

Physical and psychological health hazards and controls

ⓐ A worker is manually loading boxes of components onto metal shelves.

➤ Identify FOUR types of injury that the worker could suffer while carrying out this task. (4)

The four types of injuries include;

- spinal disc compression or a prolapsed disc;
- strains to tendons, muscles or ligaments;
- hernia;
- dislocation or fracture of bones;
- cuts and abrasions;
- crushing or impact injuries
- work related upper limb disorders (WRULDs).

➤ Identify factors (issues) in relation to the task that will increase the risk of injury. (4)

- the manipulation of the load at a distance from the trunk;
- the work rate and periods allowed for rest and recovery;
- excessive carrying distances;
- excessive lifting or lowering distances;
- and the need to adopt unsatisfactory body positions because of space restrictions.

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ⓐ List FOUR specific types of injury that could be caused by the incorrect manual handling of loads. (4)

- spinal disc compression or prolapsed disc,
- torn ligaments or sprained tendons,
- hernia, dislocation and fractures,
- muscular strain,
- cuts and abrasions
- crushing and impact injuries.

ⓑ Identify factors (issues) in relation to the load that will affect the risk of injury. (4)

- They should have identified factors (issues) such as the size and weight of the load,
- the possibility that the contents might move and the load become unbalanced,
- the centre of gravity not in the centre of the load,
- difficulty in securing a firm grasp of the load
- the presence of sharp edges.

Physical and psychological health hazards and controls

① Identify the factors (issues) that could contribute towards the development of work-related upper limb disorders

(WRULDs) amongst workers at a supermarket checkout. (8)

The identify factors (issues) such as:

- space constraints resulting in employees being forced to adopt fixed and static positions;
- non-adjustable equipment such as chairs and the design of the scanning equipment;
- over reaching often during the handling of bulky and heavy articles;
- a high pace of work and high levels of repetition;
- environmental conditions such as temperature and humidity;
- a lack of job rotation and a failure to provide adequate breaks;
- the age of the workers with some having pre-existing conditions and
- a lack of appropriate training and supervision.

Physical and psychological health hazards and controls

⑩ Outline the specific hazards associated with the use of battery-powered forklift trucks and state the precautions necessary in EACH case. (8)

The hazards and control measures include:

- the generation of hydrogen gas causing explosion or fire,
 - precaution include provision of a dedicated charging station with adequate ventilation.

- Burns by battery acid,
 - precaution includes wearing personal protective equipment such as gloves and eye protection.

- Possibility of electric shock and burns through the shorting of battery leads and
 - precaution include adequate insulation, a correct connection procedure and the wearing of gloves.

- Collisions with pedestrians with silent operation of the forklift,
 - the precaution include proper design off traffic routes, the wearing of high visibility clothing by pedestrians and with warning devices.

Physical and psychological health hazards and controls

Ⓞ Outline EIGHT rules to follow when a fork-lift truck is left unattended during a driver's work break. (8)

Answer

The rules to follow include:

- returning the fork-lift truck to a designated area;
- parking on firm, level ground;
- leaving the truck with the mast tilted slightly forward and the forks resting on the floor,
- isolating the power with the ignition key removed and retained by a responsible person;
- and parking the truck away from other vehicles and in a position that does not cause obstruction to traffic routes, fire points or emergency exits.