

Lindsay Transport MSD Project

MSD Project Objective

"Develop a holistic and simple Risk Assessment and Prevention Tool

Kit to reduce the risk of MSD injury in the Heavy Vehicle Road

Transport industry"



THE APHIRM TOOLKIT: AN EVIDENCE-BASED SYSTEM FOR WORKPLACE MSD RISK MANAGEMENT DETAILS THE FOLLOWING COMMON GAPS IN EFFECTIVE MSD RISK MANAGEMENT GAP 1. CURRENT WORKPLACE PRACTICES INTENDED TO REDUCE MSD RISK TYPICALLY FOCUS NARROWLY ON A FEW *PHYSICAL* HAZARDS SUCH AS HEAVY LIFTING AND REPETITIVE ACTIONS GAP 2. WORKPLACE MSD RISK MANAGEMENT IS MORE EFFECTIVE IN REDUCING RISK WHEN WORKERS ARE ACTIVELY INVOLVED IN THE PROCESS GAP 3. RISK CONTROL ACTIONS ARE MOST EFFECTIVE WHEN THEY ADDRESS RISK AT ITS SOURCE, IN ACCORD WITH THE CONVENTIONAL OHS HIERARCHY OF RISK CONTROL

APHIRM - A Participative Hazard Identification and Risk Management

Hazard Items from APHIRM Toolkit	Comments
Physical task demands	Physical task demands are 'heavy' in Warehouse Operations activities.
	Physical task demands are rated as 'heavy' through JTA for B Double drivers, 'light' for Line Haul drivers and 'moderate' for PUD drivers.
Physical environment, equipment, OHS overall	Strong WHS Management System from a corporate perspective.
	Erskine Park depot is new and includes extensive hardstand, truck wash, HV mechanics/workshop, rest area/motel for drivers.
	HVs are less than x years old and maintained as per manufacturer schedules. Some HVs have a sleeper section for Line Haul drivers to sleep in.
Quantitative demands	Routine task demands have undergone extensive quantitative risk assessment with associsted risk rankings detailed, see 'physical task demands'.
Work pace	Work is undertaken within HV fatigue management requirements detailed by NHVR, including 'Counting Time'. Work schedules are managed by dedicated workers at Lindsay.

• An initial assessment was undertaken on the current Lindsay WHS climate in relation to MSD risk using the tool detailed in *"The APHIRM toolkit: an evidence-based system for workplace MSD risk management"* Oakman & Macdonald (2019).

• This information was incorporated into the qualitative risk management review of Lindsay MSD risk as per APHIRM Tool guidelines.



~6-month review of incidents

Slips, trips, falls across worker types
PUD Driver manual handling injuries
Linehaul Driver manual handling injuries

Plus: common but lower frequency injuries across worker roles including:

- Plant & machinery interaction
- Forklift vs pedestrian
- Falling objects

Do you ever experience any muscular and/or joint pain in the body? – Such as swelling, numbness, tingling, 'pins & needles', stiffness, aches & pains?



83 survey responses

30% of responses from PUD HC/MC Drivers 60% of responses from Linehaul Drivers

From the list below can you select the areas in which you experience these symptoms?



If you do suffer from any of the above, could you rate the discomfort/pain?





Qualitative job task assessments with detailed biometric risk areas, body risk assessments and task duration/frequency

MSD Toolkit



Designed and built for Lindsay Transport workers



Rapid Risk Assessment Updates

- Are driver ergonomics set up?
- Purpose to reference ergonomics video available on driver phone/QR code scan in cab
- Are stretching info videos available?
- Purpose to reference stretching & myofascial videos driver phone/QR code scan in cab
- •
- Are drivers familiar with this type of vehicle?
- Purpose to ensure divers are familiar with fixtures and fittings of that vehicle
- Are cab fittings in good condition?
- Purpose to verify that fittings used in ergo set up are operational





- 3 professionally developed & edited
 - information videos
 - Vehicle ergonomics
 - Driver stretching routines
 - Myofascial release routines

Plus corresponding Safe Work Instruction



We've ordered 800 peanut balls for drivers to use with the SOP &





We've delivered F2F and online SmartMoves Manual Handling training

• Gap 1. Current workplace practices intended to reduce MSD risk typically focus narrowly on a few *physical* hazards such as heavy lifting and repetitive actions

• - Detailed JTAs with biometric assessment, development of associated safe work information in Lindsay format

• Gap 2. Workplace MSD risk management is more effective in reducing risk when workers are actively involved in the process

• - Lindsay team members are able to identify MSD risk at the pre journey stage through an update to existing risk assessment practices

• Gap 3. Risk control actions are most effective when they address risk at its source, in accord with the conventional OHS hierarchy of risk control

• - The sources of risk factors identified through the MSD survey have been the core focus of risk controls. There is limited opportunity to eliminate MSD risk completely so controls are engineering + administrative

Activity	Update	When
QR	QR code has been explained to the workers Action: Distribute QR codes to national depots and have QR codes set up in truck cabs and main areas of the depot	August 2022
Peanut Balls / TheraBands	Peanut balls have been demonstrated to workers and workers have practiced using them. Action: Distribution of peanut balls to workers	August 2022
Communication	A copy of the toolbox talk has been provided to each depot for their records. Action: Conduct further toolbox consultation to all workers	August 2022
Rapid Risk Assessment	QR code is now available for workers to help reduce the risk of musculoskeletal disorders (MSD). Action: Monitor and support workers on using the peanut balls and QR codes	August 2022
Manual handling training (technique and equipment)	Manual handling (MH) tasks that workers considers high risk was discussed and training was provided to workers to reduce the risk of MSD. See specified training in toolbox talk provided. Action: Deliver MSD prevention training to all team leaders / supervisors	August 2022
Manual Handling observations (behaviour)	Observations were conducted on workers for MH tasks such as coupling/uncoupling trailers. <u>Action: All supervisors to conduct regular MH observations of staff</u>	August 2022 & ongoing

Intervention update

Activity	Update	When
Roadshow Consultation	Healthy heads in trucks and sheds talk with demonstrations of peanut balls and therabands. Action: Distribute Peanut balls and TheraBands	August 2022
Promotion	Action: Posters to be displayed around depot to encourage peanut ball and QR code use	August 2022
Vehicle ergonomic assessments	Action: Vehicle ergonomic assessments to be conducted with truck drivers	August 2022
Measure Feedback	Interview of workers – outcome of intervention had achieved workers reporting their MS discomfort has reduced from performing stretches from 6/10 to a 4/10.	August 2022

Intervention update

Post Initiative - Results

Do you ever experience any muscular and/or joint pain in the body? – Such as swelling, numbness, tingling, 'pins & needles', stiffness, aches & pains?



15% decrease in lower back pain

10% increase in workers never feeling muscular and/or joint pain

5% decrease in workers rating their discomfort as painful



From the list below can you select the areas in which you experience these symptoms?





Summary & Recommendations

The MSD toolkit was developed to reduce the risk of MSD injury in the heavy vehicle transport industry. The toolkit has also increased the awareness of MSD in heavy vehicle drivers and has encouraged drivers to be pro active when experiencing musculoskeletal discomfort.

To continue reducing the risk of MSD injury we recommend:

- All workers including management to use MSD aids and conduct stretches with other workers on a regular basis
- For workers manual handling techniques to be regularly assessed/observed and address at risk behavior identified
- To set monthly manual handling/MSD injury KPI's across the organization
- Consider incentivizing workers that demonstrate safety values and manual handling techniques implemented
- To review MH program every 12 months
- Include MH as a set agenda for management meetings to observe and measure effectiveness and discuss any additional controls will further assist risk reduction and wellbeing.