

Ergonomic Risk Factor Identification and Assessment
Ergonomics Risk Assessment Project

Task List Worksheet

Job Summary: Carries out a variety of cleaning functions such as cleaning floors, carpets and stairways, sweeping, wet/dry mopping, scrubbing, stripping, sealing, waxing, buffing and polishing. Various additional duties as assigned and depend on work area. Frequencies and duration of all tasks vary according to work area assigned.

Where possible, transfer list of job tasks from job description onto this sheet. Determine whether ergonomics (MSI) risk assessment is required, if no, provide rationale.

Tasks and Description of Activities	Frequency/Duration	Risk Assessment Required?
1. General cleaning, including spot cleaning, wiping, dusting, polishing and scrubbing		
2. Cleaning floors, including dry mopping, wet mopping, vacuuming, buffing, operating floor machines		
3. Cleaning bathrooms, including toilets, sinks, counters, tubs and mirrors		
4. Making beds		
5. Emptying garbage and linen		
6. Moving furniture, equipment and boxes		
7. Miscellaneous duties: including restocking supplies		
TOTAL	100%	

Ergonomic Risk Factor Identification and Assessment

Ergonomics Risk Assessment Project

Description of workstation: Hours of Work/Shift Schedule: Discomfort noted on surveys:

Tasks for Ergonomics Risk Assessment (from Task Analysis worksheet):	Frequency of Task:	
Risk factors associated with all housekeeping positions are outlined first. Specifics follow. 1. All tasks: housekeeping 2. General cleaning; tidying, dusting 3. Cleaning floors 4. Cleaning bathrooms 5. Cleaning and making beds 6. Emptying garbage and linen 7. Moving furniture 8. Miscellaneous duties: restocking supplies		

	Task	Risk Factors	Freq/Dur	Mag/Range		Assessment / Observations / Comments	
	IDENTIFICATION	Housekeeping: all positions	<ul style="list-style-type: none"> • Awkward* posture 			ASSESSMENT	
		<ul style="list-style-type: none"> • Static posture 				<ul style="list-style-type: none"> • Working postures and positions are typically dynamic and not sustained for greater than 2 minutes. • There is some flexibility as to particular task to perform and when. There are a variety of tasks to perform in a variety of settings. 	
		<ul style="list-style-type: none"> • Force (lift, push/pull) 				<ul style="list-style-type: none"> • Examples: handling supplies (lifting), pushing/pulling equipment (mops, scrubber, buffer, cart), handling garbage and linen bags (lifting). • Some ramps in hospital 	

Ergonomic (MSI) Risk Factor Identification and Assessment

Ergonomics Risk Assessment Project

Department/Work Area: Housekeeping Specific Location: Assessed By:	Occupation: Cleaner Contact Name: Assessment Date:
---	---

	Task	Risk Factors	Freq/Dur	Mag/Range		Assessment / Observations / Comments
IDENTIFICATION	Housekeeping: all positions (continued)	• Environment (chemicals)			ASSESSMENT	• Exposure to various chemicals when working with cleaning solutions.
		• Environment (flooring)				• May be exposed to slippery floors due to wet mopping, floor signs are used to designate wet areas. Appropriate footwear recommended.
		• Work organization				• Tasks are varied with some flexibility as to when to perform them. • It is important to plan how and when work is conducted; e.g. shorter periods of mopping and buffing are preferred; intersperse tasks to provide for task variety and a change in posture and muscular effort.
	Cleaning, including wiping, tidying, and dusting	• Awkward posture				• Duties include wiping (e.g. walls, furniture, food trays, lamps, TVs, counters, mattress, railings, equipment and cords), high dusting (top of cupboards, around windows, doors). Rooms may include patient rooms, lounge, kitchen, elevators, utility room, medication room, locker room, nursing station, clinical areas, treatment rooms etc. • Postures include reaching, bending, may be stooping, crouching, squatting, and twisting. • Task variety and various postures provide for variation as tasks are frequently alternated depending on location e.g. one room is cleaned (wiped and mopped etc.) before next started. • Ensure proper body mechanics, tips can be provided. • Long handled equipment preferred (e.g. 95 cm handle on high duster).
		• Force (push/pull, power grip)				• Hand use: holding cloth, squeezing out excess water, wringing cloths, squeezing spray bottles, applying force to wipe. • Can try to minimize forces used. Use neutral postures. • Avoid wringing action (twisting wrist with force).
		• Force (push/pull)				• Moving housekeeping cart; forces are within guideline levels. • Wheels are appropriate (swivel under handle). • No concerns noted.

Ergonomic (MSI) Risk Factor Identification and Assessment

Ergonomics Risk Assessment Project

Department/Work Area: Housekeeping Specific Location: Assessed By:	Occupation: Cleaner Contact Name: Assessment Date:
---	---

	Task	Risk Factors	Freq/Dur	Mag/Range		Assessment / Observations / Comments
IDENTIFICATION	Cleaning floors	<ul style="list-style-type: none"> Awkward posture (reaching, bending, twisting) 			ASSESSMENT	<ul style="list-style-type: none"> Various postures. Handle heights vary, some can be adjusted, or position of hands on the handle. Handle scrubber 93 cm, handle burnisher 78 cm high. Good features: dry mop in use has full swivel (360 degrees) at base, is lightweight and does not require bending to use dust pan (statically charged so dust sticks to cloth); low sinks and drains (at floor level) are provided in utility rooms to minimize awkward postures and lifting of water buckets (can be wheeled close and tipped). Body mechanics tips as with task of cleaning rooms: keep arms in close, move feet to get in close and avoid twisting, use both hands and/or alternate hand use, minimize force applied etc.
		<ul style="list-style-type: none"> Static posture 				<ul style="list-style-type: none"> Neck flexion may be static for viewing flooring area. Counter with stretching in opposite direction.
		<ul style="list-style-type: none"> Force (lift, push/pull) 				<ul style="list-style-type: none"> Lifting, moving mops and machines (e.g. to change pads, to vacuum). Carts are used to minimize carry distances. Mop bucket (18 kg half full) lifted 2-4 times/day over 15 cm lip of cart and of drain ledge in floor sink. Minimize forces, tips; e.g. fill buckets half full, use carts to minimize carry distances, tip the bucket to drain instead of lifting; use smaller mop
		<ul style="list-style-type: none"> Force (push/pull) 				<ul style="list-style-type: none"> Frequency and duration varies. Pushing mop, vacuum, extractor back and forth. Forces may be increased at times, e.g. when spot cleaning, when changing direction or moving around tight corners, when controlling machine at start-up. Tips: Moving in various directions spreads out the workload to various muscles; for spot cleaning use spray cleaner and leave it to dissolve in order to reduce manual force required; use a light grip; maintain neutral postures etc.
		<ul style="list-style-type: none"> Force (power grip) Static posture 				<ul style="list-style-type: none"> Handle sizes and angles vary; should be lightweight, should be conducive to good hand postures e.g. keep neutral wrist posture. Handles do have softer, rubber ends for easier grip. Hygiene issues would exist with foam grips. Forces also required to push down to squeeze mop head. Some machines require power grip to operate trigger (e.g. extractor, burnisher).

Ergonomic (MSI) Risk Factor Identification and Assessment

Ergonomics Risk Assessment Project

Department/Work Area: Housekeeping Specific Location: Assessed By:	Occupation: Cleaner Contact Name: Assessment Date:
---	---

	Task	Risk Factors	Freq/Dur	Mag/Range		Assessment / Observations / Comments
IDENTIFICATION	Cleaning floors (continued)	<ul style="list-style-type: none"> • Equipment design (vibration, noise) 			ASSESSMENT	<ul style="list-style-type: none"> • May be vibration associated with operating machines, (e.g. extractor, buffer) on hands and arms. Some equipment is noisy, and may be more so in smaller, enclosed spaces. • All equipment is standard housekeeping equipment that is trialed with staff.
	Cleaning bathrooms	<ul style="list-style-type: none"> • Awkward posture 				<ul style="list-style-type: none"> • Various postures (e.g. bending, stooping, squatting, reaching) for cleaning sinks, toilets, tubs, counter tops and mirrors. Postures are not sustained. • Awkward postures especially with upper extremity and trunk noted when cleaning toilets and tubs. Some tubs can be adjusted in height. May require bending and reaching to access entire surface. • Using longer handled tools for toilet will reduce bending. Using angled tool will improve upper extremity postures.
		<ul style="list-style-type: none"> • Force (pinch grip) 				<ul style="list-style-type: none"> • Pinch grip required for changing toilet paper rolls. It is easier to change them when the roll is empty.
		<ul style="list-style-type: none"> • Force 				<ul style="list-style-type: none"> • Force applied when wiping. Minimize force to reduce muscle forces used.
	Making beds	<ul style="list-style-type: none"> • Awkward posture 				<ul style="list-style-type: none"> • Duties related to making beds and stretchers are primarily associated with discharge aide (as requested/paged) and Emergency cleaner (stretchers). • Awkward posture may be associated with wiping beds, changing sheets, restocking linen carts and cleaning wheelchairs. • Postures include reaching and bending, may also be stooping, squatting or kneeling to get underneath. Knee pads previously trialed unsuccessfully (too bulky and awkward to take on and off). • Bed and stretcher heights are adjustable to improve positioning with the exception of Psychiatry beds, which are manually adjustable.
		<ul style="list-style-type: none"> • Force (power grip) 				<ul style="list-style-type: none"> • For wiping, use power grip on cloth and apply appropriate pressure to surface to clean. Can try to minimize force used to reduce fatigue.
		<ul style="list-style-type: none"> • Force (pull) 				<ul style="list-style-type: none"> • Various forces required to pull sheets on, lift mattress for wiping underneath. • Minimize forces used.
	Handling garbage and linen	<ul style="list-style-type: none"> • Awkward posture (shoulder, elbow, trunk) 				<ul style="list-style-type: none"> • Postures include reaching, bending, stooping, squatting, or kneeling associated with retrieving bags, putting new bag in container. • Larger bins for garbage collection are 70-110 cm high; smaller bins 30-40 cm high.

Ergonomic (MSI) Risk Factor Identification and Assessment

Ergonomics Risk Assessment Project

Department/Work Area: Housekeeping Specific Location: Assessed By:	Occupation: Cleaner Contact Name: Assessment Date:
---	---

	Task	Risk Factors	Freq/Dur	Mag/Range		Assessment / Observations / Comments
IDENTIFICATION	Handling garbage and linen (continued)	• Force			ASSESSMENT	<ul style="list-style-type: none"> • Various staff including care aides, RNs, LPNs, fill laundry bags on the units. Minimal handling by housekeeping staff with the exception of some areas, e.g. Emergency. • Garbage bags are collected on individual wards and put into a small hopper by ward cleaner. Cleaner on “garbage run” then collects bags from hoppers into a carts and takes them out to the dumper. • Flexibility as to number of bags to handle at one time. Bags can be frequently emptied to avoid overfilling and reduce weights lifted. Ensure proper body mechanics at all times when handling bags, use carts to minimize carry distances. • Ramp in use on loading dock.
		• Force				<ul style="list-style-type: none"> • Biohazardous waste area: weights of bins vary depending on contents. • If there is a lack of storage space bins must be lifted on top of one another.
	Moving furniture	• Awkward posture				<ul style="list-style-type: none"> • Moving furniture not required when cleaning rooms. • Designated “project” position does staff moves (e.g. moving office furniture or larger items on site). Frequency of task is higher for this person.
		• Force				<ul style="list-style-type: none"> • Lifting assist equipment available: dollies, carts. • Some equipment has casters for easy movement e.g. night stands, beds. • Can request additional assistance from cleaners for difficult moves.
		• Force (push/pull)				<ul style="list-style-type: none"> • Have to move OR tables to clean underneath. Push/pull forces are within guideline levels (Snook & Ciriello). • Suggest: raise/lower height of the bed to improve working posture; ensure casters are unlocked and pointed in the direction of movement.
	Misc.: material handling e.g. restocking	• Awkward posture				<ul style="list-style-type: none"> • Requires restocking of carts and supply racks. • Provide information/tips on basic material handling and correct body mechanics.
		• Force				<ul style="list-style-type: none"> • Restocking supplies; weights handled varies. • Can ask for assistance when required.

Ergonomic (MSI) Risk Factor Identification and Assessment

Ergonomics Risk Assessment Project

Department/Work Area: Housekeeping Specific Location: Assessed By:	Occupation: Cleaner Contact Name: Assessment Date:
---	---

**Control Priority Note: 1 = recommended for implementation to reduce risk factors; 2 = optional, for consideration as a means of reducing risk factors; 3 = not for immediate action but for future consideration as appropriate.*

	Risk Factor	Potential Cause	Recommended Controls	Control Priority*	Responsible Person	Status
CONTROLS	<ul style="list-style-type: none"> • Work organization 	<ul style="list-style-type: none"> • Workload and time pressures 	1. It is important to continue to plan how and when work is conducted; e.g. shorter periods of mopping and buffing are preferred; intersperse tasks to provide for task variety and a change in posture and muscular effort.			
	<ul style="list-style-type: none"> • Awkward posture • Force 	<ul style="list-style-type: none"> • Equipment design 	2. When buying new equipment, continue to consider the following factors in the purchasing decision: machine weight, adjustability features, height adjustability, vibration, quiet running, manual handling required, handle length and design and location of controls. Note: any new equipment purchased is standard housekeeping equipment that is always trialed with staff prior to implementation.			
	<ul style="list-style-type: none"> • Awkward posture • Static posture • Force 	<ul style="list-style-type: none"> • Cleaning rooms • Cleaning floors 	3. Set up a small task group to review or devise general tips for housekeepers (e.g. using proper body mechanics, don't twist, using body muscles, keeping it within working arc, minimize stress on hands etc.). Ask for volunteers at a team meeting. Alternatively, this information can be provided from assessment observations.			
			4. Investigate alternate tool designs for cleaning (e.g. bent handle toilet brush, alternate mop squeeze). Web sites available on request.			
			5. Information on stretching exercises to be provided.			
	<ul style="list-style-type: none"> • Awkward posture 	<ul style="list-style-type: none"> • Making beds 	6. Knee pads were previously trialed with staff and they did not use them. Check with employees at the next crew meeting to see if they are interested in trials, specifically for discharge aids.			

Ergonomic (MSI) Risk Factor Identification and Assessment

Ergonomics Risk Assessment Project

Department/Work Area: Housekeeping Specific Location: Assessed By:	Occupation: Cleaner Contact Name: Assessment Date:
---	---

	Risk Factor	Potential Cause	Recommended Controls	Control Priority*	Responsible Person	Status
CONTROLS	• Force	• Taking garbage bins up ramp to hopper at loading bay	7. Review the existing ramp with Maintenance to see if one that is longer and has less of an angle is feasible. This will decrease the force required to move the bin to the hopper.			
	• Force	• Lifting biohazardous waste bins	8. Task to be altered: the large bins currently used are being replaced with smaller “boxes” that will have a weight limit.			
	• Force	• Material handling	9. Basic material handling information to be provided (including information on handling boxes, various stock items, food trays and laundry bags). It is recommended that a training session be scheduled also.			

Additional Comments:
<p>Suggestions are offered for new equipment and tools as future purchases are made:</p> <ul style="list-style-type: none"> • lightweight machines, making it easier to move and pull over to change pads • adjustability in handle heights • machines with low noise emissions and lower vibration ratings (e.g. vacuums) • mop buckets that empty from the bottom • lightweight service carts with appropriately designed wheels • lightweight cleaning tools with long, extendible handles and flexible heads to reduce bending and reaching (e.g. long handle duster, long handle dustpan) • rubber grips on the top of cleaning tools to improve grip <p>Thank you for the opportunity to review the work areas and tasks. If you require further assistance or have questions regarding this report, please contact me.</p>

References:

Musculoskeletal health of cleaners, Prepared by Robens Centre for Health Ergonomics, European Institute for Health and Medical Sciences University of Surrey for the Health and Safety Executive and UNISON, Authors Valerie Woods, Peter Buckle and Dr. Michael Haisman.

http://www.hse.gov.uk/research/crr_pdf/1999/crr99215.pdf

Worker’s Compensation Board of BC, MSI Bulletins for Room Cleaning, Floor Mopping and Bed Making.

<http://healthcare.healthandsafetycentre.org/s/Musculoskeletal.asp>

Canadian Centre for Occupational Health and Safety (CCOHS), OSH Answers, Hotel Housekeeping.

http://www.ccohs.ca/oshanswers/occup_workplace/hotel_housekeeping.html