# **JOB HAZARD ANALYSIS (JHA)**

## Job Hazard Analysis (JHA)

is a systematic process used to identify potential hazards associated with specific job tasks and develop measures to mitigate or eliminate those hazards.

The primary goal of a JHA is to improve workplace safety by analyzing each step of a job, identifying risks, and implementing controls to prevent accidents or injuries.

A JSA is a careful study of the job to identify hidden hazards, eliminate or control those hazards, and communicate those hazards and corrective actions take during the pre-job safety meeting,

# Job Breakdown:

The job is broken down into individual tasks or steps.

# **Hazard Identification**

Each task is analyzed to identify potential hazards such as housekeeping (fire, slips, trip, falls), mechanical, chemical, biological, electrical, or ergonomic risks.

# **Risk Assessment**

The severity and likelihood of each hazard are assessed to prioritize safety measures.

# **Control Measures**

Appropriate control measures (engineering controls, administrative controls, or personal protective equipment) are identified and implemented to reduce or eliminate hazards.

# **Documentation and Review**

The JHA is documented and reviewed periodically to ensure it remains effective and up-to-date with any changes in job processes or conditions.

A job hazard analysis (JHA) can be conducted on many jobs in your workplace. Priority should go to the following types of jobs:

- 1. Jobs with the highest injury or illness rates
- 2. Jobs with the potential to cause severe or disabling injuries or illness, even if there is no history of previous accidents
- 3. Jobs in which one simple human error could lead to a severe accident or injury
- 4. Jobs that are new to your operation or have undergone changes in processes and procedures, or where the employees are new
- 5. Jobs complex enough to require written instructions, process or procedure

# **BENEFITS OF UNDERSTANDING & CONTROLLING RISK**

Workers who have been trained to identify hazards, evaluate the situation, and prevent or control those risks will find that these standardized work processes are put in place to protect their health and safety and perceive work to be less risky.

# **PRE-TASK PLANNING**

**Pre-task Planning** is a proactive approach to ensuring workplace safety and efficiency by thoroughly assessing and preparing for the tasks at hand before any work begins. Checklists are often used in this process.

This planning involves identifying the specific steps required to complete a task, recognizing potential hazards, and determining the necessary control measures to mitigate risks.

#### During pre-task planning:

- 1. Workers & supervisors collaborate to review job procedures
- 2. Assess the working environment and
- 3. Ensure all necessary tools, equipment, PPE are available and in good condition.

This preparation helps to prevent accidents, reduce unexpected downtime, and ensure that everyone involved understands their roles and responsibilities.

Effective pre-task planning also fosters communication and teamwork among workers, enhancing their awareness of potential hazards and the importance of adhering to safety protocols.

By discussing the task in detail before starting, workers can share insights and suggestions, contributing to a safer, more productive work environment.

Additionally, pre-task planning identifies any special training or permits needed for specific activities, ensuring compliance with safety regulations and standards. Overall, pre-task planning is essential for maintaining a safe and efficient workplace, reducing the likelihood of accidents, and ensuring successful project execution.

# TASK SAFETY ANALYSIS (TSA)

**Task Safety Analysis (TSA)** is similar to JHA but focuses more specifically on individual tasks rather than the entire job.

TSA aims to identify & control hazards at a more granular level by breaking down tasks into smaller components, analyzing the risks associated with each & determining the safest way to perform them.

#### Task Breakdown

Each task is broken down into smaller, more detailed steps.

#### **Hazard Identification**

Hazards associated with each step are identified, focusing on specific activities that might pose risks.

#### **Preventive Measures**

Detailed safety measures are developed for each step to prevent accidents or injuries, such as using the correct tools, following safety procedures, and wearing appropriate PPE.

## **Communication and Training**

The results of the TSA are communicated to all workers involved, and training is provided to ensure understanding and compliance with safety procedures.

## **Continuous Improvement**

TSA is reviewed regularly & after incidents or changes in processes, to incorporate lessons learned and improve safety practices.

## SUMMARY

Both are proactive safety management tools designed to identify hazards and implement controls to prevent workplace accidents and injuries. JHA focuses on evaluating the entire job, while TSA zeroes in on specific tasks within a job. Both processes are essential for creating a safe work environment by systematically addressing risks and enhancing safety awareness among workers.

# THE ABC MODEL

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Is a framework used in behavioral-based safety (BBS) to understand and influence workplace behaviors.

## ACTIVATOR

An activator, also known as an antecedent

is any event, condition, or signal that prompts a person to take a particular action or behave in a certain way. Activators set the stage for behavior by indicating what is expected or required, such as a safety sign, a verbal reminder, or a training session.

## **BEHAVIOR**

The specific actions or responses of an individual that occur as a result of the activator. Behavior can be any task or activity an employee performs, such as wearing PPE following safety procedures, or operating machinery safely.

## CONSEQUENCE

The outcome or result that follows a behavior.

Consequences can be positive or negative and reinforce or discourage the behavior.

<u>Positive consequences (rewards or recognition) encourage</u> repeating safe behaviors.

<u>Negative consequences (injuries, reprimands) help discourage</u> unsafe behaviors.

The ABC model helps organizations identify what triggers specific behaviors (activators), understand the behaviors themselves, and analyze the consequences. By adjusting activators and consequences, organizations can influence and promote safer behaviors in the workplace.

# **SAFETY OBSERVATIONS**

#### **SAFETY OBSERVATION**

# often referred to as **BBS (BEHAVIORAL-BASED SAFETY)**

An informal process focused on assessing and improving safetyrelated behaviors and practices in the workplace. It involves watching & assessing behaviors, practices, & conditions to identify potential safety hazards and unsafe acts.

- $\hfill\square$  Primarily focuses on individual behaviors and interactions
- □ Identifies unsafe acts, conditions, or practices
- □ Conducted by supervisors, safety officers, or peers
- Observers should intervene and stop the work when necessary
- Observers should provide immediate feedback & reinforce safe behaviors to encourage safe working behaviors

#### **AVOIDING TACIT APPROVAL**

It's important for both employees and management to intervene when they observe someone engaging in unsafe or at-risk behavior. Overlooking or Ignoring these acts can give the impression that these behaviors are acceptable, which is known as tacit approval.

#### ADDRESSING UNSAFE OR AT-RISK BEHAVIORS

- □ Stop the job
- Talk in private
- Ask the employee to explain how they would do the job safety
- □ And ask them how the task should be done properly

# ADDRESSING SAFE OR AT-RISK BEHAVIORS

- Compliment the worker on work safely done
- $\hfill\square$  Praise the worker and the safe act to the rest of the group

# Safety Management System (SMS)

A Safety Management System) SMS is a structured framework that integrates safety policies, procedures, and practices within an organization to proactively identify, assess, and mitigate risks to ensure a safe working environment. It encompasses continuous monitoring, improvement, and compliance with safety regulations to prevent accidents and promote a culture of safety.

# It is a framework for EHS and can scale to all-size companies in all industries. It includes the following components:

#### **MANAGEMENT & LEADERSHIP**

- Demonstrates EHS commitment & continuous improvement
- Communicates to EHS commitment to workers
- Sets program expectations and responsibilities
- □All level managers make EHS a core organizational value and establish safety and EHS goals and objectives
- □Provides needed resources and support for the program
- Sets a good example by also complying by all policies & procedures

#### WORKER PARTICIPATION

□Workers are involved in all aspects of the program

- □Workers are involved in setting goals, identifying & reporting hazards, investigating incidents & tracking progress
- □All workers, including contractors and temporary workers, understand their roles and responsibilities under the program and what they need to do to effectively carry them out
- □Workers are encouraged & have means to communicate openly with management & report safety & health concerns without retaliation
- Any potential barriers or obstacles to worker participation in the program are removed (Ex: language, lack of information, disincentives)

#### **HAZARD PREVENTION & CONTROL**

 Procedures to continually identify EHS hazards & evaluate risks
Assessments of existing hazards & control measures are followed by periodic inspections & reassessments to identify new risks

#### **HAZARD PREVENTION & CONTROL**

- Employers and workers cooperate to identify and select options for eliminating, preventing, or controlling workplace hazards.
- Plans are developed that ensure controls are implemented, interim protection is provided, progress is tracked, and the effectiveness of controls is verified.

#### Hazards are either permanently or temporarily corrected

**Permanent = Prevention of Hazards** (*Elimination, Substitution*) **Temporary = Control of Hazards** (*Engineering, Administrative, PPE*)

#### **EDUCATION & TRAINING**

□Workers are trained to understand how the program works and how to carry out the responsibilities assigned to them under the program

□All workers are trained to recognize workplace hazards and to understand the control measures that have been implemented

#### PROGRAM EVALUATION & IMPROVEMENT LEADING AND LAGGING INDICATORS

Control measures are periodically evaluated for effectiveness

- Processes are established to monitor program performance, verify program implementation, identify program deficiencies and opportunities for improvement, and take actions necessary to improve the program and overall safety and health performance
- □. Key Performance Indicators (KPIs) are used to measure safety performance. KPIs include Leading and Lagging Indicators.
- Leading Indicators are preferred since they are a proactive tool
- Lagging Indicators are a reactive tool
- This a part of a company's Performance Analysis

#### **COORDINATION & COMMUNICATION**

#### On Multiemployer Worksites

The host employer and all contract employers coordinate on work planning and scheduling to

identify and resolve any conflicts that could impact safety or health.

□Workers from both the host and contract employer are informed about the hazards present at the worksite and the hazards that work of the contract employer may create on site.