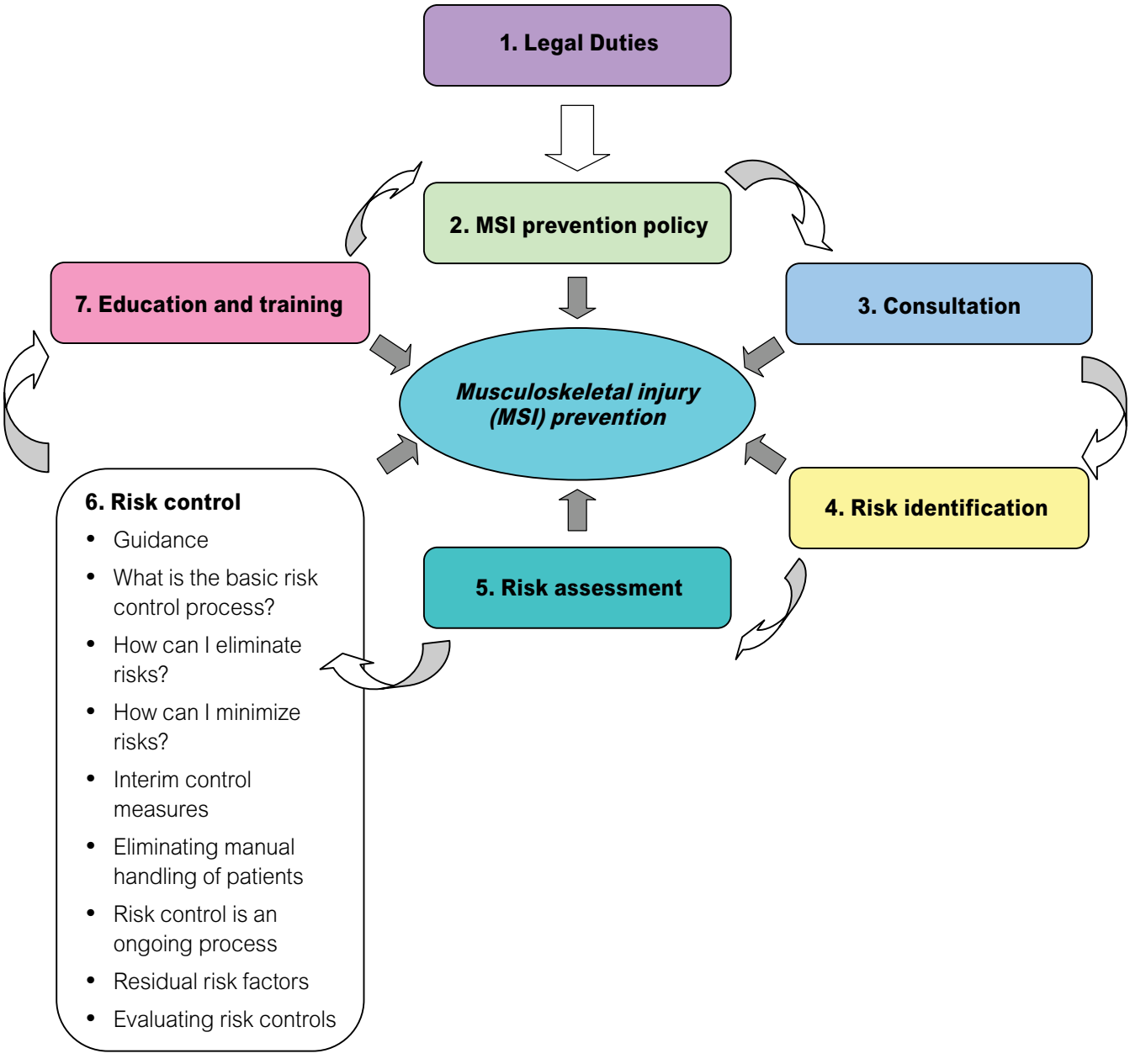
Part 6: Risk control



Regulation excerpt

Section 4.50 of the Regulation states:

(1) The employer must eliminate or, if that is not practicable, minimize the risk of MSI to workers.

(2) Personal protective equipment may only be used as a substitute for engineering or administrative controls if it is used in circumstances in which those controls are not practicable.

(3) The employer must, without delay, implement interim control measures when the introduction of permanent control measures will be delayed.

Guidance

Engineering controls include the arrangement, design, or alteration of the physical work environment, equipment, or materials. Modifying the work environment is an example of an engineering control. Mechanical lifts, ceiling lifts, and beds are also engineering controls.

Administrative controls include the use and scheduling of resources and staffing to improve work organization and performance. Examples include developing safe work procedures, training workers, and matching staffing levels to workload.

Personal protective equipment (PPE) generally does not apply to the prevention of MSI in patient handling. The use of back belts to reduce the risk of injury remains unproven, so WorkSafeBC does not consider back belts to be PPE.

Section 4.53 of the Regulation requires the employer to consult the joint occupational health and safety committee or worker health and safety representative in the risk control process. Section 4.52 requires the employer to evaluate the effectiveness of the controls.

Section 3.4 lists the contents of an incident investigation report. Employers are required to identify factors that contributed to an incident and to document the controls to be implemented.

What is the risk control process?

Effective risk control requires an effective risk assessment. Risk assessments provide the information needed to determine risk control measures. For more information on risk assessments, see "Part 5: Risk Assessment," page 25.

After identifying and assessing risks, decide which risks should be addressed first and what control measures they will require. Next, determine the range of available risk control measures. During this process, it is important to involve all persons who may be affected by the decisions or who may be able to provide insight based on previous experience.

Employers must eliminate or minimize risks, whenever practicable. In general, decisions will result in these three actions:

1. Clearly identify and communicate to workers high-risk procedures that should not occur.
2. Select the lowest-risk procedures possible for workers to use. This means selecting procedures that duration, and frequency of identified risk factors.
3. Where necessary, change the equipment, the work organization, or, if necessary, the work environment.

What does practicable mean?

Requirements for risk control are stated in terms of what is practicable. *Practicable* is defined in the Regulation as "that which is reasonably capable of being done." When determining what is practicable, consider:

- The level of risks that workers are exposed to
- How often workers perform the tasks that pose significant risks
- The availability of suitable control measures
- The cost-effectiveness of controlling risks

Although risk control measures may be minimize the magnitude, expensive, they may still be practicable for the employer to implement. For example, mechanical lifting equipment may be expensive initially but the risk reduction benefits, compared to manually lifting patients, may significantly outweigh these costs.

What is practicable may also change over time. Certain devices or equipment may become practicable as they become more widely available or less costly.

How can I eliminate risks?

The following patient handling guidelines may help eliminate risks of MSI to workers:

- Eliminate unnecessary patient handling.
- Encourage patients to assist in their own transfers as much as they are safely able.
- Install appropriate patient assistive devices such as grab bars or rails to help the patient be more independent.
- Use mechanical equipment such as ceiling lifts or electric beds to eliminate the need for strong manual forces.
- Use electric beds to eliminate handling procedures such as sitting up in bed.
- Design new facilities with patient handling needs in mind.
- Do not perform the task if a safe solution is unavailable. Use an alternative work method until a safe solution is provided. If necessary, you may have to care for the patient in bed until appropriate equipment is available.

How can I minimize risks?

The following patient handling guidelines may help minimize risks of MSI to workers:

- Use height-adjustable beds and specialized feeding tables to avoid awkward postures.
- Use slide boards, transfer boards, or slide sheets to reduce forces and awkward postures.
- Develop safe work procedures that reduce the risks of MSI to workers to the lowest possible levels and ensure that workers follow these procedures.
- Train workers to improve their technique.
- Ensure that patient assessments are kept up to date.
- Observe the patient's condition before each transfer to ensure that the designated transfer can be performed safely.
- Change the workplace layout or the organization of tasks to reduce distances for pushing and carrying tasks.
- Store heavy items at more convenient heights.

- Modify tasks to reduce the amount of time workers spend stooped over.
- Modify or reorganize tasks to increase variety.
- Share or rotate tasks among workers.
  Note: This only applies to reducing the repetition of tasks that are otherwise safe. Sharing or rotating will not turn an unsafe lift into a safe one.
- Install ramps so that stretchers, carts, and wheelchairs can be moved easily.
- Use improved handles, wheels, or castors to help reduce the amount of force needed to move a load.
- Implement a preventive maintenance program for the moving parts of equipment.

Interim control measures

Sometimes the necessary health and safety actions or equipment cannot be implemented immediately. If this is the case, interim control measures must be implemented to establish a safe system of work.

For example, a risk assessment may determine that a patient requires a height-adjustable bed. During the time it takes to free up or purchase a height-adjustable bed, the following interim control measures could be implemented:

- A hoist or slide board for transfers to and from bed
- A fabric slide aid or mechanical lift for moves up and down the bed
- A fabric slide aid for turning in bed
- A one-way slide aid to prevent the patient from sliding down in bed
- Care for the patient in bed until equipment is available
- Extra staff
- Low stools for workers

Eliminating manual handling of patients

It is practicable for employers to eliminate manual handling of most patients in care settings by providing mechanical lifting equipment. It is also practicable for workers to use these devices and avoid manual handling.

Where elimination of manual handling is not practicable, the risk factors identified in the risk assessment must be reduced to the lowest practicable level. This means that the duration, magnitude, and frequency of each risk factor must be reduced to the minimum levels required to perform the job safely.

Risk control is an ongoing process

Controlling one risk factor may introduce another, lesser risk. For example, a ceiling lift may be used to eliminate the need to lift manually. However, remaining risk factors such as awkward postures will need to be minimized using safe work procedures and effective training. Effectively controlling the risk of MSI is an ongoing process that often involves more than one risk control. Evaluating risk controls and fine-tuning where necessary are key elements of success.

Residual risk factors

Residual risk factors are risk factors that remain within a task after all practicable risk control measures have been implemented. Even with the introduction of patient lifting equipment, the risk identification process should include consideration of residual

MSI risks to workers. For example, there are potential risks of MSI involved with pushing or pulling mobile floor lifts, placing slings for ceiling lifts, or positioning patients in chairs after using patient lifts.

Even the safest patient handling activities generally have some MSI risk factors that remain and need to be minimized. Employers can control risk factors by providing workers with information, education, training, and active supervision. The risk assessment process should identify such residual risk factors present in the generic handling procedures. Employers must ensure that workers receive training in the residual MSI risk factors associated with their work activities.

Example: Side-by-side reposition with residual risk factors

In this example the workers have attempted to reduce the risk by inclining the foot of the bed, but there are residual risk factors that they need to be aware of, including the following:

- The load's centre of gravity is a considerable distance away from the base of the workers' spines.
- Although the workers are supposed to slide the patient by transferring their weight from one side to the other, it is often tempting to lift the patient.
- Lifting in this posture stresses the soft tissues of the shoulders and lower back, increasing the risk of injury.
- Certain body parts (indicated by three circles and an oval) are specifically at risk.

Evaluating risk controls

Employers must evaluate control measures to determine how effective they are in eliminating or minimizing the risk of MSI. The following are examples of evaluation methods:

- Interview the workers.
- Look for decreases in the number and severity of signs and symptoms of MSI.
- Look for a reduction in the number or severity of risk factors.
- Use a checklist or other tool to compare exposures to risk factors before and after controls are implemented.

If a risk has not been effectively controlled or new risks have been created, reexamine the task and consider what additional controls may be needed. Employers must also evaluate the overall MSI prevention program at least once a year to ensure that it continues to meet the objective of eliminating or minimizing risks to workers. Care area supervisors should review generic handling procedures on an ongoing basis to ensure that workers are following them.