

Dr. Bryan Seal, Indiana University of Pennsylvania - April 12, 2022

# The Benefits of Safety Plans on the Jobsite

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## Pennsylvania Housing Research Center

- The Pennsylvania Housing Research Center (PHRC) provides and facilitates education, training, innovation, research, and dissemination to the residential construction industry for the purpose of improving the quality and affordability of housing.
- Educational programs and publications by the PHRC address a wide range of topics relevant to the home building industry and are designed to reach a diverse audience: builders, code officials, remodelers, architects, developers, engineers, planners, landscape architects, local government officials, educators, etc. to provide professional development and continuing education

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## PHRC Webinars

[www.phrc.psu.edu/industry-education/webinars/index.php](http://www.phrc.psu.edu/industry-education/webinars/index.php)

- Always **FREE** to view
- 50+** recordings
- Broad range of topics

<https://bit.ly/PHRCWebinars>

**Residential Structures and Building Code Requirements**

- 5/11/2021 Air Sealing Tips, Tricks, and Details
- 4/13/2021 Healthy Homes: Insights for Existing Housing
- 2/25/2021 Structural Insulated Panels (SIPs) for Residential Construction
- 1/28/2021 Control Layers: Vapor Barriers & Retarders
- 10/13/2020 It's More than "Just a Deck"
- 9/24/2020 A Range of Rainscreens: An in Depth Look at the Variety of Rainscreen Applications
- 8/11/2020 Why Housing is Long Overdue for Disruption
- 2/11/2020 Building Science 101 for Residential Buildings
- 10/8/2019 Wall Bracing in the UCC

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## New! PHRC On-Demand Courses

### Available Topics

- Sub Insulation: Finding the Right Details (1 hour)
- It's More Than "Just a Detail" (1 hour)
- Solar PV in PA: Intro to the Design of New Construction and Retrofit Residential Systems (1 hour)
- Reducing Thermal Bridging with Continuous Exterior Insulation (1 hour)
- High-Performance Walls in Pennsylvania (1 hour)
- Control Layers: Vapor Barriers, Vapor Retarders, & Air Barriers (1 hour)
- The Do's and Don'ts of Crawlspace Design and Construction Revisited (1 hour)
- Healthy Homes: Insights for Existing Construction (1 hour)
- Wall Bracing in the UCC (1 hour)
- Air Sealing Tips, Tricks, & Details (1 hour)

### Topics Coming in 2021-2022

- PA UCC Residential Code Update: Part 1
- PA UCC Residential Code Update: Part 2
- All-Electric New Homes in PA
- Adapting to Tighter Enclosures through Scopes of Work
- 2021 PA Alternative Residential Energy Provisions Update
- Adapting Slates & Stone Assemblies to Changing Codes
- Building Envelope Fundamentals: Part 1
- Building Envelope Fundamentals: Part 2
- Moisture Control Layers & Materials

<https://bit.ly/PHRC-On-Demand>



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## Continuing Education

• **At end of the program, you can register for a certificate to receive the following credits for this session:**

- 1.0 PA Dept L&I Contact Hour
- 1.0 PDH
- 1.0 AIA LU|HSW (PHRCWEB4122)
- 1.0 ICC Contact Hour (0.1 CEU) (29174)
- 1.0 NARI hour/CEU

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## The Benefits of Safety Plans on the Jobsite

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## Poll #1

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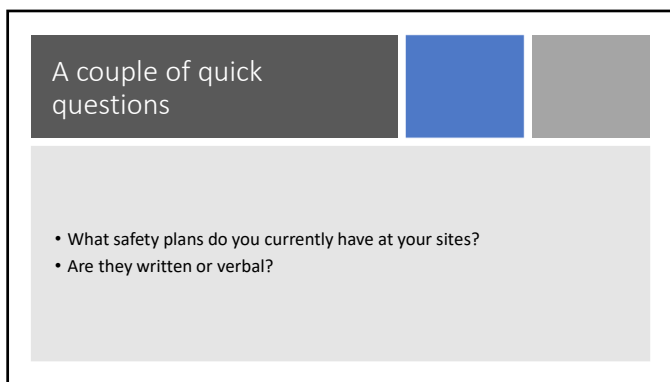
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### A couple of quick questions

- What safety plans do you currently have at your sites?
- Are they written or verbal?

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### Here are a few ...

1910.120	Spill Response Plans
1910.1030	Bloodborne Pathogens
1926.20	General Provisions
1926.21	Safety Training and Education
1926.24	Fire Prevention
1926.35	Emergency Action Plan
1926.50	First Aid
1926 Subpart E	Personal Protective Equipment
1926.101 (1910.95)	Hearing Conservation
1926.103 (1910.134)	Respiratory Protection
1926.251	Crane/Hoist
1926.417	Lockout/Tagout
1926 Subpart M	Fall Protection
1926.602	Powered Industrial Trucks
1926.651	Trenching and Excavations

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## Recommended Practices for Safety and Health Programs

Safety and health programs foster a proactive approach to "finding and fixing" workplace hazards before they can cause injury or illness. Written safety plans (or programs) are records of how an establishment is protecting (or plans to protect) employees overall for a safety or health hazard. The words plan and program can be and have been used interchangeably. Both simply document what a facility is doing to keep its employees safe and healthful.

**OSHA**  
Occupational Safety and Health Administration  
osha.gov/safetymanagement  
OSHA 3885 October 2016

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## Primary Components of a H&S Plan

- Management Leadership
- Worker Participation
- Hazard Identification and Assessment
- Hazard Prevention and Control
- Education and Training
- Program Evaluation and Improvement
- Communication and Coordination for Host Employers, Contractors, and Staffing Agencies

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## OSHA Citations

- Notice any trends?

Standard	Citations	Significance	Penalty	Description
Total	1,726	710	\$1,275,020	All standards cited for Residential Building Construction
1926.1001	293	278	\$1,414,000	Duty to have fall protection.
1926.1043	233	129	\$366,000	General requirements.
1926.1003	144	120	\$307,000	Ladders.
1926.1009	107	80	\$151,000	General safety and health programs.
1926.1002	86	65	\$108,000	Training requirements.
1926.1010	66	16	\$274,000	Eye and face protection.
1926.1010	54	14	\$176,000	Head protection.
1926.1005	46	36	\$94,000	Stairways.
1926.1011	35	23	\$55,000	Specific Excavation Requirements.
1926.1013	30	12	\$63,000	— No description found —
1926.1040	26	26	\$67,000	Hoisting methods, components, and equipment for general use.
1926.1007	26	26	\$67,000	Safety training and education.
1926.1044	24	21	\$54,000	Training requirements.
1926.1006	23	11	\$57,000	Household Communications.
1926.1018	22	20	\$57,000	General requirements.
1926.1002	22	16	\$49,000	Fall protection systems criteria and practices.
1926.1011	22	4	\$19,000	Advances.
1926.1013	20	17	\$42,000	Attachment workpieces.

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### A systematic approach

• Graphic adapted from Hoover, M.D., T. Armstrong, T. Blodgett, A.K. Fleeger, P.W. Logan, B. McArthur, and P.J. Middendorf: Confirming Our Industrial Hygiene Decision-Making Framework, The Synergist, 22(1): 10, 2011.



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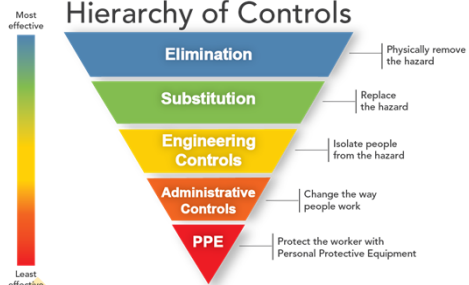
### Poll #2

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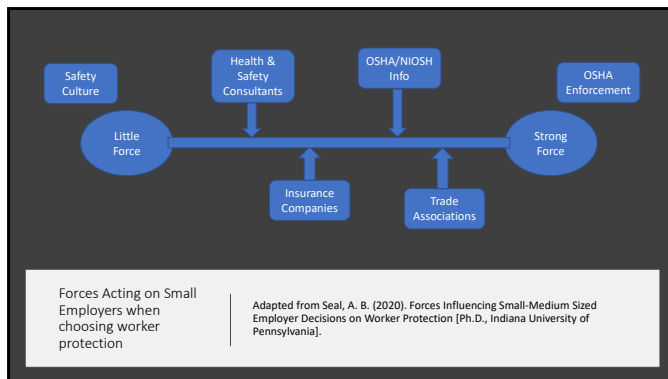


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### Hierarchy of Controls



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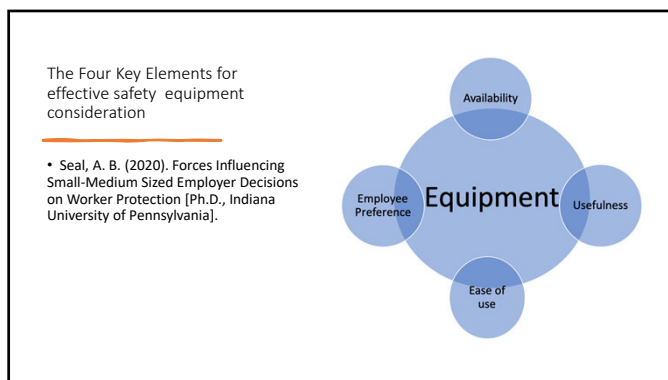
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**10 EASY THINGS TO GET YOUR PROGRAM STARTED**

If these recommended practices appear challenging, here are some simple steps you can take to get started. Completing these steps will give you a solid base from which to take on some of the more structured actions presented in the recommended practices.

- 1. SET SAFETY AND HEALTH AS A TOP PRIORITY**  
Place safety and health as the top priority. Tell your workers that making safe the way they do their job and go home safely is the way you do business. Assure them that you will work with them to find and fix any hazards that could injure them or make them sick.
- 2. LEAD BY EXAMPLE**  
Practice safe behavior yourself and make safety part of your daily conversations with workers.
- 3. IMPLEMENT A REPORTING SYSTEM**  
Develop and communicate a simple procedure for workers to report any injuries, illnesses, incidents (including near miss/unsafe acts), hazards, or safety and health concerns without fear or retaliation. Include an option for reporting hazards or concerns anonymously.
- 4. PROVIDE TRAINING**  
Train workers on how to identify and control hazards using, for example, OSHA's hazard identification training tool.
- 5. CONDUCT INSPECTIONS**  
Inspect the workplace with workers and ask them to identify any activity, piece of equipment, or material that concerns them. Use checklists, such as those included in OSHA's Small Business tipbook, to help identify problems.
- 6. COLLECT HAZARD CONTROL IDEAS**  
Ask workers for ideas on improvements and follow up on their suggestions. Provide them time during work hours, if necessary, to research solutions.
- 7. IMPLEMENT HAZARD CONTROLS**  
Assign workers the task of choosing, implementing, and evaluating the solutions they come up with.
- 8. ADDRESS EMERGENCIES**  
Identify foreseeable emergency scenarios and develop instructions on what to do in each case. Post to display these procedures and post them in a visible location in the workplace.
- 9. SEEK INPUT ON WORKPLACE CHANGES**  
Before making significant changes to the workplace, work organization, equipment, or materials, consult with workers to identify potential safety or health issues.
- 10. MAKE IMPROVEMENTS**  
Set aside a regular time to discuss safety and health issues, with the goal of identifying ways to improve the program.

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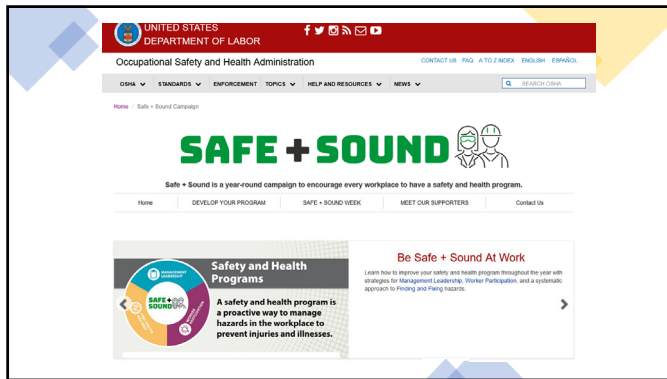
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## Questions?

**Thank you for your time!**

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## AIA Info

Credit(s) earned on completion of this course will be reported to AIA CES for AIA members. Certificates of Completion for both AIA members and non-AIA members are available upon request.

This course is registered with AIA CES for continuing professional education. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product.

Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



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## Description

- This webinar introduces attendees to health and safety (H&S) plans used on residential construction sites. The talk defines an H&S Plan and presents its primary components. The webinar looks at OSHA's enforcement of applicable standards. Lastly, the talk introduces a systematic approach for identifying, assessing, and controlling job site hazards to aid employers when creating their own job site H&S Plans.



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## Learning Objectives

1. Attendees will know the definition of a Health and Safety Plan.
2. Attendees will be able to list the primary components of Health and Safety Plans.
3. Attendees will understand how OSHA approaches Health and Safety Plans.
4. Attendees will have a rudimentary knowledge of how to systematically approach their job sites when preparing their Health and Safety Plans



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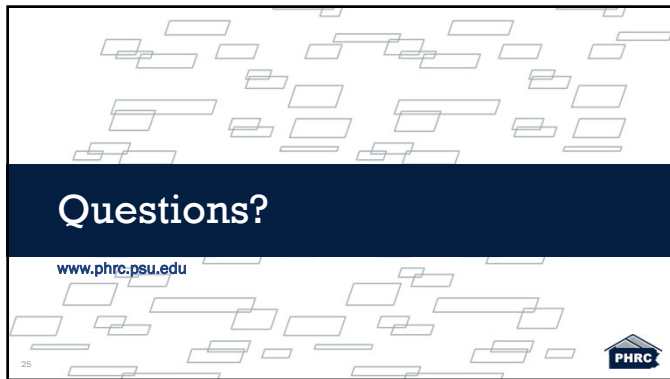
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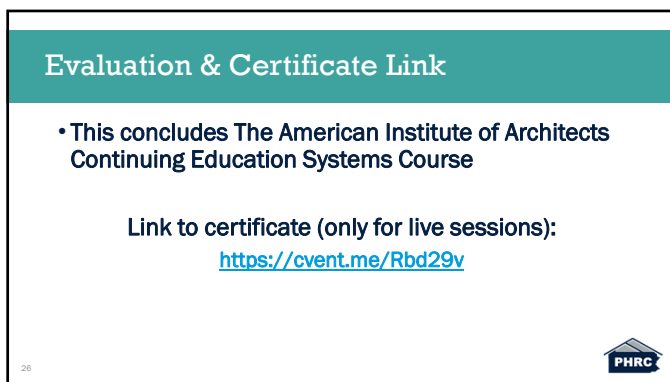
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