



TRAUMA, NERVOUS SYSTEM & TRAUMA-INFORMED SUPPORT

# Adverse Childhood Experiences (ACEs)

---

Understanding the research, ACE scores, limitations, protective factors  
and what ACEs can — and cannot — tell us.

## The key idea

ACEs research identifies important population-level associations. A simple ACE count does not diagnose trauma, measure severity, explain every current difficulty or predict what will happen to an individual.

## What ACEs are

Adverse Childhood Experiences (ACEs) is a term used in research to describe categories of potentially harmful experiences during childhood. The original ACE study examined experiences such as abuse, neglect and household difficulties and explored associations with later health and wellbeing.

## The original ACE study

The landmark CDC-Kaiser Permanente study found graded associations between the number of reported ACE categories and a range of later health and social outcomes. It was an observational study, so it identified associations rather than proving that an ACE score directly causes a particular outcome.

## What an ACE score measures

A traditional ACE score counts how many categories of adversity a person reports, usually from a fixed list. It does not measure severity, duration, timing, protective relationships, current symptoms or the meaning of an experience to an individual.

## Population risk is not individual destiny

Higher ACE exposure is associated at population level with increased likelihood of some adverse outcomes. An individual's score cannot reliably predict what will happen to them. People with the same score can have very different experiences, supports and outcomes.

### Key distinction

An ACE score can describe exposure categories in research. It is not a diagnosis, a measure of trauma severity or a forecast of an individual person's future.

## Dose-response findings

Research often describes a dose-response pattern: as the number of ACE categories increases, the prevalence or risk of some outcomes also increases across groups. This statistical pattern should not be interpreted as a deterministic biological dose in an individual person.

## Protective factors and resilience

Supportive relationships, safe environments, material resources, community connection and other protective factors can influence development and wellbeing. Resilience is not a fixed personality trait and should not be used to imply that people ought to cope with adversity without support.

## ACEs and trauma are not interchangeable

An ACE category is an exposure measure used in research. Trauma refers to the impact of experiences and is not determined by a checklist score. Someone can experience trauma that is not included in a traditional ACE questionnaire, and an ACE exposure does not automatically mean a person has a trauma-related disorder.

## Avoid simplistic brain claims

Statements that ACEs permanently 'rewire' or 'damage' the brain often oversimplify developmental science. Adversity can influence developmental pathways, while development remains dynamic and affected by many interacting factors.

### Evidence note

Chronic stress and adversity can affect development and health, but claims that trauma permanently 'rewires' or 'damages' the brain are often more certain than the evidence supports.

## Screening debates

An ACE questionnaire measures reported exposure, not current trauma symptoms. Routine screening may be unhelpful if scores are interpreted deterministically, sensitive questions are asked without purpose or services lack a meaningful response pathway.

## Universal trauma-informed practice

Respectful communication, privacy, choice, accessibility and collaboration can be offered without requiring disclosure of childhood adversity. A person should not have to produce a high ACE score to receive trauma-informed support.

## Safeguarding

Historical adversity and current safeguarding risk are different questions. A past ACE does not automatically mean current danger; a current disclosure may require action under safeguarding procedures regardless of an ACE score.

## Clinical assessment

If someone is experiencing mental or physical health difficulties, assessment should focus on their current presentation, needs, risks, strengths and preferences. An ACE score should not replace appropriate clinical assessment or evidence-based care.

## Example

Two people both report four ACE categories. One currently has significant trauma-related symptoms and needs specialist assessment; the other does not. Their identical scores do not establish identical needs, diagnoses or treatment.

## Practical check

Am I using ACEs as population-level research rather than an individual prediction tool? Have I separated exposure from symptoms and diagnosis? Am I avoiding deterministic language? Is there a clear reason for asking about adversity, and is appropriate support available if someone discloses?

## References & Further Resources

These resources provide useful starting points for understanding ACE research, trauma-informed practice and evidence-based support.

### CDC

Provides background on the original ACE research and subsequent public-health work on adverse childhood experiences, prevention and protective factors.

### NHS England

Provides resources relevant to trauma-informed care, safeguarding, personalised care and improving experiences within health services in England.

### NICE

Publishes evidence-based clinical guidance. Relevant guidance helps ensure that current symptoms and conditions are assessed and treated on their own evidence base rather than inferred from an ACE score.

### UK Trauma Council

Provides evidence-informed resources on childhood trauma and traumatic bereavement, including accessible explanations of research and implications for support.

### How to use these resources

ACE research is most useful for understanding patterns of adversity and health across populations. It should not be used as a stand-alone diagnostic, risk-prediction or treatment-selection tool for an individual. Current safeguarding, clinical and professional guidance should be followed where relevant.