

Health and Safety Essentials for Display Screen Equipment (DSE) Users

Course Introduction

Welcome to "Health and Safety Essentials for DSE Users in the EU," a comprehensive training course designed to equip you with the knowledge and skills necessary to navigate the complexities of Display Screen Equipment (DSE) use in the workplace. This course is tailored for employers, HR professionals, health and safety officers, and anyone who regularly uses DSE as part of their daily work within the European Union context.

Through this program, you will explore the EU's regulatory framework, understand the health risks associated with prolonged DSE use, and learn how to implement effective risk management strategies to create a safer, more ergonomic workspace. From conducting risk assessments in compliance with Directive 90/270/EEC to adopting best practices for workstation setup and eye care, we will guide you every step of the way.

Directive 90/270/EEC represents a significant step forward in the protection of workers using DSE across the European Union. By establishing minimum health and safety requirements, it aims to mitigate the adverse effects associated with prolonged DSE use. For employers, adherence to this directive is not just about legal compliance; it's about fostering a healthy, productive work environment that prioritizes the well-being of employees. As technology evolves and the use of DSE becomes even more prevalent in the workplace, the principles enshrined in this directive remain a cornerstone of workplace health and safety in the EU.

Our goal is to not only ensure compliance with EU regulations but also to foster a workplace culture that prioritizes the well-being and productivity of all DSE users. Whether you are looking to enhance your organization's health and safety protocols or seeking to improve your personal workstation setup, this course offers valuable insights and practical tools to help you succeed.

Health and Safety Essentials for DSE Users in the EU

Health and Safety Essentials for Display Screen Equipment (DSE) users within the European Union (EU) encompass a comprehensive framework designed to protect workers from the risks associated with prolonged use of computers, laptops, and similar devices. The EU's approach integrates both regulatory requirements and best practices to ensure that workplaces are not only compliant but also actively promoting the well-being of DSE users.

Consider a holistic approach that combines legal compliance with proactive measures to ensure the well-being of employees.

• By adhering to these principles, organizations can create a healthier, more productive work environment that respects and protects their most valuable asset: their people. The EU framework serves as a model that emphasizes not just the responsibility of employers to provide a safe working environment but also the importance of empowering employees to take an active role in their own health and safety.



Regulatory Framework

Directive 90/270/EEC, known as the Display Screen Equipment Directive, is a pivotal element in the European Union's efforts to ensure the health and safety of workers who regularly use display screen equipment as part of their job. This directive is part of the broader framework of directives related to health and safety at work, which aim to promote higher standards of protection for workers across the EU. Let's delve into the specifics of this directive and its requirements for employers:

Objective of Directive 90/270/EEC

The primary objective of Directive 90/270/EEC is to introduce measures to improve the safety and health of workers using DSE. By setting minimum requirements, the directive aims to reduce the physical and eye strain that can result from improper use or poorly designed workstations.

Scope of the Directive

The directive applies to all workplaces where DSE is used as part of the regular tasks of workers. It covers a wide range of equipment, including traditional desktop computers, laptops, and other devices with display screens. However, it does not cover calculators, cash registers, or equipment mainly intended for public operation.

Display Screen Equipment - Key Requirements for Employers

- The directive outlines several essential obligations for employers, which include but are not limited to:
- Workstation Analysis and Risk Assessment: Employers must perform an analysis of workstations to evaluate safety and health conditions, particularly focusing on risks related to eyesight, physical problems, and mental stress. This assessment should be repeated if significant changes occur in the working conditions or workstation design.
- Workstation Design and Ergonomics: Workstations must meet certain ergonomic requirements to ensure they suit the user's needs and minimize risk. This includes the design of the chair, desk, monitor, keyboard, and lighting conditions.
- Employee Information and Training: Employers are required to provide their workers with information and training concerning the proper use of workstations. This includes details about the risks associated with DSE work and the measures taken to mitigate these risks.
- Eye and Eyesight Tests: The directive mandates that workers are entitled to an appropriate eye and eyesight test before commencing DSE work, at regular intervals thereafter, and if they experience visual difficulties which may be due to DSE work. Employers must cover the costs of these tests. If the tests show that special eyewear is needed for DSE work, the employer must also provide this.
- Daily Work Routine: Employers must plan the activities of workers who use DSE so that their daily work includes breaks or changes of activity that reduce their DSE work.



Concerning Health Risks

The health risks associated with DSE are multifaceted, impacting both physical and mental well-being. However, with proactive management strategies, these risks can be significantly mitigated.

- Employers play a crucial role in this process, from conducting thorough risk assessments to providing ergonomic solutions and supporting employee health. By prioritizing the health and safety of DSE users, organizations can foster a more productive, healthy, and satisfied workforce.
- Common health issues associated with DSE use include eye strain, musculoskeletal problems, and mental fatigue. To manage these risks, the EU's framework emphasizes:

Implementation and Compliance

• For the directive to be effective within member states, it needed to be transposed into national law by each EU country. This process ensures that the directive's requirements are integrated into the legal systems of the member states, allowing for enforcement and compliance checks. National authorities are responsible for monitoring compliance and can impose sanctions on employers who fail to meet the directive's standards.

DSE - Perform Risk Assessments

The Directive is transposed into national law by EU member states, allowing for local adaptations and enforcement mechanisms that respect the EU-wide principles while addressing specific national contexts.

- Perform risk assessments on workstations to identify potential hazards and take necessary measures to mitigate them.
- Ensure that workstations meet specific ergonomic standards.
- Provide information and training to employees on the safe use of DSE.
- Offer eye and eyesight tests to employees using DSE, along with glasses if required specifically for DSE work.
- Review the workstation setup whenever significant changes occur in the IT equipment, the furniture, or the work environment.

Health Risks and Management

Health risks associated with the use of Display Screen Equipment (DSE) have been a growing concern as the prevalence of technology in the workplace increases. These risks are not confined to one specific issue but span a range of physical and mental health concerns. Understanding these risks and implementing effective management strategies are crucial for maintaining a healthy work environment.

EU-OSHA reports that a significant proportion of European workers report symptoms consistent with DSF-related health issues.



• For instance, surveys indicate that around 25% of EU workers suffer from backaches, and 23% report neck and shoulder pain, with a considerable number attributing these symptoms to DSE use. Moreover, stress, which can be exacerbated by prolonged DSE use, is cited by 22% of EU workers as a common work-related health problem.

Here's a detailed look at the health risks and management strategies related to DSE usage:

Health Risks Associated with DSE Use

- **Visual Fatigue:** Also known as computer vision syndrome, visual fatigue can result from prolonged screen time without adequate breaks. Symptoms include eye strain, blurred vision, dry eyes, and headaches.
 - o Implementing the 20-20-20 rule: every 20 minutes, take a 20-second break to look at something 20 feet away. This helps reduce eye strain.
 - Encouraging regular eye exams and providing eye care facilities if possible.
 Employers may need to cover the cost of special eyewear for DSE work, as mandated in some jurisdictions.
- Musculoskeletal Disorders: Poor workstation ergonomics can lead to musculoskeletal issues, including back pain, neck strain, and repetitive strain injuries (RSIs) such as carpal tunnel syndrome. These disorders are often due to inadequate furniture, improper posture, or the repetitive motion of keyboard and mouse use.
 - o Conducting regular DSE risk assessments to identify and mitigate risks is essential. This includes evaluating the setup of workstations, the posture of users, and the environment to ensure they meet ergonomic standards.
 - o Ensuring that furniture (chairs, desks) is adjustable and suitable for the task. The screen should be at eye level to prevent neck strain, and the keyboard and mouse should allow for a natural wrist position.
- **Mental Stress:** Continuous work with DSE without sufficient breaks can lead to increased stress levels, reduced concentration, and overall mental fatigue. This can be exacerbated by the pressure to remain constantly connected and responsive online.
- Radiation Exposure: Although modern DSE emits very low levels of radiation, there is still concern over long-term exposure, particularly in terms of eye health.
 - Offering support for mental health, including stress management programs and access to counseling services. Ensuring employees feel supported in managing workloads and are encouraged to disconnect outside work hours.
 - Recognizing that each individual may have different requirements and adjusting workstations, work patterns, and support accordingly. This is particularly important for employees with pre-existing conditions or disabilities.

Eye Care

Visual fatigue and eye strain are among the most commonly reported issues by DSE users. Symptoms include dryness, irritation, blurred vision, and headaches.



The EU-OSHA highlights that up to 90% of individuals who spend more than three hours a day at a computer may experience some form of eye discomfort. The strain on the eyes can be exacerbated by poor lighting, glare, and suboptimal positioning of the display screen.

Regular Breaks and Physical Activity:

- Promoting short, frequent breaks away from the screen to reduce visual fatigue and mental stress. Break software or apps can remind users to take breaks.
- Encouraging physical activity, such as stretching or walking, during breaks to combat musculoskeletal issues and improve overall well-being.

Education and Training:

- Providing training for employees on the safe use of DSE, including ergonomic practices, importance of breaks, and eye care tips.
- Educating employees on the potential health risks associated with DSE use and strategies to minimize these risks.

Best Practices for Adoption

Implementing these essentials faces challenges, including varying levels of awareness and commitment among organizations, the pace of technological change, and the diverse nature of work across the EU. However, these challenges also present opportunities for innovation in workplace design, for enhancing employee engagement and well-being, and for leveraging EU-wide networks and resources to share best practices and solutions.

- To effectively implement these health and safety essentials, organizations across the EU are encouraged to adopt several best practices:
- Active Participation: Involving employees in the risk assessment process and the design of their workstations to ensure that the solutions are tailored to their needs.
- Continuous Education: Providing ongoing training and information sessions to keep employees informed about safe DSE use and ergonomic practices.
- Use of Technology: Leveraging software and devices that monitor usage patterns and remind users to take breaks or adjust their posture.
- Flexibility: Allowing for adjustments to work patterns, such as offering standing desks or flexible schedules, to accommodate different work styles and physical needs.

Overview of objectives: Understanding both global and European-specific regulations and best practices for DSE usage.

The importance of compliance with EU regulations.



Understanding DSE and Health Risks in the EU Context

What is DSE? The European Perspective

Explanation of who is considered a DSE user in the EU context.

Health risks associated with the use of Display Screen Equipment (DSE) have been a growing concern as the prevalence of technology in the workplace increases. These risks are not confined to one specific issue but span a range of physical and mental health concerns. Understanding these risks and implementing effective management strategies are crucial for maintaining a healthy work environment. Here's a detailed look at the health risks and management strategies related to DSE usage:

Health Risks Associated with DSE: A Closer Look

Detailed analysis of common health issues, referencing European Agency for Safety and Health at Work (EU-OSHA) findings.

- Health risks associated with the use of Display Screen Equipment (DSE) have been a growing concern as the prevalence of technology in the workplace increases.
- These risks are not confined to one specific issue but span a range of physical and mental health concerns.
- Understanding these risks and implementing effective management strategies are crucial for maintaining a healthy work environment.
- Visual Fatigue also known as computer vision syndrome, visual fatigue can result from prolonged screen time without adequate breaks. Symptoms include eye strain, blurred vision, dry eyes, and headaches.
- Musculoskeletal Disorders due to poor workstation ergonomics can lead to musculoskeletal issues, including back pain, neck strain, and repetitive strain injuries (RSIs) such as carpal tunnel syndrome.
 - \circ These disorders are often due to inadequate furniture, improper posture, or the repetitive motion of keyboard and mouse use.

Management Strategies for DSE-Related Health Risks

- Conducting regular DSE risk assessments to identify and mitigate risks is essential. This includes evaluating the setup of workstations, the posture of users, and the environment to ensure they meet ergonomic standards.
- Ensuring that furniture (chairs, desks) is adjustable and suitable for the task. The screen should be at eye level to prevent neck strain, and the keyboard and mouse should allow for a natural wrist position.
- Implementing the 20-20-20 rule: every 20 minutes, take a 20-second break to look at something 20 feet away. This helps reduce eye strain.

Encouraging regular eye exams and providing eye care facilities if possible. Employers may need to cover the cost of special eyewear for DSE work, as mandated in some jurisdictions.



Adapting to Individual Needs

The health risks associated with DSE are multifaceted, impacting both physical and mental well-being. However, with proactive management strategies, these risks can be significantly mitigated.

- Employers play a crucial role in this process, from conducting thorough risk assessments to providing ergonomic solutions and supporting employee health.
- By prioritizing the health and safety of DSE users, organizations can foster a more productive, healthy, and satisfied workforce.
- Recognizing that each individual may have different requirements and adjusting workstations, work patterns, and support accordingly.
 - o This is particularly important for employees with pre-existing conditions or disabilities.

Policy Development and Implementation

- Developing clear policies around DSE use that incorporate health and safety guidelines, break schedules, and ergonomics.
- Ensuring policies are implemented effectively and that there is compliance across the organization.

Employee Training Obligations

Employers are required to inform and train workers about the risks associated with DSE work and the ergonomic measures in place to mitigate these risks. This includes instruction on adjusting furniture and equipment to meet individual needs and the importance of taking regular breaks.

- Educate employees about the risks associated with DSE work and the importance of ergonomic practices.
- Training should cover correct workstation setup, posture, and eye care.
- DSE risk assessments should not be a one-time activity.
- Regularly review and update the assessment, especially when there are changes in work practices, equipment, or the work environment.

Importance of Documentation and Compliance

- Documentation demonstrates an employer's compliance with EU and national regulations on workplace health and safety. It's essential for legal compliance and may be required by national enforcement agencies.
- Should there be any health claims or disputes related to DSE use, documentation provides evidence that the employer has taken proactive steps to manage risks.
- Keeping records of risk assessments, including actions taken and employee feedback, is vital for tracking progress and identifying areas for further improvement.



How EU regulations integrate with national laws

The integration of EU regulations into national laws is a dynamic process that requires coordination between EU institutions and member states. By setting minimum standards through directives, the EU ensures a baseline level of protection for workers across the Union. The flexibility in the method of transposition allows member states to adapt these standards to their specific contexts, leading to a diverse but harmonized approach to workplace safety and health, including the use of DSE.

EU directives, on DSE, set minimum standards for health and safety that member states must integrate into their national laws.

- This process of integration is fundamental to how EU regulations are applied within individual countries, ensuring a harmonized approach to workplace safety across the Union while allowing for national specificities.
- EU directives on workplace health and safety, including those concerning DSE, are designed to set out broad principles and minimum standards for protection. Unlike EU regulations, which are directly applicable, directives require transposition into the national legal frameworks of member states. This means that each country must pass its own legislation to meet or exceed the standards laid out in the directive.

The process of transposing a directive into national law involves several steps:

- Adoption of National Legislation: Once an EU directive is issued, member states have a deadline by which they must incorporate the directive's provisions into their national legal systems. This is typically done through the enactment of new laws or the amendment of existing ones.
- Flexibility with Respect to Methods: While directives specify the outcomes that must be achieved, they often leave member states with a degree of flexibility regarding the exact means of achieving those outcomes.
 - $_{\odot}\,$ This allows countries to consider local conditions, practices, and legal systems in their implementation strategies.
 - Member states are required to notify the European Commission of the measures they have taken to transpose the directive into national law.
 - $_{\odot}\,$ This ensures transparency and enables the Commission to monitor the implementation process across the EU.

• Ensuring Compliance and Enforcement

- o Once EU directives are transposed into national law, it is the responsibility of each member state to enforce these laws.
- Enforcement mechanisms can vary but typically involve workplace inspections, penalties for non-compliance, and procedures for workers to report violations.
 National authorities, such as labor inspectorates or occupational health and safety agencies, play a crucial role in this process.



Case Law and the Court of Justice of the European Union (CJEU)

- The Court of Justice of the European Union (CJEU) ensures that EU law is interpreted and applied consistently across member states. In cases of disputes or uncertainties regarding the interpretation of directives, the CJEU's rulings help clarify the law
 - o National courts may refer cases to the CJEU for a preliminary ruling when the application or interpretation of EU law is in question.
 - o These rulings can influence how national laws are implemented and enforced.

Examples of Integration

- The United Kingdom (prior to Brexit) enacted the Health and Safety (Display Screen Equipment) Regulations 1992, closely mirroring the directive's requirements.
- Germany integrated the directive's standards into its Occupational Safety and Health Act and specific ordinances on workplace health and safety.
- France included provisions for DSE users in its Labor Code, specifying employer obligations for risk assessment, workstation design, and employee training.

Conducting a DSE Risk Assessment in the EU

Conducting a Display Screen Equipment (DSE) risk assessment is a crucial step in ensuring the health and safety of employees who regularly use computers, laptops, and similar devices in the workplace.

 Utilizing EU tools and checklists can streamline this process, ensuring a thorough and effective assessment. Remember, the key to a successful risk management program is ongoing engagement with employees, regular review of risk assessments, and maintaining comprehensive documentation for compliance and continuous improvement.

The European Union (EU) has established guidelines and tools to assist employers in carrying out these assessments effectively, ensuring compliance with Directive 90/270/EEC and national laws transposing this directive.

Here's a comprehensive guide on conducting a DSE risk assessment in the EU, highlighting the importance of documentation and compliance.

- A DSE risk assessment is a systematic process to identify and manage the health and safety risks associated with the use of display screen equipment in the workplace.
- The goal is to prevent work-related musculoskeletal disorders, visual fatigue, and other health issues by ensuring an ergonomic workstation setup and safe work practices.



Steps for Conducting a DSE Risk Assessment

- **Identify DSE Users:** Recognize employees who use DSE as a significant part of their daily work. According to the EU directive, this generally means individuals who use DSE for an hour or more at a stretch.
- **Analyze Workstations**: Evaluate each workstation's setup, including the equipment, furniture, and environment. Check for ergonomic risks related to posture, screen position, keyboard and mouse placement, and lighting.
- Use EU Guidelines and Tools: The EU, through agencies such as the European Agency for Safety and Health at Work (EU-OSHA), provides resources, guidelines, and checklists to support employers in conducting thorough risk assessments. These tools are designed to help identify potential hazards and suggest ergonomic improvements.

The EU-OSHA website offers a variety of resources, including the "Ergonomic Checkpoints" app, which provides practical solutions for workplace improvement.

- Engage with DSE users in the risk assessment process. Their feedback can provide valuable insights into the risks they face and the effectiveness of current controls.
- **Document Findings and Actions:** Keep a record of the risk assessment findings, including identified hazards, proposed mitigations, and any changes implemented. Documentation is crucial for compliance, monitoring progress, and revising assessments as needed.
- **Implement Control Measures:** Based on the assessment, take appropriate actions to mitigate identified risks. This may include adjusting workstation layouts, providing ergonomic equipment, or offering breaks to reduce screen time.

Ergonomic Workspace Design in the EU - Standards for Furniture and Equipment.

Ergonomic workspace design is critical for preventing work-related musculoskeletal disorders and other health issues associated with the use of Display Screen Equipment (DSE).

- The European Union, through Directive 90/270/EEC and the work of the European Agency for Safety and Health at Work (EU-OSHA), promotes ergonomic principles and sets standards for furniture and equipment to ensure safe and healthy working conditions. Here's an overview of the ergonomic principles for DSE workstations according to EU guidelines, along with the standards for furniture and equipment.
- The EU's approach to ergonomic workspace design is based on adapting the work environment to fit the needs of the worker, rather than forcing the worker to adapt to the environment.
 - Screen Position: The top of the screen should be at or slightly below eye level to help the user maintain a natural, comfortable posture. The distance between the screen and the user should allow for easy reading without leaning forward or backward.
 - o **Chair**: An ergonomic chair is essential and should be adjustable in height, with a backrest that supports the natural curve of the spine.



- The chair should allow the user's feet to rest flat on the floor or on a footrest.
- Keyboard and Mouse: These should be placed in such a way that the arms are close to the body and form an angle of 90 degrees or slightly more at the elbows. Wrist rests can help prevent strain.
- o **Lighting and Glare:** Workstations should be arranged to minimize glare from windows and overhead lighting.
 - Task lighting may be used to ensure adequate light for reading documents without creating glare on the screen.
- o **Breaks and Changes in Activity:** Regular breaks are encouraged to prevent eye strain and musculoskeletal discomfort. Short, frequent breaks are more beneficial than fewer, longer breaks.

EU Standards for Furniture and Equipment

While Directive 90/270/EEC sets out the general obligations and ergonomic requirements, specific standards for furniture and equipment are often detailed in national regulations and guidelines within EU member states. However, there are European standards that provide detailed specifications for office furniture, including:

- EN 1335-1: Office furniture Office work chair
- EN ISO 9241-5: Ergonomics of Human-System Interaction

These and other standards cover aspects such as the adjustability of chairs and desks, the dimensions and viewing angles of monitors, and the design of input devices to minimize the risk of injury or strain.

mplementing and Reviewing Controls: Adhering to EU Regulations

- **Risk Assessment:** The first step involves conducting a thorough risk assessment of DSE workstations to identify potential hazards related to ergonomics, eye strain, and other health risks.
- **Ergonomic Adjustments:** Based on the assessment, ergonomic adjustments should be made to workstations, including adjustments to furniture, equipment placement, and work practices.
- **Employee Training:** Employees must be trained on the risks associated with DSE use, proper workstation setup, and healthy work practices, such as taking regular breaks.
- **Eye Care Provisions:** Providing eye tests and, if necessary, special glasses for DSE work is also a requirement.
- **Documentation:** Keeping detailed records of risk assessments, adjustments made, training provided, and health surveillance is crucial for compliance.



Regular Review and Compliance Checks

Adhering to EU directives and national regulations is not just about avoiding penalties; it's about ensuring a safe and healthy work environment that promotes employee well-being and productivity.

- **Scheduled Reviews** EU directives emphasize the importance of not treating risk assessments and control measures as one-off tasks. Instead, organizations should establish a schedule for regular reviews.
- These reviews should assess the effectiveness of implemented controls, consider any changes in work practices or technology, and identify new hazards.

Adapting to Changes:

• Work environments and technologies evolve, necessitating adjustments to existing controls. Regular reviews help organizations adapt to these changes effectively.

Employee Feedback:

• Input from employees about the comfort and effectiveness of their workstations and practices is invaluable for identifying areas for improvement.

Health Surveillance:

- Monitoring health reports from employees can also indicate the need for reviewing and adjusting controls.
- Keeping Abreast with Changes in EU Legislation

Continuous Learning:

- Legislation at the EU level can change, with new directives, regulations, and guidance documents being introduced.
- Organizations must stay informed about these changes to ensure ongoing compliance. This involves regularly checking updates from the European Commission and relevant national bodies.
- Employers and safety officers should participate in continued professional development opportunities, including workshops, seminars, and courses on occupational health and safety.

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