Adverse Childhood Experiences (ACEs):
What are they and what can we do about them?

Karim Martinez, Ph.D., CFLE
Extension Family and Consumer Sciences

Esther Devall, Ph.D., CFLE
Family and Consumer Sciences
What are Adverse Childhood Experiences or ACEs?

(Esther Devall)
What are Adverse Childhood Experiences?

• 10 experiences categorized as child maltreatment or household dysfunction.
Abuse (Acts of Commission)

• **Physical** - Any act by a caregiver that results in a non-accidental physical injury to a child.

• **Emotional** - Behaviors that actively harm the child’s mental health.

• **Sexual** - Any sexual activity with a child, including sexting and pornography.
Neglect (Acts of Omission)

- **Physical** - Not meeting child’s needs for food, clothing, shelter, protection, and medical care.
- **Emotional** - Failure to meet child’s emotional needs.
Household Dysfunction

- Mental illness.
- Couple violence.
- Divorce.
- Incarceration.
- Substance abuse.
What’s Your ACE Score?
Occurs in All Family Types

• Adverse Childhood Experiences (ACEs) can occur in all kinds of families, regardless of:
  • Income.
  • Education.
  • Ethnicity.
• Rates are higher among Hispanics and Blacks.
Prevalence of ACEs
ACEs in Children

- Nationally, 1 in 10 children have experienced 3 or more ACEs.
- In New Mexico, this number is 1 in 6.
Connection between ACEs and Negative Health Outcomes

(Karim Martinez)
Decreased Health and Well-Being

Greater the number of ACEs, greater the risk of poor physical and mental health throughout life.
Disrupted Brain Development

• Like a house, brain architecture is built from the bottom up and over time.
• Experiences in early childhood can either weaken or strengthen the foundation.
Developmental Impairments

• Social.
• Emotional.
• Cognitive.
Risky Health Behaviors

- Smoking.
- Drinking.
- Drug use.
- Over-eating.
- Physical inactivity.
- Many sexual partners.
Diseases and Disabilities

- Obesity.
- Diabetes.
- Stroke.
- Heart disease.
- Cancer.
Diseases and Disabilities

• Broken bones.
• Depression.
• Suicide attempts.
• Sexually transmitted diseases.
Childhood Experiences Underlie Chronic Depression

% With a Lifetime History of Depression

ACE Score

Women
Men
Childhood Experiences vs. Adult Alcoholism

![Bar graph showing the relationship between ACE score and the percentage of alcoholics.]

- 0 ACE: 2% alcoholic
- 1 ACE: 3% alcoholic
- 2 ACE: 2% alcoholic
- 3 ACE: 4% alcoholic
- 4+ ACE: 18% alcoholic
Social Problems

• School failure and drop-out.
• Unemployment.
• Failed relationships.
• Lost time from work.
Early Death

6 or more ACES linked to reduced life expectancy by 20 years (age 60 vs. 80).
ACEs Effects on Brain Development

(Esther Devall)
Toxic Stress

• Learning to deal with stress is an important part of development.
• But, ACEs can result in toxic stress.

- Positive: Brief increases in heart rate, mild elevations in stress hormone levels.
- Tolerable: Serious, temporary stress responses, buffered by supportive relationships.
- Toxic: Prolonged activation of stress response systems in the absence of protective relationships.
Brain Development

- Brain development begins before birth and continues through young adulthood.

- More primitive areas of the brain develop first while the most advanced areas of the brain develop last.
Areas of the Brain

Brain Stem
- Controls awake/alert states.
- Reacts to stress – fight, flight, or freeze.

Midbrain/Limbic System
- Movement.
- Visual and auditory processing.
- Emotions.

Prefrontal Cortex
- Attention.
- Planning.
- Decision-making.
- Self-control.
Toxic Stress and the Brain

- Stress response constantly set to High, when normal brains are calm.
- Hijacks the ability to think, reason, self-regulate, and make good decisions.
- Instead, relies on automatic survival responses (fight, flight, freeze).
- Interferes with learning and school success.
Trauma and Brain Development

Typical Development

- Cognition
- Social/Emotional
- Regulation

Developmental Trauma

- Cognition
- Social/Emotional
- Regulation
Trauma and Brain Development

Cognition
- Learning.
- Organizing.
- Problem-Solving.

Social/Emotional
- Taking another’s perspective.
- Cooperation.
- Peer relations.

Regulation
- Self-calming.
“The neural pathways in the brain that deal with stress are the same ones that are used for learning. We want our kids to achieve more academically, but we can’t do this if our kids aren’t emotionally healthy.”

Mark Brackett, Director of Yale Center for Emotional Intelligence
ACEs in the Classroom

30 students:

- 0 ACEs = 6 students
- 1 ACE = 5 students
- 2 ACEs = 6 students
- 3 ACEs = 3 students
- 4 ACEs = 4 students
- 5 ACEs = 3 students
- 6+ ACEs = 3 students
ACEs and School Outcomes

- Greater the number of ACEs, greater the likelihood of:
  - Poor academic performance.
  - Lower test scores.
  - Behavior/discipline problems.
  - Attendance problems.
## Odds for School Problems with Increasing ACEs

<table>
<thead>
<tr>
<th>Number of ACEs</th>
<th>Severe Attendance Problems</th>
<th>Severe School Behavior Problems</th>
<th>Academic Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>3+</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2.5</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>2.5</td>
<td>1.5</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
What is “Trauma-Informed Care”? 

(Karim Martinez)
What does “Trauma-Informed Care” Mean?

An organizational structure and treatment framework that involves understanding, recognizing, and responding to the effects of all types of trauma and seeking to employ practices that do not traumatize or re-traumatize.

(Adapted from Johns Hopkins and SAMHSA)
Key Principles for Trauma Informed Care

Shift focus from “What’s wrong with you?” to “What happened to you?”

Instead ask:

- What happened to you?
- What might we help?
- How might you use your story as fuel to make the world a better place for yourself and others?

© Drew Schwartz
www.drewschwartz.com
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

Core Principles - www.chcs.org

Definitions

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

Principles in Practice

Safety
Common areas are welcoming and privacy is respected

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

Collaboration
Individuals are provided a significant role in planning and evaluating services

Trustworthiness
Respectful and professional boundaries are maintained

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

Core Principles - www.chcs.org
10 Key Ingredients for Trauma-Informed Care

1. Lead and Communicate
2. Engage Patients in Planning
3. Train All Staff
4. Create a Safe Environment
5. Prevent Secondary Trauma
6. Build an Informed Workforce
7. Involve Patient in Treatment
8. Screen for Trauma
9. Use Trauma-Specific Treatment
10. Engage Partners

www.chcs.org
How to Address Root Causes of ACEs

(Karim Martinez)
ACEs Risk and Protective Factors

- Social Ecological Model
  - Individual
  - Relational
  - Community
  - Social
What Protects Children from ACEs?

Safe, Stable, Nurturing Relationships

SAFE = free from harm

STABLE = a high degree of consistency

NURTURING = compassionate, responsive caregiver(s)
What is *Essentials for Childhood*?

- Framework from the CDC Division of Violence Prevention.
- Vision for creating safe, stable, nurturing relationships and environments for all children to prevent child abuse and neglect.
  - Raise awareness and commitment.
  - Use data to inform prevention actions.
  - Create the context for healthy children and families through norms change and programs.
  - Create the context for healthy children and families through policies.

https://www.cdc.gov/violenceprevention/childabuseandneglect/essentials.html
What can Be Done About ACEs?

These wide-ranging health and social consequences underscore the importance of preventing ACEs before they happen. Safe, stable, and nurturing relationships and environments can have a positive impact on a broad range of health problems and on the development of skills that will help children reach their full potential. Strategies that address the needs of children and their families include:

- Parent support programs for teens and teen pregnancy prevention programs
- Mental illness and substance abuse treatment
- High quality child care
- Sufficient economic supports for families with lower incomes
- Home visiting to pregnant women and families with newborns
- Parenting training programs
- Intimate partner violence prevention
- Family-friendly work

The earned income tax credit (EITC) is a policy that the federal government, states, territories and some municipalities have implemented to build workers’ financial stability, especially those with children. The EITC raises approximately 6 million people—half of them children—above the poverty line each year, and research suggests that the policy reduces child abuse and risk factors for child abuse and neglect.
ACEs Prevention in Doña Ana County

(Esther Devall)
Resiliency Leaders Coalition

• Multi-sector coalition established in Fall, 2018.
• Spearheaded by:
  • Kasandra Gandara, Las Cruces City Councilor
  • Dominic Cappello, co-author of *Anna, Age Eight*
• 10 taskforces:
  • Behavioral Health, Early Childhood Learning, Family Centered Schools, Food, Housing, Job Training, Medical/Dental, Parent Support and Education, Transportation, Youth Mentoring
• Currently working on a survey to collect data to inform coalition goals.
Closing Activity

What can you do in your sector to contribute to prevent and/or address ACEs?
Thank You!

Esther Devall
edevall@nmsu.edu
575-646-1185

Karim Martinez
karmarti@nmsu.edu
575-646-2390

The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs.

New Mexico State University is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating.