

THE DEVELOPMENT OF A STAGE-I RISK FIL FOR PHYSICAL WORKLOAD

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Aims:

The application of stage-II risk assessment tools, like the NIOSH lifting equation, is time consuming. Therefore, the risk assessment process to assess all possible MSD risks (e.g. manual handling, pushing, pulling, postures, repetitive load, etc.) for all work tasks takes too much time, especially for SME's. To make the risk assessment process more efficient, there is a need for an easy, quick to apply stage-I risk filter that identifies possible hazards with respect to physical load and indicates on which aspects a stage-II risk assessment tool should be applied.

The aim of the study was to develop a stage-I risk filter (checklist) for employers to detect the possible presence of MSD risks. The result from this tool makes clear whether a more detailed assessment is needed and which stage-II method should be applied.

Methods:

The development was initiated by defining seven main aspects of physical load and selecting acknowledged stage-II risk assessment tools that are widely used in the Netherlands for those seven aspects. Simple questions were formulated from the stage-II methods with the aim to fit the core items of the stage II methods in simple and short questions. After finishing the first concept of the stage-I tool, risk assessments were performed with both the stage-I and stage-II tools in order to find possible differences and improve the stage-I tool where necessary. After assessing tasks for all aspects of physical load and adjusting the stage-I tool according to the differences, a final web application will be developed.

Results:

First results: when comparing the stage-I tool with the stage-II instrument for hand arm tasks, the final score in terms of green (no increased risk), orange (increased risk) and red (seriously increased risk) showed agreement for four out of five tasks assessed.

Conclusion:

The development of a stage-I risk filter is an effort to help employers in the process of risk assessment regarding physical load. It remains unclear if this tool will achieve this goal. To see if this tool works in practice, the tool will be made freely available, employers will be encouraged to use it and experiences from employers using the tool will be evaluated.

Keywords: Exposure measurement methods, Early prevention

