|  |
| --- |
| IALA Guideline |

G tbd

guidance for dealing with stress and trauma in vts operations

Edition x.x

Date (of approval by Council)

urn:mrn:iala:pub:gnnnn

Revisions to this document are to be noted in the table prior to the issue of a revised document.

|  |  |  |
| --- | --- | --- |
| Date | Details | Approval |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

1. introduction 6

2. purpose of this document 6

2.1. Relationship to other iala documents 7

3. document structure 7

4. PART A INFLUENCING FACTORS FOR STRESS AND TRAUMA 7

4.1. Description on stress and trauma 7

4.1.1. Stress 8

4.1.2. Different levels of stress 9

4.1.3. Trauma 11

4.2. How fatigue differs from stress and trauma 14

4.3. Influencing factors in general 14

4.3.1. External factors 14

4.3.2. Internal factors 15

5. Part B detecting and evaluating stress and trauma 17

5.1. Identification and evaluation 17

5.1.1. Identification of stress 17

5.1.2. Evaluation of stress 18

5.1.3. Identification of trauma 18

5.1.4. Evaluation of trauma 18

5.2. Coping with stress and trauma 18

5.2.1. How the affected can cope with stress and trauma 18

5.2.2. How to cope with one being affected by stress and trauma 19

5.3. Evaluation process 19

5.4. Available support 19

5.5. Precautions 19

6. Part c methods for raising awareness and addressing mental well-being in vts-operations 19

6.1. introduction to mental health training 19

6.2. benefits of mental health training 19

6.3. “Boreout” / Staying focused 20

6.4. resources available 20

6.4.1. How to raise awareness of stress and trauma 20

6.4.2. Needs a better header 20

7. abbreviations 21

8. references 21

9. References 21

10. Index 22

List of Tables

***No table of figures entries found.***

List of Figures

**No table of figures entries found.**

# introduction

The mental well-being of personnel is a critical component in professions operating in high-stress environments where safety of human lives and infrastructure is in focus. In VTS-operations the VTS personnel are frequently tasked with making complex decisions based on traffic, weather and other factors, whilst under pressure.

The above becomes even more evident considering that the work of the VTS is organised in shifts, 24 hours a day, 7 days a week. According to physiology the human mind and body function optimally only when personnel employed in the service are allowed an adequate amount of time to enjoy unrestricted nighttime sleep.

The decisions can be made under intense pressure, for a long period of time. There is also a risk for the VTS personnel to witness or being involved in traumatic events (distress situations). These factors underscore the need for targeted guidance and support programs.

# purpose of this document

The purpose of this Guideline is to provide information to VTS providers on addressing the challenges associated with stress and trauma in VTS-operations. It recognizes that mental health is vital for maintaining operational effectiveness, fostering a strong safety culture, and supporting the long-term well-being of VTS-personnel.

The objectives of this guideline are to:

* *Raise awareness on the impact of stress and trauma in a VTS environment;*
* *Assist VTS providers in detecting stress and trauma;*
* *Provide guidance to prevent or deal with stress and trauma.*

The development of this Guideline is driven by a compelling need to address the recognition that stress and trauma have profound implications for mental health, particularly within the workplace. The unique nature of VTS-operations demands tailored support systems to ensure personnel can recover and thrive following stressful and traumatic events. This guideline seeks to empower VTS-providers with tools and thoughts to foster resilience, build a supportive work environment, and enhance the overall safety and effectiveness of maritime traffic management.

VTS work requires high levels of attention and predictivity, which can lead to high levels of stress if experienced over longer periods. The burden of accidents, disasters or similar in the monitored area burdens the operator even more. This, in combination with irregular working patterns and hours makes the VTS operator more vulnerable to stress. High levels of stress might lead to poor judgement, which can increase the risk for near-miss situations, and even maritime accidents in the monitored area.

By addressing these objectives, this guideline will contribute to creating sustainable framework for managing stress and/or trauma in VTS-operations. With a focus on ensuring that VTS personnel are supported not just in their professional capacities, but as individuals whose well-being is valued and prioritized.

While acknowledging that stress and trauma can also arise outside the workplace, this document focuses specifically on work-related stress and trauma – where psychosocial hazards stem from aspects related to job tasks, work organisation, management practices, the work environment, and, more broadly, situations in which employees are exposed to demand and pressures that exceed their knowledge and capabilities.

## Relationship to other iala documents

This guidance should be read in conjunction with all IALA recommendations and guidelines specifically related to VTS and in particular:

* *G1171 Human factors and ergonomics in VTS*
* *TBFD*

*IMO Documents:*

* *Guidance on fatigue mitigation and management (MSC/Circ.1014)*
* *Guidelines on fatigue (MSC/Circ.1598)*
* *TBFD*

*ISO Standard:*

* *ISO 45003:2021 Occupational health and safety management – Psychosocial health and safety at work – Guidelines for managing psychosocial risks*

# document structure

This document consists of three parts:

* Part A sets out the general influencing factors for stress and trauma;
* Part B provides more general guidance on detecting and evaluating stress and trauma;
* Part C identifies methods for raising awareness and addressing mental well-being in VTS operations.

# PART A INFLUENCING FACTORS FOR STRESS AND TRAUMA

## Description on stress and trauma

Trauma *to be filled out*

### Stress

Stress consists of both physical and mental components and can be triggered by different events or situations. Most events that trigger stress are however similar, and the person affected is exposed to stressors, without access to the resources needed to cope with them, which results in a stressful situation.

Stress consists of both a positive component (eustress) and a negative one (distress)

Positive stress, or eustress, refers to a person’s exposure to a new situation in which they interact with environmental factors that they perceive or evaluate positively from a subjective standpoint. Therefore, eustress is seen as desirable, predictable, and manageable, or at least, this is how it is perceived.

Distress, the negative form of stress, arises from situations that are unwanted, unexpected, and beyond our control – circumstances we neither choose nor desire but are forced to face. These events create uncertainty due to their unpredictability and often lead us to doubt our ability to cope. The loss of control, or the loss of the feeling that you are in control is a guaranteed stressor. The person affected by stress reacts to it in different ways, some might cope with it, whilst others may struggle with the same amount of stress. The reaction to stress is individual, and the tolerance is individual too.

Table 1 Eustress vs Distress

|  |  |
| --- | --- |
| EUSTRESS | DISTRESS |
| Optimal level of tension and external pressure, which resolves once the goal is achieved | Continuous exposure to external stimuli |
| Protection against monotony and activation of personal resources | Excessive physiological psychological activation |
| Enhancement of attention and concentration skills | Exaggerated and unnatural strain on the body |
| Stimulation of learning and memory | Prolonged process of endurance and resistance |
| Facilitator of creative problem-solving | Period of wear and exhaustion |

Particular state of distress is the Work-Related Stress (WRS). WRS is a condition of imbalance that occurs when the worker feels incapable of meeting the demand placed on them at work. When this condition is prolonged over time, it gains importance and can impact negatively on the individual and therefore, on the organisation/company where they work. Stress is phenomenon linked to an individual’s perception of the situations in which they work; therefore, there are no inherently stressful situations, only potentially stressful ones. Stress thus arises from a situation perceived as threatening, due to an environmental demand perceived as exceeding the individual’s perception of their own ability to cope with it. Source: ref: Work-related stress 2004\_Framework Agreement

### Different levels of stress

#### No stress state

Stress in general is not just bad, but also necessary. Having no stress can be as unhealthy as having too much, this might be a sign of lack of challenge, that can lead to depression. A VTSO may experience something that can only be described as ‘underload’, meaning there are periods of inactivity that may lead to boredom and distraction. It’s important that organizations not only focus on reducing the workload, but rather increase it, in order to keep the operators focused on the task.

It’s impossible to define the perfect balance between too much and too little stress, but if the person feels okay with the level of stress (emotionally and health-wise), then it’s probably an acceptable level. The VTS provider should monitor and manage the operator workload at all times.

According to researchers, “complete freedom from stress is death. Contrary to public opinion, we must not – and indeed cannot – avoid stress, but we can meet if efficiently and enjoy it by learning more about it mechanism and adjusting our philosophy of life accordingly (Hans Selye 1973).

Examples from VTS

The no stress state can be originated from:

* Example 1: No traffic in the monitored area
* Example 2: Only routine tasks are performed

#### Good stress

“ Good stress is called ‘[eustress](https://www.verywellmind.com/what-you-need-to-know-about-eustress-3145109#:~:text=The%20excitement%20of%20a%20roller,to%20have%20in%20our%20lives.)’, and it is comparable to a feeling of excitement or eagerness. It helps people adapt and grow when facing challenges. According to international authors not all stressors necessarily result in negative effects; some can enhance functioning and well-being. Eustress is also linked to the subjective perception of a situation: when individuals feel a sense of control over the situation and see the stressor as a challenge that can be managed with available resources, or as an opportunity, they are more likely to experience eustress rather than distress, thus avoiding the physiological burden associated with chronic stress. (Kloidt & Barsalou, 2024)

Eustress is not the absence of stress, but a healthy and energizing form of it. One that can significantly contribute to both performance and psychological health. However, if the stress persists or/and is of excessive degree, it eventually leads to a need for resolution. (Villines, 2024)

Examples from VTS

The good stress state can be originated from:

* Example 1: Challenges in workload
* Example 2: Change of tasks at work

#### Vicarious stress

Vicarious stress (or ‘secondary traumatic stress’) is the emotional distress that is experienced when a person hears about a firsthand trauma experienced by another.

In many cases, the experiences of emergency personnel / personnel responding during a disaster can be just as intense as those of the victims.

It’s sometimes impossible to avoid strong feelings of identification and solidarity with the victims (a form of emotional overinvolvement). Identification is a process in which we perceive others as being almost indistinguishably like us. These feelings can occasionally become so overwhelming that the helper becomes temporarily paralyzed and unable to act. memories can resurface later and lead to sleep disturbances and concentration difficulties similar to those experienced by the victims.

Secondary disaster syndrome

Among emergency personnel, a certain drive to help has sometimes been observed – an excessive need to assist that does not correspond to the actual situation or needs of the victims. This behaviour is especially common among volunteers or other non-professional responders. The helper’s own needs lead to overactivity and doing “too much”. The response becomes exaggerated and impulsive, and the individuals involved become more prone to taking unnecessary risks. This type of hyperactivity has been particularly noted among personnel on standby, waiting for their turn to act. The desire to feel useful is a legitimate need. It is also well known that major or high-profile accidents tend to evoke a strong urge in people to help, and in serious situations, this need among helpers can itself cause problems.

Examples from VTS

The vicarious stress state can be originated from:

* A typical example is a situation where the VTS isn’t in straight contact with the distressed party but hears about it from another source. This could for example be a accident with fatal outcome that has happened in the same area, but by vessels that don’t participate in the VTS.

#### Chronic stress

Chronic stress happens when a person repeatedly feels inescapable stressors, such as being unhappy at home, feeling constantly overwhelmed at work or dealing with the effects global crisis (war, COVID-19). And while eustress is critical to fulfilment, even too much of it can lead to chronic stress if a person finds themselves overloaded with little to no restorative downtime.

Chronic stress be broken down into two different categories; chronic without acute, versus chronic plus acute stress.

When chronically stressed, the human mind and body tends towards a habitual behaviour, where long-term wellbeing, health and beauty aren’t that important. All energy is focused on handling the enemy (the task) or simply facing the challenge and keeping other burdens separate. This can for example be seen by the amount of snacks and/or fast food eaten, at this stage the human mind only grabs the food without a thought of the consequences. This might lead to obesity, diabetes or high blood pressure in the long run, or even a stroke.

Chronic stress is a constant feeling of stress that, if not treated or managed early, can harm a worker’s health and performance. It can be caused by a negative environment, difficult relationships, or traumatic events. This stress is strong and happens often enough to affect the nervous system and keep the body in a state of constant physical alertness.

Examples from VTS

The chronic stress state can be originated from:

* working with a team member whom you don’t get along with. The relationship between colleagues can be so infected that it drains energy, and steals focus from the parties affected; or
* the stress of not knowing or understanding your tasks well enough to conduct them. This can originate from receiving new tasks that you haven’t been introduced to or are familiar with. It may also originate from not being able to use the tools given for the job; and, or

working on a VTS-sector that is too hectic, which requires vast amounts of focus and energy for a longer period of time. This is especially critical for VTS-centres that only have one VTS-sector, where the VTSO:s only work with the same sector.

#### Acute stress

The acute stress response is also called the fight-or-flight response. The theory revolves around animals either fighting or fleeing in a situation where they are exposed to a threat. Acute stress is also known as a disorder, ASD (Acute Stress Disorder), which can happen up to a month after experiencing a traumatic event. It’s closely related to post-traumatic stress disorder (PTSD) and can be similar to PTSD. The main difference is that ASD often is experienced in less than 4 weeks after the event, whilst PTSD can be experienced long after.

Acute stress disorder is a short-term condition where a person experiences intrusive memory after witnessing or going through a potential stress event/condition. These symptoms usually disappear within a month. The cause for acute stress is something that occurs suddenly, an accident for example. The symptoms experienced by the affected may include headache, muscle pain, tension and increased heart rate. The affected may be anxious, irritated and restless as a result of the symptoms. It is also common that difficulties concentrating are witnessed, and the affected might be worried about the situation experienced, or the symptoms experienced.

Examples from VTS

The acute stress state can be originated from:

* Being hands-on during an accident in the VTS area. There might not be time to think over the situation during the watch, but the VTSO might start to think about what was said, and what was done later on. There is a possibility that the VTSO starts to ponder whether or not the right things were said, or if the right decisions were made.

### Trauma

Details on trauma (long-term)

This chapter focuses on psychological trauma, which can be described as a severe shock to the mind. It’s a penetration of mental defences leading to a form of psychological breakdown. There are two central elements in this event; an external event and an internal reaction. A traumatic reaction happens when something very upsetting – like an earthquake or a serious accident – is too hard for the mind to understand or cope with in a normal way. (Marzillier, 2014)

Different types of traumas carry different changes of causing post-traumatic problems, depending on how serious the trauma is. People can face many kinds of traumatic experiences in life. There are “small traumas”, which are upsetting but involve only a mild sense of danger. Examples include being humiliated or having harsh interactions with important people during childhood.

Then there are serious traumas, which include events that cause death or threaten the safety of oneself or loved ones. These include major events like natural disasters, abuse, accidents, and violence.

#### Acute trauma

Comes from a single, unexpected and stressful event (also known as type 1 trauma).

Acute trauma occurs after experiencing or witnessing an act of violence. This type of trauma can lead to Acute Stress Disorder, which usually appears within three days of the event, and can last up to one month.

Type of Trauma: Temporary (if properly managed)

Cause: Occurs in response to a single highly stressful event, such as a natural disaster, accident, or violence

Associated symptoms: After a very stressful experience, acute stress disorder may develop (within the first month) and can be a predictor of Post-Traumatic Stress Disorder (PTSD). Symptoms include dissociation, avoidance, high arousal and difficulty concentrating.

#### Chronic trauma

Comes from repeated traumatic events (also known as type 2 trauma).

Chronic trauma involves serious and long-lasting symptoms. It often comes from repeated traumatic events in childhood, especially those involving close relationships. Examples include physical or sexual abuse, emotional abuse, witnessing violence, early separation, abandonment, or losing a caregiver due to illness, addiction, or prison.

In adulthood, chronic trauma can also be caused by things like war, torture, forced migration, or any long period of feeling unsafe, with no chance to escape or protect oneself or loved ones.

* Type of Trauma: Long-lasting
* Cause: Results from continuous or repeated traumatic experiences (e.g., physical, emotional, and/or sexual abuse, domestic violence)
* Associated symptoms: Anxiety, depression, Post-Traumatic Stress Disorder (PTSD)

#### Complex trauma / Post-Traumatic Stress Disorder (PTSD)

Involves multiple different kinds of traumatic events that combine to create unique trauma symptoms (also known as type 3 trauma).

Complex trauma or PTSD (Post-Traumatic Stress Disorder) can develop after being exposed to a potentially traumatic event, either directly or indirectly. This may include actual or threatened death, serious injury, or sexual violence.  
Trauma can also result from repeated or intense exposure to disturbing details of such events — for example, first SAR operators handling human remains or police officers repeatedly exposed to child abuse cases.

* Type of Trauma: Long-lasting
* Cause: The person has been exposed to trauma such as actual or threatened death, serious injury, or sexual violence. This can happen through direct experience, witnessing the event, or learning that a violent or accidental event happened to a close family member or friend
* Associated symptoms: Intrusive symptoms appear after the traumatic event, including distressing memories, dreams, or flashbacks, which may lead to a complete loss of awareness of the surroundings. The person may experience intense or prolonged psychological distress and physical reactions when reminded of the trauma (triggers). In addition to PTSD, dissociative symptoms may also appear, such as depersonalization (feeling detached from one's own thoughts or body, as if observing oneself from outside) or derealization (feeling as if the surrounding environment is unreal or strange)

#### Vicarious trauma *(Secondary trauma?)*

Is the emotional and psychological impact experienced by individuals who are exposed to the traumatic experiences of others, often through empathetic engagement or prolonged involvement in their care or support.

Vicarious trauma happens when someone is emotionally affected by hearing about or helping with another person’s trauma. It often affects people who work closely with trauma survivors, like therapists, doctors, or emergency workers. Over time, their thoughts and beliefs can change in a negative way. What makes it different from burnout (a stress-related condition caused by emotional strain at work) is that vicarious trauma comes from deep empathy—feeling emotionally connected to someone else's pain.

* Type of Trauma: Long-lasting
* Cause: Vicarious or secondary trauma happens through **empathetic connection**. When we understand someone else’s pain, our brain "mirrors" their experience by activating our own pain areas

Associated symptoms: Even though the person is not directly exposed to the trauma, the symptoms are similar to those of PTSD: intrusive thoughts, avoidance, increased arousal, and overall decline in emotional well-being

## How fatigue differs from stress and trauma

Mention “good stress” and “bad stress”, and the difference between them.

## Influencing factors in general

Short briefing on influencing factors, both for stress and trauma.

### External factors

Short briefing on external factors that affect this matter.

Many major life events can be stressful — both positive ones like getting married, having a baby, or starting a new job, and negative ones like losing a loved one, going through a separation, or retiring. In addition to these, there are common physical stressors such as extreme cold or heat, alcohol or tobacco use, and limited physical mobility. There are also environmental factors that increase stress, such as lack of housing, loud noise, high pollution levels, or major events like natural disasters.

#### In stress

**Rapid technological changes**

Rapid technological change is a one key feature of today’s workplaces. While innovation may improve efficiency and ease the tasks performed, it can also create stress. Especially when, or if organisations don’t manage the transition well. The main source of stress related to technological change include:

* Technostress: this refers to the stress people feel when constantly adapting to new digital tools. Employees may feel overwhelmed, need to learn new skills, change their routines, or even deal with disruptions. This can lead to feelings of incompetence, insecurity, fear of being outdated, resulting in mental fatigue and lower job satisfaction.
* Lack of support and training: when companies make alterations, but don’t provide enough support and training, employees might resist change and feel less engaged.
* Digital surveillance: tools like activity trackers, keystroke monitors and productivity dashboard can increase pressure and reduce the employees’ sense of control. This can be viewed as a type of micromanagement, and it can have negative effects on trust and psychological safety, which are crucial for well-being.

**Traffic emergencies**

To be filled out

#### In trauma

To be filled out

### Internal factors in stress

Short briefing on internal factors that affect this matter.

#### Shift work

About 20-30% of shift workers develop Shift Work Sleep Disorder (SWSD). A sleep disorder caused by working irregular hours, especially at night (usually between 7 PM and 6 AM). This disorder disrupts the body’s natural sleep-wake cycle and leads to excessive sleepiness during work and insomnia when trying to rest. People’s ability to adapt to shift work varies based on factors like age, health, experience, and family duties. Older workers and women tend to have more trouble adjusting. SWSD can reduce cognitive performance, increase accidents, and lead to serious health problems such as sleep disorders, weight gain, metabolic issues, faster aging, digestive problems, and even higher risks of cancer and heart disease. It can also negatively affect mental health, causing anxiety, depression, and lower quality of life.

#### Monotony

Monotony in the workplace refers to a repetitive, unvaried, and often dull routine that can lead to mental fatigue and decreased motivation. As an internal factor of stress, monotony arises when employees perform highly repetitive tasks, such as continuously watching monitors or observing processes, without significant variation or stimulation. This lack of cognitive engagement can cause boredom, reduced alertness, distraction and feelings of frustration or disengagement, which over time increase stress levels and negatively impact both mental well-being and job performance.

#### Saturation

Saturation at work describes a state in which employees experience physical, mental, and emotional exhaustion after prolonged exposure to high job demands with insufficient recovery resources. In particular, from an occupational psychology perspective, saturation arises when workers face overwhelming workloads, limited autonomy, or inadequate support, pushing them beyond their capacity to cope.

Key elements of saturation at work:

* Job over-demand: excessive responsibilities and tasks that exceed an individual’s available resources.
* Resource imbalance: lack of sufficient control and support.
* Psychological and physical fatigue: manifestation of emotional exhaustion, reduced motivation, and eventual
* Disengagement in outcomes: lower productivity, diminished well-being, increased errors, higher turnover intentions, and reduced job satisfaction.

#### Lack of supervision

Lack of supervision refers to the absence or inadequacy of guidance, oversight, and support from managerial or supervisory personnel. In the workplace, this deficit can lead to ambiguity in roles, insufficient feedback, reduced perceived support, and a lack of accountability structures. These conditions can contribute significantly to occupational stress, as employees may feel isolated, uncertain, overwhelmed, or unsupported in meeting job demands.

#### Physical work environment

The physical work environment plays a critical role in influencing employees’ stress levels, as it encompasses the tangible conditions under which work is performed, such as lighting, noise, temperature, air quality, ergonomics, and spatial arrangement. Poor physical conditions can act as persistent stressors, leading to both physiological and psychological strain. For instance, excessive noise, sharing workplace, resources and equipment with other parties/services (SAR, MAS, etc.) and inadequate lighting can impair concentration, while uncomfortable temperatures or poorly designed workstations may cause fatigue, discomfort, or musculoskeletal issues. Over time, these factors can reduce job satisfaction, increase errors, and elevate the risk of chronic stress-related health problems. Moreover, a cluttered or unsafe work environment can signal neglect or low organizational support, which further contributes to a negative perception of the workplace.

#### Interpersonal relationships with colleagues and supervisors

Interpersonal relationships with colleagues and supervisors are a crucial factor, as they directly influence the social climate of the workplace and the emotional well-being of employees. Poor relationships, characterized by conflict, lack of communication, mistrust, or absence of support, can lead to feelings of isolation, frustration, and anxiety. Tense or hostile interactions may also undermine collaboration and create a toxic work culture, increasing emotional strain and reducing job satisfaction. Additionally, inconsistent or authoritarian supervisory behaviour can generate role ambiguity or fear of evaluation.

#### Work at a visual display terminal (VDT)

Working at a visual display terminal (VDT) for extended periods has been identified as a significant source of occupational stress, particularly in sedentary office environments. Prolonged VDT use is associated with visual fatigue, musculoskeletal discomfort, and mental strain, especially when tasks are repetitive or require sustained attention. Physically, employees may experience eye strain, headaches, neck and back pain, and carpal tunnel syndrome due to poor ergonomics or inadequate breaks. Psychologically, continuous screen-based work can lead to cognitive overload, reduced concentration, and emotional exhaustion, particularly in high-pressure roles involving constant digital interaction. Additionally, the sedentary nature of VDT work may contribute to feelings of monotony and isolation, further compounding stress.

### In trauma

* Accident / incident
* Being humiliated (blame / “punishment culture”)

# Part B detecting and evaluating stress and trauma

## Identification and evaluation

Examples on how stress and trauma can be identified, and how others can evaluate the level of stress and/or trauma. Stress and trauma must be defined and separated from each other.

Identification and evaluation need to be separated from each other; they are two different things.

Assessing the risk of work-related stress means considering the impact that a hazard present in the work environment (i.e., a describable condition where an individual may be exposed to potential harm) can actually cause stress-related damage of a certain severity and likelihood (R = L x C). When this risky condition, caused by various work factors, occurs over a prolonged period and with high intensity, it tends to produce significant consequences for the worker and, indirectly, for the organization in which they operate.

Workers experience stress when the overall demands of their job are excessive and exceed their ability to cope.

### Identification of stress

The human body reacts to stress in various ways, but the stress response usually disrupts the digestive system in a negative manner. This can for example be experienced as diarrhoea, or as constipation. Stress affects the parasympathetic nervous system (PSNS), which links the brain with other parts of the body. During an acute stressor, the nervous system reacts to activate the body in order to defend itself. The PSNS affects the heartrate, which is elevated during stressful situations, the breathing, which is sped up during a stressor.

1. Examples of stress symptoms

|  |  |  |  |
| --- | --- | --- | --- |
| **Emotional** | **Cognitive** | **Corporal** | **Behavioural** |
| Anxiety (incl. worry, fear, panic) | Difficulty concentrating | Heart palpitations | Swearing |
| Anger (incl. irritation, frustration, rage) | Sluggish thinking | Visual disturbances (e.g. tunnel vision) | Arguing |
| Sadness, low mood | Difficulty making decisions | Difficulty breathing / rapid breathing | Being cynical |
| Guilt | Empty-headed | Dizziness, feelings of unreality | Aggressive driving |
| Shame | A jumble of thoughts | Trembling, clumsiness | Isolation |
| Emotional instability | Difficulty completing a train of thought | Tension/pain in e.g. shoulders, neck, back, jaw | Rumination, brooding |
| Emotional exhaustion | Forgetfulness | Tension headache | Increased consumption of alcohol, food, nicotine etc |
|  |  | Alternating between feeling hot and cold | Passivity |
|  |  | Abnormal fatigue | Perfectionism |
|  |  | Susceptibility to infections | Controlling behaviour |
|  |  | Stomach problem | Doing everything fast |
|  |  | Sleep problems | Doing many things at once |

### Evaluation of stress

Asd

Something about exhaustion (burnout), for example the Swedish test “KEDS” (Karolinska Exhaustion Disorder Scale).

### Identification of trauma

Asd

### Evaluation of trauma

Asd

## Coping with stress and/or trauma

Examples on how the individual affected can cope with stress and trauma, and on how others can assist and/or help.

### How the affected can cope with stress and/or trauma

To be filled out later.

### How to cope with one being affected by stress and/or trauma

To be filled out later. This will most probably be the more important part of the guideline, due to the fact that the Guideline is meant for VTS providers / Managers etc.

## Evaluation process

Tools to evaluate the level of stress and/or trauma. Examples on what to do in different situations, based on the level experienced. Different situations/scenarios need to be defined. -> Swiss pocketknife, 50 in 1?

Various approaches: Mention different methods for approaching the problem / evaluating it. -> Port of Antwerp had an presentation on this topic during VTS-56 (using heart rate monitors etc).

* *Technological methods (heart rate monitors / body temperature monitors etc).*
* *Different surveys to the VTS Personnel*
* *Engineering methods, physiological methods, psychological methods.*

## Available support

Mention of occupational health, different support groups (international providers?). Institutional support (professional assistance).

Consider: Mention the possibility that the help might be provided by the same persons / organizations that evaluate you: you might lose your job if you get diagnosed.

Consider: The idea behind different support groups are really important, but we might not be able to list them.

Mention: CISM-groups or others, trained co-workers who can help out if needed.

The available help might differ between different member-states, this needs to be taken into consideration.

## Precautions

Mentioning risks of stress and trauma, as well as indirect stress/trauma (experienced by the group).

The cost, and effects of stress and/or trauma will be mentioned, references to a global level.

* Needs to be mentioned that the stress might not be work-related. [Finnish statistics](https://www.kela.fi/ajankohtaista/mielenterveysongelmat-veivat-jo-yli-100-000-suomalaista-pitkalle-sairauspoissaololle-vuonna-2023)

Consider: Calculating (on a more statistical level) what the cost might be (for example 1 in 10 costs X). Reference.

Consider: See what wording is used in C0103-1

# Part c methods for raising awareness and addressing mental well-being in vts-operations

## introduction to mental health training

Short introduction to what mental health training means

## benefits of mental health training

Data collected from different studies

## Burnout

To be filled out

## “Boreout” / Staying focused

Mentioning the “boreout” syndrome, and the risks of VTS personnel having too little to focus on at the same time. It’s the opposite of stress, but it can lead to the same thing. [Finnish link](https://www.ttl.fi/en/topical/press-release/boredom-at-work-can-make-you-sick#:~:text=Boredom%20at%20work%20is%20associated,which%20can%20predict%20health%20problems.)

study made in Korea ~10 years ago, more stressful to have close to zero traffic, in comparison to having a lot of traffic.

Mention the specific situation where the VTS personnel finds him/herself in a situation that does not “give enough”, this will not automatically lead to a “boreout”. It’s a risk if the VTS Personnel is not interested in their work, and if they don’t find it fulfilling, it will affect the result. The end-result of this might be the “boreout”, where you lose the worker / where the worker will lose interest in the job.

## resources available

Most common used methods globally, links/mentioning?

This section should focus on the resources available, not the “help available” (Part B will focus on ways to address help). Try to find different links to organizations who raise awareness, different themes etc.

### How to raise awareness of stress and trauma

Tips for different organizations on how to speak about this topic, and how to handle it within their organization. It might be good to list positive outcomes by doing it.

Add in: There will be stress, there is no way out of it. But the idea is to handle it.

### Needs a better header

Mention the small elements that contribute in a positive manner to this; focusing on working equipment, working in a dark space vs light space, having chairs/tables etc that are ergonomic. Environment of the worker -> Terveystalo checks this in Finland, try to see if there is any information available on this.

Themes for different months; this month we talk about “mental health” for etc -> the company wants to discuss it, and the idea is to have the personnel to talk about different topics (and to address them), perhaps providing good ideas / items to improve.

Ways to prepare your personnel on the topic; make them aware of what can happen (“lessons learned”), to talk about it beforehand.

Relationships & influences on working with different organisations etc. (for example VTS vs. Pilots / VTS vs. Ports / VTS vs. Vessels). Try to investigate different socioeconomical differences (does salaries have an effect?)

# abbreviations

ASD Acute stress disorder

NGO non-governmental organization

PSNS parasympathetic nervous system

PTSD Post-traumatic stress syndrome

VTS Vessel Traffic Services

The list should be typed in alphabetical order. The text automatically aligns as an indented paragraph until carriage return is hit and then the next term can be entered.

# references

References are sources directly referred to in the running text and should be given a sequential number, starting at 1. The reference number should be included as close to the referenced text as possible and included as a number within square brackets.

The reference should be listed in the References section in the following syntax using the **Reference** **list** style:

[Author surname,] <space> [initial.] <space> [year] <space> [title.]

For example:

“Hawking also suggests ways that quantum mechanics can be combined with the theory of special relativity [1]. This text builds on his discussion of the instability of black holes described in *A Brief History of Time* [2].”

should be included in the reference list as follows:

1. Hawking, S. (2001) The Universe in a Nutshell.
2. Hawking, S. (1988) A Brief History of Time.

The **Reference list** style will add a number for the reference as soon as you start typing the text and the paragraph will automatically align with the first line of text. Press return to enter a new reference in the list.

# References

Kloidt, J., & Barsalou, L. W. (2024). Establishing a Comprehensive Hierarchical construct of Eustress (CHE). *Current Psychology* , 32258-32271.

Marzillier, J. (2014). *The Trauma Therapies.* Oxford: Oxford University Press.

Schuett, T. (2014, September). Reducing VTS operator stress. *VTS, navigation, mooring and berthing*, 1-2.

Villines, Z. (2024, January 15). *Eustress vs. distress: What is the difference?* Retrieved from Medical News Today: https://www.medicalnewstoday.com/articles/eustress-vs-distress#definitions

# Index

TBD

1. debriefing sessions

To be filled out

Use the template for debriefing sessions that is used by Fintraffic / or something similar.