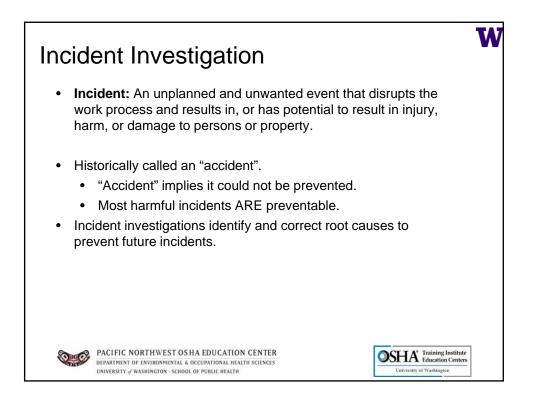
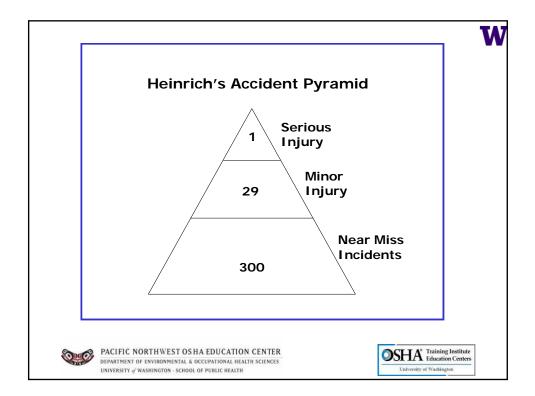
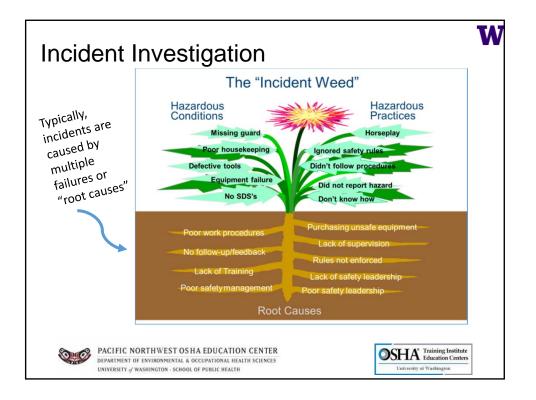


Task or Step	Hazards	Controls	
	1.1	1.1.1	
1.	1.2	1.1.2	
1.	1.3	1.2.1	
	1.5	1.2.2	
	2.1		
2.	2.2		
	2.3		
	3.1		
3.	3.2		
	3.3		
4	4.1		
4.	4.2		

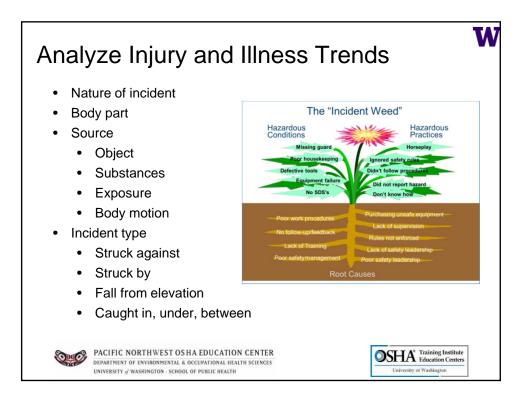


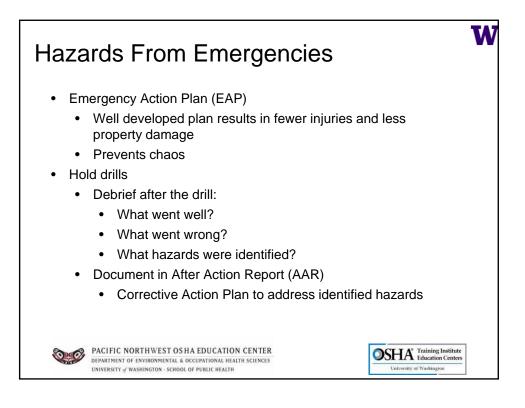


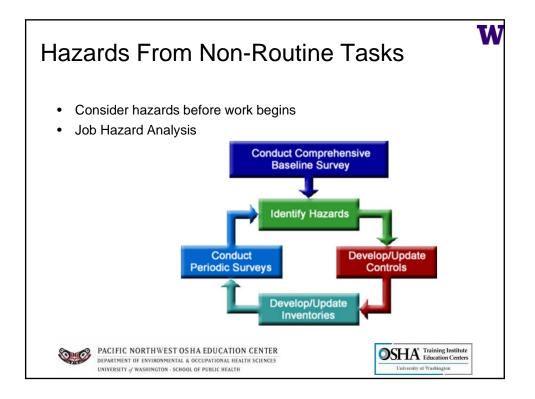


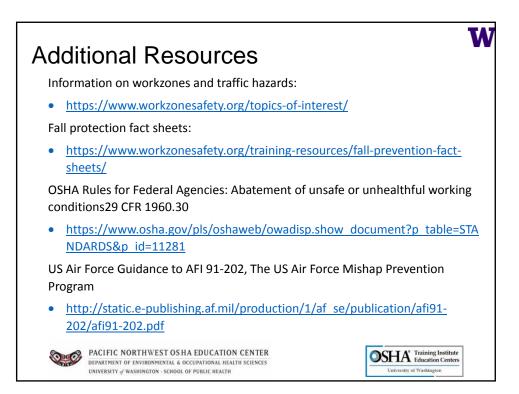
 Software Flow charting Fishbone diagram Fault tree Ask "why" five times 	My car will not start. (the problem)
	1) Why? - The battery is dead. (first why)
	2) Why? - The alternator is not functioning. (second why)
	<i>3) Why</i> ? - The alternator belt has broken. (third why)
	4) Why? - The alternator belt was well beyond its useful service life and has never been replaced. (fourth why)
	5) Why? - I have not been maintaining my car according to the recommended service schedule. (fifth why and the root cause)

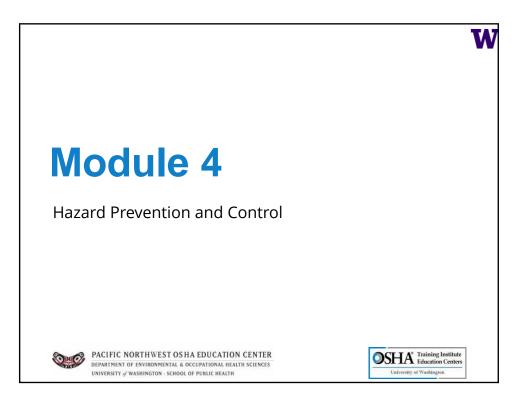


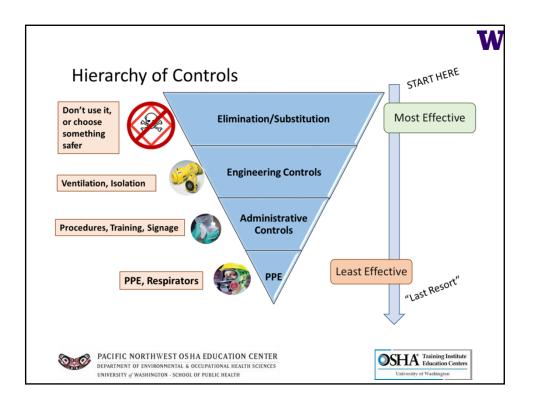


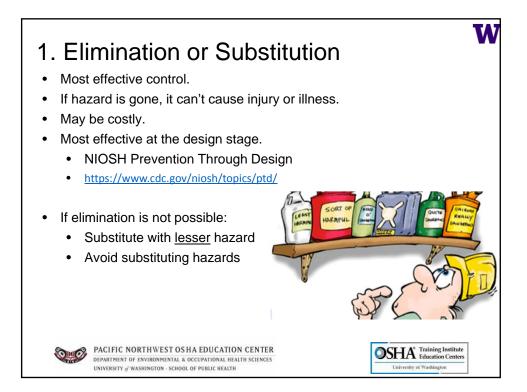


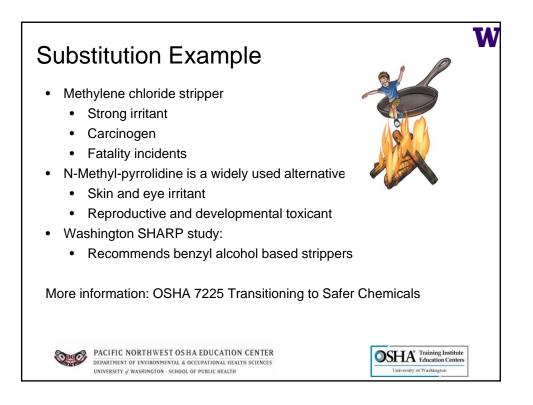




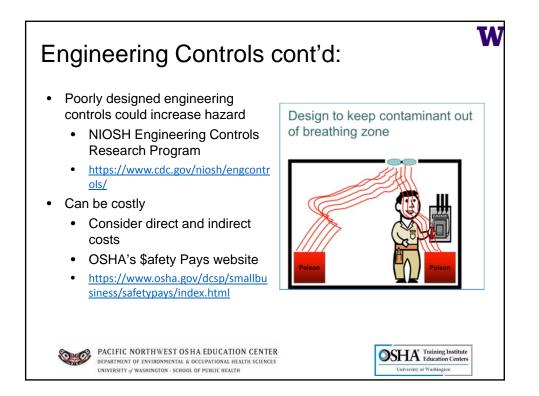




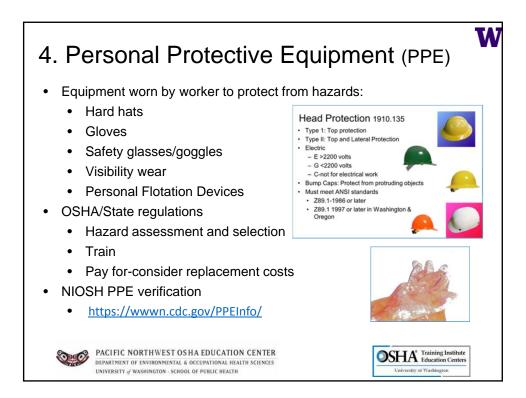


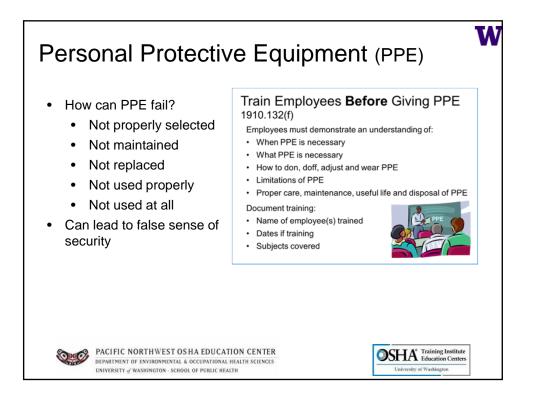


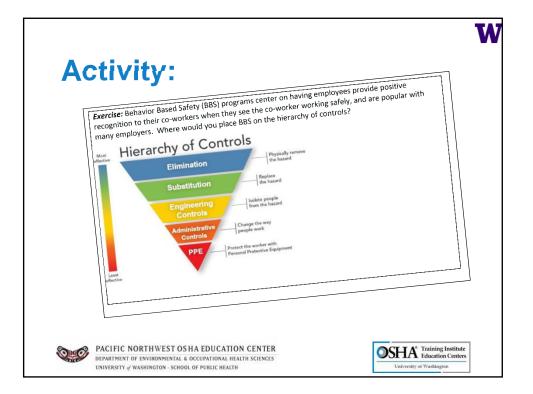


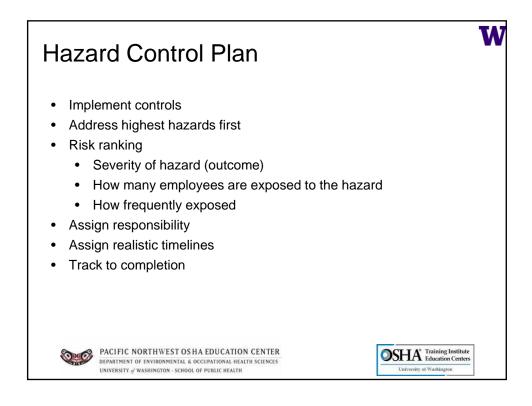


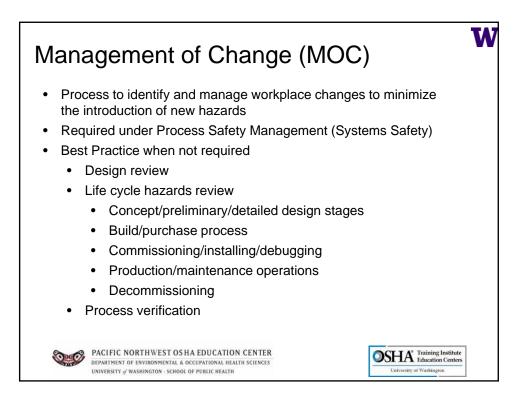


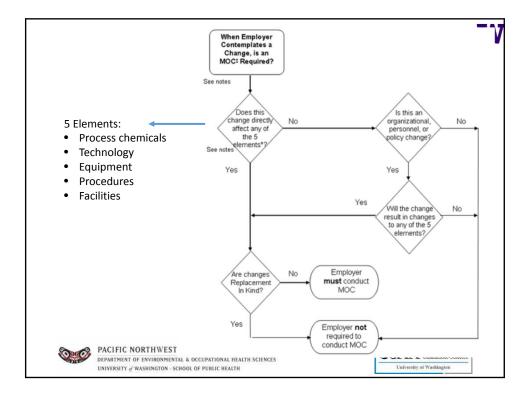


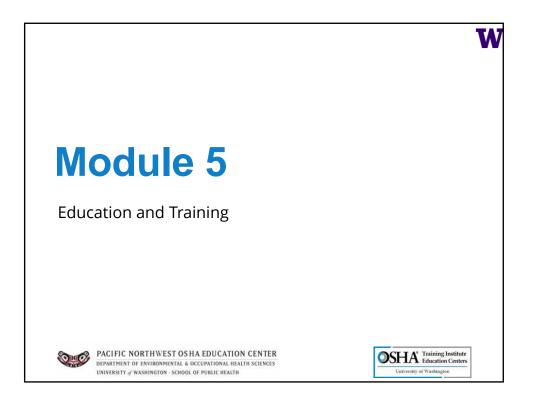




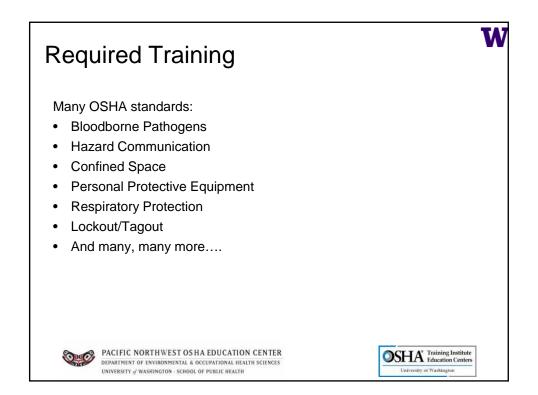


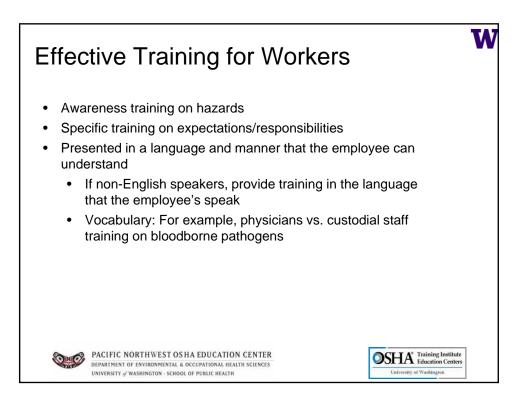


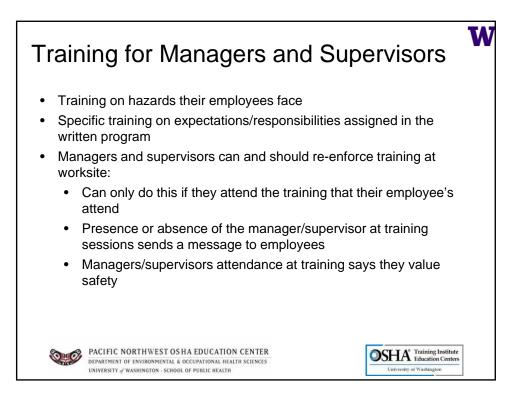


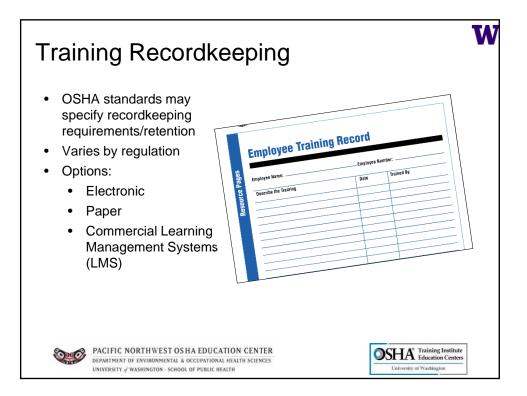


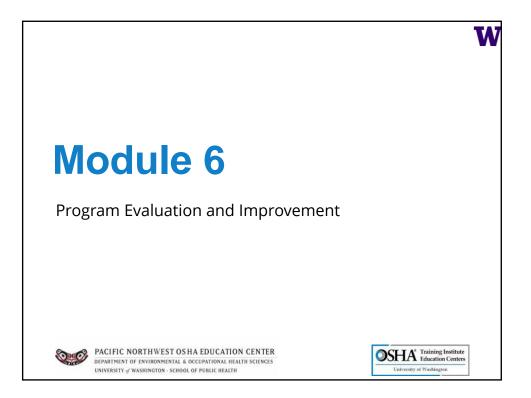


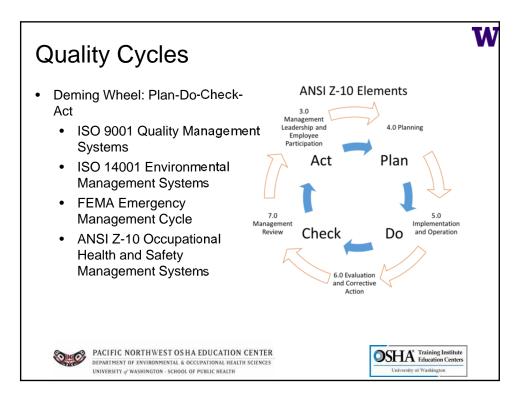




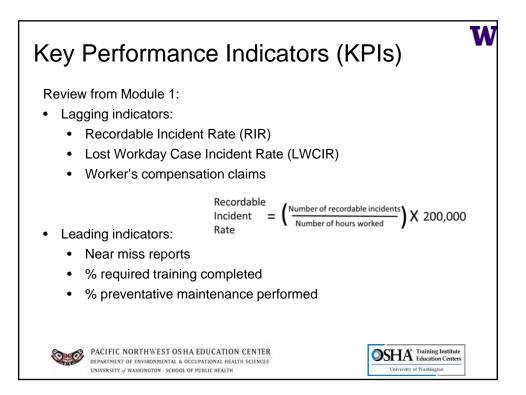




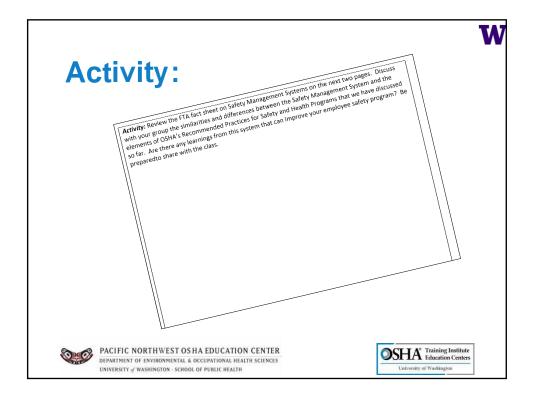




Checklists	Division of Occupational Safety and Health DOSH Consultation Services Olympia WA 98504-4648
Key Performance IndicatorsSafety assurance	Employer Consultant Consultant Darle Permany SICINALCS Code Number of employees Total hours worked
• Audits	Secondary SIDNACS Code Image: Code Code Code Code Code Code Code Code
 Follow up 	(Scores) Indicators (<i>Einma and separportate number</i>) (Scores) Indicators (<i>Einma and separportate number</i>) Comments: What evidence helped identifylverify adequecy? What improvement action is recommended? Leadenti 0 = No: 1 = No, Needs major improvements: 2 = Yes, Needs major improvements: 3 = Yes Leadenti 0 = 1 & 2 3 = N/A N/A Not a valuated: 1. Hazard Surveys 0 = 1 & 2 3 = N/A N/E 1. Comprehensive surveys have been conducted of all tasks and processes to 0 = 1 & 2 3 = N/A N/E 1. Comprehensive surveys have been conducted of all tasks and processes to 0 = 1 & 2 0 = 1 0







1. Safety management systems SMS) in brief

SMS is about strategically applying resources to risk. t is based on ensuring that a transit agency has the necessary organizational infrastructure in place to support decision-making at all levels regarding the ssignment of resources. This is essential to effectively manage safety risks during the delivery of service. The elements of an organizational infrastructure include: Defined roles and responsibilities

- Strong executive safety leadership Formal safety accountabilities and communication Effective policies and procedures
- Active employee involve

SMS is scalable and flexible

- SMS activities, and the processes necessary to support them, are scalable to the size of the transit agency and the complexity of the service delivery mode
- Key SMS activities
- Collecting and analyzing data and information to proactively identify hazards Taking actions to mitigate the risk associated with
- the potential consequences of hazards Ongoing monitoring of risk through a system of
- safety controls
- Using data to support allocation of resources that promote and support safety performance

Key features of SMS

- Accountability for the management of safety at the highest level of the transit agency Collaboration between management and labor to
- ensure agreement on safety risk priorities
- Structured and strategic decision making for safety
- resource allocation Enhanced service safety performance through
- proactive safety risk analyses Increased confidence in safety risk controls through safety assurance

- Partnership and knowledge sharing between public transportation agencies, state agencies and the FTA
- A positive safety culture that supports safety communication and reporting

5. SMS Components

- SMS is comprised of four components: Safety Policy – safety commitment and accountability, safety roles and responsibilities, safety resource allocation to support safety
- performance targets Safety Risk Management safety hazard identification, safety risk-based analysis and
- implementation of safety risk controls
 Safety Assurance monitoring of safety risk controls to ensure they are achieving their intended objective while assessing the need for new risk control strategies
- Safety Promotion achieving the safety mission through clear safety communication channels and safety training programs

6. Benefits of SMS

An SMS helps agencies see the whole picture when it comes to risk. The pedestrian fatality in a crosswalk may be avoided when drivers report near misses, supervisors proactively investigate the operating environment, and management supports organizational accountability rather than individual blame. This leads to changes in procedures and training that result in reduced risk for pedestrians.

7. The role of senior management in SMS

· Regardless of the size, mode, or operating characteristics of a transit agency, the success of SMS depends on the extent to which senior management understands and accepts its role of accountability in promoting safety and managing transit agency safety programs. Ensuring employee partnership and participation in

8. SMS and our current safety structure

- SMS builds on existing transit agency resources both human and technical, and refocuses agency activities to more effectively utilize tools and existing talent and expertise within the transit
- SMS ensures that safety decision-making is integrated into the management processes that drive the organization.

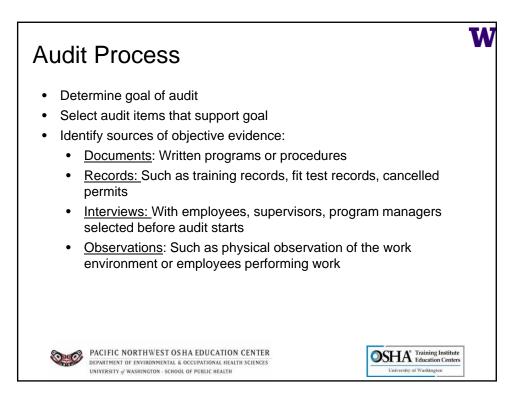
9. Security, emergency preparedness and SMS

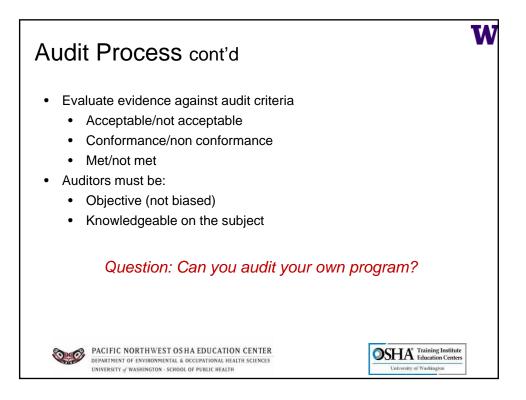
- When considering overall risk to passengers. employees and the transit agency, SMS ensures that transit management integrates security and emergency preparedness information into its assessments of risk.
- SMS helps management and employees understand their total safety risk exposure and apply resources strategically and effectively.

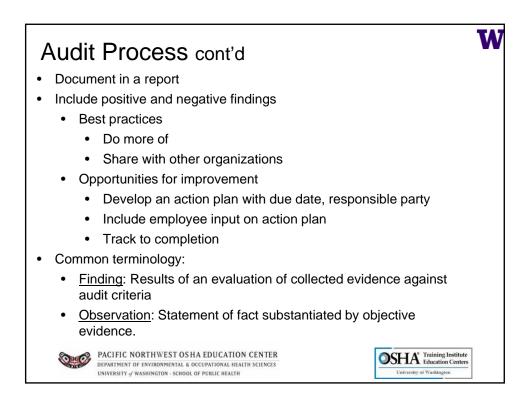
10. SMS and safety culture

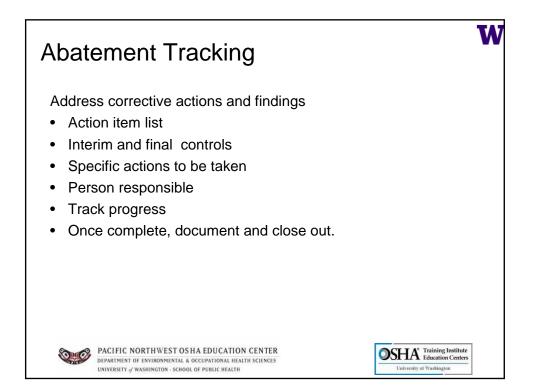
- SMS facilitates a shift in the attitudes regarding safety within a transit agency, by changing both leadership and employee perceptions of safety ar its importance in day-to-day activities.
- SMS places a strong emphasis on safety training and safety communication to guarantee that the entire transit agency fully understands SMS policies and procedures, and supports an effective safety-reporting environment within all levels of th workforce. • SMS promotes an environment where
- management and employees work together to identify risks and act together to control them.

Audits Preparing and conducting an effective audit is a learned skill. **Resources:** ٠ American Society for Quality ٠ http://asq.org/learn-about-quality/auditing/ ANSI/ISO 19011 Guidelines for Management System Auditing ANSI Z10, Appendix L PACIFIC NORTHWEST OS HA EDUCATION CENTER OSHA Training Institute Education Centers 00 DEPARTMENT OF ENVIRONMENTAL & OCCUPATIONAL HEALTH SCIENCES UNIVERSITY of WASHINGTON - SCHOOL OF PUBLIC HEALTH











∕lulti E	mployer Coordination	V
OSHA Gu	delines and Instructions:	
Definition		
Contracto	An individual or firm that agrees to furnish materials or perform services at a specified price, and controls the details of how the work will be performed and completed.	
Controllin employer	An employer who has general supervisory authority over the worksite, including the power to correct safety and health violations itself or require others to correct them.	
Correcting employer	An employer who is engaged in a common undertaking, on the same worksite, as the exposing employer and is responsible for correcting a hazard.	
Creating employer	The employer that caused a hazardous condition that violates an OSHA Standard	
Dual Empl	yers (Washington) Two or more employers who may share liability for safety and health violations that expose employees to workplace hazards	
DEP.	FIC NORTHWEST OSHA EDUCATION CENTER IMENT OF ENVIRONMENTAL & OCCUPATIONAL HEALTH SCIENCES ISITY of WASHINGTON - SCHOOL OF PUBLIC HEALTH	

Multi En	nployer Coordination	V
Definitions		
Exposing employer	An employer whose own employees are exposed to the hazard	•
Host employer	An employer who has general supervisory authority over the worksite, including controlling the means and manner of work performed and having the power to correct safety and health hazards or require others to correct them.	
Staffing agency	A firm that provides temporary workers to host employers. A staffing agency hires its own employees and assigns them to support or supplement a client's workforce in situations involving employee absences, temporary skill shortages, seasonal workloads, and special projects.	
Temporary workers	Workers hired and paid by a staffing agency and assigned to work for a host employer, whether or not the job is actually	
DEPARTMEN	temporary. NORTHWEST OS HA EDUCATION CENTER AT OF ENVIRONMENTAL & OCCUPATIONAL HEALTH SCIENCES & WASHINGTON - SCHOOL OF PUBLIC HEALTH	

