# PHYSICAL DEMANDS ASSESSMENT

## SAFETY AND LOSS PREVENTION SPECIALIST



## **PHYSICAL DEMANDS ASSESSMENT (PDA)** SAFETY AND LOSS PREVENTION SPECIALIST

As a national organization mandated to identify and support HR needs for Canada's trucking and transportation sector, Trucking HR Canada (THRC) plays a pivotal role in designing and completing projects that directly address HR challenges to support a vibrant and thriving trucking workforce. A key concern is the attraction, recruitment and retention of skilled workers to keep the wheels of the industry turning.

#### What is the Issue?

Diversity and inclusion lead to strong, skilled workplaces; however, many industries – including the trucking sector – experience difficulties and barriers in engaging and retaining individuals that require accommodations to perform their jobs to their full potential.

#### How Can Physical Demands Assessments Help Employers?

Physical Demands Assessments are an invaluable HR tool for employers to ensure diverse workplaces in which all workers can effectively perform essential and valuable work.

PDAs help to identify the physical requirements of a position that can then serve as the basis for implementing accommodations to allow workers to perform their jobs effectively and efficiently.

## What are Physical Demands Assessments?

**Physical Demands Assessments** (PDAs) identify the physical job requirements for specific occupations. Once employers are aware of the physical requirements of the job, current employees and new hires can be assessed to determine if they can perform the physical duties. If required, potential accommodations can be put in place to allow workers from various under-represented groups to not only perform, but thrive, in their roles – a mutually beneficial outcome for both workers and employers.

#### When are Physical Demands Assessments Useful for Employers?

Employers can use Physical Demands Assessments when working with the following diverse groups in the workplace:

- Workers with different physical body strength capabilities than their coworkers in the same role.
- Workers who may not have the same strength, balance, stamina or coordination as their co-workers.
- Employees who are returning to work after experiencing an injury that causes temporary impairment of physical ability or functioning.
- Employees or new hires who have permanent medical restrictions or disabilities that alter the way they perform certain physical tasks.

Physical Demands Assessments are useful for EVERY employee. PDAs promote the consideration of inclusive practices that help all workers to perform their jobs as effectively, safely and comfortably as possible.





### PDA OVERVIEW

#### Job Description: Safety and Loss Prevention Specialist

Safety and Loss Prevention Specialists play a key role in the development, delivery and management of their organizations' safety and compliance programs and training. They monitor, audit and confirm compliance related to programs linked to safety, loss prevention and control, HR and inspection. When incidents/accidents that impact the safety of the driver or equipment occur, they may be involved in the investigation process. They are employed by transportation companies, manufacturing and distribution companies and moving companies.

#### Most physical aspects of the job:

The most commonly performed actions requiring physical **STRENGTH** include:

#### **Rarely** Performed Actions:

- Lifting and Lowering
  - Floor to Bench
  - Bench to Shoulder
- Carrying
- Pushing/Pulling
  - Up/Down
  - Unilateral
  - Bilateral

#### Physical strength requirements (maximum and usual):

- Lifting and Lowering
  - Floor to Bench: Maximum 20 kg (44 lb.); usual 5 kg (11 lb.)
  - Bench to Shoulder: Maximum 20 kg (44 lb.); usual 5 kg (11 lb.)
- Carrying
  - Weight Maximum 20 kg (44 lb.); usual 5 kg (11 lb.)
  - Distance Maximum 50 meters (164 ft.); usual 10 meters (32 ft.)
- Pushing/Pulling Force:
  - Up/Down Maximum 15 kgf (33 lbf); usual 6 kgf (13 lbf)
  - Unilateral Maximum 5 kgf (11 lbf); usual 5 kgf (11 lbf)
  - Bilateral Maximum 15 kgf (33 lbf); usual 6 kgf (13 lbf)

The most commonly performed actions requiring **MOBILITY** AND **PHYSICAL POSITIONING** include:

#### **FREQUENTLY** Performed Actions:

- Walking
- Neck Movements
- Low Back Movements

#### OCCASIONALLY Performed Actions:

- Standing
- Reaching (Forward/ Vertical/Side)
- Elbow Movements
- Wrist Movements
- Gripping
- Striking with Hand

#### RARELY

#### Performed Actions:

- Sitting
- Climbing (Stairs)
- Balancing
- Kneeling
- Crouching/Squatting
- Crawling
- Fine Finger Movements
- Foot Action

#### Legend:

	% of Shift	4hr Shift	8hr Shift	12hr Shift
SELDOM	Not daily	Not daily	Not daily	Not daily
RARE	0-5%	1-12 min	1-24 min	1 – 36 min
OCCASIONAL	6%-33%	13 min- 1hr 19 min	25 min – 2hr 38 min	37 min – 3hr 58 min
FREQUENT	34%-66%	1hr 20 min - 2hr 40 min	2hr 39 min – 5hr 15 min	3hr 59 min – 8hr
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#### **ESSENTIAL JOB FUNCTIONS:**

Essential job functions are the fundamental duties required of Safety and Loss Prevention Specialists. In other words, they are the duties that the incumbent **absolutely must be able to do** to perform the job.

The Essential Job Functions of the Safety and Loss Prevention Specialists are:

- Preventing and Controlling Loss
- Conducting Inspections

Safety and Loss Prevention Specialists spend upwards of 60% of their day Preventing and Controlling Loss and upwards of 30% of their day Conducting Inspections.

#### **ESSENTIAL PHYSICAL JOB REQUIREMENTS**

The Safety and Loss Prevention Specialist position has limited physical requirements, none of which are deemed to be essential for the job. In most cases, accommodations can be made (in keeping with the capabilities of the company) to allow an individual to perform required job functions.

#### **POTENTIAL ACCOMMODATIONS**

Please note that the accommodations referenced are high-level suggestions for employers. However, any individual requiring accommodations to perform their job tasks should be assessed by an authorized professional (e.g. Registered Kinesiologist, Ergonomist, Physio/Occupational Therapist) to develop an accommodation plan that is right for the individual.

Potential accommodations for actions requiring physical **STRENGTH**:

 Lifting/Lowering; Carrying; Pushing and Pulling – use of assistive pulleys, levers or tools (situation specific)

Potential accommodations for actions requiring **MOBILITY** AND **PHYSICAL POSITIONING**:

- **Neck movements** ergonomic workstation and positioning; supportive braces
- Low back movements supportive braces
- Reaching ergonomic workstation; properly lifting and reaching techniques (and strategies)
- Wrist movements supportive braces
- Gripping use of adapters

Universal Inclusive Practices and Accommodations:

- Ensuring a low-scent or scent-free environment (e.g. in vehicles, loading/unloading areas and offices)
- Providing frequent breaks to allow workers experiencing non-visible disabilities to conserve energy (e.g. workers experiencing chronic fatigue, chronic pain, needing to take medication, needing to eat at specific times, needing to take more frequent bathroom breaks)
- Using electronic devices (e.g. tablet computers or smartphones with touchscreens) to complete administrative tasks requiring fine finger movements or wrist movement
- Providing ergonomic chairs during periods of sitting or when at rest during breaks
- Providing ice packs or heating pads (in-cab or in-office) to assist in pain management

- Stretching during breaks
- Wearing orthotic footwear
- Outfitting computer monitors with screen protection to prevent glare and prevent headaches
- Ensuring all step ladders, step stools and ladders are equipped with grips to ensure stability and prevent slips and falls, as well as grab grips and vision reflection strips.
- Providing headsets for desk jobs that require wrist movement or heck and neck movement
- Utilizing grip holders for use of devices such as phones or clipboards that require an open grip
- Using ear plugs to block out excess noise but maintain hearing ability to assist workers with noise sensitivity, post-concussion or auditory processing issues
- Using sunglasses or darkened lenses to manage light sensitivity issues.

### **PHYSICAL DEMANDS PROFILE**

Job Title	Safety and Loss Prevention Specialist	NOC	4423 - Safety and Loss Prevention Specialist
Report Completed By	CBI Workplace Solutions		

#### **JOB OBJECTIVE:**

Safety and Loss Prevention Specialists are responsible for maintaining safety standards related to training and compliance.

#### **KEY PHYSICAL JOB TASKS**

#### 1. Manage organizational safety programs

- a. Conduct needs assessments
  - i. Identify safety requirements of external stakeholders
- **b.** Deliver training

#### 2. Prevent and control loss

- a. Assess viability of emergency response plans
  - i. Participate in drills
- **b.** Investigate occurrences
  - i. Document all evidence
  - ii. Take witness statements
  - iii. Conduct interviews

#### **3. Conduct inspections**

- a. Conduct inspections with a partner
- b. Inspect worksite for safety conditions
- **c.** Conduct interviews

#### 4. Manage human resources

- a. Participate in recruitment initiatives
  - i. Participate in job fairs, etc.

#### 5. Manage internal and external stakeholders

- a. Serve as safety advisor within the company
- **b.** Communicate safety information
- c. Liaise with industry organizations
- **d.** Promote the company
- e. Participate in industry driven initiatives

EQUIPMENT	PERSONAL PROTECTIVE EQUIPMENT
Computer; keyboard; mouse; desk; desk chair; going in the	Safety boots, safety vest and coveralls when telephone; hand tools; camera yard

STRENGTH REQUIREMENTS			Fre	equenc	:y		Mass (KG)		Task #	Comments
		S	R	0	F	С	Мах	Usual		
Lifting/Lowering	Floor to Bench (0-88 cm)		1				20	5	1,2,3	<ul> <li>Creeper – 7 kg lifted from pickup bed and placed on ground (88 cm – 0 cm).</li> </ul>
										• Wheel chocks – 5 kg lifted from pickup bed and placed on ground behind vehicle tires (88 cm – 0 cm).
										• Absorball – 20 kg bag lifted from the pickup bed at 88 cm and carried to appropriate areas at arms' length.
Bench to Shoulde (89-149 cm)			1				20	5	1,2,3	<ul> <li>Lifting open hood latch (5 – 10 kg) on hood of the vehicle to access engine compartment (90 – 95cm).</li> </ul>
										• Lifting fifth wheel to inspect (15 kg) (90 cm - 115 cm).
										• Lifting wheel chocks (5 kg) back into pickup bed with tailgate closed (0 – 99 cm).
										• Closing liftgate (5 kg) (90 – 100 cm).
										• Lifting Absorball (20 kg) back into pickup bed after use (Arms' length – 90 cm).
										• Lifting creeper (7 kg) back into pickup bed (0 - 90 cm).
	Floor to Shoulder (0-149 cm)									Not Required.
	Above Shoulder (>150 cm)									Not Required.

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STRENGTH REQUIREMENTS		Frequency					Mass (KG)		Task #	Comments
		S	R	0	F	С	Max	Usual		
Carrying	Weight		1				20	10	1,2,3	• Absorball (20 kg) – Carried along area of application (50 m).
	Distance (meters)						50	10	1,2,3	• Retrieving hand tools and wheel chock (1- 5 kg) from the pickup truck bed and walking to appropriate area around the truck 10 m).
Pushing/Pulling	Up/Down		1				15	6	1,3	<ul> <li>Pushing engine cover up (15 kg) or pulling engine cover down (6 kg) – may vary depending on make and model of truck (90 cm – 160 cm).</li> </ul>
	Unilateral		1				5	5	1,3	<ul> <li>Inspecting components requires pulling and pushing to ensure attachments are safe (5 kg). Component locations range from 25 to 120 cm in vertical height. Employee is able to position themselves to optimize horizontal distance to components.</li> </ul>
										• Opening and closing door of truck cabin (5 kg, 125 cm).
	Bilateral		1				15	6	1,3	• Pulling out pickup bed tray (5kg) – Forces required may vary depending on amount of material on tray as well as the condition of the sliding mechanism.

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MOBILITY AND POSTURAL REQUIREMENTS			Fr	equen	су		Task #	Comments	
		S	R	0	F	C			
Standing				$\checkmark$			1,2,3,4,5	• Recruitment initiatives with prospective employees at various events.	
								Driver inspection – checking credentials and identification.	
								• Training sessions – 1.5 – 3 hrs.	
								Accident investigation:	
								Take witness statements     Conduct interviews	
								Record relevant notes	
Walking					1		1.2.4	Inspecting trucks.	
Waiking							1,2,4	Investigating accidents:	
								Document all evidence	
								• Walking from facilities to appropriate vehicles in the trucking lot.	
Sitting			1				1,2,4,5	• Minimal desk work (30 min / day).	
								• Driving – time driving varies depending on start and end points.	
Climbing	Stairs		1				1,2,3	• Facility stairs.	
	Ladders							Not Required.	
	Other		1				1,3	• Into truck cabin (3 steps - 42 cm step, 50 cm step, 30 cm step).	
Balancing			1				1,3	Balancing required when mounting and dismounting trucks.	
Kneeling			1				1,2,3	Required for inspection of truck specifically for brakes and wheels.	
Crouching/Squatting			1				1,2,3	• Accident investigation – determining potential causes by inspecting truck as well as marks, debris, and hazards on the ground.	
Crawling			1				1,2,3		

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MOBILITY AND POSTURAL		Frequency					Task #	Comments
REQUIREN	IENTS	S	R	0	F	C		
Neck Movements					1		1,2,3	<ul> <li>Truck inspection - important to visually assess all components of the vehicle.</li> <li>Accident investigation - determining potential causes by visually assessing truck as well as marks, debris, and hazards on the ground.</li> <li>Driving - required to be aware of surrounds for safe operation of the vehicle.</li> </ul>
Low Back Movements					1		1,2,3	<ul> <li>Truck inspection – important to visually assess all components of the vehicle.</li> <li>Accident investigation – determining potential causes by visually assessing truck as well as marks, debris, and hazards on the ground.</li> </ul>
Reaching	Horizontal (Forward)			1			1,2,3	<ul> <li>Brake line inspection (up to 90 cm).</li> <li>Retrieving supplies (up to 53 cm).</li> <li>Truck safety inspection (up to 110 cm).</li> </ul>
	Vertical (Up/Down)			1			1,2,3	<ul> <li>Opening hood (up to 90 cm).</li> <li>Closing hood (up to 130 cm).</li> <li>Truck inspection (up to 35 - 160 cm).</li> <li>Opening truck door (up to 160 cm).</li> <li>Liftgate open (up to 90 cm).</li> </ul>
	Extension (Behind)							Not Required.
	Lateral (Side)			1			1,3	Reaching components during truck inspection (up to 100 cm).
Elbow moven	nents			1			1,3	• Truck inspection requires reaching for components and attempting to manipulate them.
Wrist movements				✓			1,3	

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MOBILITY AND POSTURAL REQUIREMENTS	S	Frequency T R   O   F   C		Task #	Comments	
Gripping			1		1,2,3	<ul> <li>Hand tools require closed grips.</li> <li>Inspecting components which require pushing or pulling require closed and open grips.</li> <li>Checking logs while gripping clipboard.</li> <li>Opening vehicle doors and tailgate requires an open grip.</li> <li>Pulling out pickup bed tray requires an open grip.</li> <li>Steering wheel requires a closed grip.</li> <li>Writing utensils.</li> </ul>
Pinching			1		1,2,3	<ul><li>Writing utensils.</li><li>Organizing documents.</li></ul>
Fine finger movements (e.g. keying)		1			1,3	<ul> <li>Computer work (30 min/day) – keyboard work.</li> <li>Vehicle controls.</li> </ul>
Striking with hand			1		1,3,4,5	Inspecting truck components including brakes and wheels requires hand strikes to     ensure safety.
Foot action		✓			1,3	Truck inspection (kicking tires).

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ADDITIONAL CONCEI	RNS A	ND DEMANDS			Comments		
Environmental Conditions		Hot	1	Adequate lighting	• May be required to be at the scene		
	$\checkmark$	Dry Humid Noise		Moving objects Working at heights Slippery surface Congested area Sharp edges Fumes/vapours/gases Electromagnetic fields	of an accident in a timely fashion regardless of weather conditions		
	$\checkmark$						
	$\checkmark$						
	$\checkmark$						
	$\checkmark$						
	$\checkmark$						
Psychological/Mental Demands	$\checkmark$	✓ Work under pressure (deadlines)	$\checkmark$	Influence people	Must be "on-call" and able to respond		
Demanos		Fast pace work		Confrontation situations	to emergencies at any time		
	$\checkmark$	Deal with multiple tasks		Incentive/piece work			
	1	Perform complex and varied tasks Attain precise standards/attention to detail Control of work pace		Irregular hours			
	$\checkmark$			Overtime			
	$\checkmark$			Reading			
		Direct control/plan of work	$\checkmark$	Working alone			
		Close supervision	1	Working in a group			
		Follow instructions	1	Travelling			
Sensory Demands	$\checkmark$	Hearing	$\checkmark$	Spatial perception			
	$\checkmark$	Speech	$\checkmark$	Tactile			
	$\checkmark$	Colour vision	$\checkmark$	Smell			
	1	Near vision		Taste			
		Far vision					