

PURVIS SYSTEMS

Technology Solutions with Peace of Mind

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Stress & Physical Health for First Responders

It's well established that stress, whether environmental or psychological, impacts our physical health and well-being. Even a seemingly "low grade" stressor causes the body to adapt to a more elevated state of heightened awareness. This adaptation is known as chronic stress, and chronic stress is particularly common among firefighters and EMS personnel.

No one will dispute the fact that first responders face tremendous workplace stress. Looking beyond the intrinsic hazards of fighting fire and helping people out of life-threatening situations, consider the workplace environment for the firefighter who is not on an active service call, but is still on-duty at the station:

Constant noise

Most fire stations use radios for situational awareness, which means ongoing chatter and digitized background noise, especially within busy departments. Even if a specific fire station isn't needed for an emergency, station personnel are still likely hearing about the incident via radio chatter in the background.

Startling alarms and lights

Most fire stations broadcast loud tones that correspond with a specific type of dispatch, which are often followed by bright lights as the dispatcher's broadcasted voice shares incident information. First responders working in this environment often have elevated levels of epinephrine in anticipation of these alerts.

Disrupted sleep schedules

It has been reported that almost 40% of firefighters suffer from some sort of sleep disorder. Shift work, scheduling difficulties, and middle-of-the-night service calls make it difficult to get the requisite 8 hours of sleep. Add stress and the body's fight-or-flight response to the mix, and it's easy to imagine that many firefighters and EMS personnel have difficulty falling and staying asleep.

Why Prioritize Mental Health?

Countless fire agencies already have some sort of health program or initiative in place that emphasizes the importance of a healthy diet and regular exercise. Why add mental wellness into the mix? We've already explained the link between stress and physical health, which means mental health needs to be part of any total wellness program.

for Better Responder Mental Health & Wellness



Psychology Today reports that making mental health a priority in the workplace boosts productivity, fosters a sense of belonging, and minimizes stress. All of those would only serve to further benefit any agency. Supporting mental health in your stations has far-reaching, business-driven impacts:



Competitive Hiring

On the heels of the pandemic, mental health is in the spotlight. Highlighting a commitment to supporting both physical and mental wellness will make you more desirable to prospective candidates.



Retention

If the workplace is stressful, employees will seek alternatives. Wholistically healthy employees are 74% more likely to report job satisfaction, and 51% more likely to report their intention to stay with their organization.³



Financial Incentives

Better mental health can contribute to reduced workers comp claims, and by extension, overtime costs if you have to cover that worker who's out. Some states will even offer a discount for reduced workers comp claims.4

Technology that Reduces Stress & Improves Mental Health

Fire station alerting solutions are primarily linked with goals of reducing response times and enhancing communications, but more and more agencies are looking for functionality that improves responder mental health. Below, we highlight 4 station alerting functionalities that offer the biggest return on investment for improved responder mental health.

1. Ramped Audio and Lighting

This is typically the first choice when it comes to adding wellness features to a station alerting system, and for good reason; ramped lighting intensity and volume levels (that start at a lower level and gradually increase over a defined period of time) have proven to significantly reduce the startle effect on first responders during an alarm.

TIP: Look for solutions that allow for customizable ramping configurations, such as volume or lighting intensity settings. Some systems even offer ambient noise sensors which can automatically adjust volume given noise level at any time.

³ The Rise of the Whole Employee (metlife.com)

⁴ States that Offer Workers Comp Reductions for Safety Programs

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2. Targeted Alerting/Zoning

Alert only the responders required for an incident response - not the whole agency or the entire station - through the use of zoning. This makes it very clear who is needed for a response, and those who are not needed are not disturbed.

3. Automation

There are two forms of in-station alerting automation that can positively impact first responder health and well-being.

- Automated voice for dispatching enhances communications. The synthetic yet human-sounding voice from applications like Nuance Vocalizer is calm, consistent, and clear, so first responders don't strain to hear or need to call back into dispatch for a repeated message. Instead, they can focus on the words and instructions without getting swept into a human speaker's tone, inflection, or emotion, making the response process less stressful.
- Automated relay control for station devices provides the capability for the system to automatically activate or deactivate certain station devices, such as opening bay doors, turning on lights, and shutting off a stove. This automation removes the additional burden from responders who are trying to get themselves ready to answer a call by lessening the mental workload associated with trying to keep track of everything that needs to be done prior to leaving a station.

4. Situational Awareness

Providing easy access to critical information - incident type, responding units, turnout times, and even the weather forecast - is often overlooked in terms of its potential for impact. Large display message boards, scrolling reader boards, and even rip-and-run printers provide more comprehensible information at-a-glance than what's available from a stream of radio chatter. Furthermore, supplementing written information with visual cues such as mapping and active incidents provides quiet situational awareness. Together, this situational awareness technology equips first responders with the information they need while reducing barriers and associated stress.



A Worthwhile Investment?

Station alerting doesn't need to be an all-or-nothing proposition to still reap the mental health benefits. Start with the basics, and look for a solution that is modular and easily scalable so you can add features and functionality at any time. If the budget requires making choices among an array of features:

- **Talk with personnel and crew** to get a sense of what they feel would provide the most significant benefit to their sense of well-being in their specific workplace.
- Consider a solution that offers flexibility, since the ideal solution might not be the same for every station. For example, just because one station requires dorm zoning functionality should not mean you need to purchase dorm zoning functionality across all your stations.
- Find a solution provider with deep station alerting expertise who is willing to establish and maintain an ongoing relationship with your agency in order to keep your solution up-to-date as your needs, technology, and industry requirements change over the years.

To learn more about how your agency can affordably grow into a new, more reliable, and effective alerting system, check out PURVIS'

"5 Steps to Affordably Grow into a New Fire Station Alerting System."



About PURVIS Systems

PURVIS has been installing and maintaining mission-critical systems for fire departments and other public safety organizations for almost 50 years.

We understand the critical role technology plays in response times, and we make it our mission to implement solutions that empower our clients to handle emergency situations quickly and safely.

Additionally, we know that your ability to serve your community is dependent on your team, and you need your team to perform at their best. Consideration of their physical and mental well-being should extend beyond the gym and into the actual workplace. As your trusted partner, we tailor technology solutions to your organization to provide a solution that meets the requirements of your community and the needs of your personnel. We work to solve your challenges so you can focus on protecting life, safety, and property.

PURVIS Systems has long-term engineering and technical services contracts with clients such as:

- New York City Fire Department (FDNY)
- Boston Fire Department
- District of Columbia

- Charleston County, SC
- Los Angeles Fire Department (LAFD)
- Pittsburgh Bureau of Fire

"Fire chiefs looking for the most firefighter-friendly and practical station alerting system select
PURVIS because of their innovative commitment to firefighter well-being and operational efficiency.
PURVIS' safety features reduce station alerting stress so firefighters can better concentrate on
handling emergencies."

- PURVIS Client

If you have questions about what to look for in a fire station alerting solution or partner, let's connect.

Our team of public safety industry veterans is ready and willing to help answer any questions and steer you in the right direction.

For more information, please visit PURVIS.com/station-alerting