Ergonomics in women’s work environment

– Inspections with focus on the risk assessment of patient transfer within the health care and social care sectors
Project Report

Ergonomics in women’s work environment – inspections with focus on the risk assessment of patient transfer within the health care and social care sectors.
Introduction of new employees and substitute staff ......................................................... 28
Expert help..................................................................................................................... 29
Contribution.................................................................................................................. 29
APPENDIX 4.................................................................................................................. 31
EXPERIENCES FROM EMPLOYERS IN MARIESTAD AND BOLLEBYGD ....................... 31
Summary

During autumn 2013, the Work Environment Authority carried out a national inspection activity where we inspected workplaces within the health care and social care sector, with focus on risk assessment in patient handling.

The supervision was part of a Work Environment Authority drive concerning women’s work environments. Our lodestar has always been that all, both women and men, must be able to carry out their work without jeopardising their health and quality of life. One should not become sick though taking care of others.

Injuries that develop gradually are difficult to discover in time. The focus in work environment work has traditionally been to prevent accidents. With this supervision, we wished to contribute to minimising musculoskeletal disorders by giving employers tools to, themselves or with the help of occupational safety and health services, make visible today’s risks in order to prevent tomorrow’s injuries.

Of the 692 companies and organisations the Work Environment Authority’s inspectors visited, over 75 per cent received demands to remedy shortcomings in their work environment. 528 inspection notes were written, and 1980 demands were made – which, on average, is four demands per inspection message. This shows that this type of effort is necessary and needed. The employers were, to a large extent, positive to the question of risks for musculoskeletal disorders being highlighted. Many employers have worked further with risk assessment and measures to fix these issues in a good way.

The five most common demands that were made to the employers were:

- investigation and assessment of risks for musculoskeletal disorders
- planning and implementing risk-reducing measures
- written procedures for when and how the risks of being affected by ill health and accidents shall be investigated
- procedures for reporting and investigating incidents, ill health and accidents
- sufficient knowledge about patient handling
Success factors for workplaces where we have made few or no demands have been good procedures for systematic work with revealing risks before the work is begun with activities in new users or patients. Functioning procedures for education and follow-up of patient transfer knowledge gives employees understanding to assess risks for musculoskeletal disorders before a transfer is carried out. In addition one had good access to technical aids. Characteristic for these workplaces were a low rate of absenteeism due to illness, a participatory approach, knowledgeable managers and a good atmosphere. Where thoughts of safety permeate the organisation, these thoughts are entrenched in the highest management for the operation.

Background and problem description

In society, women are responsible for a greater proportion of absence due to illness than men, and have, in total, a sickness allowance rate that is 80 per cent higher than that of men, according to information from The Social Insurance Agency in March 2014. There are also more women than men who are forced to end their working lives early. This can, in its turn, mean that women receive lower pensions and have an insecure old age as a result of a higher sickness rate and worse economic relationships. Musculoskeletal disorders affect not just individuals but also the organisation and society, due to the costs it brings with it.

In 2011, the Work Environment Authority was tasked by the government to develop and implement special efforts with the purpose of preventing women from being knocked out of the workplace because of problems relating to their work environment. The focus is on prevention of musculoskeletal disorders (MSDs) due to improper workload, and the campaign encompasses knowledge acquirement, information, the education of inspectors, and the implementation of national supervisory activities. The result of the activities will be integrated into the ordinary activities of the Work Environment Authority after the assignment finishes in 2014.

Physical load injuries in health care and social care sectors are common. In 2013, 530 occupational injuries in the health care sector, and 2200 in the area of social
care were reported. Injuries occur during sudden accidents but can also be the result of the body being subjected to strains and physical loads over a long period of time. These strains can lead to long-term problems. During the seminar ‘Sustainable work environment and the correct physical load’ on 11 March, 2013, it was apparent that nurses and assistant nurses together made up about 10 per cent of the female working population, but together they make up 20 per cent of musculoskeletal accidents.

To work within health care and social care sectors with helping people in their daily activities such as patient transfer, dressing, toilet visits and showering brings with it problems with, for example the back, shoulders and arms as a result of sudden or long term strain. Sudden physical overload can happen, for example when someone walks with a walking aid and suddenly loses their balance and falls, in which case it is easy for carers and other persons attempting to catch the person in order to lift them up or break their fall. Physical load, which occurs several times a day, for example working in tight spaces and beside beds that are not height-adjusted, causes after a longer or shorter time, fatigue and eventually pain. These strains can damage the neck, back and shoulders and cause lifelong injuries.

Contact with people in health care and social care sectors entails one always having another person to take into consideration in their work. This can be physically and emotionally challenging but is also very rewarding. Patients in the health care sector can be in crisis. Users in the social care sector have a need of human contact in excess of the practical work. When the time to carry out the work is too limited and not enough, it can mean an emotional dilemma that stresses both the body and soul.

There is an essential difference between patient transfer compared to the movement of goods. When it comes to patient transfer, the centre of gravity is unreliable and can be displaced in an unpredictable way. This requires good communication between caregiver and patient so that the transfer can be carried out in a pleasant way for both.

To see that those who work in the activity have the possibility of working in a good way, a risk assessment for the work needs to be done. It is the employer’s responsibility to carry out risk assessments, but it is always better if the safety representative and the staff are included. In order to do risk assessments, the
relevant knowledge is necessary. The return on a risk assessment is that one can
discover whether a certain working task entails risk of musculoskeletal injury,
and in that case, what it is about the task that causes the risk to exist. Then it is
important to do something so that the risk one has seen diminishes and that no
one needs to hurt themselves.

**Purpose and aim**

The purpose of the inspection was to contribute to increasing the employers’
knowledge about the risks of musculoskeletal disorders in health care and social
care sectors and also to increase the knowledge of how these can be prevented.
Special focus was given to how one can be aware of risks for musculoskeletal
disorders.

The aim of the inspection was that more employers should know of the risks of
musculoskeletal disorders which employees in the operation can be subjected to
and to be able to assess the gravity level in these, in order to work
systematically with work environment improvements. Assessment of risks for
musculoskeletal disorders should happen at different levels in the organisation:

**At unit level**

- Organisation of the work and workload
  
  o Is there enough time? How does staffing look during evenings, nights, weekends and public holidays?

- Physical load due to the care load
  
  o Estimation of the patient needs, body weight and size. Are there special procedures for groups of patients, for example overweight persons? How do we react when a patient falls?

- Access and maintenance of technical aids
  
  o Do we have the correct type of technical aid? Are they accessible and is everyone able to use them in the correct way?
• Space
  o Sufficient space to be able to work in suitable working positions and have place for the technical aids that are needed by the bed and in the toilet area etc.

• Knowledge
  o Basic knowledge among the staff and possible guidance for specific concrete situations.
  o Orientation of newly employed and temporary or substitute staff
  o The employer's knowledge about the risks of musculoskeletal disorders the employees in the operation can be subjected to.
  o If the rehabilitation of the patient is included in the assignment, it requires special knowledge and extra time.

For patients
• For risk assessment at patient level it is the work efforts with the patients that are assessed.
• An example of how independent the patient is can be illustrated with symbols to, in a simple way, be able to perceive the patient’s functional ability and need of support.

With patient transfer situations
• Every patient transfer is unique and must be assessed to be able to be carried out in a secure manner.
  o For example, is the person who is going to be transferred alert in the morning and tired in the afternoon? It can require different approaches and be, to a great extent, about the instinctive feelings of the staff and that which is called quiet knowledge.
  o Are there other factors which can entail risk, such as lack of time or something limiting the space to move, and so on?
The carrying out of the inspections

The inspections were carried out during autumn 2013 and in January 2014 within health care and social care sectors. A total of 692 companies and organisations over the entire country were visited. Follow-ups have taken place continually from the beginning, as well as during spring 2014. In total, 56 of the Work Environment Authority’s inspectors have participated. Most of the inspectors in this drive have long experience. 79 per cent have worked in the authority for at least five years.

Approach

Through the responsible inspectors in the project who exist in every region, the education of the inspectors who participated in the supervision was carried out.

The employers were informed about the inspections three to four weeks in advance so that all involved would have sufficient time for preparation. During the inspections, which were mostly carried out in the form of dialogues but also sometimes supplemented with visits to the actual working places, dialogues were carried out about systematic work environment management. The Work Environment Authority’s brochure, ‘Load correctly during patient transfer’ was used as background material. The employer presented the current information about occupational injuries and absence due to illness, according to gender, at the workplace. The reasoning was carried out with employers and safety representatives about the extent to which working tasks for women and men were different, even among employees with the same duties. Over 70 per cent of workplaces that have received demands have had return visits. In the most cases, the inspectors and employers had, during the inspection, decided how the answer to the inspection messages should be given. If the inspector assessed that a repeat visit was called for, it could also have happened after the employer had left written answers. How one went about this was up to each inspector to assess.

With the return visit we had the opportunity of discussing and sometimes guiding the employer correctly when it came to, first and foremost, the most common demands that were about investigations and risk assessments of musculoskeletal ergonomic relationships.
**Assessment tool**

The methods that were used during the inspection efforts were the Tilt Thermometer and PTAI ((Patient Transfer Assessment Instrument) which was taken from the international technical report ISO/TR 12296 Manual Handling of People in the health care and social care sectors. The Tilt thermometer is an instrument to reveal the need of technical aids with the starting point being the user’s functional ability, while PTAI is an assessment tool, developed to assess the physical load that arises during patient transfer. When using the PTAI it is appropriate that the assessment is done by an ergonomist who observes patient transfer situations at the chosen workplace and puts targeted questions to the employee. The answers are recalculated to a point value that gives the risk level for a musculoskeletal injury and specifies a need for preventive efforts. The methods are available at [http://www.av.se/checklistor](http://www.av.se/checklistor).

**Cooperation**


The labour market partners within health care and social care sectors at central level were involved in discussions about how the employer could ensure that employees have sufficient knowledge about patient transfer.
The result

Of 692 companies and organisations that have been visited, a third of them have been companies or organisations that run activities connected to care in their patient’s own living quarters. Over half of the visits have been carried out at workplaces with more than 49 employees, which means that we reached a large number of employees. Almost half of the visits have been in special housing facilities. A smaller proportion of the visits have been done in hospitals, about ten per cent.

Three quarters of the employers received demands to rectify shortcomings in the work environment, 528 inspection notes were written and 1980 demands were made, which is, on average, four demands per inspection message. 46 per cent of the visited employers received demands to assess risks in the work situations that arise in the operation, for example where the patient is to be moved. 43 per cent received a demand to present planned measures in a written action plan.

The five most common demands

Of the demands that were made, the five most common were:

- The employer should investigate and assess the working conditions with focus on ergonomics during the different working efforts that occur in the operation.

  Comment: The risk assessment has perhaps been done at a unit level but not for different patient transfer situations where risks can arise. A general risk assessment in a home needs to be specified. Sometimes even individual patient transfers, because the situations when it comes to toilets and beds are all different. Similarly, relationships can be different when a patient has fallen or if staff during the night have to help. These assessments need to be documented and known to all employees.

- The risks, which one has found and which were not fixed immediately, should be included in a written, time bound action plan.

  Comments: The employer is always obliged to take steps to fix the risks that have been discovered, or draw up an action plan for risks that cannot immediately be minimised. The action plan must be concrete and time bound. The demands concern the employer not documenting that which one plans to
do to minimise the risks we have seen and when that will be done. In other cases a risk assessment is done but that is not followed up by measures. There are also good examples of workplaces where the assessment is taken up during workplace meets (APT) or in connection with the users’ action plan being created or updated.

- The employer should create written procedures for when and how the risks of being affected by ill health and accidents shall be investigated.

Comment: The assessment of risks shall always be done with new patients, and also if the relationship with a known patient changes. The procedures should also describe how risks and preventive measures should be made known to all employees. Who does the assessment of how patient transfers should be done in the best way, and for whom are the patient transfers done in the best way? Which way is the best for both employee and patient? These are questions that the operations should clarify.

- The employer should see that the employees know
  a. That they should report incidents, ill health and accidents.
  b. What they should report as incidents, ill health and accidents
  c. How they should report incidents, ill health and accidents

Comments: Incident reporting is a way to find out where in the activities risks can occur. When a musculoskeletal disorder arises, there have usually been several incidents and there are often the same underlying factors and course of events. To avoid musculoskeletal disorders, it is important that the knowledge about the occurred events is taken into account. The employees must know that it is important to never leave to chance a patient transfer situation.

- The employer must see that the employees have sufficient knowledge about suitable working positions, risks with unsuitable working positions, early signs of overloading of joints and muscles, as well as how technical equipment is going to be used.

Comments: Employers should be able to ensure that employees have sufficient knowledge to assess risks of strain injuries and that knowledge is continually followed up. The inspections showed that there are shortcomings in knowledge with both the employers and the employees about risks and preventive measures during patient transfer.
Other demands

At ten per cent of workplaces, demands were made about the employees having the possibility of using technical aids, calling for help with heavy and risky patient transfers, as well as taking sufficient breaks and recesses to have the necessary rest and recovery.

Comments: The employers must see that the employees have sufficient time and that there is sufficient staff. There should be a balance between the demands of the work duties and the available resources. The balance between supporting the patient and simultaneously seeing that the staff in their work environments do not risk ill health and accidents can be delicate. There are many examples of patients, with the purpose of rehabilitation, trying to move themselves with the help of personnel but where the transfer from the work environment perspective should be done with a hoist.

In many places we have seen shortcomings in the organisation of the cooperation between the caregivers where the communication between different caregivers has not worked in a satisfactory way. Technical aids are often lacking when a patient comes home from the hospital and has an immediate need of help. It can take a long time before the necessary technical aids are in place. Procedures for seeing that the workplace has the necessary measure in place when conditions change or when new patients need help. The cooperation procedures are very different between different caregivers.

Effects of the inspection

The goal of the inspection drive was that employers should know of the risks of musculoskeletal disorders with patient transfer, and at different levels in the operation create preconditions for correct physical load bearing.

94 per cent of the Work Environment Authority’s inspections made the assessment that the workplaces they inspected were worth a visit. This is shown not least in the number of inspection messages that were left.

During our follow-up visits we have seen that employers have taken steps to improve the work environment with focus on musculoskeletal ergonomics.

"The inspection has contributed to many workplaces in the healthcare sector now having methods and knowledge for systematically investigating and risk
assessing the musculoskeletal ergonomic relationships and preventing musculoskeletal disorders. Both employers and safety representatives have expressed that they, after the inspection, feel more motivated to work further with ergonomics and patient transfer techniques. This inspection has been requested and appreciated”

Pia Johansson, inspector, Gothenburg

**Learning examples which the inspectors have mentioned:**

- Procedures have been developed for how technical aids can be quickly ordered, for example beds or technical aids for patient handling, in order to ensure secure patient transfer during homecoming from hospital at short notice.

- Cooperation between municipalities and county councils to facilitate smooth homecoming has started or been reviewed.

- Innovative thinking – the putting on of compression stockings is now on the checklists and many units for home care services have found technical aids of which they were earlier unaware for facilitating the putting on of compression stockings.

- ‘Forgotten procedures’ for regular risk assessments and education in patient transfer knowledge have been found, dusted off and sharpened. It is usual that earlier functioning procedures have collapsed in connection with manager turnover.

**Employers were interested by the question**

According to the inspectors in the supervisory activity, employers were interested and they have worked with great commitment and both taken the demands seriously and seen economic profits in an amended work method. To receive a picture of the effects of an inspection, several employers were interviewed by one of the Work Environment Authority’s communication officers. See Appendix 4.
Discussions and conclusions

The inspections have shown significant shortcomings in integrating the work with revealing and handling the risks of musculoskeletal disorders in work with the systematic work environment management. In the recently published report 2014:3 about the inspections of male and female dominated municipal operations it is described that 73 per cent of managers in home care services have more than 30 staff members. It can thus be difficult for the immediate staff management to have to make and follow up the risk assessments in different patient transfer situations. It also makes it difficult to find time to develop, entrench and follow up procedures so that the work with prevention of musculoskeletal disorders becomes a part of the systematic work environment management.

The work environment brochure (ADI 581) ”Lighten the load in patient transfers” was appreciated by both employers and inspectors. It can also be used as guidance for assessing risks for musculoskeletal disorders at different levels in the operation.

Tools and support in making known the risks and shortcomings in connection with patient transfer have been introduced during inspections and have been able to be used as inspiration for the creation or supplementation of an operation’s own material.

Lena Saurell has done an evaluation of PTAI and the Tiltthermometer in a Master’s degree thesis at the Institute of Environmental Medicine. Her conclusion was that the methods are different, but can complement each other. During collaboration around the assessments according to the tool, a dialogue is created around the risks and how care work can be improved.

It is more complex to assess the risks for musculoskeletal disorders during patient transfer than with manual handling of goods, and wishes for simpler methods have been put forward. Often the employer has created their own checklists to assess patient transfers at patient level, but because of the complexity of the work it can be difficult to put forward a basic document that covers everything.
Knowledge

It is important that the staff has knowledge about the best way of moving each individual and to risk assess every work effort. This also requires communication between employer and employee so that the shortcomings and risks become known in order for preventive measures to be taken.

During inspection and follow-up it can be difficult for the inspector to assess if the employer can really ensure that employees have sufficient knowledge. The Work Environment Authority has therefore elevated the question to the central parts in order to discuss:

- What is the minimum level of patient transfer knowledge for all employed staff and managers?
- What will the back advisors, coaches and overweight team etc., know and what must the aid assessor know about patient transfer?
- What is the goal of the basic education for different vocational groups, newly employed and temporary staff?
- What are the goals of the partners with regard to the following up and topping up of knowledge?
- How often will the education take place and for how long?
- How will the organisation ensure that the employees have sufficient knowledge?

From a gender perspective it is easy to see that there is a difference in how knowledge in the work is evaluated. Guidelines for a curriculum for forklift truck drivers have been created in cooperation with the partners on the labour market. In these are described which knowledge is required in order to reduce the number of accidents and promote an effective production. In the guidelines (TLP 10), a joint agreement is clarified about the knowledge and proficiency forklift truck drivers need to be able to work safely, improve efficacy and reduce costs.

In the same way, the partners within the health care and social care sectors should have a common view of which knowledge the employees within the health care and social care sectors need to have to be able to work safely with
patient transfers. It should be a good support for the employer to have access to this when they assess the employees’ knowledge and need of education.

Personnel who are employed within the health care and social care sectors often have an occupational education. We have seen that the courses in patient transfer technique can differ both in content and in scope. This applies irrespective of whether the employee is an assistant nurse, nurse or has another occupation. This entails connecting the knowledge of the user’s needs with the knowledge about technical aids and how and where they should be used. The education also gives the possibility of discussing how the user’s own ability can be taken into consideration in different transfer situations. In the inspection, we have seen that the knowledge of the staff management plays a large role. A manager who themself has good knowledge about patient transfer sees the importance of having an employee assimilate the education at regular intervals, while a manager with less knowledge could give this question lower priority.

Areas of interest meet

The Swedish Association of Occupational Health and Safety has an important task in its role as an independent expert function that looks at work environment and the work of the staff. It also has rehabilitation personnel who can look after the interests of the user or patient. In a patient transfer situation, conflicts can occur between the patient’s need for rehabilitation and the employee’s demand for the right physical load from the perspective of knowledge and the available time to carry out the task. To use technical aids such as a hoist can be a comfortable way to transfer patients but does not stimulate the patient’s need for independence. Clarity must exist about where the rehabilitation efforts shall occur and that resources must exist for this.

Work in health care and social care sectors is regulated by several laws:

- AML: The Work Environment Act
- SoL: The Social Services Act
- LSS: The Swedish Act concerning Support and Service for Persons with Certain Functional Impairments
- HSL: Health and Medical Services Act
It is important to remember that no law, or provision to clarify the legislation, has precedence over another.

Many inspectors witness that they, during inspections in home help services, often have to discuss the different laws that meet in situations. We have examples from the entire country where managers back down in the situation where a patient does not want technical aids in their home. This can be when a patient or a member of the family does not want to consider accepting an adjustable electric bed because it means a rearrangement of the furniture in their home. In this case the result is that the staff are forced to work in an ergonomically improper way. Managers therefore allow the patient’s needs to be in the centre, while the Social Services Act and the employee’s needs suffer.

**Conclusion – sustainable work through the correct physical load**

Correctly handling a physical load can only be done if one knows how to do it. To create a work environment that is sustainable for all employees within the health care and social care sectors, there are several areas in which it is very important to invest.

**Important areas in which to invest**

- Operations would, in addition to their systematic work environment work, work with their safety culture. That is, approach, attitudes, norms and way of acting that encompass preventive measures, both with accidents and with work related illnesses.

- An MTO (human-technology- organisation) perspective where people, technology and the organisation continually cooperate for a better work environment and increased quality in health care and social care sectors work in all levels of the organisation.

- There must be good pre-conditions for managers to be able to organise the work so that risk assessments are done.

- Procedures and systems to catch risks and take measures must be clarified, also bearing in mind the risks of musculoskeletal disorders.

- Patient transfer knowledge needs to be continually maintained and developed.
References

The Work Environment Authority, 2014. Supervision of male and female dominated municipal activities, home help services and technical administration, report 2014:03
Project report. Stockholm.

Knowledge compilation. Stockholm.


Technical report.

Saurell, L.2014. Patient Transfer Assessment Instrument (PTAI) and the Tilt thermometer. An evaluation of whether the instrument is useable and gives support and aid with musculoskeletal ergonomic risk assessment in health care and social care with the focus on patient transfer.
Institute of Environmental Medicine, Master’s Degree thesis.
Appendix 1
Participants in the Project

**Overall programme management**
Programme Owner: Boel Callermo, Head of International Affairs
Coordinator of the government assignment about women’s work environment,
Mats Ryderheim

**Project Group**
Project Manager Minke Wersäll, region East
Partial Project Manager, Method and Competence Development, Minke Wersäll, region East
Partial Project Manager, Knowledge Acquisition and Dissemination, Ruth Carlsson, division for regulatory support
Partial Project Manager, supervision, Kersti Lorén, region West
Project Participant Leif Häggström Nätfalk, region North
Project Secretary Lola Lidén, region East
Communication Officer: Ulla Norrby, Division for Communication

**Responsible Inspectors in The Work Environment Authority’s regions**
Region North: Åsa Sjöström Ross, Leif Häggström Nätfalk, Bo Öberg
Region East: Madeleine Molander, Minke Wersäll
Region Mid: Ing-Marie Bjurstedt, Stefan Reis
Region West: Tommy Fahlander, Kersti Lorén
Region South: Ann-Britt Gunnarsson, Johan Jiveström, Birgitta Sivnert

A total of 56 inspectors from the entire country participated in the inspections.
Appendix 2

Prior notice of inspection

The Work Environment Authority will be doing an inspection at your workplace, address ………………… on (date) ……………… at (time). The visit is expected to take 2-2,5 hours. We will be, above all, inspecting work relationships in your operation where your staff help to /carry out patient transfers.

During the inspection

During the visit, the representative for the employer and the safety representative will be present. If there is no local safety representative, you should contact the regional safety representative to give them the possibility to participate in the inspection.

From The Work Environment Authority, the undersigned and ………………. will be present. Kindly confirm the time and place for the inspection

We will be asking you to present statistics regarding reported incidents, occupational injuries, absence due to illness, and the result of any staff surveys. We will also be asking you to tell how your systematic work environment work is run and how you work with risk assessments and measures for the prevention of musculoskeletal disorders.

If we discover shortcomings in the work environment you will receive an inspection message where we present the demands we are making in order for you to achieve a satisfactory work environment.

Information

The Work Environment Authority is developing and carrying out special efforts during the period 2011 – 2014 with the purpose of preventing women from being knocked out of working life because of work environment related problems. Visit The Work Environment’s website www.av.se when you wish to know more about these efforts, or about us as well as about laws and provisions regarding work environment.

If you should have any questions, please contact us.
Appendix 3

Inspection message

<table>
<thead>
<tr>
<th>Employer:</th>
<th>Organisation number:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workplace:</th>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Present during inspection:

Main focus of inspection:

Systematic work environment management

In your operation at (division, unit)……………………………….. working tasks occur which, individually or in combination, can entail risk for musculoskeletal disorders among the staff when the patients need help with, for example:

- Transfers in bed
- being dressed and undressed in bed
- patient transfer between bed and wheelchair
- going to the toilet
- showering
- getting up from the floor after a fall
- wound dressing
- making the bed
- feeding
- using a wheelchair outdoors
- patient transfer in car
- bed transfer
- shopping and food transport
☐ You have not sufficiently investigated the working conditions with focus on ergonomics, and not assessed the risks of ill health and accidents.

☐ During the inspection we could not show that you have taken sufficient steps or included shortcomings and planned activities in a written action plan.

☐ During the inspection you could not show written procedures for regular investigations and risk assessments of the employees’ working with focus on ergonomics.

Demands

☐ 1a. You must investigate working conditions with focus on ergonomics during the different work moments that occur in your operation and assess if they, individually or in combination, can entail risks for injuries in the musculoskeletal system with ill health as a result.

The risk assessment shall start from the Swedish Work Environment Authority’s provisions (AFS 2012:2) about physical ergonomics and their assessment models.

During the assessment the following factors should be taken into particular consideration:

- the organisation of the work
- working space
- working equipment
- working alone
- the employee’s preconditions, knowledge and experience
- breaks, recesses, the possibility of rest and recovery
- if there is sufficient time to carry out the work and use technical aids.
- working positions and working movements during the different working moments. For example working height, the possibility for variation, room for the necessary movements, inner/outer working area, bending, twisting and stretching
- stress and work pace experienced discomfort and registered absence due to illness with physical load causality.
The risk assessment must be documented in writing and describe which risks exist and whether they are serious or not.

☐ 1b. You must, from the results of the investigation and risk assessment, in a written action plan state the measures that are necessary in order to prevent ill health and accidents. From the action plan it should be clear who will see to it that the measures are taken and when they shall be carried out.

☐ 1c. You must create written procedures that describe when and how you will make assessments of the existing risks, because the employees could be affected by ill health or accidents at work. From the procedures it should be clear that the risk assessments are done as soon as possible with new patients and with changes in the care/need of assistance.

See 5, 8 and 10 §§ The Swedish Work Environment’s provisions (AFS 2001:1) about systematic work environment management and 4 § (AFS 2012:2) about physical ergonomics.

**Time to use technical aids - recovery**

It emerged that employees, because of

……………………………………………………………………………………
do not have time to call for help during heavy patient transfer/use technical aids /take sufficient breaks and recesses to sufficiently rest and recover. This means an increased risk of work-related ill health.

**Demands**

☐ 2. You must see to it that the personnel, if necessary, have the possibility of calling for help during risky lifts and transfers of patients. You must also see that there is sufficient time/personnel to use technical aids for transfer, as well as enough time for the staff to rest and recover during their shifts.

See 5, 6 and 8 §§ (AFS 2012:2) about physical ergonomics. See also Appendix A, influential factors during manual handling of physical loads.

**Absence of technical aids – the personnel do not use the existing technical aids**

At ………………………………………………………………………………………
risky work moments and transfer of patients occur. This entails risk of acute
overloading of the musculoskeletal system or risk of musculoskeletal disorders over the longer term.

Demands
☐ 3. You must see to it that heavy and/or risky working moments and transfer or patients is done with the use of technical aids.

See 5 and 6 §§ (AFS 2012:2) about physical ergonomics.

Space
During the visit it was stated that certain halls/rooms/toilets are very cramped. This applies to, above others, the following.

Many patients have a need of comprehensive support and help in connection with transfers during toilet visits, showering, transfers in bed, from bed to wheelchair etc. All too limited space means that the employees are forced to carry out physical load-bearing working moments in unfavourable working positions, which also make the use of technical aids very difficult. This can bring with it ill health or accidents.

Demands
☐ 4. You must see to it that there is sufficient working space for personnel in care situations beside beds and in hygiene areas, i.e.
   • a free working space of at least 0,8m where the employee must carry out working moments which entail an exertion of strength, for example in the transfer of patients or that the employee must crouch or bend down.
   • A free working space of at least 0,6m when the employee stands and helps from the side of the toilet, for example, without having the need to exert themselves.

You must see to it that there is a free space for the technical aids that need to be used in current situations so that the aids can fit and be manoeuvred without being hindered by walls, furniture or other material.

See 5 and 6 §§ (AFS 2012:2) and 4 § (AFS 2009:2) about the design of the workplace.
Information:

By free working space and free space is meant that the employer must be able to carry out their working duties/manoeuvre and fit the technical aids without being hindered by walls, door jambs, fixed furniture or other permanently fixed equipment.

Incidents, ill health and accidents

You have shortcomings in your procedures/are missing procedures for reporting of incidents, ill health and accidents in your work.

Demands

☐ 5. You must create written procedures to report and investigate incidents, ill health and accidents at work and see that all employees know:

- that they must report incidents, ill health and accidents at work to their employer
- what they should report as incidents, ill health and accidents
- how they should report

You must also ensure that you always:

- examine underlying causes of work-related incidents, ill health and accidents.
- assess if steps to prevent similar incidents and situations are necessary
- inform employees about what has happened and about current measures

See 5, 9 §§ (AFS 2001:1) about systematic work with the work environment.

Knowledge in ergonomics and patient transfer techniques

The Work Environment Authority assesses that your employees and team leaders do not have sufficient knowledge to carry out work in a way that the risk for physical overloading is minimised.

The assessment is based on:

☐ that a proportion of your employees do not have training in the area
☐ that the inspectors observe that the work is carried out in a risky way
☐ that training is not repeated at regular intervals
☐ that the employees themselves report that they do not have sufficient knowledge in patient transfer techniques.
Demands
☐ 6. You must see that your employees and team leaders have sufficient knowledge about, at least, the following:
- suitable working positions and how harmful working movements can be avoided
- how technical equipment and aids should be used to reduce the risk of musculoskeletal disorders
- which risks unsuitable working positions, working movements and unsuitable manual handling of physical loads bring with them
- how early signs of overloading of joints and muscles manifest themselves

You must give the employees instructions and the possibility of training themselves in a suitable working technique for the current working duties.

See 9 § (AFS 2012:2) about physical ergonomics and 6, 7 §§ (AFS 2001:1) about systematic work environment management.

Managers’ and team leaders’ knowledge as the responsible parties in the operation
The Work Environment Authority assesses that you/your managers/team leaders have a need to improve your knowledge about the work environment, applicable to the Work Environment Act, the Work Environment Ordinance and the provisions that apply to your operations.

Demands
☐ 7. You must see that the managers and team leaders have knowledge about the Work Environment Act, the Work Environment Ordinance and those provisions from The Work Environment Authority that are significant for their tasks within the systematic work environment management.

See 6 § (AFS 2001:1) about systematic work environment management.

Introduction of new employees and substitute staff
During the inspections, you were unable to show procedures for introduction that encompassed the musculoskeletal ergonomic risks that exist in your operation.
Demands

☐ 8. You must have procedures/supplement your procedures for the introduction of newly employed and substitute staff. The introduction must contain information about your systematic work with the work environment, working instructions, and procedures. It must also contain important aspects of work content, the work environment risks which occur, especially risks for musculoskeletal problems as well as how the staff should work to avoid these risks. These procedures must also apply with changes that entail a changed way to work and if an employee changes working tasks. The employee must be given the possibility to train in suitable working techniques and you should also follow up that your instructions are followed. The procedure should make clear who is responsible for what in the different parts of the introduction.

See 7 § (AFS 2001:1) about systematic work environment management and 9 § (AFS 2012:2) about physical ergonomics.

Expert help

The Work Environment Authority assesses that you do not have enough competence in your own operation to take measures to fix the demands mentioned below:

Demands

☐ 9. You must hire the occupational health and safety services or an equivalent expert help when you take steps to fulfil the demands …………

See 12 § (AFS 2001:1) about systematic work environment management.

Contribution

You have not given the safety representative and the employee the possibility of sufficiently contributing to your work with risk assessment and planning of measures regarding musculoskeletal ergonomic shortcomings.

Demands

☐ 10. You must see that the safety representative /employee received the possibility of participating in the systematic work environment through taking part in safety rounds/staff meetings/ investigations and risk assessment/planning of measures/investigating ill health, accidents and serious incidents

…………………………………………………………………………………………………………………………………………………………
See 4 § (AFS 2001:1) about systematic work environment management.

☐ 11. Other shortcomings

Follow-up visits:

<table>
<thead>
<tr>
<th>Time for follow up visits</th>
</tr>
</thead>
</table>

Reply by, at the latest:

<table>
<thead>
<tr>
<th>Date:</th>
</tr>
</thead>
</table>

You must report which steps have been taken (see 7 chapter 3 § Work Environment Act).

Labour Inspector, telephone number
Appendix 4
Experiences from employers in Mariestad and Bollebygd

"The inspection was an eye opener"

The short-term residential home Sandbäcksvägen in Mariestad has place for six children and young people with physical activity limitations. Six people work in the home, which has existed for ten years. For those who work with children with severe activity limitations, the children are the most important. Their own work environment can fall by the wayside. But an inspection at a home in Mariestad made the environment better for both the staff and the children.

Anette Karlsson, manager for IFO (individual and family care) in Mariestad’s municipality says that the municipality has run the operation for a long time and that the questions still have not cropped up, for example that the staff must have sufficient space to be able to work with lifting in a safe way. She was quite new as manager in September 2013, when The Work Environment Authority’s inspectors came to Sandbäcksvägen. Shortcomings in the systematic work environment work were stated, for example that one ‘did not sufficiently investigate the musculoskeletal ergonomic work relationships.’ Certain technical aids were missing, as was the possibility for those working solo to call for help during heavy lifting.

After the inspection, unit manager Lena Nordgren took help from the municipality occupational health services to create an action plan: ergonomic risk assessment, rebuilding the shower area, purchasing of adjustable beds as well as more technical aids and education in using them.

--There was no toilet mat and emergency sheet. Other technical aids existed, for example transfer aids, but the staff had not received education in using them in the correct way. That was something I really listened to very closely, says Anette Karlsson.

Before the inspection, she had the notion that the work environment at Sandbäcksvägen fulfilled all requirements. Afterward she looked at the home with new eyes.

--Then we saw that the premises were not completely adapted to our needs. Now we work with adaptation of things that are not directly connected to work environment, for example the placement of door handles.

--The inspection brought with it such consequences and that is positive, says Anette Karlsson.
“Now we think one more time and see the risks in another way than we did earlier”

Thus described an employer their experience during one of our inspections: Eva Lidslot is unit manager for home help services in Bollebygd municipality where 24 people help approximately 125 users. In the home care services there are many working tasks with the risk of musculoskeletal disorders: patient transfer during toilet visits, showering, dressing and undressing, bed making, shopping, transport and much else.

The inspections showed also that Bollebygd’s home help services failed in doing documented assessments of the work environment risks. An important lesson for us. Now we always do a risk assessment in dialogue together before a new user receives help; the staff, the safety representative and I, says Eva.

The staff now think more critically about work environment risks. With the help of material from The Work Environment Authority, we have compiled our own checklist to assess the risks. There are 21 questions about the risks of slipping and falling, lighting, cables, pets, smoking, threats and violence and so on.

-We go through the checklist together. If we find risks we highlight them and make an action plan, sometimes together with the physiotherapist and occupational therapist, says Eva Lidslot

-And we have a very good rehabilitation division, which does not just think about technical aids for the user, but also participates in the dialogue about work environment as well. A very good sounding board.

All staff have also received training in musculoskeletal ergonomics.
- Earlier the staff probably didn’t always think that certain movements were hard on the body, says Eva.
Our vision: Everyone wants to, and can, create a good working environment