

Measuring Safety Performance



Measuring Safety Performance

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Measuring Safety Performance

Agenda

8:30 am - 8:45 am

- Introduction

8:45 am - 11:30 am

- Why measure performance?
- Types of measures
- Results measures
- Activity measures
- Envisioning the future

11:30 am - 12:30 pm

- Lunch

1:30 pm - 4:00 pm

- Accountability
 - ✓ Define expectations
 - ✓ Provide tools
 - ✓ Measure results
 - ✓ Give feedback
- Reevaluate the process

4:00 pm - 4:30 pm

- Review session
- Website demos
- Q&A
- Evaluations

Measuring Safety Performance

Objectives

You will learn:

- A sound foundation for developing or improving safety performance measuring systems;
- Strategies and techniques for measuring safety performance, emphasizing process measures, accountability, systematic monitoring, and goal-setting strategies;
- An understanding of how you can proactively use measurement systems to guide future performance;
- Key elements of contemporary safety measurement tools.

Resources Available from the Division of Safety & Hygiene (DSH) Libraries

(800) 644-6292 (614) 466-7388

library@bwc.state.oh.us

www.ohiobwc.com

Safety training:

- Safety talks, outlines and scripts - DSH Safety leader's discussion guide, Training Center's One-hour safety presentations, reference books, web resources
- Videos – hundreds of safety and health topics
- Books and articles on training techniques

Machine and equipment safety:

- Safety standards (ANSI, NFPA, CGA)
- Books and articles on power presses, material handling equipment, lockout/tagout, etc.

Sample written programs:

- DSH program profiles and sample written programs
- Reference books
- Internet resources

Illness and injury statistics:

- Statistics from the U.S. Bureau of Labor Statistics
- National Safety Council's *Injury Facts*
- National Institute of Occupational Safety & Health (NIOSH) studies

Hazard communication and chemical safety:

- Chemical safety information
- Material safety data sheets (MSDSs)
- Sample written programs
- Videos
- Internet resources

Safety standards

- American National Standards Institute (ANSI) standards (including standards for construction, machinery and equipment, personal protective equipment)
- National Fire Protection Association (NFPA) fire codes (including the Life Safety Code and the National Electrical Code)
- Compressed Gas Association (CGA) standards

Other topics of interest (books, articles, magazines, videos and standards):

- Confined spaces
- Electrical safety
- Job safety analysis
- New employee orientation
- Powered industrial trucks
- Respiratory protection
- Scaffolds
- Spill response

Directories and lists of vendors of safety equipment

Occupational Safety & Health Administration (OSHA) regulations

Manual of Uniform Traffic Control Devices (MUTCD)

Recommendations of useful Internet sites

BWC publications

Saving You Time and Research

Requests for copies of OSHA standards, information on starting a safety committee, a video on accident investigation techniques -- these are some of the thousands of inquiries BWC's Division of Safety & Hygiene (DSH) libraries receive each year.

DSH has two libraries to serve you:

- The central library in the William Green Building in downtown Columbus;
- The resource center and video library located at the Ohio Center for Occupational Safety and Health (OCOSH) in Pickerington.

Both libraries are open 8 a.m. to 4:45 p.m., Monday through Friday. Your need for information does not require a visit to the library. You can phone, fax, or e-mail your requests and receive a quick response.

The central library provides free information services on the topics of occupational safety and health, workers' compensation and rehabilitation.

The OCOSH resource center provides similar services for those who visit OCOSH for meetings and training center classes.

The video library offers an extensive collection of videotapes to supplement your organization's safety and health training program. It is a convenient and popular source for Ohio employers to borrow quality occupational safety- and health-related training aids.

Visit our Web site at **www.ohiobwc.com**.

Central library
30 W. Spring St., Third Floor
Columbus OH 43215-2256
1-800-OHIOBWC
(614) 466-7388
(614) 644-9634 (fax)
library@bwc.state.oh.us

OCOSH resource center
13430 Yarmouth Drive
Pickerington OH 43147
1-800-OHIOBWC
Resource center (614) 728-6464
Video library (614) 644-0018

BWC Office Locations

**Ohio Center for
Occupational Safety &
Health (OCOSH)**
13430 Yarmouth Drive
Pickerington, OH 43147
1-800-OHIO BWC
(Follow the prompts)
(614) 995-8622
Safety@bwc.state.oh.us

Cambridge
61501 Southgate
Parkway
Cambridge, OH 43725
(740) 435-4210

Canton
400 Third St. S.E.
PO Box 24801
Canton, OH 44701-
4801
(330) 471-0397

Cleveland
615 W. Superior Ave.
6th Floor
Cleveland, OH 44113
(216) 787-3060

Columbus
30 W. Spring St.
11th Floor
Columbus, OH 43215
(614) 752-4538

Dayton
3401 Park Center Drive
PO Box 13910
Dayton, OH 45414
(800-862-7768
(937) 264-5230

Garfield Heights
4800 E. 131st St.
Garfield Heights, OH
44105
(216) 584-0115

Governor's Hill
8650 Governor's Hill Dr.
4th Floor
Cincinnati, OH 45249
(513) 583-4403

Hamilton
One Renaissance
Center
345 High St.
Hamilton, OH 45011
(513) 785-4510

Lima
2025 E. Fourth St.
Lima, OH 45804
(419) 227-4116

Logan
1225 W. Hunter St.
Logan, OH 43138
(740) 385-9848

Mansfield
240 Tappan Drive N.
PO Box 8051
Mansfield, OH 44906
(419) 529-4528

Portsmouth
1005 Fourth St.
PO Box 1307
Portsmouth, OH 45662
(740) 353-3419

Springfield
1 S. Limestone St.
PO Box 1467
Springfield, OH 45501
(937) 327-1365

Toledo
1 Government Center
12th Floor
Toledo, OH 43604
(419) 245-2474

Youngstown
242 Federal Plaza W.
Suite 200
Youngstown, OH 44503
(330) 797-5010

Why measure performance?



Turn and Talk

Why Measure Performance?

✓

✓

✓

✓

✓

✓

Eleven Reasons for Measuring Performance

1. **A navigational tool** – used for strategic planning, day to day running of the organization and implementing improvements.
2. **An early warning sign** – so action can be taken before final results and before it is too late.
3. **Alter behavior** – of individuals, groups, or whole organizations, to promote desired changes.
4. **Implement strategies and policies** – by defining key performance indicators for each element of a strategic plan.
5. **Trend monitoring** – to monitor development over time, and provide insight into how things should be done in the future.
6. **Improvement prioritization** – identify and prioritize business processes, areas, and departments, which need improvement. Performance measurement forms a solid foundation for deciding where improvements would have the most impact.
7. **Improvement project evaluation** – for assessing whether improvement projects actually produced the projected results.
8. **Input into bonus and incentive systems** – when linked to performance measures true achievements can be rewarded.
9. **A marketing tool** – to persuade potential customers.
10. **Benchmarking** – by comparing performance levels with other organizations, targets can be set for different performance based on what others have achieved.
11. **Increased motivation** – through the use of feedback.

Adapted from: *Performance Measurement Explained*, Bjorn Andersen and Tom Fagerhaug

Types of measures

Two Viewpoints

One of the biggest problems in safety has been – and continues to be – measurement. How do safety professionals measure their efforts and determine whether or not safety “programs” are effective? Measurement is crucial to achieving excellence in safety from two broad viewpoints:

1) **A Macro View (organizational)** – how overall results are measured to determine whether strategic goals are being met and safety efforts are paying off; and

2) **A Micro View (personal)** – measures that direct activities/behavior toward the strategic goals. The measures should ensure individual performance and not foster nonperformance.





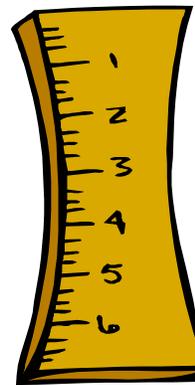
Turn and Talk

How does your organization currently measure safety performance?

√	_____	_____	_____
√	_____	_____	_____
√	_____	_____	_____
√	_____	_____	_____
√	_____	_____	_____
√	_____	_____	_____
√	_____	_____	_____
√	_____	_____	_____
√	_____	_____	_____

Two Types of Measures:

- 1) **Results Measures (trailing indicators)** are after-the fact and include measures such as OSHA recordables, lost-time accidents, severity rates and claims costs. These measures are linked to the outcome of an accident.
- 2) **Activity Measures (leading indicators)** are linked to actions taken to prevent accidents and injuries.



Which type of measure do we traditionally focus on in safety?

Results Measures (Trailing Indicators)



A Review of Traditional Results Measures

Commonly used safety and health statistical measures (trailing indicators) include:

Lost-time injury rate – The number of lost-time injuries/illnesses per 100 workers per year

$$\text{Lost-time injury rate} = \frac{(200,000) \times (\# \text{ of lost-time injuries/illnesses})}{\# \text{ of hours worked}}$$

Incidence rate – The number of recordable injury/illness cases per 100 workers per year

$$\text{Incidence rate} = \frac{(200,000) \times (\# \text{ of recordable incidents})}{\# \text{ of hours worked}}$$

Severity rate – The number of days lost due to occupational injury/illness per 100 workers per year

$$\text{Severity rate} = \frac{(200,000) \times (\# \text{ of days lost})}{\# \text{ of hours worked}}$$

TRACK DATA

Frequency and Severity Rate Calculations

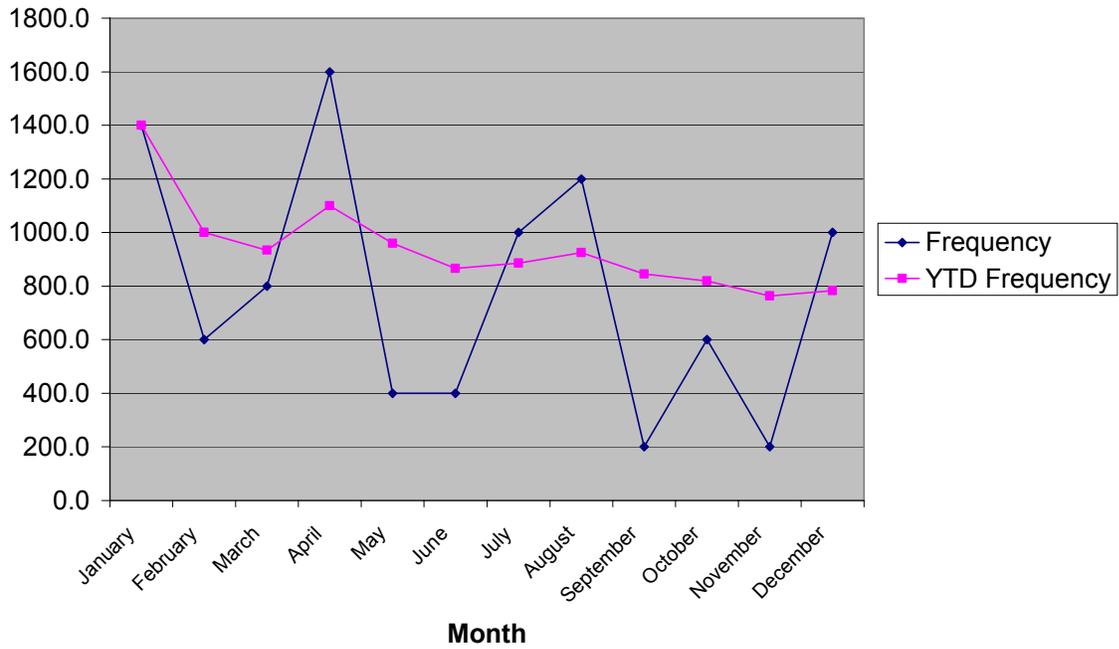
Employer Name:

Year:

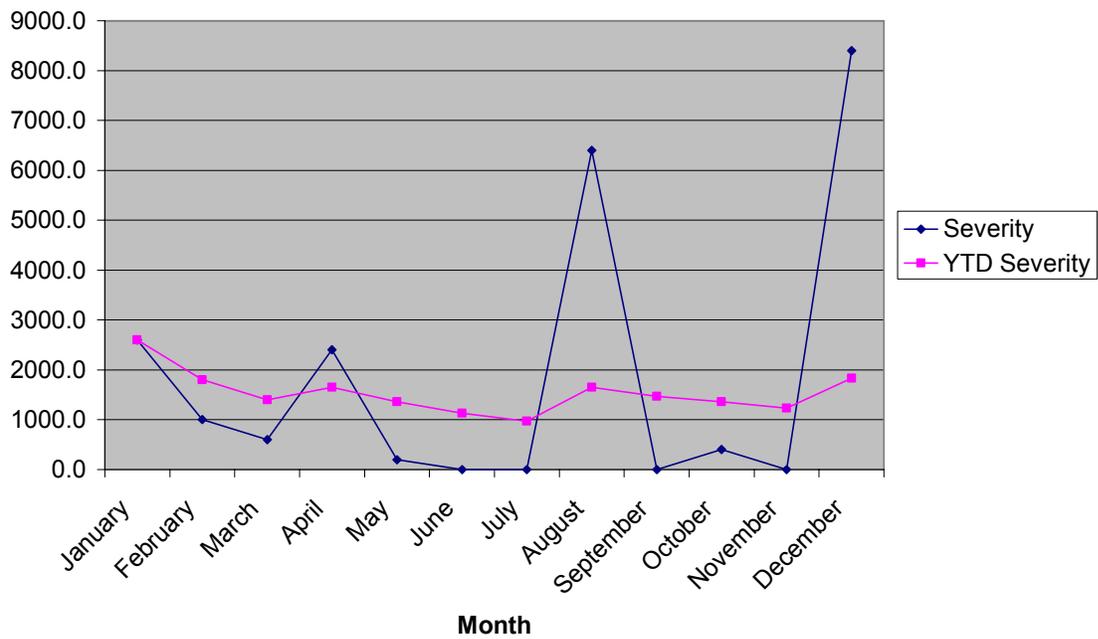
Month	Number Recordable	Number Involving Lost or Restricted Days	Number Lost and Restricted Days	Number Hours Worked	Frequency Rate	YTD	Lost-day Incident Rate	YTD	Severity Rate	YTD
	Injury/Illness				Monthly		Monthly		Monthly	
January	7	2	13	1,000	1400.0	1400.0	400.0	400.0	2600.0	2600.0
February	3	1	5	1,000	600.0	1000.0	200.0	300.0	1000.0	1800.0
March	4	2	3	1,000	800.0	933.3	400.0	333.3	600.0	1400.0
April	8	3	12	1,000	1600.0	1100.0	600.0	400.0	2400.0	1650.0
May	2	1	1	1,000	400.0	960.0	200.0	360.0	200.0	1360.0
June	2	0	0	1,000	400.0	866.7	0.0	300.0	0.0	1133.3
July	5	0	0	1,000	1000.0	885.7	0.0	257.1	0.0	971.4
August	6	2	32	1,000	1200.0	925.0	400.0	275.0	6400.0	1650.0
September	1	0	0	1,000	200.0	844.4	0.0	244.4	0.0	1466.7
October	3	1	2	1,000	600.0	820.0	200.0	240.0	400.0	1360.0
November	1	0	0	1,000	200.0	763.6	0.0	218.2	0.0	1236.4
December	5	2	42	1,000	1000.0	783.3	400.0	233.3	8400.0	1833.3

- You can track your injury and illness data and calculate your frequency and severity rates using the software provided with this manual. The software can also plot the data on charts as shown on the following pages.
- You can also download the OSHA 300 forms and track injury and illness data electronically using the online tools found in the employer section of our website www.ohiobwc.com.
- This information can be used to monitor your performance over time and compare your performance levels with other organizations. The Bureau of Labor Statistics provides data on illnesses and injuries on the job and data on workers fatalities through their website at www.bls.gov.

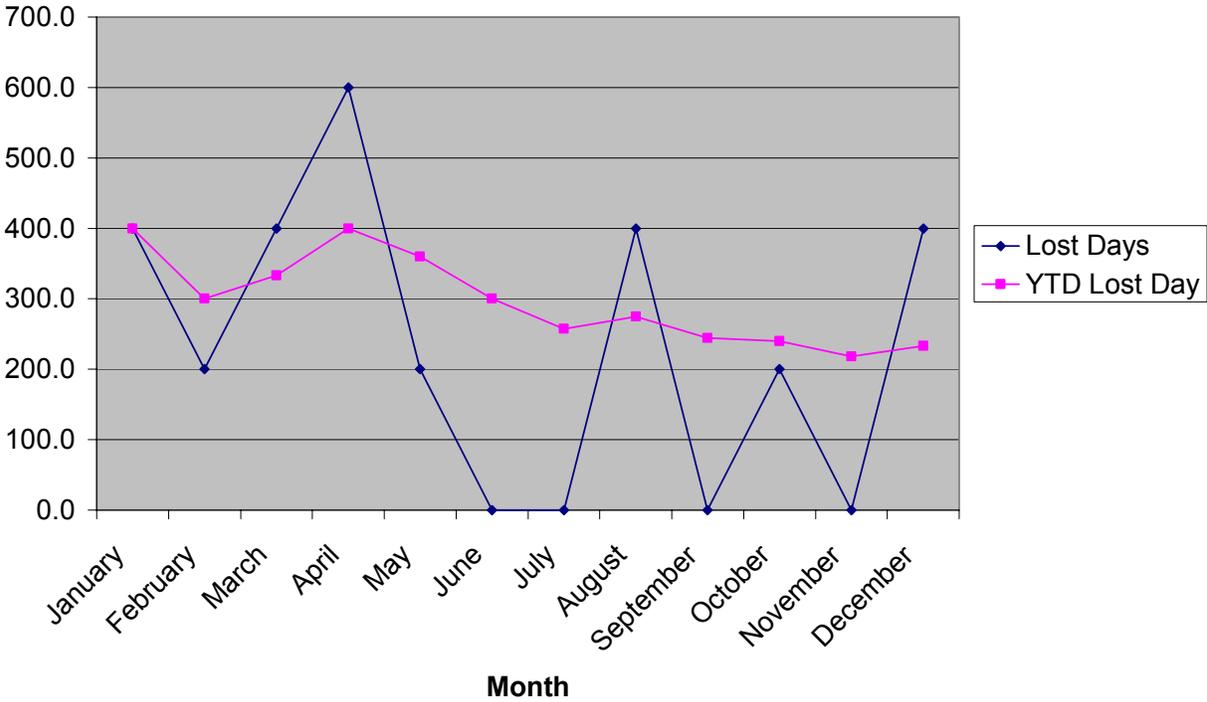
Frequency Rates



Severity Rates



Lost Day Rates



Costs of Accidents

What are the financial costs associated with the occupational injuries and illnesses in your organization.

√ _____

√ _____

√ _____

√ _____

√ _____



Every accident results in costs. Invariably, costs are either:

Direct: Medical expenses incurred from injuries sustained in the accident and indemnity payments to injured workers while away from work. These costs are most often reimbursed by insurance.

Indirect: Other “non-billable” costs that result from internal systems adapting to the accident and its aftermath. These costs are most often uninsured and therefore unrecoverable; they account for 70 to 90 percent of the true cost of an accident. Indirect costs may include: overtime, loss of production, replacement costs, product damage, and administrative costs

Do you know the true costs of accidents in your organization?

Does upper management?

Accident Cost Review

1. How much time did the injured worker lose – for which he was paid _____ hours at _____/hour*	= _____
2. How many others lost time because they were watching or helping at the accident? Total time lost _____ at _____/hour*	= _____
3. How much time was lost because others needed the output or aid of the injured worker? Total time lost _____ at _____/hour*	= _____
4. How much supervisory time was spent in assisting at the accident, investigating, reporting, reassigning work, or interviewing and training a replacement? Total _____ hours at _____/hour*	= _____
5. How much clerical time was spent filling out insurance forms, OSHA log etc.? Total hours _____ at _____/hour*	= _____
6. Describe damage to materials or equipment. _____ _____ Estimate cost of repair or replacement.	= _____
7. How long was equipment idled because of the accident? Total hours _____ at _____/hour	= _____
8. How much overtime was needed to make up lost production? Total hours at _____ at _____/hour*	= _____
9. Were any sales cancelled due to delays in shipping because of this accident? If so, indicate cost.	= _____
10. Legal costs, fines or penalties:	= _____
A. TOTAL	= _____

Worker's Compensation Costs

Workers' Compensation costs can be a big expense for employers yet are controllable. While there can be confusing calculations for different rating plans, the basic concept is simple. In a not-for-profit insurance company like BWC, premiums collected will equal the ultimate (including reserves) claims cost for any given year. So you can control your premiums by keeping claims cost down.

Our Web-site WWW.OHIOBWC.COM is an excellent source to get information that will help get you started. There is a great deal of data available to employers. Some examples of data available to employers include:

- **Claims Cost** – Shows medical, indemnity and reserve costs for each claim at an employer level
- **Summary Claims Data** – Provides a high-level consolidation of an employer's claims history.
- **Detail Claims Data** – Provides other information at a claim level (# of days missed, lagtime, optimal return to work, etc.)

- You may also wish to enroll in the BWC's classes: *Controlling Costs Through Claims Management* and *Controlling Workers' Compensation Costs*. These classes will give you a better understanding of how workers' compensation rates are determined, what drives them and what you can do to control your costs.

Advantages and Limitations of Results Measures

Results measures are very useful and can be very important when trying to gain management support. They are most useful when they are set up so that:

- They are broken down by unit.
- They give some insight into the nature and causes of the accidents.
- They are expressed eventually in terms of dollars by unit.
- They conform to any legal and insurance requirements.

The Limiting Factors Associated With Results Measures Include:

- Results measures sometimes only measure luck
- They do not discriminate between poor and good performers.
- They do not diagnose problems
- They can be unfair if used to judge individual performance.



Bottom Line..... Results measures do not tell you “why an accident occurred” or “how to improve future performance”.

ACTIVITY MEASURES

(Leading Indicators)



Activity Measures

The process of getting the results is as important as the results themselves.

Activity measures are behaviors/performance linked to accident prevention. These measures assess results of supervisor, workgroup or organizational action taken before accidents occur. These activities are the key to future success in safety.

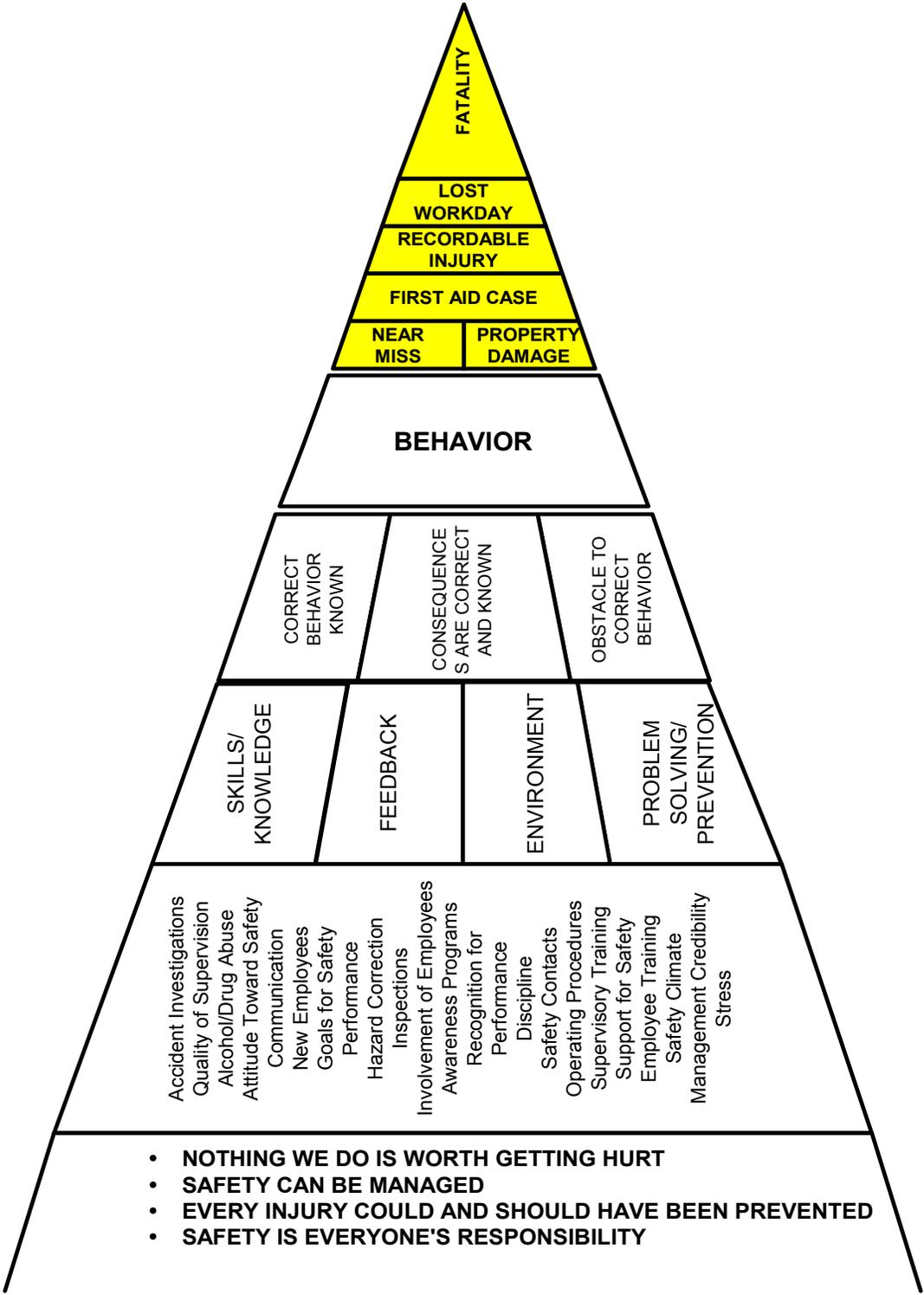


DISCUSSION

List some activities that could prevent accidents. Can these activities be measured?

	<u>Y</u>	<u>N</u>
√ _____	_____	_____
√ _____	_____	_____
√ _____	_____	_____
√ _____	_____	_____
√ _____	_____	_____
√ _____	_____	_____
√ _____	_____	_____

SAFETY MODEL



The top section of this pyramid is reprinted with permission from James C. Manzella's article titled, "Measuring Safety Performance to Achieve Long-Term Improvement," published in the September 1999 issue of *Professional Safety*, the monthly journal of the American Society of Safety Engineers.

How Do You Decide Which Activities to Measure? It depends on your goals and what you want to accomplish.

- Organizational Vision, Goals, Strategic Plans, and Mission
- Perception Surveys
- Structured Interviews
- Safety Audits/Inspections
- Accident Analysis
- Accident Trends
- Behavior Observation Data



Envisioning the Future



What is GREAT SAFETY?

What is your vision for the future?

Vision refers to a picture of the future with some implicit or explicit commentary on why people should strive to create that future. When you try to change an organization's culture a good vision serves three purposes.

1. **Clarifies direction** – An effective vision can help resolve confusion during a change process. The question –*Is this in line with our vision?*- can help keep you on the right track.
2. **Motivates people** – A good vision helps to overcome the natural reluctance to change by being hopeful and motivating.
3. **Aligns individuals** – A clear vision helps to coordinate the actions of people more efficiently. With clarity of vision, managers and employees understand what is expected.

Characteristics of an Effective Vision

- > *Imaginable*: Conveys a picture of how the future will look
- > *Desirable*: Appeals to the long-term interests of employees, customers, stockholders, and others who have a stake in the enterprise
- > *Feasible*: Comprises realistic, attainable goals
- > *Focused*: Is clear enough to provide guidance in decision making
- > *Flexible*: Is general enough to allow individual initiative and alternative responses in light of changing conditions
- > *Communicable*: Is easy to communicate; can be successfully explained within five minutes

Adapted from: *Leading Change*, John P. Kotter

Safety Culture Assessment

Two tools are used to assess organizational safety culture, the perception survey and the interview method.

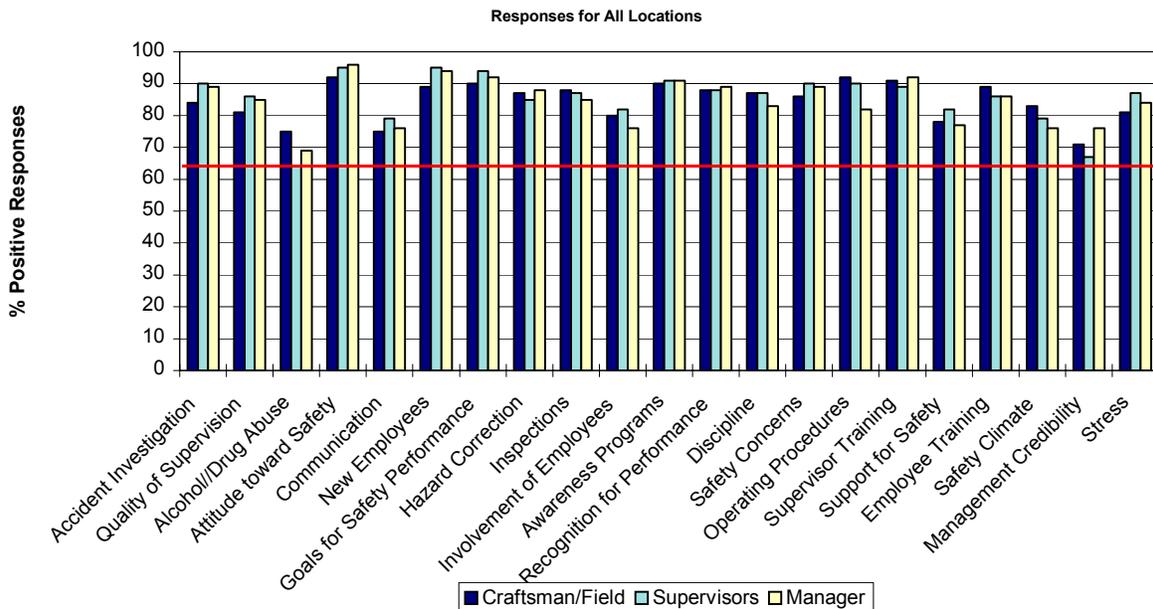
The Perception Survey

The Perception Survey instrument is a questionnaire that consists of 100 yes/no questions. An entire population can be anonymously sampled within 30 minutes. The only identifier would be “employee”, “supervisor” or “manager” designation (location can also be a variable if desired).

The survey helps identify safety system weaknesses and pin-points opportunities for improvement.

The twenty-one categories sampled in the survey help decide where to focus efforts in overcoming problems and building a new culture. The survey helps to identify gaps in perception between management and other levels of the organization. The information gained from the perception survey establishes a baseline from which all subsequent cultural improvement can be measured. The 21 categories are key functional areas that are important in preventing accidents and reducing costs rates. A computer is used to process and chart the results for easy analysis.

Perception Survey Results – Bar Chart



Structured Interviews

A complementary tool to the perception survey process, structured interviews provide additional depth and understanding regarding the current safety effort. A representative sample of employees discuss three questions with a skilled interviewer. An interview session with 10-12 participants takes about 60 - 90 minutes. Management, supervision and worker groups are each interviewed separately. After some visioning about what a mature safety culture



would look like, questions are asked of the group. The three questions, are designed to maximize helpful input and avoid “gripe sessions”, are:

1. What are the top things that should be done to improve safety at (employer) in order to prepare for the future?
2. What would you do to make (employer) world-class in safety, if you were in charge?
3. In your opinion, what’s the most important safety issue facing (employer) at this time?

Data from the perception survey and the structured interview process are analyzed, organized and presented in an executive summary.

(Sample Survey)

The Ohio Division of Safety & Hygiene
PERCEPTION SURVEY

PART 1

A. Check your work location: Shipping Production Assembly Office

B. Check your job function:
 Line worker Supervisor Manager

PART 2

- | | | | | | |
|---|-------------------------------------|---|---------------------------------|---|--------------------------------------|
| Y | 1. Do you feel you received | Y | 2. Do supervisors discuss | Y | 3. Is discipline usually assessed |
| N | adequate job training? | N | accidents and injuries with | N | when operating procedures are |
| | | | employees involved? | | violated? |
| Y | 4. Would a safety incentive | Y | 5. Do you perceive the major | Y | 6. Does your employer actively |
| N | program cause you to work more | N | cause of accidents to be unsafe | N | encourage employees to work |
| | safely? | | conditions? | | safely? |
| Y | 7. Is safety considered important | Y | 8. Are supervisors more | Y | 9. Do you think penalties should be |
| N | by management? | N | concerned about their safety | N | assessed for safety and health |
| | | | record than about accident | | violations? |
| | | | prevention? | | |
| Y | 10. Have you used the safety | Y | 11. Is high hazard equipment | Y | 12. Is the amount of safety training |
| N | involvement teams to get action | N | inspected more thoroughly than | N | given to supervisors adequate? |
| | on a complaint or hazard which | | other equipment? | | |
| | concerned you? | | | | |
| Y | 13. Have you been asked to | Y | 14. Are records kept of | Y | 15. Are employees influenced by |
| N | perform any operations which you | N | potential hazards found during | N | your employer's efforts to promote |
| | felt were unsafe? | | violations? | | safety? |
| Y | 16. Are employees provided | Y | 17. Does your employer deal | Y | 18. Are unscheduled inspections of |
| N | information on such things as | N | effectively with problems | N | operations made? |
| | cost, frequency, type and cause of | | caused by alcohol or drug | | |
| | accidents? | | abuse? | | |
| Y | 19. Is off-the-job safety a part of | Y | 20. Does management insist | Y | 21. Are safe operating procedures |
| N | your employer's safety program? | N | upon proper medical attention | N | regularly reviewed with employees? |
| | | | for injured employees? | | |
| Y | 22. Are you interested in how | Y | 23. Does your organization | Y | 24. Do your co-workers support the |
| N | your organization's safety record | N | hire employees who do not | N | employer's safety program? |
| | compares with other companies in | | have the physical ability to | | |
| | your industry? | | safely perform assigned duties? | | |
| Y | 25. Do supervisors pay adequate | Y | 26. Is safe work behavior | Y | 27. Do employees participate in the |
| N | attention to safety matters? | N | recognized by supervisors? | N | development of safe work practices? |

Accountability

Ranking Priorities

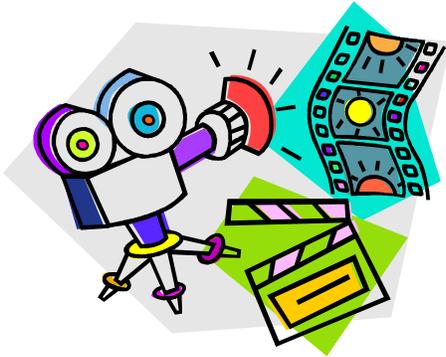
Rank the Following (as it is in your organization, as opposed to how it should be)

- _____ Quality
- _____ Cost Containment
- _____ Safety
- _____ Customer Satisfaction
- _____ Production
- _____ Employee Morale

What about “safety first”?

Can safety be first?

It cannot be either/or... organizations have to be great at all aspects of their business. They must manage safety the same way they manage other parts of the business. The question is “HOW?!”.



Now for the movie:
Safety Accountability
with *Dan Petersen*

What is the key to managing safety?

What gets measured (and rewarded) gets done!!

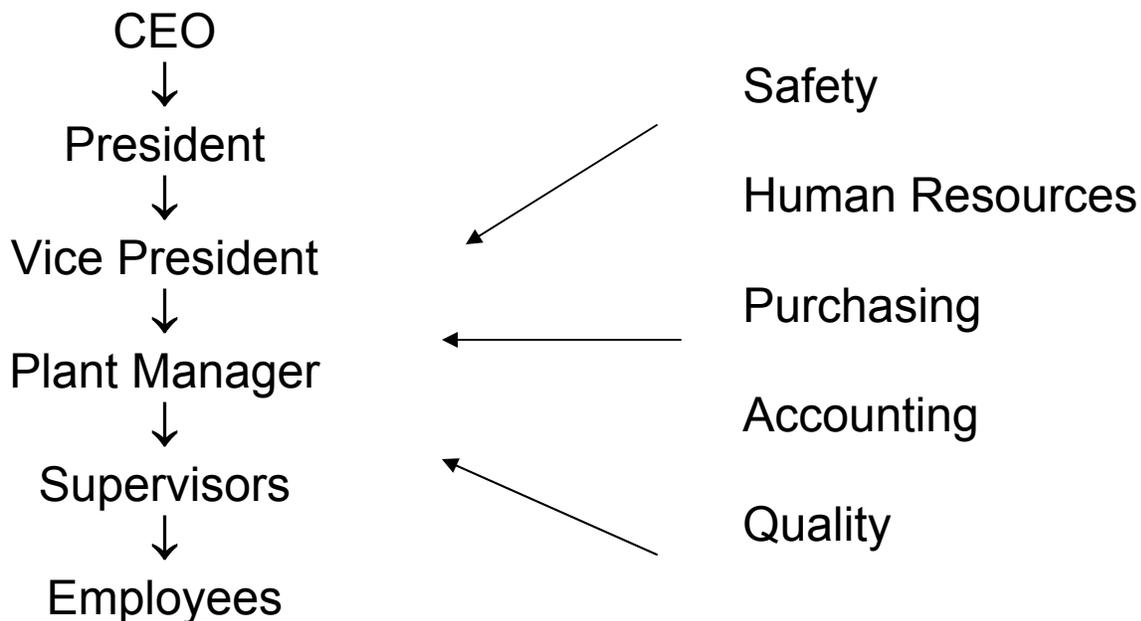
What is accountability?

- Accountability is the clarification of what is expected of each person in the organization, and then ensuring through measurement and reward that the expectations are met.

Without accountability there is no accepted responsibility.

Who Is Responsible for Safety?

Line Management and Staff



Who is responsible?

It is preferable to define tasks at the supervisor level first, since each level of management is accountable for the subordinate level. If your organization doesn't have a level with this designation, begin with the management level to which the hourly employees report.

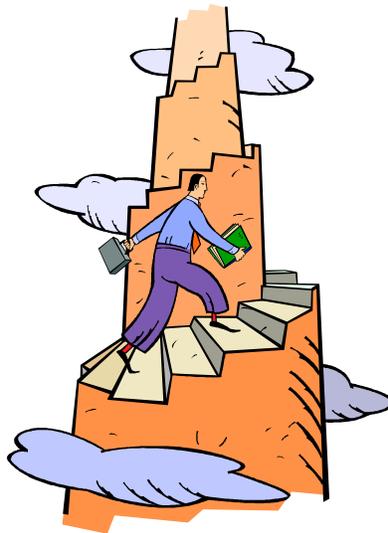
Responsibility Worksheet

	Responsible		Measured		HOW
	YES	NO	YES	NO	
New Employees					
1. Hire					
2. Accept or reject applicants					
3. Report on probationary employees					
Training Employees					
4. Orient new employees					
5. Explain safe operation/rules					
6. Hold regular production meetings					
7. Hold safety (tool box) meetings					
8. Coach employees on the job					
Production					
9. Control quantity					
10. Control quality					
11. Stop job in progress					
12. Authorize changes in setup					
13. Requisition supplies					
14. Control scrap					
15. Establish housekeeping standards					
Safety					
16. Take unsafe tools out of production					
17. Investigate accidents					
18. Establish inspection committees					
19. Inspect your own department					
20. Correct unsafe conditions					
21. Correct unsafe acts					
22. Send employees to the doctor					
Discipline					
23. Recommend promotions or demotions					
24. Transfer employees out of your dept.					
25. Grant pay raises					
26. Issue warnings					
27. Suspend					
28. Discharge					

Assigning Work					
29. Prepare work schedules					
30. Assign specific work					
31. Delegate authority to leaders					
32. Authorize overtime					
Employee Affairs					
33. Prepare vacation schedules					
34. Grant leaves of absence					
35. Lay off for lack of work					
36. Process grievances					
Coordination					
37. Authorize maintenance and repairs					
38. Make suggestions for improvement					
39. Discuss problems with management					
40. Recommend changes in policy					
41. Improve work methods					
Cost Control					
42. Reduce waste					
43. Keep production records					
44. Budget					
45. Approve expenditures					
Other					
46. Keep up employee morale					
47. Reduce turnover					

Four Steps to Hold a Person Accountable

1. Clearly define expectations and explain rationale
2. Provide the tools and skills
3. Measure performance
4. Provide Feedback



PERFORMANCE FORMULA

$$\text{Performance} = \frac{\text{Motivation} \times \text{Ability} \times \text{Job Clarity}}{\text{Obstacles}}$$

- Performance = safe job execution
- Motivation = desire
- Ability = mental/physical ability
- Job Clarity = knows expectations
- Obstacles = the things that get in the way of great performance (environment, production requirements, costs, deadlines, shifting priorities)



Turn and Talk

How do your employees know what is expected of them?

✓ _____

✓ _____

✓ _____

✓ _____

✓ _____

✓ _____

✓ _____

Define expectations

Step 1: Define Expectations

- Policies
- Safe Work Practices
- Job Safety Analysis
- Performance Goals
- Job Descriptions



SAFETY POLICIES

- A safety policy is management's expression of direction to be followed. It is management's first step in organizing to accomplish its desires.

A policy should do three things:

- 1) Express long-range purpose.
- 2) Commit management at all levels to reaffirm and reinforce this purpose in daily decisions.
- 3) Indicate the role lower-level management will have in the system.

At a minimum, the policy should include:

- √ **Management's intent** - What is management's philosophy concerning safety?
- √ **Scope of activity covered** – Does it include, fleet safety, public safety, fire, product safety, off-the job safety?
- √ **Responsibilities** – Who is responsible for what?
- √ **Accountability** – Where and how is it fixed?
- √ **Safety staff assistance** – Who? What is his/her responsibilities and authority?
- √ **Safety committees** – Will there be a committee and if so why will it exist? What will they do and what is their authority?
- √ **Standards** – What rules will the organization abide by?

To be effective, the policy must be signed by the CEO and/or top management officials.

Adapted from: Safety Management: A Systems Approach, Dan Petersen

(Example A)

Safety Policy

The management of _____ recognizes the importance of safety and health in voluntary compliance with all pertinent requirements and is committed to providing a workplace for our employees in which recognized hazards are controlled, or eliminated.

The philosophy and objectives behind this commitment are:

1. The safety and health of all _____ employees is a prime priority.
2. The only acceptable level of safety and health performance is one that prevents injury and accidents.
3. Safety and health are an integral part of the daily business functions.
4. Safety and health are a responsibility that must be shared equally and without exception by everyone within the organization.
5. Management and those with supervisory responsibilities will be held accountable for the safety and health of the personnel for whom they are responsible. All employees will be required to make their safety and the safety of their fellow workers a prime priority. and;
6. Management is committed to developing options for returning injured or work related illness personnel to work at the earliest opportunity.

Each individual within the organization will be expected to conduct their daily tasks in a manner consistent with the philosophy and objectives in this policy:

Signature: _____

Title: _____

Date: _____

(Example B)



BWC Safety and Health Policy

As a national leader in workers' compensation, BWC is committed to work place safety and effective claims management. Preserving the health and well-being of all BWC employees is the right thing to do. Being safe also helps our customers; it's good business.

As CEO, I am responsible for your safety and health on the job. My goals for safety are to:

- Minimize injuries/illnesses;
- Maximize support if people do get hurt.

It is a fundamental belief that accidents which cause injury, illness or property loss are preventable. All levels of BWC management are responsible to eliminate foreseeable hazards to maintain a safe and healthy work environment. Each level of BWC supervision has the responsibility to lead by personal example. All BWC employees are expected to share the responsibility by working safely and participating in the safety process.

We will provide the very best support for BWC employees who do become hurt or ill and need to file a claim. We will use all of the strategies and services necessary for our employees to get prompt and appropriate treatment, and remain at work as productive and contributing members of the BWC team.

Achieving a safe and productive workforce requires constant team effort. To make safety work for BWC, we must all work to safely provide a quality, customer-focused workers' compensation system for Ohio's employers and employees - including our own.

Safety is everybody's business and every employee has a number of responsibilities depending on the roles that he/she performs daily. Choose a link below to see who is accountable to maintain a safe work environment and what actions need to be taken should a workplace accident occur.

BWC Safety Administrator

- Advise Chiefs on activities relating to safety
- Participate on Executive Safety Committee
- Audit whole system for effectiveness
- Develop safety and health controls, strategies, procedures and programs.
- Help offices develop effective safety teams
- Teach offices how to do safety audits
- Evaluate improvement suggestions for manager
- Advise on accommodations for return to work and provide sources for equipment
- Help monitor effectiveness and communicate results
- Maintain a safety awareness program publishing safety tips to employers
- Report overall safety and health statistics and program results
- Review effectiveness of the notification process and make recommendations for improvement
- Maintain technical expertise
- Act as a technical resource to answer safety related questions
- Assess training needs
- Develop training information
- Provide training and/or train supervisors and agency trainers to deliver training
- Advise on selection of and sources for Personal Protective Equipment
- Conduct periodic site inspections
- Promote and disseminate the policy established by the CEO/Administrator
- Update tracking software
- Check to see if accident analysis is completed
- Monitor performance and trends
- Maintain archive of reported data and recommend improvement to safety program.
- Anticipate, identify and evaluate safety and health conditions and practices through perception surveys, focus groups and other analytical tools and measurements.
- Develop safety and health controls, strategies, procedures, and programs.
- Implement, administer, and advise others on health and safety programs.
- Measure, audit, and evaluate the effectiveness of health and safety controls and programs.
- Assist managers/supervisors and safety committees in the performance of their assigned roles and responsibilities relating to safety.

Chief of Security

- Responsible for the development and implementation of the agency security plan
- Ensure a safe and secure work place for BWC employees and visitors.
- Review of all security policies and procedures for all BWC facilities.
- Develops policies and procedures to enhance the security for BWC staff and facilities.
- Acts as liaison with the State of Ohio Security Coordinator.
- Works with all BWC Field Operations to ensure that proper security measures are in place at all locations.
- Coordinates closely with BWC Administrator to ensure security issues are addressed in the overall Safety and Health Plan

Chiefs

- Implement a system to charge back claims costs to departments.
- Review safety audit results and correction record
- Address safety issues on scheduled meeting agendas
- Hold managers accountable for annual safety and security goals and objectives in OPRS
- Sponsor recognition systems
- Discuss incident and corrective action at weekly coordination meeting
- Reinforce corporate safety culture through periodic communications
- Support training plan for managers
- Conduct impromptu safety audits
- Promote and disseminate the policy established by the CEO/Administrator
- Compile and review division statistics
- Ensure completion of necessary forms and reports

Manager

- Ensure safety topics are on meeting agenda
- Conduct climate analysis
- Track hazard correction deadlines
- Measure and reward supervisor activities in OPRS
- Budget for losses and corrective action
- Manage improvement suggestions
- Encourage and allow participation by employees in safety related issues
- Implement accommodations for return to work
- Brief Chief on incident and corrective action plan
- Conduct regular safety meetings
- Ensure accident/incident investigation is completed
- Support training plan for Supervisors
- Conduct impromptu safety audits
- Budget for Personal Protective Equipment
- Promote and disseminate the policy established by the CEO/Administrator

- Compile and review office statistics
- Ensure completion of necessary forms and reports

Supervisor

- Conduct job Safety briefings
- Participate in safety meetings and safety training
- Implement job specific training plans for employees using check lists
- Post or make available job specific work practices
- Train employees on location and proper use of fire extinguisher
- Ensure safe work environment including ergonomic factors
- Encourage early reporting of ergonomic injuries
- Disseminate injury packet to injured workers and ensure that required forms and reports are completed.
- Ensure completion of FROI/Safety Report within two business days.
- Complete necessary forms and reports
- Ensure that accident/incident investigation is completed.
- Identify Transitional Work tasks
- Include safety into OPRS goals for both supervisors and managers
- Follow recommendations for Return To Work accommodations
- Maintain communications with injured worker and discuss the Transitional Work program
- Involve injured workers in a Transitional Work program when appropriate.
- Brief manager regarding injured worker status
- Conduct accident analysis and implement corrective action plan
- Observe unsafe work practices and take appropriate action
- Provide Personal Protective Equipment where required
- Encourage employee involvement in the safety program
- Review local statistics with employees
- Act on safety improvement suggestions
- Ensure all elements of the security plan are implemented
- Implement recognition program for safe performance
- Promote and disseminate the policy established by the CEO/Administrator
- Conduct regular safety audits with employees

Employees

- Take personal responsibility for safety
- Become familiar with emergency procedures and evacuation routes
- Become familiar with basic workstation ergonomics
- Complete all required safety training and requirements
- Follow all safe work practices as outlined in the Safety and Health manual
- Encourage peers to follow safe work practices
- Wear Personal Protective Equipment if and when required

- Report unsafe work practices, conditions and safety hazards
- Participate in meetings, audits and problem solving regarding safety matters
- Make safety improvement suggestions
- Include safety in OPRS goals
- Become familiar with Transitional Work program
- Seek immediate and appropriate medical attention if injured
- Report accidents and incidents to Supervisor immediately
- Complete FROI/Safety Report within 24 hours
- Complete other necessary forms and reports as soon as practical
- Report symptoms of cumulative trauma disorder to supervisor

Safety Committees

Local

- Review reports of hazardous conditions or practices and recommend corrective actions.
- Review reports of client and employee accidents.
- Issue reports, trends and analysis regarding all incidents.
- Develop and recommend improvements related to the facility's emergency plans as outlined under Emergency Procedures
- Assist departments in addressing safety related issues and training
- Assist in conducting periodic safety inspections

Statewide

- Make recommendations concerning agency plans/policies for ongoing safety and health issues, including workplace violence, 10 Step Safety plan, emergency procedures, etc., and recognize areas for improvement.
- Assist with defining Health and Safety expectations by providing guidance throughout the organization.
- Provide resources, knowledge and tools necessary to meet those expectations.
- Measure Agency activities re: agency Health and Safety performance and reporting outcomes. This may include maintaining and reviewing minutes of all BWC office and department Safety team meetings and ensure standardized process for those teams, such as what is done by the QStP executive committee, including visits to teams, at least quarterly, and encourage local teams to visit our statewide committee meetings.
- Consider creation of sub-committees to address specific concerns or issues, such as those presented by integration of current safety teams at the William Green Building, (floor and departments), and other facilities utilized by BWC.

SAFE WORK PRACTICES

- Leaders must communicate the need for all employees to understand the safety-related processes and procedures, and to actively participate in the organization's safety programs.

Well-written safe work practices, are important in communicating expected safe behaviors and procedures and also:

- Provide guidelines for controlling potential hazards
- Communicate your organization's accident-prevention policies
- Contribute useful information during training

Criteria for Safe Work Practices

- Reasonable and specific
- Enforceable
- Easily understood
- Positive
- Regularly reviewed and updated

Items that Should be Included

- Organization's safety policy or statement
- General safe work practices
- Specific safe work practices

Examples of Items to be Considered

- Contributing to good housekeeping
- Utilizing personal protective equipment
- First aid procedures
- Ergonomic principles
- Respiratory protection
- Lockout-Tagout procedures
- Confined space entry
- Bloodborne pathogens, if applicable

Safe Work Practices (cont.)

If the hazard can be effectively removed or controlled, the need for a safe work practice also may be eliminated. Safe work practices are not a substitute for a policy of eliminating hazards in the workplace whenever possible.

Supervisors and employees should be involved in the development of the safe work practices. People tend to buy in more readily when they are involved with the process and it also helps educate the participants

Give special attention for operation of dangerous equipment where there are only a few skilled operators, for work involving extremely hazardous conditions or environments and non-routine tasks.

(Example A)

General Safe Work Practices

1. All employees must report all work related injuries and illnesses to their immediate manager/supervisor as soon as possible after they become aware an injury or illness.
2. Everyone should exercise extreme care and consideration in the performance of their duties to see they do not cause injury to others or create work hazards that could cause injury to others.
3. No employee should try to lift or move heavy or bulky objects, which could cause injury to the back and other body parts. You are requested to seek assistance from the Maintenance and Operations Department.
4. Personal tools, equipment, extension cords, or electrical heaters are not allowed to be brought on the employer's premises without prior approval.
7. When you become aware of a defect in a piece of equipment, remove it from service or report it to the appropriate party so that repairs can be made. Building and equipment defects are to be reported to the Maintenance Department. Failure to report faulty conditions for repair can result in injuries.
8. Be sure that any food or liquid spill is wiped up immediately rather than left for someone else to remove.
9. Never attempt to repair electrical equipment or an appliance. They should be removed from service and the Maintenance Department notified.
12. Heavy objects should be stored on lower shelves, while lighter and less dangerous items can be stored on the middle and upper shelves. Ideally, all materials stored on shelves should have restraints such as bungee cords.
13. Bookshelves, storage cabinets, and other elevated storage areas should be well secured, securely bolted to the wall, or unitized in such a way as to reduce tipping.
14. Defective furniture, worn carpets, defective stairs, loose handrails, and other facilities defects, which create accident hazards, should be reported to the Maintenance Department so repairs can be completed. If possible, remove the objects from service.
15. Everyone should take the time to become educated regarding the emergency procedures in place for responding to fires, earthquakes, or first aid emergencies. Know all means of exit from your work area.

(Example B)

Specific Safe Work Practices

Hand Tools

Hand Tools are non-powered tools, including wrenches, hammers, chisels and screwdrivers.

- Wear safety glasses whenever you hammer or cut, especially when working with surfaces that chip or splinter. All persons in the area also should wear safety glasses.
- Do not use a screwdriver as a chisel. The tool can slip and cause a deep puncture wound.
- Do not use a chisel as a screwdriver. The blade can snap and injure an eye
- Never carry a screwdriver in your pocket. If you fall, the tool can cause a serious injury. Instead, use a tool belt holder
- Do not use a knife as a screwdriver. The blade can snap and injure an eye.
- Replace loose, splintered or cracked handles. Loose hammer, axe or maul heads can fly off defective handles
- Use the proper wrench or socket to tighten or loosen nuts.
- Always chip or cut away from yourself when using a chisel. Use a soft-headed hammer or mallet to strike a wooden chisel handle. A metal hammer or mallet may cause the handle to split
- Do not use a wrench if the jaws are sprung.
- Do not use impact tools, such as chisels, wedges or drift pins, if their heads are mushroomed shaped.
- Direct saw blades, knives and other tools away from aisle areas and other employees.
- Keep knives and scissors sharp. Dull tools are more dangerous than sharp tools.
- Iron or steel hand tools may cause sparks and be hazardous around flammable substances. Use spark-resistant tools made from brass, plastic, aluminum or wood when working around flammable hazards.

Improper tool storage is responsible for many accidents, so:

- Have a specific place for each tool.
- Do not place unguarded cutting tools in a drawer.
- Store knives or chisels in their scabbards.
- Hang saws with the blades away from someone's reach
- Provide sturdy hooks to hang most tools on.
- Rack heavy tools, such as axes and sledges, with the heavy end down.

JOB SAFETY ANALYSIS

- A job safety analysis (JSA) is a systematic means of identifying hazards and potential unsafe procedures associated with a specific task. The JSA process effectively and efficiently analyzes the job or task and produces detailed information on task-specific accident risks, process improvements and control measures.

How to Conduct a JSA

A. Break the job down into its component steps:

1. Select a worker to observe.
2. Observe the employee performing the job.
3. Describe each step and number sequentially.
4. Observe the operator several times to make sure all steps were noted.
5. Check the list of steps with the person being observed for agreement.

B. Identify the potential accidents or hazards

1. Types of hazards
 - a. Contact
 - b. Caught
 - c. Falls
 - d. Overexertion
 - e. Exposure
 - f. Repetitive motion

C. Safe work procedures

1. Explains how to do the job safely and efficiently, step by step.
2. Involves developing solutions to the potential hazards identified.

Uses for JSAs

- Presentation and discussion with employees performing that job.
- Provide a copy for employees to use while performing the job.
- Supervisors' tool to help identify at-risk behavior.
- Training tool for new or transferred employees and post-incident
- Pre-job review for non-routine tasks

(Example A)

Job Hazard Analysis

JOB TITLE: Lathe Operator
JOB LOCATION: Machining Department

DATE OF ANALYSIS:

STEP	HAZARD	PROCEDURE OR PROTECTION
1) Blow of cutting fluid and metal shards from lathe mounting plate with compressed air.	1) Flying metal shards or cutting oil impacting on eyes, face, or skin	1) a) Lower compressed air pressure b) Use vacuum, brush and/or cloth to remove debris c) Eye protection if continue to use compressed air
2) Position part onto lathe mounting plate		
3) Tighten part on mounting plate		
4) Move overhead crane and controls out of the way		
5) Fully secure part onto plate		
6) Position cutter blades and coolant oil		
7) Turn on lathe and check position		
8) Turn off lathe		
9) Check part dimensions		
10) Blow off cutting blades with compressed air	2) Flying metal shards or cutting oil impaction on eyes, face, or skin	2) a) Lower compressed air pressure b) Use vacuum, brush and/or cloth to remove debris c) Eye protection if continue to use compressed air
11) Tighten cutting blades		
12) Turn on lathe		
13) Position blades into cutting position		
14) Position coolant fluid hose	3) Fluid harmful to skin?	3)a) Find substitute fluid b) Gloves
15) Monitor cutting	4)Exposure to hot metal chips & cutting fluid vapors or smoke	4)Deflector plate, keep operator out of area, vent for smoke

(Example B)

Job Hazard Analysis

JOB TITLE: Grinding Operator
OPERATION: Cleaning No. 1 Grinder
JOB LOCATION: Plastic Extrusion

DATE OF ANALYSIS:

STEP	HAZARD	PROCEDURE OR PROTECTION
1. Shut off grinder, lockout and tagout	None	Follow employer's LOTO Program
2. Open clean-out door	Contact with cutting knives, airborne plastic dust	Wear cotton gloves and particulate dust mask
3. Open cutting chamber and take clamp off blower pipe	Door is heavy, overexertion	Use caution, 2 person job
4. Remove screen chamber	Heavy, could fall and cause damage	Should be removed by 2 persons
5. Remove screen	Contact with cutting knives	Wear cotton gloves
6. Clean all parts	Cutting knives, plastic dust	Wear cotton gloves and particulate dust mask
7. Clean cyclone and filter	Falling parts and plastic dust	Use cage attached to forks of forklift, use particulate, mask
8. Install screen and cradle	Cutting knives, cradle is heavy	Wear cotton gloves, install cradle by 2 persons
9. Install chamber and clamp on blower pipe	Could fall and cause damage	Should be installed by 2 persons
10. Install clean out door and clean floor area	Cutting knives	Wear cotton gloves

**Provide the
Tools and skills**

Step 2:

Provide the Tools and Skills

- Make sure everyone has the skills and knowledge necessary to get the job done. Training, tools and resources will be needed in order to fulfill expectations. The training may include both technical training (rules, regulations, process) and soft skills (coaching, facilitating, problem solving).

The Division of Safety and Hygiene offers a wide variety of classes, seminars, and workshops through the Training Center in Pickerington and at several branch locations throughout the state. Refer to the Division's Services Catalog for the dates and locations of classes offered in your area. Some classes can be taught at the employer's location. The availability of the classes taught onsite may vary and can be discussed with today's instructor. The following classes/workshops are examples of what may be available:

- Leading the Change to a Safety Culture
- Safety Involvement Teams
- Facilitator Training
- Behavior-Based Safety

Besides training it is important that other tools and resources are provided to ensure that expectations can be met. Tools and resources may include: forms, checklists, video tapes, monitoring equipment, audio visual equipment, and reference materials.



NEEDS ASSESSMENT

In order to evaluate and determine what tools, skills and resources will be required, a needs assessment should be conducted.

Measured Activity	Training	Tools	Resources

Job Descriptions

A job description is a written statement of what the worker does, how they perform the job and what the working conditions are. Job descriptions typically include the following:

Job Identification

Lists information such as the job title, department, date of preparation, exempt/non-exempt status, pay scale and supervisor's name

Job Summary:

Describes major job functions

Responsibilities and Duties

Describes the job's major responsibilities, the jobholder's authority and direct supervision of other personnel

Standards of Performance

Lists the standards the employee is expected to achieve in relation to the job responsibilities

Working Conditions

Describes unusual working conditions such as extreme temperatures or hazardous conditions, if applicable

Job Specification

Lists the qualities that an ideal candidate should possess in terms of experience and behaviors

Adapted from Human Resource Management, Ninth Edition, by Gary Dessler, Prentice Hall, 2003.

Sample Job Description

JOB CLASSIFICATION:	WC CUSTOMER SERVICE REP - 64451	
SALARY:	Hourly \$14.26 - \$17.33	
POSITION NUMBER (PCN):	01435.0	
JOB LOCATION:	30 West Spring Street, Columbus, OH, 43215, Franklin County	
HOURS OF WORK:	9:00am - 5:45pm	
DIVISION:	Customer Contact Center	
SUPERVISOR:	Cathy Snider	
SEND APPLICATIONS TO:	75 W. Spring St., Columbus, OH, 43215-2256	
DATE POSTED:	09/15/2003 08:00:AM	DATE EXPIRES: 09/24/2003 11:59:PM

A proficiency/skills assessment may be given as part of the interview process

This is a Full-Time, Permanent, Bargaining-Unit, Classified position (may include lateral transfer bids).

Job Duties:

Under general supervision, provides information/assistance to &/or answers complaints, questions &/or telephone inquiries &/or Worker's Compensation Dolphin website emails &/or Worker's Compensations web chat inquiries (e.g., advises & provides technical assistance to claimants, injured workers, employers, providers, attorneys, managed care organizations, internal customers, general public) including but not limited to the navigation of the Worker's Compensation Dolphin website &/or written correspondence from customers (e.g., claimants, injured workers, employers, providers, attorneys, managed care organizations, internal customers, general public) regarding claim status, disability, lump sum payments, travel expenses, wages, medical bills, risk information, changes of address, lost/stolen checks, status of claims total indemnity/medical paid &/or how to initiate&/or reactivate claim, how to file legal bill payment, advises new companies on how to become an Ohio business & how to obtain Worker's Compensation coverage; researches information on databases, analyzes & interprets information located on the Worker's Compensation (e.g., Dolphin website, Intrafin, V3, WCIS, Cambridge, to determine the appropriate response for the customers; advises injured workers & [responds (verbally &/or written correspondence to their inquiries regarding implementing direct deposit of their Work's Compensation benefit payment(s); activates & /or modifies electronic funds transfers (EFT accounts for injured workers; benefit payment(s); responds to inquiries & provides technical

assistance for chat website help desk inquiries from customers (e.g., claimants, injured workers, employers, providers, attorneys, managed care organizations, internal customers, general public); call BWC website if unable to solve issues with customers; documents (electronically) transaction codes accurately (for each call handled) which provide statistical analysis on customer inquiries; identifies & report customer trends to call center management (e., g, high volume of calls from injured workers who have not received their benefit payment this would detect that a work process is problematic & early identification of potential statewide issues); explains policies & procedures to customers & operates personal computer to enter data (e.g., names, social security number, date of injury, place where accident occurred, time of injury, last work date, date of return to work, provider name & address, employer name & risk number, nature of injury); handles over flow of telephone inquiries for all BWC 1-800 telephone numbers (e.g., Health Partnership Program, Risk Publications). Reviews & analyzes occupational disease, medical only, lost time & death claims for claims allowance &/or payment of benefits &/or compensation &/or medical bills; adjusts medical bills on MIIS (Medical Invoice Information System); researches medical bills; prepares monthly reports; documents contracts & transactions (e.g., completes daily log of all calls &/or faxes); reviews inactive claims for reactivation.

Continued in Comment 1

Minimum Qualifications:

A. 12 months' training or 12 months' experience in public relations and successful completion of one typing course or demonstrate ability to type 35 wpm.

B. –OR- 12 months training or 12 months experience in position involving receiving & responding to written & verbal public inquiries &/or complaints or involving contact with injured workers, employers, legislators, providers or their representatives & public; successful completion of one typing course or demonstrate ability to type 35 wpm; 2 courses or 6 months experience in English Composition or Grammar; 2 courses or 6 months experience in Accounting, Bookkeeping or General Math.

C. –OR- 12 months experience as Workers' Compensation Claims Assistant, 16720, or Equivalent Position in private insurance industry; successful completion of one typing course or demonstrate ability to type 35 wpm.

D. –OR- 18 months experience in Workers' Compensation Policies, Procedures & BWC Laws; successful completion of one typing course or demonstrate ability to type 35 wpm.

Or alternative equivalent evidence of the Major Worker Characteristics noted above.

NOTE: Classification may require use of proficiency demonstration to determine Minimum Class Qualifications for Employment noted above.

Worker Characteristics Requirements:

Knowledge of: public relations; Ohio Revised Codes Sections 4121 & 4123;* Workers' Compensation Claims Examiner Manual;* Workers' Compensation Provider Bulletin* Billing Reimbursement Manual;* speech &/or oral communications. Skill in: operating personal computer calculator &/ or keyboard (e.g., Dolphin websites (Chet), Intrafin, V3, WCIS, Cambridge, FMS software. Ability to: define problems, collect data, establish facts & draw valid conclusions; complete routine forms; maintain accurate records; understand manuals & verbal instructions technical in nature; prepare meaningful, concise & accurate reports; use proper research methods in gathering data; gather, collate & classify information about data, people or things & written responses; work alone on most tasks; answer routine telephone inquiries from public; resolve complaints from angry or hostile public.

Comment 1:

Continued from Job Description

Refers customers to available community services (e.g., Social Agencies, United Way, Welfare, Unemployment Services); performs direct marketing & referral of specialized programs, services, promotions, (e.g., direct deposit, debit card, safety programs, drug free workplace, managed care, open enrollment, rehabilitation services); conducts customer service surveys for other BWC business divisions; identifies &/or reports possible media involvement issues /or crisis management issues. Conducts over-the-phone interviews with citizens reporting fraud allegations & enters information into FMS (Fraud Management System) software; researches, facilitates & verifies allegations of overpayment by Ohio Bureau of Employment Services (OBES) PURSUANT TO ORC. Operates computer hardware (e.g., keyboard/monitor, printer) to update documentation (e.g., injured worker eligibility, provider of record &/or changes in injured worker &/or employer address); assigns claim number using computer system; mails out forms &/or information to injured workers, employers &/or providers & their representatives.

Comment 2:

This is a bargaining unit position, and may be filled from within BWC in accordance with provisions of the collective bargaining agreement.

Onsite Classes/Workshops Summaries



Leading the Change To a Safety Culture – This workshop is designed for the management/supervisory staff as a way of getting upper level buy-in and as a starting point for creating a safety culture within the organization. The topics covered in this class include: How injuries affect profitability; Accident causation; How injury is the result of management error; Motivation and how consequences drive behavior; Measurement and accountability; and, How contemporary safety management differs from traditional compliance based safety.

Safety Involvement Teams – Teams can be a tool for improved performance, and better communication. This Workshop will help you develop a more effective safety team. The topic discussed will include: The benefits of teams; Phases of team development; How to deal with team conflict; Communication skills; and, Team tools such as; consensus, brainstorming, and group decision making.

Facilitator Training – A skilled facilitator can help a team stay focused and keep the meetings running more smoothly. This workshop will cover the following topics: Roles and responsibilities of the facilitator; Team problem solving and decision making; Running effective meetings; and Conflict resolution.

Behavior- Based Safety – For organizations that want to try a behavioral approach and use a safety observation process. This workshop will train the organization how to implement a safety observation process and will cover the following topics: Why behavior-based safety works; What to observe; At-risk behaviors; Feedback; Positive reinforcement; Coaching; and, Managing the behavior data.

Measure performance

Step 3: MEASURE PERFORMANCE

Criteria for Performance Measures

To ensure that the measures are effective and appropriate they should:

- Measure the performance of a task (rather than the outcome of that performance).
- Be constructed so they can be used to affect employees' rewards (appraisal, promotions, bonuses).
- Be specific and measurable
- Be within the person's span of control
- Measure the presence of a safety activity – not its absence.
- Provide a means for swift and continuing feedback
- Be flexible and allow for individual styles and strategies
- Be simple and administratively feasible
- Be self monitoring



Safety Performance Measurement Systems

- SCRAPE
- SBO
- Menu (DSH Model)
- Balanced Scorecard

SCRAPE

SCRAPE (System of Counting and Rating Accident Prevention Effort) is a systematic method of measuring accident prevention effort. It is as simple as deciding what supervisors are to do and then measuring to see that they do it. This system offers tight accountability but little flexibility.

The first step in SCRAPE is to determine specifically what the line managers are to do in safety. Typical activities include 1) making physical inspections of the department, 2) training or coaching people, 3) investigating accidents, 4) attending meetings of the workers' boss, 5) establishing safety contacts with the people, and 6) orienting new people.

With SCRAPE management selects which of these are things it wants supervisors to do and then determines their relative importance by assigning values to each. Management might then assign these values:

<u>ITEM</u>	<u>Points</u>
Departmental inspections	25
Training or coaching (e.g. 5 min. safety talk)	25
Accident investigation	20
Individual contacts	20
Meetings	5
Orientation	5
Total	<hr/> 100

Depending on management's desires, the point values can be increased or decreased for each item.

The system is self-reporting and every week each supervisor will fill out a form, indicating weekly activity. Management, on the basis of this form, spot checks quality of the work done and rates the accident prevention effort by assigning points between 0 and the maximum.

SCRAPE Activity Report Form

Department _____ Week of _____

Points

1) Inspections made on _____ # corrections _____

2) 5-minute safety talk on _____ # present _____

3) # of accidents _____ # investigated _____

Corrections _____

4) Individual contacts:
Names _____

5) Management meeting attended on _____

6) New men (names): _____ Oriented on (dates): _____

SCRAPE Weekly Report

Week of 04/05/03							
Department	ACTIVITY						Total rate (100)
	Inspect (25)	5-min talks (25)	Acc inv. (20)	Ind cont (20)	Meet atten (5)	Orient (5)	
A	25	15	20	15	5	5	85
B	5	10	20	5	5	5	50
C	25	10	5	5	5	5	55
D	15	25	20	20	-	5	85
E	10	5	-	-	5	-	20
F	20	20	15	5	-	-	60
Average	17	15	13	8	3	3	58

Dan Petersen, *Safety Management: A Systems Approach*

BWC: Division of Safety & Hygiene
Measuring Safety Performance

Safety by Objectives (SBO)

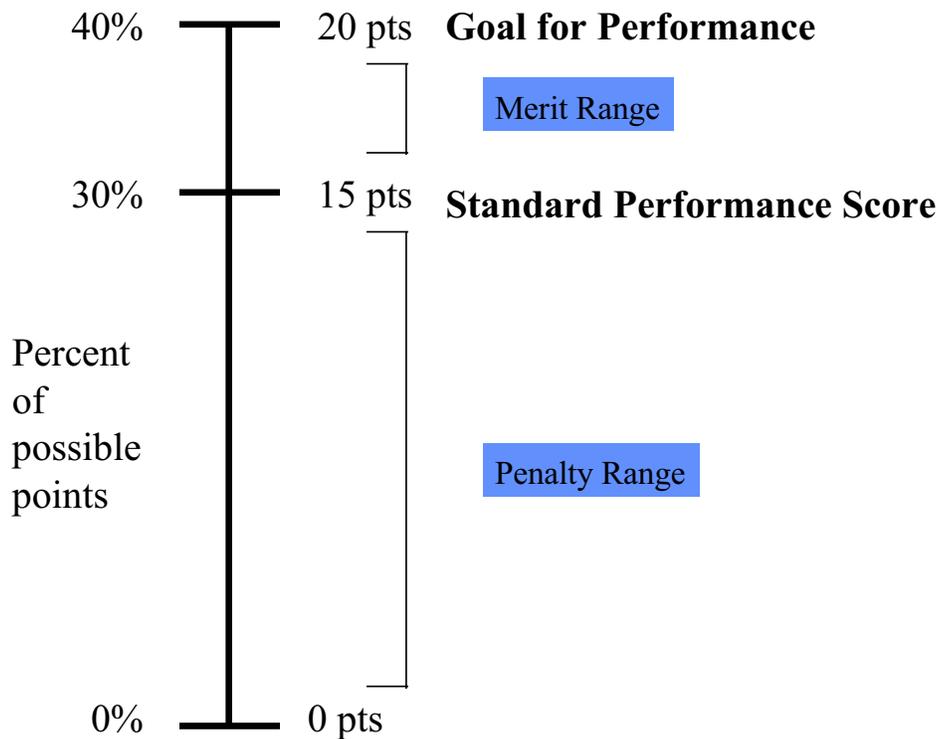
The principles of Management by Objectives (MBO) can be adapted to the safety process. With a Safety by Objectives (SBO) system management and supervisors decide together what tasks will be required. Each supervisor can select any activities to engage in to satisfy his or her safety responsibility, as long as there is mutual agreement with his or her boss.. There are 5 steps to Safety by Objectives (SBO):

1. Obtain management-supervision agreement on objectives
2. Give each supervisor an opportunity to perform. Require progress reports.
3. Give regular, current, and pertinent feedback so they can adjust their performance.
4. Help, guide and train. The safety staff provides technical assistance and management provides guidance and training.
5. Reward according to progress.

SBO allows for tight accountability with total flexibility.

Menu – DSH Safety Measurement Model

The menu system provides tight accountability with some flexibility. With a menu system some activities are required and some may be optional. Managers and their bosses work together to identify objectives that earn points from a menu of choices that best fit the manager and work environment. A minimally acceptable standard performance level (typically 75% of the goal) is also established. The theme is that managers start with a score of zero and must earn a good performance rating at review time. Failing to reach the standard performance score results in a “penalty rating”. Likewise, exceeding the standard results in a “merit rating”. Both ratings carry consequences like financial and/or other rewards. The example below illustrates the scoring scheme discussed here.

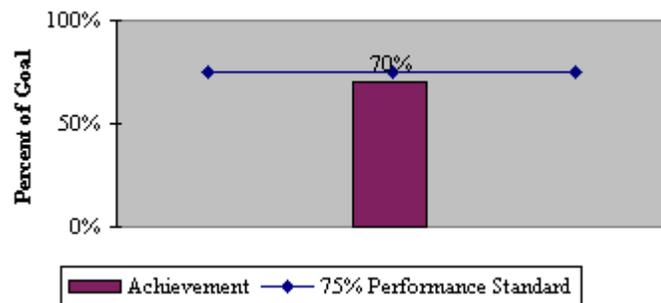


Ideally, a running tally of points earned is evaluated at regular intervals throughout the year. Review, recognition and rewards may be established for monthly or quarterly milestones. This method provides a good opportunity for in-process feedback and coaching. Managers can keep track of their own performance and progress in a format like the one on the following page.

The following table illustrates some popular safety objectives and associated point values.

Safety Objectives	Point Value per month
ACTIVITIES	
3 safety observations per day	3
Analysis of near miss accident	2
Using recognition for safe performance	2
Job safety briefings used consistently	2
Safety discussion with each employee	2
Monthly safety audits with workers	1
Monthly safety meetings	1
Impromptu safety audits	1
DEVELOPMENT	
Participation in a soft skills training	7
Participation in safety technical skills training	4
ACTIONS	
Inverse performance analysis	10
Climate analysis	10
Involving workers in safety projects	2
Daily penalty for missing hazard correction deadline	-1
Penalty for each accident not analyzed	-3

Safety Objectives	Pts	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Goal
ACTIVITIES															
3 Safety observations per day	3	3		3	3	3	3	3		3				21	20
Analysis of near miss accident	2													0	
Using recognition for safe performance	2	2	2	2		2		2		2				12	8
Job safety briefings used consistently	2													0	
Safety discussion with each employee	2	2			2						2	2	2	10	12
Monthly safety audits with workers	1													0	
Monthly safety meetings	1													0	9
Impromptu safety audits with workers	1							1						0	4
DEVELOPMENT															
Participation in a soft skills course	7								7					7	7
Participation in technical safety skills class	4													0	
ACTIONS															
Inverse performance analysis	10													0	
Climate analysis	10													0	10
Involving workers in safety projects	2			4				4						8	4
Daily penalty for missing hazard elimination deadline	-1													0	0
Penalty for each accident not analyzed	-3					-3		-3						-6	0
TOTAL		7	2	9	5	2	3	6	7	5	2	2	2	52	74



Performance Goal =	74	100%
Performance Standard =	56	75%
Achievement =	52	70%

Safety Objectives

So what exactly is a manager or supervisor held accountable for? Safety objectives are the practical things these leaders do to manage the process of safety on a daily, weekly or monthly basis. Objectives fall into three general categories: activities, development and actions.

Activities are things done on a regular or re-occurring basis that promote safe behavior, hazard identification & correction, or employee education.

Safety observations. Supervisors should be systematically observing the workforce for safe behaviors. The method is to plan to stop and observe people working at least three times per day for 15-30 seconds each time. The object is catch workers working safely and giving them positive reinforcement for doing so. In the event a supervisor observes something uns-safe, it is his obligation to provide coaching for improved performance.

Near-accident analysis. As much can be learned from a near-accident as a fatality. Any time a supervisor becomes aware of a near accident, a pro-active DOTS analysis is done. The supervisor partners with the involved employee(s) to discover the systems causes and then problem solve together.

Recognition for safe performance. The best way to motivate people to work safely is a positively reinforce them for it when they do. Any of various forms of recognition may be used to reward safe performance, not simply good results (no accidents). Ironically, the most effective form of reinforcement is also the cheapest; praise. For more on incentives, recognition and rewards see chapter x.

Job safety briefings. At the beginning of a work shift or job the supervisor has the opportunity to include safety in the discussion of logistics, scheduling and other announcements in preparation for the day. The job briefing can be as simple as quizing the workers about the common and uncommon hazards associated with the job or equipment and how they plan to avoid injury.

Safety discussions. Each month the supervisor can plan a five to ten minute, informal discussion with each employee about safety. A supervisor might be comfortable asking workers how they view the safety performance of the crew. He might take this time to do some coaching about safety knowledge a particular employee might need. The supervisor could even solicit ideas for making the department more safe. This is also a good time for positive reinforcement.

Safety meetings. Regular safety meetings are a good way for work groups to identify, evaluate and solve local safety issues. Safety meetings can include education and training as long as it is timely and meaningful. Avoid the trap of turning this sessions into a time to simply meeting OSHA training requirements.

Impromptu safety audits. Unscheduled audits of a work environment help supervisors and workers get a more true perspective of how safely a department operates day-to-day. It is often helpful to invite a high level manager and one or more hourly workers to participate. Of course, findings must be turned into corrective action plans.

Development refers to professional growth in technical and/or people skills.

Soft skills development. Many supervisors and mid-level managers have been promoted for their technical knowledge and/or superior abilities to perform the work. With promotion comes new challenges that many supervisors have not ever been formally trained for; the ability to work with people. Soft skills like handling confrontation, motivating others, effective communication, empowering others, teamwork and others must be formally developed for maximum effectiveness. A variety of resources are available at reasonable prices to gain these skills.

Technical skills development. Learning more about the unique hazards in the work environment is essential for pro-active safety. Leaders must broaden their knowledge of safety and accident prevention techniques in order to protect themselves and their workers. A variety of resources are available through video, classroom and written resources. A supervisor may also get credit for developing these skills within his workforce.

Actions measures responsiveness to situations or actions taken to evaluate the safety process.

Inverse performance analysis. Management tradition holds that a supervisor's performance is best evaluated by his boss. However, what a person's peers and subordinates say about his performance is much more telling and useful. Periodically, a supervisor might formally ask for feedback about his safety performance. Others are permitted to anonymously respond to a list of pre-determined questions and provide ratings for this person's safety performance. The supervisor is then able to compare how he rates himself to how others rate him. From here, he builds an action plan for personal improvement and reports back to the raters periodically. For more information on inverse safety performance tools, see page x.

Climate analysis. Climate analysis helps supervisors describe and evaluate the norms, attitudes, values and overall culture of his department. Once the culture can be quantified, strengths can be celebrated and action plans can be developed to shore-up noteworthy weaknesses. Annual climate analysis provides a useful comparison for judging progress. For more information on climate analysis tools, see page x.

Involving workers in safety projects. One of the best ways to motivate workers for safety is to invite them to participate in the identification, evaluation and solution of safety problems. A participative approach fosters buy-in, ownership and teamwork.

Penalty for missing hazard correction deadline. Identification of problems and hazards may come from various sources. The critical issue is how effective is a supervisor or manager at abating the hazard to protect the workers. Once issues are identified, they should be prioritized in terms of their likelihood of resulting in an accident and the severity of the potential accident. The most likely and severe should have immediate (1-3 day) correction goal. For others less likely or severe it may be acceptable to correct them within 1-3 weeks as appropriate. Every time a supervisor or manager misses a corrective action deadline they lose 2 points per day they are late. This establishes hazard correction as a high priority in the organization and forces supervisors to collaborate well with the maintenance department and other resources.

Penalty for each accident not analyzed. Each supervisor is expected to partner with employees and perform a thorough accident analysis of each accident. The goal is to identify system and process level causes of the accident and take corrective action to prevent re-occurrence. Any accident that goes un-analyzed costs the supervisor valuable points.

Other bonuses or penalties can be assessed throughout the rating period. For instance, a supervisor may lose a point for encouraging his workers to short-cut a safe work practice. Likewise, he may earn bonus points for getting his entire crew to work on and complete a particularly tough safety project. Of course, for this system to work mid-level managers must be actively involved in establishing goals and actively managing the supervisors safety activity. Another job of the higher level manager is to ensure that the quality of the supervisor activities is satisfactory and to provide coaching when it is not.

Balanced Scorecard

There are two main concepts making the BSC a desirable approach. First- traditional measures are downstream measures and are not adequate measures for today's business environment. Second-that many organizations today suffer from lack of proper alignment of all aspects of the organization.

If you were getting on an airplane and noticed that there was only one instrument in the cockpit you would probably be asking the pilot some questions. If the pilot responded – “Oh, that measures airspeed. I'm really working on airspeed on this flight, I worked on altitude on another flight and fuel gauges last month. This flight I am focusing on air speed. You're right, altitude and fuel are important but I'm focusing on air speed today.” Would you stay on that plane?

But don't many corporations today do just that? Focusing on one or just a few measures, usually downstream, while the ship goes unexplainably down?

The scorecard measures organizational performance across four balanced perspectives: financials, customers, internal business processes, and learning & growth. Safety would be an internal business process, just like quality or production. The BSC enables companies to track financial results while simultaneously monitoring progress in other key process areas such as safety.

BSC is an excellent tool to drive organizational change, a useful tool to keep all efforts aligned.

Breakthroughs in performance in safety and other areas require major changes including changes in the measurement and management systems. The BSC compliments financial measures of past performance with measures of the drivers of future performance. The objectives and measures of the scorecard are derived from your organization's vision and strategy.

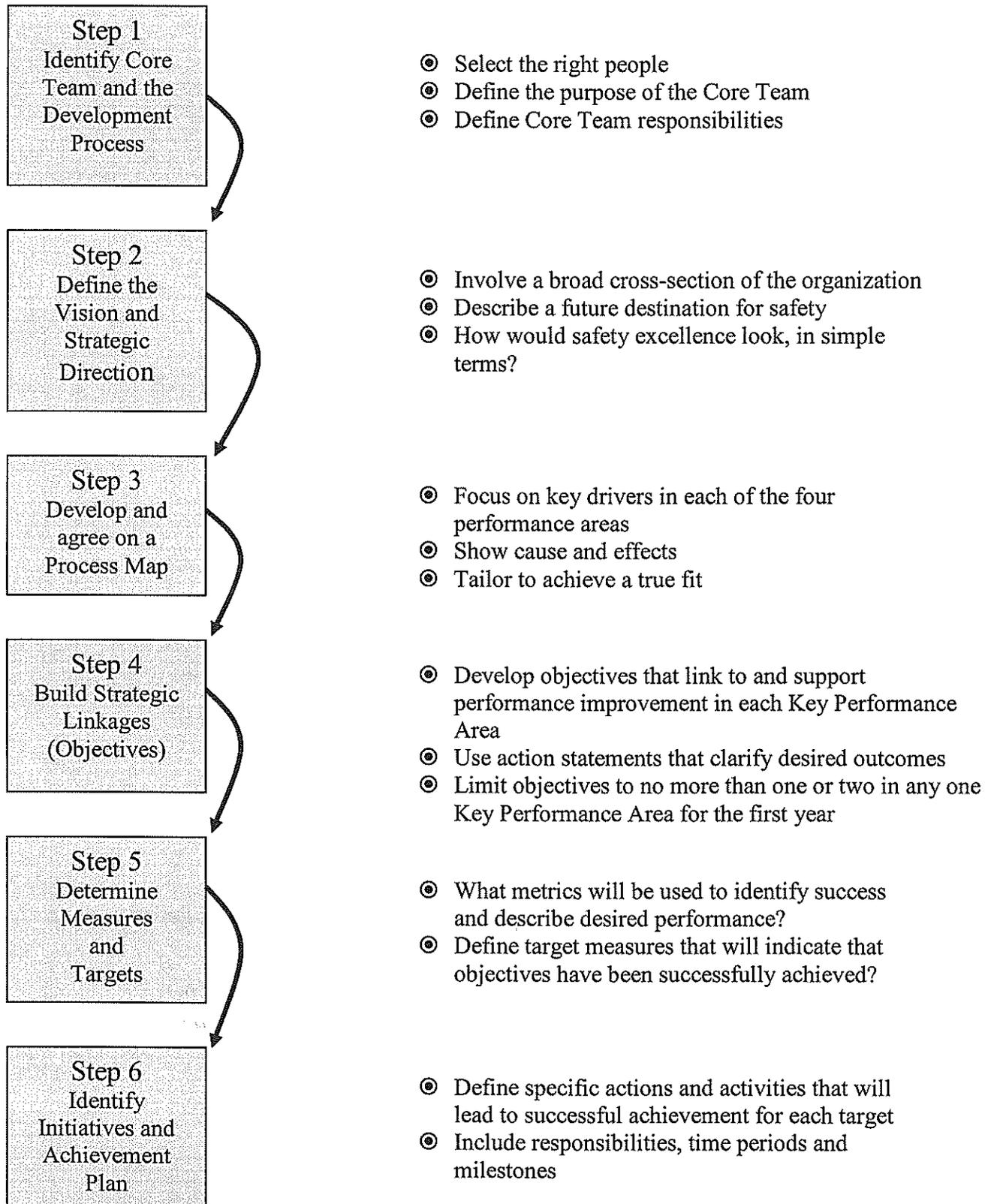
For many companies, their ability to manage successfully a process to reduce accident costs and worker's compensation premiums may be more critical for future economic performance than managing existing operations efficiently, consistently, and responsibly. The BSC can help in accomplishing this task.

The BSC is a good tool to align any organization, especially one that is anticipating significant change. The BSC translates an organization's mission and strategy into a comprehensive set of performance measures that provide the framework for a strategic measurement and management system. The emphasis on achieving financial objectives is retained and other performance drivers are added.

The Balanced Scorecard – Translating Strategy Into Action, by Robert S. Kaplan & David P. Norton, Harvard Business School Press, Boston, Mass, 1996

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Measuring Safety Performance

Balanced Scorecard Development Process



What Measures are Appropriate?

Upper Management	100% Results
Middle Management	50% Results 50% Activities
Supervisors	100% Activities
Safety Director	100% Activities
Employee	100% Activities

Provide feedback

STEP 4: Provide Feedback and Recognition

Research has shown that feedback is the most powerful determinate for a person's performance. Without feedback, behavior and decisions are made intuitively or by guessing. Providing feedback about progress toward a goal greatly enhances performance.

Feedback is information about performance that allows an individual to adjust his or her performance. Feedback shows an employee where their current performance is in relation to past performance and current goals. If the employee is not performing correctly, what is the nature of the errors? How can they be corrected?

Recognition refers to acknowledgment of employee achievement that could result in improved status. Recognition could include public praise, expressions of a job well done, or special attention. The extent to which recognition motivates depends on its perceived value. It also depends on whether the individual sees the connection between it and the behavior.





Turn and Talk

List some examples of feedback and recognition:

✓ _____

✓ _____

✓ _____

✓ _____

✓ _____

✓ _____

✓ _____

Performance Appraisals

- Utilizing performance appraisals as part of the reward structure for safety performance is extremely important in improving safety performance within an organization. If safety performance is not considered meaningful in the performance appraisal system a clear message is sent that says safety is not a high priority.

Comprehensive Criteria for Performance Evaluation

- **What:** All levels linked to the Organization's Specific Goals, with numeric summaries produced frequently to ensure everyone's requirements are supporting progress towards goals. Includes both ACTIVITIES and RESULTS.
- **Who:** Defines who conducts the appraisals at each level & who receives the appraisal at every level (all the way from superior > subordinate to 360 feedback). It is important that raters are chosen correctly for each staff member rated – raters must have a personal knowledge of the employee's performance to accurately appraise them.
- **When:** *Daily* personal feedback. *Quarterly* written reviews -- Management must understand the limitations of the quarterly review system, and instead focus on DAILY interactive coaching and feedback. Daily and quarterly reviews omit the surprises which the traditional "annual review" system often harbored.
- **Why:** 1) Assists organization with meeting its overall goals; 2) Develops employees as a resource (not to be used as a punishment); 3) Identifies weaknesses in employee support systems (ex: employee training and goal setting); 4) Identifies weaknesses in management systems and leadership skills; and 5) Protects employer against wrongful discharge lawsuits if properly implemented.
- **How:** It is imperative that raters be properly trained! The system can also be used to identify areas of need for employee training. Raters should consider the following factors: experience and training of the employee, the job description, the employee's attainment of previously set goals, knowledge of the job, quantity and quality of work, promptness in completing assignments, cooperation, initiative, reliability, attendance, communication skills, analytical/critical thinking, judgment, acceptance of responsibility and factors such as confidentiality and customer service.

- **Systems Support:** Must be supported by related systems to succeed. Such systems would include *Discipline, Leadership Training, Goal Setting, Employee Training, Position Descriptions and Objectives*, etc.
- **Personal Impact:** Linked to pay increases, educational opportunities, promotions, etc.
- **Organizational Impact:** Tied into organizational goals so as to support them.
- **Roles:** In addition to position descriptions and daily coaching, the Performance Evaluation system helps to clarify and support how an employer defines each employee's role (management, supervision, EE's. Admin. Support. Etc.), and what expectations are at each level.
- **Numerical Rating:** Is not totally subjective, but mostly objective, so as to reduce rater bias. Numeric values are to be assigned to each requirement - and an overall level of performance is to be generated from all section's scores. Note: Key requirements should bear the most weight in the scoring system and be the least flexible, while Basic requirements and Low Level Requirements bearing less and less weight, respectively.
- **Flexibility:** Has a variety of goals each person can meet (with key areas being the least flexible).
- **EE Involvement:** Mutual Goal Setting is the ideal scenario so goals are as accurate, applicable and as "do-able" as possible.
- **Central Coordination:** Coordinated by a centralized group (generally H.R.) who reminds those conducting the Performance Evaluations of deadlines, collects finished evaluations, etc.
- **Addressing Employee Weaknesses:** Failure to meet goals should result in a "Plan of Action" – including task oriented goals, as well as specified levels of discipline for failure to comply
- **Additional Items:** Performance Evaluation Form includes comments areas, date, deadlines, and signatures of EE, Supervisor and ER rep. (usually Human Resources).
- **System Evaluation:** The Performance Evaluation system itself should be reviewed periodically (usually annually) to evaluate if and how internal and external challenges may have affected goal accomplishment and accuracy of the goals.

Positive Reinforcement

Positive reinforcement is technically defined as “any consequence that increases the probability that the behavior that preceded it will occur more often in the future.”

Aubrey C. Daniels, Performance Management

Find someone doing something right, and reward them.



Make sure the behavior you reward is the behavior you want to see repeated. Be careful not to inadvertently reward “at risk” or “unsafe” behaviors.

WHERE DO WE GO FROM HERE?



NEXT STEPS

1. Review current statistics, trends, etc. Review current measurement systems. Is there a system in place? Does it measure results, activities or both? Is it sufficient?
2. Get management support/commitment.
3. What is great safety at your workplace? What is your safety vision, policy, and goals?
4. Keeping the organization's vision and goal in mind, what are appropriate safety performance measure/activities for each level?
5. What tools and training is necessary? Conduct a needs assessment.
6. How will activities be measured? How will information be reported?
7. How will performance be recognized and/or rewarded?
8. Reevaluate the process. How do you determine if you are measuring the right things? How do you continue to improve performance? You may need to change or add measures.

How do you know when you get there?



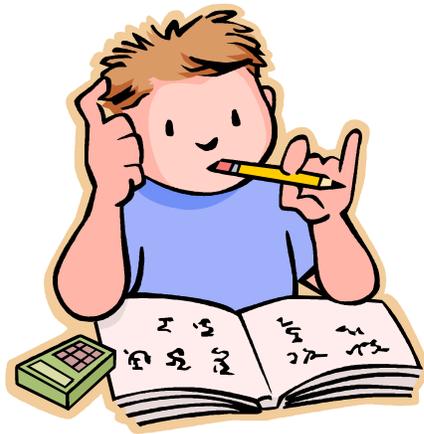
You never get there.



**There is always room
for improvement!!!**

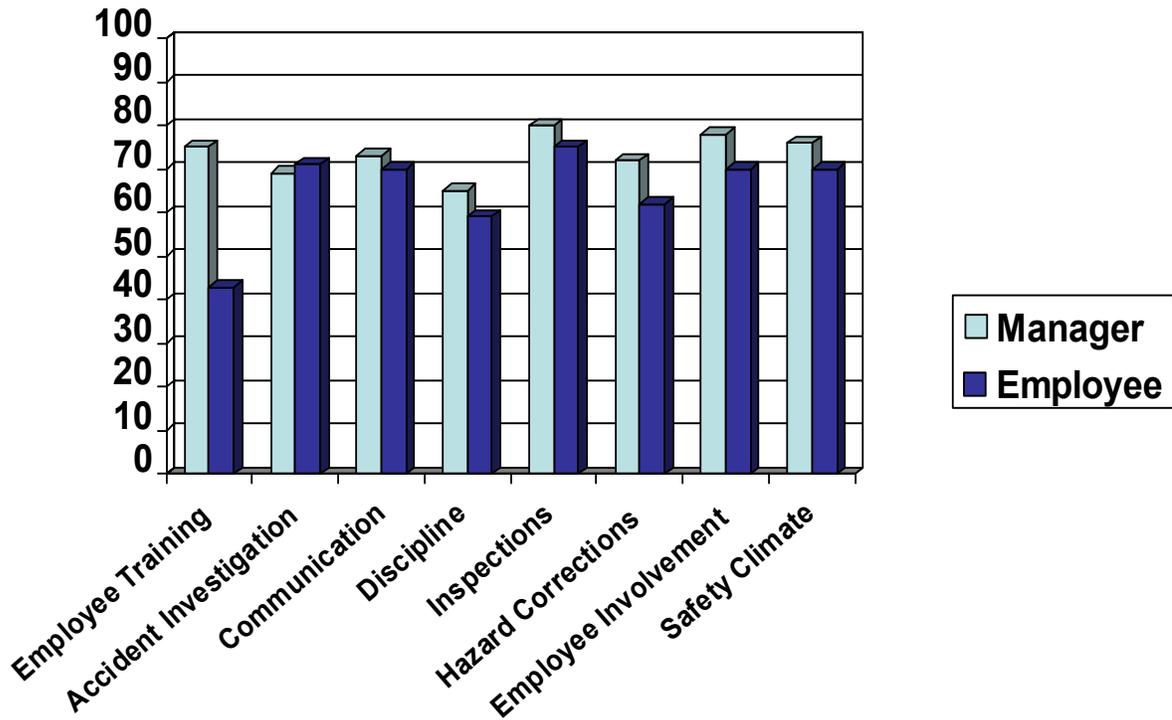
Case studies

CASE STUDIES



Case Study #1

The results of the perception survey and structured interviews are summarized below.



Structured Interview Responses	Ranking
Improve and increase training	8
Properly train employees	5
Cultivate a culture of safety first	3
Talk to employees, don't just walk by	2
Improve housekeeping	2
Have less meetings	1

Review these results and identify one process or system in need of improvement.

In addition to the results of the perception survey and structured interviews, you have the following information about your current safety program:

Employee Training	<ul style="list-style-type: none"> •New hires are trained by HR Director using videos and by distributing the employee handbook. All employees sign that they've read the handbook. •Once a year, the annual refresher classes are taught during a half-day safety day
Accident Investigation	<ul style="list-style-type: none"> •The safety director investigates accidents whenever the reports are turned in by supervisors •Accident analysis often results in employee re-training or some type of disciplinary action
Communication	<ul style="list-style-type: none"> •The bulletin board in the cafeteria lists the previous month's safety team minutes.
Disciplinary Policy	<ul style="list-style-type: none"> •A progressive disciplinary policy exists, however, "good" employees are often excused for small incidents.
Inspections	<ul style="list-style-type: none"> •The safety team performs monthly inspections and reports their findings at the safety meeting. •OSHA has been in several times in the past 5 years to do "unexpected" inspections as well.
Hazard Correction	<ul style="list-style-type: none"> •A list of safety hazards is given to the maintenance representative at the safety meeting. Maintenance is constantly busy and gets to the list when there is free time.
Employee Involvement	<ul style="list-style-type: none"> •The safety team meets monthly, there are an equal number of employees and managers but there are no senior level managers represented. •The handbook states that employees should report any unsafe conditions to their immediate supervisor. •A suggestion box hangs outside of the cafeteria. It is usually empty.
Safety Climate	<ul style="list-style-type: none"> •"Safety is #1" signs are posted throughout the building. •At the annual Safety Day picnic, cups, umbrellas or T-shirts are given to employees to motivate safe behavior. •Senior managers review the year end accident costs prior to Safety Day and are sometimes surprised to see how much improvement has occurred. They credit the Safety Director for her excellent work.

What is the goal for improving this program, process or system?

(to improve training, to increase communication, to improve accident analysis process)

***Clarify Roles and Define Expectations of
employees/supervisors/managers***

What are the employees expected to do in order to accomplish this?

What are the supervisors expected to do in order to accomplish this?

What are the managers expected to do in order to accomplish this?

Provide the Tools & Skills

What tools or skills are necessary to achieve the expectations? (What type of training, knowledge, abilities do people need to have?)

Tools

Tools, Resources

Establish Measures

What types of measures can be used to monitor progress?

Activities

Results

Provide feedback

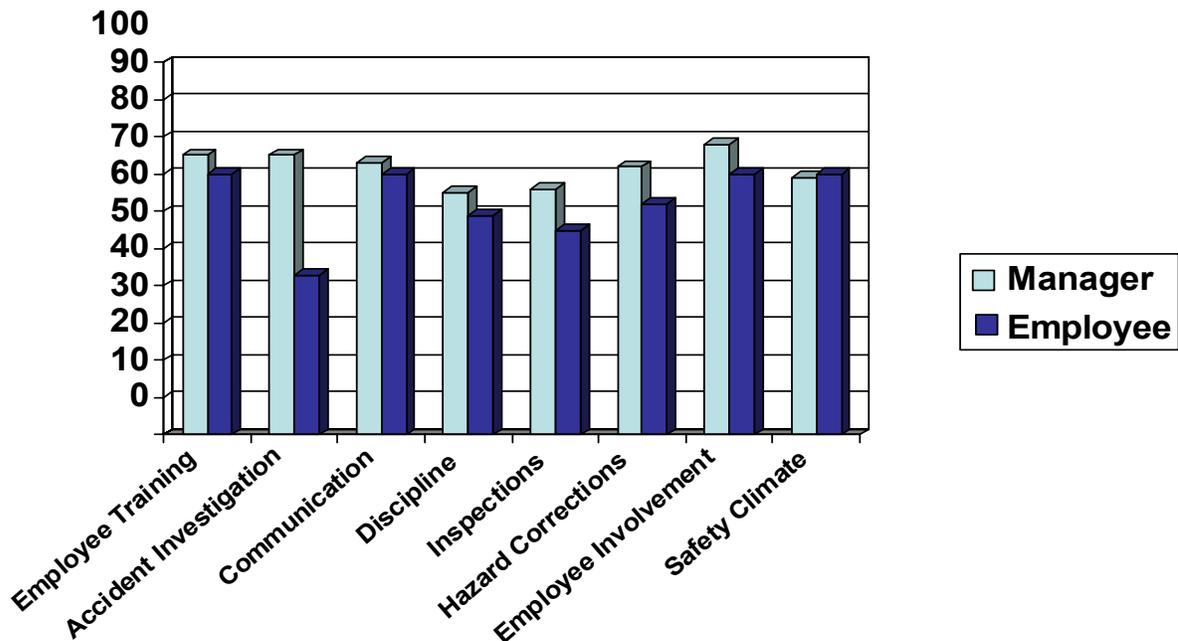
How will employees know what their level of performance is?

How will supervisors know what their level of performance is?

How will managers know what their level of performance is?

Case Study #2

The results of the perception survey and structured interviews are summarized below.



Structured Interview Responses	Ranking
Improve and increase training	4
Correct hazards when they're found	4
Cultivate a culture of safety first	4
Talk to employees, don't just walk by	2
Improve housekeeping	2
Have less meetings	1

Review these results and identify one process or system in need of improvement.

In addition to the results of the perception survey and structured interviews, you have the following information about your current safety program:

Employee Training	<ul style="list-style-type: none"> •New hires are trained by HR Director using videos and by distributing the employee handbook. All employees sign that they've read the handbook. •Once a year, the annual refresher classes are taught during a half-day safety day
Accident Investigation	<ul style="list-style-type: none"> •The safety director investigates accidents whenever the reports are turned in by supervisors •Accident analysis often results in employee re-training or some type of disciplinary action
Communication	<ul style="list-style-type: none"> •The bulletin board in the cafeteria lists the previous month's safety team minutes.
Disciplinary Policy	<ul style="list-style-type: none"> •A progressive disciplinary policy exists, however, "good" employees are often excused for small incidents.
Inspections	<ul style="list-style-type: none"> •The safety team performs monthly inspections and reports their findings at the safety meeting. •OSHA has been in several times in the past 5 years to do "unexpected" inspections as well.
Hazard Correction	<ul style="list-style-type: none"> •A list of safety hazards is given to the maintenance representative at the safety meeting. Maintenance is constantly busy and gets to the list when there is free time.
Employee Involvement	<ul style="list-style-type: none"> •The safety team meets monthly, there are an equal number of employees and managers but there are no senior level managers represented. •The handbook states that employees should report any unsafe conditions to their immediate supervisor. •A suggestion box hangs outside of the cafeteria. It is usually empty.
Safety Climate	<ul style="list-style-type: none"> •"Safety is #1" signs are posted throughout the building. •At the annual Safety Day picnic, cups, umbrellas or T-shirts are given to employees to motivate safe behavior. •Senior managers review the year end accident costs prior to Safety Day and are sometimes surprised to see how much improvement has occurred. They credit the Safety Director for her excellent work.

What is the goal for improving this program, process or system?

(to improve training, to increase communication, to improve accident analysis process)

***Clarify Roles and Define Expectations of
employees/supervisors/managers***

What are the employees expected to do in order to accomplish this?

What are the supervisors expected to do in order to accomplish this?

What are the managers expected to do in order to accomplish this?

Provide the Tools & Skills

What tools or skills are necessary to achieve the expectations? (What type of training, knowledge, abilities do people need to have?)

Tools

Tools, Resources

Establish Measures

What types of measures can be used to monitor progress?

Activities

Results

Provide feedback

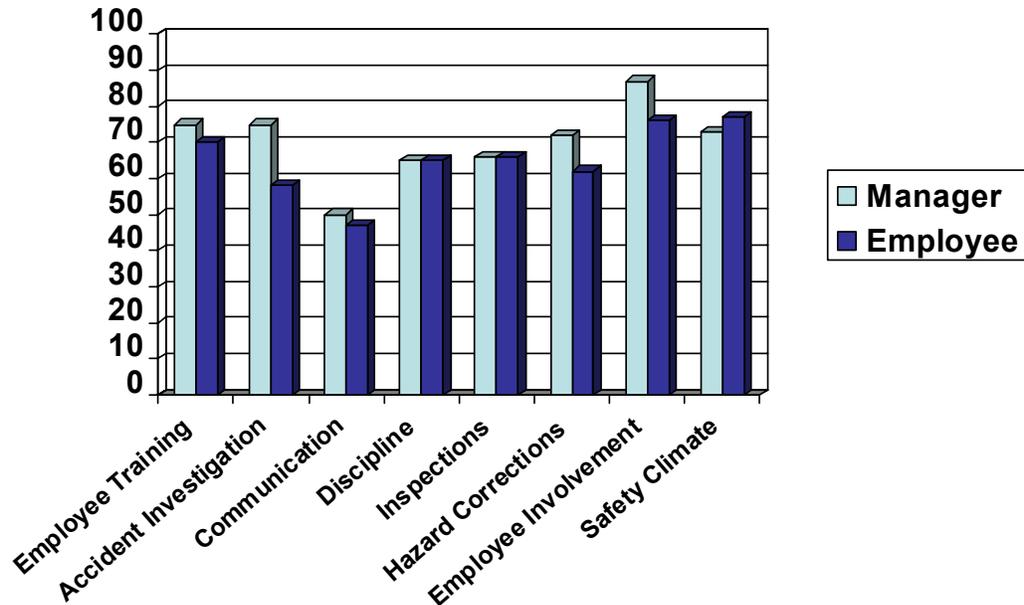
How will employees know what their level of performance is?

How will supervisors know what their level of performance is?

How will managers know what their level of performance is?

Case Study #3

The results of the perception survey and structured interviews are summarized below.



Structured Interview Responses	Ranking
Talk to employees, don't just walk by	5
Correct hazards when they're found	4
Cultivate a culture of safety first	2
Reduce paperwork	2
Improve housekeeping	2
Have less meetings	1

Review these results and identify one process or system in need of improvement.

In addition to the results of the perception survey and structured interviews, you have the following information about your current safety program:

Employee Training	<ul style="list-style-type: none"> •New hires are trained by HR Director using videos and by distributing the employee handbook. All employees sign that they've read the handbook. •Once a year, the annual refresher classes are taught during a half-day safety day
Accident Investigation	<ul style="list-style-type: none"> •The safety director investigates accidents whenever the reports are turned in by supervisors •Accident analysis often results in employee re-training or some type of disciplinary action
Communication	<ul style="list-style-type: none"> •The bulletin board in the cafeteria lists the previous month's safety team minutes.
Disciplinary Policy	<ul style="list-style-type: none"> •A progressive disciplinary policy exists, however, "good" employees are often excused for small incidents.
Inspections	<ul style="list-style-type: none"> •The safety team performs monthly inspections and reports their findings at the safety meeting. •OSHA has been in several times in the past 5 years to do "unexpected" inspections as well.
Hazard Correction	<ul style="list-style-type: none"> •A list of safety hazards is given to the maintenance representative at the safety meeting. Maintenance is constantly busy and gets to the list when there is free time.
Employee Involvement	<ul style="list-style-type: none"> •The safety team meets monthly, there are an equal number of employees and managers but there are no senior level managers represented. •The handbook states that employees should report any unsafe conditions to their immediate supervisor. •A suggestion box hangs outside of the cafeteria. It is usually empty.
Safety Climate	<ul style="list-style-type: none"> •"Safety is #1" signs are posted throughout the building. •At the annual Safety Day picnic, cups, umbrellas or T-shirts are given to employees to motivate safe behavior. •Senior managers review the year end accident costs prior to Safety Day and are sometimes surprised to see how much improvement has occurred. They credit the Safety Director for her excellent work.

What is the goal for improving this program, process or system?

(to improve training, to increase communication, to improve accident analysis process)

***Clarify Roles and Define Expectations of
employees/supervisors/managers***

What are the employees expected to do in order to accomplish this?

What are the supervisors expected to do in order to accomplish this?

What are the managers expected to do in order to accomplish this?

Provide the Tools & Skills

What tools or skills are necessary to achieve the expectations? (What type of training, knowledge, abilities do people need to have?)

Tools

Tools, Resources

Establish Measures

What types of measures can be used to monitor progress?

Activities

Results

Provide feedback

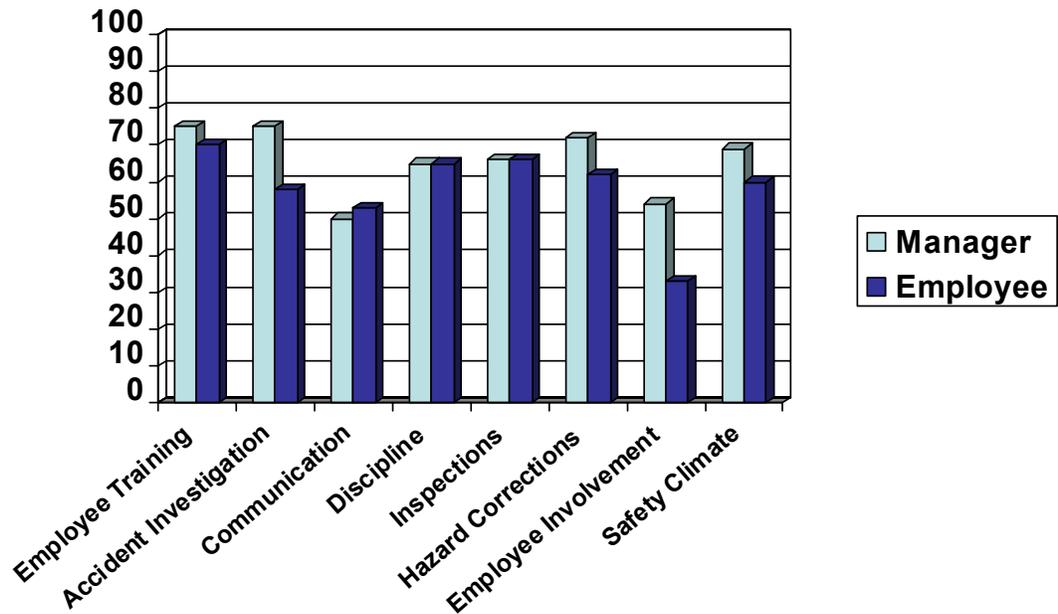
How will employees know what their level of performance is?

How will supervisors know what their level of performance is?

How will managers know what their level of performance is?

Case Study #4

The results of the perception survey and structured interviews are summarized below.



Structured Interview Responses	Ranking
Talk to employees, don't just walk by	4
Correct hazards when they're found	4
Cultivate a culture of safety first	4
Improve and increase training	2
Improve housekeeping	2
Have less meetings	1

Review these results and identify one process or system in need of improvement.

In addition to the results of the perception survey and structured interviews, you have the following information about your current safety program:

Employee Training	<ul style="list-style-type: none"> •New hires are trained by HR Director using videos and by distributing the employee handbook. All employees sign that they've read the handbook. •Once a year, the annual refresher classes are taught during a half-day safety day
Accident Investigation	<ul style="list-style-type: none"> •The safety director investigates accidents whenever the reports are turned in by supervisors •Accident analysis often results in employee re-training or some type of disciplinary action
Communication	<ul style="list-style-type: none"> •The bulletin board in the cafeteria lists the previous month's safety team minutes.
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Safety Climate	<ul style="list-style-type: none"> •"Safety is #1" signs are posted throughout the building. •At the annual Safety Day picnic, cups, umbrellas or T-shirts are given to employees to motivate safe behavior. •Senior managers review the year end accident costs prior to Safety Day and are sometimes surprised to see how much improvement has occurred. They credit the Safety Director for her excellent work.

What is the goal for improving this program, process or system?

(to improve training, to increase communication, to improve accident analysis process)

***Clarify Roles and Define Expectations of
employees/supervisors/managers***

What are the employees expected to do in order to accomplish this?

What are the supervisors expected to do in order to accomplish this?

What are the managers expected to do in order to accomplish this?

Provide the Tools & Skills

What tools or skills are necessary to achieve the expectations? (What type of training, knowledge, abilities do people need to have?)

Tools

Tools, Resources

Establish Measures

What types of measures can be used to monitor progress?

Activities

Results

Provide feedback

How will employees know what their level of performance is?

How will supervisors know what their level of performance is?

How will managers know what their level of performance is?

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Winter's safety department sponsors live fall protection training for employees and subcontractors' employees on a regular basis.

Measuring Safety Performance in Construction

In safety, if you don't move forward, you fall behind. Is there a safety director who hasn't reached the realization that long-standing safety programs are producing, at best, mediocre results? This realization led to The Winter Construction Co., a general contractor, re-energizing a solid, but lackluster, safety program. Since Winter implemented its system for measuring safety performance in 1996, its accountability program has helped the company attain some noteworthy improvements in its safety performance:

- Experience modification rate reduced from .89 to .59;
- Incidence rate reduced from 12.47 to 3.26; and
- Lost workday case rate reduced from 2.34 to 0.

Winter is a \$200 million Atlanta-based general contractor and construction management firm employing between 400 and 500 people. Some of its markets include retail, hospitality, multifamily, academic, telecommunications, government/institutional and corporate facilities.

In 1995, Winter was heavily engaged in projects related to the Summer Olympic Games due to open in Atlanta in July 1996. Added to Winter's regular operations in the 17 Southeastern states were projects such as the Olympic tennis stadium, projects on the Georgia Tech campus, site of the Athletes' Village, and those included in the makeover of Atlanta's Hartsfield International Airport.

The number and sizes of jobs in the "pipeline" at

Can business growth and improved safety performance go hand in hand? They can when a company makes accountability a key ingredient.

that time also were predictors of substantial growth following the Olympics. Safety's marching orders were to ensure that company growth came without sacrificing safety on the job sites. The company's safety culture had to extend to the new superintendents, project managers and hourly workers coming on board, and new subcontract-

by John M. Cohen



Protective eyewear is mandatory for this worker, who is cutting concrete slab.

tors had to understand Winter's safety requirements.

Winter's injury rates were improving, and there was a growing willingness by field supervisors and managers to embrace the idea that safety was everyone's responsibility, not just "the Safety Guy's." Safety training for superintendents, weekly safety training for hourly workers, regular site inspections by safety officers, site inspections by superintendents and accident inves-

tigation procedures were well-established. Nevertheless, there was recognition that Winter had reached a plateau in the energy and effectiveness of its safety program. Winter had to inject new vitality into its safety program to get off that plateau and, at the same time, ensure that the expanding workforce remained safe. Winter needed a fresh approach.

Corporate Culture

Choosing a new program required a close examination of the corporate culture to determine what defined The Winter Construction Co.'s character. What was its management style? Was safety a core value? Would bottom-up change (i.e., a behavior-based safety program) be more appropriate than a top-down, management-driven program? At Winter, the top-down philosophy set the style. Historically, strong leadership and energetic management at all levels had been rewarded. Safety was an established core value. Work-

ing safely was truly a condition of employment, and unwavering presidential support for the safety program was acknowledged throughout the company. It seemed natural, therefore, to promote the concept that safety should be perceived as a *management function* the same as productivity, quality and profitability, complete with performance measurements and appropriate consequences.

Product or service output is measured daily by the amount created. Quality initiatives are reinforced continuously. In general, employees are taught that production and quality are intertwined. Safety, however, is often relegated to a list of rules and regulations. A successful safety and accident prevention program factors safety into the production and quality mix because it directly impacts both. Lost man-hours, increased insurance premiums and other related costs affect a company's bottom line in a variety of ways, just like production and quality. Production and quality are managed with accountability. It only makes sense that safety should be managed in the same way.

Field Generals

The initial focus of the new program, it was decided, would be on Winter's project superintendents. Because the superintendents were the field generals who *made things happen*, their activities were critical to achieving improvements in the company's safety performance. Winter developed ways to measure its safety performance in a way that had direct impact (i.e., negative or positive effects on annual bonuses) on the superintendents' compensation. Superintendents had always been responsible for safety on their sites; now they would also be accountable. That accountability is based on a variety of measurements against specific goals set forth in the safety program:

- Establish safety as a management function that is measured.
- Demonstrate that there is a cause-and-effect relationship between the



Winter's safety program includes regular planning and review of job-specific safety plans. Safety officer Tim Thomas meets with project manager Ed Siqueira (center) and superintendent Reggie Parker (left) regarding scaffolding safety.



Following a scaffolding safety meeting, Thomas (right) reviews the scaffolding installation with Parker.

safety efforts of superintendents and the business viability of the company.

- Effect continuing reductions in injury rates as reflected in the incidence rate and the workers' compensation experience modification rate.
- Kindle a healthy competitiveness among superintendents for achieving excellence in safety management.

What to Measure

Winter decided its safety performance program would measure two ba-

sic elements: *safety activities* and *safety results*. Each element is weighted to provide 50 percent of a participant's total score.

The safety activities selected to be measured are those already incorporated in the company's safety and accident prevention program, including:

- Regular and frequent safety inspections by the safety department,
- Weekly site safety inspections by the superintendent,
- Weekly safety training for hourly

workers, and

- Injury reporting and accident investigation, including separate scoring for promptness of notification and for the quality of written reports.

A standard was developed for each of these activities along with corresponding point scores having a possible total of 100. The activity score is weighted at 50 percent of the total score.

Winter decided that the measurement for safety results would be the incidence rate (IR) achieved by a superintendent for a calendar year measured against a target IR. The safety department, however, believed that incidence rates alone would not necessarily reflect the true caliber of a superintendent's safety performance. Many safety professionals look at incidence rates as measures of luck.

Dan Petersen once wrote, "[Incidence rates] do not discriminate between poor and good performers. They do not diagnose problems. They are grossly unfair if used to judge individual performance." Factoring in the measurements of safety activities offsets this shortcoming and provides balance to the program. Like the activities portion of the scoring, a maximum of 100 points can be earned for scoring at or below the target IR. The results score is also weighted at 50 percent of the total score.

A superintendent's IR is derived using the totals of work hours and work-related injuries of Winter's employees, plus those of its subcontractors, on a superintendent's project(s). As a general contractor, Winter self-performs approximately 20 percent of its work, meaning that its subcontractors typically represent a superintendent's most significant safety management challenge. To measure only 20 percent of safety on a project would ignore a superintendent's duty to provide a safe work site for *all* workers. This method of developing an IR also serves to underscore Winter's safety responsibilities as a *controlling employer* under OSHA's *multiemployer work site* doctrine.

After months of development, Winter's accountability program was submitted to management for approval. In response to the recommendation, management agreed to tie 20 percent of superintendents' bonuses to their safety performance, thus providing the final, critical element of the system – tangible consequences. Management also approved a parallel program designed to provide monetary rewards for superintendents who reach certain milestones in the total number of work hours supervised without a lost-time injury. This program, with its challenging standards, creates opportunities for recognition of exceptional accomplishments throughout a calendar year and beyond until a lost workday injury occurs.

Getting Everyone on Board

The implementation program focused on gaining the support of the players – the superintendents. Informational meetings were designed to show how the new accountability system would energize the safety program and help to achieve the long-term business benefits of safe operations for the company, as well as for superintendents and managers personally. Superintendents received instructions on their new weekly reporting process, how the scoring worked, what reports they would receive and how their safety performance would impact bonuses.

It also was essential to demonstrate to superintendents that the system was objective and fair. The safety department showed them that the system scored safety activities that they were already accustomed to performing. During the three months preceding the field test of the system, Winter also arranged for all executives, managers and superintendents to complete Argonaut Insurance Co.'s S.T.A.R.T. course, which provides an introduction to the concept of accountability.

After testing the system with field data for 30 days and producing the first

Goals of the Safety Performance Program

- Establish safety as a management function that is measured
- Demonstrate that there is a cause-and-effect relationship between the safety efforts of superintendents and the business viability of the company
- Effect continuing reductions in injury rates as reflected in incidence rates and the workers' compensation experience modification rate
- Kindle a healthy competitiveness among the superintendents for achieving excellence in safety management

test reports, the accountability program went "live." Thanks to some very bright information technology people and a development budget, what started as a "manual" system carrying a considerable clerical workload was soon upgraded to a database system. Since automating the accountability system, home office data entry time has been reduced to four to six hours a week. Subsequent improvements allow Winter to take advantage of its communications capabilities. For instance, superintendents anywhere in the country can file weekly safety activities reports via e-mail and receive monthly reports showing their performance scores and relative standings.

Accountability for Now and the Future

Future applications of the accountability system are on the drawing board. This year, project managers will join the safety performance system as full participants, and there are plans to include project teams. Because the system tracks project activities differently from the conventional information systems in use by the company, managers can access project information in formats not available elsewhere. Detailed and summary reports are available for

use by management throughout the year for a variety of reasons, including evaluations for promotions, raises and assignments.

When Winter committed to developing its safety accountability system, it knew it had to make the system flexible. Moreover, the system had to be objective, relevant and make sense. Winter knew that it had to be willing to make changes if something didn't work.

Finally, like other safety endeavors and ideas, accountability was not a magic bullet. It was not meant to stand alone, but to provide an energy source for the tried and true safety efforts – training and education, inspections, communication, motivation and leadership.

Today, measuring safety performance is a part of the fabric of Winter's culture. It wouldn't be an exaggeration to say that the superintendents at Winter would actually miss it if it went away. There is a healthy, friendly competition among them for good standings in the accountability program that goes beyond the prospects for annual bonuses. It is not unusual, for instance, for a superintendent to call to ask for an explanation of why he lost two points out of a possible 100.

Earning exceptional safety performance scores has become a matter of pride extending beyond monetary implications. These are the attitudes found in a safety culture. They translate into intelligent, proactive safety management in the field, and that carries Winter a long way toward the goal of sending everyone home healthy at the end of each day. **OH**



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4. Click "Team Rooms"
5. Type "msp" in the keyword field and click search
6. Click the "Measuring Safety Performance" team room which should be the first team room listed
7. Click "Content" listed in the Team Room Tools
8. Click on the document that you wish to download
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