





### Soft Tissue Injury Prevention Tool

Tip Sheets Trade: Masonry

Job Task: Restoration Work - Pressure Washing and Cleaning

#### **General Tasks**

- Manual operation of pressure washer to rinse/ clean building exterior.
- Use extension brush to clean with soap/chemicals.
- > Rinse clean with pressure washer.

#### **Potential Risk Factors**

Risk Factors can lead to increased risk for Work Related Musculoskeletal Disorders (WMSD's)

#### Continuous Forward/Backward Neck Bending

 Higher Risk when washing parapet walls or at ground level for extended periods of time.

#### **Continuous Moderate Forward Back Bending**

 Moderate Risk when washing for long periods of time at ground level and if wand is not long enough to promote fully upright posture.

# High Hand Grip Force While Repeatedly Gripping Objects

 Higher Risk with sustained gripping of wand and trigger and when brush cleaning for extended periods of time each day.

## High Hand Grip Force with Awkward Wrists Positions

 Higher Risk with frequent arm movements while gripping wand and trigger and when brush cleaning for extended periods of time each day.

#### **Highly Repetitive Motion**

 Higher Risk with frequent arm movements while gripping wand and trigger and when brush cleaning for extended periods of time each day.

#### **High Hand/Arm and Whole Body Vibrations**

 Moderate Risk with continuous moderate vibration exposure primarily when holding wand of pressure washer.

#### **Feasibility**

- Engineer Control Anti-Vibration Gloves
- Engineer Control Grip Tool Wrap
- Administrative Control
- Work Practice Control

#### **Estimated Cost of Intervention**

- \$43.99 for pair of Anti-vibration gloves
- \$22.00 each for Grip Tool Wraps

### **Common Tools**

- > 3500 PSI Pressure Washer
- Swing Stage or Scaffold
- Gloves
- Raingear

#### **Possible Solutions**

### Awkward Posture, Heavy Gripping & Vibration Solutions:

- Evaluate the use of low pressure, insulated wands to be used with existing pressure washers.
- Apply a non-slip soft padded grip or anti-vibration grip kit material to handhold location of wand.
- Evaluate the potential of mounting a pressure washer wand on a universal ball joint or positioner on the railing of a swing stage. Ideally the mounting location should be at approximately chest level and be somewhat height adjustable for multiple users.
- Move swing stage as frequently as necessary to maintain allow all pressure washing and brushing work to be performed with the hands between waist and shoulder level and promote upright working postures.
- Utilize pocket hand warmers to intermittently warm the hands particularly when using pressure washer for extended periods in cold damp weather.
- Rotate to other tasks every 4 hours as feasible to intervene on awkward postures and build in needed recovery time.

#### **Potential Benefits**

- ✓ Increases productivity.
- ✓ Increases blood flow and reduce muscle tension.
- ✓ Reduces strain on hand and arm muscles.
- ✓ Reduces exertion of lower back.
- Reduces awkward work postures and minimize lifting requirements.



