HSA

An tÚdarás Sláinte agus Sábháilteachta
Health and Safety Authority

Guide on the Prevention of **Upper Limb Disorders** (ULDs) in the **Financial Services Sector**

Our vision:

A national culture where all commit to safe and healthy workplaces and the safe and sustainable management of chemicals

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Introduction

The Financial Services sector employs 106,400 people in Ireland (HSA Statistics Report 2009). The nature of financial services employment means that a significant part of employees' normal work is at computer workstations.

There is a need to ensure that employees are protected from the potential hazards of working at computer workstations and there is a specific piece of legislation which outlines what employers must do to protect the health of such employees.

Chapter 5 of Part 2 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 regulates the health and safety requirements of employees who habitually use display screen equipment (VDUs) at a computer workstation.

The purpose of this guide is to provide practical advice to those who work in the financial services sector on appropriate measures for managing risks to those employees who work at computer workstations, particularly the risk of developing an upper limb disorder.

This guide will aim to:

- Outline briefly the legislation governing the need to evaluate the health and safety conditions of work activities at computer workstations;
- Explain upper limb disorders and how they may develop when working at computer workstations;
- Explain in simple terms the risk assessment process that can be used to conduct a risk assessment of individual computer workstations;
- Describe briefly how to use a risk assessment template for conducting an assessment at individual computer workstations;
- Provide a useful risk assessment template to be used by employers for the risk assessment process.

Display Screen Equipment Legislation

Chapter 5 of Part 2 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 addresses the minimum safety and health requirements for work with display screen equipment. In effect the provisions relate to employees who use computer workstations as a significant part of their normal work. The definition of workstation is all encompassing and includes the visual display unit and all the individual pieces of equipment, chair, desk and work environment which can constitute a workstation. One of the most critical factors affecting the health and safety of employees working at a computer workstation is the design and layout of the workstation. A badly arranged workstation may lead to the adoption of bad working postures which could result in the development of upper limb disorders. Employees covered by this regulation:

- Are entitled to have their workstation assessed by an assessor;
- Must be trained in the use of the workstation and given information about health and safety factors;
- Must have periodic breaks or changes of routine away from the computer;
- Must be informed by their employer that they are entitled to an eye and eyesight test.

What are Upper Limb Disorders (ULDs)?

The term 'upper limb' relates to the part of the body extending from the tips of the fingers to the shoulder and extending to the neck. It includes the soft tissues and connective tissues (tendons and ligaments) and the bony structures as well as the skin, along with the circulatory and nerve supply to the limb. The symptoms of upper limb disorders can include pain, reduction in the ability to use the affected part of the limb and restrictions in the speed or range of movement. Working with display screen equipment at computer workstations should be managed and assessed to reduce the risks of upper limb disorders.

There are a number of risk factors that may result in upper limb disorders, and these include the following:

- **Repetition:** work is repetitive when it requires the same muscle groups to be used over and over again during the working day. Such repetition may not allow sufficient time for recovery and can cause muscle fatigue. Therefore it is important to ensure that when an employee works at a computer workstation the flow of work is designed to allow natural breaks to occur. Alternatively a change in the pattern of work by combining computer work and non-computer work could be introduced. In any case short rest breaks at a computer workstation are essential where continuous work requires sustained attention and is likely to result in fatigue.

- **Poor Work Posture:** certain jobs require a worker to assume a variety of awkward postures, including fixed or constrained body positions, that cause significant biomechanical stress to the joints of the upper extremity and surrounding soft tissues. Also, the incorrect positioning of a monitor or a seat at a computer workstation can result in the employee adopting an awkward slouched posture which may contribute to the onset of an upper limb disorder. Sitting is particularly characteristic of work at a computer workstation and may result in static postures as an employee holds part of the body in a particular position for an extended period of time without the soft tissues being allowed to relax. A static posture held over a long period restricts blood flow to the muscles and tendons, resulting in less opportunity for recovery. Therefore employees should be instructed not to sit in the same position at a computer workstation for long periods and to make sure they shift their position as often as possible.

- **Sustained Force:** the level of force that is generated by the muscles is affected by a number of factors, including work posture, size of objects handled and speed of movement. This risk factor is not very common for employees working at a computer workstation; however, it is still a causal factor for upper limb disorders (examples would be the force required to assemble two units or the extra force needed to cut an edge using a tool which is blunt).

- **Poor Work Environment:** examples would be poor lighting or temperature control. Poor lighting conditions at a computer workstation can result in eye fatigue and in the employee adopting an awkward posture to view the monitor.

- **Duration of Exposure:** as upper limb disorders are cumulative the length of time or duration of a task can increase the risk of injury. Since it is likely that employees working at computer workstations will spend a significant part of their work day there, it is important that workstations are assessed appropriately in line with the requirements of Regulation 72 and the associated requirements detailed in Schedule 4 of Chapter 5 of Part 2 of the Safety, Health and Welfare at Work (General Application) Regulations 2007.

The next section of this guide gives practical advice on risk assessment of computer workstations.

There are four stages in the risk assessment process:

Stage 1: *Initial consultation with the employee*

- As a first step the assessor who is conducting the risk assessment should consult with the employee at the workstation in order to collect information on the main tasks completed at the workstation.
- It is important to provide the employee with an opportunity to comment during the course of the assessment. The risk assessment form provided in Appendix 1 could be used for the purpose of recording a risk assessment of an individual's computer workstation.

Note: The seating illustrated in the risk assessment form is only an example of a type of seating that is used in a workplace. There may well be other newer types of seating which provide the same level of protection for the employee's lower back, particularly with regard to height and tilt. The assessor needs to take account of this as part of the risk assessment process.

- It is recommended that this form be printed on a colour printer for better quality.
- In the first part of the form the name of the employee, date of the assessment and details of the employee's job description should be filled in by the assessor.

Stage 2: *Observation of the employee working at the computer workstation*

- The assessor should observe the employee working at the workstation and should record whether the workstation meets the minimum requirements detailed in Schedule 4 of the Display Screen Equipment Regulation.
- It is important that the person who conducts the risk assessment of the employee's individual workstation understands how to complete the "Assessment" section of the risk assessment form.
- In this section of the template the assessor answers "Yes" or "No" to each of the statements with a picture of a particular aspect of a computer workstation set up.
- All the requirements in Schedule 4 of the Regulation are covered in this "Assessment" section of the form, with the exception of the requirements related to noise and radiation. The assessor can make a note on the risk assessment template on any issues related to noise or radiation.

Note: The assessor can refer to the guide entitled Guide to the Safety, Health and Welfare at Work (General Application Regulations) 2007 Chapter 5 of Part 2: Display Screen Equipment for further guidance on the minimum requirements for display screen equipment.

Stage 3: *Identify the issues that need to be addressed*

- Once the assessment is completed, the assessor fills in the "Findings" section of the risk assessment template form.
- This should give details of the requirements that were not met and which need to be addressed.

Stage 4: *Implementation of Corrective Actions*

- The assessor will need to consult with management and the employee whose workstation was assessed in order to agree the corrective actions that need to be put in place.
- The assessor should fill in the "Corrective Actions" section of the risk assessment form; this allows the assessor to identify the actions that need to be put in place, the responsible person and the date of completion.
- A copy of the completed risk assessment should be given to the employee for his or her records and for further follow-up where required.
- The risk assessment form can be signed off by the assessor and the employee once the corrective actions are agreed.
- It is the responsibility of the employer to ensure that the corrective actions are completed.
- An example of a completed risk assessment form is given in Appendix 2 of this document.
- The assessor should revisit the workstation to determine if the issues identified in the risk assessment were addressed.

Below is a summary of key tips for the employer and the employee for effective management of the potential risks of upper limb disorders.

Key Tips for Employers	*Key Tips for Employees*
Ensure that employees' individual computer workstations are assessed	Take short periodic breaks or changes of routine away from the computer workstation
Ensure that the assessor is capable of completing the workstation assessment and understands the minimum requirements for display screen equipment workstations	Do not sit in the same position at a computer workstation for long periods of time and make sure you change your posture as often as possible
Use a simple risk assessment form to record your findings and refer to Appendix 1 for an example of such a form	Ensure that the mouse and keyboard are close to point of use
Inform employees that they are entitled to an eye and eyesight test	Be aware of lighting conditions at your workstation and be open and honest when your computer workstation is being assessed
Provide general training on the use of a computer workstation and the health and safety factors involved	Follow up with the assessor after the assessment to ensure that any corrective actions required have been taken

Appendix 1
Blank Risk Assessment Form

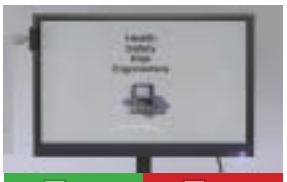
Risk Assessment Form for Individual Computer Work Station

Name of the Employee | Date

Employee Job Description (Key Work Tasks)

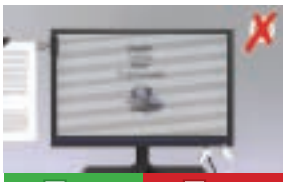
Name of the Assessor

Assessment (Tick as Appropriate ✔)



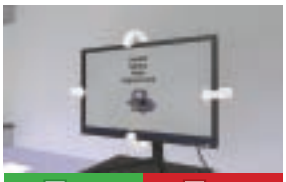
☐ Yes ☐ No

Characters on screen well defined and clearly formed (adequate size/ spacing)



☐ Yes ☐ No

Screen image stable, no flickering/ instability, contrast and brightness adjustable

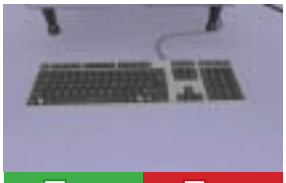


☐ Yes ☐ No

Screen can swivel and tilt easily and freely

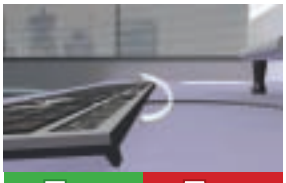
☐ Yes ☐ No

Separate base for screen or an adjustable table provided



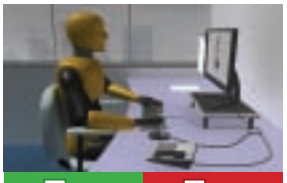
☐ Yes ☐ No

Keyboard with matt surface. keyboard arrangements and characteristics of the keys suitable symbols on keys are legible and contrasted



☐ Yes ☐ No

Keyboard tiltable and separate from the screen

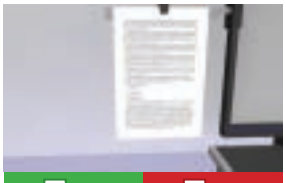


☐ Yes ☐ No

Space in front of the keyboard sufficient to support hands/arms

☐ Yes ☐ No

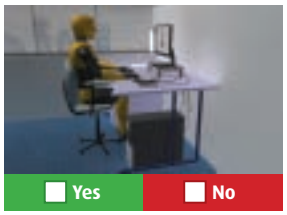
Work desk has sufficiently large low-reflectance surface and allows flexible arrangements



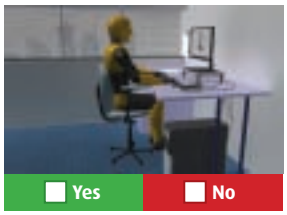
☐ Yes ☐ No

Document holder stable, adjustable and positioned appropriately

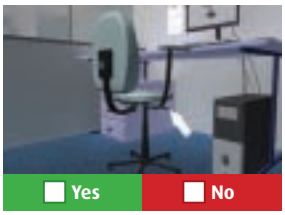
Appendix 1
Blank Risk Assessment Form



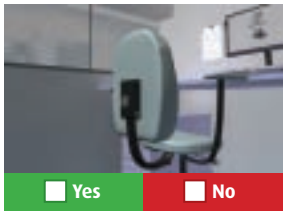
Adequate space for users to find comfortable position



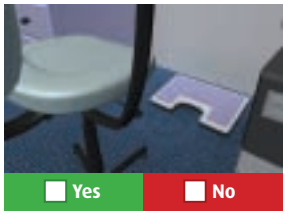
Work chair stable and allows freedom of movement



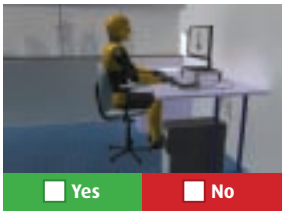
Seat adjustable in height



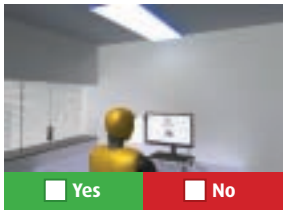
Seat back adjustable in both height and tilt



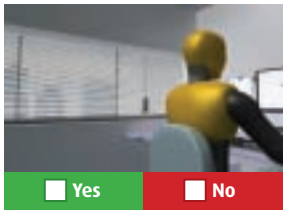
Footrest should be made available where required



Workstation provides space for user to change position and vary movements



Satisfactory lighting conditions/ contrast between screen and background/prevention of disturbing glare through correct position of light source



Sources of light at workstation managed to reduce direct glare/distracting reflection – use adjustable covering for windows

Adequate level of humidity/no excess heat at work station

Findings:

Corrective Actions:

Sign-off:

Assessor's Signature *Date* *Employee's Signature* *Date*

Appendix 2
Example of Completed Risk Assessment Form

Risk Assessment Form for Individual Computer Work Station

Name of the Employee | Date

John Smith | DD/MM/YY

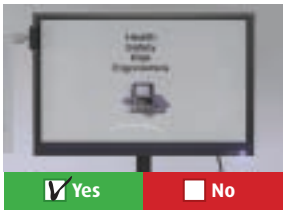
Employee Job Description (Key Work Tasks)

John spends 80% of his day completing data entry tasks at computer work station. Other duties include writing up and filing documentation and attending team meetings.

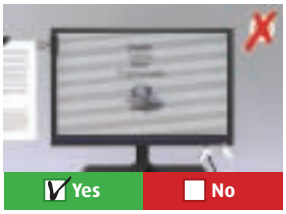
Name of the Assessor

Edel Jones

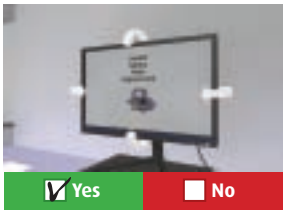
Assessment (Tick as Appropriate ✔)



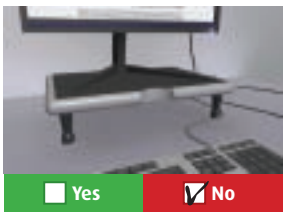
Characters on screen well defined and clearly formed (adequate size/ spacing)



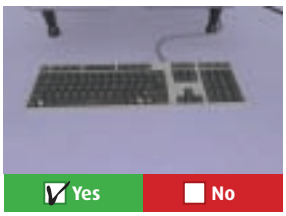
Screen image stable, no flickering/ instability, contrast and brightness adjustable



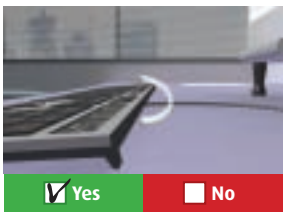
Screen can swivel and tilt easily and freely



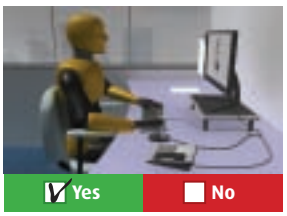
Separate base for screen or an adjustable table provided



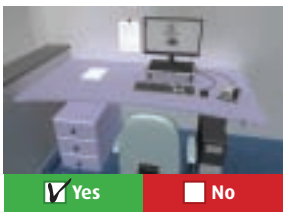
Keyboard with matt surface. keyboard arrangements and characteristics of the keys suitable symbols on keys are legible and contrasted



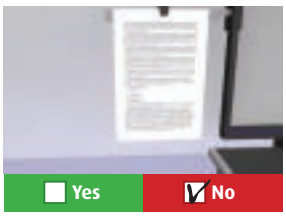
Keyboard tiltable and separate from the screen



Space in front of the keyboard sufficient to support hands/arms

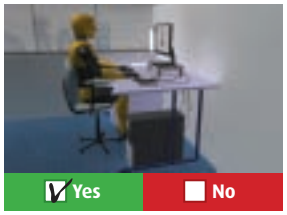


Work desk has sufficiently large low-reflectance surface and allows flexible arrangements

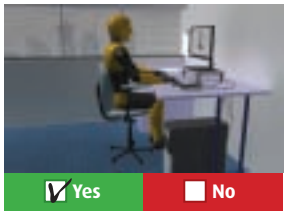


Document holder stable, adjustable and positioned appropriately

Appendix 2
Example of Completed Risk Assessment Form

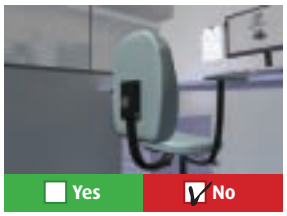


Adequate space for users to find comfortable position

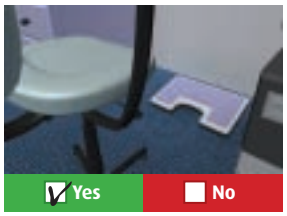


Work chair stable and allows freedom of movement

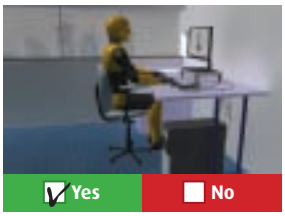
Seat adjustable in height



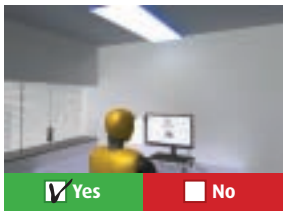
Seat back adjustable in both height and tilt



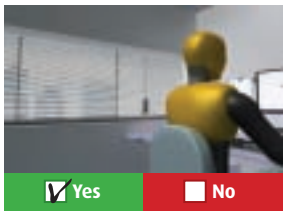
Footrest should be made available where required



Workstation provides space for user to change position and vary movements



Satisfactory lighting conditions/ contrast between screen and background/prevention of disturbing glare through correct position of light source



Sources of light at workstation managed to reduce direct glare/distracting reflection – use adjustable covering for windows

Adequate level of humidity/no excess heat at work station

Findings:

No separate base for screen available. No document holder provided. Seat not adjustable in height. Seat back not adjustable in both height and tilt.

Corrective Actions:

Source appropriate separate base for screen. Source document holder. Provide seating which is adjustable in height and which allows both height and tilt adjustability.
Note: Actions to be completed by assessor in consultation with line manager before date DD/MM/YY

Sign-off:

Assessor's Signature	Date	Employee's Signature	Date
[signature]	DD/MM/YY	[signature]	DD/MM/YY

Notes

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