Adverse Childhood Experiences in London

Investigating ways that Adverse Childhood Experiences and related concepts of vulnerability can help us to understand and improve Londoners' health.

This report discusses adverse childhood experiences including trauma and abuse.

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Executive summary

The negative impacts that experiencing adverse events in childhood can have on a person's neurological, emotional and social development are now well-documented. Multiple academic, clinical and social service organisations are looking at psycho-social and physiological needs in adults through the lens of adverse childhood experiences (ACEs) and are advocating 'trauma-informed' approaches to service delivery. A better understanding of risk and protective factors, and of opportunities for preventing ACEs in children today are being identified as emerging priorities.

This report set out to explore Adverse Childhood Experiences and related concepts of trauma and vulnerability, and how they can help us to understand and identify opportunities to improve Londoners' health. We reviewed research evidence to understand the prevalence, health outcomes, and risk and protective factors relating to childhood adversity, and reviewed policy and guidance literature to understand how organisations are responding. We also issued a survey to all of London's Directors of Public Health, Directors of Children's Services, Community Safety Partnership and Youth Offending Teams to understand current practice in London.

From our research, we learned the following:

1) Around half of Londoners are likely to have experienced at least one form of adverse experience in their childhood.

2) Around 10% of Londoners are likely to have experienced four or more different types of adversity, likely to include abuse or neglect.

3) Children and adults can be adversely affected by types of event and experience other than those identified in the dominant 'ACE studies' – the need to understand and mitigate adverse community environments as critical opportunities for primary prevention must not be overlooked.

4) The distribution of Adverse Childhood Experiences in London will broadly align with areas of affluence and deprivation, with higher prevalence of ACEs found in more deprived areas.

5) Population groups with a high level of adversity or need in adulthood, including those who are homeless, in prison, have substance misuse issues, or serious mental health problems are more likely to have had Adverse Childhood Experiences than the general population. This should be acknowledged when developing services for these groups.

6) The prominence of ACEs and trauma-informed approaches in service design and delivery currently varies between boroughs, with few system-wide approaches.

7) That making universal services, e.g. early years settings, schools, PRUs, better able to support those who have experienced adversity could benefit those individuals directly and benefit the broader group indirectly, by improving cohesion and inclusion and providing opportunities for secondary prevention of ACEs and trauma

8) Londoners with a high level of health or social need are particularly likely to have experienced ACEs and trauma and may benefit from targeted support services becoming more ACE- or trauma-informed in design, which may include asset-based approaches.

I am grateful to all who gave their time, knowledge and advice so generously to this report and particularly to my colleagues at City Hall and UCL CCIH.

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Background

The negative impacts that experiencing adverse events in childhood can have on a child's neurological, emotional and social development are now well-documented. Multiple academic, clinical and social service organisations are looking at psycho-social and physiological needs in adults through the lens of adverse childhood experiences (ACEs) and are advocating 'trauma-informed' approaches to service delivery. A better understanding of risk and protective factors, and of opportunities for preventing ACEs in children today are being identified as emerging priorities.

Several large-scale population surveys have been carried out, notably in Hertfordshire, Luton and Northamptonshire (combined) and in Wales with the aims of:

- Measuring the prevalence of ACEs experienced by their adult population
- Modelling the proportion of current health and social need attributable to those childhood events
- Developing trauma-informed service models to support adults with ACE-attributable health and social needs
- Identifying opportunities to try to prevent and mitigate the effects of ACEs in the child population

The aims of this report

To explore Adverse Childhood Experiences and related concepts of vulnerability, and how they can help us to understand and identify opportunities to improve Londoners' health.

The GLA Health Team is aware that multiple agencies are carrying out various pieces of work on ACEs and trauma-informed approaches to care and service design. National agencies, including Public Health England, and academic institutions also have workstreams ongoing.

There is a role for the Health Team to better understand ACEs and trauma-informed approaches at city-level, specifically:

- The prevalence of 'past' adverse experiences in London's adult population
- The prevalence of 'past' and incidence of 'current' adverse experiences in London's children
- The investigative work that has been carried out / is being carried out across London, and how this is informing services
- If viewing need through an 'ACE lens' can support existing work to support and improve Londoner's health and wellbeing
- Opportunities for the GLA to provide support, coordination and systems leadership to reduce the occurrence and impact of adverse experiences.

The audience for this report

This report will be of interest to teams within the Greater London Authority and externally, including:

- The Greater London Authority Health Team
- Healthy Schools London and Healthy Early Years London programmes
- The Greater London Authority Health Committee
- The Violence Reduction Unit
- Greater London Authority Education and Youth team
- Public Health England
- London boroughs – Public Health, Children's Services, Education teams
- Community Safety Partnerships
- Youth Offending Teams
- Health system colleagues in the devolved administrations
- Academic colleagues

Methods

Literature and policy review – Understanding adverse childhood experiences and their potential health impacts; prevalence, and ways this can be measured; risk and protective factors; at-risk populations.

Survey – Public Health, Children's Services, Community Safety Partnerships, and Youth Offending Teams were surveyed to establish if and how adverse childhood experiences and trauma-informed approaches were being factored into services at present.

Findings and discussion – Summary of current ACE- and trauma-informed practice in London and indications for future development; discussion of future opportunities.

What are Adverse Childhood Experiences?

The term Adverse Childhood Experiences (ACEs) is generally used to refer to acute traumatic events or chronic stressors, experienced in childhood, which a child is unable to control. A plethora of studies have provided evidence of association between ACEs and a range of physical, mental and social health outcomes in later life, including poorer educational outcomes, anxiety, personality disorders, substance misuse, cardiovascular disease and criminal behaviour. It generally refers to individual-level experiences and outcomes, albeit with multiple causative factors.

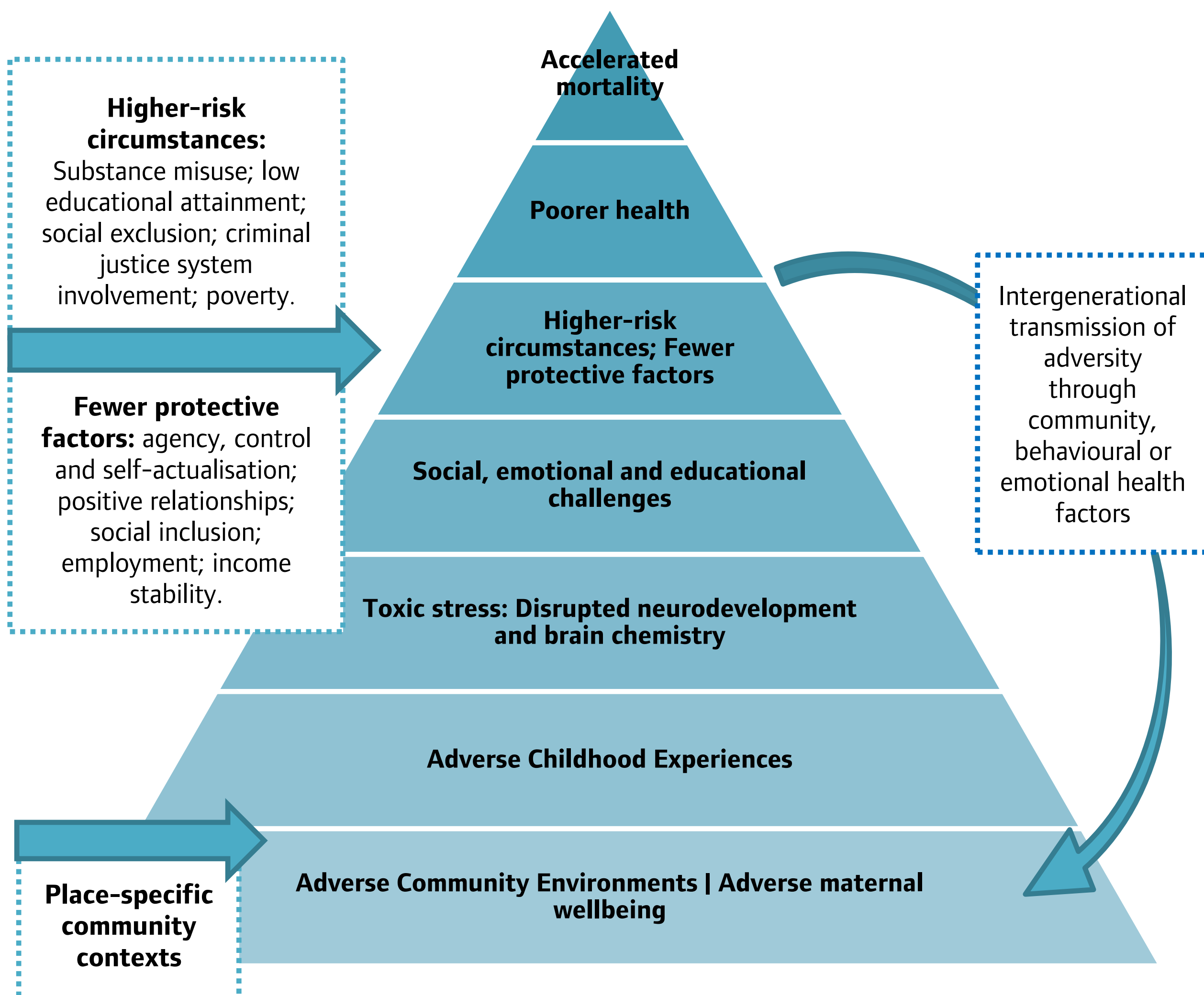
A conceptual model of the interacting biological, behavioural and social mechanisms by which ACEs have the potential to affect health and wellbeing over the life course is set out in Figure 1, (adapted from the updated ACE pyramid published by the Centre for Disease Control[1]).

To say that the way in which community, household, biological and genetic factors act and interact on an individual's physical, emotional and social development from conception through the life-course is complex is a profound understatement and attempting to express neurobiological and biomedical processes simple terms carries the risk of inaccuracy. The figure is not exhaustive and provides a high-level representation of the *biological mechanism of toxic stress* only. It does not aim to describe all the routes by which events and environment affect health.

Toxic stress refers to the prolonged physiological response the body displays upon continuous or repeated exposure to emotional, physical or environmental stressors[2],[3]. The body's response

to toxic stress is the biological mechanism by which adverse experiences are recognised as affecting health. Repeated or continuous exposure to stressful events has been shown to disrupt a child's neurobiological functioning by overstimulating the "fight, flight or freeze" response. If stressful events are frequent and are not mitigated by a caregiver's affection, the stress response fails to dissipate: a child can become primed to respond to 'lesser' situations in the same way as they would when in danger, resulting in anxiety, an inability to concentrate, aggression towards others, and other markers of being chronically ill-at-ease.

Figure 1: Revised ACE pyramid, showing maternal mental ill health and parenting challenges, the role of toxic stress, that high-risk circumstances, not just high-risk behaviours arise (including poverty), and the potential link back to maternal mental ill-health and parenting, adapted from Centre for Disease Control, US.



Source: Author, adapted from Centre for Disease Control, US.

The typical ACEs pyramid' aims to show both the progression of events in time, and childhood experiences as the foundation of good or poor health in adulthood. This can however obscure another feature of a pyramid – that each stratum is smaller than the one that precedes it. Whilst childhood adversity is an important risk factor for negative outcomes later in life, those outcomes are not an inevitability.

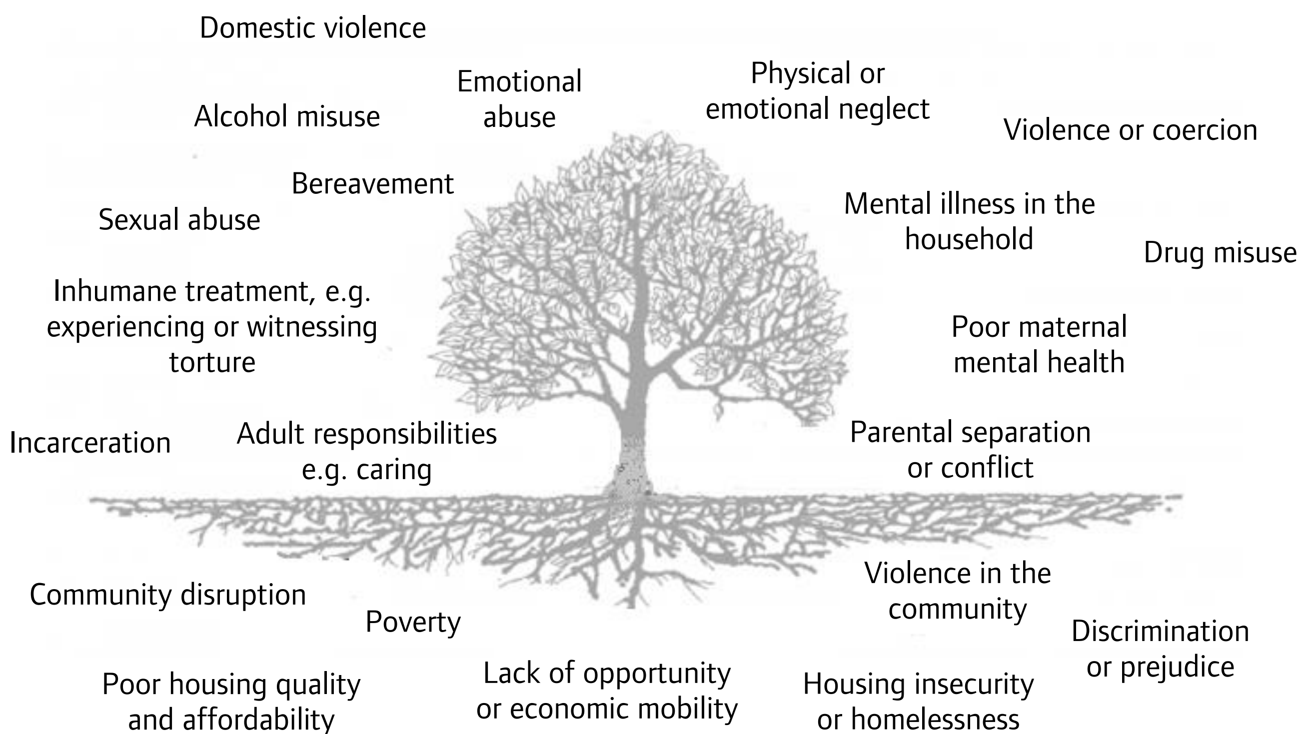
There is no agreed definition of the events that may constitute an "adverse experience". The most frequently cited set of events is that used in the original Adverse Childhood Experience study completed in the mid-1990s by the US Centre for Disease Control and Kaiser Permanente:

Abuse	**Neglect**	**Household Disfunction**	
Physical	Physical	Mental Illness	Incarceration
Emotional	Emotional	Domestic violence	Substance misuse
Sexual		Parental separation	

This set of experiences was based on the researchers' understanding of the most common and / or presumed impactful negative experiences that a child may experience. This set of childhood experiences has formed the basis of the bulk of the current assessments of prevalence of "adverse childhood experiences", including the prevalence studies conducted in the UK.

Figure 2: Adverse Childhood Experiences and Adverse Community Environments – Updating the adversity tree

Adverse Childhood Experiences



Adverse Community Environments

Source: Author, adapted from Ellis and Deitz and Young Minds

More recently, the conversation has broadened, with increasing recognition that other childhood experiences can prove impactful on the stress response, including those that are felt at community, rather than household, level. Racism, discrimination, bullying, community violence and poverty are being acknowledged as comparable, if not greater[4], sources of adversity and as risk factors for toxic stress. In considering the impact of these *Adverse Community Environments*[5], the social determinants[1] of health are brought back into a framework that has been challenged[6],[7] for overemphasising factors within or around *the individual*.

There is some variation in academic and policy literature between using the term "ACEs" to refer exclusively to one or more of the factors identified in the original study and using it to refer to childhood adversity more broadly.

Health outcomes associated with Adverse Childhood Experiences

Adverse Childhood Experiences are associated with a number of health-harming behaviours and health conditions. A dose-response has been observed, with people who report four or more ACEs at higher risk than those reporting one, two or three. The strength of association between four or more ACEs and a range of health conditions is displayed in figure 3.

How prevalent are Adverse Childhood Experiences?

The original Adverse Childhood Experience study completed in the mid-1990s surveyed some 17,000 health-insured adults attending routine medical appointments in Southern California. The study found that approximately two thirds of those surveyed reported experiencing at least one of the specified ACEs. Participants were more likely to report that they experienced multiple ACEs than a single one, and one in eight (12.5%) of the sample reported experiencing four or more ACEs.

The most commonly reported adverse experiences were physical abuse (28.3%), household substance abuse (26.9%), parental separation or divorce (23.2%), and sexual abuse (20.7%).

The original study yielded a vast number of further investigations, including many records-based studies that compared the occurrence of particular health outcomes between the participants reporting different numbers of ACEs. Associations were found between a higher number of ACEs and an increased likelihood of a great number and range of mental and physical health conditions, victimisation and perpetration of violence, and adoption of health-risk behaviours.

UK prevalence studies

ACE-prevalence has not been examined at UK-level, but several regions have studied prevalence, via population surveys and by examining service-use data. The results of these regional studies are presented in Table 1.

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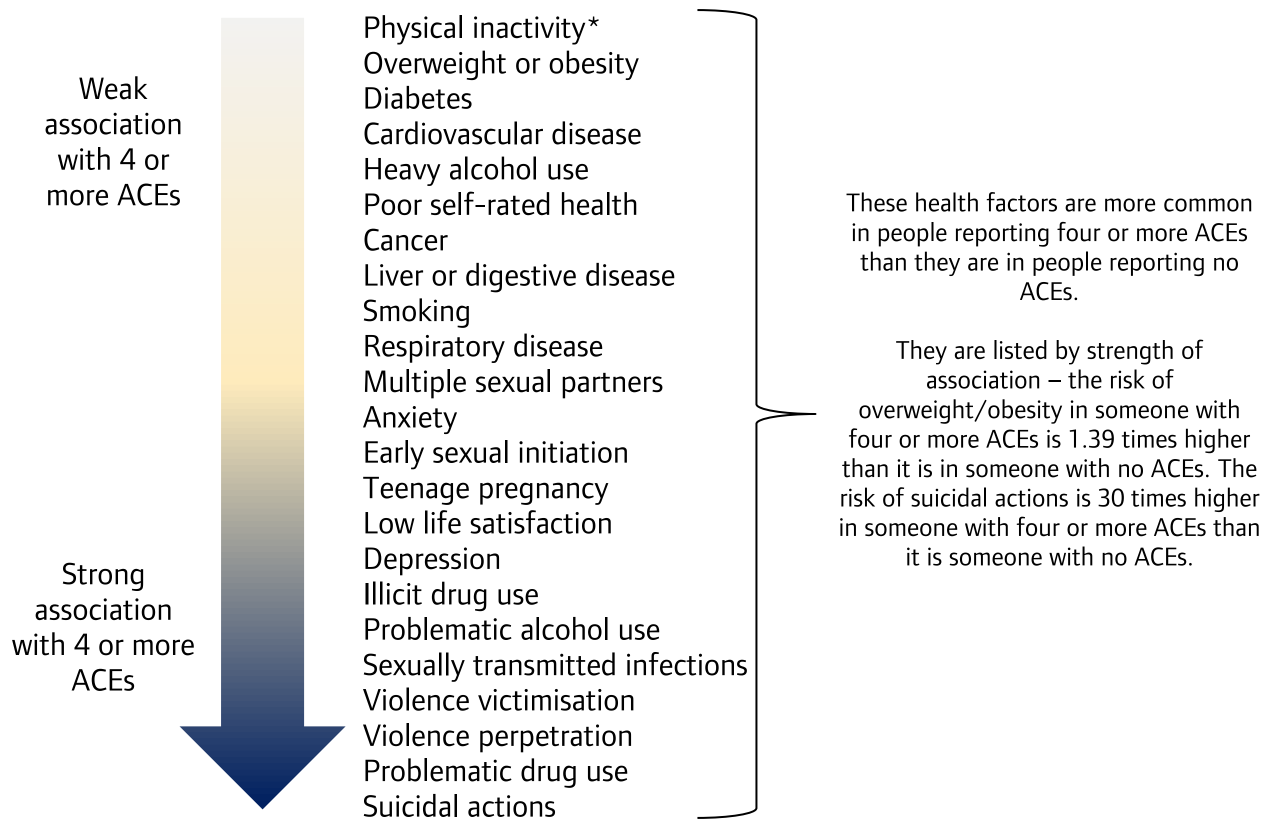
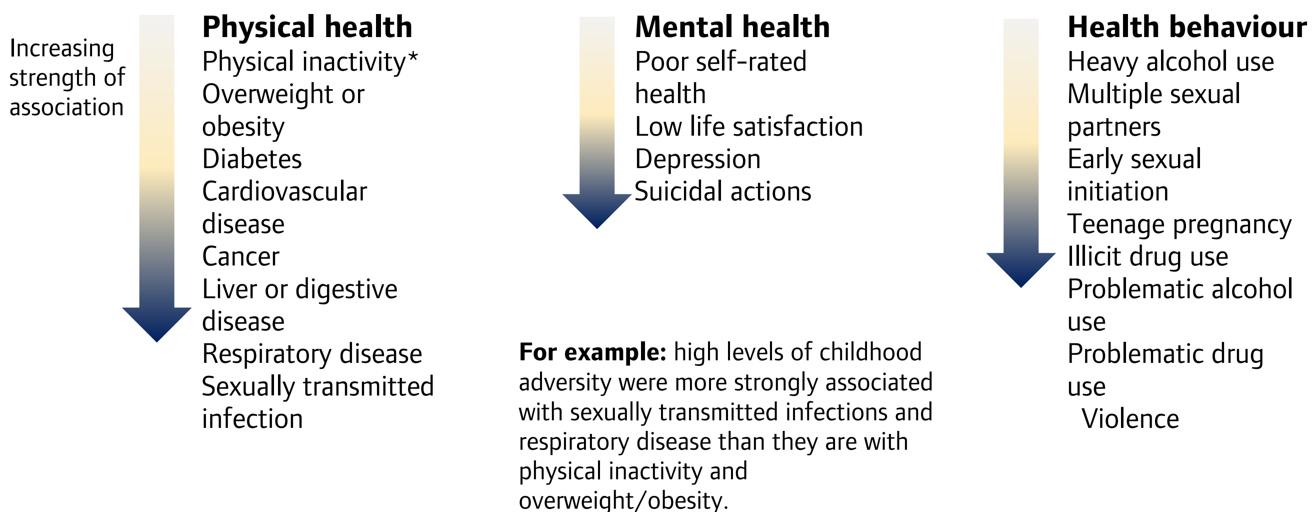
[1]The social determinants of health are defined by the WHO Commission on the Social Determinants of Health as he social conditions in which people are born, grow, live, work and age.

Figure 3: Multiple ACEs and Specific Health Conditions – visualising the relative strength of association between {reporting 4 or more Adverse Childhood Experiences} and {specified health outcomes}[8]





For example: high levels of childhood adversity were more strongly associated with sexually transmitted infections and respiratory disease than they are with physical inactivity and overweight/obesity.

As shown in Table 1, there is broad agreement between the UK studies on prevalence of ACEs reported by the study populations. A meta-analysis of the combined study population (n= 15,431) (source: author) yields a weighted average prevalence of 54.2% of people having experienced no ACEs, 27.5% having experienced one, 14.7% having experienced 2-3, and 10.6% having experienced four or more.

It should be noted that some population groups are likely to be under-represented in survey-based studies, for example prisoners and people who are homeless.

Table 1: Prevalence of ACEs, meta-analysis of five UK studies

Location of study population	Sample size	0 ACEs	1 ACE	2-3 ACEs	4 < ACEs
Combined (weighted averages)	**15,431**	**54.2%**	**19.7%**	**14.7%**	**10.6%**
England[9]	1,567	52.9%	19.1%	15.6%	12.3%
Wales[10]	2,028	53%	20%	13%	14%
Wales[11]	2,497	51.3%	19.1%	16.1%	13.4%
Hertfordshire, Luton and Northamptonshire[12]	5,454	56.9%	18.0%	16.2%	9.1%
Blackburn with Darwen[13]	3,885	53.6%	22.7%	15.4%	8.3%

Mapping ACEs in England

The Centre for Inclusion Health at University College London has developed an ACE Index (in press). Derived from routinely-available data, it aims to provide a population-level ACE index that reveals geographical variation in the occurrence of ACEs in England. The Index will permit comparison between geographical patterning of ACEs and factors thought to be associated with ACEs, such as deprivation.

ACE incidence data was taken from a range of sources, including child protection figures, drug and alcohol service use data and police and crime figures. Given the well-established association between ACEs and particular health and social outcomes, ‘ACE consequence’ data (e.g. rates of school readiness, school exclusions, young adult homelessness, and first remands) was used to validate the ACE incidence data.

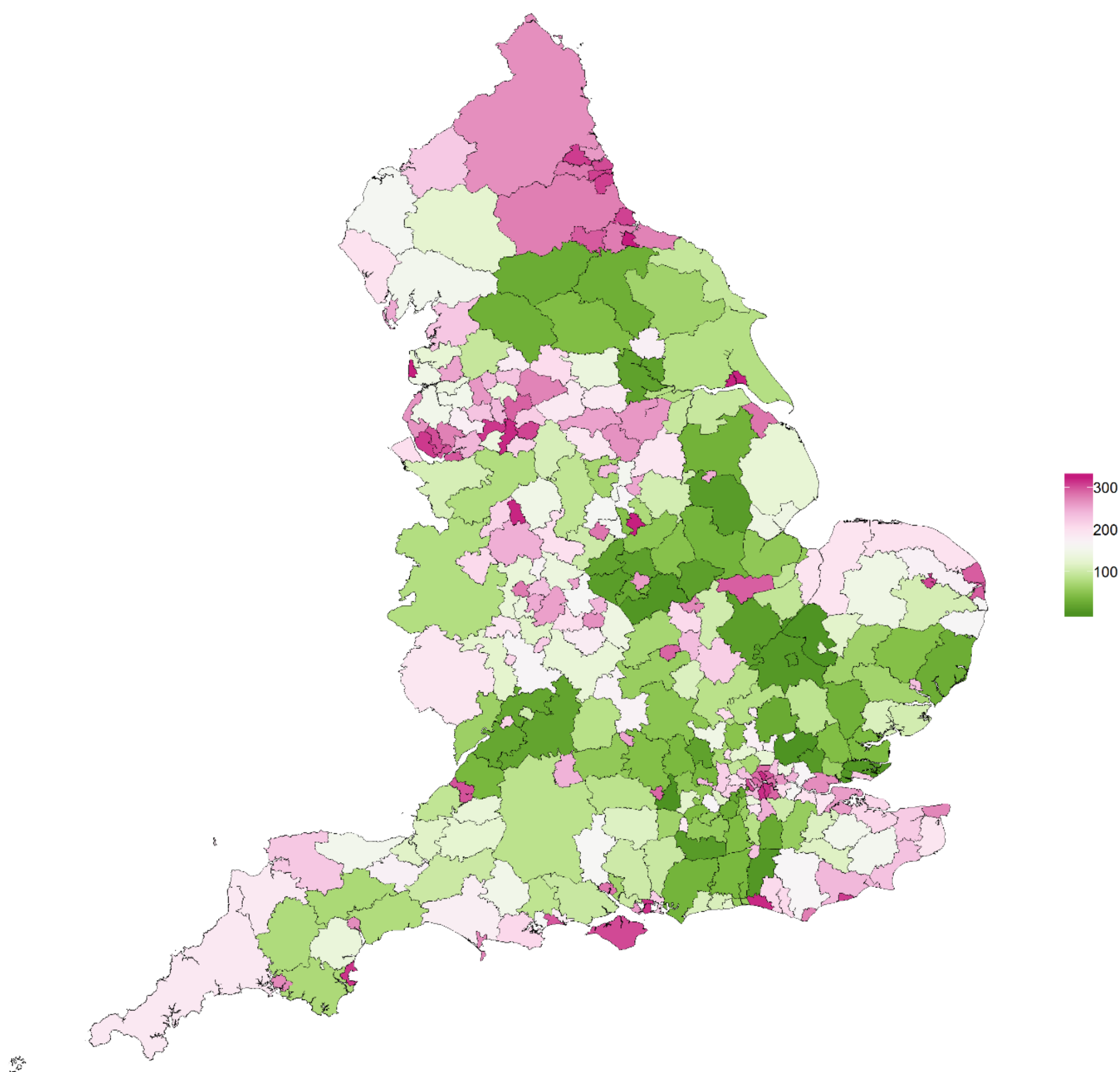


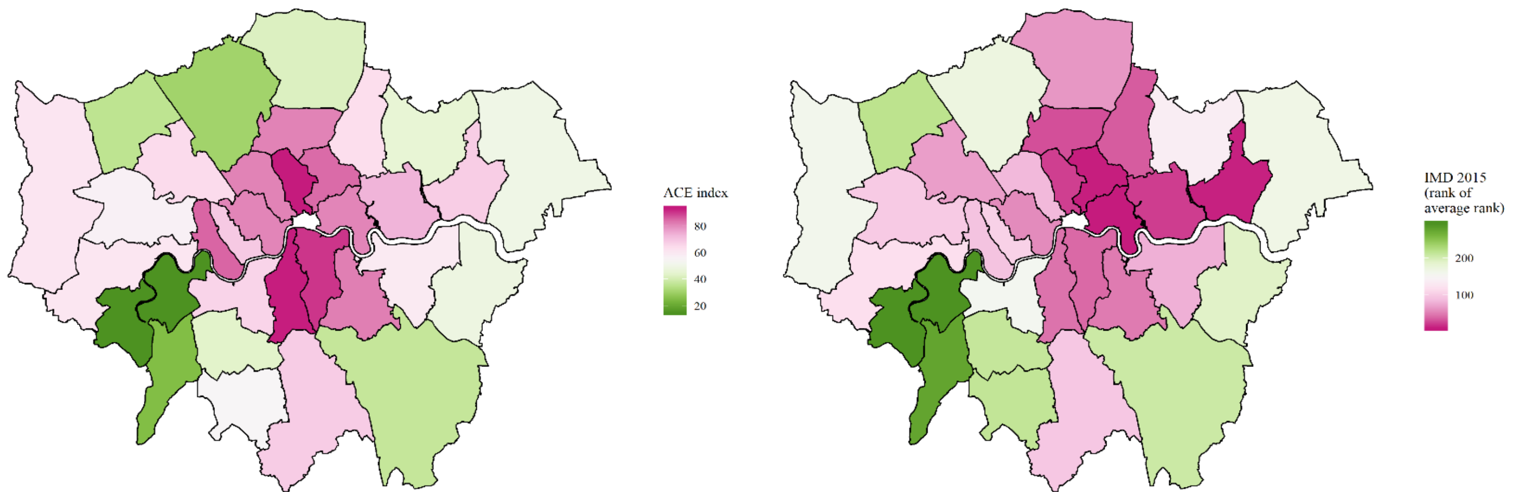
Figure 4: Map of ACE index by District Council. ACE Index: measuring Adverse Childhood Experiences (ACE) at a population level using routinely recorded data in England (in press). The Collaborative Centre for Inclusion Health at UCL

The researchers mapped rates of ACEs against levels of deprivation, population density and income inequality and found that ACEs were most strongly correlated with income deprivation, and with population density.

The Index addresses two limitations of the existing evidence-base around ACEs: (1) much of the research evidence on ACE prevalence is based on experiences recalled by adults and hence does not look at incident ACEs, and (2) the index permits detailed geographical estimates, allowing comparison with deprivation data available for the same geographies.

As shown in Figure 5, service-use data indicates high rates of ACEs in London, and that the borough patterning is commensurate with deprivation (as measured by the Index of Multiple Deprivation 2015).

Figure 5: ACE Index in London (left) + Index of Multiple Deprivation in London (right) ACE



Index: measuring Adverse Childhood Experiences (ACE) at a population level using routinely recorded data in England (in press). The Collaborative Centre for Inclusion Health at UCL

Considering individual ACEs, additional data sources

As well as ACE survey data, there are multiple sources of information about particular adverse experiences that contribute to our understanding of likely prevalence.

Children experiencing neglect

Neglect is the most common initial category of abuse for a child with a child protection plan or on a child protection register in the UK and in 2017-2018 was recorded in 48.0 per cent of cases[14]. Neglect is also the most commonly recorded reason for someone to make contact with the NSPCC helpline[15].

Children experiencing sexual abuse

Recorded offences

In England in 2016/17, there were 54,846 recorded sexual offences against children under 18 years, of which 43,522 were against children under 16 years[16].

This equates to 46.5 offences per 1000 children under 18 years, and 41.3 offences per 1000 children under 16 years[17] in England. For the same year, the rates of offences against children under 16 in Scotland, Wales and Northern Ireland were 45.0 per 1000, 51.1 per 1000 and 43.3 per 1000, respectively.

Since 2012/13, there have been marked year-on-year increases in recorded offences overall and in all subsets of offences. The most marked increases were seen in sexual activity involving a child under 13 years, abuse of a position of trust offences, and sexual grooming offences[18]. It is difficult to know whether the increase in recorded offences is due to increased incidence or to changes in reporting or recording practices.

It should be acknowledged that rates of *reported* offences are likely to underestimate true prevalence.

Survey and research data

The 2009 NSPCC Child Maltreatment survey found lower rates of sexual abuse than its 1989/99 survey. When asked if they had experienced contact sexual abuse, 0.5% of children under 11 years reported that they had, rising to 4.8% of 11 to 17-year olds and 11.3% of 18 to 24-year olds. The report observes that the higher rates of reporting by older age groups will in part be attributable to sexual assault by peers in adolescence, but also delayed disclosure. One-third of those reporting abuse (all ages) reported that they did not tell anyone about it at the time[19].

The Centre of Expertise on Child Sexual Abuse at London Metropolitan University compiled crime data, survey and research evidence to estimate that 15% of girls and 5% of boys in England and Wales experience sexual abuse by adults and / or peers before the age of 16 years[20].

There is broad agreement between the recorded offences data, survey data, and reported rates of non-disclosure: survey data indicates that 15% of children experience sexual abuse, of whom two-thirds do not disclose this and one-third do, which is consistent with recorded offences concerning approximately 5% of children. If 15% of London's under 16 year olds are affected by sexual abuse, this amounts to approximately 7,200 children[2].

Children experiencing physical or emotional abuse and violence

Experience of physical violence (towards themselves) was reported by 8.4% of NSPCC survey participants (159 respondents), with 5.4% of respondents reporting severe violence. Almost half of respondents (45.9%) reported experiencing physical punishment[21].

Domestic violence, defined as violence towards a parent from their partner or ex-partner, was reported by 23.7% of respondents and family violence, defined as violence against family members by adults and siblings living in the home, by 27.8% of respondents. Around 5% of respondents reported witnessing severe violence (kicking, choking, beating up) against a parent[22].

3.0% of survey respondents reported experiencing emotional abuse, defined as being scared, being called names, being told they were unwanted, having their possessions broken, or being threatened in with violence.

Mental illness in the household

Common mental disorders affect one in five women and one in eight men in England[23]. London figures are slightly higher than this average, at 16.4%[24]. Whilst on average one person in three receives treatment, there are inequalities within this, with particularly low treatment rates among people of Black ethnicity[25].

The Royal College of Psychiatrists report that 68% of women and 57% of men with a mental illness are parents, and that between 50% and 66% of people with a severe and enduring

[2] Based on 2016 ONS population estimates by single year age: 48,014 children aged 16 years in London.

mental illness live with a child or children under 18 years of age[26]. In London, this may amount to between 15,000 and 20,000 households[27]. The Children's Commissioner estimates that 2% of children live in a household where both parents have serious mental health problems[28].

It is thought that around one third of young carers are caring for someone due to mental health needs, but under-reporting of caring responsibilities is a recognised concern[29]. The prevalence of dual-diagnosis (mental ill-health and substance misuse) among those cared for by a young carer is not well documented[30] but thought to be particularly impactful. The Children's Commissioner's analysis of the Adult Psychiatric Morbidity Survey placed the number of UK children experiencing the 'Toxic Trio' of parental mental illness, substance misuse and domestic violence at 420,000[31].

Mental illness within the household provides an example of the potential for adversity to persist cyclically across generations. There is consistent evidence of association between childhood adversity and mental ill health in adulthood[32]. A nuance reported by some longitudinal studies[33] is that experiencing adverse events in childhood not only reduces one's ability to 'emotionally-withstand' stressful events encountered in adulthood, but they also increase the chance of adverse events coming about in a child's adulthood – cyclical stressors might include the sequalae of poverty, negative relationships, re-victimisation to abuse. Research by the Children's Society found that children with caring responsibilities also reported an average of eight additional sources of disadvantage in their lives[34].

Drug and alcohol abuse in the household

The 2011 'Hidden Harm' inquiry to the Advisory Council on the Misuse of Drugs documented the multiple harms that domestic substance misuse can present for children[35], with the more recent Vulnerability and drug misuse report making specific reference to adverse childhood experiences[36].

In England in 2017/18, there were 25,593 people who started treatment for substance misuse that lived with a child or children under 18 (20% of those receiving treatment). Of this group, 69% advised that the children were not receiving early help services nor were they engaged with children's social care services[37].

In England, 2016/17 the number of people in specialist drug misuse treatment was 199,339 and in London, 30,200. If London's proportions reflect those of England, 6,040 of those in treatment may have children under 18 in their household. In England, 2016/17, the number of people in specialist alcohol misuse treatment was 80,454 and in London 11,440[38].

Rates of children with a parent in drug treatment in London are slightly lower than England's average, at 104.1 per 100,000 children aged 0-15 years (England average 110.4). Similarly, London has a lower rate of alcohol treatment at 108.2 parents per 100,000 children (England average 147.2)[39].

These figures refer to adults who are receiving treatment for substance misuse. The total number of people abusing drugs or alcohol is highly likely to exceed the number receiving treatment. Extrapolations from health and crime survey data have estimated that 22% of children live with a hazardous drinker and 6% with a dependent drinker, 2% with a user of Class A drugs and 7% with a user of Class C drugs, and 3% with a drug-dependent user[40].

Incarceration in household with children

The number of children affected by parental imprisonment is not gathered systematically in the UK and all data sources consulted in the production of this report advise caution in interpreting the estimates they provide.

The Prison Reform Trust quote an annual UK estimate of 17,240 children being affected by maternal imprisonment but acknowledges that this figure may be out of date and an underestimate[41]. The same report estimates that 61% of women in prison have a child or children under 18, but again this data is historic (1997)[42]. The National Information Centre on Children of Offenders reports that 310,000 children every year have a parent in prison.

Prisoners' childhood and family backgrounds, Results from the Surveying Prisoner Crime Reduction (SPCR) longitudinal cohort study of prisoners 2012, Ministry of Justice, which surveyed 1,435 (91% male, 9% female) prisoners found that 54% reported that they had children under 18 years. This equates to 200,000 children affected by parental incarceration in any one year[43]. The Children's Commissioner estimates that in the year 2012, 86,000 children and young people had a parent in prison[44].

The charity Women in Prison report that 9% of children whose mothers are in prison are cared for by their father during their mother's incarceration, and that over 20% of incarcerated women who have children are single parents (compared to 9% of all mothers)[45].

A particular challenge for London is that with the closure of HMP Holloway in July 2016, London women who are sentenced to prison are required to serve their sentence at facilities some distance from their home and family, which has been shown to be impacting on children's ability to have contact their mothers[46]. There is evidence that in children who are able to cope with the challenges parental incarceration presents, early and continuing contact with a mother during her sentence plays a key role[47].

Parental separation

In 2017, there were 1,781,000 lone parent families with dependent children in the UK. This represents 22% of families with dependent children (78% of families with dependent children live in married or cohabiting couple families)[48]. London has slightly higher rates of single parent families, reported as 24% in 2011 census data[49].

When taking a broad view, family structures *other than* that in which a child resides with both biological parents, are associated with a higher risk of maltreatment or other adversity[50], however the association between non-nuclear family structure and maltreatment weakens considerably when deprivation and parents' own history of adversity are taken into account[51].

Marriage, household relationships and reducing inter-parental conflict are long-held topics of interest for government policy makers, with particular focus on the impact that this can have on children's wellbeing[52]. There is a paucity of uncontested evidence around the effect that different family structures may have on children's wellbeing and outcomes. Instead, focus has been applied to relationship behaviours within the household, rather than the household's structure[53],[54] and how interactions and relationships may be affected by socioeconomic adversity[55],[56].

Domestic violence in household with children

The Children's Commissioner reports that 7% of children in England live in households experiencing domestic violence and abuse.[57]

Findings from the Crime Survey for England and Wales[58] were that 7.9% of women and 4.3% of men had experienced domestic abuse in the last year (2017). 4.0% reported non-sexual partner abuse (physical, emotional, financial abuse or threats)

In 40.9% of cases of partner abuse, there was at least one child under 16 living in the household. Of those cases where children were present in the household, 20.5% reported that the child/ren saw or heard what happened, 64.9% that they did not hear what happened and 14.6% that they did not know or did not wish to answer. Of those who experienced domestic abuse, 17.3% said that they reported this abuse to the police.

Vulnerable groups - Adult or adolescent population groups more likely to report a high number of ACEs

In recognising the prevalence of current or previous ACEs in the general population, the prevalence of childhood adversity in those now experiencing adversity in adulthood should also be considered. As well as triangulating general population survey findings, this provides a sense of the level of need that may exist in vulnerable adolescent or adult populations.

Why do we need to understand this? Because a failure to recognise the root causes of adult adversity impedes an individual's chances of recovering from that adversity, not least because it prevents services from being designed in ways that gives their best chance of effectiveness. Where 'recovery' can mean cessation of criminal behaviour, the ability to overcome or manage addiction, realising good mental health or housing stability, the broader social benefits of effective support cannot be underestimated[59], [60]. And where this improves an individual's social, economic or emotional wellbeing before or during parenthood, it stands to reduce the intergenerational transmission of ACEs.

Adult prisoners

A longitudinal cohort study of 1,435 adult prisoners in the UK[61] reported that 9% had experienced sexual abuse, 18% had experienced emotional abuse, and 18% had experienced physical abuse. 41% reported observing violence at home as a child. 30% advised that they had a family member who had also spent time in prison (this compares to 2% of the general population). 59% reported that they regularly played truant from school, 63% that they were excluded from school temporarily, and 42% that they were excluded permanently[62].

Survey data[63] has indicated that people who have spent time in prison are 7-11 times more likely to report having had four or more ACEs than they are to report having had none.

Young Offenders

A study of 130 young offenders in Scotland[64] found that 59% of those surveyed reported four or more of the following experiences (% experiencing each event):

Sexual abuse 19%	Physical abuse 37%	Emotional abuse 30%

Physical neglect 41%	Emotional neglect 50%	Domestic violence 61%
Parental separation 81%	Family incarceration 23%	Family mental illness 42%
Family alcohol abuse 40%	Family drug abuse 26%	Four or more ACEs 59%

These findings mirror findings those of the Department of Health[65] and Joseph Rowntree Foundation, which also highlight the over-representation of looked-after children in young offender populations: 29-35% (DoH) and 40-49% (JRF) of young offenders reported having been taken into care at some point during their childhood, which compares to 6.4% of children in England overall[66].

People experiencing homelessness

Recent UK studies of homelessness and health have illustrated the diversity and complexity of need within homeless populations and have demonstrated associations between childhood trauma and *the most complex forms of homelessness*, i.e. those in which people experience the highest number of, or greatest interrelation between, problems in adulthood[67], [68].

A UK survey of 1,286 users of urban homeless services found that 26% of respondents had spent time in care as a child[69].

A Canadian study of 500 homeless adults found rates of childhood maltreatment of 87.7%[70].

57.7% physical abuse	62.8% physical neglect	45.8% sexual abuse
62.4% emotional abuse	55.2% emotional neglect	87.7% childhood maltreatment

A 2013 study of homelessness and ACEs analysed data from 34,653 adults in the US[71]. Of women experiencing homelessness, 75.1% reported abuse or neglect, as did 64.3% of men. This compares to 38.6% of not-homeless women and 39.6% of not homeless men. Rates of reported sexual abuse were roughly three times higher in homeless than non-homeless population. Rates of emotional abuse, four times higher. Rates of childhood physical abuse were three times higher among homeless women and twice as high among homeless men than in those who had never been homeless. Compared to people who have never experienced homelessness, rates of physical neglect were twice as high, rates of emotional neglect, three times as high and childhood household dysfunction, twice as high, in homeless adults[3].

Shelter estimates that almost 1% of children in Britain are homeless (in temporary accommodation, hostels or B&B), with 87,310 homeless children in London[72]. Research the charity conducted with teachers found that children experiencing homelessness are vulnerable to emotional trauma, stress, anxiety and behavioural problems[73].

People with substance misuse problems

The association between substance misuse and ACEs is well-documented[74],[75], with a rightful focus in the UK literature on the impact that parental substance misuse can have on children. The English ACE survey[76] and multiple studies outside of the UK[77],[78] confirm the higher prevalence of childhood trauma in adults reporting substance misuse, and the strong association between early life stress and increased risk of drug and alcohol use[79].

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[3]The study looked at rates of axis I and II mental disorders and found that whilst they mediated the relationship between childhood adversity and homelessness, it remained a highly significant relationship.

In the English survey, 11.3% of respondents reported current binge drinking. Those respondents were twice as likely to report have 4 or more ACEs than they were to report not having any ACEs. 2.2% of those surveyed reported having used heroin or crack cocaine. Those people were between five and 20 times more likely to have 4 or more ACEs than they were to have no ACEs. This mirrors findings from analyses of US population survey data[80], which also reported that the prevalence of four or more ACEs in people reporting higher-risk (injecting) drug use was twice as high as in people reporting *any illicit drug* use. In England, young people's substance misuse services collect and report data on 17 vulnerability items, including being in contact with children's social care, experience of sexual exploitation and domestic abuse. In 2017/2018, 96% of young service users reported one vulnerability, and 55% reported three or more[81],[82].

People with severe and enduring mental health conditions

A systematic review of 33 studies found that rates of traumatic experience were significantly higher in those with serious and enduring mental health conditions than in the general population, with physical abuse reported by 47% of people with severe mental illness (vs 21% of people without severe mental illness), and sexual abuse reported by 37% of people with severe mental illness (vs 23% of people without)[83]. Post-Traumatic Stress Disorder (PTSD) was also found to be higher in the SMI population than would be expected in the general population, though direct comparisons are challenging due to paucity of prevalence data of PTSD and complex trauma in the general population. Whilst systematic review evidence is limited, a large body of literature highlights the potential routes of association between adverse childhood experiences, and/or toxic stress, and personality disorders[84],[85],[86] and attachment theory features consistently in treatment protocols[87].

Adults that are overweight or obese

The original 1995 Kaiser-Permanente ACE study was initiated by physicians' observations of an apparent association between obesity or eating disorders and childhood abuse, and a large volume of subsequent studies have investigated childhood adversity and health. A 2017 systematic review that compiled studies investigating ACEs and health outcomes found that people reporting four or more ACEs were at an increased risk of various physical and mental health outcomes and of higher-risk health behaviours[88].

Adults that reported having four or more ACEs were 1.39 times more likely to be overweight or obese compared to those with no or fewer ACEs and were also at higher risk of having diabetes and cardiovascular disease.

The bulk of ACE studies involve adults reporting on their childhood experiences and their current health status. Possible associations between adverse childhood experiences and overweight or obesity *in childhood* are less well-investigated with some disagreement in study outcomes[89],[90],[91]. Whilst childhood obesity is a strong predictor of adult obesity, seventy percent of obese adults were not obese as children[92]. There may be opportunities for trauma-informed approaches to be explored in weight-management interventions[93].

However, with 62% of UK women and 67% UK men overweight or obese, and most ACE studies focussing on outcomes for the approximately 10% of people reporting four or more ACEs, exploring attribution of overweight or obesity to childhood trauma may risk over-pathologising (with trauma) the larger proportion of overweight or obese people who are likely not to have experienced higher levels of adversity. Careful consideration of potential benefits and harms is

needed before introducing exploration of childhood adversity in the context of weight management.

Refugees and asylum seekers

People who have sought refuge in the UK due to conflict or persecution may have experienced traumatic events in their country of origin and during passage to the UK. They may also have experienced difficulties accessing financial support, housing and healthcare, face discrimination and experience social isolation[94], [95]. Child refugees are particularly vulnerable, with some having endured trafficking, torture, family separation and bereavement through conflict[96]. In 2018, the UK offered protection – asylum or similar – to 15,891 people of which 6,628 (42%) were children[97]. In 2019, there are 5,152 asylum seekers living in London, and 1500 Unaccompanied Asylum Seeking Children (UASC)[98].

The Children's Society has highlighted that the children of asylum seekers are at particular risk of taking on caring responsibilities that may impact on their education and their wellbeing[99]. A 2015 report by Directors of Children's Services[100] identified high level of physical and mental health need in UASC, including symptoms of Post Traumatic Stress Disorder in around 50 per cent of these children.

The prevalence and impact of Adverse Community Environments

The prevalence and impact of childhood adversity at community level is a less well-documented area of 'ACE investigation' than the ten adversities identified by the original ACE study and subsequent surveys[101]. The body of evidence and policy relating to the prevalence and impacts of poverty and inequality is mature and substantial[102], however the prevalence and impact of discrimination and a perceived lack of social mobility are less clearly defined in health literature.

Social mobility and perception of opportunity

Whilst London outperforms all other English regions in terms of Government's social mobility indicators of educational outcomes, transport links and high rates of top-paid knowledge-based jobs, this is tempered by unaffordable housing, high costs of living, low pay and high rates of youth unemployment[103]. London has been categorised as a "high prosperity, low inclusion" area, highlighting that these positive and negative factors do not exist in balance within or between communities[104]. Compared to all other UK regions, London has the highest proportion of people in professional occupations with parents from professional backgrounds, and the lowest proportion of people in professional occupations whose parents are from working-class backgrounds[105]. As acknowledged by the Mayor's Strategy for Social Integration, there is scope to improve social integration and equality in numerous domains, including housing, policing and community relationships.

Children and young people that do not see themselves as the beneficiaries of London's educational, cultural and employment opportunities risk entering a vicious circle of social exclusion, confirmation bias and lack of personal control[106],[107]. This can create an environment of personal adversity, which discrimination and poverty can then exacerbate[108],[109].

Discrimination

In 2018, a poll carried out by ICM for the Guardian[110] questioned 1,000 black, Asian and minority ethnic (BAME) people and 1,797 white people about negative experiences that may be attributable to racial bias. Forty-three percent of BAME respondents said they regularly experience bias in Britain because of their ethnicity. Forty-four per cent of BAME respondents reported hearing racist language in the last year, 29 per cent had been personally racially abused with the last year, and almost one in ten had been confused with someone of the same ethnicity in the last week.

When asked about inclusion and opportunities, BAME respondents were roughly twice as likely as white people to have been refused entry to a club, overlooked in a job application process or for promotion in a way that felt unfair, be mistaken for a member of staff in a restaurant or shop, or be treated like a potential shoplifter. The survey was carried out online, with BAME participants drawn particularly for this research, and white participants interviewed as part of an omnibus survey (several research studies' questions combined in one survey), and representative sample size was determined by ONS data. Whilst there is likely to be some bias introduced by the online-only method and political stance of the newspaper, the results do provide some insight into levels of real and perceived inequalities of opportunity between BAME and white people.

In 2017/18 in London, rates of Police Stop and Search by ethnicity were 9 per thousand white people, 15 per thousand mixed race people, and 40 per thousand black people[111]. Black young people are over represented in rates of school exclusions[112], arrests made to police custody[113] and poverty[114].

Nearly half of the 1,100 lesbian, gay and bisexual pupils surveyed for Stonewall 2017 School Report disclosed that they had experienced bullying as a result of their sexuality, rising to almost two-thirds for pupils identifying as transgender[115]. Intersectionality of minority ethnicity and sexuality, and in-group prejudice may further complicate young peoples' relationship with their ethnic, cultural or sexual identity[116].

Poverty

Official government figures report that 28 per cent. of Londoners live in households of below average income, the highest proportion in the UK. This amounts to 2.4 million people. Poverty rates are higher in Inner London than they are in Outer London (32 per cent vs 25 per cent)[117].

The proportion of children living in poverty is higher. After housing costs, the proportion of children living in poverty in Inner London is 44 per cent and in Outer London is 34 per cent. Of those children living in poverty, 80 per cent are counted as being in persistent poverty, i.e. currently in poverty, and having been in poverty in two out of the last three years.

The European Union Statistics on Income and Living Conditions (EU-SILC) survey of some 16,000 UK residents aged 16 and over found clear associations between persistent poverty and higher levels of self-reported anxiety and lower levels of self-reported happiness[118].

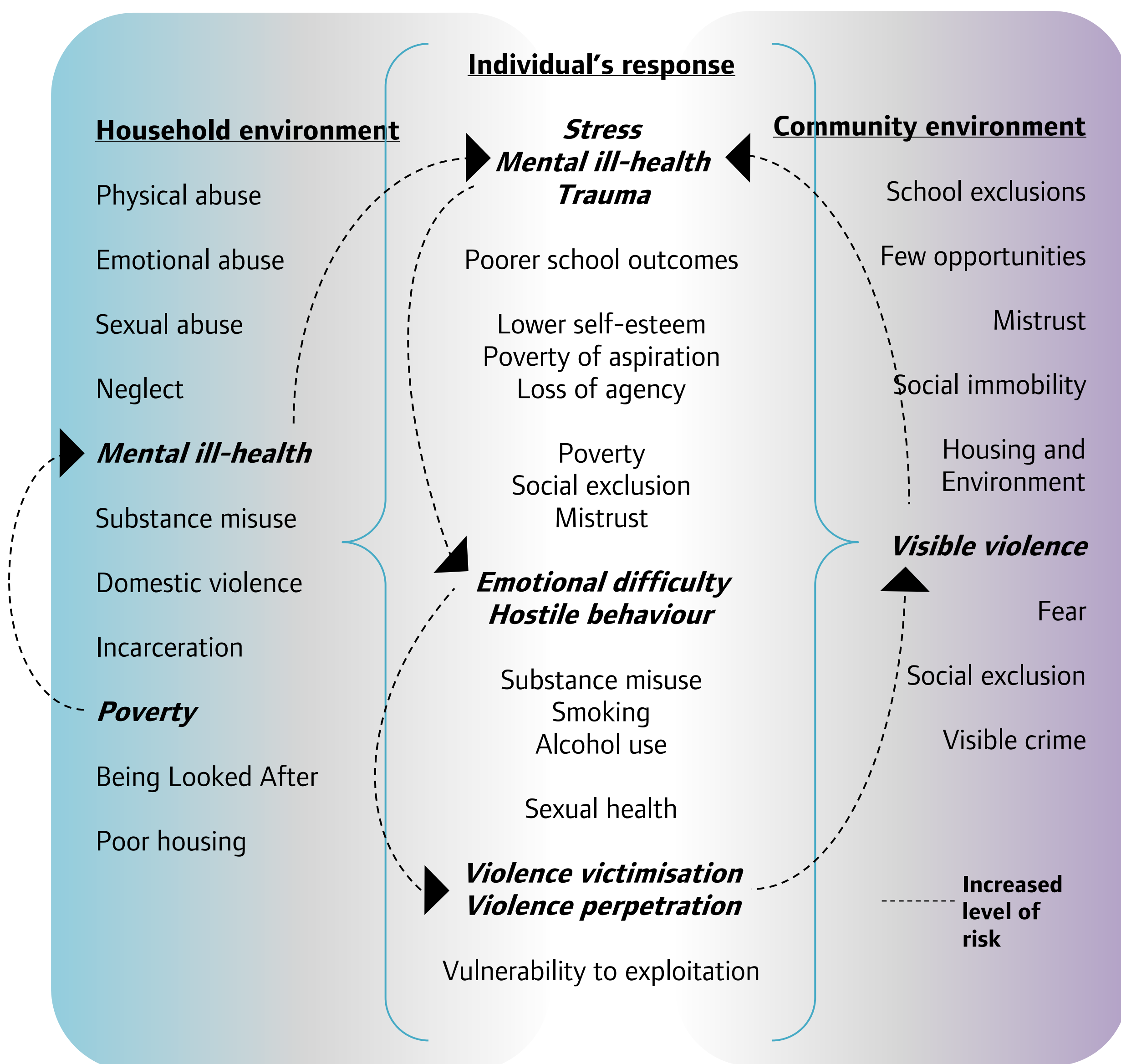
A systematic review[119] of the impact of poverty on child health found that that poverty was associated with low birth-weight, higher levels of maternal mental ill-health and maternal smoking. The review also reported evidence that *increasing* parents' income security was associated with statistically significant reductions in child-maltreatment investigations.

Interaction of individual, household and community factors

The Family Stress Model describes the pathway from economic pressure to parental distress to inter-parental conflict, and how this can impact on parent-child relationships. The model stands up to empirical scrutiny[120], and demonstrates that poverty is a risk factor for poorer parental mental health, reduced parental sensitivity, reduced interaction between parent and child, and harsher parenting practices[121].

Figure 6 builds on this model to provide an illustration of possible routes of interaction between household, individual and community factors.

*Figure 6: Conceptual model showing a possible route of interaction and overlap of particular household and community level adverse exposures and particular individual outcomes**



*This diagram is illustrative. Not all of the examples of adversity, outcomes and interactions included are seen in all households, all communities or all individuals. The dotted arrows represent increased risk, not certainty, of outcome.

Alternative concepts of vulnerability

The "toxic trio" of maternal mental ill health, substance misuse and domestic violence

The 2018 vulnerabilities report by the Children's Commissioner's Office grouped vulnerabilities into three types:

Type 1 – Groups of children and young people receiving statutory support
Type 2 – Groups of children and young people with complex family needs
Type 3 – Groups of children and young people with health-related vulnerabilities

Within Type 2 – complex family needs – the report identified the 'toxic trio' of parental domestic violence or abuse, mental health problems and substance misuse as presenting a very high risk to children. The report estimates that 0.9% of children in England are living in a household where an adult faces all three issues to a severe extent, and 3.6% where the issues are present to a moderate extent[122].

That "the ten ACEs" are not the only sources of adversity

The particular set of exposures referred to as ACEs within the literature – are not the only means by which a child can experience trauma or difficulty in childhood[123]. Too narrow a focus on a limited set of events could lead to inequalities in care, and some individuals not receiving support when they experience events which *for them* amount to adverse experiences.

The status of the original 10 ACEs has become embedded in subsequent studies and policy literature, however the demographic and social context for many Londoners differs from that of the original US research population. This strengthens the case for taking a broader view of potential sources of adversity, one that takes sufficient account of the socioeconomic factors that may contribute to childhood stress, such as material poverty, unstable accommodation, financial instability, and inequality, as well as more 'modern' risks, such as online harm. Involving children and young people in conversations about adversity and sources of pressure they face is important to ensure that current risk factors are not overlooked by focussing on retrospective analysis.

Taking account of the social, economic and cultural factors as sources of adversity and so determinants of health, reduces the risk of applying behavioural models of health inequalities (in which inequalities in health are attributed to personal decisions to adopt health-harming behaviours, such as substance misuse or violence). This is of particular relevance when considering serious violence affecting young people in London, and the known issues of community mistrust in services and feelings of stigmatisation and blame that some groups have expressed.

Adverse experiences are not necessary precursors of emotional ill-health

Children, young people and adults of any age can experience the outcomes associated with ACEs without having disclosed or experienced adversity in their childhood. Too narrow a focus on ACEs as risk factors could lead to a failure to recognise that a child or young person is in

difficulty – an assumption that anyone 'without ACEs' is low risk could lead to an individual's needs being missed.

Adversity in childhood does not lead inevitably to adversity in adulthood

Currently, the balance of research evidence and policy literature concerning ACEs is tipped heavily towards risks and impacts, with much less having been written about protective factors and interventions. The 'ACEs pathway' is intuitive, and the level at which the neurobiological evidence is pitched in many policy documents and in public health literature is both is interesting and accessible. Explanatory narratives of life-course impact often provide a fictional example of a child that experienced multiple ACEs and went on to experience poor health and to maltreat their own children. Taken together, these could lead to a deterministic and deficit-based reading of ACEs, when in fact not everyone that has had adverse events in their childhood will experience toxic stress, poor outcomes, nor visit adversity on others.

Intrinsic harm

Maltreatment and neglect are harms in themselves and eliminating them should be prioritised regardless of their potential to harm health in later life. As should supporting those who have experienced them. The current interest in the science of ACEs, and the potentially cyclical nature of adversity, should not detract from these imperatives. To this end, caution should be taken to ensure that ACE-awareness is not created at the expense of building systems that facilitate nuanced approaches to individuals' own experiences of events and their subsequent needs.

Risk and protective factors – occurrence and impact

The interrelationships between different sources and forms of adversity make it challenging to isolate the potential routes of association between them – exposures, outcomes, causes and effects can be hard to delineate and many of the causal pathways highlighted in literature and guidance are insight-based. For example, poor mental health can be both a risk factor for and an outcome of other adversities. When a *risk factor* for a negative outcome is a harm in itself the distinction between risks and outcomes can quickly feel arbitrary.

The available evidence of risk or protective factors for distinct ACEs is available is summarised below.

Sexual abuse

The NSPCC defines sexual abuse as a child being forced or persuaded to take part in sexual activities. Contact abuse describes the abuser making physical contact with a child; non-contact abuse describes non-touching activities, which includes grooming, exploitation and online abuse[124]. The ACE studies carried out in England and Wales asked respondents if before they were 18, they had ever been touched, made to touch or forced to have sex with someone at least 5 years older than they were at the time[125].

Sexual abuse presents a clear and troubling example of the ways that aspects of maltreatment can overlap and propagate. Children who experience abuse by a *caregiver* are more likely than others to be abused or victimised by others inside and outside of the family. Severe maltreatment increases the risk of being a victim of sexual abuse, violence and abuse by a sibling and of later intimate partner abuse. Prior victimisation of any kind is a risk factor for sexual abuse, as is a parental history of victimisation. The incidence of sexual abuse by peers is thought it be increasing, and household sexual abuse at an early age has been identified as a risk factor for victimhood when older[126],[127]. At-risk groups include disabled children, looked-after children, those experiencing previous or concurrent abuse, and insofar as they are over-represented in the care system and in children in need statistics, children of black or mixed ethnicity[128].

There are fewer studies looking at protective factors. A systematic review in US looked at protective factors against the *re*victimisation of sexual abuse survivors and identified "perceived parental care" as the only protective factor against this[129]. The Children's Commissioner highlights role that schools can play in preventing sexual abuse and exploitation from occurring, through PSHE and relationships education, availability of trusted adults, emotional and pastoral support within the school. The report recommends that schools consider how Relationships and Sex Education (RSE) (which is due to become compulsory) can create opportunities for children to seek help, which will include ways of establishing supportive and trusted relationships with children[130].

Physical abuse

In England, physical abuse is defined in law as "A form of abuse which may involve hitting, shaking, throwing, poisoning, burning or scalding, drowning, suffocating or otherwise causing physical harm to a child"[131]. Adverse Childhood Experience surveys carried out in England and

Wales asked respondents how often a parent or adult hit, beat, kicked or physically hurt them in anyway, excluding smacking.

A meta-analysis of 155 studies considering 39 different risk factors found that physical abuse was strongly associated with four particular factors: parent perceives child as a problem, parental anger, family conflict and [lack of] family cohesion[132]. The NSPCC identify risk factors in parents, which include emotional or behavioural problems, such as anger management and emotional regulation, and prior victimisation to abuse. Family or relationship problems, and difficulties with parenting, such as not understanding a child or knowing how best to respond to them, are also identified risk factors[133].

The evidence around the benefits of case-finding, or screening approaches to detect current physical abuse is mixed. A systematic review by the WHO Mental Health Gap Action Programme concluded that effective enquiry requires a high level of clinical and cultural competence and should be carried out in the context of case finding or diagnostic assessment and with a view to providing appropriate intervention and / or follow up care. The review found no evidence to support universal screening or routine enquiry[134].

Rather than *protective factors* per se, it may be more appropriate to think of interventions that have been shown promise in preventing physical abuse, or the risk factors for it. The evidence-base on curtailing abuse is limited[135], but there are numerous interventions that have shown effectiveness in supporting positive parent-child relationships and interactions. This includes programmes which support parent-child attachment and support parents to manage non-compliant behaviour in non-aggressive ways.

The Department of Education has assessed dozens of parenting programmes, cataloguing individual programmes by the strength of the evidence of their effectiveness, and the outcomes they have been shown to deliver[136]. Twenty-three programmes have demonstrated effectiveness in improving parenting practices or parental competence[137], and six programmes have demonstrated effectiveness in reducing the risk of maltreatment. The Early Intervention Foundation has also presented this evidence in the context of the Troubled Families programme[138].

Neglect

The original Kaiser Permanente ACE study asked participants about not having enough to eat, having to wear dirty clothes, feeling loved and feeling that there was an adult to take care of them[139]. Surveys carried out in Wales and England focussed on maltreatment rather than neglect but have captured the risk of neglect conferred by parental substance misuse, alcohol abuse, and poor mental health[140].

A meta-analysis of 36 primary studies[141] tested 24 'risk domains' and found 15 were significantly associated with child neglect. Overall, child neglect was associated with multiple risk factors rather than a single specific factor. The strongest predictors of neglect were parental history of antisocial or criminal behaviour, parental experience of mental health problems, and low educational attainment among parents. A second meta-analysis[142] reported that the strongest risk factors for child neglect were social competence, strength of the parent-child relationship, parent(s) perceiving a child as a problem, and levels of parental stress, anger, or low self-esteem. Whilst these studies identify different risks, they label parental or household, factors as stronger risk factors for neglect than environmental or community factors per se.

Substance misuse

To define substance misuse as an exposure, ACE studies in England and Wales asked participants if they, before they were 18 years, lived with anyone who used illegal street drugs, abused prescription medication, or was a problem drinker or alcoholic[143]. Drug use was recorded as a health outcome if a respondent reported that they had used cannabis, heroin or crack cocaine at any point in their lives.

Substance misuse is a risk factor for concurrent abuse and neglect[144], as well as a stand-alone source of traumatic experiences[145],[146]. Risk factors for substance misuse in parenthood again speak to the cyclical nature of adversity, with abuse, neglect and poverty cited as key vulnerabilities to misuse and addiction[147],[148],[149].

'Resilience factors' – factors found to be more common in people that have experienced household substance misuse in childhood and who do not report serious problems in adulthood include secure, caring relationships with the primary care giver or other adult(s), family harmony, and engagement in a range of activities, which in turn support the development of self-esteem, confidence, self-efficacy, and feelings of having choice and control[150].

Criminal behaviour

The US and UK ACE surveys ask participants about having lived with someone who served time or who was sentenced to serve time in prison or a young offenders' institution. Assessment of criminal behaviour as an 'outcome' has been made through surveys – defined as one or more night(s) spent in prison, jail or in a police cell – and using police, crime, prison and youth offending data.

Up to 50% of children with a diagnosis of conduct disorder go on to develop antisocial personality disorder[151]. Antisocial personality disorder is partly defined by a propensity towards criminal behaviour[152] and personality disorders are thought to effect in excess of 50% of the prison population (compared with 5-10% of the general population)[153]. Conduct disorder itself is strongly associated with substance misuse, poor educational outcomes and early acquaintance with the Criminal Justice System. The causes of personality disorder are multi-faceted, but difficulties in childhood are consistently cited as a contributor[154],[155].

Research by the NSPCC found an association between childhood maltreatment and 'delinquency' (violence towards others, truancy, running away, petty theft and taking drugs) in female respondents of all ages. An association between childhood maltreatment and delinquency was found in male respondents aged 11-17 years (in male respondents aged 18-24, delinquency and experience of maltreatment did not correlate)[156].

Violence and gang involvement in young people

Violence victimisation and perpetration has been assessed by the UK ACE surveys as having hit someone or as having been hit by someone in the last 12 months. Gang involvement has not been assessed within ACE surveys to date, but ACEs have been identified as a risk factor for gang involvement, in virtue of the overlapping associations between poor maternal mental health, domestic violence, social exclusion, deprivation and a range of other individual, relationship and community level indicators[157].

A literature review of studies commissioned by the Early Intervention Foundation for the Home Office examined risk and protective factors, recording factors at individual, family, school and

community level. Strong protective personal factors were - a belief in a moral order, positive or prosocial attitudes and low impulsivity. Strong protective family factors were good family management, stable family structure and infrequent parent-child conflict. Academic achievement and low economic deprivation were identified as protective school and community factors, respectively[158].

Insights gained from the Greater London Authority's violence reduction work suggests a level of distrust between the young people at greater risk of violence and statutory agencies – police, schools, social services – and that this reflects distrust at community level.

MOPAC's 2018 Youth Voice Survey[159] found that 56% of young victims of violence did not report the matter to the police. When asked why not, responses included thinking the police would not help them (32%), that they did not want to be a grass (27%), that they did not feel comfortable talking to the police (23%), that they did not like the police (22%), and that they had had a bad experience with the police before (14%). These responses were more common among BAME young people than among white young people.

Black and minority ethnic young people were also more likely to give a negative opinion of Stop and Search. While 62% of white young people reported that the police treated them with respect during the process, just 38% of BAME young people reported the same.

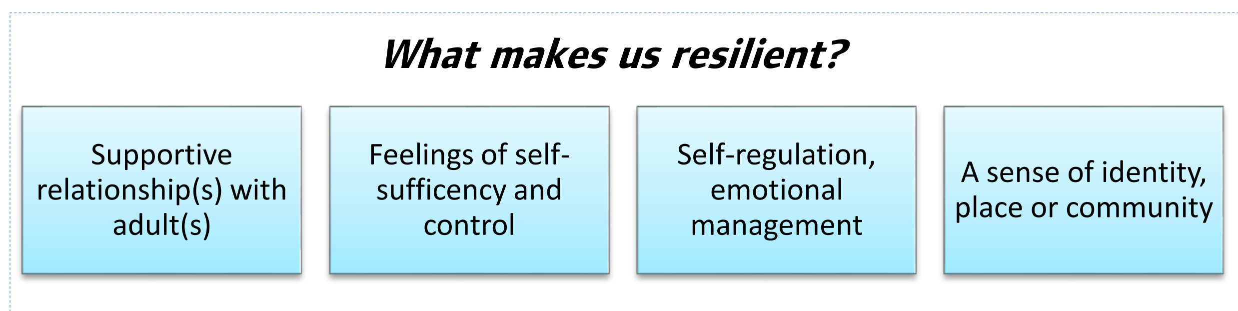
Overall, the survey found a matrix of associations between: early exposure to violence, including knowing people who are in gangs and/or personal knife carriage; poorer mental wellbeing; feeling unsafe at home, and becoming a victim of violence.

Adolescence represents a time of particular vulnerability to adverse experiences, as young people transition into adulthood, spending more time outside their home.

In adolescence, children spend more time outside of home and are exposed to a greater number of peer and community influences. Whilst this should present opportunities for personal, social, emotional and cultural growth, it can be a time of significant risk for those that are carrying vulnerabilities from experiencing prior adversity. Adolescence itself has been shown to be a risk factors for violence insofar as adolescents have a greater tendency than children or adults to take risks, pursue excitement and to over-invest in short-term gains[160].

Protective factors more broadly – the concept of resilience

Figure 6: What makes us resilient



Source: Adapted from The Center on the Developing Child and Public Health Wales

Not everyone that encounters or has encountered adverse events in their childhood will have difficulties in adulthood. A nuance of the concept of Adverse Childhood Experiences is the subjective quality of *experience*. Responses to similar events vary between individuals and adversity should not be considered deterministic of poor outcomes. Similarly, the types of adult adversity discussed in this report can result from a multiplicity of factors, which need not include events commonly recognised as ACEs.

Whilst associations between ACEs overall and negative outcomes overall are now well-documented, protective factors are less clearly understood and potentially more nuanced. Investigation and analysis of protective – or *resilience* – factors presents a complex picture, in which 'assets are not the opposite of vulnerability'[161], and the combination of assets held by a vulnerable child is likely to influence the moderating impact of said assets on a child's outcomes[162].

Public Health Wales developed a Child and Youth Resilience Measure, which aimed to assess the prevalence of factors presumed to protect children against mental ill-health in adulthood. The factors included having role models, feeling supported, having a sense of self-efficacy and attending social activities, sports and clubs. 'Adult resilience factors' were also tested, which included financial security, feeling supported by work or services, and participating in clubs or social activities. In a population survey[163], higher numbers of reported resilience factors were associated with both a lower number of ACEs and with a lower risk of mental ill-health. However, it is not clear whether the particular resilience factors identified were independently associated with a lower risk of mental ill-health in groups of people reporting a certain number of ACEs[4].

Whilst there is no agreed definition of 'resilience', it is most commonly described in terms of 'bouncing back' from set-backs or stressful experiences[164]. The most common factor found in people acknowledged to have demonstrated resilience following adverse events is the presence of at least one stable and committed relationship with a supportive parent, caregiver, or other adult[165]. Other common features are a sense of control over one's life[166] and a sense of identity in a cultural, faith, place or community context[167]. Recognising 'resilience factors' other than a single supportive adult relationship seems vital in the context of maltreatment, which can itself stem from a parent or primary caregivers. These factors are summarised in Figure 6.

When "resilience" can disempower

When discussing resilience, care should be taken to ensure that those who have experienced adversity are not stigmatised or disempowered by the implication that they ought to be or have been more resilient than they are. In common with concepts of struggling, suffering, or thriving, resilience is a subjective term. Individuals that have survived abuse, neglect, maltreatment or hardship will have done so by showing resilience.

Care should be taken to ensure that discussions about *building resilience* do not give the impression that individuals and communities who have experienced adversity have not responded to it in the appropriate way.

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[4] Within each 'ACE count' grouping, i.e. 0 ACEs, 1 ACE, etc. the proportions of people reporting low, moderate or high resilience factors have overlapping 95% confidence intervals. This means that we cannot be confident that the proportion of people with low, medium and high resilience factors truly differ. We cannot exclude the null finding that there is in fact no real difference in the levels of resilience factors between people with a defined number of ACEs and mental illness.

Assessing and responding to ACEs in the population – identification, prevention, treatment

A public health framing – Primordial, Primary, Secondary and Tertiary Prevention

Table 2: A Framework for intervention

Phase	Goal	Examples
Primordial prevention	Prevent the occurrence of factors before they exist in the context in which they could be harmful, by changing the social and environmental conditions	• Provision of secure and suitable housing before someone starts a family. • Drug and alcohol treatment services that stop harmful substance use prior to parenthood. • Whole-school approaches to emotional health and wellbeing, establishing a culture of support and inclusion before e.g. challenging behaviour arises.
Primary prevention	Prevent the occurrence of adverse events so fewer children have adverse experiences	• Parenting interventions that prevent physical abuse. • Treatment and support for maternal mental health problems
Secondary prevention	Reduce the impact of exposure to adverse experiences	• Programmes of family support for those with a family member in prison. • School-based mental health or emotional support for children with adverse experiences.
Tertiary prevention	Treat and reduce the long-term consequences of ACEs in children and adults	• Applying trauma-informed approaches to a broader range of services, e.g. education, housing, policing. • Programmes that address health-harming behaviours associated with adverse experiences. • Increasing 'trauma awareness' in health and care workforce or other populations.

Adapted from; Adverse childhood experiences and trauma informed care: the future of health care – a framework for intervention Link

Primordial prevention of ACEs – preventing factors before they become risks

Primordial prevention describes interventions that change behavioural or environmental factors before they are able to create risks in a revised context. For childhood adversity, this includes changing environmental factors to reduce the risk of 'adverse behaviours' in adults, so reducing the risk of exposure to adversity among children in turn. For example: changing health-harming behaviours like substance misuse before someone becomes a parent; supporting adults to seek treatment for mental health problems before they have a family, or actively making a school environment more nurturing, so if and when challenging behaviour occurs, it is met with less-exclusionary responses.

These could be universal programmes, e.g. improving access to mental health services for all adults, or programmes aimed at particular groups, e.g. ensuring expectant parents have safe and secure housing.

Primary prevention of ACEs – preventing adverse experiences from occurring

Primary prevention is achieved via policy and services to prevent individual exposures to adversity, e.g. parenting classes that reduce negative parenting practices, mental health promotion and support for parents, substance misuse support in maternity and early years,

safeguarding interventions for families, contextual-safeguarding interventions that prevent adverse experiences in school and other extra-familial environments.

The evidence of effectiveness of this type of prevention amounts to the evidence of effectiveness of the particular services – effectiveness of parenting classes (at preventing verbal abuse and physical punishment), substance misuse services for parents, etc.

Secondary prevention of ACEs – reducing the impact of exposure to adverse experiences

Secondary prevention could refer to interventions that: support the child that has or is experiencing ACEs and so lessen the impact; enhancing resilience in children and families at higher risk of adversity.

Secondary prevention approaches can be universal, e.g. to promote emotional wellbeing and resilience of all children through environmental factors or targeted towards families or individuals who are most at risk.

Tertiary prevention of ACEs – addressing the impact that ACEs have had, either a child's recent (or ongoing) experience, or adults living with the sequalae of trauma

Investigating and addressing the role of trauma in an adult's physical or mental wellbeing. This is preventative because it stands to breaks the cycle of ACEs and prevents the sequalae of further symptoms, including health-harming behaviours, challenging relationships, definable mental ill-health and revictimization. It also aims to prevent intergenerational transmission by supporting an adult's parenting capability.

Universal and targeted approaches

Population surveys indicate that around 10% of the general population are likely to have experienced four or more ACEs, and up to half will have experienced at least one. In populations with specific needs, such as substance misuse, homelessness, or offending, the prevalence of multiple ACEs is likely to be much higher. Recognising this prevalence in the design and delivery of **universal services**, such as education settings, is a way of taking a population-based approach to a commonly occurring problem and is a form of early intervention. And taking measures by applying such approaches to the more **specialist services** that cater to people with higher levels of need, e.g. substance misuse or homelessness services, stands to make these services more inclusive and effective.

Routine enquiry into ACEs and trauma

The prevalence of Adverse Childhood Experiences has generally been assessed through large-scale, population surveys of a representative sample of adults. The aim of these surveys has been to understand the ACE-prevalence in a population, and make a judgement based on existing literature about the likely level of need based on understandings of the sequalae of childhood trauma and adult health outcomes. These surveys have been carried out for research purposes and were not intended to form the basis for intervention in those reporting prior adversity.

An alternative way of assessing ACEs in a population is routine enquiry, sometimes referred to as 'ACE screening'. Under routine enquiry, users of either a universal service, e.g. those registering with a GP, or targeted service, e.g. those attending a drug and alcohol service, are

asked whether they have experienced ACEs or trauma. By identifying ACEs in individuals, this routine enquiry aims to identify people whose health and wellbeing may be affected by ACE-related factors either in future or at the present time, and to provide care that accommodates this. It is thought that routine enquiry facilitates early identification of ACEs, which in turn facilitates opportunities to address their current or potential consequences.

A model of routine enquiry - Routine Enquiry into Childhood Adversity (REACh) – was developed by the Lancashire Care NHS Foundation Trust, along with a practitioner training programme. The training programme was trialled in four organisations offering universal services, and five providing targeted services. The training aimed to increase practitioner's awareness of ACEs and their potential health impact(s), and their confidence in asking clients about ACEs as part of routine assessment and care. Follow-up interviews with a sample of practitioners that had received the training indicated that all organisations were implementing some aspect of REACh, with variation between services, practitioners and service user groups[168].

A subsequent pilot study based on the Lancashire Care model trialled routine ACE enquiry in three targeted settings: a Child and Adolescent Mental Health Service (CAMHS), a drug and alcohol service, and a sexual violence support service. Two of the three pilot sites commenced routine enquiry with a subset of service-users, giving a total sample size of 15 service-users. None of the pilot sites embedded routine enquiry fully into their practice. Practitioners at all three sites expressed concerns about the questionnaire, generally that the topics it raised (sexual violence, parental maltreatment) were too sensitive and nuanced to be raised through a questionnaire, in advance of developing client-practitioner rapport, and were also concerned that if ACEs were identified, service pathways and support options were not clear.

A 'pathfinder' project in Wales investigated the feasibility of routine enquiry in primary care settings[169]. In total, 218 ACE enquiries were made of adult GP patients over seven months, by clinicians in different roles (a larger sample was envisaged by several practitioners withdrew from the process after a two-week trial period).

Participating practitioners reported greater empathy and that they took a more holistic view of patients' needs following ACE enquiries. They were not able to judge any therapeutic benefits for patients but did feel it helped some patients understand themselves better. Resourcing implications were an identified challenge (length of initial appointment), as were lack of follow-up pathways.

Patients were asked to feed-back on the enquiry process and just over half agreed to do so, and their comments were overwhelmingly positive. ACE enquiry was not found to increase demand for services – patients that disclosed ACEs were offered an appointment to discuss them, but none took this up. The researchers concluded that the study demonstrated proof of concept, but that implementation challenges would need to be investigated and overcome before ACE enquiry could be confidently implemented at scale.

It has been noted that routine enquiry – the act of being asked – has been proposed to be of therapeutic benefit in itself[170]. However, a review of the evidence-base for routine enquiry found a paucity of studies investigating the positive or negative *outcomes* of routine enquiry[171], and a focus on interventions of demonstrable effectiveness has been proposed in the alternative[172].

An evaluation of methods used to assess ACEs in children in the US looked at 14 different assessment methods, of which 5 were used clinically, and whilst it found consistent intentions

across the various methods, identified potential challenges in using parent-dependent ACE questionnaires to attempt to identify current psychosocial risks or abuse[173],[174].

Some organisations have advocated for "universal screening" approaches based on writings by the US Substance Abuse and Mental Health Service Administration (SAMHSA), who have stated that "[trauma-informed approaches] can be implemented in any type of service, setting or organisation". SAMHSA in fact states that "universal screening for trauma" is applicable in services that are treating people who have presented with a substance abuse or mental health issue as part of the investigation of the symptoms with which they are presenting[175]. This would not generally satisfy a 'public health definition' of screening – in which the target population is individuals without symptoms – and would instead be considered case-finding within an at-risk population, or part of clinical investigation.

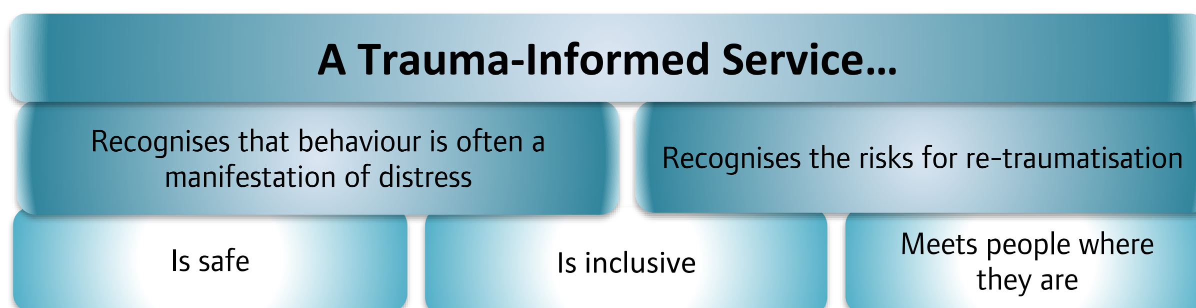
To date, Routine Enquiry in Childhood Adversity (REACh) has been implemented in several areas and services in the North West, including Health Visiting, Family Support Workers, substance misuse, domestic abuse services and young people's services[176], but are yet to be evaluated. A scoping review of the evidence base for ACE enquiry confirmed an absence of and need for evaluations to understand its impact[177].

Awareness-raising

Awareness-raising is part of the Scottish ACEs Hub's strategy to progress national action on ACEs, specifically 'raising awareness and understanding about ACEs'. Both NHS Health Scotland and Public Health Wales have produced short animated videos communicating the headline concepts of ACEs and their health impacts. High-profile conferences have been held in both nations on the theme of becoming ACE-Aware nations.

A feature length documentary film *Resilience – The Biology of Stress and the Science of Hope* has been screened in approximately 200 locations across the UK since 2017, in showings organised by various health and social care professionals, charities and independent cinemas.

Trauma-informed services and psychologically-informed environments



A service is **'trauma-informed'** if it acknowledges in its design and delivery that people accessing services may have experienced trauma which can affect their behaviour, willingness to engage, and how they interact with people. For example, a person who has experienced abuse, neglect, or chronic fear may become hyper-vigilant and mistrusting of other people and find it more difficult to manage their emotions. A trauma-informed perspective accommodates this by making service environments feel safe, showing patience and recognising challenging behaviour

as a manifestation of distress. It recognises 'survival mode', risk factors for re-traumatisation, and asks not "what is wrong with you?" but "what happened to you?". It also recognises the potential for secondary trauma in staff working within the service.

A related concept is **'psychologically-informed environments'**. These are settings or services that make use of psychological frameworks or theories in their physical design, operating policies, and how staff are supported and trained[178]. A psychologically-informed environment takes into account people's thoughts and feelings – in the context of ACEs, this means people that have experienced or are experiencing trauma – and may incorporate elements of attachment theory or community psychology. In London, the most comprehensive adoption of this approach is seen in homelessness services[179],[180],[181] with some exploration by domestic abuse services[182].

In **education settings**, trauma-informed approaches focus on making school feel inclusive and nurturing, recognising that secure, trusted relationships with adults are key to supporting children who have experienced trauma[183]. **Scotland** has progressed a trauma-informed child health model with Getting it right for every child (GIRFEC) policies on child wellbeing[184], and the Scottish ACEs Hub has brought ACEs-awareness and education policy together[185]. In **England**, Mental health and behaviour in schools guidance from the Department for Education promotes early help, attachment awareness and whole-school approaches to accommodating the presence of trauma and ACEs. In **Wales**, a training package in the ACE-Informed Whole School Approach has been made available nationally, following a pilot in three primary schools. There are numerous providers of training and tool-kits for schools around trauma-informed approaches, some of which refer to ACEs explicitly, some to trauma more generally[186],[187].

In **London**, the Healthy London Partnership's Mental Health in Schools Project has mapped mental health projects underway in London schools and identified examples of universal early help programmes in operation. Whilst not ACE- or trauma-specific, these include programmes designed to promote resilience and emotional management, cognitive behavioural therapy-modelled initiatives, and mindfulness[188].

Islington Council, CCG and Whittington Health NHS have implemented a Trauma Informed Schools Pilot Project[189], training staff (teachers in five primary schools and four PRUs, and all CAMHS staff across in multiple school sites in the first phase) in the Attachment, Regulation and Competency (ARC) framework[190]. The training aims to equip staff to take trauma-informed approaches to managing children's behaviour. The intended outcomes are that children regard school as a caring and supportive environment in which there is an adult they can talk to, that staff are better able to identify and support cases of vulnerability, and that behaviour and attendance at school improves. The pilot has been extended to additional sites, and a full evaluation is pending. In the mid-point evaluation, school staff have reported positive improvements in pupil behaviour. Pilot primary schools recorded fewer exclusions during the pilot period than in the previous year.

A **cluster of North London boroughs**[191] are working in partnership with the University of Bedfordshire to develop and apply robust systems of **Contextual Safeguarding** across schools, neighbourhood and other extra-familial spaces in which children spend time and can experience vulnerability. Because having experienced adversity or lack of safety at home increases children's vulnerability to exploitation or abuse by peers or adults outside the home, contextual safeguarding relates closely to ACEs and trauma. Adverse experiences, including bullying and peer-abuse, can also occur for the first in these environments, making extra-familial settings opportunities for primary as well as secondary prevention measures.

In **policing and the criminal justice system** more broadly, trauma-informed models recognise that those affected by crime may be traumatised by the crime itself, but also are at higher risk of having experienced other forms of trauma or ACEs. Trauma-informed policing recognises that acute or chronic trauma can impede both the recall of events[192] and a person's willingness or ability to engage with officers and that recounting events can in itself be traumatising. Trauma-informed approaches are also forming part of police forces' strategic responses to prevention, and to public health models of policing[193], which have developed in part from the recognition that an increasing proportion of police call-outs relate to issues of vulnerability. In North London, the Lighthouse provides multidisciplinary support to children and young people that have experienced sexual abuse or exploitation. This includes help and advocacy with criminal justice processes and mental and social wellbeing support tailored towards each child's recovery.

In **Scotland**, Ayrshire Police intend to deliver training on ACEs and trauma to all of its officers and have shown the documentary film Resilience to 580 officers as part of initial awareness-raising, before rolling out more targeted training[194]. In **England**, the NHS commission Liaison and Diversion teams that work with police to identify people with mental health, learning disability, substance misuse or other vulnerabilities when they first come into contact with the CJS, as suspects, defendants or offenders. Blackburn, Darwen and East Lancashire NHS Trust has developed an early intervention framework with lower thresholds for support and intervention that the existing MASH (multi-agency safeguarding hubs) services, and a multi-agency team approach involving the Council, police, fire service, NHS Trusts, social landlords and third sector consortia[195]. In Northamptonshire, The Early Intervention Partnership Hub operates a home-school-street model providing early intervention for children who do not meet the threshold for social services involvement but are coming to the attention of agencies[196].

An inspection of the work of **Youth Offending Teams** (YOTs) by HM Inspectorate of Probation found that the teams are effective in protecting the public as well as improving the opportunities of the young people they engage with. The report discussed the high incidence of traumatic events in the lives of a majority of the young people in contact with YOTs. This, and the poorly understood role of social media in young people's lives and disputes, were the key findings of the report and central to its recommendations – that the Youth Justice Board, YOT management boards and YOTs design, guide and deliver services that take proper account of the impact of trauma in young people's lives.
In **London**, the DIVERT project, engages young people at the point of police detention, aiming to support them to develop their ideas and aspirations with a view to gaining employment, with supportive training and skills development – emotional intelligence training is a case study example. They report a 7% reoffending rate, compared to 29% among those not involved in the pilot. They signpost the individual to sources of help with housing, debt or drugs if needed. Initially operating out of Brixton Police Station, Tower Hamlets and Hackney are currently piloting the scheme.

The charity Redthread is currently commissioned by MOPAC to provide a hospital-based intervention service to children and young people who present at London's major trauma centres with violent injuries. Redthread's youth workers provide support using trauma-informed approaches and aim to help the young person navigate themselves away from crime and violence.

In Haringey, Project Future is a community-based and youth-led mental health project for men aged 16-25 who are involved in offending or serious violence. The service is rooted in psychological support including elements of community psychology, trauma-informed practice and co-production. It is run by a team of mental health professionals and service-users who

have become community consultants for the service. Project Future recognises the young men who attend as having experienced multiple forms of adversity and social exclusion. It aims to help their service users by promoting feelings of choice, inclusion and capability, and to help them identify options to continue their education or find training or employment.

Asset-based approaches

There is a risk that efforts to prevent ACEs and trauma can tend only towards deficit-based models, centred on identifying and addressing health needs. Holistic approaches to enhancing individuals' and populations' health and wellbeing will include asset-based approaches, in which individual and community assets are recognised and developed[197].

Elements of asset-based approaches to ACEs and trauma will include: recognising the resilience that individuals who have experienced adversity have already shown; emphasising relationships and social connections; recognising individuals' skills and helping them find ways to apply them; co-design and -production of activities, services and care pathways.

What is happening in London Boroughs - Survey findings

A short questionnaire was sent to all of London's Directors of Public Health and of Children's Services and to Youth Offending Teams and Community Safety Partnerships to understand if and how boroughs are applying ACE-informed or trauma-informed approaches in services.

Nineteen organisations responded with several providing detailed information and advising that they would be happy to be contacted for further conversations. The majority of responses were from a named London borough, rather than from individual teams, with many describing activities that are taking place in multiple parts of their organisation. Three responses were from Youth Offending Teams, one from an acute trust, one from a provider of Health Visiting and one from a named local authority public health team. Responses were received from organisations in all of London's Sustainability and Transformation Partnership regions.

<u>Measuring or modelling the prevalence of ACEs</u>

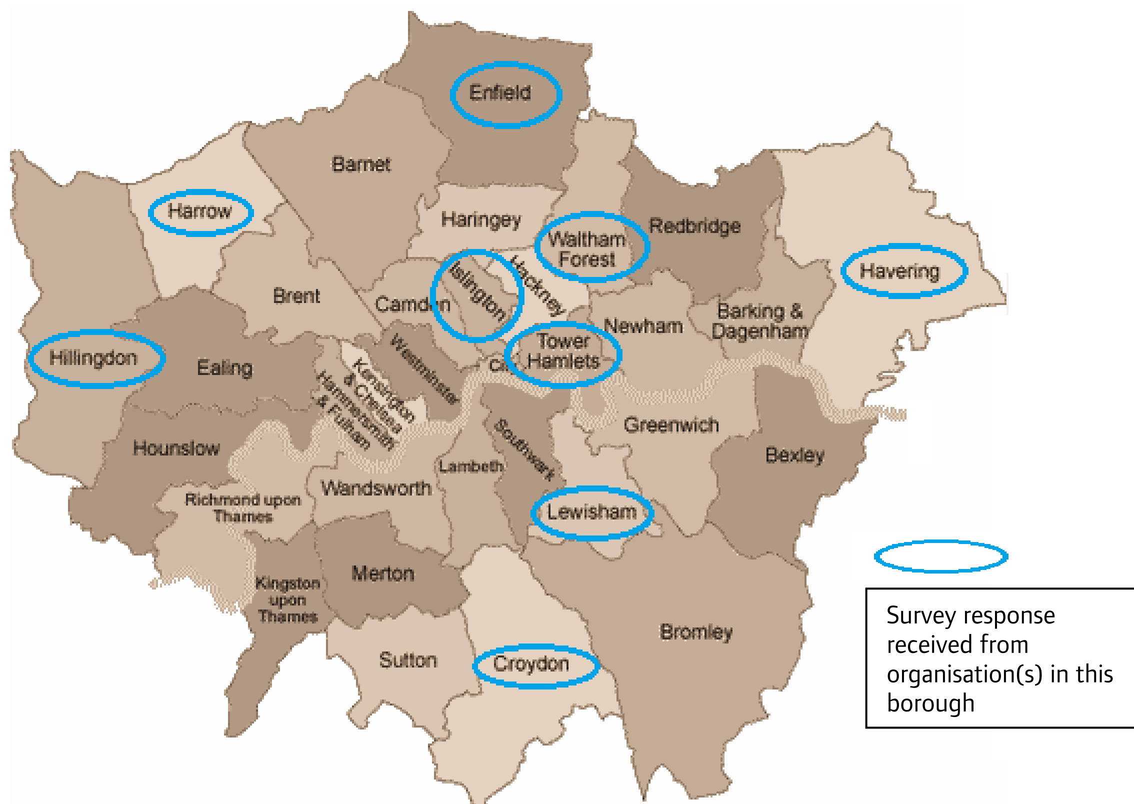
Five respondents reported having measured or modelled the prevalence of ACEs in their population, measuring prevalence in adults (2), children (3), adolescents (1) or particular population groups (2). Thirteen (72%) respondents reported not having measured or modelled prevalence. Of those that had investigated prevalence, a range of methods was used, with one carrying out a population survey, two using service-use data, two using existing health needs assessments, and three modelling local prevalence using other ACE studies.

<u>ACE- or Trauma-awareness in current services</u>

Fifty percent of respondents advised that they had designed ACE- or trauma-awareness into new or recommissioned services, and fifty per cent that they had not.

Services into which ACEs or trauma had been designed were: Early Years, schools and Pupil Referral Units, early help services, family support services, training for Youth Offending Teams and children's social care, Family Nurse Partnership, and school-based mental health services, CAMHS Transformation Plan, Domestic Abuse Intervention Service. **Schools** were mentioned by several respondents.

Figure X: Locations of organisations that responded to survey



One borough identified specialist services in their response, specifically **sexual health** and **substance misuse**, and two specified **Youth Offending Teams / services**. One identified **social care** and partners in their **Early Help board**.

Of those that were aware of other teams or services in their organisations that were applying similar approaches (39%), violence reduction teams and children's services were highlighted.

All targeted children's services are trauma-informed

One borough advised that it applies various forms of trauma-informed practice in all its **children's services**, identifying the Educational Psychology Service, Schools' Emotional Wellbeing Service, Behaviour Support Service and a Parent Infant Partnership as examples:

"[Our] Parent Infant Partnership explicitly uses trauma informed practice in their case work and through the training they deliver to other universal services, e.g. Health Visitors"

The borough gave the following examples of **training** undertaken: Attachment Lead Training undertaken by several schools; Nurture Group staff undertaking training in early or developmental trauma, and CPD events for CAMHs and EPS staff on trauma-informed practice.

Intentions to expand trauma-informed practice

Two boroughs advised that they intend to **expand trauma-informed practice within Health Visiting, School Nursing and Early Help Services**. One described incorporating ACE-awareness into a forthcoming Early Help service pilot:

"This is a redesigned service, involving closer working practice between professionals who are working with families, additional practitioners working with children and young people who are in danger of being on the cusp of violence; additional social workers; greater co-location of early help practitioners and health colleagues within children's centres; embedding the restorative practice approach to working with families and working in a holistic way. The aim is to reduce instances of neglect by intervening earlier and more effectively, and by strengths-based practice to support parent – child interaction and communication and language development."

This borough has initiated professional discussions around ACEs by **showing and discussing the film Resilience** with Early Years practitioners, Health Visitors, the borough's Early Help, Family Support, and Strategy and Policy teams, and voluntary sector organisations. They are planning further work with their children's social care service and are exploring ways of incorporating ACE-awareness into their existing social work practice model.

A similar more systemic approach was described by a second borough, who advised that they have set up a multi-agency ACEs working group and have drafted an **"ACEs approach"**, the first phase of which will include **awareness-raising** via targeted work with primary care organisations, professional training, a resource portal, and awareness-raising events. They also advised that their CCG is offering **ACE-awareness training** to GP leads, and that ACE-awareness is part of the internal training programme at one of the borough's hospitals.

One borough sounded a note of caution about awareness-raising, specifically that **simply being *aware* that a child has or may have experienced some form of trauma falls short of knowing *how* that can affect communication**, and that staff need training and support to recognise challenging behaviour in those terms:

"[the current] approach generally is simply about trying to get professionals to understand what the young person is going through. However, it is almost certain that unconsciously that young person will, in some way, be wanting the professional to 'contain' some of the difficult feelings that they cannot… e.g. a teacher who is being provoked by a child who at an unconscious level wants the teacher to understand what is going on in the child's inner world."

Findings

The prevalence of ACEs in London's population

A question this report sought to answer concerns the likely prevalence of ACEs in London, and whether a population survey was necessary to inform a strategy approach. For the following reasons, a population survey for London is not recommended:

Population surveys carried out in Wales and in regions of England produced similar prevalence estimates to one another and were in broad agreement with the original ACE prevalence study: approximately 50% of the population reported at least one Adverse Childhood Experience, and approximately 10% of the population reported four or more. The combined sample size of surveys carried out in England and Wales is 15,431. London's population is more ethnically diverse[198] than the surveyed regions and is of course, a wholly urban population. Whilst this calls into question the applicability of the ACE prevalence from other regions, it also presents

methodological challenges. The money and time cost of a large-scale survey for London would be considerable.

Given the agreement between existing surveys, it seems unlikely that the prevalence of reported ACEs in London would be so far outwith those reported that it would initiate a very different service or policy response. This mirrors the approach taken in Scotland, where policy approaches have been based on the findings of the prevalence studies conducted in England and Wales.

The academic literature and the UCL ACE Index provide evidence of association between ACEs and deprivation. This reflects the known associations between poverty and individual ACEs, and their associated physical, emotional and social health outcomes. It may be anticipated that in London, the areas of need associated with ACEs will broadly align with the areas of need associated with deprivation.

From Borough Survey

The borough survey indicates some variation between in boroughs in the prominence of ACEs and trauma-informed approaches in current policies and services. Where the concepts were being applied, it was most frequently in services for children and young people, with schools and youth offending teams being mentioned by several respondents. Two boroughs described more system-wide approaches and a prioritisation of an 'ACE agenda', including workforce awareness training with particular professional groups.

This suggests that whilst the level of professional interest in ACEs and trauma-informed approaches seems high, it is not (yet) being applied systematically in practice in London boroughs. Where Boroughs are taking systematic approaches, or prioritising ACEs across multiple agencies, this may be the result of focussed enthusiasm among local leaders.

The evidence invites the following observations for London:

1) Around half of Londoners are likely to have experienced at least one form of adverse experience in their childhood.

2) Around 10% of Londoners are likely to have experienced four or more different types of adversity, likely to include abuse or neglect.

3) Children and adults can be adversely affected by types of event and experience other than those identified in the dominant 'ACE studies' – the need to understand and mitigate adverse community environments as critical opportunities for primary prevention must not be overlooked.

4) The distribution of Adverse Childhood Experiences in London will broadly align with areas of affluence and deprivation, with higher prevalence of ACEs found in more deprived areas.

5) Population groups with a high level of adversity or need in adulthood, including those who are homeless, in prison, have substance misuse issues, or serious mental health problems are more likely to have had Adverse Childhood Experienced than the general population. This should be acknowledged when developing services for these groups.

6) The prominence of ACEs and trauma-informed approaches in service design and delivery currently varies between boroughs, and few system-wide approaches.

7) That making universal services, e.g. schools, PRUs, better able to support those who have experienced adversity could benefit those individuals directly and benefit the broader group indirectly, by improving cohesion and inclusion and providing opportunities for secondary prevention of ACEs and trauma.

8) Londoners with a high level of health or social need are particularly likely to have experienced ACEs and trauma and may benefit from targeted support services becoming more ACE- or trauma-informed in design.

Approaches to ACEs and trauma – promising interventions and where caution is advised

Table 3 summarises the findings from the borough survey and policy stocktake, identifying current services and interventions that are applying ACE- or trauma-informed approaches. It identifies opportunities for development of preventative strategies, grouped into primary, secondary and tertiary prevention opportunities. (Primordial prevention opportunities seldom delineate cleanly from the other intervention levels, so have not been listed separately).

Table 3: Summarising current ACE- and Trauma-informed practice in London and indications for future developments – Primary, Secondary and Tertiary prevention

	Primary prevention Preventing ACEs from occurring	**Secondary prevention** Lessening the impact of ACEs that have or are occurring	**Tertiary prevention** Supporting the treatment and recovery from the sequalae of ACEs
Existing legislation and policy context	Safeguarding (NL) Contextual (extra-familial) safeguarding (L) Homelessness reduction legislation and policy (NL) Social Inclusion Strategy (GLA) Health Inequalities Strategy (GLA)	Safeguarding (NL) Contextual (extra-familial) safeguarding (L) Homelessness reduction legislation and policy (NL) Social Inclusion Strategy (GLA) Health Inequalities Strategy (GLA)	Social Inclusion Strategy (GLA)
Current activities			
Current activities acknowledging ACEs and trauma ***As identified by Borough Survey*** N = national L = Local (Local authority / CCG)	• Health Visiting – core and more intensive services, e.g. Family Nurse Partnership (L) • Early Help service (violence prevention (L) • Child and Adolescent Mental Health Services – primary, secondary, community (NL)	• Educational Psychology Service (L) • Behaviour Support Service (L) • Parent Infant Partnership (L) • Early Help service (violence prevention (L)	• Educational Psychology Service (L) • Child and Adolescent Mental Health Services – primary, secondary, community (NL) • PHSE / SRE – mental health and wellbeing (L)

GLA = Greater London Authority	• School-based PHSE / SRE – health relationships, healthy sexual relationships, reducing bullying (NL) • Children and Family Centres (L) • Children's Social Care and Youth Offending training for London Safeguarding Children Board staff (L)	• Trauma-awareness training for school staff (L) • Attachment Lead training for school staff (L) • Child and Adolescent Mental Health Services / emotional wellbeing service – primary, secondary, community (NL) • PHSE / SRE – mental health and wellbeing (L) • School health and School Nursing (L) • SEND provision (L)	• School health and School Nursing (L) • SEND provision (L)
Current activities acknowledging ACEs and trauma ***As identified by literature and policy search – This will not be exhaustive*** N = national L = Local (Local authority / CCG) GLA = Greater London Authority	• Parenting classes (L) • Safeguarding procedures within 0-19 services (L) • Contextual (extra-familial) safeguarding (North London Cluster) • Adult mental health services – primary, secondary, community (L) • Troubled Families Programme (NL)	• Social / key worker support (L) • Young Londoner's Fund-funded projects (L GLA) • Youth and community projects (L) • Contextual (extra-familial) safeguarding (North London Cluster) •	• Social / key worker support (L) • Trauma-informed models in Criminal Justice System / Youth Justice, e.g. YOTs, diversion projects. (L London) • Young Londoner's Fund-funded projects (L GLA) • Youth and community projects (L)

	• Problem-orientated and hot-spot policing (violence reduction) (London)	• Trauma-informed / psychology-led young people's services, e.g. Project Futures. (L) • Social prescribing (GLA L) • Housing support for those affected by violence (L) • Troubled Families programme	• Trauma-informed / psychology-led young people's services, e.g. Project Futures. (L) • Universal Mental health awareness raising / parity of esteem / wellbeing at work (N L GLA) • Social prescribing (GLA L) • Housing support for those affected by violence (L) • Troubled Families programme • Services for high need groups, e.g. rough sleepers, substance misuse. (L) • Family Drug and Alcohol Courts (L – 9 London authorities)
Future opportunities – promising; potentially promising; caution advised			
Future opportunities - Promising evidence of effectiveness and potential for high impact	**Expanding the provision of parenting classes** *Multiple parenting programmes have demonstrable evidence of effectiveness.*	**Trauma-informed schools / Whole-school approaches** *Encouraging results from pilot project in Islington*	**Incorporating ACEs and trauma into targeted services for high need populations** *Psychologically and / or trauma-informed services for high-need groups –*

	Expanding the provision of parental mental health support *Established evidence base for clinical interventions and opportunities within community and / or social prescribing*	**Enhancing early recognition and support for children with behavioural, educational or emotional needs** *Earlier intervention to promote social and educational inclusion.* **Enhancing mental health support available to children and young people** *Earlier intervention to promote mental health and wellbeing and promote social and educational inclusion.*	*e.g.* *Psychologically-informed homelessness services;* *Trauma-informed approaches in substance misuse services.*
Future opportunities - Potential to show evidence of effectiveness or impact Opportunities for cross-policy support	**Professional group awareness-raising of ACEs and trauma – film Resilience showing, conferences.** *Raising awareness of ACE-pathways within practitioner and policy community may galvanise knowledge and interest and bring agencies together.* **Whole-systems approaches to ACE- or Trauma-awareness** *System-level approaches, including national policy support, have resulted in ACE-prevention activity in multiple children's service areas in Scotland and Wales. This may lead to more progress in reducing health inequalities, influencing the social determinants of health, e.g. education, and emotional*	**Professional group awareness-raising of ACEs and trauma – film Resilience showing, conferences.** *Raising awareness of ACE-pathways within practitioner and policy community may galvanise knowledge and interest and bring agencies together.* **Whole-systems approaches to ACE- or Trauma-awareness** *System-level approaches, including national policy support, have resulted in ACE-prevention activity in multiple children's service areas in Scotland and Wales.*	

	wellbeing, than would have been achieved otherwise.		
Future opportunities - Recommend caution due to limited evidence of effectiveness and / or untested possibility of harm	**Routine-enquiry or "ACE screening"** *Limited current evidence of effectiveness of routine enquiry processes. Evidence of outcomes, and of how to implement routine enquiry successfully is currently limited. Potential opportunity cost of implementing routine enquiry vs. proven interventions.*	**Routine-enquiry or "ACE screening"** *Limited current evidence of effectiveness of routine enquiry processes. Evidence of outcomes, and of how to implement routine enquiry successfully is currently limited. Potential opportunity cost of implementing routine enquiry vs. proven interventions.*	**Universal awareness-raising of ACEs and trauma to general / non-professional audiences** *No evidence currently that raising awareness in respect of people's own ACEs would be beneficial. The nuances of ACE-study data, i.e. 'risk vs determinism', feel important to avoiding harm or misinformation.* **Whole-systems approaches to ACE- or Trauma-awareness** *Whole-system approaches in Wales and Scotland focus on primary prevention (children and young people); ACE-informed adult services, e.g. for high risk groups, are less apparent. See above for caution re. whole system approach leading to routine enquiry / 'screening'.*

Discussion

What does 'ACE-awareness' or 'ACE-thinking' add to existing models of vulnerability or early intervention?

If ACEs are an alternative way of describing childhood vulnerability and life-course public health, where might an ACE-informed approach add value to existing approaches or programmes of work?

Parenting

The awareness-raising work carried out in Scotland and Wales seems to aim in part to communicate to parents and relevant professionals that parents' behaviours can be more impactful than they may realise, can have long-term consequences, and yet are modifiable.

The impact of general awareness-raising is untested, and the impact of population-level campaigns is generally difficult to isolate from other influences, and so can be difficult to measure. Intuitively, the idea that raising awareness of the potential harms of maltreatment (abuse, neglect) would reduce its incidence seems simplistic – more intensive interventions or support feel appropriate in higher risk cases. However, universal approaches – *shifting the curve to the right* – may reduce the incidence of 'lower level' harms, such as avoidant or inattentive parenting, harsh discipline, and increase attachment-promoting behaviour.

There is broad evidence-base around early intervention and around parenting classes (the Department of Education has published a directory of different programmes and their evidence of effectiveness in multiple domains).

Schools

School is a place where the consequences of ACEs experienced at home may play out in a child's behaviour. ACEs may affect a child's ability to concentrate and/or to engage positively with others, which can contribute to disruptive behaviour. This can begin a cycle of exclusion, where a child is addressed as a problem and withdrawn from classes, activities, other children and potentially school itself.

A school that is explicitly ACE- or trauma-informed aims to provide a more inclusive, relationship-building environment which may prevent and mitigate the effects of vulnerability, reducing the risk that a child experiencing difficulties at home or in the community will be adversely affected by those difficulties in the longer term.

If effective, a *whole-school trauma-informed* approach adds value by (inter alia):

- Making school feel safe and secure – making a child feel included and cared for
- Trying to understand and support a child whose behaviour is challenging, as opposed to excluding them (from classes, activities or school itself)
- Creating an open environment in which a child may disclose difficulties at home

Criminal Justice System

Children, young people and adults in contact with the Criminal Justice System are more likely to have experienced higher levels of childhood adversity than the general population. In a trauma-informed system, those working within this sector understand this, and understand how ACEs and trauma might affect people's communication, behaviour and decision-making. If professionals are able to apply this understanding in the way that they communicate and work

with victims, suspects and perpetrators of crime, trust and cooperation may improve, and people may be more receptive to accessing and engaging with the sources of support that are available to them.

Inclusion health

People in underserved population groups are more likely to have experienced higher levels of childhood adversity than the general population. The adversity and exclusion they have experienced may make them less likely to access preventative and supportive services, and to see hostility in people and systems. By helping the professionals that provide services for these groups of people to become ACE- or trauma-informed, those professionals may become more attuned to the thoughts and behaviour of the people they are trying to support. This stands to make services more accessible and more effective. This may mean designing-in choice, agency and control, through personal budgets or co-production.

Could an ACE-agenda support progress in other work areas?

As the body of evidence around ACEs has grown, so too has interest in the concept. ACEs have developed system-level precedence in Scotland and Wales – both have ACE Hubs comprising professionals from health, education, social care, including from third and private sector. Both countries have seen "ACE Awareness" approaches taken within professional sectors, the intention being to increase knowledge of the impact of ACEs and galvanise policy action.

An 'ACE framework' for child, adolescent and adult health has conceptual and evidential overlap with several other epidemiological and policy approaches currently in play in population health - the social determinants of health, the life-course approach, health in all policies, mental health in all policies, health inequalities, early intervention.

A programme of work to address ACEs and their impact would overlap with the following areas of work within the GLA:

- Violence reduction
- Health Inequalities
- Health in All Policies
- Mental Health
- Healthy Early Years
  Healthy Schools
- Social Prescribing
- Housing
- Homelessness
- Economic development

The GLA may wish to consider how the growing evidence, interest and enthusiasm around ACEs can be harnessed to help to progress current work programmes. This could be through awareness-raising with particularly professional groups, policy makers or commissioners of services.

Alternatively, it may wish to consider how reframing existing programmes in terms of ACEs or trauma could present opportunities to enhance their effectiveness. Either where there may be evidence that making a service trauma-informed could improve uptake or outcomes, or where an ACE-framing may better align a programme with external priorities.

Caution should be taken in light of recent critiques of 'ACE awareness' campaign approaches, which have been made by some commentators and by a survey respondent, essentially making the challenge that *ACE-awareness* is not enough, and that a level of knowledge and training sufficient to provide nuanced, individualised approaches are required.

There may also be a risk that generating ACE-awareness in the general population could lead to misconceptions not about the prevalence of ACEs, but about the causal necessity between adversity in childhood and difficulties in adulthood, and vice versa. Highlighting the association between ACEs and mental ill health could work against the hard-won gains made in reducing stigma around mental health conditions, i.e. that poor mental health can affect anyone.

Those behind the ACE-aware Scotland and Wales campaigns may counter this by pointing out that 'ACE-aware' does not mean raising awareness that ACEs exist and are harmful, but also of the mechanism by which they occur and moreover, that they can be prevented. In other words, that a broader reading of "ACEs" should be adopted – that they are experiences with the potential to affect long-term health and wellbeing if not prevented and addressed early – and so an 'ACE aware' system is one in which the full range of preventative assets are identified and deployed.

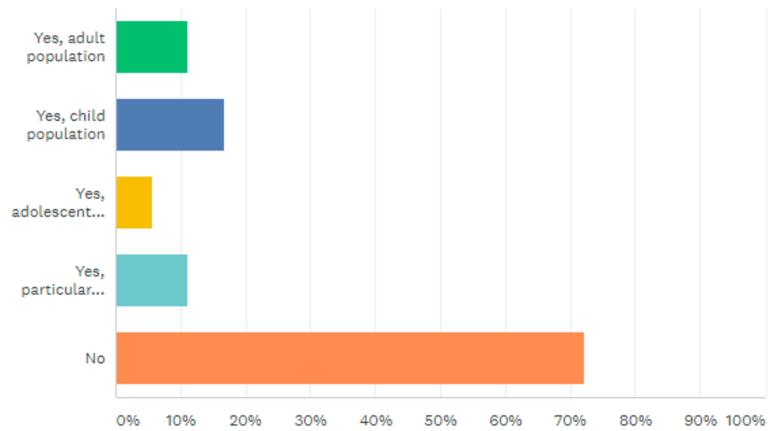
Deprivation has been identified as a risk factor for ACEs individually and collectively and of itself is a well-known risk factor for poor physical, emotional and social wellbeing. Both the London Health Inequalities Strategy and Mayoral commitments to reduce child poverty identify the impact that poverty can have on health. The existing evidence and current level of interest in ACEs and trauma can and should be used to strengthen this message.

Appendix: Borough Survey Results

1.

Have you measured or modelled the prevalence of ACEs in your population?

Answered: 18 Skipped: 0

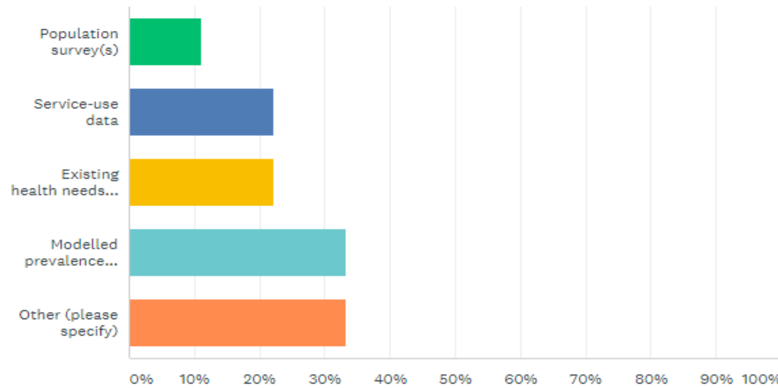


ANSWER CHOICES	RESPONSES	
Yes, adult population	11.11%	2
Yes, child population	16.67%	3
Yes, adolescent population	5.56%	1
Yes, particular population groups	11.11%	2
No	72.22%	13
Total Respondents: 18		

2.

If you answered 'yes' to one or more of the above, what method(s) have you used?

Answered: 9   Skipped: 9

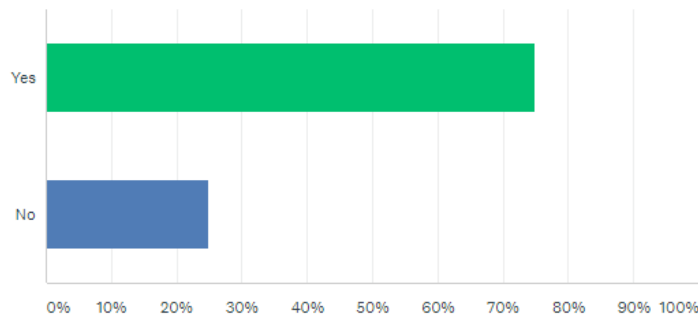


ANSWER CHOICES		RESPONSES	
Population survey(s)		11.11%	1
Service-use data		22.22%	2
Existing health needs assessments		22.22%	2
Modelled prevalence based on other ACE studies		33.33%	3
Other (please specify)	Responses	33.33%	3
Total Respondents: 9			

3.

If yes, may we contact you to discuss the findings?

Answered: 8   Skipped: 10



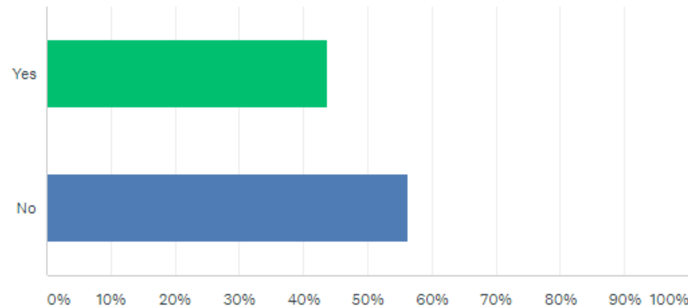
ANSWER CHOICES	RESPONSES	
Yes	75.00%	6
No	25.00%	2
TOTAL		8

Comments (6)

4.

Are you or have you designed ACE- or trauma-awareness into new or recommissioned services?

Answered: 16 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	43.75%	7
No	56.25%	9
TOTAL		16

+1 emailed response from Council

5. If yes, which services?

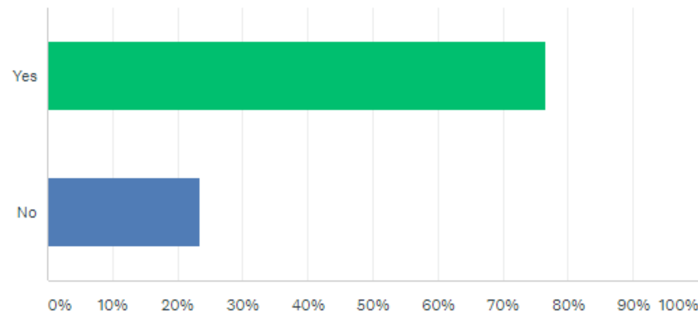
- Sexual health, substance misuse
- Children's services across the partnership, including CAMHS
- All of our services use trauma informed practice to work with staff, parents children and infants in various forms and case dependent. This would include EPS, Schools Emotional Well-Being Service, Behaviour Support Service and Enfield Parent Infant Partnership. Several schools have recently had attachment lead training and trauma informed practice would have been central to this. Nurture Groups have received training on supporting children who have experienced early/developmental trauma. • We held a one day CPD event for CAMHS & EPS staff in November 2018 on Trauma Informed Practice. We plan to have part 2 in the summer term. • Enfield Parent Infant Partnership explicitly uses trauma informed practice in their case work and through the training they deliver to other universal services, e.g. Health Visitors The Schools Critical Incident Protocol has trauma informed practice embedded within it.
- Currently working across front line staff, health visiting, school nursing,Early help soon wider
- No, but we do want to include more of it in the Health Visiting and School Nursing service approach.
- We are incorporating ACEs awareness into our Early Help Pilot, launching March 2019. This is a redesigned service, involving closer working practice between professionals who are working with families, additional practitioners working with children and young people who are in danger of being on the cusp of violence; additional social workers; greater co-location of early help practitioners and health colleagues within children's centres; embedding the restorative practice approach to working with families and working in a holistic way. The aim is to reduce instances of neglect by intervening earlier and more effectively, and by strengths-based practice to support parent – child interaction and communication and language development.
- Youth Offending services.

- Social care YOS youth work early help Board partners.

6.

Have you applied or are you applying ACE- or trauma-awareness to existing services, e.g. trauma-awareness training in schools or primary care?

Answered: 17   Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	76.47%	13
No	23.53%	4
TOTAL		17

7.

- Early Help, Children's Social Care, Children & Family Centres, Youth Offending Service
- Developing this across both
- No, but I am concerned that nowhere in any training or theoretical approaches is any concept of unconscious communication. The approach generally is simply about trying to get professionals to understand what the young person is going through. However, it is almost certain that unconsciously that young person will, in some way, be wanting the professional to 'contain' some of the difficult feelings that they cannot. This produces particular difficulties for the professional who will generally need help to understand what is going on e.g. a teacher who is being provoked by a child who at an unconscious level wants the teacher to understand what is going on in the child's inner world. The teacher will often need help to understand the specifics of this interaction / relationship not just generic understanding that this child has a trauma.
- Youth Offending, Youth Service Police
- Yes, we have begun this conversation by purchasing, showing and discussing the film, Resilience, and setting up a steering group to plan and coordinate ways forward. So far we have introduced the film and concepts around ACEs to early years practitioners in schools and PVI settings; health visitors; the LA Early Help team, the LA Family Support Service, voluntary sector organisations, LA Strategy and Policy team. We are next planning to develop this work with children's social care, and locating the ways in which it fits with the restorative practice model. We are also planning more in-depth training on trauma-informed practice, in autumn 2019 for a range of practitioners involved in the Early Help pilot.
- The nature of FNP work is trauma informed. The Family Nurses have received some training on trauma informed practice,
- Commissioned mental health services delivered through schools
- schools - primary, secondary and the pupil referral unit voluntary sector and early help services

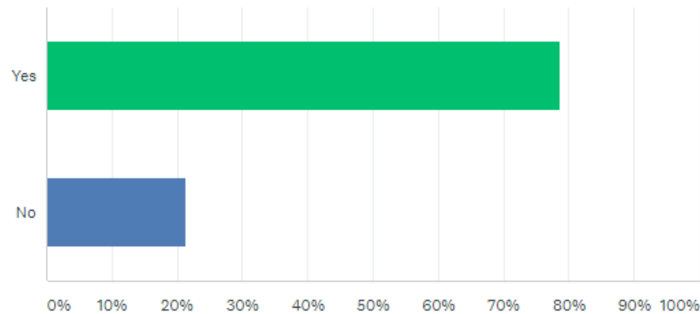
- training for Youth Offending Team offices.
- Children's social care Youth Offending Service Training has also been commissioned by the LSCB for practitioners across the LSCB partnership
- Schools

8.

9.

If yes, may we contact you to learn more about this?

Answered: 14 Skipped: 4



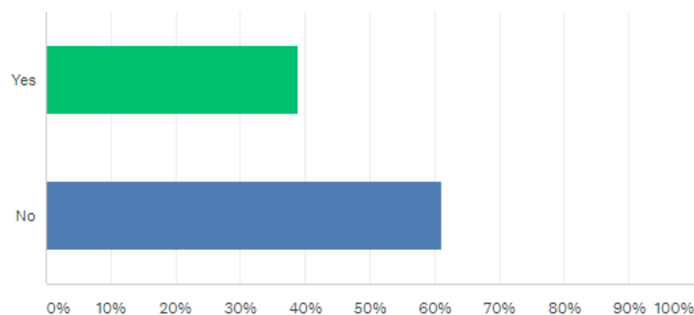
ANSWER CHOICES	RESPONSES	
Yes	78.57%	11
No	21.43%	3
TOTAL		14

Comments (9)

9.

Are you aware of other teams or services in your organisation or area applying ACE or trauma-informed approaches?

Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	38.89%	7
No	61.11%	11
TOTAL		18

Comments (7)

- Reducing Violent Crime, Early Help, Localities- linked into the public heath approach to reducing violent crime plus the Director of Public Health Annual report on the First 1000 days
- Yes, Family nurse partnership
- children's social care Early Help
- children services
- in my role I try to consider it
- all csc, yos etc

10.

Which organisation are you responding from?

- Council
- Council
- Council
- Council
- Council
- Council
- Council
- Acute Trust
- Youth offending team
- Council
- Health Visiting provider
- Council
- Council
- Council
- Youth offending team
- Youth offending team
- Council
- Council

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