

# INTRODUCTION TO TRAUMA



**R.E.A.C.H**  
**FOR TOMORROW**  
RESTORING • EDUCATING • ADVOCATING • COLLABORATING • HOPE

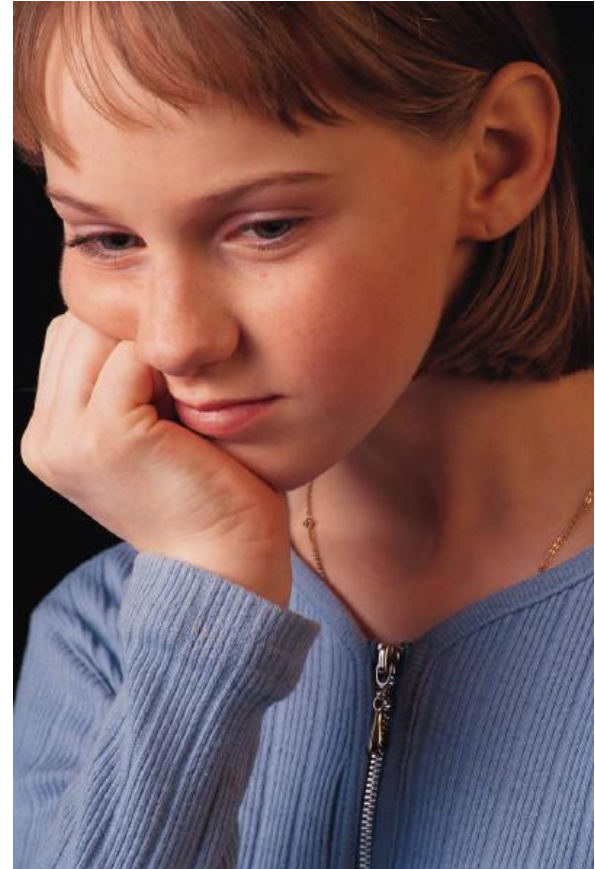


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# AGENDA

- What Is Trauma
- Trauma's Impact on the Brain
- The Sensory Experience of Trauma



# Major Differences Between Grief and Trauma

The ONE WORD

that best describes each

# Grief



# Trauma



## GRIEF

Generalized reaction is SADNESS

Grief reactions stand ALONE

Known to public and professionals

Does not disfigure identity

Regret says "I wish I would have..."

Dreams of person who died, was hurt

Pain is related to the loss

Anger is not destructive

## TRAUMA

Generalized reaction is TERROR

Trauma reactions generally include grief reactions

Largely unknown (esp. in children)

Attacks and distorts identity

Guilt says, "It was my fault."

Dreams of self dying, being hurt

Pain is related to tremendous terror and sense of powerlessness, fear and loss of safety

Anger is assaultive (even if non-violent trauma)

# Trauma

Any experience that leaves a person feeling hopeless, helpless, fearing for their life/survival, their safety. This experience can be REAL or PERCEIVED.



# Keep in Mind

Trauma reactions are **no different** following non-violent situations such as natural disasters, chronic illness, etc.



# A hot and sunny day...



# Trauma Exposure

**Victim** (abuse, neglect, car accident)

**Witness** (personal witness – domestic violence, police, fire)

**Related to** (peer, siblings – of chronically ill siblings, sibling that completed suicide)

**Listening to details of trauma** (therapists, media exposure, video games, etc.)

# Posttraumatic Stress Disorder (DSM 5)

Re-experiencing (INTRUSION – 1)	Avoidance (NUMBING - 1)	Negative Cognitions and Mood (2)	Arousal (2)
Flashbacks	Detachment	Distorted sense of self	Aggression
Intrusive thoughts -images	Numbing	Estrangement to others	Reckless behavior
Traumatic dreams	OCD like behavior Phobic like behavior	Markedly diminished interest	Self-destructive and Rule-breaking behaviors
Sleep problems	Self Harm	Depression	Hypervigilance
Physical complaints	Substance Abuse	Blames self or others	Irritability
	Eating Disorders		Inattention

Symptom Overlap (Weinstein et al., 2000)	ADHD	PTSD
Hypervigilance	X	X
Inattention	X	X
Detachment	X	X
Irritability	X	X
Anger Outbursts	X	X
Distracted	X	X
Restless	X	X
Impatient	X	X
Impulsive	X	X
Limited sense of future	X	X
Difficulty Concentrating	X	X

# Types of Trauma

Type 1 – Single exposure

Type 2 – One type of exposure that is repeated OR exposure to one or two different events

Type 3 – Complex Cumulative Trauma/Developmental Trauma Disorder



# What matters most...

NOT the only symptoms but the experience of trauma and how that impacts the experience of

- Themselves
- Others
- Life following exposure to traumatic events

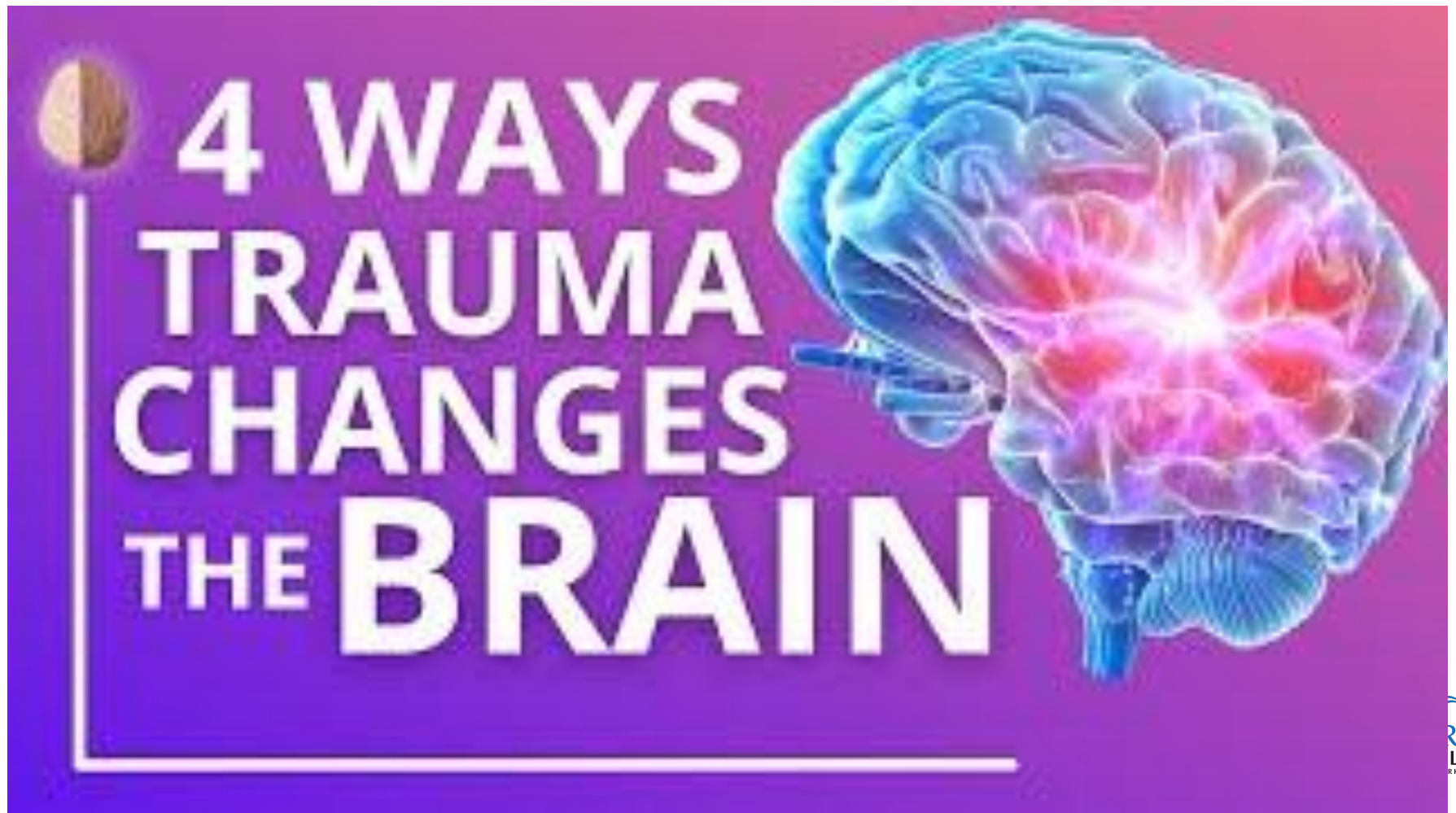
If we truly want to help; we must first understand how children are experiencing what they have been exposed to, we can't assume we know.



# Trauma is a Sensory Experience

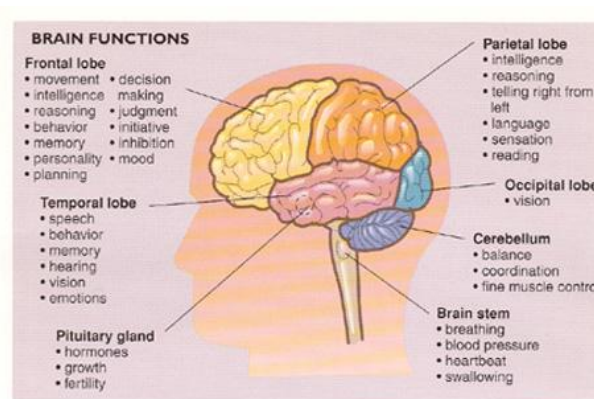
Trauma is a  
**sensory experience**  
because of what happens to the  
brain and memory during  
trauma.

# Brain Development



# Functions of the Brain

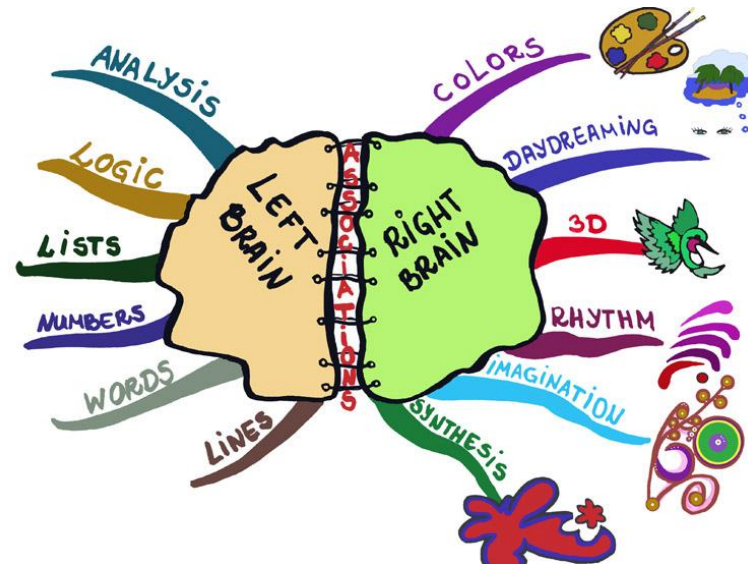
Right Brain (Sensory)	Left Brain (Thinking)
Senses	Language
Memory	Reasoning
Affect	Thinking
Emotional Regulation	Understanding/Processing



# Left Brain and Right Brain

Both brain hemispheres are affected.

The first thing that happens is that the left and right brain don't integrate and work together – There is no cooperation between the two hemispheres.



# Stress Response System

Exposure to a trauma  
inducing event

----- → **SURVIVOR** is  
frozen in an activated  
state of arousal (state of  
fear, state of alert,  
survival mode)

----- → **STRESS**  
**HORMONES** are released  
– cortisol, adrenalin, etc.



# Stress Response System

This surge in stress hormones creates changes in the brain (and actually damages the brain when arousal is prolonged.)

Changes in the brain cause changes in a person's (the survivor) cognitive, behavioral and emotional functions.



# FIGHT or FLIGHT

## NOTICEABLE EFFECTS

PUPILS DILATE  
MOUTH GOES DRY  
NECK + SHOULDER  
MUSCLES TENSE  
HEART PUMPS FASTER  
CHEST PAINS  
PALPITATIONS  
SWEATING  
MUSCLES TENSE  
FOR ACTION  
BREATHING FAST  
+ SHALLOW -  
HYPERVENTILATION  
OXYGEN NEEDED  
FOR  
MUSCLES

## HIDDEN EFFECTS

BRAIN GETS BODY  
READY FOR ACTION  
ADRENALINE  
RELEASED FOR  
FIGHT/FLIGHT  
BLOOD PRESSURE  
RISES  
LIVER RELEASES  
GLUCOSE TO PROVIDE  
ENERGY FOR MUSCLES  
DIGESTION SLOWS -  
OR CEASES  
SPHINCTERS CLOSE -  
THEN RELAX  
CORTISOL RELEASED  
(DEPRESSED THE  
IMMUNE SYSTEM)

F. Hedges

# How Trauma Impacts Right Brain

Trauma memory is stored here!

No words to describe, only  
Sensory memories – sight,  
sounds, touch, smell, taste

Iconic Symbolization  
(Images)

Affect/Dysregulation



# How Trauma Impacts Left Brain



- No language.
- No reasoning skills.
- Unable to make sense out of what happened.
- The neurons in the Hippocampus are damaged significantly by the stress hormone release.
- Learning, processing, focusing is impaired.

# Experience becomes Biology

Though it may be difficult to believe, one traumatic event in any one's life, especially a child's, can alter both the structure and the chemistry of the brain.

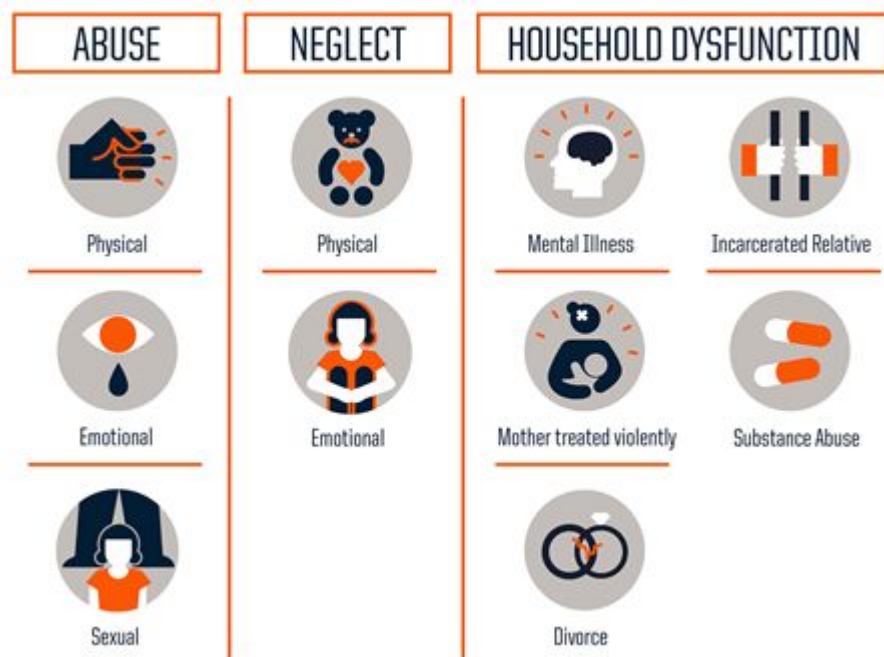


# ACE Study - <http://www.cdc.gov/ace/>

The Adverse Childhood Experiences (ACE) Study is one of the largest investigations ever conducted to assess associations between childhood maltreatment and later-life health and well-being.

More than 17,000 participants

Findings suggest that certain experiences are major risk factors for the leading causes of illness and death as well as poor quality of life in the United States.



# ACE STUDY



## ABUSE



Physical



Emotional



Sexual

## NEGLECT



Physical



Emotional

## HOUSEHOLD DYSFUNCTION



Mental Illness



Incarcerated Relative



Mother treated violently



Substance Abuse



Divorce

33%  
Report No ACEs

1 in 16 smokes

1 in 69 are alcoholic

1 in 480 use IV drugs

1 in 14 has heart disease

1 in 96 attempts suicide

51%  
Report 1-3 ACEs

1 in 9 smokes

1 in 9 are alcoholic

1 in 43 use IV drugs

1 in 7 has heart disease

1 in 10 attempts suicide

16%  
Report 4-10 ACEs

1 in 6 smokes

1 in 6 are alcoholic

1 in 30 use IV drugs

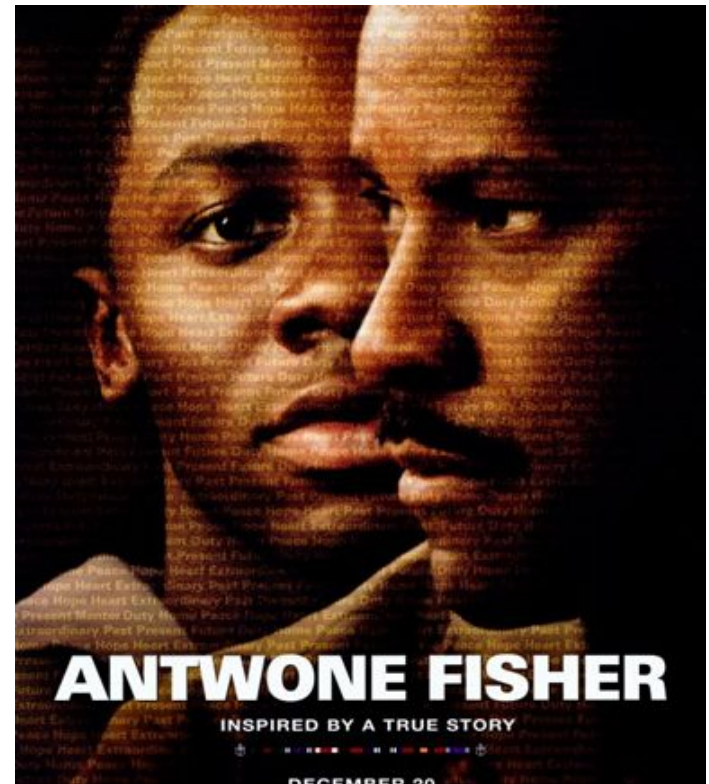
1 in 6 has heart disease

1 in 5 attempts suicide

# Our Bodies Do Remember

This is why sometimes the behavior and reactions you see TODAY look odd or like unreasonable responses to the current situation.

We must understand that behavior and reactions you see TODAY are often connected to a PAST experience or memory.



# Antwone Fisher Fight Scene



# Antwone Fisher Beating Scene

