Tonight we will...

• Review the Adverse Childhood Experiences (ACEs) study
• Define toxic stress
• Describe the stress response & the consequences of toxic stress
• Identify factors that promote resilience
• Discuss Trauma-Informed care
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ACES can have lasting effects on….

- Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)
- Behaviors (smoking, alcoholism, drug use)
- Life Potential (graduation rates, academic achievement, lost time from work)

ACES have been found to have a graded dose-response relationship with 40+ outcomes to date.

*This pattern holds for the 4+ outcomes, but the exact risk values vary depending on the outcome.
TOXICSTRESS

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.

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Types of stress responses

**POSITIVE**
A normal and essential part of healthy development

EXAMPLES
getting a vaccine, first day of school

**TOLERABLE**
Response to a more severe stressor, limited in duration

EXAMPLES
loss of a loved one, a broken bone

**TOXIC**
Experiencing strong, frequent, and/or prolonged adversity

EXAMPLES
physical or emotional abuse, exposure to violence

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Fear and Anxiety Affect the Brain Architecture of Learning and Memory

**Prefrontal Cortex**
Center of executive functions; regulates thought, emotions, and actions. Especially vulnerable to elevation of brain chemicals caused by stress. Matures later in childhood.

**Amygdala**
Triggers emotional responses; detects whether a stimulus is threatening. Elevated cortisol levels caused by stress can affect activity. Matures in early years of life.

**Hippocampus**
Center of short-term memory; connects emotion of fear to the context in which the threatening event occurs. Elevated cortisol levels caused by stress can affect growth and performance. Matures in early years of life.

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Factors that Contribute to Resilience

• Facilitating supportive adult-child relationships

• Building a sense of self-efficacy and perceived control

• Providing opportunities to strengthen adaptive skills and self-regulatory capacities

• Mobilizing sources of faith, hope, and cultural traditions

7 C's of Resilience

1. Competence
2. Confidence
3. Connection
4. Character
5. Contribution
6. Coping
7. Control

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**What is Trauma-Informed Care?**

- Trauma-informed approach and trauma-specific interventions that address trauma’s consequences and facilitate healing.
  - Realizes the widespread impact of trauma and understands potential paths for recovery;
  - Recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system;
  - Responds by fully integrating knowledge about trauma into policies, procedures, and practices; and
  - Seeks to actively resist re-traumatization

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### Foundations for Healthy Development

1. Nurturing and responsive relationships
2. Safe and supportive environments
3. Access to appropriate nutrition
4. Building the caregiver’s skills and capacity

### SAMHSA’s 6 Key Principles

**Trauma-Informed Care**

1. Safety
2. Trustworthiness and Transparency
3. Peer support
4. Collaboration and mutuality
5. Empowerment, voice and choice
6. Cultural, Historical, and Gender Issues
Helping Adults build Resilience

• Provide training in specific self-regulatory and executive function skills
• Teach strategies for reassessing a stressful situation and considering alternatives
• Teach strategies for recognizing and interrupting automatic responses
• Strengthen intentional self-regulation through specific training techniques
• Create a “multiplier effect,” in which helping adults see how small actions and successes will make a difference
Pediatrics

11-year-old JJ

• Adopted from CPS custody when he was 9 years old.
• Prenatally exposed to multiple substances
• Lived with family of origin until 6 years old
• Lived in 3 different foster homes
• Referred to his birth parents as “Mean Mom” & “Mean Dad”
• JJ reported, “I want to change my name because I need a new beginning.”
• He is functioning well in his adoptive home.

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Children

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