

Adverse Childhood Experiences in Rural Communities

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RURAL AND MINORITY HEALTH RESEARCH CENTER

Our mission is to illuminate and address the problems experienced by rural and minority populations in order to guide research, policy, and related advocacy.



HEALTH DISPARITY POPULATIONS

- Rural
- Racial/Ethnic Minorities
- Low SES
- Sexual and Gender Minorities
- Sex/Gender
- Disability
- Nativity
- Geographic Region



Source: National Institute on Minority Health and Health Disparities

RURAL CHILDREN'S HEALTH – PROBST ET AL. 2018

- Nationally, 12 million children live in rural areas.
- Rural children versus urban:
 - Higher percent Medicaid covered
 - More likely to miss 1 or more days of school
 - Higher rates of obesity
 - Lower rates of preventive medical and oral health services
 - Higher mortality rates, largely associated with unintentional injuries

WHAT ARE ACES AND WHY ARE THEY IMPORTANT?

WHAT ARE ACES?

- Adverse Childhood Experiences
- ACEs are traumatic events that occur in a child's life.
- Examples are abuse, neglect, and household dysfunction.
- There is a relationship between traumatic experiences as a child and negative health and well-being outcomes as an adult.

01/12/14

NEWS

Early Adversity Increases Physical, Mental, Behavioral Problems, Scientists Report



Dr. Robert Anda & Dr. Vincent Felitti
Investigators

Centers for Disease Control & Prevention,
Kaiser Permanente Study

Over 17,000 study participants

The ACE Study confirms, with scientific evidence,
that adversity early in life increases physical, mental
and behavioral problems later in life.

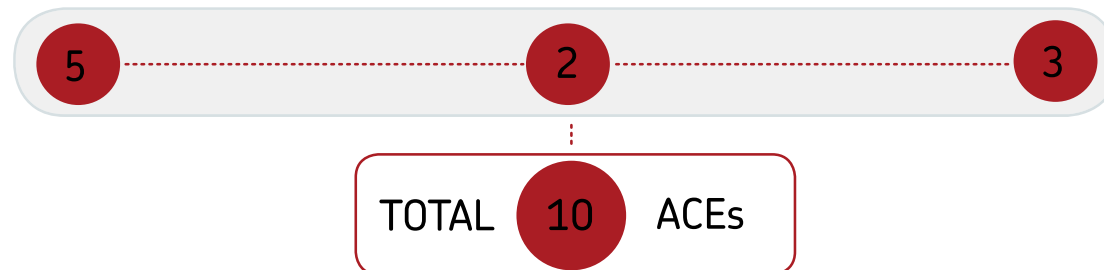
ACE Interface © 2014

Adverse Childhood Experiences ARE COMMON

Household Dysfunction	
Substance Abuse	27%
Parental Sep/Divorce	23%
Mental Illness	17%
Battered Mothers	13%
Criminal Behavior	6%

Neglect	
Emotional	15%
Physical	10%

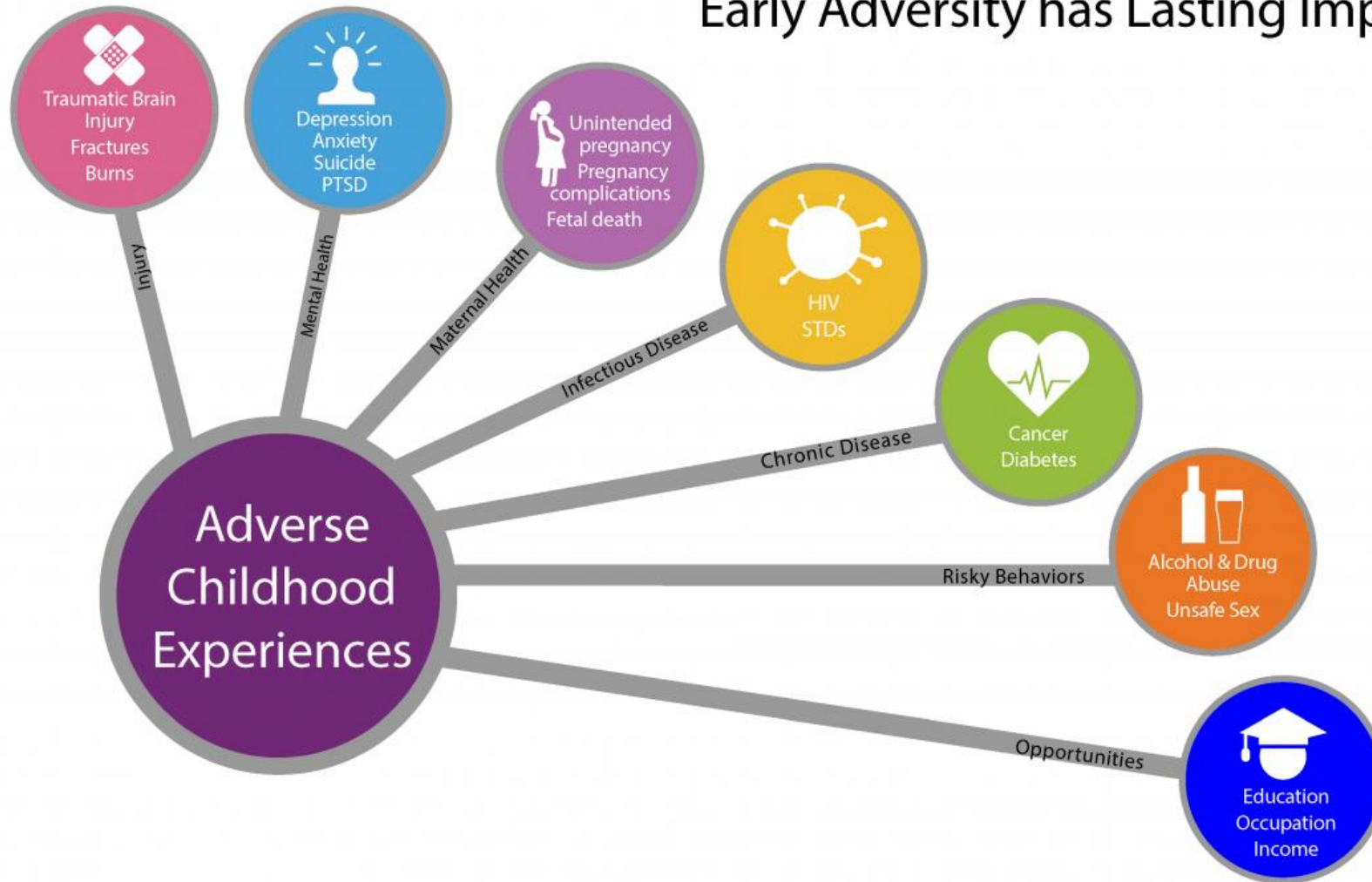
Abuse	
Emotional	11%
Physical	28%
Sexual	21%



**ORIGINAL
ACES
QUESTIONS**

**(ASKED OF
ADULTS)**

Early Adversity has Lasting Impacts



<https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html>

DOSE-RESPONSE RELATIONSHIP

- Adults reporting four or more ACEs are more likely to...
- Engage in risky drinking behavior such as binge drinking and heavy drinking (*Crouch et al. 2017*)
- Continue to smoke with diagnosis of a smoking exacerbated illness (*Crouch et al. 2018*)
- Have poor self-reported mental health and physical health in adulthood (*Crouch et al. 2017; Crouch et al. 2017*)

THE ROLE OF POSITIVE CHILDHOOD EXPERIENCES (PCES)

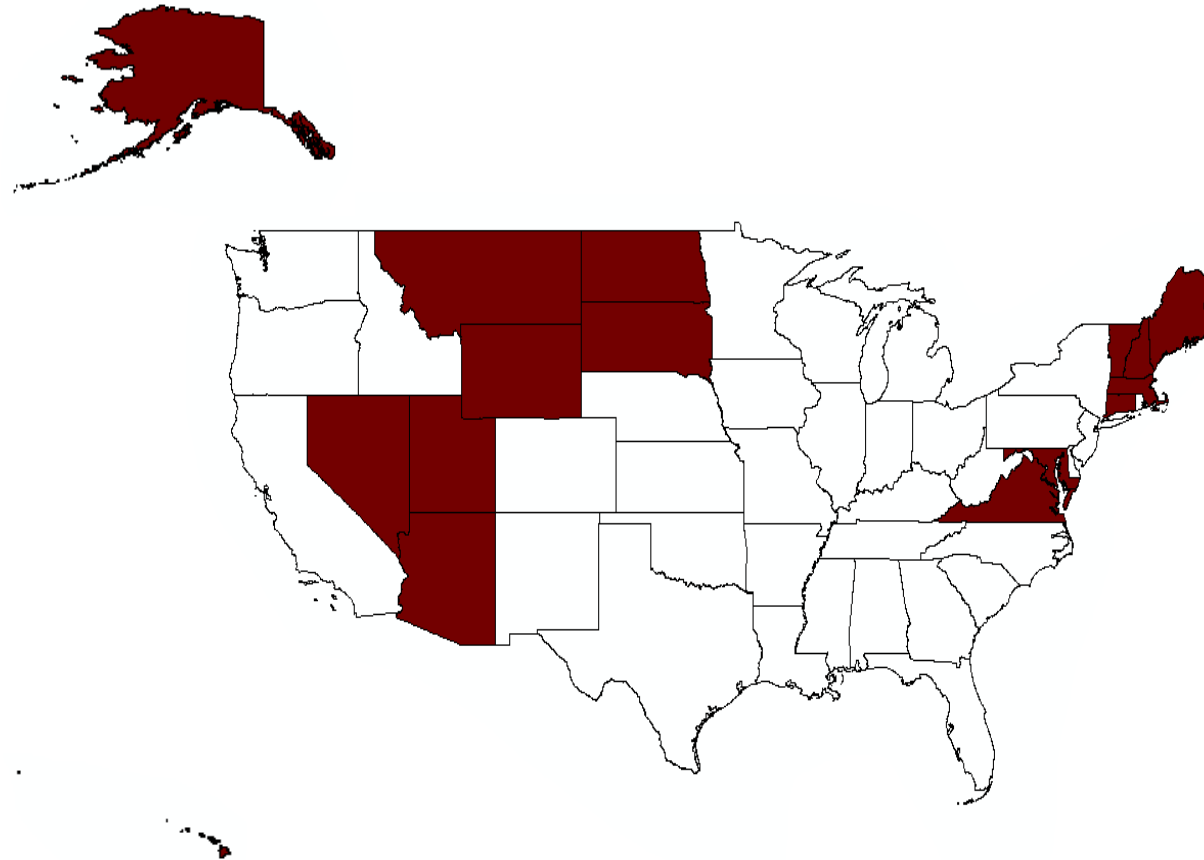
- Positive Childhood Experiences (PCEs) are positive life events such as having a mentor, or a safe, stable relationship with a caregiver.
- There is a relationship between both positive and traumatic experiences as a child and negative health and well-being outcomes as an adult.



ACES AND PCES AMONG RURAL CHILDREN

**DATA: 2016
NSCH**

**RESIDENCE
DATA
SUPPRESSED
IN MANY
STATES**



Studied



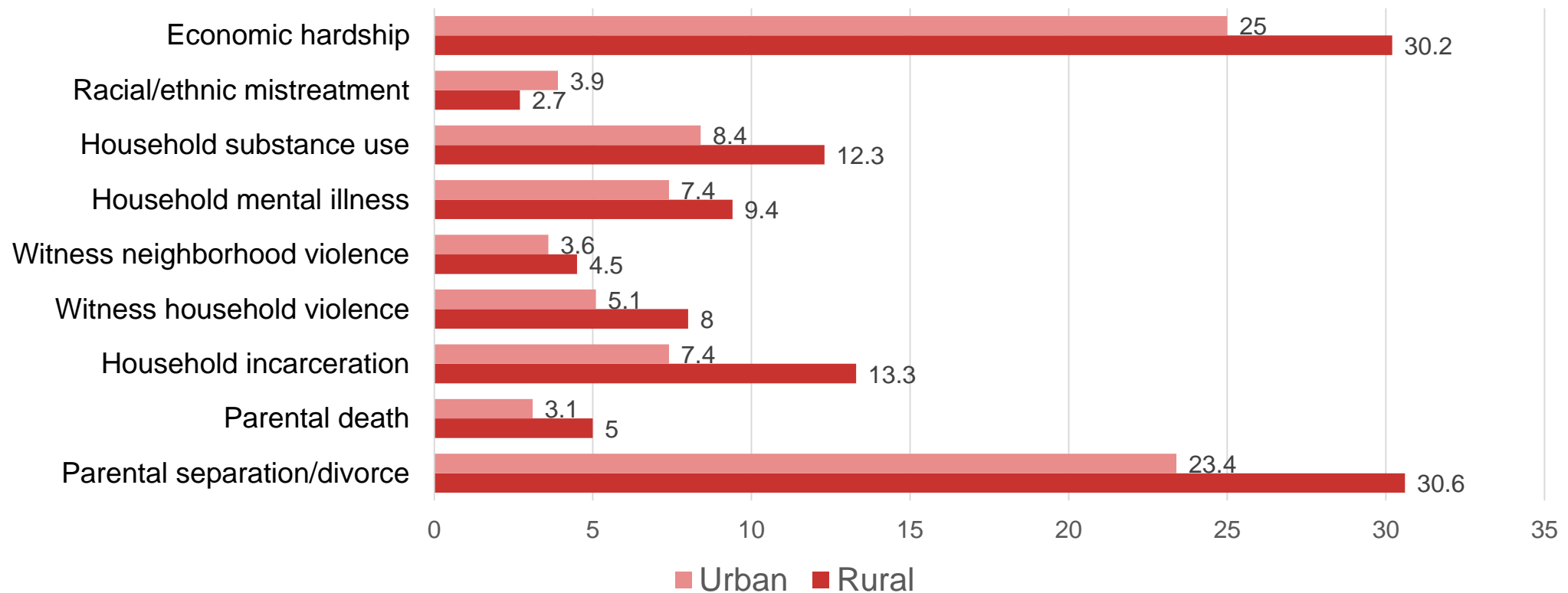
Excluded



South Carolina

RURAL CHILDREN MORE LIKELY TO EXPERIENCE NEARLY ALL ACE COMPONENTS

ACEs among rural and urban children, 2016 NSCH, 35 states

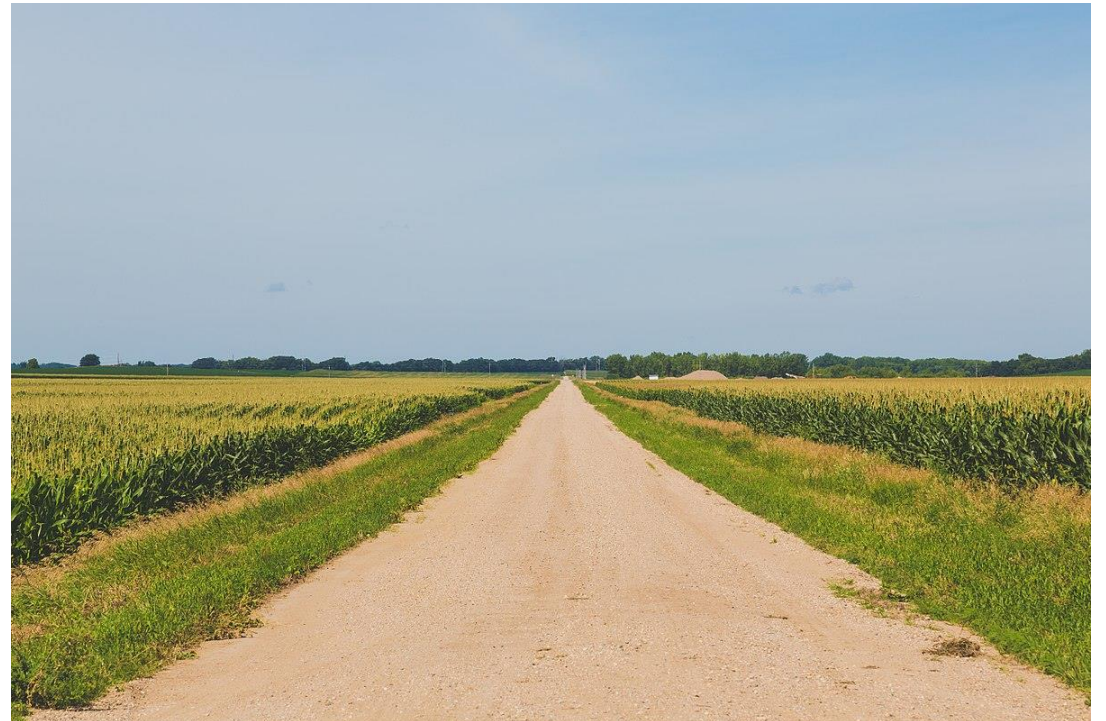


All comparisons except neighborhood violence significant at $p < 0.001$.

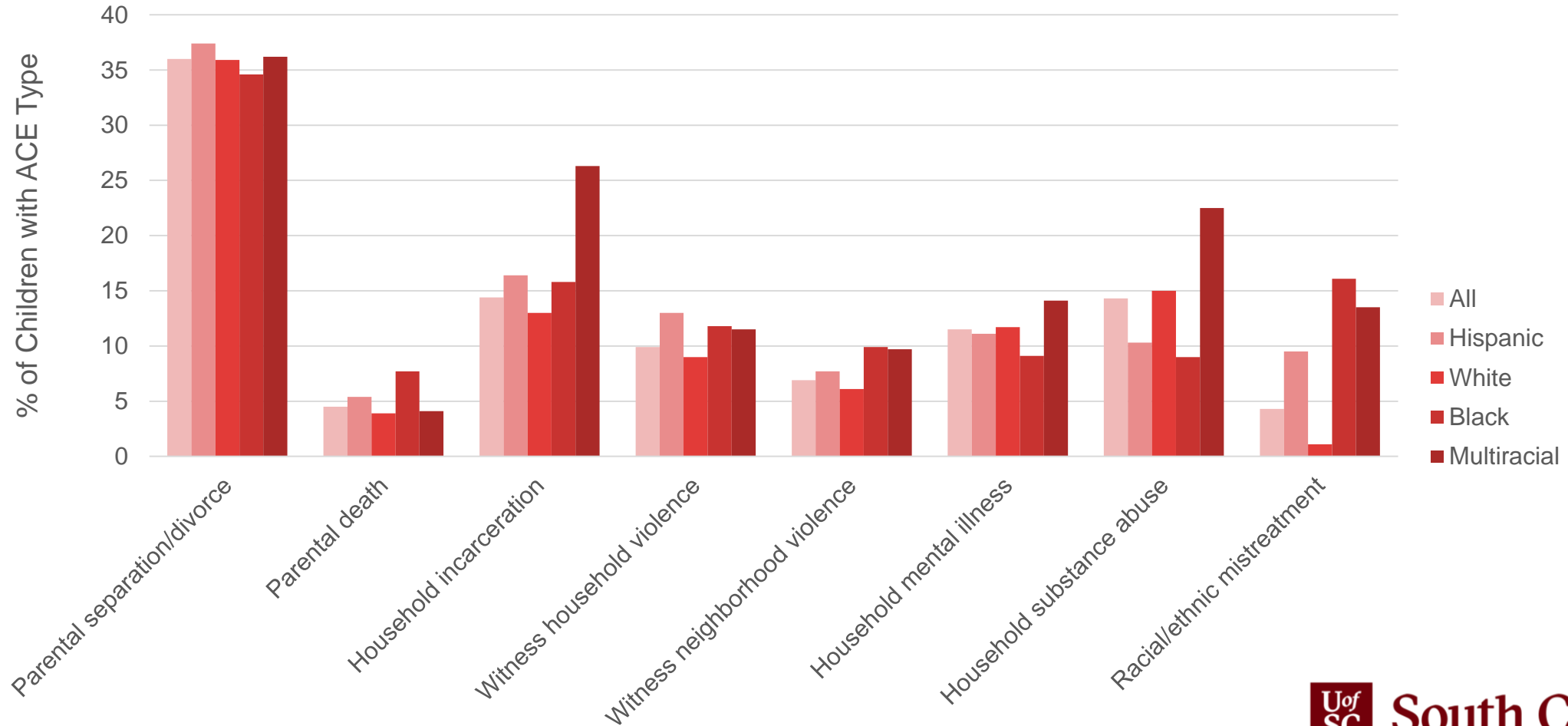
DIFFERENCES IN TOTAL EXPOSURE

ACEs have a dose-response relationship. Compared to urban children:

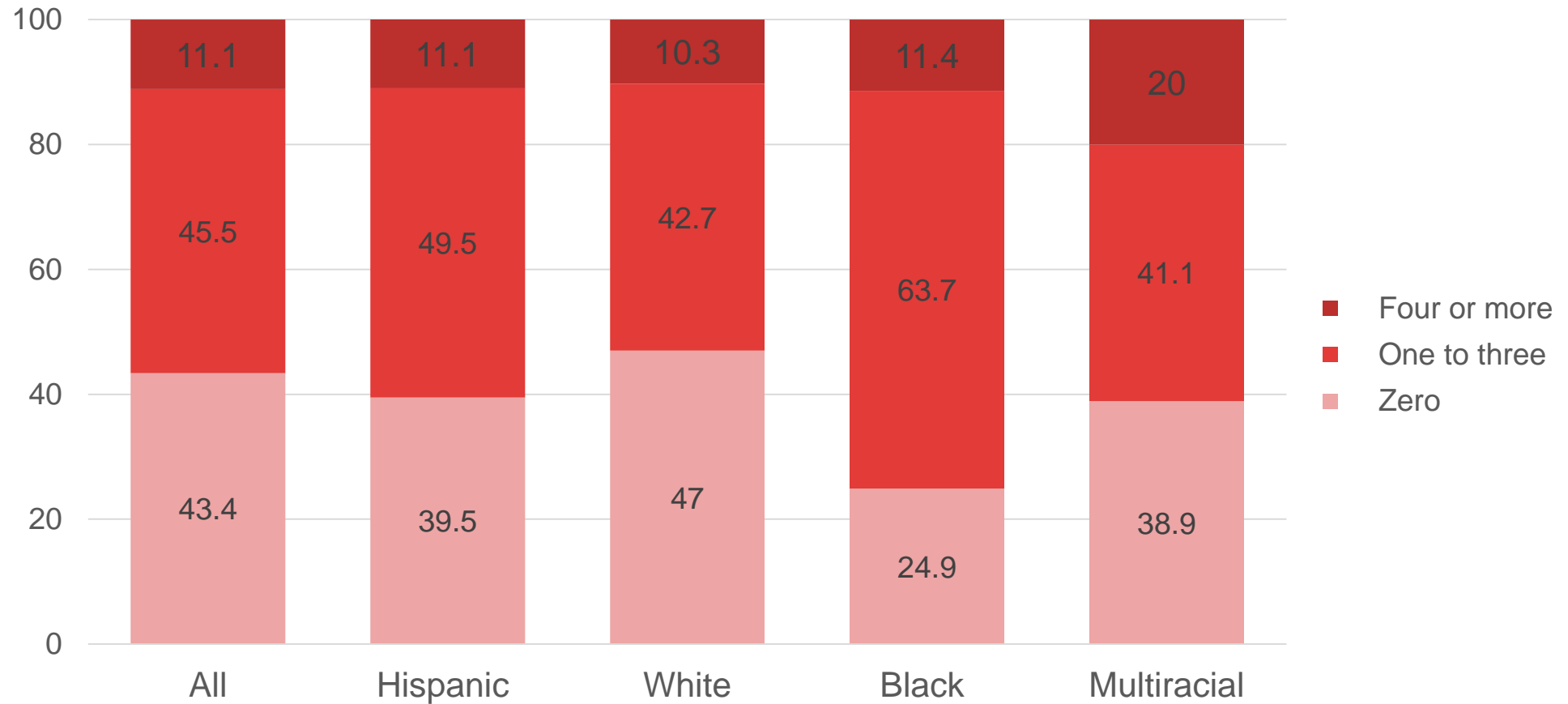
- Rural children more likely to have one to three ACEs (33.3% versus 30.1%, $p < 0.0001$)
- Rural children more likely to have four or more ACEs (6.9% versus 3.8%, $p < 0.0001$)
- Rural children less likely to have zero ACEs (59.9% versus 66.1%, $p < 0.0001$)



ACES ACROSS RURAL RACIAL/ETHNIC GROUPS



NUMBER OF ACES ACROSS RURAL RACIAL/ETHNIC GROUPS





National Advisory Committee on Rural Health and Human Services

Exploring the Rural Context for Adverse Childhood Experiences (ACEs)

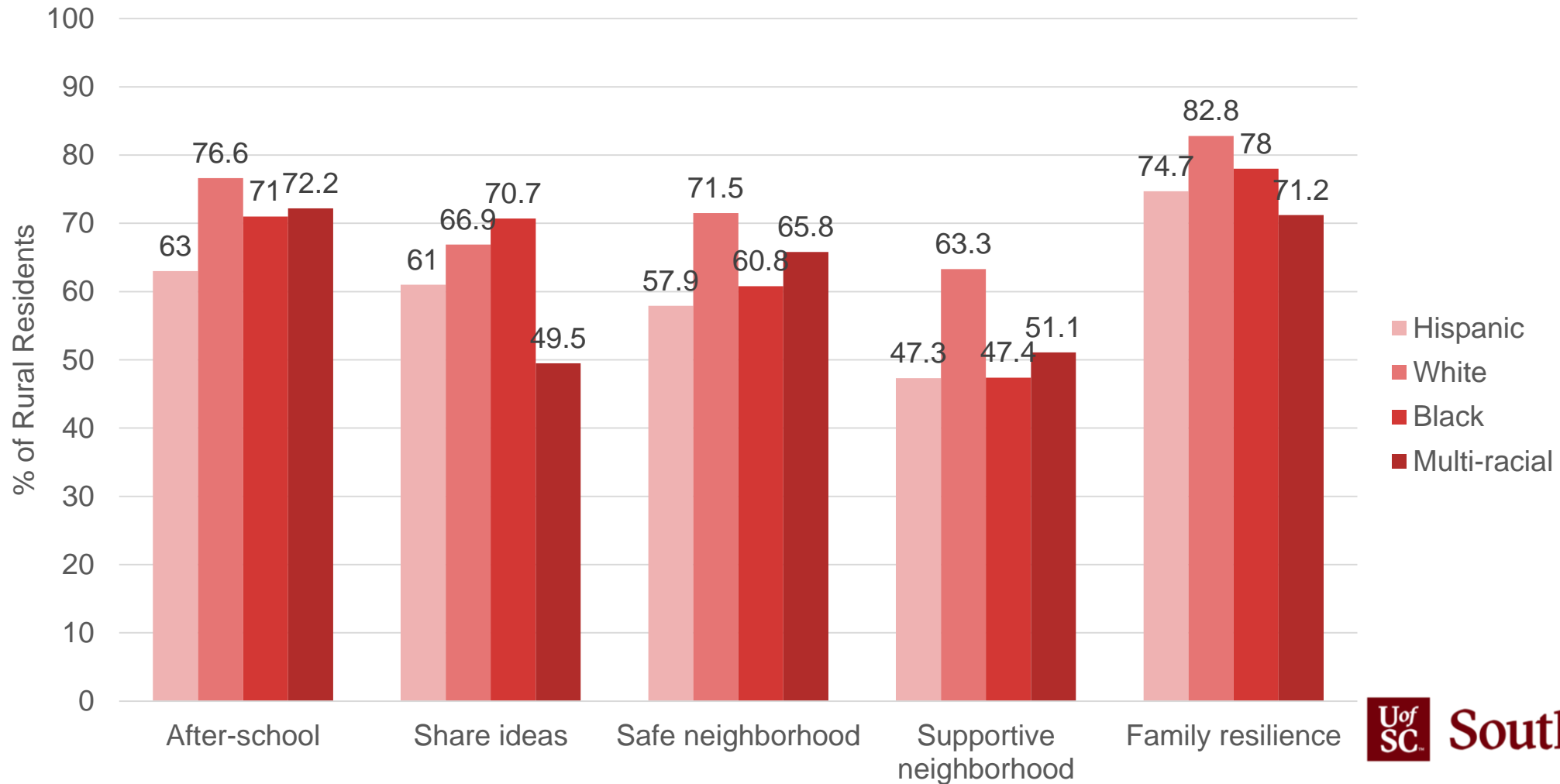
August 2018 Recommendations

1. “...develop and implement a comprehensive prevention strategy that identifies priority outreach/awareness, programming, research and policy areas to address toxic stress, trauma and the health consequences of ACEs for rural, tribal and other at-risk populations.”
2. “... support research that evaluates long-term economic costs resulting from ACEs and benefits gained from federal investments in ACE-related prevention programming.”
3. HRSA’s MCH should “... establish and include a predefined variable for “Rural-Urban Status” in the National Survey on Children’s Health to allow for standardized analyses of ACE prevalence.”
4. “... seek additional funding for telehealth-supported school-based health centers in rural areas as a way of increasing access to integrated primary and behavioral health care services.”

2017-2018 STUDY OF PCES

- Rural children, while having higher rates of ACEs, also were more likely to have at least two of the PCEs measured in our adjusted analyses.
- Rural children were more likely to volunteer in their community, school, or church, a measure of an opportunity for constructive social engagement.
- Rural children were more likely to have a mentor outside of their home (school, neighborhood, or community), a measure of being in nurturing, supportive relationships.

RACIAL/ETHNIC DIFFERENCES IN PCES AMONG RURAL RESIDENTS



**SO WHAT CAN WE DO TO OVERCOME ACES
AND PROMOTE PCES?**



Strengthen economic supports to families

- Strengthening household financial security
- Family-friendly work policies



Change social norms to support parents and positive parenting

- Public engagement and enhancement campaigns
- Legislative approaches to reduce corporal punishment



Provide quality care and education early in life

- Preschool enrichment with family engagement
- Improved quality of child care through licensing and accreditation



Enhance parenting skills to promote healthy child development

- Early childhood home visitation
- Parenting skill and family relationship approaches



Intervene to lessen harms and prevent future risk

- Enhanced primary care
- Behavioral parent training programs
- Treatment to lessen harms of abuse and neglect exposure
- Treatment to prevent problem behavior and later involvement in violence

PARENT AND HOME-BASED INTERVENTIONS

- **Home visiting programs**
 - Particularly important as ACEs can repeat across generations
 - Early childhood interventions
- **Parent education and support**
 - Address secure attachment in parent child relationship; help parents and caregivers tune in to their children
 - Referral to parenting programs such as Strengthening Families and Empowering Families
- **Parent mental health and substance misuse care**



COMMUNITY INITIATIVES

- Safe, stable, and protective environments for children are beneficial for the psychosocial development of children.
- Racial/ethnic disparities in ACEs and PCEs demonstrate the need for more community level initiatives that support children and families.
- Community level initiatives can help link families with services. One such example is the SEEK program (Safe Environment for Every Kid), which connects families, through their primary health care providers, to community supports.
- Family-based resource centers may help community programs connect directly with neighborhoods and families.



COMPASSIONATE SCHOOLS

WHAT IS THE ROLE OF SORHS?

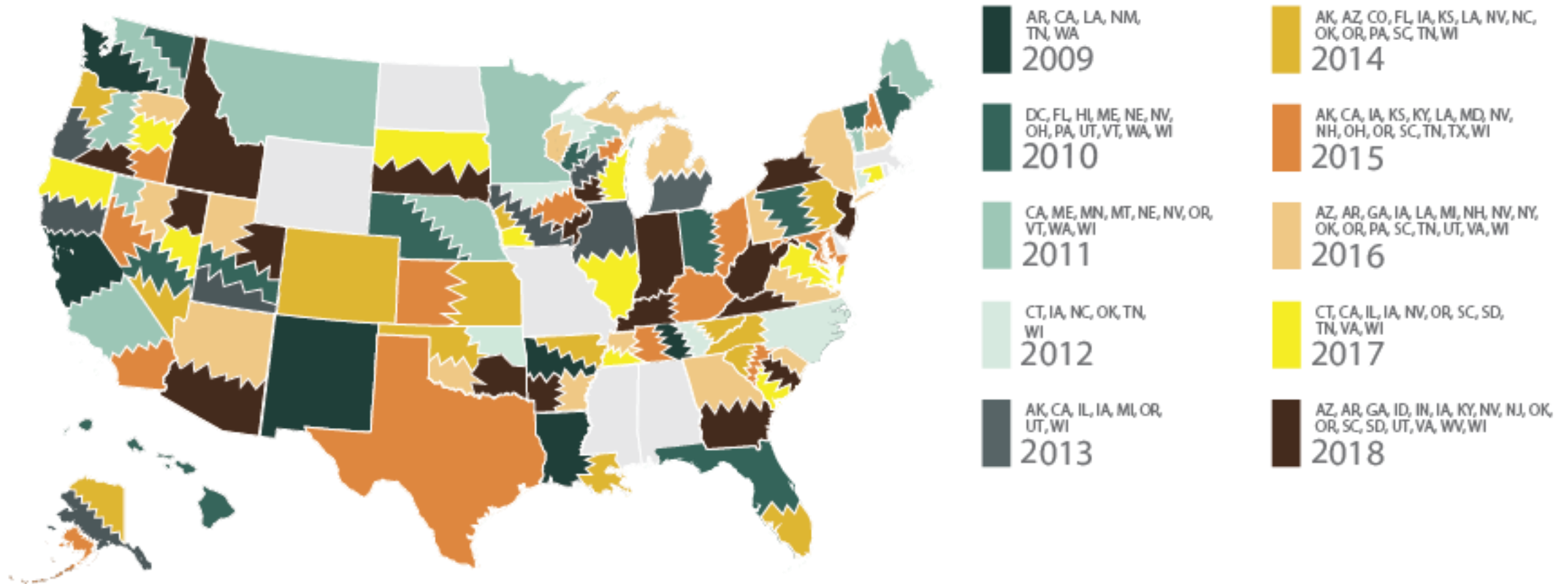
THE ROLE OF SORHS

1. Know what the data are.
 - State/county prevalence rates
 - Know your own ACEs score (if desired)
2. Identify resources.
 - ACEs trainings
 - State/local early childhood systems of care
 - National/state child advocacy organizations
3. Connect the dots.
 - Attend meetings and/or network within state to bring rural perspective
 - Provide trainings for health care providers to learn about ACEs
 - Invite early childhood professionals to rural health gatherings



State	Children experiencing 2+ ACEs (2017-2018)	Racial / Ethnic Inequities
Illinois	476,128 (17%)	35% vs 13% (Black vs White children)
Indiana	315,223 (20%)	30% vs 20% (Black vs White children)
Iowa	127,887 (18%)	24% vs 17% (Hispanic vs White children)
Kansas	140,066 (20%)	23% vs 17% (Hispanic vs White children)
Michigan	480,691 (22%)	38% vs 17% (Black vs White children)
Minnesota	219,079 (17%)	30% vs 12% (Black vs White children)
Missouri	294,278 (22%)	25% vs 21% (Black vs White children)
Nebraska	88,043 (19%)	27% vs 16% (Hispanic vs White children)
Ohio	596,147 (23%)	38% vs 19% (Black vs White children)
Wisconsin	264,569 (21%)	37% vs 17% (Black vs White children)
United States	13,353,886 (19%)	39% vs 17% (American Indian vs White children) 28% vs 17% (Black vs White children)

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; 2019.



South Carolina

Know your ACE score

What is your ACE score?

Answer as they would apply prior to your 18th birthday.

[TAKE THE ACE SCORE QUESTIONNAIRE](#)

<https://scchildren.org/resources/adverse-childhood-experiences/know-ace-score/>

THE ACE INTERFACE TRAIN THE MASTER TRAINER PROGRAM



STATEWIDE RESOURCES

- State health department colleagues
- State child advocacy organizations
- State legislative initiatives
- Specific ACEs initiatives:
 - Illinois - [Illinois ACEs Response Collaborative](#)
 - Iowa - [Iowa ACEs 360](#)
 - Michigan - [Michigan ACE Initiative](#)
- State Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program:
 - <https://mchb.hrsa.gov/maternal-child-health-initiatives/home-visiting/fy19-awards>



NATIONAL RESOURCES



KIDS COUNT data center
A PROJECT OF THE ANNIE E. CASEY FOUNDATION



NCTSN  The National Child Traumatic Stress Network



CONNECT THE DOTS



SOUTH CAROLINA OFFICE OF
RURAL HEALTH
FAMILY SOLUTIONS



thank
you

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