# Evaluate Across the Program Elements

## Ready for Level 2?

| | YES (✓) | NO (X) |
|---|---|---|
| You are evaluating the program at least yearly | ☐ | Visit Monitor Performance (1PEI_1) and Verify Program Operation (1PEI_2) |
| You are identifying shortcomings within each program element | ☐ | Visit Monitor Performance (1PEI_1) and Verify Program Operation (1PEI_2) |
| You are improving your program within each element as needed | ☐ | Visit Correct and Improve Your Program (1PEI_3) |

| To-Do |
|---|
| ☐ **Look for patterns or trends in the data you're collecting (for example, about hazards and controls).** |
| ☐ **Make program evaluation a routine part of your business, not just an annual activity.** |
| ☐ **Consider how shortcomings and improvements in each element can affect other elements and the program as a whole.** |

## Use your data to spot patterns or trends

Ongoing program improvement involves taking actions in each element toward goals, then reviewing those actions to troubleshoot and find gaps. As your program matures, you'll have more and more data to help you track successes and shortcomings. For example, you may have set up an inventory of hazards (in Implement Inspections and Other Hazard Identification Processes [2HI_2]). You may have a process to measure and monitor effectiveness of controls (in Confirm That Controls Are Effective [2HPC_4]). You are likely tracking both lagging and leading indicators to identify program successes and shortcomings (Track Progress Toward Program Goals [2PEI_1]).

Looking at several years of data, you might see patterns you can act on. For example, you might see that workers find more hazards during the annual maintenance shutdown week. At the same time, you might see that the organization hasn't followed up with appropriate controls.

# Look across program elements to make improvements

A safety and health program is like an ecosystem, made of elements that are all important and all connected. Neglecting one part or changing it without knowing the effects on the whole system can have surprising (and bad) results. If a goal of the safety and health program is to encourage frontline employees to find and report workplace hazards, then all the program elements have a role in meeting, or failing to meet, that goal and must complement each other. For example, failures of management to follow up on hazard reporting will likely discourage worker participation in the program. This in turn will affect hazard identification, the overall performance of the program, and ultimately the health and safety of workers.

As you evaluate how well your program is working, think about how improvements or shortcomings in one element will affect other elements in the system (see the example below).

## Evaluating Across Program Elements: An Example

A company had been dealing with musculoskeletal injuries in its pump production line. These injuries had to do with overreach, lifting, assembly, cleaning, and maintenance tasks. The company decided to revamp the line to automate these tasks. The company installed portable lifting tables, product handling turntables, and automated presses. These **hazard prevention and control** measures helped reduce the risk of injury.
The company also reviewed whether the other elements of the safety and health program affected risks.

- **Management leadership**: Allocated enough resources for improvements to manage identified hazards.
- **Worker participation**: Involved workers in workflow decisions on the production line.
- **Hazard identification and assessment**: Conducted a job hazard analysis to find any new hazards introduced by the change in the production line.
- **Education and training**: Helped workers recognize risks (including signs and symptoms) related to musculoskeletal injuries.
- **Program evaluation and improvement:** Discussed safety and health management in team meetings with workers.
- **Communication and coordination**: Sought input from contractors involved with the production line.

# Make program evaluation routine

When your safety and health program began, you likely conducted evaluations once a year. Now that your program is up and running and you have several cycles of data, you should make program evaluation a routine aspect of your business—just like keeping on top of quality, productivity, and customer satisfaction. This may mean doing more frequent evaluations. For example, have your evaluation team meet at least quarterly to review sources of information on program performance (worker input, indicator data, results of inspections and incident investigations, etc.). Make corrections and improvements right away as part of your cycle of program planning. Remember that you're not just addressing hazards like you did in Hazard Prevention and Control, but making improvements to your safety and health program and the ways in which you make your workplace safer.

# Activity: Brainstorm improvements needed in interaction of program elements

In this activity, your evaluation team will brainstorm what the individual program elements need from each other to meet program goals and where these interactions are falling short. The team can then pinpoint improvements needed in the separate elements to improve the program as a whole.

## Instructions

1. Convene your evaluation team. Ask them to review the goals you have set for your program (see Plan for Continuous Improvement [2ML_2a]).

2. Draw a diagram on a flipchart or whiteboard showing all the elements of your program. You can use or adapt the blank diagram below.

3. To begin, choose one goal and the corresponding element. Use markers or sticky notes to show what that element needs from other elements ("inputs") to be successful. Then think about how "outputs" from that element feed into other elements.

4. Discuss whether the inputs and outputs are helping you meet the goal. Mark (for example, with an "X") where inputs or outputs need improvement.

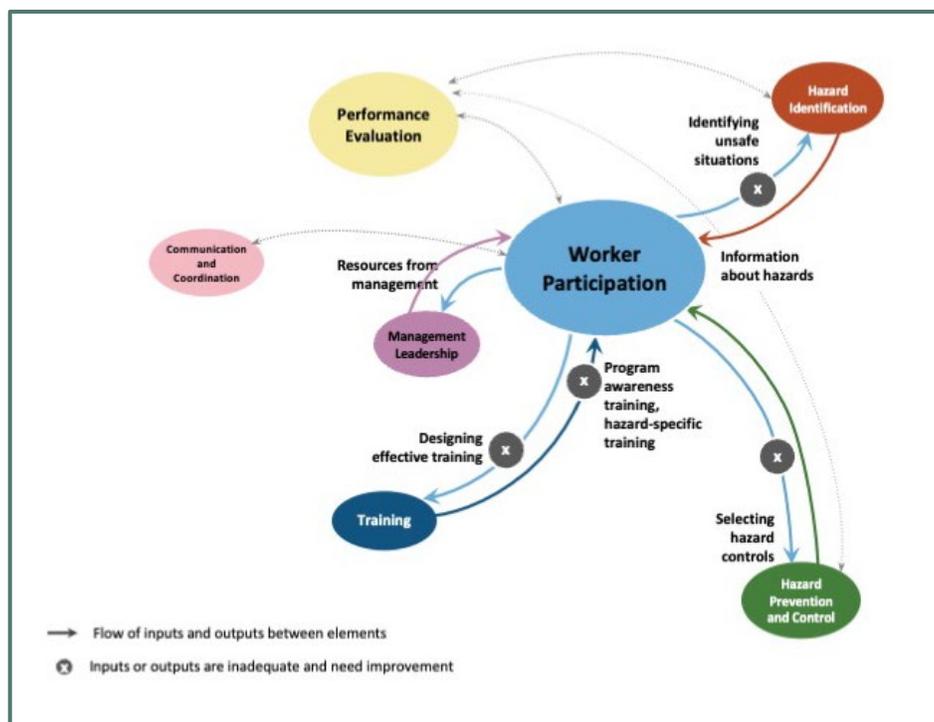5. Brainstorm ways to improve inputs or outputs to meet the goal. Add these to your implementation plan.

## Example

- Say your goal is to involve workers in workflow decisions on the production line to help address musculoskeletal injuries. The team writes this goal within the "worker participation" element.

- The team brainstorms what the worker participation element needs from other elements to help meet this goal: resources from management, information from hazard identification processes, training programs. They write these on the diagram.

- Then they identify how worker participation with respect to this goal feeds into other elements: finding unsafe situations, choosing hazard controls, designing effective training. They indicate these on the diagram.

- The team finds that workers don't get enough training to take part in workflow decisions. They put an X through the arrow from training to worker participation. They also see that the untrained workers can't provide adequate input to hazard identification and selection of controls.

- The team then brainstorms actions needed to improve inputs or outputs, especially improvements in training. They identify a need for more resources from management (time, training materials). They add these improvements to the implementation plan.
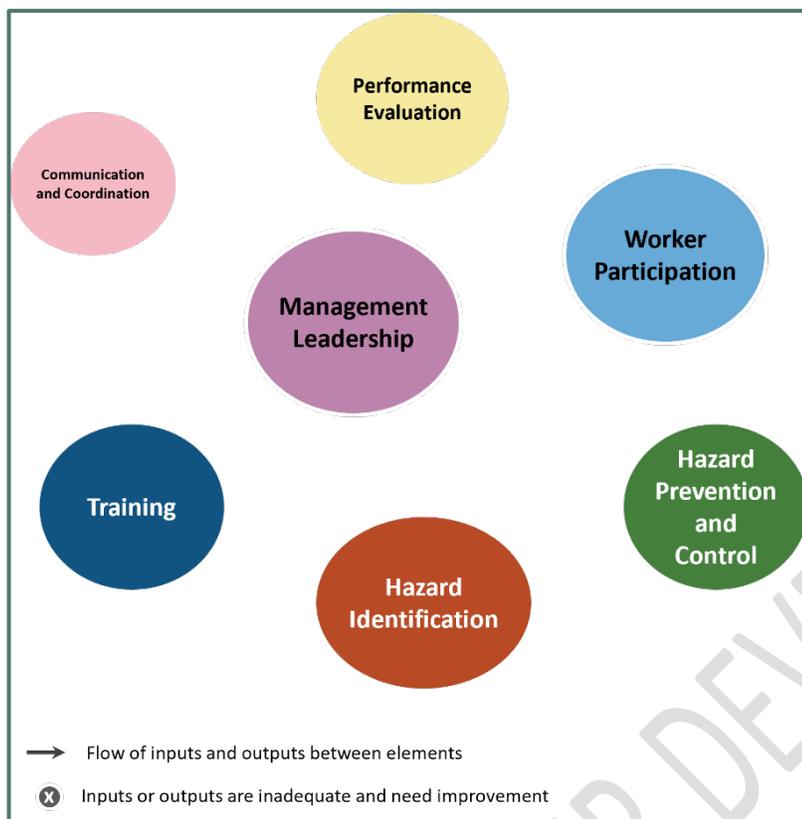
You should return to this activity to evaluate progress toward other goals and identify needed improvements in other elements of your program.

Don't forget to share the results of your evaluation with people affected by the review and those responsible for corrective actions. This will help everyone learn and improve in the future.

## Example diagram

## Blank diagram for activity

Performance
Evaluation

Communication
and Coordination

Worker
Participation

Management
Leadership

Training

Hazard
Prevention
and
Control

Hazard
Identification

→ Flow of inputs and outputs between elements

(X) Inputs or outputs are inadequate and need improvement