



SAFETY FUNCTION ACTION: Independent Study

Special Topic:
Stress and Stressors



Stress is the subjective experience that occurs when we perceive that the demands of the situation exceed our resources to successfully cope with those demands. Simply, stress is what we experience when we cannot handle the demands placed upon us. Those demands are called stressors, which are events or situations that trigger the stress response. The stress response is a common occurrence of everyday life, but can be exacerbated during a disaster. The following information regarding stress and stressors will briefly cover how stress impacts us daily. However, the primary focus of this special topic is stress resulting from a disaster and its effects on both responders and survivors.

Stress is:

- Normal
- Necessary
- Identifiable
- Manageable
- Productive or destructive
- Acute or delayed
- Cumulative
- Sometimes preventable



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What is stress? It is normal. Almost everyone will experience stress at some point in their lives, and it can be perceived as either positive or negative. While preparing for a deadline at work, you may experience stress. Just as you may experience stress as you prepare for a wedding. Both situations are stressful, but one is perceived as a positive stressor and the other is perceived as negative. Similarly, stress can be productive or destructive. If the stress you experience causes you to work harder and meet your deadline, it has been productive. However, if you become stressed to a point that you begin to avoid work or are too overwhelmed to complete your task, it has been destructive. This stress that promotes productivity can be viewed as necessary. Without some stress, things may be left incomplete. The invitations to the wedding may have never gone out if there had not been some stress pushing you to place them in the mail.

Another descriptor of stress is that it can be acute or delayed. You may be able to identify immediately after a stressor that you are stressed, or you may begin to notice the stress hours or days after the stressor has occurred. Many responders notice that they do not feel exhausted, sore, or irritable until after they have returned from disaster duty. Although these signs can be delayed, recognizing them shows that stress can be identifiable and manageable. Acknowledging the stress

you are experiencing and the effects it has on you allows you take some control over it. Once you identify your stress signs, you can manage, to a certain extent, how stress impacts you. Detecting stress responses also allows you to pinpoint the stressors that affect you the most and learn to control the stressors themselves and/or your reactions to them.

Controlling stress responses can come in a variety of forms. You can prevent your exposure to particular stressors and you can limit the number of stressors that you need to handle at one time. However, there will be times that you cannot control the stressors themselves, instead you can engage in stress management techniques to minimize the effects of stress. These techniques will be different for each person. For more information on this topic please see the separate special topic document *Stress Management Techniques*.

Stressors can be:

- Real
 - External
 - Time-limited
- Or
- Or
- Or
- Imagined
 - Internal
 - Ongoing



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It should be noted that stress is a product of the absolute magnitude of a stressor and the person's *perception* of the stressor. Much of the power of stressors comes from the individuals perception of it and their expectations on how it will impact them. A stressor that may not impact one member of a response team may cause severe stress for another member due to how they perceive that stressor. For example, if you are working with a multi-disciplinary team when responding to a pandemic influenza outbreak you may find that a Medical Reserve Corps member may experience less stress than a police officer. The difference between the two members is not the environment they are in, but their personal experiences, personal comfort levels with specific situations, and their perception of the stressor itself. Had the same two individuals responded to a terrorist attack, the levels of stress might have been reversed. Much of the stress that comes from situations or events is based in individual experiences, beliefs, personal background, previous experiences, and perceptions. As you can see above, the dichotomous nature of stressors stems from its actual power and the power individuals place upon it.

Having descriptors of stressors can help you realize how they can be identified. As shown above, stressors can be both sides of the coin. Either they are real or imagined. This means that the

stressors can either actually exist or they could be created by a person's belief or expectation. An example of an imagined stressor is if a survivor believes that they have lost their entire home and personal belongings but have no evidence to base this belief on. Although it may be imagined, it is still a strong stressor that can produce extremely negative stress reactions. Another dichotomy of stressors are that they can be either external or internal. People may be impacted by a stressor coming at them from their environment or they can create the stressor themselves (a self-imposed deadline or expectation). Finally, stressors can be time-limited (only causing stress while they are present for a finite period of time), or they can be on-going (causing stress and distress throughout an extended period of time).

Dimensions of the Stress Response

Physical	Body reactions
Emotional	Feelings
Cognitive	Thinking/decision-making
Behavioral	Actions
Spiritual	Beliefs and values
Social	Interactions



Individual reactions to stress can range across a variety of dimensions. Each dimension is a separate area of your life that impacts daily functioning and can be negatively impacted by stress. The above chart explains each area in simple terms. The following pages will go into greater detail of the reactions that can be found in each of these areas.

Physical Stress Signs

- Adrenal “rush”
- Sweating
- Startle reflex
- Dizziness
- Heart palpitations
- Tremors
- Gastro-intestinal problems



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The above-listed physical stress signs are related specifically to bodily reactions. These are the most easily identifiable and the most readily acknowledged. Since they are bodily reactions they are difficult to ignore and therefore are more easily recognized as signs that something is bothering the individual. Responders often feel more comfortable acknowledging these physical signals than they do reporting other signs. You may also find with survivors, that they have a higher likelihood of sharing their physical stress signs than other indicators of their stress. These signs are also common across cultures, making it easier to discuss stress and its impact on individuals even if there are cultural barriers.

Due to the fact that these signs are more readily acknowledged, it is a good place to start when sharing information about stress. When talking with your colleagues or survivors, you may find it easier to begin your conversation about stress and stress management by asking what their stress signs are and giving examples of physical signs. This can gradually open up a conversation on how to manage stress during high stress periods.

Emotional Stress Signs

- **Fear, terror**
- **Anxiety**
- **Anger**
- **Irritability**
- **Helplessness**
- **Hopelessness**
- **Overwhelm**
- **Emotional “numbing”**



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Emotional stress signs are an area of stress reactions that are not frequently admitted. Although those signals listed above are common, many people will not recognize them as stress related. Fear, anxiety, anger, and irritability are more easily accepted in others than ourselves. You may find that fellow responders and survivors will notice these emotional changes in people around them but fail to notice the same signs in themselves. Helplessness and hopeless are two stress signs that are common but are not always identified as signals of stress. Survivors may express that they feel helpless or hopeless following a disaster but instead of seeing it as a sign of stress they may believe that they are, in fact, unable to exert control over the situation. Feeling emotionally overwhelmed is also common following a disaster. For more information on this topic please see the special topics document *Emotional Anchoring*.

The last emotional stress sign that is important to note is emotional numbing. This particular sign is common following a disaster and is extremely important to note in responders. Although it is a natural reaction for the human body and mind to numb in order to protect itself from stress, it can become detrimental for responders. As a responder, you are often faced with tremendous stress in addition to working with survivors who are also severely stressed. A combination of personal and

vicarious stress can impact responders ability to support and empathize with survivors. The result can be burnout and compassion fatigue. These results are explored in more detail in the special topics document *Burnout and Compassion Fatigue*.

Cognitive Stress Signs

- **Difficulties thinking clearly**
 - Reduced attention span
 - Decreased concentration
 - Calculation difficulties
 - Decision-making problems
 - Confusion
 - Disbelief
 - Memory problems
- **Tendency to see only the worst**
- **Inability to believe things will get better**



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Similar to emotional signs of stress, cognitive stress signs are more often noticed in others rather than ourselves. As shown above, the two key cognitive areas impacted by stress are thought processes and perspective. Thinking while under severe stress becomes difficult in multiple areas of functioning. Memory, attention, calculation, and higher thought processes are all negatively impacted. These signs may become apparent in fellow responders as their ability to think clearly, make accurate decisions, and problem-solve is lowered. When cognitive impairments become noticeable it is vital for the individual to take a break and manage their stress. Without doing so, the individual may place themselves and those they serve in harm's way.

Perspective is another area of cognitive functioning that is modified by stress. Generally positive individuals may find themselves focusing on the negative aspects of a disaster situation. It may become extremely difficult to see the positive in the situation and, therefore, the responder or survivor may focus exclusively on the negative features of the situation. In responders, this particular signal of stress can also be the beginning of burnout. Energy and the drive to serve as a responder may be diminished if the stress has overwhelmed the individual and they lose their ability to focus on goals and the positive impacts of their work. Related to an increased focus on the

negative, is the inability to believe that things will improve. This stress sign can occur in both responders and survivors. As the ability to see the positive in the situation diminishes, it becomes increasingly hard to believe that there is hope. A loss of hope that things will improve can not only be detrimental to a person's functioning, it can also create more stress for the individual. It is here, regarding these stress signs related to perspective, that restating worry thoughts comes in. Finding ways to stop these thoughts and reframe/restate them is such a way as to increase positive perspectives and hope can be a beneficial way to manage these stress reactions. Please see unit *4Comfort for Responders* for more information on reframing/restating worry thoughts.

Behavioral Stress Signs

- Changes in sleep
- Substance use
- Frequent crying
- Speaking more or speaking less
- Changes in diet
- Medication use
- Inappropriate humor
- Decreased interest in pleasurable activities



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As mentioned previously, physical stress signs are the most commonly noted reactions to stress. However, behavioral stress signs are the most easy to recognize from an outsider standpoint. We often attribute emotional, cognitive, and social stress reactions to things other than the stress itself. Easily identified behavior changes, on the other hand, are more commonly associated with stress. Many of the indicators listed above are self-explanatory and many people recognize them as signs of stress. However, one of the signals is often missed and should be addressed more thoroughly, the use of inappropriate humor.

Inappropriate humor can be seen as both positive and negative. As a stress response, if the humor is used appropriately (i.e. in a closed group and in an appropriate setting) than it is not harmful and can be a good stress reliever. Alternately, if the inappropriate jokes or comments are shared in the wrong situation with inappropriate people then it may be even more detrimental to the individual. One example of how inappropriate humor can be both good and bad comes from a story shared by public health nurses responding to Hurricane Katrina. After a long, dirty, and stressful week of driving from town to town delivering vaccinations the nurses were exhausted. As they were driving to the next town in their large white medical response van they began talking about what they were

doing. One of the smiled and said, “You know what we’re really doing? We’re giving drive by shootings! Get it, driving through towns and giving shots. Drive by shootings!” The van erupted in laughter and the stress that had been building for days was lowering. The nurses felt relaxed for the first time during their response and they were ready for the next town. When they arrived in the town, which had been devastated by the hurricane, they were stopped in a neighborhood and asked by the curious community what they were doing there. They responded, not thinking, “We’re giving drive by shootings!”. As you may guess, this did not go over well in the community. Although the humor had worked well for the nurses, it was not appreciated by the community.

Spiritual Stress Signs

- Questioning values and beliefs
- Loss of meaning
- Cynicism
- Directing anger toward God



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Depending on the type of response team that you are deploying with to a disaster, you may be restricted in your ability to mention spirituality and religion. Still, it is important to know that spirituality is greatly impacted by stress. Although some individuals turn towards their religion for strength and support during stressful times, it is also very common for responders and survivors to question their religion/spirituality during a disaster. You may find that some of the survivors you work with experience a loss of meaning, a questioning of the beliefs and values they had held prior to the disaster, and an increasingly cynical view of life. While these signs of stress may be difficult to deal with, it is even more important to note the potential anger towards their god or higher deity.

Directing anger towards a higher power is understandable and common after a tragedy or disaster. The reason responders need to be aware of this potential response is due to the fact that a higher power is distant and intangible. People cannot confront their god but they can confront other individuals they view as having power. The anger and frustration a person feels towards their religion and god may be redirected at responders (those with power and authority in a disaster setting). Understanding this potential reaction can enable responders to realize that the anger may

not be related to them but may be a bi-product of the survivor's frustration towards their religious beliefs.

Social Stress Signs

- Hostility
- Aggression
- Withdrawal
- Interpersonal conflict
- Greater need for comfort



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A final dimension of stress reactions are social stress signs. We can often see these reactions in the way our teammates interact with us or other colleagues. Interpersonal conflict is one of the key reactions that can become apparent during disaster response. Finding ways to intercede in the conflicts, find solutions, and manage individual stress can lower the amount of conflict between team members. Stress and stress reactions are often looked at on an individual level. However, during a disaster response it is important for teammates to explore their different stress responses individually and then discuss them as a team. As was noted in multiple dimensions of stress signs already discussed, it is often easier to recognize reactions in others than ourselves. Relating what we believe are our stress signs to fellow team members provides a way for each team member to watch out for each other. If it is a team effort to minimize stress then, although the social signs will not disappear, they may be lowered. It will also become possible for teammates to encourage proper stress management for each other. A sample of stress management techniques is offered in the special topic document *Stress Management Techniques*, please refer here for more information.