



Soft Tissue Injury Prevention Tool

Tip Sheets

Trade: Concrete Work

Job Task: Concrete Placement - General Placement (Nozzle Work)

<p>General Tasks</p> <ul style="list-style-type: none"> ➤ Manual handling of large 5-10" diameter hose to direct and place concrete. Pump truck operator controls the direction and major movement of hose. 	<p>Common Tools</p> <ul style="list-style-type: none"> ➤ 5-10 diameter hose connected to boom of pump truck for directing and placing concrete.
<p>Potential Risk Factors <i>Risk Factors can lead to increased risk for Work Related Musculoskeletal Disorders (WMSD's)</i></p> <p>High Hand Grip Force</p> <ul style="list-style-type: none"> • Statically holding 5-10" diameter hose using high grip force to direct concrete placement. Higher Risk job particularly for extended mat pours of greater than 1000 yards of concrete a day. <p>Highly Repetitive Motion</p> <ul style="list-style-type: none"> • Moderate Risk with repetitive arm and shoulder movements required when operating hose for extended periods of time. 	<p>Possible Solutions</p> <p>Heavy Gripping & Repetitive Motion Solutions:</p> <ul style="list-style-type: none"> • Rotate to other concrete tasks every 2-4 hours to reduce hand/arm and whole body fatigue. The more frequent the rotation schedule the better. At the very least, limit hose operation work to 4 hours per worker per day. • Communicate clearly with pump truck operator to improve coordination of hose movements as necessary. • Utilize whole body movements as much as possible as opposed to repetitive arm and shoulder movements when directing the hose. • Develop and evaluate the use of handles that can be attached to the hose and positioned as desired to create comfortable hand holds and reduce grip diameter and high hand force. This solutions will take some testing to perfect. <p>Potential Benefits</p> <ul style="list-style-type: none"> ✓ Increases blood flow to reduce muscle tension. ✓ Increases productivity. ✓ Reduced strain on hand and arm muscles.
	
<p>Feasibility</p> <ul style="list-style-type: none"> • Work Practice Control • Administrative Control • Engineer Control <p>Estimated Cost of Intervention</p> <ul style="list-style-type: none"> • None 	