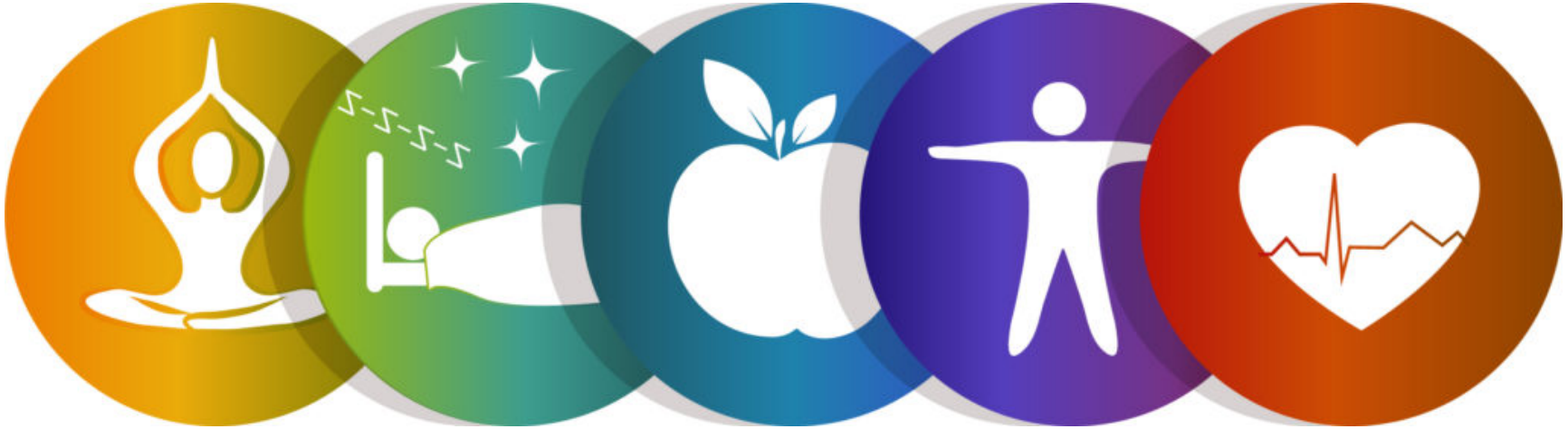


The Brain, Body, and Mental Health

Ramsey County Children's Mental Health Collaborative (RCCMHC)

Introductions

Wendy, Executive Director
Ramsey County Children's Mental Health Collaborative
wendy@rccmhc.org
1-800-565-2575 call or text

Introduce yourself!
Share your email or phone number if you would like me to get back to you.

Learning Targets

To understand and share ideas about…

- How the brain works
- Realistic expectations (ages/stages)
- Mental health warning signs
- The brain/body connection- impacts of toxic stress, nutrition , exercise, sleep
- Strategies, local resources & extended learning (and, what is RCCMHC??)

Group Agreements

For healing, belonging, and hope…

- Enter with a spirit of curiosity
- Listen actively and be open to new ideas
- Step up & step back to create a rhythm for learning and sharing together.
- What is said here stays here; What is learned here leaves.

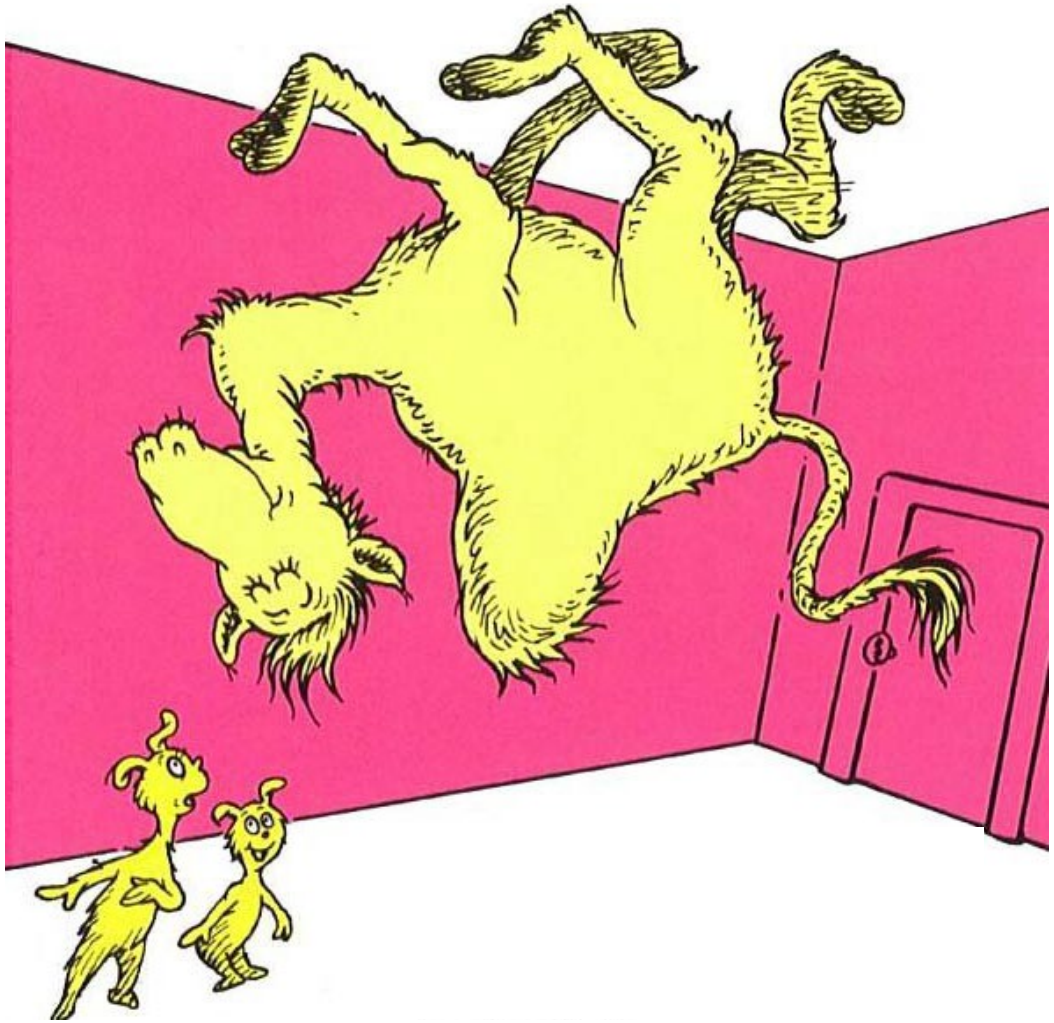
There's a lot of WISDOM in this space. We will learn from each other!

I AM HERE. I AM READY.

- Please take a moment to quiet your thoughts.
- Let go of the stress and worries of today.
- Take a deep breath.
- Now let it out.
- I am here.
- I am ready.

https://youtu.be/rlWMDYpI7fM

BIG C,
little c,
what begins with C?



collaboratives
and
…Collaboratives!

In Minnesota,
Collaboratives are more than
just a coalition of partners who
“collaborate” together.

In 1993, the Minnesota Legislature approved a set of laws to create COLLABORATIVES as special districts in our state.

<u>Special Districts</u>

- Local government units created or authorized by state law to perform specific duties or to provide specific services in a limited scope.
- Ex. public schools

https://www.revisor.mn.gov/statutes/?id=245.493

- **12 Children's Mental Health Collaboratives**
  - Address the multi-system needs of families who have a child with a MH disorder
  - Only 1 per county
- **47 Family Services Collaboratives**
  - Address the health, developmental, educational, and family-related needs of children and youth
  - Can have more than 1 per county
- **31 Integrated CMH and FS Collaboratives**

http://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=id_001475

Partnerships, Policy and Collaboration

Youth, Family and Community Engagement

Capacity Building and Professional Training

Cross-System Services and Supports

Community Defined/Driven and Data-Informed Decision Making

Resource Sharing & Development

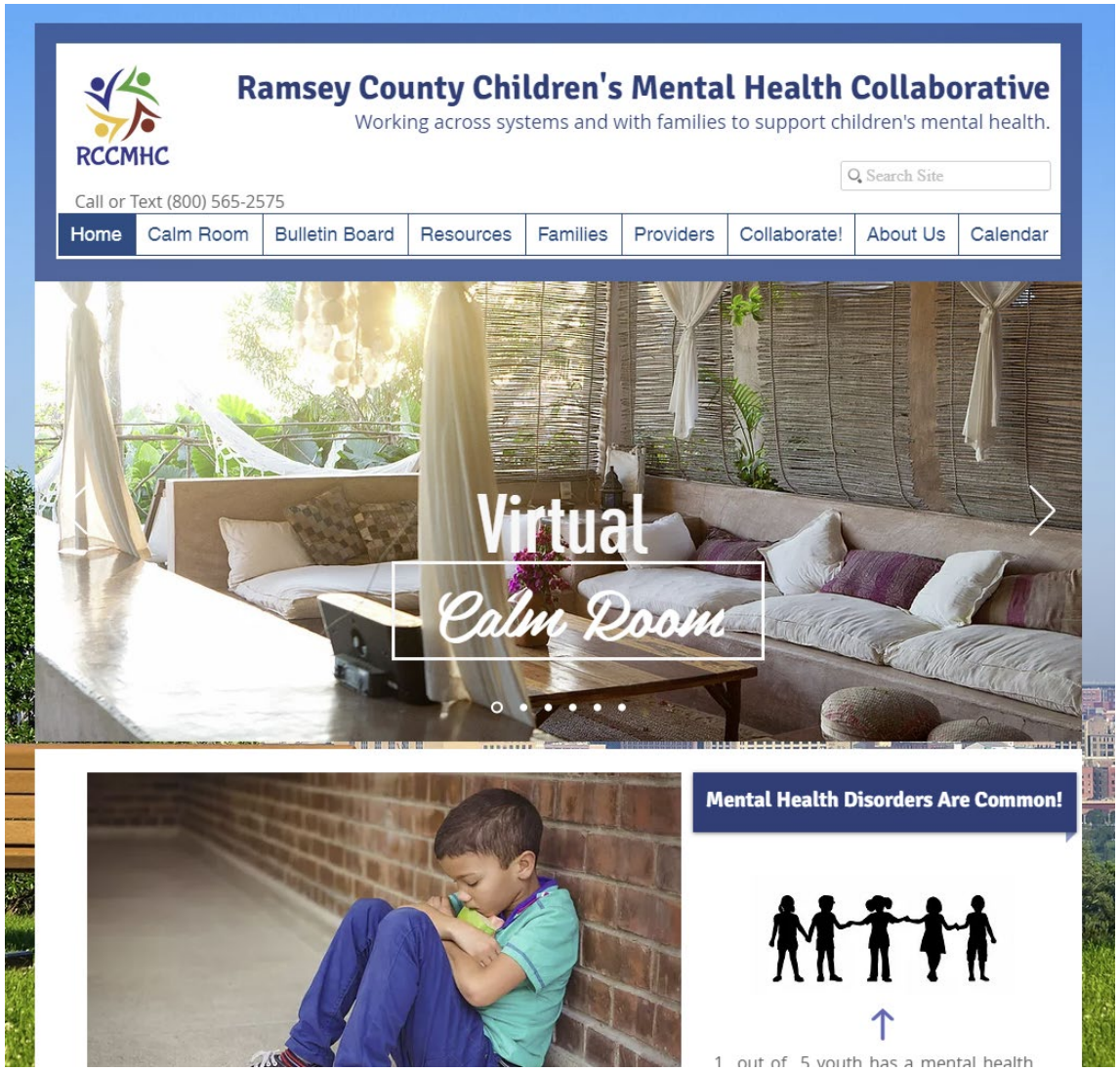
RCCMHC

RCCMHC works with…

1. Systems Leaders
2. Community Agencies
3. Families

Today, we'll focus on Youth, Family & Community Engagement!

Visit the RCCMHC Website: https://www.rccmhc.org/

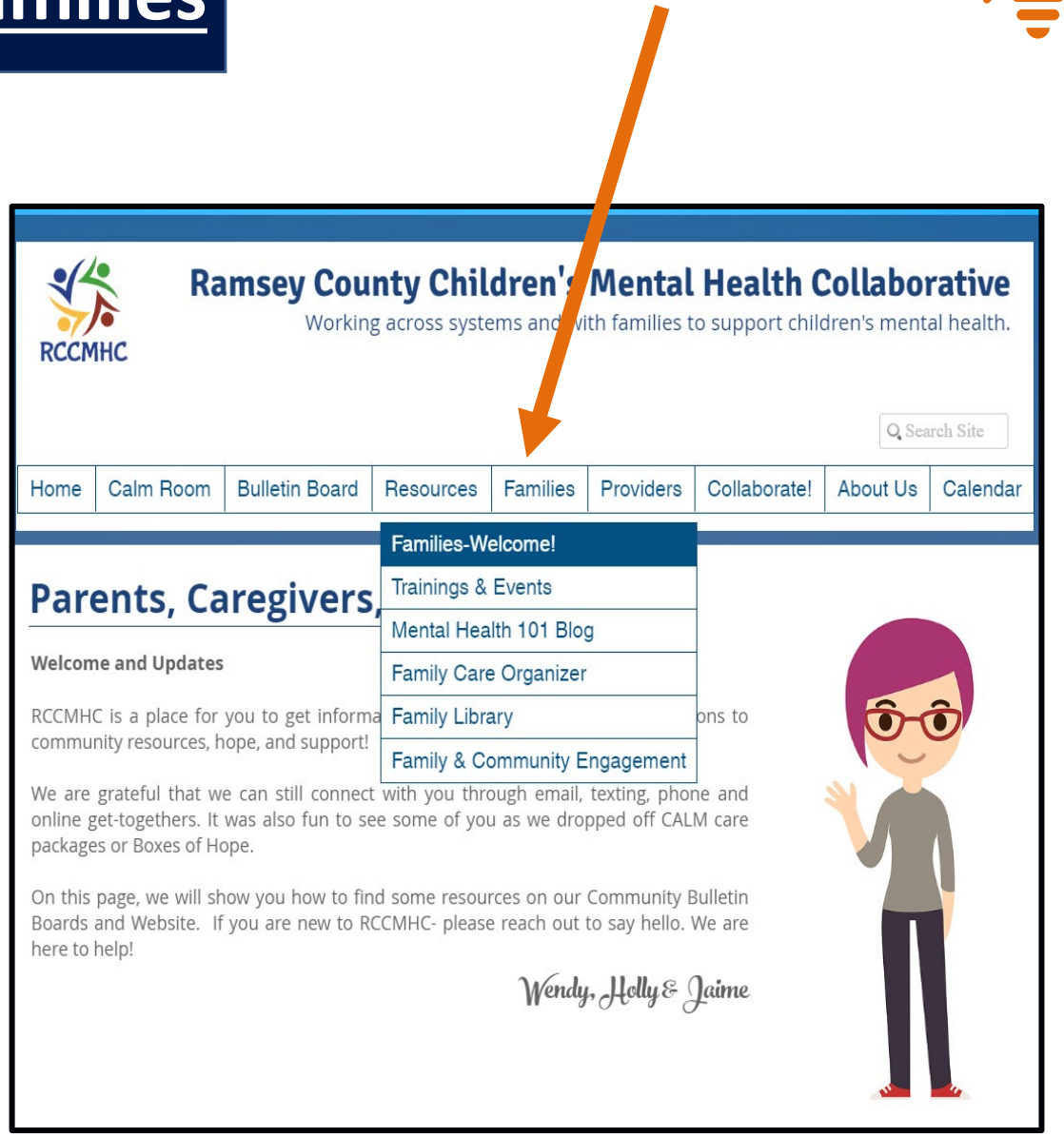


- Calm Room
- Bulletin Board
- Family Care Organizer
- Resources: Crisis, Hospital, Mental Health
- Family & Provider Trainings
- Family Library
- Make a Referral (professionals)
- More!

https://www.rccmhc.org/families

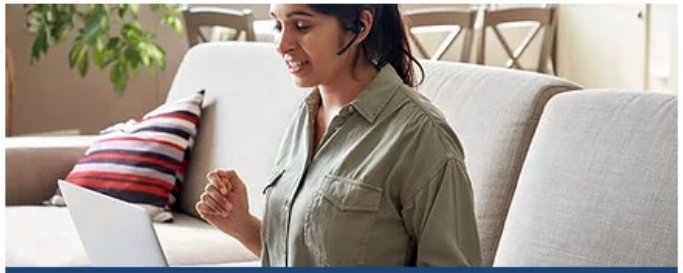
Visit our Families Welcome page

- Text us at 800-565-2575
- Crisis Resources
- Bulletin Board
- Trainings
- Blog
- Youth Mental Health Resources
- Online Care Organizer
- Family Library
- Family Services Committee
- Connect with the RCCMHC team
- And MORE!



FREE Family Trainings & Events

https://www.rccmhc.org/family-trainings



Tuesday Trainings 101

Tuesday Trainings 2.0

Wellbeing Wednesdays

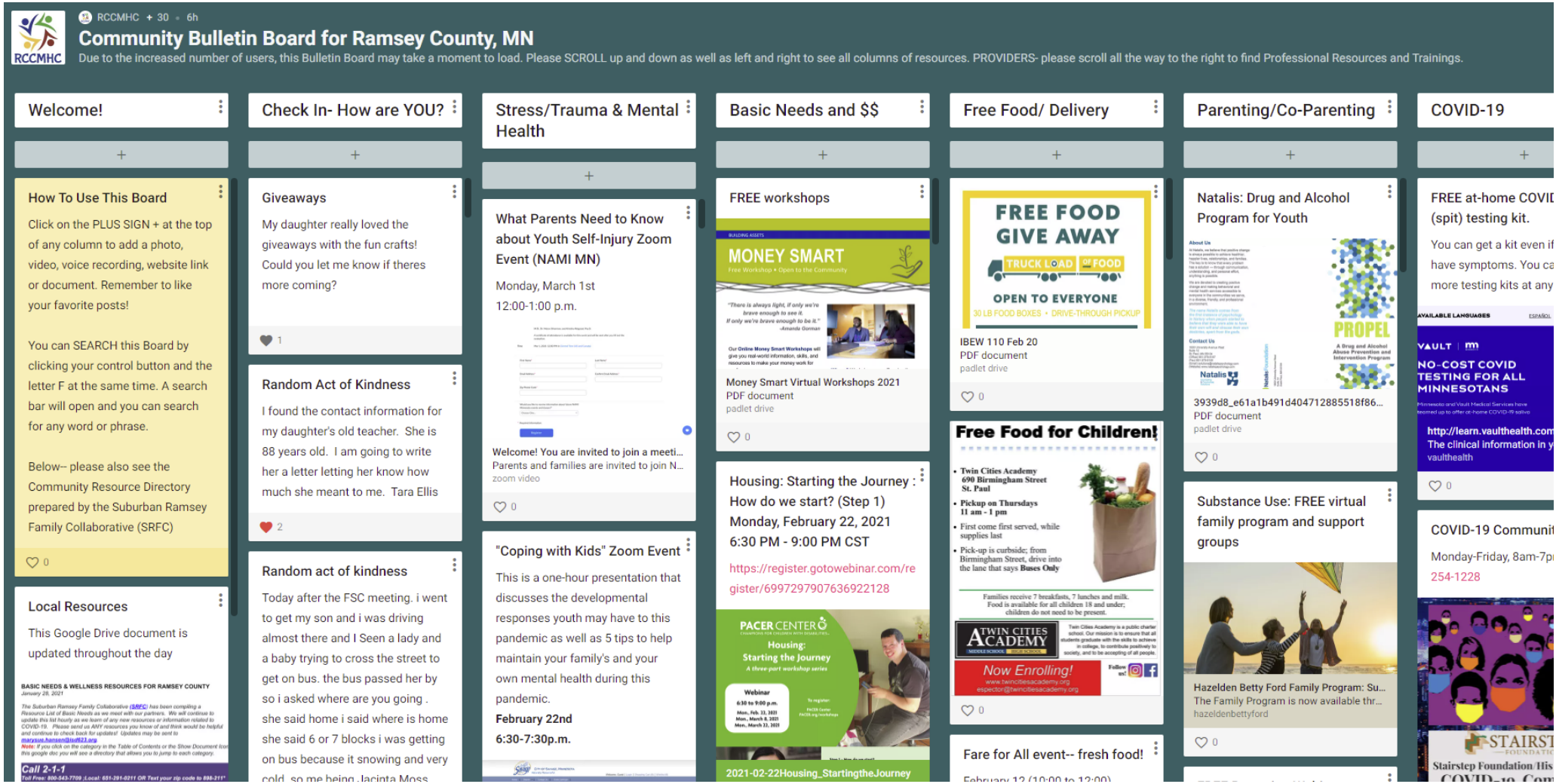
Monday's Moodies- just for youth!

Family Nights & Respite Fun

Resource Fairs & Scavenger Hunts

Community Bulletin Boards

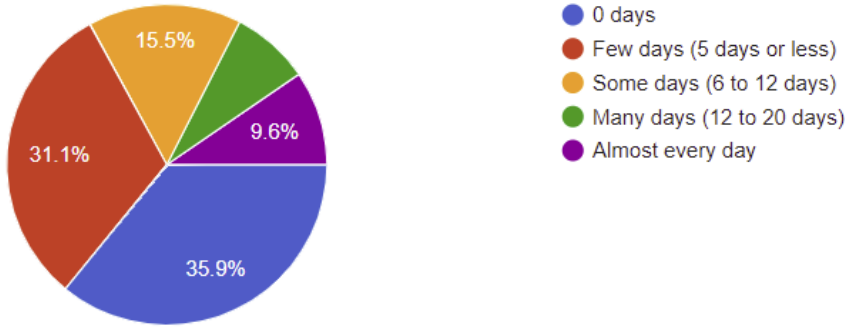
https://www.rccmhc.org/community-bulletin-board



Preliminary Data: RCCMHC Youth Survey

IN-PERSON: In the last month (30 days), how often do you get together with other kids through sports, community programs, clubs, or just "hanging out"?

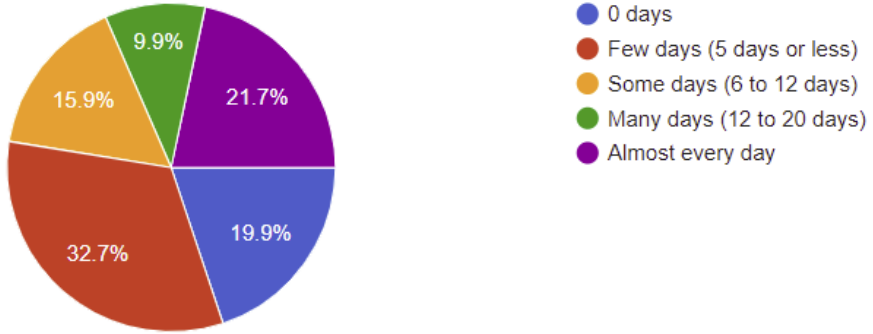
858 responses



67% are engaging with other youth IN PERSON for 5 days or less.

VIRTUAL: In the last month (30 days), how often do you get together with other kids through online clubs or virtual activities, texting, or phone calls (do NOT count time posting on social media)

900 responses



HALF of the youth who responded are not even engaging with other youth VIRTUALLY.

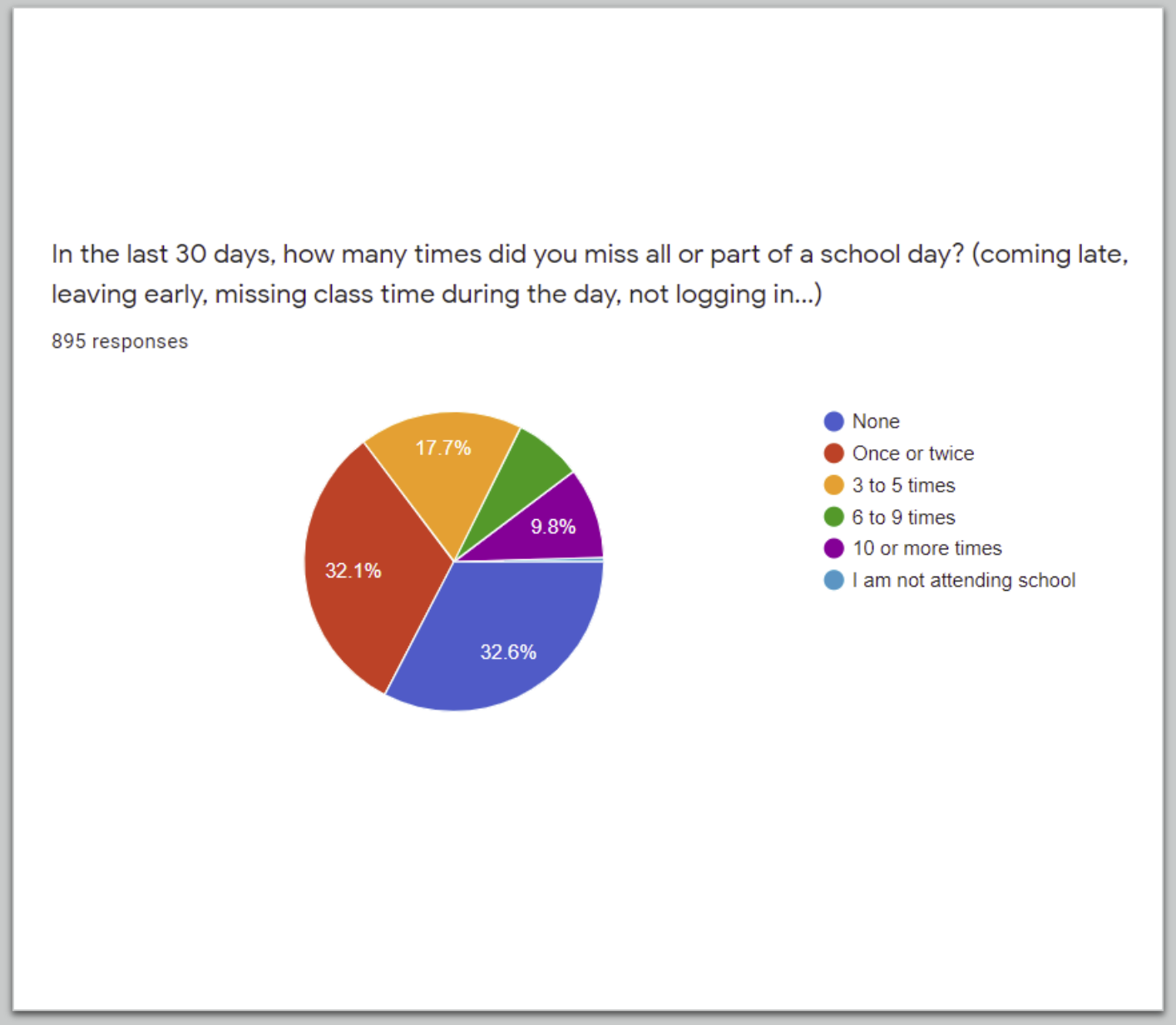
895 Youth Responded

287 youth missed school once or twice

158 youth missed 3 to 5 times

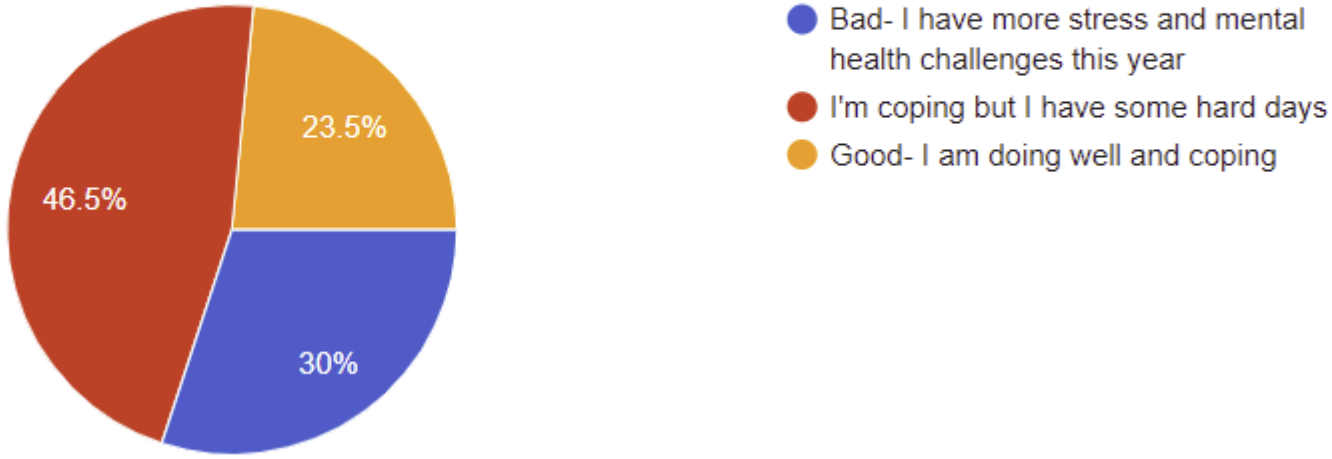
66 youth missed 6 to 9 times

88 youth missed 10 or more times



How has your stress/ mental health been this year?

912 responses



Only 23.5% of surveyed youth say they are doing well and coping.

We asked surveyed youth: What is stressing you out or hurting your mental health?

827 Youth Replied

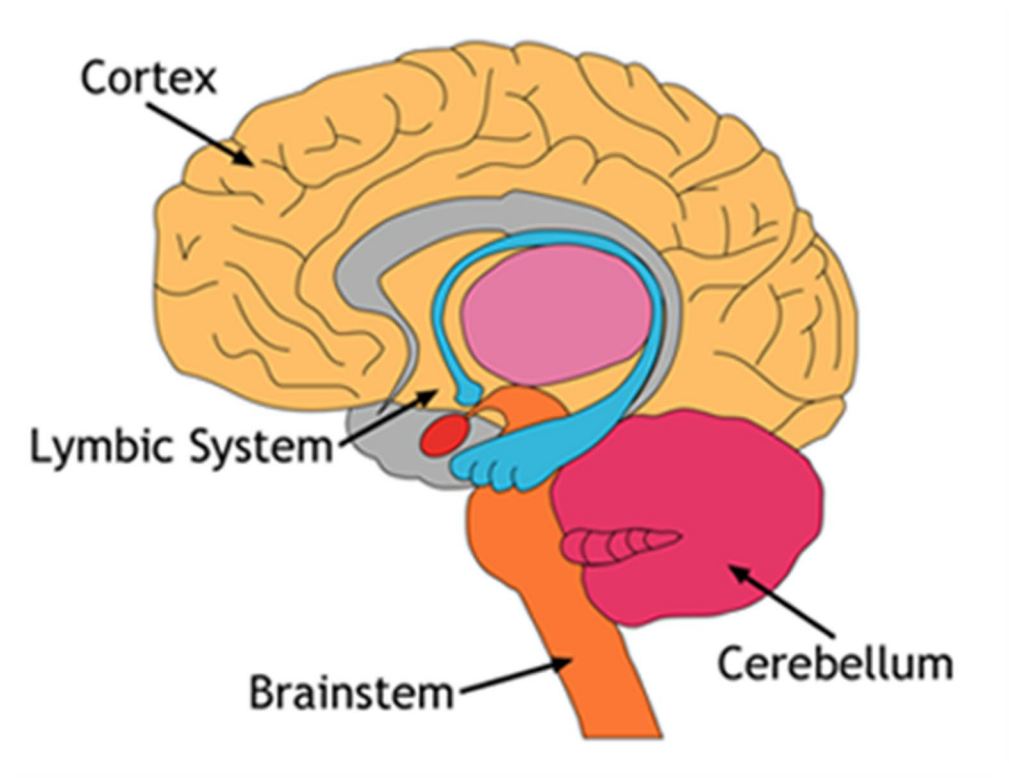
Sad; depressed; feeling down; hopeless	**400**
Anxious; afraid; worried; nervous	**472**
Isolated; feeling alone	352
Angry; short temper; fighting	239
Bored	**542**
Fidgety; restless; can't sit still	331
Stressed out; overwhelmed	**544**
Feeling sick a lot; stomachaches or headaches	142
Tired; not interested in doing anything	**471**
Nightmares; trouble sleeping	132
Sleeping too much or not sleeping enough	**398**

“NO youth will be returning to school unfazed. If 100% of your kids are affected by something, you don't need an expert; you've got to become the expert."

David Johnson, Co-Director of the Post Traumatic Stress Center
and associate clinical professor at Yale University School of Medicine; department of psychiatry.)

CHAT: What do you feel like you need to know in order to “become the expert”?

Each part of the brain has a job



BRAINSTEM

Basic body functions (breathing, swallowing, heart rate, blinking.) Sensory messages between the brain and the rest of the body (hot, pain, loud.)

CEREBELLUM

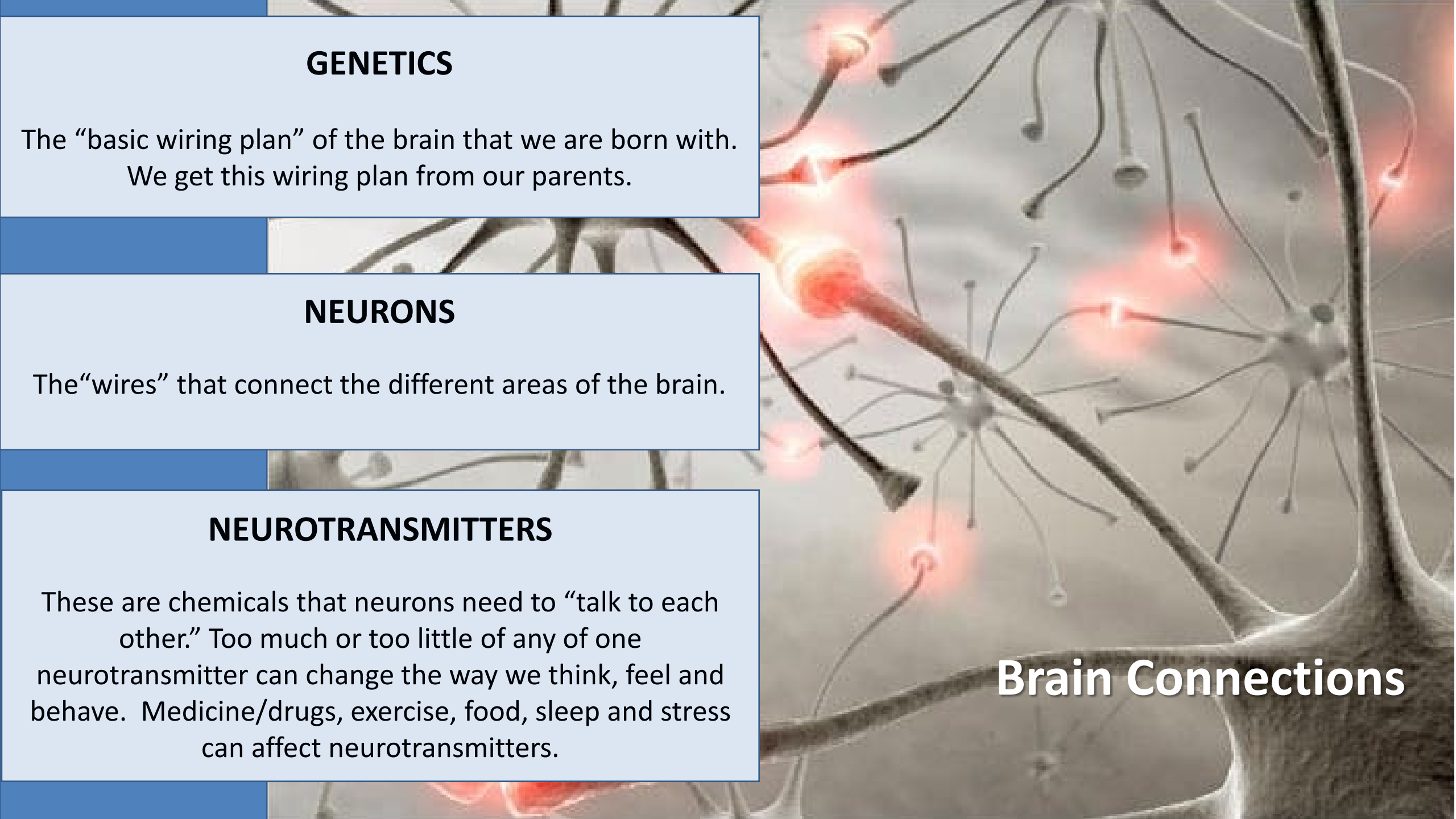
Muscle movements and balance.

LIMBIC SYSTEM (the “inner brain”)

Emotions, behavior, motivation, long-term memory, and the sense of smell. The “alarm center” (fight, flight, freeze)

CEREBRUM & CORTEX

Thinking, imagination, planning, reasoning, and impulse control.



GENETICS

The “basic wiring plan” of the brain that we are born with. We get this wiring plan from our parents.

NEURONS

The“wires” that connect the different areas of the brain.

NEUROTRANSMITTERS

These are chemicals that neurons need to “talk to each other.” Too much or too little of any of one neurotransmitter can change the way we think, feel and behave. Medicine/drugs, exercise, food, sleep and stress can affect neurotransmitters.

Brain Connections

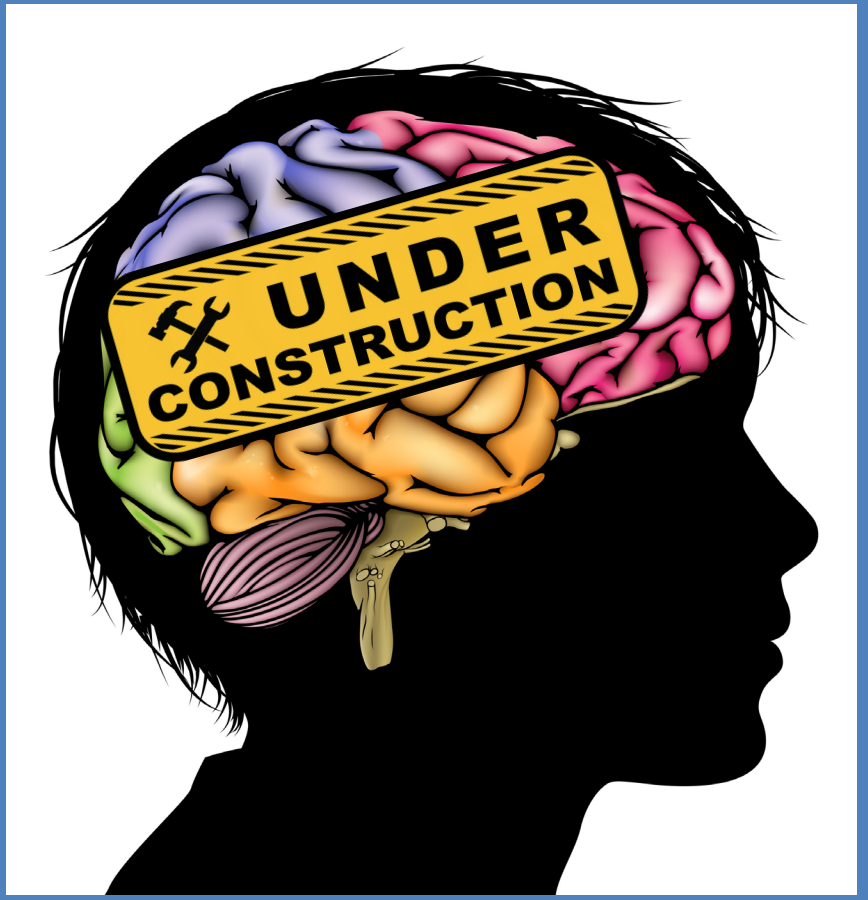
Brains are BUILT by experiences

The brain can reorganize and change its connections or “re-wire” itself.

Our Life Experiences…

- Can turn on or off certain parts of the brain’s genetic “wiring plan.”
- Can strengthen “wires.”
- Can cut “wires.”

By the time a child is 3 years old, lots of learning and new experiences have taken place. A 3-year old’s brain is double the size of a baby’s brain because of all these new brain cell connections!



Build Brains with Relationship: Secure Attachment

Child and teen brains need secure attachments with trusted caregivers.

THE POWER OF SHOWING UP

DANIEL J. SIEGEL, M.D. AND
TINA PAYNE BRYSON, PH.D.

Children who form secure attachments with their caregivers lead happier and more fulfilling lives. These bonds are formed when parents respond to the needs of their children by providing the Four S's:

SAFE:
Parents have two primary jobs when it comes to KEEPING kids safe, and making them FEEL safe: protect them from harm, and avoid becoming a source of fear and threat.

SEEN:
Truly seeing our kids is about three main things: (1) attuning to their internal mental state by being present; (2) coming to understand their inner life; and (3) responding to what we see in a timely and effective manner. This three-step process helps children "feel felt."

SOOTHED:
When a child is in a state of internal distress, that negative experience can be shifted by an interaction with a caregiver who attunes to and cares for her. She might still suffer, but at least she won't be alone in her pain. Based on this parent-directed "inter-soothing," she'll learn to provide "inner soothing" for herself.

SECURE:
The fourth "S" results from the first three. We give our kids a secure base when we show them that they are safe, that there's someone who sees them and cares for them deeply, and that we will soothe them in distress. They then learn to keep THEMSELVES safe, to see THEMSELVES as worthy, to soothe THEMSELVES when things go wrong.

https://youtu.be/yPwypAQ1RGM?t=16 (2:45 minutes)

Learn more about attachment

https://youtu.be/UaIWrWY-Omw
1:24 minutes

https://youtu.be/Ouzb_Urt7LQ
59:33 minutes

Build Brains with Relationship: Serve & Return

Brains need relationships with responsive and attentive caregivers.

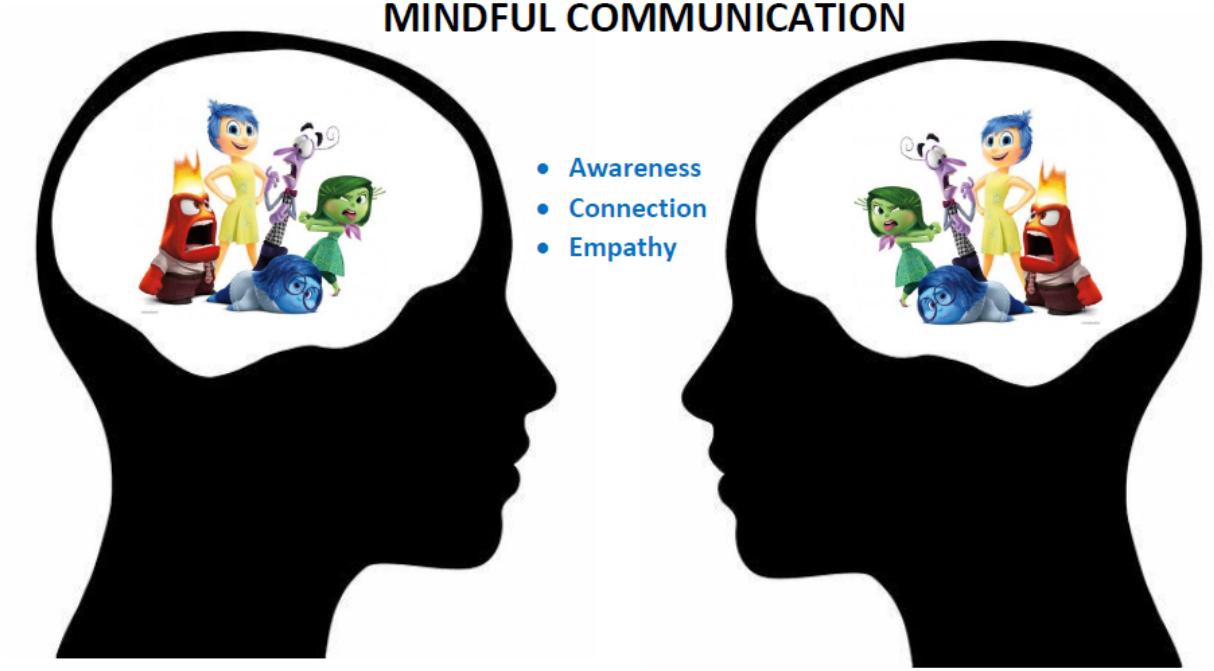
1. Share the Focus
2. Support and Encourage
3. Name It
4. Take Turns Back and Forth
5. Practice Endings and Beginnings

Can we use Serve and Return with older youth and teens? How?

https://youtu.be/KI0dOuZ8fZk?list=PLBBHukUBKdDgQ5nbvvpB6d6vYkbHWMkbB

Build Brains with Relationship: “Feeling Felt”

MINDFUL COMMUNICATION



- Awareness
- Connection
- Empathy

ASK: What emotions are talking in MY brain?

ASK: What emotions are talking in YOUR brain?

Learn more about serve & return

5 Steps for Brain-Building Serve and Return

from Filming Interactions to Nurture Development (FIND)

Child-adult relationships that are responsive and attentive—with lots of back and forth interactions—build a strong foundation in a child's brain for all future learning and development. This is called "serve and return," and it takes two to play! Follow these 5 steps to practice serve and return with your child.

https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2017/06/HCDC_ServeReturn_for_Parents_Caregivers_2019.pdf

https://youtu.be/KNrnZag17Ek

Ages/ Stages & Realistic Expectations

(Babies can't walk… so they don't run marathons.)

Brains have different abilities at each age/stage of life. So kids will act, feel, and learn differently as their brains grow.

Mental health disorders, developmental delays, and learning disorders may also impact how your child acts, feels, or learns.

Health, hunger, stress, tiredness, and pain affect how we act, feel, or learn (no matter how old we are!)

Personality plays a role too! Everyone is UNIQUE.

Baby/Toddler Brains (0 to 3)…

- grow as they form attachments and learn to trust caring adults.
- learn to move, walk, and understand words.
- learn by playing and experiencing life.
- need praise and positive reinforcement.
- need your help to calm down.
- need your help to be and feel safe.
- can't understand time or abstract ideas
- can't understand or guess other people's feelings or thoughts
- can follow 2 step directions by age 3 (get the ball and give it to me)
- will test behaviors as they begin to understand cause and effect.
- can understand more than they can explain with words.
- are like sponges- they soak up and copy what they see!

CHAT

One of these is NOT a realistic expectation:

A. Cries when tired
B. Shares & takes turns
C. Climbs on furniture

Preschool Brains (3 to 6)…

- engage in lots of questioning and exploring!
- develop memory and imagination.
- try to understand what is real versus not real (pretend)
- are learning how to understand bigger words/ longer sentences
- start to make friends
- have short attention spans (5 to 10 minutes)
- start to develop self-control (ages 3 ½ to 4 years)
- can get overwhelmed by mental demands
- can understand cause and effect better
- start to use empathy
- start to understand time- before and after
- like routines (bath time, story time, bedtime)

REMEMBER: new brain skills will go “offline” during stress or when hungry/tired etc.

CHAT

One of these is NOT a realistic expectation:

A. Is afraid of monsters
B. Has a meltdown
C. Cleans up toys for 15 minutes

Middle Childhood Brains (ages 6 to 12)…

- can start to use and understand logic
- are becoming more independent
- are learning social skills to interact with peers.
- can compare self to others
- use and understand bigger words and longer sentences.
- can understand rules and pay attention longer.
- can control impulses and regulate emotions better
- can understand and reflect on things that they see and touch.
- can follow a series of commands / directions
- can understand consequences- “if this… then that.“
- can understand time, calendars, and planning
- can recognize many different facial expressions

LOTS of growth happening in the prefrontal cortex of the brain!

CHAT

One of these is NOT a realistic expectation:

A. Wants to fit in with other kids
B. Can play a board game with the family
C. After a very stressful day, is able to calmly discuss a disagreement with his or her sibling.

Teen Brains (13 to 18)…

Brain chemistry changes during puberty.
The teen brain remodels and specializes itself.

- feel emotions in a stronger way than other ages
- make decisions and problem solve with the emotional and reactive part of the brain
- are impulsive
- can easily "feel bored."
- are eager to try new things
- can use abstract reasoning and think about big ideas or hypothetical situations with enough time and access to info.
- tend to feel self conscious (like everyone is watching them.)
- naturally tend to stay awake later at night
- are more susceptible to addiction.
- Often read other's emotions incorrectly.

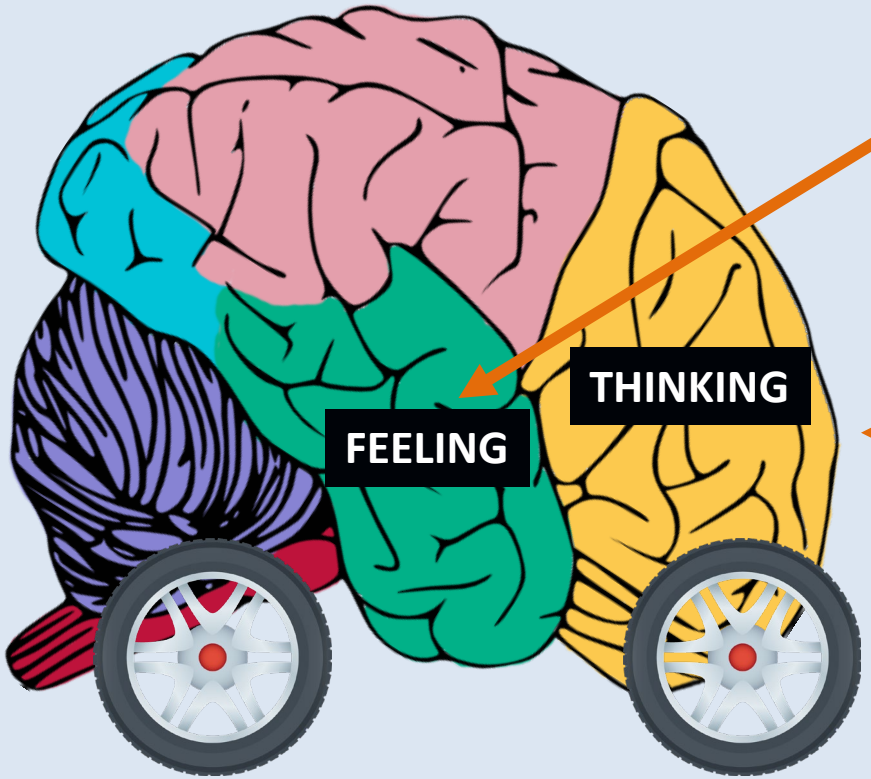
CHAT

One of these is NOT a realistic expectation:

A. Wakes up early
B. Has a meltdown about a friendship or dating issue
C. Takes risks or tries drugs/alcohol.

Teen Brains

This car has left the factory with a strong motor, accelerator pedal, and plenty of gasoline… but the steering wheel and the breaks don't work very well yet!



Your teen's "feeling brain" is ready to go! Teens can use their "thinking brain", but they need time and access to information. In the "heat of the moment" or if they are tired or stressed out… they will rely on their "feeling brain" instead.

The prefrontal cortex is the LAST part of the brain to mature (age 24.) This area of the brain is involved in decision-making, planning and self-control.

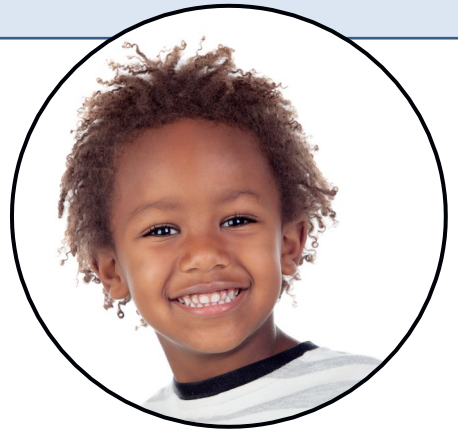
Ages/Stages & Behavior + Realistic Expectations

BABY/TODDLER

Needs your help to calm down. Use praise & positive reinforcement. Use distraction & re-direction instead of punishment.

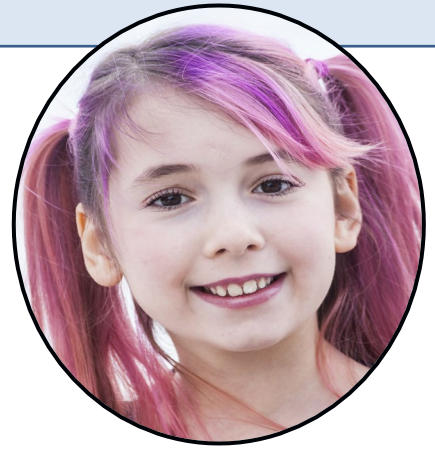
PRESCHOOL

Set limits with a few simple rules. Use pictures. Connect and Re-direct. Offer Calm Down tools and strategies. Use less criticism and more warmth/praise. Try to teach instead of discipline.



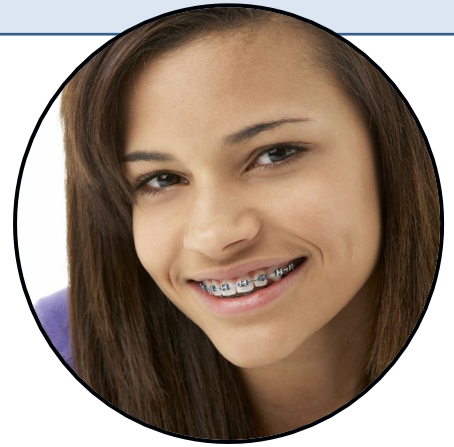
MIDDLE CHILDHOOD

Your child could help you to develop a simple list of house rules. Use short, clear instructions. Use natural & logical consequences. Use appropriate motivators. Older kids may respond to withholding privileges. Communicate- talk it out.



TEEN

Set rules in a non-critical way. Try using a "contract" with your teen. A Calm Down space & tools are still helpful. Timing is everything- communicate when your teen is most receptive. Allow enough time and information to help teen problem solve.



Check Your Expectations

Before you respond to your child's behavior, ask yourself…

- Why do I have this expectation? Where did it come from?
- Does it fit my child's age/stage, abilities, personality & background?
- Is it based on my child’s needs? Have I considered health, hunger, stress, tiredness, and pain?
- What purpose does it serve?
- Am I being reasonable?

Getting to CALM:

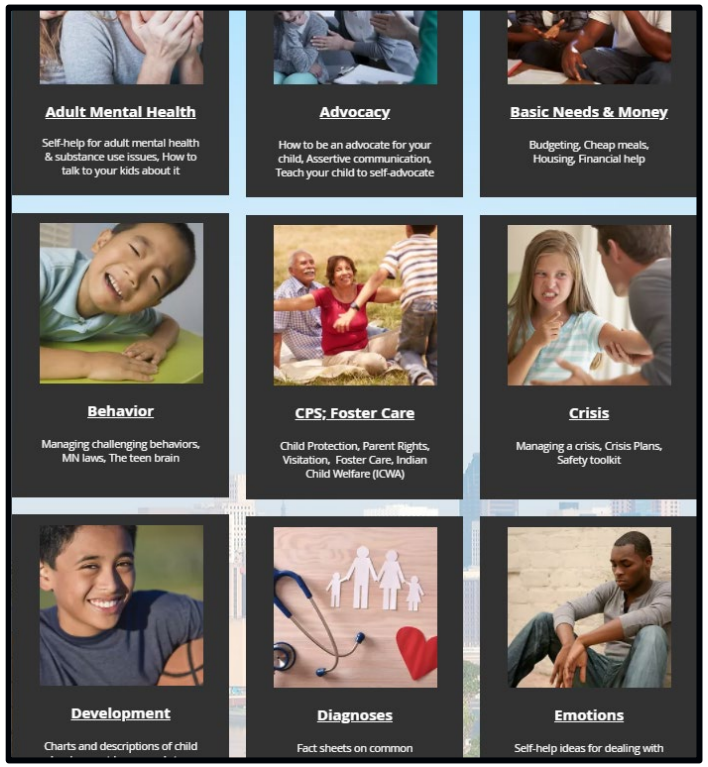
Sometimes a child/teen might be too agitated or upset to talk. (hint: DON'T SAY CALM DOWN)

https://youtu.be/XhqHOHis-IY (3 min)

- RELAX & REFLECT to manage your own response.
- Get rid of the audience (other kids or adults)
- Use a respectful tone of voice.
- Don't engage with power struggles/ fights
- Move slowly. Use less eye contact. Give space.
- Use the person's name.
- Connect with the "feeling brain."
- Try a coping skill/ re-direct to a place to calm down.
- Use close-ended questions, express support, offer options.
- Seek support from someone with expertise in mental health
- Get immediate help if there are safety concerns

1. Connect with the "feeling/reacting" brain (it needs to feel safe, seen, soothed, and secure.)
2. After the person is calm and feels safe, you can talk to their "thinking" brain and use open ended questions

Learn more about ages/stages



https://www.rccmhc.org/family-library

https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/index.html

Learn more: Is this just a stage?

Children and Mental Health
Is This Just a Stage?

Points to Remember

- Always seek immediate help if a child engages in unsafe behavior or talks about wanting to hurt him or herself or someone else.
- Seek help when a child's behavior or emotional difficulties last for more than a few weeks and are causing problems at school, at home, or with friends.
- A thorough evaluation can help determine if treatment is necessary, and which treatments may be most effective.
- Early treatment can help address a child's current difficulties and can also help prevent more serious problems in the future.

When to Seek Help

Even under the best of circumstances, it can be hard to tell the difference between challenging behaviors and emotions that are consistent with typical child development and those that are cause for concern. It is important to remember that many disorders like anxiety, attention deficit hyperactivity disorder, and depression, do occur during childhood. In fact, many adults who seek treatment reflect back on how these disorders affected their childhood and wish that they had received help sooner. In general, if a child's behavior persists for a few weeks or longer, causes distress for the child or the child's family, and interferes with functioning at school, at home, or with friends, then consider seeking help. **If a child's behavior is unsafe, or if a child talks about wanting to hurt him or herself or someone else, then seek help immediately.**

Young children may benefit from an evaluation and treatment if they:

- Have frequent tantrums or are intensely irritable much of the time
- Often talk about fears or worries
- Complain about frequent stomachaches or headaches with no known medical cause
- Are in constant motion and cannot sit quietly (*except* when they are watching videos or playing videogames)
- Sleep too much or too little, have frequent nightmares, or seem sleepy during the day
- Are not interested in playing with other children or have difficulty making friends
- Struggle academically or have experienced a recent decline in grades
- Repeat actions or check things many times out of fear that something bad may happen.

NIH National Institute of Mental Health

- When to seek help
- Where to start
- Understanding evaluations
- Treatment options
- Choosing a mental health professional
- Working with the school

https://www.nimh.nih.gov/health/publications/children-and-mental-health/20-mh-8085-childrenmenthealth_157169.pdf

Age that symptoms "typically" emerge

Anxiety Disorders, Age 6

Behavior Disorders, Age 11

Mood Disorders, Age 13

Substance Use Disorders, Age 15

RCCMHC's Training Film

Children's Mental Health: The Whole Story is a locally-produced, documentary-style training film about children's mental health and trauma. Narrated by a teen with mental illness, this film uses real stories from families and providers across multiple systems. It offers a down to earth and holistic look at challenges, strengths, and opportunities for intervention. It also talks about policy- what works and what is needed.

https://www.rccmhc.org/whole-story

"Just because you see something on the outside, you don't know what's going on in the inside- you don't know the in-depths of the family that's involved- all you're seeing is the action of a person or a child you don't see what's going on internally or why that child is the way he is."

What do you think Safiya means?

How can you apply this understanding to your work with youth/families?

EMOTIONS

BEHAVIOR

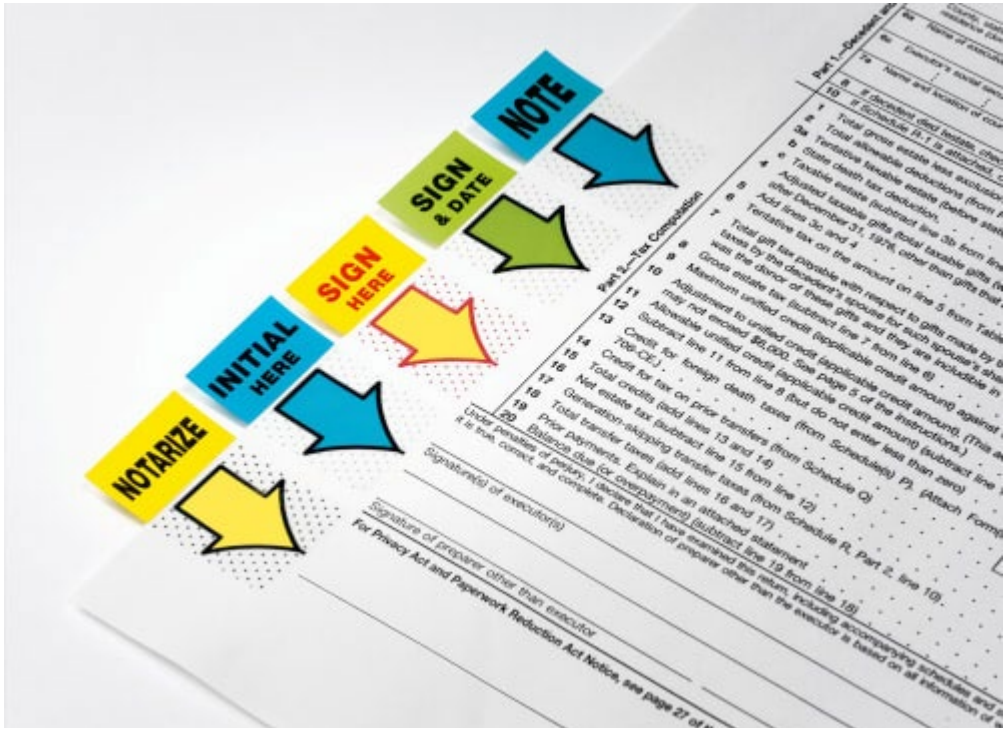
THINKING

PHYSICAL SYMPTOMS

Categories of Common Disorders

Anxiety Disorders
Bipolar and Related Disorders
Depressive Disorders
Disruptive, Impulse-Control, and Conduct Disorders
Neurodevelopmental Disorders
Obsessive Compulsive and Related Disorders
Schizophrenia Spectrum and Other Psychotic Disorders
Substance-Related and Addictive Disorders
Trauma and Stressor-Related Disorders

The diagnosis doesn't matter as much as the symptoms and the intervention.



DANGER

ELECTRICAL HAZARD

Emotions

- Mood change that lasts at least 2 weeks
- Intense feelings or mood swings
- Inability to cope; Worry or stress that interferes with daily activities
- Frequent nightmares
- Difficulty dealing with changes to routine

Behavior

- Behavior changes
- Frequent fighting, temper tantrums , severe agitation
- Difficulty concentrating, hyperactivity, impulsivity, risk-taking, talking rapidly
- "BabyTalk“ or younger behavior
- Self-injury and/or suicidal thoughts or statements
- Withdrawal from friends
- Substance Abuse
- Poor eye contact and communication

Body

- Unexplained weight loss; Frequent vomiting or use of laxatives
- Physical complaints- headaches, stomachaches
- Changes in appetite or sleep
- Extreme energy or lack of energy
- Oversensitive or under sensitive to light, sound, touch

Thinking

- Confused thinking or difficulty thinking
- Detachment from reality (delusions), paranoia or hallucinations
- Difficulty reading other people’s emotions

WARNING SIGNS (danger/safety)

Always pay attention to warning signs that indicate a child may hurt himself or others. Confused thinking, excessive anger, strange ideas, and difficulty completing daily tasks are also signs that something more serious may be going on.

- Talking about killing self or saying he/she wants to die
- Sudden interest in ways/methods to die (guns, hanging etc.)
- Depression/sadness symptoms, hopelessness, feeling isolated
- Talking about being in unbearable pain/ feeling trapped
- Unexplained cuts or bruises
- Talking about being a burden to others
- Increased use of drugs or alcohol
- Confused thinking, “talking crazy”
- Taking unusual risks or acting recklessly
- Changes in sleep patterns
- Extreme mood swings
- Rage or seeking revenge
- Withdrawing (from home/friends/activities)
- Making plans to die (Giving away possessions., writing a suicide note, planning how to do it.)

CALL 911: DANGER

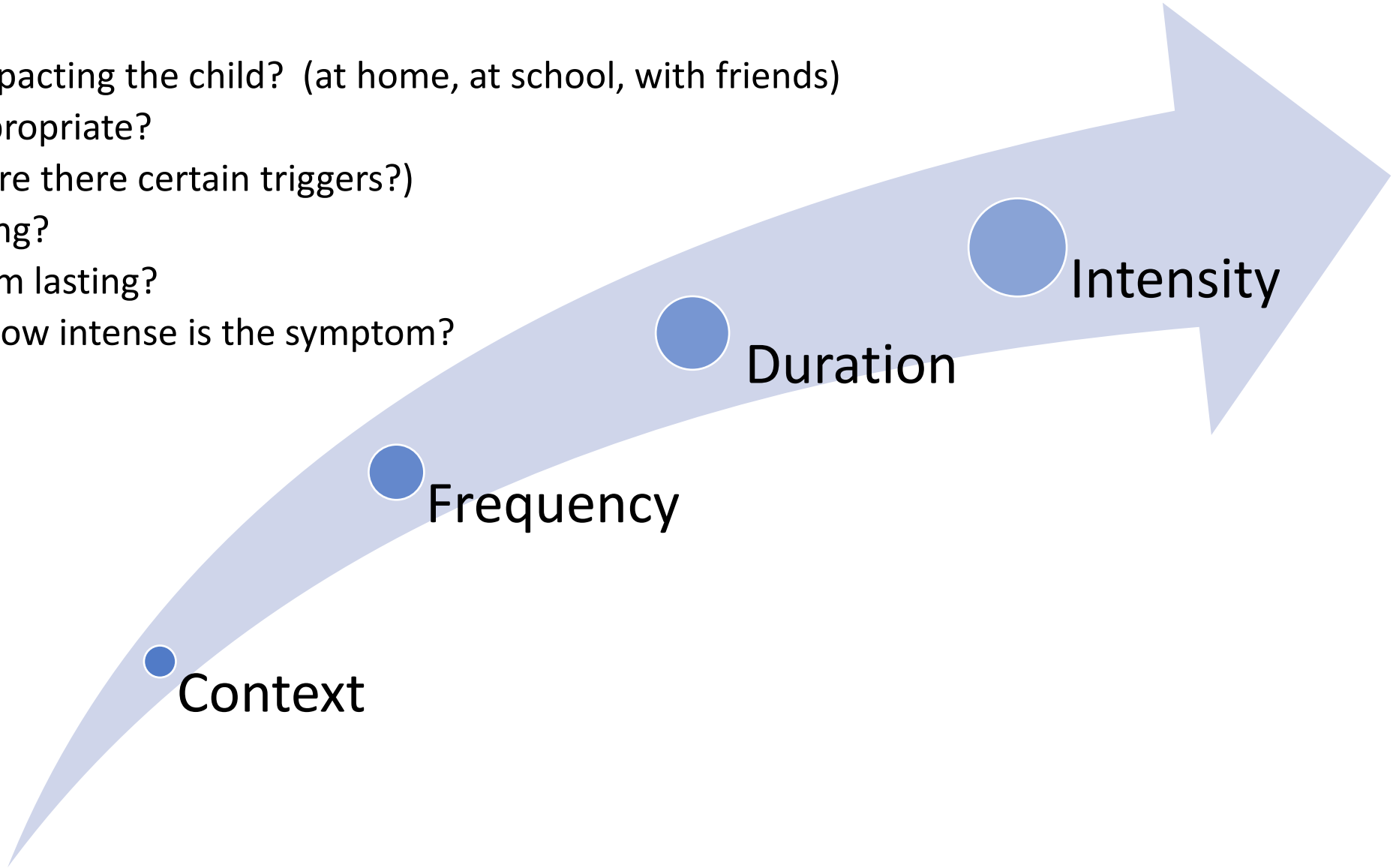
CALL 651-266-7878

Ramsey County Crisis Response

24/7 mobile response
24/7 phone intervention
De-escalate before crisis
Non-emergency transport
Stabilization after crisis
Assessments, resource connections

Parents/caregivers should watch for signs that their child may need to be evaluated by a professional.

- How is the symptom impacting the child? (at home, at school, with friends)
- Is the symptom age-appropriate?
- When is it happening (are there certain triggers?)
- How often is it happening?
- How long is the symptom lasting?
- On a scale of 1 to 10… how intense is the symptom?



Try a behavior/mood tracker…

- What happened BEFORE the behavior?
- What exactly did your child DO or SAY? Hear and see what your child is saying.
- What happened AFTER the behavior?
- How long has this been going on?
- Are these “new” behaviors?

Parents may want to try a behavior/mood tracker to see if they can discover any patterns or triggers.

https://www.rccmhc.org/all-in-one-place

Behavior/Mood Tracker

My Child’s Name _____

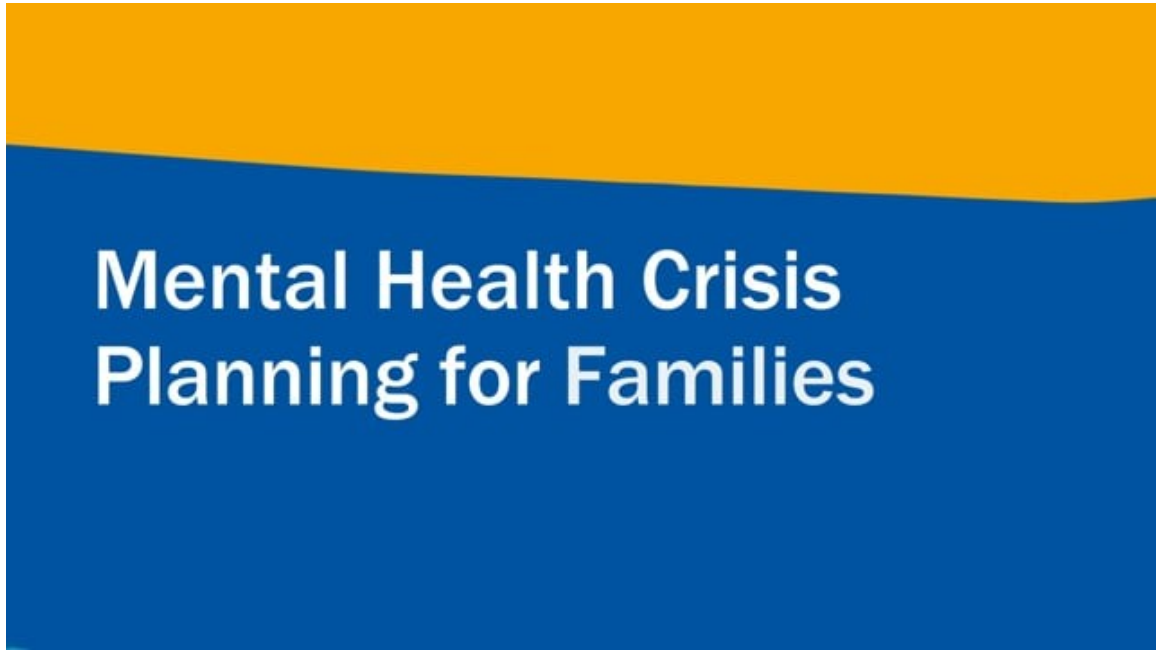
Day/Time	Describe Behavior/Mood	How Long Did It Last?	What Happened BEFORE	What Happened AFTER

Family Care Organizer

https://www.rccmhc.org/all-in-one-place

Learn more about: Mental Health Crisis

Youth mental health warning signs, suicide warning signs, crisis plans & crisis management.



https://vimeo.com/313212936

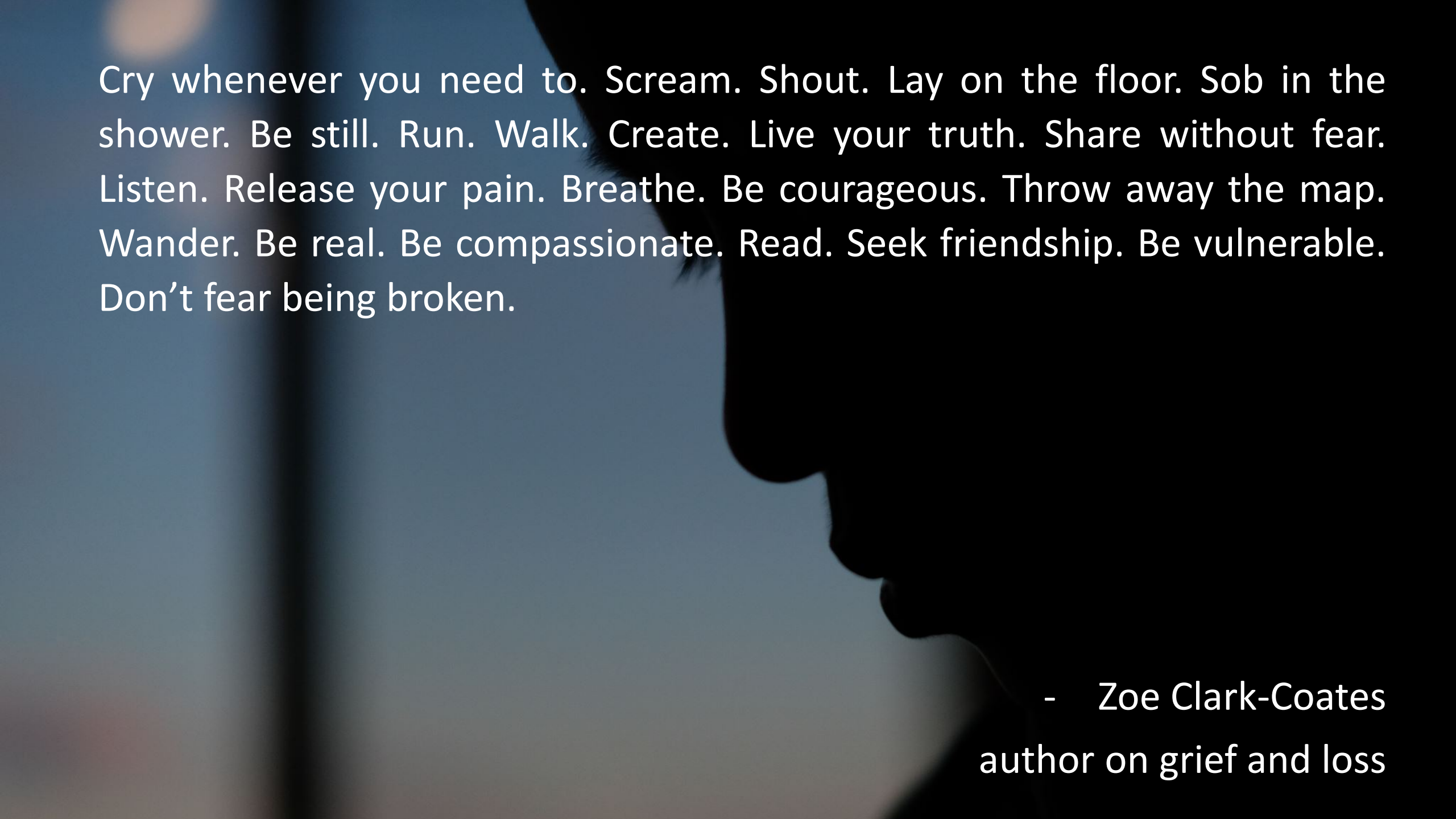
https://www.rccmhc.org/crisis-

Don’t forget to look at the WHOLE child

Some symptoms may be caused by a mental health disorder. But they could also be caused by a physical health problem or another reason (migraines, headaches, eating and digestion problems, allergies, medication not working, thyroid conditions, drug use, stress…)

Encourage parents to make an appointment with their child’s doctor or other medical professional.

In addition to using a BEHAVIOR/MOOD TRACKER, suggest the parent talk to the child's teacher, close friends or loved ones, or other caregivers to see if they've noticed any changes in your child's behavior. They can share this information with the child's doctor, too.


Cry whenever you need to. Scream. Shout. Lay on the floor. Sob in the shower. Be still. Run. Walk. Create. Live your truth. Share without fear. Listen. Release your pain. Breathe. Be courageous. Throw away the map. Wander. Be real. Be compassionate. Read. Seek friendship. Be vulnerable. Don’t fear being broken.
- Zoe Clark-Coates
author on grief and loss

Grief and Loss

The Center for Grief and Loss-- Family Means
651-641-0177
https://www.griefloss.org/

Children's Hospital Bereavement Services
612-813-7216
https://www.childrensmn.org/services/family-services/bereavement/

For School Staff

- This website offers videos and downloadable grief support modules for school personnel. https://grievingstudents.org/
- Sample scripts & videos: https://www.schoolcrisiscenter.org/resources/covid-19-pandemic-resources/
- Coping with a parent's suicide: https://childmind.org/article/coping-with-a-parents-suicide/
- Traumatic grief: https://www.nctsn.org/what-is-child-trauma/trauma-types/traumatic-grief
- Supporting Children with Traumatic Grief: What Educators Need to Know https://tfcbt.org/wp-content/uploads/2014/07/SPI4008271.pdf
- Supporting Students after the Death of a Family Member or Friend https://www.esc3.net/cms/lib/TX00001506/Centricity/Domain/14/SupportingYourStudents2013%20AFT.pdf

Heal the Healer (Dr. Aja King)

https://www.rccmhc.org/recorded-trainings-professional

Survival Brain/ “alarm system”

STRESS

The Brain, Body & Toxic Stress

Over time… the body stays in a constant state of inflammation.

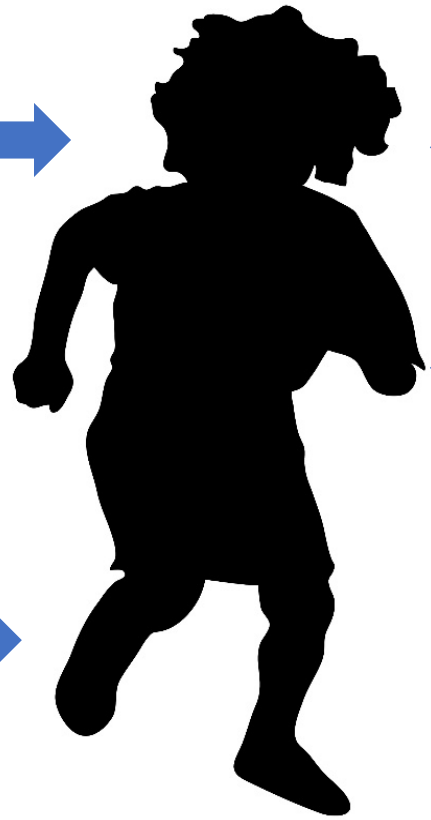
Can you feel COVID19 stress in your body? Do you see it in your children/students?

Prefrontal cortex ("thinking brain") shuts down and limbic system ("survival brain") takes over.

Thyroid reduces output to keep body cooler

Liver releases glucose for muscle fuel/energy.

Oxygen, nutrients, and blood flow pushed to muscles. Muscles tighten.

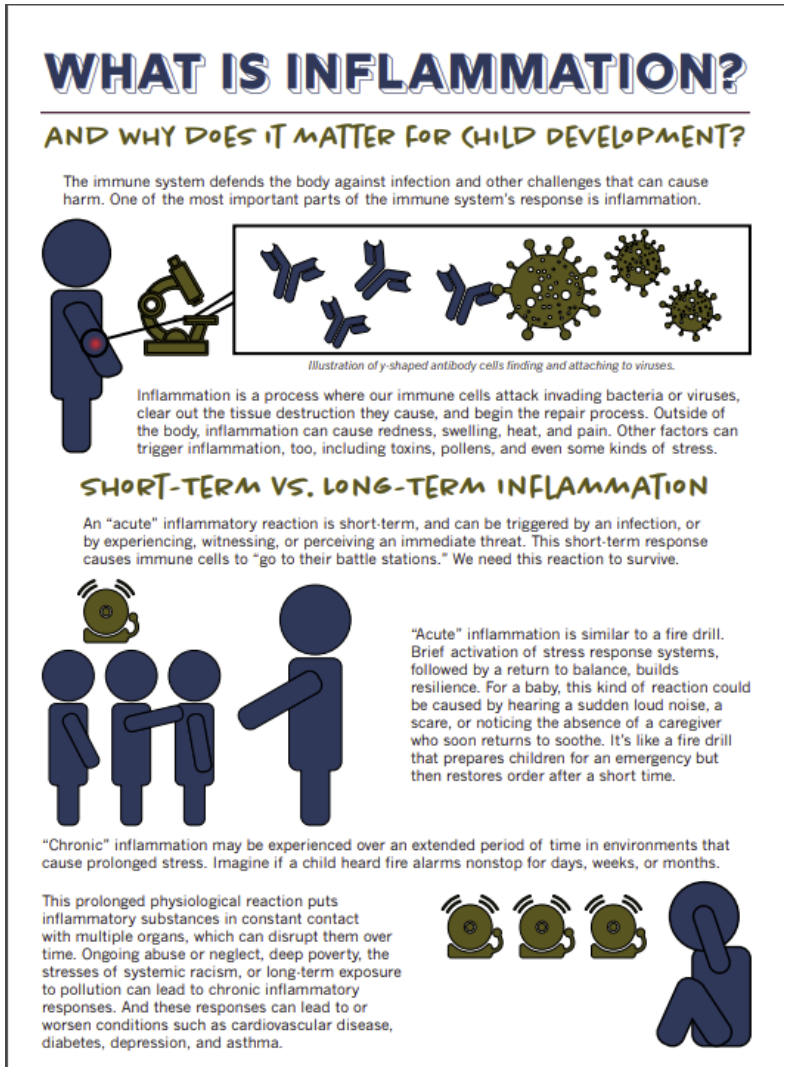


Cortisol released. Blood pressure and blood sugar increase. Immune system decreases.

Adrenaline released to increase strength for Fight/Flight. Increased alertness and reaction time. (Sleep turned off)

Digestion and urine slows or stops.

Learn more about inflammation



WHAT IS INFLAMMATION?

AND WHY DOES IT MATTER FOR CHILD DEVELOPMENT?

The immune system defends the body against infection and other challenges that can cause harm. One of the most important parts of the immune system's response is inflammation.

Illustration of y-shaped antibody cells finding and attaching to viruses.

Inflammation is a process where our immune cells attack invading bacteria or viruses, clear out the tissue destruction they cause, and begin the repair process. Outside of the body, inflammation can cause redness, swelling, heat, and pain. Other factors can trigger inflammation, too, including toxins, pollens, and even some kinds of stress.

SHORT-TERM VS. LONG-TERM INFLAMMATION

An "acute" inflammatory reaction is short-term, and can be triggered by an infection, or by experiencing, witnessing, or perceiving an immediate threat. This short-term response causes immune cells to "go to their battle stations." We need this reaction to survive.

"Acute" inflammation is similar to a fire drill. Brief activation of stress response systems, followed by a return to balance, builds resilience. For a baby, this kind of reaction could be caused by hearing a sudden loud noise, a scare, or noticing the absence of a caregiver who soon returns to soothe. It's like a fire drill that prepares children for an emergency but then restores order after a short time.

"Chronic" inflammation may be experienced over an extended period of time in environments that cause prolonged stress. Imagine if a child heard fire alarms nonstop for days, weeks, or months.

This prolonged physiological reaction puts inflammatory substances in constant contact with multiple organs, which can disrupt them over time. Ongoing abuse or neglect, deep poverty, the stresses of systemic racism, or long-term exposure to pollution can lead to chronic inflammatory responses. And these responses can lead to or worsen conditions such as cardiovascular disease, diabetes, depression, and asthma.

https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2020/08/InflammationInfographic_FINAL.pdf

Toxic Stress

Signs/Symptoms:

- Hard to learn; memory problems
- Hard to focus/ hard to solve problems
- Hard to communicate
- Hard to control impulses
- Sleeping problems (too much/too little)
- Hard to manage pain
- Eating problems (too much/too little)
- Hard to regulate emotions- short-tempered, anxious, fidgety, aggressive, moody
- Frequent colds or flu
- Stomach aches, headaches, chest pain
- Using alcohol, cigarettes/drugs to relax
- “Spaced out”/ in a daze or dizzy
- Grinding teeth; clenched jaw
- Muscle tightness; hard to relax
- Diarrhea or constipation; upset stomach
- Clumsy; accident-prone; feeling distracted

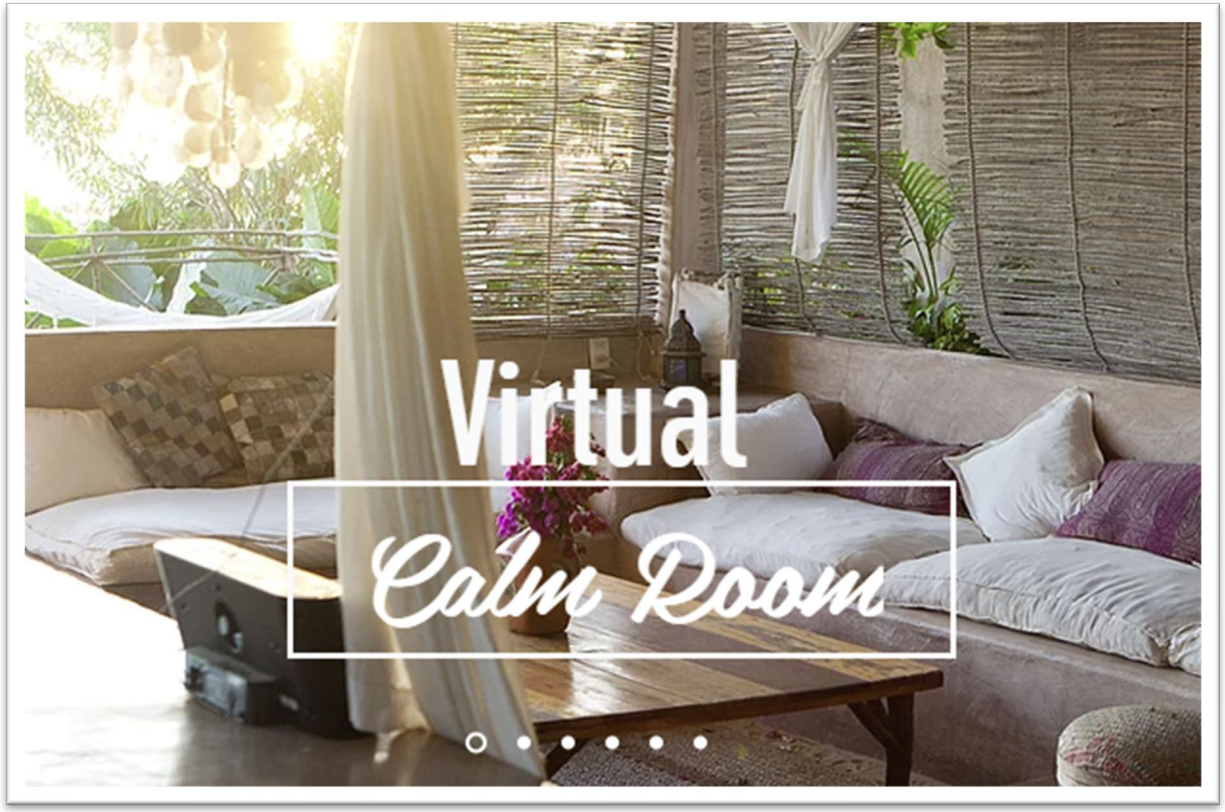
Too much stress for too long can disrupt the brain’s “wiring” and negatively impact the whole body.

But we can protect kids’ brains/bodies with…

1. A caring adult
2. Coping skills
3. Brain-body health promotion

https://youtu.be/KdTiPGVZNes (9:37 min)

Learn more: Virtual CALM Room



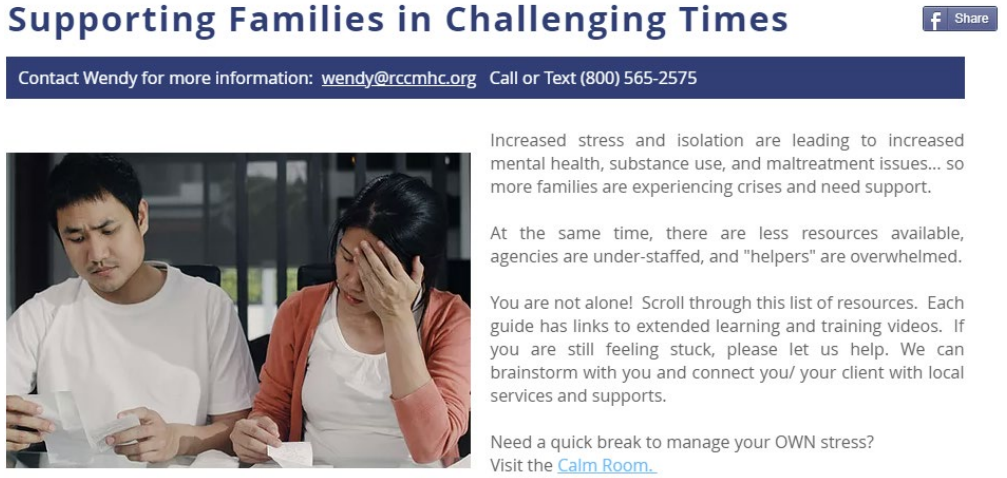
60+ free calm down strategies
for adults and youth

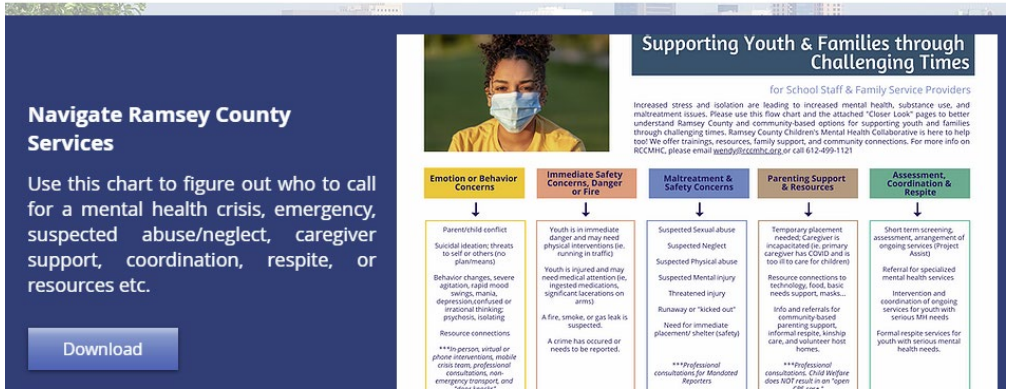
https://www.rccmhc.org/breathe

Learn more about the Brain, Body and Toxic Stress

Dr Nadine Burke Harris is an expert on Toxic Stress, ACEs and Resilience. https://youtu.be/Wbn9YiSrh9U

Learn More: supporting families & keeping youth safe





https://www.rccmhc.org/families-in-crisis

Brain Break: Practice Autonomic Arousal

1 minute video teaches physiological sigh

https://youtu.be/HbFtryuhh54

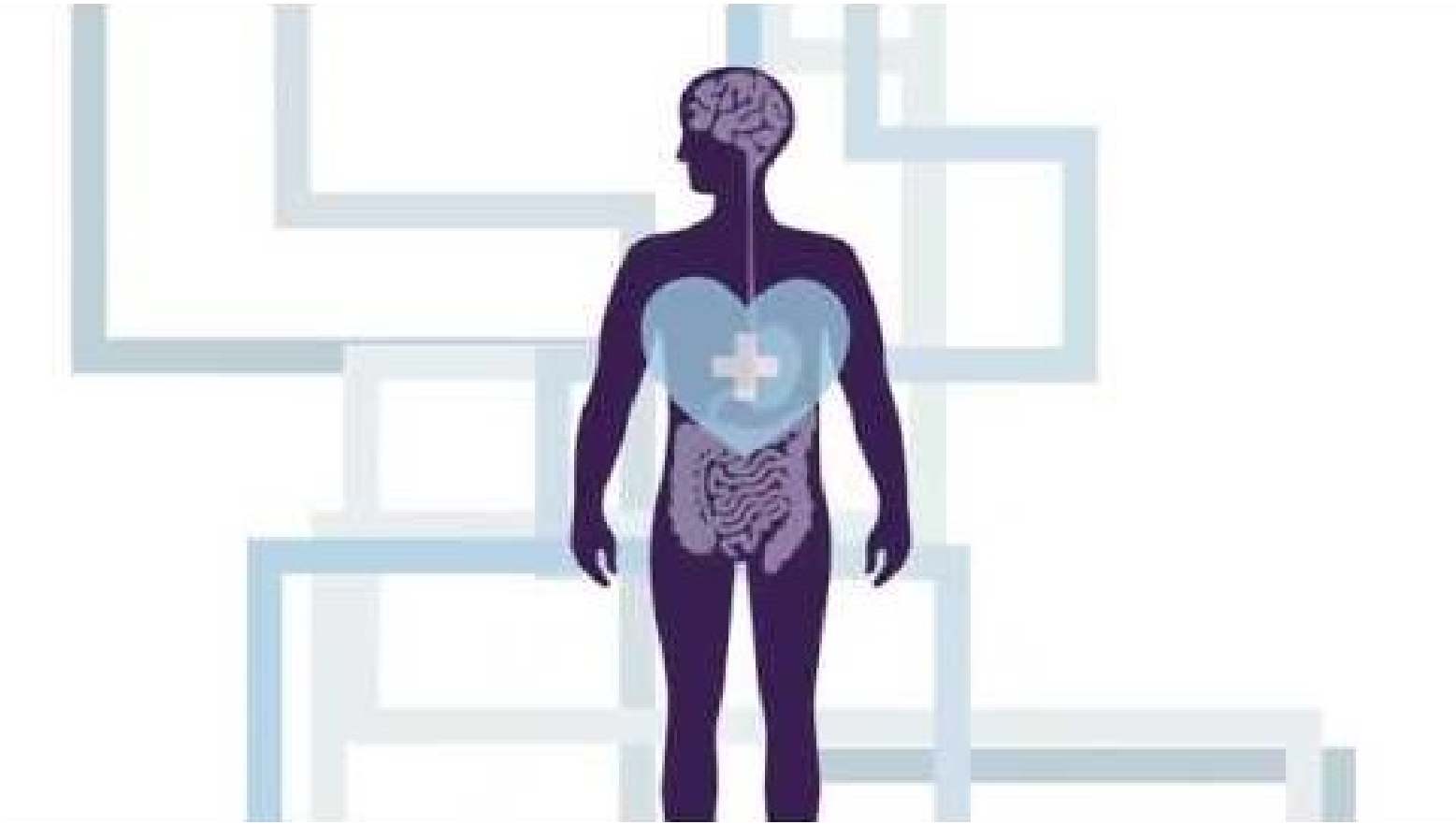
The Science of Stress, Calm and Sleep with Andrew Huberman, neuroscientist and tenured professor in the Department of Neurobiology at the Stanford University School of Medicine (3 min)

https://youtu.be/Ft9N2-CEPzc?t=1930

The Brain/Body Connection

The Gut

- Your gut is the part of your body that digests food and turns it into waste.
- Esophagus & stomach, small & large intestines, gallbladder, liver, pancreas.
- Sometimes called **“the second brain.”**
- The gut “microbiome” is the word used for all of the bacteria, fungi, protozoa and viruses that live in our gut.



https://youtu.be/a8i7suRwjyA (1:48 minutes)

Learn More About Your Microbiome

https://youtu.be/5DTrENdWvvM (5 minutes)

When swimming pool chemicals are not balanced… algae grows.

When our BRAIN and BODY chemicals are not balanced, we get <u>inflammation</u>.

But we can clear up inflammation and balance our brains/bodies with…

1. sleep
2. physical activity
3. nutrition
4. mind-body tools to cope with stress

The Brain, Body and SLEEP

Sleep improves brain function and mental health. Over time, lack of sleep can worsen behavior and mood disorders such as anxiety, depression, bipolar disorder.

Signs & Symptoms (good sleep)

- More creative
- Can focus and concentrate on tasks longer
- Has better problem-solving abilities
- Is better able to learn and remember
- Has more energy during the day
- Can create and maintain good relationships
- Can regulate emotions better
- Less impulsive

Signs & Symptoms (lack of sleep)

- Hard to wake up; Falls back to sleep after waking
- Prefers to lie down during the day; misses out on physical activities and fun
- Falls asleep/ tired at school; wants to nap
- Sugar/ caffeine (day) and alcohol (night)
- Lack of interest, motivation and attention; fidgety
- Forgetfulness; Difficulty learning
- Blurred vision
- More moody, aggressive, or short-tempered
- More impulsive
- Difficulty managing stress
- More injuries/ accidents

If your child is very sleepy during the day or you are concerned about the number of times your child wakes up, snores or has pauses in their breathing during the night, see your family doctor. Report any new medicines that are causing sleep problems.

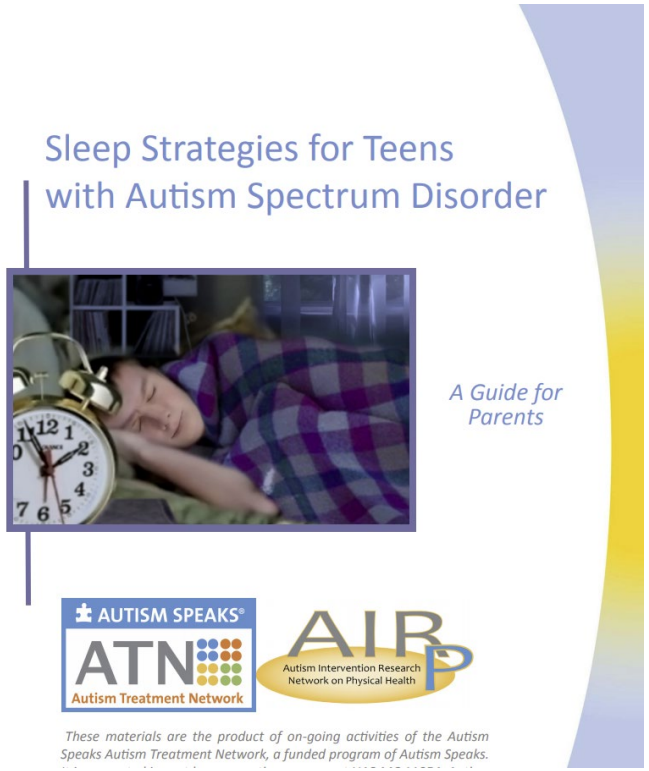
IDEA: Try an "electronics curfew" (a nice idea for parents, too!)

How Much Sleep?

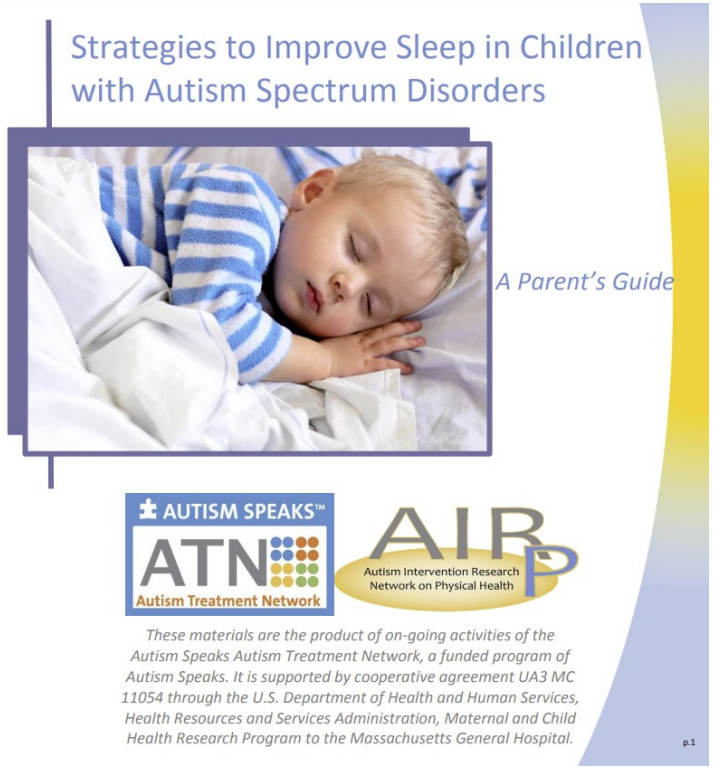
Age Group		Hours of Sleep
Newborn	0-3 months	14-17 hours (+naps)
Infant	4-12 months	12-16 hours (+naps)
Toddler	1-2 years	11-14 hours (+naps)
Preschool	3-5 years	10-13 hours (+naps)
School Age	6-12 years	9-12 hours
Teen	13-18 years	8-10 hours
Adult	18-60 years	7 or more hours

https://www.cdc.gov/sleep/about_sleep/how_much_sleep.html

Learn More About Sleep Strategies



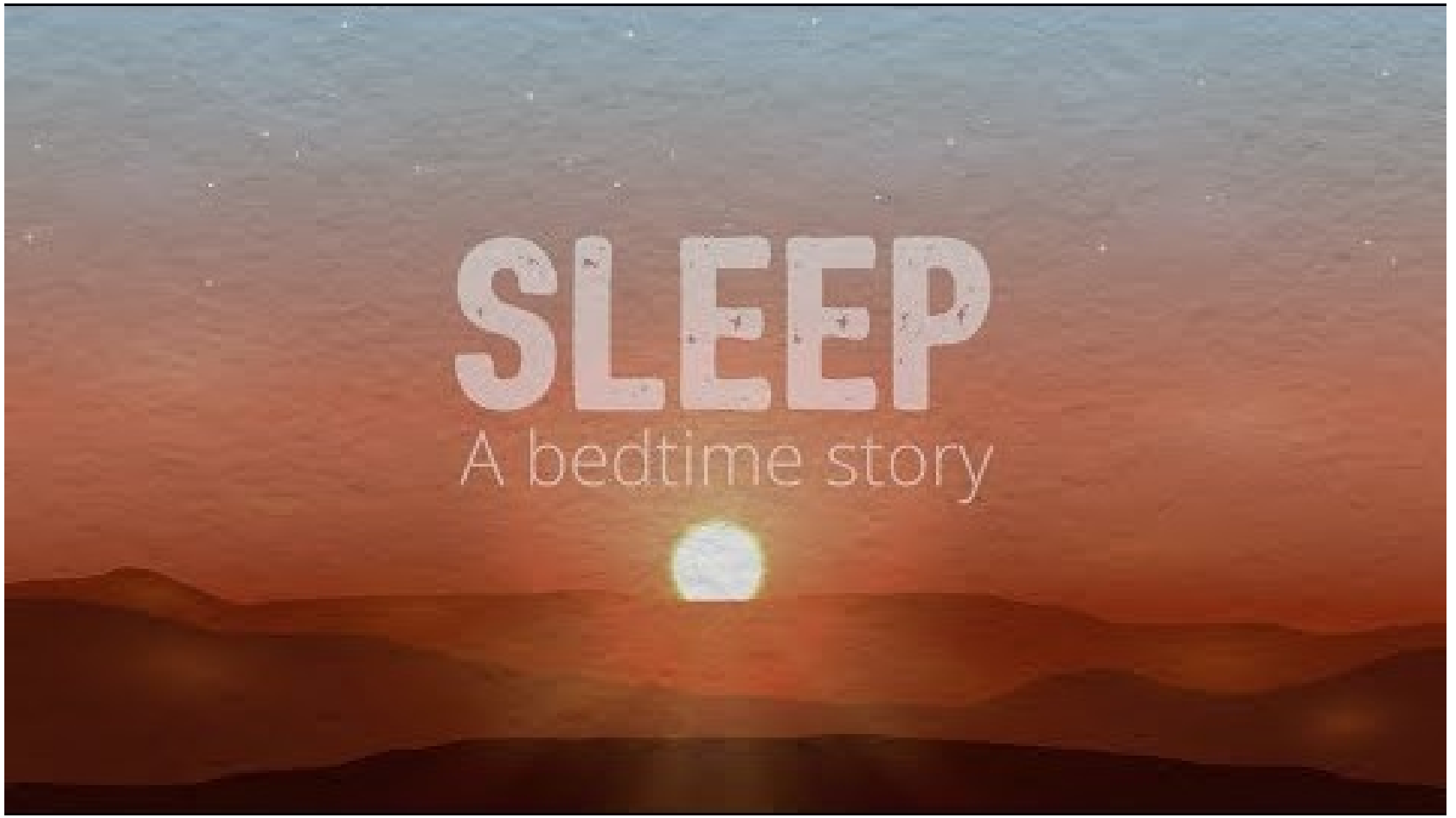
https://www.autismspeaks.org/sites/default/files/2018-08/Sleep%20Strategies%20Teens.pdf



https://www.autismspeaks.org/sites/default/files/2018-08/Sleep%20Tool%20Kit.pdf

Although written about youth/teens with Autism, these guides can be helpful for all kids.

Learn More About Relaxing Bedtime Routines



https://youtu.be/2fbaoqkY0Qk (8:37 minutes)

Brain, Body & Physical Activity

Physical activity can reduce stress and improve sleep, mood, attention and overall wellbeing.

How much do they need?

Kids and teens ages 6 to 17 need at least **60 minutes** every day.

Most of it can be **moderate-intensity aerobic activity**. Anything that gets their heart beating faster counts.

At least 3 days a week, encourage your kids to step it up to **vigorous-intensity aerobic activity.**

Is it moderate or vigorous? Use the "talk test" to find out.

When you're being active, try talking:

- ✓ If you're breathing hard but can still have a conversation easily, it's **moderate-intensity activity**
- ✓ If you can only say a few words before you have to take a breath, it's **vigorous-intensity activity**

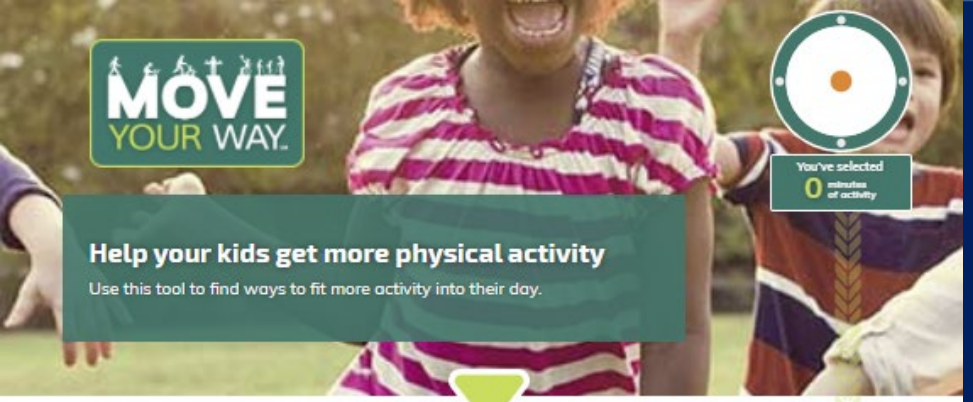
As part of their daily 60 minutes, kids and teens also need:

Muscle-strengthening activity
At least 3 days a week

Anything that makes their muscles work harder counts — like climbing or swinging on the monkey bars.

Bone-strengthening activity
At least 3 days a week

Bones need pressure to get stronger. Running, jumping, and other weight-bearing activities all count.

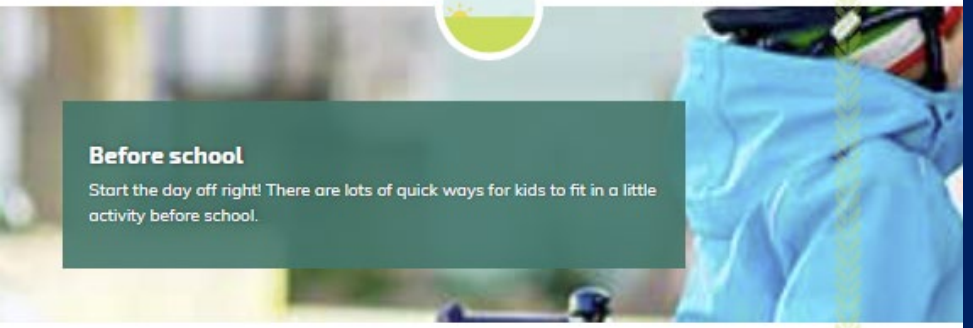


Kids and teens ages 6 to 17 need 60 minutes of activity every day.

That may sound like a lot for a school day, but it doesn't have to happen all at once. And there are so many ways to squeeze in activity at different times of the day.

Could they get a little more active in the morning? What about after school? Remember, a little here and a little there — it all adds up throughout the day.

As you move down the page, use the sliders to add time to the clock. If you can get it to 60, then you've found a way for your kids to meet the goal.



- Walking the dog
- Doing morning stretches or yoga
- Dancing around the living room
- Walking or biking to school (Skateboarding, riding a scooter, rollerblading, and wheelchair walking count, too!)

Can't walk or bike to school?

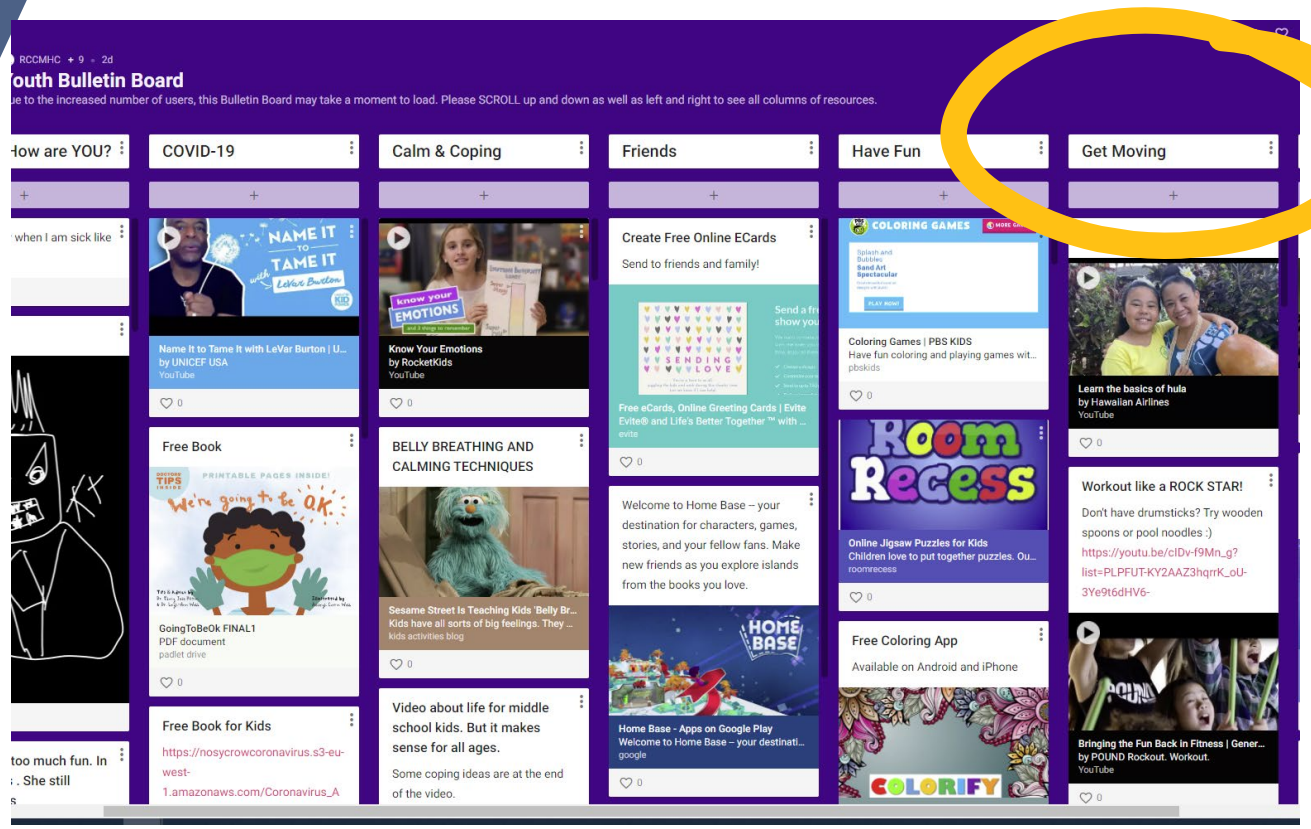
Learn More About Physical Activity

Try this Interactive Tool

https://health.gov/moveyourway/get-kids-active/

https://youtu.be/99Grz6zrzIl (1:47 minutes)

Find Ideas for Physical Activity



https://www.rccmhc.org/community-bulletin-board

Brain, Body & Nutrition

What is Nutritional Psychiatry?

https://youtu.be/fhzn3IC7cc0 (3:39 minutes)

Learn More About the Mediterranean Diet

Mediterranean Diet

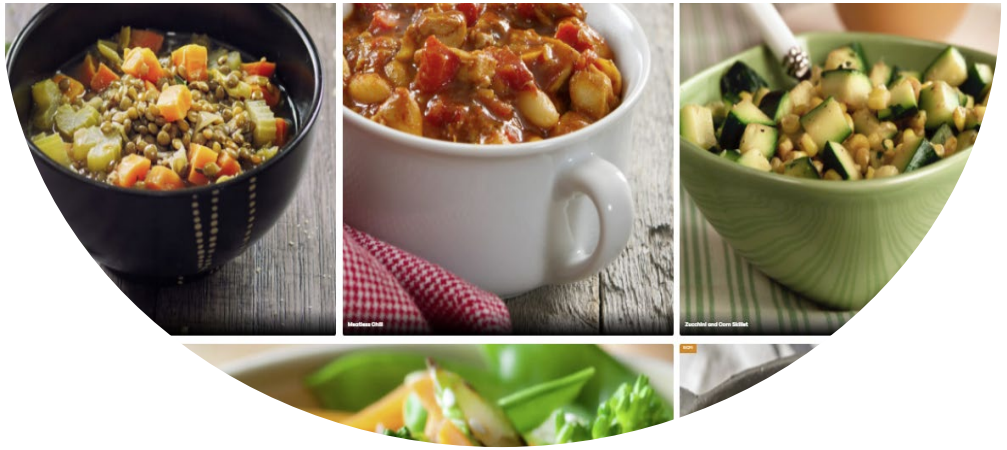
https://www.childrens.com/health-wellness/is-the-mediterranean-diet-heathy-for-kids

https://www.takingcharge.csh.umn.edu/mediterranean-diet

Learn more about Whole/ Healthy Foods

https://youtu.be/MfxuumD-tXQ (1:52 minutes)

Find Healthy and Kid-Friendly Recipes



Simple Succotash

Preparation time: 10 minutes | **Cook time:** 10 minutes | **Cost:** $1.25

Ingredients:
- 1 teaspoon **oil**
- ½ cup **bell pepper**, chopped
- ¼ cup **onion**, chopped
- 1 cup **canned corn**, drained and rinsed
- 1 cup **canned lima beans**, drained and rinsed
- ½ cup **diced tomatoes**
- 1 tablespoon **vinegar**
- 2 teaspoons **garlic powder**

Directions:
1. Heat oil in a skillet over medium-high heat.
2. Add peppers and onion. Cook for 3 minutes.
3. Add corn and lima beans. Stir to mix. Cook for 3 minutes.
4. Add tomatoes, vinegar and garlic powder. Cook for 3 minutes.

Makes 4 servings

Try serving with a lean protein like chicken breast or fish.

Nutrition Facts
4 servings per container
Serving size 2/3 cup
Amount per serving
Calories 100

	% Daily Value*
Total Fat 2g	3%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 230mg	10%
Total Carbohydrate 17g	6%
Dietary Fiber 5g	18%
Total Sugars 4g	
Includes 0g Added Sugars	0%
Protein 2g	
Vitamin D 0mcg	0%
Calcium 27mg	2%
Iron 1mg	6%
Potassium 354mg	8%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Meatless Chili

Preparation time: 5 minutes | **Cook time:** 25 minutes | **Cost:** $4.00

Ingredients:
- 2 teaspoons **oil**
- 1 **onion**, chopped
- 3 **carrots**, chopped
- 2 tablespoons **chili powder**
- 2 (15 ounce) cans **low-sodium black beans**, drained and rinsed
- 1 (15 ounce) can **low-sodium corn**, drained and rinsed
- 1 (28 ounce) can **low-sodium diced tomatoes**
- 3 cups **water**
- ½ teaspoon **salt**

Directions:
1. Heat oil in a large pot over medium heat.
2. Add onion. Cook for 4 minutes.
3. Add carrots. Cook for 5 minutes, stirring a few times so they do not burn.
4. Add chili powder. Stir to coat onions and carrots. Cook for 1 minute.
5. Add beans, corn, tomatoes, water and salt. Stir to mix chili.
6. Bring chili to a boil. Reduce heat to low. Simmer for 15-20 minutes.

Makes 6 servings

Nutrition Facts
6 servings per container
Serving size 1 cup
Amount per serving
Calories 250

	% Daily Value*
Total Fat 3g	4%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 500mg	22%
Total Carbohydrate 44g	16%
Dietary Fiber 14g	50%
Total Sugars 11g	
Includes 0g Added Sugars	0%
Protein 12g	
Vitamin D 0mcg	0%
Calcium 93mg	8%
Iron 4mg	20%
Potassium 614mg	15%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Recipes include the cost, the calories, the nutritional information, and detailed instructions.

https://hungerandhealth.feedingamerica.org/healthy-recipes/

Find Fresh Food

Fare For All
Fresh food – 40% cheaper than grocery stores
Drive through Sales. EBT cards accepted.
https://fareforall.thefoodgroupmn.org/

Free Food
Check the Community Bulletin Board to find FREE groceries and prepared meals.

https://www.rccmhc.org/community-bulletin-board

What type of food is for sale?

PRODUCE PACK - $10
Five varieties of fresh vegetables and two varieties of fresh fruit.

MINI MEAT PACK - $11
A minimum of four assorted meat items (3-5 pounds).

COMBO PACK - $20
Save an extra $1 by combining the Produce Pack and the Mini-Meat Pack.

MEGA MEAT PACK - $25
Typically includes 7-9 frozen meat items.
Watch for $30 Holiday Packs in Nov & Dec.

Site	Dates	Time	Location
Frogtown	Mar 3	2:00-4:00pm	**St. Stephanus Lutheran- 739 Lafond Ave**
St. Paul	Mar 12	10:00am-1200pm	**West 7th Comm. Ctr, 265 Oneida St**
South St. Paul	Mar 23	4:00-6:00pm	**Doug Woog Arena- 141 6th St. S**
White Bear Lake	Mar 19	1:00-3:00pm	**Community of Grace Lutheran- 4000 Linden St**

Mind-Body Tools
to Cope With Stress & Improve Wellbeing

Virtual Calm Room

- https://www.rccmhc.org/breathe
- Butterfly Hug
- Turn Off Fight/Flight/ Freeze (Nostril Breathing)

Family Care Organizer

- https://www.rccmhc.org/all-in-one-place
- Use the Wellbeing Section
- Track Food, Sleep, Exercise

Assess Your Wellbeing

- https://www.takingcharge.csh.umn.edu/
- Take this quiz and set goals for holistic health

Brain, Body and Integrated Health Care

- Cognitive behavioral therapy (CBT),
- Aromatherapy, Biofeedback,
- Clinical hypnosis/ self-hypnosis,
- Herbs and supplements,
- Reflexology,
- Massage therapy,
- Acupressure/ Acupuncture,
- Breathwork,
- Guided Imagery,
- Music therapy,
- Art therapy,
- Nutrition consultation,
- Yoga,
- Energy therapy (such as Reiki, Healing Touch or Tui na)

Learn more about Holistic Practices

https://www.takingcharge.csh.umn.edu/what-are-holistic-practices

A Focus on Wellbeing: Mind, Body and Spirit

Conventional medical therapies plus holistic strategies

Learn More about Pediatric Integrative Medicine

NOTE:
This video is about a clinic that is NOT in Minnesota. Info about MN clinics is on the next slide.

https://youtu.be/6_R7W9W1v3I (3:15 minutes)

Learn More About Pediatric Integrated Health in MN

- https://www.childrensmn.org/services/care-specialties-departments/integrative-medicine/
- https://www.prairie-care.com/services/integrative-medicine/
- https://www.mhealth.org/childrens/care/overarching-care/integrative-health-pediatrics

Learn More about the Brain-Body Connection, Integrative Medicine, Endocrinology & Metabolism

https://youtu.be/FFVEFKgT8A0 (19:46 minutes)

https://www.rccmhc.org/