

## **ACE adverse childhood experiences and health**

**if you have a history of health problems such as a chronic illness and adverse childhood experiences** – and wish there was a way to convey the huge body of scientific evidence explaining how life experiences you never chose influence the risk of getting sick – these fact sheets are especially for you.

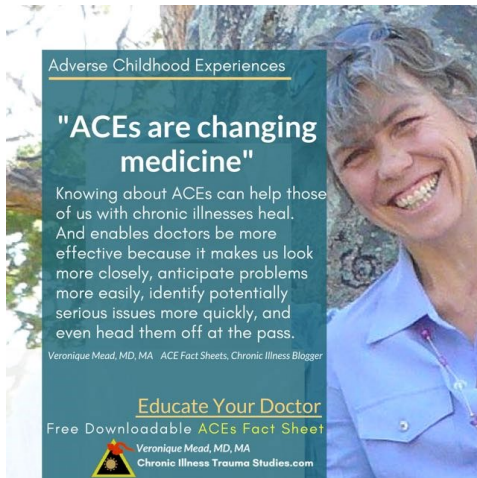
You can learn about the fact sheets in Part 2 of this article, see a list of over 30 diseases affected by ACEs in Part 3 (IIIA), download the 5 best journal articles to give your doctors in Part 4, or skip to Part 6 for ideas on how to use the fact sheets. Part 7 describes potent tools for healing the effects of trauma.

**If the ACE information is new to you**, learn more about ACEs in Part 3, see if your chronic illness or other symptoms are on the lists (IIIA and IIIB) and go from there.

**IF YOU ARE A DOCTOR, psychotherapist, psychologist or other health care professional** (or provide other kinds of services such as if you are a teacher, lawyer, social worker etc, you can incorporate ACE screening into your work.

Part 5 presents MDs who have implemented ACEs screening into their practices and links to resources about how they are doing it. It includes stories about how doctors overcame the fears we all have about lack of time and our concerns over opening a can of worms if we ask about ACEs (it's easier than we all expect).

## **If I Had Known About ACEs ...**



**If I had known about the ACE studies when I was a family doctor, it would have completely changed how I practiced medicine.**

**The ACE studies might have even led me to stay and continue to practice primary care and obstetrics, and to remain an assistant professor because I believed I had something truly valuable to teach others.**

**Knowing about ACEs might also have prevented the worsening of my chronic fatigue into a debilitating illness, [even though my ACE score is 0](#).** This is because it's not only ACEs that affect health, as I've learned since retraining as a somatic therapist specializing in trauma. The science is showing us that [all sorts of adversity – both big and small – affect long-term health](#).

If I were to ever practice medicine again, knowing about ACEs and trauma would enable me and my patients to make sense of their suffering, their illnesses and the difficult symptoms they struggle with. It would also offer [new tools](#) and [approaches](#) for beginning to work with and address symptoms, flares, speed of worsening and much, much more.

But the ACE study hadn't yet been published when I left medicine early in 1998. And we didn't know as much about the science and effects of adversity then either.

I didn't learn about the ACE study until a chance encounter with the article 5 or 6 years after leaving medicine. Like many others, [I dismissed the ACE findings at first](#) because they didn't seem to apply to me with my score of "0," to the disease I was exploring for possible links to trauma (type 1 diabetes), nor to my own chronic illness. But over time I started to see the light.

## **Knowing about ACEs provides a solution.**

Knowing about ACEs gives me and others with chronic illness a whole new set of tools to prevent and begin to address health problems.

It enables doctors be more effective because knowing about ACEs makes you look more closely, anticipate problems more easily, identify potentially serious issues more quickly, and even head them off at the pass <sup>(1)</sup>.

Knowing about ACEs would have helped me connect more deeply with my patients and love them even more. It would have fed my starving soul that had too little to offer my patients.

## **Knowing about ACEs helps turn our lives around and bring in more joy, wholeness, and health.**

This is because people want to understand.

We want to understand Why. Why we are sick. We we're not getting better. Why stress seems to trigger symptoms. Why medications often don't work or make symptoms worse.

We're hungry for self-awareness.

We crave connection.

And we want to be seen, valued, and understood. We need to know we matter.

ACEs and other forms of trauma disconnect us from ourselves and from others.

Whether we are patients or health care professionals, mothers or kids, students or doctors we want to feel empowered and alive.

When I retrained as a somatic psychotherapist I learned what I'd always believed deep down but that had slowly been covered over as a consequence of my medical training – which is that our bodies want to heal.

## **In fact, our physiologies are DESIGNED to heal.**

Healing trauma supports relationships and love, so we can be more fully who we really are.

And it supports health to much larger extents than we imagine is even possible.

**The ACE studies are the tip of the trauma iceberg.** They are a clear, straightforward, quick assessment tool that have repeatedly been shown to increase risk for everything from heart disease, obesity & autoimmune illness, to cancer, depression and suicide, to giving birth prematurely or experiencing postpartum depression, to addictions, divorce, violence, fractures, and beyond.

**The ACE studies are offering doctors and the lay person alike** a new understanding of health. They are helping our society recognize that when there is an imbalance between levels of adversity and levels of loving, nurturing support in our childhoods and in our lives, it has a profound impact.

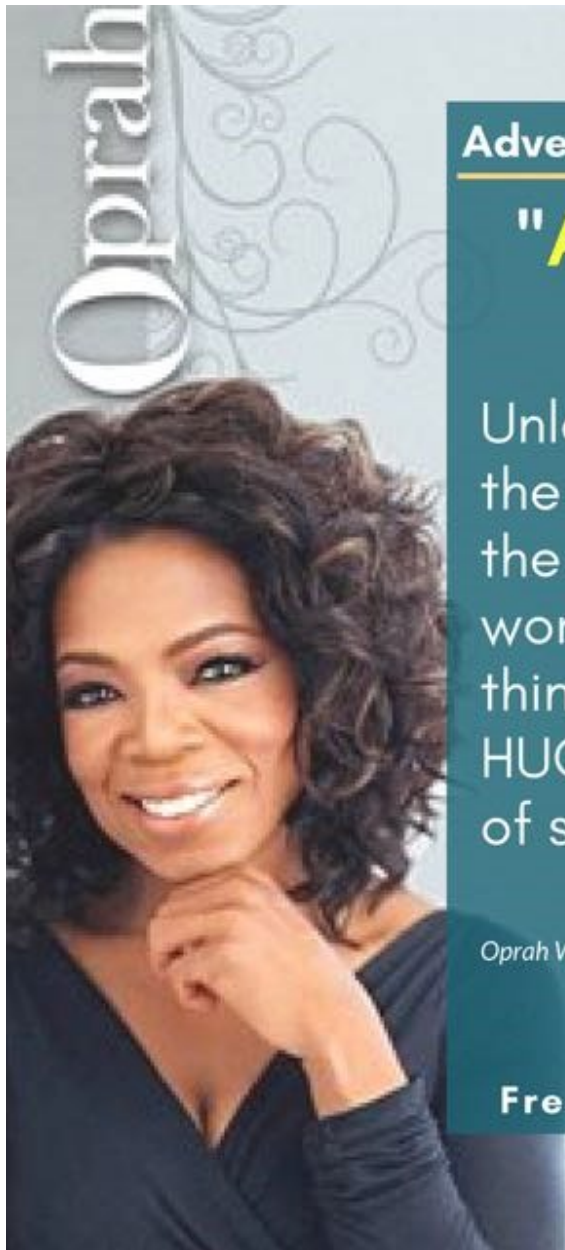
**The ACE studies are changing medicine.** And they can change our society.

Most doctors aren't yet being taught about the ACEs science or the decades of research preceding ACEs showing that the effects of trauma are not limited to psychological health. This needs to change. ACE Fact Sheets can help you support this emerging awareness as patients educate their doctors and other health care professionals while we wait for medical training to catch up with the science.

**When doctors and patients start to recognize big traumas,** it leads the way to start seeing the more subtle every day adversities that are just as powerful in affecting our long-term health. It can also begin to change how we support and educate parents and families and how police, rescue personnel, emergency room doctors and others can help and understand root causes so we can stop the blame and recognize the meaning underlying painful or destructive behaviors, health conditions and other effects of trauma.

**Learning about ACEs can change your life. Sharing the ACE questionnaire or an ACE fact sheet** with your doctor, teacher or friend can change their lives too.

## 1. Inspiration For ACE Fact Sheets

A portrait of Oprah Winfrey, smiling and resting her chin on her hand. The name "Oprah" is written vertically in a large, white, serif font to the left of her head.

**Adverse Childhood Experiences**


**"ACEs are a game changer"**

Unless you fix the trauma ... the hole in the soul...where the wounds started, you're working at the wrong thing.... [The ACE story is] HUGE ... and I've done a lot of stories in my life."

*Oprah Winfrey on an interview she prepared for CBS 60 minutes*

**Educate Your Doctor**

**Free Download ACEs Fact Sheet**

A logo consisting of a yellow triangle with a black border, containing a black circle with a white sun-like symbol inside. A red ribbon is tied around the top of the triangle.

Veronique Mead, MD, MA  
Chronic Illness Trauma Studies.com

*[Excerpts from Oprah Winfrey](#) talking about what she learned about ACEs. She conducted an interview with child advocate, clinician and researcher Dr. Bruce Perry on [CBS 60 minutes](#) March 11th, 2018. And shares how learning about ACEs impacted her in [this preview](#), which is where the quote came from.*

**I was first inspired to create an ACE fact sheet by [a commenter on the ACEs Too High news site who wished she had something to hand her doctors](#) that validated what she knew.**

This comment was the spark that got me started with a fact sheet.

I so deeply want doctors to know the science so they can act with more compassion and expertise. And so they can realize how effective they can be. I also feel my own anguish that comes from the limitations of living with chronic illness every day.

**I created the ACE fact sheets so that people with chronic illness** and adverse childhood experiences, as well as so many who struggle in other ways, can learn that being sick or having trouble finding support in life is not their fault. That they are not to blame. Or lazy. And that having experienced trauma affects our nervous systems and immune systems and is not something that we cook up, invent, or that is “all in our heads.”

**I created the ACE fact sheets so patients and doctors could make sense of symptoms and find the tools to heal.**

**I was further motivated by science writer and fierce ACEs advocate** Christine Cissy White, who described [the best medical appointment of her life](#) as being with a health care professional who “got it” about ACEs. That’s the kind of office visit that makes it worth practicing medicine for me as well. Her article includes the treatment recommendations that helped.

Cissy also describes how she used her knowledge of ACEs one day to get a refill. She was seeing a new specialist and [instead of repeating her painful traumatic history, explained that she had a score of 8/10](#) and what the study found. It simplified her visit, empowered her, and informed her health care professionals all at the same time.

I want that for my fellow patients with chronic illness and for all of those living with other symptoms, as well as for my colleagues in the health professions.

**In January I read a book on ACEs so connecting that it made my heart sing.** And cry. If you read only ONE THING about ACEs, this is it.

Pediatrician Nadine Burke Harris describes her struggles to make sense of something she couldn’t quite put a finger on when treating her patients. She explains how learning of the ACEs studies changed her own life as well as how she works.

In [The Deepest Well](#) [21] she describes how ACEs taught her a different and more effective way of helping her patients. She envisions ACE screening becoming universal.

The quote below references a story Burke Harris shares about a woman who had just learned about ACEs during a presentation and who had then started crying. A friend of Nadine's who was there worried that she'd just been triggered or traumatized by the information. When she asked the woman what was happening, however, the response surprised her:

*"These are tears of pure, unadulterated joy." "Why joy?" ...  
"Because I understand now why I am this way. I understand why my siblings are this way. I understand why my mother raised us the way she did. I understand that I can break this cycle for my children and I understand that I'm not a victim, I'm a survivor." p. 178*

**Oprah Winfrey says ACEs changed her life and her work too.** She was [on CBS 60 minutes](#), March 11th, 2018. I'm thrilled to know that OPRAH is on board this wagon now, too. ***This is OPRAH! we're talking about.*** And if learning about how [ACEs are filling the hole in Oprah's soul, you can bet she's going to help others find ways to heal](#) and become trauma-informed and use the ACEs to address all kinds of wounds too. ***She's going to be another game changer in ACEs.***

Oprah interviewed psychiatrist [Bruce Perry](#), MD, PhD on [60 minutes](#). He is [well known in the trauma field](#) for his compassion, science, research and knowledge about how trauma affects us beginning in the womb. He describes how infants and children are especially vulnerable because their brains and organs are developing during this time. And he talks about how to help them heal. A lot of trauma happens in relationships, as he explains, and healing happens in relationship too.

In a [preview on CBS This Morning](#), Oprah acknowledged her history of sexual abuse, stated how excited she was about the ACEs information (so much so that she would jump on tables and dance if it helped spread the word), and explained that it's changed the way she works with her philanthropies.

*Unless you fix the trauma, you're working on the wrong thing .... If you don't fix the hole in the soul... where the wounds started, you're working at the wrong thing.... It's not an excuse. It's an explanation..... It's HUGE.... And it's a game changer.*

*Oprah Winfrey*

*(Note: I use photos of Oprah and Dr. Nadine Burke Harris in this post because they are spreading the word and becoming the new faces of ACEs. To be clear, neither has endorsed this post nor my ACE fact sheets – but feel free to spread the word!)*

**Dr. Vincent Felitti is a role model of compassion and action for me.** Felitti is a co-author and principal investigator of the original ACE study with CDC epidemiologist Dr. Robert Anda, and speaks directly to the challenges in spreading the word and engaging doctors to act. He believes the best way to involve doctors is by changing PATIENTS' expectations, so we understand ACEs and the impact of ACEs on our health and lives.

Felitti believes educating the general public is how we will get doctors to learn about ACEs.

That's because as patients we can vote with our feet and our pocket books.

An educated public is an empowered citizenship. This will create a potent market force that will incentivize doctors and medical organizations to change. You can hear his comment in the video at the bottom of Part 5 (below) at 1 hour and 30 minutes (1:30:00).

These are all examples that inspired me to create the ACE fact sheets.

## **2. Two Fact Sheets: Chronic Illness and Other Effects of ACEs**



# ACE Fact Sheet

## ALL EFFECTS

1 Page Summary Effects of  
Adverse Childhood Experiences (ACEs)

- Chronic Illness
- Severe Obesity
- Fractures & Injuries
- Giving Birth Prematurely
- Addictions
- Mental Illness such as
- PTSD, Depression,
- Anxiety
- & more effects



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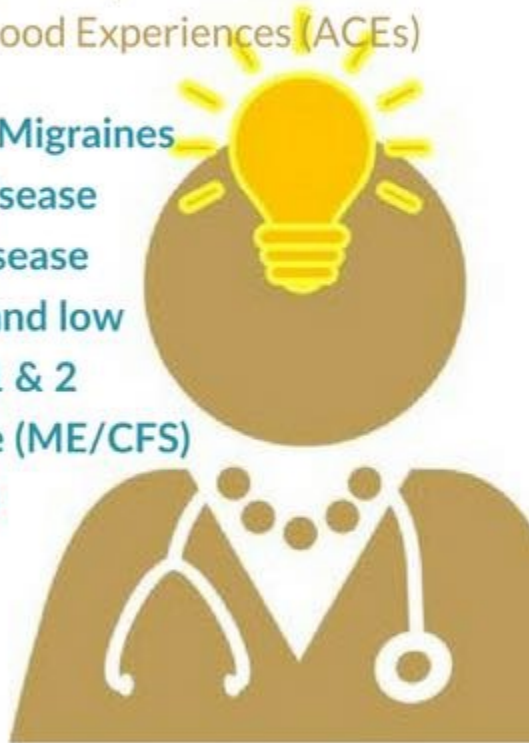
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# ACE Fact Sheet

## CHRONIC ILLNESS

1 Page Summary Effects of  
Adverse Childhood Experiences (ACEs)

- Chronic pain & Migraines
- Autoimmune disease
- Liver & Lung disease
- Thyroid - high and low
- Diabetes type 1 & 2
- Chronic Fatigue (ME/CFS)
- Celiac, IBS, IBD
- Obesity
- Cancer
- Asthma
- Sjogren's ...



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**The Chronic Illness and Adverse Childhood Experiences ACE fact sheet** focuses exclusively on physical diseases and lists over 20 chronic illnesses and physical health conditions that are more common with a history of ACEs (a longer list is included below in Part 3, Section IIIA).

The chronic illness and adverse childhood experiences fact sheet does not include risk for mental health and other non physical conditions common with ACEs. This is because medical doctors often see trauma as a source of only

psychological effects. I created this fact sheet to emphasize the science and change this inaccurate outdated perception.

The **All Effects of ACEs fact sheet** summarizes all of the effects of ACEs, which include autoimmune and other chronic illnesses as well as many other symptoms such as PTSD, depression, anxiety and rage and other mental health conditions along with much more (see Part 3, Section IIIB).

### **3. What's On the ACE Fact Sheets: The ACE Findings**

Most of the information in Sections I-IV below is summarized on the ACE Fact Sheets. I've included it in this post for anyone unfamiliar with ACEs. It's here so you don't have to download the sheets if you're just looking for information.

References are numbered according to the chronic illness ACE Fact Sheet, with a few specific references identified for the All Effects Fact Sheet and listed at the very bottom of this post in the References section.

#### **I. The Adverse Childhood Experiences (ACE) Study**



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Adverse Childhood Experiences

ACES need to be a  
"VITAL SIGN"  
as important as  
height, weight, and  
blood pressure

Jeffry Brenner, MD  
2013 MacArthur Foundation genius award  
ACES Too High

Educate Your Doctor

Free Downloadable [ACEs Fact Sheet](#)

*[“ACEs need to be a vital sign” quote by Dr. Jeffry Brenner](#), founder and executive director of the Camden Coalition of Healthcare Providers, and a 2013 MacArthur Foundation genius award winner. Cited in Chronic Illness ACE Fact Sheet to educate your doctor. Dr. Nadine Burke Harris says the same thing.*

The concept of adverse childhood experiences (ACEs) come from a 1998 Kaiser-CDC study with more than 17,000 participants finding that trauma in childhood increases risk for autoimmune [1] and other chronic diseases, and additional health problems later in life [2]. The results have been reproduced in a continuation of this study, which includes [450,000 patients](#) (number based

on personal communication with Dr. Felitti March, 15th, 2018), as well as hundreds of other studies with different populations [3]. The [first national ACE study](#) was completed in the U.S. in September 2018, having looked at 214,157 adults in 23 states between 2011 and 2014 with similar findings.

The ACE study can be found on websites such as the World Health Organization ([WHO](#)), the Centers for Disease Control ([CDC](#)) [8], and the Robert Wood Johnson Foundation ([RWJ](#)), which is the nation's largest public health philanthropy. ACEs have also in the national news on [PBS](#) [9], [NPR](#) [10], the [New York Times](#) [11], the [Huffington Post](#) and [on CBS 60 minutes](#) with Oprah Winfrey.

You can find more information about [ACEs and chronic illness](#) in my post that uses an example from the movie Boyhood.

For the largest and most in-depth overviews of ACEs and how they are being studied, used and implemented around the United State, see the news and educational site [ACES Too High](#).

## **II. How Are ACEs Measured? ACE Score is based on a maximum of 10 points**

Adverse Childhood Experiences

# Know Your ACE Score

1. loss of a parent
2. parent with mental illness
3. physical abuse
4. sexual abuse
5. emotional abuse
6. physical neglect
7. emotional neglect
8. household domestic violence
9. household member in jail
10. parent with substance abuse

*Drs. Vincent J. Felitti, Robert F. Anda et al 1998*

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The 10 original ACE questions were drawn from areas in public health for which national programs were being developed in the 1990s and is not intended or designed to cover every type of trauma that affects health. [Other types of trauma also increase risk](#) (accidents, unsafe neighborhoods, being bullied, medical procedures, homelessness etc).

The ACE questionnaire asks if you have experienced any of the following types of trauma between birth and your 18th birthday. You add 1 point for any event per category. You can figure out your ACE score by [taking the full questionnaire](#) and it is also included in both ACE fact sheets.

1. Physical abuse (Stats: 1 in 3.5 Americans)
2. Sexual abuse (1 in 5)
3. Emotional abuse (1 in 9)
4. Physical neglect
5. Emotional neglect
6. Loss of a parent from divorce or separation (loss for other reasons, including death, were not included in the original ACE study but also increase risk)
7. Violent treatment of mother (1 in 10)
8. Member of household: mental illness (1 in 5)
9. Member of household jailed (1 in 30)
10. Member of household: substance abuse (1 in 4)

### \*\*\* SURVEY \*\*\* Calculate Your ACE Score \*\*\*

\* Your responses are anonymous and are also reflected in the identical questionnaire and graph in the [Intro to ACEs](#) blog post.

You'll find results from the first [3800 ACE survey responses on this blog post](#) from 2024. It contains a surprising finding with 2 of the 10 ACEs being much more common than in the original ACEs study.

\* Your responses are anonymous and are also reflected in the identical questionnaire and graph on the [ACEs Fact Sheet](#) blog post.

#### [Take the Multigenerational ACE Survey](#)

You can download free ACE fact sheets summarizing chronic illnesses and other health conditions affected by ACEs below (both include the ACE questionnaire) or download just the ACE questionnaire [here](#).

[Subscribe to my blog to get regular posts about chronic illness & trauma related science, tips and tools and get instant access to the free PDF.](#)

Get ACE Fact Sheets

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Learn about the ACE studies, it will help you find new tools and links about chronic illness and adverse childhood experiences (ACEs) so you can begin to heal. Quote by Dr. Vincent Felitti "The impact of a successful approach to ACEs might be as great as that of a major vaccine." Give the ACE fact sheet

and educate your doctor, teacher, lawyer, social worker, local rescue and emergency personnel and police

## Limitations of the ACE Study

One of the limitations of the ACE study is that it only looks at 10 types of trauma.

In addition to these 10, other serious life events also increase risk for chronic illness, mental health conditions and other long-term health problems.

Such events include

- death of any close relative and not only separation or divorce of a parent
- abuse of any member of the household and not only the mother
- growing up in an unsafe neighborhood, a war zone, refugee camp, or in foster care
- being bullied
- and more.

As [neurologist and traumatologist Dr. Robert Scaer](#) states,

***Any negative life event occurring in a state of relative helplessness— a car accident, the sudden death of a loved one, a frightening medical procedure, a significant experience of rejection—can produce the same neurophysiological changes in the brain as do combat, rape, or abuse.***

**Another limitation is that ACEs don't include the role of what I call Adverse Institutional Experiences (AIEs),** which refers to racism, sexism, and the many other forms of discrimination that are deeply embedded, disproportionate and additive to risk for many groups. These are also based on religion, ability, sexual orientation; they include having been in institutions such as foster care, juvenile detention, jail, mental institutions; they include the pervasive threat minority groups feel about their risk of being incarcerated

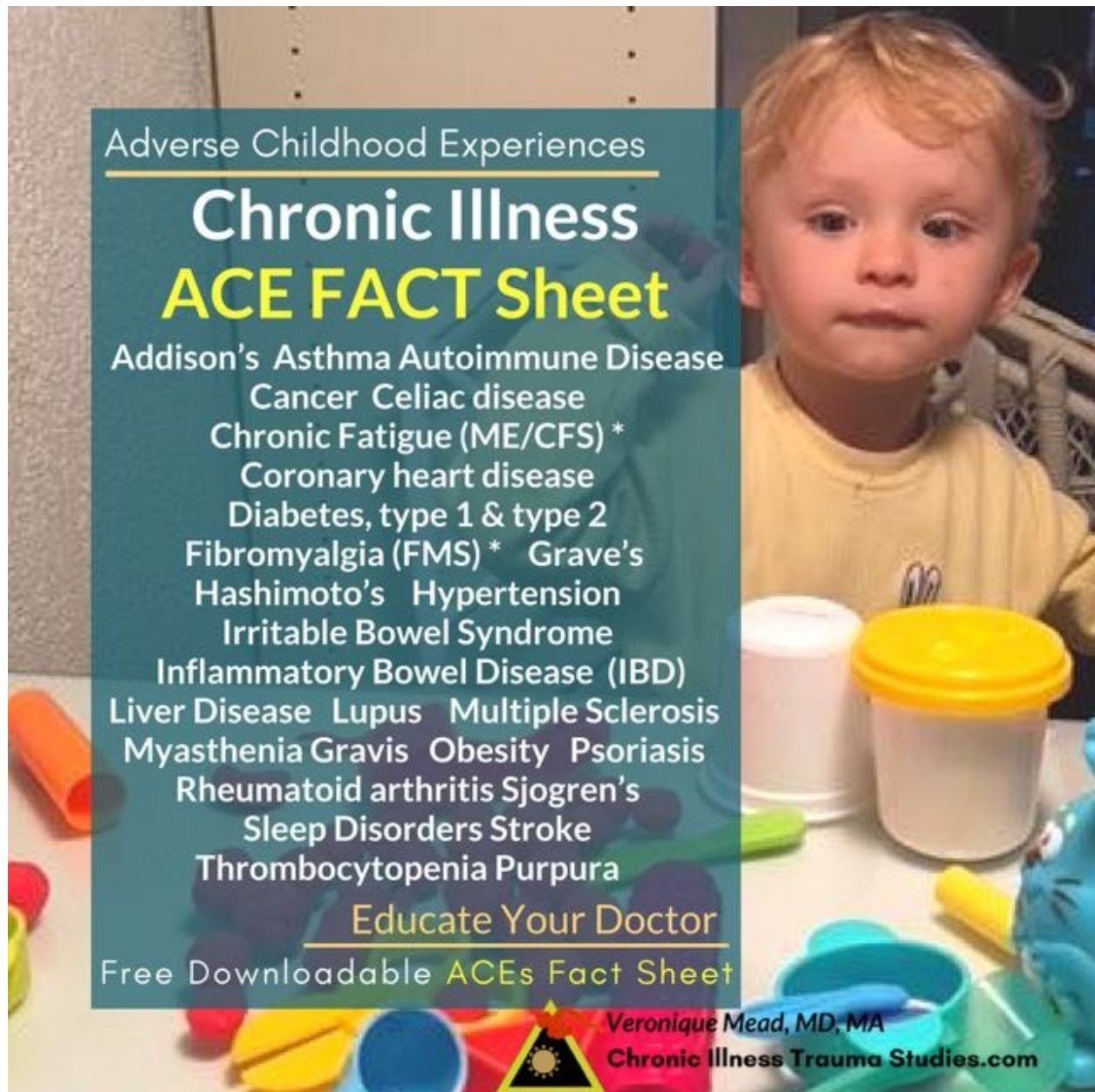


even when innocent and more than can be named. AIEs occur in all age groups and affect risk across generations. I write more about AIEs in my [Essential Guide](#) to Trauma, Chronic Illness and the Nervous System. Search for the term AIEs and you'll find Serena William's story and other topics and references.

An update to this blog post comes from a 2018 ACEs telephone survey of [250,000 noninstitutionalized adults](#) older than 18 years finding that ACEs are higher in groups experiencing discrimination for race, sexual orientation, who have lower education or income, and who are unemployed or unable to work <sup>(2)</sup>. See a summary and graphics [here](#).

Ultimately, there are many types of trauma that are not included in the ACEs survey nor in ACE studies. While these are important limitations, I see the power of ACEs in that it begins the important process of raising awareness. Once we start to open our eyes, ACEs science gives us tools to start to recognize the many different forms of trauma even as it can take time to identify and acknowledge the more subtle or pervasive ones. Another example of a limitation is [attachment trauma](#), which is inherent with all ACEs but also occurs in ways that are invisible to most of us until we start to look quite deeply. I am currently working on another subset of ACEs that I call adverse babyhood experiences, which involves adversity before and during pregnancy, birth and the very first years of life. I share an introduction to ABEs in this post on [type 1 diabetes](#).

### **IIIA. The Chronic Illness ACE Fact Sheet [1,2,12]**



Adverse Childhood Experiences

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# Chronic Illness

## ACE FACT Sheet

Addison's Asthma Autoimmune Disease  
Cancer Celiac disease  
Chronic Fatigue (ME/CFS) \*  
Coronary heart disease  
Diabetes, type 1 & type 2  
Fibromyalgia (FMS) \* Grave's  
Hashimoto's Hypertension  
Irritable Bowel Syndrome  
Inflammatory Bowel Disease (IBD)  
Liver Disease Lupus Multiple Sclerosis  
Myasthenia Gravis Obesity Psoriasis  
Rheumatoid arthritis Sjogren's  
Sleep Disorders Stroke  
Thrombocytopenia Purpura

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Free Downloadable ACEs Fact Sheet

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Chronic Illness Trauma Studies.com

The Chronic Illness ACE Fact Sheet cites links between chronic illness and adverse childhood experiences and includes many of the illnesses listed below.

**The list of chronic diseases that are known to be increased by ACEs is long.** It can feel overwhelming but I've included it here so you can get an idea of just HOW MANY DISEASES have been specifically linked to adversity.

1. Addison's Disease
2. ADHD, Behavioral problems in children, problems concentrating in school [21, All Effects ref 23-26]

3. Asthma
4. Cancer
5. Celiac disease
6. Chronic Fatigue (ME/CFS)\* [15 & 16]
7. COPD (chronic obstructive pulmonary disease)
8. Coronary heart disease
9. Dermatomyositis
10. Diabetes, type 1
11. Diabetes, type 2
12. Fibromyalgia (FMS) \*\* [16]
13. High blood pressure (hypertension) [13]
14. Idiopathic pulmonary fibrosis
15. Irritable Bowel Syndrome (IBS)
16. Inflammatory Bowel Disease (IBD)
17. Liver Disease
18. Lung Disease (Asthma, COPD)
19. Lupus (Systemic lupus erythematosus or SLE)
20. Multiple Sclerosis
21. Myasthenia Gravis
22. Obesity
23. Psoriasis
24. Rheumatoid arthritis
25. Scleroderma
26. Sjogren's
27. Sleep Disorders [14]
28. Stroke
29. Thrombocytopenia purpura
30. Thyroid, Grave's
31. Thyroid, Hashimoto's
32. Wegener's granulomatosis
33. Poor self-related health

\* Chronic fatigue (ME/CFS) and medically unexplained symptoms were not included in the original ACE studies but other studies have found that ACEs and other types of trauma in childhood increase risk for these illnesses as well [16] and that early adversity is likely an important risk factor as it is for other diseases <sup>(3)</sup>.

- At least 2 additional studies have found that ACEs increase risk for ME/CFS <sup>(4)</sup>, <sup>(5)</sup>.

\*\* At least three studies have found that ACEs are a risk factor for fibromyalgia. I've included one reference [16] in the ACE fact sheet (there isn't room for more) <sup>(6)</sup>, <sup>(7)</sup>, <sup>(8)</sup>. Two additional references are <sup>(9)</sup>, <sup>(10)</sup>. I don't have the room to include these additional references on the ACE fact sheet but am glad to be able to list them here.

If your illness isn't listed above, know that the science is pointing to the fact that it's not just one type or 10 types of adversity – nor is it only certain kinds of trauma – that affect our health. It's the balance between experiences of adversity and nurturing support.

If you've experienced any of the 10 ACEs, or other types of trauma that you believe has influenced your having developed a chronic illness, leave a comment below and name your disease for others to see as we all gradually increase our awareness of the impact of life events on health.

**The length of the list of chronic illnesses highlights a coming change in medicine.** It gives an idea of just how deeply life experiences interact with children's developing bodies and physiologies to change how our nervous and immune and digestive and other organ systems learn to function later in life. And how many illnesses can respond to the effects of healing trauma.

Learn more about links between chronic illness and adverse childhood experiences in this [summary post about ACEs and disease](#). Or download the ACE study about autoimmune disease [Dube, ref 1] and the original ACE study [Felitti, 1998] below in Part 4 either for yourself and / or for your doctors.

*NOTE: There are many other effects of ACEs that have not yet been studied or that I haven't yet been identified. If you have a chronic health condition of any kind or other symptom that you believe has been affected by ACEs and that isn't listed here (in IIIA or IIIB), please leave a comment at the bottom of this post with a little bit about your history / symptoms and what you've found about this relationship. Leave a link to a page if you've written about it somewhere.*

## **IIIB. The Overall Effects of ACEs Fact Sheet**



Adverse Childhood Experiences

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# All Effects of ACEs

## ACE FACT SHEET

addictions  
anxiety    depression    PTSD  
autoimmune disease & chronic illness  
fractures  
injuries, intentional & not intentional  
more marriages  
intimate partner violence  
low life satisfaction  
greater challenges with parenting  
giving birth prematurely  
smoking  
teen pregnancy  
self-harm    violence

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Free Downloadable ACEs Fact Sheet



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The All Effects of ACEs Fact Sheet summarizes the effects of ACEs on risk for the 10 major causes of death in adults (including chronic disease), and a variety of other effects.

As in section IIIA, I've included these detailed lists so you can see if you've experienced any of these kinds of symptoms yourself. And to give you and doctors and others an idea of just how pervasive and powerful the effects of trauma and adversity are.

## The 10 major causes of illness and early death in the US are all increased by ACEs:

1. smoking
2. alcohol abuse (7 times greater risk of abusing alcohol)
3. addictions and abuse of illicit drugs (10 times greater risk)
4. suicide attempts (12 times higher risk)
5. a high lifetime number of sexual partners (more than 50)
6. parenteral drug abuse (IV drugs)
7. a history a sexually transmitted disease (STD)
8. severe obesity
9. physical inactivity
10. depressed mood

## Other effects of ACES

- addictions [Reference 17 on the All Effects ACE Fact Sheet]
- anxiety
- depression
- fractures and other injuries, intentional and not intentional: motor vehicle accidents, being the victim of shootings, stabbings [13 all effects ACE Fact Sheet]
- criminality (also see violence below) [Reference 14 on the All Effects ACE Fact Sheet]
- more marriages and greater difficulty with relationships in general
- intimate partner violence
- low life satisfaction
- parenting: greater challenges and difficulties
- poor academic achievement
- premature births
- PTSD
- unintended pregnancy & parenthood in teen boys and girls
- self-harm
- violence: Read about the [Las Vegas](#) or [Parkland](#) shooters' ACE histories; Learn more in the books [Barking to the Choir](#), [G-Dog and the Homeboys: Father Greg Boyle and the Gangs of East Los Angeles](#), and [Preventing Violence](#) [References 14 & 16 on the All Effects ACE Fact Sheet]

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## IV. ACE Facts & Stats

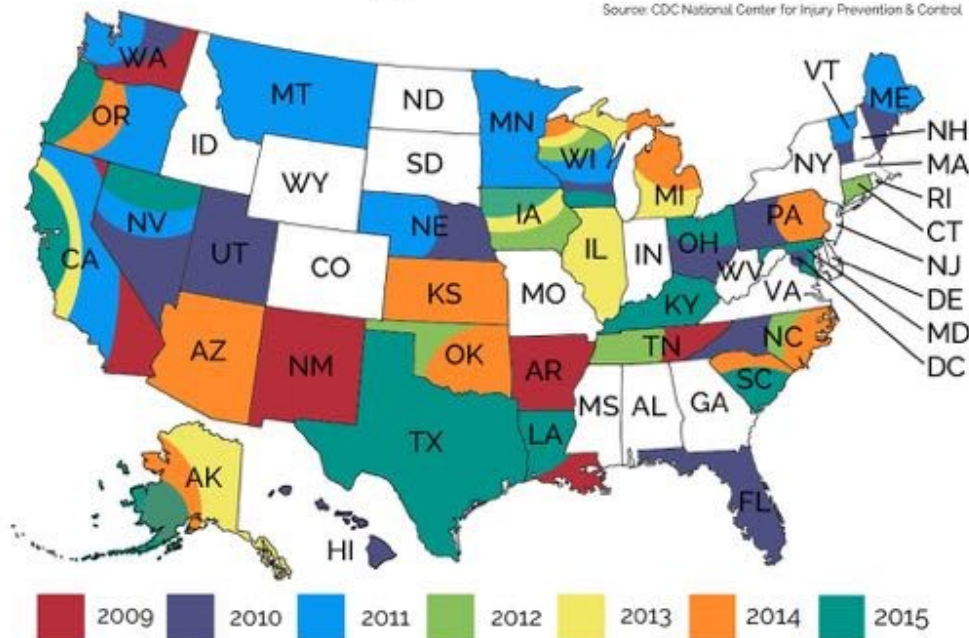
What we are learning about the effects of adversity is mind boggling. Your ACE score affects not only your quality of life but also your chances of dying prematurely.

We think that no one wants to hear this – except that knowing changes our lives and empowers us to take action.

As Felitti alludes to, knowing about ACEs can be like getting a major vaccine in how powerfully it can be used for prevention.

### States Collecting ACEs Data 2009 - 2015

Source: CDC National Center for Injury Prevention & Control



The image below shows the number of states collecting ACEs data. This is an example of just how seriously ACEs are being taken around the United States

(the study findings are also recognized in many other countries).

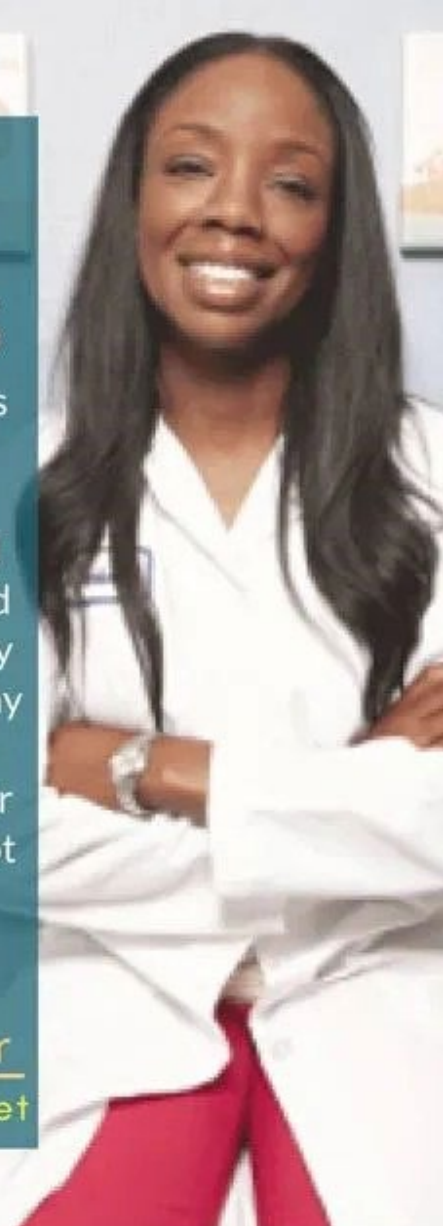
*Above image by Vjkrist – Own work, CC BY-SA 4.0, in ACEs article on [wikipedia](#)*

- **How Common are ACEs?**
  - 63% of the United States population has an ACE score of 1 or more [2]
  - 25% has an ACE score of 2
  - 12.5% has an ACE of 4 or more
- **ACEs Decrease Life Expectancy**
  - People with an ACE score of 6 live 20 years less on average (to age 60 instead of 80) [2]
  - Premature death is 2 times higher with an ACE score of 4 [12]
- **“Dose” Effect**
  - Each additional ACE increases risk for developing a chronic illness & other effects [2]
  - Chronic illnesses begin at a younger age as the number of ACEs increase [6, 17]
- **Risk for Autoimmune Disease Increases**
  - 20% increased risk with each additional point in ACE score [1]
- **Hospitalizations Increase**
  - 70% risk for an autoimmune disease with ACE score of 2 compared with ACE of 0 [1]
- **Markers of Inflammation Increase**
  - C reactive protein is an indicator of inflammation and is higher with a history of ACEs [1]
- **ACEs Amplify Other Risk Factors**
  - ACEs may increase sensitivity to other risk factors such as infections [1]
  - ACEs increase 10 of the leading risk factors for morbidity and mortality:
    - smoking, severe obesity, physical inactivity, depressed mood, suicide attempts, alcoholism, any drug abuse, parenteral (IV) drug abuse, a high lifetime number of sexual partners, and having a sexually transmitted disease (STD)
- **ACE Effects Are Multigenerational**
  - Maternal ACEs increase a child’s risk of physical / emotional health conditions [4, 18]
- **ACEs are Higher in Minority Groups**



- ACEs are higher with low income, unemployed or inability to work
- ACEs are higher with lower education or income
- ACEs are higher in Black, Hispanic and Multiracial populations
- ACEs are higher in bisexual and lesbian / gay populations
- Suggests that “exposure to ACEs may exacerbate inequities in health, social, and economic outcomes across generations <sup>(11)</sup>.
- **Why Doctors Should Ask About ACEs**
  - When doctors ask about ACEs it offers insights, validates, and removes blame [19, 20]
  - As a doctor, it helps your patient if you ask, “How has this affected you later in life?” The responses rarely take more than a few minutes according to Felitti and others who screen their patients for ACEs. Their recommendation is to ask for the total ACE score, and not which specific ACEs a person has experienced.
  - Informing people offers [new options and tools for prevention and healing](#)
- **Book by a Pediatrician Screening for ACEs in Medical Care**
  - A must read for every health care professional, this overview of ACEs describes how one pediatrician learned about ACEs, screens for ACEs as part of medical care and how the knowledge informs the treatment she provides. She also shares some gut-wrenching details about her personal experiences that give you an inkling of her own ACE experiences.
  - Written by pediatrician Nadine Burke Harris, MD: [The Deepest Well: Healing the Long-Term Effects of Childhood Adversity](#) [21]
- **ACEs Science & Story of Recovery from Autoimmune Disease**
  - Science journalist Donna Jackson Nakazawa describes the science of stress and how learning of the links between chronic illness and adverse childhood experiences helped her begin to recover from a number of autoimmune and other diseases over the course of 1 year. She also shares other people’s stories and helpful tools that you can use as well:
  - [Childhood Disrupted: How Your Biography Becomes Your Biology, & How You Can Heal](#) [22]

## 4. The 5 Most Important Journal Articles to Give Your Doctor (& Read Yourself)



Adverse Childhood Experiences

### How **Knowing** About **ACEs** HELPS

Dr. Burke Harris describes one woman's reaction to learning about ACEs :

"These are tears of pure, unadulterated joy." "Why joy?" ... "Because I understand now why I am this way. I understand why my siblings are this way. I understand why my mother raised us the way she did. I understand that I can break this cycle for my children and I understand that I'm not a victim, I'm a survivor." p. 178

Nadine Burke Harris, MD *The Deepest Well* p 178

Educate Your Doctor

Free Downloadable **ACEs Fact Sheet**

Veronique Mead, MD, MA  
Chronic Illness Trauma Studies.com

Quote from [Dr. Nadine Burke Harris](#), founder of the [Center for Youth Wellness](#), which incorporates and studies ACEs in clinical practice, from her 2018 book [The Deepest Well](#), p. 178.

When introducing ACEs to your doctor, I recommend starting with only one document at a time, such as the double-sided ACE fact sheet, the ACE questionnaire, or one study from below. Doctors are like us and get easily

overwhelmed with too much information, especially given the small amount of time they have for appointments.

So one option is to provide one piece of information only at any single office visit.

As an example, if you have type 2 diabetes, depression, PTSD, severe obesity or other chronic conditions you can give your doctor an ACE fact sheet (both the Chronic Illness ACE fact sheet and the All Effects ACE fact sheet are appropriate here. At a future visit, give him or her a copy of the original ACE study below (Felitti, 1998). At a third, give them a copy of the ACE questionnaire.

If you have an autoimmune disease, you can use the more specific Chronic Illness Fact Sheet, which summarizes chronic diseases only. You can then give your doctor the study by Dube 2009 [1] at a future visit, which specifically describes how adverse childhood experiences affect risk for autoimmune diseases (they increase risk significantly).

If your doctor or other health care professional is especially interested in ACEs, give them the other articles. Or direct them to this post.

## **Anonymous Letter From a Patient (Who Explains The Links)**

### **A Published Letter to Her Doctor(s) & Story of Recovery**

This letter, written by a real patient in the Kaiser Permanente Journal, will show you why we can't ignore ACEs any longer.

This story shows how random we think health problems are from our current medical perspectives. It shows how the knowledge of ACEs changes how we can instead look for, investigate and treat these health conditions when we have a trauma-informed lens. And how it is possible to heal, even as an adult whose adversities happened decades in the past.

*Anonymous (2002). "Dear Doctor (A Patient's Personal Case Study of Adverse Childhood Experiences)." The Permanente Journal 6(1): 48-51.*

[Download Dear Doctor Letter](#)

## Journal of Family Practice (Stillerman, 2018)

A terrific summary article on ACEs, written by a family doctor for other primary care doctors.

*Stillerman, A. (2018). "Childhood adversity and lifelong health: From research to action." Journal of Family Practice 67(11): 690-699.*

[Download JFP 2018](#)

## The Original ACE Study (Felitti, 1998)

This first ACE study introduces all the effects of ACEs, including chronic illness.

*Felitti, V. J., Anda, RF. et al. (1998). "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study." American Journal of Preventive Medicine 14(4): 245-258.*

[Download Felitti 1998](#)

## ACEs & Autoimmune Disease (Dube, 2009)

This study specifically looks at ACEs and increased risk for autoimmune illnesses. It describes effects of ACEs on the immune system, differences in immune responses in men and women, and includes a list of the 5 most common autoimmune diseases found as well as others.

*Dube, S. R., et al. (2009). "Cumulative Childhood Stress and Autoimmune Diseases in Adults." Psychosomatic Medicine 71(2): 243-250.*

[Download Dube 2009](#)

## American Academy of Pediatrics (AAP)

### AAP ACE-Related Policy (Garner, Shonkoff et al, 2012)

The American Academy of Pediatrics has updated its policies to incorporate how adverse events increase risk for chronic illness and other health conditions. See also Shonkoff [4] in the References below for more information.

*[Garner, A., Shonkoff, J. P., et al. \(2012\). "Early childhood adversity, toxic stress, and the role of the pediatrician: translating developmental science into lifelong health." Pediatrics 129\(1\): e224-231.](#)*

[Download AAP PDF](#)

## 5. How to Incorporate ACEs Into Medical Practice



Adverse Childhood Experiences

## MDs Screening for ACEs "Would Never Go Back"

Two years into screening for ACEs in their clinic ... "the 27 pediatricians who are using the survey say they'd never go back to the way they did things before."

"Most parents love the questionnaire. The responses include "Thank you for letting us participate in this." and "I feel confident I'm going to be a great mom."

*Children's Clinic pediatricians Teri Pettersen and RJ Gillespie*

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*"Two years in — with more than 1500 parents having taken the survey — "the 27 pediatricians who are using the survey say they'd never go back to the way they did things before," says Gillespie. Quote from article about [implementing ACEs screening at the Children's Clinic](#) with pediatricians Teri Pettersen and RJ Gillespie*

Most doctors worry about opening up pandora's box and not being trained to deal with the emotional distress that might arise if they screen for ACEs.

This is especially true because we are already so short on time and have so much to cover medically.

I would have been cautious too when I considered how to implement ACEs screening. But these resources will show you that it's possible, and that it can change how you and your patients feel and deal and heal.

Look at these examples and tips from early implementers of ACE screening in medical care, who say they would never go back to the way they used to practice, and who encourage the use of [ACEs as a routine vital sign](#), like weight and blood pressure [21].

Where and how to start:

1. **The one MUST READ ACES BOOK for every DOCTOR and other health care professional**, is "[The Deepest Well](#)" by pediatrician Nadine Burke Harris. It describes step by step how ACEs affect physical illness, how she gradually [incorporated ACEs screening into clinical care](#) and how she overcame the obstacles. She also provides examples of how to help parents by educating them about the research showing that we often parent the way we were parented (children raised in a household with ACEs generally have parents who were exposed to ACEs themselves as children), and offering support rather than judgment. You can also learn about her ongoing practice and research at the [Center for Youth Wellness](#). See her 3 minute [video about ACEs on PBS Newshour](#) on the need for ACEs screening in medicine.
2. Get a feel for the compassion, insight and clarity on how it's truly possible and critical to implement ACEs screening from this thoughtful presentation by one of the principal investigator's of the ACEs study, co-author and internist, Dr. Vincent Felitti: "*The Relationship of Adverse Experiences to Adult Health Status*" (see video at bottom of this section)
  - o drawing from evaluation of over 1.1 million patients since 1975
  - o describes how they make it work in their Kaiser clinic (in the video, starting at 56 minutes to 1:07:00 in video)
  - o Felitti and colleagues ask their patients "How has this affected you later in life?" and find responses short and usually less than 1 minute long
3. Two Oregon pediatricians at the [Children's Clinic started screening for ACEs](#) got started with screening
  1. 2 years later, 27 MDs who screened with them say they would "never go back to the way they did things before."
  2. "Except for two who weren't confident about how to have a conversation about ACEs, all of the pediatricians said that none of

their fears materialized. Not a single parent broke down. The average time spent on the topic was three to five minutes. And all pediatricians said that it wasn't as scary as they anticipated."

4. [In Alberta, Canada, family physician Tera Killam has implemented ACEs screening](#) with her patients
  1. including expectant mothers because of risk for postpartum depression
  2. she is working with colleagues such as University of Calgary clinical psychologist Keith Dobson, who is researching the effects of asking about ACEs.
5. Here is a list of [books and approaches for healing the effects of trauma](#) to recommend to patients. You can link to it from your website or have patients or clients google "Chronic Illness Trauma Therapies Books and Therapies." The post includes
  1. approaches that people can use on their own and therefore at low cost.
  2. links to effective trauma therapies
  3. a description on how to find a therapist
  4. a free downloadable one page summary and the full post in PDF
6. The American Academy of Pediatrics provides a [toolkit for primary care providers](#).
7. The [ACEs 101 post on the news site ACEs Too High](#) has articles on how ACEs are being incorporated into medical practice and other settings (search the page for "Who's using ACEs science"). The entire site is a go-to place for up-to-date information on ACEs.
8. See programs out of Harvard's [Center for the Developing Child](#) and John Hopkin's [The Child and Adolescent Health Measurement Initiative](#) (watch the 5 min video intro) and the latest [surveys and data](#)
9. Watch the award-winning documentary "[Resilience](#)" on the science of ACEs and how ACE screening and knowledge is changing schools, health care and more around the country (here's the [trailer](#)).

*Felitti's presentation at The Snowbird Conference with The Child Trauma Treatment Network of the Intermountain West to the Department of Pediatrics at the University of Utah School of Medicine in Salt Lake City. September 2003.*

## 6. How to Use the ACE Fact Sheets



## Adverse Childhood Experiences

# "ACEs are the new cholesterol"

If you don't screen for it,  
and you don't look for it,  
you'll never find it, but  
it has more health impacts  
than you imagine.

*Paul Espias, MD, Kaiser, Hayward, CA from ACEs Connection*

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Chronic Illness Trauma Studies.com

*"ACEs are the new cholesterol" quote from Dr. Paul Espias, who led the effort to implement screening at Kaiser Permanente's pediatric clinics in Hayward and San Leandro in 2016. Cited in ACE Fact Sheet to educate your doctor. Also a recommendation of Dr. Nadine Burke Harris.*

Use the ACE fact sheets as a patient or client consulting a health care professional or other service provider and in any other way you see fit (and leave a comment on what you tried and how it went to help others in this new way of working with our health).

Either fact sheet can also be used by others to educate those you serve, such as if you are a health care professional, social worker, teacher, lawyer, and beyond.

## Share the ACE Fact Sheets To:


- educate your doctors and other health care professionals & others
- get earlier recognition and heightened awareness of potentially serious problems by your doctor and others, who can offer appropriate screening, treatment and referrals
- become an organization that is [trauma-informed](#)
- implement business practices to improve care, service, health and save costs
- shape the rules & laws in your community, local government, school etc
- help clarify that the effects of ACEs are real and not “in our heads”
- find powerful tools for healing and prevention (here’s a list of [books and therapies](#) for healing the effects of trauma such as ACEs)

## Give ACE Fact Sheets to Your:

- primary care providers such as family doctor, internist or pediatrician
- specialist (rheumatologist, immunologist, pulmonologist, endocrinologist,...)
- psychiatrist, psychologist or psychotherapist
- practitioner of functional medicine or integrative medicine
- naturopath, chiropractor and other health care professionals
- teacher
- lawyer
- social worker
- select family & friends

*Feel free to share either ACE fact sheet under the creative commons license [CC BY-NC-ND 3.0](#): post a link on your website, share at will without making changes, don't sell or otherwise use for commercial purposes, and kindly cite and link to this page as the source of the original document.*

## 7. What You and Doctors Can Do and Recommend for Healing ACEs



Adverse Childhood Experiences

"The impact of a successful approach to ACEs might be as great as that of a major vaccine."

Vincent J. Felitti, MD  
co-author ACE study in *Acad Pediatr*, 2009

Educate Your Doctor

Free Downloadable ACEs Fact Sheet

Veronique Mead, MD, MA  
Chronic Illness Trauma Studies.com

*"The impact of a successful approach to ACEs" quote is from Dr. Vincent J. Felitti, internist at Kaiser and co-author with Dr. Robert J. Anda and others of the original ACE study in 1998. Citation from Felitti's 2009 journal article, "[Adverse childhood experiences and adult health.](#)" *Academic Pediatrics* 9(3): 131-13*

**1. KNOWLEDGE:** Gaining knowledge about the effects of trauma makes it easier to understand symptoms, triggers, flares and other effects. As I've mentioned earlier, the ACEs studies are just the tip of the iceberg.

The science of traumatic stress, brain development, child health and so much more all offer good, solid, eye-opening research explaining the [mechanisms](#) of how trauma affects health and how subtle events can be.

- Read my [summary of the science](#) describing how adverse life events, which include but are not limited to ACEs, increase risk for chronic illness and other health conditions.
- Get an overview of how trauma affects risk for chronic illness, which includes ACEs as well as other types of trauma – in my series of [free ebooks](#) and downloads.
- These are what I consider the best books on the science and are appropriate for health care professionals and the lay person alike:
  - Dr. Nadine Burke Harris' book about ACEs, [The Deepest Well](#)
  - Trauma specialist with doctorate degrees in Medical Biophysics and Psychology, founder of somatic experiencing approach to healing trauma, Peter Levine's
    - [Waking the Tiger](#)
    - [In an Unspoken Voice](#)
  - Neurologist and traumatologist, Dr. Robert Scaer's [The Trauma Spectrum](#)
  - Psychiatrist Bessel van der Kolk [The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma](#)
  - Journalist Donna Jackson Nakazawa introduces ACEs and her improvements from an autoimmune disease interspersed with a discussion of the science of toxic stress (which complements and adds to the science of traumatic stress) in [Childhood Disrupted](#)

**2. RESOLVING EFFECTS OF TRAUMA:** There are many approaches for healing the effects of trauma, even if it happened years or decades in the past.

Cognitive behavioral therapies can help change behaviors, recognize threats and make life changes that increase safety and support, which are important in the process of healing.

Nervous system patterns of threat cannot usually be accessed and addressed through conscious awareness or talking (effects of trauma are stored in

nonverbal parts of the brain), so other approaches are often necessary for healing underlying effects of trauma.

I trained in SE and SPI (below) and have been using the following other approaches for healing trauma and recovering from my own debilitating chronic illness (here's [my story](#)). It's given me insights, a deep understanding of how subtle traumatic events can be that affect health, and taught me that healing is possible. I am greatly improved even if not yet fully recovered.

The following and many other approaches are better designed for accessing and resolving underlying physiological effects of trauma, and therefore for working with symptoms such as fatigue, asthma and other chronic illnesses, high and low blood pressure / heart rate / body weight / cholesterol, and pain, depression, anxiety, PTSD and more.

Examples of somatically based trauma therapies include:

- Somatic experiencing (SE) [website](#), a [list of SE practitioners](#) around the world
- Sensorimotor Psychotherapy Institute (SPI) [website](#); [list of their practitioners](#) around the world
- EMDR (Eye Movement Desensitization and Reprocessing) is [described on wikipedia](#); lists of [practitioners with the EMDR Institute](#) and [the EMDR International Association](#).

For more information on healing, start with this list of [books and therapies for working on your own](#) as well as tips and links to finding a trauma therapist.

### 3. ENCOURAGEMENT THROUGH STORIES OF HEALING

- a patient's published letter "[Dear Doctor](#)" (mentioned above)
- Donna Jackson Nakazawa's journey of healing [Childhood Disrupted](#) (mentioned above)
- other stories in my [free ebook 1](#) An Overview of Trauma & Chronic illness

### 4. LETTER TO YOUR HEALTH CARE PROFESSIONAL

Patient advocate, [author](#), speaker, artist, [Joyelle Brandt](#) speaks for the trauma informed movement as a survivor of adverse childhood experiences. She has created a set of 1 page downloadable letters for anyone with a history of

ACEs and other types of trauma that can affect your health and how you experience medical appointments, care, exams and procedures.

As Joyelle so articulately states, when a health care professional knows about ACEs and a patient's history, it can save lives.

She has a letter for general health care professionals (HCPs) and one for prenatal care providers.

See [“Dear Health Care Provider”](#) and [“Dear Prenatal Care Provider”](#) on her Resource Page.

She also uses these letters for HCPs to give to patients and offers guidelines on how to speak about it (as well as a book). [See No. 5 in her post “Vital Information ... Left Out Can Cost Lives”](#) from above.

**5. FIND MORE ACEs RESOURCES & INFORMATION** in the article [“ACEs 101”](#) or the 5 minute [ACEs video primer on ACEs Connection](#)

**6. HOW ACES INFLUENCE HEALTH** is described in my [essential guide](#) to chronic illness, trauma and the nervous system.



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