

Moving equipment in children's services

What is the problem?

Workers in the children's services sector experience musculoskeletal injuries (eg sprains, strains, fractures and soft tissue injuries) from manually moving or carrying equipment.

Equipment includes large, bulky, awkward or heavy objects such as indoor and outdoor play equipment (eg climbing frames, model kitchens, bookcases or block trolleys). Equipment also includes objects such as evacuation cots and children's furniture.

Equipment is frequently moved in children's services to provide children with a stimulating or changing environment. Organisations are encouraged to discuss how equipment is moved so the needs of workers and children are addressed safely.

What are the risks?

Workers may be at risk of injuries from:

- bending, twisting and exerting high or unexpected force due to manually lifting, moving or carrying heavy or awkward indoor and outdoor equipment
- no aids being available to move equipment (eg trolleys)
- poorly maintained or inappropriate ladders
- an insufficient number of people to undertake the task
- pushing or pulling evacuation cots that are difficult to manoeuvre over uneven surfaces or in small spaces.

What are solutions to the problems?

Equipment

- Replace heavy or awkward equipment with lighter equipment.
- Replace heavy or awkward equipment with equipment with lockable wheels so it can be easily moved.
- Store equipment close to where it is used.
- Use trolleys for moving heavy or awkward objects rather than manually lifting and carrying objects. For example:
 - match the trolley to the weight and dimensions of the objects that are being moved
 - designate appropriate routes for trolleys so they are not pushed over surfaces with a high level of friction or resistance or lifted over structures such as steps.
- Use sandpit covers that are segmented or rolled to reduce manually lifting the entire cover.
- Store objects in smaller rather than larger containers to avoid having to lift and balance heavy loads.
- Use lightweight, sturdy, stackable containers with wheels and handles to store or move objects.

Evacuation cots

- Measure doorways to ensure they are wide enough for evacuation cots.
- Fit evacuation cots with large diameter wheels (eg 100-150mm) to assist with the negotiation of external surface obstacles. Wheels should be sturdy, lockable and well maintained to move the cot with minimal resistance.
- Assess the floor and ground surfaces of the evacuation route for minimal friction (eg no thick carpet, tanbark or broken concrete), and modify existing surfaces where necessary.
- Remove or modify any structures the evacuation cot needs to be lifted over (eg steps or raised door frames).
- Ensure emergency exits are accessible at all times and are not locked or blocked.

A Health and Safety Solution

Systems

- Consider the weight, size and manoeuvrability when purchasing or replacing equipment.
- Identify and label the weight, size and handling instructions for equipment that is moved (eg whether equipment must be moved with an appropriate aid such as wheels or a trolley or if it can only be moved with two people).
- If facilities are shared with other organisations, designate how equipment should be moved, who will move equipment and when it will be moved.
- Provide workers with information, instruction and supervision on documented work procedures and use of equipment and aids.
- Provide reporting processes so safety issues can be identified and fixed as soon as possible.
- Schedule and record regular inspections and maintenance of all areas of the workplace and equipment.

The problem



Worker is at risk of injury when manually lifting and carrying heavy or awkward objects.

A solution



Trolley used to move playground equipment and toys, reducing the need to manually lift and carry objects. Large wheels help move the trolley over uneven surfaces.

Further Information

WorkSafe Advisory Service

Toll-free 1800 136 089

Email info@worksafe.vic.gov.au

worksafe.vic.gov.au

Related WorkSafe Health and Safety Solutions

- *Lifting children in/out of cots and highchairs or on/off change tables*
- *Working at low levels in children's services*
- *Storing supplies and equipment in children's services*
- *Using office areas in children's services*
- *Maintaining indoor and outdoor areas in children's services*

Related WorkSafe publication

- *Manual Handling Code of Practice, 2000*

Other related publications

- *Children's Services Regulations, 2009* (available from education.vic.gov.au)
- *Design guide for Victorian children's services, 2009* (available from education.vic.gov.au)
- *Outdoor play guide for Victorian children's services, 2007* (available from education.vic.gov.au)

Australian Standards

- *AS/NZS 4422:1996, Playground surfacing – specifications, requirements and test method*
- *AS/NZS 4685.1-200,4 Playground equipment safety*