

## Why Are You Interested In Lone Worker Safety?

- Have you had an incident involving a person working alone?
  - Do you feel there is a risk to a person working alone?
- Have you been asked by a regulatory agency to provide a Lone Worker Plan?

A worker's average age in the United States has increased since 1992 and is expected to continue to increase through 2022. An older worker coupled with the competitive demands for increased efficiency in operations has found business doing more with less...this means doing more with an older at risk workforce. Age is a contributing factor to risk in working alone, but is not the only reason why we protect a person working alone.



## LONE WORKER SAFETY: THE CHALLENGES & SOLUTIONS

### What Is a Lone Worker?

Lone Worker (or Working alone) refers to situations in which a worker is performing their job duties in isolation from other workers – rather that means they are the only employee present at the workplace, or maybe in a separate room or area where assistance is not readily available to the worker in the event of injury, ill health, or emergency.

# What is the Employer's Responsibility?

## USA Federal Regulations:

- **OSHA 1915.84(a)** Except as provided in § 1915.51(c)(3) of this part, whenever an employee is working alone, such as in a confined space or isolated location, the employer shall account for each employee:
- **1915.84(a)(1)** Throughout each work shift at regular intervals appropriate to the job assignment to ensure the employee's safety and health; and
- **1915.84(a)(2)** At the end of the job assignment or at the end of the work shift, whichever occurs first.
- **1915.84(b)** The employer shall account for each employee by sight or verbal communication.

This means that throughout each work shift **“at regular intervals”** appropriate to the job assignment to ensure the employee's safety and health... **the employer shall account for each employee.”**

**Canada has similar regulations governing the protection of lone workers. See below for details.**

## Canada – Federal

- **Under Canada Bill C-45** (which applies to the Code of Liabilities for Corporations), the Criminal Code has been amended such that organizations and even individuals may be criminally liable for failure to take reasonable measures to protect employee safety (effective March, 2004).
- The regulations apply for staff working in Canada according to provincial legislation standards.

## The Challenge in Protecting a Lone Worker

### What Is a Regular Interval?

A lot is left for interpretation in the statement, **“at regular intervals”**. If you were injured and laying on the ground unable to call for help, **how long** would be an acceptable amount of time to wait for help, and **can you afford to wait?**

# Check In / Out Systems VS Immediate Notification Systems:

1. Some employers use “**Check in**” and then “**Check Out**” Systems to monitor their Lone Workers. These systems require the worker to check in at regular intervals which could be an hour or half hour. What if something happens between check in times? Example, a worker checks in at 10am; at 10:05 am, an accident occurs leaving the worker unresponsive. His next check in may not be till 11am.



2. Other employers use an **Immediate Notification System** to monitor their Lone Workers. These systems provide notification of a worker in distress **within as little as 120 seconds**. A true “**man-down**” system is a dedicated system that is looking for movement from and **automatically senses** when a person has stopped moving and prompts them to move or when they activate the manual panic button. This system does not rely on voice communication or two-way radio tilt-switches. The tilt switch solution is prone to false alarms while voice communication does nothing for a worker who is totally incapacitated and cannot speak.



## When using an immediate call out system:

Determine who is receiving the call. Establish a call handling procedure. Test your system regularly. Never use an automatic voice call system to directly dial 911 without prior permission from your local Public Safety Answering Point PSAP. Alternatively, use an intermediary such as your own security or a commercial security monitoring center. **The best Immediate Notification Systems for fixed facilities are dedicated and designed radio frequency RF systems that have a known dedicated system coverage area.**

# Planning Your Lone Worker Risk Plan

Ask yourself the following questions and then focus on mitigating risks which have been identified below.

- Do any tasks of the worker require a second person?
- Does the workplace present a special risk to the lone worker?
- Can the employee safely exit and enter the workplace?
- Can temporary access equipment, such as portable ladders or trestles, be safely handled by one person?
- Can all machinery and goods involved in the workplace be safely handled by one person?
- Are any chemicals or hazardous substances being used that may pose a risk to the worker?
- Does the work involve lifting objects which are too large for one person?
- Is more than one person needed to operate essential controls for the safe running of equipment or workplace transport?
- Are young, pregnant, or disabled workers at risk if they work alone?
- Are there language barriers between workers? If so, an immediate notification system overcomes these barriers.

## Classifying the Lone Worker

After it has been determined that a worker is at risk because they are working alone, the worker should be presented with a plan to protect them. A plan should include the written policies and procedures of what and how to handle a Lone Worker Alarm including the identification of special required “man-down” Personal Protection Equipment PPE.

**Lone Worker equipment policies need to be treated no differently from standard PPE requirements of boots, helmets, fire resistant clothing, glasses, or gloves.**

## **LONE WORKER PPE IS NOT OPTIONAL.**

A “man-down” device is a special piece of Personal Protective Equipment PPE for the classified Lone Worker. With a custom system designed specifically for Lone Worker Protection, you can have immediate notification in the event of an emergency situation in 120 seconds or less.

We invite you to consider the benefits of a *true high performance lone worker SOLUTION*, without a recurring subscription fee:

Grace Industries' solutions feature:

- Rugged Durability
- Intrinsically Safe
- Waterproof
- Dust Proof
- Shock Proof
- Temperature Sensing
- Made In the USA
- No Monthly Fees
- Immediate Notification of Fallen Workers
- No Check In or Hassle for the worker, just wear the extremely small, lightweight device and forget about it.
- Peace of mind for the employer knowing that their lone workers are safe and that their organization is in compliance with lone worker legislation.
- Each device features a panic button which the worker can use to call for help and a motion accelerometer which can detect when a worker has become incapacitated and call for help on the worker's behalf.
- Our unique modular Design makes upgrading your protection later easy and cost efficient

How Does Your  
Lone Worker Protection  
Measure Up?



# You Have Choices and We Have Solutions

*“If we put our name on it, you can bet your life on it!”*

## LONE WORKER TELEMETRY OVERVIEW

Grace’s line of Radio Telemetry devices combine the features of our audible alarm devices and add smart signaling technology which allows for communication between Grace products.

We break our Telemetry line down into two main groups: The Orange Line which is limited to just “one-way” transmitting of an alarm to receiver; and the Yellow Line “two-way” operation which can BOTH Transmit AND Receive radio signals.

The yellow line is used in our evacuation system (MS1000) and interfaces to other existing alerting systems (fire, security, and process control).

When combined with the Grace Locator, the Grace Locator tells you “where to look” when a user is in alarm

## **Yellow Line** Vs **Orange Line**

### **Orange Line Specifications**

For users who require the simplest of features, our **Orange Line** Telemetry device (LTX200) is limited to just “one-way” transmitting of an alarm to a receiver (SC500/MS900/SMS-ST/Portable Worksite Alarm). The **Yellow Line** is our most popular series because of the expanded features available in two-way signaling.

### **Yellow Line Specifications**

Our **Yellow Line** offers many advantages over our **Orange Line**. Not only does it have the capabilities to send AND receive radio signals; it also allows for co-monitoring of worn devices as well as evacuation and location capabilities when paired with one of our base monitoring systems. Examples of **Yellow Line** devices include our TPASS ® 3 and SuperCELL ® SC500

## Co-Monitoring Vs Base Monitoring

Both our **Orange** & **Yellow Line** are then broken down into either Co-Monitoring solutions or Base Monitoring solutions. Co-Monitoring allows for two or more worker worn devices (SuperCell® SC500 or TPASS® 3) to monitor each other, while Base Monitoring uses either a fixed (MS900/MS1000/SMS-AT/ WatchDog™) or portable base receiver ( Portable Worksite Alarm) to monitor one or more worker worn devices. Deciding which method is best for you depends upon your operational need. Many users take advantage of a mixed system of both co-monitoring and base monitoring.

### Co-Monitoring Examples:



### Base Monitoring Examples:



## Location Systems

### Grace Locator

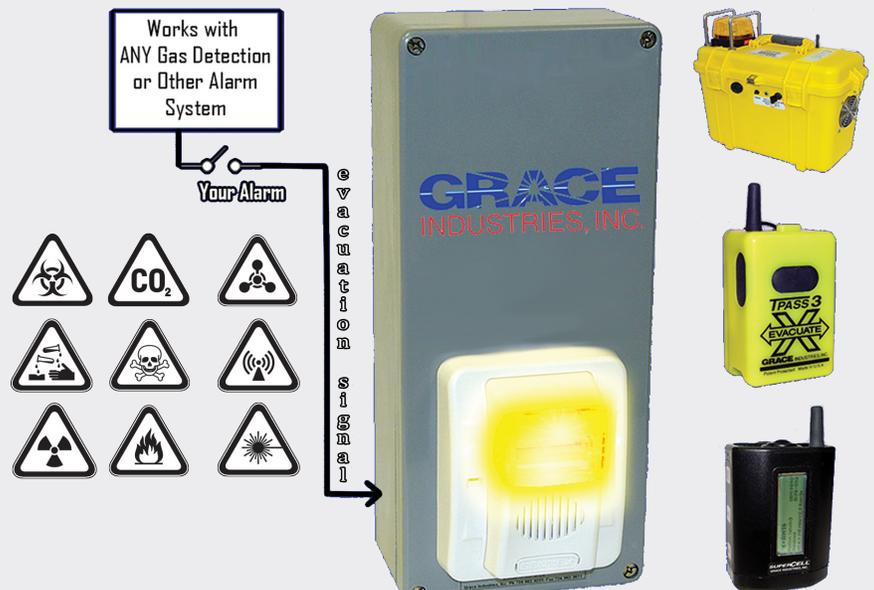
Exclusively on our **Yellow Line**, the Grace Locator is strategically located within a building so that when a user wearing a TPASS® 3 or SC500 passes in front of the locator, a signal is received from the locator marking the TPASS® 3 or SC500 with the location information which is then transmitted from the TPASS® 3 or SC500 when the unit goes into alarm or when it is polled from the Grace Watch Software.



## Evacuation Systems

### MS1000 X

Exclusively on our **Yellow Line**, you can prevent accidents before they happen by alerting and evacuating users. The MS1000X will accept inputs from your existing alarm systems such as fixed gas detection units, fire alarm panels, or security alarm panels. The input from these systems will activate an Evacuation alarm on TPASS® 3 and SuperCELL® SC500 Devices. Workers who were out of range of these alerts before are now protected.



## To Find a Grace Authorized Telemetry Reseller In Your Area:



Call Grace Industries: 724-962-9231  
Email Our Sales Team: [sales@graceindustries.com](mailto:sales@graceindustries.com)  
Visit Us Online: [www.GraceIndustries.com](http://www.GraceIndustries.com)  
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