Occupational Health Clinics for Ontario Workers

Centre de Santé des Travailleurs(ses) de l'Ontario

OHCOW
PHYSICAL DEMANDS
DESCRIPTION HANDBOOK

www.ohcow.on.ca

ABOUT OHCOW

Throughout the 1970's and 1980's workers in Ontario became increasingly aware of the toll of injury and disease caused by dangerous and unhealthy working conditions. A groundswell of opinion demanded more effective diagnosis of work-related health problems and effective prevention strategies. The Occupational Health Clinics for Ontario Workers (OHCOW) was established in 1989 by the Ontario Federation of Labour (OFL) and is funded through the Ontario Ministry of Labour (MOL). The first clinic opened in 1989 in Hamilton, with subsequent clinics opened in Toronto, Windsor, Sudbury, Sarnia and more recently Thunder Bay.

Staffed by an inter-disciplinary team of nurses, hygienists, ergonomists, researchers, client service coordinators and contracted physicians, each OHCOW clinic provides comprehensive occupational health services and information in five areas:

- An inquiry service to answer work-related health and safety questions
- Medical diagnostic services for workers who may have work-related health problems
- Group service for workplace health and safety committees and groups of workers
- Outreach and education to increase awareness of health and safety issues, and promote prevention strategies.
- Research services to investigate and report on illnesses and injuries.

Our clients include workers, joint health and safety committees or representatives, unions, employers, health professionals, community groups, legal clinics, students and members of the public.

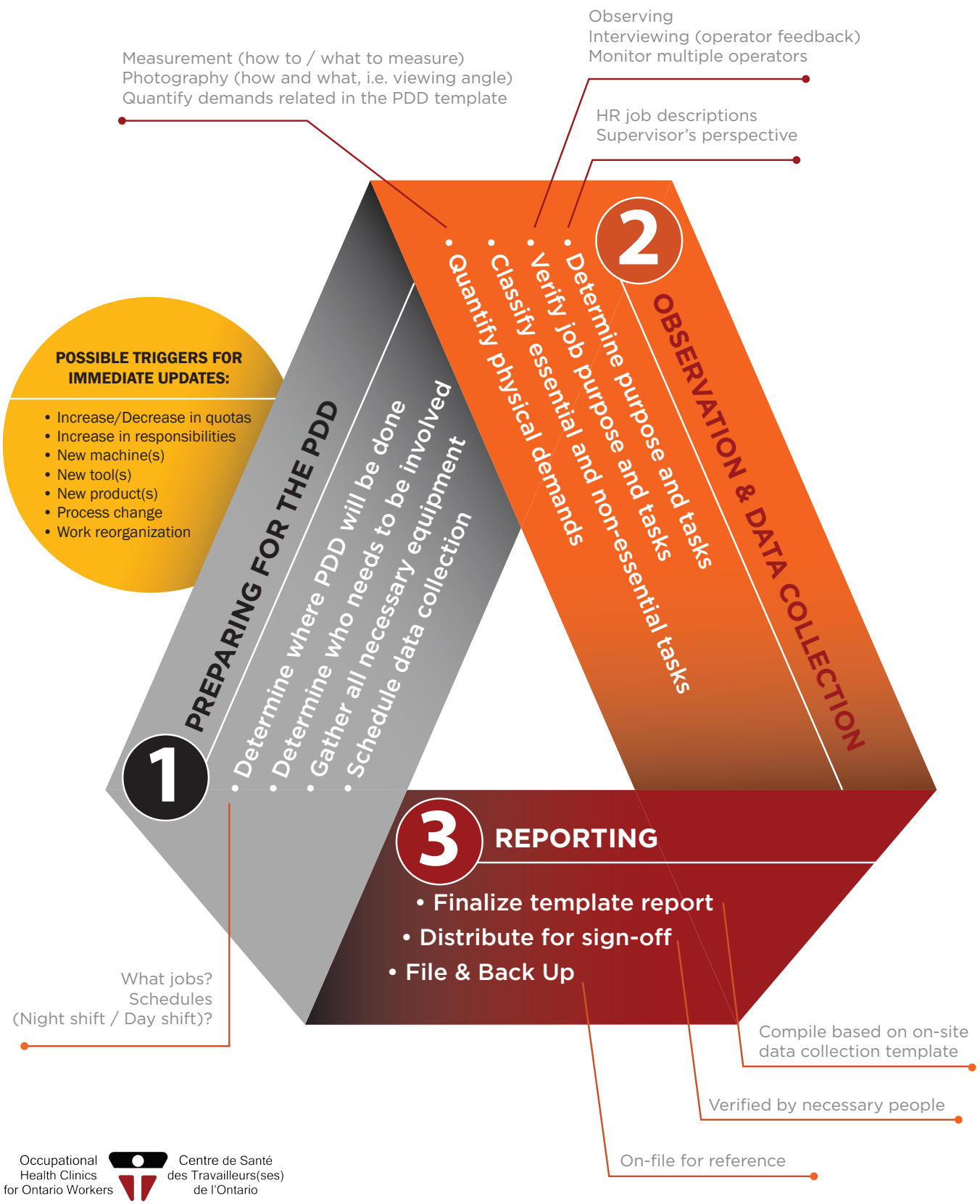
OHCOW is governed by an eighteen person volunteer Board of Directors. At the local level each of the six clinics has a Local Advisory Committee. The management of OHCOW is comprised of the Chief Executive Officer, director of finance and the executive directors of the six clinics.

OUR MISSION

The mission of the Occupational Health Clinics for Ontario Workers Inc. (OHCOW) is to prevent occupational disease, injuries and illnesses, and to promote the highest degree of physical, mental and social well-being of all workers.

We strive to accomplish this through the identification of workplace factors which are detrimental to the health and well-being of all workers, through the distribution of excellent occupational health, hygiene, and ergonomic information to increase knowledge among workers, employers and the general public; and through the provision of services designed to produce changes to improve workplaces and the health of workers.

THE PDD PROCESS



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INTRODUCTION

What is a PDD

A PDD, or *Physical Demands Description,* is a document used by employers to objectively capture and describe the physical demands that are required to perform a particular job or role. Many will be familiar with the term *Physical Demands Analysis (PDA)* for this type of document, however, PDD is being used intentionally. A PDD is simply a detailed, objective description of the physical aspects of a particular job; there is no analysis being performed. For this reason, the word 'Description' is used rather than 'Analysis'.

Who Uses PDD Information

A PDD can be used by a wide range of individuals within different organizations. It can be used internally in a workplace or externally by various individuals or organizations. Some examples are listed below:

INTERNAL

- Human Resources
- Health & Safety
- Occupational Health
- Managers
- Supervisors
- Engineers

EXTERNAL

- Family Doctors
- Physiotherapists
- Occupational Therapists
- Workplace Safety & Insurance Board
- Worker Compensation
- Insurance Providers

How PDD Information is Used

Adjudication of Claims – PDDs can be used by insurance providers (particularly the WSIB in Ontario) to assist in the determination or work-relatedness or cause of injury in the adjudication of claims. There are limitations to the use of information for this purpose.

Accommodation of a Worker – PDDs can be used as a reference to provide employers with specific information about jobs to quickly and effectively accommodate workers in jobs that are within prescribed physical restrictions by a healthcare practitioner. This should not be mistaken for simply matching restrictions and PDDs. A PDD does not eliminate the possibility of accommodating a restriction through modifications to the current process.

Educate Treating Healthcare Practitioners – PDDs can provide treating healthcare practitioners with an accurate understanding of the tasks their patients are required to perform in their occupations. This can help in creating an effective treatment plan that considers the potential impact of work and may help them return to work more quickly, but also safely.

Inform Prevention Efforts – PDDs can be used to guide further investigation into potential hazards or risk of injury. Workplaces can use the PDD observation and data collection process to flag potential hazardous tasks that require analysis or further investigation. It may result in ergonomic improvements such as process modifications or design changes that prevent future injuries.

To download a digital version of this PDD Handbook, visit: www.ohcow.on.ca/resources

Cautioned Uses of PDD Information

Job Matching to Restrictions – Using PDDs as the sole source of information for matching workers with restrictions to potential jobs is very problematic. There may be ways that a job or specific tasks could be modified in order to accommodate a worker with an impairment that are not captured in a PDD. It should be used as only one source of information in a larger process.

Risk Assessment – PDDs themselves are not an assessment or measure of risk. They can inform where further investigation is needed, but should not be used as a determination of risk.

Body Postures – PDDs *cannot* be used to identify specific body postures for a task. Every worker is different and therefore it is impossible to document a common posture such as angle of back flexion or shoulder abduction. Stature, arm length, etc. can all have an impact on a worker's posture.

DISABILITY PREVENTION VS DISABILITY MANAGEMENT

D E F I N I T I O N :

DISABILITY MANAGEMENT

Compares the physical demands of a job as it is currently performed to a worker's restrictions. If there is not a direct match, the worker is determined to be unable to perform the job or essential tasks that cannot be performed are downloaded onto another worker.

D E F I N I T I O N :

DISABILITY PREVENTION

Compares the physical demands of the pre-injury job to a worker's restrictions. Where there is a barrier or mismatch, creative solutions are considered and the best one is implemented in order to remove the barrier(s) and allow full performance of the essential duties.

EXAMPLE: A worker is returning to work. The restriction is no lifting or carrying more than 10 Kg. Currently, the job requires carrying a 12 Kg box.

PREPARING TO CONDUCT A PDD

Determine Where PDD(s) Required

An important first step in your PDD program is determining which jobs require a PDD. If you are currently without any PDDs, you will require documentation for all jobs. In some cases you may have PDDs, but they are outdated, or you have new jobs that have yet to be documented. A review of all current jobs and PDDs on file should be conducted to identify gaps and create a list of jobs without up to date PDDs.

CONSIDERATIONS

- All Current Jobs
- Existing PDDs
- Dates of Existing PDDs
- New Processes Since Last PDDs
- New Equipment or Tools Since Last PDDs
- New Jobs Since Last PDDs

Determine Who Needs to be Involved

Having all of the appropriate people involved is crucial to creating a collection of PDDs that are accurate and therefore useful. All individuals may not be involved in every step of the PDD process, but may be required for certain aspects such as verifying the essential tasks of the job, data collection, or even providing job descriptions.

COMMON PEOPLE INVOLVED

- Workers Performing the Job
- Supervisors
- Managers
- HR
- Union
- JHSC
- Maintenance

Have Trained Observer(s)

If the worker or consultant performing the observation and data collection isn't a *Canadian Certified Professional Ergonomist (CCPE),* than he or she should have appropriate training in conducting PDDs. The training should include multiple elements such as task analysis, observation, measurement, data collection, photographing and video recording for PDDs, and documentation. With appropriate and thorough training, anyone within your organization could complete PDDs effectively.

Have All Necessary Equipment

In order to create accurate PDDs, certain equipment will be required in order to measure aspects of the work that is being observed. Whether it is measurement of working heights, or the weight of a load being lifted, there are common tools that should be available in order to collect accurate data for PDDs.

Schedule Observation and Data Collection

Scheduling when the observation and data collection will take place is an important consideration to ensure accurate data. All people that were identified as necessary for data collection must be available. It is critical that all parameters that could affect the results are considered in order to capture the physical demands that truly represent the job; production levels, staffing levels, shift type, etc. could all have an impact on the data collected on a particular day. It may be necessary to schedule data collection on multiple days in order to document a range of activities under different conditions.

CONSIDERATIONS

- Are necessary people available?
- When is the highest workload?
- When is the lowest workload?
- Is there a difference in workload between days/shifts?
- Are there variations in staffing levels?
- Will all tasks be performed during observation and data collection?

[See Measurement Techniques and Tools Section for full list of tools]

OBSERVATION & DATA COLLECTION

The following steps are completed for Observation & Data Collection:

01 Determine Job Purpose & Tasks

Knowing the job purpose or objective will be helpful to accurately document the job during observation. It will guide the observation and data collection by having a high level view of the tasks required to fulfill the job requirements. Often this information can come from a job description from Human Resources or other documents within the organization.

02 Verify Purpose & Tasks

In order to verify the job purpose and tasks performed in the job, the tasks must be observed and captured while they are performed. If the job is cyclical, it should be observed for several cycles to ensure the entire sequence of tasks is documented. Non-cyclical jobs become more challenging to verify all tasks. Most often the tasks that are identified during the observation should be discussed with the worker and supervisor in order to verify that they are accurate. Types of tasks include lifting, lowering, pushing, pulling, gripping, walking, climbing, talking, reading, writing, etc.
[See Physical Demands Task Elements section for more detail].

03 Quantify Physical Demands

Using appropriate tools, all of the physical aspects of each task must be measured and documented. Common measures include force or load, distance, frequency, and duration of a task. It is important that the measurements are objective and not based on the individual worker being observed. The measures should be the same regardless of the worker performing the tasks.

SOME COMMON MEASURES

- Weight lifted, carried or lowered
- Tools used by worker
- Distance walked
- Force used to push or pull
- Frequency of task performed
- Distance reached for object, control or tool

04 Classify Essential & Non-Essential Tasks

Once all of the tasks have been identified and verified, each should be classified into essential and non-essential tasks. The definitions of essential and non-essential are:

DEFINITION:

ESSENTIAL

Tasks or duties that are deemed to be very important, necessary or vital to the job or service. Other synonyms include: critical, fundamental, integral, crucial, indispensable or imperative.

DEFINITION:

NON-ESSENTIAL

Tasks or duties that are not an integral part of the job or service; they may be shared by other workers within the organization. Other synonyms include: peripheral, accessory, incidental, or supplementary.

[Based on Ontario Human Rights Code]

MEASUREMENT TECHNIQUES AND TOOLS

Using proper tools as well as correct measurement techniques are necessary to create PDDs that will be both accurate and useful. This section discusses the equipment you should have and the proper way to measure various aspects of tasks.

Tools

- **Tape Measure** ▸ Measure all heights, reaches and distances associated with tasks.
- **Camera** ▸ Take pictures of each task as well as tools and working environment
- **Video Camera** ▸ Record the overall job for task identification, frequency, etc
- **Force Gauge** ▸ Measure push, pull forces
- **Note Pad** ▸ Take additional notes or observations
- **Scale** ▸ Weigh parts, tools and other objects
- **Stop Watch** ▸ Time task or cycle length
- **Clip Board** ▸ Hold paper or data collection sheets
- **Pen/Pencil** ▸ Record measurements and notes
- **Other Tools:** ▸ Dynamometer to estimate grip force ▸ Pinch Force Gauge to estimate pinch force

How to Measure

Weight (part, tool, etc.) – Measured by either a scale or a force gauge, depending on the tool. A force gauge that includes a tension feature can be used to measure weight (NOTE: it is important that any chain, rope or hook that is used to hold the object is not included in the measured weight). If there is variation in the weight, multiple measures should be collected and averaged. It is recommended to report both the maximum weight measured and the average. Some items in a workplace may have a standardized weight that can simply be verified by measuring and recorded.

Force – Multiple measurements should be collected in order to ensure a representative measurement. It is recommended that at least 3, but more likely 5 or more, measurements be completed. The calculated average force should be used (note that there may be some judgment required to remove abnormally high or low measures compared to others that would otherwise skew the results). It is recommended to also document the maximum force measured.

Distance – A tape measure will be used to collect the distances for heights, reaches and distances.

Height – Must be measured as an absolute value. This is most typically measured from the floor height. Depending on the work environment, there may be other structures that height could be measured from such as platforms, staircases, etc.

Reach – Must be measured based on the work environment, not the individual. All reach distances must be measured from a physical barrier such as a table or railing.

Distance – Measured from start point to end point. This could be for walking, carrying, crawling, etc.

Frequency – Will be measured using a stop watch and/or a video camera. The number of times a task is completed will be counted. The number of tasks performed will be stated as a rate per minute, hour or shift. Video is the most accurate form of measurement because it can be reviewed after observation and verified. Note that cyclical jobs are most often stated as a rate per minute (e.g. 6/min).

Duration – The amount of time to perform a task should be measured using a stop watch and/or a video camera. The duration of a task may vary and therefore may require averaging based on multiple measures of the task. Similar to frequency, video is the most accurate way to capture the duration of tasks.

Enviromental Factors to Document

There are many factors that can affect the physical demands of a task. It may be important to identify and document these types of factors in the PDD. Be sure to provide an appropriate amount of detail in order to understand why the environmental factor is important to the performance of the task.

Examples:

INDOOR

- Hot
- Dry
- Slippery
- Vibration

OUTDOOR

- Cold
- Wet
- Surface Noise
- Lighting

How to Take Photographs

Significant effort should be made to take photographs of tasks that clearly illustrate the physical demands required. Photographs should be taken perpendicular to the work performed in order to capture the postures and technique used (either from directly behind, directly in front, or directly to the side of the worker). Photographs that are not taken from a 90 degree angle may be more difficult to visualize or understand the work being performed.

All photographs taken should include a clearly visible worker performing the desired task. If possible, the face of the worker should not be included, or at least blacked out or pixelated after the fact, to keep anonymity as much as possible.

Photographs should only include detail that is specific to the task. Visible backgrounds should be minimized to focus on the tasks itself. Unnecessary work environment details in the background of the photograph will reduce the focus on the task.

- 90 Degrees to Worker
- Clearly Visible Worker
- Minimize Unnecessary Background

GOOD PHOTO VS. BAD PHOTO

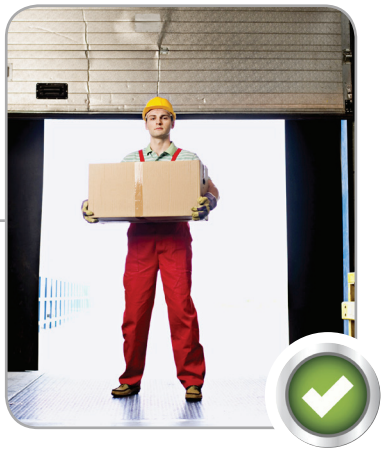
90 DEGREES TO WORKER

✔ 90 Degree View of Worker
✔ Task Clearly Visible

✘ 90 Degree View of Worker
✘ Task Clearly Visible

CLEARLY VISIBLE WORKER

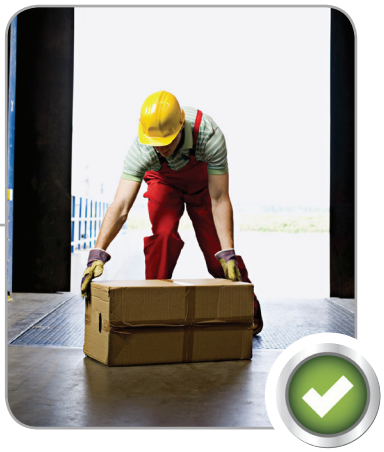
✔ 90 Degree View of Worker
✔ Task Clearly Visible
✔ Minimal Background



✘ Task Clearly Visible
✘ Minimal Background

MINIMIZE UNECESSARY BACKGROUND

✔ 90 Degree View of Worker
✔ Task Clearly Visible
✔ Minimal Background



✘ 90 Degree View of Worker
✘ Minimal Background

DOCUMENTING TOOLS USED BY WORKER

Identify the Make and Model

Documenting the specific details of the job tasks, including the tools used, is important. Introducing a new tool or model of tool to a task could alter the way the task is performed. As much detail as possible about the tool(s) should be recorded including the make, model, and year of manufacturing. Ideally, reference to a manual for the tool would be included for further information. Depending on the job or task, several different tools may be used by workers due to preference. All of the possible tools and associated tasks should be documented in order to fully capture the physical demands of the job (note that additional tasks identified in the PDD may be required due to variations in tool use) .

Measure the Weight

Similar to any other object that is lifted, the weight of the tool(s) should be measured. The weight of tools can impact the physical demands of a job. Weights should be measured during the observation and data collection phase. If the weight of the tool is supported by a balancer or other apparatus, it should be documented.

Take a Photograph

A complete PDD should include photographs of each and every tool used in the job. This does not mean a photograph of a task where the tool is being used, but rather a standalone photograph of the tool itself. The tool should be photographed on a light, blank surface (such as a table or the floor) that contrasts the tool and makes it clearly visible in the photograph.

PHYSICAL DEMAND TASK ELEMENTS

LIFT/LOWER ▸ Moving an object from one level to another (includes pulling or exerting upward force to hold a static object).

Important Items to Document:

- ✔ Description of the task (what, where, how)
- ✔ The weight of the object being lifted
- ✔ Starting height of the lift
- ✔ Final or end height of the lift
- ✔ Whether right, left, or both hands were used
- ✔ Horizontal reach distance (if applicable)

CARRY ▸ Transporting an object over a distance, usually holding in the hands, or on the arm(s) or shoulder(s).

Important Items to Document:

- ✔ Description of the carrying task (what, where, how)
- ✔ The weight of the object carried
- ✔ The distance the object is carried
- ✔ Height the object is carried at
- ✔ Whether right, left or both hands/arms/shoulders used
- ✔ Type of grip used

PUSH ▸ Exerting force upon an object in order to move the object away from worker (includes striking and holding static).

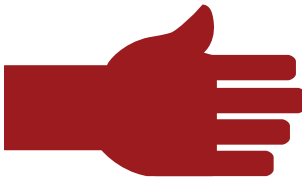
Important Items to Document:

- ✔ Description of the pushing task (what, where, how)
- ✔ The maximum and average force
- ✔ The distance traveled for the push task
- ✔ Hand height(s) during the pushing task
- ✔ Whether right, left, or both hands were used
- ✔ Type of grip used

PULL ▸ Exerting force upon an object in order to move the object towards worker (includes jerking and holding an object stationary).

Important Items to Document:

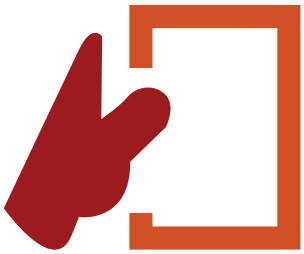
- ✔ Description of the pulling task (what, where, how)
- ✔ The maximum and average force
- ✔ The distance traveled for the pulling task
- ✔ Hand height(s) during the pulling task
- ✔ Whether right, left, or both hands were used
- ✔ Type of grip used



REACH ▸ Extending hands and arms in any direction away from a neutral posture beyond a barrier or abstacle.

Important Items to Document:

- ✔ Description of the reaching task (what, where, how)
- ✔ Height of the hand(s) during the reach
- ✔ Distance from the obstacle or barrier to the hand(s)
- ✔ Whether left, right, or both hands were used



GRIP ▸ Seizing, grasping, holding, turning, or otherwise working with the hands. Fingers are simply an extension of the hand.

Important Items to Document:

- ✔ Description of the gripping task (what, where, how)
- ✔ Type of grip used
- ✔ Direction of turning or manipulation (if applicable)
- ✔ Whether left, right or both hands were used
- ✔ Height of the hand(s) during the task
- ✔ Reach distance required (if applicable)

PINCH ▸ Using the fingers specifically, rather than the entire hand, to hold or manipulate an object.

Important Items to Document:

- ✔ Description of the pinching task (what, where, how)
- ✔ Type of pinch grip used
- ✔ Whether left, right or both hands were used
- ✔ Height of the hand(s) during the task
- ✔ Pinch force required, if measurable
- ✔ Reach distance required (if applicable)

WRITE ▸ Holding a pen, pencil or stylus while drawing or making notes with written words on a surface.

Important Items to Document:

- ✔ Description of the writing task (what, where, how)
- ✔ Whether left or right hand was used
- ✔ What type of writing surface (paper, box, tablet, etc.)
- ✔ What type of writing utensil was used (pen, pencil, etc.)
- ✔ Duration or amount of writing required
- ✔ Hand height for the writing task

FINE FINGER MOVEMENT ▸ Using the fingers to manipulate one or more objects, requiring accuracy or precision.

Important Items to Document:

- ✔ Description of the fine fingering task (what, where, how)
- ✔ The number of fingers involved
- ✔ Details regarding the precision or accuracy involved
- ✔ Whether right, left or both hands are used
- ✔ Height of the hand(s) for the task

SIT ▸ Remaining in a seated position on a surface for a period of time. All or the majority of body weight is being supported.

Important Items to Document:

- ✔ Description of the sitting task (what, where, how)
- ✔ Type of seat surface
- ✔ Seat height
- ✔ Seat dimensions
- ✔ Duration of time seated

STAND ▸ Remaining on one's feet in an upright position. This would involve a worker being stationary for a period of time.

Important Items to Document:

- ✔ Description of the standing task (what, where, how)
- ✔ Duration of standing task
- ✔ Type of standing surface or terrain
- ✔ Condition of standing surface (wet, dry, slippery, etc.)
- ✔ Footwear used

WALK ▸ Moving one's self on foot over a measurable distance.

Important Items to Document:

- ✔ Description of the walking task (what, where, how)
- ✔ Distance from start to end of walking task
- ✔ Duration of walking task
- ✔ Type of walking surface or terrain
- ✔ Condition of walking surface (wet, dry, slippery, etc.)
- ✔ Footwear used

KNEEL ▸ Supporting a portion of one's body weight on one or both knees for a period of time.

Important Items to Document:

- ✔ Description of the kneeling task (what, where, how)
- ✔ Duration of kneeling task
- ✔ Type of surface
- ✔ Whether one knee or both knees used

CROUCH/SQUAT ▸ Remaining in a lowered position for a period of time by bending one's knees.

Important Items to Document:

- ✔ Description of crouching/squatting (what, where, how)
- ✔ Duration of task

BALANCE ▸ Maintaining body equilibrium to prevent falling on any number of surfaces (e.g. platform, slope, slippery surface, etc.).

Important Items to Document:

- ✔ Description of balancing task (what, where, how)
- ✔ Duration of task
- ✔ Type of surface
- ✔ Whether one or both feet used
- ✔ Condition of surface

CRAWL ▸ Moving one's self on the hands and knees over a measurable distance.

Important Items to Document:

- ✔ Description of crawling task (what, where, how)
- ✔ Duration of task
- ✔ Distance from start to end of crawling task
- ✔ Type of surface
- ✔ Condition of surface (wet, dry, slippery, etc.)

CLIMB ▸ Moving one's self in the vertical direction on one or more surfaces (e.g. stairs, ladder, rope, ramp, etc.).

Important Items to Document:

- ✔ Description of climbing task (what, where, how)
- ✔ Distance from start to finish of climbing task
- ✔ Type and description of surface
- ✔ Details of climbing surface (e.g. step height, ramp angle)

TASTE ▸ Distinguishing or recognizing, with a degree of accuracy, differences or similarities in particular flavours using the tongue.

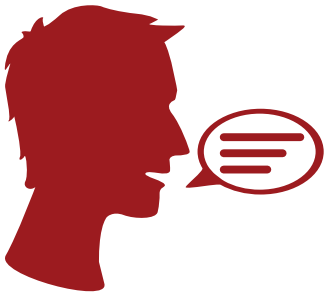
Important Items to Document:

- ✔ Description of tasting task (what, where, how)
- ✔ Type of food or product being tasted
- ✔ Type or level of recognition or accuracy required
- ✔ Tool(s) used in tasting task

SMELL ▸ Distinguishing or recognizing, with a degree of accuracy, differences or similarities in particular odours using the nose.

Important Items to Document:

- ✔ Description of smelling task (what, where, how)
- ✔ Type of odour being smelled
- ✔ Type or level of recognition or accuracy required



SPEECH ▸ Delivering information through oral word to others.

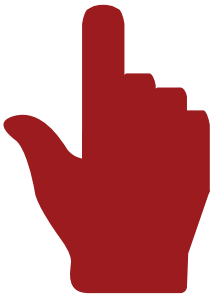
Important Items to Document:

- ✔ Description of the speaking task (what, where, how)
- ✔ Level of detail conveyed (single word, sentence, etc.)
- ✔ Purpose of the speech

HEAR ▸ Perceiving particular sounds or spoken words by the ear.

Important Items to Document:

- ✔ Description of hearing task (what, where, how)
- ✔ What sounds or words are required to be heard
- ✔ Sound level that is being heard (dB)



FEEL/TACTILE ▸ Perceiving attributes of objects by touching with the skin, particularly the hands and fingers.

Important Items to Document:

- ✔ Description of feeling task (what, where, how)
- ✔ What object(s) are being felt
- ✔ Detail(s) that are required to be detected by feel

VISION/READ ▸ Perceiving detail, information, or written words by the eye(s).

Important Items to Document:

- ✔ Description of vision task (what, where, how)
- ✔ What is being viewed or read
- ✔ Level of detail that is required to be viewed

DATA ENTRY ▸ Entering information. This is often completed using a physical keyboard or other technology, however, could be speech.

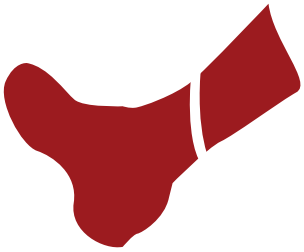
Important Items to Document:

- ✔ Description of data entry task (what, where, how)
- ✔ Amount of information being entered
- ✔ Type of technology being used to enter data
- ✔ Whether one or both hands are used, or other body part

DRIVING ▸ Operating and steering a vehicle in motion.

Important Items to Document:

- ✔ Description of driving task (what, where, how)
- ✔ Type of vehicle being driven
- ✔ Type of steering mechanism (wheel, levers, etc.)
- ✔ Height of steering mechanism
- ✔ Type of driving surface or terrain
- ✔ Description of surroundings (traffic, workers, buildings)



FOOT ACTION ▸ Using the foot to operate or strike an object, such as using a pedal or a kicking motion.

Important Items to Document:

- ✔ Description of foot action task (what, where, how)
- ✔ What object(s) are being operated or struck
- ✔ Foot force required
- ✔ Height and location of the pedal or object
- ✔ Whether one foot or both feet are required`

HANDLING OF ODD OBJECTS ▸ Lifting or handling of oddly shaped or balanced objects or people such as patients.

Important Items to Document:

- ✔ Description of handling task (what, where, how)
- ✔ Type of object being handled
- ✔ Weight or approximate weight handled
- ✔ Duration of the handling task
- ✔ Height of the handling task

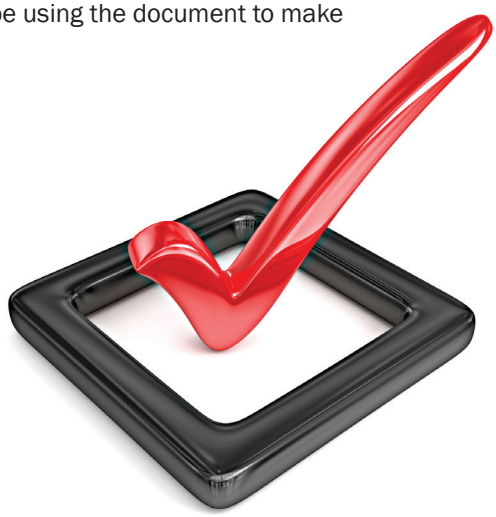
Finalize PDD Document

After all of the tasks have been observed and verified with the worker and supervisor, photographs taken, the measurements have been collected, the OHCOW PDD template should be completed. The template should be completed thoroughly, providing as much detail as possible. It is important when completing the OHCOW PDD template that all information provided is objective and based on the task and the work environment where it was performed, rather than the worker that was observed.

Ensure that pictures of tasks included in the final document are clear. Documented tasks should include photographs as often as possible to provide a visual reference to the measurements and description.

Make every effort to consider who will be reading the PDD document once it has been completed. It should be clear and concise, allowing someone who is not familiar with the job to understand the work being performed. As discussed above, there is a broad range of individuals who could be using the document to make decisions.

Distribute for Approval & Sign-Off



The final PDD document should be distributed to all individuals in the organization that were involved in the preparation phase. It provides everyone with a final opportunity to review all of the job elements to verify accuracy and that there are no omissions. Create a short but manageable timeframe for individuals to provide feedback.

The document should be finalized following the timeframe for feedback. Be sure to include the date it was completed, the name of the observer, and all other information required on the OHCOW PDD template.

File & Backup

Store your PDD collection in a location that can be accessed by all authorized individuals. Be sure to consider who will require the documents and where they will be stored, both in hard copy and electronically. It is wise to have multiple copies in order to prevent loss of files.

You may want to consider what type of file is used to prevent unauthorized modifications. Locked file formats such as .pdf may be preferred to control the PDD content.

FUTURE CONSIDERATIONS

Timeline for Review & Updates

A structured timeline should be implemented for PDD reviews. Organizations should regularly be revisiting their PDDs to determine where updates are necessary. It is recommended that PDDs be reviewed at least annually to evaluate if updates are warranted. If all jobs do not currently have PDDs, a timeline for completion should be established in addition to a timeline for review. Larger workplaces may develop a plan to review all PDDs annually by reviewing certain departments or areas monthly or quarterly in order to complete all jobs over a 12 month period.

There may be significant changes to jobs or processes that would trigger an immediate update to one or more PDDs. Each organization should consider what these triggers could be in order to maintain a current PDD database.

POSSIBLE TRIGGERS FOR IMMEDIATE UPDATES:

- New machine(s)
- New tool(s)
- New product(s)
- Process change
- Work reorganization
- Increase/Decrease in quotas
- Increase in responsibilities

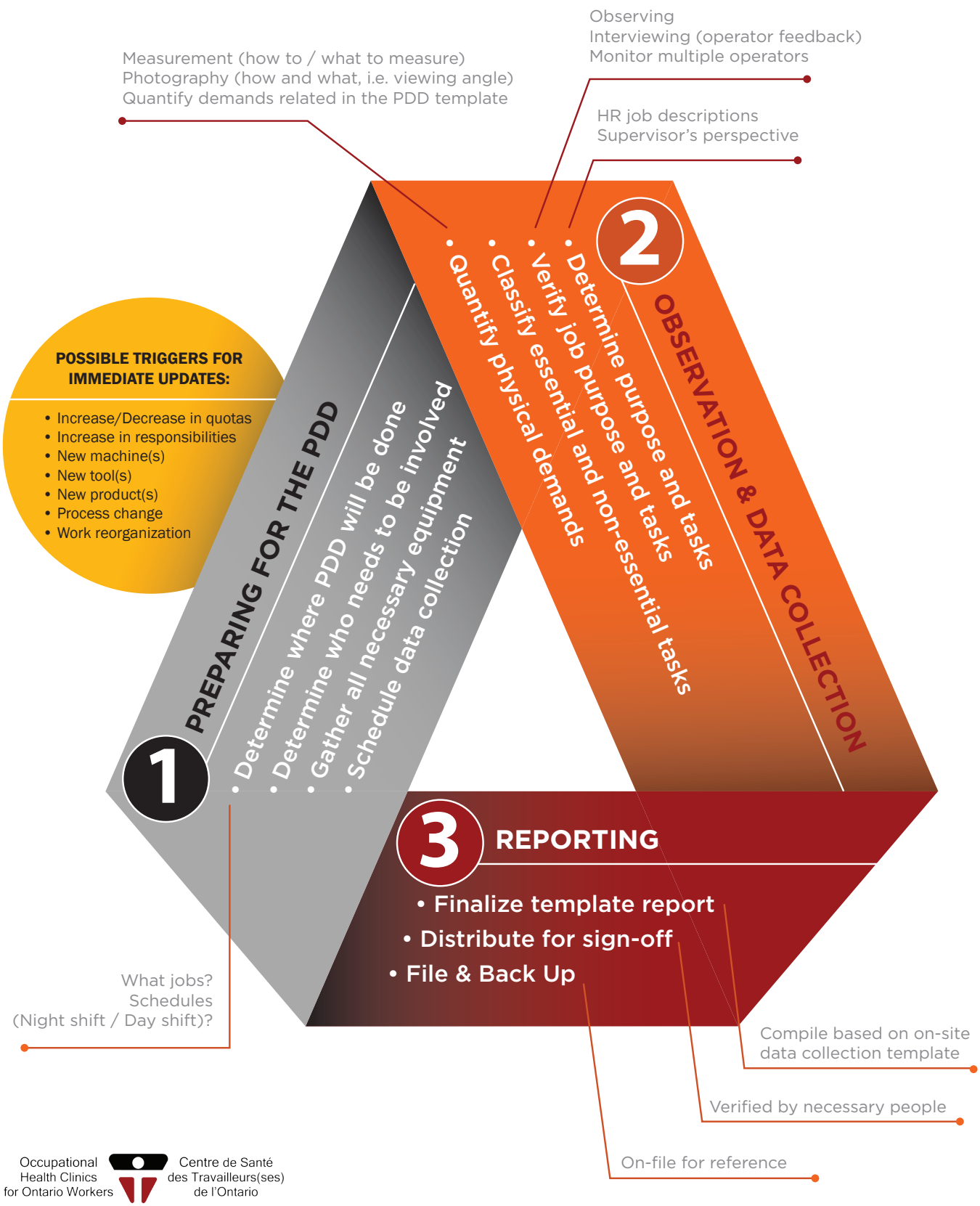
Use of Data for Ergonomics and MSD Prevention

With proper care and planning, data and measurements from the PDD process can be used in risk assessment tools in order to analyze various aspects of the work being performed. Musculoskeletal Disorder (MSD) hazards can be identified, assessed, and either eliminated or reduced as part of a functioning ergonomics or MSD prevention program. This type of program goes far beyond the PDD process described in this document.

It is recommended that *Canadian Certified Professional Ergonomists (CCPEs)* perform the detailed analysis and hazard evaluation. A significantly higher level of training and experience is required to perform such hazards assessments and implement solutions.

The appendix that follows provides a PDD template for organizations to use as a standard document. It has been designed in such a way to provide measures that can be taken and used in MSD hazard or risk assessment tools.

THE PDD PROCESS



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APPENDIX: PDD TEMPLATE

PHYSICAL DEMANDS DESCRIPTION | Job Title: _____

Date: *Date*
Department: *Department Name*
Work Hours: *e.g., 8:00AM – 5:00PM*
Schedule: *e.g., Monday – Friday*
Shift: *e.g., 'Nights', 'A'*

Completed by: *Name of Observer*
Verified by: *Worker Representative*
Management Representative

PPE: *Personal Protective Equipment used*

Description of the Job: *Describe the overall purpose of the job here*

Summary of Essential Tasks

TASK NAME	FREQUENCY	TOTAL DURATION	% OF WORK TIME
1.			
2.			
3.			
4.			
5.			
6.			

Summary of Non-Essential Tasks

TASK NAME	FREQUENCY	TOTAL DURATION	% OF WORK TIME
1.			
2.			
3.			

Environmental Factors (Check all that apply)

- ❑ Indoor
- ❑ Outdoor
- ❑ Flat Surface
- ❑ Rugged Terrain
- ❑ Weather
- ❑ Hot
- ❑ Cold
- ❑ Dry
- ❑ Wet
- ❑ Slippery
- ❑ Dark
- ❑ Bright
- ❑ Noise
- ❑ Vibration
- ❑ Traffic
- ❑ Biological Agents
- ❑ Chemicals
- ❑ Gas/Fumes
- ❑ Magnetic Fields
- ❑ Congested Area
- ❑ Other

Summary of Tools & Equipment

TOOL/EQUIPMENT	MAKE	MODEL	WEIGHT	DIMENSIONS
1.				
2.				
3.				

Photographs of Tools & Equipment

To download a digital version of this PDD Template, visit: **www.ohcow.on.ca/resources**

Physical Demand Task Details

1. Task Name	Task Duration	Description & Comments	*Description of the task and environmental factors (what, where, how, etc.)*				
INSERT PHOTO OF TASK	*Time*						
	Task Frequency						
	Frequency						
Task Elements	**Measure 1**	**Measure 2**	**Measure 3**	**Measure 4**	**Measure 5**	**Measure 6**	**Measure 7**
Element 1							
	Measure 2	**Measure 2**	**Measure 3**	**Measure 4**	**Measure 5**	**Measure 6**	**Measure 7**
Element 2							
	Measure 2	**Measure 2**	**Measure 3**	**Measure 4**	**Measure 5**	**Measure 6**	**Measure 7**
Element 3							
	Measure 2	**Measure 2**	**Measure 3**	**Measure 4**	**Measure 5**	**Measure 6**	**Measure 7**
Element n							

2. Task Name	Task Duration	Description & Comments	*Description of the task and environmental factors (what, where, how, etc.)*				
INSERT PHOTO OF TASK	*Time*						
	Task Frequency						
	Frequency						
Task Elements	**Measure 1**	**Measure 2**	**Measure 3**	**Measure 4**	**Measure 5**	**Measure 6**	**Measure 7**
Element 1							
	Measure 2	**Measure 2**	**Measure 3**	**Measure 4**	**Measure 5**	**Measure 6**	**Measure 7**
Element 2							
	Measure 2	**Measure 2**	**Measure 3**	**Measure 4**	**Measure 5**	**Measure 6**	**Measure 7**
Element 3							
	Measure 2	**Measure 2**	**Measure 3**	**Measure 4**	**Measure 5**	**Measure 6**	**Measure 7**
Element n							

Physical Demand Element	Measures to Document in the PDD						
Lift/Lower	Frequency	Weight	Start Height	End Height	Hand(s) Used	Reach	Grip Type
Carry	Frequency	Weight	Height	Distance	Hand(s) Used	Reach	Grip Type
Push	Frequency	Average Force	Max Force	Height	Distance	Hand(s) Used	Grip Type
Pull	Frequency	Average Force	Max Force	Height	Distance	Hand(s) Used	Grip Type
Reach	Frequency	Height	Distance	Hand(s) Used			
Grip	Frequency	Force	Height	Direction	Hand(s) Used	Reach	Grip Type
Pinch	Frequency	Force	Height	Pinch Type	Hand(s) Used	Reach	
Write	Frequency	Duration	Height	Surface	Tool Type		
Fine Finger Movement	Frequency	Duration	Height	Finger(s) Used	Hand(s) Used	Precision Level	
Sit	Duration	Seat Height	Dimensions	Surface			
Stand	Duration	Surface	Footwear				
Walk	Duration	Distance	Surface	Footwear			
Kneel	Frequency	Duration	Knee(s) Used	Surface			
Crouch/Squat	Frequency	Duration					
Balance	Duration	Leg(s) Used	Surface				
Crawl	Frequency	Duration	Distance	Surface			
Climb	Frequency	Duration	Distance	Surface			
Taste	Frequency	Food(s)	Precision Level				
Smell	Frequency	Odour Type(s)	Precision Level				
Speech	Frequency	Information	Level of Detail				
Hear	Frequency	Duration	Sound(s)	Sound Level			
Feel/Tactile	Frequency	Duration	Material(s)	Precision Level			
Vision/Read	Frequency	Information	Level of Detail				
Data Entry	Frequency	Information	Technology	Hand(s)			
Driving	Duration	Hand Height	Vehicle	Surface	Surroundings		
Foot Action	Frequency	Force	Height	Object	Foot/Feet		
Handling of Odd Objects	Frequency	Duration	Weight	Height	Object		

To download a digital version of this PDD Template, visit: **www.ohcow.on.ca/resources**

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