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Hazard ID and Correction Changes Lives

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According to the National Safety Council, a worker is injured every seven seconds in the United States. This breaks down to the following:

- 4.6 million lives are affected by medically consulted injuries each year.
- Costing $170.8 billion nationwide, averaging $41,000 per injury.
- Totaling 70 million lost workdays in 2018.

In the last three years, the JPIA's Workers' Compensation Program experienced 938 injuries, with medical costs alone exceeding $10 million. What is the root cause of the majority of these accidents? The inability to effectively recognize, identify, and correct hazards in the workplace.

How to Effectively Identify Hazards

OSHA found Injury and Illness Prevention Programs that include hazard identification and correction programs had a reduction in accidents ranging from 9 percent to 60 percent. The obvious question is, why is there such a significant variance in results? The simple answer is ***effectiveness***. Effectiveness is simply a word used to sum up the total positive efforts of an organization in a particular effort; in this case, hazard identification. Who knows what the next seven seconds will bring. However, our actions or inactions will indeed influence the outcome. If we follow the steps and take action to conduct effective hazard identification and correction, we will change lives.

Step 1: Collect Existing Information About Workplace Hazards

Reviewing accidents/incidents and near-miss records can quickly identify where the most immediate hazards are. Multiple injuries of the same type clearly indicate the "root cause" has not been addressed. If your district has few incidents, the JPIA recommends staying focused on potential hazards by reviewing the most common injuries within the industry. In the JPIA's Workers' Compensation Program, the top three injury causes include ***lifting***, ***struck-by***, and ***slip, trip, and fall injuries***.

Following are other useful resources to help identify potential hazards:

- Input from workers
- Inspection reports
- Existing safety programs
- Cal/OSHA top violations
- Safety Data Sheets
- Equipment manuals
- ACWA JPIA

Take Action:

- Identify common hazards by reviewing accidents, near misses, and talking with staff.
- Identify the district's top three potential injury causes.

Step 2: Inspect the Workplace for Safety Hazards

Cal/OSHA's Injury and Illness Prevention Program (IIPP) requires periodic workplace inspections. It is a best practice to conduct formal inspections on a monthly or quarterly basis depending on the district's needs and resources. These inspections should include offices, shops, treatment facilities, and other essential facilities. For inspections to be most effective, it is best to utilize checklists and have workers from different departments be involved as much as possible. The JPIA has sample checklists on its website that can be modified to address specific concerns and hazards.

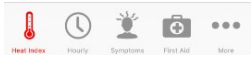
Take Action:

- Verify that regular inspections are conducted, if not start.
- Review the checklist for effectiveness and document corrective actions.

Step 3: Identify Hazards

The following hazards can be elusive; therefore, a thorough assessment should be completed for each exposure in these categories.

- **Chemical hazards** – Review SDSs and other relevant information to identify if it affects the body.
- **Physical hazards** – Include exposures such as excessive noise, elevated heat, and vibration.
- **Biological hazards** – Include hazards such as Valley Fever, COVID-19, snakes, and other exposures that have the potential to cause allergic reactions or illnesses.
- **Ergonomic hazards** – This includes any work activity that requires heavy lifting, awkward postures, or repetitive motions.



OSHA-NIOSH Heat App assesses site conditions

Take Action:

- Review SDSs and train staff on chemical hazards.
- Identify high-risk tasks to assess for ergonomic hazards.

Step 4: Conduct Accident/Incident Investigations

This is a critical step to correct a misstep in the organization's safety management system. It's time to look at program errors, not to cast blame on the individuals involved. The sole purpose of an accident investigation is to identify the "root cause" of the incident and to implement effective corrective measures. The JPIA's Accident Investigation Class goes into great detail on how to conduct a proper accident investigation and identify the root cause to implement corrective action.

Take Action:

- Identify management and supervisor staff that need Accident Investigation training.
- Add causes identified in the investigations to inspection checklists when applicable.

Effective Hazard Correction and Control

Now that the hazards have been identified, we must apply a control. Affected workers should be involved in developing controls. Once a control is in place, it should be reviewed for effectiveness.

Step 1: Identify Potential Controls

Research and develop a list of potential hazard control options. Information for control options can typically be found from the following sources:

- Cal/OSHA standards
- Industry standards
- Professional publications
- Manufacturers publications
- Trade publications
- Controls in other workplaces
- JPIA Risk Control Webpage

Take Action:

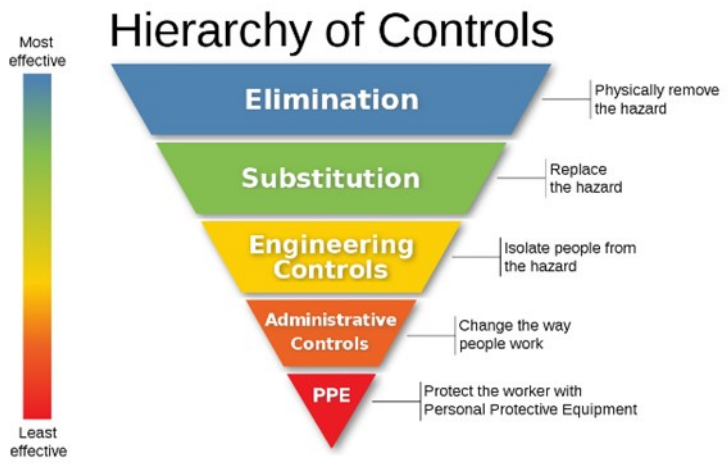
- Identify 2-3 potential controls for each hazard before implementing a control.
- Involve front line workers in developing effective hazard controls.

Step 2: Select Control

An organizations' goal should be to select controls that are the most effective and feasible. Typically, this would be to select controls that are engineering controls or higher on the Hierarchy of Controls. Engineering controls are more effective in protecting staff, as they are passive and do not require workers to do anything once in place. Districts can apply for the JPIA's Risk Control Grant Program to help fund projects.

Take Action:

- **Consider the hierarchy of controls when controlling a hazard.**
- **Review whether the district is currently using administrative or PPE controls where an engineering control would be more effective.**



Step 3: Develop a Hazard Control Plan

A hazard control plan takes the hazards that have been identified on an inspection checklist, investigation, or other evaluation, and lists how it will be controlled. The responsibility to implement controls should be assigned to one person. This person's responsibility is to confirm the hazard control has been implemented. If multiple hazards have been identified, they should be given priority based on seriousness. Once the hazard has been corrected, it should be recorded on the plan.

Take Action:

- Verify the district's hazard control plan lists a person responsible for control.
- Verify when a hazard is corrected by documenting the method and date.

Step 4: Follow Up on Controls Effectiveness

All controls should be evaluated after implementation to ensure effectiveness. A follow up evaluation should be conducted with staff after 30 days and again after 90 days. Feedback from staff is critical at this point to determine the control's long-term effectiveness, additional training needs, SOP updates, and maintenance requirements.

Take Action:

- Review the district's process on how to determine if a control is effective.
- Verify a 30, 60, or 90-day follow up is completed and documented.

Works Cited:

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Toolbox Safety Discussion: Identify and Correct Hazards

IDENTIFY HAZARDS—Review the pictures above and answer the following questions:

Step 1: **Collection Information on Hazards.** What information does the picture tell you about the workplace?
Step 2: **Inspect Workplace.** Would a workplace inspection be helpful here? Why?
Step 3: **Identify Hazards.** What are the potential hazards in the pictures?

CORRECT HAZARDS—Review the pictures and answer the following questions:

Step 1: **Identify Potential Controls.** What are the possible controls?
Step 2: **Select Control.** What is the best control to reduce the hazard?