

Adverse Childhood Experiences

The long-term effects of childhood adversity and how we can respond

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A story.

- 1985 - Kaiser Permanente in San Diego



Vincent Felitti, MD
Preventive Medicine Physician
Kaiser Permanente

- 1985 - Kaiser Permanente in San Diego
- Weight loss clinic



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- 1985 - Kaiser Permanente in San Diego
- Weight loss clinic
- 50% dropout rate over 5 years - why?



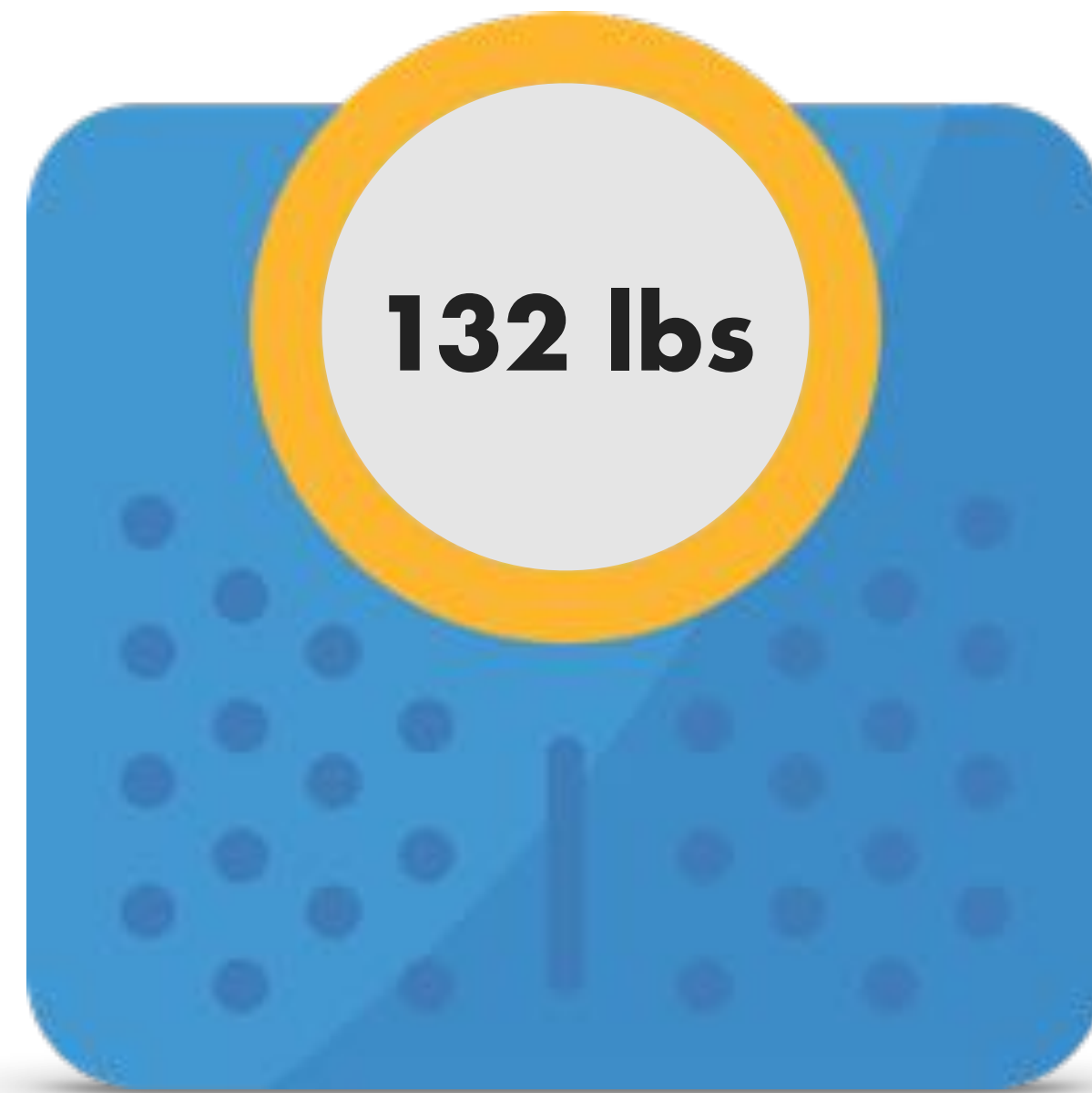
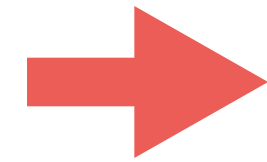
Vincent Felitti, MD
Preventive Medicine Physician
Kaiser Permanente

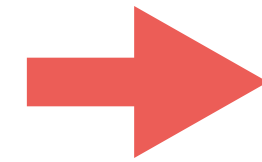
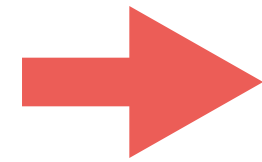
- 1985 - Kaiser Permanente in San Diego
- Weight loss clinic
- 50% dropout rate over 5 years - why?
- 286 “dropouts” interviewed



Vincent Felitti, MD
Preventive Medicine Physician
Kaiser Permanente








Most patients had been abused in their childhood.

Most patients had been abused in their childhood.
Sexual abuse was unexpectedly common.



What was seen as the
PROBLEM



What was seen as the
PROBLEM

was, in fact, the
SOLUTION

ADVERSE CHILDHOOD EXPERIENCES STUDY

“The ACEs Study”



Centers for Disease
Control and Prevention



KAISER
PERMANENTE

ABUSE

NEGLECT

HOUSEHOLD STRESS

ABUSE



Physical abuse



Emotional abuse



Sexual abuse

NEGLECT

HOUSEHOLD STRESS

ABUSE



Physical abuse



Emotional abuse



Sexual abuse

NEGLECT



Physical neglect



Emotional neglect

HOUSEHOLD STRESS

ABUSE



Physical abuse



Emotional abuse



Sexual abuse

NEGLECT



Physical neglect



Emotional neglect

HOUSEHOLD STRESS



Mental illness



Substance abuse



Domestic violence

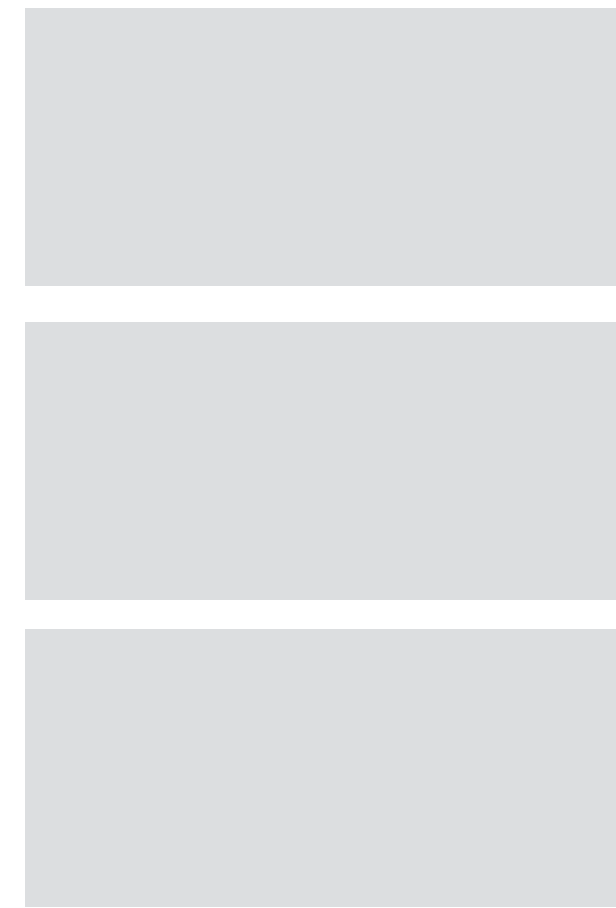


Incarceration



Parental separation /
Divorce

17,000
ADULTS



WHITE
COLLEGE EDUCATED
INSURED

17,000
ADULTS

75%

WHITE

75%

COLLEGE EDUCATED

100%

INSURED

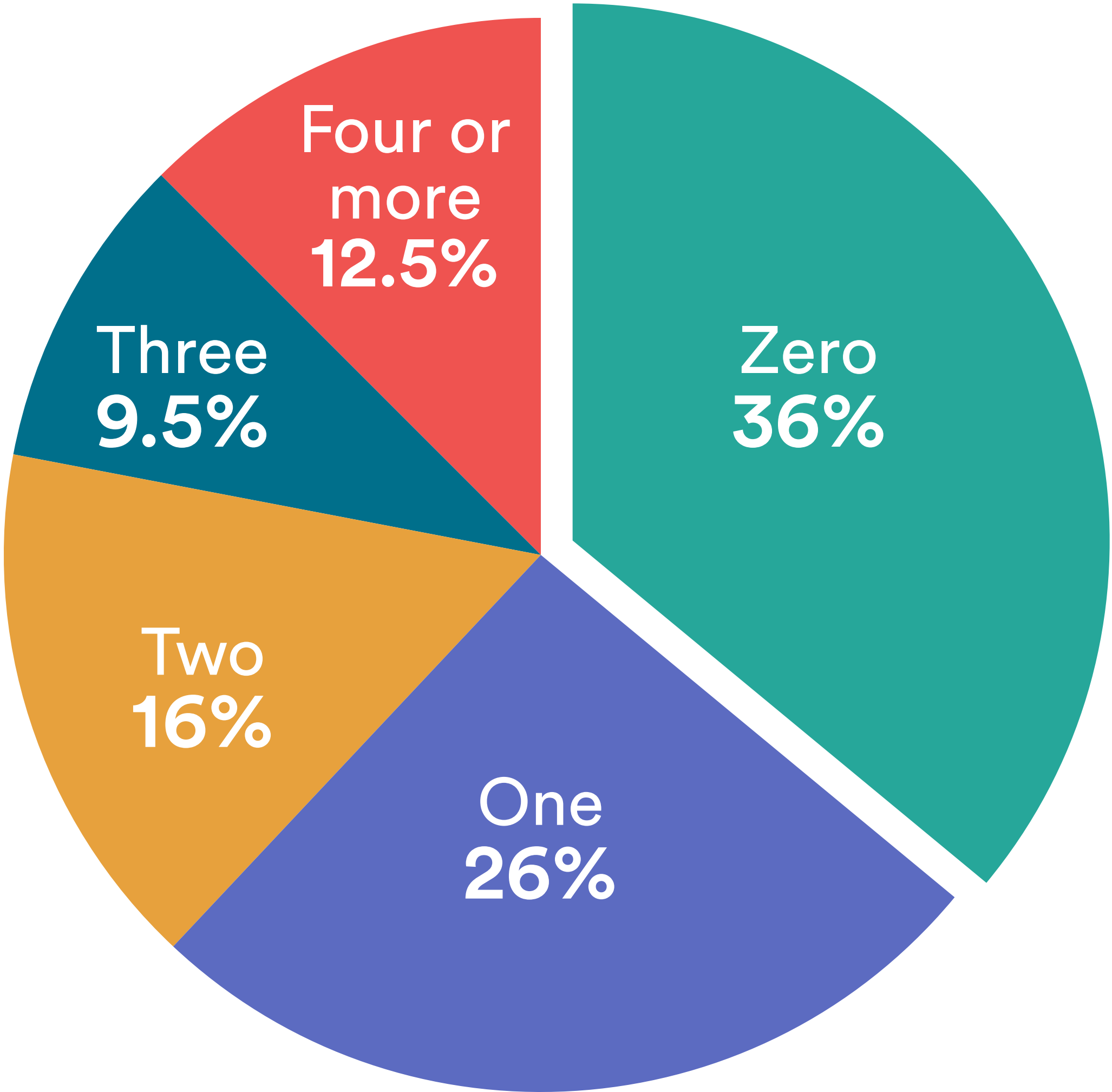


#1. ACES ARE COMMON



NUMBER OF ACES

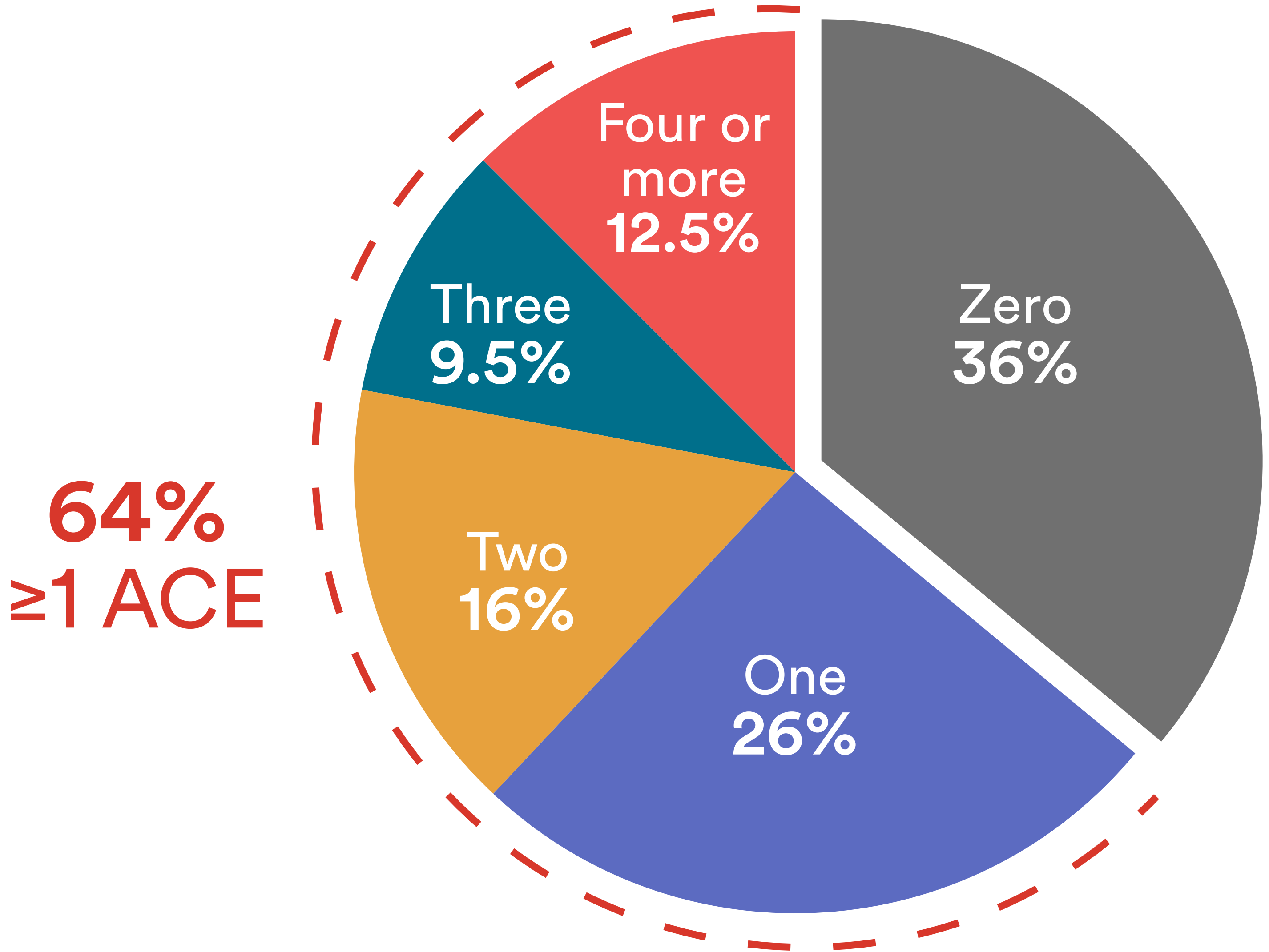
among ACE Study participants



Felitti, V. J., Anda, R. F. et al (1998). Am J Prev Med, 14(4), 245-258.

NUMBER OF ACES

among ACE Study participants



Felitti, V. J., Anda, R. F. et al (1998). Am J Prev Med, 14(4), 245-258.



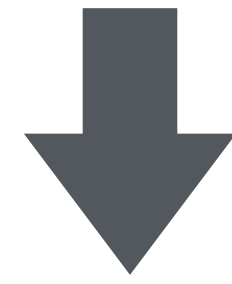
**#2. ACES NEGATIVELY
AFFECT HEALTH**

MORE ACES



INCREASED RISK OF:

MORE ACES



INCREASED RISK OF:



Health risk
behaviors

MORE ACES



INCREASED RISK OF:

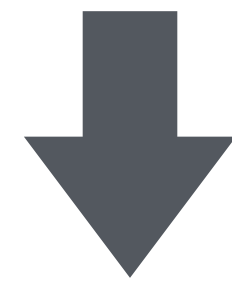


Health risk
behaviors



Mental health
problems

MORE ACES



INCREASED RISK OF:



Health risk
behaviors

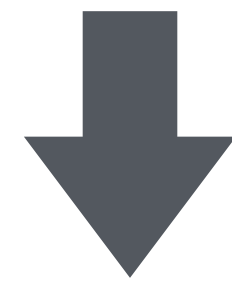


Mental health
problems



Chronic
disease

MORE ACES



INCREASED RISK OF:



Health risk
behaviors



Mental health
problems

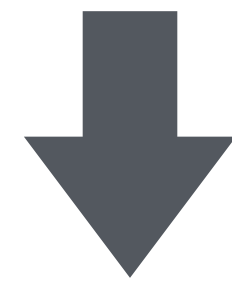


Chronic
disease



Job
challenges

MORE ACES



INCREASED RISK OF:



Health risk behaviors



Mental health problems



Chronic disease



Job challenges



School problems



7X

ALCOHOLISM

7X
4.7X

ALCOHOLISM
SUBSTANCE USE DISORDER

7X
4.7X
4X

ALCOHOLISM
SUBSTANCE USE DISORDER
LUNG DISEASE (COPD)

7X

ALCOHOLISM

4.7X

SUBSTANCE USE DISORDER

4X

LUNG DISEASE (COPD)

2.2X

CARDIOVASCULAR DISEASE

7X

ALCOHOLISM

4.7X

SUBSTANCE USE DISORDER

4X

LUNG DISEASE (COPD)

2.2X

CARDIOVASCULAR DISEASE

2X

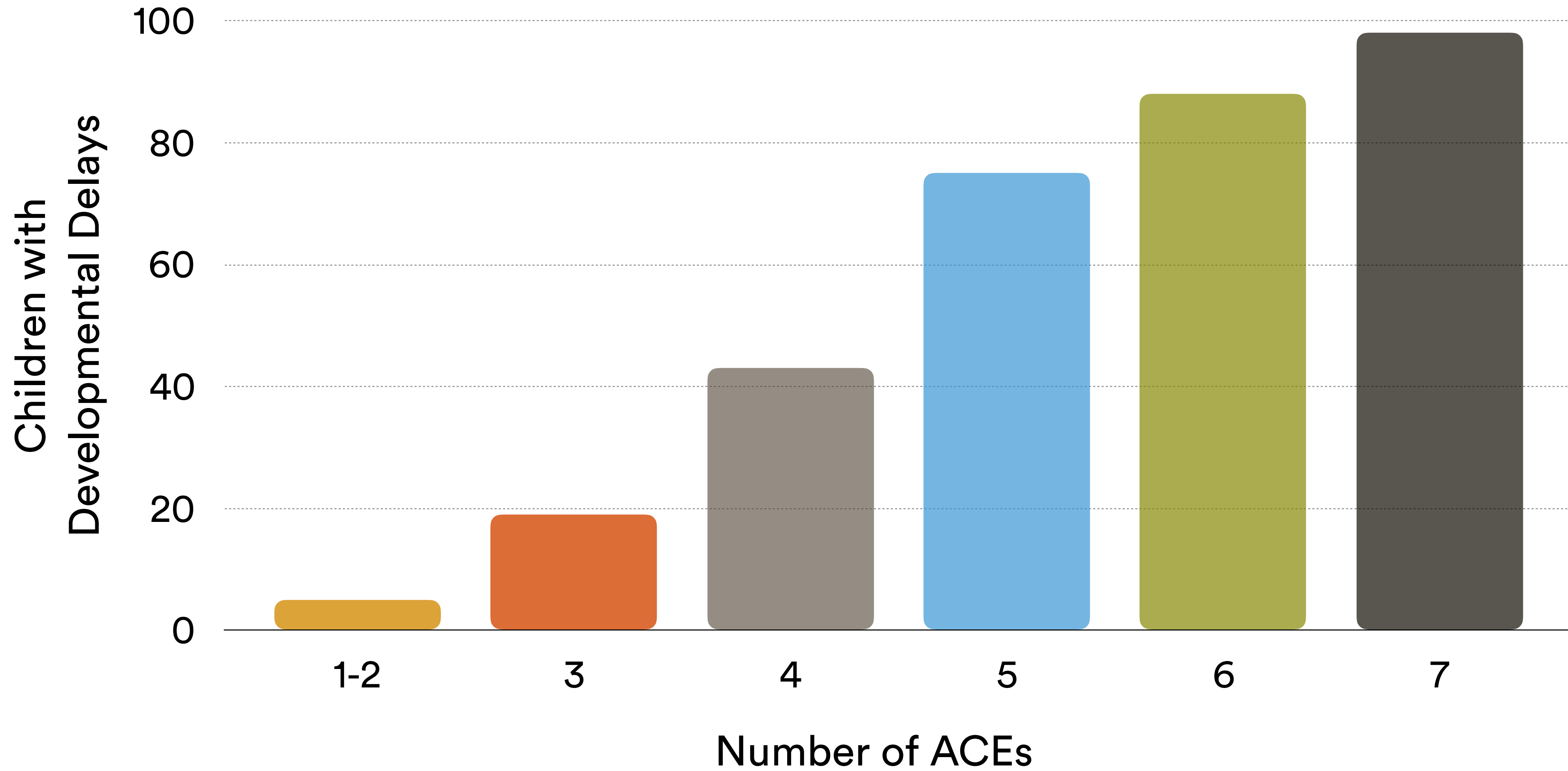
CANCER

33x

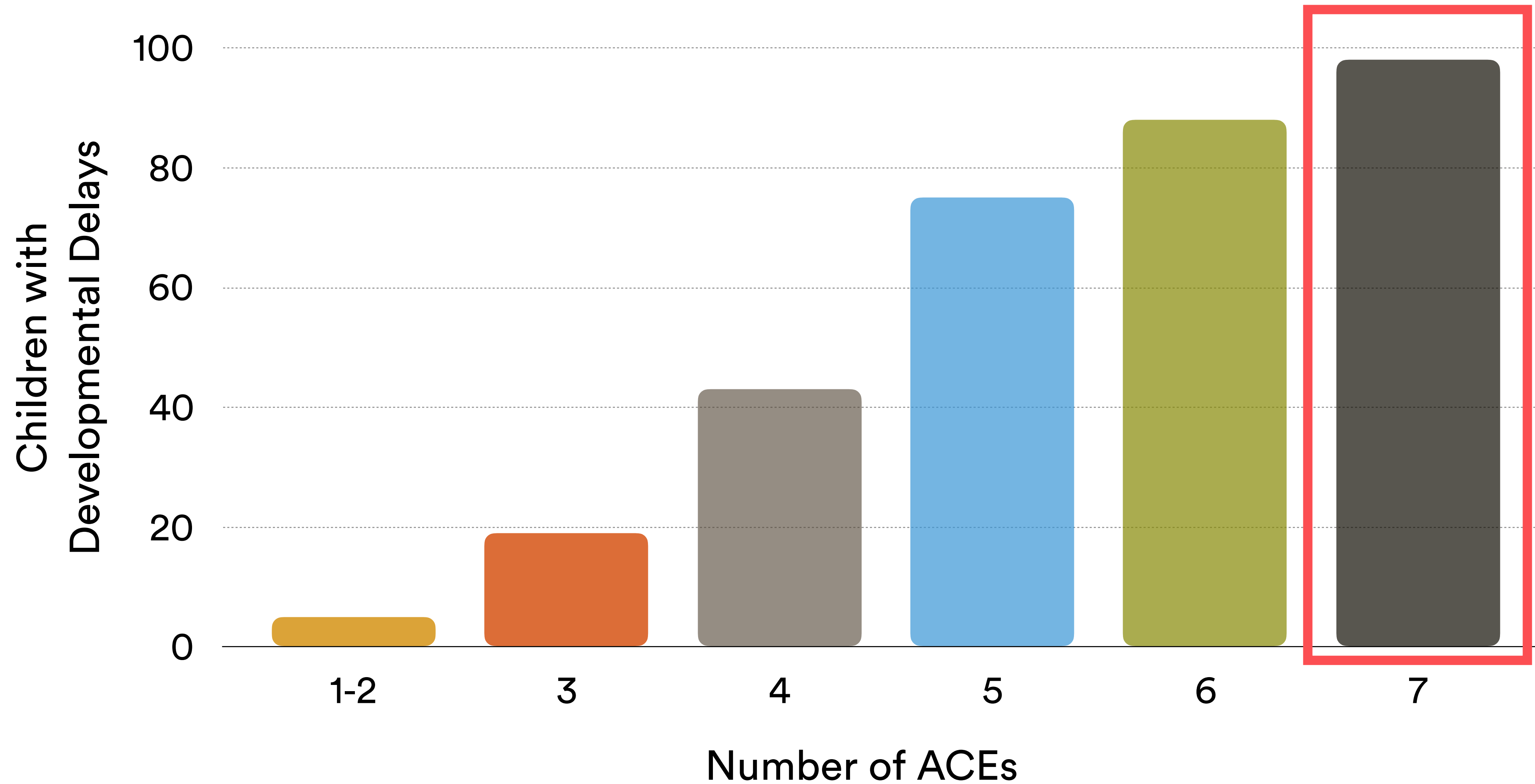
LEARNING OR BEHAVIORAL PROBLEMS



DEVELOPMENTAL DELAY AND ACEs



DEVELOPMENTAL DELAY AND ACEs





#1. ACES ARE COMMON



#1. ACES ARE COMMON



**#2. ACES NEGATIVELY
AFFECT HEALTH**



**#3. ACES ARE
ASSOCIATED WITH
EARLY MORTALITY**

IMPACT ON LIFE EXPECTANCY

0
ACEs

≥ 6
ACEs

IMPACT ON LIFE EXPECTANCY

0
ACEs



80
YEARS

≥ 6
ACEs

IMPACT ON LIFE EXPECTANCY

0
ACEs



80
YEARS

≥ 6
ACEs



60
YEARS

ABUSE



Physical abuse



Emotional abuse



Sexual abuse

NEGLECT



Physical neglect



Emotional neglect

HOUSEHOLD STRESS



Mental illness



Substance abuse



Domestic violence



Incarceration



Parental separation /
Divorce

ABUSE



Physical abuse



Emotional abuse



Sexual abuse

NEGLECT



HOUSEHOLD STRESS



Substance abuse



Incarceration



Parental separation /
Divorce

AREN'T THERE
MORE
THAN 10
ACES?

ADVERSE CHILDHOOD EXPERIENCES



ADVERSE CHILDHOOD EXPERIENCES



ADVERSE CHILDHOOD EXPERIENCES



ADVERSE COMMUNITY ENVIRONMENTS

Holocaust

Slavery

Genocide

Unaffordable housing

Racism

Joblessness

Community violence

Poverty

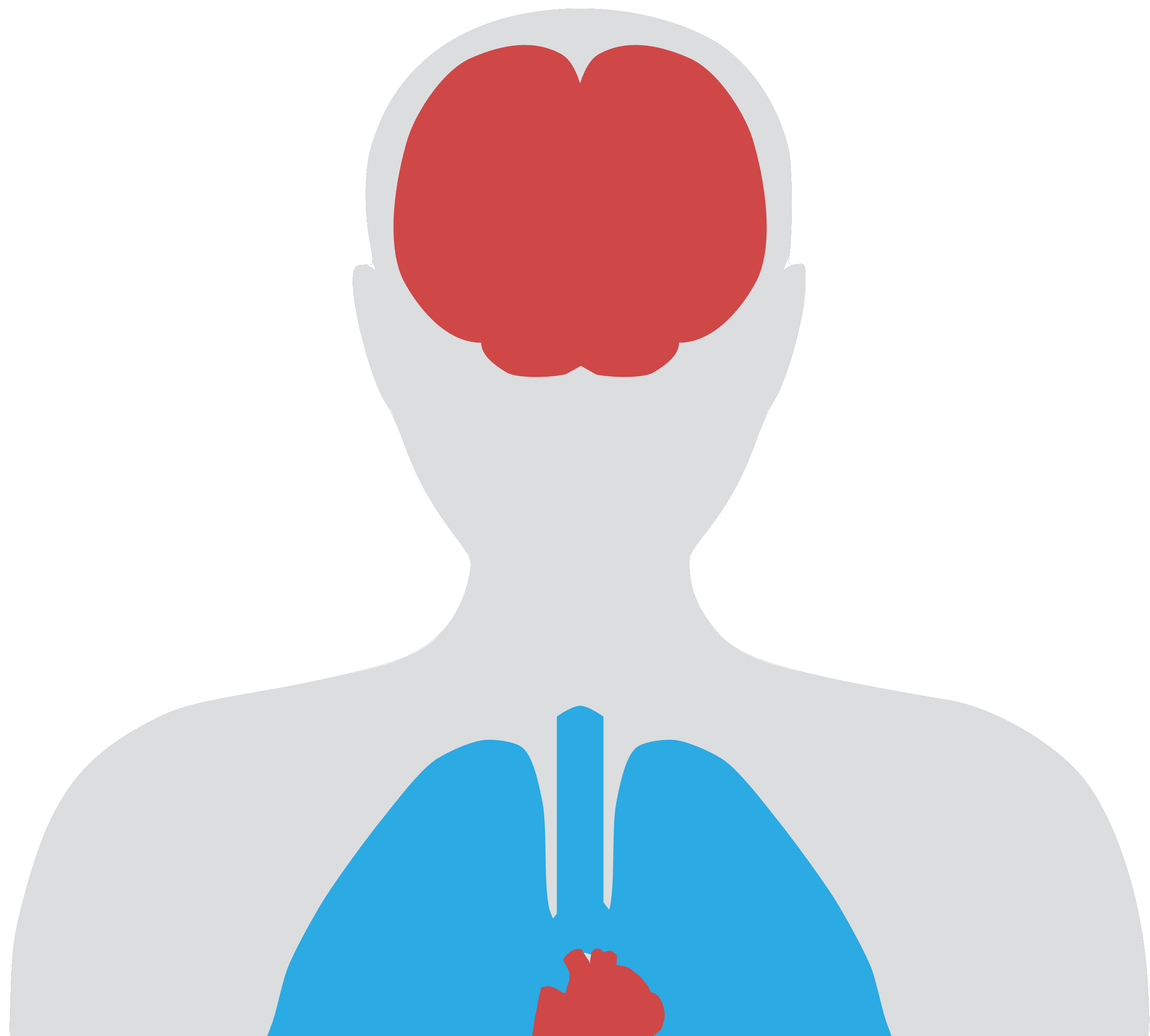
Mass incarceration

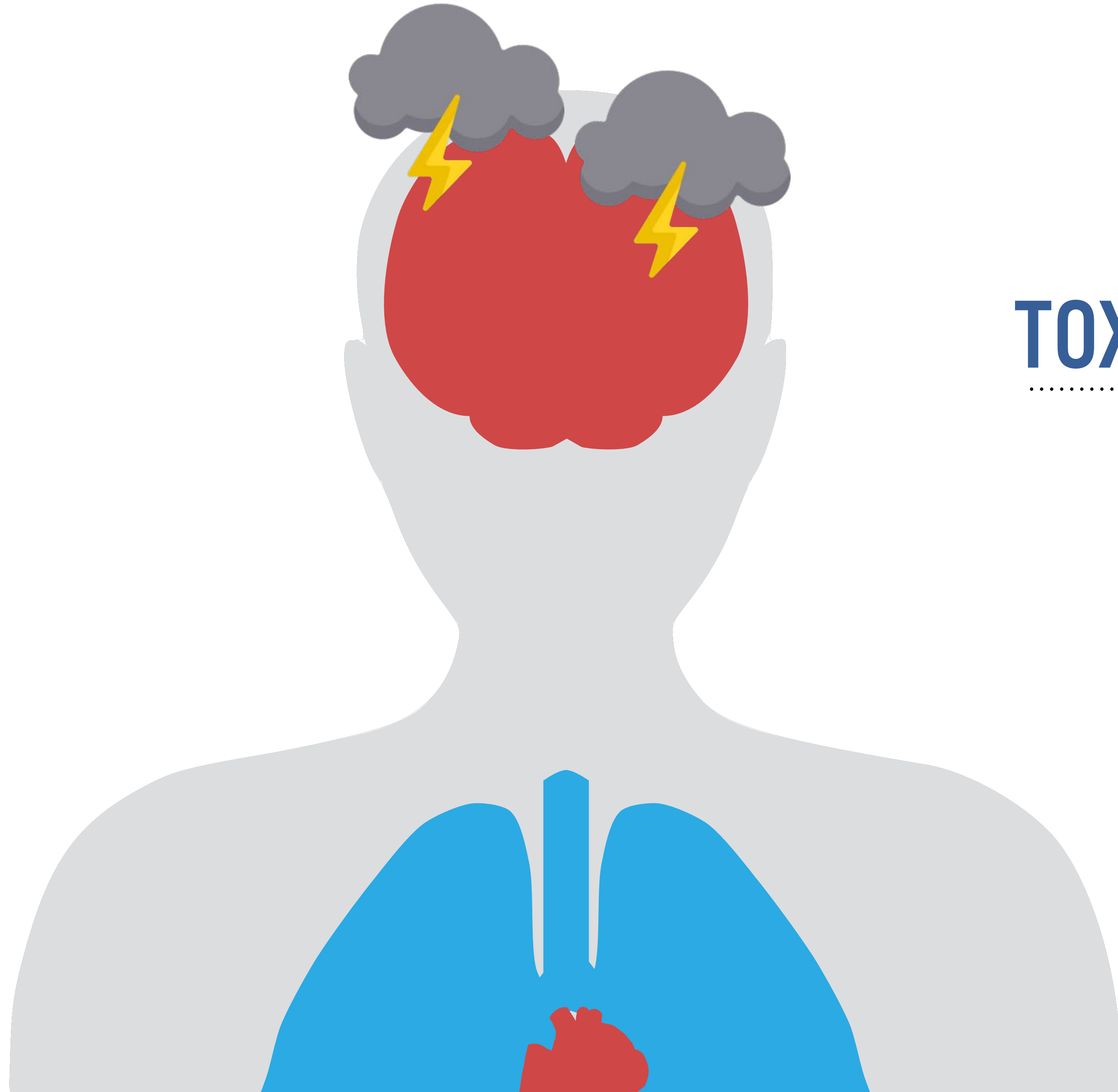
Forced displacement

ADVERSE COLLECTIVE HISTORICAL EVENTS

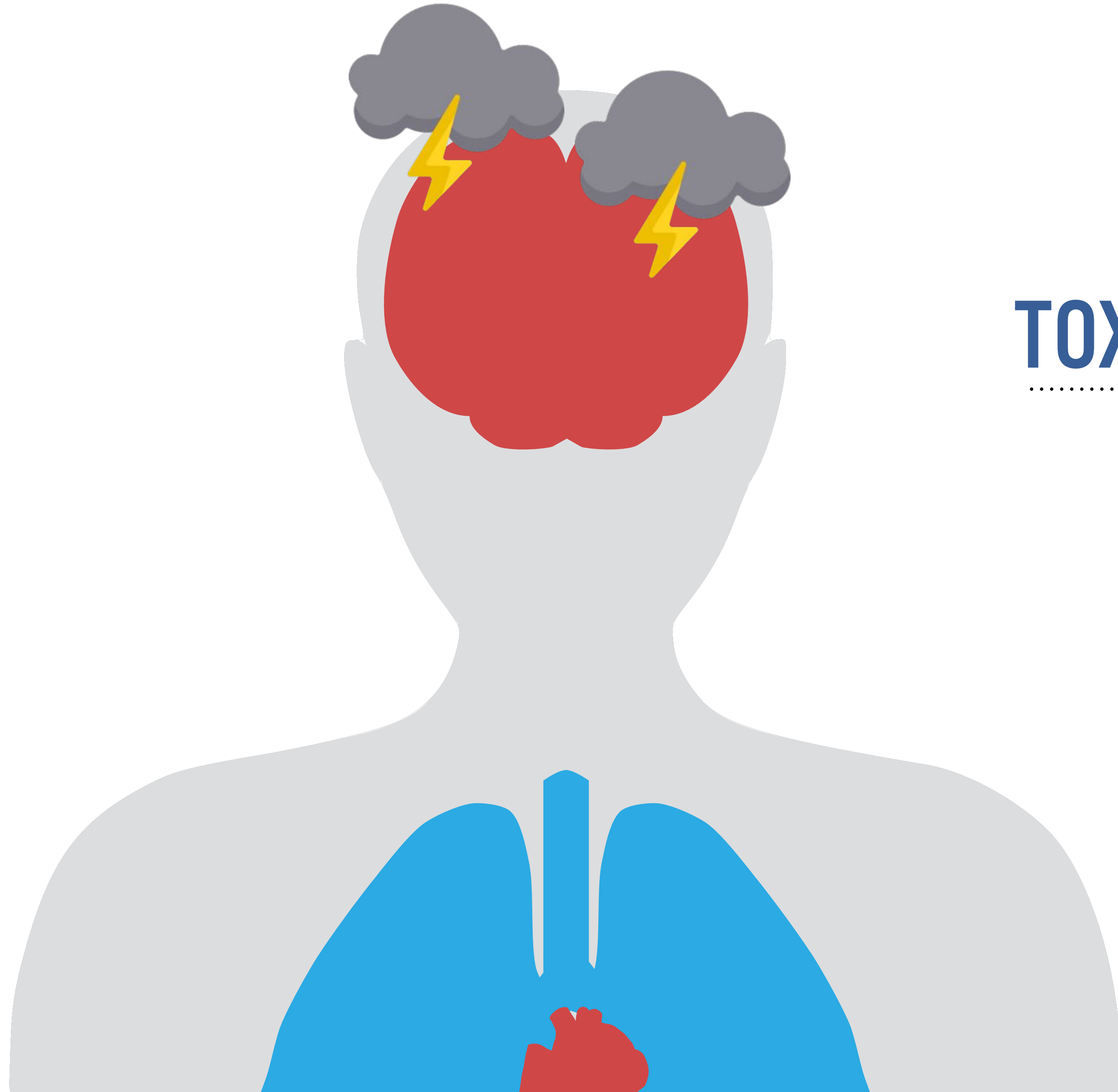


HOW IS THIS HAPPENING?





TOXIC STRESS



TOXIC STRESS CAN DISRUPT:

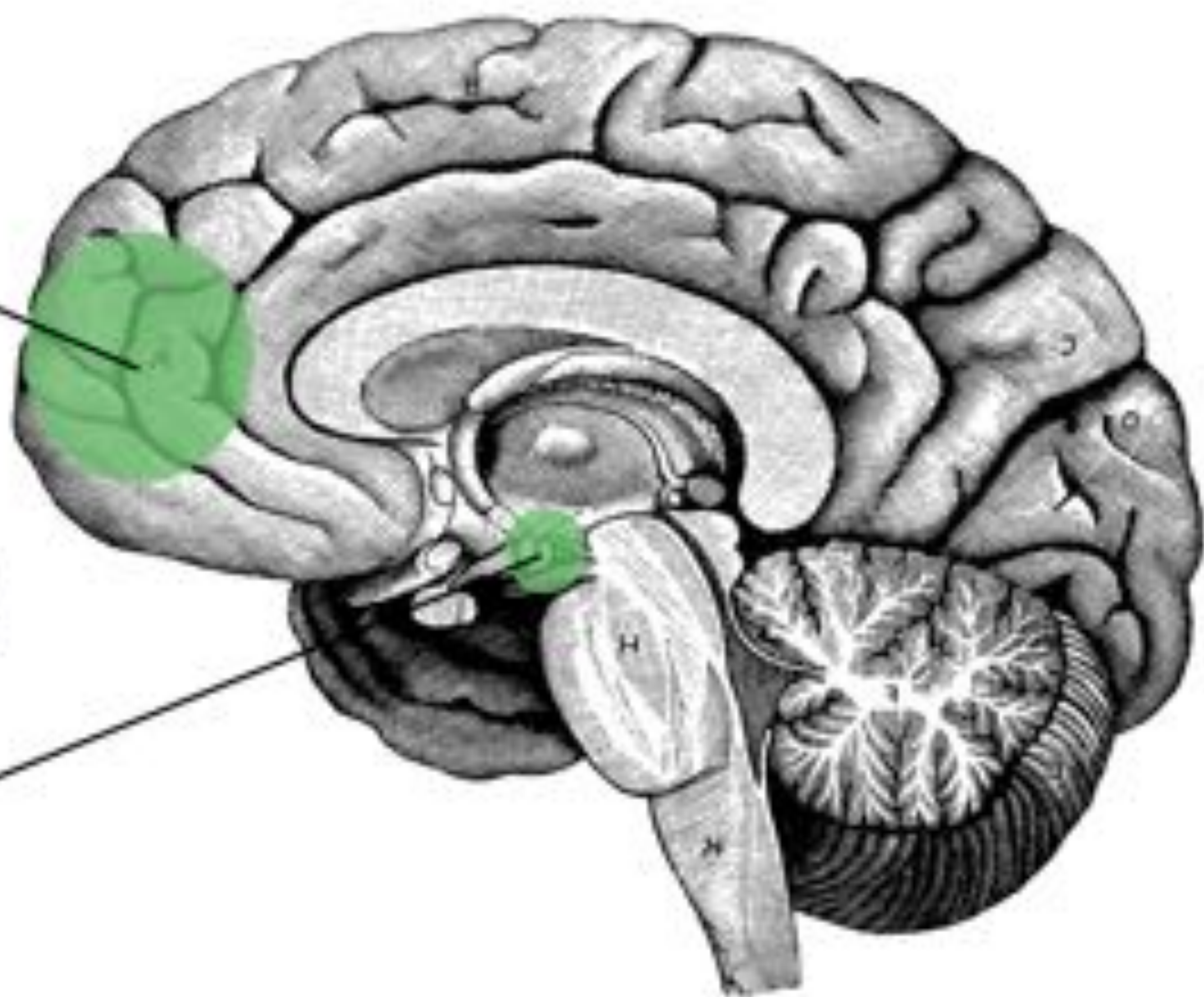
- Brain **development**
- Brain **function**
- Brain **growth**

PREFRONTAL CORTEX

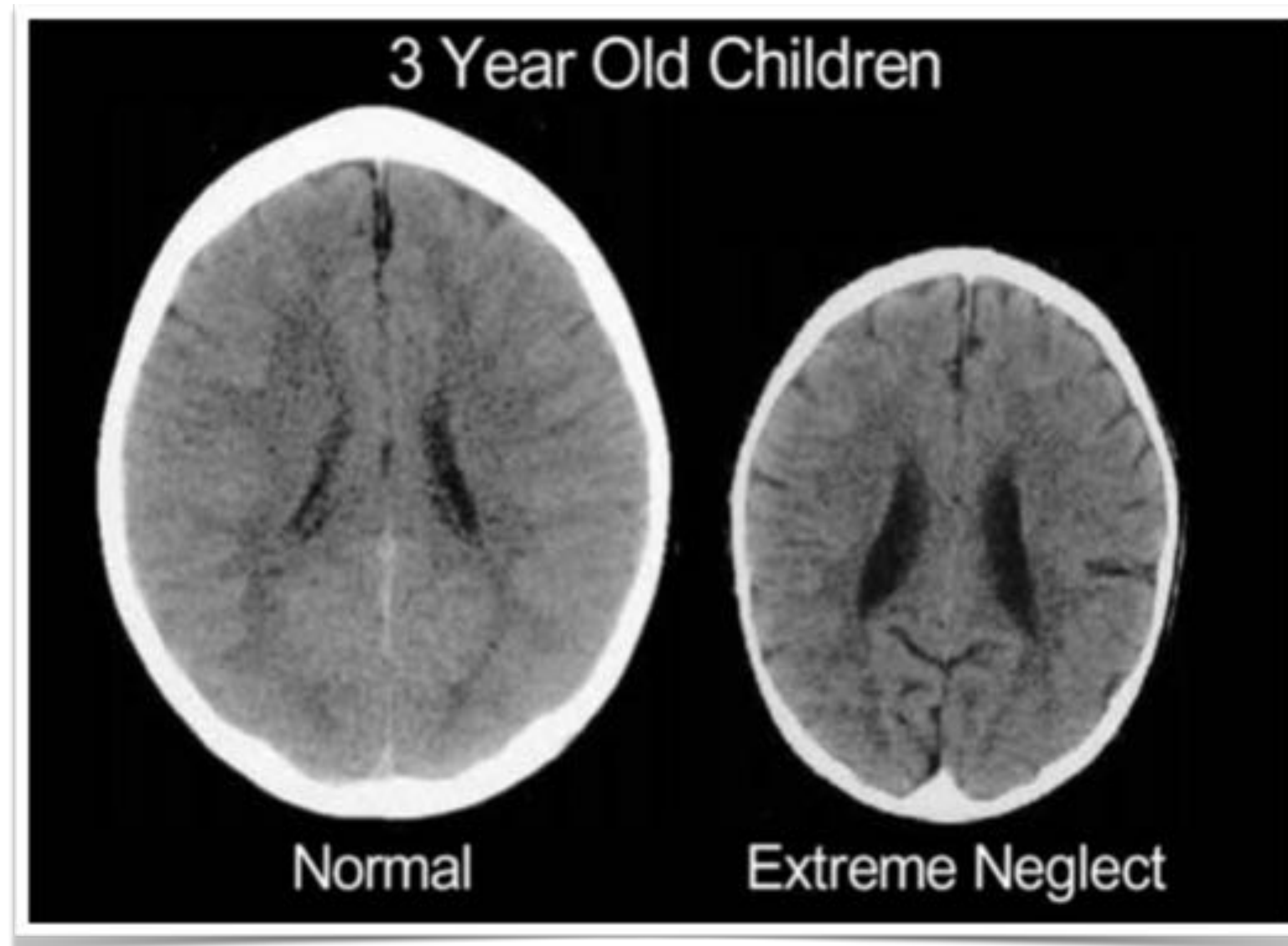
- Planning for future
- Empathy
- Reasoning
- Self-control (impulsivity)

AMYGDALA

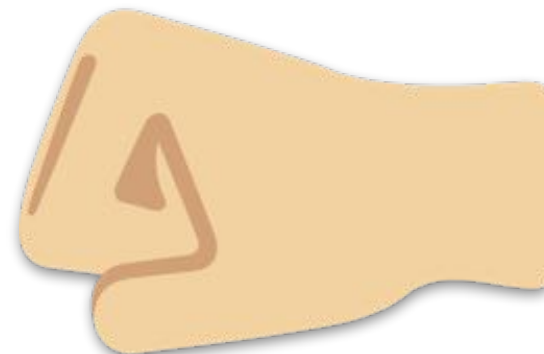
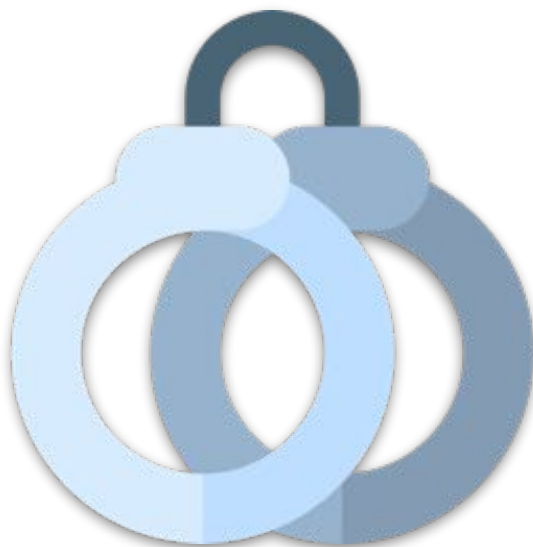
- Fight or flight



PERSISTENT TOXIC STRESS



Perry, B. D., & Pollard, D. (1997). Altered brain development following global neglect in early childhood. Paper presented at the Society For Neuroscience Annual Meeting, New Orleans, LA.



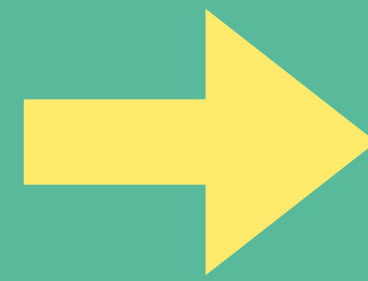


RESILIENCE

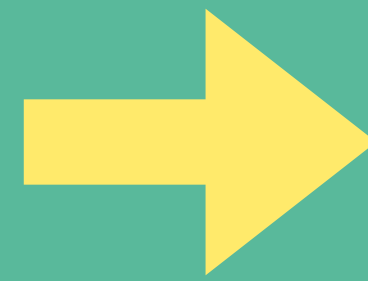
The ability to adapt in the face of significant adversity



**MOST IMPORTANT
FACTOR FOR
CULTIVATING
RESILIENCE**



**MOST IMPORTANT
FACTOR FOR
CULTIVATING
RESILIENCE**



**A LOVING,
COMMITTED
RELATIONSHIP
WITH AN ADULT
CAREGIVER**

TRAUMA-INFORMED CARE



WHAT'S WRONG WITH YOU?

WHAT'S WRONG WITH YOU?
WHAT'S HAPPENED TO YOU?

EMPATHY

The willingness (or ability) to understand the experience or perspective of another



WHAT CAN WE DO?

Collecting BRFSS ACE Data by Year, 2009-2018



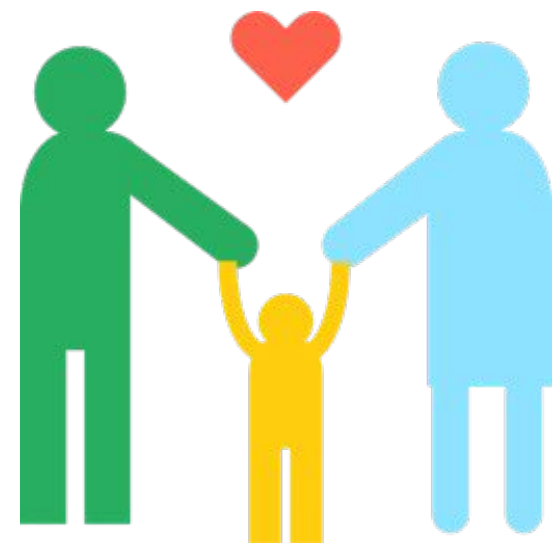
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System Survey ACE Data, 2009-2018. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2018.

STATE OF THE EVIDENCE

What works to improve outcomes in children?

STATE OF THE EVIDENCE

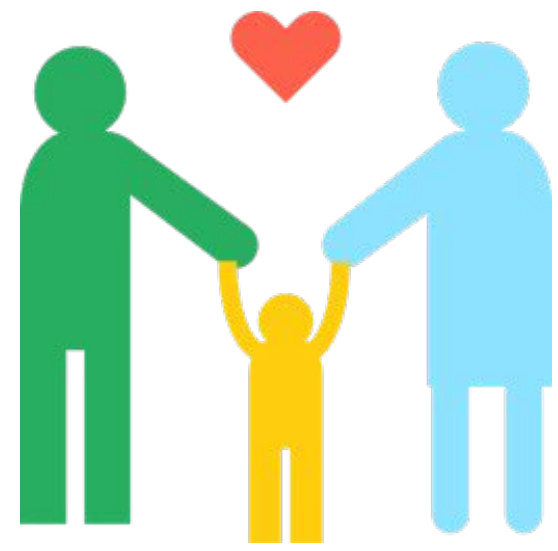
What works to improve outcomes in children?



Positive parenting
counseling

STATE OF THE EVIDENCE

What works to improve outcomes in children?



Positive parenting
counseling



Behavioral/Mental
health counseling

STATE OF THE EVIDENCE

What works to improve outcomes in children?



Positive parenting
counseling



Behavioral/Mental
health counseling



Nurse home visits

THE FOUR RS OF TRAUMA-INFORMED CARE

THE FOUR Rs OF TRAUMA-INFORMED CARE



REALIZE

...and understand
the widespread
impact of trauma

THE FOUR Rs OF TRAUMA-INFORMED CARE



REALIZE

...and understand
the widespread
impact of trauma



RECOGNIZE

...signs and
symptoms of
trauma

THE FOUR Rs OF TRAUMA-INFORMED CARE



REALIZE

...and understand
the widespread
impact of trauma



RECOGNIZE

...signs and
symptoms of
trauma



RESPOND

...**interpersonally**
and through
policies,
procedures, and
practices

THE FOUR Rs OF TRAUMA-INFORMED CARE



REALIZE

...and understand the widespread impact of trauma



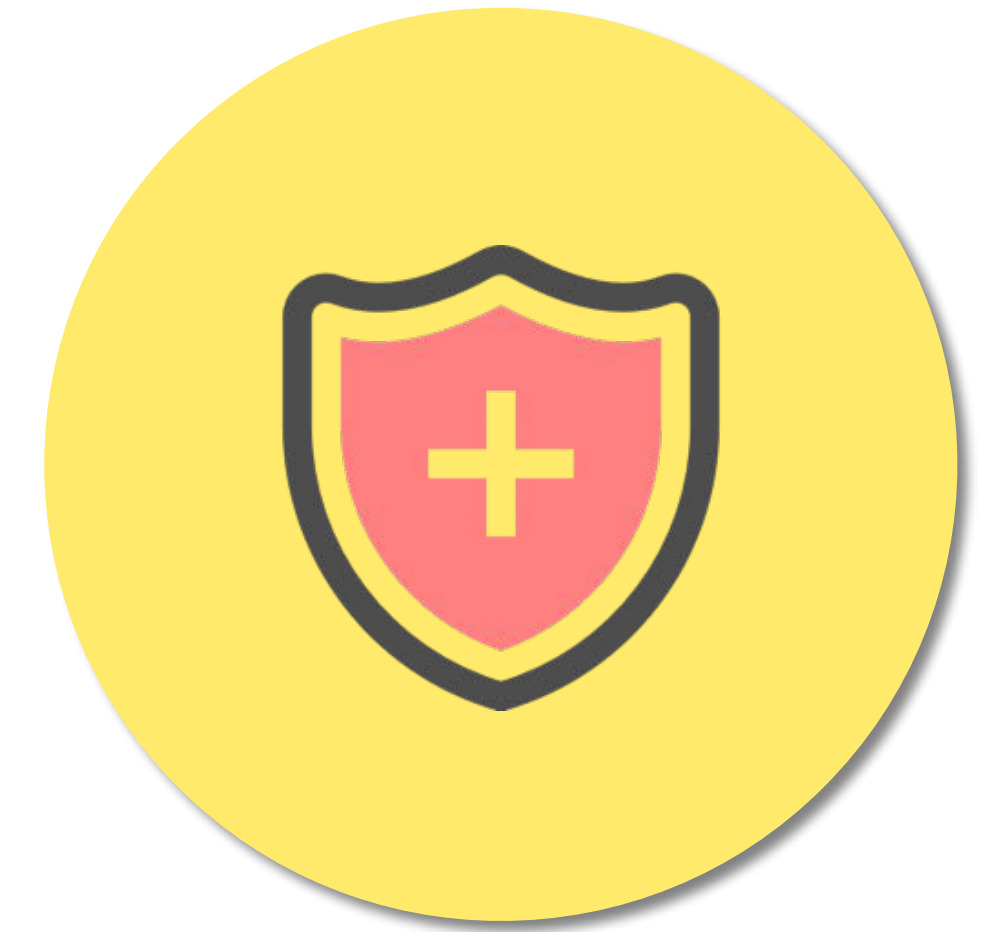
RECOGNIZE

...signs and symptoms of trauma



RESPOND

...interpersonally and through policies, procedures, and practices



AVOID RE-TRAUMATIZATION

...actively, through universal and targeted actions

Lincoln high school

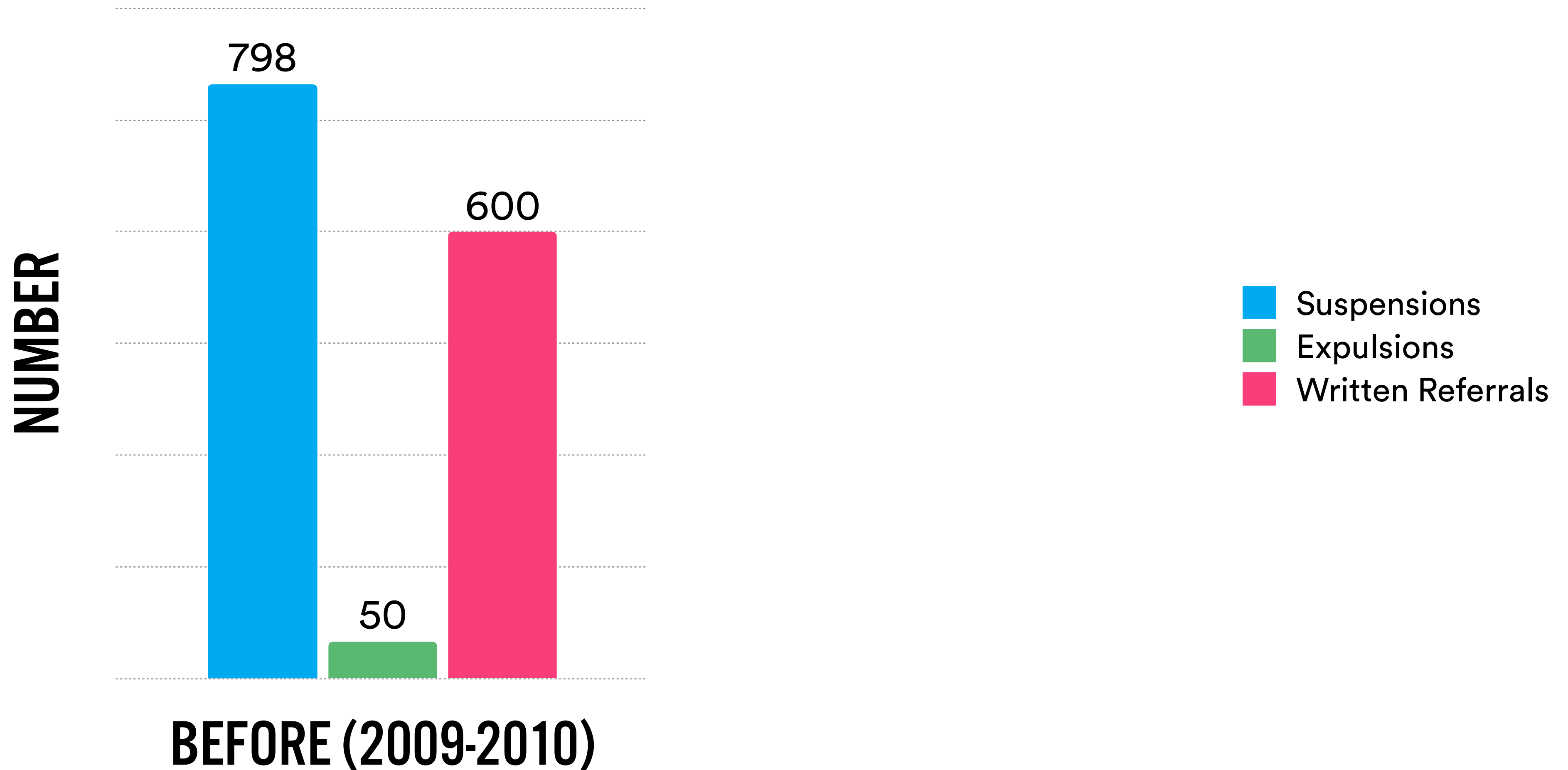
Walla Walla, Washington



- Alternative school
- Avg ACE score = **4.5**
 - 25% homeless
 - 80% serious depression
 - 65% with family member incarcerated
- Implemented trauma-informed practices in 2011

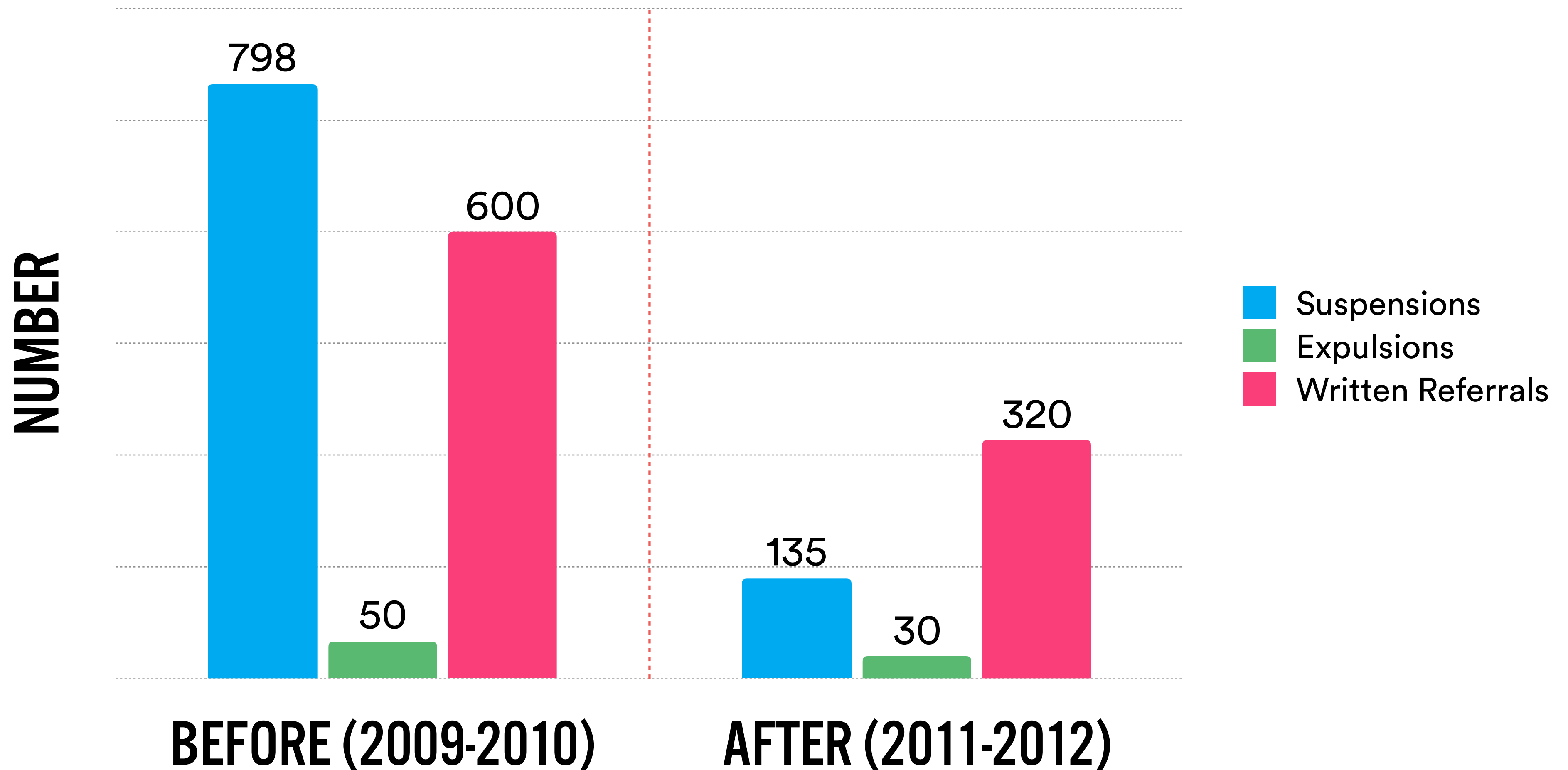
Number of school discipline actions before and after TIC implementation

Lincoln High School, Walla Walla, WA



Number of school discipline actions before and after TIC implementation

Lincoln High School, Walla Walla, WA





Can we prevent ACEs?

- Strengthen economic support to families
- Change social norms to support parents and positive parenting
- Provide quality care and education in early life
- Intervene to lessen harms and prevent future risk

Can we prevent ACEs?

- Strengthen economic support to families

TANF
SNAP

- Change social norms to support parents and positive parenting

Tax credits

Subsidized child care

Living wage

Expanded paid leave

- Provide quality care and education in early life

Home visiting programs

Accessible evidence-based positive parenting programs

- Intervene to lessen harms and prevent future risk

Quality care and education in early life
Enhanced primary care (medical home),
equipping/educating pediatricians



It is easier to build strong children than to repair broken men.

- Frederick Douglass

