

Understanding the Trauma Response

PSYCHOEDUCATION · THREAT AND DEFENCE RESPONSES

How the brain and body respond to danger, and why reactions can continue afterwards

After frightening or overwhelming experiences, many people notice reactions that feel confusing or out of proportion. These are often the body's protective systems at work. This page offers general information to help make sense of them. It is not a diagnosis.

1 · DETECT

A possible threat

The brain picks up signs of danger, often very quickly and automatically.

2 · ALARM

The body prepares

Heart rate, breathing and muscle tension change to get ready to respond.

3 · RESPOND

A protective reaction

Fight, flight, freeze or shutdown, depending on the situation.

4 · SETTLE

Returning to baseline

Once safe, the body usually settles gradually, though this can take time.

01 When the brain detects threat

fast, automatic and protective

Fast and *automatic*

Networks in the brain involved in survival can detect and respond to possible danger rapidly, without waiting for careful thought.

Protective by *design*

These systems evolved to keep us alive. They tend to err on the side of caution, reacting to anything that might be dangerous.

Not a *choice*

The initial response isn't decided consciously. Feelings and thoughts about what happened often come afterwards.

02 The alarm response

how the body prepares for action

WHAT YOU MIGHT NOTICE	WHAT IT'S FOR
Heart beats faster, breathing quickens	Sends oxygen and energy to the muscles
Muscles tense	Prepares the body to move or protect itself
Attention narrows onto the threat	Focuses on what seems most important for safety
Digestion and other "non-urgent" processes slow	Redirects energy to immediate survival
Stress hormones, such as adrenaline and cortisol, are released	Helps sustain the response while it's needed

03 Fight, flight, freeze and shutdown

a range of automatic defence responses

ACTIVE

Fight

An urge to push back, defend or protect. May show up later as irritability or anger.

"I need to stop this."

ACTIVE

Flight

An urge to escape or get away. May show up later as restlessness or avoidance.

"I need to get out."

ALERT STILLNESS

Freeze

Becoming very still and watchful while the brain assesses what to do next.

"I can't move yet."

WHEN TRAPPED

Shutdown

The body may go limp, numb or heavy, and things can feel distant or unreal.

"I'm not really here."

These responses are automatic. Freezing or shutting down is not a choice or a weakness, and does not mean a person wanted or agreed to what was happening. They reflect what the nervous system detects in the moment, often faster than conscious thought.

04 Common reactions afterwards

tick any you have noticed

- ☐ Feeling jumpy or on edge
 ☐ Trouble sleeping or nightmares
 ☐ Unwanted memories
 ☐ Avoiding reminders
 ☐ Irritability or anger
 ☐ Feeling numb or distant
 ☐ Difficulty concentrating
 ☐ Guilt or shame
 ☐ Feeling unsafe
 ☐ Tearfulness
 ☐ Tiredness
 ☐ Physical tension or pain

Reactions like these are common in the days and weeks after a frightening event, and differ from person to person. There is no right or wrong way to react. For many people they ease with time; if they don't, support can help.

When the Body Remembers

PSYCHOEDUCATION · AROUSAL AND TRAUMA REMINDERS

Why reactions can happen quickly, feel too much or too little, and return with reminders

Understanding these patterns can make reactions feel less confusing. It may also help to know that many people's reactions ease over time, and that effective support is available if they don't.

05 Why the body may react before thought

two speeds of processing

The fast *route*

Threat detection can happen within moments, sometimes before we're consciously aware of what we've noticed. The body starts reacting first.

The slower *route*

Careful thinking, reasoning and making sense of events take longer. Looking back, people sometimes ask "Why didn't I...?" without realising how fast the body acted.

06 Hyperarousal and hypoarousal

too much, or too little

Hyperarousal

TOO MUCH ACTIVATION

Feeling on edge, jumpy or irritable; racing heart or thoughts; panic; difficulty sleeping or concentrating; scanning for danger.

A manageable zone

OFTEN CALLED THE "WINDOW OF TOLERANCE"

Able to feel emotions and still think, connect with others and respond flexibly. Stress can still be present here.

Hypoarousal

TOO LITTLE ACTIVATION

Feeling numb, flat, foggy, disconnected or far away; low energy; difficulty speaking or moving; things may feel unreal.

The "window of tolerance" is a widely used clinical model rather than a precisely measured system. Many people find it a helpful way to notice their state; its range can vary and may widen with support.

07 Why reminders can activate the body now

even when you're currently safe

Memories of overwhelming events can sometimes be experienced as vivid, sensory, or difficult to place in context. Research suggests this can contribute to a sense of **current** threat. A sight, sound, smell or feeling that resembles the original event may then activate the alarm response as if the danger were happening now.

Sometimes the body is responding to a reminder rather than to danger in the present.

Reminders I have *noticed*

- ☐ Sounds or voices
- ☐ Smells
- ☐ Places
- ☐ Certain times or dates
- ☐ Body sensations
- ☐ Faces or appearances
- ☐ Words or tones
- ☐ Strong emotions
- ☐ News or media
- ☐ Touch

08 What may help

and when to seek support

In the *moment*

- Notice where you are now: name the place, the date and a few things you can see
- Slow, gentle breathing with a longer out-breath may help some people settle
- Remind yourself: "This is a reminder. I am safe right now," if that is true

Seeking *support*

Many people recover in the months after a traumatic event. If reactions continue for more than a month or affect daily life, speak with a GP or psychologist. Trauma-focused psychological therapies, including trauma-focused CBT and EMDR, are recommended in clinical guidelines.

Go at your own pace

Reading about trauma can bring up difficult feelings. You can pause, come back to this later, or talk it through with your psychologist or another appropriate professional.

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