

# Social Determinants of Health and Adverse Childhood Events

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# Objectives

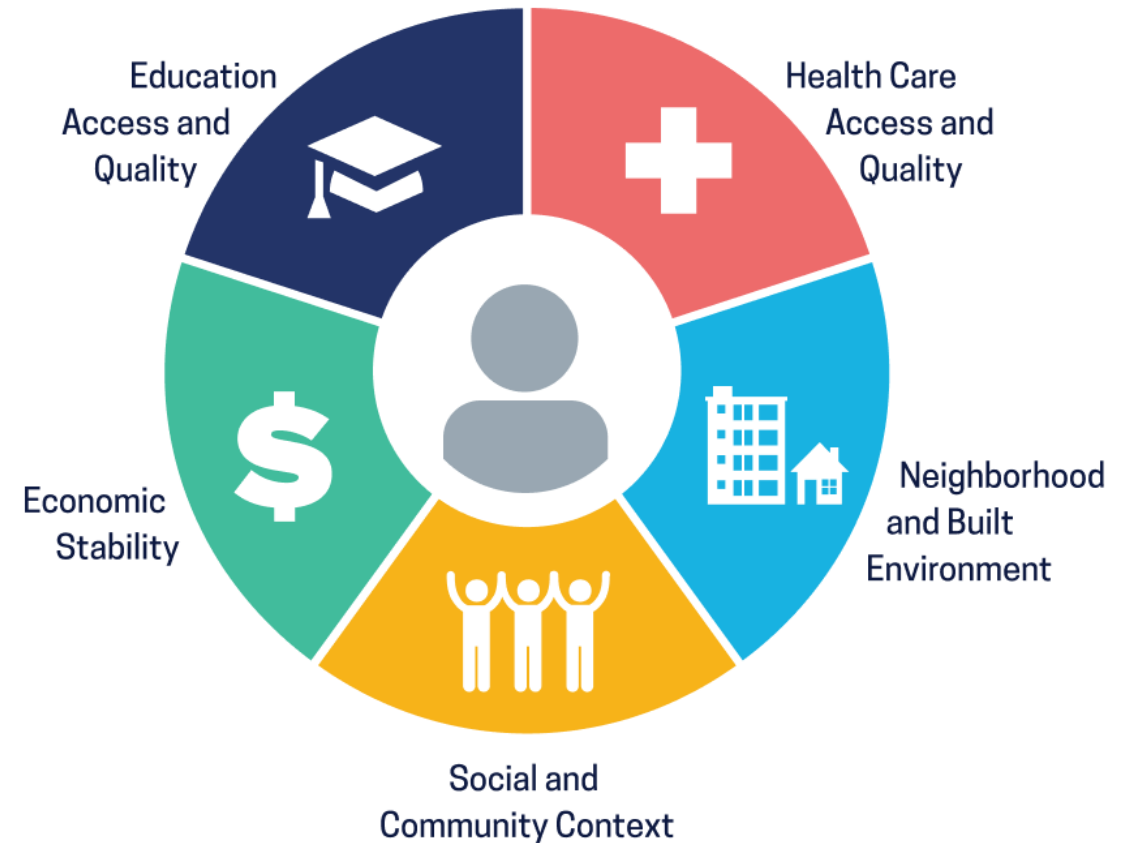
Understand the 5 domains of Social Determinants of Health

Understand how trauma/adversity in childhood can affect health

Holistic, patient-centered health evaluation

What are  
Social  
Determinants  
of Health  
(SDoH)?

## Social Determinants of Health



<https://health.gov/healthypeople/priority-areas/social-determinants-health>

# Economic Stability

- The connection between people's financial resources (income, cost of living, socioeconomic status) and their health
- Key Issues Include:
  - Poverty
  - Employment
  - Food security
  - Housing stability

# Education Access and Quality

- This is the connection of education to health and wellbeing
- Key issues include:
  - Graduating from High School
  - Enrollment in higher education
  - General educational attainment
  - Literacy
  - Early childhood education and development

# Healthcare Access and Quality

- Connection between one's **access to** and **understanding of** health care services and one's own health
- Key issues include:
  - Access to health care
  - Access to Primary Care
  - Health insurance coverage
  - Health literacy

# Neighborhood and Built Environment

- The connection between where a person lives (housing, neighborhood, and environment) and their health and wellbeing
- Key issues include:
  - Quality of housing
  - Access to transportation
  - Availability of healthy foods
  - Air and water quality
  - Neighborhood crime and violence

# Social and Community Context

- Connection between characteristics of the contexts within which people live, learn, work, and play and their health and wellbeing
- Key issues include:
  - Cohesion within a community
  - Civic participation
  - Discrimination
  - Workplace conditions
  - Incarceration



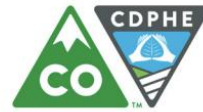
# Who is affected by SDoH?

- Nearly everyone
- Why is this important?
  - Research suggests that health behaviors and social and economic factors are primary drivers of health outcomes
  - Social and economic factors can shape an individual's health behaviors

# Health and Well-Being Consequences and SDoH

- Morbidity
- Mortality
- Life expectancy
- Health care expenditures
- Health status
- Functional limitations

# Colorado and SDoH



**COLORADO**  
Department of Public  
Health & Environment

## SOCIAL DETERMINANTS OF HEALTH META-ANALYSIS

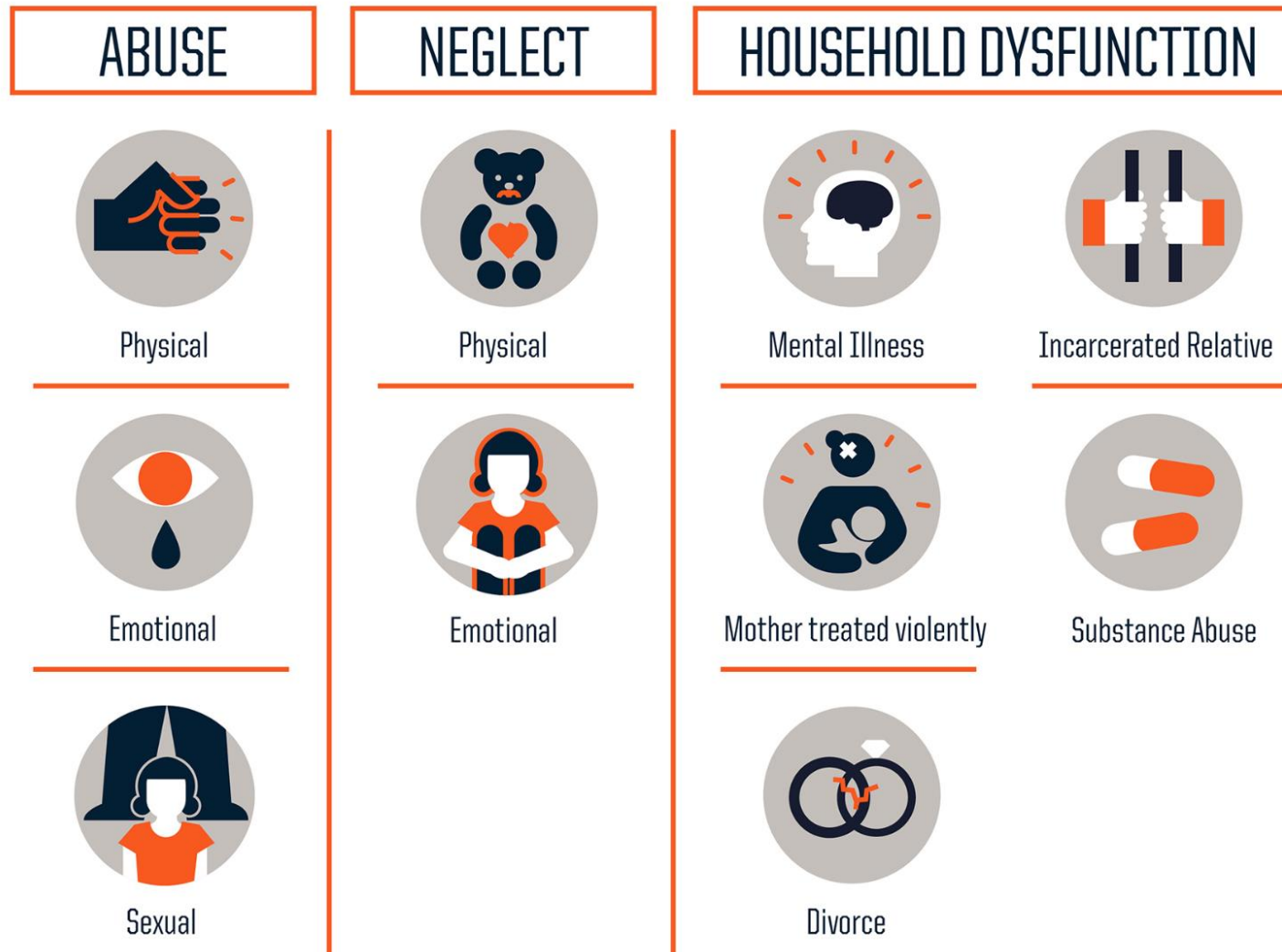
**TABLE 1: SDOH KEY FOCUS AREAS FOR CDPHE RESEARCH PAPERS**

KEY AREA	ELEMENTS	CDPHE HMA FOCUS TOPICS
<b>Neighborhood and Physical Environment</b>	Access to healthy food, quality housing; exposure to environmental conditions, crime, violence	Quality Housing
<b>Health and Health Care</b>	Access to health care and primary care; health literacy	Family Friendly Business Practices
<b>Social and Community Context</b>	Social cohesion, civic participation, discrimination, incarceration	+ Neighborhood Fabric and Social Connectedness + Criminal Justice: Cradle to Prison Pipeline
<b>Education</b>	Early childhood education and development, high school graduation, enrollment in higher education, language and literacy	+ Childcare + Early Childhood Education + K-12 Education
<b>Economic Stability</b>	Poverty, employment, food insecurity, housing instability	+ Economic Opportunity + Homelessness + Affordable Housing + Paid Leave

# What about Adverse Childhood Experiences (ACEs)?

- ACEs are potentially traumatic events that occur in childhood (0-17 years)
  - Experiencing violence, abuse, neglect
  - Witnessing violence at home or in the community
  - Family member suicide (either attempt or death by)
  - Substance misuse problems
  - Behavioral health problems
  - Instability due to parental separation or household member incarceration

## Three Types of ACEs



Source: Centers for Disease Control and Prevention

Credit: Robert Wood Johnson Foundation

# ACEs are linked to

- Chronic health problems
- Mental illness
- Substance misuse problems

As an adolescent or adult

# ACEs might negatively impact

- Education
- Employment opportunities
- Earning potential

# Adverse Childhood Experiences (ACEs) Study

Emotional Abuse	1.7x
Physical Abuse	1.5x
Sexual abuse	1.4x
Emotional Neglect	1.3x
Physical Neglect	1.4x
Domestic Violence	1.4x
Mental Illness	1.4x
Substance Abuse	1.3x
Household Criminal	1.7x

ACEs increase risk of heart disease\*



\*After correcting for age, race, education, smoking & diabetes



# Impact of Childhood Trauma



## Cognition

- Impaired readiness to learn
- Difficulty problem-solving
- Language delays
- Problems with concentration
- Poor academic achievement

## Physical health

- Sleep disorders
- Eating disorders
- Poor immune system functioning
- Cardiovascular disease
- Shorter life span

## Emotions

- Difficulty controlling emotions
- Trouble recognizing emotions
- Limited coping skills
- Increased sensitivity to stress
- Shame and guilt
- Excessive worry, hopelessness
- Feelings of helplessness/lack of self-efficacy

## Relationships

- Attachment problems/disorders
- Poor understanding of social interactions
- Difficulty forming relationships with peers
- Problems in romantic relationships
- Intergenerational cycles of abuse and neglect

## Mental health

- Depression
- Anxiety
- Negative self-image/low self-esteem
- Posttraumatic Stress Disorder (PTSD)
- Suicidality

## Behavior

- Poor self-regulation
- Social withdrawal
- Aggression
- Poor impulse control
- Risk-taking/illegal activity
- Sexual acting out
- Adolescent pregnancy
- Drug and alcohol misuse


## Brain development

- Smaller brain size
- Less efficient processing
- Impaired stress response
- Changes in gene expression

# How big is the problem?

- ACEs are common
  - 61% of adults surveys (25 states) reported at least one type of ACE before 18 years of age
  - 1 in 6 reported they had experiences 4 or more types of ACEs
- Women and several racial/ethnic minoritized groups are at greater risk for experiencing 4 or more types of ACEs
- ACEs are costly – a 10% reduction in ACEs in the North America could equate to an annual savings of \$56 billion dollars



# Calculating ACEs

 **Calculate**  
by QxMD

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CalculatorAboutReferences

 **Adverse Childhood Experience (ACE)**  
10 question screener for numerous health, social, and behavioral problems.

### Questions

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 of... often or very often drink so much alcohol that they were drunk more than once a month?
3. Did an adult or person at least five years older ... than you often or very often use or threaten to use physical force against you?
4. Did you often or very often feel that... No one in your household loved you?
5. Did you often or very often feel that ... You did not matter to anyone in your household?
6. Were your parents ever separated or divorced?
7. Was your mother or stepmother: Often pushed or scolded you?
8. Did you live with anyone who was a problem drinker or alcoholic or who used alcohol heavily?
9. Was a household member depressed or mentally ill or did a household member attempt suicide?
10. Did a household member go to prison or to jail (more than 12 months) for more than one occasion?

→ 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?

Yes
No

### More Information

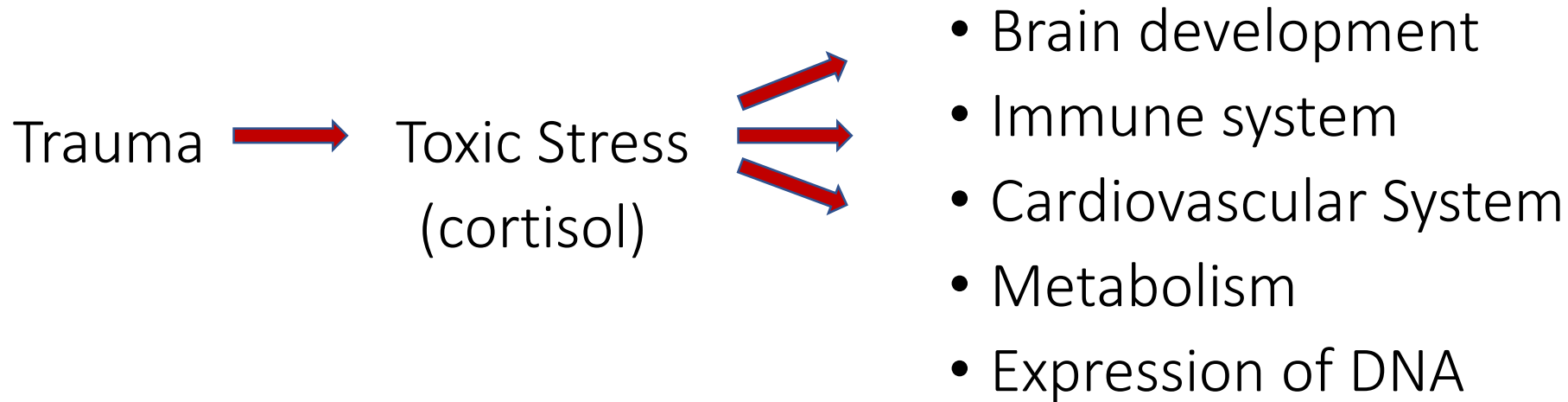
While you were growing up, during your first 18 years of life:

[https://qxmd.com/calculate/calculator\\_715/adverse-childhood-experience-ace](https://qxmd.com/calculate/calculator_715/adverse-childhood-experience-ace)

# How do ACEs and SDoH intersect?

- ACEs and SDoH can cause toxic stress
- Toxic stress is extended or prolonged stress
- Toxic stress can negatively affect child brain development, immune systems, and stress response systems. This in turn can affect a child's attention, decision making, and learning.

# How Trauma Affects the Body

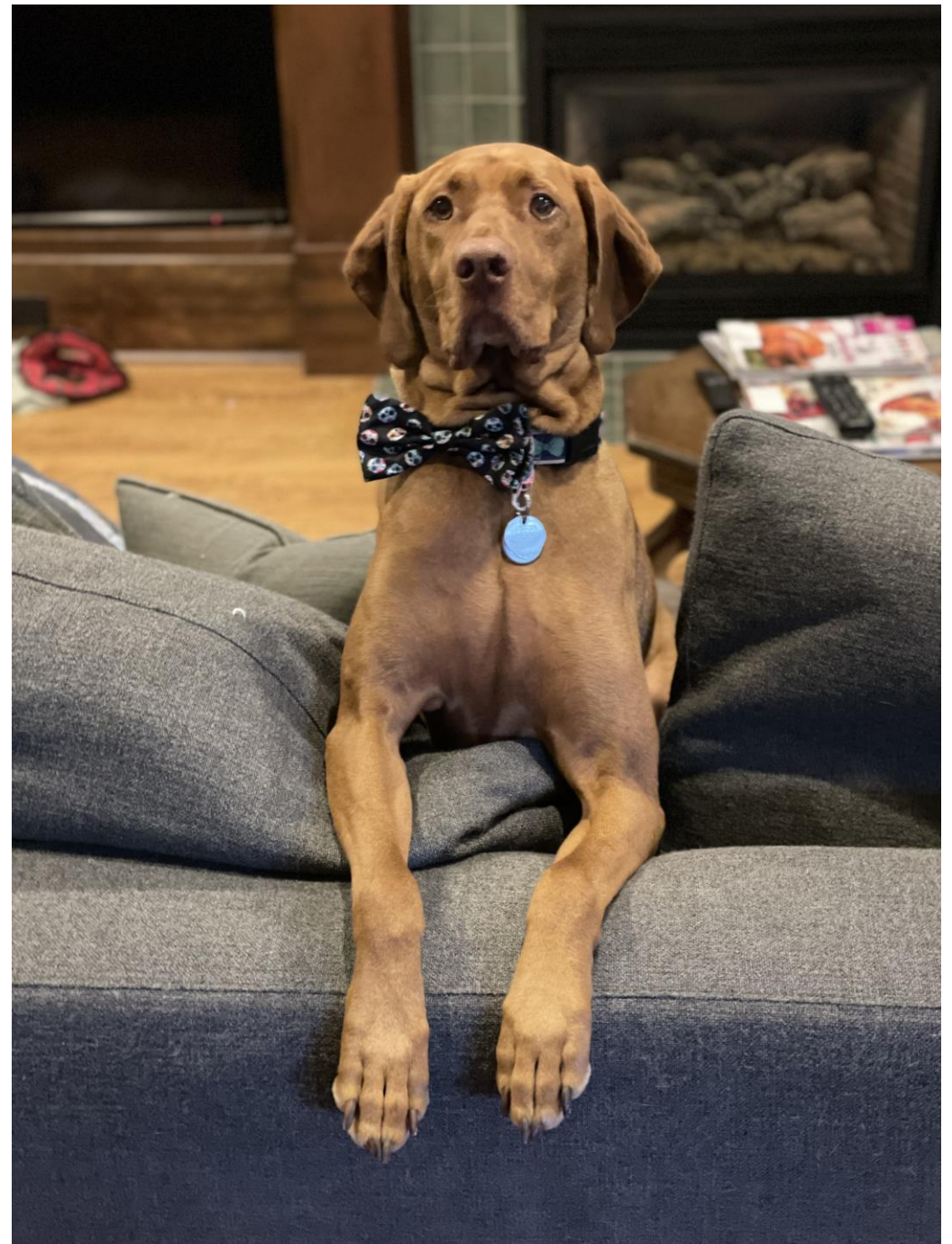


Important to identify and mitigate trauma exposure!

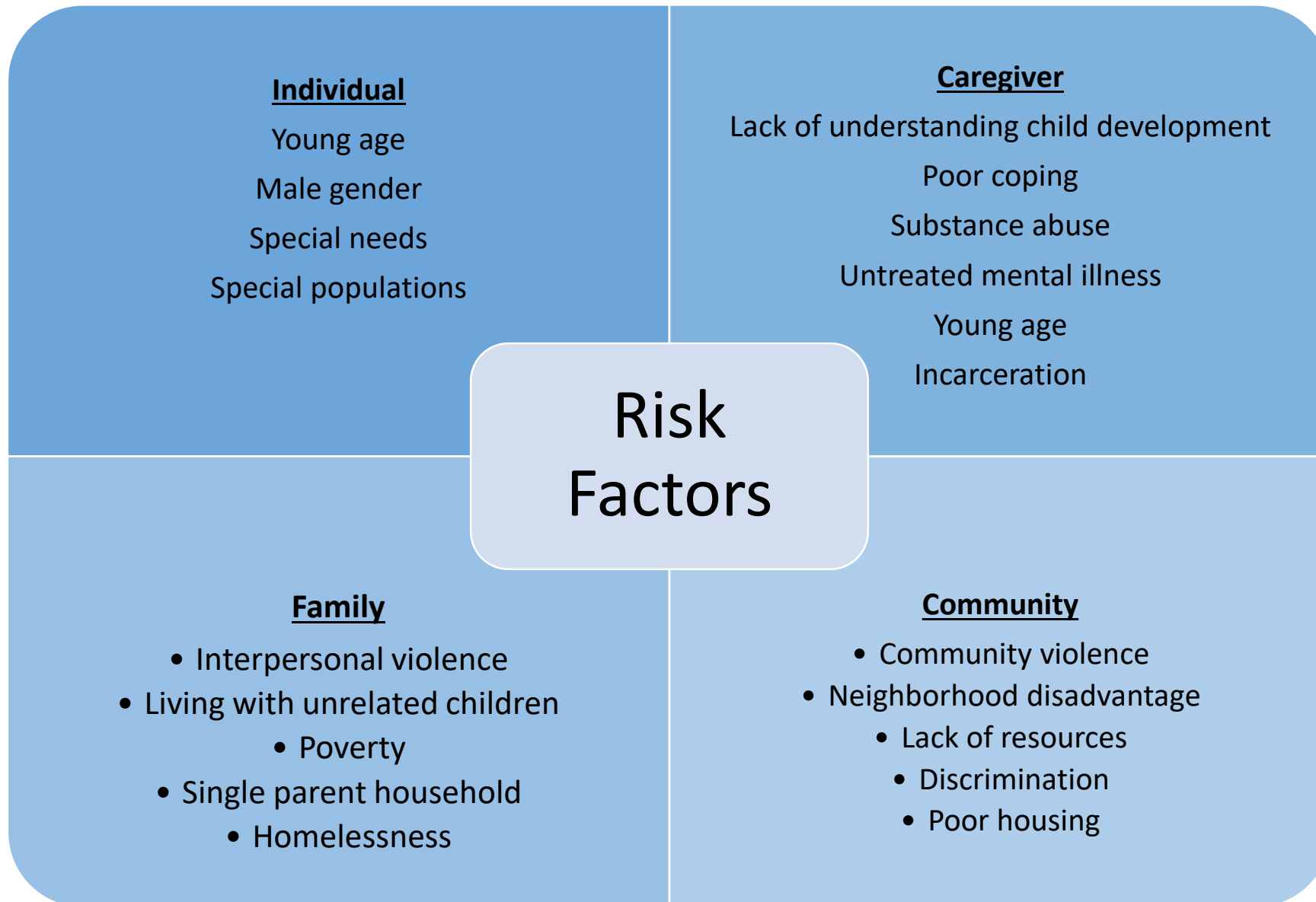
# The Greater Your Trauma Exposure, the Higher Your Risk of...

- Mental Health
  - Depression
  - Anxiety
  - Suicide attempts
  - Panic attacks
- Substance Abuse
  - Alcoholism
  - Current and early initiation smoking
  - Illicit drug use
  - IV drug use
- Behavior
  - Perpetrating IPV
  - Anger management
- Physical Health
  - Cardiovascular disease
  - Diabetes
  - Stroke
  - Cancer
  - Hepatitis
  - Obesity
  - COPD (lung disease)
- Sexual Health
  - Early intercourse
  - Promiscuity (>30 partners)
  - Unplanned pregnancy

# Risk and Protective Factors

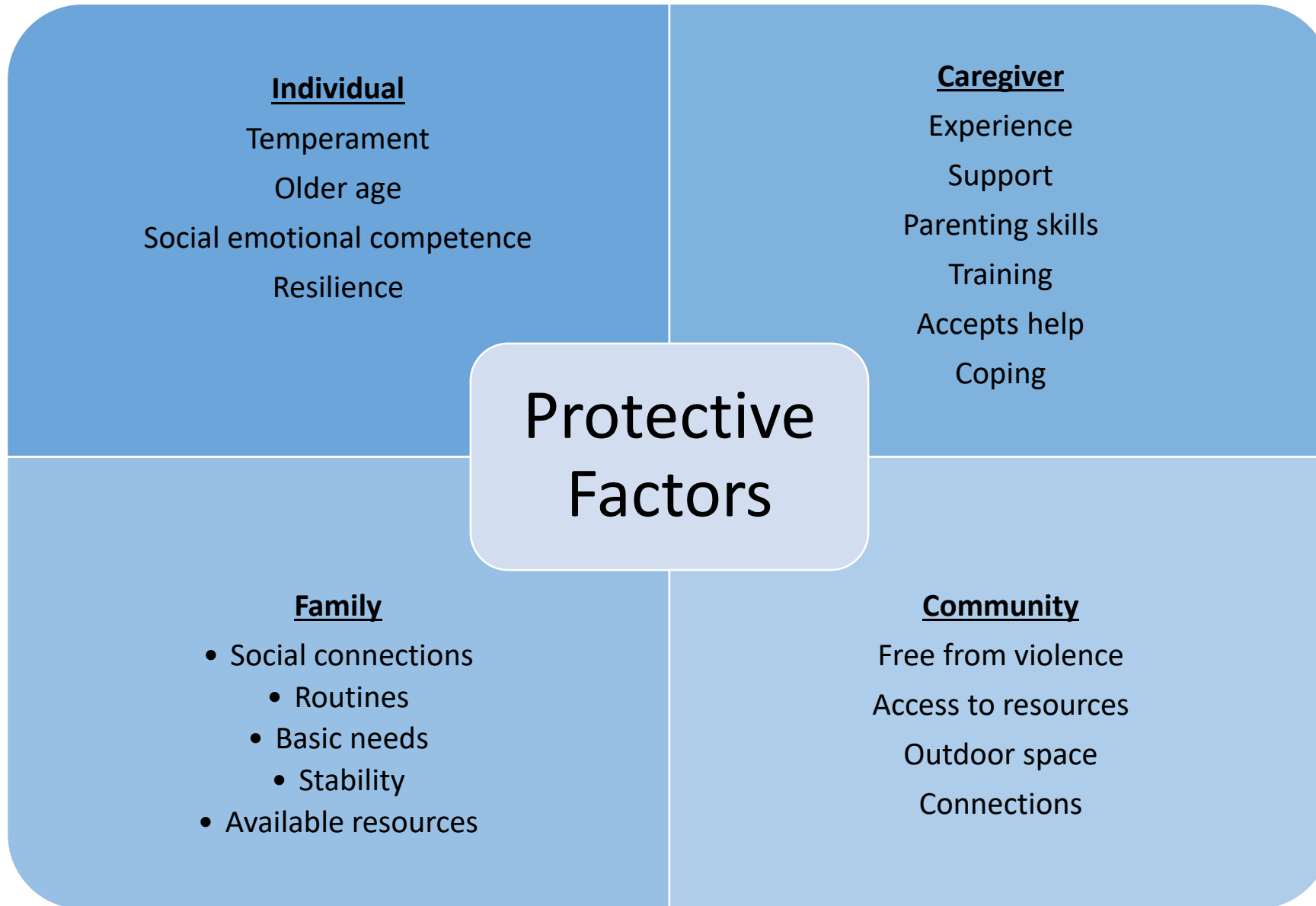


# Risk and Protective Factors





# Risk and Protective Factors



# What do we do with SDoH and ACEs?

- Acknowledge them
- Think about local, state and federal resources
- Supports within your community

# Honoring the Role We Play

- Pay attention to patient and family emotional well-being
- Listen deeply and respond to patients and family concerns and questions
- Have a sustained practice of checking-in and providing reassurance
- Seek and use authentic feedback from patients
- Promote relationship with patients

# Provider Traumatic Stress

- It is real
- Be intentional about self care
- Support your team and they can support you
- Please reach out to discuss challenges as needed

*If you are experiencing a mental health crisis,  
please call the crisis line at  
**Colorado Crisis Services: 1-844-493-8255**  
or visit one of their locations as a walk-  
in <https://coloradocrisiservices.org/#map>*



**Questions/Comments?**

**Thank you!**

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Child Protection Team

720-777-6919