

Overview

SafetyNet is the leading safety management system for saving lives by predicting workplace injuries. This solution enables you to measure the effectiveness of your safety programs, determine leading indicators of risk and identify where your next injury is likely to occur.

Data is loaded into the system via mobile devices such as the iPhone, iPad, Droid or Blackberry. Data can also be added through the web application making the process very simple. Once the information has been entered into the mobile device, it is then synchronized with the server for further analyses.



Continuous Improvement

The most successful safety processes are those that promote sustainability and the way to do so is by maintaining the continuous improvement process. The primary components of this are Plan, Do, Study and Act.

- **Plan** – We as a team need to first understand the reasons why SafetyNet is being used on the program and what the expectations for participation and process improvement are. A data use plan is part of this process which defines how we manage information and more specifically, which reports are selected for use, to whom they're sent to and on what interval.
- **Do** – Successful programs thoroughly define an inspection strategy which includes which checklists are used for which process, which processes are observed and who is actually performing the observations. It's very important to ensure that when something is identified as having been unsafe or in need of some level of correction, that provisions are put in place to protect the employee until such time that the required corrections are made.
- **Study** – Once your team collects the data, it needs to be reviewed to identify those who deserve reward and recognition for their outstanding achievement. Additionally, there may be items which warrant a plan for correction. During the data review, we conduct a gap analyses to identify trends and measure progress.
- **Act** – The final segments of the process are to maintain accountability, take action as required and provide necessary feedback, both positive and corrective. The action taken is directly correlated to the decisions made in the study phase of the continuous improvement process.

Goals and Expectations

Programs see the most success when there is marked participation up front. The goal is always to start out in a quantitative manner, then refine the approach to address quality. In any successful process there are measurable goals set, which can be tracked through to completion. While it's very important to develop a goal plan that works for your company, here is an example of a simple set of participation goals:

- 1-2 per month for Senior Management such as Plant Managers and Executives
- 1-2 per week for Line Managers, Superintendents, Directors, and Workers
- 3-5 per week for Safety

Remember!

Inspections can be:

- General – Covering wideband compliance
- Focused – Task, category or group of workers

You can also look at one single project, or an entire area



Approaching an Inspection

SafetyNet's flexibility is a key component of its success. SafetyNet allows for diverse styles and approaches for capturing the level of safety in an area or within an organization. Some of these best practice approaches are outlined below.

➔ **Select a single category (focused) and inspect for it in a comprehensive manner.**

Example – Select ladders and inspect every ladder onsite for all subcategories. This method is commonly used to satisfy compliance with an OSHA requirement such as Fire Protection (extinguishers), or for an Assured Grounding Program.

➔ **Conduct an inspection using all components of the checklist which can be a wall to wall comprehensive audit.**

If this type of inspection is chosen, it's best to have a plan to follow so that all pertinent areas and work groups are covered.

➔ **Choose a specific task or operation and inspect the process for all behaviors and conditions associated with that task.**

Example – A breaker change out or other work within an electrical panel. When working within an electrical panel, inspecting tasks could involve the following categories: PPE, Electrical, Housekeeping, Site/Public Protection, Hand and Power Tools, Control of Hazardous Energy and Medical/Emergency.

The intent of this inspection would be to measure the level of safety only for that particular task or operation.

➔ **Snap Shot Method - Walk around an area, taking mental "snap shots" and record what you see**

This type of inspection might not be focused on one specific category or group of categories, but based on what you see at the time of the walk through. This is a great opportunity for positive and corrective feedback sessions with the workforce. It's also a great method to promote leadership engagement by having them participate.

➔ **Select a specific work group or crew and capture all observations related to that work group or crew only.**

During this inspection process, you can learn about how the group works as a team, which can be used as a cultural indicator. Again, this is a great opportunity for a group feedback session and team building.

Counting Rules

Inputting safes into the system is considered to be a best practice. This does not mean that you're required to look at every single category on the checklist and mark it as either a safe or an unsafe. We use representative sampling to help in the process. Select a category that you feel is important or know needs attention. If the majority of your observations are acceptable, move on to something else. This is especially applicable to PPE, or areas which have space restrictions. Don't ever estimate; document only what you see.

Safe observations provide an opportunity for reward and recognition and to document that inspection efforts were put forth. Consider this: If you don't document safes and you see two companies; one which appears to have 5 unsafes, the other with none, how do you know the one with no unsafes was even looked at?

An inspection can be defined two ways; (1) the act of viewing carefully or critically and (2), a collection of observations. We define an observation as the act of, or an instance of noticing or perceiving and those observations can be a collection of conditions, behaviors or activities.

In addition to the preservation of life, our goal is to ensure that you have confidence in the data collected. To do so, we encourage you to consider the following ways to conduct your inspections, relative to counting as described below:

- **People & Parts** – This is generally approached by looking at it as a 1:1 ratio. More specifically, each occurrence of people we see who have separate PPE (hard hat, safety glasses, etc) should be recorded separately. Other examples where this would apply would be equipment guards, light fixtures, wall receptacles, individual ladders, etc.
- **Length** – Sometimes it’s most appropriate to measure things in individual sections. Guardrails, walkways and even fencing are great examples of this. For guardrails, consider observing section by section because if one of the connection points is compromised, it presents a significant threat to life safety. Think about a prison fence; it would be inappropriate and dangerous to assume that the entire length of the fence is satisfactory by only looking at one small section.
- **Area** – In certain cases, it’s appropriate to look at an entire area as a whole. This would apply to the review of rebar caps and general housekeeping within a room. For example, if we went into a section or a room and found 30 different items strewn across the floor, we would not classify this as 30 at risk observations. Rebar caps are treated the same way in that we would observe them in a grid, not individually.

Understanding and Applying Severity

Proper assignment of severity requires us to understand, both consequence and likelihood. Within the system, there are four choices available for selection; low, medium, high and life threatening. When an unsafe is filed, one of these must be chosen.

From a severity perspective, the difference between high and low comes down to whether or not a worst case scenario will result in hospitalization, or worse. It’s important to calibrate the team on their severity selections and one way to do this is through the detail report. Run the detail report from SafetyNet, then do the calculation to identify if the most appropriate severity selection was chosen. This is an opportunity to give feedback based on the findings.

Once confidence is gained in the process, this provides an opportunity to prioritize our needs and focus our resources. Some additional reference information is listed below.

Determining Consequence

- HIGH/Life Threat Severity = injury requires hospitalization or worse
- LOW/MEDIUM Severity = injury does not require hospitalization

		Consequence	
		Low	High
Likelihood	Low	LOW	HIGH
	High	MEDIUM	LIFE THREAT

Consequence X Likelihood = Severity in SafetyNet

Determining Likelihood (4 determining factors)

1) Number of employees exposed

- <5, or >5

2) Frequency and duration of exposure

- 10 minutes/month *intermittent* vs. 8 hours/day *all day every day*

3) Environmental conditions

- Dry, moderate temperature, well-lit vs. wet, hot, low light

4) Stress factors

- Speed
- Crowding
- Other hazards in the area that make this hazard more likely to occur

Inspection Best Practices and Strategy

Focus on, both the behaviors and conditions and recognize that each is important when working towards total improvement. It's also important to vary your inspection efforts. Don't focus on only one area or group, or limit yourself to certain locations. Ensure that you are entering all of the data you collect, even if it's an unsafe that you've corrected on the spot, note that if it's not entered, it can't be tracked.

Although it's found on some of the reports within SafetyNet, remember that Percent [%] Safe is not a measure of risk and is not a sole indicator as to whether a program is safe or not. For example, if two projects were inspected 100 times and one was 97% safe and the other 95% safe, which one is safer? We could arbitrarily say that the 97% is safer, but what if all three unsafes were exposure to Anhydrous Ammonia, while the others were classified as low?