



Safer Ports Initiative Guide to Preventing Slips, Trips and Falls

1. Safer Ports Initiative

This document is one of a series produced in accordance with the aims and objectives of the Safer Ports Initiative (SPI) and provides a good practice guide to preventing slips, trips and falls. The SPI sets demanding targets for the reduction of accidents in the ports industry. To achieve those targets all employers in the industry need to take action to ensure they have adequate systems and controls in place to effectively manage this particular issue.

2. Introduction

According to port industry statistics, 'slips and trips' are consistently the highest cause of all accidents which are reportable to the HSE under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995 (37% of the total in 2002). 'Falls from height' is the fifth highest accident cause (nearly 8% of the total in 2002)⁽¹⁾. With over 39% of ports' accidents occurring on board ships, management of this problem area is as important on board ship as it is ashore.

Regulations impose a duty on all employers to ensure a safe place of work⁽²⁾, to assess risks and have appropriate arrangements for effective planning, organisation, control, monitoring and review of those risks⁽³⁾, good surfaces, lighting and safe access, keeping surfaces clean and clear of obstructions⁽⁴⁾, as well as additional requirements for docks in planning, lighting and fencing⁽⁵⁾. The HSE has also recently revised the generic guidance on the subject of slips, trips and falls⁽⁶⁾.

3. Risk Assessment

It is essential that the workplace is assessed from a specific slips, trips and falls perspective. Hazards should be identified e.g. uneven floors or slippery surfaces, as should the effect of weather on the workplace. Controls should be implemented to remove the hazard or, if this is not possible, reduce its risk to a safe level.

Removing the hazard altogether is the primary approach to safety in the workplace e.g. installing non-slip surfaces removes the slip hazard. Good housekeeping will remove obstructions that may cause a trip hazard and edge protection will prevent falls.

¹ PSS, Ports Industry Accident Statistics for 2002

² Health and Safety at Work etc. Act 1974

³ Management of Health and Safety at Work Regulations 1999

⁴ Workplace (Health, Safety and Welfare) Regulations 1992

⁵ Safety in Docks COP 25 ISBN 011 885456G

⁶ Preventing slips, trips and falls at work. IND(G) 225(Rev1) and Slips and trips. HS(G) 155 ISBN 0 7176 1145 0

4. Example Hazards

A. Slips: Potential Causes and Control Measures

- *Spillage of cargo, grease and oils*
Ensure that any spillages are quickly reported and cleaned; have a 'clean-as-you-go' policy
- *Inappropriate selection of surfaces that do not suit the operational use of the area*
Select surfaces that are appropriate to the area use, ensuring a high degree of slip resistance in all expected conditions
- *Wrong cleaning methods on the surfaces, causing loss of traction*
Ensure that the cleaning method used does not degrade the slip resistance of the surfaces
- *Poor maintenance of slip resistant materials on steps and slopes*
Implement inspection regimes for all areas and equipment to ensure that surfaces, particularly access routes, retain acceptable standards of slip-resistance
- *Loose matting or discarded materials that slide on surfaces*
Matting should have slip resistant backing or be fixed by other means and a regime of good housekeeping applied
- *Inappropriate or poor condition of footwear*
Ensure that workers are issued with suitable footwear that it is worn and maintained in good condition
- *Working on top of cargo*
Implement safe systems of work to avoid, where possible, the need to walk across slippery or uneven cargo. Hidden gaps are particularly associated with timber cargo.
- *Adverse weather conditions i.e. ice, snow or rain, which reduces traction on surfaces*
Introduce systems to deal with the clearance of working areas and access ways in the event of adverse weather conditions

B. Trips: Potential Causes and Control Measures

- *Uneven or defective surfaces*
Ensure suitable reporting and maintenance regimes to enable speedy repair
- *Wires, ropes or cables crossing working area*
Avoid wires, ropes and cables crossing access ways and working areas – stow them away when not in use
- *Broken pallets, banding wire or other debris left across working areas or access ways*
Implement high standards of house keeping, ensuring that working areas and access ways are monitored and kept clear, as work progresses, with a suitable waste area, bins or skips
- *Poor lighting*
Provide adequate lighting in all circumstances. Additional portable lighting may be required at times to supplement fixed systems
- *Obstructions*
Ensure any obstructions that cannot be moved are highlighted e.g. brightly painted to make sure they are clearly visible
- *Level changes and uneven steps*
Ensure that steps are evenly spaced and hand rails provided where necessary. Any level changes should be well lit and highlighted
- *Poorly defined access ways*
Ensure that there is a system of walkways that is clearly marked and signed

C. Falls: Potential Causes and Control Measures

- *Unprotected edges and platforms*
Wherever possible secure fencing or rails should be provided when working at height. Special rules apply to working near quay edges⁽⁵⁾
- *Insufficient working platforms*
If space is limited for shore activities there may be a need to supply scaffolding or use access machinery, such as mobile elevating work platforms and personnel cages
- *Use of portable ladders*
Where it is appropriate to use portable ladders, effective measures should be taken to ensure that the ladder is of good construction and fit for purpose⁽⁷⁾
- *Fall arrest systems and devices incorrectly used*
Fall arrest equipment must be carefully selected and maintained. Users must be trained, with adequate supervision provided to ensure it is correctly used
- *Access provisions to working position are poorly maintained or inappropriate*
Access provisions to high places must meet appropriate standards
- *Unstable platforms that move or have insufficient strength*
On large plant such as container gantries, an assessment must be carried out to ensure that safety is maintained in all conditions. Do not forget to take into consideration maintenance requirements and to ensure they are implemented. Purpose built platforms must be designed and tested for the purpose for which they are being used. Temporary platforms e.g. scaffolding, must also meet required standards. Where man baskets, personnel cages, or container gondolas are used and exposed to the elements, wind speed may require operational limits to be set
- *Container top working*
Working on the tops of containers can be particularly hazardous. The HSE has produced specific guidance on this subject.⁽⁸⁾

5. Safe Working on Vessels

All of the above hazards are as relevant on board vessels as they are ashore. Personnel are often faced with working in an area designed to maximise the vessel carrying capacity. In some cases this leads to insufficient design considerations being given to those who have to work the cargo. The situation can be compounded if the ship is in a poor general condition, on arrival in port.

It is vital that each ship's area, and its access, is inspected and remedial action taken, prior to any work commencing to ensure the safety of personnel. Any safety concerns should be brought to the attention of the Master and Owner of the vessel in an effort to obtain future improvements. Where standards are not met temporary measures must be taken to ensure safety so far as is reasonably practicable. However, where this is not possible, inadequacies must be reported to the Master. If the Master refuses to make satisfactory improvements the ship should not be worked. (At this time it is recommended to inform the local MCA office/surveyor.)

- 6. Remember:** Planning dock work⁽⁵⁾ and the management of risks⁽³⁾ are legal requirements. It is vital to have well trained staff, both permanent and non-permanently employed, supported by safe systems of work derived from detailed risk assessments which are regularly reviewed. Through effective hazard management, an attitude of safe behaviour can be promoted and accidents prevented.

Ports compete on efficiency but this cannot be at the cost of broken lives.

⁷ Height Safe – Essential Health and Safety Information for People who Work at Height, HSE leaflet

⁸ Safe Working On Top of Containers On Board Ship, Docks Information Sheet No. 7, HSE

Notes:

1. The Safer Ports Initiative (SPI) was developed and implemented to reduce the number of accidents that occur each year in the ports industry.
2. The SPI complements the government's initiative outlined in its Revitalising Health and Safety Strategy Statement published in June 2000.
3. The accident reduction targets, twice the level recommended in the Revitalising Health and Safety Strategy Statement, are:
 - *to reduce the incidence rate of reportable fatal and major injury accidents by 10% by the end of 2005*
 - *to reduce the incidence rate of all other reportable over 3 day accidents by 20% by the end of 2005*
4. Further information is available from:

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5. PSS was established by the ports industry at the end of 2001 to carry forward its combined national work on health, safety, skills and standards. PSS is a non-profit making organisation and provides the ports industry with a full range of services including representation to Government and other national European and international bodies, practical advice and information through regular newsletters and information papers, training events, guidance publications, National Occupational Standards and Vocational Qualifications. PSS is funded by subscriptions and is open to all port related organisations.

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This guide has been developed by the SPI Special Work Group and published by Port Skills and Safety (PSS) on its behalf.