

A NATIONAL SURVEY

Knowledge and awareness of Adverse Childhood Experiences (ACEs) in the public service workforce in Wales

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GIG CYMRU NHS WALES
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PROFIADAU NIWEIDIOL MEWN PLENTYNDOD
ADVERSE CHILDHOOD EXPERIENCES

Knowledge and awareness of Adverse Childhood Experiences (ACEs) in the public service workforce in Wales: a national survey

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Foreword

The Welsh Adverse Childhood Experiences (ACE) Hub, established in 2017 by Cymru Well Wales, and funded by the Welsh Government over three years, has sought to bring about transformation change in Wales.

We have committed to a programme of work to create a social movement that raises awareness of what ACEs are, and the link between childhood trauma and the increased risk of health harming behaviours, criminal behaviour, and poor outcomes in adult life. We have worked hard to ensure that work on ACEs is not seen as a deficit model and focusing on the things that enable people to overcome adversity. Working with sectors such as education, housing and youth work, we have co-produced models to embed and sustain ACE-awareness and trauma informed practice to help prevent ACEs and support those who continue to be affected by childhood trauma.

We have worked hard to ensure that work on ACEs is not seen as a deficit model and focusing on the things that enable people to overcome adversity.

Joanne Hopkins
Cymru Well Wales Adverse Childhood Experiences (ACE) Support Hub Director

Over 600 primary and secondary schools in Wales have received training and we are seeing reductions in school absence, increased confidence from school staff in supporting the whole family. We developed training in Psychologically Informed Environments for those working in housing and homelessness; over 1000 people including leaders and commissioners attended and outcomes included reductions in calls to the emergency services, hospital admissions and a 55% reduction in eviction rates. Our independently evaluated training with the youth service provided 120 trainers through a train the trainer model, and we have developed a Level 2 qualification module for all new youth workers. The fact that these three sectors, and the NHS, have come out as being more ACE aware and having increased knowledge of training opportunities is no coincidence; the collaboration with the Hub has enabled increased awareness and confidence.

We will be using this report to continue to develop work with sectors and organisations that are less aware of ACEs, and to develop approaches that work for them. We are already collaborating with the sports sector, with local authorities and with communities to look at more integrated approaches to systemic change. This takes us further towards prevention and mitigation of ACEs, and all childhood adversity, to give all children the best start in life. This report provides an important baseline to help us assess where we are. But also more importantly it highlights that there is more to do to achieve the longer term outcomes of the hub so that ultimately fewer people in Wales experiencing ACE-related harm.

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Executive Summary

Background

Early in 2016, Public Health Wales published the first Welsh Adverse Childhood Experiences (ACEs) study, which revealed that 47% of adults in Wales have suffered at least one ACE in their childhood and 14% suffered four or more. ACEs such as abuse, neglect and dysfunctional home environments, have damaging impacts on individuals' life chances. ACEs are associated with poor educational achievement and the development of a wide range of harmful behaviours, including smoking, increased alcohol consumption, drug use, risky sexual behaviour, violence and crime. They are also linked to the development of diseases such as diabetes, mental illness, cancer and cardiovascular disease, and ultimately to premature mortality.

This report provides an insight into the levels of ACE-awareness, knowledge and understanding amongst respondents from across public services in Wales.

The Cymru Well Wales (CWW) ACE Support Hub was established in 2017 to help drive the collective vision for Wales as a leader in ACE-free childhoods. Its task has been to help create the environment for change, enable and support individuals, communities and organisations to achieve their local ambitions around the ACEs agenda. Using a strengths-based strategic approach to support the creation of conditions for change and organisational readiness, the CWW ACE Support Hub has developed approaches to raise awareness of ACEs across Wales.

To understand knowledge and awareness of ACEs amongst the workforce working within the sphere of public services in Wales (including those delivered in third sector or charitable organisations) a cross-sectional bi-lingual online survey of the public sector workforce was conducted by Public Health Wales over a four week period in May/June 2019. This report provides an insight into the levels of ACE-awareness, knowledge and understanding amongst respondents from across public services in Wales.

Findings

A total of 3,033 individuals from 12 employment sectors responded, providing an overview from a diverse cross section of public service workers in Wales. Given the opportunistic nature of the survey, the findings are not representative of all public services within Wales, and as such the results should be interpreted with caution.

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from 12 employment sectors responded, providing an overview from a diverse cross section of public service workers in Wales.

ACE-awareness (section 4.1)

The results of this study highlight the high level of awareness of ACEs amongst individuals employed within publicly funded services and sectors in Wales, with 75% of 3,033 respondents reporting having heard of the term ACEs before engaging with the survey. Awareness of the term ACEs was greatest amongst those employed within youth services (92%) and charitable/third sector (90%) – a noticeable difference to the 48% and 55% within the sports sector and fire and rescue services, respectively.

ACEs and terminology (section 4.2)

When asked to use words to associate with ACEs, the most frequent ones reported by respondents related to trauma and abuse/neglect (47% of responses). Words which related to the promotion of protective factors appeared less frequently, for example resilience to mitigate the impact of ACEs (3% of responses).

Figure A: Word cloud representation of the words used to describe ACEs by respondents.

Some respondents expressed concern about the term ACEs because of the way in which it focuses upon negatives, and not on positives. There was feedback that individuals may be at risk of being stereotyped, which may affect building relationships with those they support. It was also suggested that 'counting ACEs' may not be the most beneficial approach to tackling the burden that ACEs can have on population health.

Knowledge, prevention and mitigation of ACEs (sections 4.3 and 4.4)

When further exploring knowledge of ACEs, the majority of respondents had a good understanding of what is meant by ACEs, followed by their awareness of the impact that ACEs can have upon both mental and physical health. Specific physical health impacts such as the early development of disease and effects on the immune system were less well known than the impact on mental health, relationships or health-harming behaviours. The majority of sector findings indicated up to half of the respondents were not aware of how to prevent and mitigate the impact of ACEs, but self reported knowledge was higher in youth services and the housing sectors, and lowest in the sports sector and fire and rescue.

This pattern was repeated when respondents were asked how comfortable they felt within their role to prevent and mitigate the impact of ACEs, where less than half felt comfortable to do so.

When asked to prioritise the top three national strategies or approaches that respondents believed to be most important in preventing ACEs, the greatest number of responses suggested a focus on families, tackling poverty and the Violence Against Women, Domestic Abuse and Sexual Violence (Wales) Act 2015.

How do people find information on ACEs (section 4.5)

67% of respondents indicated that they had seen information on ACEs, and mostly reported seeing information on ACEs through research evidence (55%), videos (54%) and reports (52%).

67%

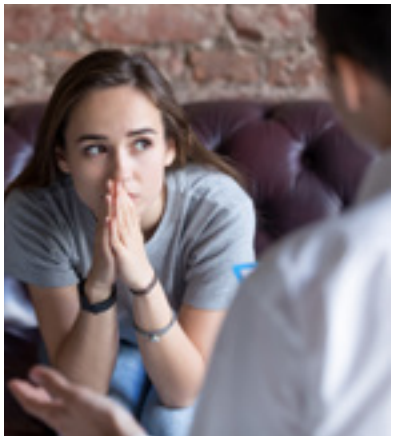
of respondents indicated that they had seen information on ACEs

ACE-awareness training in organisations (section 4.6 and 4.7)

47% of respondents reported having been offered formal training from their employer or another provider within the last 18 months which had information about ACEs. This was higher amongst those within youth services (73%), the housing sector (67%) and education (66%), compared to the sports sector (18%) and the Welsh Government (23%). 75% of respondents reported attending the training that had been offered to them, and 79% of those agreed that the training had increased their awareness and knowledge of ACEs. It was noted that as a front

line public service, less than half of respondents in National Health Service (NHS) settings (45%) had been offered formal training on ACEs in the last 18 months.

When asked whether they would like to receive any further training on ACEs, the majority of respondents indicated yes, and when asked to provide further detail on the type of training that they would like, the most widely reported were: training on how to mitigate the impact of ACEs and promote resilience (42%), followed by training on ACE prevention (29%), refresher training sessions with research updates (15%), theory-based training (14%) and general ACE-awareness (12%). This links with our findings reporting lower awareness levels for the prevention and mitigation of ACEs.



Free-text responses also identified that future training should include more information on how to support children and families, adults and communities to prevent and mitigate the impact of ACEs. Respondents raised the need for a more wide-reaching mandatory training which highlights the links between ACEs and health in adulthood across all sectors. It was suggested by respondents that further training should be provided to show the practical ways in which individuals and specific organisations can play their role in the ACE agenda, with a more joined-up approach amongst all sectors needing to be established.

ACE-informed leadership and organisation Infrastructure (sections 4.8 and 4.9)

Many respondents were unsure how publicly funded services within Wales incorporate ACE-informed principles into their organisational infrastructure. 48% were unsure whether their organisation's policies had ACE-informed principles and practices, whilst 58% of respondents were unsure whether their organisation endorsed ACE-informed skills and knowledge at recruitment stages. Uncertainty about these items was greater amongst those in fire and rescue, the sports sector and the Welsh Government. Overall, 55% stated that they were aware their organisation supports the workforce to receive ACE-awareness training or advanced training as required, and this was higher within youth services (85%) and education (71%), compared to the sports sector (18%).

Most respondents agreed that currently within their roles, they feel able to interact with vulnerable people (83%), understand what ACEs are (78%) and respond to those who may have experienced or been experiencing ACEs (66%). However, this was different for the prevention and mitigation of ACEs, with 36% and 48% of respondents respectively, agreeing. Respondents from youth services, housing and education were most comfortable in their role to mitigate and prevent ACEs, whereas those within sport, fire and rescue and the Welsh Government were least comfortable.

Respondents from youth services, housing and education were most comfortable in their role to mitigate and prevent ACEs, whereas those within sport, fire and rescue and the Welsh Government were least comfortable.

Similar findings were seen for leadership within publicly funded services. 47% of respondents were unsure whether leadership within their organisation allowed for resourcing of ACE-informed practice, and 44% were unsure as to whether their organisation had ACE-informed practices supported by senior leadership.

Youth services, education, police and criminal justice, housing sector and local authority, were more likely to report having leadership which supported the ACE agenda, compared to those within the NHS, Welsh Government, fire and rescue and the sports sector.

Conclusion

The findings from our survey have identified a number of potential areas to focus on to further support the workforce across public services in Wales to tackle ACEs and become more ACE-informed.

Awareness was greatest amongst those working within youth services, other charitable/ third sector, housing sector and education. These higher levels of awareness may reflect the areas of programme work currently supported by the CWW ACE Support Hub, and identifies further sectors and services where ACE-awareness remains more limited. Only a minority of respondents were aware of the CWW ACE Support Hub before the survey, reflecting the specific areas of programme work delivered through the Hub.

Findings show high levels of awareness and knowledge of ACEs amongst the publicly funded workforce in Wales. The most common themes used to describe ACEs include abuse and neglect, and those linked with trauma and negative experiences, suggesting a commonality of language across sectors. However, future strategies and ACEs messages would benefit from a focus on using positive language and building resilience to ensure increasing ACE-awareness in the workforce does not lead to a deterministic view of those who have experienced or are experiencing them.

Respondents showed good awareness of the impacts of ACEs on both physical and mental health but less awareness for both prevention and mitigation measures. This has been identified as an area in which future training should focus on, with a focus on families and tackling poverty; across different sectors. Almost half of the survey sample had been offered training on ACEs, and just over three quarters of those who attended training with ACE content felt it had improved their knowledge and awareness. This demonstrates that initial ACE-awareness training has been making an impact on publicly funded services. Although, neither training content or outcomes have been measured as part of this survey, our findings provide evidence on the types of training identified by respondents to help organisations plan their services through an ACE-lens. Continuing to develop targeted ACE-awareness within the workforce should be seen as important for informing the way services plan and respond to those who have experienced or are experiencing ACEs, creating a universal approach which is ACE-aware, and not focussed on selective screening for service provision.

There is evidence to suggest that organisations should consider raising further awareness where ACE-informed policies and practices currently exist or develop policies and practices that are ACE-informed to embed systems change. There was uncertainty about ACE-informed leadership principles, suggesting that the concept of ACE-informed leadership was not visible to our respondents.

Respondents showed good awareness of the impacts of ACEs on both physical and mental health but less awareness for both prevention and mitigation measures.

Key considerations for future action:

- The development of ACE-awareness training with a focus on prevention and mitigation knowledge and skills, developed using co-productive approaches to embed a sustainable model across organisations.
- Consider the training needs of the wider Wales workforce, beyond publicly funded services, if we are to become a truly ACE-aware nation.
- Future research to better understand the national strategies and approaches which will have the best impact on the reduction of ACEs in Wales.
- Consider auditing the scope and breadth of ACE training currently on offer across Wales to establish what is working, for whom and why.
- Build on further strategic work with organisations to promote a holistic approach through the embedded practice of ACE-awareness in organisational leadership, and ACE-informed policies and practices to support.

1 Introduction

As in the rest of the United Kingdom (UK) and across the world, the health and wellbeing of the people of Wales is significantly affected by Adverse Childhood Experiences (ACEs). Early in 2016, Public Health Wales published the first Welsh ACEs study, which revealed that 47% of adults in Wales have suffered at least one ACE in their childhood and 14% suffered four or more (1).

ACEs such as abuse, neglect and dysfunctional home environments, can have a detrimental impact on an individuals' life chances. ACEs are associated with poor educational achievement and the development of a wide range of harmful behaviours, including smoking, increased alcohol consumption, drug use, risky sexual behaviour, violence and crime (2,3,4). ACEs can also contribute towards an increased risk of developing conditions such as diabetes, mental illness, cancer, cardiovascular disease, and premature mortality (3,5,6). In 2015, the first national Welsh ACEs study identified the extent of ACE exposure among adults in Wales, and the strong cumulative relationships between ACEs and health-harming diseases, health conditions and health service use (2,5,6).

While the experience of ACEs can impact an individuals' life potential, there is a substantial subset of people who suffer ACEs and avoid in part (or entirely) the negative health and social consequences. There is emerging evidence to suggest that a range of factors can help develop childhood resilience including at least one stable relationship between a child and adult, better developed self-regulation skills and a sense of having control over personal circumstances (6). These findings are influencing local and national public health policy in Wales and driving multi-agency work to prevent ACEs and support those affected by them.

In order to tackle ACEs at a population level, Cymru Well Wales (CWW) established the ACE Support Hub, funded from March 2017-2020, to help drive the achievement of the collective vision for Wales as a leader in ACE-free childhoods. Its task has been to help create the environment for change, enable and support individuals, communities and organisations to achieve their local ambitions around the prevention of ACEs and protection against the impact of ACEs (7); ultimately attempting to make Wales a leader in ACE-free childhoods.

47%

of adults in Wales have suffered at least one ACE in their childhood and 14% suffered four or more (1).

The CWW ACE Support Hub has developed its model by working alongside existing networks and programmes and seeking to transform organisational strategies, services and people to be ACE-informed; with integrated systems to tackle ACE-related outcomes in their sectors. This strengths-based, strategic approach supports the creation of conditions for change and supports organisational readiness. The Welsh Government has provided three years' funding totalling £1.2 million for the establishment of the Hub. Indirect funding of £116k also comes from Health and Social Services via Public Health Wales.

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Findings in this report help evidence the knowledge and awareness of ACEs for those working within the sphere of public services (including those delivered in third sector or charitable organisations). This insight data will offer feedback to public bodies, commissioners, funders and service providers on the reported workforce awareness and knowledge of ACEs, and help to identify areas to support the workforce to tackle ACEs in Wales.

1.1 About this report

1.1.1 What are ACEs?

The collective term Adverse Childhood Experiences was originally developed in the United States following the first Adverse Childhood Experience (ACE) study (3). ACEs include stressful experiences occurring during childhood that either directly hurt a child, like maltreatment; or indirect experiences which affect them through the environment in which they live, such as growing up in a house with domestic violence (Table 1). Such chronic stressors in childhood have been described as 'toxic stress' (8), with the potential to adversely impact cognitive functions, affecting learning and memory. These changes are thought to impact how an individual adapts to future adverse experiences and the chance of developing health-harming behaviours (8).

Table 1: Adverse childhood experiences (1)

ABUSE		
Physical	Verbal	Sexual
NEGLECT		
Physical	Emotional	
HOUSEHOLD DYSFUNCTION		
Parental substance abuse	Domestic violence	Mental illness
Incarceration	Parental separation/ divorce	Alcohol abuse

Studies in Wales have demonstrated that ACEs have a major impact on the development of health-harming behaviours, and that prevention of ACEs is likely to reduce levels of alcohol use, smoking and poor diets (1).

Further studies have shown that ACEs more than double the risk of having no educational qualifications, and those with ACEs are at much greater risk of unemployment (4). Individuals who have suffered ACEs have significantly increased risk of mental illness, with childhood and adult resilience resources showing to have protective relationships with mental illness, independent of whether someone has experienced ACEs (6). Preventing ACEs and supporting those affected by them needs to be seen as integral in improving population mental health. Studies have also found there are strong relationships between sports participation in childhood and lower lifetime illness (6), potentially offering protections even in those with no ACEs.

1.1.2 The policy and practice landscape

There is increasing recognition that much existing and new policy development, both nationally and internationally, is supportive of the ACEs agenda. With a growing emphasis as to whether a universal, public health approach to addressing ACEs should be adopted, there is increasing discussion about the role public health bodies have to offer in tackling ACEs both nationally and internationally (9-10).

Universal public health approaches to addressing ACEs:

These approaches can be briefly summarised as:

- Whole-systems / joined-up approach
- The development of adversity / trauma-informed services
- Common approaches to prevent ACEs and / or mitigate their negative impacts
- Workforce development / role of the employer
- Prevention and awareness of ACEs

Since Public Health Wales undertook its first ACEs survey, we have seen the start of a national agenda in Wales to tackle the impact of ACEs, a focus on prevention and the development of services which can respond through an ACE-lens. Preventing ACEs should be seen within the wider context of tackling societal inequalities, and while they can be seen across the population, areas of higher deprivation have more risk of inhabitants experiencing ACEs (11).

It is worth noting that a counter-narrative challenges the concept of ACE-awareness, without broader social and political commitment to tackling the impact of ACEs. The Children's Commissioner for Wales has highlighted perceived pitfalls in placing ACEs as a driver for public policy for children, such as the risk that children and their families' social problems could be seen as down to individual behaviour; and that counting ACEs is a reductive mechanism to measuring trauma (12), with potential risk to individual privacy when screening for such experiences (13). These concerns are balanced with the acknowledgement that ACE-awareness itself is important, and does offer potential to reconfigure public services around the recognised needs of the population.

1.1.3 The role of ACE-awareness

Considering the prevalence of ACEs in Wales and the well-established impact of negative health outcomes (1-2,5,6), it is essential for those working with individuals impacted by ACEs to be knowledgeable and confident in the care and services they provide. Some commentators argue that the expanded definition of ACEs to include family instability, parental separation, low parental education, child poverty, parental unemployment and lone parenthood only serves to conflate directly harmful risk factors, such as abuse, which might be associated with other risk factors for health (14). The suggestion is that conflating these issues is conceptually unhelpful and potentially stigmatising, leading to the importance of socioeconomic conditions being overlooked (14,15).

However, it is worth noting the terminology for evidence of ACEs and trauma-informed practice is often used interchangeably within literature and language in this area is complex and overlapping. Because of this, we suggest that ACE-awareness offers an opportunity to create a culture of compassion in a psychologically-informed society (11,16) and as such, the two concepts of being ACE-aware and trauma-informed should be seen along a spectrum of core knowledge and skills within the workforce. Current evidence suggests that many providers are unaware of the impact of ACEs, and lack training on how to work with patients exposed to such adversity (17-19). In a study of nearly 600 paediatricians in primary care in the USA, over three quarters reported not being familiar with ACEs evidence/research, demonstrating many health care professionals were unaware of the negative health ramifications and were unable to adopt person-centred care as effectively (19).

ACE-awareness offers a contribution to a framework which views individuals through an ACE-lens and creates a common understanding about the role of trauma/ACE-informed practice across different workforces (11,16). Raising ACE-awareness in the workforce can be seen as the initial building blocks to the development of trauma-informed public services (16-18). Where trauma-informed care begins to overlap with broader good care/practice, it then also includes person-centred and compassionate care approaches – a key tenet behind the ambition for greater ACE-awarenesss. There is emerging evidence that trauma-informed systems can have better outcomes for people affected by trauma (20). Experience of interpersonal trauma, particularly in childhood, can disrupt the ability to form and maintain healthy, supportive relationships with others (20-22). The development of a trusting relationship with a practitioner can have the greatest impact on an individual's capacity to seek care or a support intervention (4, 20). Recovery is better supported in a workforce that is able to recognise where an individual is affected by trauma and then to adapt their practice to minimise distress (23). An ACE-aware workforce can have a role to play in supporting the development of such relationships.

Raising ACE-awareness in the workforce can be seen as the initial building blocks to the development of trauma-informed public services.

It has been suggested that organisations' relevant policies and services should consider how understanding the impacts of ACEs can be a contributory factor to building ACE-awareness and whether such policies will help to prevent or mitigate ACEs; and that leaders should challenge their organisations to do things differently (11,16,24). Workforce development has been identified as crucial to developing an adversity-informed system (20,25-27). To introduce such a system, this involves training and capacity building, and importantly, nurturing and supporting the wellbeing of the workforce to enable people to deliver services in an informed way and avoid becoming compassionate fatigued (19,21). There is a suggestion that training and support are required across the entire workforce, which needs to be consistent and avoid 'siloed' professional training (e.g. consider place-based training for all relevant professionals) (11,20,24-27). While offers of ACE-awareness and ACE-screening training are becoming more commonplace across the UK, they are not always delivered with adequate support systems in place for the staff who receive training on what should be seen as sensitive topic areas (14,28). There are reports of staff guilt at learning about ACEs and their intergenerational effect, and suggestions that trainers need careful selection, training and supervision in the delivery of ACEs content (28).

Resources and leadership within organisations and services need to support an ACE-informed culture and empower staff to have ACE-informed conversations. Workforces require the skills and confidence to raise issues relating to ACEs, peer support for staff in doing so, as well as knowing how or where to signpost those experiencing ACEs for appropriate support when needed. Individuals with trauma are found in multiple service sectors (18), however little or no evidence exists within Wales which highlights the ACE-related knowledge of professionals who work within this integrated system. Further to this, it is also not known how the infrastructure of organisations within our systems are suited to adopt the ACE agenda of prevention and mitigation.

1.1.4 Examples of raising ACE-awareness

There are a number of examples underway to raise awareness of ACEs. Three examples are highlighted below:

Box 1: Early Action Together (E.A.T)

The transformation change programme, Early Action Together (E.A.T) is a unique collaboration between Public Health Wales and the four Welsh Police Forces and Police and Crime Commissioners in partnership with criminal justice, youth justice and third sector organisations.

The four key areas of the E.A.T programme are:

1. A competent and confident workforce to respond more effectively to vulnerability using an ACE-informed approach to policing
2. Organisational capacity and capability which proactively meets changing demand
3. A 24/7 single integrated 'front-door; for vulnerability that signposts, supports and safeguards encompassing 'blue light', welfare and health services
4. A whole-system response to vulnerability by implementing ACE-informed approaches for operational policy and key partners

A key feature in achieving the above is the development of a training programme for professionals to ensure they have the appropriate knowledge and skills to respond to vulnerability using a trauma-informed approach. For more information visit www.aces.me.uk

Box 2: Aneurin Bevan University Health Board

Aneurin Bevan University Health Board and its Local Authority and Third Sector partners, working through the Gwent Children and Young People's Strategic Partnership, have developed the 'Iceberg Model' as an integrated response to the mental health and emotional wellbeing of children, young people and their families. The 'Iceberg Model' is a rethinking of how services in the Gwent Region can better support and respond to children's emotional wellbeing and mental health, in order to address an 'iceberg' of needs that are not effectively met by traditional service models.

The 'Iceberg' model focuses on models of support that are community-embedded, multiagency-owned and directed by a psychological understanding, including an understanding of the impact of trauma and ACEs. While focusing especially on prevention and early intervention, the model takes a whole-systems integrated approach across the age spectrum from birth to age 18, and spans primary prevention to highly intensive and targeted support for children and young people with the most complex needs. A key enabler of this integrated approach is the implementation of the Single Point of Access for Children's Emotional Wellbeing (SPACE-Wellbeing), which brings staff from across agencies together to ensure that children get the right help, first time.

At the heart of the approach is the aspiration to build a relationship-based system in Gwent:

- that recognises the impact of relationships on children's development, metal health and emotional wellbeing
- that supports the relationships that matter in a child's life by easy access to specialist expertise - that enables professionals to 'hold on' rather than 'refer on'
- in which professionals work together across traditional agency boundaries as part of an integrated network of care and support, and work in partnership within our communities

Box 3: Live Lab Workshops

The CWW ACE Support Hub partnered with the Future Generations Office to offer a 'Live Lab' workshop to Cwm Taf Public Service Board (PSB) in relation to their wellbeing goal of tackling ACEs. The model was designed to provide a structured means for people to think differently. It succeeded in generating breakthrough thinking and enabled the group to identify the real changes they need to make to achieve an ambitious goal. The model is rooted in evidence within the systems change body of knowledge. The group produced 4 logically robust, breakthrough ideas and started to develop theories of change which had [1] consensus that implementation would deliver the goal and [2] consensus commitment to action.

Work was taken as far as it could have been i.e. to the point where it then needed to be validated by Cwm Taf PSB and formally absorbed into its trackable workplan. The experience was deliberately designed to be highly immersive and peer led whilst providing the tools for challenge of ideas, beliefs and mindsets to overcome any prevailing paradigm that could constrain progress in tackling ACEs.

The workshop harnessed and started to test the 'simple truths' identified, by starting to develop logical theories of change, which if sustained, developed, supported and led effectively would bring about significant improvements in wellbeing. Thus all 4 objectives are beginning to be achieved, and the Live Lab model enabled the Future Generations Office and CWW ACE Support Hub to support public bodies in their endeavour to tackle ACEs. For more information: https://futuregenerations.wales/work/live-labs/

2 Survey Aims

This survey aimed to establish the awareness of ACEs in the professional practice of those working in publicly funded organisations in Wales and to help inform the needs of workforces in helping to prevent and mitigate the impact ACEs.

The survey had the following objectives:

- To ascertain the national spread of information and depth of knowledge of ACEs within public sector workforces in Wales.
- To measure workforce awareness of the impact of ACEs on physical and mental health in later life or adulthood.
- To measure awareness of national strategies and approaches which are important in supporting action to prevent ACEs.
- To determine the role of organisations in building ACE-awareness through: workforce development (knowledge, training, skills) and ACE-informed service infrastructure.

3 Methods

A cross-sectional survey of ACE-awareness and knowledge amongst the public sector workforce within Wales was carried out during May and June 2019. The bi-lingual survey was launched online by a market research company and targeted towards all public sector employers and organisations which receive public money/funding to deliver their services. Full details of the methodology are provided in Appendix 1.

3.1 Measures in the survey

The questionnaire content was developed to elicit respondent awareness and knowledge of ACEs and their impacts; perceived importance of prevention or mitigation strategies for ACEs in Wales and the role of organisations in creating an ACE-informed public system (see Table 2).

Table 2: Themed areas within the questionnaire

Theme 1	ACE awareness	Awareness of the term ACEs and associated words
Theme 2	ACE knowledge	Knowledge of the impact of ACEs on physical and mental health
Theme 3	Prevention agenda	Perceived importance of national strategies to prevent ACEs and how to both prevent and mitigate its impact
Theme 4	Workforce development	Evidence of organisational ACE-training; ACE-informed procedures, policies and practices
Theme 5	Role of employers	Resources and Leadership

In order to determine if the participant was eligible to take part, initial screening questions asked the respondent to confirm they were aged 18 years or over, working in Wales and working for an employer or organisation which received public funding to deliver its services before completing. The questionnaire was piloted internally and externally by the Public Health Wales Evaluation and Impact team. There are 11 defined sectors and 'other,' which includes other public, charity or third sector (see the full list in Appendix 1, Table A1).

3.2 Data screening and analysis

Initial data received from the market research company was screened to create a dataset which included responses from 3,033 individuals (where each individual had answered at least one question). Findings reporting on awareness of ACEs (including self-reported words associated with ACEs) and the ACE Support Hub, reflect the responses provided by these 3,033 individuals.

Approximately one third of the 3,033 individuals did not then complete a large proportion of those questions which followed our initial awareness questions (see Appendix 3), therefore a sub-sample of 2,253 individuals was established for analysis after excluding those individuals who provided a significant number of non-response or incomplete response to the questions. Results presented after section 4.2 are the responses from this sub-sample of individuals (n=2,253).

Where lower numbers are reported in findings, this is mostly due to the structure and routing of the questions, or where respondents chose not to answer a question. When free-text was given within the survey, results have been quantified and free-text responses included in the report to illustrate key points. Quotes from survey respondents are given to illustrate the findings. Where appropriate, a count approach was undertaken to estimate the frequency of themes associated with ACEs as described by respondents. Data analyses were undertaken using IMB SPSS Statistics 24.0.

4 Results

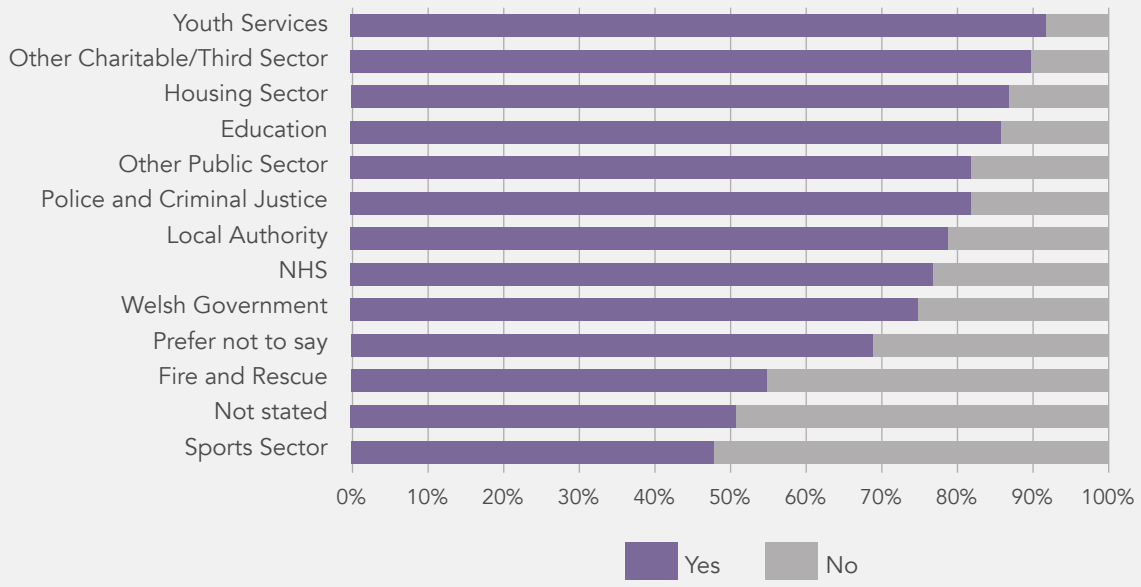
4.1 ACE-awareness

Key messages:

- The majority of respondents (75%) were aware of ACEs before the survey. Awareness was greatest amongst those employed in youth services, other charitable/third sector, housing and education – with lower levels in those in sports and fire and rescue.
- Only a minority of respondents (26%) were aware of the Cymru Well Wales (CWW) ACE Support Hub before the survey.

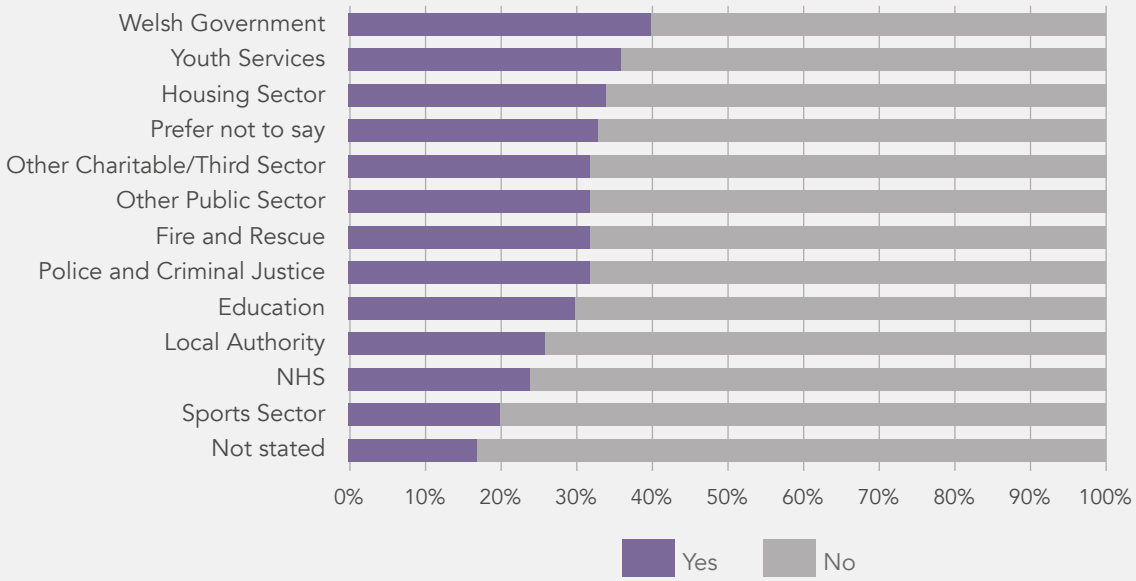
Our findings present evidence that a predominant proportion of the workforce in publicly funded services are aware of ACEs. 75% of respondents (2,273/3,025) reported having heard of the term ACEs before this survey, and this was higher amongst those employed within youth services (92%), other charitable/third sector (90%), housing (87%) and education (86%). Those employed within the sports sector (48%), not stated (51%) and fire and rescue (55%) reported the least awareness – see Figure 1.

Figure 1: Have you heard of the term ACEs? (n = 3,025)



Respondents (n=3,005) were asked about their awareness of the CWW ACE Support Hub. 26% reported they had heard of the CWW ACE Support Hub, with highest levels in Welsh Government (40%), youth services (36%) and housing sector (34%) – see Figure 2. The sports sector and the NHS reported low levels of awareness of the CWW ACE Support Hub (20% and 24%, respectively).

Figure 2: Have you heard of the ACE Support Hub? (n = 3,005)



4.2 ACEs and terminology

Key messages:

- Words associated with trauma and abuse/neglect were the most frequently reported to describe ACEs.
- Words associated with protective factors (including resilience), physical health and disability were rarely mentioned by respondents, suggesting that further efforts to raise awareness of the broad spectrum of ACEs and their impacts should include information on these areas.

To establish how respondents articulate ACEs, a question was presented which asked individuals to describe the words they associate with the terms ACEs (free-text). In total, 2,247 (74% of 3,033) respondents reported 6,174 different words associated with ACEs. The majority of responses (25%) were words related to the theme trauma and negative/harmful experiences (see Figure 3). The second most common theme (22%) were words associated with abuse and neglect (physical, sexual and psychological abuse and including loneliness, isolation, cold or hunger). Only 3% of all words reported were associated with protective factors.

Words or terms used were grouped into 10 categories according to 59 initial thematic codes (see Table 3 for how themes were created).

Figure 3: Frequency of themes associated with ACEs as described by respondents (n=2,247 total respondents and 6,174 different words associated with ACEs)

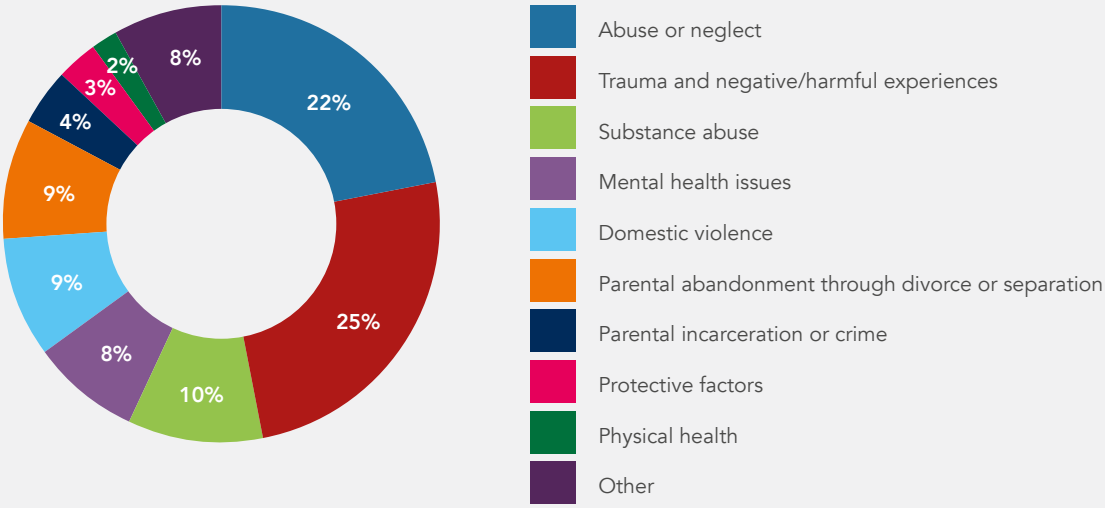


Table 3: Categories of words described by respondents (n=2,247)

Themes	Categories of words used by respondents to describe ACEs
Abuse or neglect	physical, sexual or emotional including rape, exploitation, bullying, malnourishment, loneliness, isolation, children in care, prejudice, hunger, cold
Trauma and negative/ harmful experiences	poverty, parental unemployment, poor housing conditions, bereavement, teenage/underage pregnancy, fear, intergenerational cycle, eating disorders/obesity, asylum/refugees
Substance abuse	drugs, alcohol, addiction
Domestic violence/abuse	domestic violence
Mental health issues	suicide, stress, anxiety, depression, low self-esteem, confidence, or self-worth
Parental abandonment through divorce/separation	relationship breakdown
Parental incarceration	imprisonment, crime, offending, jail
Protective factors	resilience, safeguarding, raising awareness, attachment, therapy, early prevention, informed care or practice, intervention
Physical health	chronic diseases, poor health, ill-health, disability
Other	neurodevelopment, impact to wellbeing, impact to social/emotional/ personal development, poor life outcome, behavioural issues, and risk factors

When explored by individual sector, the top three themes associated with ACEs remained abuse/neglect, trauma and substance misuse. This suggests that amongst our sample of staff in these sectors, there is a commonality of language used to describe ACEs around abuse, neglect and trauma, along with substance misuse and mental health conditions.

4.3 What is the knowledge of ACEs demonstrated by respondents?

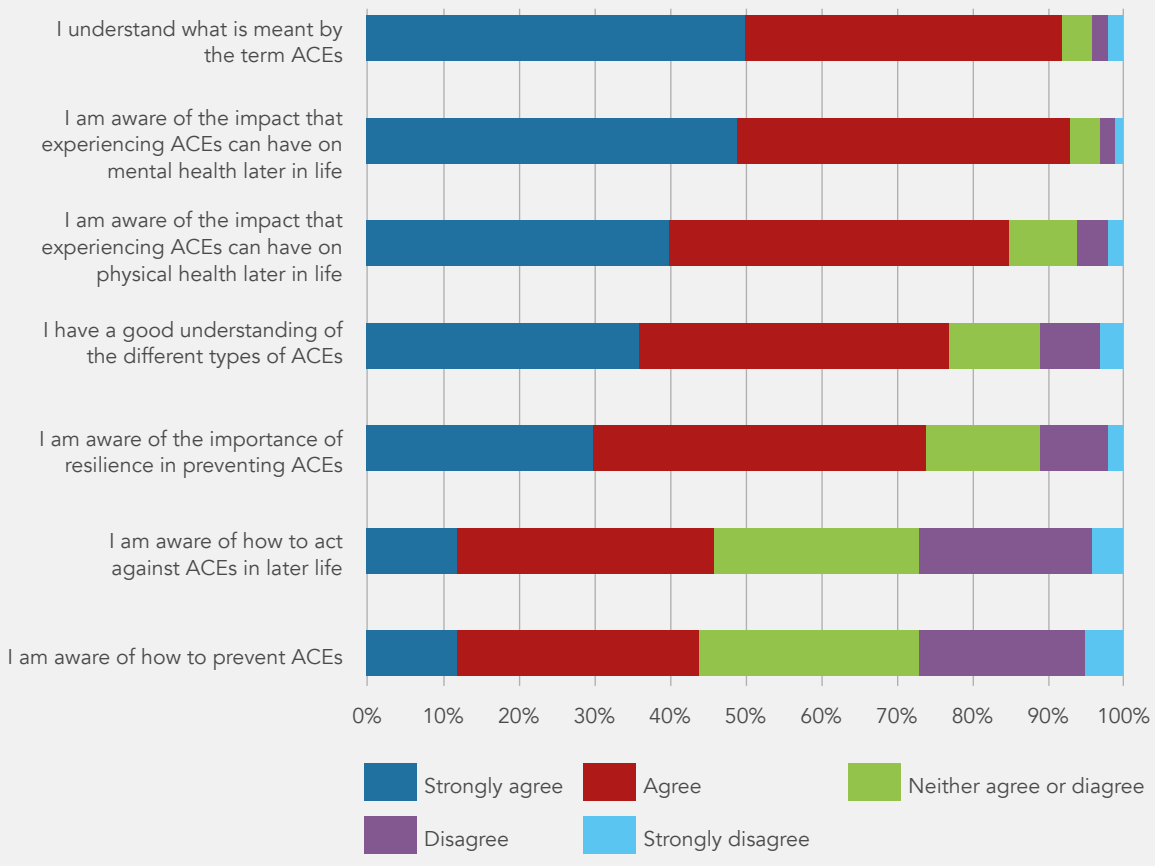
Key messages:

- A high proportion of respondents reported understanding the concept of ACEs and the impact that ACEs can have upon both physical and mental health (mental health appeared more well-known).
- Substantially fewer respondents indicated that they were aware of how to prevent or mitigate the impact of ACEs, when compared to self-reported awareness of the impact of ACEs.

To ascertain knowledge of ACEs (beyond general awareness), we asked our respondents if they understood what was meant by ACEs (Figure 4). Almost all reported they understood what was meant by the term ACEs (92%), with the remainder either disagreeing or unsure. Similar figures were reported for knowledge of the impact of ACEs on mental (93%) and physical (85%) health later in adult life; though word associations with chronic health conditions or ill-health were not as widely reported when respondents were asked to describe ACEs in their own words. This suggests the reported impacts on mental health are better known within the workforce.

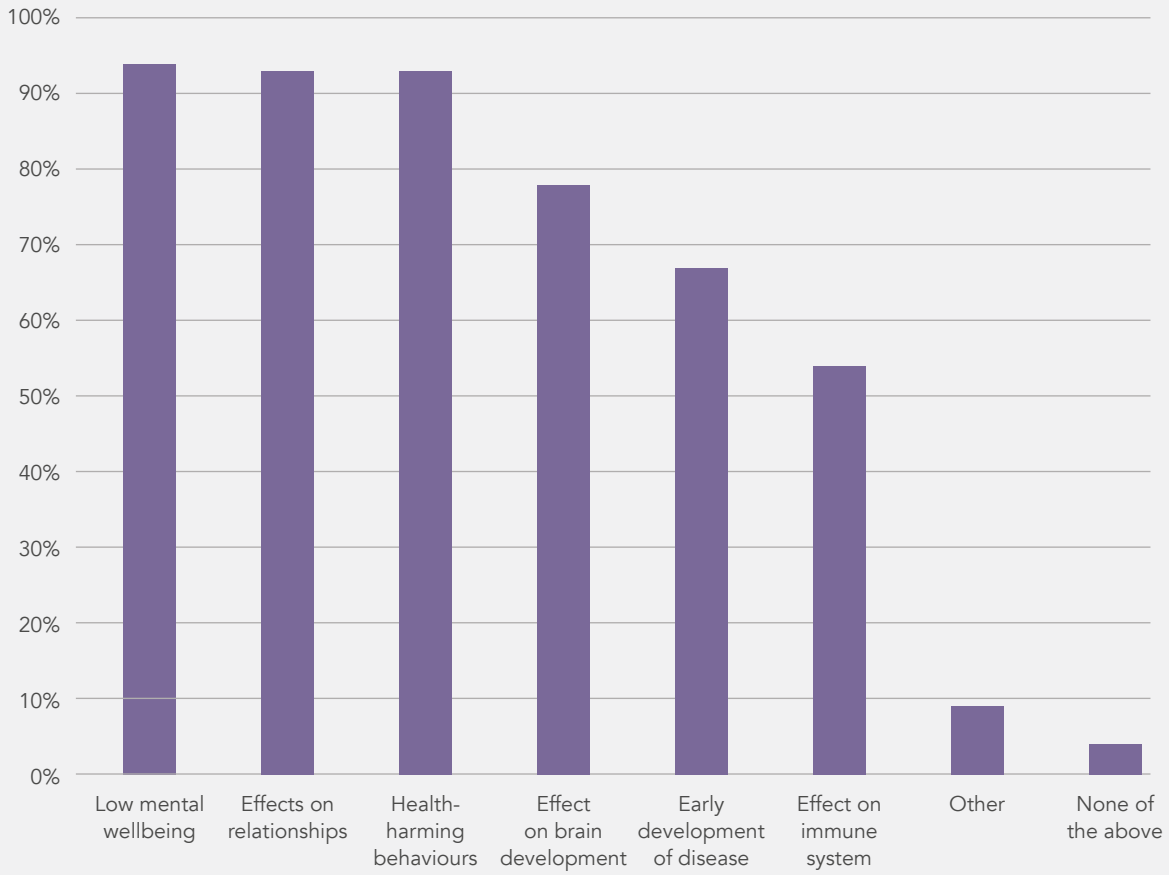
Respondents demonstrated slightly less awareness of the importance of resilience in preventing ACEs, with 74% responding they had a good awareness but 26% either were not sure or disagreed.

Figure 4: Awareness of specific understanding of ACEs (n = 2,253)



Respondents were asked to report their awareness of the impact that ACEs can have upon an individual's physiology and psychology. Results (see Figure 5) indicate that a large proportion of respondents reported having been aware of the impact that ACEs can have upon low mental wellbeing (94%), relationships (93%) and health-harming behaviours (93%). However, this level of awareness was not reported for the impact that ACEs can have upon specific physical aspects such as the immune system (54%) or early development of disease (67%).

Figure 5: Awareness of the physical and mental impacts of ACEs (n = 2,253)



4.4 Prevention of ACEs

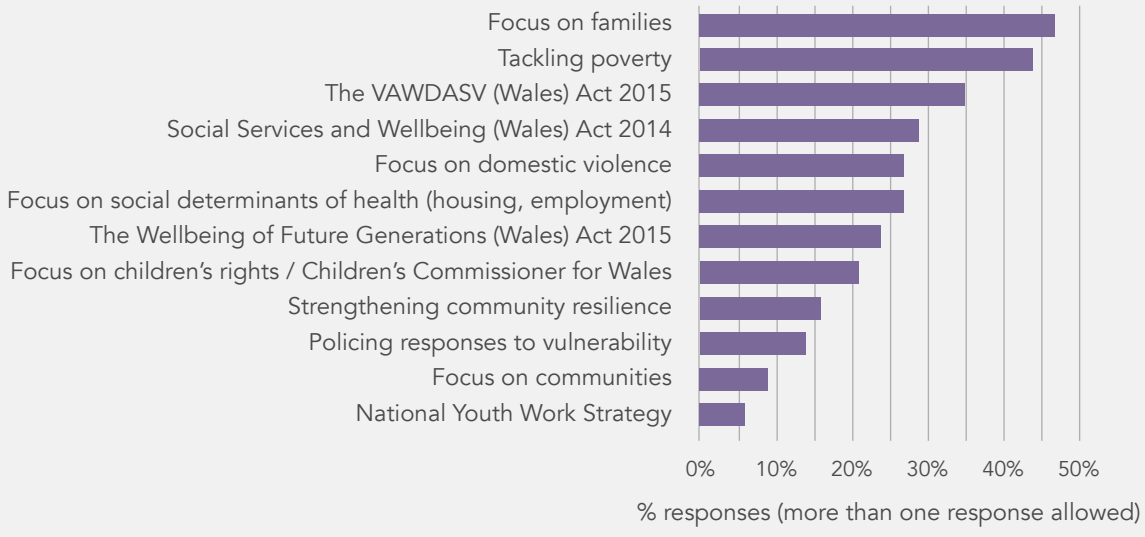
Key messages:

- The prevention and mitigation of ACEs represent the lowest levels of respondents reported awareness.
- Focusing on families was reported as the most important action to support the prevention of ACEs, closely followed by tackling poverty.
- Respondents highlighted the need for multi-agency collaboration to be able to respond better to issues related to ACEs.

One of the lowest areas of reported knowledge was around the prevention of ACEs. Only 44% of respondents described themselves as being aware of how to prevent ACEs, with 56% either unsure or unaware of how to prevent ACEs (Figure 4). As well as prevention, the area of mitigating against ACEs later in life was also highlighted in the findings as an area lacking in knowledge. Only 46% of respondents agreed they would know how to act against ACEs later in life, with 54% either unsure or disagreeing they would know-how.

We went on to ask respondents about Welsh strategies or approaches which were important in supporting action to prevent ACEs and all those listed were considered important by respondents (Figure 6). Yet when we asked them to prioritise their choice, a focus on families (47%), tackling poverty (44%) and The Violence Against Women, Domestic Abuse and Sexual Violence (Wales) Act 2015 (35%) were considered the three most important approaches to preventing ACEs in Wales.

Figure 6: Top 3 national approaches and strategies to prevent ACEs (n = 2,153)



In our qualitative analysis, respondents across all sectors also highlighted that in order to support the prevention of ACEs there is a need for multi-agency collaboration to be able to respond better to issues related to ACEs. Because of disconnected services and lack of communication between agencies, some respondents have found the approach to ACEs very limiting.

"This now needs to be joined-up rather than in silos of each profession entrenched in their own practice which is limiting." – *Local Authority*

"Education, social services and health just need to work in a more joined-up way. Services are too disparate, parents and carers need more help to link the various systems together."– *Education*

4.5 How does the workforce in Wales find out information about ACEs?

Key messages:

- Respondents reported having seen information on ACEs through a broad range of mediums, with research evidence, videos and reports being the most common.
- Outside of the direct workplace, workshops with ACEs content were most widely attended and conferences were reported as an important setting to disseminate information for ACEs.

Just over two thirds of respondents (67% - 1,509/2,253) reported having seen information on ACEs. Then when asked which type of information they had seen, over half of respondents reported having seen information on ACEs through research evidence (55%), with videos (54%) and reports (52%) next most commonly cited by respondents. Information on ACEs through a website (40%), posters (40%), social media (31%) and other types of information (23%) were also reported by respondents. Although, only a small proportion reported having seen any information on ACEs through blogs (7%).

Our findings demonstrate that information about ACEs is seen across a broad range of mediums, suggesting that content about ACEs should be written and delivered in content-appropriate ways for different audiences.

Workshops which contained some ACEs content were most widely reported (49%) by our respondents to have been attended (n=1,509), suggesting that opportunities for staff to attend continuing professional development (CPD) opportunities outside of the workplace-based setting is important. Conferences were reported to be an important setting to disseminate information on ACEs (35%). Almost a quarter (n=1,509) had not attended an event with ACEs content over the last 18 months.

4.6 ACE training in Wales: how ready are organisations?

Key messages:

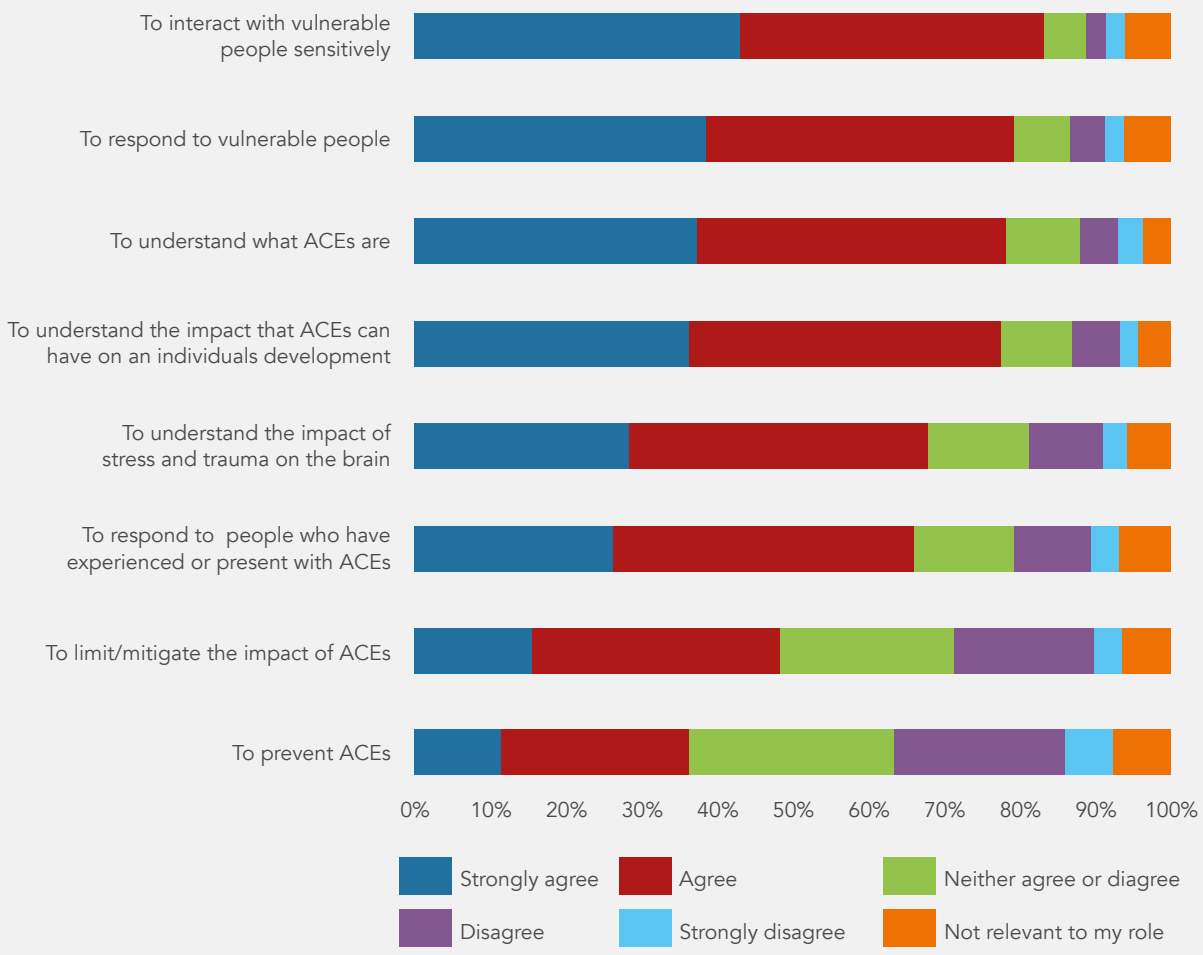
- Over three quarters of those who attended formal training which included ACEs content, reported that it had increased their awareness and knowledge of ACEs.
- A similar proportion of respondents felt comfortable in their role to interact with a vulnerable person sensitively and understand the impact ACEs can have on an individuals development. Respondents were less comfortable in supporting the prevention or mitigation of ACEs.

Almost two thirds of our respondents reported that their organisation provides direct services for people who may have experienced ACEs, with half of them offering direct professional support to someone in order to help them deal with or prevent ACEs (50%). This was across services for both adults and children.

Of those who answered our questions on training, 75% reported having attended formal training which included information on ACEs in the last 18 months (n=1,041). From this sub-sample, 79% agreed that it had increased their awareness and knowledge of ACEs, with 21% either disagreeing or unsure.

We wanted to find out how comfortable respondents felt within their role to both understand and work with those who have experienced ACEs. Most of our respondents indicated they felt comfortable within their role to do so across the different areas (see Figure 7). 80% felt comfortable to interact with a vulnerable person sensitively, and 76% to understand the impact ACEs can have on an individuals' development (n=2,253). Yet there was again a noticeable difference observed relating to the prevention (36%) and mitigation of ACE (49%).

Figure 7: Comfortability to undertake ACE-related activities within their role (n = 2,253)



4.7 What are the workforce ACE-training needs?

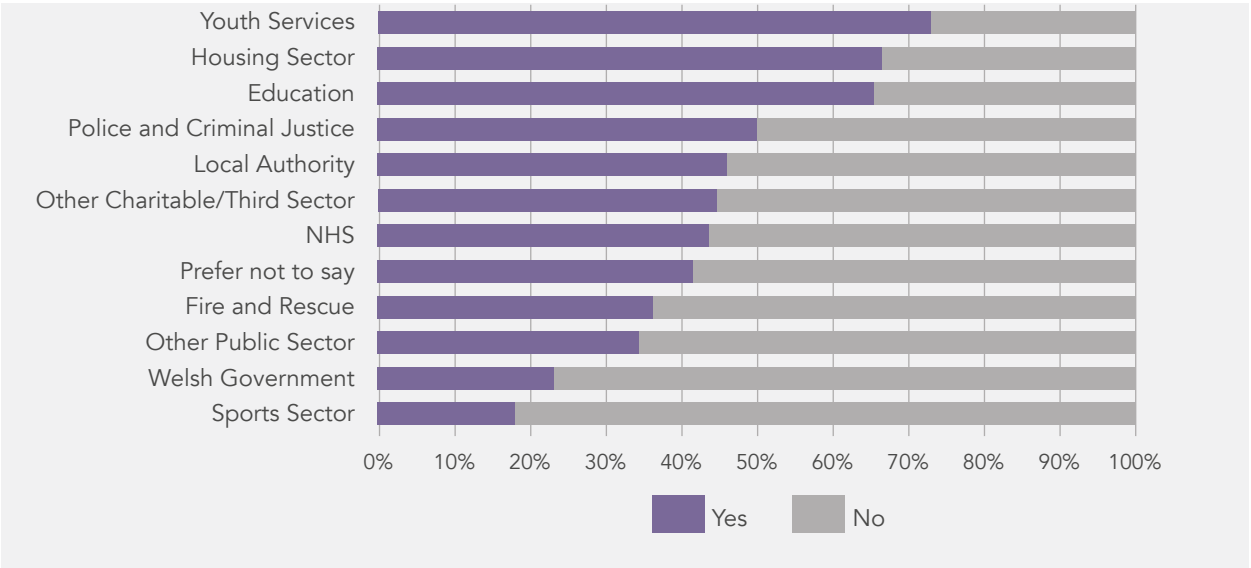
Key messages:

- Knowledge from ACE training has not always been translated into specific actions to help vulnerable children and families to decrease the risk of experiencing ACEs.
- Respondents reported a need to learn the practical elements to support individuals affected by ACEs, now that their awareness of ACEs had been raised.
- The link between ACEs and health in adulthood needs more wide-reaching mandatory training.
- Training should take into account that ACE terminology can stereotype individuals, which has the potential to damage relationships with health professionals or service providers.
- ACE-awareness training should not be mistaken for ACE enquiry. Counting ACEs was reported as not being the right approach for everyone.

47% (1,068/2,253) of respondents reported having been offered formal training from their employer or another provider within the last 18 months which included information one ACEs (Figure 8). This offer was higher amongst those employed within youth services (73%), the housing sector (67%) and education (66%). Only 18% of respondents employed with the sports sector and 23% employed within Welsh Government reported having been offered such training (see Appendix 7). It was noted that in terms of front line services, less than half of respondents in NHS settings (45%) had been offered formal training on ACEs in the last 18 months.

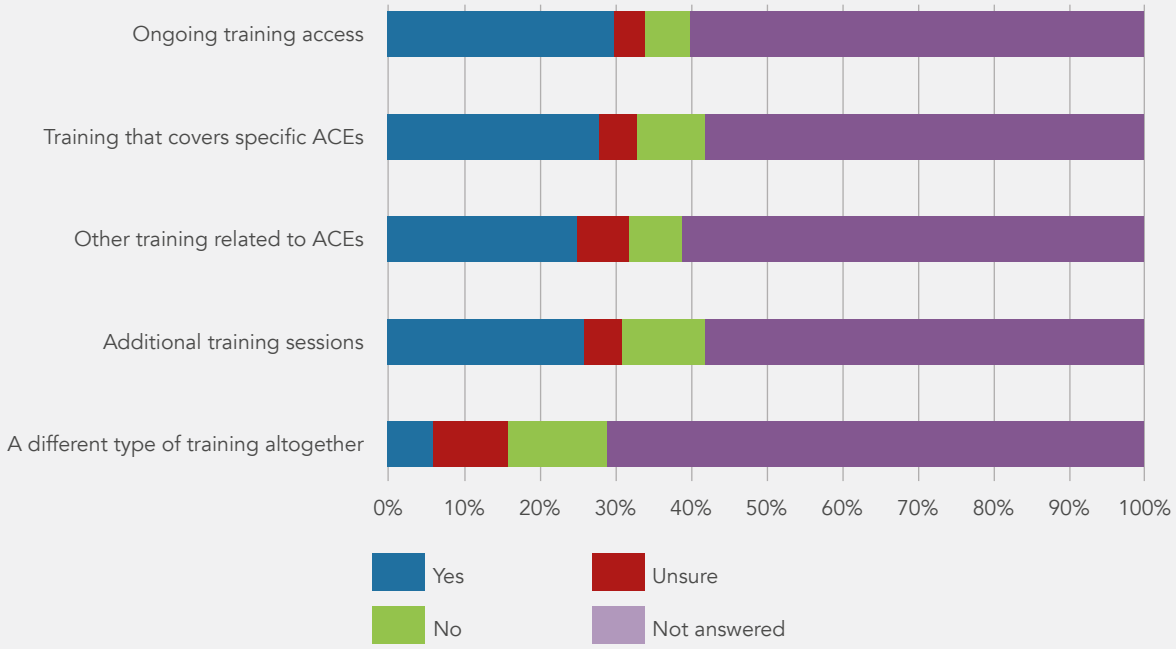
When asking respondents whether they had attended the training which was offered, 75% of respondents (784/1,041) indicated that they had. When asked whether the training had increased their knowledge and awareness of ACEs, 79% (625/784) were in agreement that the training had increased both their knowledge and awareness of ACEs.

Figure 8: Offered formal ACE training within the last 18 months



When asked whether they require any further ACE-related training, the majority of respondents reported wanting a wider variety of training, with ongoing training access the most widely reported in terms of training needs (see Figure 9).

Figure 9: What additional training do respondents want, if any? (n = 2,253)



To further indicate what type of training respondents would like, thematic analysis of the free-text responses found that some respondents thought that future training should include 'not just the basics' but more information on how to support children and families, adults and communities to prevent and mitigate the impact of ACEs. This included practical skills to build resilience and how to change individual policy to support families.

> "More in-depth ACE-awareness training and how to heal foster children who have many ACEs". – *Local Authority*

> "How to incorporate the prevention (or later life management) of ACEs into policy work, so that individual policy areas can make a difference". – *Welsh Government*

Respondents also reported that training should be specific to each sector/job role with real examples and training tools in order to be more successful.

> "Training with real examples, statistics, people's stories about how their lives were affected and what they would have wanted to happen". – *Local Authority*

> "I would like to see training delivered specifically focused on the impact of ACEs focusing on youth offending. I would also like to see more evidence from peer-reviewed published academic articles and journals to support any training materials that would be used". – *Youth Services*

In addition, respondents also reported that information about local support services to signpost people and contacts of other organisations working on innovative ways to prevent ACEs would enable them to provide the support people need.

"More training around multi-agency working and the initiatives that are going on. Information on what is happening in the local areas to tackle ACEs including the contact information of people involved in the projects". – *Education*

"Training that may provide useful information on the up to date and relevant services and interventions that are available in our area. Innovative ways to work with service users that are affected by adverse childhood experiences". – *Police*

Respondents also felt that strategies to increase professionals' knowledge about ACEs had not always been translated into specific actions to help vulnerable children and families to decrease the risk of experiencing ACEs. The need for a more wide-reaching mandatory training which highlights the links between ACEs and health in adulthood across all sectors was raised by respondents.

"I think everyone in the sector needs to understand ACEs more and the ongoing impact they can have. There should be an on-going rolling training programme about ACEs and PIE [psychologically informed environment] training and maybe focus on specific issues with ACEs to ensure people are informed and aware and get a deeper understanding of the issues". – *Housing*

"There needs to be some specific training offered to adult practitioners to consider the support required in adulthood and those individuals who are going through transition, which are often more complex with significant ACEs and often the response can be detrimental, for example mental health sectioning. We should be focusing upon prevention as well in adult services". – *Local Authority*

Although receiving training about ACEs was considered important, respondents highlighted that there are so many factors associated with ACEs (e.g. poverty and health inequalities) that need to be tackled in order to make a real difference. For instance, strategic and financial policies were seen as limiting factors for professionals to help to mitigate the devastating impact of ACEs on children, adults and communities as a whole.

"…the number of children living in poverty is increasing, the impact of substance addiction is rocketing and it is no surprise that domestic abuse and child abuse then increases. The prevention strategy is not explicit enough. A political decision needs to be made that it is unacceptable for any child to be brought up in poverty, and there needs to be sufficient funding to support people who have experienced trauma. Bluntly, the 'preventions and cures' that we try to provide people with are pretty ineffective in light of the overwhelming indifference of current political policy".
– *Local Authority*

Despite increased knowledge and the ability of professionals to identify ACEs, one of the main issues reported in the survey, across all sectors, includes funding cuts within the local authorities and public services. The lack of services (or the lack of knowledge of services available) to signpost people to, were reported as an important gap in the ACEs agenda.

> "If ACEs have been identified, what happens next? Are those who suffer from ACEs automatically referred to psychologists to prevent the cycle of ACEs being broken? How will cuts to the various services that support those with ACEs impact agencies who assist? It seems as if all of the relative agencies are able to identify ACEs and know the effects, however, the issue is preventing ACEs and supporting those who have ACEs. I fear that with the funding cuts, identifying ACEs is a bit pointless unless there is support available". – *Police*

Although the vast majority of people did not have any concerns about the ACEs terminology and approach, a few respondents (n=25) highlighted that the term ACEs focuses attention on 'all the negatives' instead of focusing on 'looking for positives from the negatives'. For instance, it was argued that ACEs terminology has the potential to 'label' vulnerable people or to keep reminding them of their negative experiences early in life while more attention should be placed in empowering language and building resilience.

> "Possibly we need to build and focus on resilience and whether individuals always want to be reminded of their poor memories that ACEs may have had upon them. Should we also focus on the health and wellbeing of the child and parent in the here and now?" – *National Health Service*

> "In my experience the ACEs agenda focuses on the negative impact of ACEs almost entirely. It would be helpful to have empowering language to ensure those with ACEs are not stereotyped in a negative and potentially damaging way." – *Local Authority*

A Wales-wide policy to sensitively screen service users for ACEs was suggested in order to avoid using ACEs as a diagnostic tool or use ACEs as 'predictors' of certain behaviours without really understanding the complex association between ACEs and later health and wellbeing and the needs people with ACEs may have.

> "I wonder if the phrase ACEs, although helpful in terms of recognising the challenges faced by families, can, in the wrong hands be used as a diagnostic tool or worse". – *Local Authority*

> "I have some concerns about the approach to 'counting' ACEs that seems to have been put into practice as a way of assessing ACE impact in a number of services. Something seems to be getting lost in translation. The change required is often a culture shift and this requires more investment than brief attendance at staff training. 'Trauma-informed' has become a bit of a buzz phrase, which is not meaningfully translated into day to day practice". – *Police*

4.8 ACE-informed organisations

Key messages:

- 42% of respondents were unsure whether their organisational policies and approaches were ACE-informed.
- ACE-informed policies were predominantly reported by those within education, police/criminal justice and youth sectors.

Almost two thirds of respondents (63% - 1,408/2,253) indicated that their organisation provides direct services for people who may have experienced ACEs, with 50% of respondents (806/1,608) also indicating that they had offered direct professional support to somebody within the last 12 months to help them deal with or prevent ACEs, and 17% (273/1,608) of respondents indicating that they had offered indirect support. For those who had offered direct support, 49% (396/806) had offered this to both adults and children, whilst 50% of respondents (134/270) that had offered indirect support had done so to both adults and children.

When asked about the policies held by their organisation in terms of how ACE-informed they were, 42% felt that their organisational policies were ACE-informed, whereas 48% were unsure. ACE-informed policies were predominately reported by individuals employed within the education (54%), police and criminal justice (54%) and youth sectors (52%). Respondents from the fire and rescue service reported the lowest levels of ACE-informed policies and practices (9%).

We wanted to establish if organisations displayed evidence to its workforce of ACE-informed practices at levels such as recruitment and selection. Less than one third (28%) reported that their organisation had such processes. Youth services and the housing sector were more likely to report yes (52% and 42% respectively), but this was much lower in Welsh Government (15%), sports sector (9%) and fire and rescue (5%).

55% of respondents reported their organisation supports staff to receive ACE-awareness training or advanced training as required. This was greatest amongst those employed within youth services (85%) and education (71%), compared to those within the sports sector (18%), and reflects patterns of uptake of training across sectors (sections 4.6 and 4.7).

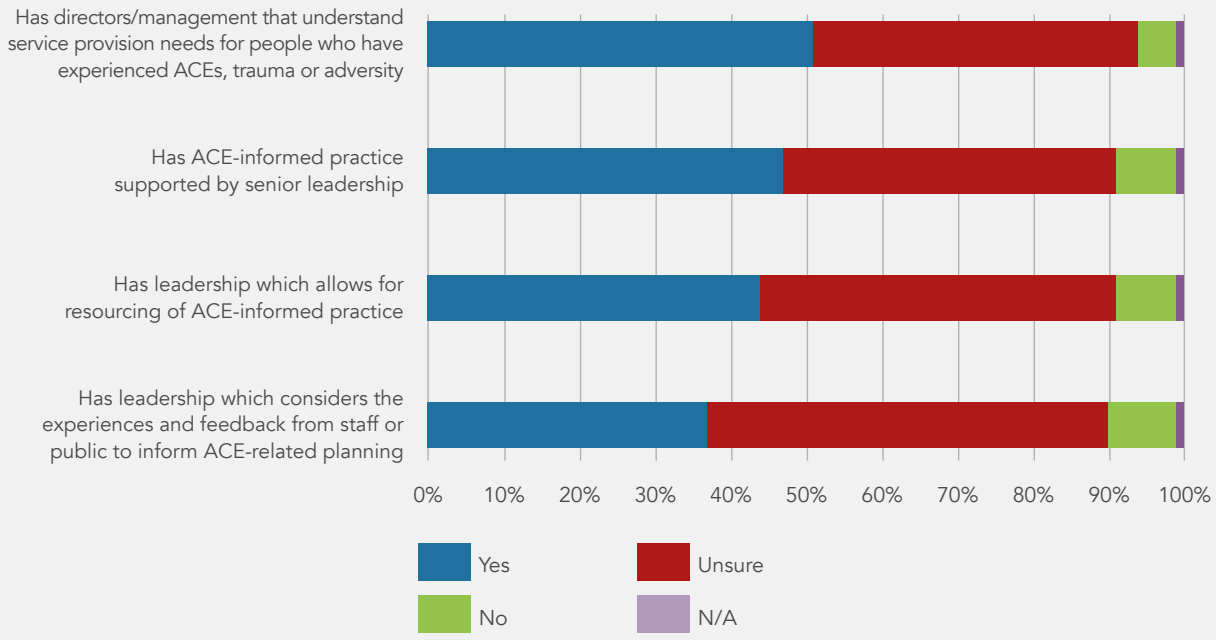
4.9 ACE-informed leadership

Key messages:

- There is more work to be achieved in supporting organisations to become ACE-informed at an organisational and leadership level, and making progress transparent to all workforces.
- Leadership in organisations is not reported to be considering the experiences or feedback from staff or the public to help inform ACE-related planning in services.

Just under half of respondents reported having leadership which supports the ACE agenda (47%), although a large proportion of respondents were also unsure. This uncertainty of ACE-informed leadership principles was consistent across each of the areas we asked in Figure 10, suggesting that the concept of ACE-informed leadership was not visible to our respondents.

Figure 10. Does your organisation have leadership which supports the ACE agenda? (n = 2,253)



5 Discussion

5.1 Levels of ACE-awareness in Wales

Our findings present evidence that a large proportion of workforces in publicly funded services within Wales have awareness of ACEs, with at least 48% of respondents from each sector reporting having heard of the term ACEs before taking part in this study. This was highest in youth services, housing and education sectors.

To establish how the respondents articulate ACEs and their impact, we asked respondents to consider which words they use to describe ACEs. The majority of responses describe using themes associated with trauma and negative or harmful experiences (such as poverty, poor housing, bereavement). The second most common theme were words associated with abuse and neglect (physical, sexual and psychological abuse and including loneliness, isolation, cold or hunger). Our findings suggest that there is a commonality of language used to describe ACEs around abuse, neglect and trauma, with substance misuse and mental health conditions. Services have found that when practitioners were working within a trauma-informed organisation, they were better able to recognise possible traumatised patients, whilst also being better able to offer the appropriate support to that individual (22). This suggests that accurate understanding of what ACEs are will be important to identification and support to individuals.

ACE-awareness levels are evident across the different public sectors using a broad range of terminology. It is worth noting that there was less word association from our respondents to terminology associated with themes around protective factors (including resilience), and physical health and disability, suggesting that further efforts to raise awareness of the broad spectrum of ACEs and their impacts should include information on these areas.

5.2 What is the knowledge of ACEs demonstrated by respondents?

We wanted to establish what respondents knew about ACEs, rather than a general awareness of the word. Almost all our respondents (92%) reported they understood what was meant by the term ACEs. Similar figures were reported for knowledge of the impact of ACEs on physical and mental health later in adult life, though aspects of physical health conditions were not widely reported when asked which words respondents used to describe ACEs. This suggests the reported impacts on mental health and health-harming behaviours are better known within the workforce than those associated with chronic conditions and ill-health.

Respondents demonstrated slightly less understanding of the importance of resilience in preventing ACEs, with 74% responding they had a good understanding. Being 'resilient' describes the ability of an individual, a community, or a system to withstand stress and challenge. It encompasses both the ability to adapt and survive adverse circumstances (such as environmental, societal, or economic shocks) or to cope and thrive given the challenges of everyday life. At an individual level, resilience has been linked to mental and physical health across the life course and the benefits of a resilient population have been suggested to extend beyond health to wider societal and economic outcomes (10). The links between resilience and health throughout the life course have been recognised in many national and international policies addressing sustainable societies and disaster recovery (29).

Concepts of resilience as a construct are complex and Public Health Wales has recently published a report on building a framework for resilience (understanding the interdependence between individuals and communities) (29). Within Wales, resilience is one of the goals of the Well-being of Future Generations (Wales) Act 2015 (10), emphasising the importance of achieving a social, economic, and ecological resilient Wales.

Our findings show awareness and knowledge of ACEs is evidenced across different publicly funded service areas. If Wales is to become a truly ACE-aware nation, there should be consideration of how the wider workforce beyond those receiving public funding are also able to evidence the skills and knowledge of their workforce in working with those affected by ACEs too, and what tools will be required by the workforce to build this capability.

5.3 The prevention of ACEs

One of the lowest areas of reported knowledge was around the prevention of ACEs. Only 44% of respondents described themselves as being aware of how to prevent ACEs. There is a focus in published works on the role and benefit of working in trauma-informed services and the benefits for service users this can bring (9,11,17-18). Public Health Wales' report on resilience focuses on universal prevention approaches to improve resilience at population level, and recognises that building resilience in vulnerable or marginalised groups who have experienced trauma requires more tailored and targeted support (29). A systems-level approach to resilience is acknowledged and there is a role for supportive policy and the legislative context for prevention offered through the Wellbeing for Future Generations Act in Wales (10).

As well as prevention, the area of mitigating against ACEs later in life was also highlighted in the findings as an area lacking in knowledge. Less than half of respondents agreed they would know how to act against ACEs later in life. We wanted to find out how comfortable respondents felt within their role to both understand and work with those who have experienced ACEs. Most of our respondents indicated they felt comfortable within their role to do so. Yet there was again a noticeable difference observed relating to the prevention and mitigation of ACE. **These are identified as specific areas for additional ACE-related training that could benefit workforces.**

We went on to ask respondents about Welsh strategies or approaches which were important in supporting action to prevent ACEs and all those listed were considered important by the respondents. Yet when we asked them to prioritise their choice, a focus on families, tackling poverty and The Violence Against Women, Domestic Abuse and Sexual Violence (Wales) Act 2015 were considered the three most important approaches to preventing ACEs. **The identification of these approaches and national strategies by respondents would benefit from a further synthesis of the evidence base and areas of early intervention or good practice in relation to the ACEs prevention agenda.**

5.4 ACE training in Wales: how ready are our organisations?

When we asked about the policies held by organisations in terms of how ACE-informed they were, there was much uncertainty about the ACE content in their organisational policies. This may reflect respondents' individual awareness of internal policies or roles within their organisation, however findings suggest the views expressed in our survey need further consideration as those organisations with an increased embedded approach to ACE-awareness would generate greater visibility across all levels. We saw ACE-informed policies were predominately reported by the youth service, police and criminal justice and education sectors. All three of these sectors have been working with Public Health Wales through the CWW ACE Support Hub and the Early Action Together collaboration (see Box 1, page 17) to explore their professional work through an ACE lens, which may explain the higher levels of organisational readiness for tackling ACEs.

We wanted to establish if organisations displayed evidence of ACE-informed practices at levels such as recruitment and selection, but there was limited evidence of organisations having such processes. Organisations are supporting staff to receive ACE-awareness training, but not for all staff in our respondents. We saw that youth services, education and housing sectors, police/criminal justice and local authorities all reported higher levels of support to undertake ACE training. Where ACE-awareness training offers the opportunity for basic workforce development, alone it will not bring about the transformational organisational change required to tackle ACEs at a population health level. The CWW ACE Support Hub has developed a knowledge and skills framework, along with organisational tools to embed systems change. Further development and evaluation of this work will help to strengthen the case for co-productive approaches that will allow organisations to lead, grow and embed a sustainable model for ACE-informed services.

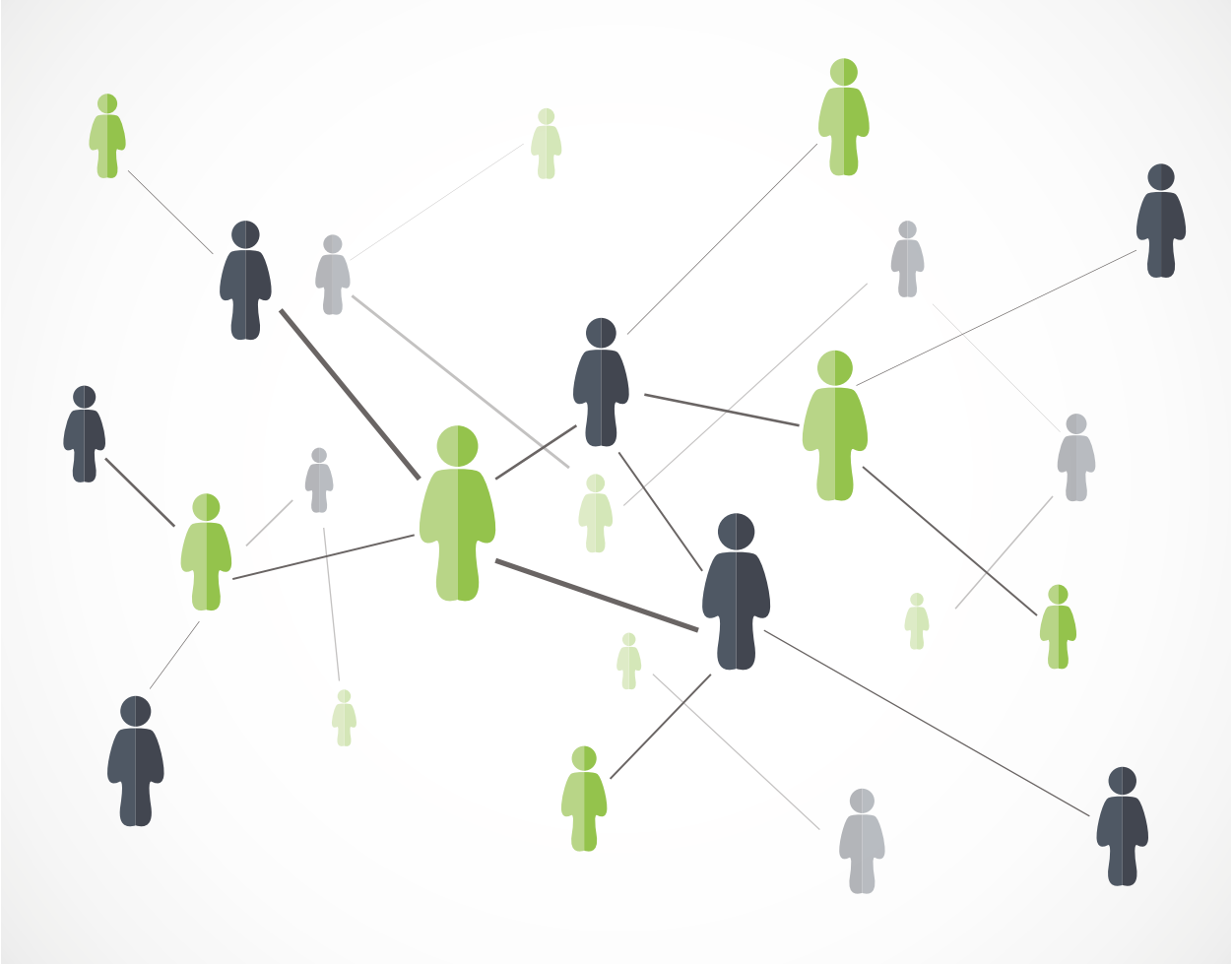
The Scottish Government has endorsed a Knowledge and Skills Framework for Psychological Trauma and a training plan designed to support the development of the workforce and help organisations to make informed decisions about the most suitable evidence-based training to meet gaps for a trauma-informed workforce (20-21). In Wales, one of the key mechanisms for delivering the *Violence Against Women, Domestic Abuse and Sexual Violence (Wales) Act 2015* is the National Training Framework on violence against women, domestic abuse and sexual violence, which seeks to adopt a Wales-wide approach to informing the workforce. **This suggests that there is scope to continue strategic work in Wales within organisations to promote a holistic approach to raising awareness of ACEs and the need for a sustainable training, developed and led across the sectors.**

The CWW ACE Support Hub has promoted the use of ACE-informed principles and practices in the workplace as part of its model. This has included a focus on the role of leadership. Our findings report those in youth services, education, police/criminal justice, housing sector and other third/charitable sector were all more likely to have leadership which supported the ACE-agenda. But this was only reported by a minority within the sports sector and the NHS. It is important to acknowledge that developing ACE-informed processes still remains relatively new to organisations, and while there is scope to continue building on what has been achieved so far, it will be important to focus on where embedding ACE-informed approaches has been successful and learning is shared.

5.5 ACE training in Wales: what are the needs of the workforce?

Information about ACE training is being made available to staff. Overall, training was reported to have been helpful in raising awareness and knowledge of ACEs. Themes around more training on how to mitigate the impact of ACEs were reported as well as promoting resilience, suggesting that these are two areas which are still poorly understood, and was demonstrated in a number of areas in our survey.

It was suggested that knowledge from training had not always been translated into specific actions to help vulnerable children and families to decrease the risk of experiencing ACEs. The need for a wider-reaching mandatory training which highlights the links between ACEs and health in adulthood across all sectors was raised. ACE terminology has the potential to stereotype individuals in a deficits model, which could damage relationships with health professionals or service providers, and it is argued that viewing social issues through a negative prism of ACEs can inhibit the ability to respond to human need (13-15). It was also felt that the term ACEs focuses attention on 'all the negatives' and does not relate to solutions or prevention. **This insight offers trainers and development of future training content an opportunity to focus on a strengths-based model, and how this can contribute to the prevention agenda.**



6 Limitations of the survey

There are limitations of this survey which should be considered in the interpretation of the findings presented.

The respondents to the survey do not constitute a representative sample of the workforce population of publicly funded services in Wales. Therefore, the authors acknowledge the potential for a sampling bias, in that respondents taking part may have been influenced to take part by (for example) personal or professional interest in the topic area under discussion. The design of the survey to reach across a broad range of professional sectors nationally has meant that it was not feasible or practical to attempt a probability sampling methodology at this time. However, our findings do offer insight on awareness and spread of information of ACEs within specific organisational groupings, which will help commissioners and providers of services to consider the training needs of their staff in relation to ACEs.

The survey was designed to provide a baseline of evidence of the awareness of ACEs within the workforce of publicly funded services in Wales and offers evidence on the application of training currently on offer in Wales. However, we have not sought to measure the impact of this training on individuals or organisations and there remains a need for further impact evaluation in this area in order to better understand how being ACE-informed can improve population health outcomes. The succinct nature of the online questionnaire and nonprobability sampling methods, whilst designed to encourage participation, has limited the analysis of data and we are therefore unable to demonstrate statistical significance in our findings.

7 Conclusion

The findings from our survey have identified a number of potential areas to focus on to further support the workforce across public services to tackle ACEs and become more ACE-informed.

Awareness was greatest amongst those working within youth services, other charitable/ third sector, housing sector and education. These greater levels of awareness may reflect the areas of programme work currently supported by the CWW ACE Support Hub, and identifies further sectors and services where ACE-awareness remains more limited. Only a minority of respondents were aware of the CWW ACE Support Hub before the survey, reflecting the specific areas of programme work delivered through the Hub.

Findings show that staff in publicly funded roles in Wales have awareness and knowledge of ACEs. The most common themes used to describe ACEs include abuse and neglect, and those linked with trauma and negative experiences, suggesting a commonality of language across sectors. However, future strategies and ACEs messages would benefit from a focus on using positive language and building resilience to ensure building ACE-awareness in the workforce does not lead to a deterministic view of those who have experienced or are experiencing them.

Respondents showed good awareness of the impact of ACEs on both physical and mental health, but less awareness for both prevention and mitigation measures. This has been identified as an area on which future training should focus, with a focus on families and tackling poverty across different sectors. Almost half of the survey sample had been offered training on ACEs, and just over three quarters of those who attended training with ACE content felt it had improved their knowledge and awareness. This demonstrates that initial ACE-awareness training has been making an impact on publicly funded services. Although training content nor outcomes have been measured as part of this survey, our findings provide fresh evidence on the types of training that will further help organisations to plan their services through an ACE-lens. Continuing to develop targeted ACE-awareness within organisations should be seen as important for informing the systems change and the way services plan and respond to those who have experienced or are experiencing ACEs, creating a universal approach which is ACE-aware, and not focussed on selective screening for service provision.

There is evidence in our findings that organisations should consider raising further awareness where ACE-informed policies and practices currently exist or develop policies and practices that are ACE-informed, to build embedded systems change. There was consistent uncertainty of ACE-informed leadership principles, suggesting that the concept of ACE-informed leadership was not visible to our respondents.

Awareness was greatest amongst those working within youth services, other charitable/third sector, housing sector and education.

Key considerations for future action:

- The development of ACE-awareness training with a focus on prevention and mitigation knowledge and skills, developed using co-productive approaches to embed a sustainable model across organisations.
- Consider the training needs of the wider Wales workforce, beyond publicly funded services, if we are to become a truly ACE-aware nation.
- Future research to better understand the national strategies and approaches which will have the best impact on the reduction of ACEs in Wales.
- Consider auditing the scope and breadth of ACE training currently on offer across Wales to establish what is working, for whom and why.
- Build on further strategic work with organisations to promote a holistic approach through the embedded practice of ACE-awareness in organisational leadership, and ACE-informed policies and practices to support.

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Appendices

Appendix 1 – Methods

A cross-sectional survey of public sector workforces (including those in charity/third sector roles supported by public funding) within Wales was conducted by Public Health Wales over a four week period in May/June 2019. The fieldwork was carried out by Strategic Research & Insight, a professional market research company. It was launched online both in English and Welsh, and circulated to workforce of the priority groups identified in Table A1.

Table A1. Target Sample Groups

Professional Sector / group targeted for participation
• Education (primary and secondary schools), Association of Educational Psychologists (Wales), Estyn
• Early years: Local Authority only, Flying Start, Families First
• Housing: Local Authority stock only, social landlords
• Police
• Health: acute care, community, primary care, mental health, public health
• HM Prison and Probation Service – includes prisons, youth custody service
• Community Youth Offending Services (Local Authority)
• Commissioned Care Providers (residential, domiciliary, day and other)
• Youth Workforce: Local Authority, faith workers, cadets, Council for Voluntary Youth Services
• Fire and Rescue
• Public Service Boards (PSBs)
• Regional Partnership Boards (RPBs)
• Area Planning Boards: safeguarding (Early Help teams), substance misuse services
• Welsh Government: civil servants, Crown Prosecution Service, Department Work and Pensions, Welsh Local Government Association
• Local Government: Cabinet local councillors, Welsh Local Government Association, Association of Directors of Social Services, Education in Wales and Children's Services, Community Youth Offending Services
• Sport: sport statutory bodies such as Sport Wales, Welsh Rugby Union; leisure providers in Local Authority settings
• Higher Education providers: Universities Wales
• Further Education providers: Colleges Wales
• Social Work
• Wales Strategic Migration Partnership
• Refugee Sector
• Women's Sector

NHS research permissions were gained from the Public Health Wales Research and Development Office.

Sampling

A non-probability sampling approach (also known as snowball sampling) was used, allowing for exponential non-discriminatory sampling. The survey included demographic and basic information about the respondents employment sector to enable the field agency to track the completed responses within different groups. Through the information given, all levels/grades of workforces were encouraged to participate. The survey initially aimed to attract 1500 completed respondents, aged 18+, working in Wales, in uniformed public sector services such as health, police, ambulance, fire and rescue. In the design stages, it was further extended to include participation from non-statutory service providers in receipt of public funding (third sector/charity).

Professional sectors and groups were identified by specialist staff working within the Cymru Well Wales (CWW) ACE Support Hub by nature of their services provided i.e. schools or healthcare providers. Groups were then targeted through their organisations, existing networks and programmes through a snowballing approach both by the CWW ACE Support Hub and Strategic Research & Insight. Respondents are collectively referred to within the report as 'workforce' but it is used to recognise both the role and work of employees and volunteers within organisations.

Data screening

3,656 responses were collected in total from the online survey. Following screening of the data, 620 responses were identified as blank and 3 identified as test-runs; leaving a dataset of 3,033 responses. The results of Q4 (awareness of the term ACEs), Q5 (words associated with ACEs) and Q6 (awareness of the ACE Support Hub) reflect the responses provided by these individuals. However, preceding these questions, those individuals that provided a no-response and/or incomplete response for the questions listed within Appendix 3 were excluded (step-wise) from subsequent analysis. With 780 individuals excluded on this basis, a final sample size of 2,253 individuals was therefore established.

Data analysis

Data analysis were undertaken using IBM SPSS Statistics 24.0. Descriptive statistics are presented.

Free-text responses were analysed using thematic analysis (30). For Q5 (words associated with ACEs), words or terms used were thematically analysed into 59 thematic codes by the market research company. These initial thematic codes were cross-checked by the research team in a sample of 100 respondents. Finally, ten common themes were identified by the research team and used to group the initial 59 thematic codes into categories of words used by respondents including: 1) abuse and neglect, 2) trauma and negative/harmful experiences, 3) substance abuse, 4) domestic violence/abuse, 5) mental health issues, 6) parental abandonment through divorce/separation, 7) parental incarceration, 8) protective factors, 9) physical health, and 10) other. A count approach was undertaken to estimate the frequency of themes associated with ACEs as described by respondents.

How they became aware of the survey

When asked about how respondents had become aware of the survey, as highlighted within the results in Appendix 2 and 4, for both sub-groups of respondents, many reported having become aware of the survey through either their colleague or through receiving an email from Public Health Wales/Strategic Research & Insight.

Appendix 2 – Demographics of the 3,033 respondents (including questions 1-6)

Employer	n	%
Local Authority	941	31%
Welsh Government	65	2%
NHS	579	19%
Police and Criminal Justice	245	8%
Education	216	7%
Fire and Rescue	22	1%
Housing Sector	62	2%
Youth Services	61	2%
Sports Sector	25	1%
Other Public Sector	57	2%
Other Charitable Sector	193	6%
Prefer not to say	40	1%
Did not state	527	17%
Total	**3,033**	**100%**

Employer		n	%
If Welsh Government is that…	Policy	27	42%
	Operational	8	12%
	Delivery	14	22%
	Corporate	*	*%
	Professional	10	15%
	Other	*	*%
	Prefer not to say	*	*%
	Total	**65**	**100%**
If NHS is that…	Primary Care	84	15%
	Mental Health Services	58	10%
	Acute Hospital Services	60	11%
	Community Services	162	28%

Employer		n	%
	Ambulance	5	1%
	Public Health	99	17%
	Early Help Teams	*	*%
	Dental	20	4%
	Other	76	13%
	Prefer not to say	6	1%
	Total	**573**	**100%**
If Police and Criminal Justice is that…	HM Prison and Probation Service	22	9%
	Community Youth Offending Service	7	3%
	Police	207	85%
	Other	6	2%
	Prefer not to say	*	*%
	Total	**245**	**100%**
If Education is that…	Higher Education	6	3%
	Further Education	6	2%
	Secondary	51	24%
	Primary	86	40%
	Early Years	24	11%
	Educational Psychology	7	3%
	Other	32	15%
	Prefer not to say	5	2%
	Total	**216**	**100%**

*Number <5

		n	%
Role	Non-managerial/frontline practitioner	1,098	36
	Managerial/supervision/leadership	834	28%
	Administrative	475	16%
	Prefer not to say	89	3%
	Did not state	537	18%
	Total	**3,033**	**100%**
Age	18-24 years	58	2%
	25-34 years	426	14%
	35-44 years	651	22%
	45-54 years	862	28%
	55-64 years	435	14%
	65+ years	23	1%
	Prefer not to say	48	2%
	Did not state	530	18%
	Total	**3,033**	**100%**
Gender	Male	460	15%
	Female	1,975	65%
	Prefer not to say/prefer to self-describe	66	3%
	Did not state	532	17%
	Total	**3,033**	**100%**
Employed	Employed full-time (35+ hours)	1,865	62%
	Employed part-time	546	18%
	Self-employed/Agency	36	1%
	Prefer not to say	43	1%
	Did not state	543	18%
	Total	**3,033**	**100%**

		n	%
Education	Secondary school or equivalent	161	5%
	College/Sixth-form or equivalent	336	11%
	Higher education/University	1,952	64%
	Prefer not to say/No qualification	52	2%
	Did not state	532	18%
	Total	**3,033**	**100%**
Ethnicity	White	2,362	78%
	Asian or Asian British	16	1%
	Mixed/Multiple ethnic background	24	0.5%
	Black/African/Caribbean/Black British and Other	15	1%
	Prefer not to say	72	2%
	Did not state	544	18%
	Total	**3,033**	**100%**
Found out about the survey	A colleague told me about it/Sent me a link	1,198	40%
	I received an email directly from PHW/SRI	652	22%
	I received an email from another organisation	318	11%
	I saw it on social media	86	3%
	Other	180	6%
	Prefer not to say	57	2%
	Did not state	542	18%
	Total	**3,033**	**100%**

Appendix 3 – Demographics of the 2,253 respondents (excludes non-responders and incomplete answers from questions 7-47)

Employer	n	%
Local Authority	831	37%
Welsh Government	60	3%
NHS	530	24%
Police and Criminal Justice	227	10%
Education	192	9%
Fire and Rescue	22	1%
Housing Sector	57	3%
Youth Services	52	2%
Sports Sector	22	1%
Other Public Sector	52	2%
Other Charitable Sector	172	8%
Prefer not to say	36	2%
Total	**2,253**	**100%**

Employer		n	%
If Welsh Government is that…	Policy	24	40%
	Operational	7	12%
	Delivery	14	23%
	Corporate	*	*%
	Professional	10	17%
	Other	*	*%
	Prefer not to say	*	*%
	Total	**60**	**100%**
If NHS is that…	Primary Care	76	15%
	Mental Health Services	53	10%
	Acute Hospital Services	59	11%
	Community Services	152	29%

Employer		n	%
	Ambulance	*	*%
	Public Health	88	17%
	Dental	17	3%
	Other	70	13%
	Prefer not to say	6	1%
	Total	**525**	**100%**
If Police and Criminal Justice is that…	HM Prison and Probation Service	18	8%
	Community Youth Offending Service	7	3%
	Police	194	86%
	Other	5	2%
	Prefer not to say	*	*%
	Total	**227**	**100%**
If Education is that…	Higher Education	5	3%
	Further Education	*	*%
	Secondary	46	24%
	Primary	79	41%
	Early Years	22	12%
	Educational Psychology	6	3%
	Other	27	14%
	Prefer not to say	*	*%
	Total	**192**	**100%**

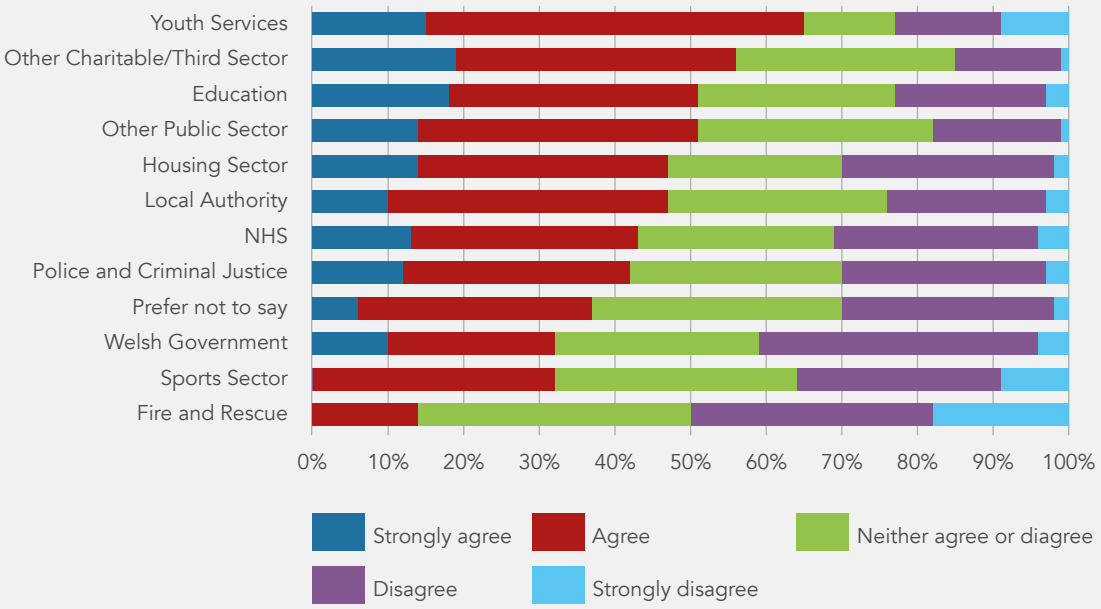
*Number <5

		n	%
Role	Non-managerial/Frontline practitioner	996	44%
	Managerial/Supervision/Leadership	759	34%
	Administrative	424	19%
	Prefer not to say	74	3%
	Total	**2,253**	**100%**
Age	18-24 years	54	2%
	25-34 years	385	17%
	35-44 years	588	26%
	45-54 years	776	34%
	55-64 years	388	17%
	65+ years	19	1%
	Prefer not to say	43	2%
	Total	**2,253**	**100%**
Gender	Male	421	19%
	Female	1,774	79%
	Prefer not to say	58	3%
	Total	**2,253**	**100%**
Employed	Employed full-time (35+ hours)	1,694	75%
	Employed part-time	492	22%
	Self-employed/Agency	31	1%
	Prefer not to say	36	2%
	Total	**2,253**	**100%**

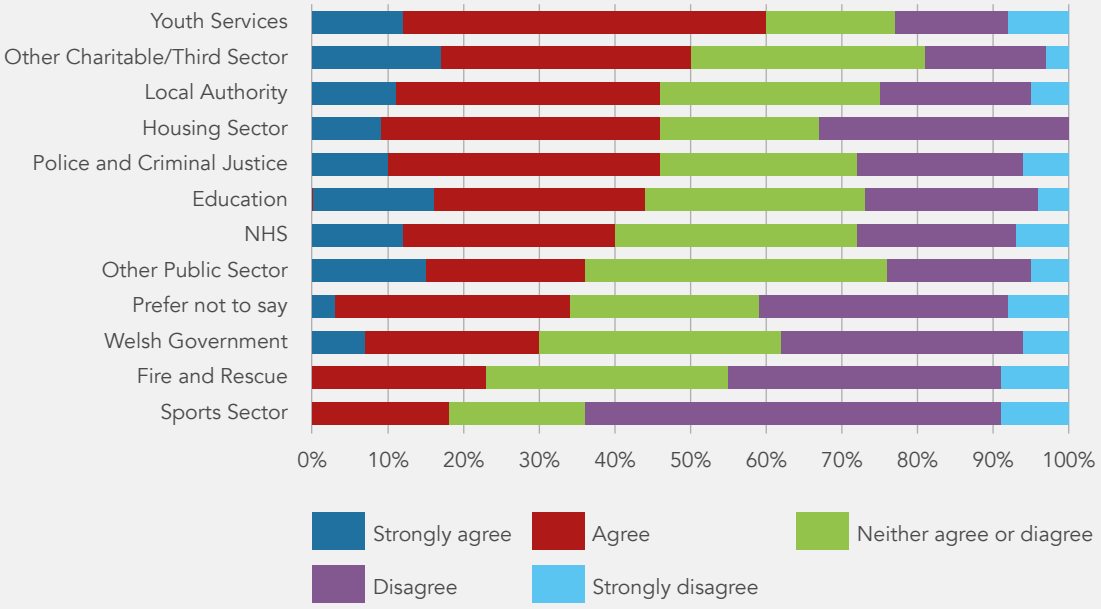
		n	%
Education	Secondary school or equivalent	138	6%
	College/Sixth-form or equivalent	306	14%
	Higher education/University	1,764	78%
	Prefer not to say/No qualification	45	2%
	Total	**2,253**	**100%**
Ethnicity	White	2,142	95%
	Asian or Asian British	13	1%
	Mixed/Multiple ethnic background	21	1%
	Black/African/Caribbean/Black British and Other	13	1%
	Prefer not to say	64	3%
	Total	**2,253**	**100%**
Find out about survey	A colleague told me/Sent me the link	1,090	48%
	I received an email from PHW/SRI	580	26%
	I received an email from another organisation	286	13%
	I saw it on social media	82	4%
	Other	162	7%
	Prefer not to say	53	2%
	Total	**2,253**	**100%**

Appendix 4

Awareness of how to act against ACEs in later life amongst those employed in publicly funded services and sectors

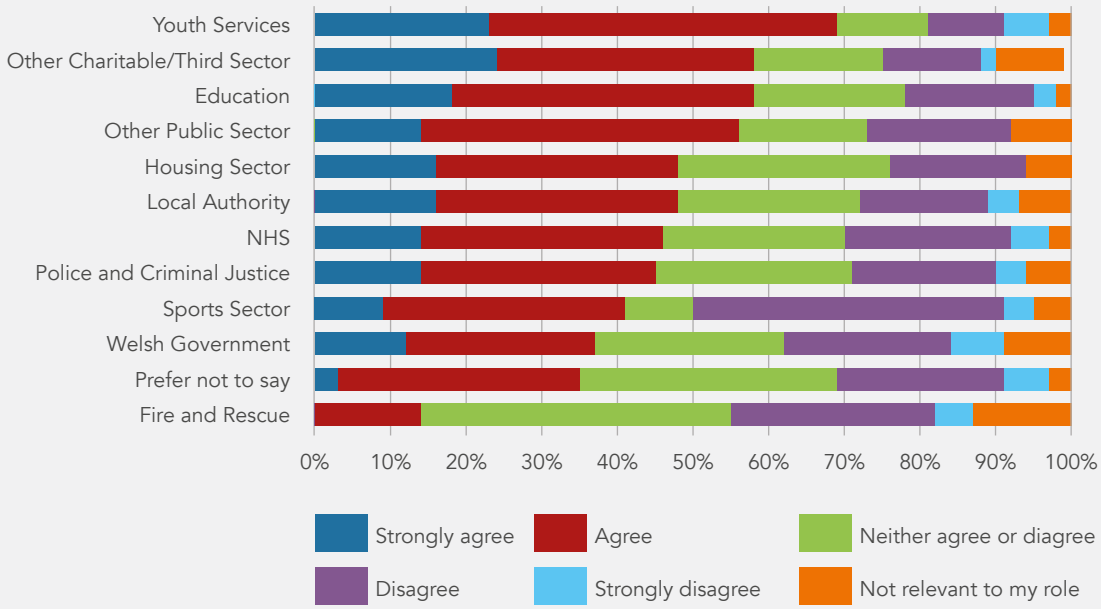


Awareness of how to prevent ACEs amongst those employed in publicly funded services and sectors

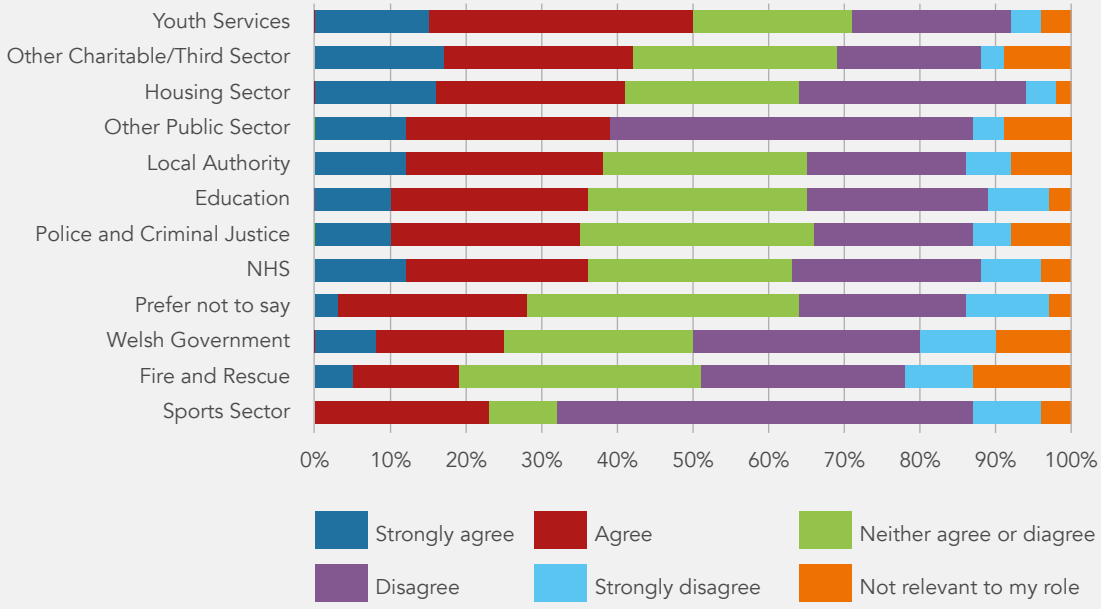


Appendix 5

Comfortability in role to mitigate the impact of ACEs

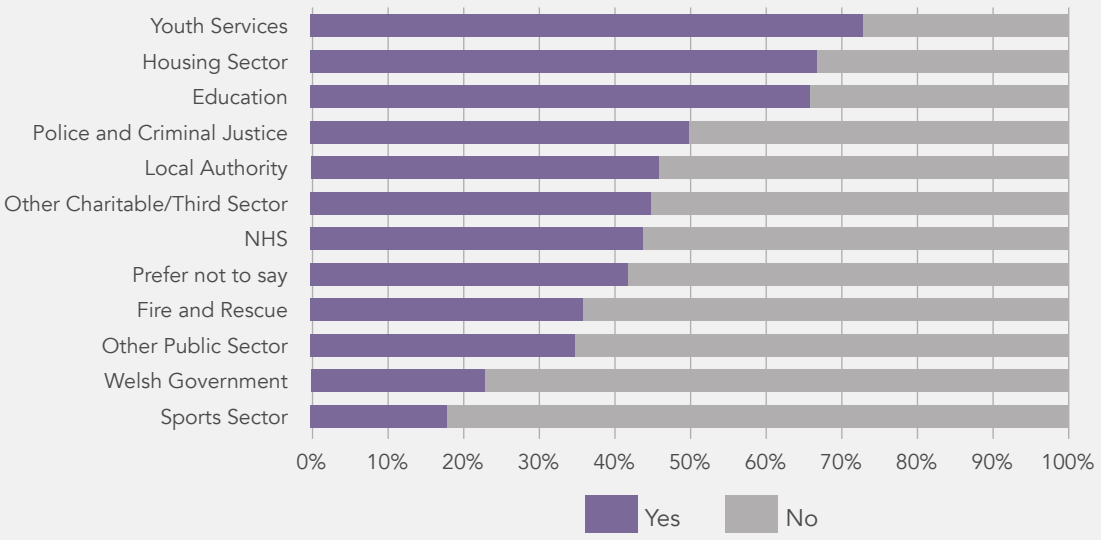


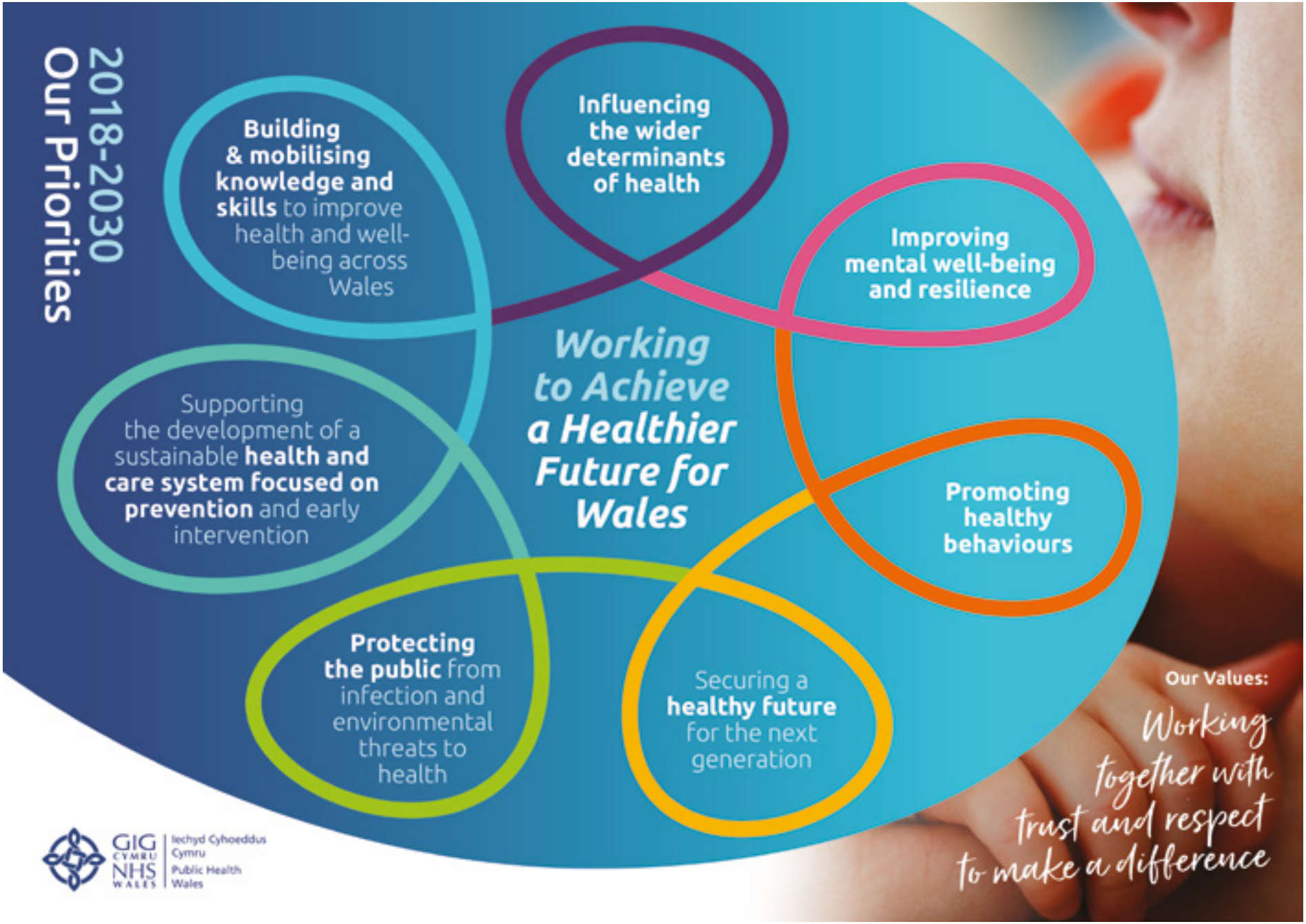
Comfortability in role to prevent ACEs



Appendix 6

Offered formal ACE-training within the last 12 months by public sector/service




2018-2030
Our Priorities
Building & mobilising knowledge and skills to improve health and well-being across Wales
Influencing the wider determinants of health
Improving mental well-being and resilience
Working to Achieve a Healthier Future for Wales
Supporting the development of a sustainable health and care system focused on prevention and early intervention
Promoting healthy behaviours
Protecting the public from infection and environmental threats to health
Securing a healthy future for the next generation
GIG CYMRU NHS WALES
Iechyd Cyhoeddus Cymru
Public Health Wales
Our Values:
Working together with trust and respect to make a difference

GIG CYMRU NHS WALES
Iechyd Cyhoeddus Cymru
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