Pre-Task Planning through Post-Job Review: CPWR's Guidelines and Applied Resources

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CPWR – The Center for Construction Research and Training

CPWR's Webinar Series

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Project & Aims

Project: CPWR's "Prevention through Augmented Pre-Task Planning" funded by NIOSH.

AIMS: Enhance the quality of Pre-Task Planning (PTP) in construction.

- Identify gaps and shortcomings in current PTP practices
- Explore effective strategies to fill the gaps



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- Identify gaps and shortcomings in current PTP practices
- Explore effective strategies to fill the gaps
- Develop applied tools to help practitioners initiate, assess, and improve their PTP process



Why Pre-Task Planning?

- Research findings suggest that most work-related injuries could be prevented by:
 - Proactively identifying hazards and unsafe conditions associated with each task, tools/equipment, materials, work methods, and jobsite
 - Properly addressing hazards using effective controls before work begins
- When and how to recognize and address hazards?
- Pre-Task Planning (PTP) is a process performed before each task starts to discuss the steps of work, the hazards, and available controls. It may also be known as JHA, JSA, morning huddle, or other terms.



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Are current PTP practices functional?

To answer this question, we:

- Interviewed 52 construction managers and safety & health professionals
- Interviewed 132 construction workers
- Observed onsite Pre-Task Planning and morning huddles
- Reviewed 30 sample Pre-Task Planning forms and documents
- Reviewed findings with our Industry Advisory Group



A Comprehensive Guidelines & Resources Package

- Translated research findings into an easy-to-use, comprehensive PTP package (<u>www.cpwr.com/ptp</u>)
- Helps contractors design, implement, assess, and continuously improve their PTP
- Contains:
 - > Implementation and Assessment Guidelines
 - ➤ Sample Completed PTP Form
 - ➤ Blank PTP Template (PDF and Word)
 - Post-Job Review Checklist
 - ➤ Management PTP Assessment Checklist
 - ➤ Workers' Perspective Questionnaire

Pre-Task Planning (PTP) Implementation and Assessment: Guidelines and Resources

Guidelines and Resources

Pre-Task Planning (PTP)
Implementation and Assessment
in Construction



Pre-Task Planning (PTP) Guidelines and Resources Page



A-Z Index Lista de recursos en español

Search

RESEARCH

TRAINING

SERVICE

NEWS & EVENTS

ABOUT CPWR

Home > Research > Management Resources from Research > Pre-Task Planning (PTP) Guidelines and Resources for Construction

Pre-Task Planning (PTP) Guidelines and Resources for Construction

Pre-Task Planning (PTP) is a process performed before each task starts to discuss the steps of work, the hazards, and available controls. This process may also be known as job hazard analysis (JHA), job safety analysis (JSA), morning huddle, or other terms.

To help contractors design, implement, assess, and continuously improve their PTP process, CPWR has developed a comprehensive PTP package. It contains several applied tools — including checklists, templates, and practical examples — to help you through the process. To access these resources, use the links below.

Pre-Task Planning (PTP) Implementation and Assessment: Guidelines and Resources

To obtain individual checklists and tools included in the full package, select from this list:

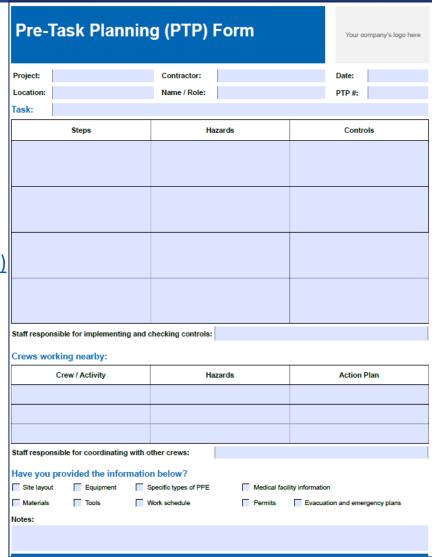
- Sample Completed Pre-Task Planning (PTP) Form
- · Blank Pre-Task Planning (PTP) Form (PDF, Word)
- Post-Job Review Checklist: An End-of-Shift Assessment Tool
- Pre-Task Planning (PTP) Assessment: Management Checklist
- Pre-Task Planning (PTP) Assessment: Worker's Perspective





Ready to develop your PTP?

- Ready to develop your own PTP?
- Follow the example provided in CPWR's package
- Download and use the blank PTP form.
- Download:
 - Sample Completed PTP: Sample-Completed-Pre-Task-Plan-PTP-Form.pdf (cpwr.com)
 - ➤ Blank PTP form: Blank-Pre-Task-Plan-PTP-Form-PDF.pdf (cpwr.com)





How to Develop PTP

- Conduct PTP before each task starts
- Conduct daily walkthroughs and involve workers
- Update and communicate PTP content when condition changes
- Break the task into manageable steps
- Specify hazards associated with each step
- Identify ways to control each hazard
- Identify who is responsible for implementing the controls
- Discuss permit requirements
- Use photos or other visual aids instead of text where possible
- Use educational aids like a whiteboard or live demo

Task: Conduit Installation

Steps	Hazards	Controls		
Pre-job set up	Injury from hand tools and power tools Slips, trips, and falls	Inspect all tools prior to use. Secure the work area and clear bystanders. Use site-specific PPE. Maintain good housekeeping. Complete hands-on training prior to using power tools. Evaluate materials to be drilled for potential hazards (e.g., lead based paint		
Bend conduit using conduit bender tool	Injury to hands, including pinching fingers Strain/sprain from awkward position	Use site-specific PPE. Keep hands away from bender head. Use proper body positioning when bending conduit.		
Cut conduit with reciprocating saw	Lacerations Metal debris in eyes Strain/sprain from awkward position	Use site-specific PPE. Secure conduit with a vise prior to cutting. Keep hands away from saw blade. Use proper body positioning.		
Drill holes with power drill and install conduit supports	Debris in eyes Lacerations Strain/sprain from awkward position Strainhing hazardous dust Noise Burns	Use site-specific PPE. In addition to site-specific PPE, use an N95 mask and hearing protection. Make sure drill bits are sharp and not cracked before use so they don't break off and cause injury. Do not wear loose fitting clothing that can get caught in moving parts. Keep hair and jewelry out of the drill path. Keep hands away from rotating drill bit. Use proper body positioning. After drilling, do not touch the drill bit, it is often extremely hot.		
Drill hole in junction box with power drill	Debris in eyes Lacerations Strain/sprain from awkward position Breathing hazardous dust Noise Burns	Use site-specific PPE. In addition to site-specific PPE, use an N95 mask and hearing protection. Do not wear loose fitting clothing that can get caught in moving parts. Keep hair and jewelry out of the drill path. Keep hands away from rotating drill bit. Secure junction box with a vise prior to drilling to prevent rotation. Use proper body positioning. After drilling, do not to touch the drill bit, it is often extremely hot.		
Place conduit Staff responsible for implementing and checking	Falls Strain/sprain from awkward position Debris in eyes	Use site-specific PPE. If using a ladder, select one of appropriate height. Position the ladder directly beneath work area to avoid over-reaching as this can result in falls.		





How to Develop PTP

- Discuss hazards posed by other <u>crews working nearby</u>
- Include supplemental information
- Give workers the opportunity to lead the PTP meeting
- Provide PTP training how to complete and how to conduct it
- Gather and incorporate workers' feedback on the PTP process

Crews wor	kina	nearby	v:

Crew / Activity	Hazards	Action Plan		
Ironworkers / Overhead work	Falling objects	Use safety nets. Establish a clearly marked safety perimeter.		
Drywallers / Sanding	Silica exposure	Wear a dust mask or N95.		
Laborers / Excavation	Cave-ins Falling into excavation	Install barriers or fence off excavation site. Use a spotter when workers are in or near excavation site.		
Operating Engineers / Heavy equipment traffic	Struck by	Designate marked pedestrian walkways.		

Staff responsible for coordinating with other crews:

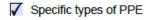
√ Tools

L. Smith

Have you provided the information below?

/	Site layout	\checkmark	Equ
	_		

Materials



✓ Work schedule

Medical facility information

Evacuation and emergency plans



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Operating Engineers / Heavy equipment tra	ffic • Struck by	Designate marked pedestrian walkways.				
Staff responsible for coordinating with other crews: L. Smith						
Have you provided the i	nformation below?					
✓ Site layout ✓ Equipme	nt	✓ Medical facility information				
✓ Materials ✓ Tools	✓ Work schedule	√ Permits √ Evacuation and emergency plans				



Post-Job OR End-of-Shift Review

- Huddle at the end of the work shift
- Briefly discuss issues that occurred during the shift
- Discuss safety, health, and other concerns
- Plan adjustments for the next day
- Keep track of issues during the project lifecycle
- Download the Post-Job Review Checklist:

<u>Post-Job-Review-Checklist-An-End-of-Shift-Assessment-Tool.pdf</u> (cpwr.com)

Post-Job Review Checklist: An End-of-Shift Assessment Tool

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An end-of-shift review (also known as post-job or post-task review) is a huddle held at the end of the work shift to briefly discuss issues that occurred during the shift, safety and health concerns, and adjustments needed for the next day.

This checklist has been developed based on research findings and input from industry experts to help work crews continuously evaluate and improve their work process. Ask each question from your crew and develop an action plan if the status is not satisfactory. Please note that this checklist is to complement your Pre-Task Planning (JHA, JSA, pre-job planning, etc.) process and is not a replacement for any other planning steps.

Please use the QR code above or go to http://bir.ly/48QUruw.lf you have any feedback or questions.

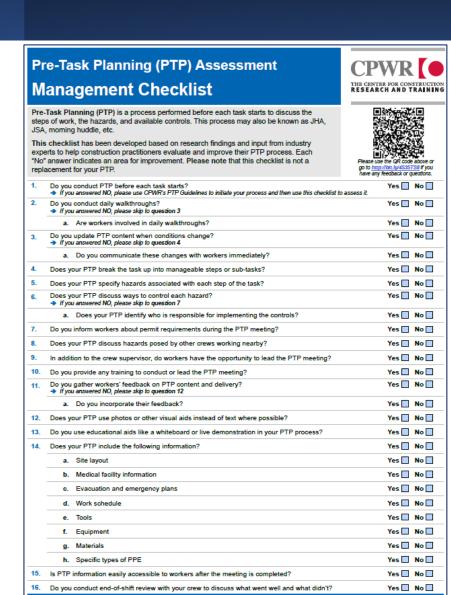
Proje	ect:			Name / Role:	
Task	sk:		Date:		
No.	Questions	Sta Yes	tus No		Explanation/Action Items
1	Did you have everything you needed to do your jo properly?	ob 🔲			
2	Were all tasks completed as planned?				
3	Were there any incidents during the shift?				
4	Were there any near misses during the shift?				
5	Were all hazards identified in PTP controlled well	? 🔲			
6	Did any new hazards emerge during the shift?				
7	Were there any conflicts within the crew?				
8	Were there any conflicts with other crews?				
9	Did any crews work nearby that you did not expect?				
10	Did other crews' work cause any challenges or hazards to your crew?				
11	Were any major pieces of equipment (e.g., tower crane) mobilized to the jobsite?				
12	Were there any equipment or tool related issues (breakdown, unavailability)?				
13	Were there any material related issues?				
14	Did weather conditions impact your work?				
15	Is there anything else you would like to discuss?				



Assess Your PTP Process; Management Checklist

- Use the Management Checklist to assess your PTP process
- Each "No" answer indicates an area for improvement
- Use guidelines presented in the PTP package to improve each component
- Download the Management Checklist:

Pre-Task-Planning-PTP-Assessment-Management-Checklist.pdf (cpwr.com)

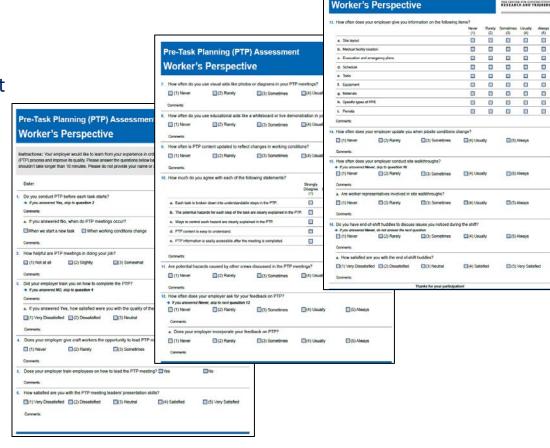




Assess Your PTP Process; Workers' Perspectives

- Actively gather firsthand information from workers and continuously incorporate it to reach an optimum outcome
- Identify areas for improvement
- Use guidelines presented in the PTP package to improve each component
- Download the Workers' Perspective Questionnaire:

Pre-Task-Planning-PTP-Assessment-Workers-Perspective.pdf (cpwr.com)



Pre-Task Planning (PTP) Assessment

CPWR (



Continuous Improvement

- Encourage contractors to initiate their PTP process without emphasizing perfection.
- Ask for workers' perspectives.
- Repeat the process to identify shortcomings.
- Simplify the process so it can be completed with minimal effort.
- Remove unnecessary, non-value adding steps.
- Exercise post-job review.

Guidelines and Resources

Pre-Task Planning (PTP)
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Acknowledgement







































Thanks!

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