Job	Date / /
Notes	Analyst(s)

The lifting analysis on the following page is performed when one or more of the Caution Level job risk factors in the following checklist is present. This checklist is taken from the adapted WISHA checklist.
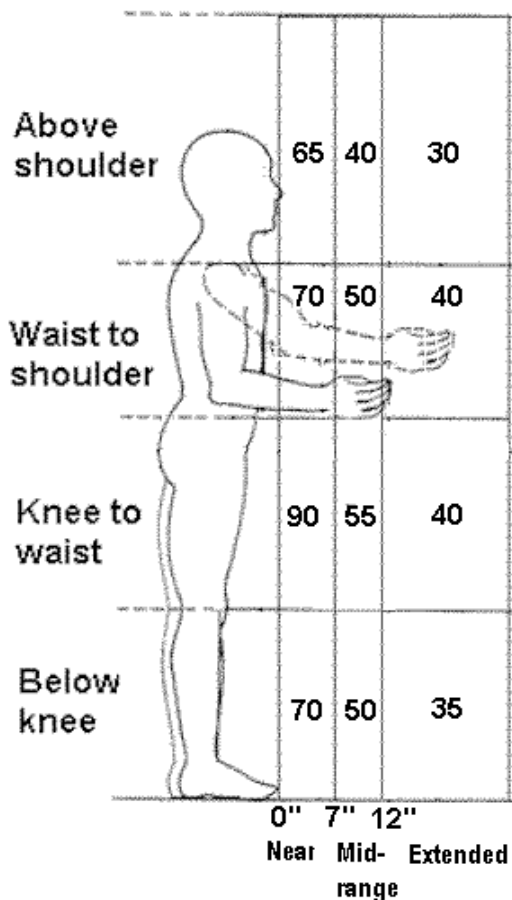
Heavy, Frequent or Awkward Lifting				Check (✓) as applicable
Body Part	**Physical Risk Factor**	**Combined with**	**Duration**	
Back and shoulders	Lifting 75 or more pounds	No other risk factors	One or more times per day	Caution ❑
	Lifting 55 or more pounds	No other risk factors	More than 10 times per day	Caution ❑
	Lifting more than 10 pounds	More than 2 times per minute	More than 2 hours total per day	Caution ❑
	Lifting more than 25 pounds	Above the shoulders Below the knees At arm's length	More than 25 times per day	Caution ❑
	WISHA Lifting Analysis – Perform if any Caution condition exists. Actual Weight (Step 1) is greater than the Weight Limit (Step 4) (See separate work sheet)			Hazard ❑

This analysis pertains to jobs where employees lift 10 lbs. or more.

Step 1   **Find out the actual weight of objects that the employee lifts.**

     Actual Weight = _____ lbs.

Step 2   **Determine the Unadjusted Weight Limit.** Where are the employee's hands when they begin to lift or lower the object? Mark that spot on the diagram below. The number in that box is the Unadjusted Weight Limit in pounds.

Above shoulder	65	40	30
Waist to shoulder	70	50	40
Knee to waist	90	55	40
Below knee	70	50	35

     0"   7" 12"
     Near Mid- Extended
           range

Unadjusted Weight Limit: _____ lbs.

Step 3   **Find the Limit Reduction Modifier.** Find out how many times the employee lifts per minute and the total number of hours per day spent lifting. Use this information to look up the Limit Reduction Modifier in the table below.

How many lifts per minute?	For how many hours per day?		
	1 hr or less	1 hr to 2 hrs	2 hrs or more
1 lift every 2-5 mins.	1.0	0.95	0.85
1 lift every min	0.95	0.9	0.75
2-3 lifts every min	0.9	0.85	0.65
4-5 lifts every min	0.85	0.7	0.45
6-7 lifts every min	0.75	0.5	0.25
8-9 lifts every min	0.6	0.35	0.15
10+ lifts every min	0.3	0.2	0.0

Note: For lifting done less than once every five minutes, use 1.0

Limit Reduction Modifier: ____._____

Step 4   **Calculate the Weight Limit.** Start by copying the Unadjusted Weight Limit from Step 2.

Unadjusted Weight Limit: = _____ lbs.

If the employee twists more than 45 degrees while lifting, reduce the Unadjusted Weight Limit by multiplying by 0.85. Otherwise, use the Unadjusted Weight Limit

Twisting Adjustment: = _____.____

Adjusted Weight Limit: = _____ lbs.

Multiply the Adjusted Weight Limit by the Limit Reduction Modifier from Step 3 to get the Weight Limit.   **X**

Limit Reduction Modifier: _____.___

Weight Limit: = _____ lbs.

Step 5   **Is this a hazard?** Compare the Weight Limit calculated in Step 4 with the Actual Weight lifted from Step 1. If the Actual Weight lifted is greater than the Weight Limit calculated, then the lifting is a WMSD hazard.

Note: If the job involves lifts of objects with a number of different weights and/or from a number of different locations, use Steps 1 through 5 above to:
1. Analyze the two worst case lifts -- the heaviest object lifted and the lift done in the most awkward posture.
2. Analyze the most commonly performed lift. In Step 3, use the frequency and duration for <u>all</u> of the lifting done in a typical