



NSRP

Behavior Based Safety Programs

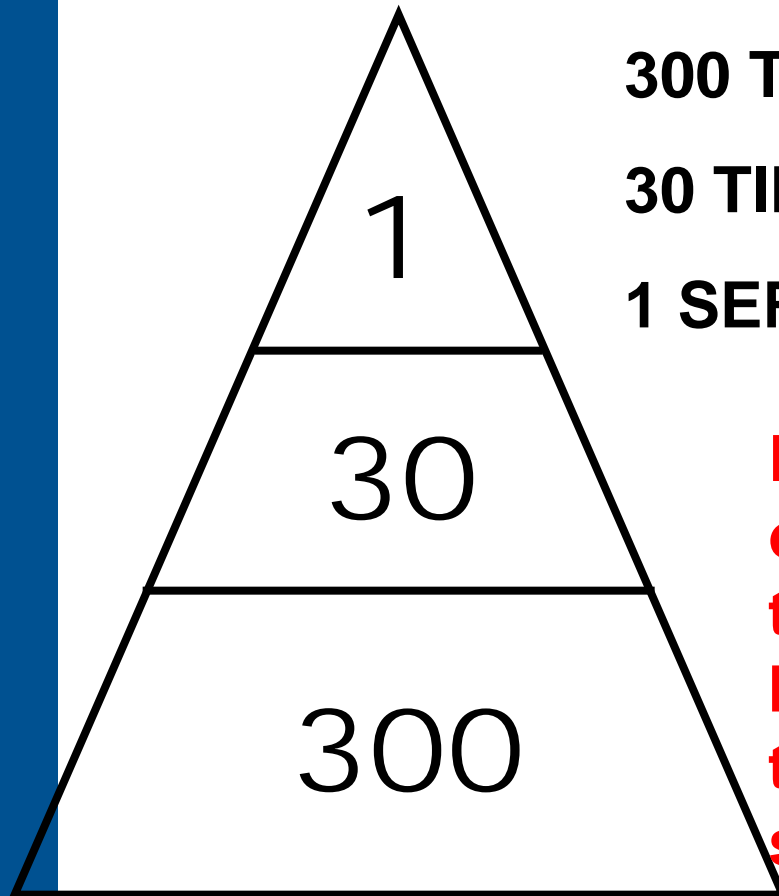
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BEHAVIOR BASED SAFETY PRINCIPLES



- An injury is usually not caused by the first occurrence of the unsafe act. There is evidence of unsafe acts before injuries
- Behavior is the primary cause of accidents (96%)
- Consequences motivate behavior
- What gets measured gets done
- Feedback is essential to improvement

HIENRICH TRIANGLE



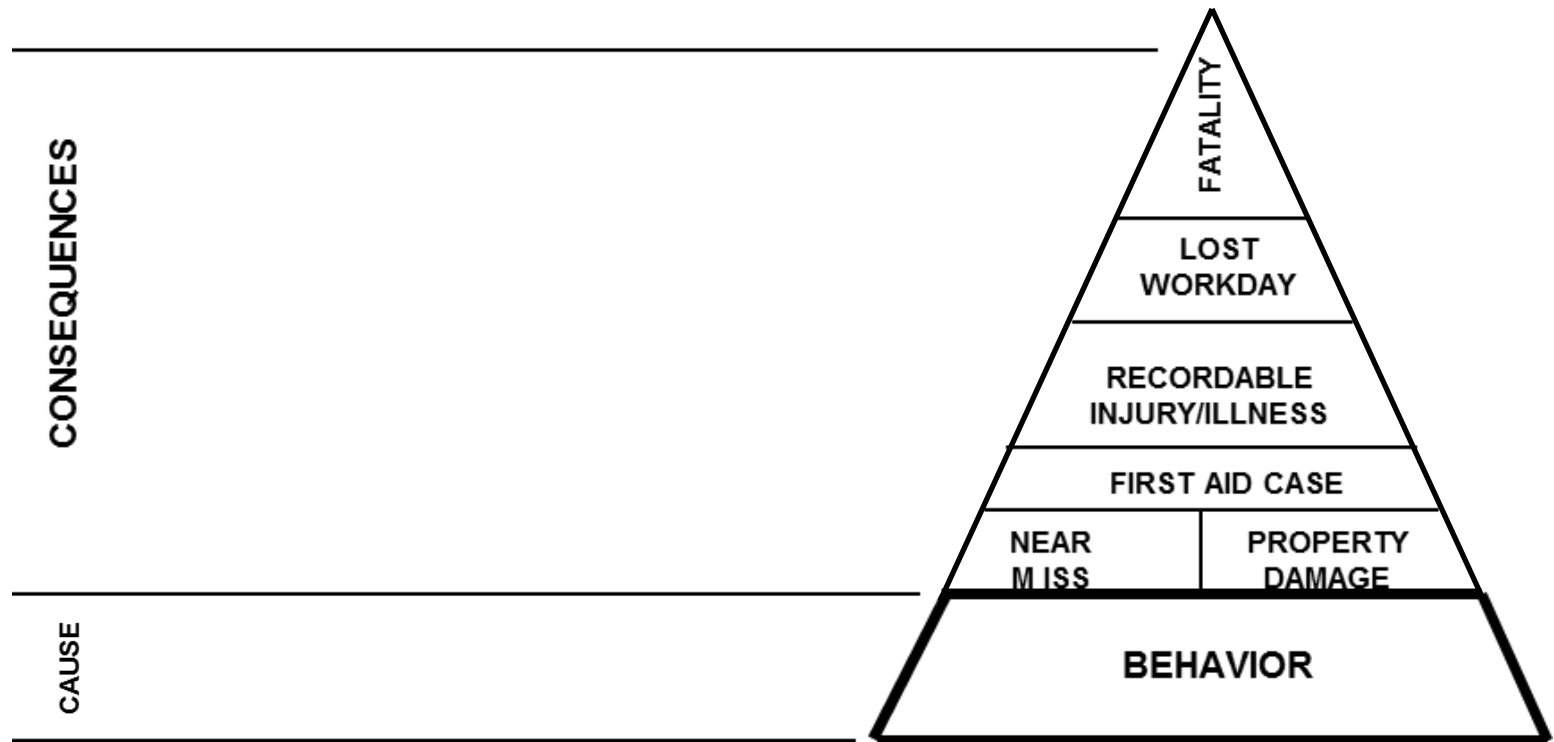
300 TIMES NOTHING/NEAR MISS

30 TIMES CLOSE CALL/FIRST AID

1 SERIOUS/CATASTROPHIC

Rarely does a serious accident or injury happen for the first time - generally there have been a number of “close calls” to warn of the impending serious accident.

HIENRICH TRIANGLE



UNSAFE ACTS

- Why Employees Perform Unsafe Acts
 - What Maintains and Supports Unsafe Behavior?
 - The workers who regularly performs unsafe acts when he or she “knows better” is probably following Skinner's Law of Operant Conditioning. The unsafe act has been learned and is maintained because it has been (and continues to be) reinforced by satisfying events.

UNSAFE ACTS

- Why Employees Perform Unsafe Acts
 - What Maintains and Supports Unsafe Behavior?
 - Behavior that appears “abnormal” because it courts possible injury is as much a product of reinforcement as “normal” behavior is; in fact, it is learned right from childhood in exactly the same way. Children learn to throw tantrums because their parents provide the right reinforcements at the right time, say the operant conditioners. When parents:
 - refuse to give a child what they asks for whenever he cries
 - only to give in the moment they cries harder, and
 - make a regular practice of refusing to give in unless the child raises the intensity of his crying, the child will soon reach full-blown temper tantrums.

UNSAFE ACTS

- Why Employees Perform Unsafe Acts
 - How Workers Personally Benefit from Unsafe Act.
 - The advantages and satisfaction to be gained by the workers at that particular moment seems greater to them than the disadvantages or dissatisfaction's.
 - The Unsafe Act “makes real sense” to the employee. If challenged, they will explain why he thinks his way is the most sensible way to do the job. Typically, the older employee will justify himself by saying he has been doing it that way for years.

UNSAFE ACTS

- Why Employees Perform Unsafe Acts
 - How Workers Personally Benefit from Unsafe Act.
 - The unsafe act gives the worker personal satisfaction. It may attract the attention of co-workers, gain their approval and admiration; give him either the thrill of taking a chance or the satisfaction of bucking authority – or even paying back an imagined grudge; it may make him feel daring and it may even involve many other personal incentives.
 - To the worker, their “unsafe” act may be perceived as having definite job-related advantages – get the job done soon, etc.

DEALING WITH UNSAFE ACTS

- Dealing with Unsafe Acts
 - When an unsafe act is committed, the question always arises as to whether or not the person knew the rules. The key question is:
 - Could the person perform the task safely If their life depended on it?
 - If they could not, then they need either training or additional practice. If they person does not know the rules, then one of the following problems may exist:

DEALING WITH UNSAFE ACTS

- Safe Performance is Punishing
 - The person feels that they will get punished (i.e. lose production) if the proper procedures are followed
 - To solve this problem, remove the punishment. Make it clear that a person is not expected to commit unsafe acts for the sake of production (for example), or in an effort to hurry up and complete a job.



DEALING WITH UNSAFE ACTS

- Non-Performance is Rewarding
 - Person gets recognition for completing the task but gets nothing for working safely.
 - Solve this problem by giving recognition and attention to positive safety performance.



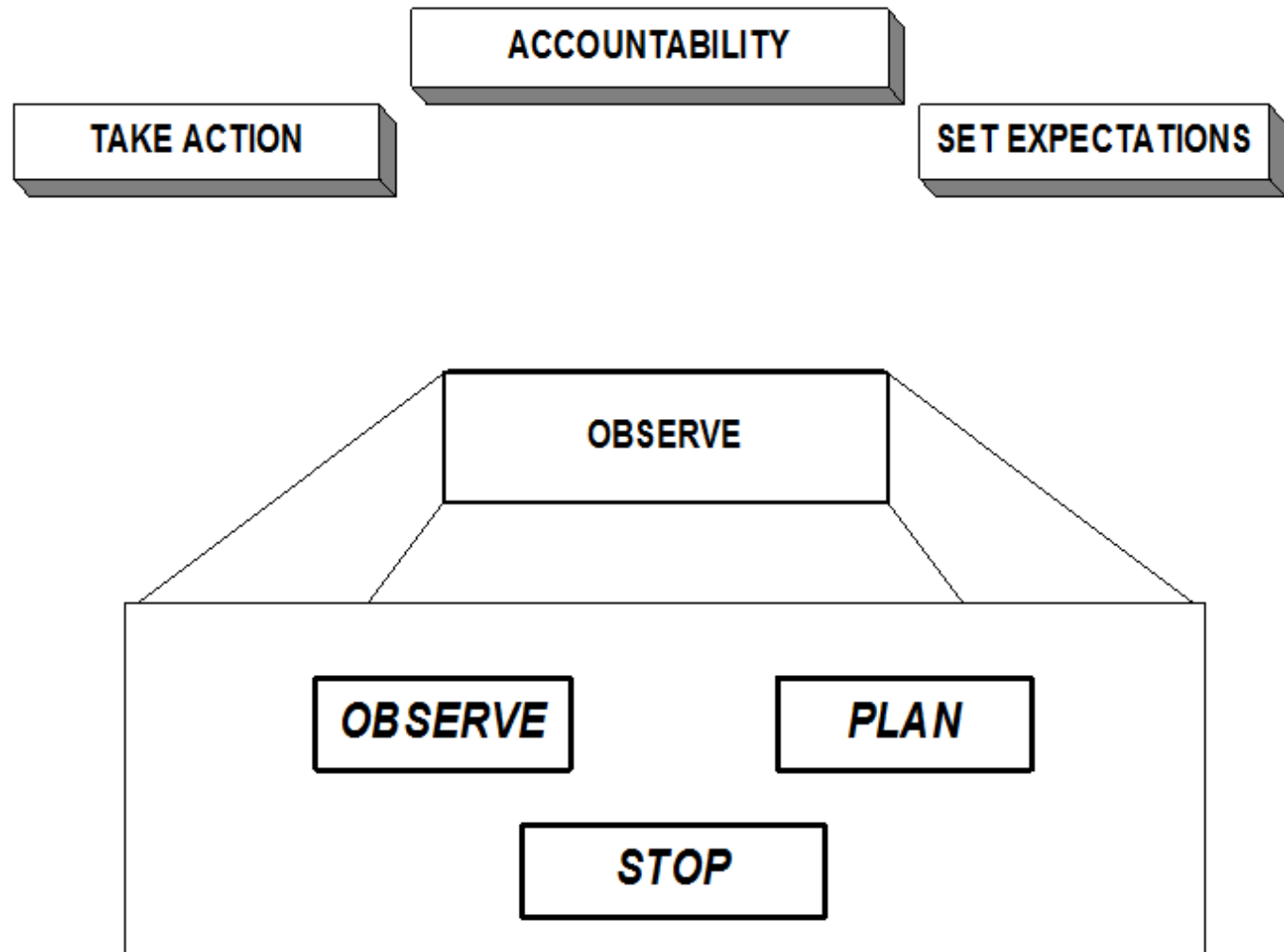
DEALING WITH UNSAFE ACTS

- Performance Doesn't Matter
 - Person feels that no one will say anything if the safety requirements aren't followed, just as long as the job gets done.
 - Solve this by arranging consequences. Let the person know that the expectation is the job will be done safety.

DEALING WITH UNSAFE ACTS

- Obstacles Are Present
 - A problem exists which keeps the persons from working safely. A broken disconnect handle or a safety device which doesn't work are two examples.
 - Solve this by removing the obstacle, the unsafe act can be eliminated.

THE ACCOUNTABILITY MODEL





THE ACCOUNTABILITY MODEL

- Planning
 - Plan the time into your schedule.
 - Be selective of your observations.
 - Know what to look for.
 - Develop a Checklist



THE ACCOUNTABILITY MODEL

- Stop
 - Walk out
 - Stop for 10 – 30 Seconds
 - Go to Different Locations each Time
 - Don't Walk the Entire Area



THE ACCOUNTABILITY MODEL

- Observe
 - Give it your complete, undivided attention
 - Look in the vicinity of people
 - Watch out for “Evaporative Acts”
 - THE DISAPPEARANCE OF AN UNSAFE BEHAVIOR UPON REALIZING THAT ONE IS BEING OBSERVED
 - Record observations



BEHAVIOR OBSERVATION AUDITS

- One size does not fit all
- Refer to incident reports for data on root causes and corrective actions
- Refer to JSA's, SOP's, etc. for safe practices
- The group discusses "critical behaviors"
- The BOA form is created and used
- The behaviors on the list are reviewed at least quarterly



SUCCESS STORIES

- The average reduction from baseline amounted to 26% in the first year increasing to 69% by the fifth year. *
Krause study, 5 years of injury data from 73 companies
- Positive and Negative Reinforcement Programs
- Involvement of workforce participation and ownership of personal safety
- Less recordable type injures
- Improvement in safety management system

PIT FALLS

- The observers did not correct the behavior immediately.
- Training was not completed for steering committee.
- Data collection was different with every company.
- Data collection was voluminous
- Lack of employee buy-in
- Observation checklist not targeting accidents causing behaviors

PIT FALLS

- Unsafe behaviors have not been defined sufficiently
- Observation checklist focus on unsafe condition's not unsafe behaviors
- People's names used
- People disciplined
- Equipment and tools in poor condition causing higher risk
- Rewarding production without an equal emphasis on safety

SAFETY MANAGEMENT SYSTEMS

- The observation process cannot, however, succeed on its own in changing an organization's culture, no matter how well it is designed, implemented, and executed. Other safety management systems as well as individual management practices must also support the desired culture. In fact, in the absence of a positive (or changing) safety culture, an observation and feedback process is likely to meet limited success. *Geller



TRADITIONAL SAFETY

- Incident and near miss reporting
- Incident investigations
- Safety meetings
- Safety committees
- Safety accountability
- Processes
- Safety reward and recognition program

TRADITIONAL / BEHAVIORAL SAFETY



- Define SOP and Procedures
- Develop Safety Rules
- Requires Top – Down Support
- Emphasis is Proactive vs. Reactive
- Conduct training for SOP and Observation
- Measurable – Progress Vs. Objectives/Goals
- Best Practices – Combines the best of Behavioral based with proven Traditional Safety Management Approaches.



QUESTIONS