

MANUAL MATERIAL HANDLING

Risk Reduction Evaluation Form



Use this form to assess Manual Material Handling (MMH) tasks, including lifting, pushing and pulling, and to identify opportunities to reduce the risk of injuries!

Assessment completed by:	John Doe
Date of assessment:	8/1/2019

Loss Review – Complete this section to identify the frequency and costs of MMH claims. This can be used to define the scope of issues and help justify interventions.

Period considered for loss review	# MMH injuries	MMH work comp claims costs	% MMH claims	% MMH claims costs
8/2014 – 8/2019	8	\$144,000	42%	60%

Manual Lifting (ML) – Complete this section by describing related tasks, risk of injuries, and possible solutions to help overcome the risks.

ML Task	Task description	Weight	Lifts per min / hour	Lifting session duration	Torso twisting	Load held out from body	Lifting over shoulders	Lifting below knees	Sub-optimal grip points
ML Task 1: Risk Factors	Workers repetitively lift bags from a waist-high conveyor onto an adjacent pallet at ground level	20-50 lbs	1 lift per minute	Workers rotate out of the task every 2 hours	Occasional twisting between the end of the conveyor and the pallet	Workers extend the arms to set bags down on the far side of the pallet	No	The first few layers of bags on the pallet are below the knee	No
ML Task 1: Possible Solutions					Place pallet far enough away from conveyor so workers are forced to take a few steps and straighten out their body before setting bags down	Invest in a pallet lifter that rotates and prohibit workers from extending arms to set down bags on the far end of the pallet		Place spare pallets under the one being worked from, or invest in a spring loaded pallet lifter	

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ML Task	Task description	Weight	Lifts per min / hour	Lifting session duration	Torso twisting	Load held out from body	Lifting over shoulders	Lifting below knees	Sub-optimal grip points
ML Task 2: Risk Factors	Workers manually lift bags of concrete mix from a pallet, onto the edge of a hopper to be emptied.	80 lbs	Once per hour	N/A	No	No, workers observed walking around pallet to lift bags located on opposite side from them	No	The first few layers of bags on the pallet are below the knee	No
ML Task 2: Possible Solutions		Begin using mix packaged in 50 lbs bags						Place spare pallets under the one being worked from, or invest in a spring loaded pallet lifter	
ML Task 3: Risk Factors	Buckets manually lifted between shelving units and a cart	40 lbs	5 times per hour	N/A	No	No	Top shelf of the shelving units is above shoulder height for the majority of workers	Bottom shelf of shelving units is below knee height	No
ML Task 3: Possible Solutions							Prohibit use of the top shelves or replace shelving units	Prohibit use of the bottom shelves or replace shelving units	

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ML Task	Task description	Weight	Lifts per min / hour	Lifting session duration	Torso twisting	Load held out from body	Lifting over shoulders	Lifting below knees	Sub-optimal grip points
ML Task 4: Risk Factors	Bags filled with parts manually lifted between shelving units and a cart	20 - 30 lbs	Once every 5 minutes	2 hours	No	No	No	No	Bag is bulky and not easily gripped
ML Task 4: Possible Solutions									Consider using bags or buckets with handles

Manual Pushing/Pulling (MPP) – Continue completing this section by describing related tasks, risk of injuries, and possible solutions to help overcome the risks.

MPP Task	Task description	Subjective sense of force required	Frequency of push/pull	Duration (min/sec)	Optimal grip points for applying force	Pushing/pulling over the shoulders	Pushing/pulling below the knees
MPP Task 1: Risk Factors	Workers push heavy carts 50 feet across the facility throughout day	Workers must lean heavily into cart to get it moving and travel slower than average walking pace	Once every 10 minutes	60 seconds	Yes	No	No
MPP Task 1: Possible Solutions		Consider replacing cart wheels with those of a larger diameter or harder material	Consider investing in a powered tugger	Consider how rearranging workstation layout could result in a smaller travel distance			

Manual Pushing/Pulling (MPP) – Continue completing this section by describing related tasks, risk of injuries, and possible solutions to help overcome the risks.

MPP Task	Task description	Subjective sense of force required	Frequency of push/pull	Duration (min/sec)	Optimal grip points for applying force	Pushing/pulling over the shoulders	Pushing/pulling below the knees
MPP Task 2: Risk Factors	Workers push carts 20 feet between workstations	Workers are able to maintain erect posture while getting the cart moving and walk at an average walking pace	Once every 5 minutes	10 seconds	Carts do not have optimal handles; workers required to use the hard outer edges of the cart frame	No	No
MPP Task 2: Possible Solutions					Replace carts with a model equipped with optimal grip points		
MPP Task 3: Risk Factors							
MPP Task 3: Possible Solutions							
MPP Task 4: Risk Factors							
MPP Task 4: Possible Solutions							

Next Steps – Prioritize the Manual Lifting and Manual Pushing/Pulling tasks you’ve identified. Which will you work on first? Add your next steps and proposed date for improving the risk for these tasks. If you have questions or need assistance with your plan, contact your ICW Group Risk Management Consultant – we’re here to help!

Priority #	Task identified (from above)	Describe your next steps	Proposed date	Completed?
1	ML Task 2 – Replace 80 lb concrete bags	Discuss with buyer to procure concrete in 50 pound bags. This should be fairly easy as our first step.	6/14/2019	Yes
2	MMP Task 1 – Replace cart wheels	Check with manufacturer on replacing cart wheels with those of a larger diameter or harder material.	7/29/2019	Yes
3	MMP Task 1 – Invest in power tugger	Observed 4 carts typically being used at same time. Create request for procurement to get quotes on 4 power tuggers. Get these by 3 rd quarter.	9/9/2019	No