# Safety Improvement Plan (SIP)

The main tool that you’ll use to make changes to your safety and health activities is the Safety Improvement Plan (SIP). This document explains the purpose of the SIP, and provides worksheets that you’ll fill out to create your SIP and share it with L&I. There’s an example of a completed SIP worksheet that you can use as a guide on the last page.

## Goal of the SIP

The purpose of your SIP is to lay out the safety and health goals or milestones that your Fire Department plans to accomplish during the FIIRE project. Think of it as an action plan for safety. Your SIP should be specific to the hazards that your staff are exposed to. You can draw from the following as you identify these hazards:

* The results of the VAP survey
* Your safety committee meetings
* Your Accident Prevention Program (APP) or Safety Plan
* The Risk Management training provided by L&I
* Your discussions with peers in the FIIRE Collaboratives

## Best practices in your SIP

Your plan should identify best practices that you’ll put in place to address the hazards chosen as priorities. We expect that most fire departments participating in the pilot project will focus on best practices to prevent carcinogen exposures and musculoskeletal disorders, such as those related to patient transport and equipment handling. The changes you make could be to the fire station or to apparatus, to equipment or turnout gear, or to work, training and exercise methods. Chances are you’ll be making several different types of changes to address each hazard that you identify.

Think of your SIP as a living document that grows and changes with the needs of your Department. As you make progress towards your safety and health goals, you’ll send in Quarterly Reports that describe your accomplishments and what you plan on working on for the next three-month period.

## Implementing your SIP and monitoring effectiveness

Your SIP will be more than just a written program. It will be a roadmap to guide the changes that you’ll make to improve safety and health. Your SIP will help you think through what those changes will be, when and how they’ll be made, and who will make them. You’ll also include a plan for monitoring the changes for effectiveness, and adjusting them as needed to make sure you’re getting the greatest possible benefit from them.

## Help is available from L&I

If you’d like to make sure you’re on the right track as you create your SIP, help is just an email or phone call away. Contact us at FIIRE@Lni.wa.gov or call Pam Zenzius at 360-701-6113.

# Safety Improvement Plan – Carcinogen Exposure Reduction

**Find**

Briefly describe how you identified hazards (task analysis, input from firefighters, reviewing injuries/near misses, reviewing known hazards in the fire service, etc.). Include all of the carcinogen exposures you identified.

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| **This is how we identified potential carcinogen exposure hazards:****These are the people who were involved in the process:** |
| **These are the tasks, locations, and sources of potential carcinogen exposures that we identified:** |
| **Task** | **Location** | **Source of carcinogens** |
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# Safety Improvement Plan – Carcinogen Exposure Reduction

**Prioritize**

Briefly describe how you prioritized the hazards (frequency of exposure, number of personnel exposed, etc.). Describe the hazard that you’ll be working on first.

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| **This is how we prioritized potential hazards:** |
| **This is our top carcinogen exposure hazard priority:** |

# Safety Improvement Plan – Carcinogen Exposure Reduction

**Fix**

Briefly describe how you chose the best practices that you plan to carry out (brainstorming, sources such as Healthy In, Healthy Out, etc.) List the solutions for your priority, and the plan for putting them into place. Include any additional tools or training you’ll need, and describe any challenges you anticipate.

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| **This is how we identified solutions:** |
| **These are the solutions we plan to carry out for the priority hazard:** |
| **Solution** | **Implementation plan** | **Estimated completion date** |
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| **We will apply for an equipment grant for the following:** |

# Safety Improvement Plan – Carcinogen Exposure Reduction

**Evaluate**

Briefly describe your plan for evaluating the effectiveness of your solutions. Include the criteria you’ll use to measure success, your plan for monitoring use of the solution, and the approach you plan to use if a solution needs to be adjusted to be more effective.

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| **This is how we will verify that our solutions are successful:** |
| **Priority:**  |
| **Solution** | **Evaluation plan** - Who will monitor for effectiveness? What methods will they use? How often will they monitor? How will you make adjustments if the solution is not immediately successful? |
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# Safety Improvement Plan – Musculoskeletal Injury Reduction

**Find**

Briefly describe how you identified hazards (task analysis, input from firefighters, reviewing injuries/near misses, reviewing known hazards in the fire service, etc.). Include all of the musculoskeletal injury exposures you identified.

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| **This is how we identified potential musculoskeletal injury hazards:****These are the people who were involved in the process:** |
| **These are the tasks, locations, and sources of potential musculoskeletal injuries that we identified:** |
| **Task** | **Location** | **Source of musculoskeletal injuries** |
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# Safety Improvement Plan – Musculoskeletal Injury Reduction

**Prioritize**

Briefly describe how you prioritized the hazards (frequency of exposure, number of personnel exposed, etc.). Describe the hazard that you’ll be working on first.

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| **This is how we prioritized potential hazards:** |
| **This is our top musculoskeletal injury hazard priority:** |

# Safety Improvement Plan – Musculoskeletal Injury Reduction

**Fix**

Briefly describe how you chose the best practices that you plan to carry out (brainstorming, sources such as Healthy In, Healthy Out, etc.) List the solutions for your priority, and the plan for putting them into place. Include any additional tools or training you’ll need, and describe any challenges you anticipate.

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| **This is how we identified solutions:** |
| **These are the solutions we plan to carry out for the priority hazard:** |
| **Solution** | **Implementation plan** | **Estimated completion date** |
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| **We will apply for an equipment grant for the following:** |

# Safety Improvement Plan – Musculoskeletal Injury Reduction

**Evaluate**

Briefly describe your plan for evaluating the effectiveness of your solutions. Include the criteria you’ll use to measure success, your plan for monitoring use of the solution, and the approach you plan to use if a solution needs to be adjusted to be more effective.

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| **This is how we will verify that our solutions are successful:** |
| **Priority:** |
| **Solution** | **Evaluation plan** - Who will monitor for effectiveness? What methods will they use? How often will they monitor? How will you make adjustments if the solution is not immediately successful? |
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**EXAMPLE**

# Safety Improvement Plan – Musculoskeletal Injury Reduction

**Find**

Briefly describe how you identified hazards (task analysis, input from firefighters, reviewing injuries/near misses, reviewing known hazards in the fire service, etc.). Include all of the musculoskeletal injury exposures you identified.

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| **This is how we identified potential musculoskeletal injury hazards:*** Reviewed last 3 years of injury and incident reports
* Got input from an L&I FIIRE project ergonomist
* Discussed recent near misses and crew concerns with safety committee
* Applied the risk management process with crews at each station

**These are the people who were involved in the process:**Chief, Battalion Chief for Training and Safety, safety committee members, and several line firefighters/EMTs from each station |
| **These are the tasks, locations, and sources of potential musculoskeletal injuries that we identified:** |
| **Task** | **Location** | **Source of musculoskeletal injuries** |
| Lift assist calls | Nursing homes and patients’ residences | Awkward positions while assessing patients and lifting patients up off the floor |
| Lateral transfers – bed to gurney to hospital bed | Patients’ rooms and hand off at the hospital | Pushing and pulling while reaching out and grasping a bed sheet |
| Lifting and carrying heavy med kits | On scene taking kits out of the rig and carrying them to the patient location, then returning them to the rig | Lifting of 40+ pounds over shoulder level, sometimes carrying over long distances |
| Extrication training and actual extrications | At the training center and at the scene of the accident | Lifting and carrying equipment, 50+ pounds, and holding equipment while operating it |

**EXAMPLE**

**Prioritize**

Briefly describe how you prioritized the hazards (frequency of exposure, number of personnel exposed, etc.). Describe the hazard that you’ll be working on first.

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| **This is how we prioritized potential hazards:*** Looked at frequency of call outs by type
* Considered relative level of physical demands (example: heavy vs light weight lifted)
* Gave extra points to tasks where injuries had occurred
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| **This is our top musculoskeletal injury hazard priority:**Sliding transfers – moving a patient from their bed to gurney, and then transferring to bed at hospital hand off |

**EXAMPLE**

**EXAMPLE**

**Fix**

Briefly describe how you chose the best practices that you plan to carry out (brainstorming, sources such as Healthy In, Healthy Out, etc.) List the solutions for your priority, and the plan for putting them into place. Include any additional tools or training you’ll need, and describe any challenges you anticipate.

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| **This is how we identified solutions:*** Started with step-by-step description of how we currently do transfers
* Asked which steps could be improved
* Crew members brainstormed solutions on their own, then met to compare
* Looked at the best practices on the FIIRE website
* Organized solutions by effectiveness and ease of getting them done (yellow stickies)
* Got consensus on several solutions that will be both effective and easy to put in place
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| **These are the solutions we plan to carry out for the priority hazard:** Sliding transfers |
| **Solution** | **Implementation plan** | **Estimated completion date** |
| Low friction slide sheets | * Purchase enough slide sheets so that each rig can have several of them
* Store slide sheets on gurneys so that they’re always available
* Train crews on how to use them in combination with a draw sheet or Mega Mover
 | Purchase by March 30, 2021Training completed by August 31, 2021 |
| Protective gear and impermeable sheet for working with soiled patients | * Purchase and use extra PPE to protect crew members who place slide sheet under patient
* Use protective sheet to allow crew members to climb onto bed to get closer to patient during transfer
 | Purchase by March 302021Ongoing |
| Make sure all crews are trained on sliding transfers | * Share best practice on relative position of gurney to bed
* Have crews practice setting up gurney, placing slide sheet under patient, teaming up for transfer, one crew member pushing while the other pulls
 | Training completed by August 31, 2021 |
| **We will apply for an equipment grant for the following:*** 16 slide sheets
* 16 impermeable protective sheets
* 32 sets of additional PPE
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**EXAMPLE**

**Evaluate**

Briefly describe your plan for evaluating the effectiveness of your solutions. Include the criteria you’ll use to measure success, your plan for monitoring use of the solution, and the approach you plan to use if a solution needs to be adjusted to be more effective.

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| **This is how we will verify that our solutions are successful:** |
| **Priority:** Sliding transfers |
| **Solution** | **Evaluation plan** - Who will monitor for effectiveness? What methods will they use? How often will they monitor? How will you make adjustments if the solution is not immediately successful? |
| Low friction slide sheets and protective gear | * Battalion chief will ask crews for feedback on slide sheets and protective gear 3 weeks after purchase
* Reporting on transport calls will include questions on lateral transfers and whether slide sheets and PPE were used
* If not successful, we will discuss possible adjustments or new solutions with crews
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| Training on sliding transfers | * Training officer will have all crew members demonstrate sliding transfer techniques at least once per quarter
* Crew members will report any instances where proper technique was not possible so that we can figure out best possible alternative methods
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| Hospital bed location | * Crews will report to battalion chief on conditions at the hospital following transport calls
* Battalion chief will discuss adjustments with hospital administration if needed
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