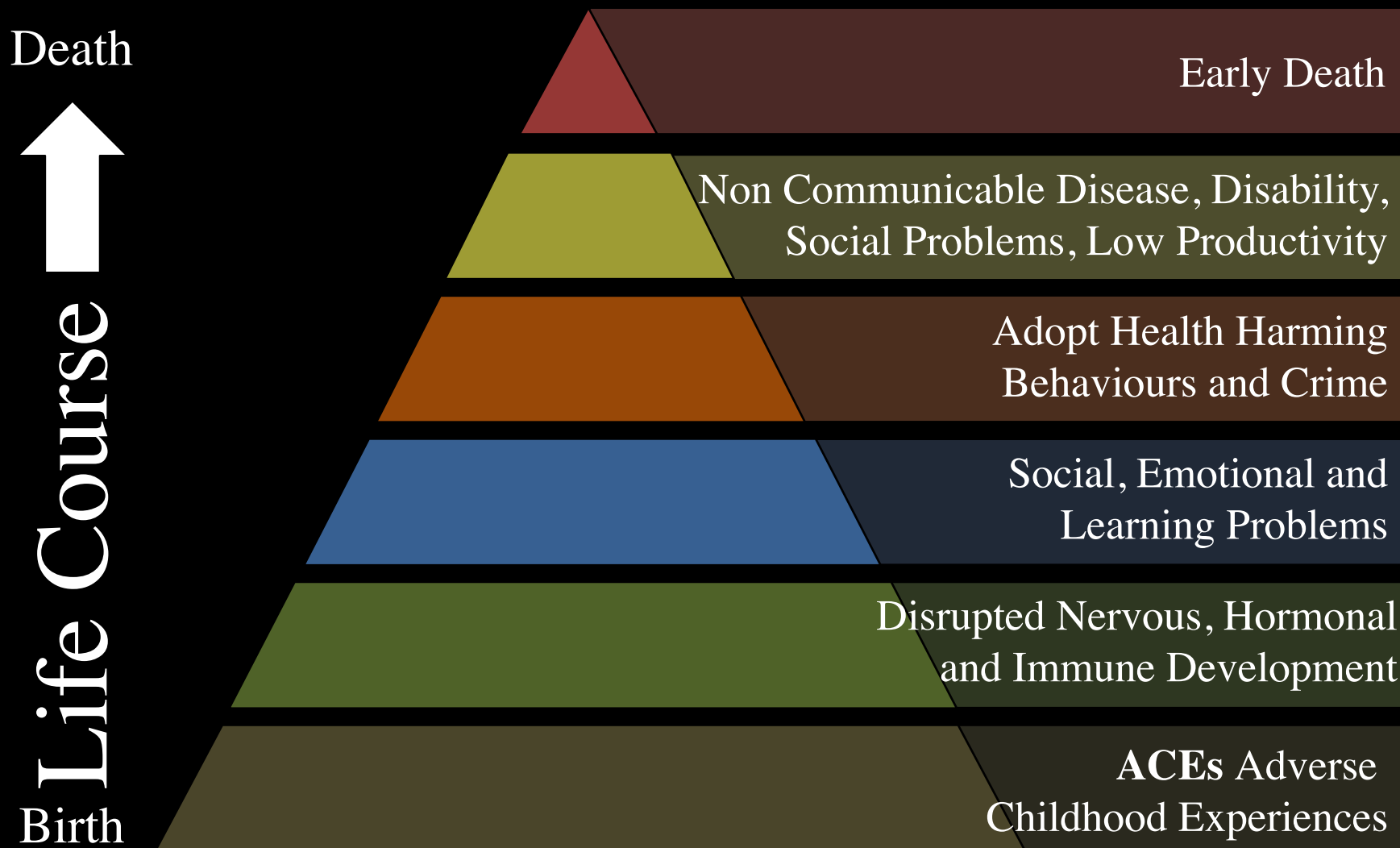


# Adverse Childhood Experiences and Alcohol

## Addressing the roots of ill health and anti-social behaviour



# Adverse Childhood Experiences ACEs - The Life Course

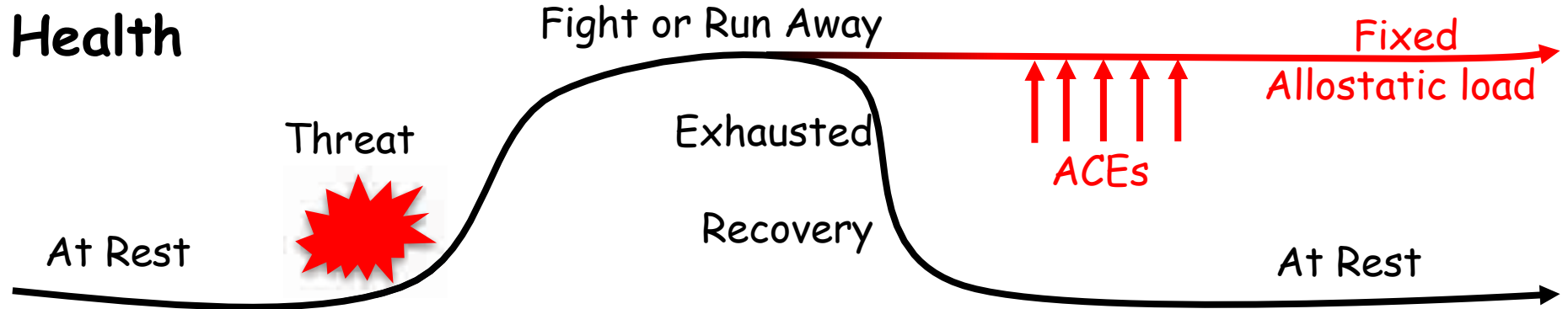


# Early Life Experience and The Brain



## Critical Years

- First 2 years - baby's brain grows from 25% to 80% of adult size
- Development continues in childhood learning *empathy, trust, community*



## Chronic Stress from ACEs

- Violence - over-develop 'life-preserving' brain

***NEUTRAL CUES LOOK THREATENING***

- School – anxious, disengaged, poor learner

# Alcohol & Development of Violent Individuals

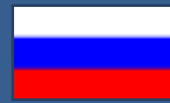
- Early life Stress & Genetic Variation
- ‘Instinctive’ Tendencies  $\leftrightarrow$  Executive Control
- **Alcohol alters the balance**
- Laboratory controlled and in situ studies
  - Reduced self-control
  - Poor information processing
- **Learnt & Expected Behaviour**

# How many people suffered ACEs 0-18 years old?

European Survey of students 18-25 years old (n=10,696)

ACE area	Wales	England	Europe
Physical abuse	17%	15%	12.1%
Sexual abuse	10%	6%	7.1%
Domestic violence	16%	13%	10.2%
Parental separation	20%	24%	18.3%
Emotional neglect		11.8%	11.8%
Emotional abuse		8.0%	8.0%
<b>Household member:</b>			
Depressed/suicidal	14%	12%	12.1%
Alcoholic	<b>14%</b>	<b>10%</b>	12.1%
Incarcerated	5%	4%	4.1%
Street drug user	5%	4%	4.1%





Eight Nation Study of ACEs in eastern Europe (18-25 years)

Compared with people with no ACEs (47.4%), those with 4+ ACEs (7%) were:

- 2 times more likely to be physically inactive
- 3 times more likely to be a current smoker
- 3 times more likely to have had sex under 16 years
- 6 times more likely to have used drugs**
- 10 times more likely to be problem drinkers**
- 4.9 times more likely to have attempted suicide

INDEPENDENT OF POVERTY

# Nation Study of ACEs in Wales (18-69 years)

Compared with people with no ACEs (53%), those with 4+ ACEs (14%) were:



## Preventing ACEs could reduce

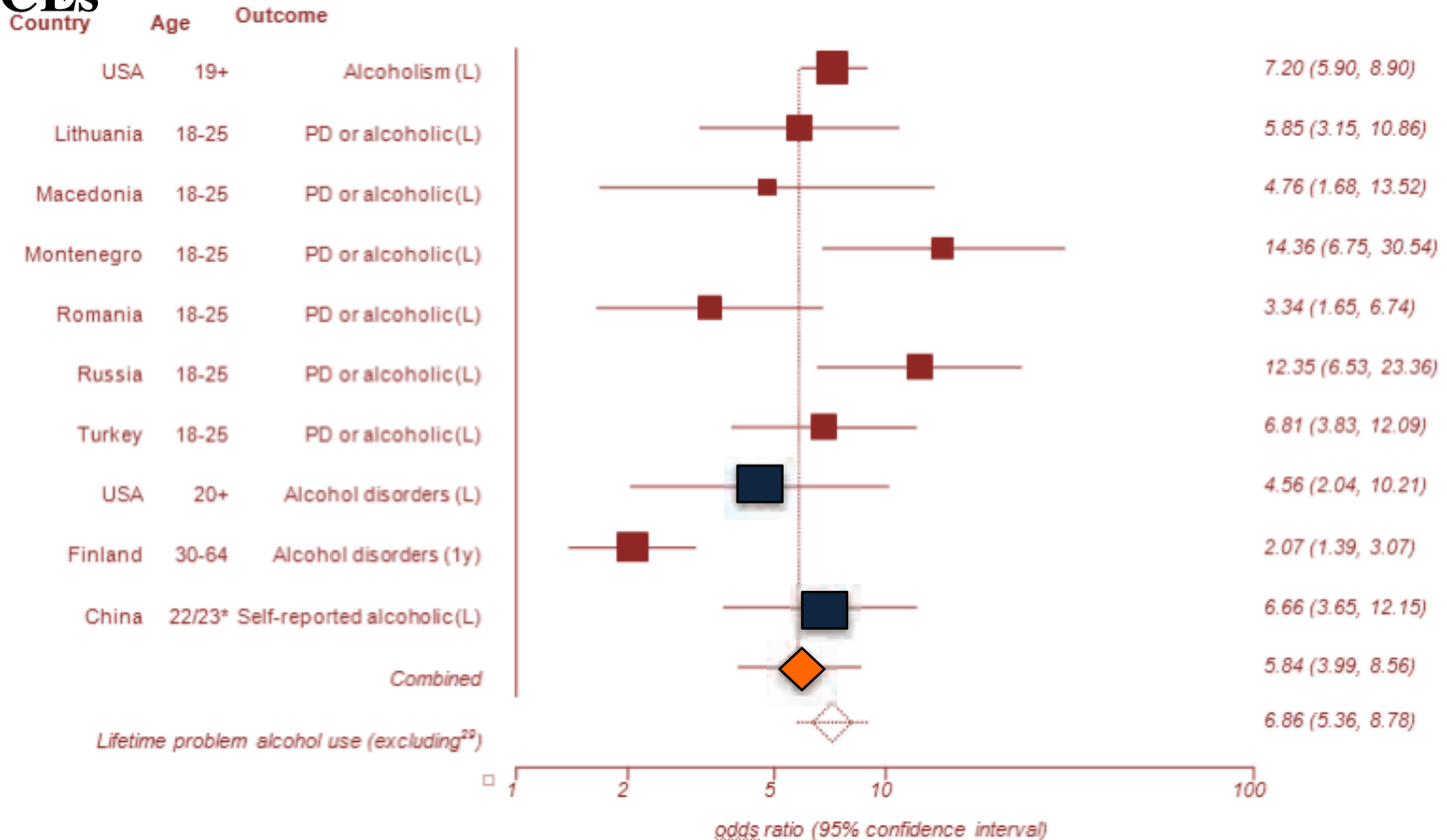


INDEPENDENT OF POVERTY

# ACEs and Problematic Alcohol Use

## Summary meta-analysis plot (random effects): 4+ ACEs v 0

### ACEs



1y = last 12 months; L=lifetime; \*mean for males/females.  $I^2=79.7%$  (95%CI: 60.0% to 87.5%); Cochran Q 44.399865 (df=9),  $P<0.0001$ . Lifetime problem alcohol use  $I^2=37.6%$  (95%CI: 0% to 70.0%); Cochran Q 12.821062 (df=8),  $P=0.1182$

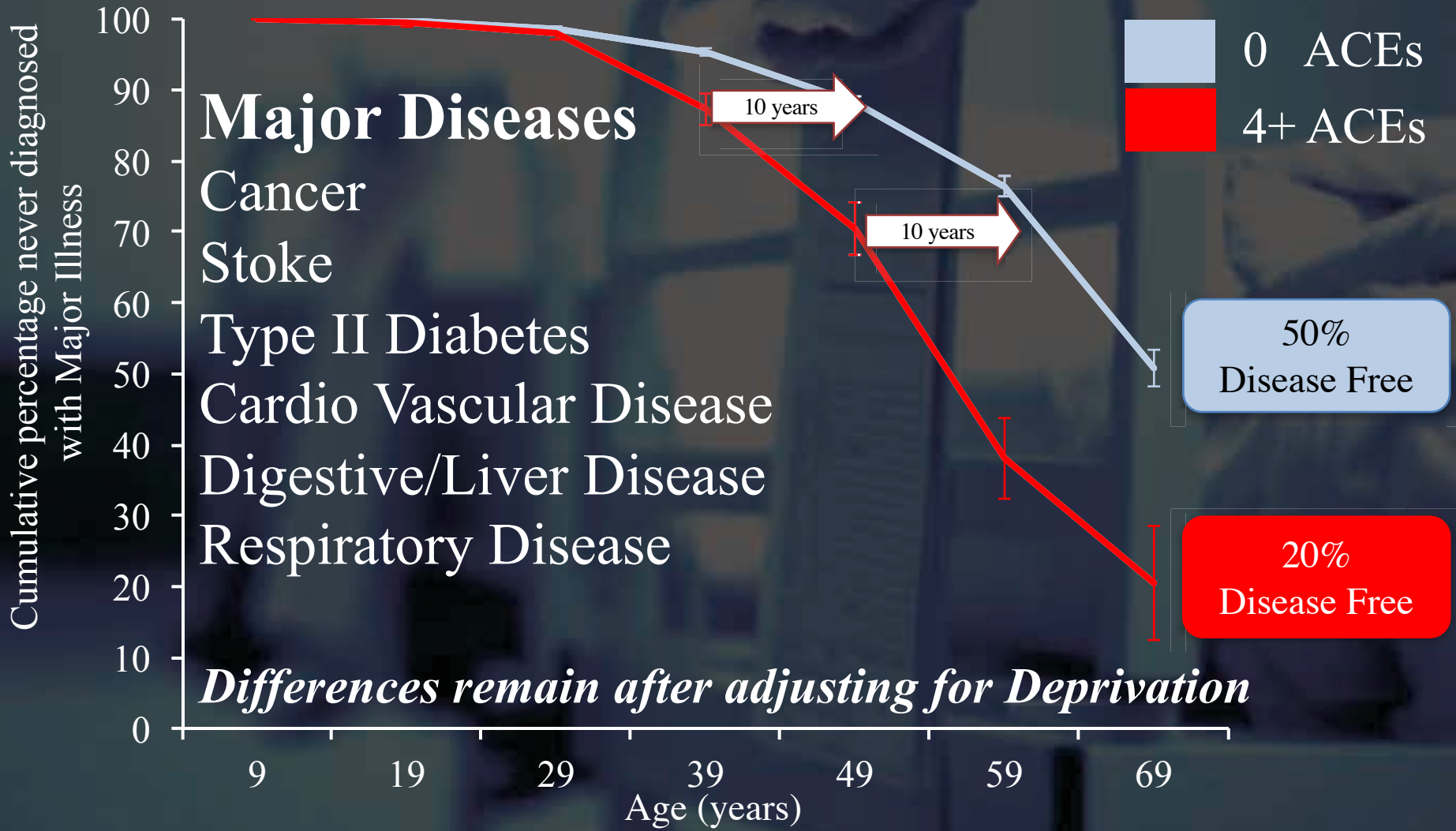


# Over the past two weeks, compared to people with no ACEs, those with 4+ ACEs were

- 3 times more likely to have never or rarely felt relaxed
- 4 times more likely to have never or rarely felt close to other people
- 3 times more likely to have never or rarely been thinking clearly
- 3 times more likely to have never or rarely dealt with problems well
- 2 times more likely to have never or been able to make up their mind
- 2 times more likely to have never or rarely felt optimistic about the future
- 3 times more likely to have never or rarely felt useful

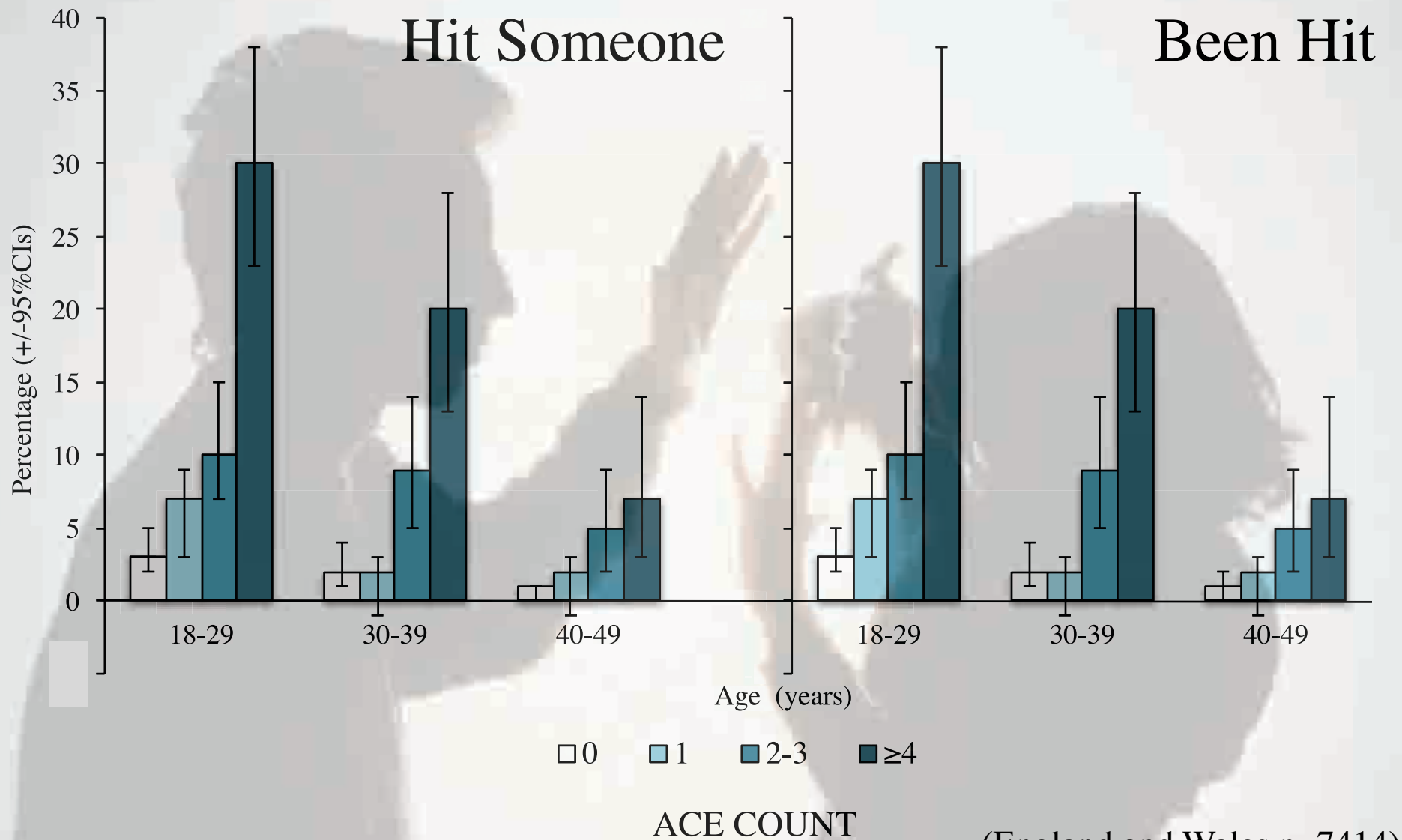
*Poor Mental Health, Vulnerability, Crime and Incarceration are strongly linked*

# England: Individuals Never Diagnosed with a Major Disease by Age (%)



Aged 18 to 69 years; (n = 3,885) Bellis et al, Journal of Public Health, 2014

# Exposure to Violence in Last 12 months



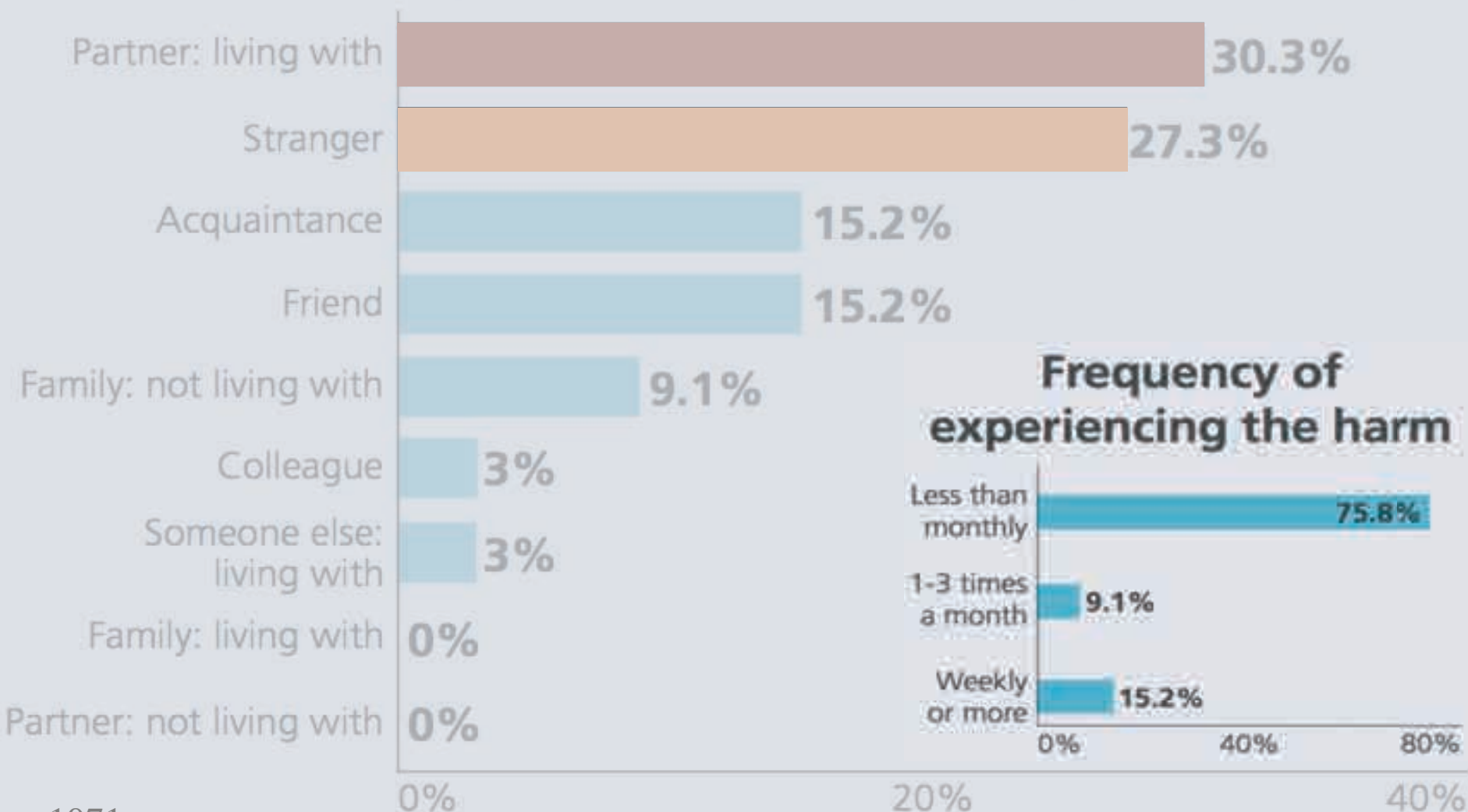
(England and Wales n=7414)



# Physically Assaulted

Been physically assaulted due to someone else's drinking

## Relationship to drinker causing the harm



# Alcohol and Adverse Childhood Experiences

- **Child Abuse** 1/3 of fatal incidents by individuals who have been drinking
- **Intimate Partner Violence** increases with alcohol outlet density
- **Parental Separation** increases with alcohol consumption
- **Child Sexual Abuse** – parental alcohol dependency and use of alcohol on victims
- **Suicide Intoxication** increases risk up to 90 times compared to abstinence
- **Incarceration** - >1/3 of prisoners had alcohol problems the year before





Based on [savethechildren.mx](http://savethechildren.mx)

# Building Resilience - Helping people cope with ACEs

*Avoid damaging behavioural and physiological changes in response to chronic stress*

Feel you can overcome hardship and guide your destiny

Grounded in cultural traditions 'Connected'

Equipped to manage your behaviour and emotions

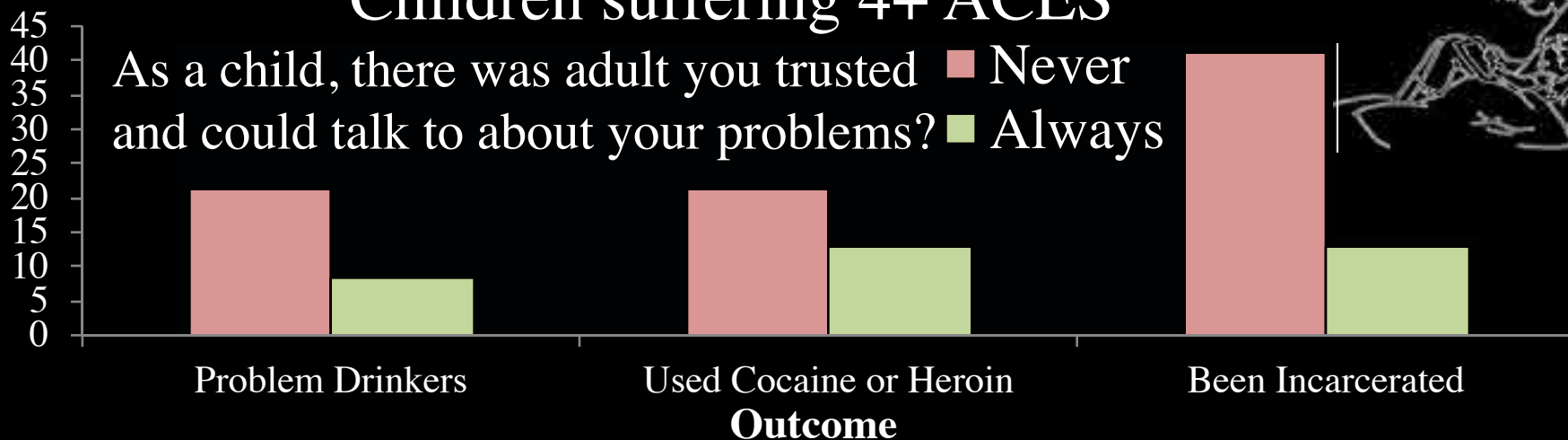
One or more stable, caring child-adult relationship

## Children suffering 4+ ACEs

As a child, there was adult you trusted and could talk to about your problems?

■ Never

■ Always





# Birth and Prevention



**SEEK™**  
Safe Environment for Every Kid

## Safe Environment for Every Kid

- Primary care professionals practical, evidence-based approach to address psychosocial problems:
- Alcohol and Drug abuse
- Parental depression
- Major stress
- Intimate partner violence
- Food insecurity
- Discipline challenges

### STRESS

Don't let stress affect your family.

You need to feel good about yourself to be a good parent.

*Two randomized controlled trials promising - lower rates of child abuse and neglect and harsh parenting*

# Early Years Support and Prevention



## Nurse Home Visiting

Improve parent skills, maternal support  
Often younger, poorer, new mothers

## Benefits

↓ **Child maltreatment**



## Parenting Programmes

Social worker/Nurse/Other improving  
parents' skills, knowledge and confidence

## Benefits

↓ **Child maltreatment**



## Preschool Enrichment

Social, emotional, educational skill  
development often with parenting skills

## Benefits

↓ **Child maltreatment**

# Multi-agency First 1000 Days Service

# ACEs in Challenging High Schools

*Example from Washington State Family Policy Council*

- **ACEs**
  - 1/3 of class had 4+ ACEs
  - Best predictor of health, attendance, behaviour
  - Educational success related more to ACEs than income
- **Change**
  - Public Health and others inform staff about ACEs
  - Move away from automatic punishment



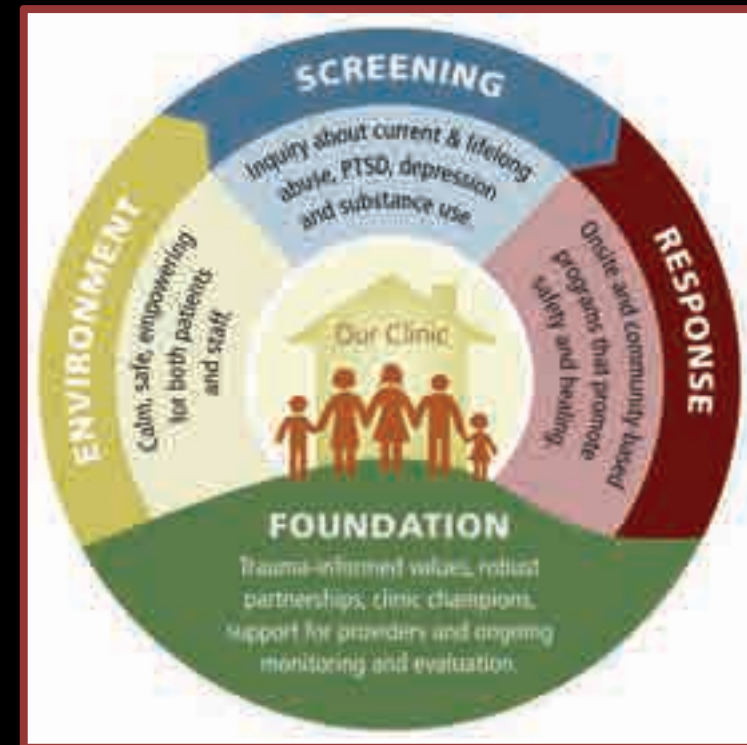
# ACEs - A life course approach to Adult ill health



- Underlying reasons for accessing health care?
- **Pre-examination** → Self-completed ACE survey
- **At examination** → *How have these [ACEs] has affected you in later life?*
- Following year attendances (**Preliminary Results**)
  - General Practice ↓35%; Emergency Department ↓11%
  - Routine enquiry increases visibility not trauma?
- **What is Criminal Justice - Recidivism equivalent?**

# Trauma Informed Practice

- **Workforce Development**
- **Trauma Screening**
- **Practice Change**
- **Inter-Agency Working**





“THINK THROUGH THE EYES OF THE CHILD”,  
DURHAM CONSTABULARY

- **Policing Teen Brain/Connecting Cops and Kids (USA)**
  - From criminalising teen behaviour to recognising a trauma response
  - Combined intelligence, Early intervention prior to ‘trigger’ crime
  - Reported juvenile arrest ↓65% and runaways ↓80%
- **Lancashire Police**
  - Training staff to be ACE aware through their early action programme
- **West Midlands**
  - Data software to identify people with 4+ ACEs
  - Provide support for them and their families
- **Wales**
  - National Offender Management – ACE make connections to their past and influence their parenting

# Safe Babies Courts - *Who is being sentenced?*

*The judges in early childhood courts who have learned about this science of childhood adversity have turned their courts upside down and inside out.*



- Early comparisons to those in traditional family court, infants and toddlers
  - end up in a permanent family two to three times faster
  - they leave foster care a year earlier
  - they end up with their own family nearly twice as often

# *Breaking Inter-generational Cycles of Crime and Ill health*

## *South Wales Memorandum of Understanding*

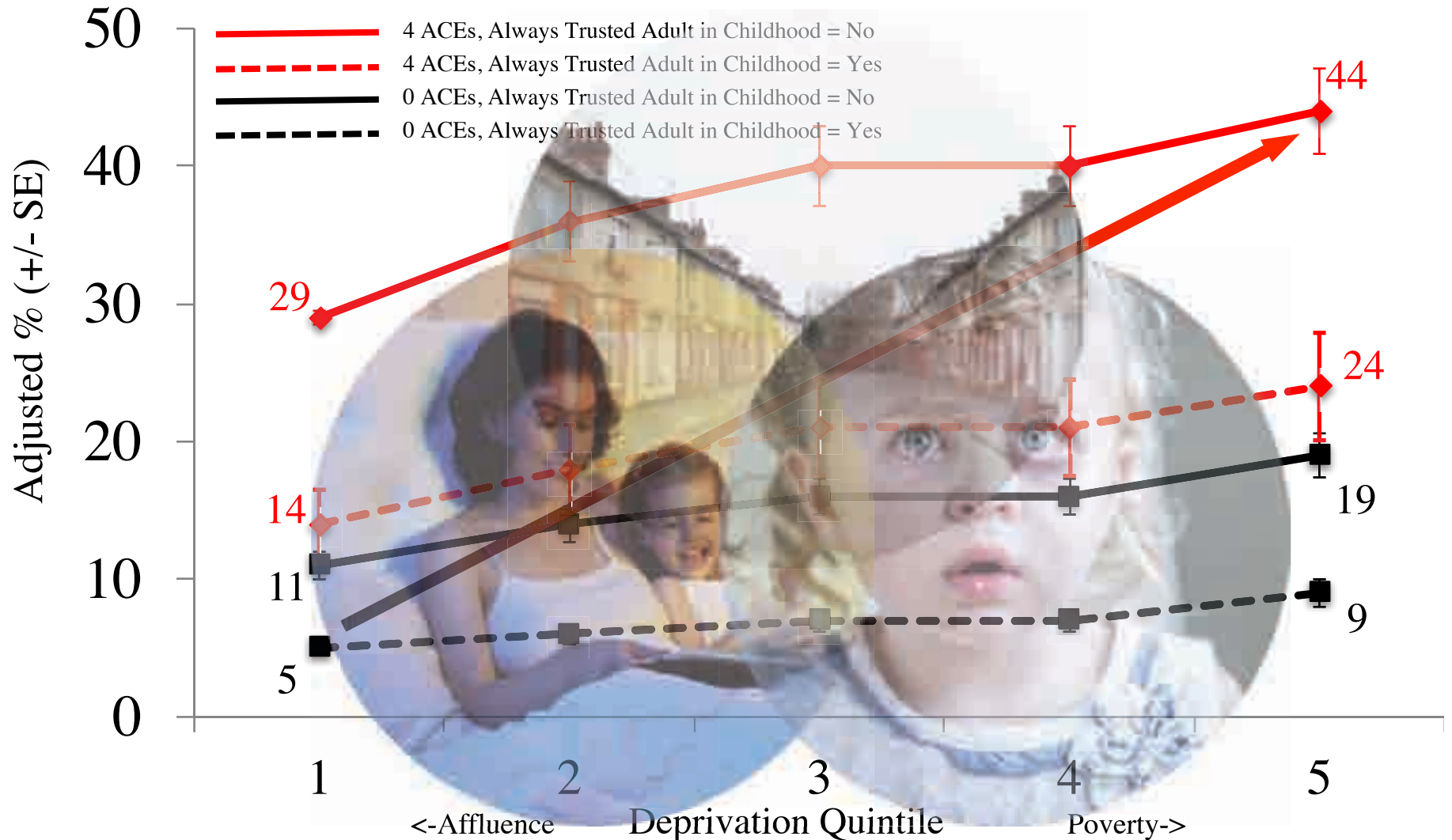
*Wherever possible we will focus our efforts on ensuring that, from the earliest possible age, individuals are supported to follow a health benefiting and crime free life course...*

- >80% police contact complex welfare, public safety & vulnerability
- Just 11% referrals  
Police → Social services result in action
- Interventions late and expensive
- Test police and partners early identification and response to vulnerability using ACE lens



# Vulnerability - Poor Mental Well-being

## *Deprivation ACEs and Resilience*



*Mental Well-being measured using the short Warwick Mental Well-being Scale (Low MWB >1 standard deviation below the mean)*

# Adverse Childhood Experiences ACEs - The Life Course

Mend Broken  
Adults  
£ € ₪

Health &  
Social,  
Educational and  
Criminal Justice  
**Investment in  
Early Life**

Build  
Stronger  
Children

Alcohol Price, Marketing, Availability

Early Death

**Non Communicable Disease**, Disability,  
Social Problems, Low Productivity

Adopt Health Harming  
Behaviours and **Crime**

Social, Emotional and  
Learning Problems

Disrupted Nervous, Hormonal  
and Immune Development

**ACEs** Adverse  
Childhood Experiences

**Pre-conception and Fetal  
Epigenetic effects**



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