

Screening Tool for Lifting

Adapted from American Conference of Governmental Industrial Hygienists® (ACGIH®) Threshold Limit Value® (TLV®) for Lifting

Job	Analyst
	Date / /

Special Concern	
Presence of any of these factors indicates significant risk and need for further study	
Lifting frequency more than 360 lifts per hour	<input type="checkbox"/>
Lifting tasks performed for longer than eight hours per day	<input type="checkbox"/>
Lifting or placing loads in postures of trunk twisting more than 30 degrees	<input type="checkbox"/>

Additional Risk - Lower Screening Limit	
Presence of any of these factors indicates the lower screening limits should be used	
One-handed lifting	<input type="checkbox"/>
Forward flexed trunk postures beyond 30°	<input type="checkbox"/>
Constrained overhead posture	<input type="checkbox"/>
Lifting unstable objects	<input type="checkbox"/>
Trunk postures in which the normal curve in the low back is not maintained	<input type="checkbox"/>
High heat and humidity	<input type="checkbox"/>

Choose the appropriate set of tables. Each set of tables considers the frequency and durations of the lifting first. Within a table, there are 12 zones. Space is provided to enter a typically high load in pounds that originates in that zone. If a load is placed with control, then enter the load in the destination zone as well. Place a check in any zone in which the load exceeds the indicated threshold. For a given lifting condition (frequency and zone), a zero value means that that lifting activity is not recommended without careful consideration.

American Conference of Governmental Industrial Hygienists (ACGIH®). Threshold limit values and biological exposure indices for 2001. Cincinnati: ACGIH, 2001. See www.acgih.org for more information.

Standard Screening Limits

If none of the Lower Screening Limit conditions is met, then use the following tables. Place a check mark in any cell that represents a weight or load in pounds that exceeds the value for the combination of vertical height and horizontal distance. Consider origin and any controlled destination zone.

Infrequent Lifting < 2 h/day and <120 lifts/day			
Zone From mid-point of ankles	Close 0 – 12 in	Middle 12 – 24 in	Far 24 – 31 in
High 52 – 72 in	33 -- <input type="checkbox"/>	15 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>
Chest 32 – 52 in	70 -- <input type="checkbox"/>	35 -- <input type="checkbox"/>	20 -- <input type="checkbox"/>
Low 12 – 32 in	40 -- <input type="checkbox"/>	31 -- <input type="checkbox"/>	15 -- <input type="checkbox"/>
Floor 0 – 12 in	31 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>

Intermediate Lifting Frequency > 2 h/day and < 30 lifts/h			
Zone From mid-point of ankles	Close 0 – 12 in	Middle 12 – 24 in	Far 24 – 31 in
High 52 – 72 in	31 -- <input type="checkbox"/>	11 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>
Chest 32 – 52 in	59 -- <input type="checkbox"/>	31 -- <input type="checkbox"/>	15 -- <input type="checkbox"/>
Low 12 – 32 in	35 -- <input type="checkbox"/>	24 -- <input type="checkbox"/>	11 -- <input type="checkbox"/>
Floor 0 – 12 in	20 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>

Frequent Lifting > 2 h/day and <360 lifts/h			
Zone From mid-point of ankles	Close 0 – 12 in	Middle 12 – 24 in	Far 24 – 31 in
High 52 – 72 in	24 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>
Chest 32 – 52 in	31 -- <input type="checkbox"/>	20 -- <input type="checkbox"/>	11 -- <input type="checkbox"/>
Low 12 – 32 in	20 -- <input type="checkbox"/>	15 -- <input type="checkbox"/>	4 -- <input type="checkbox"/>
Floor 0 – 12 in	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>

Lower Screening Limits

If any of the Lower Screening Limit conditions is met, then use the following tables. Place a check mark in any cell that represents a weight or load in pounds that exceeds the value for the combination of vertical height and horizontal distance. Consider origin and any controlled destination zone.

Infrequent Lifting with Additional Risk Factors < 2 h/day and <120 lifts/day			
Zone From mid-point of ankles	Close 0 – 12 in	Middle 12 – 24 in	Far 24 – 31 in
High 52 – 72 in	16 -- <input type="checkbox"/>	7 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>
Chest 32 – 52 in	35 -- <input type="checkbox"/>	17 -- <input type="checkbox"/>	10 -- <input type="checkbox"/>
Low 12 – 32 in	20 -- <input type="checkbox"/>	15 -- <input type="checkbox"/>	7 -- <input type="checkbox"/>
Floor 0 – 12 in	15 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>

Intermediate Lifting Frequency with Additional Risk Factors > 2 h/day and < 30 lifts/h			
Zone From mid-point of ankles	Close 0 – 12 in	Middle 12 – 24 in	Far 24 – 31 in
High 52 – 72 in	15 -- <input type="checkbox"/>	5 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>
Chest 32 – 52 in	30 -- <input type="checkbox"/>	15 -- <input type="checkbox"/>	7 -- <input type="checkbox"/>
Low 12 – 32 in	17 -- <input type="checkbox"/>	12 -- <input type="checkbox"/>	5 -- <input type="checkbox"/>
Floor 0 – 12 in	10 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>

Frequent Lifting with Additional Risk Factors > 2 h/day and <360 lifts/h			
Zone From mid-point of ankles	Close 0 – 12 in	Middle 12 – 24 in	Far 24 – 31 in
High 52 – 72 in	12 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>
Chest 32 – 52 in	15 -- <input type="checkbox"/>	10 -- <input type="checkbox"/>	5 -- <input type="checkbox"/>
Low 12 – 32 in	10 -- <input type="checkbox"/>	7 -- <input type="checkbox"/>	2 -- <input type="checkbox"/>
Floor 0 – 12 in	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>	0 -- <input type="checkbox"/>

The lower limits are based on a fixed proportion of the TLV® values of 50%.