

Thank you, Justin.

Welcome to the first part of Stress Management. We discuss the types of reactions and the physiological effects.

Good Studying.

What is Stress?

- Stress is the body's reaction to anything which needs adjustment or response
- The 'Fight or Flight' response in the human body
  - ✓ Activates the immune system
- Stress might help during difficult situations
- As an EMT, stressful situations are the norm and not by chance



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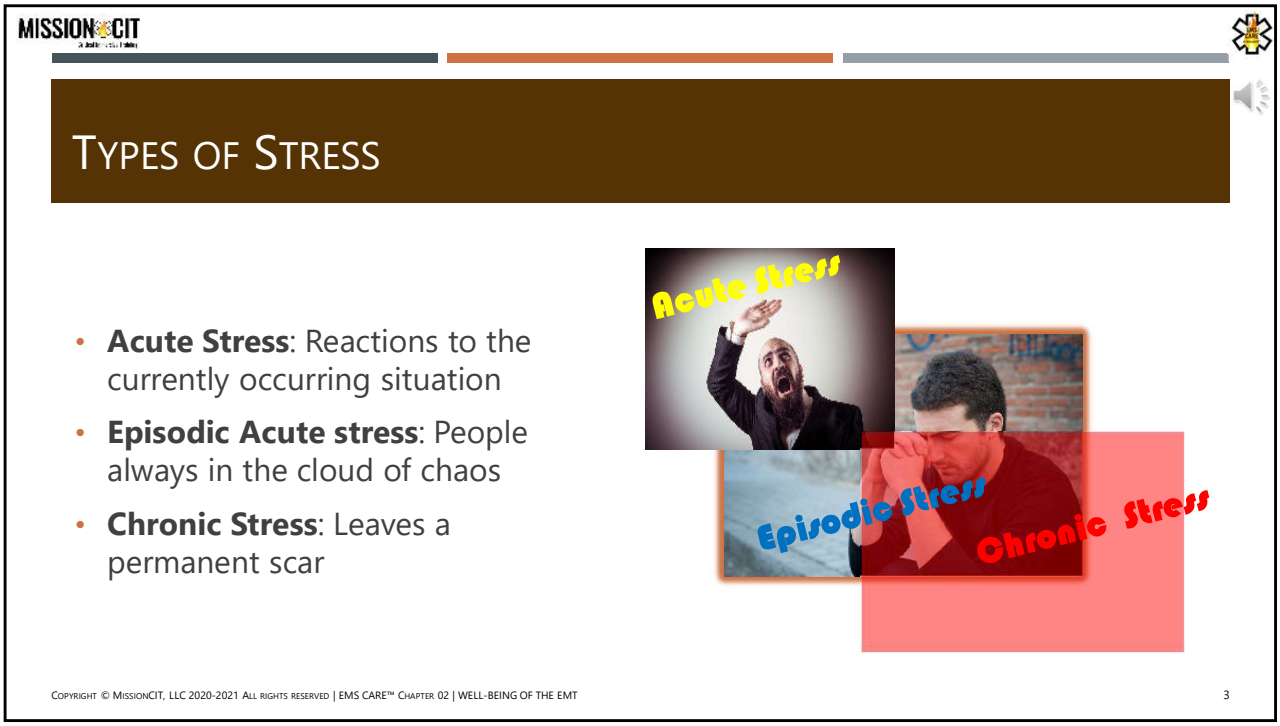
The body's reaction to anything which needs adjustment or response is called stress. It can be physical, mental, or emotional factors; that trigger tension and make us feel overwhelmed or unable to cope. The baseline is that stress releases hormones that trigger a 'fight or flight' response and activate the immune system.

Such reactions help to take split-second appropriate decisions or manage well, which otherwise would have rattled us.

But as we handle stressful situations repeatedly, it starts impacting our body and mind and can lead to chronic

medical problems.

Being an EMT, stressful situations are not by chance but the daily norm; and it can cause wear and tare of our physical and mental faculties.

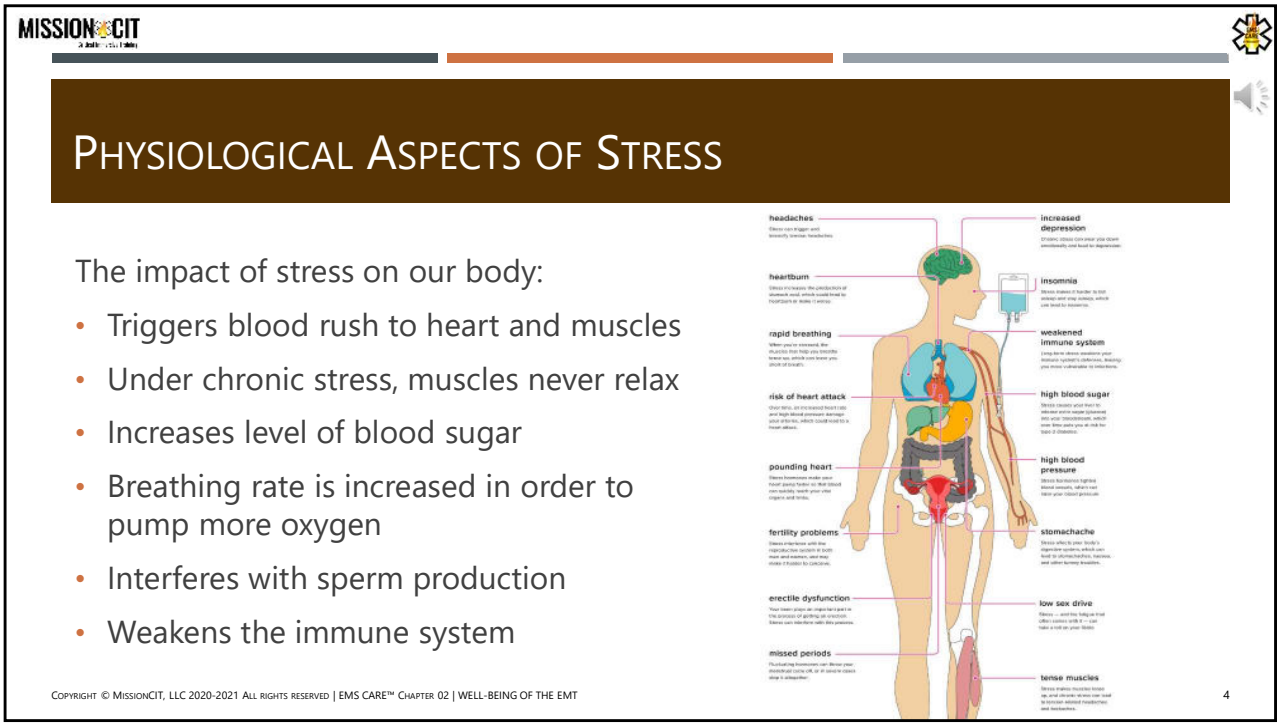


Now, we will see the types of stress based on trigger factors, or for how long the body reacts.

They are Acute Stress, Episodic Acute Stress, and Chronic Stress.

- Acute stress is the reaction to the current situation, and its immediate outcomes. It can be sometimes exciting too, similar to the last leg of a sports event, and helps circumvent demanding situations. Once the stressor gets detached from the context, the body relaxes.

- Episodic Acute stress leaves people always in the cloud of chaos, and it is like perpetual acute stress. They get lost in the whirl of life's regular demands and pressure, like being on time. It can lead to negative personality traits like anger, irritability, and a very pessimistic attitude.
- Chronic stress is similar to a permanent scar on the body that never heals. Triggered from childhood pain, or war situations, or any problem that sees no solution, chronic stress sometimes cements itself, so that the person gets used to it, despite the damage, requiring external help.



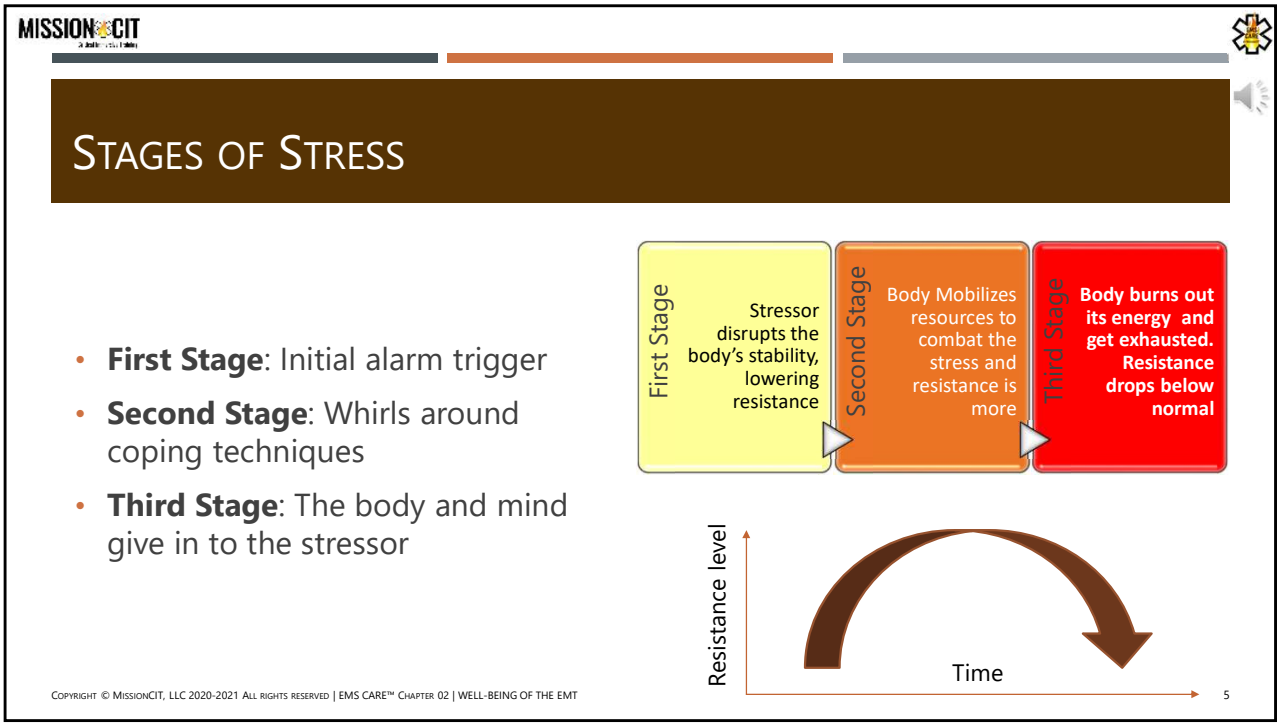
Now let us see how stress intervenes in the normal functioning of the body systems.

Stress can disrupt the physiology of many organs in the human body. The stressor can trigger the hypothalamus, located in the brain for releasing the stress hormones, as a protective mechanism, but this can prove to be detrimental in the long run in the following ways:

- Triggers blood-rush to those organs like muscles and heart, which need to overwork.
- Under chronic stress, muscles never reach the point

where they can relax.

- Increase in blood sugar level for an added boost, but in the long term, the body cannot balance this with insulin levels, leading to type 2 Diabetes.
- The breathing rate increases to pump more oxygen to the entire body for additional energy, with a possibility of causing a push in the blood pressure.
- Constant stress on the mind can lead to a drop in testosterone and interfere with sperm production.
- Though stress peaks the immune system in small intervals, it can weaken the immune system if it is chronic.
- Stress leads to depression, anxiety, loss of sleep, fatigue, memory loss, and hypervigilance. Substance abuse, violence, post-traumatic stress disorder, and dissociative response are some different possibilities.



- **First Stage**: Initial alarm trigger
- **Second Stage**: Whirls around coping techniques
- **Third Stage**: The body and mind give in to the stressor

Though we might be aware of the stress playing in our body, there are three stages specifically:

- The first stage is the initial level reaction arising from the alarm. Here the body immediately responds to a trigger, and the response varies across a spectrum of people.
- In the second stage, the mind has judged the situation. It whirls around coping techniques to either solve the issue, blame the hurdle, the people involved, or run away from it.

- In case the stress continues, people reach the Third Stage: here, like a losing battle, the body and mind get exhausted and give in to the stressor.
- Being aware and conscious of these stages and that they are nature’s mechanisms for various reasons will help us deal with our stress and will not make us feel helpless.

Signs and Symptoms of Stress

Physical Symptoms

- Symptoms that can be felt physically like muscle tension, headache, weight gain or loss, acidity, dry mouth and trembling

Emotional Symptoms

- Signs from how we feel, like, depression and low self-esteem

Behavioral Symptoms

- These can be noticed as impacts in routine, like lack of sleep, disconnect with people and increased use of alcohol, cigarettes

Cognitive Symptoms

- Constant worry, lack of organization, not able to make decisions and forgetfulness



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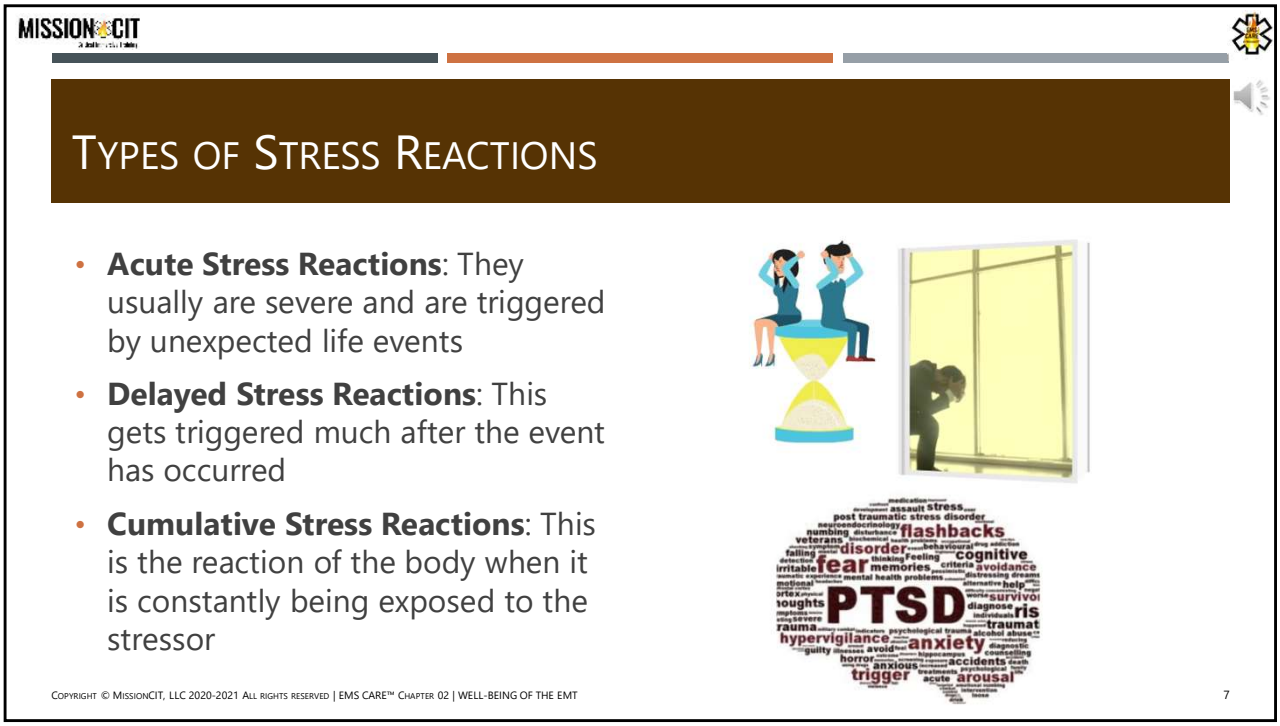
We have seen what stress is and the damage it can do. Since they weave themselves into all the parts of the body; the signs and symptoms range wide and vary from person to person.

- Physical Symptoms include Muscle tension in the head, neck & face, Headaches, Weight gain or loss, Indigestion and acidity problems, Cold and Sweaty Palms, Dry mouth, Clenched Jaw, Trembling, and shivering.
- The Emotional Symptoms are Sleeping disorders, Depression and Anxiety, Sexual difficulties, Low Self-

Esteem, and guilt.

- The Behavioral Symptoms can be, Lack of attachment with close relationships, Increased use of Alcohol and Cigarettes, and Use of Drugs.
- The Cognitive Symptoms are Constant worry, Inability to make decisions, Forgetfulness, and lack of organization.

We might not have all these above-said symptoms, but we need to be very wary if we have some or any of these, that there is a probability that It could be related to actual stress or because of a different medical condition. Being aware always places us in a better position to make decisions or seek professional help.



Apart from the signs and symptoms, there are also variations in stress reactions. The reactions are cumulative of different factors like the stress triggers, how a person internalizes it, and how their physiological functions get impacted.

The types of stress reactions are acute, delayed, and cumulative.

- Acute stress reactions are usually severe are triggered by unexpected life events. Though critical, they do not last long. They can be positive too and referred to as Eustress.
- Delayed stress reactions get triggered much after the

event, maybe after months or even years. The patient might not recognize what could have caused the stress and might generally need professional intervention. A typical case would be the stress triggered by war.

- A cumulative stress reaction is the reaction of the body during constant exposure to the stressor. So, the wear and tear on the person are always happening.