

#### Return to Work

# **Return to Work - Job Demands Analysis**

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#### What is a job demands analysis?

A Job Demands Analysis (JDA) includes both a physical demands description as well as a cognitive (mental) demands analysis. A job demands analysis aims to systematically quantify and evaluate the physical, cognitive (mental), and environmental demands of a task or job.

- A Physical Demands Description (PDD), sometimes referred to as a Physical Demands Analysis (PDA), is a detailed, objective description of the physical demands required to complete the essential and non-essential tasks of a job.
- Similarly, a Cognitive Demands Analysis (CDA) is a detailed, objective evaluation of the specific cognitive, emotional, and psychological skills required to perform essential and non-essential tasks of a job.

The job demands analysis must include details about the job position, requirements related to safety, training needed, hours of work, skills needed, equipment used, and the work environment with considerations for accessibility.

For more information on return to work programs, please see the following OSH Answers documents:

• Return to Work – Program Overview

- Return to Work Accommodation
- Return to Work <u>Functional Abilities Evaluation</u>
- Mental Health Return to Work

# Are there different types of job demands analyses?

There are a few types of physical demands descriptions that can be considered. The type of physical demands description used will depend on the job and the needs of your organization. For example, a task-based physical demands description is good for complicated, non-repetitive jobs. They are specific to the task, and separate each task and its details. For positions that include repetitive and cyclical tasks, a checklist or chart may be more appropriate.

The cognitive demands analysis should capture the cognitive, emotional, mental, and psychological skills required to complete essential and non-essential job tasks. These skills include:

- Memory
- Attention
- Recognition
- Communication
- · Problem solving
- Critical thinking
- Time pressures

A comprehensive cognitive demands analysis should provide employers with an understanding of the cognitive needs of a certain task, as well as the stressors that exist which may give rise to mental stress in the workplace.

#### What are the benefits of a job demands analysis?

A job demands analysis can be used to determine the compatibility between a worker and the requirements of a specific job. Physical and cognitive demands information can be used to:

- Assist in worker accommodations
- Inform prevention efforts
- Educate others on the demands of certain jobs

These analyses can be completed at any time, preferably before an injury, and kept on file.

During the return to work process, the completed job demands analysis documents can be used to determine where modified duties may be available in each work area or department. In addition, when the worker visits their health care provider with the job demands analysis documentation, the health care professional will be able to consult the physical and cognitive demands of the job when completing their functional or cognitive abilities evaluation to determine if their pre-injury job is suitable, or if there is a need for modification to better accommodate the injury.

A cognitive demands analysis may be used whenever a health condition, whether it is cognitive, physical, or emotional impacts a worker's thinking, cognition, or interpersonal processes and abilities.

# When should a workplace conduct a job demands analysis?

A job demands analysis can be conducted proactively or reactively. Both have advantages and disadvantages. The proactive job demands analysis is performed before any incident; whereas a reactive job demands analysis is performed whenever a case arises.

A proactive job demands analysis is beneficial because it allows for a wide range of applications and the information can be useful from the first day of an injury. A proactive job demands analysis can assist in identifying alternate work, ergonomic intervention, and workplace stressors. It can also provide relevant physical and cognitive demands information that can be used in job descriptions and hiring. Some drawbacks to proactive job demands analyses are they require many resources, may be difficult to keep up-to-date, and the information collected may not be as specific as needed for every injury.

A reactive job demands analysis is beneficial because it provides specific information related to the injury, and accommodations can be considered. It also requires fewer resources. Unfortunately, reactive job demands analysis does not allow for a wider range of uses, and it may be difficult to find alternate work or tasks as there are no or few other analysis documents to reference

A hybrid approach may be considered for your organization where job demands analyses are prioritized for jobs that have the highest number of injuries, or the highest number of workers. Next, you would consider light, modified, or return to work jobs. After you have these documents, you can collect information on an as-needed basis or when needed for specific situations.

It is important to ensure that job demands analyses are reviewed on a set schedule, or as needed with process or task updates.

### Who should conduct the job demands analysis?

The job demands analysis should be completed by a person with the appropriate background knowledge and education to evaluate all aspects of the job. They should be joined by a health and safety representative, a manager or supervisor of the area, and the worker or other persons familiar with the job, including the processes, and the physical and mental demands.

#### What do you need to conduct a job demands analysis?

To collect meaningful data, you will need the proper background knowledge and education, as well as specific equipment.

For the physical demands descriptions, some data collection tools include:

- Stopwatch (cycle time)
- Notebook or tablet (for recording notes)
- Tape measure (equipment/surface height, reach)
- Camera (pictures and video)
- Laser distance meter (distances)
- Floor plan
- Scale (weighing parts, tools)
- Force gauge (push/pull forces, weighing items)
- Pinch gauge
- Goniometer (measure joint angles)

Another critical component will be the workers themselves. Interviews to discuss job details, process flow, and production must be considered to have an overall understanding of the task. Interviewing several workers is a good practice to ensure consistency and so that no steps are missed.

The cognitive demands analysis can be completed at the same time as the physical demands description. The cognitive demands analysis requires an on-site observation of workers completing a task. The evaluation includes objective measurements and may include interviews with the employer and workers.

The following elements are identified throughout the cognitive evaluation:

- Hearing, vision, and perception
- Work pace
- Safety
- Memory, attention, and problem solving

- Self-supervision
- · Work pressures and deadlines
- · Interpersonal skills required
- Self-regulation and independent work
- · Reading, writing, and speech

Each element should be compared against an established classification of occupational data. For example, the <u>National Occupational Classification Skills and Competencies Taxonomy</u> established by the Government of Canada. This data provides the descriptor as well as the definition for specific skills that may be required for a job or task.

When describing the demands of a task, we often see "frequency categories." These categories may include descriptors such as rare, occasional, frequent, or constant. These categories must be well defined within the job demands analysis.

# How does a Job Demands Analysis compare to a Job Safety Analysis?

A <u>Job Safety Analysis (JSA)</u> can be used to identify potential risk factors for injury in a job, and to identify ways to modify a job. Job safety analyses can also be used to understand and address the hazards of a job task, and in developing a return to work program.

A job safety analysis (JSA) is a procedure which helps integrate accepted safety and health principles and practices into a particular task or job operation. In a JSA, each basic step of the job is to identify potential hazards and to recommend the safest way to do the job. Other terms used to describe this procedure are job hazard analysis (JHA) and job hazard breakdown.

A job demands analysis differs from a job safety analysis. The job demands analysis focuses on the demands of the job, not necessarily how to do the job. The job safety analysis can identify hazards throughout the task and suggest controls, whereas the job demands analysis is describing the demands of the task as is.

# How often should you review a job demands analysis?

Job demands analyses should be reviewed as often as necessary to remain current. If there are changes in the process, task, equipment, layout of the workplace, or job demands, the corresponding job demands analysis should be reviewed and updated as required.

# Where can I get more information?

There are many documents available online that provide a job demands analysis template. For example\*:

- Workers Compensation Board of Manitoba: <u>template for Worksite and Job Analysis</u>.
  (Always adapt any online template to the needs of your workplace.)
- Occupational Health Clinics for Ontario Workers (OHCOW): <u>Physical Demands</u> <u>Description Handbook</u>

(\*We have mentioned these organizations as a means of providing a potentially useful referral. You should contact the organization(s) directly for more information about their services. Please note that mention of these organizations does not represent a recommendation or endorsement by CCOHS of these organizations over others of which you may be aware.)

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