

Manual Handling in Libraries

2nd Edition 2005

A guide to reducing injuries from manual handling in libraries

INTRODUCTION

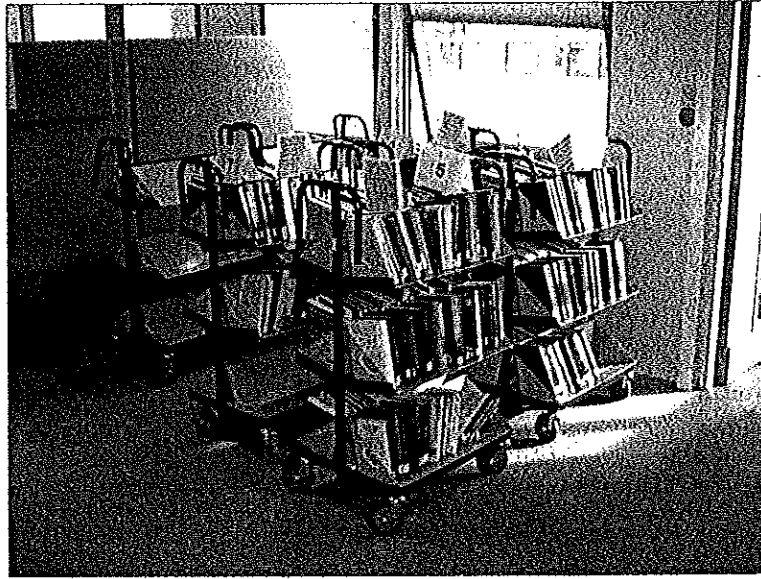
A Working Group of the Universities Safety Association was formed in 1998 to address concerns about a number of manual handling issues that appeared to be specific for libraries. The Group consisted of library staff, health and safety advisers, occupational health nurses and an ergonomist, comprising 30 individuals from 18 higher education institutions. As a result of these discussions, a guidance document *Manual Handling in Libraries* was produced and published in 2000 by the Universities Safety Association (now the Universities Safety & Health Association: USHA).

The Working Group also developed a questionnaire for investigating the extent of work related upper limb disorders (WRULD) associated with manual handling in libraries. This was sent to university libraries and 54 usable replies were received from 39 different institutions (representing 3943 staff members in 137 libraries). 26% of libraries reported at least one diagnosed or putative WRULD case. 75 cases were reported in total: an incidence of 18 cases per 1000 staff per year. WRULD cases were associated with administration, receiving and processing acquisitions, issue desk activities, re-shelving books, and other activities involving manual handling. 21 WRULD cases were reported amongst library staff who re-shelved books, 27 cases amongst staff working at book issue & return desks and 7 cases attributed to other manual handling activities (postal delivery duties, moving books during an emergency, photocopying, use of trolleys, processing new acquisitions and use of compact shelving). A full report of this study can be found at: www2.warwick.ac.uk/services/safety/health_and_safety/papers/libthree.pdf

In 2003 the USHA Executive asked the Midlands Universities Health & Safety Forum to review and update the guidance in the light of any developments that had occurred since the publication of the 2000 guidance. This 2nd Edition is the result of the review. Although the principal target of the guidance is libraries in further and higher education institutions, much of it is equally applicable to other types of libraries.

The contributions of the many people who provided information and advice for this document are gratefully acknowledged.

1. GENERAL CONSIDERATIONS



Employers have clear legal duties under the *Health and Safety at Work etc Act, 1974* and various *Regulations* made under the *Act* to address manual handling hazards in libraries. These are summarised in **Appendix A**.

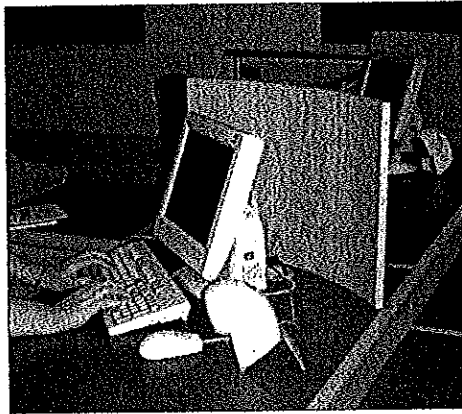
As far as practicable, the layout of libraries should seek to eliminate congestion and provide sufficient working space to carry out handling operations without interfering with other activities.

Library managers must make a careful assessment of manual handling risks. Particular attention should be given to:

- book issue and return
- re-shelving books
- moving shelving and other equipment
- use of trolleys.

Relevant general guidance on assessment is given in *A Guide to Manual Materials Handling* (Mital, Nicholson & Ayub; 2nd Edition; published by Taylor & Francis; ISBN 0-7484-0728-6). The HSE has published an assessment tool for basic manual handling operations (lifting, carrying and team operations) in *Manual Handling Assessment Charts* (INDG 383; also available interactively on the HSE web site). The HSE has published an assessment tool for more complex operations in the Contract Research Report CRR 251/1999 *Evaluating Change in Exposure to Risk for Musculoskeletal Disorder – a Practical Tool* (HSE Books; ISBN 0-7176-1722-X).

Identified risks should be either eliminated or adequately controlled in consultation with the staff concerned. Manual handling aids should be used as much as practicable. Staff should receive information on risks and instruction and training on safe methods of work. Where appropriate, there must be occupational health monitoring.



Health and Safety issues in libraries should not be seen in isolation from other management issues. Reduction of risk from manual handling injuries could involve:

- selection of staff and equal opportunities issues
- job descriptions and patterns of working
- design of facilities and equipment
- the way books are arranged and packed on shelves
- types of floor coverings (ease of pushing trolleys etc)
- sizes of volumes of bound periodicals
- facilities management (maintaining a safe and comfortable workplace – heating, lighting, ventilation etc)
- monitoring the health of staff
- adequate training and supervision.

Arrangements must include temporary and casual employees.

2. OCCUPATIONAL HEALTH

Risk of musculoskeletal injury should be controlled by training, safe systems of work and provision of suitable equipment. Pre-employment screening should be used to identify people who may have a disability or other condition that may require either adjustments to duties or working conditions or special equipment. This can take the form of a confidential questionnaire administered by the institution's occupational health service with follow up as appropriate. Attention must also be given to staff who are pregnant or who have a permanent or temporary disability that could affect their manual handling ability. Proactive periodic health surveillance of staff undertaking manual handling, however, should not normally be needed nor be a cost effective use of resources.

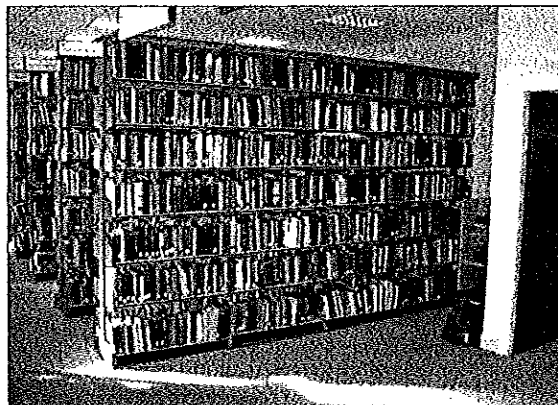
Library managers should ensure that members of staff are encouraged to report persistent pains in the back, shoulders, arms or hands and other health problems that may be thought to be work related. The earlier symptoms are reported the better as it may well be possible to treat injuries successfully before irreversible damage is caused. The working practices of staff reporting health problems must be examined carefully and appropriate recommendations for improvements made. It may be necessary to find alternative tasks that do not involve a risk of

manual handling injury. The person should be advised to seek medical advice, preferably from the institution's occupational health service but otherwise from their GP. The technique of body mapping (see McAtamney & Corlett, *Reducing the Risks of Work Related Upper Limb Disorders - a Guide and Methods*; Institute for Occupational Ergonomics, University of Nottingham), where people are asked to indicate problem areas on plans of the human body, may also prove useful. Occupational health staff should carry out appropriate investigations of the working conditions and practices of staff reporting health problems in conjunction with managers, health & safety staff and others as required and recommend remedial action.

The survey of manual handling injuries in libraries carried out by the original Working Group (see Introduction above) indicated that a significant amount of work related musculo-skeletal injuries in libraries were associated with work with display screen equipment. Such injuries could have an impact on manual handling injuries and should be considered as a possibility when considering library staff undertaking a variety of tasks.

Exercise is beneficial when preparing for manual handling tasks. Exercises that improve posture by training the muscles that support the spine (Pilates, Alexander Technique, Yoga, Tai Chi etc) are likely to be of most use.

3. RE-SHELVING BOOKS



POTENTIAL HAZARDS. Loads are generally not heavy, though some problems may be encountered with very large folios etc. Re-shelving and shelf tidying may, however, require the repetitive adoption of awkward body postures. The action of shelving involves inserting another book into the shelves (normally with the dominant hand). The book must be held in a tight pinch grip and, normally, adjacent books must be thrust aside. Exertion of considerable force may be needed if the shelves are tightly packed. This may lead to the development of pains in the back, shoulders, arms or hands. Shelves may also choose to hold a heavy pile of books in the other (non-dominant) hand, which may also lead to problems.

The development of symptoms will be influenced by work patterns. Many libraries are now employing dedicated shelvers who, while often working part-time, do nothing other than re-shelve books. Libraries should review the job descriptions of shelvers and, where practicable, incorporate periods of other types of activity to reduce the risk of injury. Otherwise, shelvers must be allowed regular rest periods during their shifts.

LIBRARY MANAGEMENT. The prevention of injury to shelvers and other book users should be an important factor when the design and stocking of library shelves is considered. This is particularly critical in heavily used areas. The following practices should aid the work of shelvers:

- shelvers should familiarise themselves with their work area and try to identify potential problems
- shelves should not be tightly packed with books, they should be checked periodically and be replaced if faulty
- There should be a policy of removing infrequently used books to compensate for new acquisitions
- book ends must be used to prevent books falling off shelves and must be compatible with the shelving, a suitable type for the load and correctly fitted (some may be unstable or slip under pressure), double book ends may be needed if the load is great
- book ends, shelf ends, shelf dividers etc should not be moved one-handed
- two-handed or two-person lifts may be necessary for handling very large or awkward books
- very heavy books should be located at around waist height, where practicable
- libraries should have a clear policy on bookbinding; journals should not be bound into very large volumes
- unbound journals should be placed in boxes which must not be over-filled
- twisting the body, excessive reaching forward and reaching above the head or below the knees should be avoided where practicable
- loads should be held as close to the body as practicable
- where practicable, shelves should be no higher than an adult of average size otherwise kick-stools or steps must be provided to allow shelvers to reach the shelves safely without having to lift books above shoulder height
- books should be rested on the shelf before being slid into place (particularly on high shelves)
- if shelves are very high, steps should be provided with handrails and a fenced working platform to guard against falls
- kick-stools may present a tripping hazard and, if practicable, should be kept where they will not be an obstruction and should be of a contrasting colour to their surroundings
- kick-stools of differing heights should not be used in the same area as people may forget which stool they have used and misjudge their step
- where practicable, the lowest stocked shelf should be at least 30 cm from the ground (it may be convenient for shelvers to sit on kick-stools of suitable design while replacing books on the lower shelves)

- aisles should be sufficiently wide to allow trolleys to be brought as close as practicable to the shelves
- trolleys must not be left blocking fire exits or obstructing aisles etc
- "high-grip" gloves may lessen the force needed to grip books and hence reduce the risk of injury (however, they may be uncomfortable to wear for long periods)
- it may be possible to provide some support for carried books (e.g. by resting them on a "bum-bag")
- if practicable, tasks should be varied or alternated
- adequate rest breaks must be taken
- regular exercise is recommended.

Some tasks such as assembling/dismantling shelving, re-spacing stock on shelves or moving large quantities of stock between sites (e.g. from the library into store) may involve much heavier manual handling tasks than normal and require special risk assessment and planning.



INFORMATION, INSTRUCTION AND TRAINING. Shelvees should receive thorough training before starting work, adequate supervision and periodic refresher training. Topics covered should include:

- potential health and safety hazards
- use of trolleys, steps and kick-stools
- maximum weights to be carried
- re-shelving techniques
- operations requiring two people
- reporting accidents and ill health that may be work-related.

An outline of a possible course is given in **Appendix B**. Shelvees should be given a written summary of good working practices. The booklet *Battling with Books* published by Anglia Polytechnic University may be suitable (obtainable from Margie Mason, the Library, Anglia Polytechnic University, Bishops Hall Lane, Chelmsford CM2 1SQ; £2 Inc. p+p).

4. BOOK ISSUE AND RETURN

POTENTIAL HAZARDS. Staff members have to take books from borrowers and process them. This normally involves stamping and desensitising them before handing them back to the borrower. Operations which could lead to work related upper limb disorders include:

- repeated awkward or long reaches
- awkward twisting movements
- lifting heavy books
- inefficient scanning/desensitisation/book stamping techniques (e.g. having to swipe bar codes several times).

Problems may be compounded by long work stints, lack of task rotation and uncomfortable working position.

ISSUE DESK DESIGN. The following should be considered:

- desk heights should be suitable for both the borrower and the book issuer
- it may be necessary to provide raised seating or a platform for the issuer or, alternatively, desks with built-in height adjustment
- a section of lower deskings may be necessary to cater for wheelchair users
- it may be helpful to require borrowers to hand staff books or place them on a specified area of the desk (notices asking users to slide books as close to the book issuer as possible may be used)
- a bag rack should be provided for the borrower
- seating, if provided, must be comfortable; chairs should be adjustable in height and should have adjustable back and foot rests; if necessary; the chair should swivel to avoid the need for twisting movements of the back; there should be adequate space for the legs so that staff can sit close to desks
- if the issuers are standing, appropriate footwear must be worn and their posture should distribute their weight evenly between both feet; the provision of an anti-fatigue floor surface will reduce discomfort; periodic rest breaks and/or changes in activities are desirable
- there should be sufficient space
- work stations, reception desks and associated equipment (such as display screens and desensitisers) should be designed and set up so that books can be held as close to the body as practicable and awkward movements such as excessive reaching eliminated
- use of light pen/wand readers may lead to poor finger and wrist postures and prove inefficient in use
- location of bar codes on the outside would eliminate the need to open books but may not be practicable if date stamping is considered essential

- where practicable, desensitisers should be inset into the desk surface to avoid having to lift books during processing
- display screen workstations should be set up in compliance with *Work with Display Screen Equipment – Guidance on Regulations* (L26).

The Australian Services Union publication *Library Design Guidelines* by John Herring and Peter Wilson contains useful guidance and can be obtained through Inter Library Loans (quoting reference NM81618-Y). There are parallels with supermarket checkouts and the following HSE publications may be useful:

- *Checkouts and Musculoskeletal Disorders* (INDG269) free from HSE Books; and
- *Musculoskeletal Disorders in Supermarket Cashiers* (ISBN 0-7176-0831-X; £20.00; HSE Books).

Similar considerations apply to other library workstations where manual handling operations are carried out in a seated position.

If self-issue facilities are provided for borrowers, they should be designed to minimise manual handling and other risks.

INFORMATION, INSTRUCTION AND TRAINING. Staff should be advised:

- how to adjust their seating, foot rests and (if appropriate) desk height to produce a comfortable and efficient working position
- how to carry out operations so as to minimise risk of injury
- to report any unusual or painful sensations in their backs, shoulders, arms or fingers and any problems with equipment etc to their supervisor.

Staff should be given a written summary of good working practices. The booklet *Battling with Books* (especially pages 8-10) may be suitable.

5. USE OF TROLLEYS

POTENTIAL HAZARDS. The main occupational health risk is injury to backs. A fully loaded trolley may be very heavy to push or pull, particularly if the wheels are small with simple bearings. Frictional resistance will be increased on carpeted floors and uneven surfaces, ramps, steps and differences in floor level (e.g. into lifts) may also cause difficulty. Some trolleys may be difficult to steer and handles may be inconveniently positioned. Stooping to load/unload the lower shelves may put undue strain on the back. Other health and safety risks include:

- trolleys overturning because they have been incorrectly loaded or manoeuvred
- books falling off
- trolleys collapsing either by being overloaded or as a result of poor design or inadequate maintenance
- trolleys that are heavy to push and manoeuvre
- injuries on sharp edges and corners.

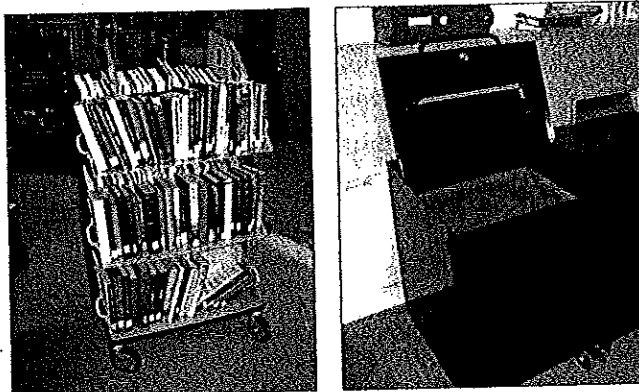
TROLLEY DESIGN. Trolleys may be required for a variety of different tasks e.g.:

- re-shelving
- cataloguing
- temporary static storage of books
- mobile book displays or
- moving outside books, book boxes etc.

Libraries should select trolleys that are appropriate for specific applications. Different trolley designs may be needed for different tasks. The Working Group was not able to identify an "ideal" trolley but the following design criteria should be born in mind when selecting equipment:

- ease of manoeuvrability on all surfaces encountered (including changes of level)
- good quality wheel bearings
- providing sufficient foot space to allow a natural walking gait
- handles at a convenient height/angle, easy to grip and preferably adjustable
- retention of mobility and stability at all loads
- reasonable capacity
- adequate means (angled shelving etc) to prevent books falling off accidentally
- contents at a convenient working height
- adequate brakes (if necessary).

Guidance on trolley design is given in the HSE publication *Manual Handling – Solutions you can Handle* (ISBN 0-7176-09693) and in the HSE Research Report 228/2004 *Review of the Risks Associated with Pushing and Pulling Heavy Loads* (ISBN 0-7176-2845-0; available on the HSE website). Advice on risk assessment is given in *Manual Handling Operations – Guidance on Regulations* (L23; ISBN 0-7176-2823-X). The Australian Services Union publication referred to in **Section 4**, above, also contains useful guidance.



The Working Group did not think that it would be appropriate to recommend particular designs of trolleys. A list of trolley suppliers is given in **Appendix C**. Some of these suppliers will customise trolleys to suit the specific needs of customers and/or loan trolleys on approval. Prospective purchasers are strongly advised, with the co-operation of the supplier, to seek the views of other customers. **The list is by no means exhaustive and inclusion must not be taken as an indication that products supplied have the endorsement of USHA.**

TROLLEY ROUTES should be designed, as far as practicable, to reduce twists, turns and to eliminate gradients. It should be possible to move trolleys close enough to shelves, desks and other workstations to allow direct reshelving etc. Floor coverings should provide the feet with sufficient grip without producing excessive frictional resistance. Trolleys should be pushed rather than pulled.

INFORMATION, INSTRUCTION AND TRAINING. See **Appendix B** and *Battling with Books*.

6. OTHER OPERATIONS

BOOK RETURN BOXES. Most libraries have arrangements to allow borrowers to return books directly. Most return boxes are metal cubes on castors and may be very heavy when full.

- They should be fitted with a spring-loaded platform so that the contents are kept at a convenient working height and people do not have to stoop to retrieve books from the bottom of the box.
- Books should not be able to slip under the platform.
- Should a book get wedged between the platform and the inside wall of the box, a second member of staff should assist in holding down the platform (or in carefully unhooking the springs) to ensure the safe removal of the book without damage to hands or fingers.

- The platform, and if practicable, the inside of the box may be padded to reduce damage to books.
- Handles should be provided at a convenient height and the wheels/castors should be of reasonable diameter & tread width and have good quality bearings.
- Manoeuvring may be facilitated by having two fixed and two swivelling wheels with the fixed set furthest from the operator.
- Training should be similar to that for trolley users.

HEAVY ITEMS may include book boxes for continuing studies courses, interlibrary loan packages, cash boxes etc. Staff should assess the task before attempting to move items and be instructed to refuse to move items where there is a significant risk of injury. Containers should be of a suitable size and overfilling should be actively discouraged. Where practicable, heavy items should be moved using trolleys or other aids. Correct lifting procedures must be used, including two-, three- (or more) person lifts if necessary.

MAPS. Staff may have to retrieve and replace large A0 paper maps stored in cabinets, taking care not to damage them.

VERTICAL STORAGE OF MAPS. Unsecured vertical plan filing cabinets (where maps are hung vertically) may tip as maps are moved forward. Cabinet lids can also fall and cause injuries when maps are lifted out. Handling large and potentially fragile maps may require significant reaching, stretching and raising of the arms. Maps may be tightly packed in the cabinets, requiring some force to push adjacent maps aside. Particular difficulties may be experienced by staff that are short in stature, pregnant or have impaired mobility of their arms and shoulders.

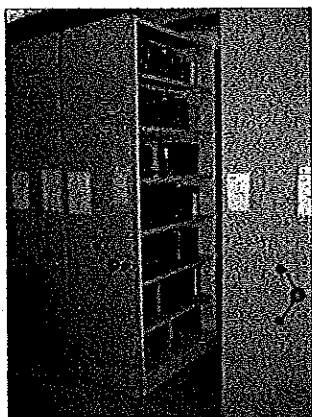
- Cabinet depth should be the minimum practicable so that reaching is minimised.
- Access is easier with front-loading as opposed to top-loading cabinets.
- cabinets must be secured to prevent tilting when maps are moved forward (some cabinets are fitted with anti-tilt feet).
- Aisles between cabinets need to be wide enough to admit kick-stools or small step ladders and facilitate easy movement of the maps (greater aisle width is needed where cabinets have anti-tilt feet or opening fronts).
- Lids to cabinets should be supported when open (some cabinets have support struts which need to be locked into position while others have gas-lift devices).
- Cabinets must be checked and maintained periodically.
- Staff should be instructed to use suitable kick-stools or step ladders while moving maps in and out of top-loading cabinets (where practicable, maps should be placed on the top of an adjacent cabinet or passed to a colleague before climbing on or off the stools/steps).

- A reference set of maps for browsing, either on line or on a rack, helps to identify the exact maps required and minimise unnecessary handling.
- Tables placed close to cabinets helps to discourage staff from carrying several maps at once.

HORIZONTAL STORAGE OF MAPS. The main hazard is people tripping over or colliding with drawers that have been left open. Drawers that are difficult to open/close make this more likely and introduce additional hazards of strains or trapped fingers.

- Aisles between cabinets must be wide enough to allow drawers to be opened for easy access and permit the use of kick-stools or ladders.
- Drawers should not obstruct traffic routes when open.
- Cabinets may need to be secured to walls or adjacent cabinets to prevent tipping (particularly if several drawers can be opened at once).
- Users should close drawers fully when not in use.
- The most frequently-used maps should be stored in the most readily accessible drawers and infrequently used items kept in low or high level drawers.

(We are indebted to Maureen Blackman, University of Greenwich, for information on map handling).



MANUALLY OPERATED MOVABLE STACKS must be kept in good repair with well-lubricated mechanisms so that they move easily and smoothly. Tracks and aisles must be kept clear of obstructions and operators must ensure that people do not become trapped between moving stacks.

GENERAL MANUAL HANDLING ISSUES. Much manual handling undertaken will not be specific to libraries (e.g. lifting boxes of photocopier paper or unpacking newly purchased items). Standard manual handling guidance such as that given in the HSE publications *Manual Handling – Solutions you can Handle* (ISBN 0-7176-09693) and *Manual handling Operations – Guidance on Regulations* (L23; ISBN 0-7176-2415-3) will apply to most of these tasks.

Worcestershire County Council has produced a training programme *Manual Handling in Libraries* (In both DVD and CD-ROM formats; £30) which can be obtained from Dr C Werrett, Worcestershire County Council, Spetchley Rd, Worcester WR5 2NP (tel.01905-766219; fax.01905-766221; cwerrett@worcestershire.gov.uk).

APPENDIX A

LEGAL ASPECTS

The main relevant legal requirements for employers are as follows.

Universities have a duty under Section 2 of the *Health and Safety at Work Act etc, 1974* to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all staff. This includes arrangements for the use, handling, storage and transport of articles and substances. There is also a duty under *the Manual Handling Operations Regulations, 1992* to avoid the need for employees to undertake manual handling operations which involve a risk of injury, and, where this is not reasonably practicable:

- make a suitable and sufficient assessment of risk (having regard to the factors and questions specified in the schedules to the Regulations)
- take appropriate steps to reduce the risk of injury to the lowest level reasonably practicable.

Employers also have a duty under the *Provision and Use of Work Equipment Regulations, 1998* to ensure that work equipment is only used under conditions for which it is suitable, that it is maintained in an efficient state, in efficient working order and good repair. Employees must have:

- adequate health and safety information pertaining to the use of equipment;
- appropriate written instructions
- adequate training for the purposes of health and safety.

Work at height, including the use of kick-stools, steps etc. is subject to the requirements of the *Work at Height Regulations 2005*.

There are general requirements under the *Management of Health and Safety at Work Regulations, 1999* to carry out risk assessments (including risks to young persons and women of childbearing age), to provide employees with such health surveillance as is appropriate and to provide:

- comprehensive and relevant information on risks to health and safety identified by risk assessments and the preventative and protective measures
- adequate health and safety training.

General requirements to provide a healthy and safe workplace and adequate welfare facilities (such as rest areas) fall under the *Workplace (Health, Safety and Welfare) Regulations, 1992*.

APPENDIX B

MANUAL HANDLING FOR SHELVERS – OUTLINE OF A POSSIBLE TRAINING COURSE

OBJECTIVES. At the end of this session you should be able to move a trolley correctly and use a kick-step, work at height and lift and carry books safely.

USE OF TROLLEYS.

- Do not overload trolleys - if an overloaded trolley needs moving, remove some of the load first.
- Ensure that the trolley is stable (i.e. not top heavy or overloaded on one side).
- Do not leave oversize books sticking out on the lower shelves.
- Find the best route involving least manoeuvres.
- If you cannot move a trolley by yourself, ask for assistance in moving the load.
- Make sure you have a good grip on the trolley handles; push the trolley rather than pull it; lean in the direction you are pushing.
- Move the trolley as close as practicable to the shelves you are using.
- Stay close to the trolley and let your body weight and leg muscles do the work for you.
- Do not use a trolley that is damaged in any way.

USE OF KICK-STOOLS

- Always place both feet on the top of the kick-stool.
- If you are using the kick-stool a lot, alternate the foot with which you step up.
- When shelving on the lower shelves, use a kick-stool to sit on.

SHELVING

- Wherever possible, shelve directly from a trolley.
- Do not carry too many books at once.
- When moving several books at once from the shelves, never extend your hand span.
- Reach over with one hand to the back of the books, pull them out with that hand and support them underneath with the other.
- To avoid stress on arm muscles, do not try to force a book into a tight space.
- Do not put books on bays after the last shelf divider, as they are not secure.
- Move the shelf divider first to create more room.
- Use a two-handed lift or get help if the book is very heavy or awkward.
- Try to vary the use of your muscles as you work.
- Take a rest break when you are tired.

SHELVING AT HEIGHT

- Extra care must be taken when working at height, kick-stools may not be appropriate if the load is very heavy (steps, preferably with a handrail, are desirable).
- Avoid twisting your body as you lift, try to keep your back straight.
- Use two hands to lift and shelve.

LIFTING/CARRYING BOOKS

- If you are lifting lowering books, always do so by bending your knees and not your back. When carrying always keep your arms tucked in and hold the load as close to the body as possible.
- Never carry a load that is too heavy for you; either break it down to make it lighter or seek assistance.
- Ensure that loads do not obscure your vision.
- Beware of objects on the floor.
- Make sure you do not carry too many books down the stairs and always leave a free hand for use on the handrail.

This advice could be combined with pages 12-14 of *Battling with Books*.

APPENDIX C

SOME SUPPLIERS OF LIBRARY BOOK TROLLEYS

- Gresswell Direct Library Essentials** Grange House, 2 Geddings Road, Hoddeston, Herts EN11 0NT
Tel 01992-454511 **Freefax** 0800-616634
Email enquiries@gresswell.com
<http://www.gresswell.com>
- LFC Despatchline** Freepost ANG 9675
PO Box 188, Herts EN11
Freephone 0800-616621; **freefax** 0800-616629
Email orders@LFCdespatch.co.uk
<http://www.lfc-ltd.co.uk>
- Norseman Direct** 6-8 Town Street, Batley, Wakefield West Yorkshire, WF17 6BX, **Tel** 01924-439800; **Fax** 01924-439801

This list gives examples of book trolley suppliers and is by no means exhaustive. Inclusion on the list is not an indication that the products supplied have the endorsement of USHA.