



foundation for
healthy generations

CREATING ENDURING HEALTH EQUITY

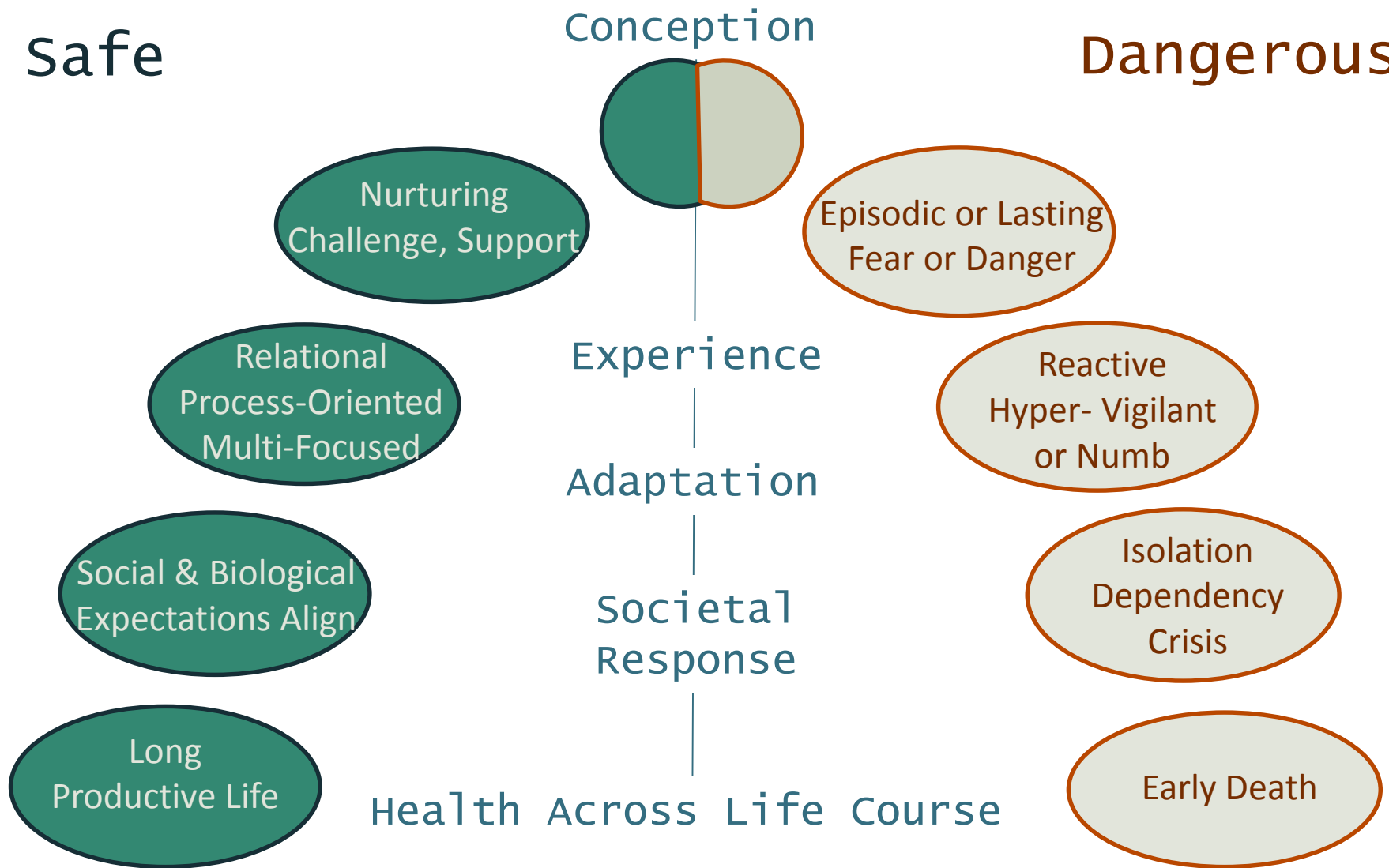
ACEs & Work



Experience & Adaptation

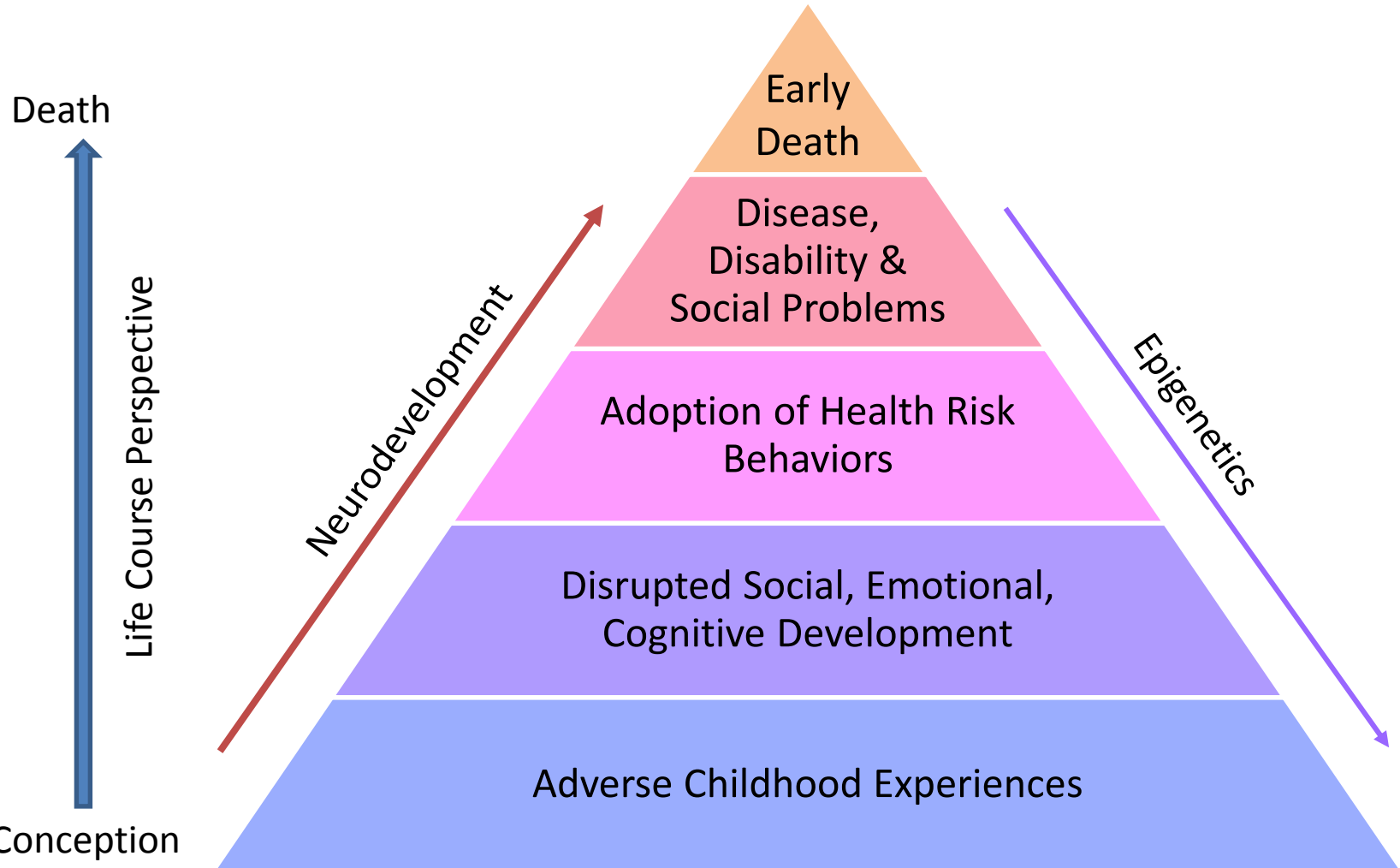
Safe

Dangerous



Adverse Childhood Experience

“The ACE Study”



Experiences Considered

Indicators of Family Dysfunction

1. Mentally ill, depressed or suicidal person in home
2. Drug addicted or alcoholic family member
3. Parental discord – indicated by divorce, separation, abandonment
4. Witnessing domestic violence against the mother
5. Incarceration of any family member

Abuse

6. Child physical abuse
7. Child sexual abuse
8. Child emotional abuse

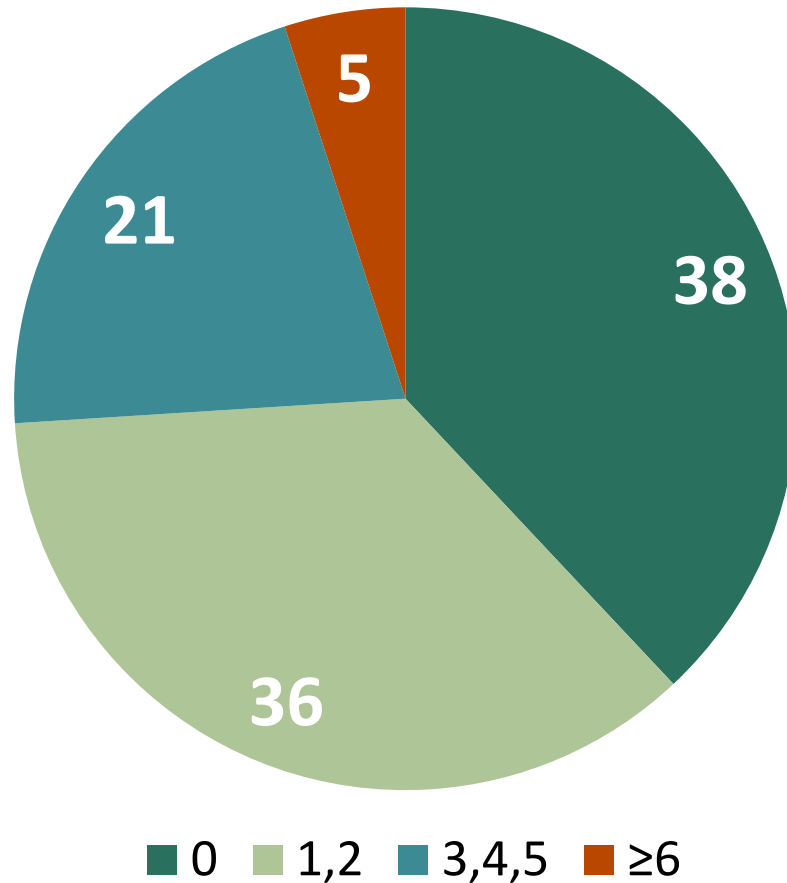
Neglect

9. Physical Neglect
10. Emotional Neglect

ACE Score = Number of Categories (1-10)



ACEs are Common



**62% of adults
have ≥ 1 ACE**

5% have ≥ 6



Major Findings

ACE Categories (ACEs) are Interrelated

- 87% of people with 1 have >1

ACEs are Common

- Nearly 2/3 of adults have ≥ 1 ; 27% have ≥ 3 ; 5% have ≥ 6

Accumulation of ACEs Matters

- Higher # (ACE Score) = higher population risk

Graded Relationship: Disease, Disability, Social, Productivity

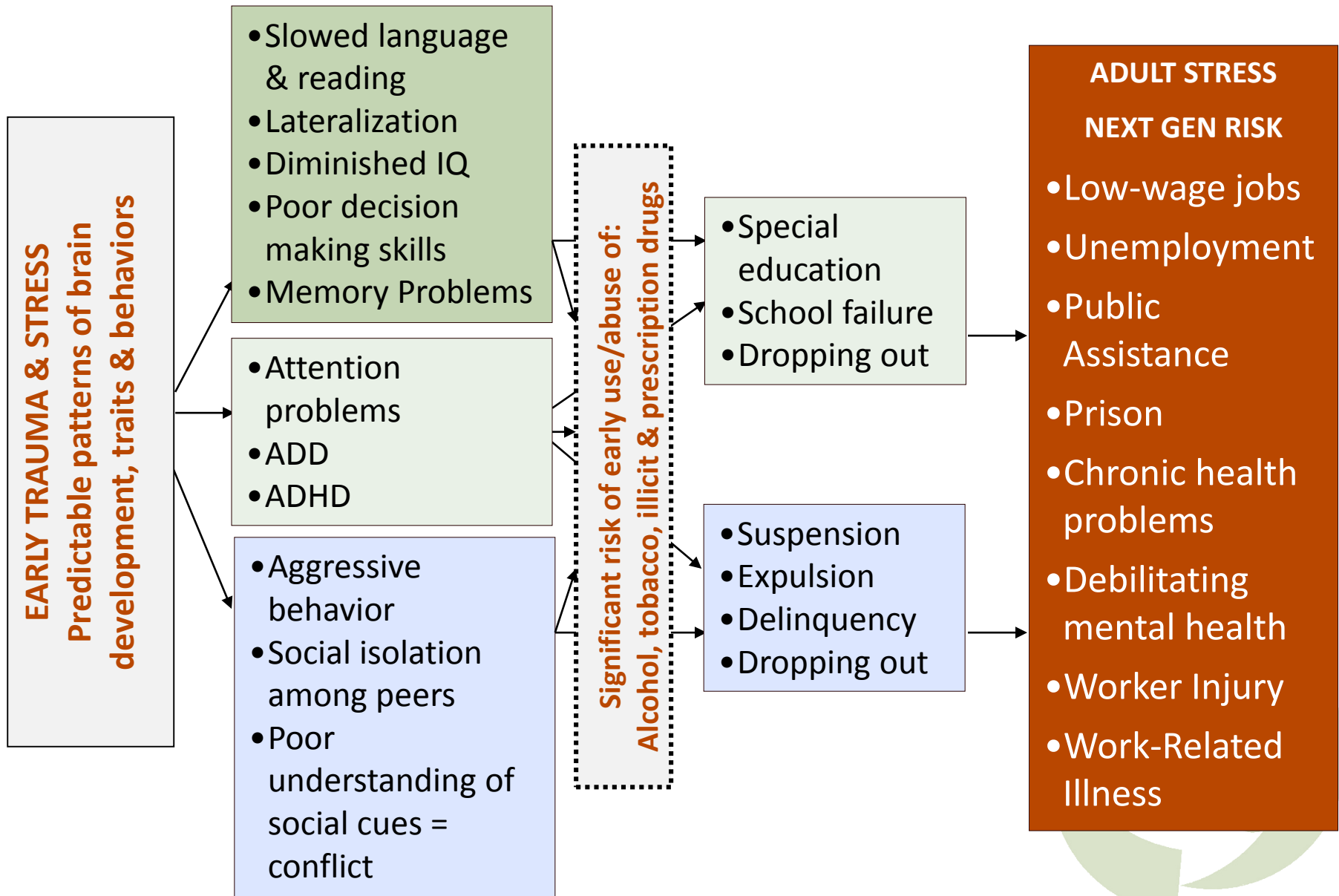
Scores= Good Proxy Measure Childhood Toxic Stress Dose

ACEs are the Most Powerful Known Determinant of Health

- Mental, Physical, Behavioral, Productivity, Disability, & Social Problems



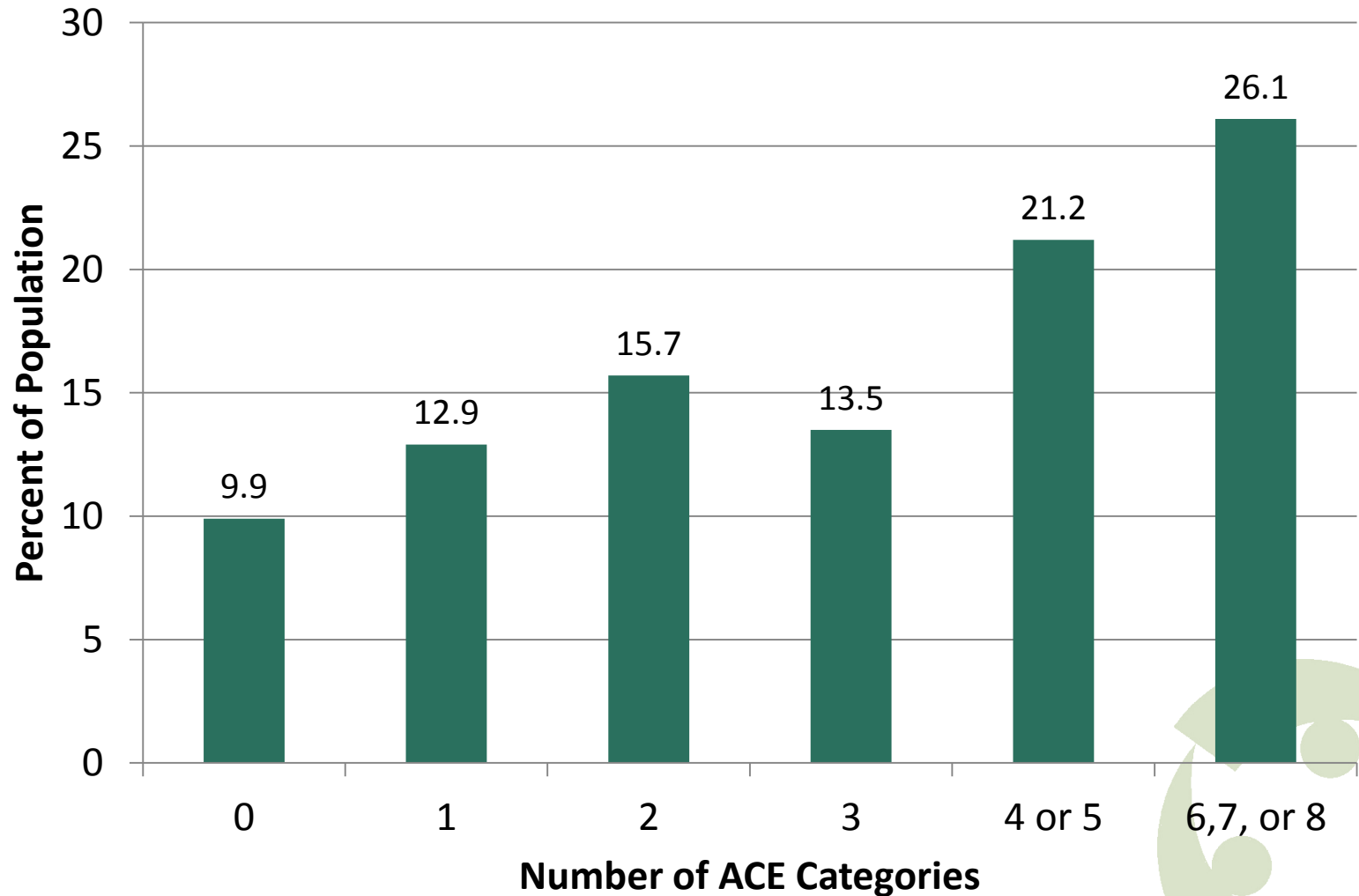
The Fast Track to Poverty



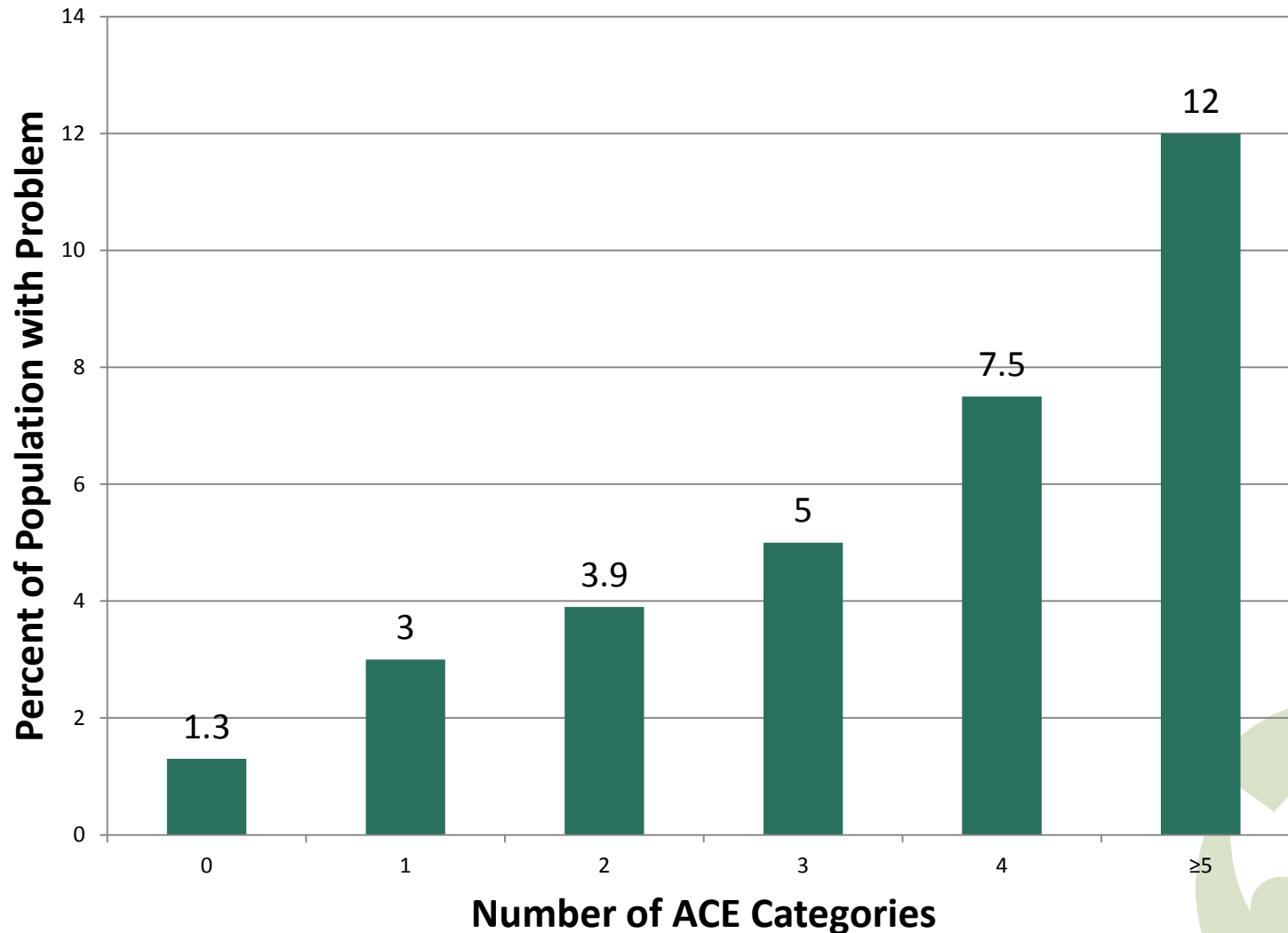
Adverse Childhood Experience & Risks for Workplace Injury/Illness



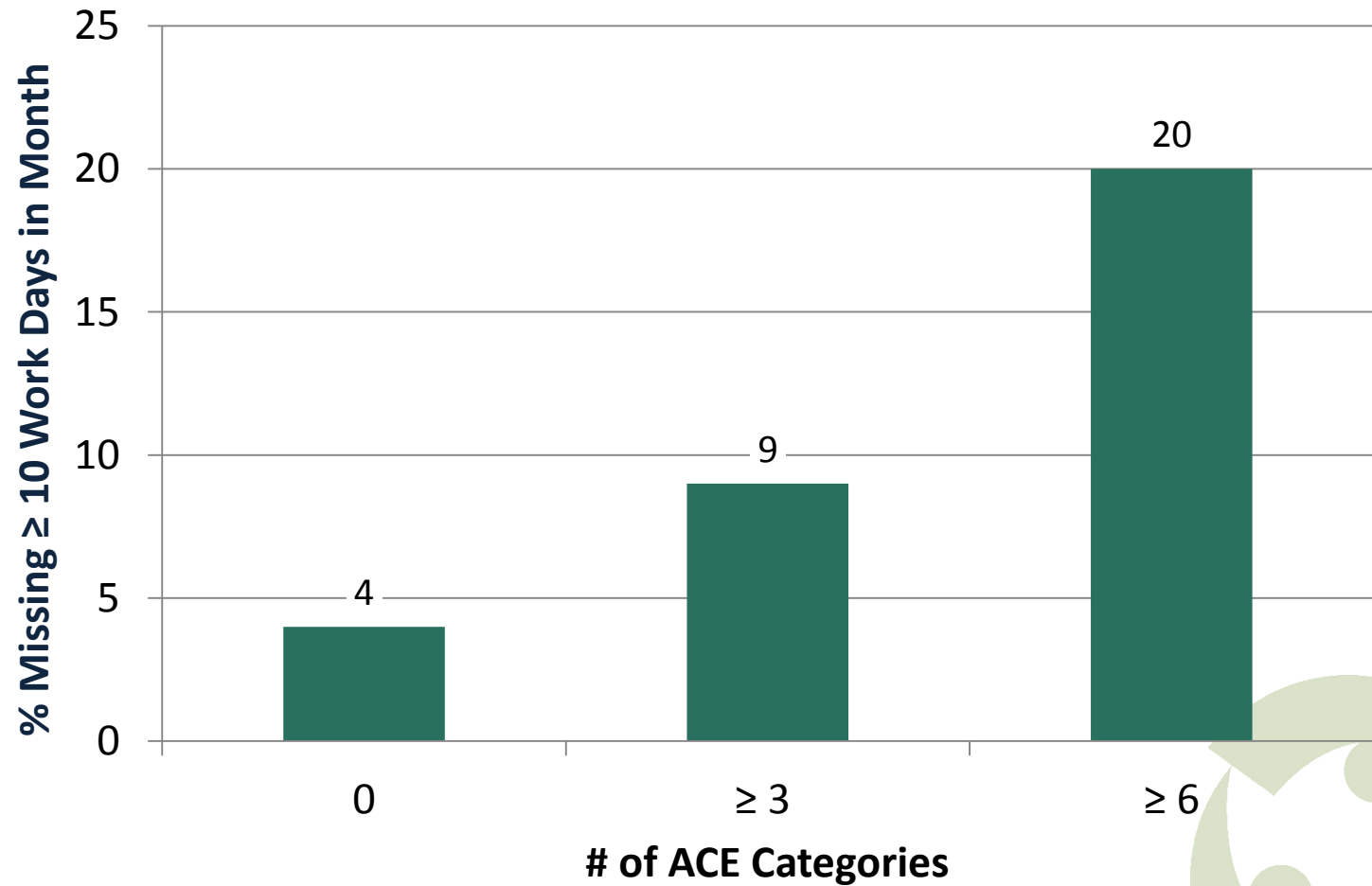
Insufficient Sleep ≥ 21 of 30 Days



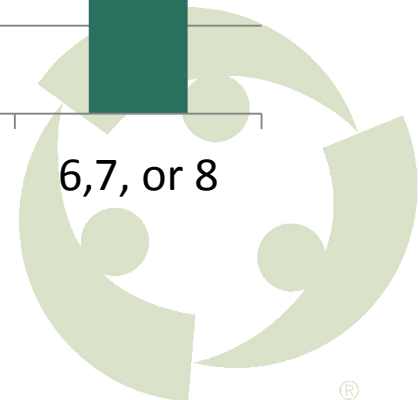
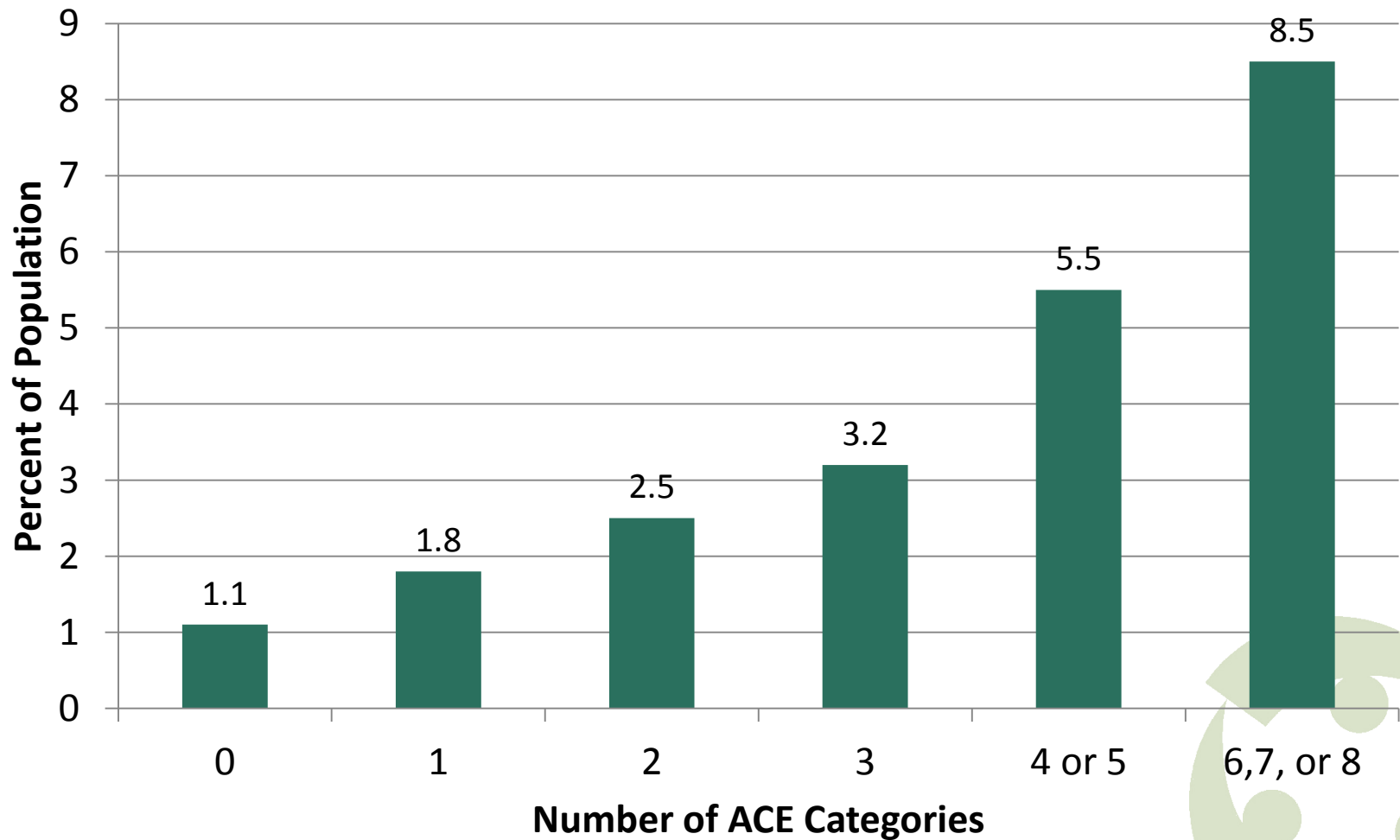
Ever Had a Drug Problem



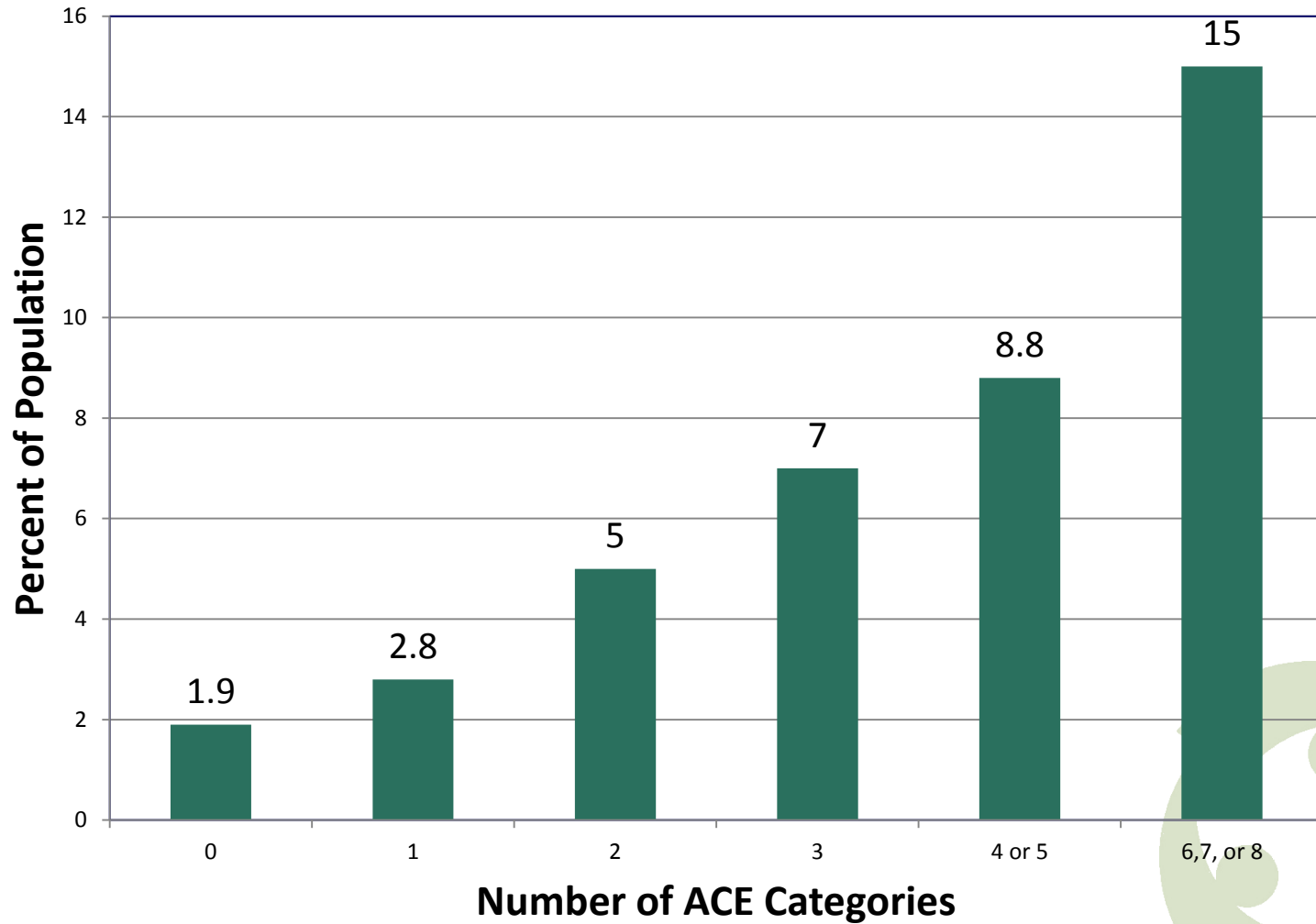
Missed Work



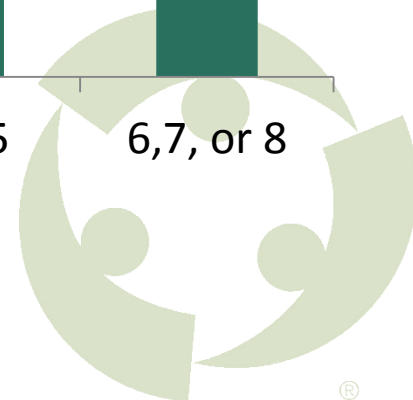
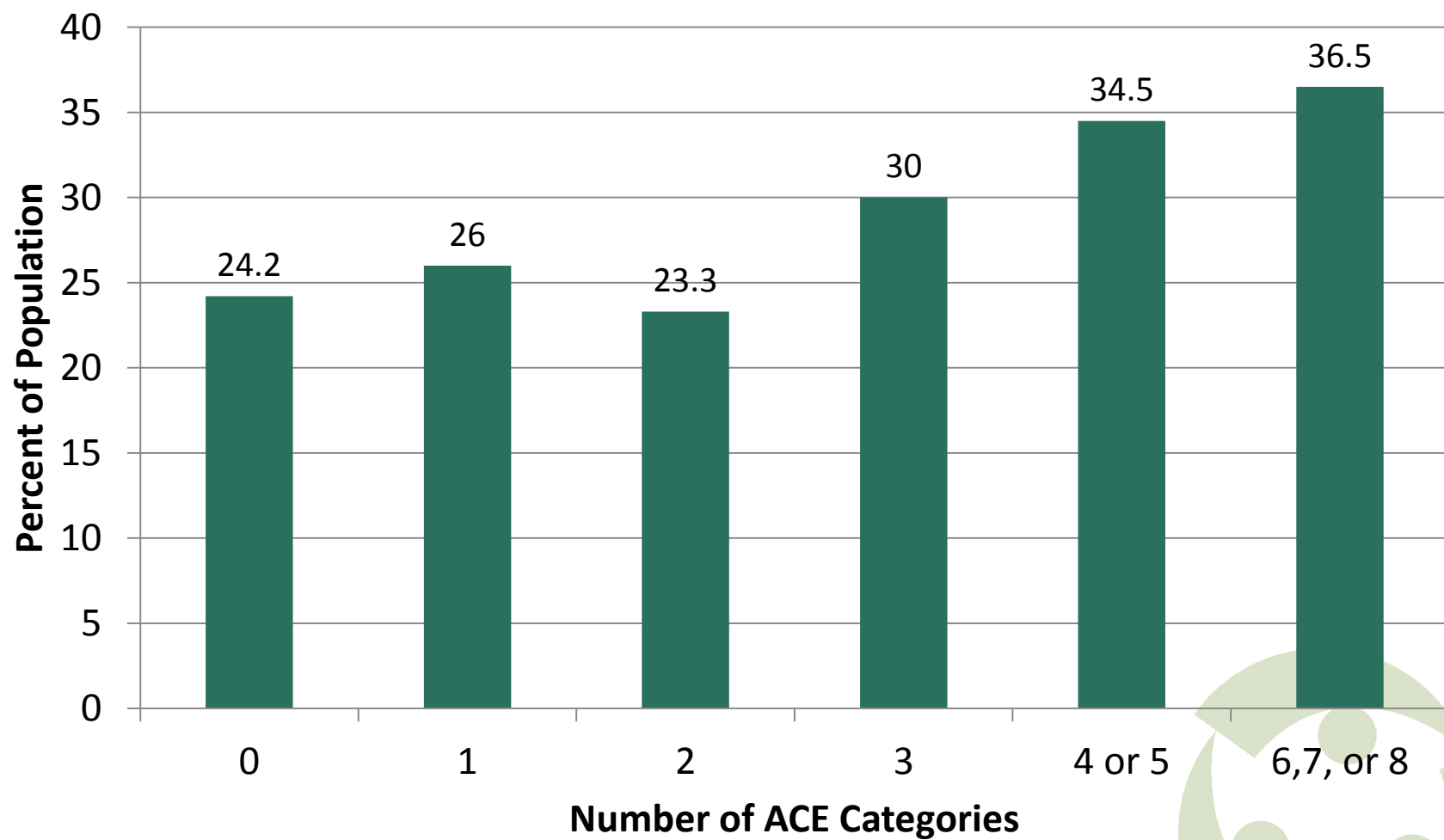
Missed Work ≥ 30 Days Due to Mental Health



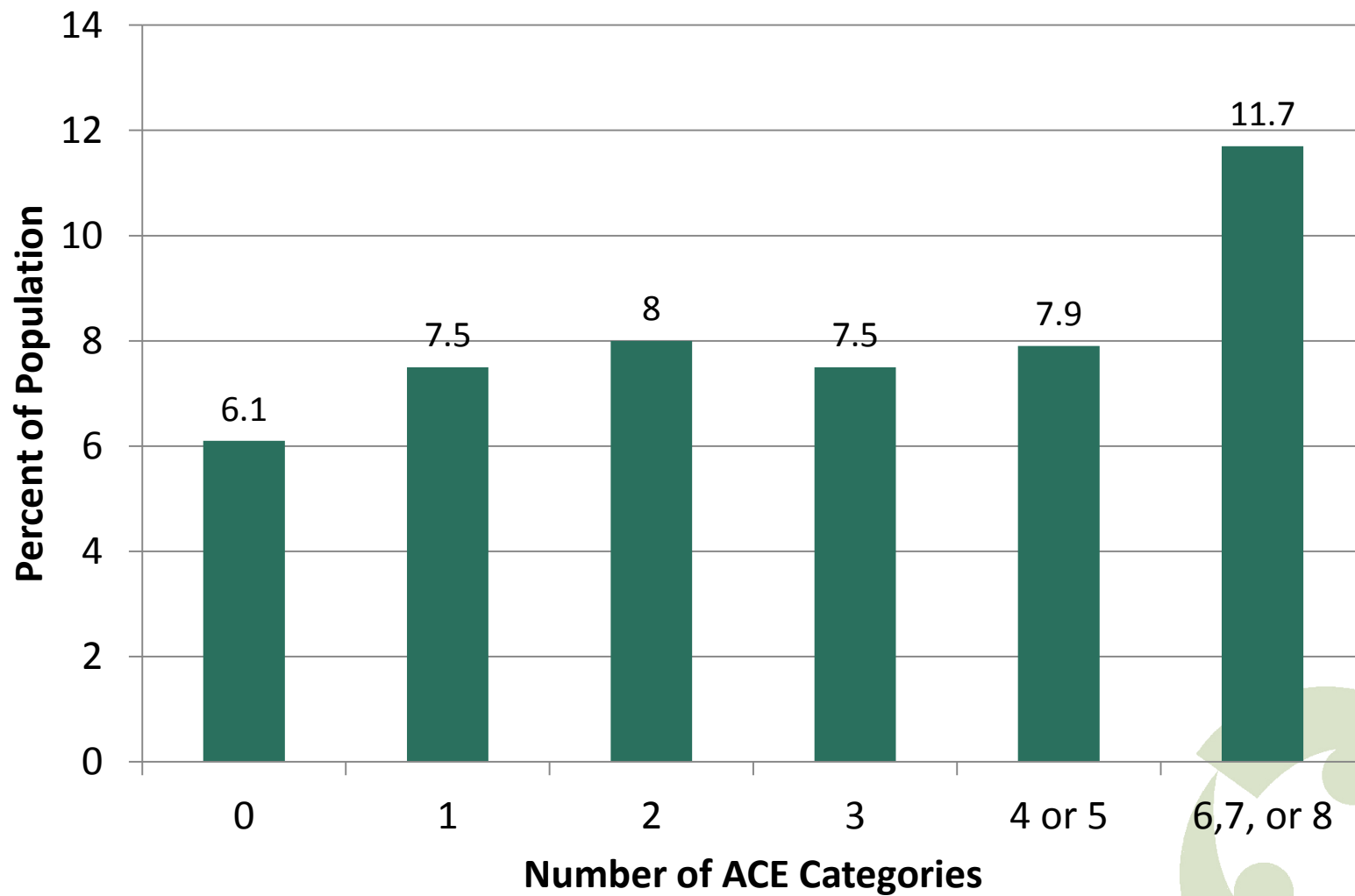
Anxiety



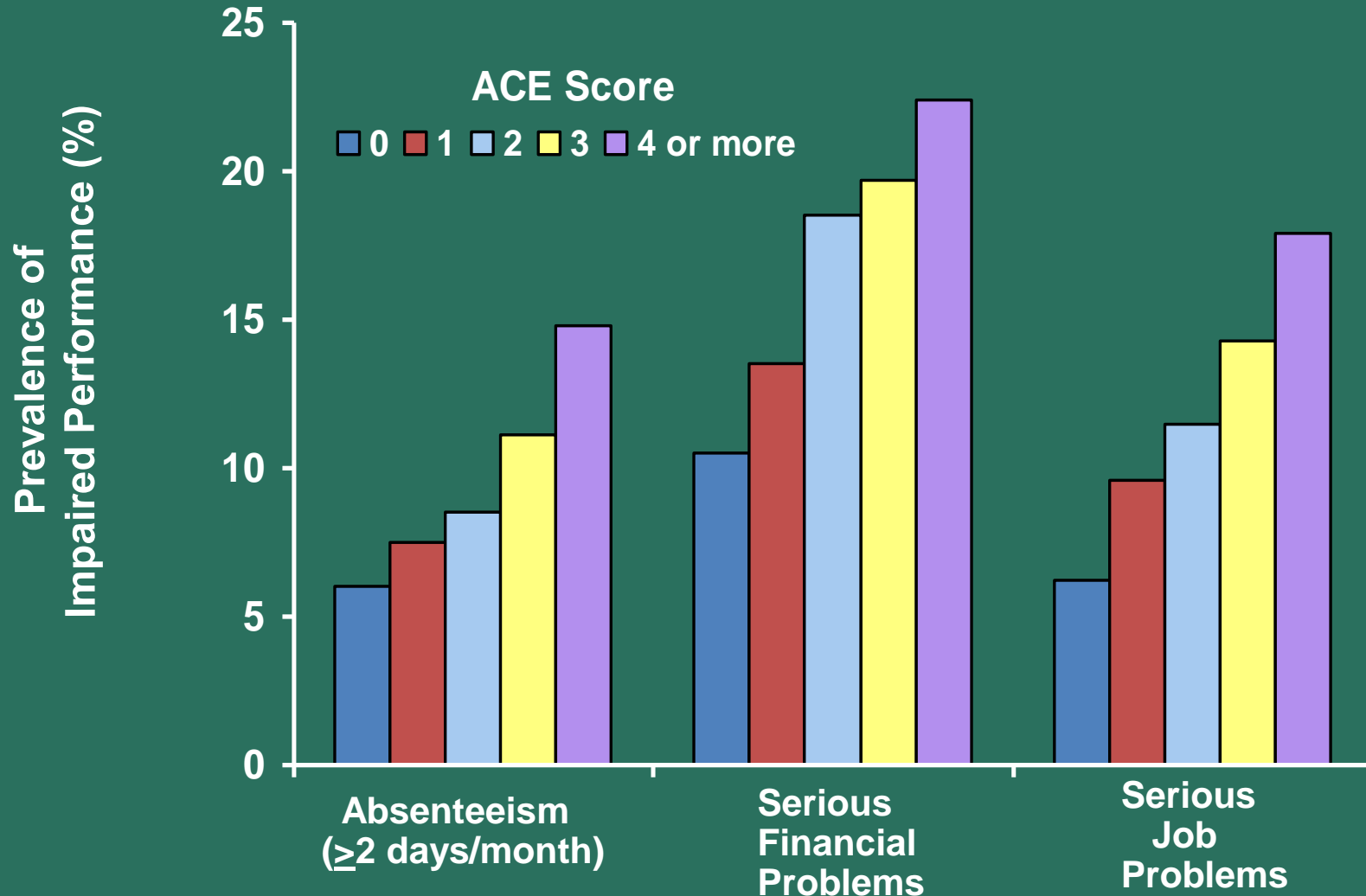
Obesity



Diabetes



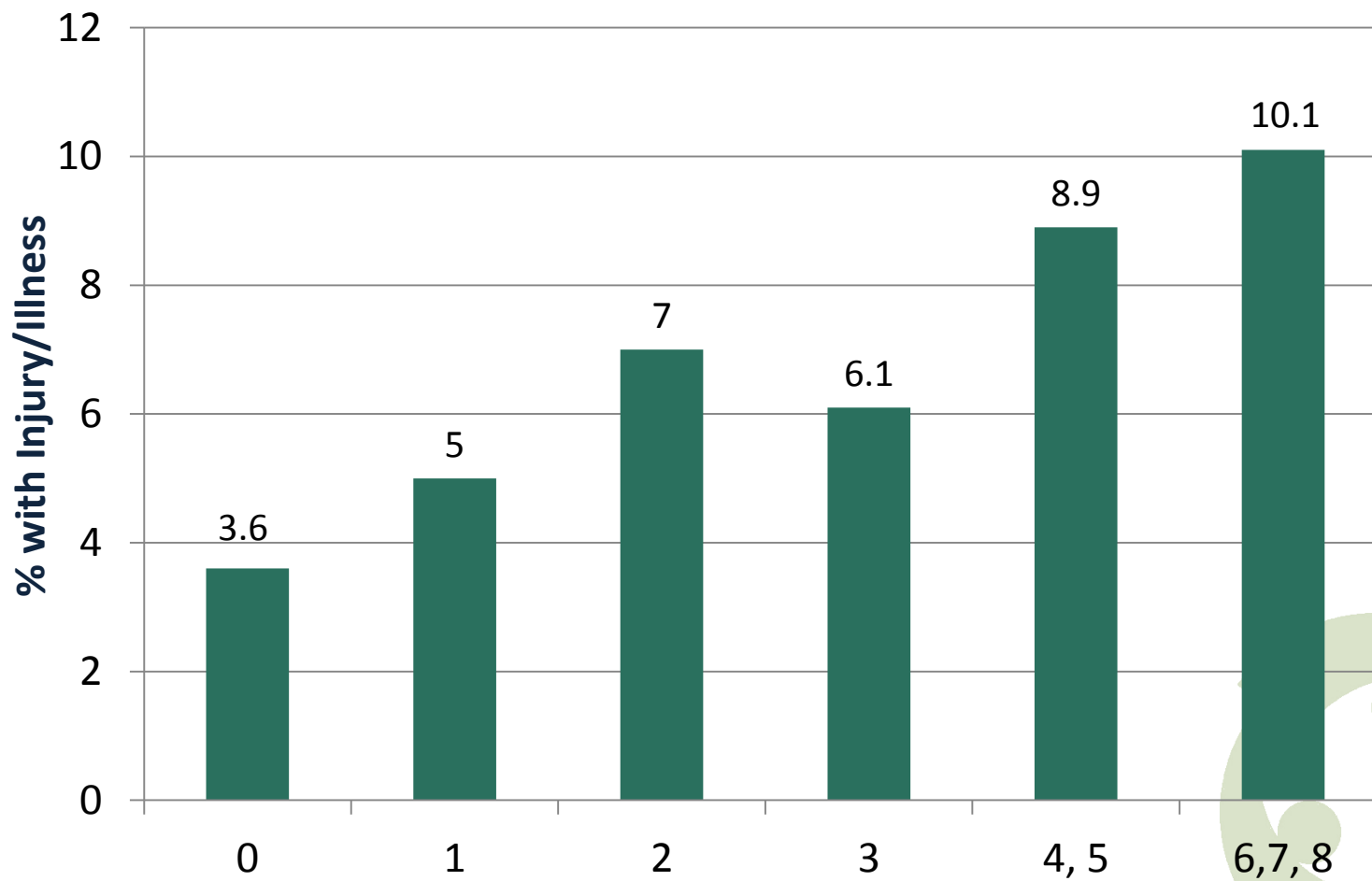
ACE Score and Indicators of Impaired Worker Performance



Adverse Childhood Experience & Worker Injury, Work-Related Illness



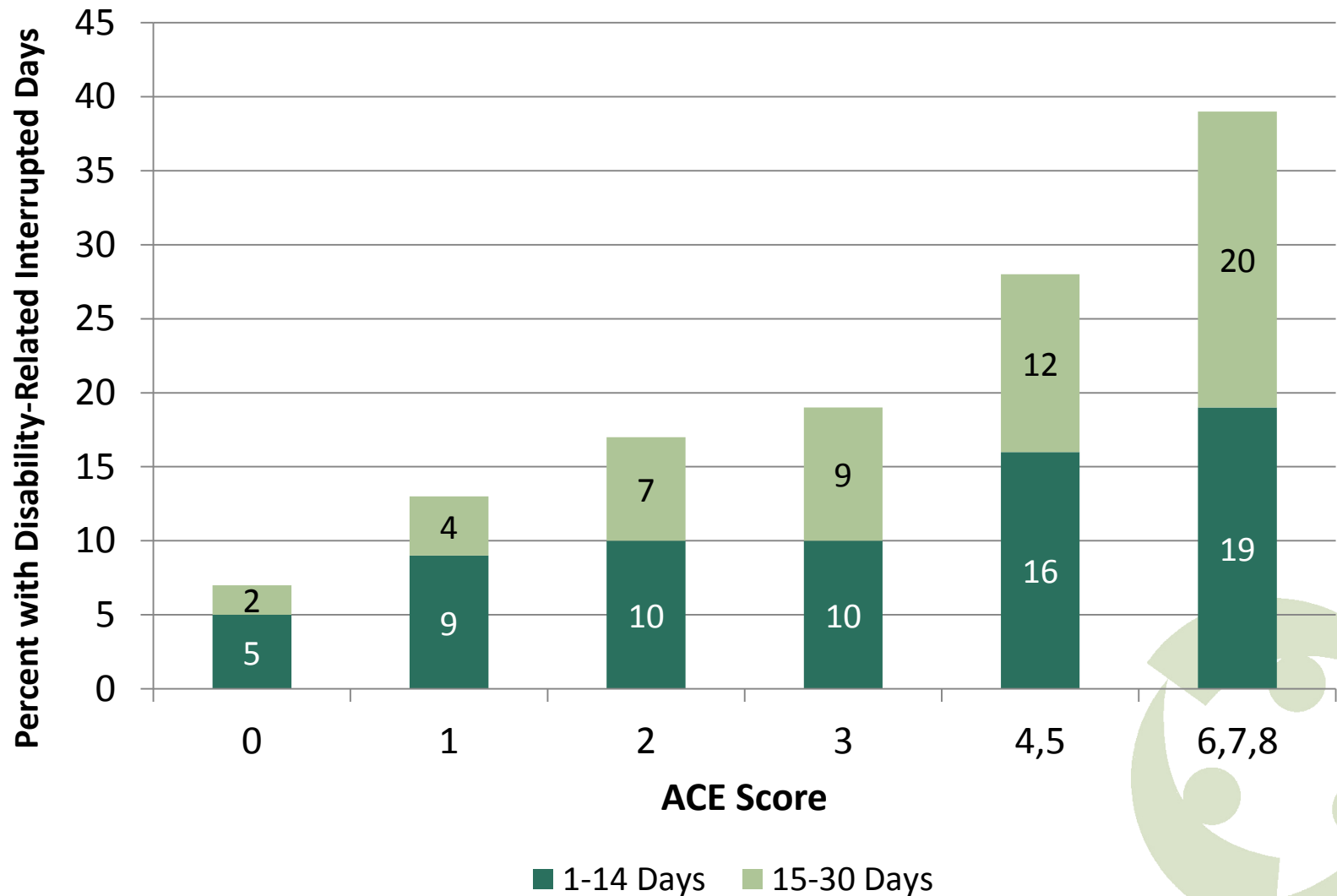
Work-Related Injury or Illness in Past Year



Adverse Childhood Experience & Barriers to Returning to Work

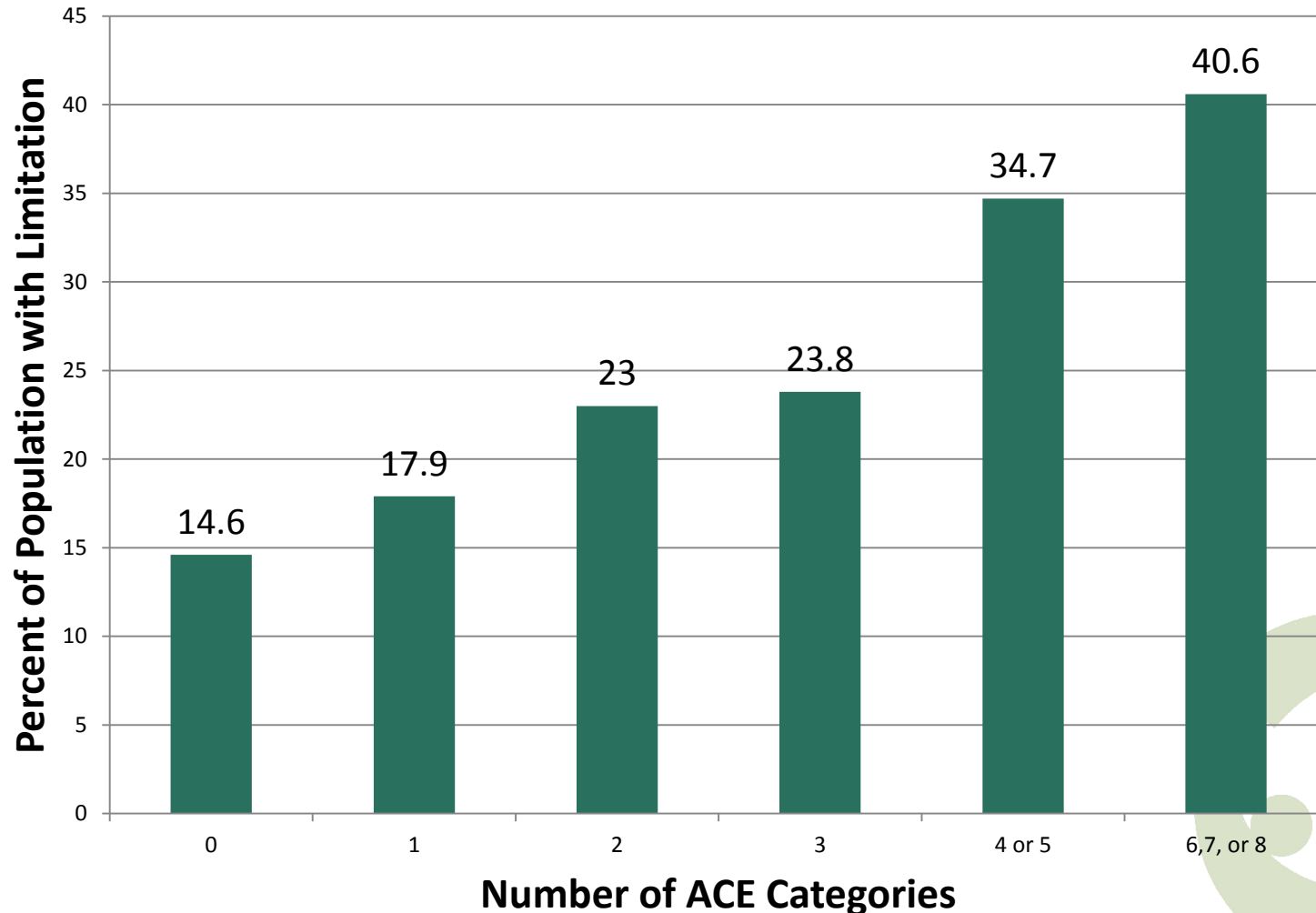


Disability-Related Days When Can't Do Usual Activities

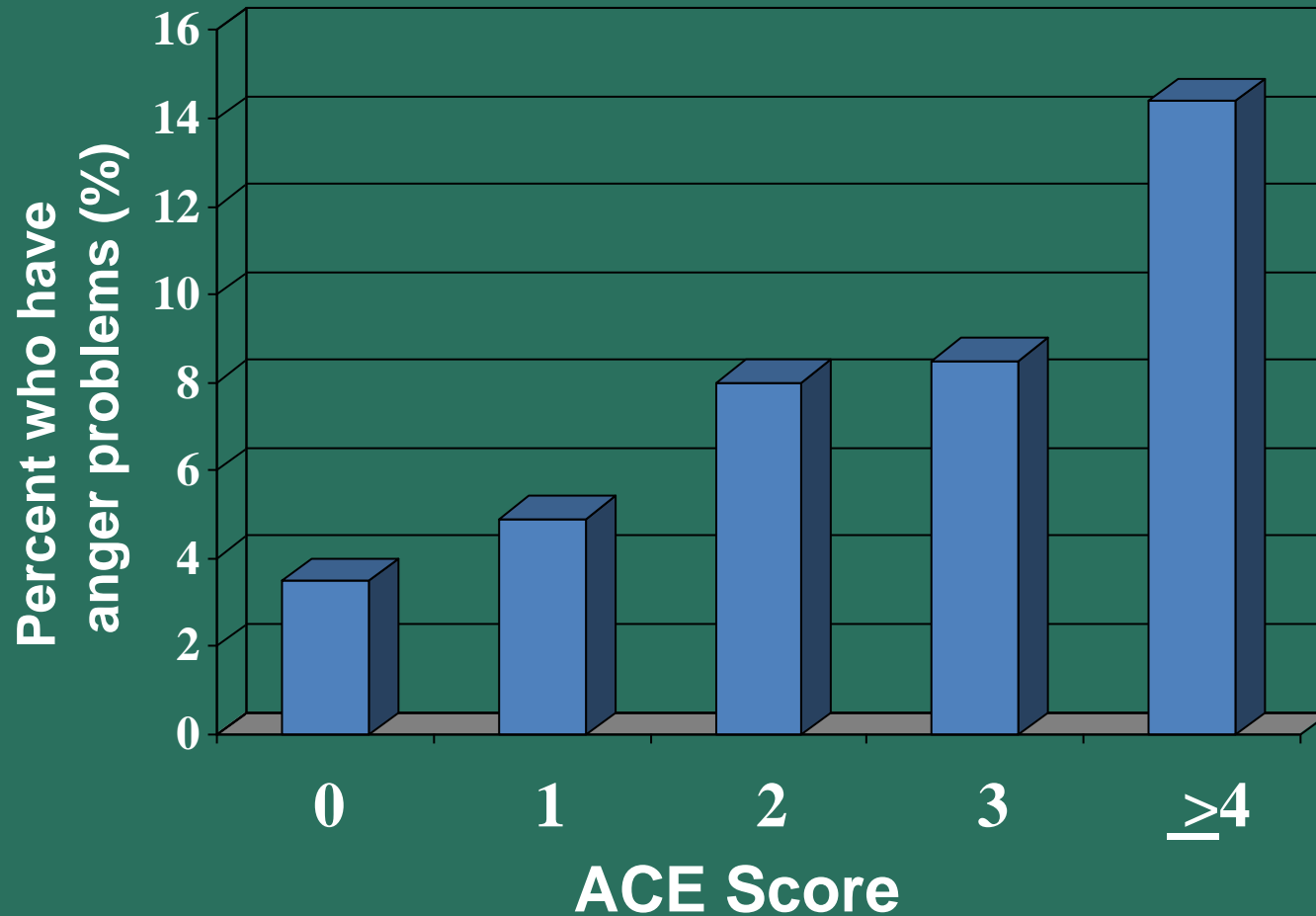


Activity Limitation

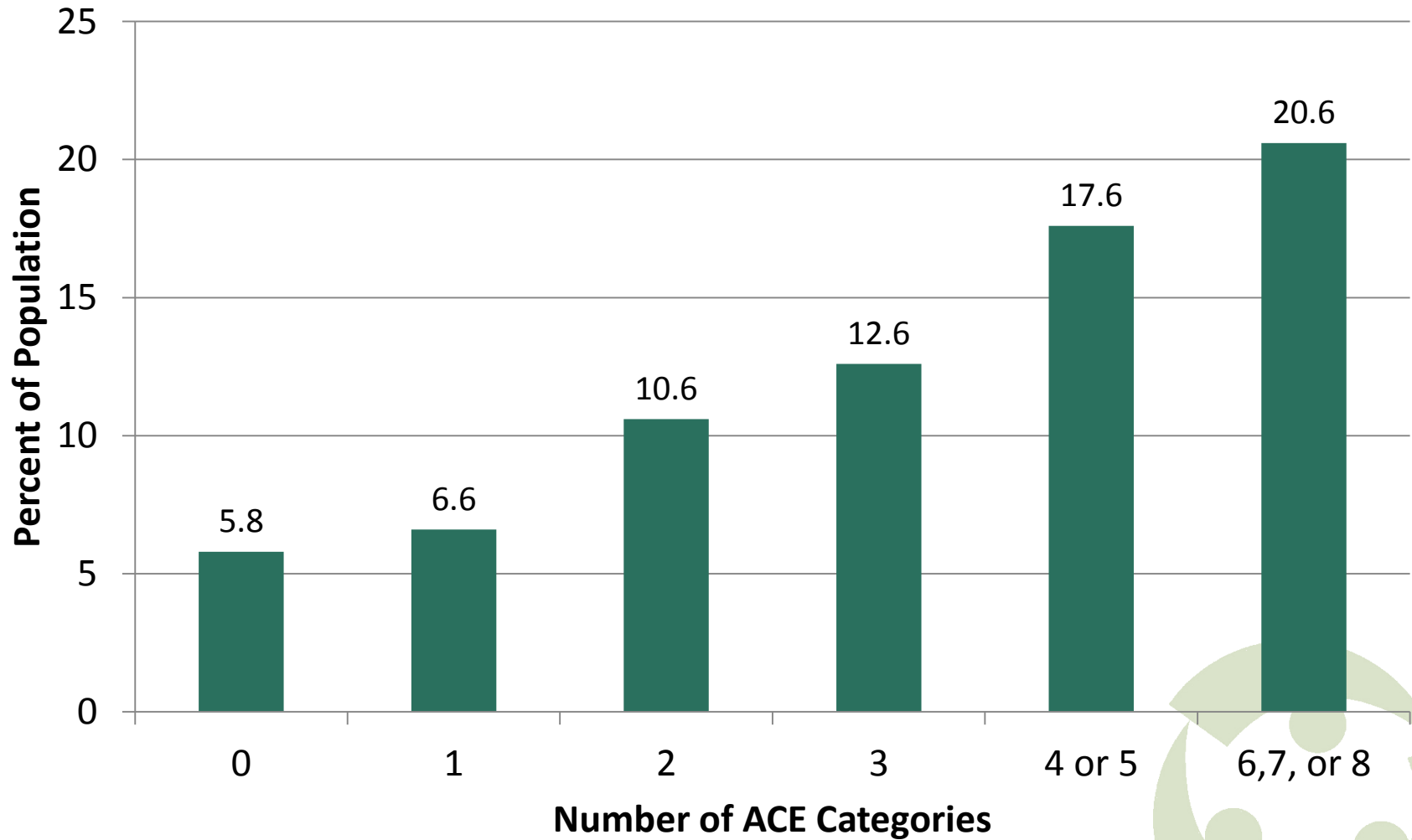
Due to Mental, Physical or Emotional Problems



The ACE Score and Difficulty Controlling Anger

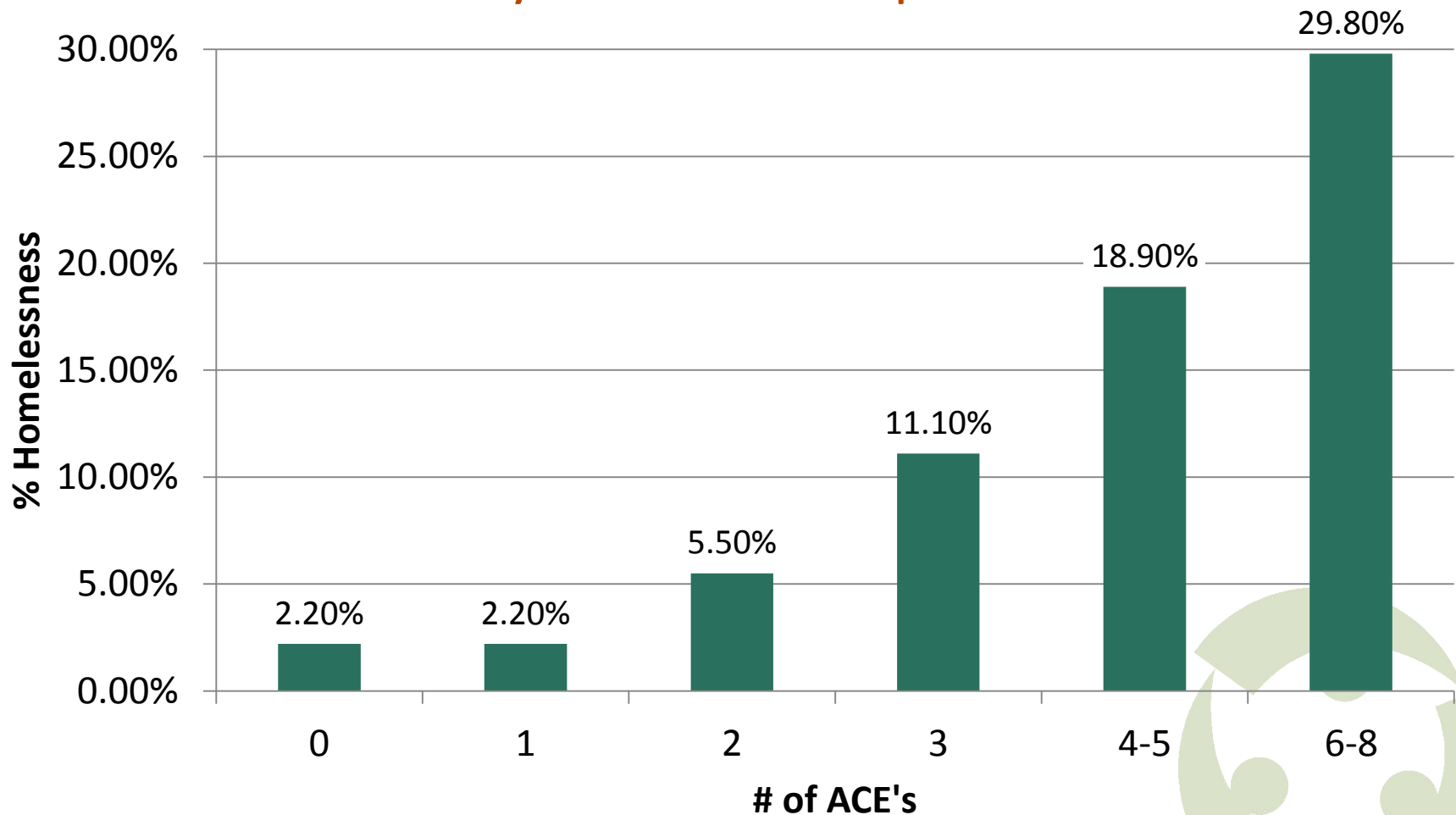


≥ 14 of 30 Unhealthy Mental Health Days

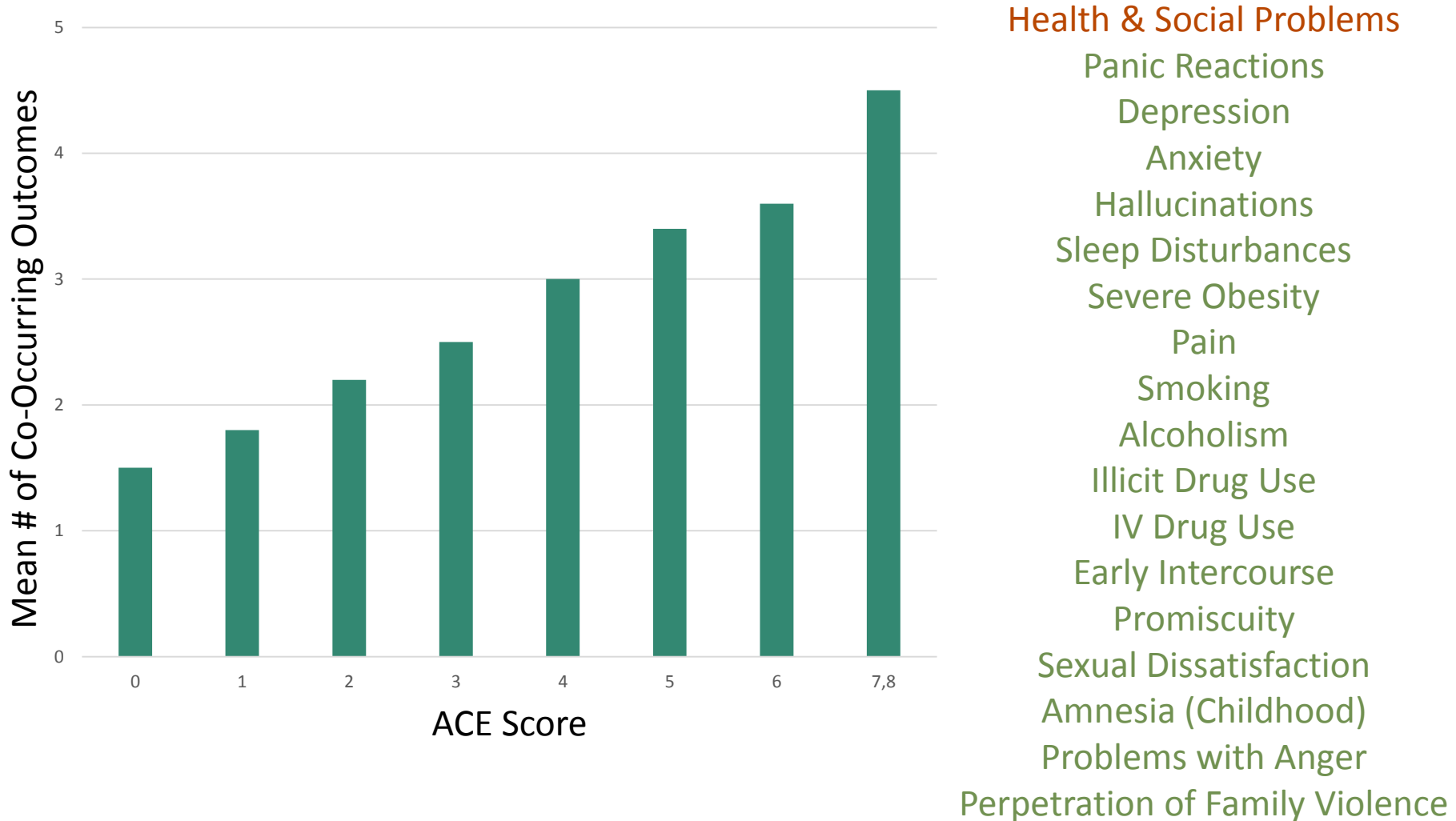


ACEs & History of Homelessness

25-54 yr Old Adult Population



ACEs and Co-Occurring Problems



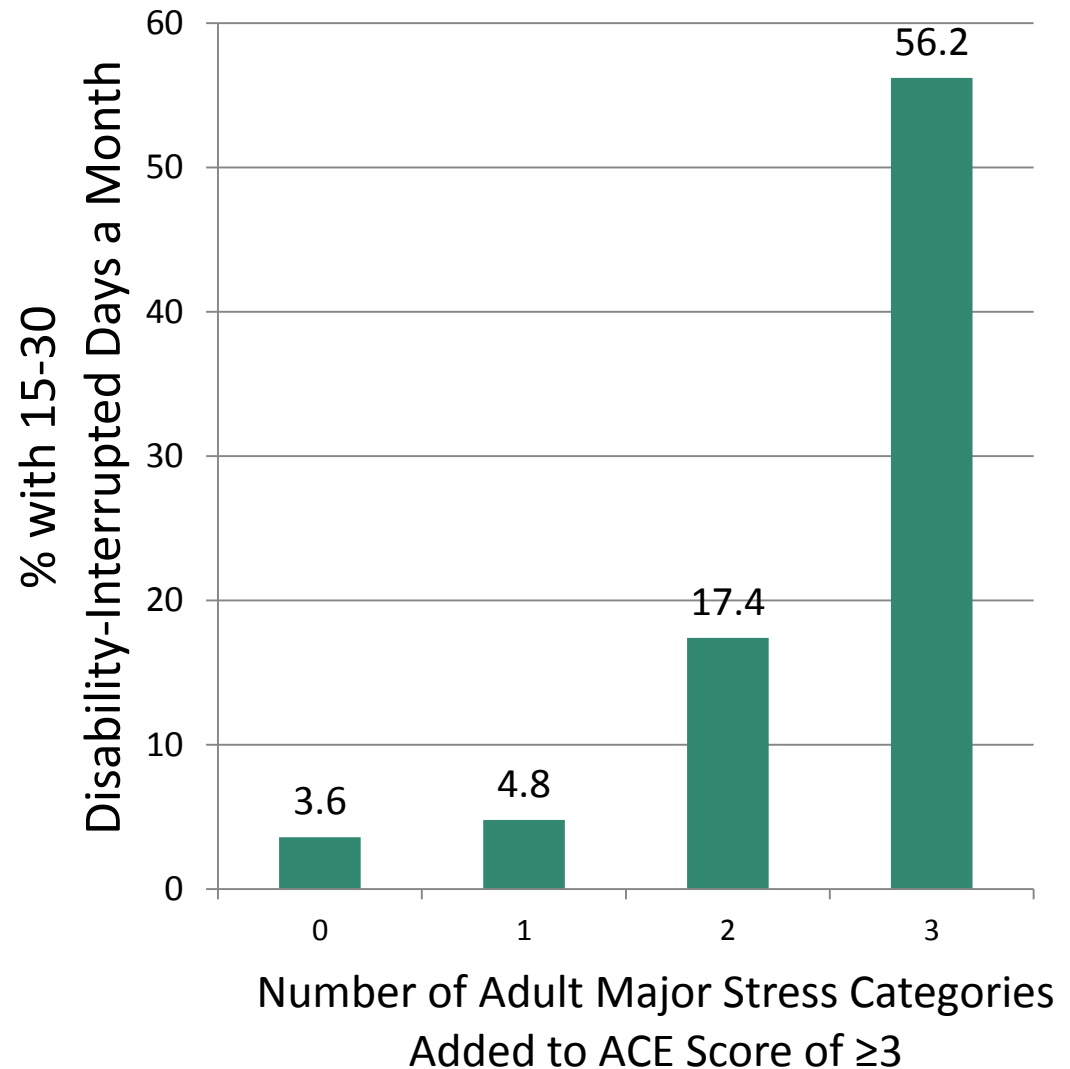
Adult Adversity Compounds Effects

Adults with ≥ 3 ACEs

Plus

Major Stress Categories:

- 1. Homelessness**
- 2. Incarceration**
- 3. Chronic illness**
- 4. Separation/Divorce**
- 5. Severe Depression**
- 6. Work-related Injury/
Illness**



Outcomes Attributable to ACEs

Risk

- Smoking
- Heavy drinking
- Obesity
- Risk of AIDS
- Taking painkillers to get high
- Obesity

Prevalent Disease

- Cardiovascular
- Cancer
- Asthma
- Diabetes
- Auto immune
- COPD
- Ischemic heart disease
- Liver disease

Poor Mental Health

- Frequent mental distress
- Sleep disturbances
- Nervousness
- MH problem requiring medication
- Emotional problems restrict activities
- Serious & persistent mental illness

Intergenerational ACE Transmission

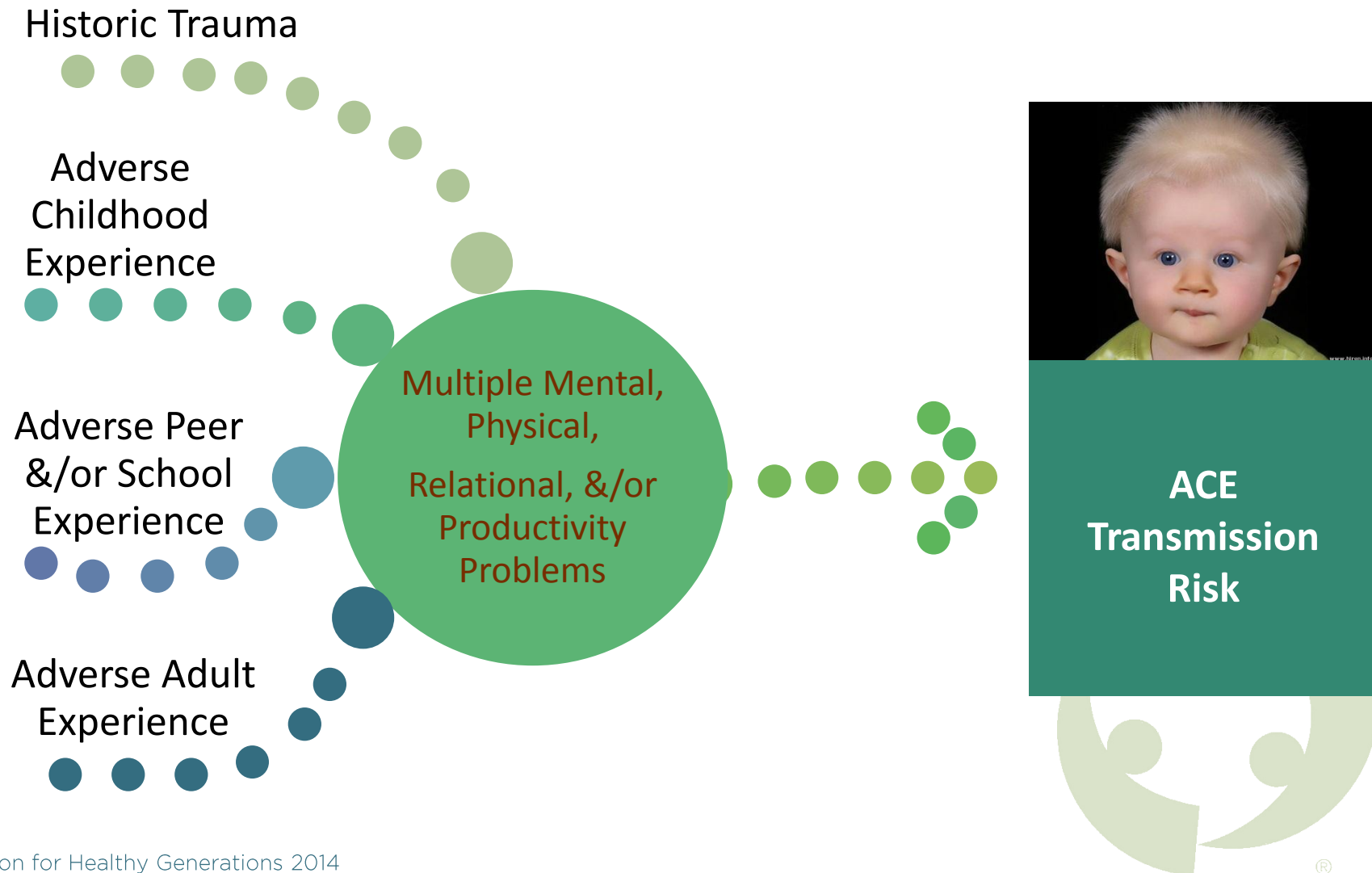
- Mental Illness
- Drugs or Alcohol Problem
- Multiple divorces, separations
- Victim of family violence
- Adult incarceration

Health & Social Problems

- Fair or poor health
- Life dissatisfaction
- Health-related limits to quality of life
- Disability that impedes daily functioning
- Don't complete secondary education
- Unemployment
- History of adult homelessness



Cascade of Experience- Societal Response Matters



The Help that Helps

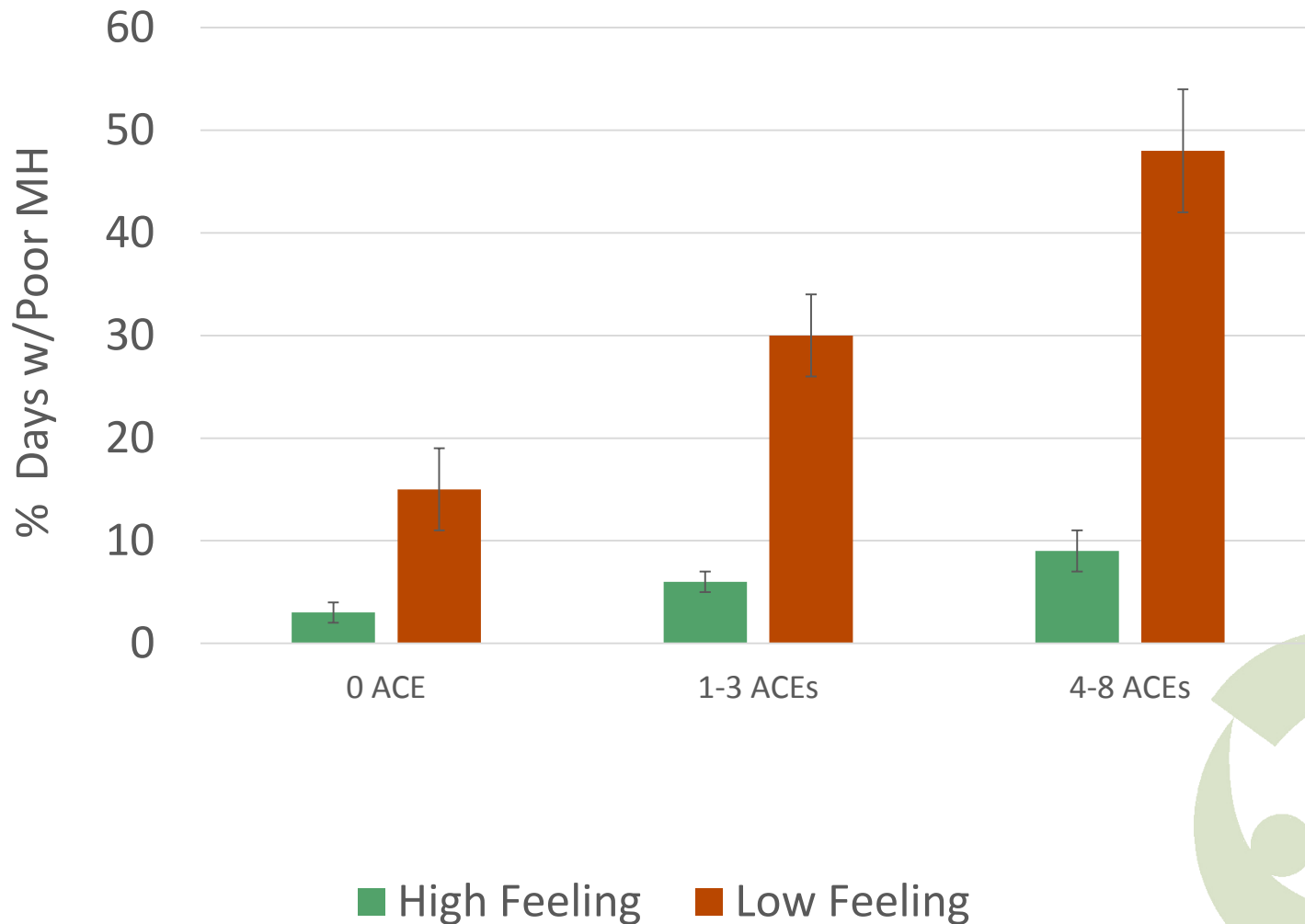
Three Resilience Themes Each Make a Difference

They are even more powerful when we Layer Up...

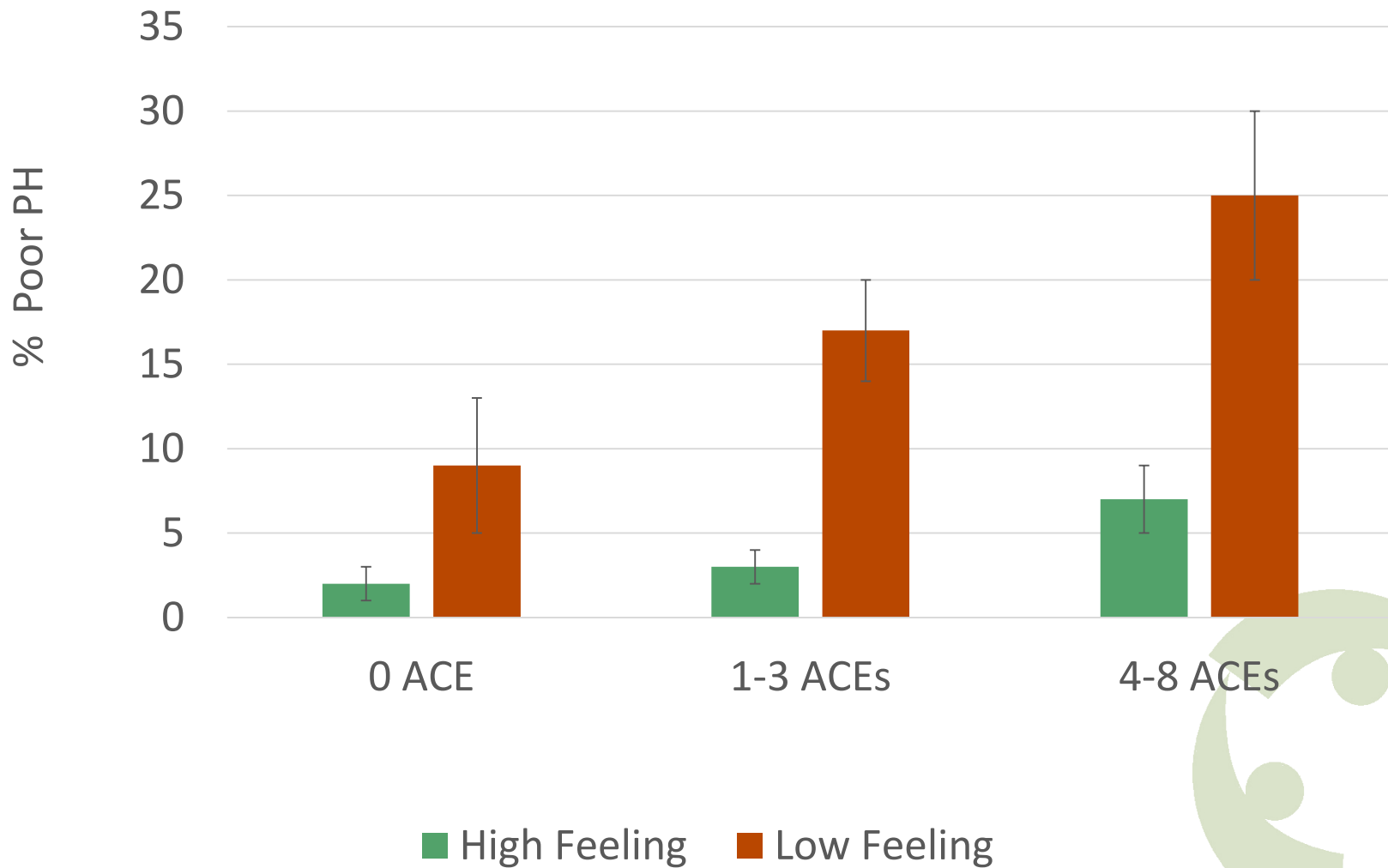
1. **Feeling** socially & emotionally supported, satisfied with life and hopeful
2. **Experiencing** hope plus two or more people who give concrete help when needed
3. **Community reciprocity** in watching out for children, intervening when they are in trouble, asking for help from friends and doing favors for one another (Community Reciprocity).



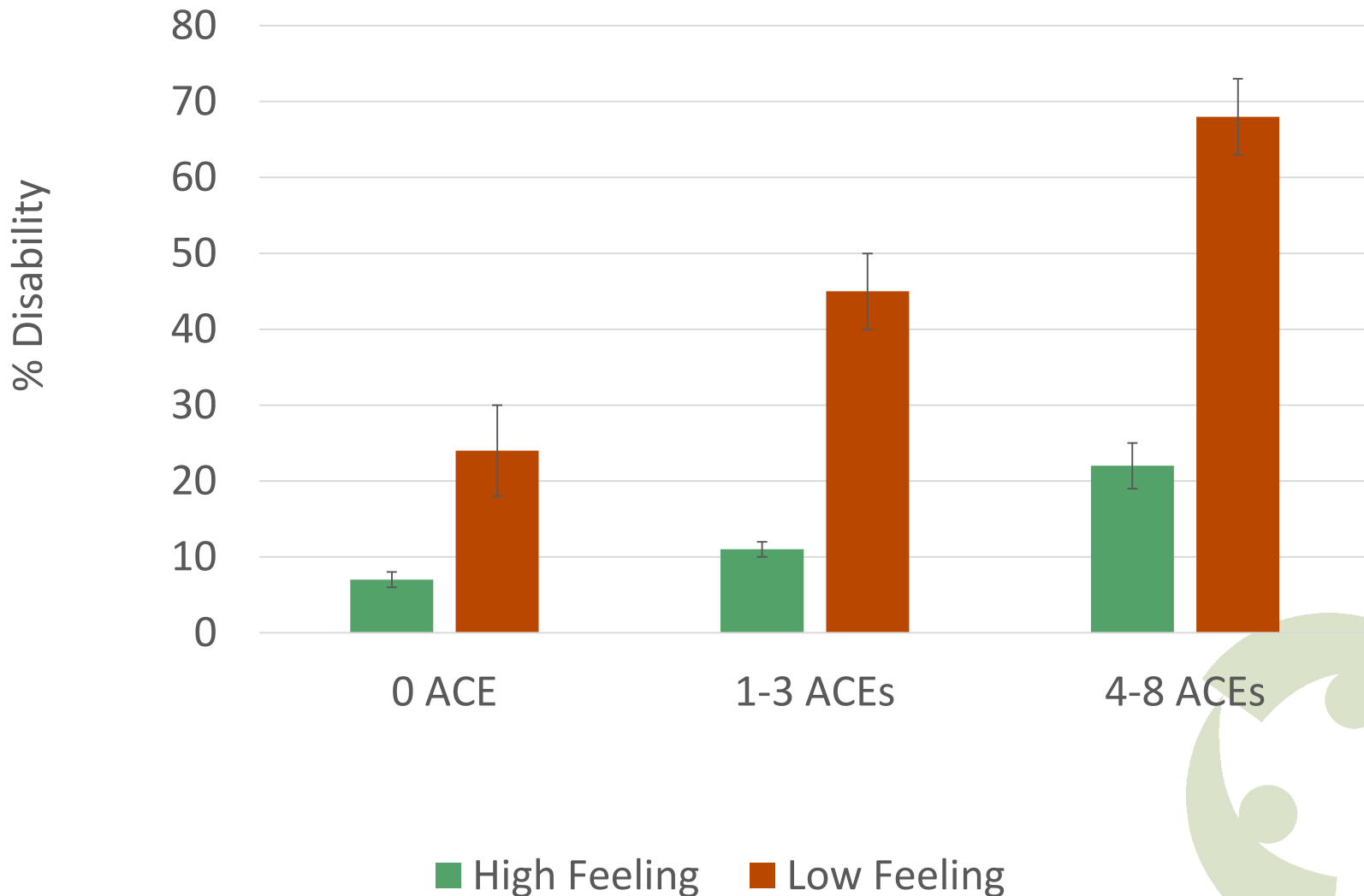
Poor Mental Health Days & Feeling Supported, Satisfied, Hopeful



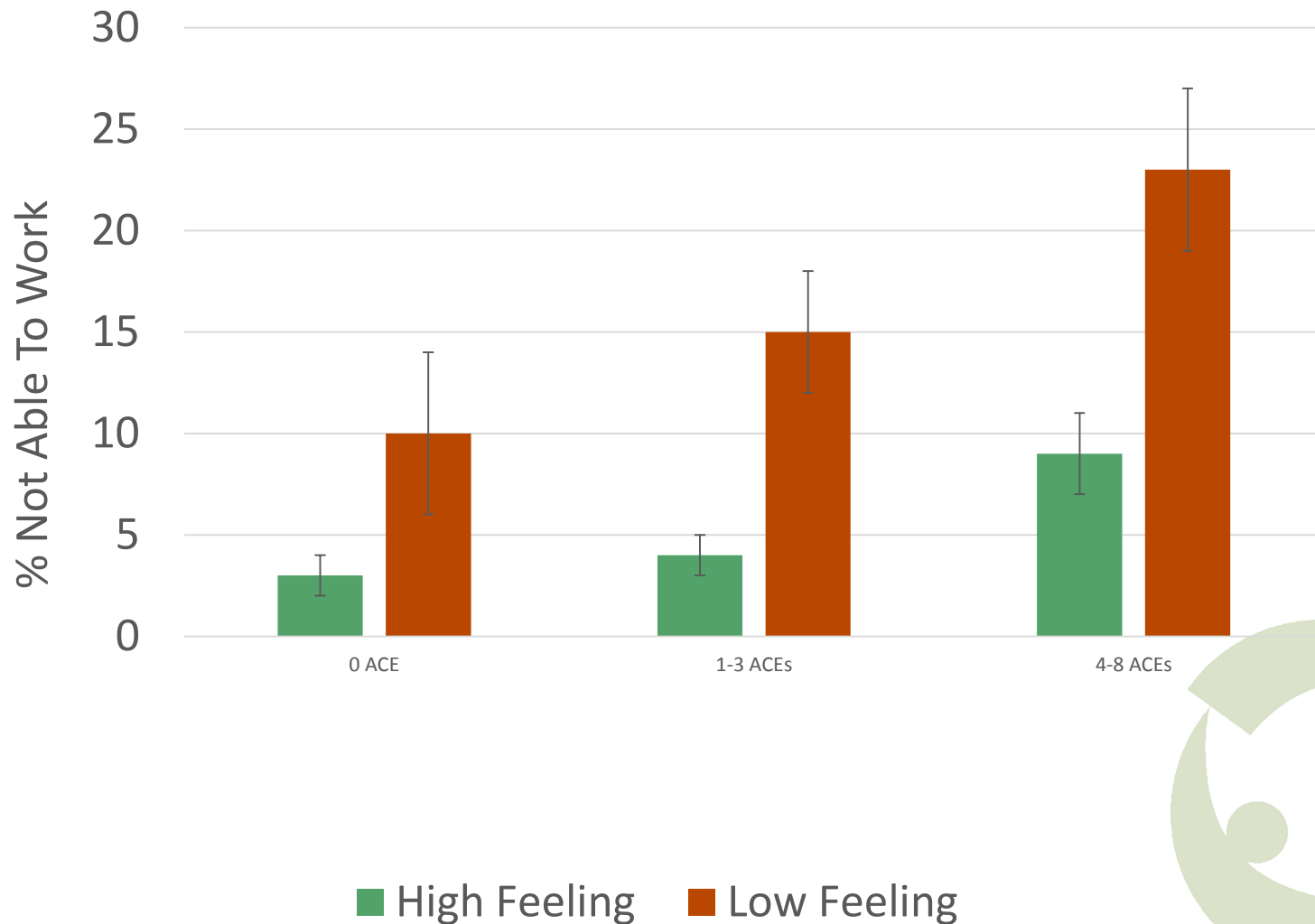
Poor Physical Health & Feeling Supported, Satisfied, Hopeful



Functional Disability & Feeling Supported, Satisfied, Hopeful



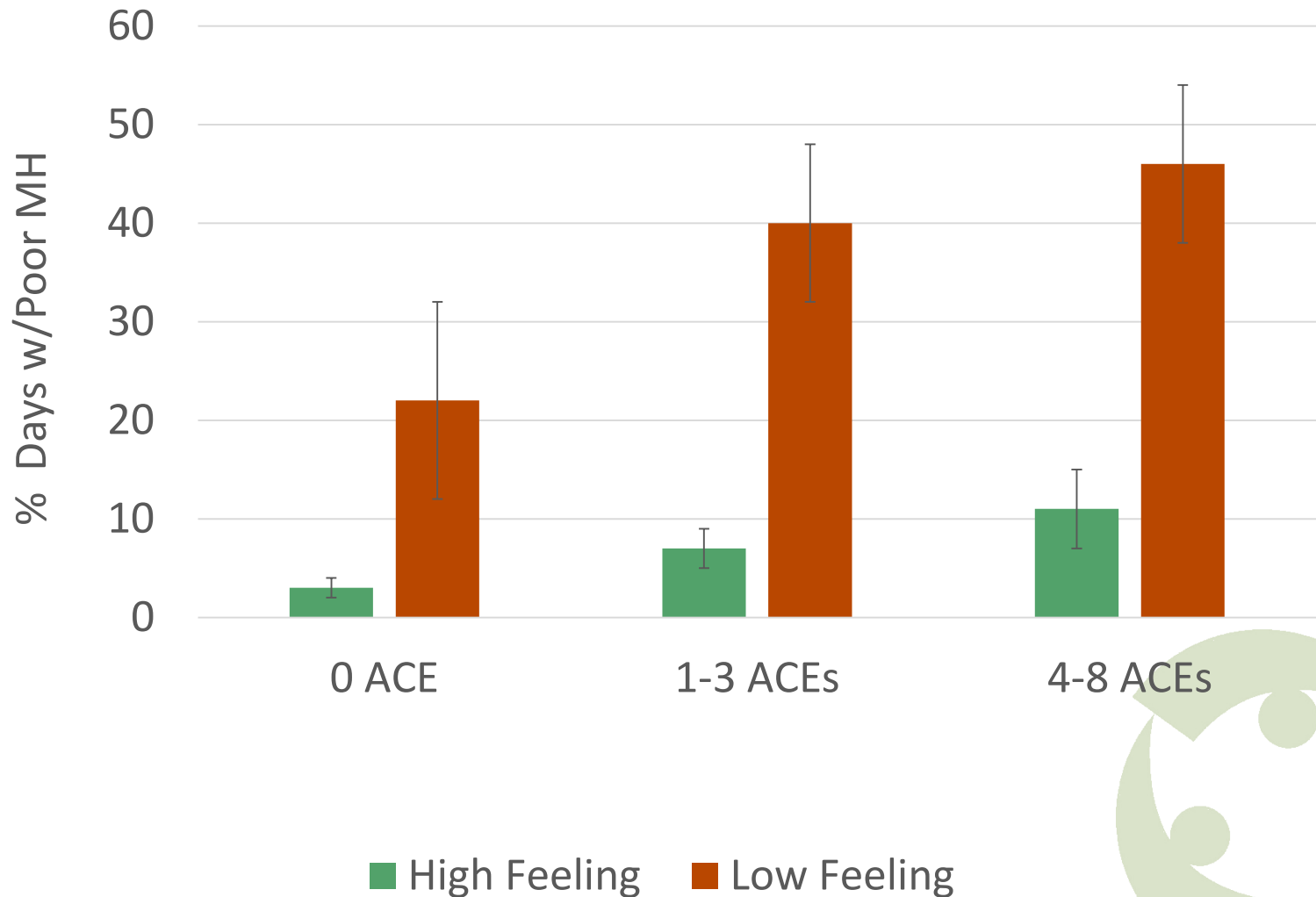
Report Not Being Able to Work & Feeling Supported, Satisfied, Hopeful



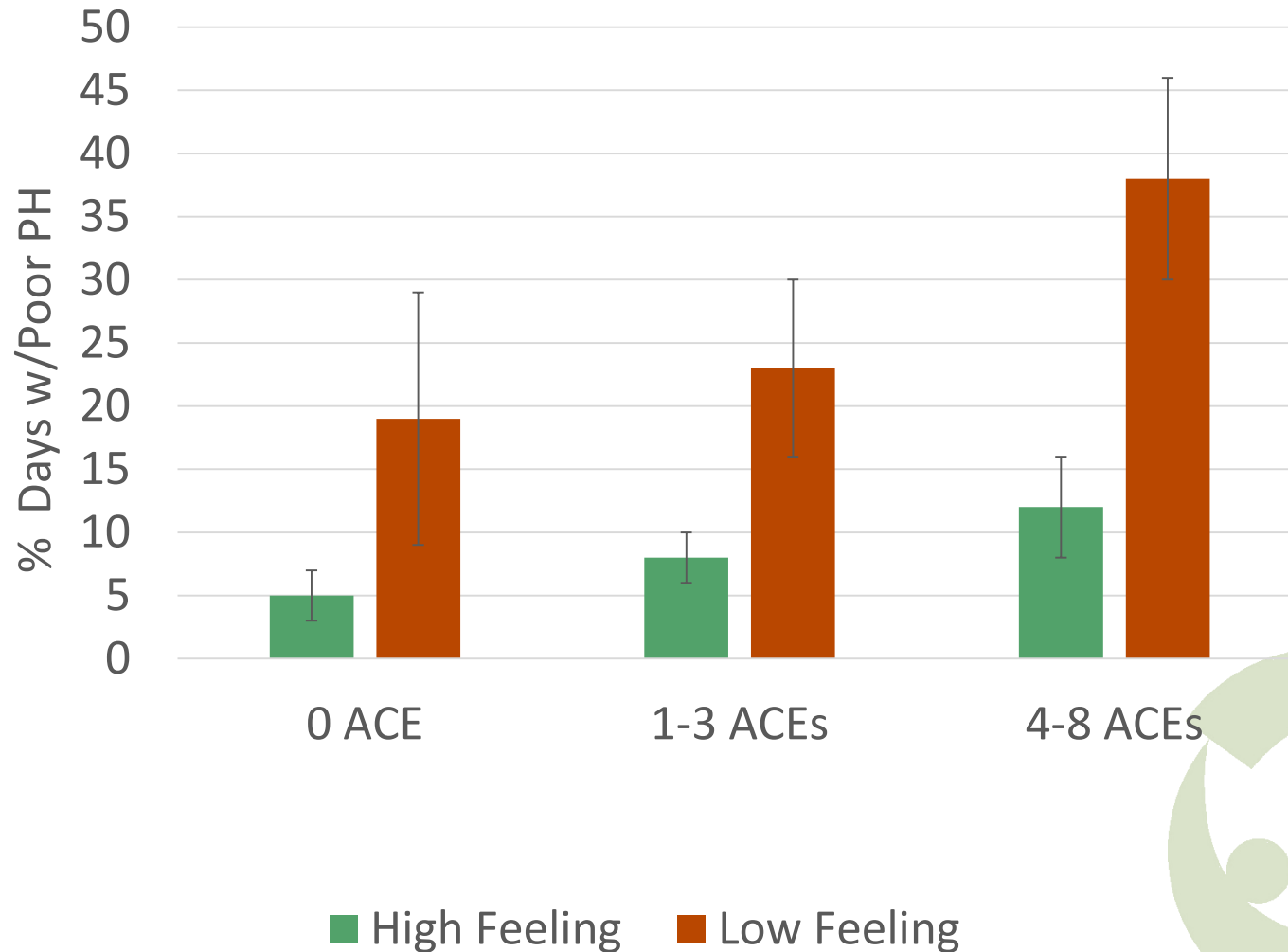
Experiencing Hope + At Least Two People Who Help



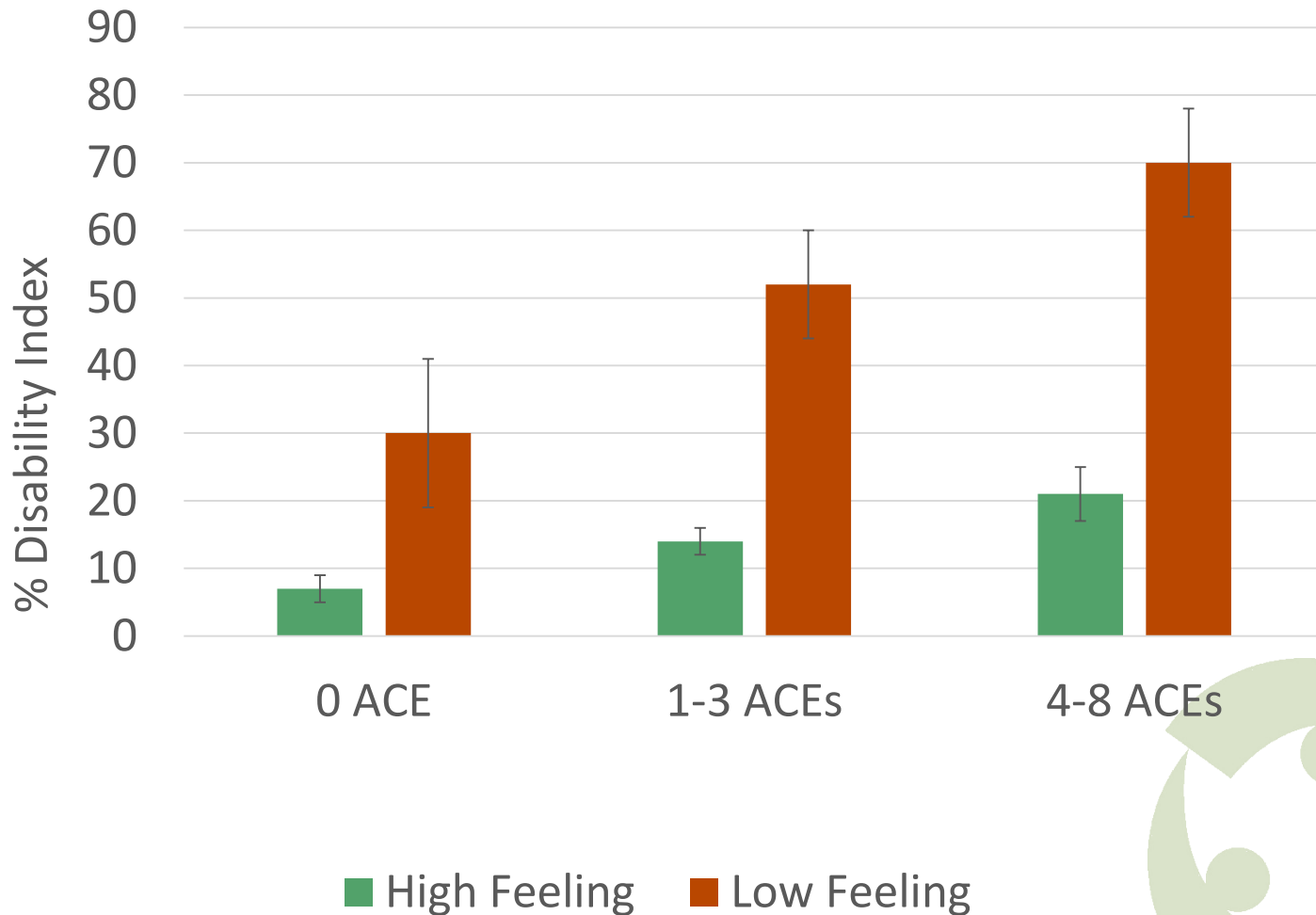
Poor Mental Health Days & Experiencing Help & Hope



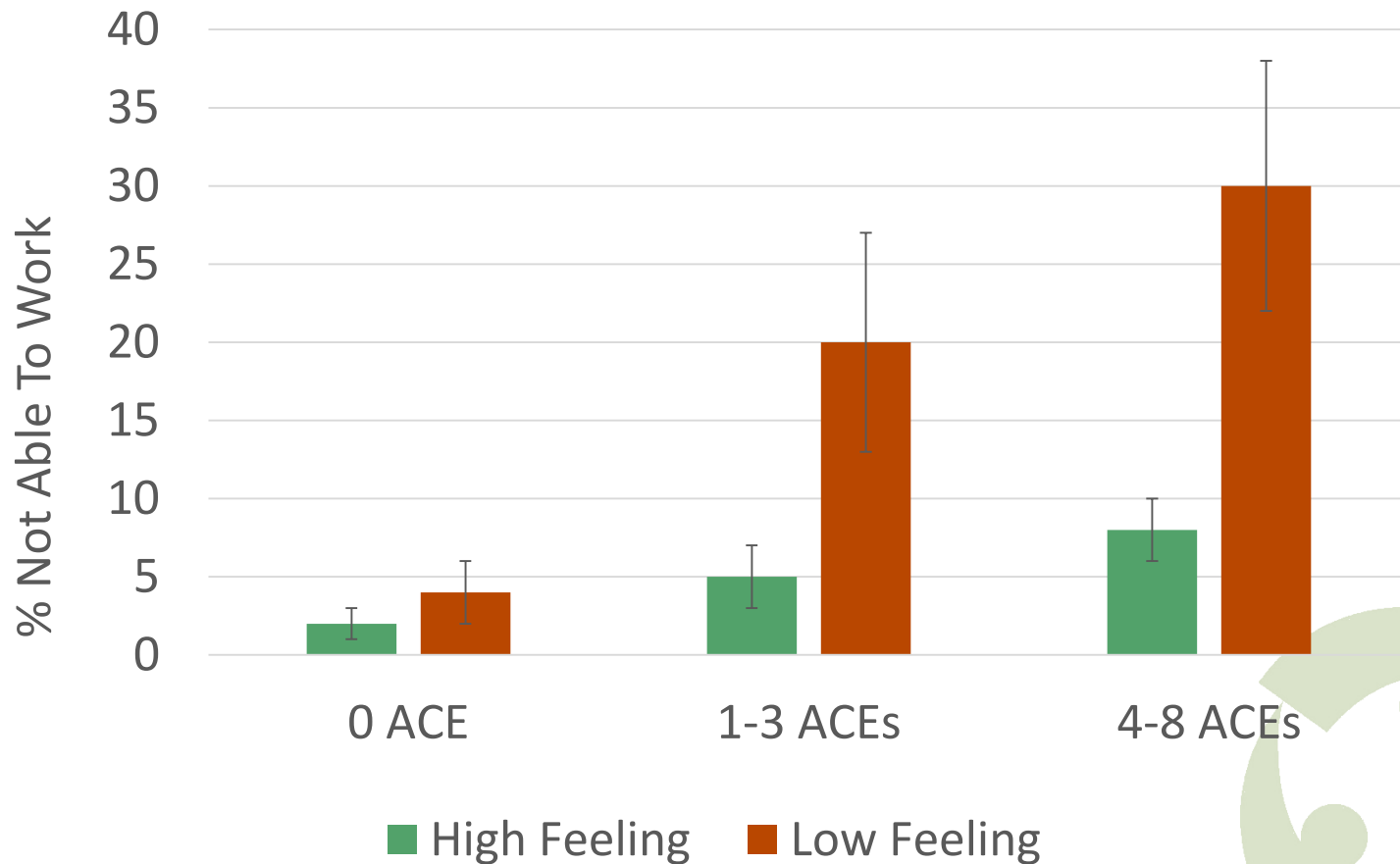
Poor Physical Health Days & Experiencing Help & Hope



Functional Disability & Experiencing Help & Hope



Report Not Being Able to Work & Experiencing Help & Hope



Community Reciprocity

- a. Watching out for children,
- b. Intervening when they are in trouble,
- c. Reaching outside friendship circle to seek help for friends
- d. Doing favors for one another (Community Reciprocity).

A Rising Tide Lifts All Boats

Mental Illness

Obesity

Alcohol consumption

Physical activity meeting recommended levels



Layer Up

Strengths in All 3 Resilience Factors: Population-Level Impacts

1. **Feeling** socially & emotionally supported, satisfied with life and hopeful
2. **Experiencing** hope plus two or more people who give concrete help when needed
3. **Community reciprocity** in watching out for children, intervening when they are in trouble, asking for help for friends and doing favors for one another (Community Reciprocity).



Protocol: Ask, Listen, Educate, Affirm

“We now know that childhood experience has a big impact on health throughout our lives. These ACE questions are important for us to work together to improve your health and the health of your family.”

When you know the ACE score, ask:

“How have these experiences affected you through your life?”

Support the next steps in the conversation, e.g.:

“People with high ACE scores often have to work harder in many aspects of their lives... how have you managed to do so well?” (Build from their answer to affirm their strengths and resilience.)

“I am sorry these things happened in your childhood. We didn’t know back then; this science is new. Now that we know about the power of ACEs, how would you like to use that information to improve the health of your family?”

Develop Learning Collaborative; Systematically Test Innovation

ACE-Informed Communication with Customers

Decision Aids Informed by ACE Impacts to Executive Function

Screen for Depression among High ACE Patients, Use
Combination to Improve Predictive Value of Health Testing

Consider Two Generations in Patient Interaction – Education &
Support Should Include Reducing the Odds of High ACE Scores in
the Next Generation

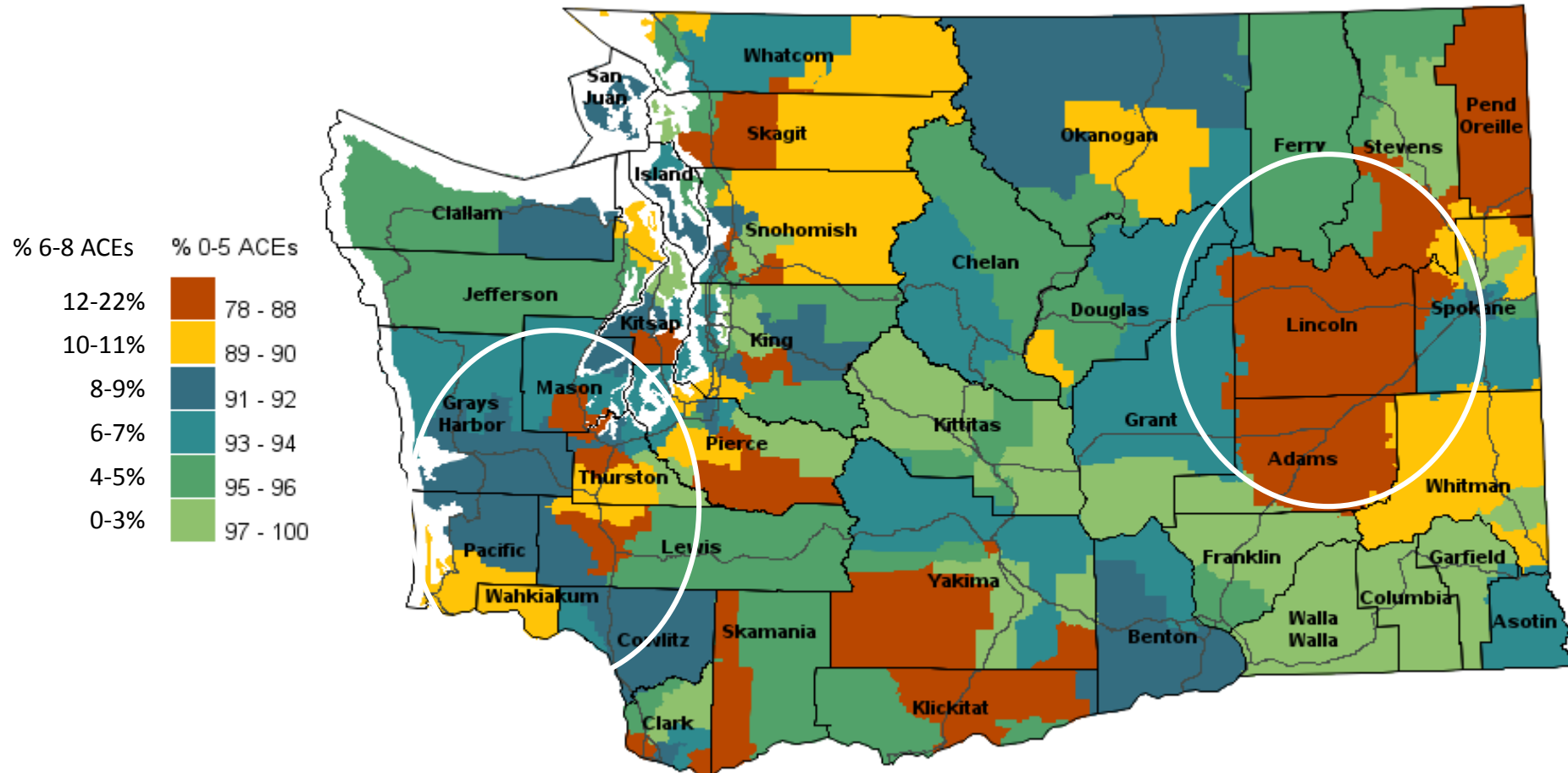


Differential Help & Resource Distribution

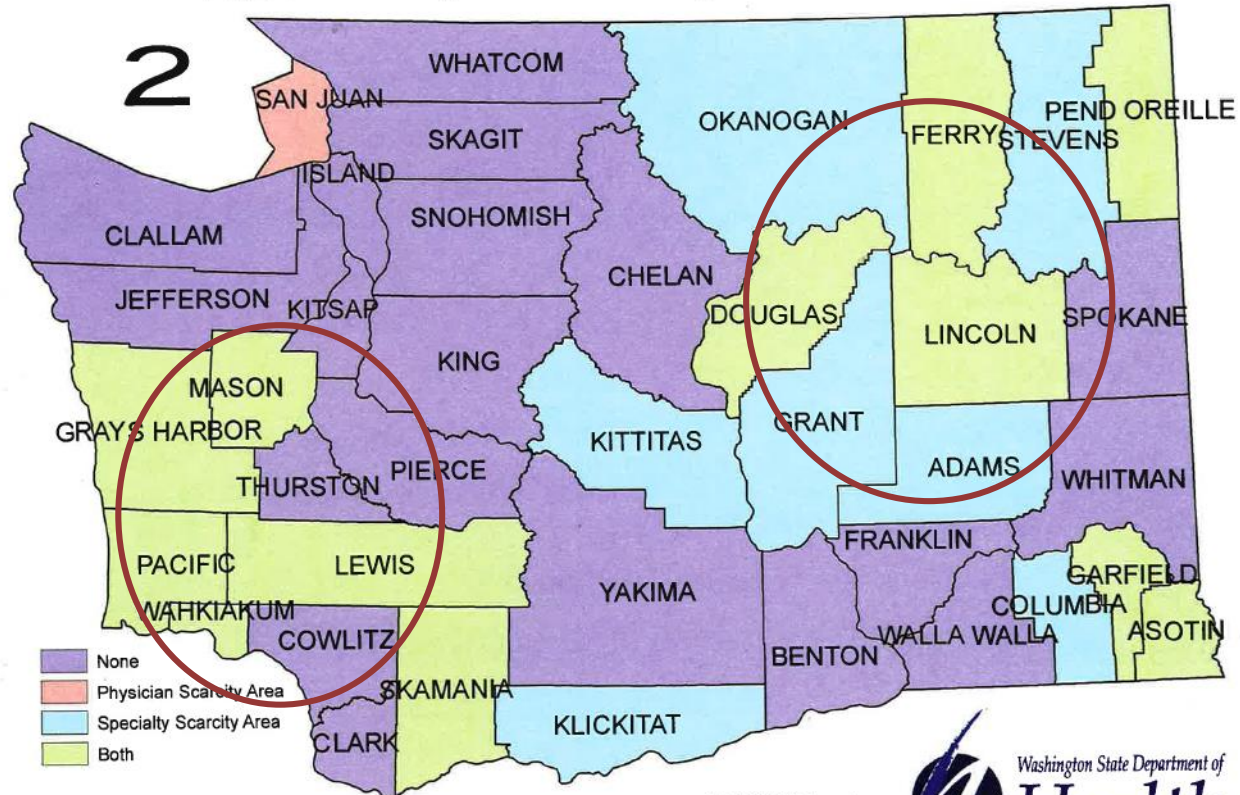


Population with ≥ 6 ACEs

Ages 18-64



Physician Scarcity Areas in Washington State, August 2007

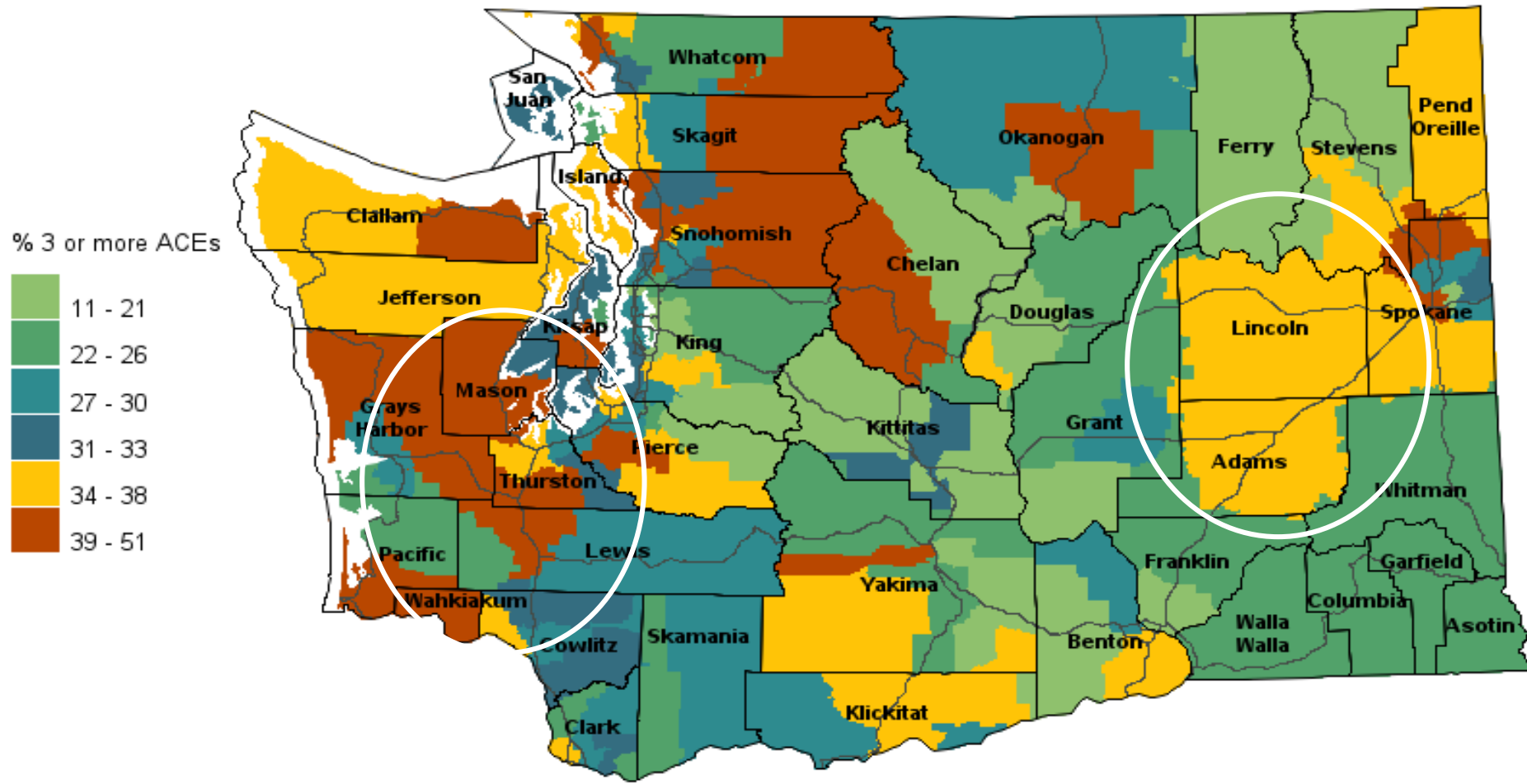


Created August 1, 2007 in ArcGIS 9.2
 Kristina Kernan, Research Analyst,
 Office of Community & Rural Health
kristina.kernan@doh.wa.gov
 Geo-data updated by craig.ericsson@doh.wa.gov

The Washington State Department of Health (DOH) does not warrant the accuracy, reliability, or timeliness of any information published in this map and assumes no responsibility for errors in the content of the information provided. Persons or entities that rely on any information obtained from this map do so at their own risk.



Population with ≥ 3 ACEs, Ages 18-64

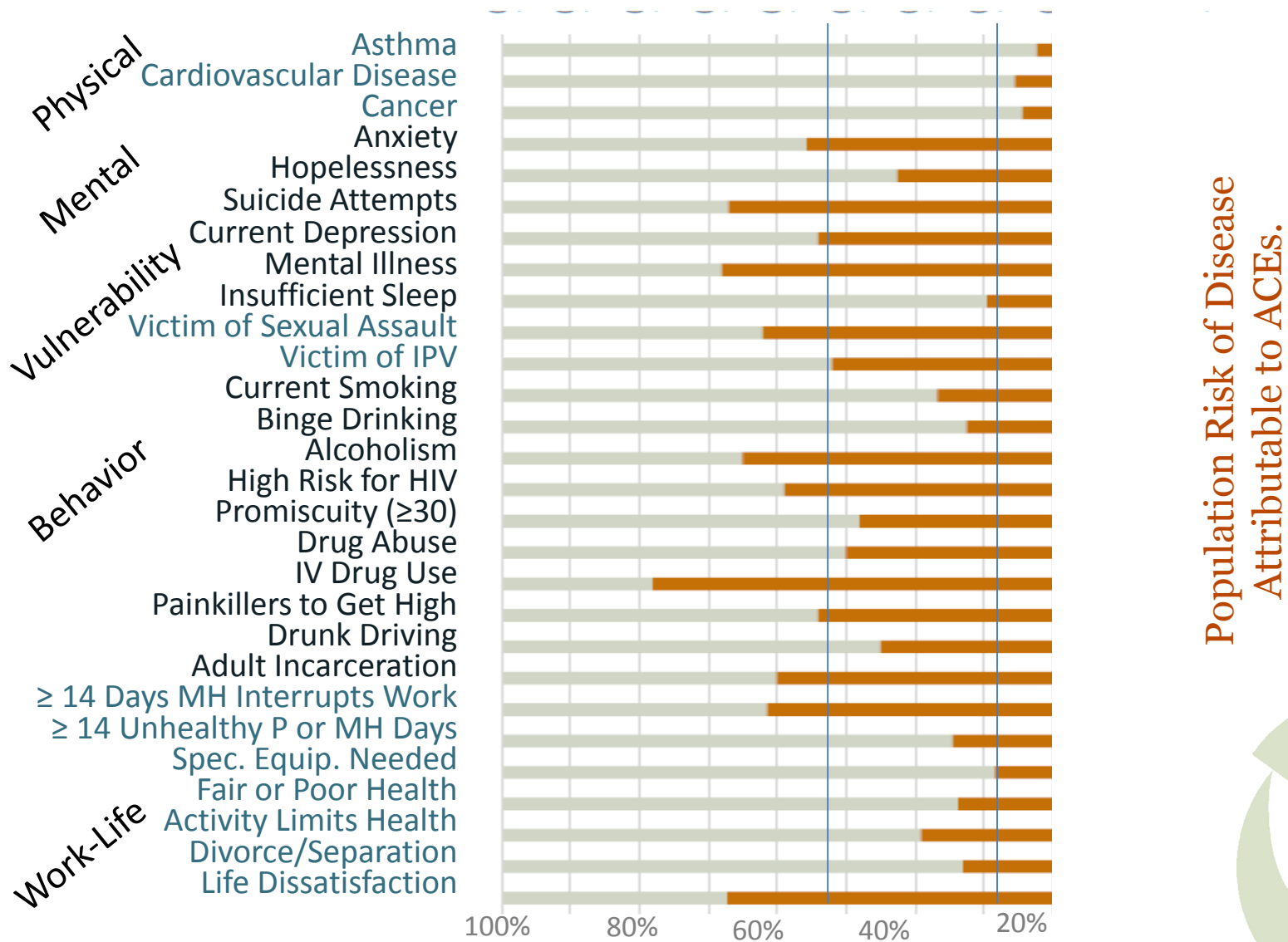


New Era of Workforce Investment

1. **Effects Whole Person and Context** of Family, Community & Society - Understands Behavior as Language of Adaptation
2. **Considers Experience Over Time** - Prevents Escalation of Toxic Stress; Interrupts Accumulation and Transmission
3. **Invests in Positive Adaptation** through Healthful Relationships, Cultural Integrity & Hope-filled Engagement
4. **Employs Dual Generation Strategies** - Intentional Supports are Sensitive to Age/Stage and History of Adversity
5. **Shifts the Status-Quo Interplay of Stress & Neurogenesis** throughout Peer & Universal Systems



The Magnitude of the Solution



Population Risk of Disease
Attributable to ACEs.

ACE
Prevention
Reliably
Predicts
Concurrent
Rate
Reductions
for All ACE-
Attributable
Problems





foundation for
healthy generations

CREATING ENDURING HEALTH EQUITY

Thank You

