





#### Adverse Childhood Experiences

Information & Mini Neuroscience Lesson
Suggested Audience: Ages 7-12
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Some information in this presentation may bring up strong feelings. If you are feeling upset at any time, you are encouraged to take a break or talk to a trusted adult.

# What does ACE stand for?

Adverse (adverse is another word for bad / negative)

Childhood

Experience



ACEs are negative experiences that happen to people before they are 18.



# **ACEs = Negative Experiences**

- ACEs can make kids feel scared, alone, or sad.
- Most people have at least one ACE. Some people have more than one. Some people have none.
- Everyone reacts to ACEs differently, and there is no right or wrong way to feel.
- ACEs are NEVER the kid's fault!



## **Types of ACEs**

- Violence / Abuse
  - Physical (hitting, punching, inappropriate touch)
  - Emotional (not caring for child's feelings)
  - Verbal (mean words)
- Death of a close family member or friend
- Not caring for child's needs
- Family member in jail
- A family member who struggles with their own mental health
- Addiction having too much alcohol or drugs





# **Class Activity!**

Work with your table group to figure out which events on the list are ACEs and which are not.



# How do you feel when you are stressed out? What makes you feel stressed?





ACEs can cause kids to be super stressed out! This type of stress is not normal, and it is called **toxic stress**.

Toxic stress can make the brain and body very tired and sick.

We will talk later about healthy ways to deal with stress.







# Do you know what "fight or flight" is? Can you think of an example?





# Fight or Flight is the body's response to an emergency.

If there is something scary happening, the body prepares to react by fighting or running away.

Your body focuses all of its energy on the emergency!

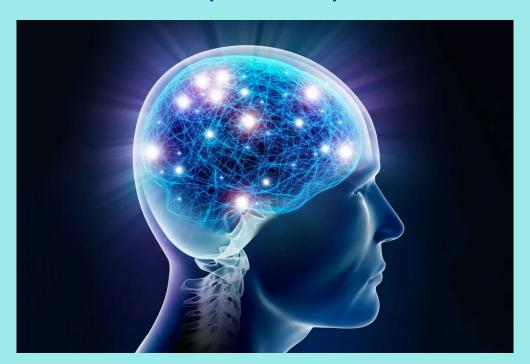
- Your heart beats faster
- You sweat more
- Your body and brain forget about what you were focusing on before the scary thing happened

This is a good thing if you are trying to run away or fight off something scary.





# What happens to your brain during fight or flight mode? Let's look at 2 important parts of the brain!





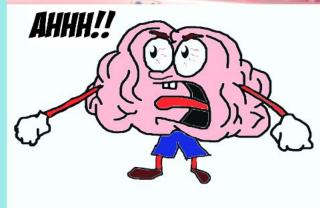
#### **Amygdala = Emotion Center**

The Amygdala helps to control emotions like **fear**, **disgust**, **and anger**. The amygdala is in control during fight or flight.



In an emergency, the amygdala takes control!





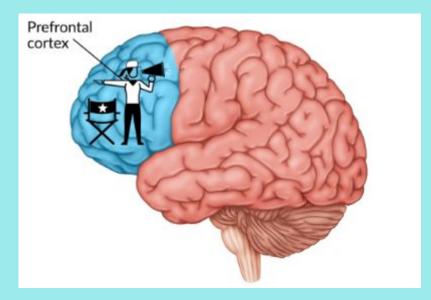


#### **Prefrontal Cortex = Decision Making Center**

The prefrontal cortex is the director of the brain. It is responsible. The prefrontal cortex's job is to make smart decisions and solve problems.

The prefrontal cortex is in control most of the time.

In an emergency, the prefrontal cortex is used less, because the amygdala is in charge.



Fun Fact:

The prefrontal cortex does not fully develop until you are 25! This means some of your teacher's brains aren't done growing!!



ACEs can make your body think that there is always an emergency. The body is in fight or flight mode for too long!



The amygdala is in control. This crazy guy is running the brain instead of the responsible prefrontal cortex!



## **Long Term**

#### **Adults with ACEs have increased risk of:**

- Heart disease
- Depression
- Cancer
- Diabetes
- Drug use



- Dropping out of school
- Unemployment (no job)
- Homelessness

# What are some things I can do to make sure I grow up to be a healthy adult?



## **Healthy Solutions**

- Therapy
- Check ups with a doctor
- Spend time with friends
- Talk to a grown up you trust
  - Teacher
  - Neighbor
  - Coach
- Get involved!
  - Sports
  - o Clubs
- Take care of yourself
  - Exercise
  - Eat healthy
  - Get enough sleep
- Do things that make you happy :)





#### **Activities and Ideas!**

- Boys and Girls Club
- Local Parks and Nature Conservatories
- Crossfit
- YMCA Camps and Activities
- Student Leadership Programs
- School Therapy Services
- Download a mindfulness app (Insight)





QR code for mindfulness app



#### Handle With Care - North Central, North Quabbin

Some schools have a helpful program called Handle With Care!

The local police departments, hospitals, and schools work together to help make sure kids feel safe and happy.

If a student has a scary experience outside of school, the teachers will know to be extra kind and patient with that student (short breaks, homework passes).



Handle With Care is **confidential** (private). The school is not given specific details about the scary experience. The school only gets told to handle the student with care.





## **Class Questions**

- 1. Brainstorm activities and people that make you feel happy and supported.
- 2. What are some new activities that you wish your school had?
- 3. Who would you go to if you needed help? (teacher, caregiver, coach, counselor, neighbor)



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# Helpful Video!! <a href="https://www.youtube.com/watch?v=py8deTlxNco">https://www.youtube.com/watch?v=py8deTlxNco</a>

# THANK YOU FOR LISTENING!

Any questions?

# This material may be shared or printed!

### **Citations**

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