

# STRESS MANAGEMENT FOR FIREFIGHTERS



Diabetes  
Covid-19  
Drug Abuse  
Work Problems  
Back Problems  
Stroke  
Insomnia  
Heart Attacks  
Cancer  
Alcoholism  
Suicide  
Depression  
Obesity  
Eating Problems  
Joint Problems  
Absenteeism  
Other Problems

**STRESS**

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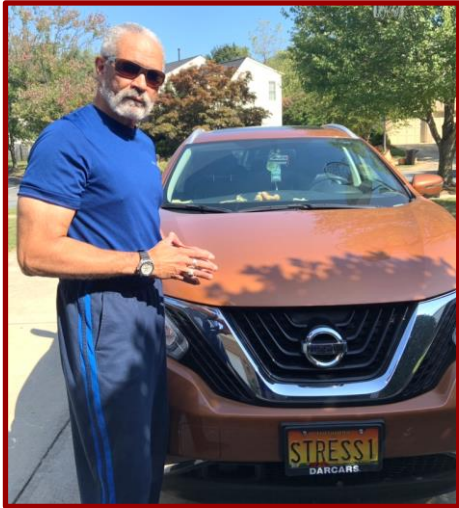
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## About the Authors

**Dr. Ivor Livingston** is a health-lifestyle-entrepreneur living in the United States who loves sharing knowledge and helping others on the topic of health, personal development and positive



lifestyle experiences. He was educated at Howard, Harvard and Johns Hopkins Universities. He has written extensively, as well as given conferences, webinars, and lifestyle coaching, on the relationship of stress to the everyday health of individuals. He has written several books in the area of healthy lifestyle management with a particular focus on stress and stress management ([click link](#)). He is a passionate person who will go the extra mile to over-deliver on the information he presents.

Dr. Livingston's basic words of wisdom that have guided his personal and professional activities are as follows:

*"I believe that while knowledge is power, sustained, meaningful and positive actions are the fundamental keys to a healthy life. Everyone should improve themselves and/or business, no matter what their stages of life. However, to develop a better and more productive mindset, which leads to better health, you should have incremental and sequential life goals and consistently set realistic objectives to achieve these incremental and sequential life goals."*

If you would like to learn more from Ivor Livingston, as well as the information he produces, please visit his Company's various media sources: blog: <https://goodhealthisforyou.com>; main webpages: <https://stresshealthsolutions.com>; <https://stressreliefgram.com>; <https://stresshealthzone.com>



***Stefan Livingston*** began his career in the fire service as a volunteer firefighter/EMT in Prince George's County Maryland in 2009. Prince George's county fire department was ranked the



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# Introduction

## 1a. Goals of the Book

The main goal of this book is to deal with the stress epidemic in our modern-day and to better understand and control the stress in everyday life (see *Figure 1a*) especially in the lives of society's everyday heroes - firefighters (see *Figure 1b*). Numerous *illustrations* are used to complement adjacent narratives, all of which helps in a better understanding of the information presented.



Figure 1a

It is hoped that this book will, in some sense, allow you to “get back home” stress-wise by giving you the tools that you need to limit your body’s reaction to today’s stress through an understanding of why those reactions occur in

the first place. To better understand the complexities of the stress process, and present the information in an easy-to-understand manner, a 3-Step I-R-M Approach to Stress Management by the author (Dr. Livingston) is used to organize how the main sections of the book are presented (see *Figure 1c* and *Figure 1d*). **I** = identifying your stressors, **R** = recognizing when you are experiencing stress, and **M** = managing stress selecting from and using a variety of strategies. **The main sections of the book are organized around the three areas of the I-R-M Model of Stress Management.** To complement the I-R-M Model, one other very important and related O-R-O Model is mentioned that incorporates the important sequential process ( $E+P=R/T$ ) of how firefighters and others actually experiences stress (see *Figure 1e*).

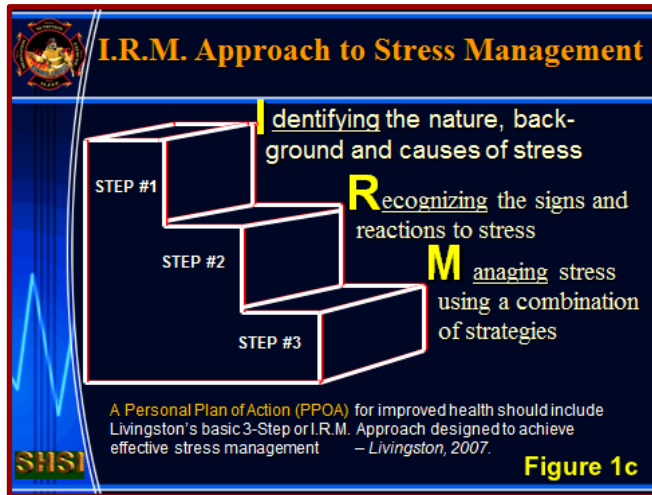


Figure 1b

Basically, and as alluded to before, *Figure 1e* represents the core model that incorporates all the other sequential processes (I-R-M,  $E+P=R/T$ ) and on which this (digital) book is structured and organized. Although a more formal and definition of stress will be mentioned in the next couple of pages, and more elaborations will be made about the O-R-O Model illustrated in *Figure 1e*, it is important to mention some key pieces of information about the model here.

As seen and illustrated in *Figures 1c, 1d and 1e*, the stress process occurs in three important stages:

**O = Onset**, where using a transactional view of stress (i.e., the relationship between demands of stressors and the “perceived” resources available to the individual (firefighter) is illustrated as to how the stress process is likely to begin.



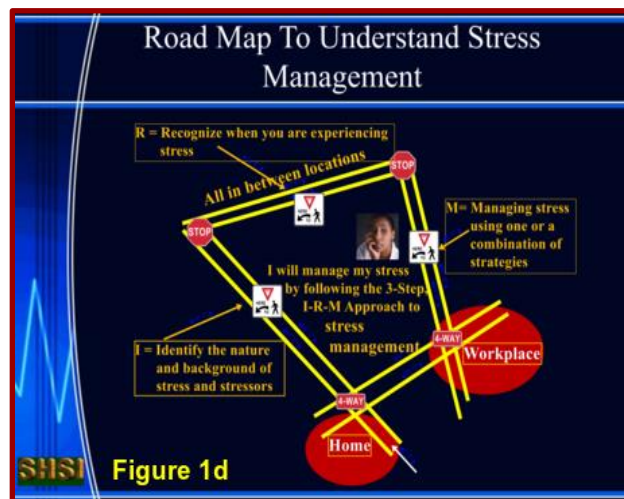
**R = Reaction**, where the individual (firefighter) responds to the perceived stressful experiences by engaging in one or a combination of five actions or activities. In addition to the two most documented reactions of fighting and/or fleeing (traditionally called the fight-or-flight reaction), the other three options include ignoring the perceived stressor, flowing with the perceived stressor, learning from the perceived stressor, and lastly, solving the

issues associated with the perceived stressor.

**O - Outcomes**, where the individual (firefighter) responds to the perceived stressful experiences by engaging in selected behaviors (good or bad), by having certain emotions (or feelings - good or bad), by having certain cognitions (thinking - good or bad), and by reacting in a spiritual sense (good or bad).

By way of an introduction, and as can be seen in the Table of Contents, we will start by taking a look at what is stress and, given the focus of the book, present a brief overview about stress and firefighters.

The importance of this book is captured in the illustration seen in *Figure 1e*. Whether the focus is on any other group besides firefighters, the fundamental relationship between stress and health remains forever the same. That is, usually low levels of (normal) stress contributes increasingly to improvements in health (e.g., lower burnout) and performance. This stress-health-performance relationship is maximized at each individual’s “*optimal level*.” This optimal level varies for each person, so this should be a main goal for everyone, including firefighters, to find out where is their optimal stress level. As also seen in *Figure 1e*, as (bad, chronic) stress increases poor health and positive human performance levels are likely to decrease.





While mention will be made about good stress and bad stress, we will show why stress can be

bad, specifically examining the mechanics of the flight or fight reaction (i.e., two of the outcome options - see *Figure 1e*) to danger.

We will also look closely at the purpose of stress and its specific effects on the body. We will then turn our attention to the common causes of modern stress, both acute and long-term, and the symptoms exhibited because of that stress. Next, we will present five categories of stress management strategies (in the last section of the book) on how to deal with stress by being better able to manage and control it before it controls your health and performance (see *Figure 1f*)

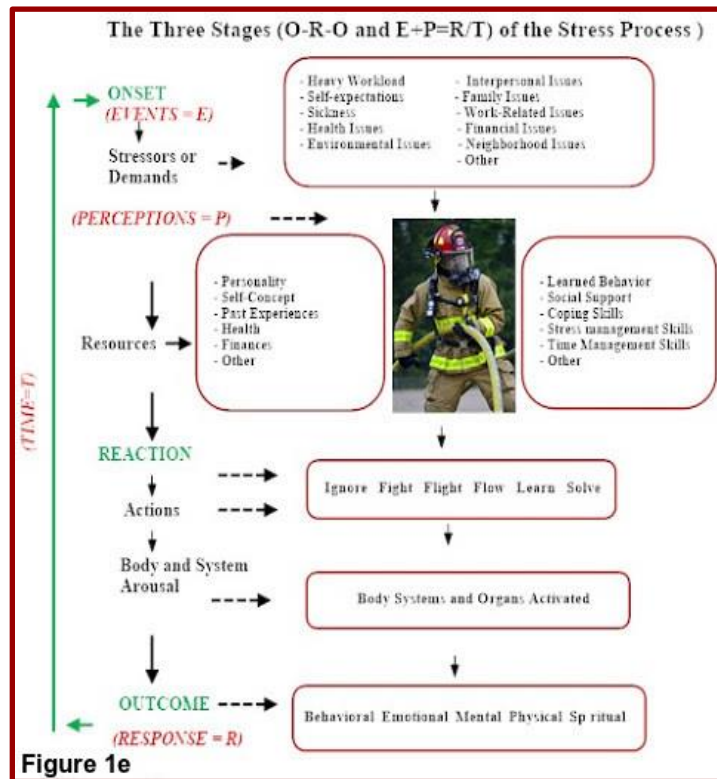


Figure 1e

Although stress has not yet been defined and how it is used in this book, it was very important in this introduction section of the book to lay out the importance of stress in our modern-day society, the models used in the book to allow readers to better understand the complex process that is involved, so a greater appreciation can be had of how to manage stress with a particular focus on firefighters. So, if you're quite ready, let's start learning how to make your life more calm, peaceful and enjoyable!

### 1b. What is Stress?

In today's fast-paced modern world, we are experiencing stress in our everyday lives. Stress is a fact of life, wherever you are or whatever you are doing. You cannot avoid

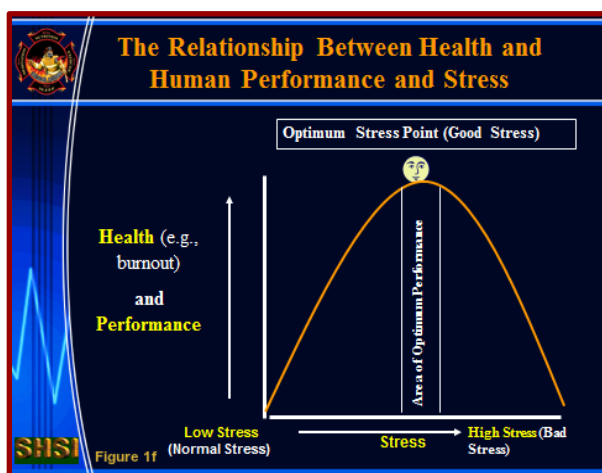
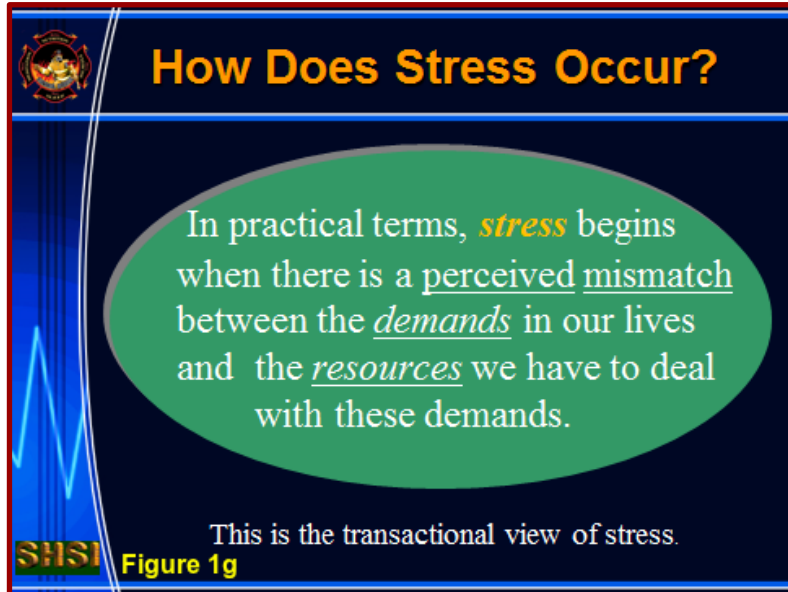


Figure 1f

stress, but you can learn to manage it so it doesn't manage you.

As seen in *Figure 1g*, and as alluded to before, stress is defined and used in this book as a



transaction between the perceived demands (or stressors) and the individual's perceived resource capabilities. Whenever there is a discrepancy or differences between the demands and resources stress is likely to occur. More will be said about the demands-resource capabilities and stress when we speak in later pages how we react when we are experiencing stress (see *Figure 1g*).

Stress is caused by changes. Any change in life including enrolling in college, getting married,

changing jobs or illness are frequent causes of stress. Keep in mind that changes that cause stress can also benefit you. Moving away from home to attend college, for example, creates personal-development opportunities—new challenges, friends, and living arrangements. That is why it's important to know yourself and carefully consider the causes of stress.

Learning to do this takes time, and although you cannot avoid stress, the good news is that you can minimize the harmful effects of stress, such as depression or hypertension. The key is to develop an awareness of how you interpret, and react to, circumstances. This awareness will help you develop coping techniques for managing stress.

The dictionary defines stress as...

1. "Pressure or tension exerted on a material object."
2. "A state of mental or emotional strain or tension resulting from adverse or very demanding circumstances." While this definition is a little different from the definition used to guide the information presented in this book (see *Figure 1g*), the outcomes are essentially the same. That is, some affect (mental and/or physical) is experienced when individuals experience stress. Also,

the main view of stress used in this book goes into more detail as to how stress is likely to occur using the demand-resource discrepancy process.

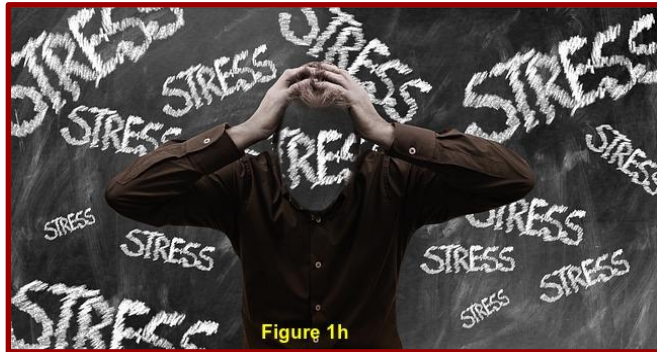
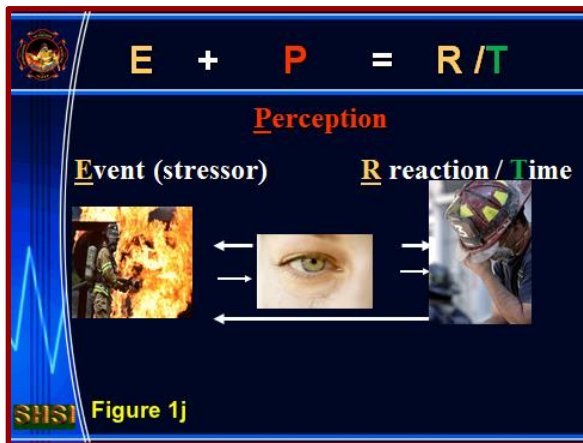


Figure 1h

Several decades ago, stress (see *Figures 1h* and *1i*) was just another word in the dictionary and, at best, it was used negatively only in the context of a few people (e.g., corporate executive) and selected conditions (e.g., ulcers, strokes, heart attacks). However, in today's society

stress is mentioned in the context of all types of stress (good versus bad stress. Acute versus chronic stress, critical incident stress, post-traumatic stress disorders, or PTSD) conditions (e.g.,



SHSI Figure 1j

Figure 1i

heart attacks, strokes, diabetic complications, depression, drug addiction, violence) affecting a variety and categories of people in various occupations and circumstances (e.g., workers in general, military, teachers, nurses, lawyers and first responders, such as paramedics and firefighters). This digital book is focusing specifically on addressing *perceptual* stress (see *Figure 1j*) and stress management experiences among firefighters.

Regardless of the ambiguity surrounding the precise definition of stress, it is generally accepted as an essential response to our survival, even if we are not actively under threat. Essentially, this stress response helps prepare the body for what is about to come, and along with a variety of internal and documented hormones (e.g., neurotransmitter epinephrine/adrenalin), gives rise to what is called the “fight or flight” response within the autonomic nervous system. As seen in *Figure 1j*, and in particular the case of firefighters, all these possible negative outcomes occur in the “R” portion of the stress process over “T,” or time. More will be said about the “fight or

flight” and an additional four other responses (flow, ignore, learn and solve) responses later on in the book.

### 1c. The Impact of Stress on Modern-Day Societies

Some people have referred to a “stress epidemic” (see **Figure 1k**) in our modern-day societies. That said, let us mention some key statistics that demonstrate how widespread and damaging stress is today.

To highlight the severity of stress, it’s worth noting that work-related stress causes 10% of strokes (via raised blood pressure). 3 out of 4 doctors’ visits are related to stress and stress can raise your risk of heart disease by 40%. Stress is also ruining our diets. We eat for comfort but also when our body uses up blood sugar (which it does when we’re stressed). Cortisol makes us store more fat and as such, 40% of stressed people will overeat or eat unhealthily. Another 44% of people lose sleep due to stress.



**Figure 1k**

If you thought stress was making you more productive think again: stress blunts creativity and even *physically shrinks the brain*. It’s thought that stress related problems cost the US a whopping \$300 billion every year. That’s \$100 billion more than obesity. 44% of Americans say they are feeling more stressed year on year and 1 in 5 say they experience ‘extreme stress’. (Credit: <https://www.mequilibrium.com>).

#### According to Statistic Brain Research Institute, American Institute of Stress, NY

- 77% of people regularly suffer from physical symptoms caused by stress
- 73% regularly suffer from psychological symptoms caused by stress
- 33% of people report extreme stress
- 48% of people believe stress has increased over the past 5 years
- 48% of people report sleepless nights from stress



## According to the American Institute Of Stress,

- 3 out of 4 doctor office visits are stress related
- Stress is the basic cause of 60% of all human illness and disease
  1. Stress increases risk of heart disease by 40%, risk of heart attack by 25% and risk of stroke by 50%
  2. According to WebMD:
  3. 43% of all adults have some type of health problems because of stress.
  4. 75% to 90% of all visits to the doctor are stress related.
  5. The Occupational and Safety and Health Administration (OSHA) declared stress to be a hazard in the workplace annually.
  6. The costs of stress related conditions costs American over \$300 billion.
  7. The lifetime prevalence of an emotional disorder is over 50% mainly as a result of untreated stress.
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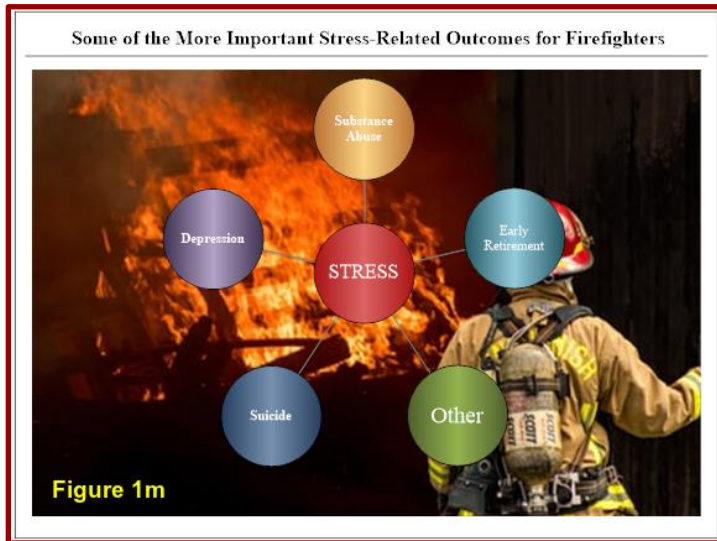
### 1d. Stress and Firefighters

Firefighting has been rated as one of the most stressful jobs (*see Figure 11* and [click here for more information](#)). This was reported by CareerCast (2018). According to FireRescue (2018), firefighting "... is physically dangerous and psychological taxing, with constantly changing conditions."(p.1) Firefighters routinely experience stress on the job, and while some amount of stress actuates peak performance,



especially in life-threatening situations, too much stress for an extended period of time adversely affects the body and mind. It has been reported that prolonged stress is one of the leading causes of health problems among firefighters. "If not managed in a timely manner, excessive stress can

manifest symptoms of depression and anxiety, headaches, digestive problems, hypertension, and even heart attacks.” (p.1)



The stress firefighters experience has led to early retirements, injuries, divorces, suicides, and firefighters engaging in high risk-taking behaviors. Alcohol abuse is one of the main substance abusers for firefighters. Every firefighter’s response and ability to process and deal with stress varies a great deal. Stress can be seen as both a direct and indirect cause of death for firefighters. Additional health-related experiences that are stress-related include, but are not limited to the

following: financial hardships, gambling, poor work habits, heart disease, hypertension and depression (see *Figure 1m*).

Additional physical health symptoms, including “dizziness, headaches, grinding teeth or clenched jaws, gastrointestinal problems (e.g., indigestion, nausea), muscle tension, difficulty sleeping, excess fatigue, racing heart, weight fluctuation and changes in appetite.”

Throughout the book, reference will be made to previous publication, illustrations and perspectives on stress written by the author of this book - Dr. Livingston. [Click this link to see an example of some of these books](#)



## 2. The I-R-M Approach to Stress Management - I = Identifying Stressors

### 2a. Overview

Basically, stress can be viewed as the psychological (mind) and physiological (body wear and tear, or reaction, to perceived conditions, or stressors, in and around us on a daily basis.



This perceived reaction to stressors is a direct result of an imbalance between the perceived “demands” of life and the variety of “resources” we have to meet these demands.

Depending on how the balancing act goes, there are three basic possibilities with two likely stressful experiences (*see Figure 2a*). Overload, where demands exceed perceived available resources (e.g., overworking on the job). Underload, where perceived

resources exceed the available demands (e.g., boredom). Both overload and underload are potential sources of stress. Evenload, where both perceived demands are equal (*see Figure 2b*) to, or can be adequately managed by perceived resources, is the relatively low level, or stress free experience that should be preferred by all.

### 2b. Classifying Stressors

So far mention has been made that what causes stress are stressors. Also, stress occurs when there is a perceived difference between demands, or stressors, and resources. That said, let us say more about: a) the five ways stressors are classified in this book and 2) how the reported stressors firefighters experience in their daily lives fit in and under these classified stressors.

As seen from *Figure 2c*, stressors are viewed in five distinct ways:

