

ENDING THE EPIDEMIC OF CHILDHOOD TRAUMA
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Opening Oral Statement:

Chairman Elijah Cummings, Ranking Member – Jim Jordan, other distinguished members of the Committee:

I am deeply humbled and honored to testify before such an esteemed group of political leaders who have come together as concerned Americans, across party lines, to address this troubling and ever growing epidemic of childhood trauma. I applaud your efforts and hope that I can add science and on the ground experience that can assist in the decisions I know that you will make to help all our children. I am emboldened to represent the voices of all children in the United States, who, to borrow a metaphor from the pediatrician and psychoanalyst DW Winnicott, I describe as suffering from ‘primitive agony’. For, unfortunately, according to trauma expert Bessel van der Kolk, children’s own parents perpetrate 80% of child maltreatment cases. These children experience the trauma of actual parental figures being too intrusive, unpredictable, abandoning or dysfunctional. These circumstances are oftentimes coupled with harsh realities of the communities in which they live, and /or the society to which they belong, not providing the protective factors and resilience building conditions for them to heal so as to ultimately thrive and reach their potential.

I have lived and worked through the impact of the natural disaster ‘Katrina’ that decimated New Orleans in 2005, whose disaster effects are still being felt in certain communities. The lessons learned are very applicable to other communities across America that experience similar or other natural disasters – whether they are fires and earthquakes in the West; tornadoes and flooding in the mid-West; blizzards and snow storms in the Atlantic and Northeast, or other extreme weather events such as droughts, extreme heat and windstorms anywhere in the United States. In every community affected by natural disaster, traumatic exposures increase.

The term trauma, derived from the Greek word meaning ‘wound’ is an external event that overwhelms a person’s coping, and activates the neurobiological stress response – the survival mechanism to ‘fight, flight or freeze’. Such experiences occur when a person is exposed to actual or threatened death, serious injury or sexual violence. This can result from directly experiencing a traumatic event, witnessing a traumatic event, learning that a traumatic event happened to a close friend or relative, or being a first responder or working with traumatized persons (APA, 2015). The National Child Traumatic Stress Network (NCTSN) more specifically defines trauma in children as a “frightening, dangerous, or violent event that poses a threat to a child’s life or bodily integrity”.

There is enough evidence now that shows the negative proximal and distal physical and mental health outcomes of childhood trauma that costs the United States economy hundreds of billion of dollars each year. There is ample science showing the harmful effects of chronic and persistent trauma on the developing brain of children. These neurobiological impairments oftentimes manifest as emotional and behavioral dysregulation, diminished motivation and cognitive execution, and impaired social functioning that can lead to mental and physical disorders and poor academic performance.

The seminal ACE study conducted by the Centers for Disease Control & Prevention (CDC) and Kaiser Permanente San Diego explored the relationship between Adverse Childhood Experiences (ACEs) and adult health outcomes. These adverse events include physical, sexual and emotional abuse; emotional and physical neglect; violence against mother (domestic violence); and growing up with household members who were substance abusers, mentally ill or suicidal, or ever imprisoned. The study concluded that there is a, “strong graded [cumulative] relationship between the breadth of exposure to abuse or household dysfunction during childhood and multiple risk factors for several of the leading causes of death in adults.” These disorders include cancer, ischemic heart disease, liver disease, skeletal fracture, and chronic obstructive pulmonary disease (Felitti et al., 1998).

More specifically, the study found that persons who had experienced four or more categories of ACEs compared to those who had experienced none, had:

- Four- to twelve-fold increased health risks for alcoholism, drug abuse, depression, and suicide attempt
- Two- to four-fold increase in smoking, poor self-rated health, greater than 50 sexual intercourse partners, and sexually transmitted disease
- And 1.4- to 1.6-fold increase in physical inactivity and severe obesity

With the enormity of the problem, we will need the cooperation and collaborative efforts of federal agencies to pool resources, especially the CDC and the Substance Abuse and Mental Health Services Administration (SAMHSA). It is important that a coordinated and concerted effort is made to drive:

- Evidence-based prevention and early intervention strategies and activities in all affected communities, especially those reeling from the effects of substance use and drug addiction, poverty and violence
- Continued research at the population and individual level to develop and test new and innovative prevention and intervention approaches
- Enhanced capacity of state and local healthcare entities to train their workforce to deliver proven trauma-based clinical treatments that are evidence-based and culturally appropriate

Being on the ground where children and their families congregate post-Katrina (schools, playgrounds, churches) has reinforced for me what has been scientifically proven, that children displaying emotional and behavioral dysregulation are **Sad, not Bad**. Hence, working together with diligence and compassion, we can end this epidemic of preventable childhood trauma. We can restore all American family's capability to achieve our highest ideals as a country—to unconditionally love and nurture our children, and guide them towards achieving their greatest potential.

A. The need to address childhood trauma

Our children are born helpless! Nested within the affectionate bond and attachment to responsive and nurturing caretaker(s) they come to trust and create a safe base from which to explore and make sense of their inner and outer world – self, others, and the universe at large. This loving attunement of caretaker(s) to their needs helps them to navigate their mental, physical and social development from childhood through to adulthood. This secure base forms the foundation upon which they will develop their sense of self-worth, agency, and efficacy, mattering and belonging. All of these are key ingredients in the development of their capacity to cope, bounce back, and learn from the hardships they will confront as they journey through life. The environment outside of their home – extended family, school and community – also plays a key role in providing protective factors that can enhance a positive and thriving trajectory.

The term trauma, derived from the Greek word meaning 'wound' is an external event that overwhelms a person's coping, and activates the neurobiological stress response – the survival mechanism to 'fight, flight or freeze'. Such experiences occur when a person is exposed to actual or threatened death, serious injury or sexual violence. This can result from directly experiencing a traumatic event, witnessing a traumatic event, learning that a traumatic event happened to a close friend or relative, or being a first responder or working with traumatized persons (APA, 2015). The National Child Traumatic Stress Network (NCTSN) more specifically defines trauma in children as a 'frightening, dangerous, or violent event that poses a threat to a child's life or bodily integrity'.

These terrifying, frightening and dangerous traumatic exposures can result from: 1) physical, sexual and emotional abuse; 2) terrorism and war; 3) household and community violence; 4) natural disasters such as hurricanes, floods, fires, earthquakes, or tornadoes; and 5) injury and/or serious medical illnesses. According to the NCTSN, traumatic exposures are common in the United States with up to twenty-five percent of children experiencing trauma before the age of 16. In a study of potentially traumatic events in a healthy cohort of young children in the Northeastern United States, it was estimated that 26% of youth had witnessed or experienced a traumatic event before the age of 4 years (Briggs-Gowan et al., 2010). The study found that the most consistent predictive factors were poverty, parental depression and single parenting.

Epidemiologic studies show higher and multiple rates of exposures in some subgroups of youth for example: 1) youth in the child welfare or foster care system; 2) runaway and homeless youth; 3) juvenile justice-involved youth; 4) youth with physical and mental disabilities; and, 5) youth with mental disorders. A large proportion of children with multiple exposures to trauma are racial and ethnic minorities, and/or children who live in households with low income, low maternal education and single-parenthood. Other subsets of vulnerable youth are: 1) those who use drugs or live with caretakers who use drugs; 2) youth whose families are experiencing economic stress; 3) children of military and veteran families; 4) homeless youth; 5) LGBTQ youth; and, 6) those with intellectual developmental disabilities (NCTSN).

There is ample science showing the harmful effects of chronic and persistent trauma on the developing brain of children in the amygdala, the hippocampus, and the prefrontal cortex (Monat et al. 2015; Garrett et al. 2019). These neurobiological impairments often manifest as emotional and behavioral dysregulation, diminished motivation and cognitive execution, and impaired social functioning that can lead to mental and physical disorders and poor academic performance (De Bellis 2013). These psychological impairments usually present as: 1) difficulty regulating their arousal levels in response to sensory stimulation/cues/triggers; 2) difficulty with attention and memory; 3) disruptions to their sleep and other circadian rhythms; 4) compromised language development; and, 5) impaired social information processing (McClellan 2014). Fortunately, protective factors, such as innate resilience, and psychosocial supports in the home, school and/or community can also shield some children from these negative outcomes.

The seminal Adverse Childhood Experiences (ACE) study (Felitti et al., 1998) conducted by the Center for Disease Control & Prevention (CDC) and Kaiser Permanente San Diego explored the relationship between adverse childhood experiences before the age of 18 and adult health outcomes. These adverse events include physical, sexual and emotional abuse, emotional and physical neglect, violence against mother, and growing up with household members who were substance abusers, mentally ill or suicidal, or ever imprisoned. It found that,

Persons who had experienced four or more categories of childhood exposure, compared to those who had experienced none, had 4- to 12-fold increased health risks for alcoholism, drug abuse, depression, and suicide attempt; a 2- to 4-fold increase in smoking, poor self-rated health, 50 or more sexual intercourse partners, and sexually transmitted disease; and a 1.4- to 1.6-fold increase in physical inactivity and severe obesity.” The study concluded that there is a “strong graded [cumulative] relationship between the breadth of exposure to abuse or household dysfunction during childhood and multiple risk factors for several of the leading causes of death in adults”- cancer, ischemic heart disease, liver disease, skeletal fracture, and chronic obstructive pulmonary disease.

Participants in the conventional ACEs study were predominantly white (72%, as compared to 14% Black and Latinx), middle class and college-educated persons living in San Diego. In this sample, 12.5% reported ACEs scores greater than four. The city of Philadelphia conducted an adapted version of the ACEs study that surveyed a more racially diverse population including a sample that was 39% White and 47% Black and Latinx (Cronholm, 2015). Researchers in Philadelphia expanded upon the original ACEs questions were further expanded in the Philadelphia study to include questions about community trauma, such as living in unsafe neighborhoods, experiencing bullying, racism and discrimination, being in foster care and witnessing violence. In the Philadelphia study, 37% reported ACEs score greater than four, as compared to 22% who reported greater than four ACEs with the conventional survey.

Significant disparities exist with ACEs scores. According to Child Trends (2016) in a national sample of adolescents (2016 National Survey of Children's Health), 61% of Black non-Latinx and 51% of Latinx children reported experiencing at least 1 ACE; compared to 40% of white non-Latinx and 23% of Asian non-Latinx children. In a racially diverse study examining ACEs and behavioral problems in middle childhood (Hunt et al., 2017), Black children and children of mothers with a high school education or less were the most likely to have been exposed to multiple ACEs. White children were less likely to be exposed to high levels of adversity compared to Black and Hispanic children -however highly exposed White children were at particular risk for problem behaviors. It was also found that Black children more likely to have an ADHD diagnosis compared to Latinx and White children after exposure to 2 or more ACEs

The dimensional construct of "complex trauma" (Herman 1992) is increasingly being used in the field of childhood trauma to describe the experiences of children exposed to, "multiple, chronic and prolonged, and developmentally adverse traumatic events" (van der Kolk 2005). These early life events are frequently interpersonal in nature, a result of sexual or physical abuse, emotional abuse and neglect, as well as witnessing domestic violence, ethnic cleansing, war, and/or community violence (Cook et al, 2005). These children usually present with impairments in attachment, cognition, biology, affect regulation, behavioral control, cognition and self-concept, dissociation (alterations in states of consciousness). Children thus affected are more vulnerable to experiencing other traumas, and developing chronic medical illnesses, mental health and addictive disorders, legal, vocational and family problems along the life-course (van der Kolk, 2005).

Children with complex trauma are oftentimes misdiagnosed with a multiplicity of psychiatric diagnosis that capture only a limited aspect of the whole child's impairment such as, Attention Deficit Hyperactivity Disorder (ADHD), behavioral disorders such as Oppositional Defiant Disorder and Conduct Disorder, anxiety disorders, eating disorders, sleep disorders and communication disorders (Cook, 2005). The more categorical and circumscribed diagnosis, Post Traumatic Stress Disorder (PTSD), unfortunately does not capture the full dimension of "complex trauma" and the related developmental

impairments, hence a new diagnosis, Developmental Trauma Disorder, is being proposed (Carrion and Kletter, 2012). Core components of treatment interventions include: establishing safety, competence to manage 'fight or flight' reactions, dealing with traumatic re-enactments, managing the previously uncontrolled emotions and behaviors, and integration and mastery to achieve equanimity and fun (van der Kolk, 2005).

Nobel Prize winning University of Chicago Economics Professor James Heckman identifies Adverse Childhood Experiences (ACEs) as the single biggest predictor for later problems in adult health and wellbeing. Heckman's work to identify upstream solutions to the biggest problems facing America concludes, "The short answer is there is general expert consensus that it is somewhere between economically worthwhile and imperative to invest more heavily, as a proportion of both local and national spend, in the very earliest months and years of life."

According to Dr. Ruth Gerson and Dr. David L. Corwin (Academy on Violence and Abuse, 2015) the estimated economic impact of ACEs ranges from \$124 billion if considering confirmed child maltreatment cases occurring in one year, to a significantly higher \$585 billion when new cases of fatal and nonfatal child maltreatment costs and aggregate lifetime costs for all new child maltreatment cases are considered (Fang, 2012). It is important to note, that even the projected cost that approaches nearly \$600 billion may underestimate the economic impact of childhood trauma because it does not quantify the impact of exposure to domestic violence, parental substance abuse, and other ACEs that significantly affect long-term mental and physical health. For example, depression is comorbid with other post trauma mental health disorders resulting from childhood adversities, and has been found to be the costliest disease in middle- to high-income countries around the world (World Health Organization, 2008)

B. Childhood trauma in the context of natural disasters and the disproportionate effect on underserved communities

Disasters validate children's worst fears that the world is unsafe and unpredictable, and the impact can be profound and long lasting (Lubit et al 2003). They are also dependent on adult caretakers, their families, neighbors, and local, state or federal disaster rescue and response teams for their safety during and after disasters. The younger they are, the more difficult it is for them to negotiate their safety on their own. In the aftermath of a disaster, children are particularly sensitive to the loss of their home, personal property, old friendship networks and extended family. Children often face challenges orienting into new environments and adapting to different cultural mores and expectations in new neighborhoods and schools. They particularly worry about being included into new friendship groups.

The nature of children's recovery from disaster tends to mirror the ability of their caretaker(s) to soothe the child's worries and appear efficacious and optimistic about

the future. Therefore the recovery process of children is a reflection of the quality of their caretaker's own recovery. The families of children living in underserved communities with histories of chronic adversities usually have little access to the resources needed for preparedness, rescue, recovery, and rebuilding. Oftentimes under-resourced families are living in survival mode at their "yield point" and their capacity for resilience is diminished and fatigued.

Additionally, as was noted by community trauma scholars at the Prevention Institute (2016), chronic trauma and adversity eventually wear and tear down not only the built and economic environment, but also the socio-cultural environment – the social networks, trust, social norms, and capacity for advocacy. Hence during times of acute shocks, such as a natural disaster, the capacity of the people living at the margins, or in under-resourced communities, may be eroded. If the adults exposed to disaster are not able to be maximally efficacious and resilient they will be unable to protect vulnerable children who rely upon them.

Underserved populations have been shown to be at greater disaster risk, are generally impacted to a greater extent and for longer periods, and are more likely to experience pre-existing inequities in a disaster recovery period. Hence, special analysis and attention to the needs of these communities for enhanced supports in disaster planning and rescue is essential for an equitable response. In a review of the literature on poverty and disasters in the United States a pattern of differential impact in the United States was described in the following way (Fothergill, 2004):

Socioeconomic status is a significant predictor in the pre- and post-disaster stages, as well as for the physical and psychological impacts...the poor are more likely to perceive hazards as risky; less likely to prepare for hazards or buy insurance; less likely to respond to warnings; more likely to die, suffer injuries, and have proportionately higher material losses; have more psychological trauma; and face more obstacles during the phases of response, recovery, and reconstruction.

These differences are significant, and they illustrate a systematic pattern of stratification within the United States.

Housing plays a significant role in many families' ability to reorient and recover after a disaster. For underserved communities whose inhabitants often experience financial insecurity pre and post disaster, the acute shock of disasters can further unlock psychological vulnerability and create and or exacerbate trauma-based disorders. Access to housing and housing stability is a key mediator of psychological recovery. Unfortunately, after disasters underserved communities are often plagued by uneven housing recovery policies, market volatility and displacement. It has been repeatedly observed that after disasters, rental units in low income and minority neighborhoods have been slower to recover, and that some that are renovated are rebuilt to attract

more middle class tenants. Recovery policies and practices that prioritize and assure housing assistance to vulnerable and poor communities needs to therefore be enacted, as exists in disaster-prone countries such as Japan and the Netherlands.

Support is needed not only for rebuilding of the physical infrastructure, but also for repairing broken social infrastructure and networks. In studying post-disaster environments after the Kobe Earthquake, Indian Ocean Tsunami and Hurricane Katrina, Aldrich (2008) highlights the important role of social capital in addition to financial resources. He notes that restoring the social infrastructure and capital helps with improving community disaster-preparedness, builds up responsive governance, increases innovation and business growth, assists in attracting and controlling resources, and promotes better health.

Access to staged post-disaster trauma-based psychological services is also very important. Psychiatric morbidity is predictable in populations exposed to disasters, especially those living in underserved communities, and mental health and psychosocial support programs are increasingly a standard part of humanitarian response (Tol et al., 2012). Psychosocial and mental health services must be planned and actively integrated components of all disaster relief and broader health care responses (McFarlane, 2012). There is growing consensus that in the rescue and immediate recovery phase of disasters, the focus should be on making survivors feel safe, and giving assistance to decrease their anxiety by addressing their basic needs and welfare (McFarlane, 2012). After disasters, survivors must be helped to regain their autonomy, and psychiatric help is reserved for those exhibiting dissociative symptoms or with prolonged mental health symptoms that showed no improvement after two months (Bosman, 2013). The World Health Organization recommends a similar approach along a continuum, beginning with psychological first aid, community development, skills for psychosocial recovery, and trauma-focused cognitive behavioral therapy for medium to long-term mental health problems (WHO, 2011).

Unfortunately, many public mental health systems in the United States, upon which poor families and children rely, provide mental health services primarily for the severely and persistently mentally ill. Few if any are prepared to conduct the population level psycho-education and/or the appropriate evidence-based and culturally resonant trauma-based therapeutic interventions needed after a disaster. For poor and racial ethnic minority children, their hyperarousal and inattention can mimic behavioral dysregulation and is oftentimes mistaken and misdiagnosed as conduct disorders and/or ADHD.

If schools are not trauma-informed, and staff do not: 1) realize the prevalence of trauma, 2) recognize the signs/symptoms of trauma disorders, 3) respond with the appropriate clinical and/or restorative approaches, and 4) do not re-traumatize children who are disaster survivors, school personnel and poorly trained mental health professionals can further harm children. In other words, unrecognized and untreated

trauma, wherein children are perceived as 'bad' not 'sad' can contribute to the pipeline of vulnerable youth into the criminal justice system. Children exposed to trauma must be met with the attitude of "what happened to you?" rather than "what's wrong with you?"

New Orleans is one such example of a natural and man-made disaster in which the flood washed to the surface the pernicious underlying reality of economic, educational and social inequity. As was penned by New York Times columnist David Brooks a few days after the Hurricane Katrina, "Floods wash away the surface of society, the settled way things have been done. They expose the underlying power structures, injustices, the patterns of corruption and unacknowledged inequalities."

As a result of the failed levees, poor evacuation planning, and slow governmental rescue and response efforts, the differential impacts of disaster based on age, gender, race/ethnicity, language access, education, employment status and income were very evident when Hurricane Katrina struck America's Gulf Coast in 2005. These inequities resulted in African Americans experiencing the most deaths, flood damage and inequitable access to recovery resources. It is well documented that the rescue and recovery efforts post Katrina did not factor in one of the most devastating and nefarious outcomes of structural inequities—poverty. For example, evacuation plans did not include providing transportation in a city where approximately 30% of the population had no access to a household vehicle. The disaster plans also did not provide adequate housing support and shelters for those unable to leave the city.

Nor did the mental health system anticipate an increase and/or exacerbation of youth trauma, and therefore plan and implement youth and family psychosocial trauma services. As a result, trauma data collected by the Institute of Women and Ethnic Studies (IWES) since 2012 has shown consistent annual rates of PTSD and Depression two to three times the national average, with no return to baseline expectations. Young people's endorsement of exposures to violence has also remained steady over the years, with greater than half of all youth surveyed reporting that they have lost a close family member and/or friend to murder, 51% worry about getting shot, 37% reporting witnessing domestic violence, and 18% reporting that they have witnessed murder (iwesnola.org).

Perhaps a few lessons could be learned from the Australian government management of the 2009 bush fires in Victoria. Their guiding principle was the definition of "recovery" set forth by (Alesch, 2009) in which recovery was viewed as a self-organizing process in which, "the community repairs or develops social, political, and economic processes, institutions, and relationships that enable it to function in the new context within which it finds itself." As such it was recognized that after a disaster vulnerable people are generally impacted to a greater extent and for a longer period, that responding to disaster without recognizing vulnerabilities can further reinforce preexisting social

inequality, and that new vulnerabilities can be created by the relief and recovery process. The guiding principles for their recovery framework were:

- Build community capacity so that survivors can have the resilience to lead their own recovery, and then work with community as they are in the best position to identify local needs and priorities.
- Connect with established community networks to support long-term capacity and organize the public sector to address specific recovery needs that harness expertise and complement local participation.
- Then plan, review, assess, and respond to changing community priorities because recovery is non-linear with no clear end-point.

C. How the federal government could best assist local public health systems in preventing and mitigating childhood trauma and its effects

Childhood adversity is of epidemic proportion, underlying and fueling morbidity and mortality in all fifty states in America. From the opioid epidemic which claimed greater than 47,600 lives in 2017 (CDC), or the close to 6000 homicides in America's 50 cities in 2017 (Madhani, USA Today), untreated trauma can become a significant contributor to the underbelly of unintentional or intentional suicide and/or homicide.

Given that the mission of the Centers for Disease Control (CDC), the nation's public health and protection agency, is to "work 24/7 to protect America from health, safety and security threats, both foreign and in the United States," it seems most appropriate for this agency to lead the further development of nationwide population strategies needed to prevent, detect and respond to this epidemic and save American lives. In order for state and local public health systems to achieve the 10 essential public health services listed below, which the American Public Health Association (APHA) recommends for effective public health systems, the CDC could assist local systems in creating a population-based prevention and early intervention framework on childhood trauma:

1. **Monitor** health status to identify community health problems.
Recommendation -
 - a. Conduct ACEs surveys with youth and representative samples of parents/caretakers.
2. **Diagnose and investigate** health problems and health hazards in the community.
Recommendation -
 - a. Conduct universal screening beginning in early childhood settings and repeated periodically to assess level of trauma exposure and possible resultant trauma-based conditions.
3. **Inform, educate and empower** people about health issues.
Recommendation -
 - a. Conduct psycho-educational and public will campaigns to educate the general public about childhood trauma using traditional and social media. For example, IWES has conducted a public will campaign (In That Number

#sadnotbad) since 2016 in New Orleans to change the negative perceptions of behaviorally dysregulated youth suffering from trauma, and to advocate for psychological and restorative services rather than punitive juvenile justice responses. Local data collected by IWES on youth trauma was paired with narratives of youth struggling with trauma. Soon after the campaign launched, the local media began to frame the issue of youth violence with a landscape lens that presented a broader perspective of their lived lives – their personal traumas and community trauma. After one such multimedia series in 2018, and the showing of the documentary, “The Children of Central City”, the City Council soon adopted a resolution to create a more compassionate city and develop mechanisms to help schools be more trauma-informed.

4. **Mobilize** community partnerships to identify and solve health problems.

Recommendation -

- a. Identify key stakeholders and community advocates to adopt Human Centered Design (HCD) processes to gain wide perspectives about childhood trauma and the social determinants. Then tailor and segment solutions to meet population needs.
- b. Adopt the principles of Trauma Informed Community Building (TICB) delineated by Bridge Housing San Francisco to create intentional strategies that de-escalate chaos and stress, build social cohesion and foster community resiliency over time. This approach is grounded in the belief that in order to create healthy places for underserved low-income families to live and thrive, strategies should: 1) do no harm by being aware of past and on-going trauma and avoid re-traumatizing; 2) accept and meet community members where they are and set expectations accordingly; 3) empower community by recognizing the importance of self-determination to encourage long-term community stewardship; and, 4) engage in ongoing reflective processes by responding to new developments and knowledge and constantly adjusting. (Weinstein et al., 2014)

5. **Develop policies and plans** that support individual and community health efforts.

Recommendation -

- a. Work with informed advocates to develop policies and plans to assure that youth serving organizations and institutions (such as schools, recreational spaces, the juvenile justice system, healthcare systems) are trauma-informed.
- b. Additionally, given that adversities outside of the home that exist in communities and society can exacerbate childhood trauma, policies and practices that address the impact of community trauma on the socio-cultural environment, the built environment, and the economic environment must be adopted. For example, the Prevention Institute recommends reclaiming public space to be appealing to residents and

reflective of their culture, rebuilding and maintaining public spaces that encourage positive social interactions and relationships, as well as healthy behaviors and activities, and improving economic opportunities for youth and adults to create individual and community healing.

- c. Replicate the Community Emergency Response Team training (CERT) to involve youth considered “high risk” in helping to prepare for disasters and minimize damage when disasters occur. CERT is a program of the Department of Homeland Security and FEMA that has more than 2700 local programs nationwide. Most programs focus on adult participants, but in Los Angeles the Watts (Ossey et al., 2017) community identified and trained youth at increased risk for harm during emergency situations or disasters to be first responders in their communities.

6. **Enforce** laws and regulations that protect health and ensure safety.

Recommendation -

- a. Work with local authorities (e.g. school boards) to enforce policies to keep institutions trauma-informed.

7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.

Recommendation -

- a. Work with local mental health authorities to assure that mental health organizations are trauma informed and that the workforce is adequately and continuously trained in evidence-based and culturally resonant trauma-based therapeutic services and care.

8. **Assure** a competent public health and personal health care workforce.

Recommendation -

- a. Conduct frequent trainings to assure that the workforce is knowledgeable in all aspects of trauma identification and care.
- b. Train public health and personal health professionals to be aware of the disparate and inequitable impact of trauma conditions in marginalized and underserved communities.

9. **Evaluate** effectiveness, accessibility and quality of personal and population-based health services.

Recommendation -

- a. Assist local mental health systems in increasing their capacity to monitor and evaluate service delivery.
- b. Conduct systematic quality improvement for health-systems related projects.

10. **Research** for new insights and innovative solutions to health problem.

Recommendation -

- a. Support research that deepens the evidence about the interaction of epigenetics and the lived experience on trauma vulnerability and transmission.
- b. Studies the impact of disasters on exacerbating childhood trauma and/or domestic violence.

- c. Develops new approaches to improve the impact of housing policies on equitable recovery and restoration post-disaster.
- d. Supports scientific inquiry on how indigenous culture can be harnessed to send positive messages to the community, promote optimism and hope and help dislodge deeply held reactions to traumatic events, acute or chronic.

The National Child Traumatic Stress Network (NCTSN) was created by Congress in 2000 as part of the Children's Health Act to 'raise the standard of care and increase access to services for children and families who experience or witness traumatic events.' The NCTSN is administered by the Substance Abuse and Mental Health Services Administration (SAMHSA) and coordinated by the UCLA-Duke University National Center for Child Traumatic Stress (NCCTS). To accomplish the mission, NCTSN grantees and Affiliates work to: 1) provide clinical services; 2) develop and disseminate new interventions and resource materials; 3) offer education and training programs, collaborate with established systems of care; 4) engage in data collection and evaluation; and, 5) inform public policy and awareness efforts.

Given the many successes of NCTSN over the past two decades in their comprehensive and multidisciplinary approaches to mitigating childhood trauma, funding could be expanded to increase the number of funded centers in all 50 states, especially those with high prevalence of substance use disorders and violence in their populations. The reach should also extend to child protective services, the schools, and law enforcement, as well as other clinical providers.

The country's leading population-based public health federal agency, and the more clinically-oriented substance abuse and mental health agency, SAMHSA, through funding of NCTSN, should serve as the lead federal agencies setting the agenda for research, clinical services, workforce development and policies to address the comprehensive needs of traumatized children. Whether they are in schools, in juvenile detention centers, in detention camps, and/or in foster care, a more coordinated system of approach that addresses the whole child from an assets-based positive youth development approach would be more ideal than the current fragmented system. Such coordination would prevent duplication, and streamline and maximize resources to help children gain the psychological, social, and academic competencies that they need.

In conclusion, as was stated by some of the leading ACEs experts in the field (Anda et al., 2005):

There is a striking convergence of recent findings from the neurosciences with those from a large epidemiologic study of the long-term effects of ACEs, which has the potential to open multidisciplinary approaches to studying and improving human well-being. Current practices of medicine and public health are fragmented by categorical funding, organizational boundaries, and a symptom-based system of medical care. Prevention and remediation of our nation's

leading health and social problems is likely to benefit from understanding that many of these problems tend to be co-morbid and may have common origins in the enduring neurodevelopmental consequences of abuse and related adverse experiences during childhood.

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