Physiology of Trauma Study Guide

What Is Trauma?

Trauma isn't just about what happened - it's about how your **nervous system experienced it**.

A helpful way to understand trauma is this: **Trauma is anything that feels like "too much, too fast" for your system to handle.**

It happens when:

- The experience is overwhelming
- It comes on too quickly
- You don't have enough support
- And you have **no way to process or integrate** what's happening

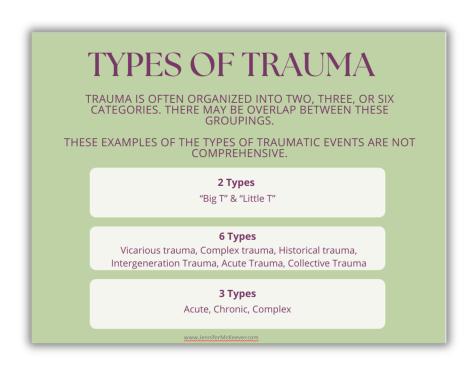
The event itself doesn't define trauma, but rather the **impact it has on your body and nervous system**.

How Do We Heal Trauma?

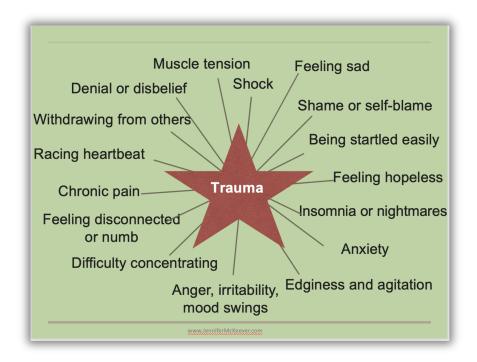
Healing trauma means giving the body and nervous system a chance to **integrate what** couldn't be processed at the time. This happens through:

- **Somatic awareness** (feeling and sensing the body)
- Emotional expression and regulation
- And for many, a spiritual reconnection to meaning, presence, or a deeper sense of self

Healing is not about erasing the past, it's about **reclaiming safety, connection, and resilience in the present**.



And there are many ways the signs and symptoms can manifest:



How the Body Responds to Trauma

Our body responds to stress and trauma through two key systems:

- The autonomic nervous system (ANS)
- The adrenal system (which releases stress hormones like adrenaline and cortisol)

Let's focus on the **autonomic nervous system**, which has two main branches:

Sympathetic Nervous System - "The Gas Pedal"

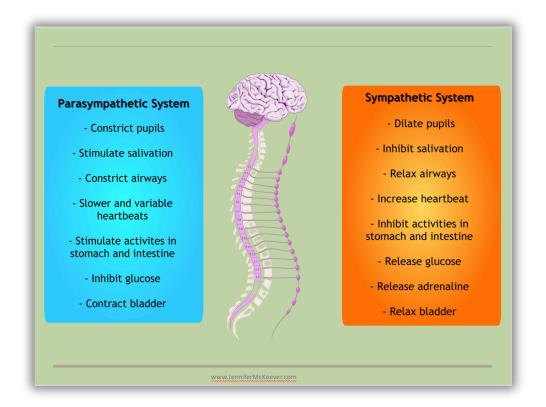
This branch gives us the energy to **take action**. It activates the **fight-or-flight** response, helping us **defend ourselves** in the face of danger.

Parasympathetic Nervous System - "The Brake Pedal"

This branch helps us **slow down, rest, and recover**. It has two main roles:

- It supports the **freeze response** when the body shuts down under extreme stress
- It also helps us relax, settle, and discharge stress after sympathetic arousal

Together, these two branches help the body **respond to threats and return to balance**, but trauma can disrupt this natural rhythm, leaving us stuck in survival states.



Survival Responses of the Nervous System

When we experience a threat or stress, our nervous system responds automatically to keep us safe. These are known as **survival responses**:

- Fight Meeting the threat head-on with aggression or confrontation
- Flight Trying to escape or avoid the threat by running away
- Freeze Becoming immobilized; feeling stuck, numb, or shut down
- Fawn People-pleasing or appeasing to avoid conflict or danger

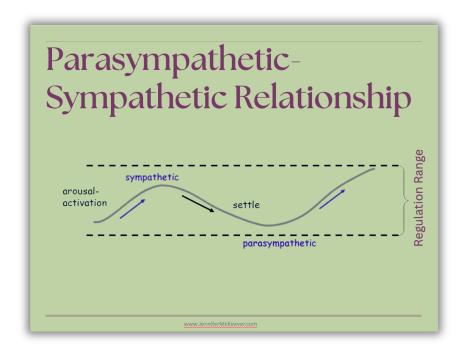
These are not conscious choices - they're **instinctive reactions** wired into our biology.

What Happens in a Regulated Nervous System?

A regulated nervous system has flexibility. It can:

- Shift into **sympathetic activation** (fight or flight) when there's real danger or stress
- Then return to a **parasympathetic state** (rest, recovery, safety) once the threat has passed

This ability to **move in and out of activation smoothly** is key to resilience and nervous system health.



What Causes Trauma Symptoms?

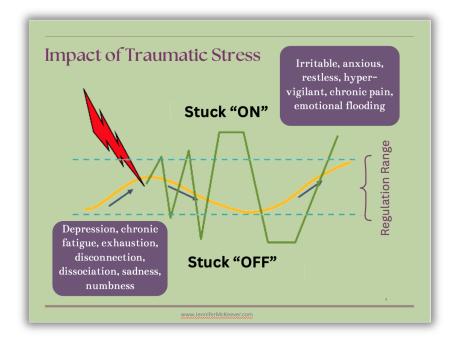
Trauma symptoms appear when the natural rhythm of our nervous system gets **disrupted**. Normally, our nervous system moves smoothly between:

- **Sympathetic activation** (gas pedal for action and response)
- Parasympathetic calming (brake pedal for rest and recovery)

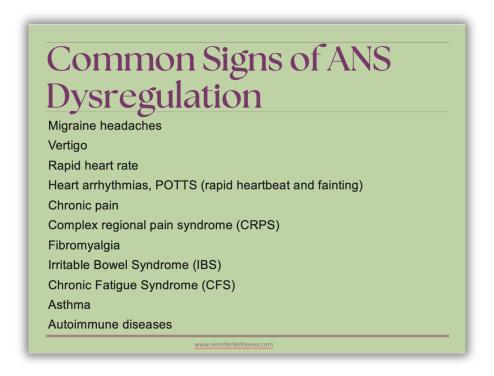
But when we experience trauma, this flow can get **stuck**. Instead of moving in and out of stress and recovery, the nervous system becomes **dysregulated**. This happens when **traumatic stress is not fully processed or released**. It stays stuck in the body.

As a result, the system can get trapped in:

- Constant activation (anxiety, hypervigilance, agitation)
- Or shutdown and numbness (fatigue, disconnection, freeze)



This dysregulation of our autonomic nervous system and accumulation of traumatic stress can have a range of effects on our health:



Why Understanding Trauma Matters

Understanding how trauma affects us is an essential step in healing.

When we begin to **recognize our automatic survival patterns** - like fight, flight, freeze, or fawn - we gain insight into how our **body and mind respond to stress**. This awareness helps us meet ourselves with more compassion, rather than shame or confusion.

The Role of the Nervous System in Healing

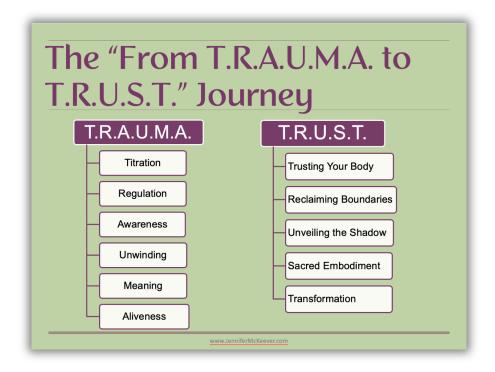
At the core of trauma healing is the **release of traumatic stress from the nervous system**. Until that stress is discharged, the body may stay stuck in survival mode, even long after the danger has passed.

But true healing goes beyond just the body.

It's about bringing the body, mind, and spirit back into connection—

- So we can feel safe in ourselves
- So we can make sense of what happened
- And so we can reconnect with purpose, meaning, and wholeness

This is the path of **deep integration**—and it's the heart of all lasting healing:



Healing trauma is not just about reducing symptoms - it's about **reclaiming the full arc of who we are**. The *From Trauma to Trust™* model guides us through this journey: from the descent into our wounds, survival responses, and stored stress, to the return, where we learn to trust our body, reclaim our boundaries, integrate our shadow, and embody the truth of who we are. It's a path that honors the nervous system *and* the soul. By meeting trauma with compassion and skill, we awaken our capacity for connection, aliveness, and transformation. This is how we move from merely surviving... to truly living.

With Care & Respect,

Tennifer McKeever

p.s. Be sure to tune into my 3-part training, *The Vagus Nerve and Healing Trauma*, where you will learn more about what is needed to release traumatic stress and support a return to nervous system regulation.

