Adverse Childhood Experiences

A Toolkit for Family Practitioners

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SharedCare
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Kootenay Boundary
Division of Family Practice
A GPSC initiative

Dear Colleague,

Traumatic childhood events such as abuse, neglect, and household dysfunction, are risk factors for many of the leading causes of disease, death and social problems as adults. These events have negative long-term associations with learning, health risk behavior, and health status well into adulthood.[1]

Known as adverse childhood experiences (ACEs), these types of events are common, with nearly two-thirds of adults reporting at least one ACE.[1] ACEs can create dangerous levels of toxic stress that can negatively impact a child's developing brain, and have been found to be associated with increased risk for coronary artery disease, chronic pain, alcohol use disorder, depression,[1,2] hospitalization for autoimmune diseases, like idiopathic myocarditis and rheumatoid arthritis,[3] and dozens of other illnesses later in life.

There are a number of approaches to address ACEs in primary care, one of them being use of the ACE Questionnaire. Exploring a patient's trauma history acknowledges that past experiences shape current behaviour and health status, and can help people develop coping skills and resilience, supports practitioners in determining effective interventions and/or treatment.[4]

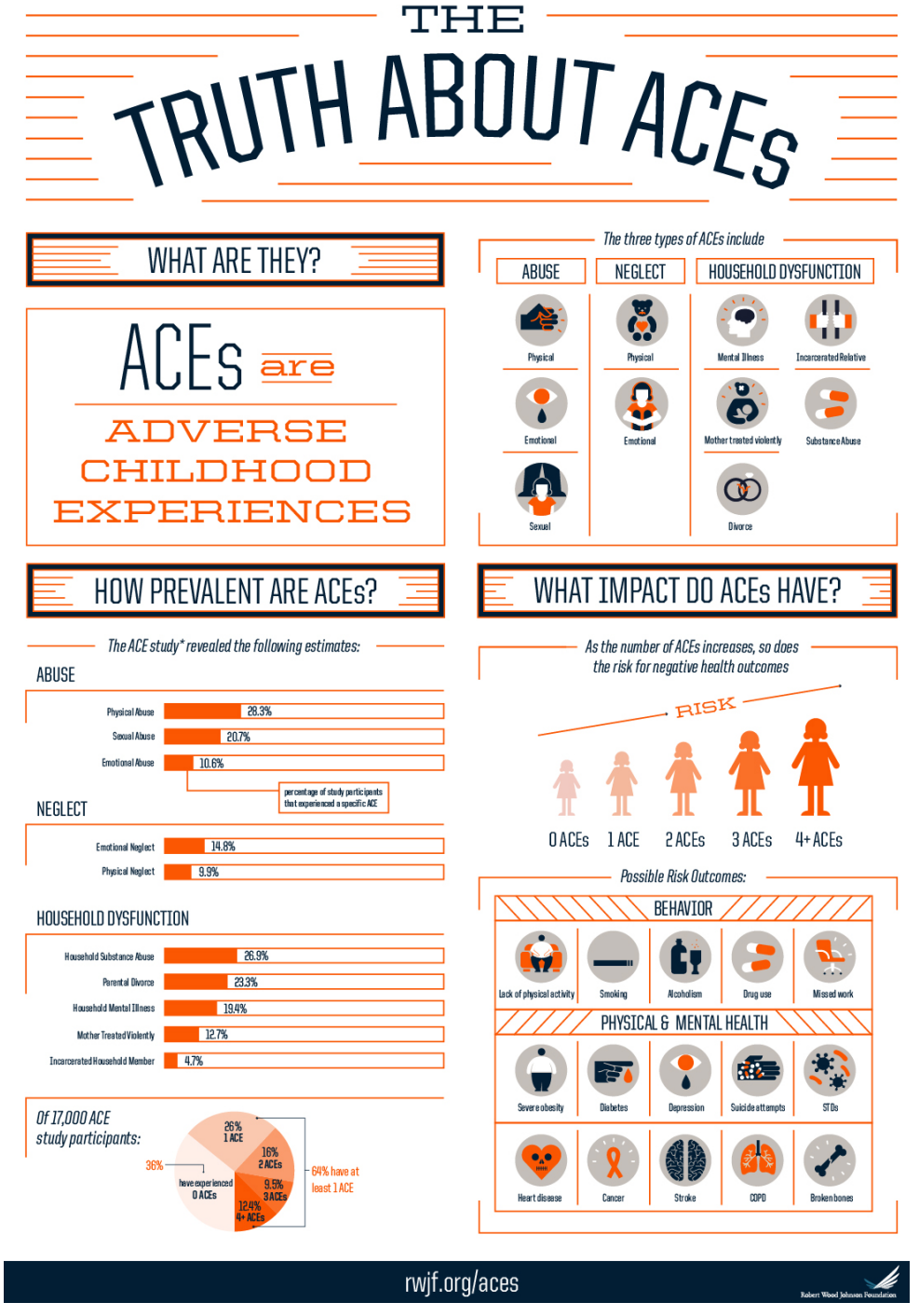
The ACEs Toolkit for Family Practice builds on an earlier version released in 2018. This updated version incorporates our learnings of implementing ACE history taking into primary care practices after two years of active engagement, training and support with more than 80 primary care general practitioners in Kootenay Boundary.

We hope you will find this toolkit helpful in understanding and implementing ACE history taking, and incorporating trauma-informed and resilience-building approaches into practice.

Sincerely,

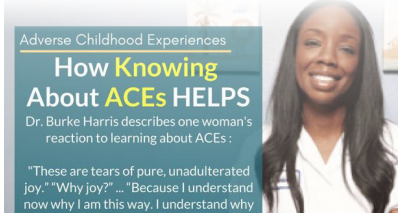
Dr. Lee MacKay & Dr. Megan Taylor

ACEs – A Toolkit for Family Practitioners



Primary Care is an Ideal Setting to Address ACEs

Primary Care is uniquely positioned to be the site for ACE history taking. Interacting with patients and their families over time allows for the development of trusting, supportive, therapeutic relationships, which can facilitate the disclosure of ACEs. The Guidelines and Protocols Advisory Committee (GPAC) cites primary care as an ideal setting in health care for addressing ACEs.



What is the ACE Questionnaire?

The Adverse Childhood Experience (ACE) Questionnaire asks about ten experiences before age 18. One point is assigned to each question answered "yes" and the total represents an individual's ACE score.

Five ACEs are personal:	Five ACEs are related to family members:
• Verbal abuse • Physical abuse • Sexual abuse • Physical neglect • Emotional neglect	• Caregiver who had problematic substance use • Family member incarcerated • Family member diagnosed with a mental illness • Incidence of domestic violence in the home • Disappearance of a caregiver through divorce, death or abandonment

The ACE Questionnaire focuses on these ten childhood events as they were found to be the most common experiences of childhood trauma in the landmark Adverse Childhood Experiences Study.[1] There are, of course, other types of childhood trauma beyond these ten. If your patient experienced other types of toxic stress as a child over months or years, those will also likely increase risk of negative health outcomes as well.

The ACE Questionnaire should be viewed as a history-taking tool for understanding how past experiences may impact an individual's health; it should not be viewed as a diagnostic tool. It is also important to note that the overall score is what is important, not the individual questions, as each type of adverse experience has been shown to be equally impactful.[6]

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ACEs & Pediatric Populations

For pediatric populations, the Centre for Youth Wellness in San Francisco, California has developed three age-specific versions of the ACE Questionnaire:

1. CYW Adverse Childhood Experiences Questionnaire for Children (CYW ACE-Q Child) *17 item instrument completed by the parent/caregiver for children age 0 to 12*
2. CYW Adverse Childhood Experiences Questionnaire for Adolescents (CYW ACE-Q Teen) *19 item instrument completed by the parent/caregiver for youth age 13 to 19*
3. CYW Adverse Childhood Experiences Questionnaire for Adolescents : Self Report *(CYW ACE-Q Teen SR) 19 item instrument completed by youth age 13 to 19*

Each of the child and youth instruments consists of two sections: Section 1 focuses on the traditional ten ACEs. Section 2 includes seven to nine items assessing for exposure to additional early life stressors, such as harassment or bullying, being in foster care, history of life threatening illness, etc. Both children and their parents should be asked about the child's ACEs separately. For clarity and accuracy, children under the age of 12 can answer the questions verbally, asked by their practitioner. Differences in how parents and children answer the questions can be addressed in the appointment, as parents may not be aware of their child's perceptions, or one or the other may under-report the stressors present in the family.

For parents-to-be or parents of young children, asking about their own ACEs history can determine intervention strategies that help parents manage their symptoms and reduce intergenerational trauma. In pediatric settings, practitioners can use ACEs screening to identify children experiencing, or at risk for, toxic stress. Early detection programs are designed to correct the course of development and build resilience.[7]

What Impact Does a History of ACES Have on Health?

The ACE score has an independent, cumulative, dose-response relationship with numerous negative physical and mental health outcomes later in life. Neuroscience tells us that there are two mechanisms by which adverse childhood experiences transform into biomedical disease:

1. Adoption of maladaptive coping behaviours (e.g. over-eating, problematic substance use).
2. Chronic stress response resulting in increased allostatic load, which negatively impacts health and wellbeing, even without the presence of health risk behaviours.

For example, strong relationships have been reported between ACE score and coronary artery disease, **even AFTER correcting for all the conventional risk factors like smoking, cholesterol, etc.**[6] Similarly, childhood abuse is associated with significantly increased lung cancer risk, even when adjusting for smoking,[8] and the odds of liver disease was higher in those with elevated ACE scores after controlling for major risk factor behaviours.[9]

The table below shows the increased risk of health problems or chronic disease of someone with an ACE score of 4 compared to someone with an ACE score of 0.[1]

Health Problem	Adjusted* Odds Ratio	Disease Condition	Adjusted* Odds Ratio
Current Smoker	2.2	Ischemic heart disease	2.2
Severe obesity	1.6	Any cancer	1.9
Depression	4.6	Stroke	2.4
Ever attempted suicide	12.2	Chronic bronchitis	3.9
Self-reported alcohol use disorder	7.4	Diabetes	1.6

* Adjusted for age, sex, race, and educational attainment

As well as the above, a variety of other negative health and social problems are associated with a history of ACEs.

Adult negative health outcomes associated with history of ACEs[5]

Health Problem	Social Problems
COPD Gastrointestinal disease Headaches Sleep disturbance Obstetrical complications Fracture Somatic pain Anxiety Post-traumatic stress disorder Borderline personality disorder Concurrent mental health/substance use disorders	Challenges at work and school Intimate partner violence Sexual violence Unintended pregnancy Poor quality of life Psychological distress Low socioeconomic status

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Who is Appropriate for the ACE Questionnaire [5]

ACE history taking is at the discretion of the practitioner, but these may be potential types of patient encounters to start with:

- Preventative health visits, such as immunizations, sexual health
- Follow-up for chronic disease management (i.e. physical or mental health conditions, substance use disorder)
- Prenatal care
- Anytime comprehensive history taking is performed (e.g. new patient intake)

When to Incorporate ACE History Taking

The earlier the better! Earlier in the physician's relationship with their patient as well as earlier in the appointment visit to allow time for a brief conversation and next steps.

How to Conduct ACE History Taking [10]

1. Introduce the ACE questionnaire

Explain the rationale for the questionnaire. Practitioners can explain that certain stressors are known to increase the patient's risk for illness across their lives. These questions are being asked of all patients to identify and help reduce stressors early while promoting resilience. Explain that their answers are confidential, except in those cases where a child is at risk of serious harm from abuse or neglect.

2. Incorporating ACE history taking into workflow

Completing the questionnaire typically takes a patient less than 5 minutes. It is up to the practitioner to decide how best to incorporate ACE history taking into their practice, but these are some suggestions:

a. **New patient intake:** Include the ACE Questionnaire as part of new patients comprehensive health history.

b. **During the encounter:** Give the questionnaire to the patient, see another patient while they are completing, then return to discuss the results.

c. **During the encounter with subsequent follow up appointment:** Introduce the ACE questionnaire during the appointment, give the questionnaire to the patient and ask them to schedule a follow up appointment to discuss results.

d. **In the Waiting Room:** Have the patient complete the ACE questionnaire while they wait for their appointment, then discuss results during their appointment.

e. **Virtual care:** For virtual appointments, you can send your patient the ACE Questionnaire via email from the Pathways platform.

3. Collect a summary ACE score

For adults, have your patient complete the questionnaire and report the summary (de-identified) ACE score. It is not the answers to the individual questions that is important, but their overall score.

4. Discuss the results

Reviewing and explaining the significance of the ACE score is an essential part of the process. Engaging non-judgmentally with the patient, as well as acknowledging the strength and resiliency of a patient who has a high ACE score, is important to maintaining your treatment alliance. Taking a stance that emphasizes collaboration, support and patient resiliency is central to trauma-informed care.

For children, practitioners should explain to parents that early intervention can reduce these ACE stressors. Describing the intervention as an investment in the child's lifelong physical and mental health may help reduce perceived stigma around the results of the screen, and increase engagement. Link the ACE score to any health concerns the child may currently have, emphasizing that addressing ACEs will help regulate the child's health by lowering stress hormones, and could therefore improve health and learning. If the Ministry for Children and Family Development Child Protective Services must be notified, discuss this with the parent as an effort to assist the family and ensure the long-term health of the child.

Suggested script to support an ACEs discussion with your patient

"I see that your ACEs score is _____. It sounds like you went through rough times as a child. I'm really sorry that happened. That should never have happened to you. How do you think this has impacted your health?" (Suggestions for parents - "how do you think this has impacted your parenting?")

Then LISTEN.

"People with high ACEs scores often have to work harder in many aspects of their lives. What were the things that helped you through the difficult times and how have you managed to do so well?"

"Have you shared this with anyone else? (e.g. spouse/partner) If ever needed, would it be OK if I shared this with your specialist?"

"If you think it'd be helpful, I can provide you with some resources that might further support you" (see resource page at end of toolkit)

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5. How to incorporate into treatment

Move forward by acknowledging, reflecting, and empowering. Creating experiences of safety, validation, and relationship-based connection can help facilitate trauma healing and improve patient experience.[11] If you have a patient with a history of ACEs, these are some simple things that can be incorporated into your approach:

- **Offer choice** – Give as much control and choice to the patient as possible about what happens and when.
- **Explain** – Take time to explain what each procedure is and obtain consent before you perform any physical examination. Be clear that the patient may pause or end the exam or procedure at any time.
- **Encourage** – Encourage your patient to ask questions. Be straightforward and generous with information.
- **Validate** – Use validating statements to reassure the patient that concerns they may have are understandable and normal.
- **Be flexible** – Ask your patient if they would like to have a support person in the room for a consult.
- **Create safety** – Ask your patient if they have any worries about any aspect of the exam or medical intervention. The patient might also feel safer with the door ajar, opened, or closed, if it's possible.
- **Listen** – Listening and accepting is itself an intervention that can support patient health outcomes and promote healing.

Examples of Validating Statements

"I can see this is important to you."

"I can see that you are [upset, sad, frightened, scared]"

"Here's what I'm hearing you say" [Summarize with fact checking]

"I know you're scared. It's going to be hard... and I know you will figure it out."

In some cases, practitioners can use ACEs data to make appropriate referrals. Evidence-based interventions to address ACEs include parenting therapy, individual psychotherapies, and treatment of parental mental health and substance use concerns, among others. If you have access to Primary Care Network resources, consider making a referral to a Social Worker for further discussion and support.

6. Revisit the ACEs Conversation

Periodically revisiting the conversation maintains a supportive relationship and acknowledges how their score continues to impact health outcomes. The score remains static in adults so there is no need to have patients fill out the questionnaire more than once.

"I have found ACE history taking gets easier every time I do it. My patients have really appreciated that I am interested in this science and their whole health picture. Discussing my patient's ACEs score has helped enhance our relationship in tackling challenging issues collaboratively." – Dr. Lee MacKay

"When I started asking about ACE's in my history taking, I worried that it would be like opening Pandora's box and that it might be unfair to ask about these things and not have the skills to manage what I might uncover. However I have found that simple acknowledgement and validation of their experiences is helpful for many patients."- Dr. Megan Taylor

"This changes the narrative from what's wrong with this child to what happened to this child? It is also helpful to know what the parent experienced while growing up, so that I can think about how to support parenting skills through what might be challenging times or experiences." – Dr. Cindy Loukras

> *"It's really important [for physicians] to be super compassionate to people who have been through trauma in their childhood and who have experienced health issues. It's really difficult, a long road. I feel a little compassion and a little kindness can go a long way in a person's life when they're struggling with health issues and stuff." – KB patient*

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Where to Find ACEs Questionnaires

Version	How to Find it
Paper Based	• Links to PDF versions of ACEs Questionnaires can be found at the end of this booklet. If patients are completing the ACE questionnaire on paper, consider shredding after the appointment to ensure confidentiality. • Some practitioners find it useful to laminate the paper-based ACE questionnaire and use dry erase markers for completion. This may help the patient feel comfortable knowing that their answers won't be stored.
EMR Based	• **Med Access:** Questionnaires directly embedded into the EMR, search for "ACE" in the search bar. Also available as an Observation Template in Social History tab, and under the Tasks tab. • **Intrahealth Profile:** Questionnaires in .JFA format available for download via the Pathways BC platform in the EMR Forms Section. * Login to your Pathways BC account > Click on Forms > EMR Forms > ACEs Questionnaire. This version can be uploaded into Profile EMR. • **Interior Health Profile:** Directly embedded into the EMR.
Pathways BC	• Login to your Pathways BC account > Click on Forms > Patient Forms and scroll for Adverse Childhood Experiences.

Coding ACEs Communicates a Key Determinants of Health

Why Code ACEs Into Your EMR?

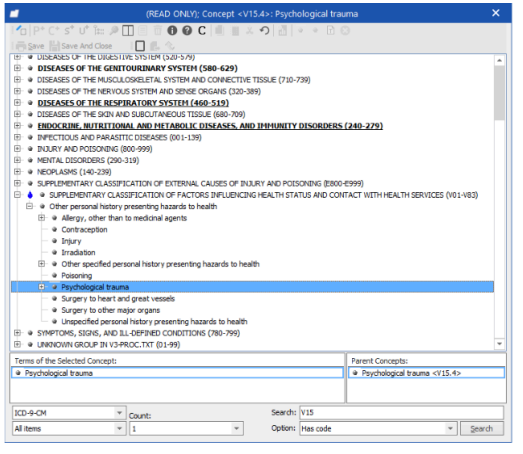
ACEs can be coded into your EMR in the same way that other risks are recorded, such as smoking and alcohol consumption. Coding ACEs allows it to be drawn automatically into referral letters, thus sharing this important information with colleagues to help understand how ACEs may affect your mutual patient. Coding ACEs consistently also allows for active panel management of your patients with a history of ACEs.

When to Code ACEs Into Your EMR?

Common practice of coding in the EMR occurs when the ACE score is 4 or more. An ACE score of 1-3 may also be coded if it is determined that the trauma history is negatively impacting the patient's life and wellbeing.

How to Code ACEs Into Your EMR?

If the ACE score is significant, it can be coded as ICD9 V154 (Telus Med Access) or V15.4 (Intrahealth Profile) "Personal history of psychological trauma presenting hazards to health" in the problem list. Although this ICD9 code does not correspond perfectly, this is the ICD9 code that was identified as the best fitting for a history of ACEs.



If you work on Intrahealth Profile, you may have to use the Ellipsis function [...] to find V15.4 for the first time. Once you use the code once, it will auto populate and be included in your 'short list' of codes going forward.

Some primary care providers may also record an ACE score under social history in the patient's chart rather than enter the ICD9 code in the problem list.

What are Some Other Codes for Social Determinants of Health?

There is also well-documented evidence outlining the profound impact poverty has on health.

A patient answering yes to "Are you having difficulties making ends meet at the end of the month?" can be coded ICD9 V609 (Telus Med Access) or V60.9 (Intrahealth Profile) "Unspecified housing or economic circumstance". To learn more about intervening around poverty, refer to the Poverty Intervention Tool: bit.ly/povertyintervention

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Managing Your Patient Panel

Coding ACEs consistently will allow you to be able to pull a list of patients who have a history of ACEs from your EMR.

Once you are coding consistently, registry reports can help improve understanding of how many patients in your practice have a history of ACEs. Once you have a registry of all the patients in your panel with a history of ACEs, it will help inform the following:

- The number of patients with a history of ACEs as a percentage of your total practice
- Your practice needs for nursing and allied health supports to provide support to patients with a history of trauma (e.g. PCN resources)
- Your practice training needs for staff on the impact of ACEs and poverty on health
- Identify care gaps or opportunities for care

If you are interested in building a registry for ACEs in your practice, contact your local Practice Support Program (PSP) Coordinator for further support and conversation.

Additional Resources for Practitioners

GPAC Guidelines – bit.ly/GPACACEs

Alberta Youth and Family Wellness: The Brain Story Certification – bit.ly/brainstorycert

ACES Connection – acesconnection.com

San'yas Indigenous Cultural Safety Training from the Provincial Health Services Authority – sanyas.ca

KB ACEs Toolkit for Specialists – bit.ly/sp-aces

Resources for Patients

B211 – bc211.ca

- An online resource directory providing information and referral regarding community, government and social services in BC.

Anxiety Canada – anxietycanada.com

- Includes the MindShift App, video library, online workshops, resource links and more for children, teens and adults.

Mental Health Information Line – 310-6789

- Toll-free, 24 hours a day, 7 days a week phone line with provincial access to confidential emotional support, information and resources specific to mental health.

Interior Crisis Line Network, West Kootenays – 1-888-353-2273

- Toll free, 24 hours a day, 7 days a week phone line answered by trained staff and volunteers who are available to listen, provide information, referral and support in an anonymous and confidential manner. Offers suicide intervention, information about community services and non- judgemental support during challenging times.

KB Fetch – kb.fetchbc.ca

- A website for the communities of the Kootenay Boundary with information on: health services, mental health/counselling, substance use/addictions, basic needs/ supports, abuse/neglect, children, youth & families, seniors, education, employment development, legal advocacy and cultural, recreation and social supports.

KB Searchlight – bit.ly/SearchlightKB

- Interactive map of Kootenay Boundary Child and Youth Mental Health Substance Use Services. Whether you are dealing with mild anxiety, depression, eating disorders, substance use, or suicidal thoughts, KB Searchlight can help link you to the right services in your community.

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ACE Questionnaires

For Adult: bit.ly/ACEsAdult (see below)
For Children: bit.ly/ACEsChildren
For Youth (Parent/Caregiver): bit.ly/ACEsY-PC
For Youth (Self-Report): bit.ly/ACEsY-SR

Appendix A: Adverse Childhood Experiences (ACEs) Questionnaire

Self-rating: PLEASE CHECK ALL THAT APPLY USING CIRCLES BELOW

While I was growing up, before I turned 18:

1. A parent or other adult in the household would often swear at me, insult me, put me down, humiliate me, or act in a way that made me fear I would be physically hurt.

2. A parent or other adult in the household would often push, grab, slap, or throw something at me or would hit me so hard that I had marks or was injured.

3. An adult or person at least 5 years older than me touched or fondled me or had me touch their body in a sexual way or tried to or actually had oral, anal, or vaginal sex with me.

4. I often felt that no one in my family loved me or thought I was important or special or that my family didn't feel close or support or look out for each other.

5. I often felt that I didn't have enough to eat, had to wear dirty clothes, and had no one to protect me or that my parents were too drunk or high to take care of me or take me to the doctor if I needed to go.

6. I experienced a parental death, separation, or divorce.

7. My mother was often pushed, grabbed, slapped, or had something thrown at her or sometimes kicked, bitten, hit with a fist or something hard, or ever repeatedly hit over at least a few minutes or threatened with a gun or knife.

8. I lived with someone who was a problem drinker or alcoholic or who used street drugs.

9. A household member was depressed or mentally ill or attempted suicide.

10. A household member went to prison.

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Write the total number of YES answers: _____