BEHAVIOR BASED SAFETY

BY

RAJNIKANT SHARMA

BSc, BE(FIRE), PDIS, MBA (HR)

MANAGER (FIRE & SAFETY)
Traditional Safety Model

- Safety Training
- Reprimands
- Safety Meetings
- Policies
- Fewer Accidents
- Contests & Awards
- Committees & Councils
- Slogans
- Regulations

4/20/2015
R.K. SHARMA
Please think . . .

How many of the above elements can be directly traced to injury elimination just at the moment the injury is about to occur ??

Question: Are injuries totally eliminated ??
Injury Statistics . . . In INDIA

• 124 people die at workplace everyday
• 66575 people are injured
• 32% contribution to global fatality at work
• 37% of global burden of occupational injury

Question: Are injuries totally eliminated?
To Conclude . . .

Safety Management systems exist

• Still workplace is injury prone & not safe
• Injury although declined, still persists

WHAT IS MISSING ??
WHERE IS THE CATCH ??
Why Safety Programs Do Not Work:

• Safety is enforced & it's not a habit or value!
• Safety is not managed in the same manner as production, quality, and cost issues!
• Safety is not driven through continuous improvement!
• Lack of top management commitment!
“COMMON MYTHS ABOUT SAFETY”

• Conditions cause accidents!
• Enforcing rules improves safety!
• Safety professionals can keep workers safe!
• Low accident rates indicate safety programs are working well!
• Investigating to find the root cause of accidents will improve safety!
• Awareness training improves safety!
• Rewards improve safety!
Scientifically proven that . . .

In 1951, Dr. Heinrich claimed that **more than 90% of injuries were caused by UNSAFE ACTS**

DuPont proved by research that:

<table>
<thead>
<tr>
<th>Injury Causes</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injuries due to Unsafe Acts / Behavior</td>
<td>76</td>
</tr>
<tr>
<td>Injuries due to combination of Unsafe Behavior &amp; Conditions</td>
<td>20</td>
</tr>
<tr>
<td>Injuries due to Unsafe Conditions</td>
<td>4</td>
</tr>
</tbody>
</table>

4/20/2015

R.K. SHARMA
DuPont Research found that . . .

- 30,000 Hazards (Unsafe Acts & Conditions)
- 3,000 Near Miss / First Aid
- 300 Non LTAs
- 30 LTAs
- 1 Fatal

Avoid

Eliminate

4/20/2015
R.K. SHARMA
To Conclude . . .

Eliminate Unsafe Acts / Conditions = Avoid Injuries & Accidents

4/20/2015
R.K. SHARMA
What is behavior-based safety?

- Reflects a proactive approach to safety and health management
- Reflects a proactive approach to injury prevention
- Focuses on at-risk behaviors that can lead to injury
What is Behaviour Based Safety

A process of involving workers in ---
– defining the ways they are most likely to be injured,
– seeking their input, and
– asking them to observe co-workers in order to determine progress in reduction of at-risk behaviours.
What is BBS

- In this process, Observers drawn from workforce will observe safe and at-risk behaviours of their coworkers and give on-the-spot feedback to the observed on the observations made.
Unsafe Acts & Objectives of BBS

1. Unsafe Acts is a behavioral process

2. Also defined as “at risk” behavior

Objective of BBS is to minimize “at risk” behavior at workplace
Origins of BBS

• Considered a “behavioral psychology” approach to safety
• The idea is that “at-risk” behaviors are the last measurable and observable events preceding workplace injuries. By controlling these behaviors, safety performance will improve.
• This sounds a lot like Hienrich’s pyramid, i.e. unsafe acts eventually lead to an injury event.

R.K. SHARMA
Behavioral Safety Iceberg

- Lost Time Injuries
- Medical Treatment
- First Aid Cases
- Unsafe Acts
It is **BOFP** viz.

- **BEHAVIOUR OBSERVATION** AND
- **FEEDBACK PROCESS**
Principles of BBS

Behavior is the cause of accidents
Consequence motivate behavior
What gets measured, gets done
Feedback is essential to improvement
Quality is built early in the process
Conversations change organizations
Behavior Based Process Model

**Identification**
- Data Analysis
  - OSHA 200 & 300 Log
  - Worker Observations
  - Interviews
  - Inspections/Audits

**Evaluation**
- Risk Analysis

**Control**
- Lift Safely
- Wear PPE
- Avoid “Line of Fire”
- Eyes on task
“Everyone, and that includes you and me, is at some time careless, complacent, overconfident, and stubborn. At times each of us becomes distracted, inattentive, bored, and fatigued. We occasionally take chances, we misunderstand, we misinterpret, and we misread. These are completely human characteristics.”
Common Behavior Based Program Elements

- Critical behavior lists
- Workers observe workers
- Training for observers
- Frequent observations of workers to identify at Risk behaviors
- Commitment of resources
What Determines Behaviours?

- Consequences: certain, soon, significant
- Determine
- Behaviours
- Stimulate Activators
- Influence Cultures, Attitudes, Feelings

4/20/2015
R.K. SHARMA
DEFINITIONS

Attitude
- Deep-seeded feelings or emotions
- Internally focused

Behavior
- An observable action
- Externally focused
Attitude decides your altitude

Behavior

Known to others 10%

Unknown to others

Impact

Values - Standards - Judgments

Attitude

Motives - Ethics - Beliefs 90%
ATTITUDES OR BEHAVIOR?

Where should we focus our attention first?
Human behavior is both:

- Observable
- Measurable

therefore

Behavior can be managed!
Attitudes are inside a person’s head - therefore they are not observable or measurable.

However

Attitudes can be changed by changing behaviors.
Q: Why focus on behavior?

A: It’s the best way of measuring how well your system is working!

Systems’ Weaknesses

At-Risk Behaviors
Near Misses
Non Serious Injuries
Serious Injuries
Reactive
Proactive
The Safety Triangle

- Deaths*
- Lost Workday Cases
- Medical Attention Cases
- First Aid Cases
- Near Miss Cases
- Unsafe Behaviours or Conditions

1
10
100
1,000
10,000
Research

4/20/2015
R.K. SHARMA
Repeated behaviour corrections attempted with personalized, caring approach will lead eventually to permanent behaviour change as well as to attitude change.
Reasons Why Behavioral-Based Safety Management is Right

• Behaviors can be measured and therefore managed
• Changing behavior leads to changing attitudes
• Avoids personality conflicts and fault finding
• Embraces employee involvement
• Provides valuable feedback
• The effect of such correction attempt will be stronger if it is done by peer

• Reverse i.e., bringing behaviour change through attitude change is far more difficult.
People often act according to their perception of the risk & reward for their behaviour… not necessarily according to the rules, policies, or procedures.
Focusing on At-Risk Behaviours Can Reduce Injuries.
Recall . . .

Safety Activities

Fewer Unsafe Acts

Fewer Accidents
What do we do now?

Safety Activities → BBS Program + Traditional Model

Fewer Unsafe Acts

Fewer Accidents
Basic Elements of BBS

• Identify/define targeted safe behaviors.
• Observe behaviors.
• Measure process/activities.
• Deliver feedback.
• Deliver positive consequences.
• Analyze variance/take action.
• Improve process continuously.
The Behavioral Process

RESULTS

CRITICAL SAFE & PROCESS SUPPORT BEHAVIORS

PERFORMANCE

IMPROVEMENT

VERBAL & GRAPHIC ON PERFORMANCE

EVALUATE

PINPOINT

REINFORCE

MEASURE

GIVE FEEDBACK

4/20/2015

R.K. SHARMA
What are significant characteristics of BBS

Involves significant participation of workforce. Employees carry out Observation and Feedback process. Employees are source of expertise for behavioural change.

Hence it is the movement of the people, by the people, for the people, based on established principles of behavior theory in Psychology.

Demonstrates that each employee can make a difference in organization’s safety.
• Employees’ movement with support and commitment of management
  Bottom up approach, not top driven
• Generates data on safe and at-risk behaviors and serves as measurement and decision making tool.

• “What gets measured, gets done.”

• Maintains no record of persons committing at-risk behaviours, hence ensures the anonymity and encourages workforce participation.
Includes recognition of safe behaviours instead of penalties for at-risk behaviours.

Not a substitute for the existing safety management efforts, but an additional initiative to plug the gap.
A B C Analysis
ABC Model

*Antecedents*
(Event that triggers a behavior)

*Behavior*
(Observable action (measurable) human performance-)

*Consequences*
(Outcome or result of behavior either reinforce or punish behavior)

4/20/2015 R.K. SHARMA
Definitions:

Activators: A person, place, thing or event that happens before a behavior takes place that encourages you to perform that behavior.

Activators only set the stage for behavior or performance - they don’t control it.
Consequence

"A consequence that is certain to follow a behavior is seen as a strong deterrent to unwanted behavior."
Significance

"The significance of a positive response has been shown to be more powerful in changing behavior than a negative exchange."
The ABC Model Explains Why People Speed

Activators

- Guides or directs the behaviour
- Speed limit signs
- Drivers Education
- Sunny day
- Late
- No Cops
- Sports car
- Police car
- Others are Speeding

Behaviours

- Speeding
- Wreck
- Personal Injury
- Ticket
- Waste Gas
- Save Time
- Fun!
- Wear & Tear
- Property Damage

Consequences

- Motivates future occurrences of the behaviour
- Save Time
- Wear & Tear

4/20/2015
R.K. SHARMA
Safety is a continuous fight with human nature

At-risk behaviours are:

- Often more comfortable, convenient, and faster than safe behaviours
- Often reinforced by the work culture
- Rarely result in negative consequences (e.g., injury, reprimand) powerful enough to discourage their performance
THE SAFETY DILEMMA

*Many safe behaviors are punishing*

- Uncomfortable
- Restricts motion
- Inconvenient
- Unavailable
- Difficult

*Many unsafe behaviors are rewarding*

- Faster
- Comfortable
- Freedom of movement
- Saves time
- Serious incidents are low probability events
- Short cuts are often
  - Faster
  - Easier
  - Allow us to be more comfortable
- Therefore natural consequences are not sufficient!

- Identify and eliminate unsafe behaviors before bad things happen
- Reinforce and reward safe behaviors
- Gain safety insight from every employee
- Distinguish the real safety concerns from the perceived safety concerns
What Employees Want:

• A Safe Workplace
• A Positive Workplace
• To Take Care of One Another
• To Stop the Hurt!
What Management Wants:

• An Accident Free Workplace
• Empowered Employees
• Pro-active Rather Than Re-active Work Process
• To Minimize Direct and Indirect Costs and Threat of Liability From Accidents

R.K. SHARMA
Behavior-Based Safety Process

Employee Involvement + Scientific Method + Management Commitment

Continuous Improvement in Safety Performance and Productivity

Skilled and Technically Knowledgeable Facilitator(s)
Core beliefs that influence culture on the personal and organizational level.

- All injuries are preventable.
- All employees are responsible for their safety and the safety of their co-workers.
- Management is ultimately responsible for the safety of all employees.
- Working safely is a condition of employment.
- All risks will be identified, addressed, and managed.
- Educating and training employees to work safely is essential.
- Preventing injuries is good business - a profit center activity.
- Safety, production, cost, and quality depend on each other.
- Safety will never be compromised for production or convenience.
- Every employee has the obligation to shut down an unsafe operation.
- The continuing health and wellness of each employee is vital to our long-term success.
There is no one right way to achieve safe production in an organization. For a safety system to be effective it must fit the organization’s culture and it must:

- Force supervisory performance
- Involve middle management
- Have top mgt. visibly showing their commitment
- Have employee participation
- Be flexible
- Be perceived as positive

Dan Petersen
Why Do We Need to Change?

“If you do what you’ve always done, you’ll get what you always got!”

W. Edwards Deming
What Triggers Change?

Train Employees

Conduct Safety Observation

Discuss Findings With Co-worker

Affect System Changes To Eliminate Behaviors

Compile/Trend Information

Key Information Into Database

This process can take weeks... months... years.

Shortcut
The Traditional Culture

It won't happen to me
Focused on accident
Failure oriented
Management driven only
I'm the expert here
Management as owners
Safety as a priority
Watch for unsafe acts to punish.

A Behavioral Changed Culture

It will happen to someone
Focused on safe behaviors
Success oriented
Both Management and Employee driven -
A process
Learn by doing
Coach and players
Safety as a value
Recognize positively the safe acts that are done.
The Behavior Based Safety Challenge:

To create conditions that encourage people to collaborate because they want to, not because they have to.

Let’s do it!!
If Safety Interventions are Effective You Will See:

- % of safe behaviors increasing and the % at-risk behaviors decreasing
- Reporting of near misses / hits increasing
- Both the number of observations and level of participation increasing
- Frequency & severity of injuries decreasing
- Increasing acceptance of responsibility and accountability for personal behavior
A Values-Based Process

“Focus on the process....not results......they will come later!”
Safe Behavior Management Process Implementation Will Allow Your Organization To:

Take Safety Performance to a Higher Level

Focus on Continuous Improvement vs. Reacting to Accident Cycles

Gradually Change the Perceptions (Culture) of What Safety is Supposed to be (Responsibilities, Accountabilities, Commitments)

Reduce Direct & Indirect Costs of Accidents so that Efficiencies are Maximized
Transforming the Safety Culture

“**We Care**” Safety Culture
Support workers to watch out for one another’s safety; observe safe and at-risk behaviors; provide timely peer feedback.

“**Get Better**” Safety Culture
Involves workers in the task of ensuring regulatory compliance through performance and actions; hold employees personally responsible and accountable for safety and establishing metrics/goals.

“**Must Do**” Safety Culture
Basic regulatory compliance and documentation system in place to ensure safety training programs, work conditions, procedures and processes comply with regulations.

Modify the program as needed!
If you want to know what people find to be reinforcing.... observe what they do when they have the freedom to choose.
The Five R's of Behavior

If you Regularly Recognize and Reward, you'll Rarely have to Reprimand
Is safe behavior an occupational necessity?

Is safety required only at work place?

Don’t I want my son to drive safely & reach home every day?

Can safe behavior be a philosophy of life?

Safe Behavior = Safety Assurance
Thank you