

Impact of Adverse Childhood Experiences on Health and Chronic Disease

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Priority #1: Self Care

- Some of the information presented today may be disturbing or bring up difficult emotions. Please take care of yourself as needing during this presentation as well as afterwards.



NM Crisis Line - New Mexico Crisis Line

nmcrisisline.com

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New Mexico Crisis And Access Line

Call toll free anytime 24/7/365 **1-855-NMCRISIS (662-7474)**
If you are having a life threatening emergency, call 911 immediately.



Crisis And Access Line

Call for support and resources

1-855-NMCRISIS (662-7474)

Toll Free 24/7/365



Peer to Peer Warmline

Call or text to connect with a peer

1-855-4NM-7100 (466-7100)

call 7:00am - 11:30pm / text 6pm - 11pm



NMConnect App

Call, text and access mental health resources



Healthcare Worker and First Responder Support Line

1-855-507-5509



NM 5 Actions

Self-guided road map to understanding and addressing substance use and addictive behaviors



Path to Wellness

Mental Health Awareness Messages

Translate »

11:41 AM 9/1/2021

What are Adverse Childhood Experiences?

- Adverse Childhood Experiences (ACEs) are potentially traumatic events that occur in childhood.
- In the original study, these included
 - Emotional abuse
 - Physical abuse
 - Sexual abuse
 - Household dysfunction

Household Dysfunction

- Household substance abuse
- Household domestic violence
- Household mental illness
- Parental separation or divorce
- Household member incarcerated

Social Experiences

More recent expansions of the ACES Study are investigating community dysfunction and experiences of adverse social problems

- Crime in neighborhoods
- School shootings
- Gang violence
- Discrimination and marginalization

The Story

A long time ago, in a galaxy known as
Southern California....

Dr. Vincent Felitti, M.D.

- The director for Kaiser Permanente's Department of Preventative Medicine in the 1980's-1990's
- He ran an obesity and weight loss clinic.
- Dr. Felitti wondered why so many patients dropped out of the program early.
- He created a detailed intake questionnaire to learn more about the patients' weight and health history.



He misspoke

- The story goes that he meant to ask a new patient, “How old were you when you became sexually active?”
- But instead, he asked, “How much did you weigh when you first became sexually active?”
- The patient, who was a woman, responded, “about 40 lbs.”
- He asked the question again, verbatim.
- She responded, “40 lbs, I was four years old and it was my father.”

????

- Dr. Felitti was confused, and he did not know what to do with this information.
- He began to ask the question to other patients and discovered a large number also disclosed childhood sexual abuse.
- He asked his colleagues to interview the next 100 patients, and they turned up with similar findings
- Out of 286 total patients, most reported childhood sexual abuse

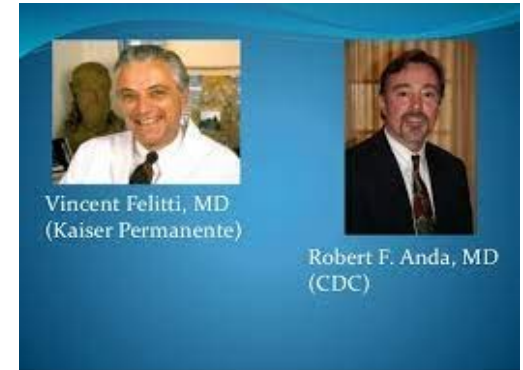
And there was more...

- In taking a weight history from a woman who reported being sexually assaulted at the age of 23, she shared that she gained 103 lbs in the year following the assault.
- He discovered that for many of his obesity patients, eating was a “fix,” or a solution, not a problem.

“Overweight is overlooked, and that’s how I need to be.”

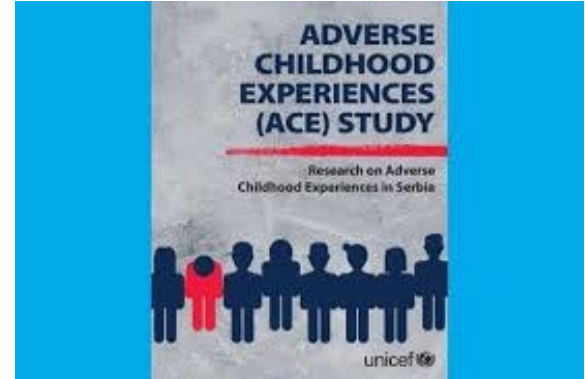


- Dr. Felitti reported his findings to Kaiser Permanente, and he joined with Dr. Robert Anda to conduct one of the largest research projects ever to assess associations between childhood maltreatment and later life health and well being.



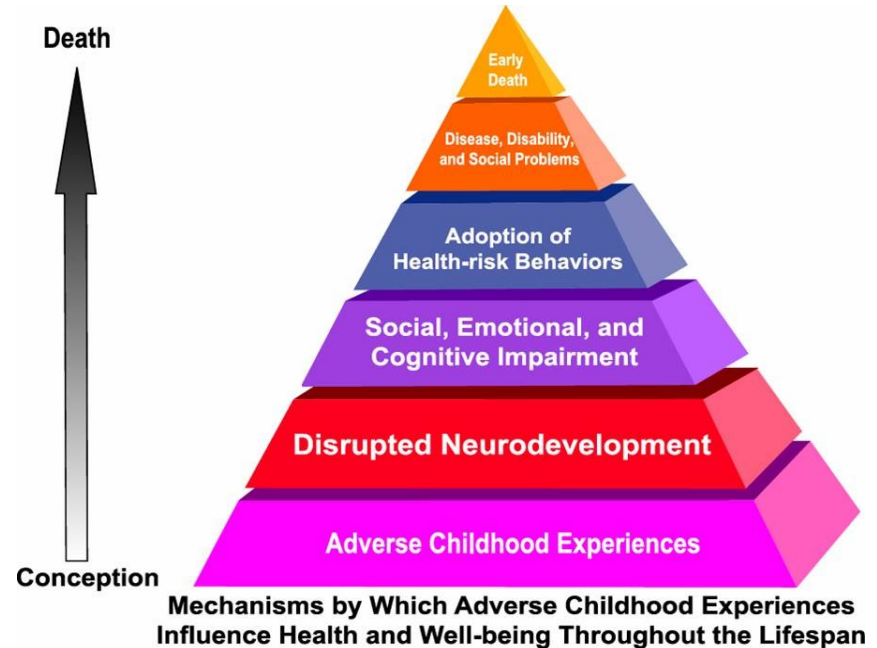
The ACE Study: 1992-1997

- 17,000 + Kaiser patient volunteers with diverse backgrounds for gender ID, race ID, age and education level



Findings

- Certain experiences in childhood are major risk factors for leading causes of illness, death and poor quality of life in the U.S.
- These include chronic diseases such heart disease, stroke, cancer and diabetes
- Also obesity, autoimmune diseases, depression, substance abuse and suicide



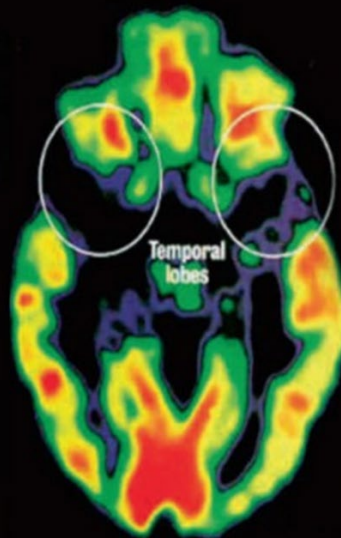
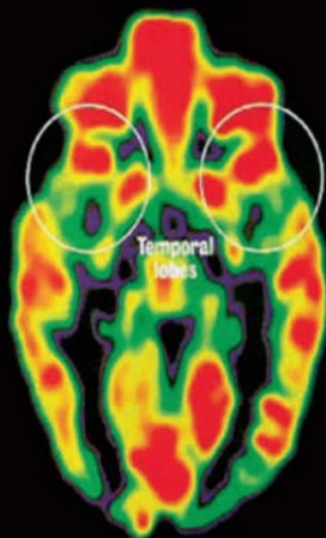
Toxic Stress

- Can occur when a child experiences strong, frequent, and/or prolonged adversity (physical/emotional abuse, chronic neglect, caregiver substance abuse/mental illness, exposure to violence, or family economic hardship) **without adequate adult support.**
- Prolonged activation of the stress response systems can disrupt the development of brain architecture and other organ systems, and increase the risk for stress-related disease and cognitive impairment into adulthood.

HEALTHY BRAIN

ABUSED BRAIN

Front



Back

This PET scan of the brain of a normal child shows regions of high (red) and low (blue and black) activity. At birth, only primitive structures such as the brain stem (center) are fully functional; in regions like the temporal lobes (top), early childhood experiences wire the circuits.

This PET scan of the brain of a Romanian Orphan who was institutionalised shortly after birth, shows the effect of extreme deprivation in infancy. The temporal lobes (top), which regulate emotions and receive input from the senses, are nearly quiescent. Such children suffer emotional and cognitive problems.

MOST ACTIVE LEAST ACTIVE

 A color scale legend for PET scans. It consists of five colored squares arranged horizontally: red, yellow, green, blue, and black. The red square is labeled "MOST ACTIVE" and the black square is labeled "LEAST ACTIVE".

Toxic Stress and Allostasis

- When toxic stress response occurs continually, or is triggered by multiple sources, it can have a cumulative toll on an individual's physical and mental health—for a lifetime.
- The more adverse experiences in childhood, the greater the likelihood of developmental delays and later health problems, including heart disease, diabetes, substance abuse, and depression.

Similar to a car engine being revved over and over, our internal systems get overloaded with cortisol and other stress related responses. (High allostatic load)



Also...

Findings from ACES suggest that these experiences increase the risk that children:

- will not perform well in school
- are more likely to be unemployed as adults
- are more likely to have high health risk behaviors



But...

- Research also indicates that supportive, responsive relationships with caring adults as early in life as possible can prevent *or reverse* the damaging effects of toxic stress response.

<https://developingchild.harvard.edu/science/key-concepts/toxic-stress/>



Resilience: The Other Side of the Coin

- Resilience is the ability to withstand adversity and bounce back from difficult life events.
- Being resilient does not mean that people don't experience stress, emotional upheaval, and suffering. ...
- Resilience is important because it gives people the strength needed to process and overcome hardship.



Resilience

- According to the American Psychological Association, resiliency is:
 - *“the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress”*
- *“Research has shown that resilience is ordinary, not extraordinary. People commonly demonstrate resilience.”*
- However, “Resilience is *learned*...it is not something that is automatic or innate.”

<https://www.apa.org/topics/resilience>



Benefits of Resilience

- Greater resilience leads to improved learning and academic achievement.
- Resilience is related to lower absences from work or school due to sickness.
- It contributes to reduced risk-taking behaviors including excessive drinking, smoking, and use of drugs.
- Those with greater resilience tend to be more involved in the community and/or family activities.
- Higher resilience is related to a lower rate of mortality and increased physical health (2015).
- <https://positivepsychology.com/what-is-resilience/>

ACE Score Prevalence for Participants Completing the ACE Module on the 2010 BRFSS

Number of Adverse Childhood Experiences (ACE Score)	Women Percent	Men Percent	Total Percent
0	37.6%	39.3%	38.5%
1	22.7%	24.5%	23.5%
2	12.9%	13.9%	13.4%
3	9.0%	8.6%	8.8%
4 or more	17.8%	13.7%	15.8%

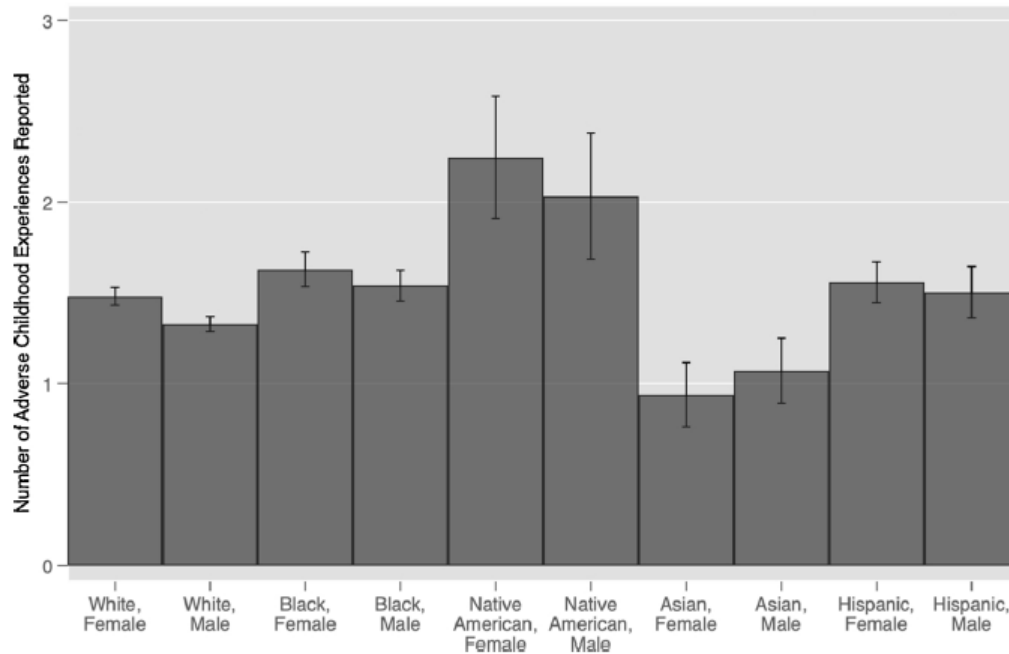
Note: Reports and articles that use data from other years and/or other states may contain different estimates.

Source: Merrick, M.T., Ford, D.C., Ports, K. A., Guinn, A. S. (2018). [Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States](#). [JAMA Pediatrics](#), 172(11), 1038-1044.

Prevalence of ACEs by Category for Participants Completing the ACE Module on the 2011-2014 BRFSS

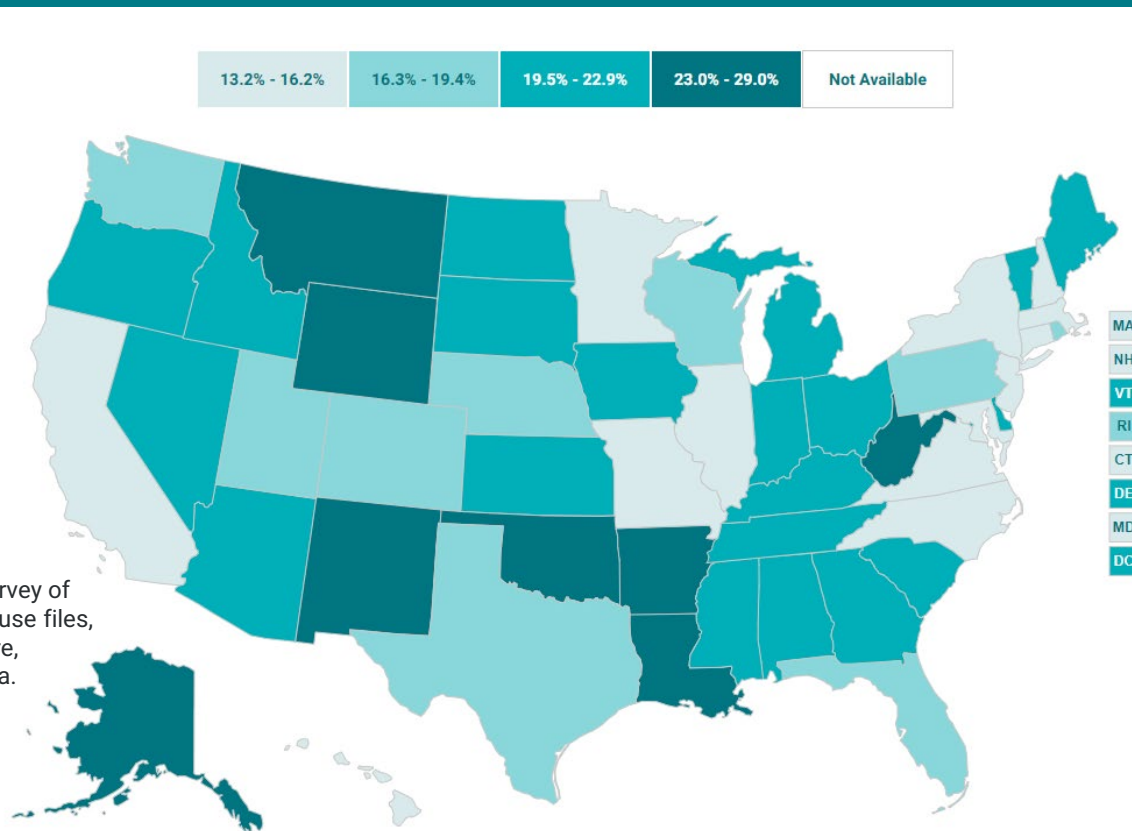
ACE Category	Women	Men	Total
	Percent	Percent	Percent
ABUSE			
Emotional Abuse	33.9%	34.9%	34.4%
Physical Abuse	17.5%	18.4%	17.9%
Sexual Abuse	16.3%	6.7%	11.6%
HOUSEHOLD CHALLENGES			
Intimate Partner Violence	18.2%	16.8%	17.5%
Substance Abuse	28.7%	26.3%	27.6%
Mental Illness	19.2%	13.7%	16.5%
Parental Separation or Divorce	27.8%	27.5%	27.6%
Incarcerated Household Member	7.3%	8.6%	7.9%

Mean Number of ACEs reported by Adults, across Racial/Ethnic Categories and Sex



N=34,653
NESARC Wave 2, 2004-05
Richards et al, 2021

Percent of children 0-17 with 2 or more ACEs



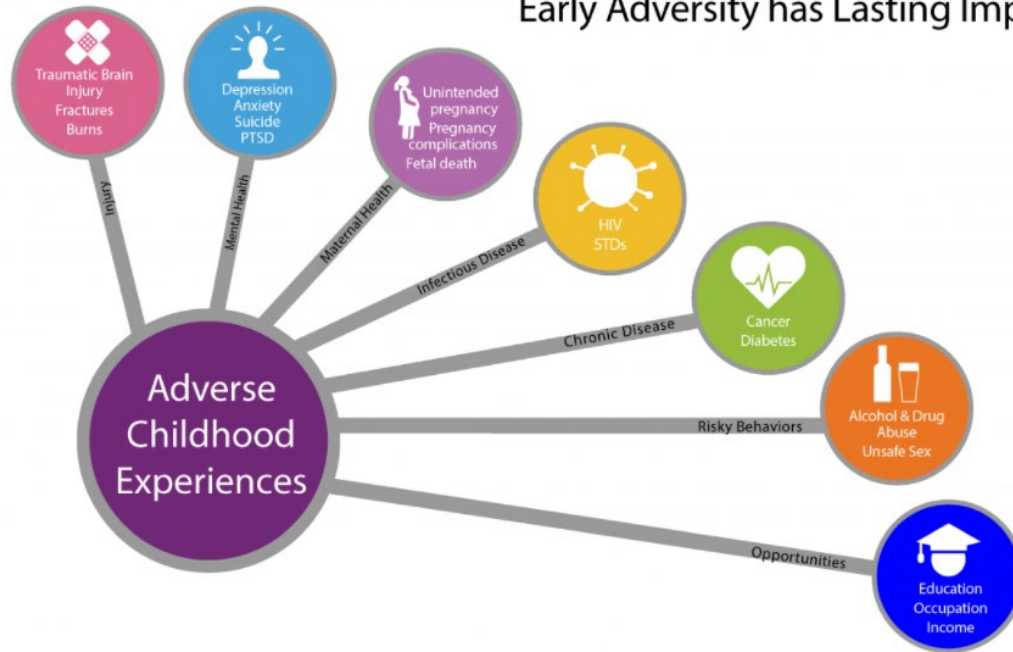
SHADAC analysis of National Survey of Children's Health (NSCH) public-use files, 2018-2019, State Health Compare, SHADAC, University of Minnesota. statehealthcompare.shadac.org
Accessed 8/24/21.

Percentage of Adults Reporting ≥ 4 ACEs by Racial/Ethnic Self-Identification

Race/Ethnicity	National 10-state sample	New Mexico
White, non-Hispanic	14.5	22.0
Black, non-Hispanic	21.8	NR
Asian, non-Hispanic	3.2	NR
Native Hawaiian/Pacific Islander	13.4	NR
American Indian/Alaska Native	26.5	33.3
Multiracial, non-Hispanic	34.6	NR
Hispanic	21.2	23.7
New Mexico, all adults		23.8

(Gilbert et al, 2015;
NMDOH, 2021)

Early Adversity has Lasting Impacts



[National Center for Injury Prevention and Control, Division of Violence Prevention \(2020\)](#)

Chronic Disease and Disability

Impact of ACEs

- Replication of ACEs study using Behavioral Risk Factor Surveillance Survey (BRFSS) across 10 states and DC.
- Weighted sample to control for selection, nonresponse and demographics, N=53,998
- Statistically significant ($p < 0.01$) linear dose-response relationship between ACE score and:
 - Frequent mental distress
 - Disability
 - Myocardial infarction
 - Asthma
 - Coronary heart disease/stroke
 - Diabetes

Percentage of NM Adults Reporting Health Outcomes by Number of ACEs

Characteristic	0 ACEs	1 ACE	2-3 ACEs	≥ 4 ACEs
Poor Physical Health	11.0	11.3	15.1	21.2
Frequent Mental Distress	6.9	11.3	14.1	28.2
Disability	23.0	25.3	31.0	38.3
Asthma	5.1	7.6	8.9	13.0
COPD	3.6	5.2	7.1	7.5
Depression	7.7	10.0	20.6	31.3
Heavy Drinking	3.2	4.7	7.7	8.2
Current Smoking	9.5	13.3	16.3	24.6

(NMDOH, 2021)

Preventing ACEs could reduce a large number of health conditions.



UP TO

21 MILLION
CASES OF
DEPRESSION



UP TO

1.9 MILLION
CASES OF
HEART DISEASE



UP TO

2.5 MILLION
CASES OF
OVERWEIGHT/OBESITY

SOURCE: National Estimates based on 2017 BRFSS; Vital Signs, MMWR November 2019.

Vital^{CDC}**signs**TM

www.cdc.gov/vitalsigns/aces

CE319119-C



Adverse Childhood Experiences (ACEs) Questionnaire

1. Did a parent or other adult in the household often or very 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?
2. Did a parent or other adult in the household often or very often... Push, grab, slap, or throw something at you? or Ever hit you so hard that you had marks or were injured?
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 attempt or actually have oral or anal intercourse with you?
4. Did you often or very 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?

Adverse Childhood Experiences (ACEs) Questionnaire

5. Did you often or very 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?
6. Was a biological parent ever lost to you through divorced, abandonment, or other reason?
7. Was your mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very 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?
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
9. Was a household member depressed or mentally ill? or did a household member attempt suicide?
10. Did a household member go to prison?

Use of the ACEs Questionnaire

- Significant limitations in test construction and psychometrics (McLennan et al, 2020).
- Most useful for epidemiological research to measure risk in populations.
- Not appropriate for use as a general screening tool.
 - Indicates heightened risk for a broad range of poor outcomes but does not indicate a specific clinical response.
 - More sensitive and specific screens exist for conditions that are correlated with ACEs.
 - Content can trigger reactive distress (NOT trauma-informed).
- Has some utility in specific clinical situations (e.g., bariatric presurgical evaluation).
- Use PHQ-9, GAD-7, and PC-PTSD to screen for related behavioral health conditions.

What is Trauma-Informed Care?

- Trauma-Informed Care understands and considers the pervasive nature of trauma, and promotes environments of healing and recovery rather than practices and services that may inadvertently *re-traumatize*.
- It first seeks to avoid *re-traumatization*.

<http://socialwork.buffalo.edu/social-research/institutes-centers/institute-on-trauma-and-trauma-informed-care/what-is-trauma-informed-care.html>

Trauma-Informed Care is a Paradigm Shift

- A shift from asking:
 - “What is wrong with this person?”
- to...
 - “What has happened to this person?”

Trauma-Informed Care

- An approach in human services fields that assumes an individual is more likely than not to have a history of trauma.
- Recognizes the presence of traumatic stress and acknowledges the role trauma may play in an individual's life (including the service staff).
- Changes organizational culture to emphasize respecting and appropriately responding to the effects of trauma at all levels.

(Bloom , 2010)

Organizational and Clinical Applications

Organizational

- Leading and communicating about the transformation process
- Training clinical as well as non-clinical staff members
- Preventing secondary traumatic stress in staff
- Hiring a trauma-informed workforce
- Training staff in trauma-specific treatment approaches

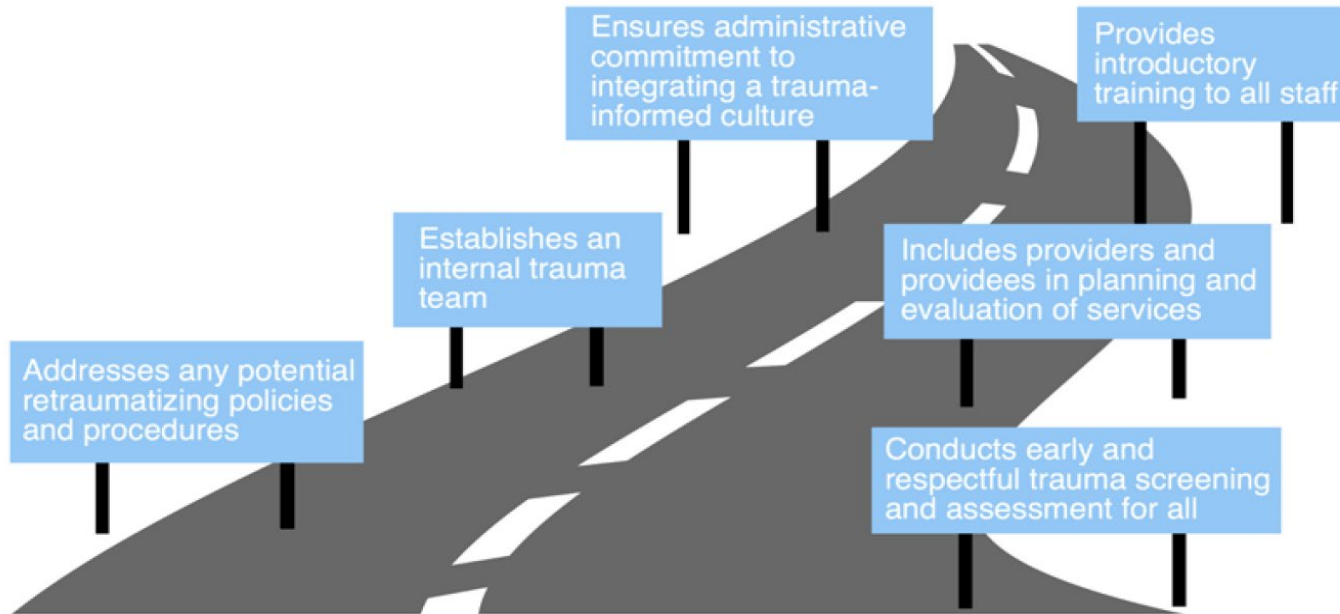
Clinical

- Engaging patients in organizational planning
- Creating a safe environment
- Involving patients in treatment process
- Screening for trauma, respectfully and appropriately
- Engaging referral sources and partnering organizations

The Road to Trauma-Informed Care (TIC)

Trauma-Informed Care calls for a change in organizational culture, where an emphasis is placed on understanding, respecting and appropriately responding to the effects trauma at all levels.

(Bloom, 2010)



Institute on Trauma and Trauma-Informed Care (2015)













(Fallot & Harris, 2001)



Retraumatization



WHAT HURTS?

SYSTEM (POLICIES, PROCEDURES, "THE WAY THINGS ARE DONE")	RELATIONSHIP (POWER, CONTROL, SUBVERSIVENESS)
 HAVING TO CONTINUALLY RETELL THEIR STORY	 NOT BEING SEEN / HEARD
 BEING TREATED AS A NUMBER	 VIOLATING TRUST
 PROCEDURES THAT REQUIRED DISROBING	 FAILURE TO ENSURE EMOTIONAL SAFETY
 BEING SEEN AS THEIR LABEL (I.E. ADDICT, SCHIZOPHRENIC)	 NONCOLLABORATIVE
 NO CHOICE IN SERVICE OR TREATMENT	 DOES THINGS FOR RATHER THAN WITH
 NO OPPORTUNITY TO GIVE FEEDBACK ABOUT THEIR EXPERIENCE WITH THE SERVICE DELIVERY	 USE OF PUNITIVE TREATMENT, COERCIVE PRACTICES AND OPPRESSIVE LANGUAGE

Five Principles of Trauma-Informed Care

- Five Guiding Principles serve as a framework for how service providers and systems of care can work to reduce the likelihood of re-traumatization.
- These principles are generalizable across a variety of service settings.
- Rather than providing a set of practices and procedures, the principles can be interpreted and applied in ways that are appropriate for a specific type of service setting.

Safety



Ensuring physical and emotional safety

Choice



Individual has choice and control

Collaboration



Making decisions with the individual and sharing power

Trustworthiness



Task clarity, consistency, and Interpersonal Boundaries

Empowerment



Prioritizing empowerment and skill building

Definitions

Principles in Practice

Common areas are welcoming and privacy is respected

Individuals are provided a clear and appropriate message about their rights and responsibilities

Individuals are provided a significant role in planning and evaluating services

Respectful and professional boundaries are maintained

Providing an atmosphere that allows individuals to feel validated and affirmed with each and every contact at the agency

Video: From Treaters to Healers

- <https://youtu.be/8wxnzVib2p4>

Resources for TIC information and Training

The Center for Health Care Strategies

<https://www.chcs.org/topics/trauma-informed-care/>

The Crisis Prevention Institute

https://institute.crisisprevention.com/Trauma-Informed-Care.html?code=GSIT01TIC&src=PPC&utm_source=google&utm_medium=cpc&utm_campaign=tic_resource&utm_content=tofu_gen&gclid=EAlaQobChMIp935yITm8glVhWpvBB05kwbPEAMYASAAEgIZZ_D_BwE

SAMSHA

https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf

Discussion Questions

1. What are the implications for our state of high overall ACEs across the general population and among subgroups such as Native Americans, women, LGBTQ+ and multiracial persons?
2. How can this knowledge of high levels of ACEs be used to improve health outcomes and the quality of healthcare?
3. What are implications of high ACEs in NM for primary, secondary and tertiary prevention?
4. What does resilience look like to you, what factors/behaviors help you adapt and “bounce back?”