

# HAND REPETITION:

## The Hand Activity Scale (HAL)

We use our hands and wrists for nearly every task without even thinking about it.

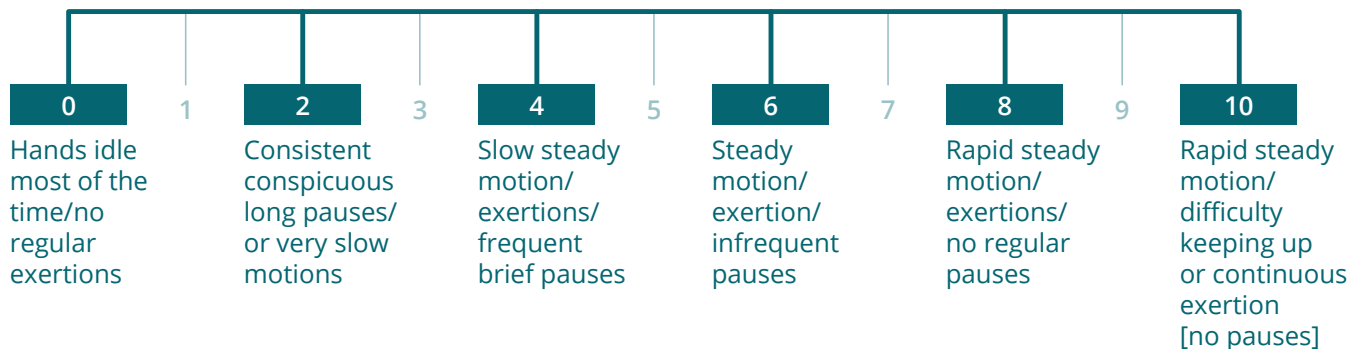
Major factors that increase the risk of developing an MSD are the gripping force of the hand and the repetition of hand use. This video describes how to quantify repetition using the Hand Activity Scale (HAL).

The Hand Activity Scale (HAL) was developed to rate the repetitiveness of hand use. It also

accounts for recovery time and the amount of time gripping with the hands.

This extra information makes it better for identifying MSD hazards and reducing them.

For example, is it the frequency of the action or the lack of recovery that needs to be addressed?






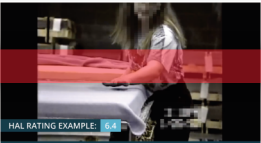
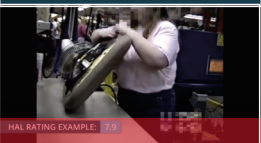
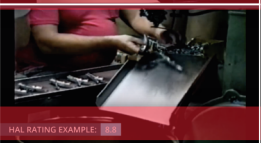
Use the HAL Scale to identify MSD hazards and make necessary improvements to help keep your workforce safe and injury-free.

Major factors that increase the risk of developing hand and wrist MSD are the gripping force of the hand and the repetition of hand use.

The " Hand Activity TLV" Risk Assessment combines both these factors. This method can be found in the Resources section at [www.msdpredvention.com](http://www.msdpredvention.com).

Thanks to the University of Michigan and the Centers for Disease Control and Prevention/National Institute for Occupational Safety and Health (Grant #R01-OH02941) for development of the task videos.

The development of the HAL Scale is documented in: Latko, W. A., Armstrong, T. J., Foulke, J. A., Herrin, G. D., Rabourn, R. A., & Ulin, S. S. (1997). Development and evaluation of an observational method for assessing repetition in hand tasks. *American Industrial Hygiene Association Journal*, 58(4), 278-285.

| RATING | PAUSES  | EFFORTS & MOTIONS   |
|--------|---|---|
| 0      | No regular exertions.<br>(Duty Cycle = 0%)            | Hands are idle most of the time.  |
| 0.8    |   |    |
| 1      |   |    |
| 1.55   |   |   |
| 2      | Consistent conspicuous long pauses.                   | Very slow motions.  |
| 3      |   |   |
| 4      | Frequent brief pauses.                                | Slow, steady motions/efforts.   |
| 4.5    |   |    |
| 5      |   |   |
| 6      | Infrequent pauses.                                    | Steady motion/efforts.  |
| 6.4    |   |  |
| 7      |   |   |
| 7.9    |   |  |
| 8      | No regular pauses.                                    | Rapid steady motion/exertions.  |
| 8.8    |   |  |
| 9      |   |   |
| 10     | Continuous effort [No pauses].<br>(Duty Cycle = 100%) | Rapid steady motion/difficulty keeping up.  |

WATCH THE HAL SCALE ANIMATION AT [MSDPREVENTION.COM](http://MSDPREVENTION.COM) FOR VIDEO EXAMPLES.



For more info visit:  
[msdprevention.com](http://msdprevention.com)

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shouldn't  
hurt**