How Does Stress Affect Health?

The human body is designed to experience stress and react to it. Stress can be positive, keeping us alert and ready to avoid danger. Stress becomes a negative factor when a person faces continuous challenges without relief or relaxation between challenges. As a result, the person becomes overworked and stress-related tension builds.

This stress that continues without relief leads to what is called 'distress' – a negative stress reaction. What does it look like?

How about:

- Selling your soul for a paycheck
- Toxic relationships
- Out of touch with your life's purpose
- Money worries
- A pessimistic world view (and watching cable news!)
- Continual negative beliefs about your health
- Loneliness
- Pretending to be something you aren't
- Sleeplessness
- Over-reacting, irritability

Negative stress reactions can lead to physical symptoms including headaches, upset stomach, high blood pressure and problems sleeping. Consider:

- 75-90% of all doctor office visits are for stress-related complaints¹
- 43% of all adults suffer adverse health effects from stress²
- Untreated chronic stress can lead to a lifetime of emotional disorders

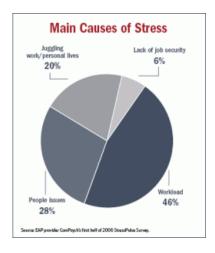


Stress is about negating the body's ability to self-repair. As Dr. Lisa Rankin wrote: "As an integrative medical doctor in posh Marin Country, California, I never understood how my patients – all health nuts, eating vegan diets and juicing, working out with personal trainers, taking supplements, sleeping eight hours – could be some of the sickest people I've ever met. But after my research, I had an epiphany: My patients were sick

because they were in chronic negative stress response. No amount of kale can counterbalance the poisonous effects of high doses of cortisol and epinephrine on every cell. Their bodies had lost the ability to self-repair."³

Business and Stress

Many studies show that job stress is far and away the major source of stress for American adults, and that it has escalated progressively over the past few decades. Increased level of job stress is assessed by the perception of having little control but lots of demands have been demonstrated to be associated with increased rates of heart attack and hypertension.⁴



Nearly half of all workers suffer from moderate to severe stress while on the job, according to a recent survey.⁵ And 66% of employees report that they have difficulty focusing on tasks at work because of stress.

Stress has been called "the health epidemic of the 21st century" by World Health Organization and is estimated to cost American businesses up to \$300 billion a year.

Additionally:

- 21% of employees in a survey of 2,500 employees by ComPSYCH said that stress was responsible for errors and missed deadlines⁷
- 14% said it was responsible for having trouble getting along with superiors and co-workers
- 14.5% said it was responsible for missed days and lateness

Due in part to the prevalence of stress in today's workplace, behavioral disability costs have increased more than 300% in the past decade and account for 30% of all disability claims. Although the Great Recession has "officially" been laid to rest – a major source of workplace stress itself – it is unlikely that the recovery will witness radical reductions in workplace stress, experts state.

Military Stress

"Soldiers are trained to fight. Basic training is a process designed to develop skills which will keep a combatant alive and fighting long after he or she would have given up under normal circumstances. These patterns do not go away by themselves if they have been burned into the soul by a traumatic experience."

Emotional numbing allows a person to put aside feelings in order to do what it takes to survive or help others to survive. This is appropriate and effective. Yet later, such numbing may come to include the feeling of being isolated, not fitting in, that no one understands, lack of emotional intimacy, efforts to avoid emotions associated with the trauma(s) may include substance abuse and compulsive behaviors.

Military stress is part of the deployed veteran's family life. During the deployment, family members have a range of feelings and experiences, including:

- Concern, worry, or panic
- Loneliness, sadness
- Added family duties and responsibilities
- Learning new skills, making new friends
- Fear for their service member's safety
- Feeling overwhelmed
- Financial difficulties
- Dealing with problems on their own
- Understanding what your loved ones have been through
- Concern over being needed and loved⁹

Children's reactions to a parent's deployment vary with each child. Reactions depend on age, maturity, and any other behavioral or mental health problems the child might have. The mental health of the at-home parent often affects the child's distress level. This is especially true for young children. If parents can learn to successfully handle the stress of deployment, their children are less likely to have mental health or behavior problems.

The current impact of war stress is devastating to our nation. And while general awareness by the public has been growing during the past few years, the data shows that programs in general are not making wide-spread, constructive health changes for our heroes and their families who face the damage of chronic stress.

The Rand Report's Invisible Wounds sums it up: "The DOD and VA must work with funders and nonprofit providers to support our troops, veterans and their families before these problems become larger, public issues." Heal The Hero (HTH) is dedicated to stepping up and being part of a community who takes responsibility to help. We know that it is at the community level that problems can be readily identified and solutions can be implemented.

Veterans' Health Data

- Experts estimate the total monetary cost to date (including long term care) of the conflicts in Afghanistan, Iraq and Pakistan may eventually total \$4 trillion.¹¹
- Roughly 20 veterans a day commit suicide nationwide, according to new data from the Department of Veterans Affairs. In 2014, the latest year available, more than 7,400 veterans took their own lives, accounting for 18 percent of all suicides in America. Veterans make up less than 9 percent of the U.S. population. About 70 percent of veterans who took their own lives were not regular users of VA services. 13
- More U.S. troops have died from suicide than have been killed in Afghanistan.
- The Veterans Crisis Line has answered almost one million calls and has made over 30,000 life-savings rescues since its 2007 launch. And yet reports show they are inefficient in their operations.
- Almost 75% of all U.S. veterans have a VA serviceconnected disability rating.
- Broken families are widely commonplace among returning Iraq/Afghanistan veterans. The divorce rate is 42% higher than for civilians. It is estimated that as many as 500,000 children who have coped with a parent deployed to Iraq/Afghanistan may have become clinically depressed.¹⁴
- The VA is spending \$1.2 billion this year to combat PTSD.



Stress & Law Enforcement

Police officers and other law enforcement personnel are vulnerable to multiple health problems that are caused by the stress of the profession. Of course, law enforcement officers recognize that stress is part of the profession and working conditions. However, there is now plenty of evidence and research showing that unmanaged stress can lead to anxiety, depression, and stress disorders.

A 5-year long major scientific study, 'Buffalo Cardio-Metabolic Occupational Police Stress' (BCOPS) was one of the first police-population based studies to test the association between the stress of being a police officer and physiological and psychological health outcomes.

The study revealed links between the daily stress factors of police work and insomnia, suicide, obesity, cancer and various general health disparities which police officers suffer compared with the general population. Another finding revealed that shift work is a contributing factor to an increase in metabolic syndrome, a combination of symptoms such as hypertension, weight, insulin resistance, stroke and diabetes. Principal investigator John Violanti, PhD (and former New York state trooper) commented: "The study showed that compared with 32% of the population, 40% of police officers were obese and over 25% suffered from metabolic syndrome compared with 18.7% of the general population. Furthermore, among those with the highest level of selfreported stress, female officers were four times more likely to experience a poor quality of sleep and male officers were six times more likely to have a bad night's sleep." 15

In summary, severe stress can cripple an individual's ability to do his/her job and live a normal life. Unresolved trauma can kill just as surely as a gun. Maladaptive attempts to deal with the stress of trauma include denying your feelings, trying to suppress memories of the event(s), and attempting to numb yourself with alcohol and drugs. In the extreme, unresolved trauma can even provoke suicide attempts.

A 2012 study on police officer stress and fatigue reveals these alarming facts (Basinka & Wiciak 2012) – that stressed and fatigued officers: ¹⁶

- Use more sick time
- Have difficulty managing successful personal relationships
- Have trouble reporting for duty on time
- Mistakes on departmental and court paperwork
- Generate higher rates of citizen complaints for reported misconduct
- Have stressful relationships with supervisors
- Being prepared for testifying in court
- Experience more accidental on-the-job injuries
- Burnout
- Higher risk of being seriously injured or killed by not recognizing danger signs



Sleep and Stress

Most of us agree we function more effectively with a good night's sleep, but what actually happens to us when we are not getting enough rest? And how is insomnia and lack of adequate sleep impacting veterans and police officers?

It is a fact that we are sleeping less as a nation than ever before. With working around the clock and during weekends and vacations considered a badge of honor for many, it is not surprising that we are increasingly drowsy as a society. In just a decade society has become more around-the clock and more complex. People are able to be active at any time, from anywhere, and it causes people to be more active 24/7. This increased activity is essentially giving sleep less importance.

The Centers for Disease Control and Prevention recently conducted a nationwide study revealing that 35 percent of Americans are not getting the recommended seven plus hours of sleep per night on a regular basis. We're self-restricting our sleep, meaning that our schedules and behaviors are cutting into our sleep time. As a society, we just don't appreciate the value of sleep.

According to Dr. Raj Kakar, a medical director at the Dallas Center for Sleep Disorders. "More people are stressed. Stress is associated with sleep deprivation, anxiety, depression and sleeplessness."

Doctors warn about the effects of sleep deprivation, such as car accidents, depression, anxiety and cardiovascular problems. Doctors recommend seven to eight hours a day. Dr. David Schulman, the medical director of the Emory Clinic Sleep Disorders laboratory in Atlanta, Georgia likened sleep deprivation to chronic alcoholism.

"Our society has valued people who brag about being able to function on very little sleep as a mark of someone who is aggressive, dynamic, successful," Dr. Neil Kavey, director of the Sleep Disorder Center at New York-Presbyterian at Columbia University Medical Center, said. "Well, forget that. Admire someone who puts focus on sleep and is not making mistakes from sleep deprivation."

The Damage of Sleeplessness May

- Raise your blood pressure and increase your risk of heart disease.
- Increase your risk of dying from ANY cause.¹
- Aggravate chronic pain. In one study, poor or insufficient sleep was found to be the strongest predictor for pain in adults over 50.
- Increase your risk of depression, aggravate or makes you more susceptible to stomach ulcers.²
- Contribute to premature aging by interfering with your growth hormone production, normally released by your pituitary gland during sleep.³
- Dumb you down
- Cause accidents
- Kill sex drive
- Age your skin
- Make you forgetful
- Instigate weight gain



Veterans and Sleeplessness

According to Dr. Vincent Mysliwiec, the Army's top sleep specialist at Fort Hood, Texas, the Army alone reported a 19-fold increase in insomnia from 2000 through 2009. "If this was anything else, it'd be labeled an epidemic," he told a conference of sleep specialists in Seattle in June. He added,

"Insomnia is the signature illness of military service."

More so than even the amputations and traumatic brain injuries that have come to define the Afghanistan and Iraq wars, **insomnia is the hidden wound that America's warriors are bringing home. It's largely unnoticed, underprevented and untreated.** It's also the single most important factor, say military sleep researchers, for treating the post-traumatic stress disorders (PTSD) that plague America's returning veterans, keeping them on meds and out of work and preventing them from enjoying a normal life.

A review by two sleep researchers in Pittsburgh showed that 54 percent of the two million Americans who've served in combat since September 11, 2001 have insomnia. That compares with about 22 percent of civilian adults. Soldiers who suffer from insomnia while deployed have a greater chance of developing depression, suffering from PTSD and even committing suicide, wrote Dr. Adam Bramoweth of the Department of Veterans Affairs Pittsburgh Healthcare System, and Dr. Anne Germain of the University of Pittsburgh School of Medicine.





"If we don't treat sleep disorders, we can't treat PTSD. We have to attack them together."

Many veterans are "severely sleep-deprived" and are often kept awake by persistent thoughts and pain, according to a survey released in April 2013. Conducted by the firm VetAdvisor and a sleep expert at Johns Hopkins School of Medicine, the online survey questioned more than 2,800 veterans from each branch of the military, though it was a not a nationally representative sample.

A recent study in the journal SLEEP found that insomnia symptoms prior to deployment are associated with the subsequent development of PTSD, depression and anxiety.⁵

We all have innate abilities that we must maximize to reach our full potential. Our mission at Heal the Hero is to help veterans do that—to help the good become great by removing unseen performance barriers. Sleep deprivation has many veterans performing at a fraction of their full potential and it is within our reach to help veterans get the rest they need.