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Farm Stress & Decision-Making During Challenging Times John Shutske, Professor and Extension Agricultural Safety and Health Specialist

What causes stress for farmers and farm families?

Do any of these scenarios sound familiar?

I haven't started the paperwork for that major loan due next week! I just learned two producers in my township lost their milk contracts! Should I go back to school with so much economic uncertainty? How will I ever find time to learn more about precision farming? We were supposed to start in the field at 8a.m. and my two most important operators are no-shows! My spouse and I aren't able to talk about things the way we used to. I haven't had a moment to myself since we added all that custom work to make our business plan feasible. Who knows whether the big tractor will make it through another full chopping season? There's a missed call on my cell – one of our employees must be hurt!

The list could continue endlessly for most people who work in agriculture. Farming is one of the most stressful occupations in the U.S. Stress is a double-edged sword. A little stress can serve as a constructive motivator, galvanizing us to action (Simon & Sieve, 2013). Too much stress, on the other hand, can damage our health (Donham & Thelin, 2016), compromise safety and sabotage personal relationships (Buck & Neff, 2012; Randall & Bodenmann, 2009). Stress diminishes our capacity for considering and evaluating alternative solutions to complex problems, thereby limiting our power to make sound decisions (Morgado, et al., 2015). Stress can also manifest itself as a vicious cycle with escalating consequences that can paralyze a farm family. With the arduous and sometimes volatile conditions we see in agriculture, the risk of too much stress is alarming.

Physically, what happens?

Stress is our reaction to a threatening event or stimulus. Such events and stimuli are called "stressors." People differ in how they perceive and react to stressors. Something one person would rate as highly stressful might be rated as considerably less stressful by someone else. Several factors influence our capacity for coping with stress: The presence of a social network (e.g., family, friends, community groups, church); Our skill and confidence in assessing a complex situation and then developing and evaluating solutions; Personal variables (e.g., physical health, experience, confidence, anxiety threshold, problem-solving ability) (Donham & Thelin, 16)

When we encounter a stressor, our brain and body respond by triggering a series of chemical reactions that prepare us to engage with or run away from the stressor. Two hormones that we release are adrenaline, which prepares muscles for exertion, and cortisol, which regulates bodily functions. If a stressor is exceptionally frightening, it might cause us to freeze and become incapacitated (Fink, 2010). The stress response causes our: Blood pressure to rise; Heart rate to increase; Digestive system to slow down (or stop); Blood to clot more quickly (Fink, 2010; Donham & Thelin, 2016; Simon & Zieve, 2013).

Thousands of years ago, people who stumbled upon a hungry saber -toothed tiger or other predator would be more likely to survive the encounter if they were able to spring up and sprint away swiftly. An increase in blood pressure and heart rate and a slowdown of digestive processes meant more energy could be directed toward escaping. If they couldn't run quickly enough, their odds of surviving a wound from the hungry tiger were better if their blood clotted rapidly.

Today, this physical response to stress can be damaging to our health. Unrelieved stress is a known risk factor in many of the leading causes of premature death among adults, including conditions and illnesses such as heart disease, hypertension, stroke, diabetes and deterioration of the immune system (Mayo Clinic, 2016). Stress is also a risk factor for depression, addiction and suicide (Donham & Thelin, 2016).

What about my safety?

Farming ranks as one of the most dangerous industries in the U.S. (National Safety Council, 2017). Stress, long hours, and fatigue contribute to injury risk (Gerberich et al., 1998). When we confront several stressors at once, we may become distracted, and this distraction can cause errors that lead to serious or fatal incidents, such as tractor rollovers or entanglement in a fast-moving machine. Thus, proper safety precautions are essential for preventing such incidents.

Farm operators who face financial pressures while running a modern farming operation sometimes don't invest in eliminating farm hazards. They might not replace damaged or missing shields on machinery. They may choose not to retrofit old tractors with rollbars and seatbelts. They might defer investments in equipment and facilities needed for safe animal handling and housing. Or they may require children to do potentially dangerous farm work before they are physically and mentally ready to perform these jobs safely. All farm safety efforts must include taking specific steps to better cope with the stress that operators and their families are likely to experience!

How do farmers and their families cope with stress?

During the last couple decades, researchers have learned how successful farmers and families effectively manage their stress by discussing their stress management methods with them. The actions described in this guide come directly from those discussions as well as suggestions from the larger agricultural community. Some of these actions involve preparing ourselves physically and emotionally to deal with stress. Other actions, such as planning and education, involve minimizing confusion and ambiguity and bolstering our levels of "hope" and perceived control. It is important to recognize that it is impossible to totally eliminate all stress in any job, but effective management is possible. More information and this full article can be found at https://fyi.extension.wisc.edu/farmstress/