

# **Annual Safety Program Evaluations Part 1**

**(How To Do Them)**

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for VPPPA Region 9, 2010 Newport Beach Meeting



# Annual Evaluations – Part 1

- Why ?
- What it is and isn't
- Annual Evaluations - “Keeping The Flame Alive”
- Metrics – Measuring Safety
- Monthly Reports leading to Annual Reports
- Objectivity
- What is the “Standard”? The Benchmark?
- How to you get time to do this?
- **DROP THE “COMPLIANCE MIND SET” !**

# Why ??? !!

- Objective evaluations may surprise
- Required for VPP!!!
- “Keeping The Flame Alive”
- As “Continuous Measurable Improvement”
- **YOU ONLY HAVE SO MUCH TIME & RESOURCES TO IMPROVE, SO.....**





# **What do Annual Evaluations have to do with VPP?**

**“Companies participating in MERIT and STAR are expected to have comprehensive programs, including .... annual comprehensive self evaluation.” – Fed VPP**

**”All applicants must perform an annual evaluation of the elements required for VPP participation. This evaluation is NOT the same as a safety audit. It is a review & assessment of the effectiveness of all the program elements: management leadership, employee involvement, worksite analysis, hazard prevention & control and training.”**



# What Annual Evaluations Are and Are Not:

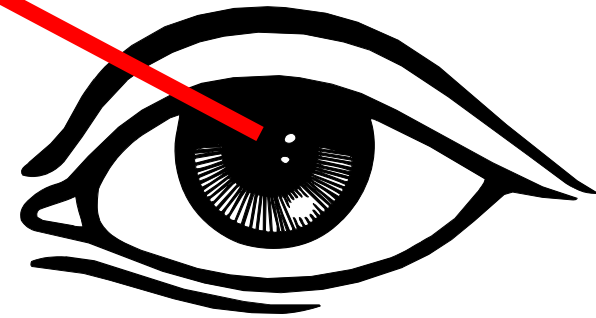
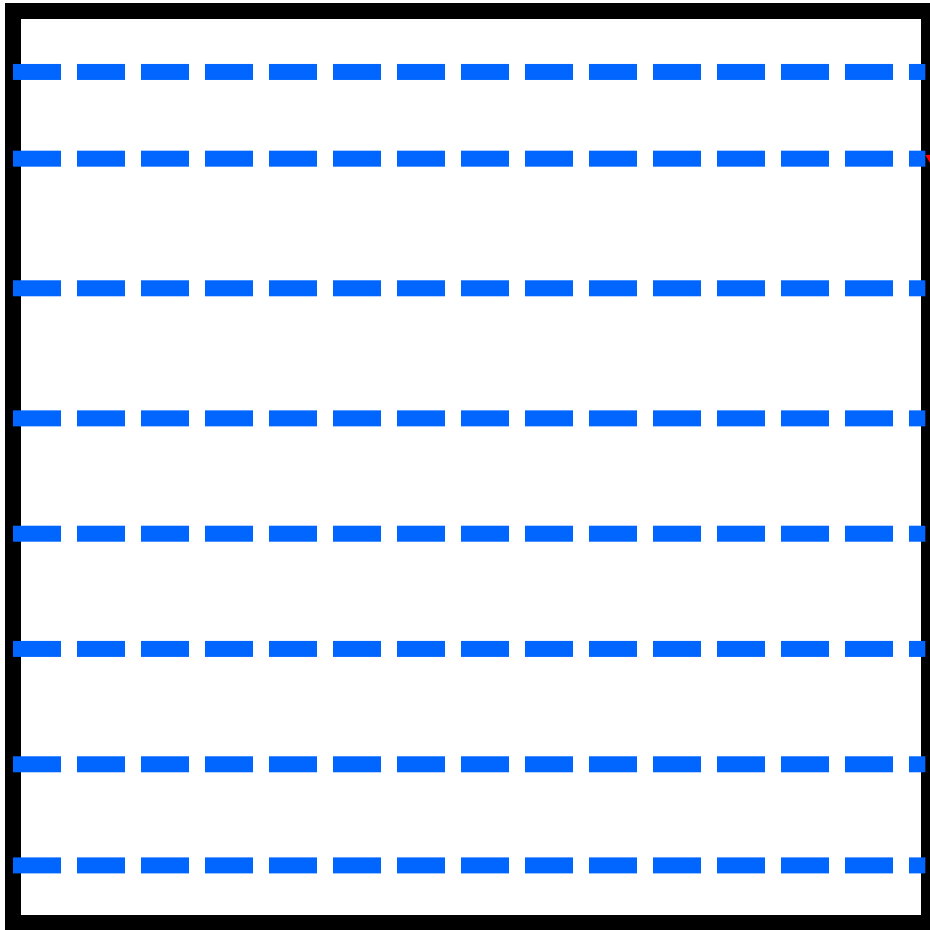
- Not an audit, Hazard ID, or Hazard Analysis
- Annual Evaluation is more than an audit, it is an evaluation of the performance of each component – and the Synergy – of your entire Safety Program.

# Annual Evaluations - “Keeping The Flame Alive”

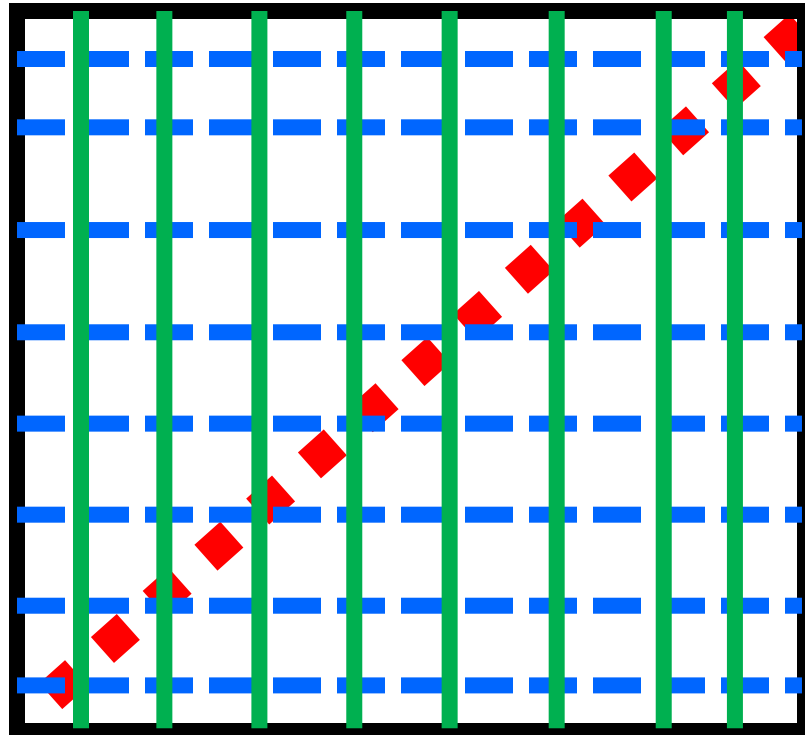


- What happens after you finally earn VPP status? A big relief! But later..... does complacency set in?
- Comprehensive Annual Evaluations are the solution- APPLICATION OF CONTINUOUS MEASUREABLE IMPROVEMENT TO YOUR VPP SITE.

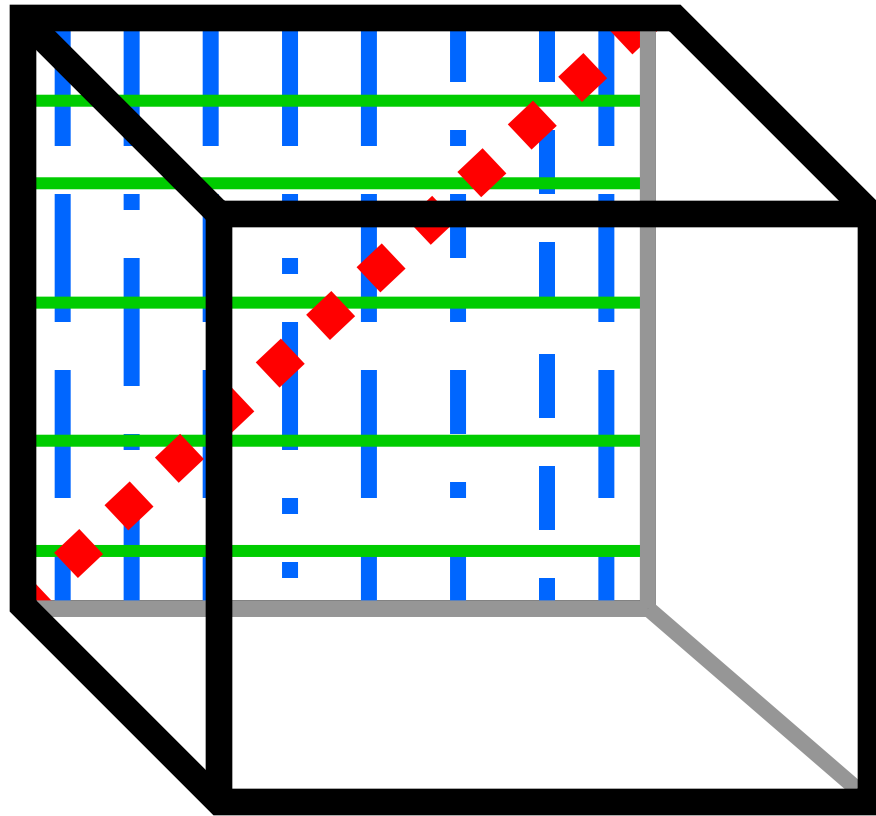
**Audits are quick, laser like views of  
“physical” safety at one time.**



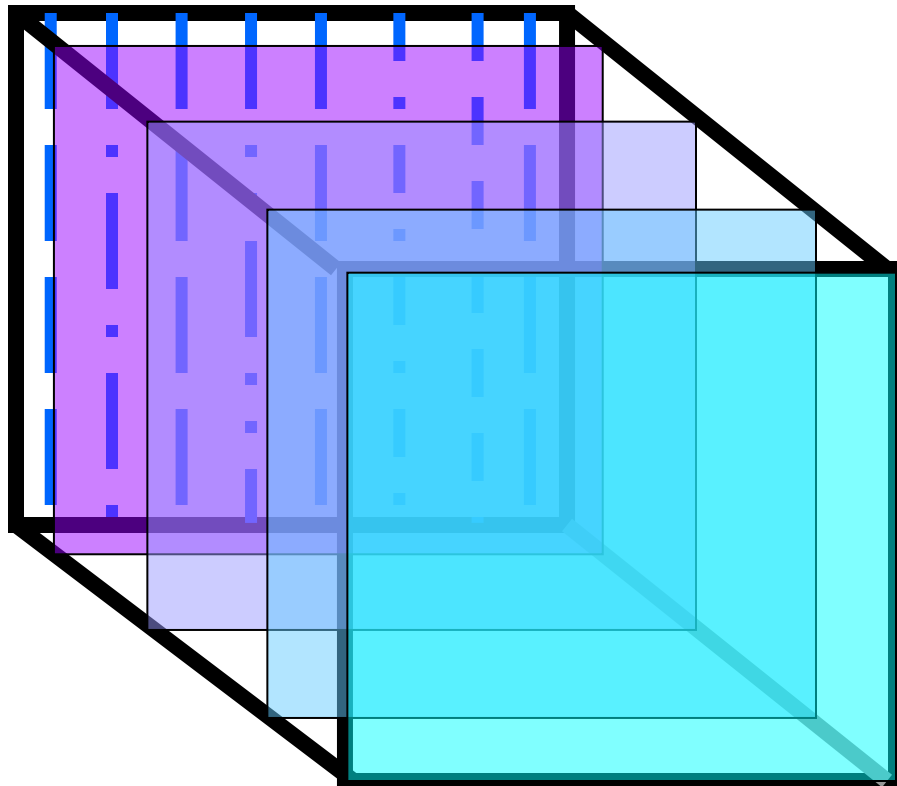
**Other audits *CAN* act as cross-checks.**



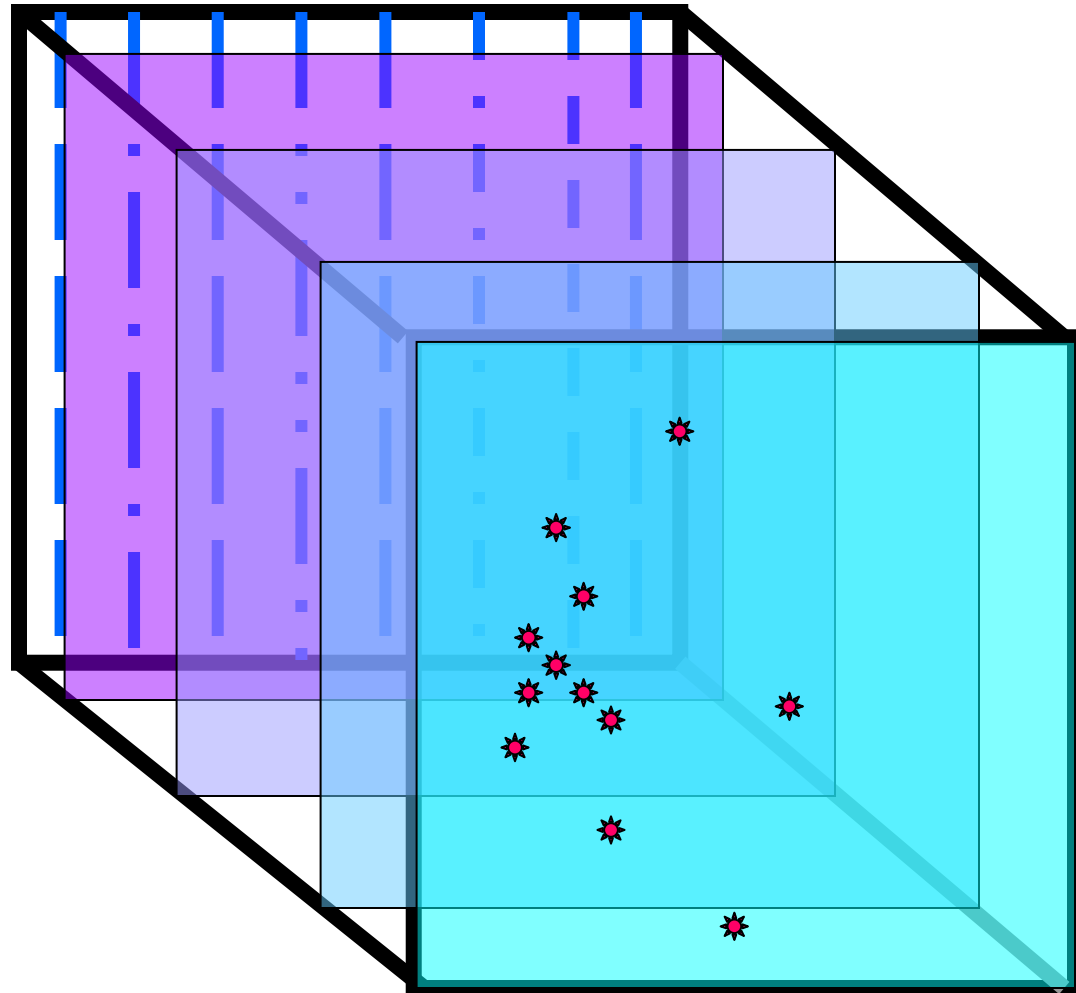
**But audits are only one aspect  
of your entire safety program.**



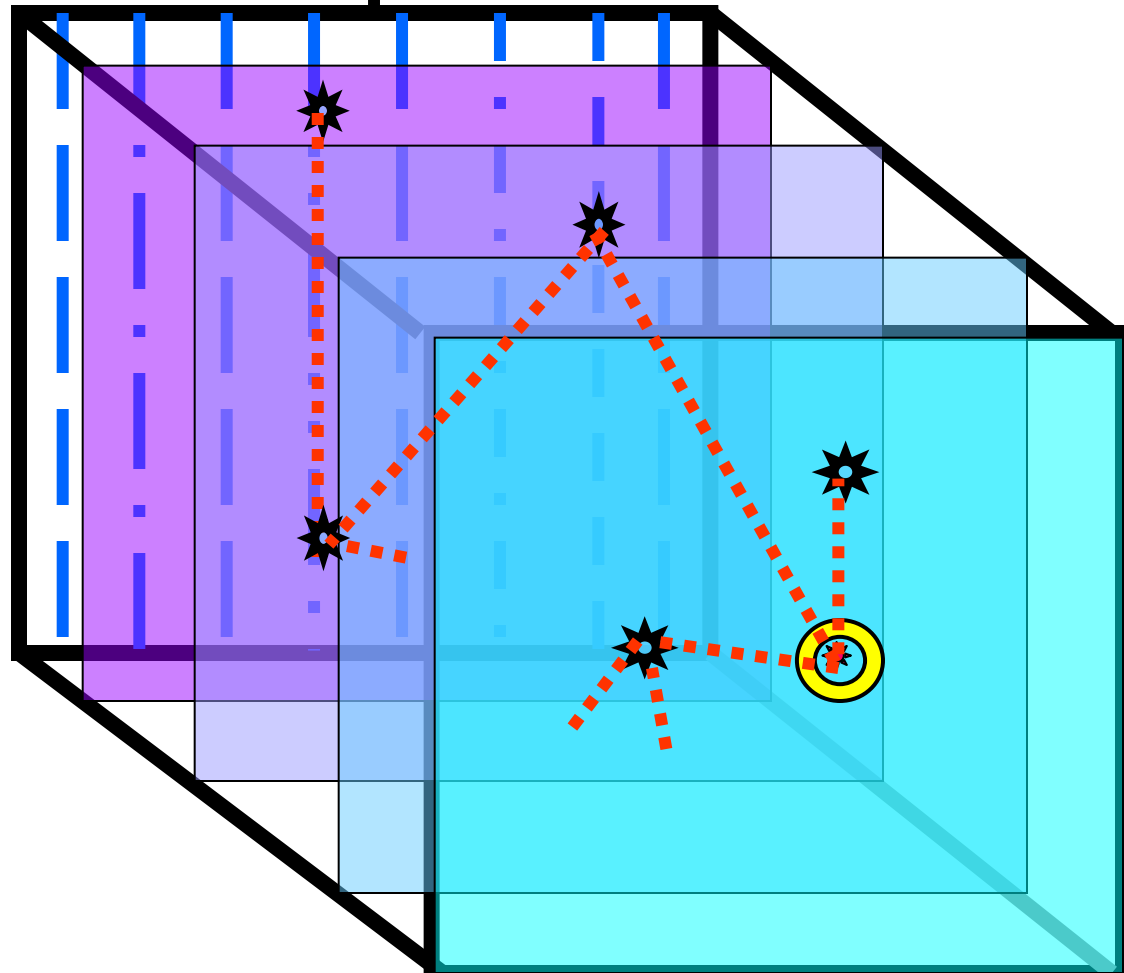
**Your safety program is many programs – PPE, Audits, Behavior, etc. Each are “slices” of the whole “Layer Cake”.**



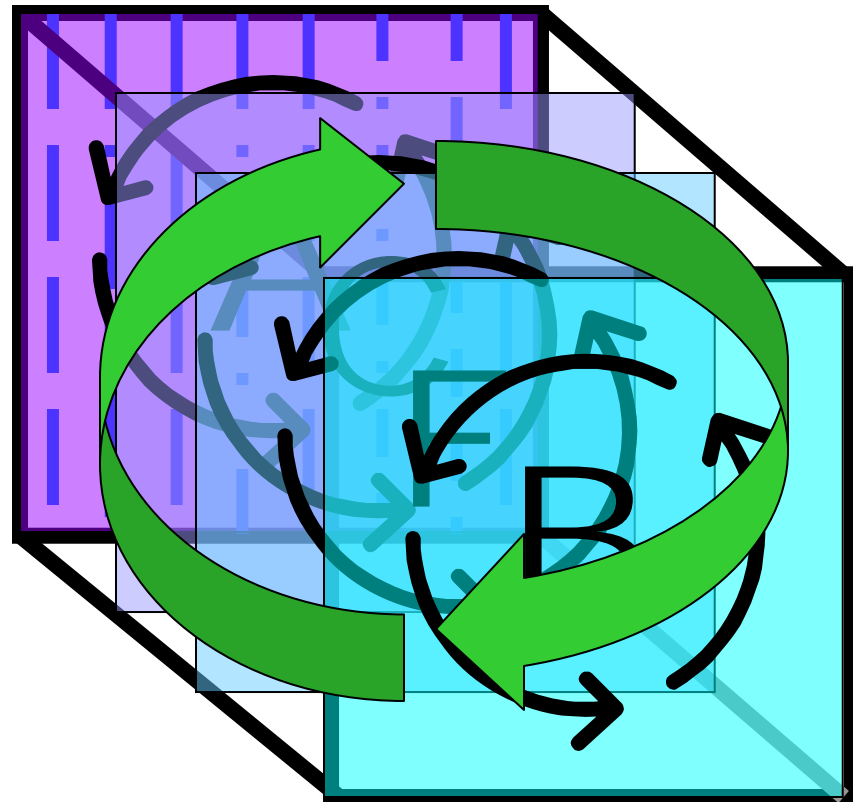
**Injuries/Incidents are discrete events, not  
a measurement of program activity**



**Incident Root Cause Analysis should reach deep into your programs and tell you some of your “Layers” in the cake need to be improved.**



**Annual evaluation covers your entire safety program – each part and how they work together.**



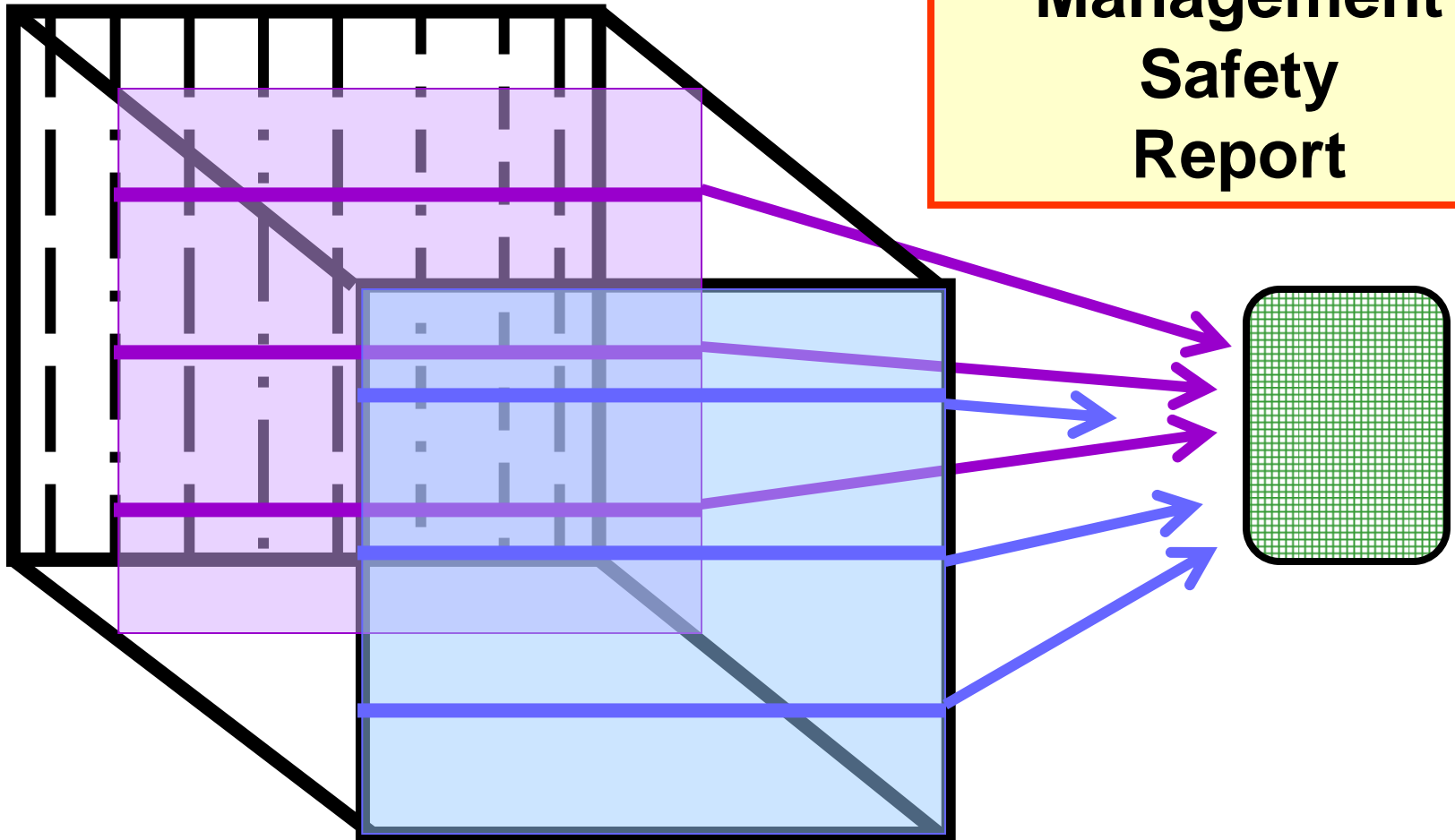


# Measurement of Safety

- **Ideally, enough safety measurements could do your annual evaluation for you.**
- **You'd have to have the right ones, and you might need 30-40 of them.**
- **Having something solid to measure, - other than injury rates - goes a long way in your evaluation.**

# Metrics

Monthly  
Management  
Safety  
Report

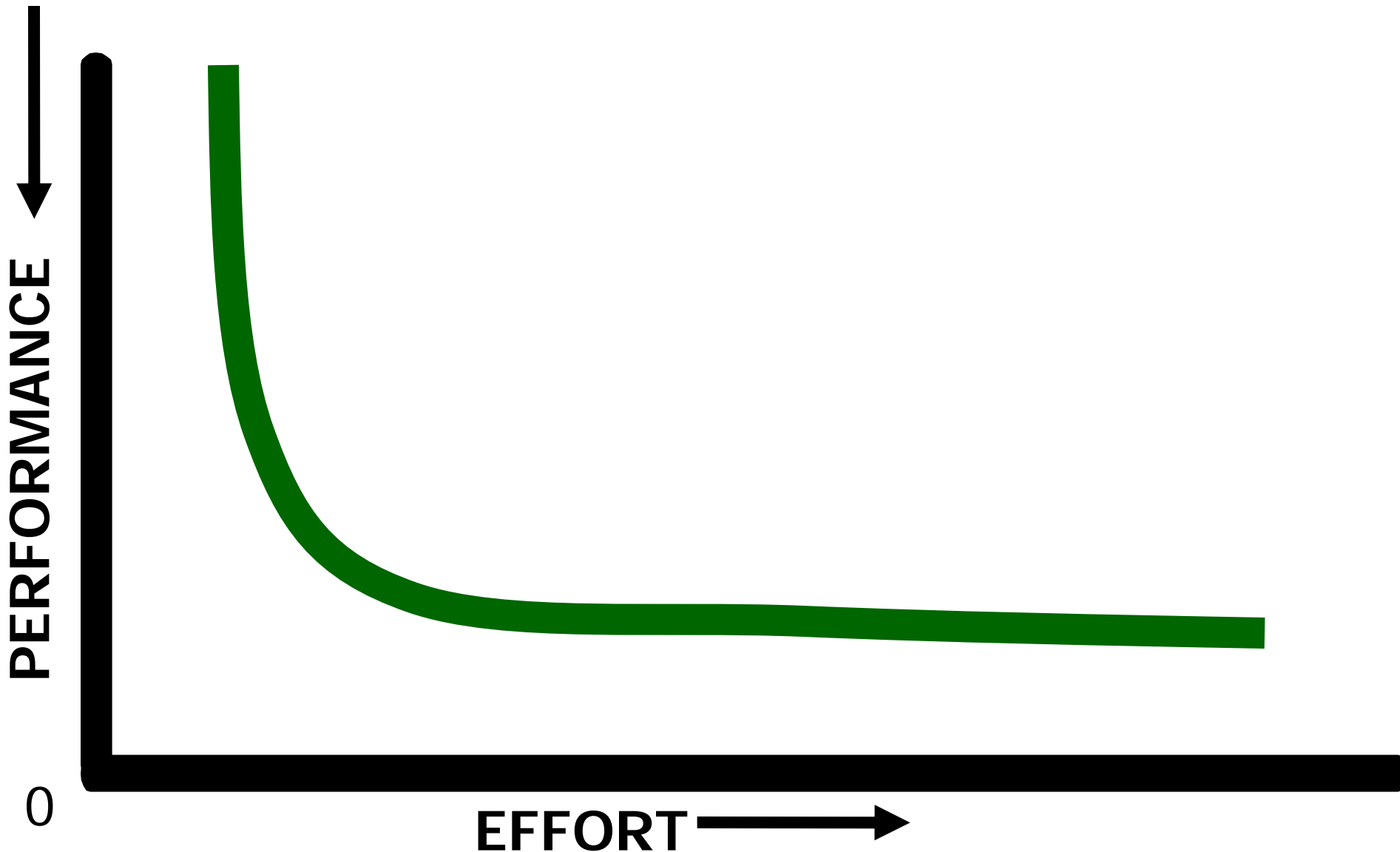


**Measure what your Safety Program DOES.**

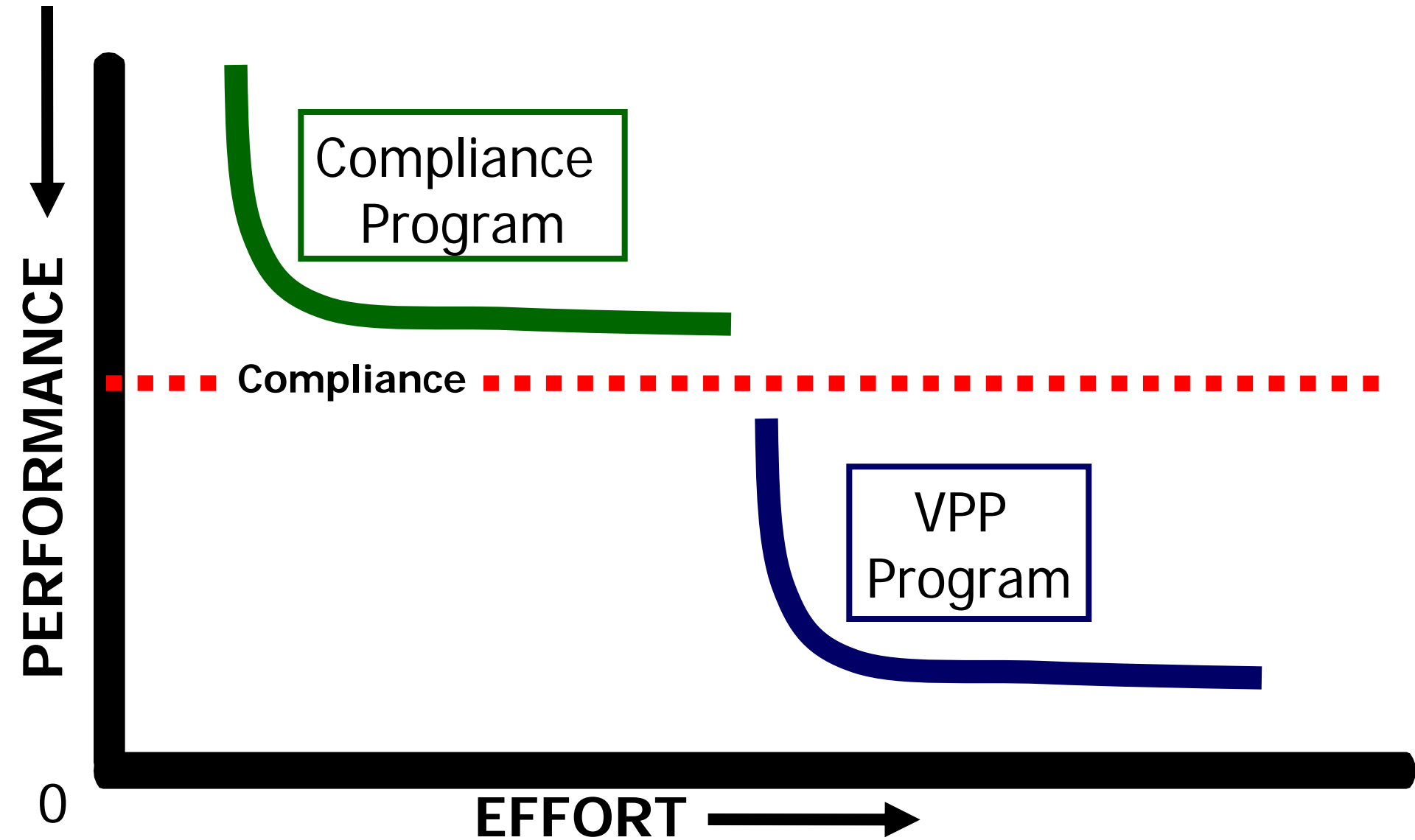
# Measuring Safety?

- **“Traditional Safety” is Compliance**
  - (Doing the minimum required to keep out of jail!)
- **VPP is about Excellence**
  - (How do you improve beyond regulatory standards?)
- **Continuous Improvement of the RIGHT Measures will Break the “Boom and Bust” cycle of Safety.**

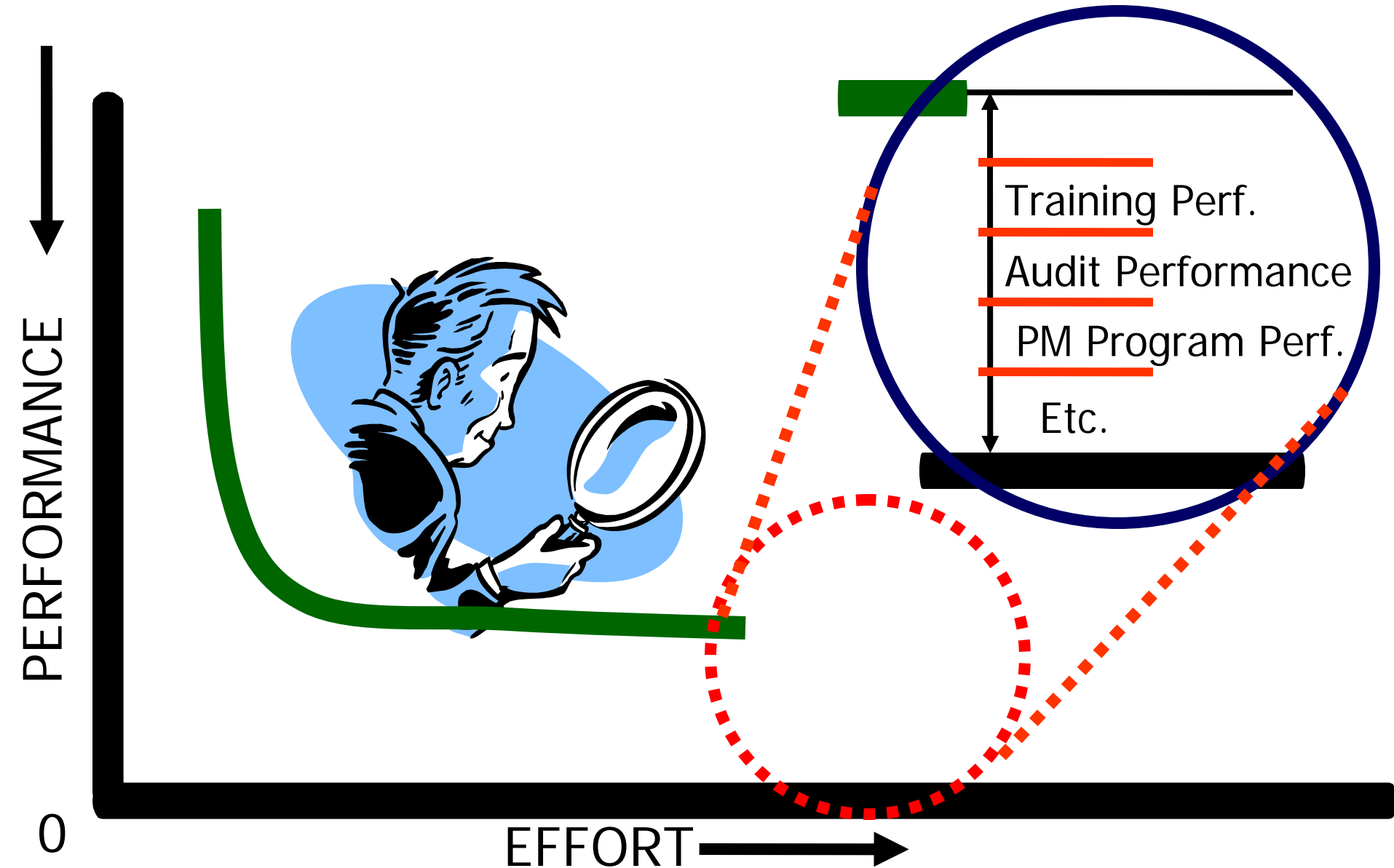
# "The Law Of Diminishing Returns"



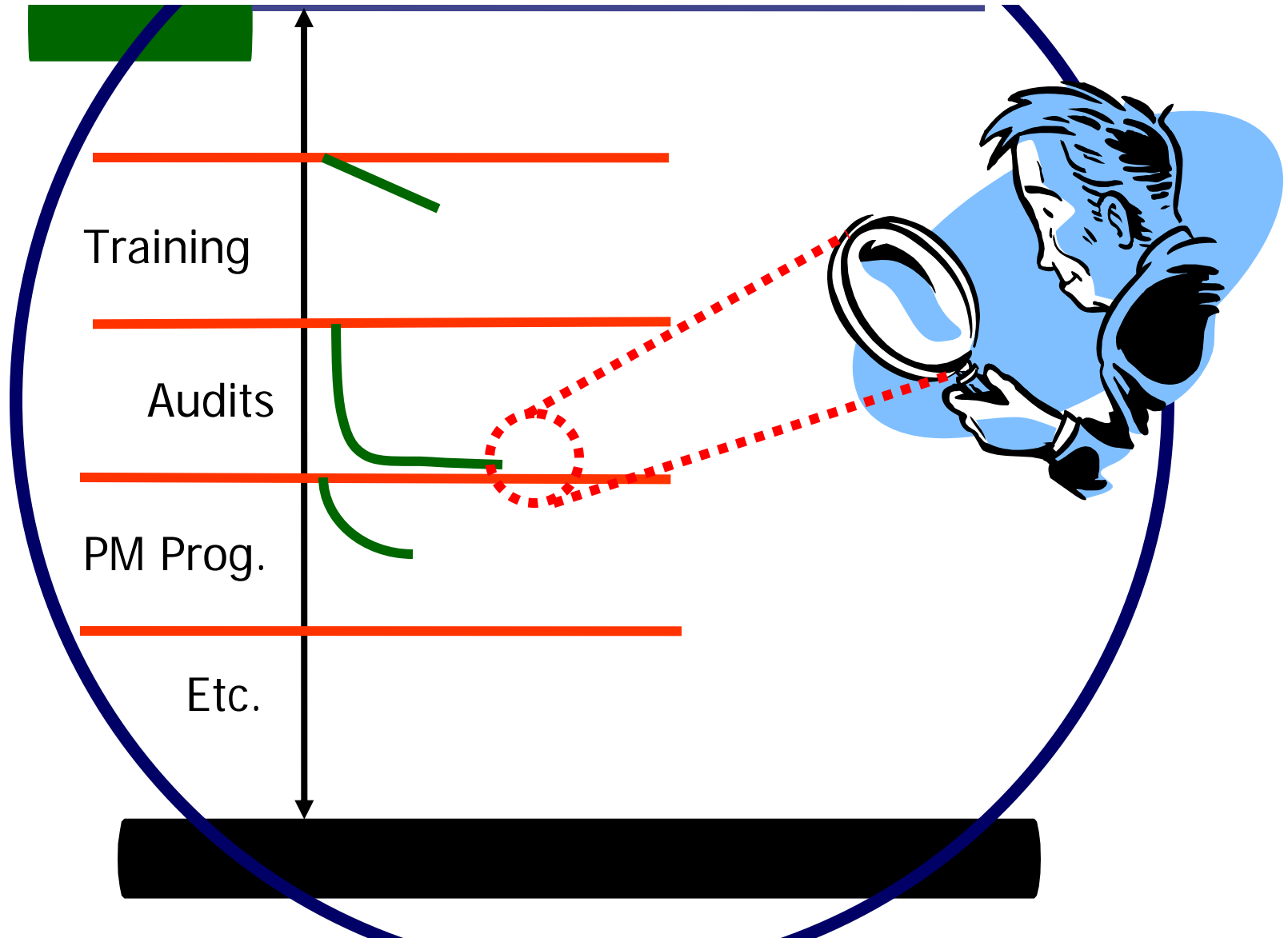
# The First Way to Break "The Law Of Diminishing Returns": Change the Paradigm



# Second Way to Break "The Law Of Diminishing Returns": Measure The Results OF YOUR "LAYER CAKE"



Remember the "The Law Of Diminishing Returns":  
Once you are ~95+%, you need to take a closer look  
and get new measurements.





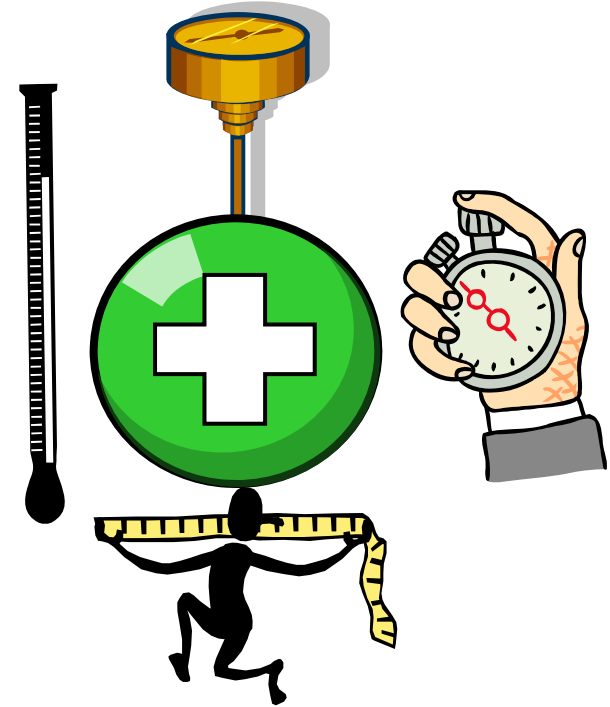
# In other words:

- That same old training list and methods won't get you lower.
- But a more comprehensive list and more effective methods will.
- Measurement tells you what is happening.

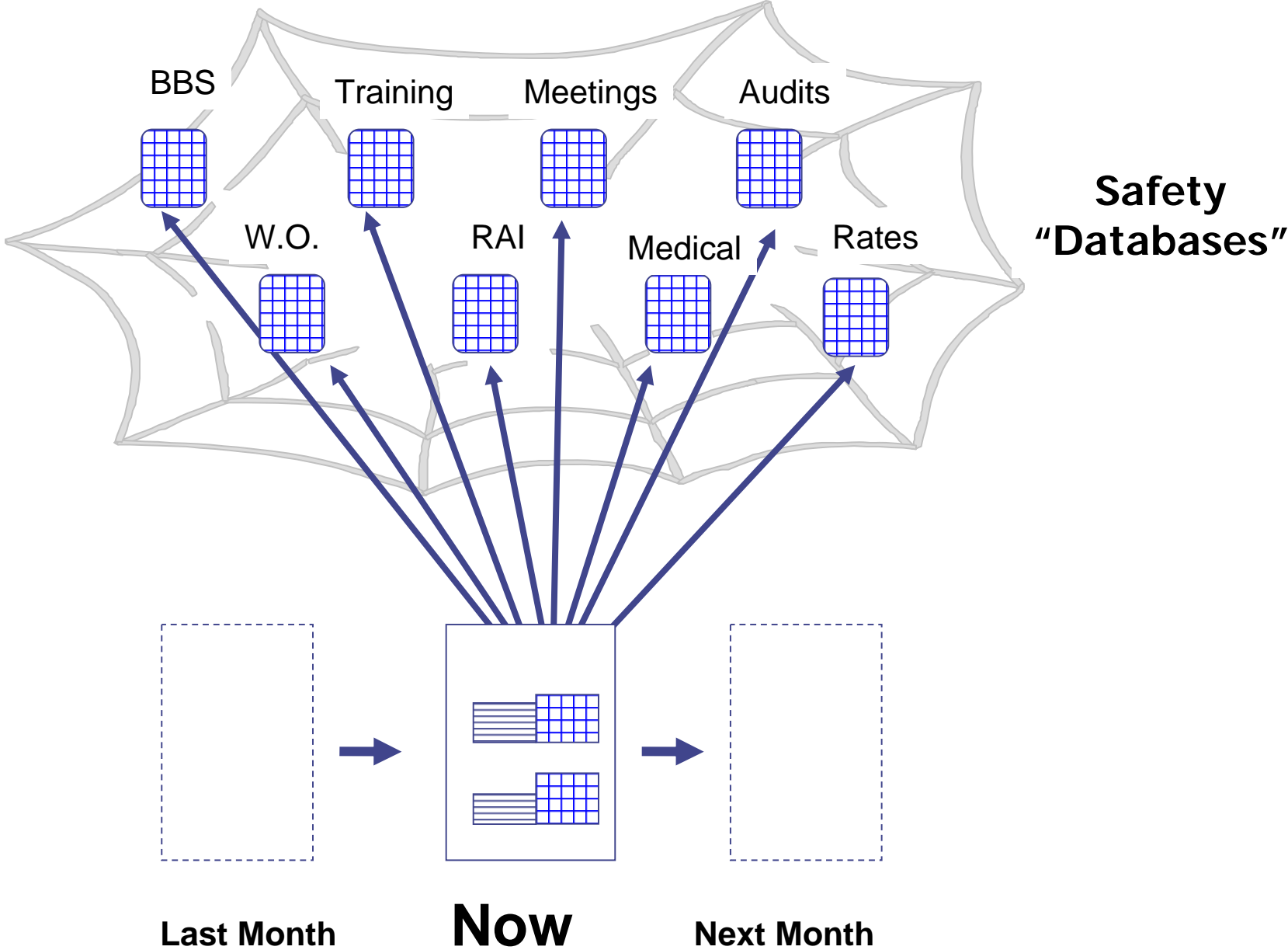
# Turn Safety into a Respected Loss Control Tool in Your Organization:

## Measure it and make Continuous Improvements

- Accounting systems aren't detailed enough to show the true financial results from Safety.
- But, Safety activity and performance can be reliably measured. "MBA types" do respect measurement, even if its not dollars.



# Monthly Safety Report- Conceptual Model



# Example Report:

**SAFETY STATISTICS:** Highlights are as follows:

## ***Injury Rates***

| <b>Oct. 2003 and YTD,<br/>vs. 2002</b> | <b>Oct.<br/>2003</b> | <i>Oct.<br/>2002</i> | <b>YTD<br/>2003</b> | <i>YTD<br/>2002</i> | <b>YEAR END 2002</b> |
|--|----------------------|----------------------|---------------------|---------------------|----------------------|
| Total Case Rate                        | <b>18.1</b>          | 25.6                 | <b>12.4</b>         | 13.9                | 10.9                 |
| OSHA Recordable Rate                   | <b>7.2</b>           | 12.8                 | <b>6.4</b>          | 5.8                 | 4.9                  |
| Lost Time Case Rate                    | <b>0</b>             | 0                    | <b>0.7</b>          | 0.0                 | 0.0                  |
| Lost Time Day Rate                     | <b>112</b>           | 0                    | <b>35.9</b>         | 0.0                 | 0.0                  |

## **Safety Training, Audits. And other Key Indicators**

| <b><i>(September Records)</i></b>   | <b>Sept.<br/>2003</b> | <i>Sept.<br/>2002</i> | <b>YTD<br/>2003</b> | <i>YTD<br/>2002</i> | <b>GOAL</b>           | <i>Year End<br/>2002</i> |
|---|-----------------------|-----------------------|---------------------|---------------------|-----------------------|--------------------------|
| Supervisors/Managers/Trainers<br>Total Attendance, %  | <b>75 %</b>           | 74                    | <b>75 %</b>         | 76                  | Requirement:<br>100 % | <b>73</b>                |
| Employee Safety Training<br>Attendance, %   | <b>71 %</b>           | 20                    | <b>70 %</b>         | 69                  | Requirement:<br>100 % | <b>70</b>                |
| % of Required Safety Training<br>Performed (Average)  | <b>135 %</b>          | 14                    | <b>85 %</b>         | 73                  | Requirement:<br>100 % | <b>79</b>                |
| % of Monthly Safety Audits<br>Performed   | <b>50 %</b>           | 55                    | <b>57 %</b>         | 37                  | Requirement:<br>100 % | <b>34</b>                |
| *'Silver Star' Audit Score  | <b>73</b>             | 77                    | <b>74</b>           | 80                  | Goal: > 80%           | <b>80</b>                |
| * % All PPE Compliance  | <b>97%</b>            | 96%                   | <b>95%</b>          | 97                  | Requirement:<br>100 % | <b>97</b>                |
| "Employee Active Participation Rate", %<br>(Those who Directly Participate In The Safety Program) | <b>7 %</b>            | 5                     | <b>13 %</b>         | 13                  | Goal: > 10%           | <b>11</b>                |

# Example Report:

Details are available by "clicking" on the hyperlinked numbers ([in blue](#)).

## PROACTIVE MEASURES

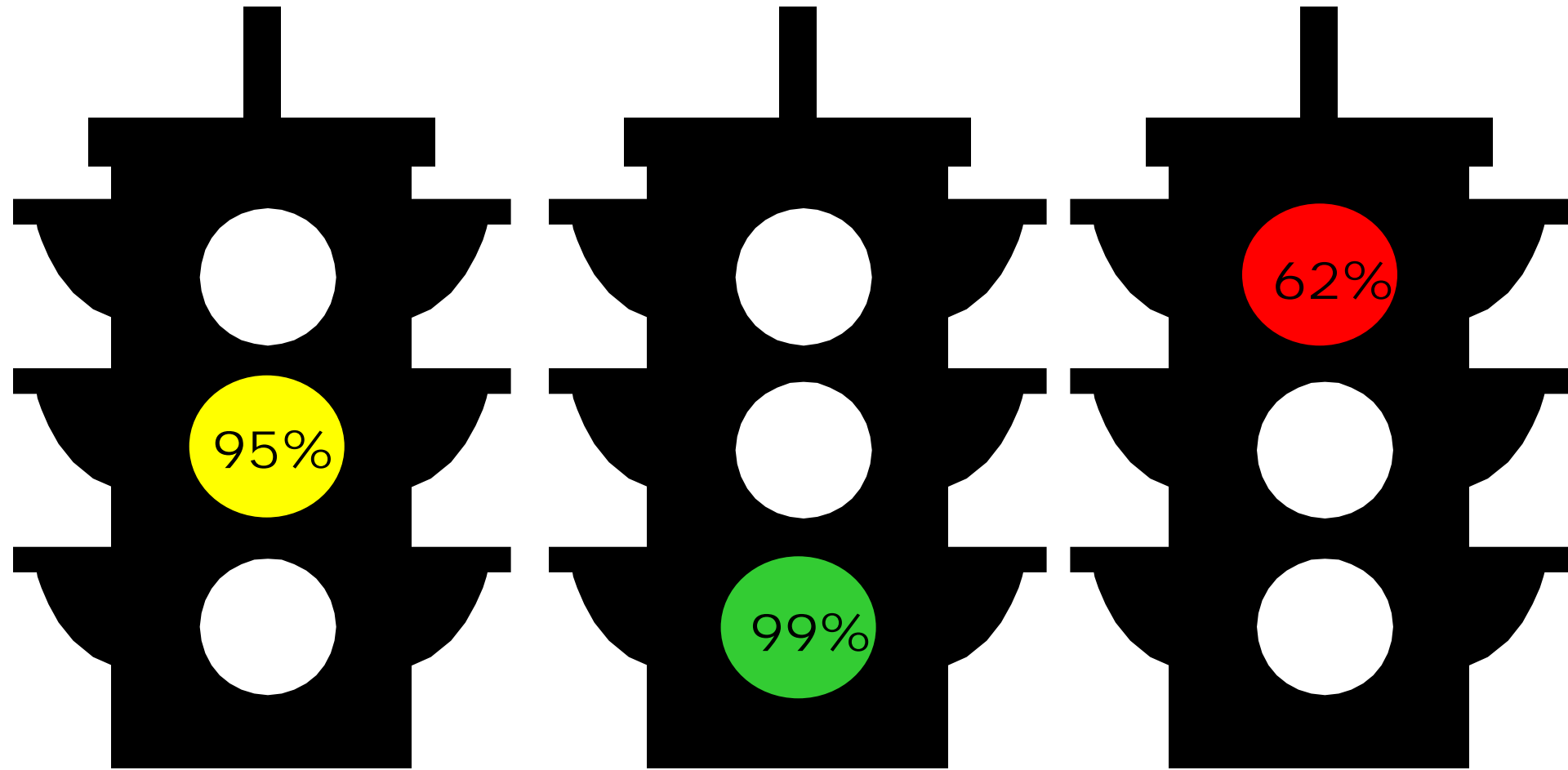
|   |                        | August 2004          |                     | 2004 YTD            |                      | 2003 YTD    |      | Target |      |
|---|------------------------|----------------------|---------------------|---------------------|----------------------|-------------|------|--------|------|
| Change in Number of BBS Observers         |                        | <a href="#">91%</a>  |                     | <a href="#">70%</a> |                      | 0%          |      | 5%     |      |
| Number of Observers                       | Number of Observations | <a href="#">145</a>  | <a href="#">384</a> | <a href="#">922</a> | <a href="#">3531</a> | 392         | 1076 | 300    | 1200 |
| Mandatory Safety Training Completed       |                        | <a href="#">96%</a>  |                     | <a href="#">94%</a> |                      | 98.6% (Y-E) |      | 99%    |      |
| Safety Meeting Attendance (Operations), % |                        | <a href="#">37</a>   |                     | <a href="#">58</a>  |                      | 66%         |      | 85%    |      |
| EH & S Audits / Inspections Done, %       |                        | <a href="#">36</a>   |                     | <a href="#">87</a>  |                      | 93%         |      | 100%   |      |
| Safety Work Orders Closed                 |                        | <a href="#">100%</a> |                     | <a href="#">66%</a> |                      | 57%         |      | 65%    |      |
| PHA Recommended Action Items (#)          |                        | <a href="#">90</a>   |                     | <a href="#">69</a>  |                      | 103         |      | 65     |      |
| Open Incident Reports (#)                 |                        | <a href="#">17</a>   |                     | <a href="#">34</a>  |                      | 92          |      | 55     |      |
| Medical Surveillance Completed            |                        | <a href="#">88%</a>  |                     | <a href="#">92%</a> |                      | 99% (Y-E)   |      | 100%   |      |

# Example Report, Cont'd:

## RESULTS

|  |           |          |          |                         | Contractors |          |          |                         |
|--|-----------|----------|----------|-------------------------|-------------|----------|----------|-------------------------|
|  | Aug. 2004 | 2004 YTD | 2003 YTD | 12 - Month Rolling Avg. | Aug. 2004   | 2004 YTD | 2003 YTD | 12 - Month Rolling Avg. |
| <b>First Aid Injury Rate (FAIR)</b>  | 2.01      | 2.69     | 1.59     | 3.30                    | 0.00        | 5.19     | 10.3     | 2.06                    |
| <b>Total Recordable Incident Rate (TRIR)</b>                                   | 0.00      | 0.22     | 1.06     | 0.31                    | 0.00        | 0.00     | 0.00     | 1.14                    |
| <b>Lost Time Incident Rate (LTIR)</b>  | 0.00      | 0.00     | 0.53     | 0.00                    | 0.00        | 0.00     | 0.00     | 0.00                    |
| <b>Non-Injury Incidents Rate</b><br>(Near Hits, Fires, Equipment Damage, etc.) | 10.0      | 18.2     | 13.2     | 15.3                    | 9.9         | 5.0      | 4.1      | 7.3                     |

# Present Measurements in your site's cultural style:



PPE

Training

Audits

# Having something solid to measure, -other than injury rates – is a way to do MONTHLY Continuous Measurable Improvement Process



# Annual evaluations are an ANNUAL Continuous Measurable Improvement Process



# If your site goal was to eat more ice cream next year:



- **UNDERSTANDABLE:** By all
- **CERTAINTY:** People know how to eat
- **UNKNOWN:** How much did we eat last year?
- **UNLIKELY:** Any estimates or reports will be accurate – too many variables, too many personal decisions and subjective judgments  
– **CONFLICTING PERSONAL GOALS!**



# But: If Goal is to reduce Accident Rate next year:

- **UNDERSTOOD:** By few
- **UNKNOWN :** People do not know how to “reduce accidents”
- **UNKNOWN:** What the rates last year and next year truly are.
- Any estimates or reports will not be accurate – too many variables, too many personal decisions and subjective judgments –  
**CONFLICTING PERSONAL GOALS!**



# Objectivity When Doing Your Annual Evaluation

- The more objective, the more useful.
- Can you critically judge your own performance?
- Ways to achieve Objectivity:
  - **Contractors / Consultants / Specialists**
  - **“Corporate H&S” Group.**
  - **Teams from other facilities in your organization**
  - **Joint Employee/ Management Safety Committees.**
  - **Using Measurable Standards of Performance – not subjective judgments**



# What is the “Standard”?

## The Benchmark?

- OSHA On-site evaluation for each component:
  - Adequate for VPP? Yes / No
- GRADING SYSTEMS:
  - A= “World Class” to F= Below Compliance
  - **Percentiles are easily understood!!!!!!!!!!!!!!!!!!!!**
  - What were your goals (if any) from last year?
- How important is this part of your program?



# What is “High Performance”?

## What is “World Class”?

- Innovative, self- sustaining, systematic, measurable, with continuous improvement
- Deeply focused on Employee and Management Involvement
- Requires less organization (or Safety Group) resources.
- Generates excitement, “Esprit De Corp”
- Is an actual competitive advantage



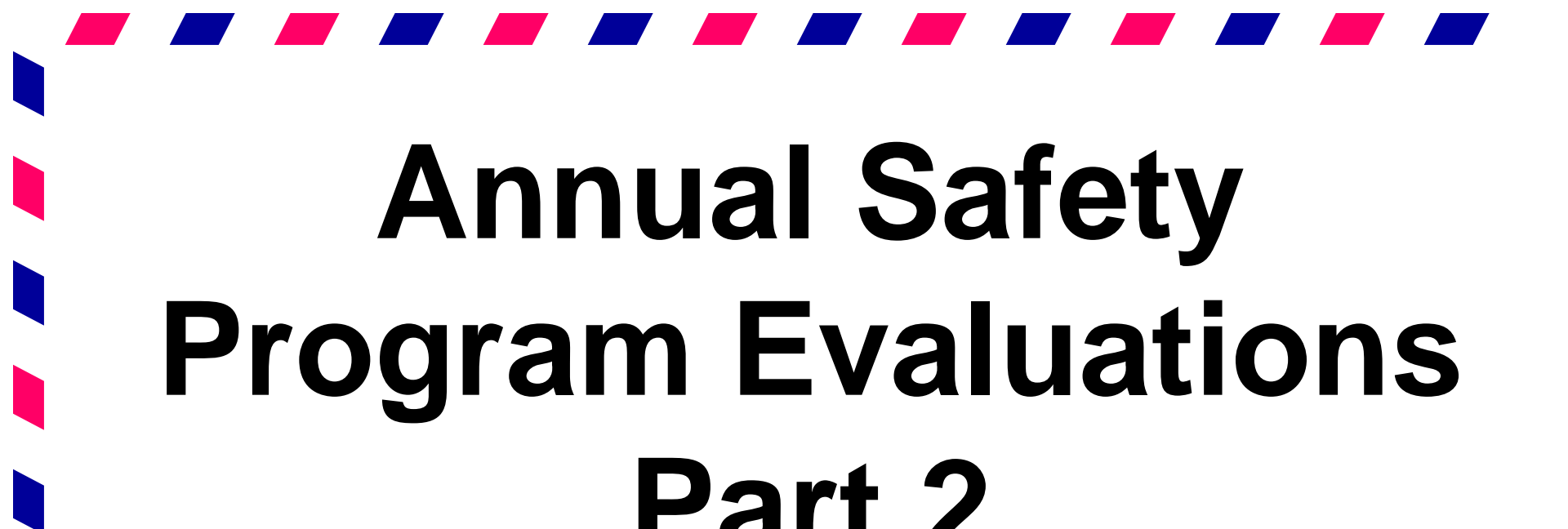
# Drop the “Compliance Mindset!”

- Once you reach VPP, Compliance is a given
- Working on Compliance – for VPP- is a huge waste of time – you already have it.
- Now you need to focus on going beyond it, maybe far beyond it.



# Innovation, Reaching for Higher Performance – Takes Time & Energy. Where can YOU get that?

- My Goals as a Safety Professional:
  - Automate & streamline every “compliance type” function
  - Eliminate unnecessary activities
  - Move functions to more appropriate parts of the organization.
  - Move the Safety Program out of the Safety Office and into the organization.
  - Get double/triple/quadruple duty programs-activities
  - Create a deep body of safety knowledge in the organization.
- Use the time and leverage from these to improve, innovate



# **Annual Safety Program Evaluations Part 2**

**(How To Do Them)**

By Michael Norder,  
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# Annual Evaluations – Part 1

- Why ?
- What it is and isn't
- Annual Evaluations - “Keeping The Flame Alive”
- Metrics – Measuring Safety
- Monthly Reports leading to Annual Reports
- Objectivity
- What is the “Standard”? The Benchmark?
- How to you get time to do this?
- **DROP THE “COMPLIANCE MIND SET” !**



# Annual Evaluations – Part 2

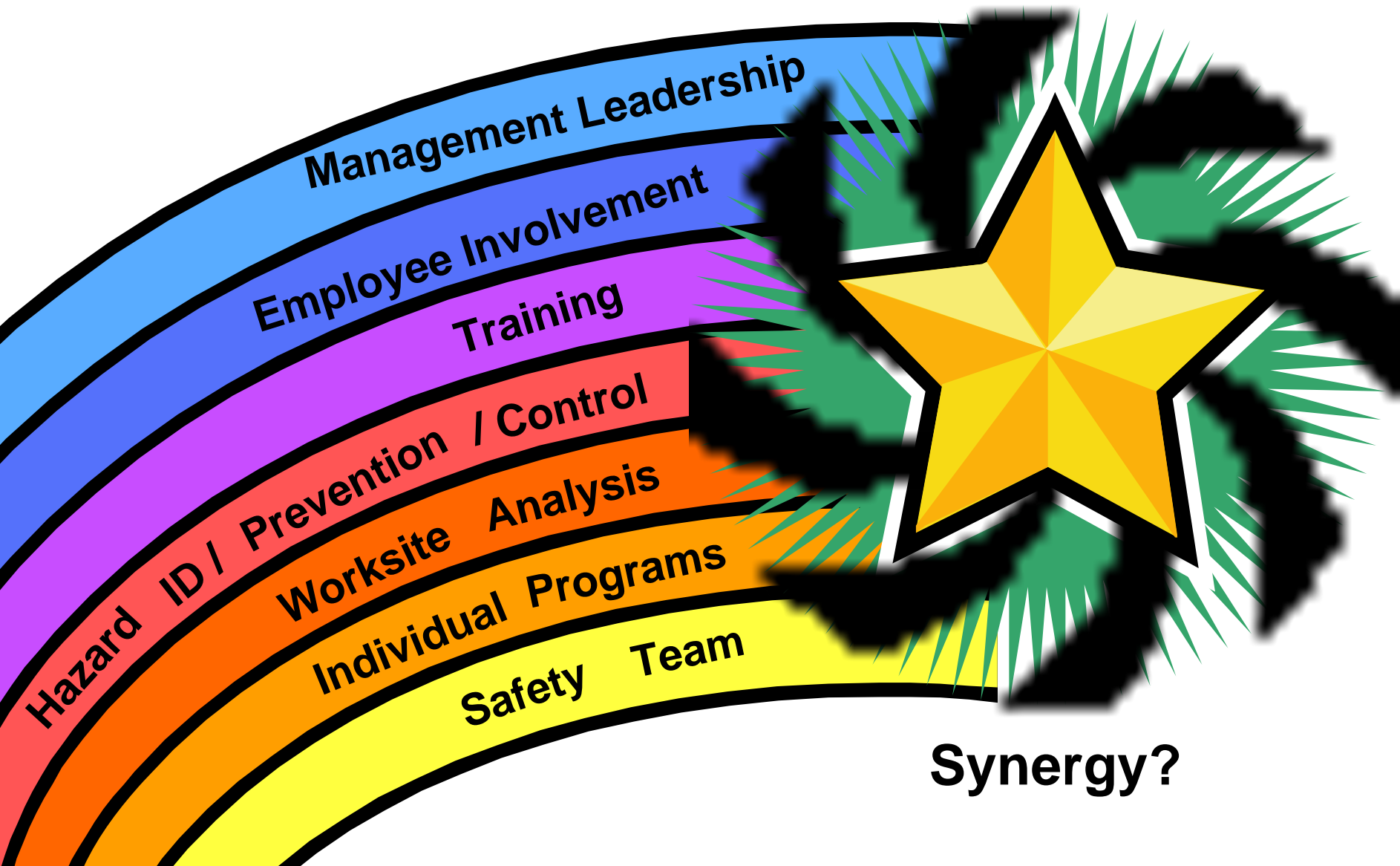
- What & How Do You Evaluate?
- How Injury Analysis and Audit Analysis can assist your evaluation of programs
- Examples:
  - How To Evaluate Training
  - How To Evaluate Employee Involvement
  - How To Evaluate Management Commitment
- **The 3 most powerful Safety Activities developed at Gillette Papermate**



# What Do You Evaluate?

- Each component of your Safety Program- the “Layer Cake”
- Concentrate on the important aspects of VPP:
  - **Management Commitment / Leadership**
  - **Employee Involvement**
  - **Training**
  - **Hazard ID / Prevention / Control**
  - **Worksite Analysis**
- Performance of each, Interrelation of the Whole
- How your program fits into your organization culture and meets / influences it’s goals
- Yourself ?!

# What Do You Evaluate?



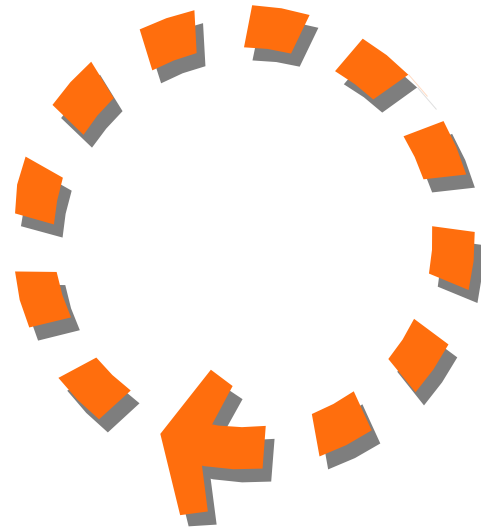


# How Do You Evaluate Programs?

- **Did you meet your goals for this program?**
- **What does your Injury /Audit /*ANALYSIS* (not the rate!) tell you about this program?**
- **Is this Program's performance affected by / or affecting other programs?**
- **How much of your time & resources is this program taking? Is that investment commensurate with the Risk ?**

# What Do You Do With Your Evaluation?

- Choose which programs to improve – get the most bang for your buck.
- Establish realistic (Measurable!) goals for improvement in 1 year.
- Improve your programs
- Re-evaluate results next year.





# **What type of improvements may be needed?**

- **Keep the same?**
- **Evolve? - Linear? – Quantum Leaps?**
- **Change to something else? (Structural Changes – Paradigm Shifts?)**
- **The entire program?**
- **The “rules”/standards? How they are communicated?**
- **The implementation or “enforcement”?**
- **The training?**



# Example:

**How Injury Analysis  
and Audit Analysis can  
assist your evaluation  
of programs?**



# What if your rates are too low to give you enough information to analyze?

- Add multiple years together ( trending suffers, but deep problems can be seen)
- Include contractor injuries,
- Add EVERYTHING! – Emergencies, Incidents, Non-industrial, Non work related, Near Hits,
- FIRST AID INJURIES = Gold!!!!!!!

# What does the following tell you?

## • INJURY ANALYSIS:

- Significant Delays in Reporting
- Injury concentrations in both Place and Time
- 10% of all were Strain/Sprain, 45% of Cost
- 2 were Office Repetitive Motion, minimal Cost
- 5 Back Injuries, 35% of Cost
- 7 Slip and Falls, 15% of Cost
- 25 Hand Injuries, All FA
- 1 Machine Related
- 1 Near Hit Electrical

## • AUDIT ANALYSIS:

- 30% of findings electrically related
- 15% Machine Related
- Major problems with LO/TO/Try
- 20% Housekeeping
- 10% Fire Life Safety
- PPE virtually perfect
- No HazMat problems at all.



# What does that tell you? - I

- PPE, Haz Mat Programs probably OK
- Injury / Incident Notification needs major boost
- Office Ergonomics- OK, “Field” Ergo & Backs-Lifting needs a major improvement.
- A Slip, Trip & Fall Prevention Program & Training is called for



# What does that tell you? -II

- The Audit Electrical, LOTO, and Machine Findings with the 1 Near-Hit Electrical and 1 Machine related injury; TELLS YOU:
- Major changes needed in Machine Guarding, Electrical Safety, LO/TO/Try Programs, and Preventive Maintenance Programs
- Were the FA's actually "near hits" for something worse?

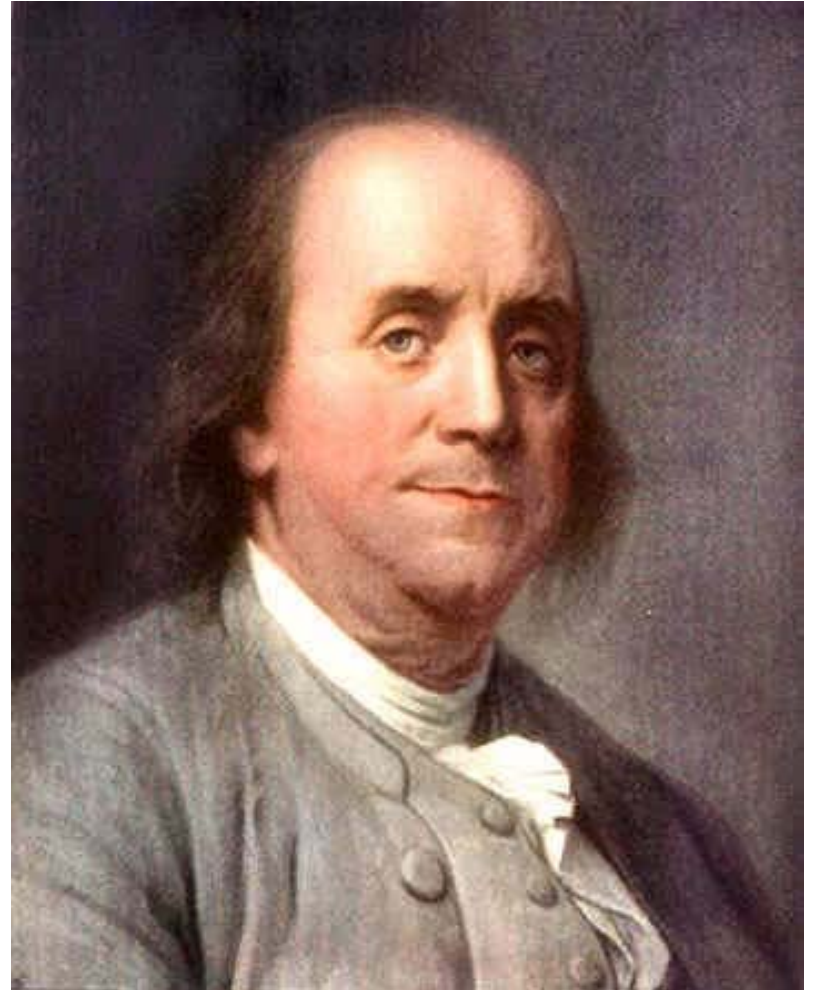


# What if you aren't sure?

- **Employee interviews**
- **Look at training tests**
- **Focused audits**
- **Test it out!**

# How well did YOU do?

- Did you make your goals?
- How much were you “blind-sided” by actual events?
- Sufficient resources? Are you using them to the best of your ability?





# Example Evaluation: Training - I

- **The Critical Part:**  
**Did employees carry their training into their work habits?**
- **When is the last time you looked at your training grid?**
- **Are you training beyond compliance to meet your actual needs?**



# **Simplistic way of looking at Training is a one-shot “compliance” list:**

**“All Employees will get:**

**Hazardous Materials Communication,  
IIPP, PPE, Etc.”**

**= Easy to say you are 100%**

**But the measurement is not real, and  
actual training needs may be poorly  
addressed.**

# EXAMPLE TRAINING “GRID”

| Expiration Dates of Training: |         |           |               |          |                |              |               |
|-------------------------------|---------|-----------|---------------|----------|----------------|--------------|---------------|
| Job Title                     | Haz Com | PPE - Eye | PPE - Hearing | PPE - RP | Welding Safety | Ergo- Genral | Ergo - Office |
| Accountant                    | 1/7/09  | 3/6/07    |               |          |                | 4/5/07       | 5/7/05        |
| Lab Tech                      | 1/7/10  | 9/1/09    |               | 9/2/09   |                | Open         |               |
| Welder                        | 12/7/09 | 9/1/09    | 7/14/09       | 9/2/09   | 11/12/09       | 4/5/06       |               |
|                               |         |           |               |          |                |              |               |

= “Hard to achieve 100%”,

But measurement is accurate, and training needs are being addressed.

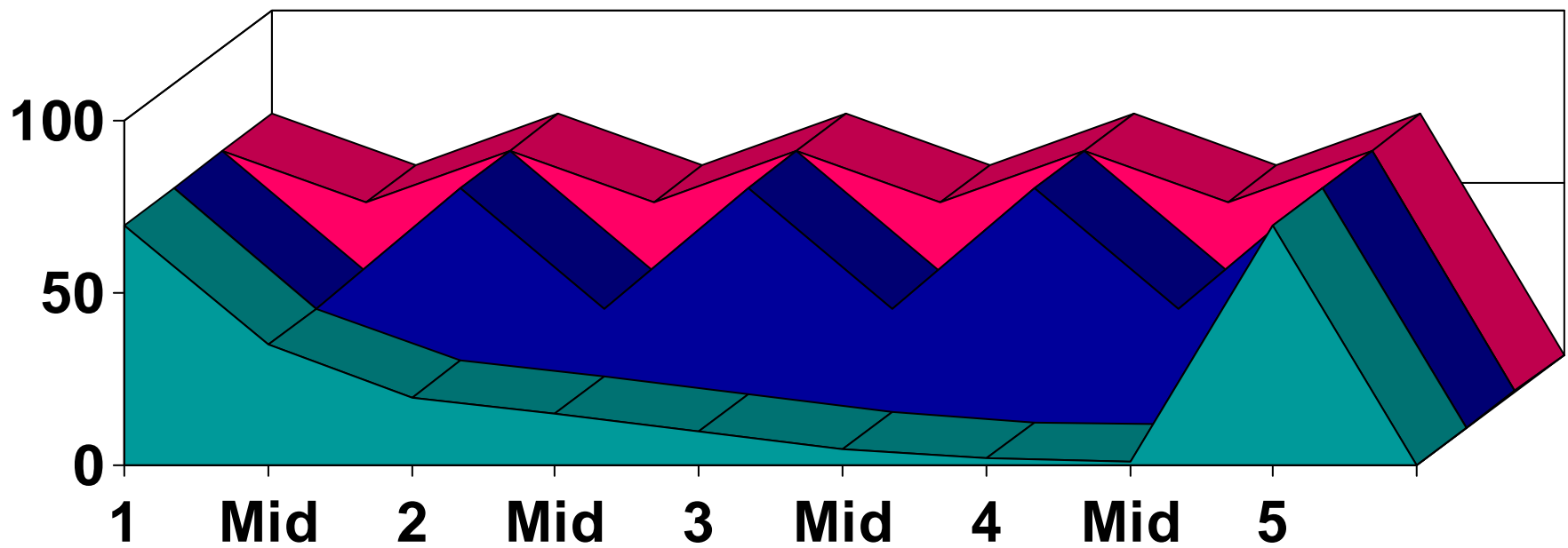


# Example Evaluation: Training – II

- Length of training classes? Are they interesting and memorable?
- Is material practical and applicable to jobs? Are there exercises? Are the tests HARD – and do they change?
- Training needs to be changed and improved constantly. People get bored.

# Example Knowledge Retention with Different Training Cycles

■ Five Year Cycle ■ One Year Cycle ■ One Year W/ Interval Boost





## Example IMPROVEMENT: Training - I

- **RESULTS OF EVALUATION:**

Average age of training curriculum is 4 years old, Range is 1-6 years. Some classes only given occasionally.

- **IMPROVEMENT GOAL:**

Update enough programs so the average age is 2 years old.



# Example Improvement: Training - II

- **RESULTS OF EVALUATION:**  
Incident rates are low, but unchanging. No clear significant pattern or problem.
- **IMPROVEMENT GOAL 1:**  
Re-evaluate entire Training Grid. Change to more frequent training.
- **IMPROVEMENT GOAL 2:**  
Improve quality by changing delivery methods, materials and adding exercises & “Hard” tests to 8 subjects.



# Example Evaluation- Employee Involvement - 1

- The Critical part: Is Involvement REAL?
- Is their involvement functioning well? – Do they need more coaching, Technical training, communication skills?
- Do employees feel their input is valued?
- Are employees actually doing document review/creation? – Identify it.
- Are employee involved with training? How?



# Example Evaluation- Employee Involvement - 2

- Are hazards being turned in? Are they “solid”?
- Ditto – Suggestions?
- **Employee Active Participation Rate**
- **The Silver Broom Housekeeping Audit © & Gold Star Safety Audit ©**
- **Octuple Duty Activity!!!!!!!**



# The Silver Broom<sup>©</sup>

- A joint ESCM / Mgmt Effort using a standard form that makes scoring easy
- A surprise Housekeeping Audit
- Auditors are trained in application of Simple, Objective / Repeatable Visual & Written HK Standards
- Teams fan out, never audit your own area, average scores.
- Fast – 60 min max, Deliver results same day at a public meeting
- Departments above “X” score get the silver broom & Certificate to keep – Competitive Spirit
- Scores become accurate & part of culture – they were added to supervisors/Management annual evaluations!



# The Gold Star ©

- Evolved from “inherent “unfairness” in Silver broom – and diminishing returns once a high performance reached
- Similar in application to Silver broom, but on 10 selected Safety areas.
- A mathematical “handicap” scoring system made it fair to any kind/size department



# Example Evaluation: Management Commitment -1

- The critical part: Is it real? – The acid test.
- Is safety given a real, solid effect on hiring & promotion decisions?
- Does management supply the people & resources needed for the Employee Involvement?
- Split off similar measures used with employees



# Example Evaluation: Management Commitment -2

- Does management honestly evaluate and implement suggestions? Correct Hazards?
- **SCRM- Steering Committee Review Meeting.**
- **Train the Trainer!**
- **= 12-15 fold duty activities!**



# SCRM

- High level Board / Team formally critiques all incidents/injuries/investigations.
- Managers required to present Supervisors Investigations to Board
- Board critiques Investigation, Interviews, Root Cause Analysis, and corrective actions
- Corrective actions must be shown to the board after accepted
- **Incredibly powerful! Eventually the most influential team on site.**



# Train the Trainer

- Applied to Safety Training – Supervisors and Managers must do training for their people.
- Requires very good training materials – constantly updated & improved
- Supes & Mgrs trained by Safety Monthly
- **Colossal affect:** a) Think about this training from the employees view, b) Think about this from the Supes Pt of view!



## What Do You Do With This Information (From Your Evaluation) in Your Annual Report?

- DESCRIBE: Actual Performance/Activities of each Program (or Element) in previous year.
- DESCRIBE: Effectiveness (Your evaluation)
- DESCRIBE: Future Actions for Improvement:
  - Choose which programs to improve – get the most bang for your buck.
  - Establish realistic (Measurable!) goals for improvement in 1 year.
  - Improve your programs
  - Re-evaluate results next year!

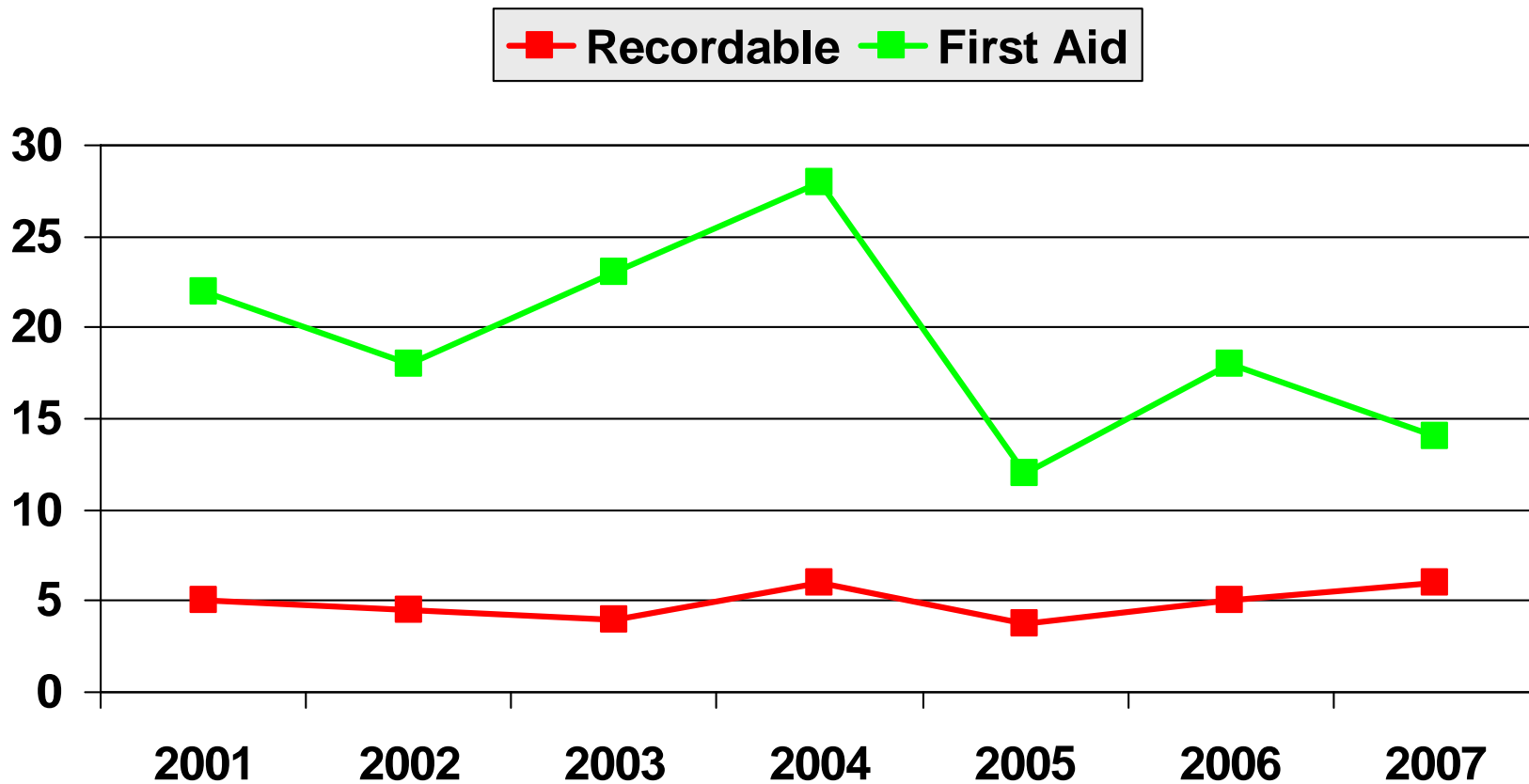


**Mature Safety  
Programs often see  
injury rate patterns like  
the following.**

**What do they mean?**

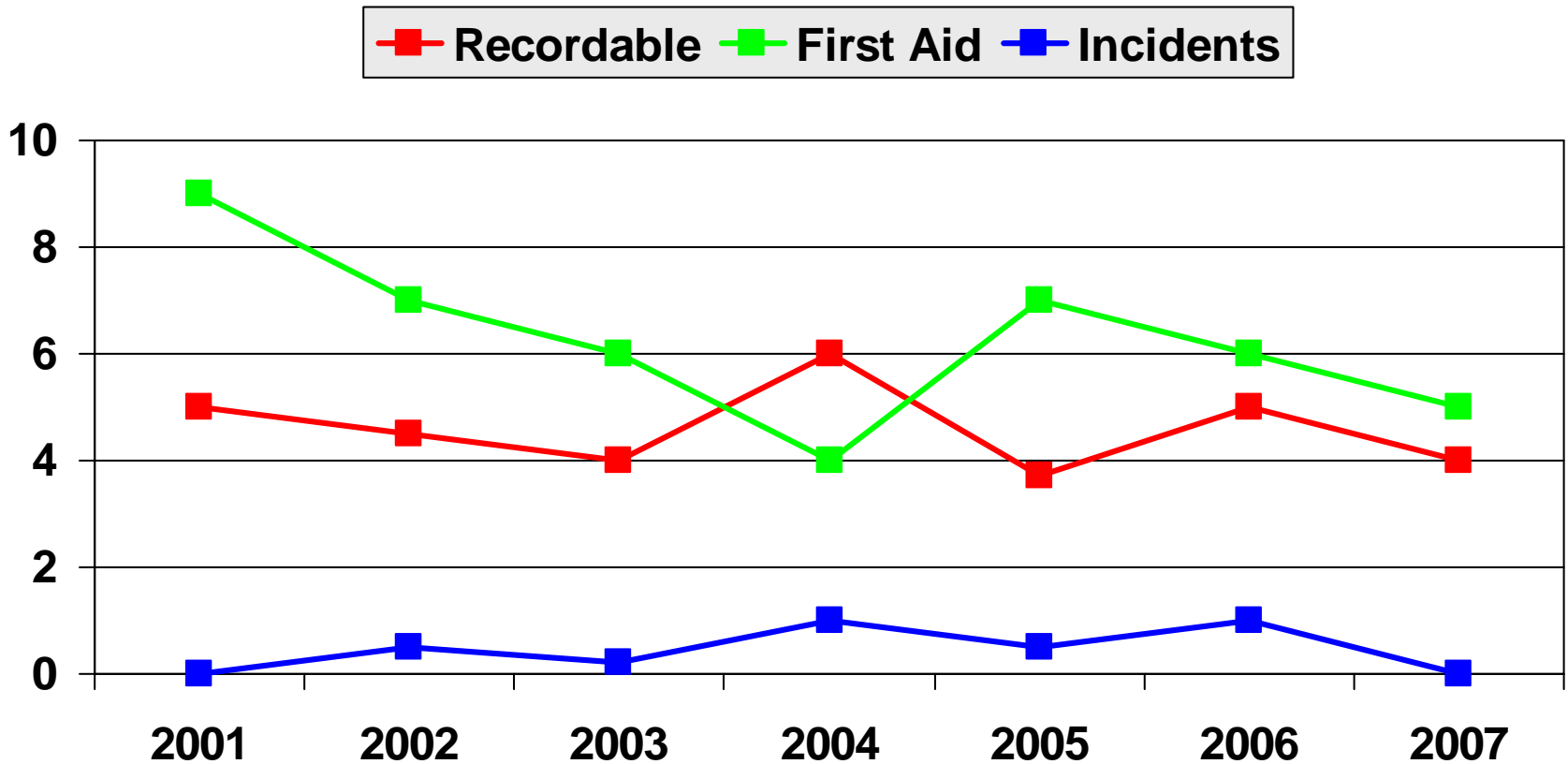
**Injury Rates are low to moderate, but relatively unchanging over time.**

**What could this indicate?**

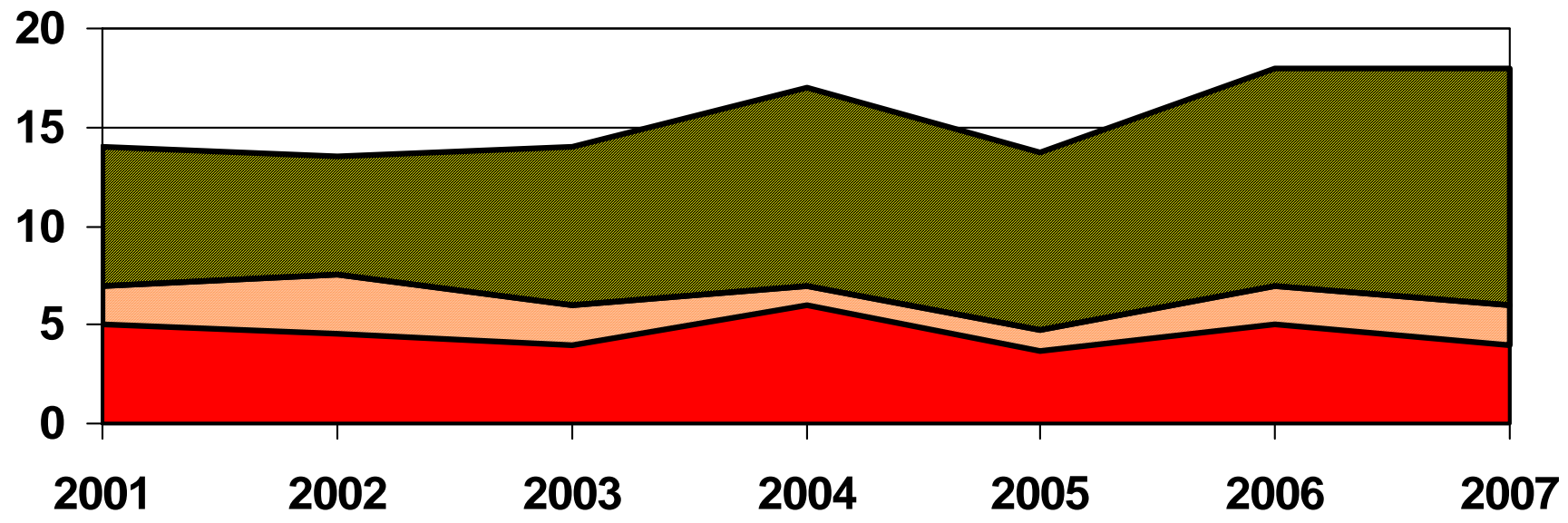


**Recordable Rate is low, FA Rate is about the same, Incidents and Near – Hits are almost none.**

**What does this type of pattern indicate?**

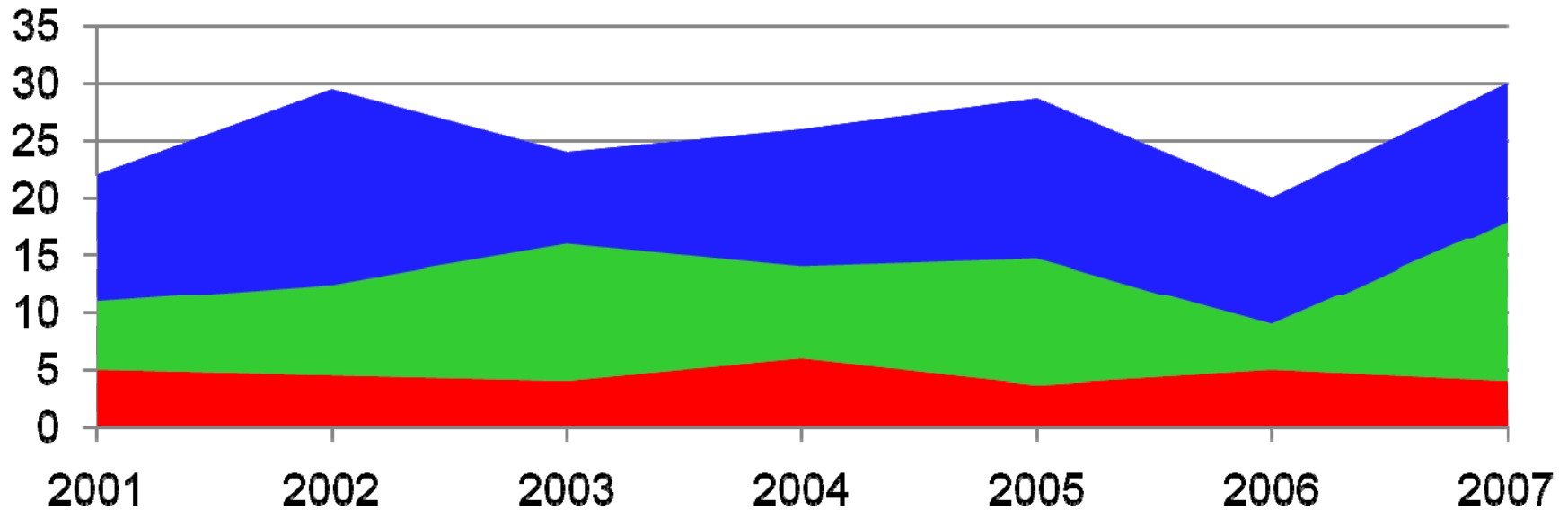


**For a *NON-VPP* Site, this is might  
be the real story:**



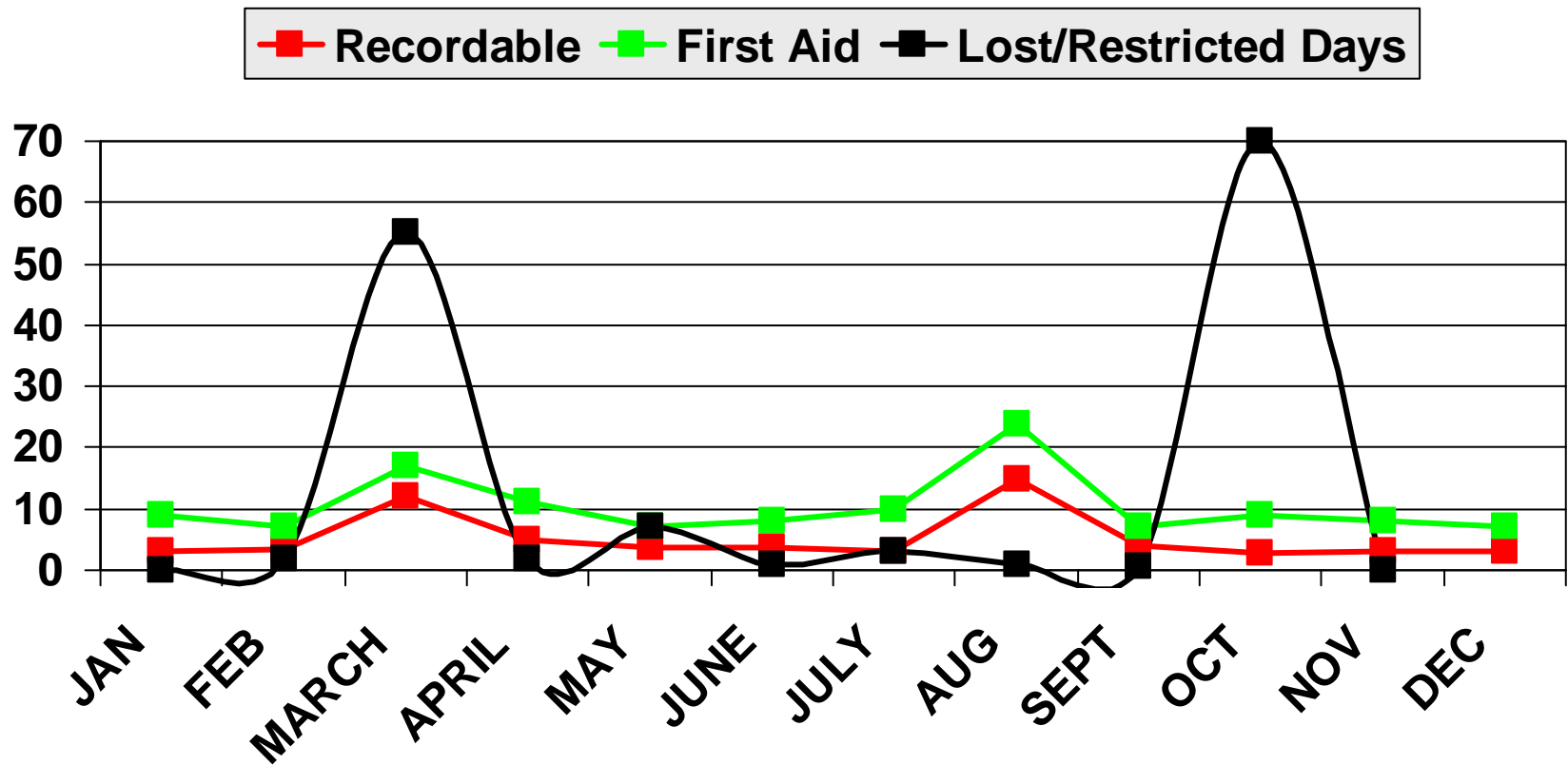
# For A VPP site, this is may be happening:

- Recordables Reported
- First Aid Injuries Under-reported
- Near Hits Under Reported



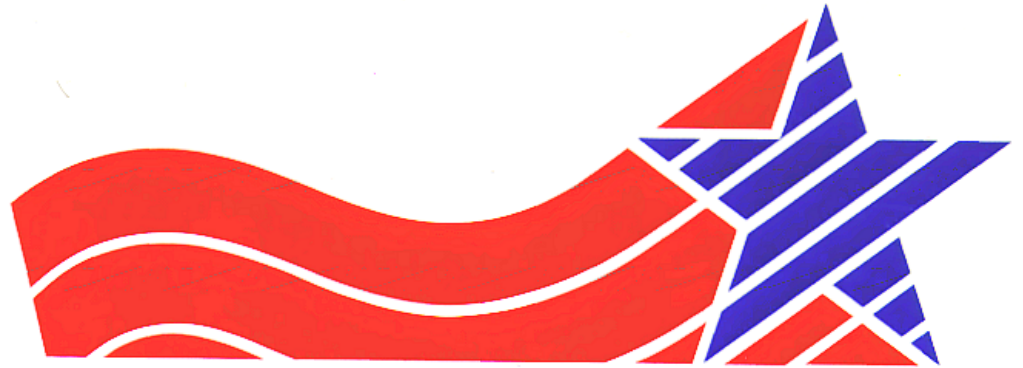
**Injury Rates are low to moderate, but occasionally serious injuries produce sharp “spikes” in rate.**

**What could this indicate?**





# Clarification & Discussion



How to Do Annual Safety Program Evaluations, VPPPA Region 9,  
2010 Newport Beach Meeting, by Michael Norder, Occupational Safety  
Consultant (310) 683-9907 [safetyNhealthNorder@gmail.com](mailto:safetyNhealthNorder@gmail.com)