

WHAT ARE THE SYMPTOMS OF MSD?

- Pain and/or restriction in joint movement in:
 - the back
 - the hips and/or knees
 - the ankles and/or feet
- Squatting puts strain on hips, knees and ankles
- Sitting puts less strain on the joints as long as the work is at a suitable height.

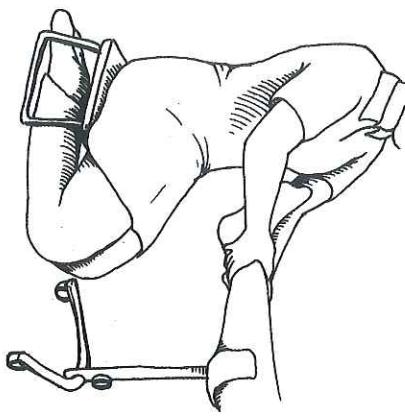


Figure 2 Combining a kneeling stool and a leg support to reduce strain on knees and keep the back upright. Some padding under the knees would make this position even more comfortable.

WHO IS AFFECTED?

Any staff group who spend more than 15 minutes at a time working at or near floor level are at risk.

Key groups this applies to are those working:

- to provide treatment/care to the lower leg of a person sitting in a chair
- with a person on a low bed
- with young children who are sitting on a small/low chair
- with babies and young children at floor level.

This is particularly the case when working in clients' own homes where space and equipment provision is often poor.

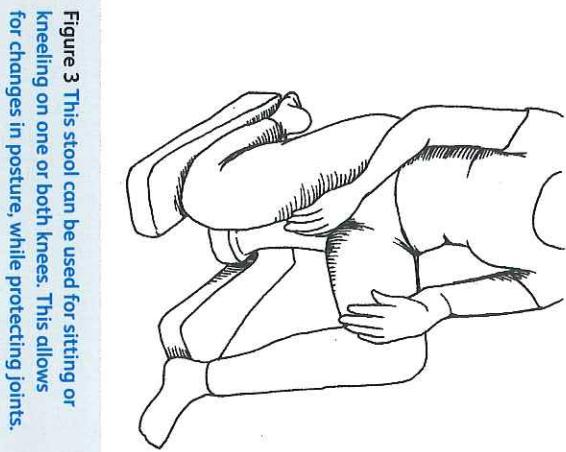
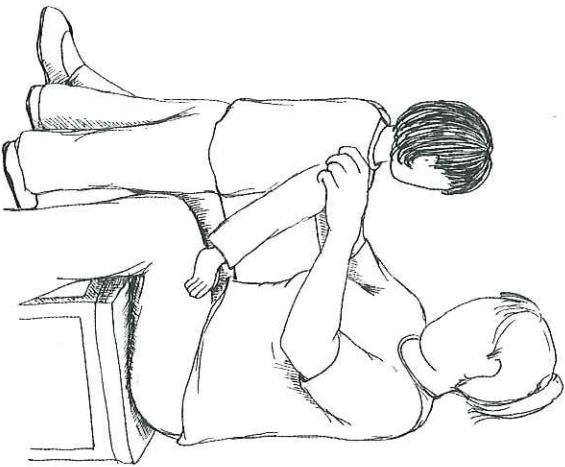


Figure 3 This stool can be used for sitting or kneeling on one or both knees. This allows for changes in posture, while protecting joints.

WHICH POSTURE?

All the commonly observed postures used when working at a low level put strain on the lower limbs and the lower back (Croskaw 2007). In particular:

- Stooping causes back pain.
- Kneeling can put strain on the knees (fig 1).
- Squatting puts strain on hips, knees and ankles.
- Sitting puts less strain on the joints as long as the work is at a suitable height.

STEPS WHICH CAN BE TAKEN TO REDUCE STRAIN

- Avoid stooping by using a small stool or kneeling (figs 2, 3, 4 and 5).
- If kneeling, use a knee pad and cushion behind the knees or a kneeling stool and raise the object to prevent too much back and hip bend (figs 2 and 3).
- Avoid squatting, but if you need to adopt this position use a small stool to support hips.
- When sitting or standing, raise the object you are working on to prevent stooping.

ACT NOW TO REDUCE YOUR RISKS

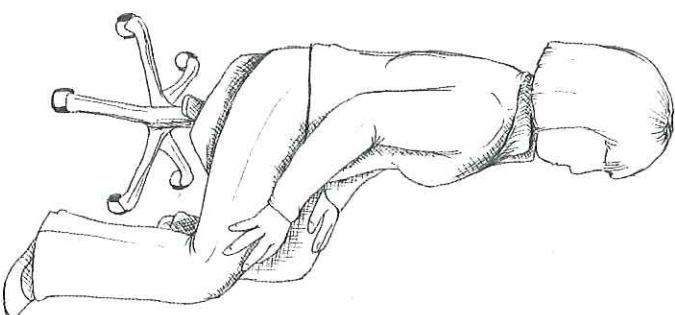
- Talk to your team and manager
- Undertake a risk assessment of the activity (European Agency for Safety and Health at Work 2008)
- Put in place appropriate risk reduction measures (HSE 2008)

- Alter your working posture
- Use suitable equipment
- Rotate staff to lessen the time spent undertaking an activity
- Take regular breaks – change position whenever possible.

USEFUL EQUIPMENT

- Kneeling stools
- Low stools to sit on or to raise a person's leg
- Saddle seats (height adjustable)
- Supports to raise patients' limbs to optimum working height
- Kneeling pads/cushions
- Mirrors to help view the under side

Figure 5 An alternative stool. This one features a saddle seat to promote good back posture. It has height adjustment and wheels to allow movement and to enable the staff to stay close to the load.



- Bending or twisting the back and/or overreaching
- Staying in one position for long periods

Figure 4 Using a stool to work with a small child, improving back posture and avoiding strain on knees and ankles



Working at Or near floor level

A survival guide for health and social care staff

REFERENCES

Arthritis Research UK (2013). Arthritis information available at: <http://www.arthritisresearchuk.org/arthritis-information/data-and-statistics.aspx> (last accessed March 2013).

Croshaw, C. (2007). To kneel or not to kneel – that is the question. column 19.3 winter 2007, NBE. European Agency for Safety and Health at Work (2008). Checklist for the prevention of lower limb disorders – E-FACt 4/2 available at: <https://osha.europa.eu/en/publications/e-facts/efact4/2/view> (last accessed March 2013).

HSE (2011). Lower limb disorders, HSE available at: www.hse.gov.uk/msd/lid/index.htm (last accessed March 2013).

HSE (2008). *Musculoskeletal disorders in podiatry and chiropody professionals – Reducing the risk*, HSL on behalf of HSE available at: www.hse.gov.uk/research/rnpdf/rn647.pdf (last accessed March 2013).

© National Back Exchange 2013.
Author Carol Croshaw
MSc, BA, MCSP, Registered member of NBE

ISBN 978-0-9564838-4-3

LEAFLET 001_APRIL13

INTRODUCTION

We are living longer and working longer. This means our exposure to the risk factors that can contribute towards us getting musculoskeletal disorders (MSD) is likely to increase. These MSDs will have an impact on our quality of life.

The risk factors for MSD in the lower limbs and back are greatest when working at a low level (HSE 2008). This is due to the static loading on the body affecting the blood and nerve supply to the tissue resulting in potential damage.

FACTS AND FIGURES

According to Arthritis Research UK (2013):

- 1 in 5 adults age 50 to 59 has painful arthritis affecting one or both knees.
- 1/3 of adults over 50 have pain that interferes with their normal activity.

According to HSE (2011):

- About 20% of all work-related disorders affect the lower limbs.

WHAT ARE THE RISK FACTORS?

Research shows that the risk factors for developing lower limb MSD include:

- Repetitive kneeling and/or squatting
- Fixed/static posture
- Length of time in the job
- Heavy lifting especially in kneeling
- Climbing stairs carrying loads
- Walking and standing
- Slips/trips
- Jumping from a height

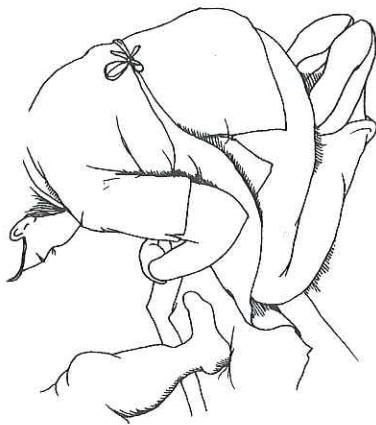


Figure 1 Poor posture – working at floor level without using any equipment

Note the rounding of the back, the fully flexed knees and the strain on the ankles by performing the task in this posture

