

## Pediatric ACEs Algorithm

Developed at Vanderbilt University Medical Center



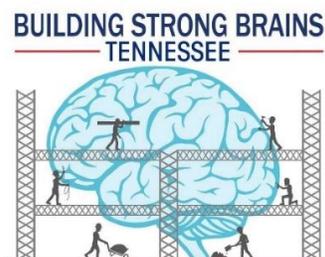
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## Pediatric ACEs Algorithm Introduction

The Pediatrics ACEs Algorithm provides a comprehensive method to screen for Adverse Childhood Experiences (ACEs). ACEs can cause toxic stress and are associated with many poor health outcomes. In theory, many diseases could be prevented by assessing ACEs in pediatric primary care (see Image). The Pediatric ACEs Algorithm screens for 1) unhealthy parenting behaviors, 2) other childhood stressors, 3) parent's current stressors, and 4) parent's past stressors (see Table).

Table: The Pediatric ACEs Algorithm screens for four categories of ACEs.

ACEs Category	Name of Screening tool	Items
Unhealthy parenting behaviors	Quick Parenting Assessment (QPA)* or Part 1 of the Parenting and Childhood Stressors (PCS)	13
Other childhood stressors	Other Childhood Stressors (OCS) or Part 2 of the Parenting and Childhood Stressors (PCS)	15
Parent's current stressors	Parent's Needs Assessment	9
Parent's past stressors	Parent's ACE score	10

\*The QPA has also been developed as a stand-alone screening tool.

We suggest screening for ACEs every two years, starting in the first 6-12 months of a child's life. Intervention will depend upon the specific stressors being addressed and local resources. Some health care providers work in clinics with integrated social workers and mental health providers whereas other providers will need to refer families to counselors in the community. To educate parents about healthy discipline strategies, providers can provide individual counselling, provide resources, follow up in clinic, and refer as indicated. To save time, we present an evidence-based parenting resource that providers can introduce to parents in one minute.

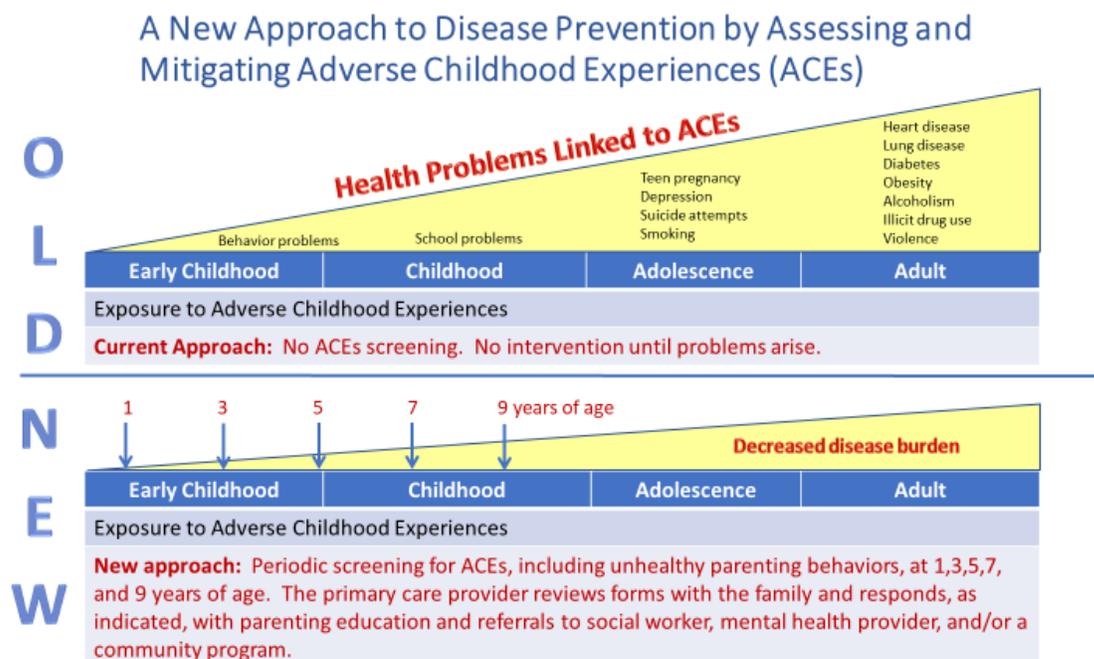


Image 1: A new approach to disease prevention by assessing ACEs, including parenting behaviors.

## Parenting and Childhood Stressors (PCS): Part 1

### Quick Parenting Assessment (QPA)

Date: \_\_\_\_\_

Name of your child: \_\_\_\_\_ Age of your child: \_\_\_\_\_

What is your relationship with your child? Mother    Father    Grandparent    Other

**Parents use many options to discipline their children and no parent does it right 100% of the time. To support you and your child, please let us know what YOU and OTHER CAREGIVERS *do*, not what you *think* you should do.**

**In the past month, what have YOU done when your child needed to be disciplined?**

1. You redirected your child toward a good behavior. For example, you said something like: "Don't bite people, use your teeth to eat food" or "Don't kick the dog, let's go kick a ball".	Yes	No
2. In general, more than once per day, you used time-out or took away privilege.	Yes	No
3. In general, more than once per day, you spoke angrily or raised your voice.	Yes	No
4. You told your child that he/she is going to be spanked, smacked, popped, or slapped.	Yes	No
5. You gave your child a spanking, smack, pop, or slap.	Yes	No
6. You told your child something like "You are a bad boy" or "You are a naughty girl".	Yes	No
7. You spent more time with your child to talk about or show them how to improve behavior.	Yes	No

**In the past month, what have your child's OTHER CAREGIVERS done when your child needed to be disciplined? SKIP questions 8-12 if you are the only caregiver.**

8. In general, more than once per day, they used time-out or took away privilege.	Yes	No
9. In general, more than once per day, they spoke angrily or raised their voice.	Yes	No
10. They told your child that they are going to be spanked, smacked, popped, or slapped.	Yes	No
11. They gave your child a spanking, smack, pop, or slap.	Yes	No
12. They told your child something like "You are a bad boy" or "You are a naughty girl".	Yes	No

**Your health care provider wants to support you.**

13. I would like to discuss healthy ways to respond to my child's behavior.	Yes	No
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## Parenting and Childhood Stressors (PCS): Part 2

### Other Childhood Stressors (OCS)

**Other childhood stressors: Please answer “Yes” or “No” to these statements.**

1. In general, all household members support each other and have warm relationships.	Yes	No
2. In general, household members bully or fight each other.	Yes	No
3. In general, your family members are treated badly because of your race.	Yes	No
4. There is a lot of violence in your neighborhood.	Yes	No
5. Since your child was born, a household member has served time in jail.	Yes	No
6. Since your child was born, a household member was depressed, mentally ill, or attempted suicide.	Yes	No
7. Since your child was born, a household member has had a problem with using drugs or alcohol.	Yes	No
8. Since your child was born, someone touched your child’s private parts or asked your child to touch their private parts in a sexual way.	Yes	No
9. Since your child was born, you have been homeless.	Yes	No
10. Since your child was born, there has been a divorce or separation in your household.	Yes	No
11. Since your child was born, your child has been separated from his/her caregivers through deportation or immigration.	Yes	No
12. Since you child was born, your child has been in foster care.	Yes	No
13. Within the past 12 months, you worried whether your food would run out before you got money to buy more.	Yes	No
14. Your child has been exposed to other concerning stressors. For example, your child has been bullied at school or your child has witnessed real-life violence.	Yes	No

**Sometimes stress can cause physical or behavioral health problems.**

15. I feel that my child may be having physical or behavioral health problems related to stress.	Yes	No
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### Parent's Needs Assessment

**Children can tell how their parents are coping.**

**I am having a hard time coping with stressors in my life. Circle all that apply.**

Finding childcare	Paying the bills	My physical or mental health
Having a place to live	Getting a job	My relationship with others
Having enough food to eat	Transportation	Drug or alcohol use
Other Stressors		

**I might be interested in getting help with these stressors:**

   **Yes please**

   **No thank you**

   **Maybe later**

### Parent's ACE Score

Adverse Childhood Experiences are types of childhood trauma that can affect your health and your child's health. **Please think about how many of these events apply to you? Do not mark each statement. Just add up the total number that apply to you and write that number in the box below.**

Prior to your 18th birthday:

1. Did a parent or other adult in the household often or very often... Swear at you, insult you, put you down, or humiliate you? or Act in a way that made you afraid that you might be physically hurt?
2. Did a parent or other adult in the household often or very often... Push, grab, slap, or throw something at you? or Ever hit you so hard that you had marks or were injured?
3. Did anyone... Touch or fondle you or have you touch their body in a sexual way without your consent? or Attempt or actually have oral, anal, or vaginal intercourse with you without your consent?
4. Did you often or very often feel that ... No one in your family loved you or thought you were important or special? or Your family didn't look out for each other, feel close to each other, or support each other?
5. Did you often or very often feel that ... You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
6. Were your parents ever separated or divorced?
7. Were any of your parents: Often or very often pushed, grabbed, slapped, or had something thrown at her? or Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? or Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?
8. Did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?
9. Was a household member depressed or mentally ill, or did a household member attempt suicide?
10. Did a household member go to prison?

Parent's ACE score:

**Mother**

**Father**

**Grandparent**

**Other**

## Pediatric ACEs Algorithm

### Summary

Consider screening for ACEs at regular intervals, starting at one year of age (e.g. 1, 3, 5, 7, and 9 years). Intervention will depend upon the number of at-risk responses and local resources. If a parent answers “No” to all questions, consider literacy issues and/or whether the survey was completed accurately.

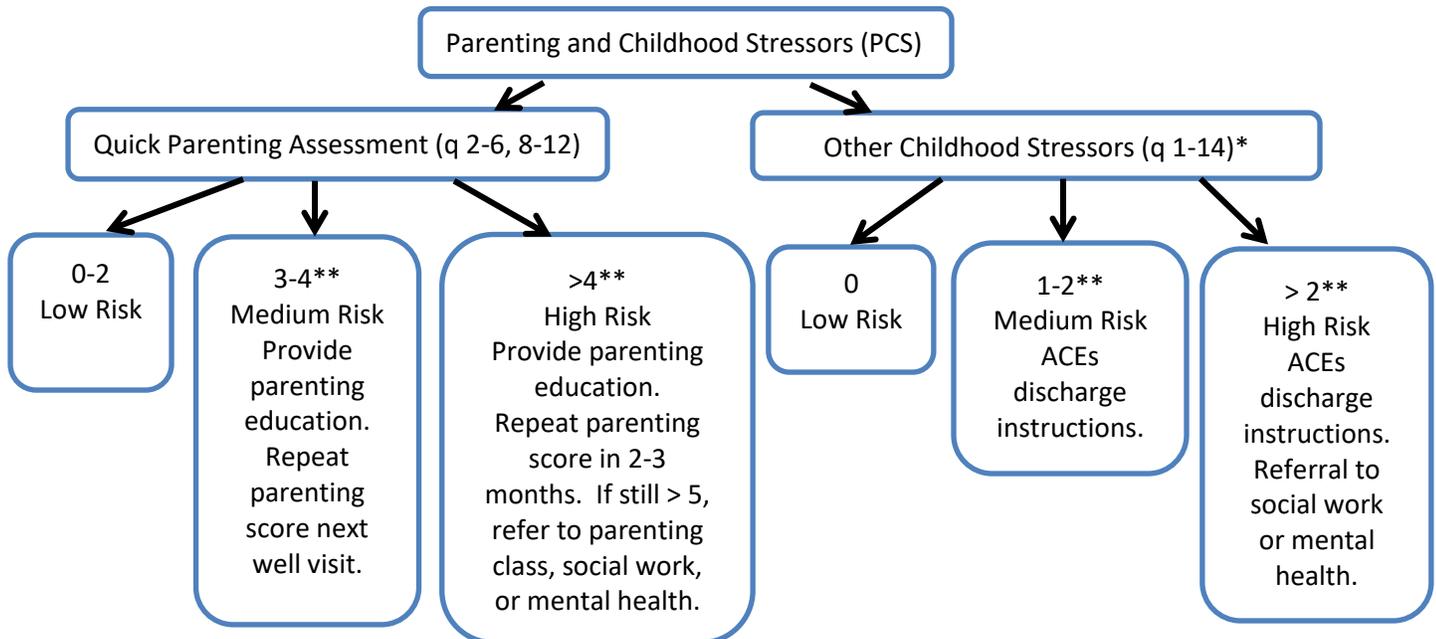
**QUICK PARENTING ASSESSMENT (QPA):** Questions 2-6 and 8-12 should all be “No”. Score 1 point for each at risk response. Questions 1 and 7 can be reviewed but should NOT be scored. Question 13 assesses a parent’s interest in receiving education about discipline.

**OTHER CHILDHOOD STRESSORS (OCS):** Question 1 should be “Yes” and all other responses should be “No”. If “Yes” to question 8 about possible sexual abuse, ask follow-up questions to ensure that there are no concerns that have not been addressed; involve social work and/or children’s services as needed.

**PARENT’S NEEDS ASSESSMENT:** This section reminds parents that how they are coping affects their children’s health and allows the health care provider to troubleshoot. If able, refer (e.g. social work) and/or provide resources. If not, acknowledge the stressor(s), consider providing parents with [www.211.org](http://www.211.org), and offer follow up as indicated.

**PARENT’S ACE SCORE:** These 10 questions, slightly modified, are from the original ACEs study. High scores are associated with health problems in the parent and may also have 2<sup>nd</sup> generation effects.

### ACEs Algorithm Summary



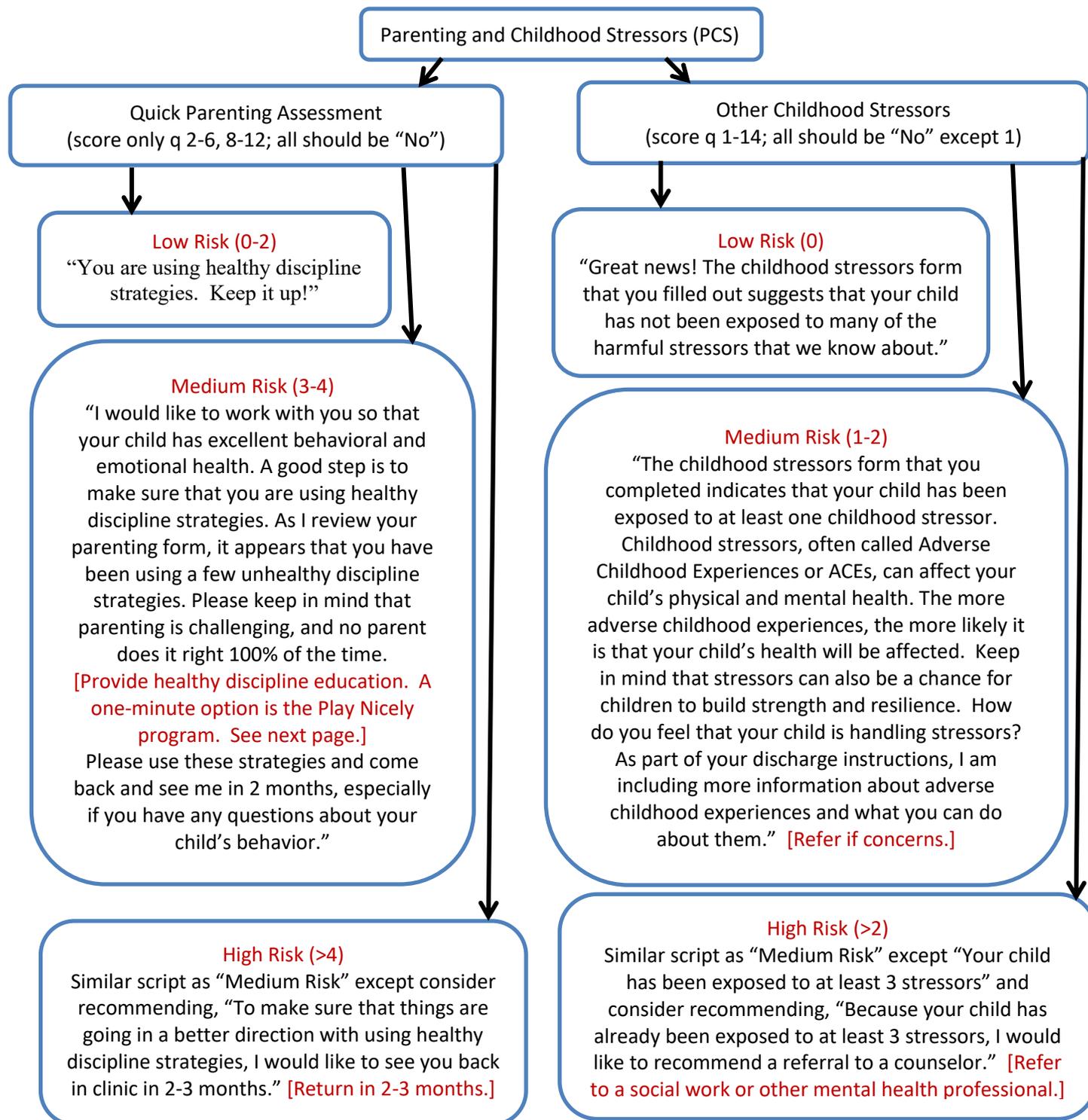
\*If "Yes" to question #8 on OCS, follow up concerns of sexual maltreatment and address as indicated.

\*\*Consider intervention at a lower score if:

1. The needs assessment indicates that the parent is not coping well.
2. The parent's ACE score is > 4.
3. The child has symptoms associated with stressors (q 15 on OCS): These might include behavior changes (e.g. anxiety, depression, aggression), headache, abdominal pain, sleep problems, incontinence, poor school performance.

## Pediatric ACEs Algorithm Intervention Scripts for Health Care Providers

“I would like to take a minute or two to review the form you completed about parenting and childhood stressors. This form is important because we are trying to decrease children’s exposure to things that might affect their behavioral and emotional health.”



## Pediatric ACEs Algorithm

### One Minute Healthy Discipline Education Intervention

**Assume you see one young child hit another.**  
Consider these 20 options.

---

Redirect toward a positive behavior (Redirect)

Spank your child (Spank)

Set the rule by firmly saying “No Hitting” (Set rule)

Later, praise your child for playing nicely (Praise)

Ask your child how the other child feels (Other’s feelings)

Place your child in Time-Out (Time-out)

Yell or speak angrily at your child (Yell)

Say “No” to your child (Say “No”)

Take away a privilege (Take privilege)

Give a warning (Give warning)

Ignore the behavior (Ignore)

Consider physical activity, sports, or martial arts (Activity)

Ask your child about his feelings (Child’s feelings)

Tell your child that he is a “bad boy” (“Bad boy”)

Leave the area (Leave area)

Discuss why hurtful behavior is wrong (Discuss why)

Set future expectations for behavior (Expectations)

Role play at another time (Role play)

Change your daily schedule (Change schedule)

Redirect behavior with a question (Redirect with a ?)

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**Turn to the tabbed page to learn if your choice is:**

✔ Great    ✔ Good    ✘ Not recommended

### Step 1: Introduce 20 Discipline Options

“We want all parents to use healthy discipline strategies with their children. If you haven’t already seen it, I would like to introduce you to great resource call Play Nicely. The program has been proven to increase parents’ toolkits for managing behavior problems.”

[Turn to page 7 in the Play Nicely Handbook. If the handbook is not available, go to Step 2.]

“Assume you see one young child hit another. What are you going to do? Here is a list of 20 options.”

“Some options are great, some are good after others have been tried, and some are not recommended. Turn to the tabbed pages to learn why redirecting is a great option and why spanking is not recommended. The handbook fills your toolkit with lots of options, so you can pull out one of the better strategies for the situation. The handbook reviews how the options can be modified to use with other childhood behavior problems.”

“You can check out the handbook for free in the Family Resource Center on the 2<sup>nd</sup> floor of this building.”

[Note: The handbook is available in Spanish and Arabic and the multimedia program is available in Spanish]

### Step 2: Introduce a Media Option

“If you would rather learn discipline options using media, you can view the free Play Nicely multimedia program on your computer, tablet, or smart phone by going to the website, [www.playnicely.org](http://www.playnicely.org).”

### Step 3: Get All Parents on Board

“Consider showing the program to everyone who takes care of your child. Your child will behave better if everyone is consistent with discipline.”

### Step 4: Follow up

“If you have any ongoing concerns about your child’s behavior or about how to discipline your child, please come back and see me in 2-3 months.”

## **Pediatric ACEs Algorithm Discharge Instructions**

Health care providers usually give written discharge instructions to patients. Below are examples of text that could be provided to parents as part of the ACEs Algorithm assessment. At Vanderbilt University Medical Center, our electronic health record, EPIC, uses Smart Phrases in the After Visit Summary (AVS) Text [i.e. discharge instructions for parent]

**.ACESQPALOW:** Healthy Discipline: Our goal is for your child to have excellent emotional and behavioral health. A first step is for parents to use healthy discipline strategies. You are doing it! Keep it up!

Although there is no one right way to respond to behavior problems, some discipline strategies work better than others. Try to avoid spanking, yelling, or threatening or saying “No” too much because these do not teach children what they are supposed to do, and these strategies can be unhealthy for your child. First, take the time to explain the rules, using good eye contact. Then, one of the best discipline strategies is to redirect a child toward a more positive behavior. For example, if your child hits another, redirect your child to go build blocks, throw a ball, or help you around the house. If your child kicks, have them go kick a soccer ball or run up and down the hall with their feet. Redirecting works great because you give your child attention, and at the same time, you teach them what they can do, not what they can’t.

If you want to learn lots of ways to respond to behavior problems, please consider viewing the Play Nicely multimedia program at home on your computer or smart phone (see [www.playnicely.org](http://www.playnicely.org)). You can check out the Play Nicely Healthy Discipline Handbook from the Family Resource Center on the 2<sup>nd</sup> Floor of the Doctor’s Office Tower.

### **Other healthy discipline resources**

[www.cdc.gov/parents](http://www.cdc.gov/parents)

[www.zerotothree.org](http://www.zerotothree.org)

**.ACESQPAMEDIMUM:** Healthy Discipline: Our goal is for your child to have excellent emotional and behavioral health. A first step is for parents to use healthy discipline strategies. Unfortunately, you and/or other caregivers are using a few unhealthy discipline strategies to respond to behavior problems. Your child will likely have better behavioral health if you and your child’s other caregivers use the best discipline strategies to respond to behavior problems.

Although there is no one right way to respond to behavior problems, some discipline strategies work better than others. Try to avoid spanking, yelling, or threatening or saying “No” too much because these do not teach children what they are supposed to do, and these strategies can be unhealthy for your child. First, take the time to explain the rules, using good eye contact. Then, one of the best discipline strategies is to redirect a child toward a more positive behavior. For example, if your child hits another, redirect your child to go build blocks, throw a ball, or help you around the house. If your child kicks, have them go kick a soccer ball or run up and down the hall with their feet. Redirecting works great because you give your child attention, and at the same time, you teach them what they can do, not what they can’t.

To learn about healthy ways to discipline, please view the Play Nicely multimedia program at home on your computer or smart phone (see [www.playnicely.org](http://www.playnicely.org)). You can check out the Play Nicely Healthy Discipline Handbook from the Family Resource Center on the 2<sup>nd</sup> Floor of the Doctor’s Office Tower. Show the program to everyone who takes care of your child. Your child will behave better if everyone is consistent with discipline. Please use the strategies in the program and come back to see me in 2 months, especially if you have any questions about healthy discipline options or your child’s behavior.

### Other healthy discipline resources

[www.cdc.gov/parents](http://www.cdc.gov/parents)

[www.zerotothree.org](http://www.zerotothree.org)

#### .ACESQPAHIGH:

**Healthy Discipline:** Our goal is for your child to have excellent emotional and behavioral health. A first step is for parents to use healthy discipline strategies. Unfortunately, you and/or other caregivers are using many unhealthy discipline strategies to respond to behavior problems. Your child will likely have better behavioral health if you and your child's other caregivers use the best discipline strategies to respond to behavior problems.

Although there is no one right way to respond to behavior problems, some discipline strategies work better than others. Try to avoid spanking, yelling, or threatening or saying "No" too much because these do not teach children what they are supposed to do, and these strategies can be unhealthy for your child. First, take the time to explain the rules, using good eye contact. Then, one of the best discipline strategies is to redirect a child toward a more positive behavior. For example, if your child hits another, redirect your child to go build blocks, throw a ball, or help you around the house. If your child kicks, have them go kick a soccer ball or run up and down the hall with their feet. Redirecting works great because you give your child attention, and at the same time, you teach them what they can do, not what they can't.

To learn about lots of other healthy ways to discipline, please consider viewing the Play Nicely multimedia program at home on your computer or smart phone (see [www.playnicely.org](http://www.playnicely.org)). You can check out the Play Nicely Healthy Discipline Handbook from the Family Resource Center on the 2<sup>nd</sup> Floor of the Doctor's Office Tower. Show the program to everyone who takes care of your child. Your child will behave better if everyone is consistent with discipline. Please use the strategies in the program and come back to see me in 2-3 months.

### Other healthy discipline resources

[www.cdc.gov/parents](http://www.cdc.gov/parents)

[www.zerotothree.org](http://www.zerotothree.org)

#### .ACESOCSLOW:

**ACEs and brain health.** The childhood stressors form that you completed indicates that, so far, your child has not been exposed to harmful stressors. Some stress is normal but too much can cause problems. Harmful childhood stressors, often called adverse childhood experiences or ACEs, can affect your child's brain health. The more adverse childhood experiences, the more likely it is that your child's health will be affected. The good news is that you can do something about ACEs.

Spend time with your children, reading and talking.

Have a healthy relationship with your children and other family members.

Use healthy discipline strategies such as setting the rule and redirecting.

When ACEs cause problems:

Listen to your child's needs, fears, and concerns. You may need to modify your daily activities to help them through a rough period. Give lots of support and reassurance. Let your child know that you and other supportive adults are always available.

Talk! Do not feel embarrassed to ask for help. Think about how ACEs affect you and your parenting. If ACEs are causing problems in your home, please let me know.

Learn more about ACEs and brain health:

<https://developingchild.harvard.edu/>

<http://www.albertafamilywellness.org/>

<https://acestoohigh.com/>

Resources to help your situation:

[www.kidcentraltn.com](http://www.kidcentraltn.com): Resources for parents in Tennessee

[www.211.org](http://www.211.org): Community services and resources

[www.nationalparenthelpline.org](http://www.nationalparenthelpline.org): Parenting support

[www.playnicely.org](http://www.playnicely.org): Healthy discipline strategies

#### **.ACESOCSMEDIUM:**

**ACEs and brain health.** The childhood stressors form that you completed indicates that your child has been exposed to at least one childhood stressor. Some stress is normal but too much can cause problems. Harmful childhood stressors, often called adverse childhood experiences or ACEs, can affect your child's brain health. The more adverse childhood experiences, the more likely it is that your child's health will be affected. The good news is that you can do something about ACEs.

Spend time with your children, reading and talking.

Have a healthy relationship with your children and other family members.

Use healthy discipline strategies such as setting the rule and redirecting.

When ACEs cause problems:

Listen to your child's needs, fears, and concerns. You may need to modify your daily activities to help them through a rough period. Give lots of support and reassurance. Let your child know that you and other supportive adults are always available.

Talk! Do not feel embarrassed to ask for help. Think about how ACEs affect you and your parenting. If ACEs are causing problems in your home, please let me know.

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[www.playnicely.org](http://www.playnicely.org): Healthy discipline strategies

#### **.ACESOCSHIGH:**

**ACEs and brain health.** The childhood stressors form that you completed indicates that your child has been exposed to at least 3 childhood stressors. Some stress is normal but too much can cause problems. Harmful childhood stressors, often called adverse childhood experiences or ACEs, can affect your child's

brain health. The more adverse childhood experiences, the more likely it is that your child's health will be affected. The good news is that you can do something about ACEs.

Spend time with your children, reading and talking.

Have a healthy relationship with your children and other family members.

Use healthy discipline strategies such as setting the rule and redirecting.

When ACEs cause problems:

Listen to your child's needs, fears, and concerns. You may need to modify your daily activities to help them through a rough period. Give lots of support and reassurance. Let your child know that you and other supportive adults are always available.

Talk! Do not feel embarrassed to ask for help. Think about how ACEs affect you and your parenting. If ACEs are causing problems in your home, please let me know.

Because your child has already been exposed to at least 3 stressors, I may have recommended that you speak with our social worker in clinic or by phone.

Learn more about ACEs and brain health:

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<https://acestoohigh.com/>

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