



Evaluation report

SLIC European inspection and communication campaign

Manual Handling of Loads 2007



Prologue

The Hague, May 2008

We present you the evaluation document of the Senior Labour Inspectorate Committee (SLIC) European Campaign Manual Handling of Loads 2007.

We can be proud of the results! 26 European labour inspectorates working together in harmonising the supervision of the EU Directive 90/269/EEC concerning the manual handling of loads in the transport and the health care sectors. We developed and combined inspection and communication methods and shared knowledge on the topic of manual handling of loads and the EU Directive 90/269/EEC.

This joint European investment in supervising manual handling of loads in workplaces needs ongoing attention in annual inspection programmes. Every sector at risk from manual handling of loads needs its own approach! I am therefore very happy that our Polish colleagues continue the project management for a 2008 inspection and communication campaign on the same topic in the construction and retail sectors.

With confidence I hope that the 2007 and 2008 campaigns are only the beginning of a European campaign cycle on this very important topic of manual handling of loads, every time in another high risk sector, managed by another labour inspectorate.

We would like to thank all the participating Member States and congratulate them with the success. Although the results show that still a lot of work has to be done regarding work-related risks from manual handling of loads. We also thank the European Agency for Safety and Health at Work in Bilbao for a good cooperation which strengthened our mutual campaigns.

On behalf of the project management SLIC Manual Handling of Loads 2007

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Summary

This document concerns the evaluation of the SLIC inspection and communication campaign Manual Handling of Loads, executed in 2007.

Work-related posture and musculoskeletal disorders are a common problem in Europe. This is recognised by the European Commission. SLIC executed an inspection and communication campaign tying in with the European strategy on safety and health. This campaign brought together 25 Labour Inspectorates of the EU Member States and 1 EFTA country. The campaign integrated and cooperated as much as possible with the 'Lighten the Load campaign' of the European Agency for Safety and Health at Work in Bilbao.

Campaign goals

1. Better compliance in the EU with Directive 90/269/EEC "Manual Handling of Loads" in order to reduce musculoskeletal disorders,
2. Improving the inspection and communication methods of the national labour inspectorates by learning from existing methods,
3. Greater harmony in the enforcement of the manual handling of loads throughout the EU.

Inspections in Transport

In 22 countries, 790 inspectors inspected:

- ♦ 27% of all harbours in these countries
- ♦ 44% of the airports
- ♦ thereby a substantial number of transport companies were inspected

In total 2340 companies were inspected on:

- ♦ Risk assessment on manual handling of loads situations
- ♦ Preventive measures taken to avoid baggage handling and stevedoring manually
- ♦ Product loading, transshipment and unloading in general (not specified in the results).

Intervention took place in 1974 companies. Interventions can be divided into verbal and written warnings, administrative fines, cessation of work and legal prosecution.

Inspections in Care

In 24 countries, 980 inspectors inspected:

- ♦ 24% of all hospitals in these countries
- ♦ 37% of the elderly homes
- ♦ 16% of the homes for mentally / physically handicapped persons

In total 3037 companies were inspected on:

- ♦ Risk assessment on manual handling of loads situations
- ♦ Preventive measures in patient handling
- ♦ Preventive measures in ancillary services (catering, laundry)
- ♦ Other topics inspected were the training and education of the staff (not specified in the results).

Intervention took place in 2543 companies. Interventions can be divided into verbal and written warnings, administrative fines, cessation of work and legal prosecution.

Conclusions

Generally it can be concluded that the executed SLIC Manual Handling of Loads Campaign 2007 contributed to the campaign goals well. A lot of work on the prevention of risks from manual handling of loads is still to be done.

- 25 SLIC countries (out of 27) and 1 EFTA country participated, which is 92%.
- 84% of the inspections in both transport and health care resulted in an intervention on manual handling of loads.
- Inspections in transport: mean 106 inspections per country.
- Inspections in health care: mean 126 inspections per country.
- Number of participating inspectors in campaign: 1770.
- 1610 inspectors trained through the train the trainers programme.
- The SLIC assessment guideline was widely used in the campaign. Usability was valued as good.
- Concerning the EU train the trainers course: all learning goals have been achieved. Weaker points were given to the expertise of the trainers (knowledge of assessment methods, biomechanics and anatomy), the quality of the case studies and the knowledge of the current enforcement of EU regulation practice in other countries.
- Brochures were used in 24 out of 25 countries and well-received.
- The SLIC working group on Manual handling of loads consists mostly of experts and carries on in the SLIC campaign Manual Handling of Loads 2008. They know how to find each other but no formal network has been set up yet.

What SLIC should take forward from this campaign?

The results of the SLIC campaign show a high level of non-compliance (more than 80% of the companies inspected in transport and health care had some kind of intervention) with the Directive 90/269/EEC.

The following matters deserve ongoing attention and promotion

- ♦ In general more attention should be given to awareness raising on manual handling of loads with employers and employees. Underline that current medical publications state that training on the body strength and posture has only a small influence in reducing risks.
- ♦ Europe-wide there still is a broad variety on interpreting the Directive. SLIC reached a consensus in using assessment methods to determine risks in different situations instead of a maximum weight.
- ♦ The first step in the prevention of (risks from) manual handling is the risk assessment of manual handling situations. Risk assessment is a cyclic process which is a day-to-day process which should be common with all employers and employees.
- ♦ Taking measures to prevent manual handling should always be the step before reducing the risks. Knowledge about solutions on manual handling is not common yet. For transport as well as health care, a (digital) guide with good practices should be made available. Several EU countries / labour inspectorates need to develop this knowledge and can benefit from such guide.
- ♦ When equipment to avoid manual handling is available employees should be trained and instructed to work with it. Employers should make time for this process.
- ♦ The logistic chain of assessing risks from manual handling of loads should be in focus, not only at the workplace level. Cooperation with designers, producers, managers, OSH experts, employers and employees is needed to tackle this complex problem.

Good and bad practices that need ongoing international attention in the future are mentioned in the report.

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1. Introduction

This document concerns the evaluation of the SLIC inspection and communication campaign Manual Handling of Loads, executed in 2007.

1.1 Background to the project

Work-related posture and musculoskeletal disorders are a common problem in Europe, and this is recognised by the European Commission. The social consequences of this, in the form of a growing number of people registered as (long-term) disabled, are due to the fact that some groups of workers are less effectively protected against health risks arising from the manual handling of heavy loads. EU Directive 90/269/EEC concerns the manual handling of loads in working situations. In implementing this Directive, Member States are facing problems varying from a lack of useful norms / assessment methods for manual handling situations, lack of knowledge with employers / employees and difficulties in changing the ruling culture. There is also a risk of competitive distortion due to disproportional high investments required in some countries towards other countries where no measures are demanded.

Following the SLIC meeting on the theme of the manual handling of loads in Maastricht in November 2004, the SLIC decided to start an inspection and communication campaign tying in with the European strategy on safety and health with the following brief: 'The working group shall design a European information and inspection campaign in an internationally-oriented sector, relating to the supervision of EU Directive 90/269/EEC. The working group shall link this information and inspection campaign to the European Week of Health and Safety at Work in the second half of 2007'.

Following this brief, the campaign targeted manual handling of loads situations and their risk assessment in transport (amongst others, the airports and harbours), this being an internationally-oriented sector. Later it was decided to also target the health care sector (mainly hospitals, elderly homes, mentally and physically handicapped homes), a socially relevant sector with a significant manual handling of loads problem.

The mandate of SLIC for launching the campaign under Dutch project leadership was given during the meeting of March 2005 in Luxembourg after which the preparations started. The execution of the campaign took place in 2007.

1.2 Campaign goals

1. Better compliance in the EU with Directive 90/269/EEC "Manual Handling of Loads" in order to reduce musculoskeletal disorders,
2. Improving the inspection and communication methods of the national labour inspectorates by learning from existing methods,
3. Greater harmony in the enforcement of the manual handling of loads throughout the EU.

This campaign brought together 25 Labour Inspectorates¹ of the EU Member States and 1 EFTA country. Each of these Labour Inspectorates sent 1 expert on the manual handling of loads, forming together the SLIC working group *Manual handling of loads*. The campaign integrated and cooperated as much as possible with the 'Lighten the Load campaign' of the European Agency for Safety and Health at Work (OSHA) in Bilbao.

¹ Participating inspectorates: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary (no campaign execution), Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Northern-Ireland, Norway, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden. Denmark and United Kingdom have inspected manual handling of loads in the targeted sectors before the 2007 campaign.

1.3 Campaign products and costs

Overall campaign costs

In order to stimulate a harmonious execution of the campaign, the working group developed several products for use by the national labour inspectorates. For the professional editing and finalising of the campaign materials the working group hired external contractors with the use of an EU subsidy. Therefore, the Commission published two calls for proposals. The Dutch Labour Inspectorate applied successfully for subsidy. For the phase 1 information and communication campaign, we have made costs of around €240 000, and received a €167 000 subsidy. The extra costs were mainly funded by the Dutch, Belgian and German (Brandenburg) Labour Inspectorates in kind, that is to say in the form of unpaid contributions, and for about €10 000 as a financial contribution of the Dutch Labour Inspectorate. For phase 2, the train the trainers and the e-learning module, the Commission also granted a subsidy. The maximum costs were €143 000, for which a 70% subvention was available. In the end, the total costs were lower because of the friendly offer of the French Training Institute related to the French Labour Inspectorate. With the total costs of around €100 000 and a subsidy from the Commission, a subsidy of around €70 000 was expected, the rest of the costs were funded by the Dutch Labour Inspectorate in kind and money.

Campaign costs for national labour inspectorates

Besides the overall costs, the national labour inspectorates made their own costs (besides the usual day-to-day inspection costs) to execute the campaign on a national level. These costs concerned amongst others the revising, printing and distribution of the brochures and other communication products and the costs for the train the trainers courses. Some countries even advertised on radio and television. Generally these costs were varying between €5000 and €10 000 per country

Campaign products

1. **SLIC guidance MHL** to support national project preparations in line with EU campaign
 - ♦ Developed by project management based on working group input
 - ♦ SLIC assessment guideline to assess manual handling of loads situations²
 - ♦ Goals of inspections, sectors to inspect, how many companies
2. **Communication material**
 - ♦ Developed by Prevent, Belgium (by external contracting)
 - ♦ Communications plan with dates and actions
 - ♦ Press Release
 - ♦ Brochures: general and sector specific (transport / care)
3. **Train the trainers course**
 - ♦ Developed by l'INTEFP, France (external contracting)
 - ♦ To make the inspections through Europe happen in a more uniform manner
4. **Website** www.handlingloads.eu
 - ♦ Developed by ASER, Germany (external contracting)
 - ♦ all products mentioned before are on the website. Published in 22 EU languages
5. **E-learning module**
 - Published in 22 EU languages on the OSHA website
<http://osha.europa.eu/en/topics/msds/slic/>
 - hosted by OSHA

² SLIC assessment guideline is developed by the SLIC working group Manual handling of loads. It consists of three levels to choose from:

1. A global checklist, screening tool
2. A more detailed assessment of risks involving
 - the Key Indicator Method (developed in Germany)
 - the Manual Assessment Chart (developed in UK)
3. Nationally sector specific risk assessments on manual handling of loads if available

This assessment guideline is to help inspectors identify and evaluate risks on manual handling of loads. The actual responsibility for the risk assessment is for the employers.

2. Overall results and conclusions

2.1 Inspections in Transport

In 22 countries, 790 inspectors inspected:

- ♦ 24% of all harbours in these countries
- ♦ 40% of the airports
- ♦ thereby a substantial number of transport companies were inspected

In total 2340 companies were inspected on:

- ♦ Risk assessment on manual handling of loads situations
- ♦ Preventive measures taken to avoid baggage handling and stevedoring manually
- ♦ Product loading, transhipment and unloading in general (not specified in the results).

Intervention took place in 1974 companies. Interventions can be divided into verbal and written warnings, administrative fines, cessation of work and legal prosecution.

Inspection method / assessment guideline (Annex 1 table A1.2):

17 out of 22 countries used (a part of) the SLIC assessment guideline in transport. The level 1 screening tool was used 13 times; level 2, the Key Indicator Method was used 16 times; the Manual Handling Assessment Chart was used 8 times. These results indicate that the developed SLIC assessment guideline was used frequently in the campaign. Countries (4) that did not use the assessment guideline used their own method exclusively, or indicated (1 country) that they did not assess at all themselves.

Quantitative Results (Annex 1 table A1.3 / A1.4):

Relatively smaller companies (1-5 employees) were inspected less than the bigger ones. Size class did not matter for the number of interventions: relatively all size classes had the same percentage of interventions. Inspections resulted in 1974 of the 2340 companies receiving an intervention, a percentage of 84%. In these 1974 companies a lot of advice / verbal warnings were given: 2326 times. There was no clear distinction to be made in the evaluation between the positive-rated advice and more negative warnings. Also written warnings were given in large numbers: 1904 times. Cessation of work was given 3 times, and in 70 cases a fine was written. One company was confronted with legal prosecution.

These results show that inspection instruments with less enforcement pressure were used the most.

At the *airports* 390 interventions were made during inspections on manual handling of loads. Most of the interventions concerned risk assessment on manual handling of loads and preventive measures on baggage handling manually in terminals and on the airplanes.

In the *harbours* 196 interventions were made during inspections on manual handling of loads. Most of the interventions concerned risk assessment on manual handling of loads and preventive measures on stevedoring manually in the ship.

Besides the predefined sectors to be inspected (harbours and airports), a lot of other transport companies were inspected. These amounts of inspections were underestimated beforehand. In total 1236 interventions were made in transport companies, mostly transport by road (inspection topics also concerned risk assessment on manual handling of loads and preventive measures). 1002 interventions on the same topics were made on the in-company carriage and warehousing. The sum of the interventions in all sectors was 1628 times on not having a risk assessment on manual handling of loads, and 487 times on not taking preventive measures on risky manual handling of loads situations.

2.2 Remarks of the National labour inspectorates on transport

A selection of the qualitative evaluation remarks with European importance (non limitative) are given beneath.

National companies in international transport are confronted with the logistic health unawareness of other countries (in and outside the EU);

- Cross-border problems with pallet use / non-use

Aids for baggage loading in airplanes (e.g. Rampsnake®, Powerstow® amongst others) should be used in every EU airport

- ◆ Risk assessment on manual handling is not common in several countries.
- ◆ Unawareness about the risks and possible consequences in general due to insufficient information of both employers and workers on the load, workplace and organisation
- ◆ Lack of (use of) equipment / aids to prevent manual handling due to
 - Unawareness / knowledge about solutions
 - High costs
 - Time needed for the introduction and use of aids
 - Insufficient training of employees
- ◆ Best practice encountered at several airports where excessive luggage weight (kilos) are labelled
- ◆ Important Alert Note from the Swedish NLI: employees at airports and cabin crew who transfer disabled passengers in order to be able to travel by air (see Annex 5)

2.3 Inspections in Care

In 24 countries, 980 inspectors inspected:

- ◆ 25% of all hospitals in these countries
- ◆ 37% of the elderly homes
- ◆ 16% of the homes for mentally / physically handicapped persons

In total 3037 companies were inspected on:

- ◆ Risk assessment on manual handling of loads situations
- ◆ Preventive measures in patient handling
- ◆ Preventive measures in ancillary services (catering, laundry)
- ◆ Other topics inspected were the training and education of the staff (not specified in the results).

Intervention took place in 2543 companies. Interventions can be divided into verbal and written warnings, administrative fines, cessation of work and legal prosecution.

Inspection method / assessment guideline (Annex 2 table A2.2):

19 out of 24 countries used (a part of) the SLIC assessment guideline. The level 1 screening tool was used 11 times; level 2, the Key Indicator Method was used 13 times; the Manual Handling Assessment Chart was used 6 times. These results indicate that the developed SLIC assessment guideline was used frequently in the campaign. Countries (2) that did not use this assessment guideline used their own method exclusively.

Quantitative Results (Annex 2 table A2.3 and A2.4.):

Relatively smaller companies (1-5 employees) were inspected less than the bigger ones. Especially large companies (21 employees and more) were inspected. This was to be expected given the characteristics of organisations in the care sector (hospitals, elderly homes are often large organisations). Size class did not matter for the number of interventions: relatively all size classes had the same percentage of interventions. Inspections resulted in 2543 of the 3037 companies receiving an intervention, a percentage of 84%. In these 2543 companies a lot of advice / verbal warnings were also given: 2938 times. Written warnings were given most: 5404 times. This means most companies got more than one written warning (more violations of the law). Cessation of work was given 59 times, and in 107 cases a fine was written. 3 companies were confronted with legal prosecution.

At hospitals 3433 interventions were made during inspections on manual handling of loads. Most of the interventions concerned risk assessment on manual handling of loads, preventive measures on

patient / client handling, manual handling of loads in service/ancillary activities (laundry, catering) and training / education on prevention of risks in manual handling of loads situations.

In the *elderly homes* 4275 interventions were made during inspections on manual handling of loads on the same topics as in hospitals.

In the *mentally and physically handicapped homes* 1056 interventions were made during inspections on manual handling of loads on the same topics as in hospitals.

Other health care institutes (400 interventions) inspected on these topics were home nursing, private homes and the psychiatric homes / hospitals.

2.4 Remarks of the National labour inspectorates on health care

A selection of the qualitative evaluation remarks with European importance (non limitative) are given beneath.

- ♦ Risk assessment
 - A wide variety in European countries; in some countries it is standard, in other countries risk assessment is not (yet) common. Some countries need adaptation of the national law
 - Per patient /client is most effective, lifting / auxiliary aids are used dependent on the mobility of the patient
 - For some countries the relative costs are high (in time and money)
- ♦ Financial problems: Building technical problems (not enough room for handling and the use of auxiliary materials)
- ♦ Major problems in handling patients, strong staff stress. Time pressure causes non-use of lifting aids
- ♦ Training of employees is most effective if it is done on the job
- ♦ Elderly patients prefer manual handling by staff. Needs a cultural change and a stronger policy of the institution
- ♦ Employees working in ancillary services of institutions are (unjustly) addressed with less manual handling of loads importance than nursing staff.
- ♦ Insufficient level of employees' awareness of the hazards. Some countries experience language problems in the private sector with foreign workers. Training and communication is more difficult with these employees.

2.5 Communication

Brochures

Most countries used the brochures to communicate with the sectors to be inspected. Distribution took place on a high scale (14 countries distributed more than 500), using the inspections to hand them over personally to employers and employees. Traditional mail service was also used frequently. Less intensively used as a distribution medium was e-mail.

The preparation process should improve next time; it took too much time to get all brochures in place with all national adaptations processed in good quality. The time schedule was too tight (brochures should have been provided in the first half of 2007).

Press release

A uniform press release was developed for use and adaptation at national level.

Website

All campaign materials, except the train the trainers material and the e-learning module, were put on the www.handlingloads.eu website in all EU languages. The website was well-received; no hit numbers were registered. The website will be continued for future SLIC campaigns up until 2010.

2.6 Train the trainers

55 trainers participated in the train the trainers programme developed by l'INTEFP from France. These 55 trainers trained altogether 1640 inspectors, enabling them to inspect the risks from manual handling of loads situations. The appreciated quality of the training varied between good and bad. Good points were, amongst others, the training material, the course structure and the opportunity for sharing information and views on the issue with other EU Labour Inspectorates. Despite all the preparations some participants still had a need for more practical information about the campaign, inspections and solutions. Thereby the trainers should have been experts on the manual handling of loads problem.

2.7 E-learning tool

The e-learning tool is available on the OSHA website for everyone who wants to know more about manual handling of loads in general (<http://osha.europa.eu/topics/msds/slic/handlingloads>). Within this campaign its aim was to support inspectors and create a general knowledge base.

2.8 Cooperation with OSHA

The cooperation with the European Agency for Safety and Health at Work (OSHA) in Bilbao went very well. To sum-up our joint actions:

- The project manager of the OSHA MSD-campaign participated in our working group and shared the OSHA knowledge about the theme musculoskeletal diseases;
- The SLIC campaign used the OSHA logo (only changing the colours to purple and blue) and the slogan;
- We also referred to OSHA on the SLIC campaign website www.handlingloads.eu and in the brochures. OSHA, vice versa, referred to our campaign on their website www.osha.europa.eu and included our campaign in their press release in Brussels in June this year.
- OSHA accepted to host the assessment guideline Manual Handling of Loads and the e-learning tool on their website. In this way these useful products are preserved for future use after the SLIC manual handling campaign ends.
- And, last but not least, the project management contributed to OSHA's Lighten the Load summit with a presentation of the campaign, including the first results.

2.9 Conclusions: goals and quality expectations

Generally it can be concluded that the executed SLIC Manual Handling of Loads Campaign contributed to the overall campaign goals well. A lot of work on the prevention of risks from manual handling of loads is still to be done.

In the initial phase of the campaign, quality expectations had been formulated: when will the campaign be successful? A summary of the results in relation to the quality expectations follows.

Quality expectation (QE)	Results of the campaign
Inspection campaign	
80% of the SLIC countries to be implementing the inspection project on the manual handling of loads by 2007.	25 SLIC countries (out of 27) and 1 EFTA country participated, which is 92%.
50% of the companies inspected to result in an intervention in the manual handling of loads	84% of the inspections in both transport and health care resulted in an intervention on manual handling of loads.
25% of the inspectors in each Member State to take part in the inspection project.	No specific results can be generated because the total number of inspectors is not known. All together 1770 inspectors participated in the EU campaign.
Every participating country will inspect at least 100 companies in the transport sector.	EU Mean: 106 (range 2 - 390). The total number of inspections in a country depends strongly on the existence of harbours and airports etc.
Every participating country will inspect at least 100 institutions in the care sector.	EU Mean: 126 (range 22 – 317). The total number of inspections in a country depends strongly on the size of the country and the number of inhabitants.
Each participating inspector to have taken part in the European training course on the manual handling of loads or to have met the minimum training requirements applied within the project.	Participating: 1770. Trained through the train the trainers: 1610. Countries not participating in train the trainers course indicated that inspectors were already skilled.
Inspection method	
The EU Directive on the manual handling of loads to be able to be implemented in a uniform and transparent way in all the Member States.	Evaluation showed that the SLIC assessment guideline was widely used in the campaign. Usability was valued as good; only in patient handling did it show restrictions.
Training	
Health and safety inspectors to be able to be uniformly trained for inspection of the manual handling of loads, using a basic MHL training plan which adjusts with the Directive 90/269/EEC.	This QE is translated in the train-the-trainer education goal; -to provide an understanding of the key requirements of the Manual Handling of Loads Regulations as set out in Council Directive 90/269/EEC, -to give an understanding of current practice in other EU Countries in terms of enforcement of the Manual Handling of Loads Regulation,
Health and safety inspectors who take part in the MHL 2007 project to be aware of the risks from the manual handling of loads.	This QE is translated in the train-the-trainer education goal; -to provide and understanding of the anatomy and biomechanics of the spine and muscles and how injuries and damage take place due to manual handling,
Health and safety inspectors who take part in the MHL 2007 project to be able to conduct a clear risk assessment on the manual handling of loads.	This QE is translated in the train-the-trainer education goal; - to give an understanding of the core elements for effective management of manual handling in the workplace, these elements include, policy, consultation, training and a detailed understanding of the Manual Handling Risk Assessment process and the risk factors outlined in the Directive,

Quality expectation	Results of the campaign
<p>Health and safety inspectors who take part in the MHL 2007 project to be able to judge a risk assessment on the manual handling of loads.</p>	<p>This QE is translated in the train-the-trainer education goal;</p> <ul style="list-style-type: none"> -to present workplace case studies from the Health care and Transport Sector in order to provide an understanding of how an employer can comply with the requirements of the Manual Handling of Loads Directive, -to provide an understanding of the procedure or protocol to follow when addressing manual handling issues while carrying out a workplace inspection
<p>It can be concluded that all learning goals have been achieved. Weaker points: expertise of the trainers (knowledge of assessment methods, biomechanics and anatomy), the quality of the case studies and the knowledge of the current enforcement of EU regulation practice in other countries.</p>	
<p>Public information</p>	
<p>In each country where the MHL inspection project is carried out, the social partners and other relevant parties (to be defined) to be informed at national level of the advent of the MHL 2007 project.</p> <ul style="list-style-type: none"> ♦ Awareness of the risks and prevention measures associated with the manual handling of loads to be increased among employers, workers and other relevant players. ♦ A cultural change in the approach to risks associated with the manual handling of loads; involving tackling problems at the source rather than responding to the way people work. 	<p>Brochures were used in 24 out of 25 countries and well-received. No outcome in awareness raising and cultural change was measured.</p>
<p>Expert network</p>	
<p>Experts in physical loads / manual handling of loads in the European Labour Inspectorates to know how to contact one another and to be able to communicate with each other / learn from one another in a straightforward way, including after the project.</p>	<p>The SLIC working group on Manual handling of loads consists mostly out of experts and carries on in the SLIC campaign Manual Handling of Loads 2008. They know how to find each other, but no formal network has been set up yet.</p>

General campaign remarks

- ♦ The campaign was useful for labour inspectors to acquire new knowledge on the topic of manual handling of loads. The SLIC campaign is a very good opportunity to learn from each other
- ♦ MHL is a very important subject, previously overlooked in several countries
- ♦ Use of SLIC assessment method was helpful, although KIM is not applicable in patient handling
- ♦ Timing of campaign was too tight
- ♦ SLIC information and material was useful and important
- ♦ SLIC guidance was a good reference document
- ♦ More ideas on how to integrate the campaign with the EU week of safety would have been useful
- ♦ Employers liked the assessment methods provided by SLIC
- ♦ SLIC supplied materials were very useful and positively assessed by companies and enterprises
- ♦ a DVD / web guide with better work practices and an outline of injuries will make an effective training material

3. What SLIC should take forward from this campaign

The results of the SLIC campaign show a high level of non-compliance (more than 80% of the companies inspected in transport and health care had some kind of intervention) with the Directive 90/269/ EEC. More research into the causes might be needed. In this chapter recommendations are given to ensure a higher grade of compliance in the future. All labour inspectorates were asked:

'According to your campaign results, what should SLIC take forward on the European agenda of manual handling of loads in the coming years?'

First it should be mentioned that the general provision of Directive 90/269/EEC, Article 3 states that the employer should avoid the need for the manual handling of loads by workers. Only if this need cannot be avoided then the employer shall take the appropriate organisational measures etc. in order to reduce the risk involved in the manual handling of such loads.

This evaluation shows that this provision is not always carried out in this order. In transport, as in the health care sector, plenty of (technical and organisational) measures are available to avoid manual handling. Inspectors in this campaign encountered that risk assessment and avoiding manual handling is not day-to-day practice. Employees are being fitted to the job instead of the other way around - risk reduction instead of risk avoidance. SLIC faces the challenge to change this widespread attitude.

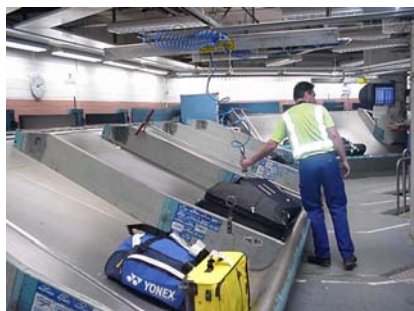
The following matters deserve ongoing attention and promotion:

- ♦ In general more attention should be given to awareness raising on manual handling of loads with employers and employees. Underline that current medical publications state that training on the body strength and posture has only a small influence in reducing risks.
- ♦ Europe-wide there is still a broad variety on interpreting the Directive. SLIC reached a consensus in using assessment methods to determine risks in different situations instead of a maximum weight.
- ♦ The first step in the prevention of (risks from) manual handling is the risk assessment of manual handling situations. Risk assessment is a cyclic process which is a day-to-day process which should be common with all employers and employees.
- ♦ Taking measures to prevent manual handling should always be the step before reducing the risks. Knowledge about solutions on manual handling is not common yet. For transport as well as health care, a (digital) guide with good practices should be made available. Several EU countries / labour inspectorates need to develop this knowledge and can benefit from such a guide.
- ♦ When equipment to avoid manual handling is available employees should be trained and instructed to work with it. Employers should make time for this process.
- ♦ The logistic chain of assessing risks from manual handling of loads should be in focus, not only at the workplace level. Cooperation with designers, producers, managers, OSH experts, employers and employees is needed to tackle this complex problem.

Interesting practices in transport that deserve international attention

Good practices

- ♦ Use of lifting equipment in baggage terminals



Ceiling track lifting equipment in baggage terminals

- ♦ Use of containers for the baggage



Baggage containers

- ♦ Labelling baggage which is too heavy according to risk assessment
- ♦ Use of equipment (like Rampsnake® / Powerstow®) which transport baggage completely in the belly of a narrow body airplane without manual handling.



Rampsnake

- ♦ Use of (carton) slip sheets in loading and unloading containers
- ♦ Use of 'shooting' conveyer belts in loading containers



Shooting conveyer belt

- ♦ Use of mechanical turn over installation to empty a container loaded filled with goods / bags



Mechanical container- turn over installation

- ♦ Palletising goods instead of stevedoring goods manually into the ship



Palletised goods in ship using fork lifter



Palletised goods are mechanically lifted from ship

- ♦ Use of big bags which cannot be lifted manually at all



Use of big bags

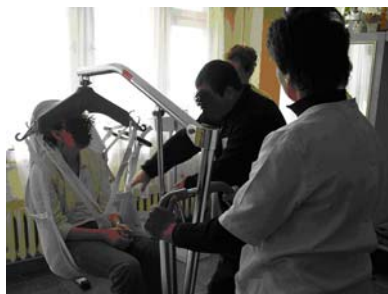
Bad practices

- ♦ Countries are confronted with the poor health awareness in the transport chains of other countries (also outside EU). Heavy goods (50 kg bags) are imported which often have to be handled manually. This is encountered in harbours (container loading and unloading, ship loading and unloading) as well as at airports (baggage).

Interesting practices in health care that deserve international attention

Good practices

- ♦ Risk assessment is carried out per patient. Measures and auxiliary aids are taken individually, depending on the mobility and ability of the patient.
- ♦ Standard use of auxiliary equipment like hoists (for less mobile and immobile people, in height adjustable shower chairs)



Use of hoist for immobile patient



lift for bath, shower or swimming pool

- ♦ Ceiling track hoists in institutions (especially to be taken into account in new buildings)



Ceiling track hoists

- ♦ Electric adjustable beds standard in all nursing homes and hospitals
- ♦ Electric motorised transport equipment to use in food supply, post, laundry, beds in institutions



Electric transporter for mail



Electric food transporter with fridge inside

Bad practices

The construction of many older institutions makes the working space very narrow, which causes bad postures in patient / client handling and non-use of lifting equipment because of the lack of space. Needs high investments to cope with issues.

- ♦ Unavailability of technical measures like hoists
- ♦ High staff stress level which causes time pressure and non-use of lifting equipment.
- ♦ Patients / clients are often transferred manually with two people which is still a high risk situation.
- ♦ The transport by air of immobile people (see Annex 5)
- ♦ More attention should be given to the risks to employees working in the ancillary services.
- ♦ Elderly patients prefer manual handling by staff. Needs a cultural change and a stronger policy of the institution
- ♦ Ambulance staff are at higher risk in carrying patients manually

4. Recommendations for future SLIC Campaigns

Project management and organisation

- Appoint one project leader who is responsible for the whole project and easily accessible for questions from working group members.
- Appoint separately a person responsible for finances, tendering, contracting. That is the budget, the contacts with the financial department of the Commission in Luxemburg, all calls for tender or for subsidy and the final accounting and declaration of money.
- Make for every subgroup a clear project plan with timeline and responsible person / team leader. Divide the tasks to be done. You might think of using a project management approach such as Prince 2 to give a clear structure.
- The parties to communicate with frequently are the working group members,
- The SLIC members need a progress report twice a year as input for the SLIC meetings (through the SLIC secretariat).
- Develop your evaluation forms directly at the start, harmonised with your goals, so the national labour inspectorates know what to focus on
- Develop a common framework and guidance to the implementation of the campaign, respecting at the same time the national specificity

Cooperation with the European Agency for Safety and Health at Work (OSHA).

- Try to synergise with the campaign of the European Agency for Safety and Health at Work.
- OSHA website hosts the assessment guideline Manual Handling of Loads and the e-learning material at <http://osha.europa.eu/topics/msds/slic/>
- Exchange website banners, try to find synergy in brochures and other publications, and have a brainstorming session with the project managers of the OSHA campaign 2008 (assessment methods).

Network

- Create an easily accessible website and discussion forum. The latter provides a need for experts to communicate with each other.

Annex 1: Inspection results in Transport

A 1.1 General

Respondents	22 countries *)
Total number of inspectors participating in transport:	790
Mean percentage of harbours inspected by labour inspectorates in Europe:	24 %
Mean percentage of airports inspected in Europe:	40%
Total number of interventions / violations in project (can be more then one in a company):	4617

*) Austria, Belgium, Bulgaria, Cyprus, Czech Rep, Estonia, Finland, France, Germany, Greece, Ireland, Latvia, Lithuania, Malta, Netherlands, Norway, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden.

A 1.2 Assessment methods

Which inspection assessment method has been used in transport inspections?

Assessment method	Total times used in Europe
SLIC assessment guideline: MHL level 1: screening tool	13
SLIC assessment guideline MHL level 2: Key Indicator Method	16
SLIC assessment guideline MHL level 2: Manual Handling Assessment Chart	8
SLIC assessment guideline MHL level 3: a national sector specific tool	4
Own assessment method MHL	8

A1.3 Quantitative results: Enforcement in transport

Size class	Number of companies visited	Advise/ verbal warning	Written Warning	Cessation of work	Fine	Legal prosecution	Number of companies: no violations
1 – 5	260	304	236	0	7	0	26
6 – 20	631	606	511	0	21	0	88
21 – 50	565	588	460	2	18	0	90
>50	884	828	697	1	24	1	162
Total	2340	2326	1904	3	70	1	366

A 1.4 Quantitative results: Inspection topics in transport

Inspection on:	Airports	Harbours	Transport other e.g. Transport companies	Transport other e.g. in-company carriage, picking, warehousing
	Number of interventions	Number of interventions	Number of interventions	Number of interventions
Risk assessment on manual handling of loads	137	46	976	469
Measures on manual baggage handling in baggage terminals	138	15	250	84
Measures on baggage handling on the <i>airplanes</i>	104	0	0	424
Measures on stevedoring manually in the ship	0	131	2	0
Other e.g. transportation charges into trucks	11	4	8	25
Total	390	196	1236	1002

Annex 2: Inspection results in Care

A2.1 General

Respondents:	24 countries)*
Number of inspectors participating in care project	980
Mean percentage of hospitals inspected by labour inspectorates:	25
Mean percentage of elderly homes inspected by labour inspectorates:	37
Mean percentage of mentally/ physically handicapped homes inspected:	16
Total number of interventions/ violations in project (can be more than one in a company):	8856

*Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Northern-Ireland, Norway, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden.

A2.2 Assessment methods

Which inspection assessment method has been used in care inspections?

Assessment method	Total used
SLIC assessment guideline: MHL level 1: screening tool	11
SLIC assessment guideline MHL level 2: Key Indicator Method	13
SLIC assessment guideline MHL level 2: Manual Handling Assessment Chart	6
SLIC assessment guideline MHL level 3: a national sector specific tool	2
Own assessment method MHL	12

A2.3 Quantitative results: enforcement in care

Size class	Number of companies visited	Verbal warning	Written warning	Cessation of work	Fine	Legal prosecution	Number of companies: no violations
1 – 5	97	67	72	0	4	0	13
6 – 20	511	532	845	2	16	1	44
21 – 50	805	765	1421	4	31	0	140
>50	1624	1574	3066	53	56	2	297
Total	3037	2938	5404	59	107	3	494

A2.4 Quantitative results: inspection topics in care

Care → amount ↓ Inspection topic	Hospitals	Elderly homes	Mentally/ physically handicapped homes	Other institutions such as Home nursing, private homes, psychiatric homes
Risk assessment on manual handling of loads	867	1246	248	98
Patient/ client: handling/ washing/ transporting	1086	1445	285	106
Service activities	673	795	201	23
Other inspection items such as training, education, maintenance of equipment	807	789	322	173
Total	3433	4275	1056	400

Annex 3: Communication results

A3.1 How many SLIC Campaign MHL brochures were distributed?

<i>General brochure</i>		<i>Care brochure</i>		<i>Transport brochure</i>	
<i>Distributed</i>	<i>In 22 countries</i>	<i>Distributed</i>	<i>In 24 countries</i>	<i>Distributed</i>	<i>In 24 countries</i>
<input type="radio"/> 1-50	4	<input type="radio"/> 1-50	2	<input type="radio"/> 1-50	1
<input type="radio"/> 50-100	5	<input type="radio"/> 50-100	4	<input type="radio"/> 50-100	4
<input type="radio"/> 100-250	1	<input type="radio"/> 100-250	2	<input type="radio"/> 100-250	1
<input type="radio"/> 250-500	2	<input type="radio"/> 250-500	0	<input type="radio"/> 250-500	0
<input type="radio"/> 500 or more	9	<input type="radio"/> 500 or more	15	<input type="radio"/> 500 or more	17

General:

Austria, Bulgaria, Cyprus, Czech Rep, Estonia, Finland, France, Germany, Greece, Latvia, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden.

Care:

Austria, Belgium, Bulgaria, Cyprus, Czech Rep, Estonia, Finland, France, Germany, Greece, Latvia, Italy, Latvia, Lithuania, Malta, Netherlands, N-Ireland, Norway, Poland, Portugal, Romania, Slovenia, Slovakia, Spain.

Transport:

Austria, Belgium, Bulgaria, Cyprus, Czech Rep, Estonia, Finland, France, Germany, Greece, Latvia, Italy, Latvia, Lithuania, Malta, Netherlands, N-Ireland, Norway, Poland, Portugal, Romania, Slovenia, Slovakia, Spain.

A3.2 How did the brochures' printing and distribution process go?

Process went..	Total
Good	20
Poor	3
Bad	0

A3.3 How were the brochures distributed?

Distributed	Total
By Mail	13
By E-Mail	7
Through inspections personally	22
Other	13

A3.4 How were the brochures received in the sectors?

Reception was...	Total
Good	23
Poor	0
Bad	0

Annex 4: Training of inspectors' evaluation

A4.1 Quantitative results

Number of trainers participating in the EU train the trainers course	55* (21 countries)
Number of inspectors trained nationally for the campaign Manual Handling of Loads	1610

*Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, Greece, Ireland, Latvia, Lithuania, Malta, Netherlands, Northern-Ireland, Norway, Poland, Portugal, Slovenia, Slovakia, Spain, Sweden. France had its own train the trainers course at the same institute and educated 30 inspectors.

A4.2 What is your overall judgement about the 'train the trainers on Manual Handling of Loads' programme?

Judgement	Total
Good	11
Poor	7
Bad	4

A4.3 How were the trainers 'equipped' in the train the trainers programme to train the inspectors nationally for the inspections on manual handling of loads?

Equipment of trainers was..	Total
Good	11
Poor	7
Bad	4

Annex 5: Alert Note: high risk patient transfer in airplanes

Summary

The Swedish Work Environment Authority (SWEA) has drawn attention to the challenge of the prevention of MSD risks to the employees at airports and cabin crew who transfer disabled passengers in order to be able to travel by air. Referring to the Directive on manual handling (90/269/EEC), preventive measures have to be taken to enable a safe work environment.

Background

Beside common risks occurring in baggage handling at airports there is another source of manual handling within the same trade. Employees at airports and cabin crew assist disabled passengers with reduced mobility when travelling by air. Depending on the ability of the passenger, some of them need to be transferred upstairs to, and downstairs from, the aircraft. They also often need help with transfers to and from the seat inside the aircraft. For the employees these situations result in heavy manual handling with a risk of musculoskeletal disorders.

When transferring a passenger to or from the seat, the employees often have to lift in a poor working posture due to, for example, insufficient space in the aircraft. There are few transfer and lifting aids available yet to solve the transfer without manual handling. This situation has been identified by SWEA as an obvious risk for MSD. The risk occurs in all EC countries.

The authority has identified the need for **long-term** solutions in order to create a safe work environment. Conditions have to be created which enable transfers without manual handling.

These situations occur daily and may not be avoided. New regulations have been implemented since 1 July 2007, Regulations (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006 which concern the rights of disabled persons with reduced mobility when travelling by air. Alongside the implementation of these regulations, the need to prevent the risk of MSDs in air transport staff generally in Europe is still required. **Long term-** as well as **short-term** measures need to be taken.

Observations done by the SWEA when inspecting airports since 2005 are as follows:

- At the time of inspection passengers were manually lifted into and out of the plane as well as manually lifted into the window seat, with a high risk of MSD and injuries.
- In smaller aircrafts space is very limited, which increases risk for MSD
- Folding arm rests enable a sideways transfer with sliding board
- Employees need the knowledge to assess the situation and to choose favourable techniques for transferring passengers

The Authority demanded the following measures, which are to be seen as **short-term** activities:

1. Avoid manual handling in carrying passengers into and out of the aircraft
2. Safe transfer of disabled passengers to the passenger seat
3. Knowledge of ergonomics, risk assessment and safe transfer techniques

When airports were inspected again as a part of the SLIC project we noted that:

1. Many airports have invested in special equipment, a powered step climber, to be used for transferring passengers with reduced mobility on the stairs (picture 1). The step climber looks similar to a wheelchair but can move up- and downstairs. It is powered by an electric battery and can be manoeuvred by one person walking beside it. Some models of stair climbers are especially designed for conditions on aircraft stairs.
2. Lifting aids were found in the aircrafts: sliding boards and belts.

3. Training is organised for the employees about which aids to use, transfer techniques etc. Instructions about how to use the step climber are usually given by the supplier of the equipment; other education is given by occupational health centres.



Stair climber

Long-term activities to avoid unnecessary manual strain for the operator is the responsibility of the airline company and the designer / constructor of the airplane and some solutions could be:

- Elevators for passengers to enter the aircraft
- Technical solutions in order to avoid heavy transfers to and from the seat inside the aircraft