

Pre-Task Planning for Construction Worker Safety and Health

Pre-task planning for construction worker safety and health: Implementation and assessment

Babak Memarian, Sara B. Brooks, and Jean Christophe Le. American Journal of Industrial Medicine, July 2024.

Overview

Compared to other industries, construction workers experience a disproportionately high rate of occupational injuries and fatalities. In construction, Pre-Task Planning (PTP) is a preventive process intended to describe each step of work, identify associated safety and health hazards, and recommend controls to eliminate or mitigate the hazards before work begins. Despite PTP's importance, the industry lacks comprehensive guidelines for its design and implementation in a consistent and effective manner. To fill this gap, this study pursued two objectives: (1) identify shortcomings in current PTP practices and explore recommended solutions and (2) translate research findings into a tool to help practitioners assess and improve the quality of their PTP process. To this end, 28 construction safety and health professionals and 104 workers were interviewed, and seven onsite PTP sessions were directly observed.

For more information, contact:

Babak Memarian: bmemarian@cpwr.com

Read the article:

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Key Findings

- A practical, easy-to-use checklist tool was developed to help contractors assess and continuously improve their PTP processes.
- Inconsistent terminology and PTP implementation practices across the construction industry can result in workers' confusion, conflicts between trades, and unaddressed hazards.
- The PTP process should be regularly updated and continuously improved to accurately reflect site conditions. Establishing a feedback loop is a key part of the process.
- To enhance buy-in, management should actively solicit and incorporate workers' feedback, directly involve them in PTP development and implementation, and give them an opportunity to lead the PTP meetings.
- To enhance PTP quality and prevent worker complacency, contractors should implement visual aids, discuss real-life incidents, and provide information on tools, materials, and schedules. Training on presentation skills and consistent PTP delivery should also be provided.
- The production activities of different trades are usually interrelated. Thus, in addition to the crew's immediate tasks, PTPs should discuss other trades' scopes, potential clashes, and hazards their activities pose. Regular all-trades PTP meetings can identify and address hazards from overlapping activities.
- To ensure steps were completed as planned, assess whether controls functioned as expected, and discuss changes and hazards that emerged during the shift, crews should conduct post-task debriefing sessions.



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