. But as the human brain isn't fully mature (all parts communicating effectively) until the mid-twenties, children flip their lids much more often. They need a lot more help "re-connecting" the rational brain with the emotional brain—that is, calming down—and learning how to respond to strong emotions.

https://www.youtube.com/watch?v=DD-lfP1FBFk

Reflective Listening Skills

Why they are important?

- Show that feelings matter
- Show that it is possible to talk about uncomfortable or complicated feelings
- Show that we care about the child's feelings
- Teach the child that all feelings are acceptable, even though certain behavior is not
- Defuse an uncomfortable situation
- Reduce a child's urge to act out because the child feels heard
- Teach the child a vocabulary for articulating how they feel
- Reduce whining, anger and frustration

Basic Skills?

- Listening before speaking
- Deal with personal specifics, not impersonal generalities
- Decipher the emotions behind the words, to create a better understanding of the message
- Restate and clarify how you understand the message
- Understand the speaker's frame of reference and avoid responding based only on your own perception
- Respond with acceptance and empathy

From http://cultureofempathy.com