Supporting Emergency Pediatric Mental Health Needs

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Outline

- Prevalence data
- Use of emergency services for pediatric behavioral health emergencies
- Strategies for the first phases of care
- Trauma
- Resources

Rising rates of mental health concerns in US and Wisconsin

combined with

Insufficient providers and services

plus

Proposed defunding of suicide/crisis hotlines and cutting services, especially for specific populations

leads to

Increased acute mental health needs being addressed by first responders

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Mental Health Prevalence Rates - US

- 14% - 43% of youth experienced at least one trauma
- 1 in 7 youth ages 3-17 had a current diagnosed mental or behavioral health condition (2018)
- Adolescents ages 12-17 (2021 – 2023):
  - In past two weeks:
    - 21% reported symptoms of anxiety and 17% of depression
  - In past year:
    - 40% reported persistent feelings of sadness or hopelessness
    - 20% considered attempting suicide, 16% made a plan
    - 9% attempted suicide

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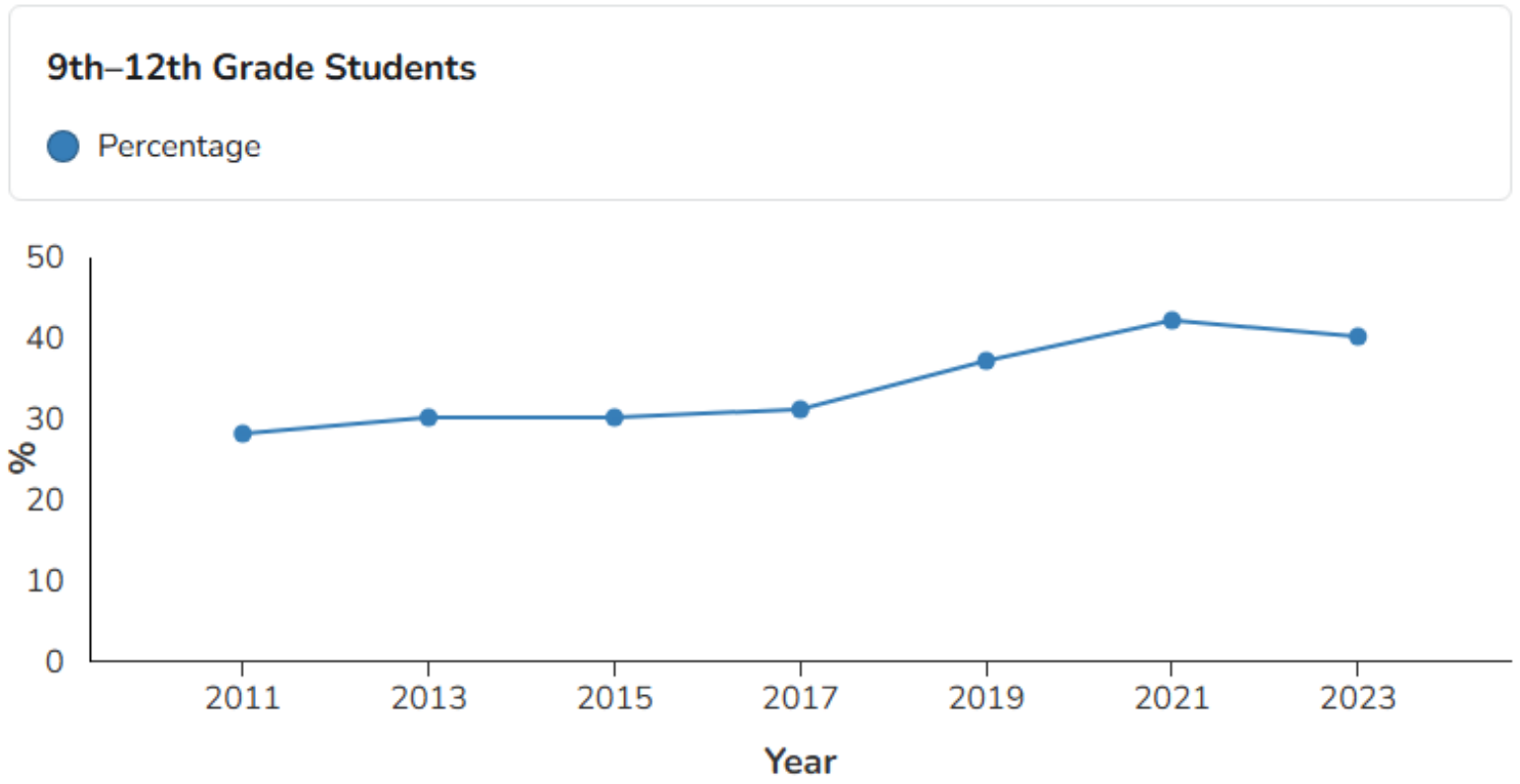
https://www.cdc.gov/children-mental-health/data-research/index.html#:~:text=Many%20adolescents%20discuss%20mental%20health,unmet%20mental%20health%20care%20needs.

Depressive symptoms

Too many students are experiencing symptoms of depression. The percentage of high school students feeling sad and hopeless increased significantly over 10-year.



https://www.cdc.gov/healthy-youth/mental-health/mental-health-numbers.html

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Mental Health Prevalence Rates – Wisconsin

Wisconsin Youth Risk Behavior Survey (2023)

- More than half (51.6%) reported anxiety
- 1 in 3 (35%) reported depression
- 1 in 5 (20.9%) reported NSSI

- Students who identify as LGBTQ+ reported disproportionate number of mental health challenges
  - 70% report anxiety
  - 63% report depression
  - 40% report considering suicide

- Only 1 in 5 (21.2%) indicated they receive the help they need “most of the time” or “all of the time” (a continuous decrease since 2017)

https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/WI_2023_YRBS_Summary.pdf

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Pediatric Mental Health Needs in Wisconsin

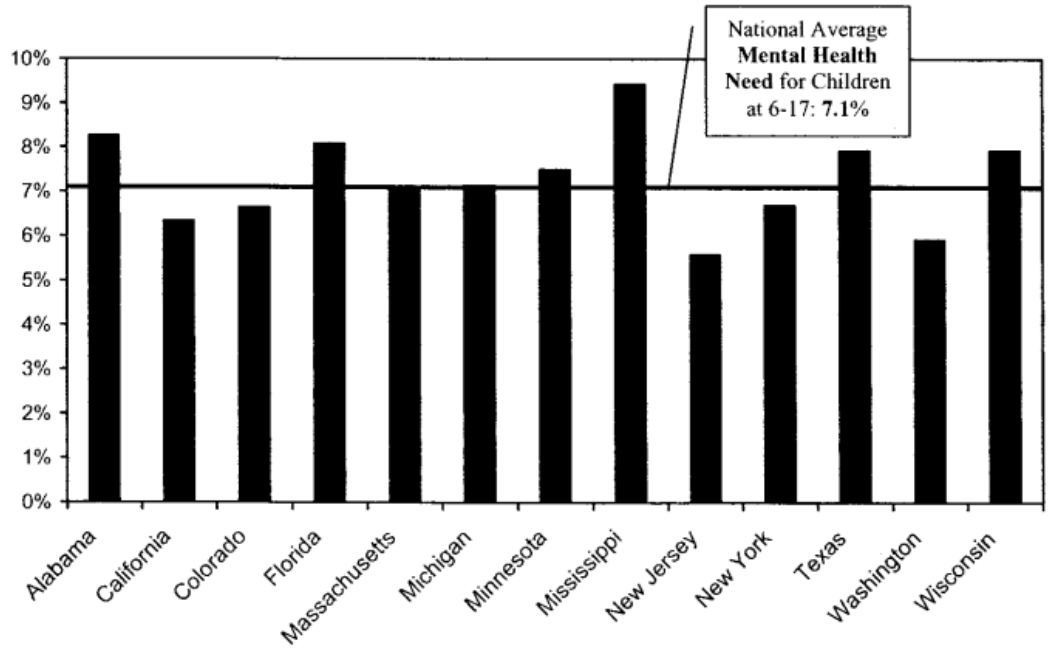

Fig 2. Geographic variation in need for mental health services for school-age children in the NSAF states.

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Use of emergency services for Pediatric Behavioral Health Emergencies (PBHE)

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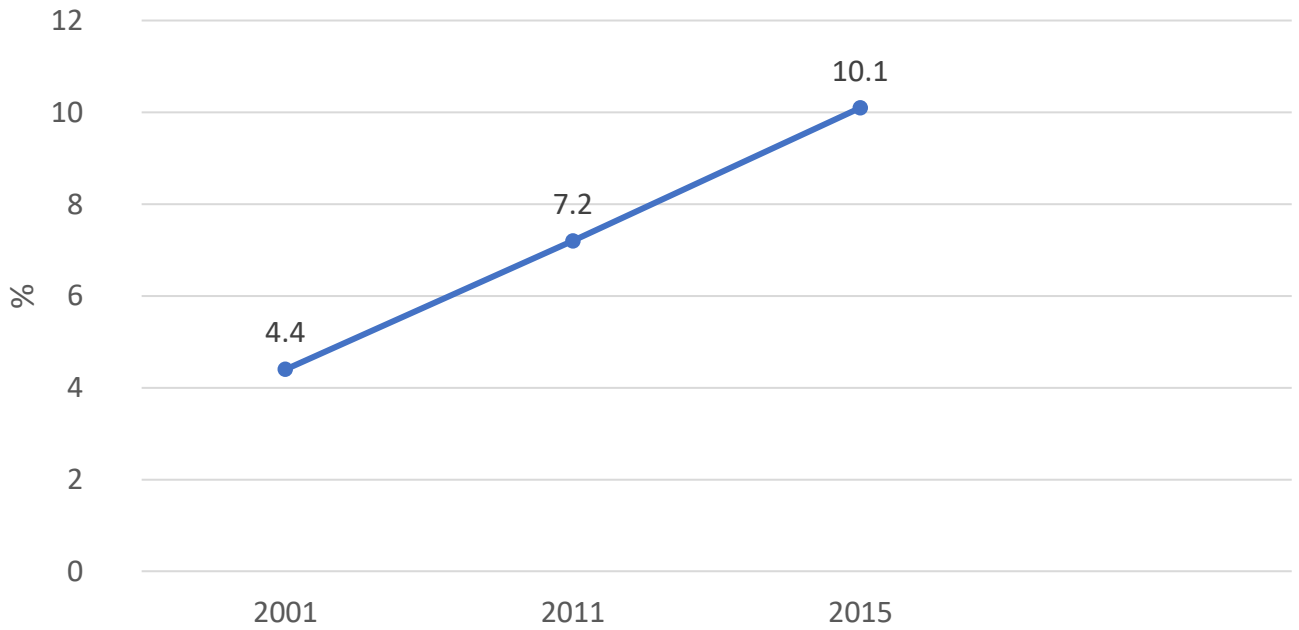
Percentage of Pediatric ED visits for BHE



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EMS and Pediatric Behavioral Health

- EMS is critical entry point to emergency health are for many patients, especially true for Behavioral Health Emergencies (BHE)
- 26% of pediatric patients seen in ED's for BHE arrived by ambulance (2011 – 2015)

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EMS and Pediatric Behavioral Health

- About 1 in 10 pediatric EMS activations through 911 are for a BHE
  - Initially recorded as non BHE in 35% of cases
  - Transported by EMS 69% of the time, treatment by EMS refused 12.5%
  - Sedation administered in 1.9% of encounters, physical restraints in 1.7%, naloxone in 1.5% of cases (majority if transports do not involve restraint or sedation)

Boland, L. L., Anderson, M. K., Powell, J. R., Patock, M. T., & Panchal, A. R. (2023). EMS Responses for Pediatric Behavioral Health Emergencies in the United States: A 4-Year Descriptive Evaluation. Prehospital and disaster medicine, 38(6), 784–791. https://doi.org/10.1017/S1049023X2300657X

Fishe, J. N., & Lynch, S. (2019). Pediatric Behavioral Health-Related EMS Encounters: A Statewide Analysis. Prehospital emergency care, 23(5), 654–662. https://doi.org/10.1080/10903127.2019.1566423

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EMS and Pediatric Behavioral Health

- Total EMS time (including time on scene and ED turnaround time) significantly longer for BHE
- Pediatric behavioral health EMS encounters showed significant disproportionate effects on rural agencies
  - Of the 14 counties in the top quartile of BH intervention:
    - 7 Rural
    - 10 did not have hospitals with child/adolescent psychiatric services
    - 7 did not have any child psychiatrists
  - And under resourced MH counties are also often under resourced EMS

Fishe, J. N., & Lynch, S. (2019). Pediatric Behavioral Health-Related EMS Encounters: A Statewide Analysis. Prehospital emergency care, 23(5), 654–662. https://doi.org/10.1080/10903127.2019.1566423

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Strategies for use in the initial phases of care

Prepare
Control the environment
Deescalate

Maintain safety
Communicate effectively
Wrap up/hand off/accept

Provide immediate medical care
Increase predictability

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Prepare

- Work to develop a relationship with repeat patients and their support networks
- Think about how to maintain a safe environment ahead of time
- Practice de-escalation
- Gather community resources ahead of time

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Maintain Safety

- Prioritizing the safety of the patient, others, and responders/staff must always take priority
- Create a safe environment, remove dangers objects as possible
  - Involve law enforcement/security if necessary
- Maintain situational awareness
  - Have a route out at all times, do not put the patient in between you and that route
- Consider PPE
- Be aware of impact of uniform (badge, mask, etc)

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Provide Immediate Medical Care

- Address any medical concerns
  - May be related or unrelated to BHE (injuries caused by self-harm, agitation, substance abuse)
  - Could be causing/contributing to the BHE (eg; pain in a youth with developmental delays, etc)

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Control the environment

- Reduce stimulation
  - Emergency responses can be very overstimulating
- Consider use of “One-voice” strategy
- Avoid talking over a patient
- Consider personal space

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Communicate Effectively

- Establish trustworthiness
  - Can include talking directly to youth, possibly first if there is discord between youth and caregiver
- Identify who you are, what your role is and what you are going to do
- Emphasize safety for the patient
  - Emotional and physical
  - Needs to be authentic – if situation is not yet safe, emphasize that the individual is not alone and you are working to get to a safe outcome
- Ask permission and offer choices when possible, do not offer/ask if there is not a choice

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Communicate Effectively

- Active listening (avoid personalizing, especially with teenagers)
  - “This is hard” versus ‘I know this is hard”
- Non verbal communication can be valuable as well
  - Can include modeling desired behaviors (quiet and calm voice)
- Straightforward communication
- Establish common ground

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Increase Predictability

- Especially important in situations with traumatic nature or patients with trauma history
- Label what you are doing to do before you do it
- Identify what comes next (eg: when we get to the ED, when the doctors come in, etc)

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Brief trauma focused interventions

- Grounding
  - Identify if they're experiencing a flashback, emphasize that you know it seems real
  - Identify what is real (I'm here, my voice is real, the rain you feel is real, etc)
  - 5 senses grounding
  - Pick a shape/color
- Breathing
- Reassurances of safety

Deescalate

- Verbal and non verbal strategies
- Validating patient's concerns (they are valid even if they are not accurate)
- Active listening
  - "I want to make sure I understood you.."
- Maintain a calm environment
- Deescalate family members
- Consider sensory aspect of trauma

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Wrap up/Hand off/Accept

- Transport to appropriate facility
- In person handoffs (in front of patient and with patient participation) can be helpful
- Connection to resources
  - May be helpful to have resources at the ready (crisis lines, community support programs, etc), especially for patients who decline care
- Self care
- Advocacy
  - First responders and emergency medicine professionals have unique and valuable experiences
  - Share what you are seeing (while maintaining privacy!)
  - Can include policy/political advocacy

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Challenges

- Lack of dedicated mental health support:
  - Many areas still lack the necessary resources and infrastructure to effectively address mental health emergencies.
- Misidentification of psychiatric emergencies:
  - Not labeled as such during initial 911 call
  - Some may label/misinterpret a behavioral health crisis as “acting out”
- And many more….

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Specialized training for EMS providers

- Dedicated mental health crisis response teams with EMTs and paramedics trained in crisis intervention and mental health care.
- Psychological first aid:
  - Evidence based approach to provide initial support to individuals and communities in the immediate aftermath of a disaster or traumatic event.
  - Focus on reducing distress and promoting resilience
  - https://learn.nctsn.org/course/index.php?categoryid=11
- Solution-Focused Brief Interventions

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Trauma

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Developmental Trauma

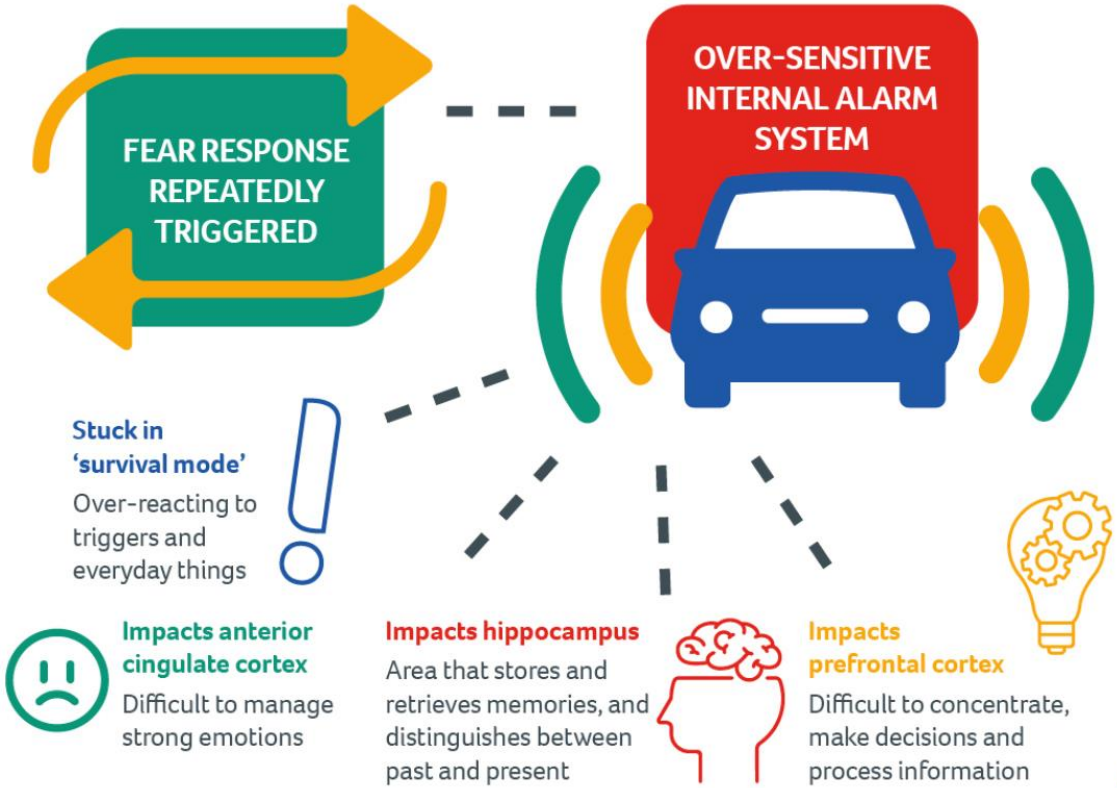
- Diagnosis proposed for DSM-V, not included
  - Variety of traumatic events (physical abuse, witnessing domestic and community violence, separation from family members, etc.)
  - Can impact physiology, emotions, ability to think/learn/concentrate,
  - Can impact impulse control
  - Linked to physical health concerns
  - May not meet full PTSD criteria
  - Inverse correlation between age of onset of trauma and severity of symptoms

Effects of maltreatment on the developing brain

- Can change structure and chemical activity
  - Hippocampus *(learning and memory)* – Reduced volume, impaired ability to bring cortisol back to normal after spike
  - Corpus callosum *(connects hemispheres)* – decreased volume
  - Cerebellum *(coordinate motor behavior and executive functioning)* – decreased volume
  - Prefrontal cortex *(behavior, cognition, emotional regulation)* – smaller
  - Amygdala *(threat perception)* – can be overactive

fostering therapeutically
SINCE 1987

Trauma and the child's brain



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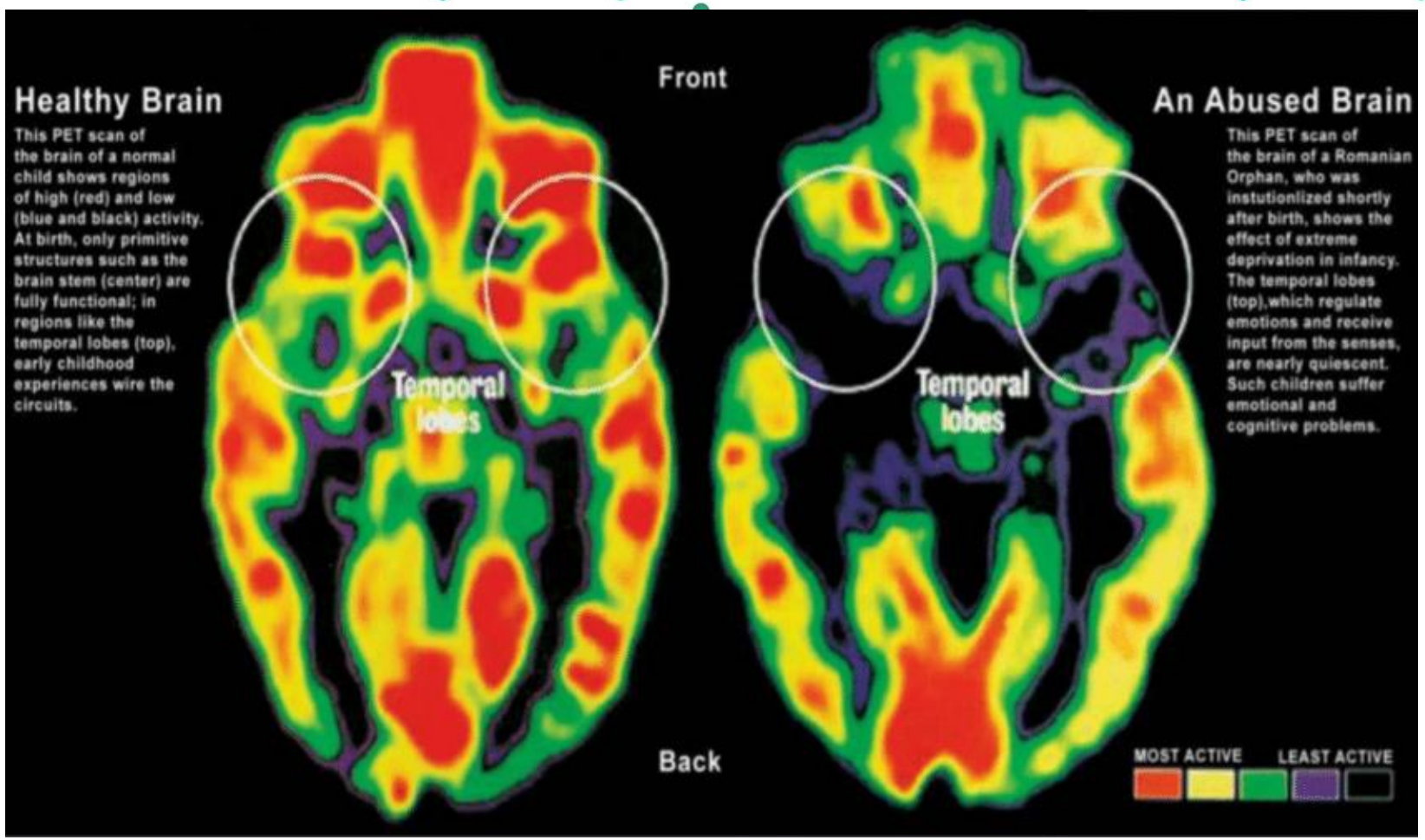
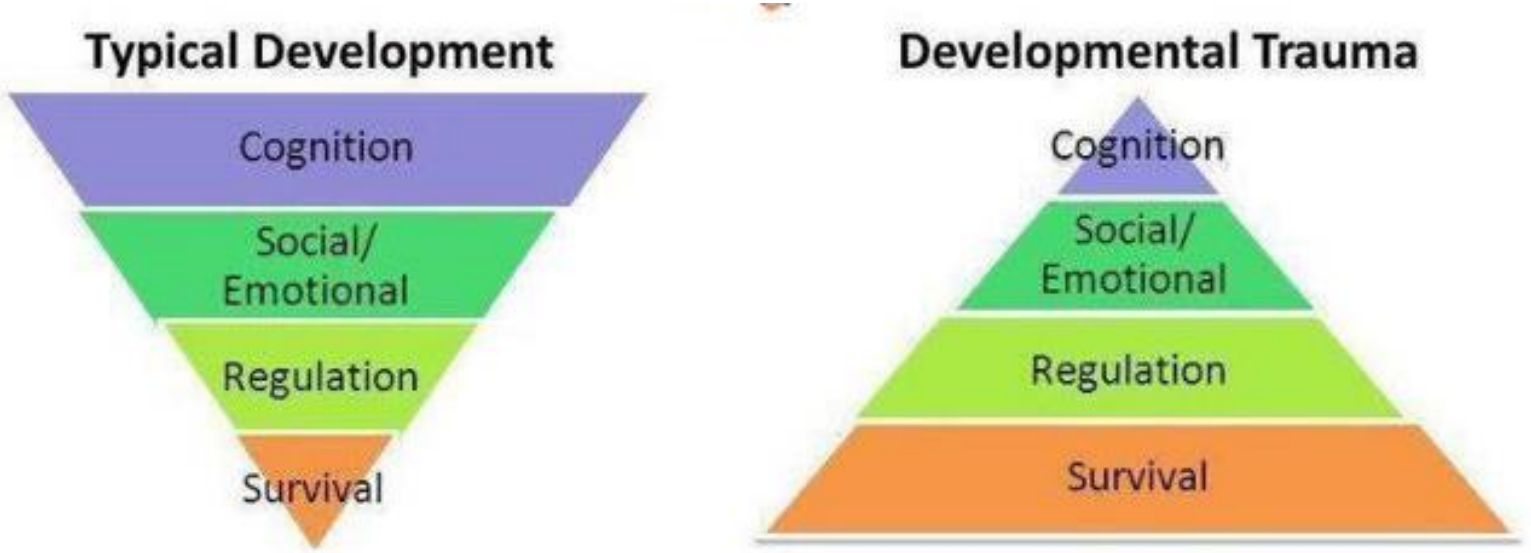

Healthy Brain
This PET scan of the brain of a normal child shows regions of high (red) and low (blue and black) activity. At birth, only primitive structures such as the brain stem (center) are fully functional; in regions like the temporal lobes (top), early childhood experiences wire the circuits.
Front
Temporal lobes
Temporal lobes
An Abused Brain
This PET scan of the brain of a Romanian Orphan, who was institutionlized shortly after birth, shows the effect of extreme deprivation in infancy. The temporal lobes (top),which regulate emotions and receive input from the senses, are nearly quiescent. Such children suffer emotional and cognitive problems.
Back
MOST ACTIVE
LEAST ACTIVE



Adapted from Holt & Jordan, Ohio Dept. of Education

How does CW address trauma?

- All patients admitted under trauma service are screened for trauma risk
  - CW has been screening patients admitted on the trauma service since 2008 (ACS just started requiring screening of trauma patients in 2003).
- Pediatric Psychology consultation and intervention
  - 80% of patients admitted after a GSW see inpatient psychology
- Project Ujima
- System wide Trauma informed care
- TQoL clinic
- Follow up mental health services with experts
- And much more….

Additional Resources

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Symptoms of trauma

Infant	Toddler
• High levels of distress when separated from caregiver • “Frozen watchfulness”, may have a “shocked” look • Less playful, engaging • Startles easily • Cries excessively • Sleep concerns	• Memory problems, difficulty focusing • Acts out in social situations • Imitates the traumatic event • Irritable, sad, anxious • Avoidant • Believe they are to blame • Struggle socially • Loss of developmental skills • Somatic symptoms • Avoid eye contact • More challenging to soothe

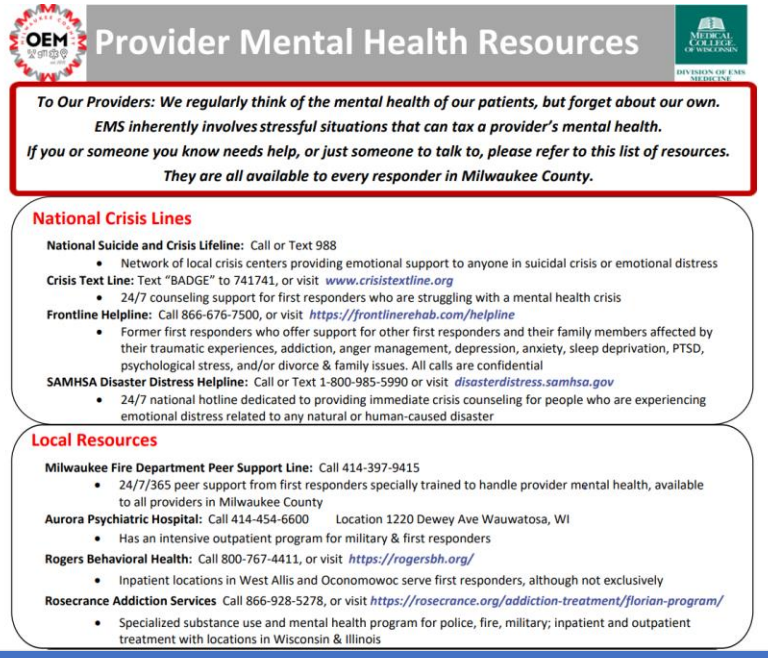
Symptoms of trauma

School Age	Adolescence
• Posttraumatic play and/or reenactment • May see traumatic themes in play and drawings • Changes in mood/behavior • Sleep concerns • Aggression and/or internalization • Somatic concerns • Time skew (mis-sequencing trauma events when recalling the memory) • Omen formation (belief there were warning signs that predicted the trauma, if they are alert enough they will recognize future warning signs and avoid future traumas)	• More closely resembles adult PTSD • Increased impulsivity and aggression (as compared to adults and school age youth)

Online Trauma resources

- National Child Traumatic Stress Network
  - www.nctsn.org
  - Has resources and online trainings
- International Society for Traumatic Stress Studies
  - www.istss.org
- National Society for PTSD (VA)
  - www.ptsd.va.gov

- First responder specific trauma resources



Provider Mental Health Resources

To Our Providers: We regularly think of the mental health of our patients, but forget about our own. EMS inherently involves stressful situations that can tax a provider's mental health. If you or someone you know needs help, or just someone to talk to, please refer to this list of resources. They are all available to every responder in Milwaukee County.

National Crisis Lines

National Suicide and Crisis Lifeline: Call or Text 988
- Network of local crisis centers providing emotional support to anyone in suicidal crisis or emotional distress

Crisis Text Line: Text "BADGE" to 741741, or visit *www.crisistextline.org*
- 24/7 counseling support for first responders who are struggling with a mental health crisis

Frontline Helpline: Call 866-676-7500, or visit *https://frontlinerehab.com/helpline*
- Former first responders who offer support for other first responders and their family members affected by their traumatic experiences, addiction, anger management, depression, anxiety, sleep deprivation, PTSD, psychological stress, and/or divorce & family issues. All calls are confidential

SAMHSA Disaster Distress Helpline: Call or Text 1-800-985-5990 or visit *disasterdistress.samhsa.gov*
- 24/7 national hotline dedicated to providing immediate crisis counseling for people who are experiencing emotional distress related to any natural or human-caused disaster

Local Resources

Milwaukee Fire Department Peer Support Line: Call 414-397-9415
- 24/7/365 peer support from first responders specially trained to handle provider mental health, available to all providers in Milwaukee County

Aurora Psychiatric Hospital: Call 414-454-6600 Location 1220 Dewey Ave Wauwatosa, WI
- Has an intensive outpatient program for military & first responders

Rogers Behavioral Health: Call 800-767-4411, or visit *https://rogersbh.org/*
- Inpatient locations in West Allis and Oconomowoc serve first responders, although not exclusively

Rosecrance Addiction Services Call 866-928-5278, or visit *https://rosecrance.org/addiction-treatment/florian-program/*
- Specialized substance use and mental health program for police, fire, military; inpatient and outpatient treatment with locations in Wisconsin & Illinois

https://county.milwaukee.gov/files/county/emergency-management/EMS-/Standards-of-Care/Provider-Mental-Health-2024.pdf

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knowledge changing life

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