

# MSI PREVENTION BULLETIN 5

## Floor Mopping

**Housekeepers, cleaners, and custodians** often perform floor-mopping tasks. This bulletin provides information regarding the typical musculoskeletal issues faced by workers performing this task and some possible risk control measures to either eliminate or minimize the MSI risk. This information is only a guideline, and the employer must still complete an MSI risk assessment to accurately determine the risks and appropriate control measures applicable to their worksite for floor mopping activities.

<b>MSI Issue: Clearing the Area to Be Mopped</b>	<b>Possible Risk Control Measures</b>
<ul style="list-style-type: none"><li>• Worker lifts and moves furniture such as tables and chairs that are heavy, unbalanced, odd-shaped, or difficult to grasp or hold onto.</li><li>• Worker lifts furniture using an awkward posture, for example, stooped or twisted.</li></ul>	<ul style="list-style-type: none"><li>• Use a mechanical lift assist.</li></ul>  <ul style="list-style-type: none"><li>• Have a second person help lift and carry furniture.</li><li>• Use portable caster bases to move the furniture. Workers need to lift the furniture onto the casters, but pushing and pulling is reduced.</li></ul>
<b>MSI Issue: Wet Mopping the Floor Area</b>	<b>Possible Risk Control Measures</b>
<ul style="list-style-type: none"><li>• The arm grasping the top of the mop handle is held with the elbow away from the body, resulting in an awkward shoulder posture. This may be because the mop is too high for the worker or because of a poor work technique.</li></ul> 	<ul style="list-style-type: none"><li>• Ensure the mop handle is not higher than the worker's eye level.</li><li>• Instruct workers to keep their arm close to the body.</li></ul>



MSI Issue: Wet Mopping the Floor Area <i>(continued)</i>	Possible Risk Control Measures
<ul style="list-style-type: none"> <li>• Worker applies excessive force during push/pull action while mopping.</li> <li>• Worker forcefully grips the mop handle if the diameter is too small (less than 3 cm or 1.2 in.) for hand size (as indicated by the thumb and forefinger overlapping excessively).</li> <li>• Worker bends wrists.</li> <li>• Worker squats or kneels on the hard floor to reach underneath items.</li> <li>• Worker keeps head bent down and forward in a static (stationary) posture while looking down.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide smaller mop tops and encourage their use.</li> <li>• Provide lighter plastic or aluminum mop handles instead of wooden handles.</li> <li>• Ensure workers wring excess water out of mop tops before use.</li> <li>• Enlarge the mop handle with padding such as firm compressible foam, plastic, or tape.</li> <li>• Train workers to maintain a loose grip on the mop handle and to avoid excessive wrist bending.</li> <li>• Provide kneepads or foam to allow workers to kneel safely and avoid awkward stooping postures and contact stress on their knees.</li> <li>• Train workers to take frequent short breaks from constantly looking down.</li> </ul>
	
<ul style="list-style-type: none"> <li>• Worker bends forward with the mop.</li> </ul> 	<ul style="list-style-type: none"> <li>• Train workers to move their feet to get closer to the area being mopped.</li> <li>• Ensure mop height is not below shoulder level when mopping.</li> </ul>
<ul style="list-style-type: none"> <li>• Worker twists when mopping.</li> </ul> 	<ul style="list-style-type: none"> <li>• Arms crossing past the midline of the body during the mopping motion indicate that too large an area is being mopped in one motion. Train workers to mop so that their arms do not cross the midline of body and they are not twisting at the waist.</li> <li>• Ensure workers move their feet side-to-side as they mop.</li> </ul>



<p><b>MSI Issue: Wringing Out the Mop</b></p> <ul style="list-style-type: none"> <li>• Worker experiences contact stress in the palm of the hand from pressing down on the wringer handle. The wrist may also bend backwards.</li> <li>• Worker stoops forward to press the wringer down.</li> </ul> <div> </div> <div> </div>	<p><b>Possible Risk Control Measures</b></p> <ul style="list-style-type: none"> <li>• Provide a wringer with a longer handle, which requires less force to squeeze water out of mop tops.</li> <li>• Pad the wringer handles or install a plastic grip cover on the metal handle to reduce the contact stress.</li> <li>• Train workers to bend their knees, wringing from the side of the body instead of reaching forward to the wringer.</li> <li>• Provide higher buckets so workers don't need to bend over as far.</li> </ul>
<p><b>MSI Issue: Emptying Mop Bucket</b></p> <ul style="list-style-type: none"> <li>• Worker lifts the mop bucket up off the floor to empty the water into a drain or hopper.</li> </ul> <div> </div> <div> </div>	<p><b>Possible Risk Control Measures</b></p> <ul style="list-style-type: none"> <li>• Lower drains to floor level or to less than 28 cm (11 in.) high.</li> <li>• Ensure drains are free from clutter.</li> <li>• Place drains in rooms where there is enough room to wheel the mop bucket close to the drain.</li> <li>• Train workers to maintain a symmetrical posture and to avoid stooping and twisting.</li> </ul>