

#### Welcome!

We invite you to introduce yourself in the chat with your name, position, and organization affiliation.

Make sure you change the setting so you're sending the message **To:All panelists and attendees** 

To:	All panelists and attendees ♥	
Тур	e message here	

If you have a specific question or topic that you would like covered in this webinar, feel free to add it to the Q&A section.

#### THE BRAIN ON TRAUMA: DOMESTIC VIOLENCE & PTSD

BRENISEN WHEELER, EDUCATION AND OUTREACH COORDINATOR

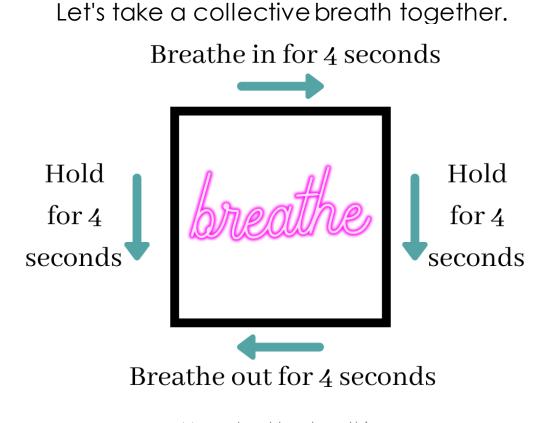


# Thank you for being here!

Resources to support

**BLM** here

**Black Lives Matter** 



Take care

More about box breathing



#### Overview of the next 90 minutes

- ▶ What is domestic violence? Trauma? PTSD?
- Domestic violence & head injuries
- A note on strangulation
- Prevalence of PTSD among survivors
- Domestic violence-based trauma
- Initial instincts in the face of trauma: seeking connection, fight, flight, freeze
- Core of Traumatic Reaction: hyperarousal, constriction, dissociation, immobility
- Common emotional, psychological, behavioral, physical reactions to trauma
- ► The 3 Brains

- ▶ Key Brain Regions that Process Trauma
- Emotions & regulation
- Trauma triggers
- More traumatic brain processes
- A traumatized persons reality
- Trauma is preverbal
- Trauma & memory
- Biology of trauma
- ► Continued learning & resources

Feel free to use the **chat box** to add any comments or responses to our questions. Use the **Q&A feature** to ask any questions anytime during the presentation! A PDF of the slides will be emailed to you after the presentation is complete.

# A legacy of advocacy since 1972

Women's Advocates is one of the first domestic violence shelters in the United States

- 1972- Crisis line for women experiencing domestic violence was created by 11 women in St. Paul
- 1974- Official shelter began operating out of a Victorian home on Grand Avenue



Follow the Getting to Know Women's Advocates Blog Series

#### Mission:

Women's Advocates
walks with victim
survivors and our
community to break
the cycle of domestic
violence.



Learn more about our history here



# Defining domestic violence

Domestic violence is an intentional and systematic **pattern** of physical and psychological abuse, threats, intimidation, isolation or economic coercion used by one person to exert **power and control** over another person in the context of a **dating, family or household** relationship.

Domestic violence is maintained by societal and cultural attitudes, institutions and laws which are **not** consistent in naming this violence as wrong.



#### What is trauma?

Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that can have lasting adverse effects on the individual's functioning and physical, social, emotional well-being.

- Types of Trauma
- Acute trauma results from a single incident.
- Chronic trauma is repeated and prolonged
- 3. **Complex trauma** is exposure to varied and multiple traumatic events, often of an invasive, interpersonal nature.



#### More on trauma



- ► Trauma "as a breach in the protective barrier against stimuli leading to feelings of overwhelming helplessness" Freud in 1914
- ► Feelings of:
  - ▶ Intense fear
  - ► Helplessness
  - ► Loss of control
  - ► Threat of annihilation
- Traumatic events produce profound and lasting changes in physiological, arousal, emotion, cognition, and memory



#### Post-Traumatic Stress Disorder

- ▶ Diagnosis developed in 1980 by a group of Vietnam veterans and psychoanalysts in New York
- Develops in some people who have experienced a shocking, scary or dangerous event
- Up to 20 percent of veterans who served in military operations Iraqi Freedom and Enduring Freedom have PTSD in a given year
- Approximately 30 percent of all Vietnam War veterans have received diagnoses of PTSD at some point.
- ▶ In comparison, about 7 to 8 percent of the general population is diagnosed with PTSD at some point.
- Women are about twice as likely as men to experience PTSD.



## PTSD Diagnosis

To be diagnosed with PTSD, an adult must have all the following for at least 1 month:

- At least one re-experiencing symptom (flashbacks, bad dreams, frightening thoughts)
- At least one avoidance symptom (Staying away from places, events, or objects that are reminders of the traumatic experience, Avoiding thoughts or feelings related to the traumatic event)
- At least two arousal and reactivity symptoms (easily startled, feeling tense or "on edge", having difficulty sleeping, angry outbursts)
- At least two cognition and mood symptoms (trouble remembering key features of traumatic event, negative thoughts about oneself or the world, guilt/blame, loss of interest in previously enjoyable activities)



# Domestic Violence and Head Injuries

#### You might get a head injury if your partner:

- Hits you in the face or the head
- Puts their hands around your neck or tries to choke or strangle you
- Makes you fall and you hit your head
- Shakes you severely
- Has done something that made you pass out, lose consciousness, or have trouble breathing.
- Did your partner sit on your chest, suffocate you, or put their hand over your mouth so you can't breathe or put you in a choke hold?

#### Common Problems After a Head Injury

- Nightmares or flashbacks; feeling jumpy, anxious or withdrawn; tense muscles or a racing heart.
- You have trouble remembering things.
- Noise, light, or sound bothers you or your vision is off.
- You have a hard time understanding information.
- Difficulty planning, organizing, or problem solving. It's hard to start new things or finish things.
- It's hard to concentrate or pay attention.

Poll: Have you worked with a victim-survivor who has reported any of the following



Source

### A Note on Strangulation

- Strangulation is a head injury & hurts one's brain.
  - Even if they have no marks- most people don't
  - Even if they didn't pass out
  - Even if they don't feel like it's a big deal, it is
- ▶The survivor can be unconscious in seconds and can die within minutes- or it can kill them days after it happened
- ▶If a survivor has been strangled, their partner/abuser is 7 times more likely to kill the survivor
- ► Most people who have been strangled and are murdered- are killed by guns.



# Prevalence of PTSD/TBI in victimsurvivors

- ▶ 88% of women in domestic violence shelters report experiencing PTSD
- ▶ Of women reporting to emergency rooms for injuries associated with domestic violence, 30% reported a loss of consciousness at least once
  - ▶ 67% reported residual problems that were potentially head-injury related
- ► The prevalence of PTSD in victims of IPV has been found to be as high as 63.8% (Golding, 1999)
  - ► This prevalence rate is especially alarming when compared to lifetime estimates of PTSD in the general population, which vary from approximately 1% to 12% (Golding, 1999)



#### Domestic Violence Based Trauma

- 1. Domestic violence is, by its nature, chronic ongoing
  - 1. Could be classified as chronic or complex trauma
- 2. The perpetrator of the traumatic experience is a loved one
  - Violation of trust
  - Betrayal
  - Grief / shame / guilt
  - Regular interaction with source of trauma + trauma triggers
  - Abuser typically robs survivor of imagination
  - Abuser causes trauma + provides comfort = confusion



#### Common Beliefs about Trauma

- 1. Anyone who experiences a trauma will eventually have post-traumatic stress disorder.
- Trauma and conditions like PTSD only impact people who have had a near-death experience.
- 3. Post-traumatic stress disorder only impacts soldiers.
- 4. Strong people can deal with trauma on their own and don't need help.
- 5. Trauma reactions last forever and are incurable.



# Common Beliefs about Trauma that are inaccurate

- Myth: Anyone who experiences a trauma will eventually have post-traumatic stress disorder.
  - ▶ **Fact:** Amazingly, some people are able to avoid PTSD, even after they experience terrible events. A person may experience anxiety, grief, or even acute stress disorder, but seek recovery before it turns into PSTD.
- Myth: Trauma and conditions like PTSD only impact people who have had a neardeath experience.
  - ▶ Fact: If a situation feels life-threatening, or a person feels an extreme loss of control followed by fear for their ability to survive normally (whether that feeling is accurate or not), then that person may have experienced trauma.

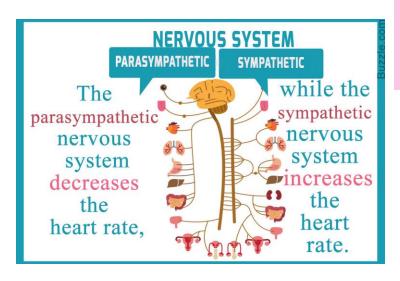


# Common Beliefs about Trauma that are inaccurate

- Myth: Post-traumatic stress disorder only impacts soldiers.
  - ► **Fact:** Because all humans have similar brain structures and capabilities, anyone may be at risk of PTSD after a particularly distressing and uncontrolled event.
- Myth: Strong people can deal with trauma on their own and don't need help.
  - ▶ **Fact:** PTSD and other trauma reactions have nothing to do with mental strength, character or background.
- ▶ Myth: Trauma reactions last forever and are incurable.
  - ▶ **Fact:** Counselors, doctors and psychologists are pioneering new treatments for PTSD and helping people get back to the business of enjoying life again.



#### Initial Instincts in the Face of Trauma



facilitated by the most evolutionarily advanced part of the vagus nerve, the central element in the parasympathetic half of our autonomic nervous system-responsible for "rest and digest" to relax

Seek out connection & comfort

Fight or flight response

Sympathetic nervous system

Freeze

mediated by the oldest part of the vagus nerve, deep in our brainstem. It produces physiological collapse and a release of pain-numbing endorphins **Poll:** Which traumatic reactions would you say you encounter the most in the people you work with?



Source

#### The Core of Traumatic Reaction

Four components of trauma that will always be present to some degree in any traumatized person:

#### Hyperarousal

- nervous system's accelerator
- Hypervigilance
- Exaggerated startle reflex

# Constriction or avoidance

- Detachment
- Disorientation
- Denial

#### **Dissociation**

 Disconnection between person and body, part of the body or part of the experience

#### Freezing/immobility

- Nervous system's brake
- Associated with feeling of helplessness

Learn more about tonic immobility



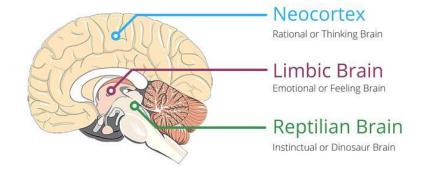
#### Common Reactions

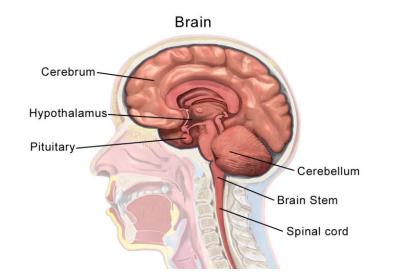
▶ Traumatic responses are normal reactions to abnormal events

Emotional	Psychological/Cognitive	Behavioral/Physical
<ul> <li>Shock and disbelief</li> <li>Fear and/or anxiety</li> <li>Grief</li> <li>Guilt or shame</li> <li>Denial or minimization</li> <li>Depression or sadness</li> <li>Anger or irritability</li> <li>Emotional detachment</li> </ul>	<ul> <li>Difficulty concentrating</li> <li>Slowed thinking</li> <li>Difficulty making decisions</li> <li>Confusion</li> <li>Poor attention span</li> <li>Mental rigidity</li> <li>Memory difficulties</li> <li>Intrusive thoughts/flashbacks</li> </ul>	<ul> <li>Sleep disturbance</li> <li>Appetite disturbance</li> <li>Fatigue/inability to rest</li> <li>Nausea or upset stomach</li> <li>Aches and pains</li> <li>Increased susceptibility to illness</li> <li>Fainting/dizziness</li> <li>Chronic pain</li> </ul>



#### Do we have 3 brains?





 Rational Brain: understanding how things and people work & figuring out how to accomplish our goals, manage our time, and sequence our actions

#### **Emotional Brain:**

- Limbic System/Mammalian Brain: seat of the emotions, monitors danger, judges what is pleasurable or scary, decides that is important for survival, responsible for coping with challenges
- Reptilian brain: eat, sleep, wake, cry, breathe, feel temperature, hunger, wetness, and pain, rids the body of toxins by urinating & defecating

**Poll:** Is this brain stuff making sense to you?



Source

#### Key Players in the Brain that Process Trauma

#### Medial Prefrontal Cortex = watch tower

- Conscious awareness
- Makes judgments about stimuli

#### Thalamus = cook

- Sensory info arrives through eyes, ears, nose, skin & converges here
- "this is what is happening to me"

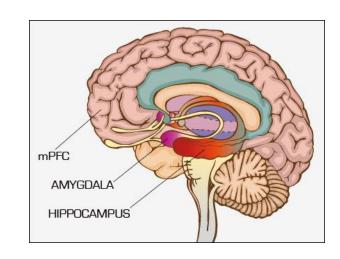
#### Amygdala = smoke detector

- Identifies if incoming input is relevant for survival
- With support of hippocampus
- Releases cortisol & adrenaline





- Balance between smoke detector & watch tower --> effectively deal with stress
- ► Top down regulation: strengthening the capacity of the watchtower to monitor your body's sensations
- Bottom down regulation: recalibrating the autonomic nervous system
- ► Emotions are the foundation of reason as they assign value to experiences



## Trauma Triggers

They are the images or words or ideas that drop like trapdoors beneath us, throwing us out of our safe, sane world into a place much more dark and less welcoming. The past is not dead...triggers have been waiting there in the darkness, working out, practicing their most vicious blows, their sharp hard thoughtless punches into the gut, killing time until we come back that way" - Neil Gaiman

**Common triggers:** sounds, smells, colors, movements, objects, anniversaries, significant life events



#### More Traumatic Brain Processes

Dissociation	Flashbacks/Intrusions	Emotional Intensity
<ul> <li>Essence of trauma</li> <li>Overwhelming         experience is split off         &amp; fragmented-         sensations take on a         life of their own</li> <li>Sensory fragments of         memory intrude         present moment&gt;         reliving</li> <li>Unresolved trauma&gt;         continual secretion of         stress hormones</li> </ul>	<ul> <li>Can occur at any time-while awake or asleep</li> <li>No way of knowing when it will occur again or how long it will last</li> <li>Stress hormones engrave memories even deeper in the mind</li> </ul>	<ul> <li>Defined by smoke alarm (amygdala) &amp; watch tower (medial prefrontal cortex)</li> <li>Context and meaning of experience determined by dorsolateral prefrontal cortex (timekeeper) &amp; hippocampus</li> </ul>



## A Traumatized Persons Reality

"I don't know of one thing I don't fear. I fear getting out of bed in the morning. I fear walking out of my house. I have great fears of death...not that I will die someday, but that I am going to die within the next few minutes. I fear anger...my own and everyone else's, even when anger is not present. I fear rejection and/or abandonment. I fear success and failure. I get pain in my chest and tingling and numbness in my arms and legs every day. I almost daily experience cramps ranging from menstrual-type cramps to intense pain. I just really hurt most of the time. I feel that I can't go on. I have headaches, I feel nervous all the time. I have shortness of breath, racing heart, disorientation, and panic. I'm always cold, and I have dry mouth. I have trouble swallowing. I have no energy or motivation, and when I do accomplish something, I feel no sense of satisfaction. I feel overwhelmed, confused, lost, helpless, and hopeless daily. I have uncontrollable outbursts of rage and depression."



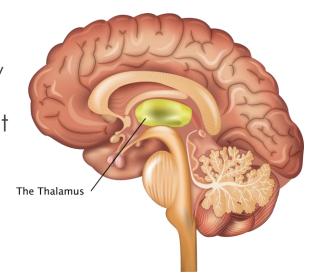
# Trauma is preverbal

- ► Alexithymia- Greek for not having words for feelings
- "I don't know what I feel, it's like my head and body aren't connected. I'm living in a tunnel, a fog, no matter what happens it's the same reaction- numbness, nothing. Having a bubble bath and being burned or raped is the same feeling. My brain doesn't feel."
- ▶ If you keep secrets and suppress information, you are fundamentally at war with yourself.
- Symptoms of PTSD often include statements like:
  - I feel dead inside
  - I will never be able to feel normal emotions again
  - I have permanently changed for the worse
  - I feel like an object, not like a person
  - I have no future
  - I feel like I don't know myself anymore



# Trauma & Memory

- "There is evidence that trauma is stored in the part of the brain called the limbic system, which processes emotions and sensations, but not language or speech. For this reason, people who have been traumatized may live with implicit memories of terror, anger, and sadness generated by the trauma, but with few or no explicit memories to explain the feelings."-Sidran Traumatic Stress Foundation
- Thalamus = filter/gatekeeper
  - Central component of attention, concentration & new learning which are all compromised by trauma
  - People with PTSD have their floodgates wide open & lack a filter --> constant sensory overload
- Traumatic memories can be stored in the brain differently & so survivors cannot access them as readily as others = protective mechanism

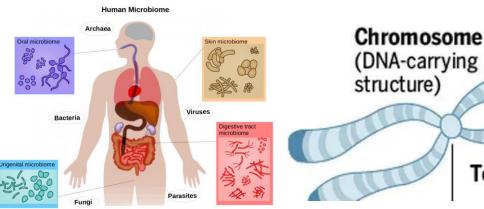




Telomeres

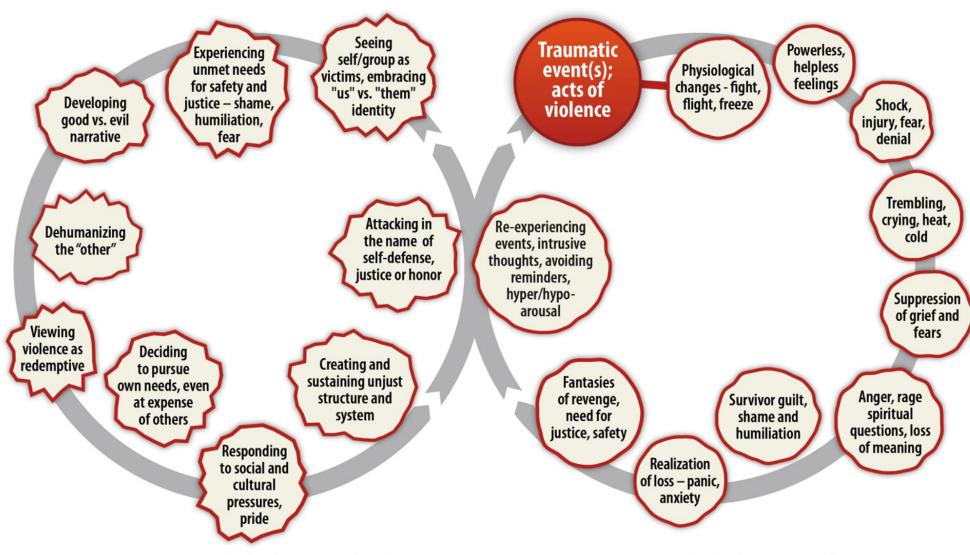
# Biology of Trauma

- Trauma can cause epigenetic changes: alterations in the structure of our chromosomes which affect the way our genes function and may make us less resilient, more vulnerable.
  - ► Can be transmitted to our children & grandchildren
- ► Trauma can also accelerate the shortening of telomeres-structures at the ends of our chromosomes that diminish in size with age
- Digestive system & eating:
  - Lose our appetite
  - After trauma- eat compulsively & fast
  - Powerful effect on microbiome
    - ▶ Healthy microbiome stimulates vagus nerve



# **Cycles of Violence**





Aggressor Cycle (Acting Out)

Victim Cycle (Acting In)



# Learn more about trauma and domestic violence

- Trauma Stewardship
- Trauma Informed Care Guide for helping survivors of domestic violence
- Resources for Advocates Trauma-Informed DV Advocacy
- ► Traumatic Brain Injury and Domestic Violence
- Intimate partner violence and traumatic brain injury:
  An "invisible" public health epidemic
- Traumatic brain injury: The unseen impact of domestic violence
- The Connection Between PTSD and Domestic Violence
- Thinking about Trauma in the Context of DV Advocacy: An Integrated Approach

- ► INTIMATE PARTNER VIOLENCE AND LIFETIME TRAUMA
- PREVALENCE OF INTIMATE PARTNER VIOLENCE AND OTHER LIFETIME TRAUMA AMONG WOMEN SEEN IN MENTAL HEALTH SETTINGS \*
- NCDVTMH Online Repository of Trauma-Focused
  Interventions for Survivors of Intimate Partner Violence
- New Resource NCDVTMH Online Repository of Trauma-Focused Interventions for Survivors of Intimate Partner Violence
- More relevant webinars
- Tips for Enhancing Emotional Safety
- Practical Tips for Increasing Access to Services
- Blood Memory



## Continued Learning

#### **Book Recommendations**

- Waking the Tiger: Healing Trauma by Peter A. Levine and Ann Frederick
- ► The Body Keeps the Score: Brain, Mind and Body in the Healing of Trauma by Bessel Van Der Kolk
- ▶ The Transformation by Dr. James S Gordon
- ► Healing: The Act of Radical Self-Care by Dr. Joi Lewis
- No Visible Bruises by Rachel Louise Snyder
- ► The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation by Dr. Stephen Porges
- ► The Body Bears the Burden: Trauma, Dissociation, and Disease, Dr. Scaer
- ▶ Documentary: Trauma Treatment for the 21st Century.

# Recommendations from webinar attendees

- The Body Keeps the Score has a free audiobook recording on YouTube!
- https://www.braininjurymn.org/
- Narrative Exposure Therapy
- https://www.strangulationtraininginstitute.c om/
- American Dance Therapy Association
- Addiction & the brain
- John Sarno's MIND BODY PRESCRIPTION book

# Mental Health Resources: International

HTTPS://TOGETHERWEARE-STRONG.TUMBLR.COM/HELPLINE



# Mental Health Resources & Support: In the United States

- ► The National Alliance on Mental Illness (<u>NAMI</u>): <u>1-800-950-6264</u>, <u>info@nami.org</u>. NAMI operates an emergency mental health hotline Monday–Friday from 10 a.m. to 6 p.m. EST. Operators can provide information about mental illness and refer callers to treatment, support groups, family support, and legal support, if needed.
- Substance Abuse and Mental Health Services Administration (<u>SAMHSA</u>): (800) 662-4357. SAMHSA runs a 24-hour mental health hotline that provides education, support, and connections to treatment. It also offers an online <u>Behavioral Health Treatment Locator</u> to help you find suitable behavioral health treatment programs.
- National Institute of Mental Health (<u>NIMH</u>): (866) 615-6464. This organization has a variety of methods for you to communicate with knowledgeable people about mental health issues. In addition to the phone line, there is a live online chat option. These resources are available Monday–Friday, 8:30 a.m. to 5 p.m. EST.
- <u>Crisis Text Line</u>: Text CONNECT to 741741. Specialized crisis counselors are just a text message away on this free, confidential 24-hour support line. To further protect your privacy, these messages do not appear on a phone bill. The text line also provides services and support if you are upset, scared, hurt, frustrated, or distressed.
- National Domestic Violence Hotline: 1-800-799-7233
- More Minnesota Specific: click here

#### Resources Available



Tri-Folds available for download here: https://www.wadvocates.org/our-services/violence-prevention-education/safetyresources/



SAFETY TIPS

# DOMESTIC USE THIS FAMPHLET FOR RESOURCES. SAFETY PLANNING AND TIPS, & MORE MORE INPO AT WADVOCATES ORG Women's Advocates





#### Comprehensive 90 page National/Minnesota Resource Hub: click here to view

 This document is organized by topic including: Sexual Assault/Stalking Victim Resources, Sex Trafficking/Prostitution Resources, DV Groups, Legal Services, Mental Health Services, Emergency Shelters, Supportive/Transitional/Affordable Housing, Emergency Assistance Services, Child Services, Youth Services, Senior Citizens, Disability Services, Health, LGBTQ+ Services, Services for Men, Transportation, Furniture, Childcare Resources, Clothing Resources, Community Advocacy, Family Support Services, Employment Services, Debt Management Resources, and more!

> Click here to access 100+ page resource searchable doc

Other helpful handouts <u>here</u>: power and control wheels, safety plans, helpful quizzes, lethality tools, identityspecific resources, health-specific resources, social service specific resources, and more.



# Safety Planning

- Connect victim-survivor with a DV advocate
- Allow it to be collaborative in nature
- Don't forget about emotional wellness
- Ideas to help kids know the plan
- Direct them to this questionnaire: <a href="https://www.wadvocates.org/finding-the-right-safety-resources-step-1/">https://www.wadvocates.org/finding-the-right-safety-resources-step-1/</a>

- Emotional Safety Plan
- One Page Domestic Violence Safety
   Plan
- ► <u>Interactive Online Safety Plan</u>
- Children's Safety Plan
- College Student Safety Plan
- Teen Safety Plan
- Technology Safety Information
  - Remove online information
- Safety Planning for Survivors with Disabilities





#### Chat with an advocate if:

- Someone you are living with or in a relationship with is causing you harm
- If you are scared for your safety and need somewhere to go
- If you need resources (legal, financial, housing, safety)
- You do not need to be in immediate danger to reach out to help. We want to help in any way that we can.

#### What we provide:

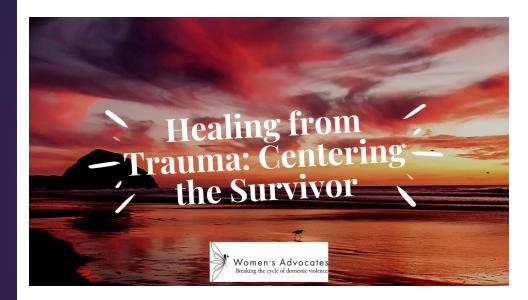
- Safety planning / response
- Emotional support
- Connection to helpful relevant resources
- Access to available shelter/housing programs



Women's
Advocates
has a LIVE
CHAT feature
on our
website



#### Remaining July Webinars! Register now!



Click here to register for the healing from trauma webinar



Click here to register for the healthy relationships webinar

Previous webinars located here

# Connect with us online!

Live chat at: www.wadvocates.org

24/7 Crisis Resource Line: 651-227-8284



Facebook Like our page @wadvocates



Instagram
Follow us

@womensadvocates



Twitter
Follow us
@womensadvocates



YouTube Subscribe to our channel youtube.com/c/womensadvocates

Email us at outreach@wadvocates.org or resources@wadvocates.org