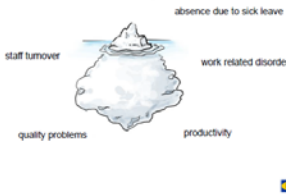
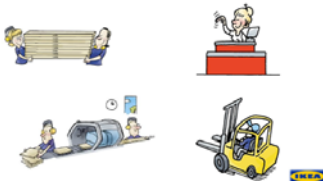


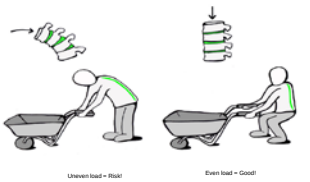
SCRIPT to the Ergonomics basic training

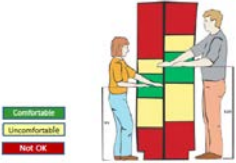
May 25, 2013.

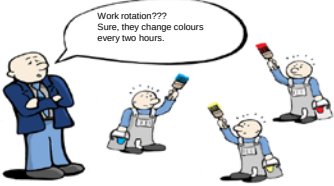
General advice to the presenter: This is a short introduction regarding Ergonomics. Engage the participants by using some of the below suggested points for discussions.
Expect the introduction to take 1 – 1,5 hrs.

Slide	Script
Ergonomics a short introduction 	Slide 1 This training aims at giving you a first introduction to the topic of ergonomics should you not already been into it or are in a need of some refreshment on the subject.
Ergonomics is the science of fitting the job and the product to the user 	Slide 2 First a short introduction to the definition of ergonomics: What does the word ergonomic stand for? Note that it says “Fit the job and the product <u>to the user</u>” and not the opposite! The human species is historically designed for a completely different environment than the one we are part of today. We are made for a physical everyday life with big variation in tasks. Muscles are made for usage. What effect will today’s life have on young people growing up today? Will we see new medical disorders? What impact on our bodies does a lack of variation at work have?
Costs of poor ergonomy 	Slide 3 The total costs due to poor ergonomic situations are much higher than we might imagine. How can we sustain the quality of our products if our co-workers are not at work or needs to be replaced? How can we keep up productivity with co-workers that are suffering from back pain or even staying at home due to their aches? Could it be a good investment to improve the overall ergonomic situation? If yes, how can we do that?
Benefits of good ergonomic workplace conditions 1. Reduced risk for long term health problems to workers. 2. Reduced risk for worker fatigue. 3. Optimised worker efficiency. 4. Reduced costs for illhealth and for low efficiency. 	Slide 4 <i>Discuss:</i> <i>Can you come to think of any other advantages of good ergonomic workplace conditions?</i> <i>Do you agree on the listed ones?</i> <i>Can you even come to think of any disadvantages with good ergonomic workplace conditions?</i>
Differences in workplaces within IKEA 	Slide 5 In our business we have a huge variety of work places. Some more heavy and physical than others but still with individual ergonomic risks and challenges. Each workplace needs to be risk assessed regarding the ergonomic factors. <i>Discuss:</i> <i>What examples of different workplaces can we find in our factory / warehouse / office / store / harbour etc.?</i>

The physical performance Heart Fitness Muscular strength Technique Motivation Psychological factors	Slide 6 Our physical ability varies between individuals and is depending on a number of factors; our fitness, our strength and of course our motivation.
Age	Slide 7 Different periods in our lives pose different strengths and / or weaknesses. Not least from a physical aspect. <i>Discuss:</i> How can age impact the physical performance? What can be done to reduce negative impact?
Gender	Slide 8 Does gender have an impact on the physical ability? In some situations yes. We will go deeper into this matter.
Relative strength age and gender	Slide 9 Around the age of 30 both men and women have their peak when it comes to the muscular strength. Men are physically stronger than women. Of course we need to consider this when we design our work places.
	Slide 10 What we lose in physical strength with age we pretty much compensate for in experience. A good mix between women and men, younger and older employees gives a flexible and vital workplace.
Your body	Slide 11 The human body is a complex system built up by different "layers". They are all contributing to our ability to move.
So much "potential" for pain	Slide 12 Treated badly, our body reacts instantly sending us painful signals.

The Spine – great potential for problems 	Slide 13 The spine is central to the skeletal system supporting the head and enclosing the spinal cord. It is made up of 33 vertebrae which are classified into five regions. When it comes to ergonomic aspects the spine is of great interest.
LBP- Lower Back Pain  Heavy physical work Sudden/ unexpected work load Rapidly/ lack of attention Carrying (time and distance) Pull and push Prolonged time in flexed position Bent position without support	Slide 14 Musculoskeletal disorders (MSDs) can affect the body's muscles, joints, tendons, ligaments and nerves. Typically, MSDs affect the back, neck, shoulders and upper limbs.
Sholder pain  Static work for too long Arm above sholder hight Working with stretched arms Repetitive work Psychological tension Working height	Slide 15 Main reasons for this kind of disorder are overload, repetitive work load and static work.
Load 	Slide 16 An uneven load on the discs means a high risk of back injury. Keep the load even by the help of good lifting technique and minimize the risk for injuries. Don't bend your back!
Not ok! 	Slide 17 <i>Discuss: What ergonomic risks do you see in this situation?</i> Big risk of back injury due to stretched arm in combination with bent back.
LBP- Lower Back Pain  Heavy physical work Sudden/ unexpected work load Rapidly/ lack of attention Carrying (time and distance) Pull and push Prolonged time in flexed position Bent position without support	Slide 18 <i>Show with some examples how you can injure your lower part of your back:</i> Heavy physical work (Pretend you are carrying something really heavy) Sudden/ unexpected work load Rapidly/ lack of attention (make a quick movement) Carrying (time and distance) Pull and push Prolonged time in flexed position Bent position without support

Sholder pain Static work for too long Arm above sholder hight Working with stretched arms Repetitive work Psychological tension Working height  	Slide 19 <i>Show with some examples how you can injure your lower part of your shoulder:</i> Static work for too long Arm above shoulder height (work with high arms). Working with stretched arms. Repetitive work (do the same movement over and over again). Psychological tension. Working height.
Static load  	Slide 20 Our head is heavy! The picture shows the risk with a bad posture. Review the whole work place. Straighten the back, sit closer to the desk, change the height of the screen and so on. <i>Discuss: What other examples of static load situations have you met at work or even in private life?</i>
Working height Unsuitable Working Height Shoulders/Neck Back Hands/ fingers  	Slide 21 <i>Discuss: What ergonomic issues can they see in the picture?</i> Comment: Working height to high, repetitive lifting and so on. Risk of injuring back, shoulders, wrists etc
Standing working  	Slide 22 Two different persons often have different needs when it comes to work height. The green area is preferred area. Above or below gets gradually worse. We need flexibility at our standing work stations. Possibility to adapt the height to different persons.
Standing workstation   + Possibility to alternate the load of different muscular groups + Bigger active space + Use of more groups of muscles + Use of bigger muscular power + More alertness when working - Fatigue and pain in lower limbs - Adjustment of the workstation difficult - Unsuitable for fine and precision works - Unsuitable when legs needed for commands	Slide 23 Is it always good to have a standing workstation? No, it depends on the type of work performed.
Sitting workstation   + Lower static and dynamic load of the body + Lower energy consumption + Higher stability, better absorption of vibrations and shocks + Better concentration capability + Suitable for fine and precise works - Monotony – decrease of attention - Limited area for working movements - Limited physical movements, stiffness - Bad posture leading to ache and other health disturbances	Slide 24 Is it always good to have a sitting workstation? No, it depends on the type of work performed. The best alternative is probably the possibility to VARY! Flexibility!

Elbow pain  Weak wrists Repetitive gripping Hard and/or durable gripping of tool Gripping big objects Throwing 	Slide 25 Elbow pain is often connected to the usage of working with hand tools or gripping big objects. Is the tool ergonomically developed? Is the tool suitable for its purpose? ...
Wrist pain  Big force Bent wrist Big force + bent wrist = big risk 	Slide 26 Is the tool ergonomically developed? Is the tool suitable for its purpose? The employer needs to provide ergonomically appropriate tools for the tasks.
Avoid extreme postures  	Slide 27 Is the tool ergonomically developed? Is the tool suitable for its purpose? Again, how do the workers use their hands?
 	Slide 28 Work rotation can really help the staff to avoid Musculoskeletal illnesses. By having more varied task we minimize the risks related to repetitive work. However, work rotation doesn't mean, move to the next work station and do exactly the same task as before!
Lifting right! • Use your legs when lifting • Keep the load close to your body  	Slide 29 Lifting technique! Use your legs when lifting. Keep the load close to your body! Avoid bending your back!
The responsibility of the Employer • Identify ergonomical risks • Adaptation of: - the work - the work place - the equipment - the work organisation • Give information about work postures and work movements • See to that work can be safely and harmlessly done • Rehabilitation 	Slide 30 It's the responsibility of the employer to secure good working conditions for the workers. Ergonomic aspects must be secured as well. Assess the work places from an ergonomic point of view; what needs to be improved. A safe and well organized workplace will contribute to a better productivity and also quality.

The responsibility of the Co-worker Contribute! - Follow given directions - Use safety devices - Apply the ergonomical knowledge that they developed - use good working technique - use lifting aids and other facilitating tools - take micro pauses/ breaks - Report potential ergonomical problems to the employer 	Slide 31 The workers must follow given directions when it comes to work safety (ergonomic aspects included). They must use the agreed safety devices and make use of their knowledge in ergonomics.
Better way of working - Swap work tasks - Pauses when needed - Adjust working speed - Swap working postures – sitting and standing - Get help when needed - Possibility to influence working methods and equipment - Training how to do it right 100020113, slide 38 	Slide 32 Summing up! How can we improve the overall ergonomic situation in our work places? Remembering that the employer has the overall responsibility!
 IWAY Chapter 8.11 The ergonomic conditions of the workplaces are assessed. A documented plan how to reduce monotonous repetitive work and work positions etc. that can cause long-term injuries is in place and acted on. 	Slide 33 IWAY Chapter 8.11; IKEA expectations and demands regarding Ergonomic issues.
Learn more To learn more about ergonomics; Study the ILO publication Ergonomic Checkpoints: Practical and easy-to-implement solutions for improving Safety, Health and Working Conditions (2010) (www.ilo.org/global/publications). and / or National programs, trainings and publications related to ergonomics. 	Slide 34 You have now got a short and quick introduction to the important subject of ergonomics. It is important for the well being of the workers, short term but even more in the longer term. It is also very important for the efficiency and productivity of the individuals as well as for the workplace. Take the advantage of learning more by studying national and international programmes related to ergonomics.
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