Appendix 1C Risk Assessment and Risk Control Form (ASSESSING & CONTROLLING RISKS FROM MANUAL TASKS)

Assessment details

Date of assessment:

Description of manual task:

Location of task:

Persons doing assessment

Work area management rep:

Work area H&S rep:

Others (employees, consultants):

Reason for identification

- ☐ Existing task
- ☐ New task
- ☐ Change in task, object or tool
- ☐ New information
- ☐ Report of musculoskeletal disorder (MSD)
- ☐ Change in the workplace/work environment

The *National Standard for Manual Tasks (2007)* requires duty holders to assess the risk of any hazardous manual tasks found in the workplace and put effective measures in place to:

> prevent injury by eliminating the risk
> where elimination is not reasonably practicable, reduce the risk of injury as much as is reasonably practicable

How to use this worksheet

Follow the worksheet step by step and refer to the *National Code of Practice for the Prevention of Musculoskeletal Disorders from Performing Manual Tasks at Work (2007)* (COP) as indicated on the worksheet to:

> assess tasks in the workplace involving hazardous manual tasks and determine the sources of risk – **Refer COP Sections 6.3**
> list appropriate risk control measures – **Refer COP Sections 6.4**
> implement those measures – **Refer COP Sections 6.4**

You are required to consult with the relevant health and safety representatives and, where possible, also involve the employees who do the tasks, when assessing the tasks and planning and introducing risk controls.

This worksheet and the Code of Practice can be downloaded from the ASCC website at www.ascc.gov.au

Record your assessment! – It is recommended that you retain your risk assessment if it shows a risk of injury.

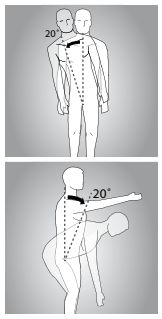
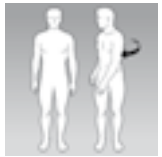
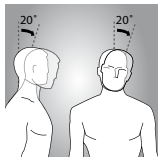
Control any risk! – This worksheet provides general guidelines only. Some workers may still be at risk of injury because manual handling occurs in a variety of tasks and workplace situations, and injury may be caused by a number of factors. It is important, as far as is reasonably practicable, to control any risk you find.

Question 1 – Does the task involve repetitive or sustained postures, movements or forces?

Tick **yes** if the task requires any of the following actions to be done:

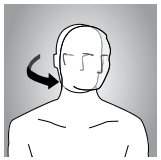
> repetitively (done more than twice a minute) OR

> sustained (done for more than 30 seconds at a time)

Postures and Movements	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
Bending the back forwards or sideways more than 20 degrees  ☐	41			**Eliminate the manual task** > Automate or mechanise the task, especially repetitive functions > Modify operation or production method > Use bulk handling methods **Alter the design and layout of the workplace (p 62)** > Ensure the equipment accounts for differences in worker size, shape and physical ability – i.e. adjustable or fixed to suit all workers > Ensure working heights are matched to the task and the worker > Ensure items are within reaching distance > Place items where the person can be in a comfortable symmetrical posture when handling > Provide seating that matches the needs of the task and the worker – i.e. adjustable seating for multiple workers > Reposition items that workers are required to look at
Twisting the back more than 20 degrees  ☐	41			
Any visible backward bending  ☐	41			
Bending the head forwards or sideways more than 20 degrees  ☐	41			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box..

Postures and Movements	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
Any visible bending of the head backwards ☐	41			> Use fixtures/jigs to orientate the item worked on by the worker > Provide arm supports for precision work **Alter the nature of the load handled (p 64)** > Alter the size or shape of the load **Alter the items used (p 70)** > Use power tools > Ensure tools are suitable for the task > Ensure tools orient the arm, hand and wrist in a power grip position **Alter the working environment (p 72)** > Ensure visual requirements are not too demanding by providing breaks, better lighting > Provide visual aids > Ensure lighting is suitable to task demands – i.e. task lighting for fine, manipulative work **Alter the work organisation (p 74)** > Relocate equipment or items > Restructure task to minimize multiple handling > Remove machine or other pacing > Remove or monitor piecework schemes > Select the best working position for the type of work being undertaken
Twisting the neck more than 20 degrees  ☐	41			
Working with one or both hands above shoulder height  ☐	41			
Reaching forward or sideways more than 30cm from the body ☐	41			
Reaching behind the body  ☐	41			
Squatting, kneeling, crawling, lying, semi-lying or jumping  ☐	41			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

Postures and Movements	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
Standing with most of the body's weight on one leg ☐	41			
Twisting, turning, grabbing, picking or wringing actions with the fingers, hands or arms  ☐	41			
Working with the fingers close together or wide apart   ☐	41			
Very fast movements ☐	41			
Bending of the wrist beyond the angles indicated on page 40 of the Code of Practice  ☐	41			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

Forces	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
Lifting, lowering or carrying ☐	43			**Eliminate the manual task** > Automate or mechanise the task, especially tasks that are repetitive > Modify operation or production method > Use bulk handling methods **Alter the design and layout of the workplace (p 62)** > Provide a means for attaching mechanical aids for lifting to the load > Use jigs to hold or support the items > Alter the workplace so mechanical aids can be used and are accessible **Alter the load handled (p 64)** > Reduce weight and dimensions of the load > Reduce the number of items handled at one time > Provide handles, handholds or cut-outs to improve grip > Reduce amount of manipulation required (use mechanical aids) > Modify the load so mechanical aids can be used **Alter the items used (p 70)** > Use power tools > Ensure tools are suitable for the task > Use lightweight tools where possible > Use tool counterbalances
Carrying with one hand or one side of the body  ☐	43			
Exerting force with one hand or one side of the body  ☐	43			
Pushing, pulling or dragging  ☐	43			
Gripping with the fingers pinched together or held wide apart  ☐	43			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week
What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

Forces	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
Using a finger grip, pinch grip, or an open handed grip to handle a load  ☐	43			> Ensure tool handles fit workers comfortably > Maintain tools and equipment **Alter the work organisation (p 74)** > Alter the method used to perform the task – i.e. push rather than pull and slide rather than lift > If gloves are used, ensure that they fit and are suited to the task > Provide rest or recovery breaks to prevent the onset of fatigue > Restructure task to minimize multiple handling
Exerting force while in an awkward posture, for example, supporting items while arms or shoulders are in an awkward posture, or moving items while legs are in an awkward posture  ☐	43			
Holding, supporting or restraining any object, person, animal or tool  ☐	43			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box..

Question 2 – Does the task involve long duration?

Tick **yes** if the task is done for:

	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
☐ More than 2 hours over a whole shift, OR Continually for more than 60 minutes at a time	43			**Alter work organisation (p 74)** > Increase variety of tasks over the whole day > Provide rest or recovery breaks to prevent the onset of fatigue > Implement task rotation

Question 3 – Does the task involve high force?

Tick **yes** if the task involves any of the following actions:

High Force	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
☐ Lifting, lowering or carrying heavy loads	45			**Eliminate the manual task** > Automate or mechanise the task, especially repetitive functions > Modify operation or production method > Use bulk handling methods **Alter the design and layout of the workplace (p 62)** > Use foot pedals > Provide a means for attaching mechanical aids for lifting to the load > Use jigs to hold items > Modify the workplace layout to ensure the movements of workers handling people are not constrained **Alter the load handled (p 64)**
☐ Pushing or pulling objects that are hard to move or are hard to stop (e.g. a trolley) 	45			
☐ Using a finger-grip, a pinch-grip or an open-handed grip to handle a heavy or large load 	45			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

High Force	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
Exerting force at the limit of the grip span  ☐	45			> Reduce weight of the load > Reduce the number of items handled at one time > Provide handles, handholds or cutouts to improve grip > Modify the load so mechanical aids can be used > Move animals to a place that constrains movement before commencing the task **Alter the items used (p 70)** > Use power tools > Ensure tools are suitable for the task > Use lightweight tools where possible > Use tool counterbalances > Ensure tool handles fit workers comfortably > Maintain tools and equipment **Alter the work organisation (p 74)** > Restructure task to minimize multiple handling > Reduce amount of manipulation required (use mechanical aids) > Alter the method used to perform the task – i.e. push rather than pull and slide rather than lift
Needing to use two hands to operate a tool designed for one hand ☐	45			
Holding, supporting or restraining a person, animal or heavy object  ☐	45			
Exerting force with the non-preferred hand ☐	45			
Two or more people need to be assigned to handle a heavy or bulky load ☐	45			
During the application of high force, the body is in a bent, twisted or otherwise awkward posture  ☐	45			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

High Force	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
Applying force suddenly in response to unexpected forces (for example, when an animal suddenly moves) ☐	45			> If gloves are used, ensure that they are well fitted and are suited to the task > Provide adequate rest breaks to prevent the onset of fatigue > Reduce the effort require to start a load in motion by aligning wheels to the direction of travel > Control unpredictable movements, for example movements of animals by using physical constraints
Hitting or kicking ☐	45			
Holding, supporting or restraining a person or animal likely to move unexpectedly ☐	45			
Throwing or catching ☐	45			
Jumping while loading a load ☐	45			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

Tick **yes** if workers report any of the following about the task

High Force	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
The task can only be done for short periods ☐	46			
Pain or significant discomfort during or after the task ☐	46			
Stronger workers are assigned to do the task ☐	46			
Workers think the task should be done by more than one person, or seek help to do the task ☐	46			
Workers say the task is physically very strenuous or difficult to do ☐	46			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box..

Question 4 – Is there a risk?

Does the task involve repetitive or sustained postures, movements or forces, AND long duration?

☐ Tick **yes** if you ticked any boxes in Questions 1 and 2 — **The task is a risk. Risk control is required.**

Does the task involve high force?

☐ Tick **yes** if you ticked any box in Question 3 — **The task is a risk. Risk control is required.**

Question 5 – Are aspects of the work environment or the way work is organised increasing the risk?

Tick **yes** if the task involves:

Vibration	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
☐ Hand-arm vibration 	48			**Eliminate the manual task** > Use remote controlled processes to isolate workers from vibration sources **Alter the design and layout of the workplace (p 62)** > Isolate workers from vibration sources through the use of damping or suspension systems. **Alter the items used (p 70)** > Select alternative lower vibration equipment > Use balancers/tensioners > Use vibration damping materials > Maintain equipment **Alter work organisation (p 74)** > Reduce exposure time to vibration **Eliminate the manual task**
☐ Whole-body vibration 	48			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

Thermal Environment	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
☐ Low temperatures (for example, in cool rooms, cold stores, or working outside in cold weather)	49			> Automate or isolate processes **Alter the items used (p 70)** > Insulate hot/cold items or tools **Alter the working environment (p 72)** > Redirect cold exhaust air > Improve ventilation and air circulation > Provide shade > Provide thermal screens/barriers > Provide sheltered walkways/wind barriers > Provide lighting suited to the task **Alter work organisation (p 74)** > Avoid working in the cold > Provide warm clothing > Avoid working in the heat > Provide a supply of drinking water > Allow workers time to acclimatise to cold and heat > Provide rest breaks > Implement task rotation > Provide information and training
☐ Wearing thick clothing that restricts movement while working in cold conditions (e.g. gloves)	49			
☐ Handling very cold or frozen objects	49			
☐ High air temperatures (for example, in foundries, laundries, kitchens, manufacturing processes which generate heat, or working outside in hot weather)	49			
☐ Radiant heat (for example, from the sun, or from processes such as smelting or plastics extrusion)	49			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

Thermal Environment	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
Wearing heavy protective clothing while working in hot conditions  ☐	49			
Workers are working in hot conditions and they are not used to it ☐	49			
High humidity caused by the weather or processes such as steam cleaning ☐	49			
Windy conditions, combined with hot or cold weather ☐	49			
Handling large objects in windy conditions ☐	49			
Wind chill caused by exposure to wind in low temperatures ☐	49			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

Work organisation and work practices	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
The work rate being set by a machine or the team and not under the worker's control  ☐	50			**Alter work organisation (p 74)** > Allow for task variation > Provide rest breaks > Allow workers some latitude to influence the rate and pace of work > Ensure workloads and deadlines are achievable > Ensure good communication and reporting of problems > Give and receive feedback about work requirements and performance > Allow workers some latitude to influence workload, work methods and changes in the workplace > Monitor and control overtime and shiftwork > Provide appropriate training and supervision to develop and maintain skills required > Allow for a gradual build up to full production speed > Seek advice on special requirements
Systems of work, such as piecework, that encourage workers to skip breaks to finish early, or to produce more items in the set time ☐	50			
Levels of work demand that workers find difficult to keep up with (pace) ☐	50			
Sustained high levels of attention and concentration ☐	50			
Systems of work that offers the worker little or no control over the way they do their work ☐	50			
Workers frequently needing to meet tight deadlines ☐	50			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

Work organisation and work practices	Page	Comments*	Describe any risk control options you have identified	Control Options (not exhaustive list)
☐ Sudden changes in workload, or seasonal changes in volume without any mechanisms for dealing with the change	50			
☐ Levels of physical work demand that workers find difficult to maintain (effort)	50			

Tick **yes** if workers

☐ Feel that guidance and resources provided by **supervisors or co-workers** should be increased so they can perform to the required standard	50			
☐ Feel that they have not been given sufficient training and information by **their employers** in order to carry out their job successfully	50			

* Describe what the person is doing – e.g. hand operation of drill 10 times per minute, performed 3 hrs per day, five days a week

What are the sources of risk? Describe any aspect of the design and layout of the workplace, the nature of the load handled, the nature of the item used, the working environment, the work practices or work organisation that may have caused you to tick a box.

Has there been a report of MSD associated with this task?

The report of MSD associated with the task usually means increased risk so implementing risk controls should be a high priority.

☐ Tick **yes** if any reports of MSD have been made

Provide comments here. It may be helpful to sketch the task or attach a photograph, and describe the task or area more fully.

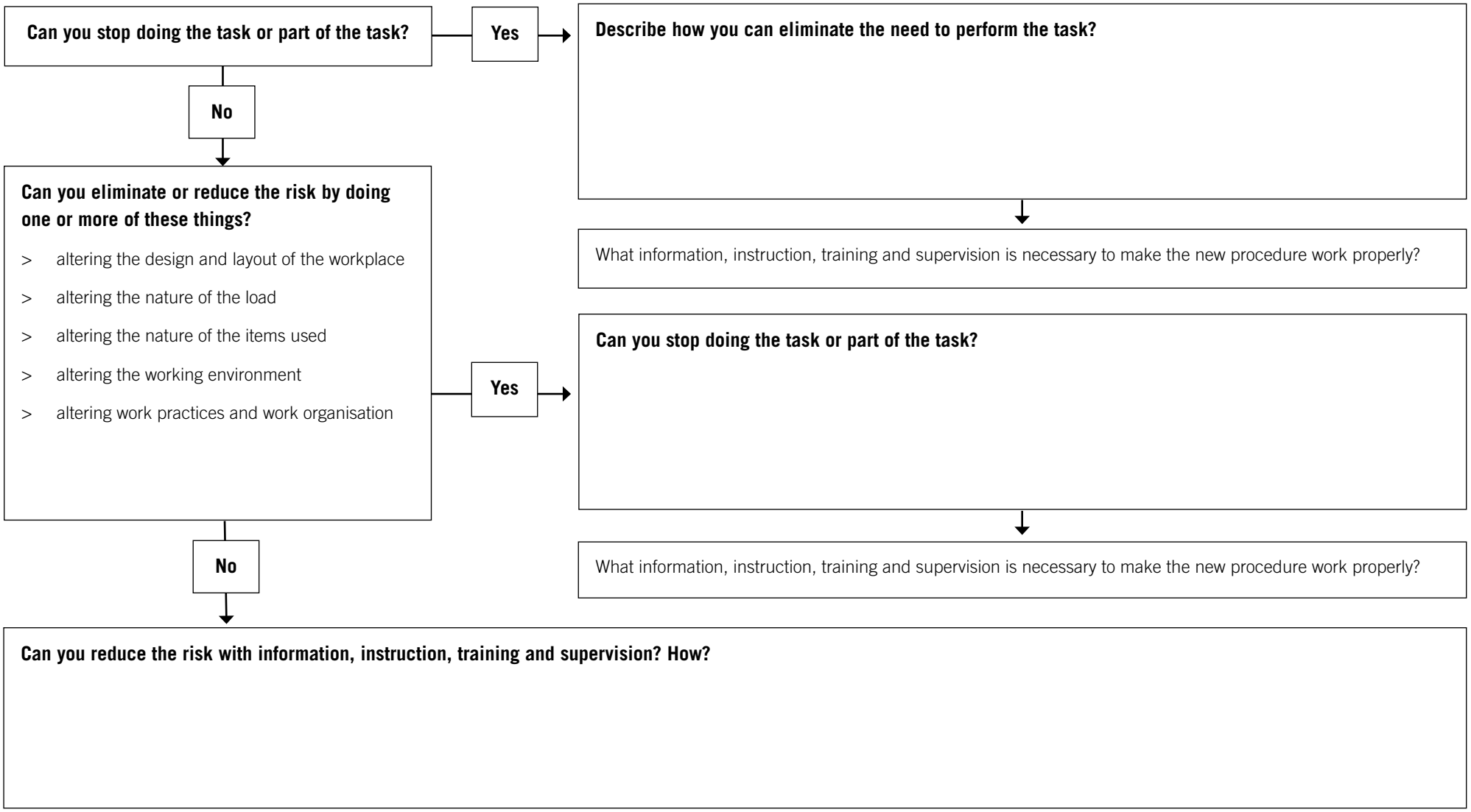
If you found any risk of MSD, you must control it as far as is reasonably practicable.

Generally, the more boxes you ticked in each section on this worksheet, the greater the risk.

If the assessment shows a risk of MSD, you should keep this record until the task is no longer done or if the task is changed and another assessment is done.

How are you going to fix the problems?

You may need to use a combination of risk controls to eliminate or minimise the risk as far as reasonably practicable.



Implementing Risk Controls

Task:	Date prepared:

When will these controls be implemented?

Short-term (immediately to within a few weeks)				
Action required	*Person responsible*	*Completion date*	*Reviewed date*	*Action completed*
Medium-term (within a few weeks to a couple of months)				
Action required	*Person responsible*	*Completion date*	*Reviewed date*	*Action completed*
Long-term (within several months)				
Action required	*Person responsible*	*Completion date*	*Reviewed date*	*Action completed*