

Addressing Adverse Childhood Experiences (ACEs) in Wellington-Dufferin-Guelph

To: Chair and Members of the Board of Health

Meeting Date: May 3, 2023

Report No. **BH.01.MAY0323.R16** Pages: 13

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Recommendations

It is recommended that the Board of Health receive this report for information.

Key Points

- Adverse childhood experiences (ACEs) can negatively impact the health and well-being of children and adolescents during childhood and across the lifespan.
- ACEs are associated with a significantly increased risk of adopting negative health behaviours, such as smoking and substance use, and higher risk of poor health outcomes.
- Increasing protective factors, for example having a nurturing relationship with a caring adult, can help to build resilience and mitigate the negatives effects of ACEs especially during childhood.

- In WDG, 80 percent of adults have reported having at least one ACE and 30 percent of people have experienced four or more ACEs.
- WDG Public Health works with partners such as the Community Resilience Coalition of Guelph and Wellington to raise awareness of ACEs and increase protective factors available to children, youth, and their families.

Background

The first years of life are crucial to a child's health and wellbeing and set the foundation for the life ahead of them. Experiences in childhood can have a significant effect on short- and long-term learning and behaviour outcomes and physical and mental health throughout the lifespan.¹ Along with community partners across Wellington-Dufferin-Guelph (WDG), WDG Public Health is working to prevent and reduce the effects of adverse experiences in childhood and promote healthy brain development through positive childhood experiences, to prevent and reduce the burden of disease later in life and even prevent premature death.

Adverse Childhood Experiences

The term adverse childhood experiences (ACEs) is used to describe potentially traumatic or stressful events occurring in the first 18 years of life that can have negative effects on children's developing brains.² This term was first introduced in a 1998 study that examined 10 specific types of ACEs and their relationship to health and behaviour outcomes later in life.² ACEs were previously discussed in a December 2017 [Board of Health report](#) focused on promoting the healthy social and emotional development of children.

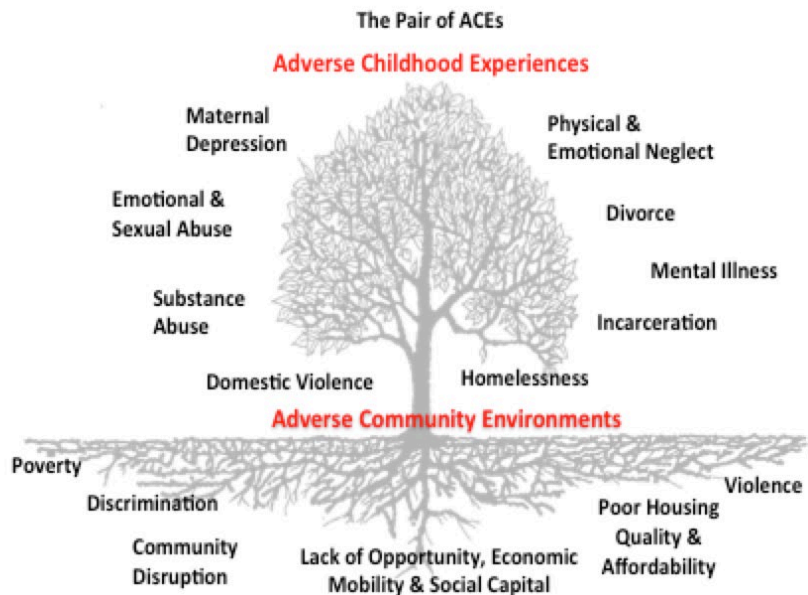
The original definition used three categories to describe ACEs:

- **Household dysfunction** such as parental separation; having a parent who struggles with uncontrolled mental illness or a substance use disorder; or being exposed to domestic violence, criminal behaviour in the household.
- **Emotional and physical neglect** such as not having someone who loves you, looks out for you and supports you or makes sure you have enough to eat and clean clothes.
- **Abuse**, including emotional, physical or sexual abuse.²

In order to quantify the impacts of ACEs, participants in the 1998 study were given a score between zero and 10 depending on how many ACEs they reported being exposed to. In the original US study cohort of over 17,000 people almost two thirds (64 percent) of participants reported experiencing at least one ACE indicating that ACEs are common and universal.²

With the current understanding of neuroscience and brain development we know early adversity extends beyond the ten ACEs originally identified by the 1998 ACEs study. Other adversities such as violence, poverty and discrimination can lead to the toxic stress response and have the same long-term effects on brain development. The pair of ACEs tree shown in Figure 1 demonstrates this and suggests a systemic response is required to address adversity.³

Figure 1. The Building Community Resilience Pair of ACEs tree³



Learning how to cope with adversity and moderate stress is important for healthy child development, however, without any social support adverse experiences can cause a toxic stress response. This response can have an adverse impact on body and brain development, and they can have long-term effects on health wellness into adulthood.⁴ Individuals with more ACEs also have a significantly increased risk of adopting negative health behaviours and are at higher risk of poor health outcomes.² The more ACEs a child experiences, the more likely they are to have negative outcomes later in life.⁵ For example, individuals who have experienced four or more ACEs in childhood have an increased risk for the following health behaviours and outcomes in adulthood compared to those who have zero ACEs:

- 4 times more likely to be a high-risk drinker
- 6 times more likely to smoke
- 6 times more likely to have received treatment for mental illness
- 6 times more likely to have had or caused an unplanned teenage pregnancy
- 12 times more likely to have attempted suicide
- 15 times more likely to have been violent in the last year

- 16 times more likely to have used substances
- 20 times more likely to have been incarcerated
- 46 times more likely to have injected drugs⁶

Resilience

The negative effects of ACEs can be reduced by increasing protective factors that build resilience. Resilience can be described as “the capacity of individuals to navigate their way to the psychological, social, cultural and physical resources that sustain their well-being and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways”.⁷ Research indicates that resilience can help buffer the effects of adverse experiences.⁸⁻¹⁰

Protective factors are the “individual or environmental characteristics, conditions, or behaviours that reduce the effects of stressful life events. These factors also increase an individual’s ability to avoid risks or hazards and promote social and emotional competence to thrive in all aspects of life”.¹¹ These can include:

- Nurturing and supportive relationships
- Structure/routine
- A powerful identity
- A sense of belonging and control
- Safety and support
- Physical wellbeing
- Financial wellbeing¹²

A resilient community provides equitable access to supports and buffers necessary to bounce ‘forward’.^{13,14} The best time to build the base of resilience is early childhood as that is when the brain is most susceptible to change. However, it’s never too late to build resilience as it continues to develop across the lifespan.¹⁵

Discussion

An understanding of ACEs and the science of resilience presents an opportunity for public health to intervene early with evidence-based strategies that can reduce or eliminate the impact of ACEs and stop them from occurring in the first place. WDG Public Health can help by increasing awareness of the impact of ACEs and working with members of the community to make sure there are protective factors in place to buffer the effects of adversity and promote resilience.

Local Population Health Data

WDG Childhood Experiences Survey

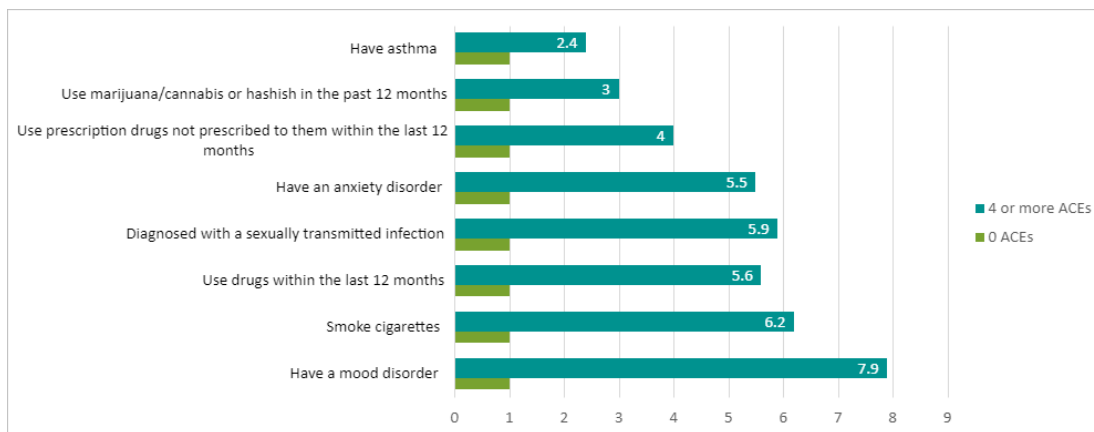
WDG Public Health conducted *The Wellington-Dufferin-Guelph Childhood Experiences Survey* in 2019 with the support from various partners across the region. The purpose of the survey was to develop a greater understanding of how early life experiences impact health outcomes of residents living in WDG. Prior to this survey there was no population-level health data collected related to ACEs and resilience in Ontario.

The voluntary survey was completed by 990 participants (18+) in the WDG region and found that ACEs are very common among the local adult population. The results found that before turning 18:

- 80 percent of participants reported one or more ACE
- 30 percent had experienced four or more ACEs
- 40 percent had lived in households where there was problematic substance use
- 46 percent had experienced emotional neglect
- 21 percent experienced physical neglect
- 55 percent had experienced emotional abuse

After controlling for age, gender, education and ethnicity, compared to participants who experienced zero ACEs, those who had four or more ACEs were more likely to report a range of health behaviours and physical and mental health problems as shown in Figure 2. For example, an individual who experienced four or more ACEs was 5.6 times more likely to have used drugs within the last 12 months than an individual who had experienced zero ACEs.

Figure 2. Impact of ACEs on Health Behaviors, Physical and Mental Problems in Wellington-Dufferin-Guelph



The key findings from the survey align with international research and found that:

- **ACEs are very common in WDG**, with 80 percent of the participants indicating experiencing one or more.
- **High ACEs scores are associated with a variety of negative health outcomes and behaviours** which are important to the work of public health.
- **There is an intergenerational effect of ACEs** on mental illness and substance use. For example, the study concluded that mental illness and substance use in the household are the top two most common ACEs experienced in WDG and individuals with high ACEs scores are also most likely to develop mental illness and substance use behaviours in adulthood.
- **High resilience has a protective effect on long term health outcomes**, particularly on the development of anxiety and mood disorders.

More information about the survey findings and limitations can be found on the [poster presentation to The Ontario Public Health Conference \(TOPHC\), March 2020](#).

Health Equity Implications

Although ACEs affect people in all communities, research consistently suggests several groups of people are at a higher risk of experiencing ACEs due to systemic factors (i.e. systemic oppression and racism). Research evidence suggests that the following groups of people are at an increased risk of ACEs:

- Multiracial individuals¹⁶
- Black, Hispanic and Indigenous individuals^{16,17}
- Individuals that are a part of the LGBTQ2S+ community^{16,18-20}
- Individuals living in low socioeconomic status households^{18,19}

The increased risk of experiencing ACEs within these populations must be understood and considered when planning tailored interventions.

How is WDG Public Health addressing ACEs and promoting resilience?

Community Resilience Coalition of Guelph and Wellington (formerly the ACEs Coalition of Guelph and Wellington)

In Guelph and Wellington County, community partners have mobilized to create the [Community Resilience Coalition](#) of Guelph and Wellington (the Coalition). What started as a community call

to action event in 2017, with over 100 community stakeholders participating, has grown into an active coalition guided by the vision of: *a resilient community that prevents and reduces the effects of adverse childhood experiences (ACEs)* (see [the Coalition's theory of change model](#) for more information). The Coalition works together to decrease risk factors that impact health and wellbeing and increase protective factors that build resilience.

Through it's work with the Coalition, WDG Public Health has been involved in the following activities aimed at increasing awareness of the impact of ACEs and increasing protective factors to buffer the effects of adversity and promote resilience:

Training Modules

The Coalition launched a five-module, online ACEs & Resilience Core Training on June 8, 2020. As of March 27, 2023, the training series has been completed by 2602 users. The purpose of the training is to provide foundational knowledge for people to prevent and reduce the effects of ACEs and promote resilience. Access the modules here: communityresilience.ca/get-trained.

Evaluation of the Core Training indicates the training modules are well-received and useful to the training participants. Although evaluation is ongoing, an August 2022 review of survey data indicated most respondents to the evaluation survey found the training well-organized, useful, and relevant to their work. Survey respondents indicated their understanding of ACEs and resilience concepts increased as a result of the training.

Additional modules tailored to specific audiences or disciplines are also available:

- *Promoting Resilience: A Science-Informed Approach for Decision-Making'* – designed for community organization boards of directors, community leaders, and other decision makers. This module takes approximately 30 minutes to complete and can be used to inform strategic and fiscal decision-making to promote positive outcomes for children, youth, and their families. It is also available directly through the Coalition's learning portal at communityresilience.ca/get-trained
- *'Reducing Stress & Promoting Resilience in Young Children* – designed for people who work with young children (i.e. Registered Early Childhood Educators, Family Home Visitors, Infant and Child Development Specialists), the module explores the role of early learning and care staff in helping to reduce the impact of stress and promote resilience in young children.
- *'Promoting Mentally Healthy Schools and Resilience: Strategies for Educators'* – created in collaboration with the Upper Grand and Wellington Catholic District School Boards, this module provides educators with information about how the brain works and highlights the important role of educators in promoting healthy development and resilience.

Toolkit for ACEs Resilience Champions

To complement the online training, a [seven-part toolkit](#) was created for individuals wanting to take an active role in preventing ACEs and building resilience in their community. The toolkit provides guidance on how local ACEs & Resilience Champions can start a conversation with their community about ACEs and resilience and present ideas for action. It includes useful resources including a facilitated discussion guide and a communication resource guide. It also explores concepts that organizations and practitioners can adapt to their interactions with clients such as Person-Centered Care and Trauma-Informed Care. These types of resources help practitioners to shift conversations with clients away from, “what’s wrong with you?” to “what happened to you?”.

The Dufferin Basics

Dufferin County based community collaboratives, like the Dufferin Coalition for Kids (DuCK), are also working to address ACEs and build resilience in the community. WDG Public Health and the other service providers at DuCK introduced an evidence-based model called *The Basics* which was originally developed by the Achievement Gap Initiative at Harvard University.²¹

[The Dufferin Basics](#) are five simple strategies that parents can use everyday to improve the social and emotional brain development of children from birth to age three. These include the following:

- 1) Maximize love, manage stress
- 2) Talk, sing and point
- 3) Count, group and compare
- 4) Explore through movement and play
- 5) Read and discuss stories²²

The Dufferin Basics began as an effort to ensure that organizations across Dufferin County provide consistent, evidence-based parenting messages. This program works to ensure that every parent and caregiver is fully supported by family and friends to use *The Dufferin Basics* practices in everyday life. The program is currently promoted in local EarlyON centres and provides parents and caregivers with videos, tip sheets and workshops that show how simple everyday interactions with their child promote important brain development.

A baseline evaluation of parenting knowledge conducted in Dufferin found that many misconceptions about parenting exist within the community. See Table 1 for the most prevalent parenting misconceptions that were observed.

Table 1. Parenting Misconceptions and Tips based on the Dufferin Basics²²

Common Misconception	Dufferin Basics Parenting Tip
A parent's stress levels could not affect their child's brain development .	Stress is normal, however an adults' stress can spill over to a child and too much stress is bad for a child's developing brain. It is important to have coping strategies for when life gets stressful.
It is best to teach a child one language at a time.	All languages are equally beneficial so parents and/or caregivers can use any language when speaking to their child.
Clapping and dancing to music could not help develop math skills.	By clapping and dancing with a child, they can learn about patterns and counting while having fun.
Parents should always show the child how to do the activity first and then let them try.	Children are curious, so it's valuable to let them explore their surroundings and discover how the world works by experimenting and problem-solving on their own, while keeping an eye out for them to assist and make sure they are safe.
When reading to a child, it's not okay to let the child turn the page even if the parent and/or caregiver is not finished reading it.	It's important to keep reading fun, which means it's okay for a child to turn the page before the parent and/or caregiver is finished reading. It's also okay if a child can't sit still for the whole book.

The same evaluation found that the most common places for parents to go for parenting information were the internet, friends/family and their doctor. This indicated the importance for *The Dufferin Basics* to have a strong presence on the internet and to be championed and promoted by primary health care providers.

Conclusion

Public health has the opportunity to address the harmful effects of ACEs which can impact a person's health and wellness throughout their life. In WDG, 80 percent of adults have experienced at least one ACE and 30 percent of people have experienced four or more ACEs, indicating that this is a prevalent issue in the WDG community. These effects can be mitigated by increasing protective factors, for example nurturing relationships with a parent, and fostering resilience in children.

Long-term community commitment is required to prevent and mitigate hazardous exposures in childhood, which can reduce the burden of disease later in life and even prevent premature death. WDG Public Health along with community partners, such as the members of the Community Resilience Coalition of Guelph and Wellington, continue to work on increasing awareness and knowledge of this important issue. There are multiple training modules available to the public, community leaders, educators, and other service providers that can be found at communityresilience.ca/get-trained. In addition, evidence-based interventions in early childhood are an effective and upstream solution in mitigating the effects of ACEs across sectors. The *Dufferin Basics* initiative is an excellent example of consistent, evidence-based messaging for all caregivers that can promote important brain development in children.

WDG Public Health will continue to play an active role in increasing awareness and knowledge of ACEs, leading surveillance and monitoring of population health data and implementing evidence-based initiatives that promote protective factors. The goal is to create a more resilient community that prevents and reduces the effects of ACEs while building a safe environment for children to thrive in.

Ontario Public Health Standards

Foundational Standards

- Population Health Assessment
- Health Equity
- Effective Public Health Practice
- Emergency Management

Program Standards

- Chronic Disease Prevention and Well-Being
- Food Safety
- Healthy Environments
- Healthy Growth and Development
- Immunization

- Infectious and Communicable Diseases Prevention and Control
- Safe Water
- School Health
- Substance Use and Injury Prevention

2023 WDGPH Strategic Directions

- People & Culture:** WDGPH has an organizational culture of engagement, inclusion and agility.
- Partner Relations:** WDGPH collaborates with partners to address priority health issues in the community.
- Health System Change:** WDGPH is positioned to be an agent of change within the broader health sector.

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