

PEOPLE AT WORK

All about the Health and Safety in the Warehouse Code



HEALTH AND SAFETY IN THE WAREHOUSE CODE



HEALTH AND SAFETY IN THE WAREHOUSE CODE

As initiator of the program “SZW- Zelfregulerend Gezond en Veilig Werken” (Ministry of Social Affairs and Employment- Self-regulation of Health and Safety in the workplace) we are very pleased by the decision of evofenedex and BMWT to pick up the gauntlet together with all stakeholders in the sector in order to create The Health and Safety in the Warehouse Code.

The way in which support level has been created with all the stakeholders from so different branches of business is impressive. The problems you are in being faced are not small. The danger of collision with forklift trucks (among other things) is the most common cause of accidents in the workplace.

To involve and to motivate employers and employees to go to work on this subject is of great importance. We therefore hope that many companies, supported by the Code, are being challenged to make a safer and healthier workplace. With interest we look forward to the implementation and the further roll out of the Code to all companies with warehouse. We shall follow the development closely and we wish you all the good luck!



Rob Triemstra, Deputy Director , Directorate Health and Safety in the workplace,
Dutch Ministry of Social Affairs and Employment

FOREWORD

There are well over one hundred thousand companies in the Netherlands that also have a warehouse, which is often at the heart of the company. More than 600,000 people work in these warehouses, such as reach truck drivers, forklift truck drivers, order pickers and packers.

Every year, there are at least 150 serious accidents in warehouses in the Netherlands. Furthermore, the way in which warehouse employees deal with the often heavy physical loads results in many of them having to miss work because of injury. The average age of a warehouse employee is increasing and addressing vitality and long-term employability are, therefore, essential.

Luckily, increasing attention is given to health and safety in the workplace and an increasing number of companies value safety highly. The great enthusiasm for events such as “Het Veiligste Magazijn van Nederland” (The Safest Warehouse in the Netherlands), in which many companies participate, is an indication of this increased safety awareness.

However, it appears to be difficult for companies to actually start tackling safety in their own warehouse. Guidance and good practices are difficult to find and not every approach is suitable for every company, which makes it even more difficult. You may well recognize this.

After the Dutch Ministry of Social Affairs and Employment launched the Zelfregulerend Gezond en Veilig Werken (Self-regulation of health and safety in the workplace) program two years ago, evofenedex picked up the gauntlet and, together with BMWT, we took the lead in involving employers' organizations, companies, training institutes, government authorities, the science sector and insurance companies in the creation of the Health and Safety in the Warehouse Code. It is a code that offers companies the insight, guidance and good practical examples they require to make their own warehouse a safe place to work.

It will lead to less damage, reduced absence from work, a better working atmosphere and higher efficiency. Certainly, that must appeal to any company.



evofenedex
Machiel van der Kuijl
General Manager



BMWT
Jan Hommes
Manager

PARTICIPATE IN THE HEALTH AND SAFETY IN THE WAREHOUSE CODE

Do you agree with the following?

- Health and safety in the workplace is important.
- Our company uses an RI&E assessment.
- I want to go from compliance to participation.
- I work (or will work) towards creating a clear safety culture.
- I want to work on an integral safety policy.

If so, you are ready for the next step, which is committing to the Health and Safety in the Warehouse Code to make your warehouse a truly safe place to work.

You can read all about it here and on the following website: www.cgvw.nl

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referring to website



tips



highlighted



risks

HEALTH AND SAFETY IN THE WAREHOUSE CODE

Practice has taught us that companies with a warehouse find it difficult to deal with safety in the workplace by themselves, amongst other things, because of the lack of clarity and the 'open standards' in the occupational health and safety regulations. There are no common safety standards that companies can apply and commit to and the work in a warehouse is often underexposed in occupational health and safety catalogues, as well as in the RI&E assessments of individual companies and of the various business sectors. So, to make a warehouse a truly safe place to work requires more than just satisfying the legal requirement of having an RI&E assessment. Read more on page 58

Joint agreements and clarity concerning a safe warehouse in the form of the Health and Safety in the Warehouse Code can give a new impulse to reducing the number of accidents and the level of absence from work in a warehouse. The authors of the Code, to which companies can commit themselves on a voluntary basis, do not want to introduce new rules, but rather stimulate companies to put in place an effective safety policy. The assumption is that safety and efficiency go hand in hand and that a safe warehouse is an efficient warehouse.

Chapters

The first part of the Code consists of a number of chapters on subjects that have a large influence on health and safety in a warehouse, such as conduct and culture, information and training. The underlying assumption is that companies manage the risks and prevent them instead of only observing the rules and regulations; the employer and employees work together to stimulate the correct conduct and to create awareness and an overall culture of safety.

Risk hotspots

The second part of the Health and Safety in the Warehouse Code describes ten risk hotspots in a warehouse. In these risk hotspots, as specified and defined by the participating parties, accidents regularly take place, damage regularly occurs or the physical load placed on the employees is often too high. Not every warehouse will have all ten hotspots, because not every warehouse is the same. However, the hotspots will be recognizable to every company, large or small.

Good practices

Finally, one or more good practices, which have been gathered from the participating parties and companies, are given for each hotspot. On the Code's website, www.cgvm.nl, good practices are regularly added based on input from the science sector and the business sector; the Code is a dynamic document.

Participation

Companies can participate in the Code on a voluntary basis and ensure that their warehouse remains a safe place to work by continually making improvements. The Code offers support in the form of practical tips to help create the right culture and conduct, and it places importance on employees when addressing health and safety. We also place importance on good leadership by analyzing accidents and how they are dealt with, through making joint agreements and observing good practices, which are aimed at achieving a balance between people, the process and technology. Participating companies can - if required and desired - get help from the organizations that have drawn up the Code. A company can publicly commit itself to the Code via www.cgvm.nl. By doing so, a company shows that it follows the Code's ideas and lines of approach in creating a safe warehouse. Public commitment also ensures that their commitment is guaranteed, that current employees become involved, that potential employees get a positive feel for the company, that the company distinguishes itself in the chain it is a part of and that it has a good relationship with insurance companies and the Labor Inspectorate.

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See www.cgvm.nl for more information, updates and good practices.

PARTICIPATION IN THE HEALTH AND SAFETY IN THE WAREHOUSE CODE

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FROM RI&E TO RI&E+

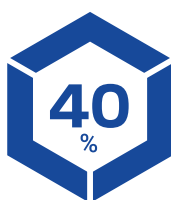
Every company that employs people is legally bound to identify the risks for its employees in the form of a Risk Identification and Evaluation assessment (RI&E).

A company that wishes to use the Code will notice that an RI&E is the first step; it forms the basis.

However, to make a warehouse a truly safe place to work requires more than just satisfying the legal requirement of having an RI&E. For that reason, the creators of the Health and Safety in the Warehouse Code strive for an RI&E+.



Only 35% of companies have an RI&E.



Only 40% of small and medium-sized companies have a proper RI&E.



Not having an RI&E can result in a fine between € 300 and € 3,000.

Awareness and compliance

The starting point is a certain level of awareness and compliance; awareness of the relevant risk hotspots in a warehouse and inclusion of them in the RI&E, while taking into consideration the applicable rules from the Occupational Health and Safety Act.

Since an RI&E is a dynamic document, which companies can start working with, some parts of it will still be under development (the awareness phase), while other parts will already meet the rules and regulations (the compliance phase). At this level, the motivation is mainly external.

Control and prevention

The next level assumes an RI&E+ and compliance, while motivation from within starts to play a role. Instead of only meeting the rules and regulations, a company tries to control and prevent risks. The employer and the employees work together to improve the conduct, increase awareness and create an integral culture of safety.

Leadership and participation

The ultimate objective is the level of leadership and participation: the employer and employees are both motivated from within to work on occupational health and safety. They believe in the added value of working safely and through their conduct, they contribute to occupational health and safety.

Route

The route to an RI&E+ is not a straight line; for many companies, the different levels cross over each other. It is possible for there to be a risk hotspot which does not yet meet the rules and regulations, while the company has a good integral safety policy. Or a company may have an excellent culture of safety, but the Code makes the company realize that it has missed a risk hotspot. A company can upgrade an RI&E to an RI&E+ at any level.

WITH THE CODE FROM RI&E TO RI&E +



Would you like to know more about an RI&E?
Then see www.rie.nl



Check whether you are on the right track at www.zelfinspectie.nl

Chapter 1

CULTURE AND CONDUCT



A company that wants to have an (integral) culture of safety in its warehouse must have a foundation that consists of a healthy organizational culture, clear objectives and core values, business interests that are well supported at every level, an eye for the employees and good communication, both top-down and bottom up. This does not only apply to large companies; it concerns principles and core values that can also be followed by small companies. A culture of safety can only be created if a company has these fundamental elements.

The manager's role

In short: the company is a reflection of the manager. People who like to take risks must accept unsafe situations and damage, and accept that they have to correct things after they have gone wrong. This is also true for warehouses. A manager's role is crucial for safety in a warehouse.

It is a misunderstanding to believe that focusing on safety leads to a reduction in productivity. Jelle de Vries, a lecturer in Supply Chain Management at the Vrije Universiteit of Amsterdam stated the following in his thesis Behavioral Operations in Logistics: *"Somebody who wants to have a safe warehouse must give the good example themselves, be able to inspire the employees and make them aware of the risks involved in their work. Guards and other investments in physical safety measures are necessary, but if the manager has other priorities and gives the wrong example, the warehouse will never be a safe place." There must be a balance with credibility, concluded De Vries. "If the manager accepts that a footpath is obstructed by a pallet, having a footpath as a safety measure is no longer credible. If the manager walks through the warehouse without wearing safety shoes or quickly climbs in a rack to get something, what can you expect from the employees?"*



80% of the accidents
in the warehouse is
caused by man itself.

A work in progress

Eighty percent of the accidents are caused by human error. It is, therefore, worthwhile influencing people's conduct, but this requires constant attention. Working to achieve a safe warehouse and safer conduct by the employees on the shopfloor, the team leaders and the management is a work in progress. They must be made aware of the risks in the work environment and of their own unsafe conduct. Awareness can be created through instruction, training, communication and an open culture of accountability. The next step is actually changing the unsafe conduct and embedding the new conduct. That also costs time and energy. There is always a risk of falling back into the old ways, particularly during busy times. After a few weeks, the new conduct becomes automatic and part of the daily routine.

Also, once the new, safer conduct has been embedded, it is still necessary to continue working on developing safe conduct, because safety is never 'finished'.

Jelle de Vries:
"Who wants to have
a safe and healthy
warehouse must set
the good example"





Tips for a good culture of safety

- Make employees responsible for making their own work area safe.
- Allow them to think about the risks and solutions, and regularly discuss these with them.
- Set rules, objectives and values together, such as 'the floor must always be kept clean', 'zero accidents' and 'we always hold each other accountable for unsafe situations'.
- Do not allow the pressure of time to be decisive for the safety policy.
- As the person in charge, always give the good example.
- Stimulate and reward safe conduct.



See www.cgvm.nl for more tips.

Chapter 2

INFORMING, INSTRUCTING AND TRAINING





An employee requires awareness, good conduct, knowledge and competence to be able to work safely. Words such as 'informing', 'instructing' and 'training' are terms that are also often used in occupational health and safety texts and information sheets. The 'self-inspection tool' from the Inspectorate SZW (Social Affairs and Employment) (www.zelfinspectie.nl) asks questions such as 'Are all your employees aware of the risks involved in their work?', 'Do your employees know how to work safely?' and 'Do your employees always work safely?'

Responsibility

Of course, the employees are also responsible for their own health and safety, but according to the law, their employer must allow them to give their own interpretation of this through, for example, training and instruction. It is not always clear what the legislator expects from employers in this regard and what is wise to do.

Although some external training courses are compulsory, such as in-house emergency and first aid (BHV) training and training for operating various hoisting and lifting equipment, information and training is more than just offering external training to employees.



Knowledge and competence

It is, in fact, quite simple: employers are expected to ensure that all their employees have sufficient knowledge and competence and that they know how to apply that knowledge and competence, so that they can safely return home at the end of the day without having put their health and safety at risk. This could include a general training period; coaching on the job, function-specific skills and competences, such as working with internal transport equipment, packing/re-packing and order picking; work agreements; regular - such as weekly - feedback about safety and incident reports.

A continuous process

Information and training is, together with external training, a continuous process from the employer towards the employee. Through repetition, the message sticks and the employees can accept their responsibility.



Highlighted: forklift truck training

There is a great deal of uncertainty over forklift truck training. For example, according to article 7.17c, paragraph 1, of the Dutch Working Conditions Decree (Arbobesluit), the employer is responsible for ensuring that the employee has specific skills for operating this piece of equipment. Paragraph 4.3.2 of occupational health and safety information sheet 14 (AI14) clearly specifies these specific skills, which are roughly the following: An employee must have general knowledge of the mobile work equipment (for example, a forklift truck) and the skills to operate it. The knowledge and the skills must be suitable for the company, such as the traffic plan, the process, the applicable rules and the RI&E assessment and the type of forklift truck that the company uses.

Furthermore, it is required that the contents of the training are recorded in writing, as well as the employee's participation. Partly for that reason, it is recommended to use an external training course. But it is not compulsory.



Tips for informing, instructing and training:

- Draw up a training plan for every function which states the knowledge and skills required for that specific function.
- Find a training institute that is in line with your own training and/or education plan. Excellent tips for forklift truck training can be found at www.cgvm.nl/selecteer-een-opleider.
- Do not forget to include safety awareness and conduct in the training and instruction.
- An external forklift truck training course is not compulsory, neither is a forklift truck certificate or a 5-year refresher course, but they all allow you to show that your employees have the specific competence.



Chapter 3

ERGONOMICS AND PHYSICAL LOADS

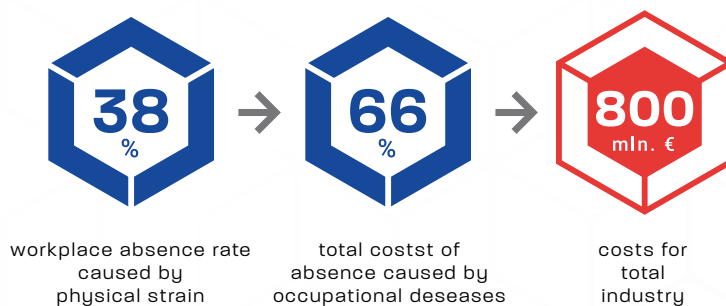
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During their work, warehouse employees regularly have to deal with heavy physical loads: the load that the body is subjected to during physical labor. When working in a warehouse, the joints and muscles of, in particular, the back, the neck and the shoulders are placed under great stress by lifting and carrying, pushing and pulling, a poor working posture (reaching, stretching, turning sideways on a forklift truck, getting on and off) and repetitive movements. It may, therefore, come as no surprise that the list of risk hotspots includes various locations where excessive physical stress can play a role.

The disadvantages of excessive physical stress

It is important for both employers and employees to give continuous attention to preventing excessive physical stress, because excessive physical stress is one of the most important causes of health complaints, (long-term) absence from work and an employee's inability to work. Roughly a third (38%) of absenteeism are related to excessive physical stress. This equals 66% of the total cost of absence from work due to occupational illnesses. The costs related to this come to around € 800 million a year for the entire industry, as calculated by TNO (Monitor Arbeid, 2015).



Furthermore, excessive physical stress is bad for the long-term employability of employees. Many employees have knee, back or hip problems before they reach the retirement age of 67, which makes them less employable.

Prevention

Luckily, it is possible to prevent excessive physical stress. In cooperation with the HR department, it is possible to ensure a culture that makes the well-being of the employees a matter of discussion. As a result, dormant psychological or physical stress can be recognized at an early stage and overcome by, for

example, rotating the work tasks and/or using ergonomic tools, but also by employing an age-conscious HR policy. Furthermore, it is important that employees know what the risks of excessive stress are, particularly for the long term. An incorrect posture, pulling and pushing in the wrong way, or continually stretching and reaching too far may lead to permanent damage over a period of ten years. Once employees are aware of the risks, they can also think of solutions and they will use the instructions they are given more effectively.

Removing the risks

A company can remove the risks of excessive physical stress in a number of different ways, varying from measures related to the process and the logistics (placing the goods to be picked in a higher rack) and the technology (better wheels under the roll containers), to measures related to the individual to improve risk awareness. Giving good work instructions (push roll containers instead of pull them) is also a measure that can be taken.





Tips for ergonomics and physical stress

- Involve the users when purchasing new transport equipment.
- Make sure the work tasks are rotated between the employees, so that heavy physical work is swapped for light work and too many repetitive movements are avoided.
- Check your own transport equipment; a simple, but efficient, way to test roll containers is to roll them down a meter-high decline. Does the roll container roll to one side? Then the wheels require maintenance.

Chapter 4

FORKLIFT TRUCKS AND ACCIDENTS

Over vuil en afval rijden is gevaarlijk en
kan dure schade veroorzaken



drive safely and never drive
over dirt and garbage



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Almost every company uses internal transport equipment to move goods, particularly in a production and warehouse environment. These types of mobile work equipment must satisfy the general standards for maintenance, inspection, load indication and skilled use, which can be found in the occupational health and safety legislation. For example, users must be at least 16 years old and at that age, they may only use a forklift truck under expert supervision after having received sufficient instruction in its use. The driver must also know how to operate it and be familiar with the company's traffic regulations.

The employer is responsible for deciding what the required expert skills are and how they must be applied. The user of the equipment, i.e. the employee, is required to care for his own safety and the safety of others and is obliged to follow the instructions. This includes using personal protective equipment, such as a seat belt, and participating in instruction and training sessions.

Accidents with forklift trucks

Forklift trucks are the fourth most common cause of accidents in the workplace. The top-5 causes of accidents involving a forklift truck and pedestrians are:

- There is no eye contact between the forklift truck driver and the pedestrian. The driver, therefore, does not see the pedestrian.
- The pedestrian is somewhere where he is not expected to be.
- Poor infrastructure. That can mean that there is no separation between pedestrians and forklift trucks, or that the infrastructure is illogical and unclear.
- Poor audiovisual contact for the pedestrian with regard to the forklift truck. He does not hear or see the forklift truck coming.
- The driver does not have the vehicle under control and cannot avoid the pedestrian or stop in time. That can be because the driver was distracted or because of his physical condition. However, it could also most definitely be due to his conduct or to not having received sufficient instruction.

According to analysis by the National Institute for Public Health and the environment consultancy RPS (*Ongevallen bij gebruik van heftrucks [Accidents when using forklift trucks], 2012-2014*), it is possible to reduce the number of accidents by 35% if all the causes are tackled at the same time.

Unsafe working method and unsafe conduct

An unsafe working method and unsafe conduct by both drivers and pedestrians appear to be important causes of accidents. However, to reduce the number of accidents, it is also necessary to look at why drivers do not work safely. The reason could be the wrong working method, underestimating the risks, too much work pressure or the wrong instructions.

Doing something about this requires more than just good training and education; it requires a good culture of safety, such as described in chapter 1. Employees must be given sufficient space to be able to work safely by, amongst other things, giving them a good work environment and suitable instructions; by having a safe infrastructure, good forklift trucks and the correct mobile work equipment and accessories; by having team leaders that have safety awareness, by setting the right example and showing safe conduct and by complying with safety regulations and enforcing the rules and the conduct.

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Would you like to know more about internal transport training? Then go to www.cgvm.nl/intertransportopleidingen or www.cgvm.nl/opleidingsplan

TOP 5 CAUSES COLLISION



173 collisions

because the driver did not see the pedestrian



154 collisions

because the pedestrian was somewhere he was not to be expected



112 collisions

because infrastructure was not logic and/or confusing



62 collisions

because the pedestrian did not hear or see the truck coming



50 collisions

because the driver could not keep control of the truck

** source see page 21*

Chapter 5

TRAFFIC PLANS



A company is not obliged to have a traffic plan, but according to the Dutch Working Conditions Act (Arbowet), employers are obliged to do everything possible to provide a safe environment for employees and visitors. This means that, at the very least, there must be traffic agreements that are known by all the employees and that are enforced. A traffic plan for both the outdoor premises and the warehouse is a handy and commonly used way of meeting this condition.

After a (near) accident in a warehouse, the organizations involved always investigate whether the company has any traffic agreements and how the infrastructure is organized. A spaghetti diagram of the traffic flows of the various parties in the warehouse quickly shows where the bottlenecks are located. Tips on how to make such a diagram can be found at www.cgvm.nl.



Traffic participants

There are different kinds of traffic participants in the outdoor area of a company: pedestrians, internal transport equipment and external transport equipment. The traffic flows of these participants must be separated from each other as much as possible. In places where this is not possible, there must be different rules in place to ensure that the work can always be carried out by the various participants without unacceptable risks being created.



Example: A footpath along loading and unloading docks

A difficult part of the traffic plan is a footpath that goes past the loading and unloading docks. A footpath close to the docks leads to a lot of crossing traffic, just like a path straight across the expedition floor. There is no ready-made solution, because a lot depends on the specific situation. The most important issue, though, is that the employees have a good view, which gives them enough time to anticipate what to do. Blue spots, or motion detection, can help in this, just as illuminating the loading area or marking a risky area with fences and posts. For example, just before every loading dock door, you can place posts or a fence along the footpath or choose a different way of marking the floor (e.g. a zebra crossing) to make employees aware of the risk of crossing directly behind the loading area.



**Do you want to draw up a traffic plan or update your current traffic plan?
Then see www.cgvm.nl/planvanaanpak for tips.**

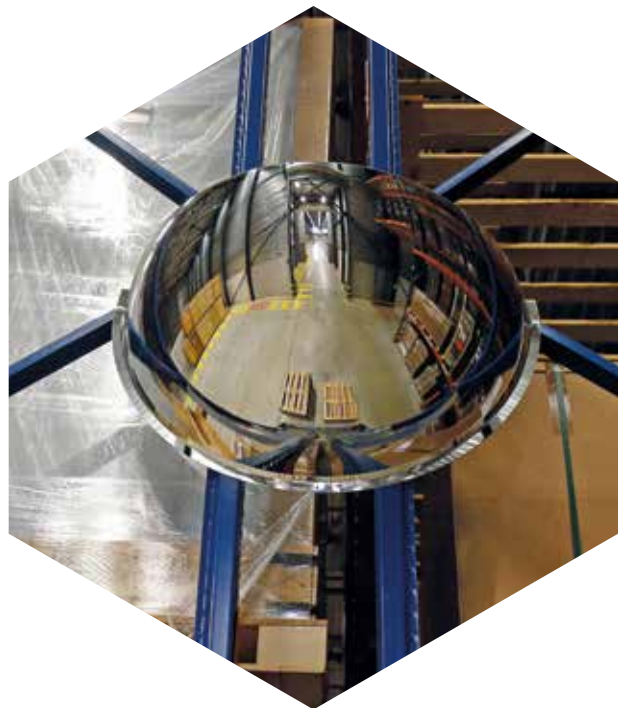
Measures

Pedestrian zones, driving zones for internal transport, work areas, storage areas and parking areas – each area requires its own measures in order to reduce the risk of an accident. This is possible by varying the maximum speed, the driving style and/or the driving direction; by improving visibility; by marking the various areas; by erecting signs and fencing; by using curved mirrors; by using signs such as red and blue spots, but mainly by making eye contact, so that the traffic participants can tell what a colleague's or visitor's next move is going to be.

All the traffic participants must have received sufficient instruction on the risks and on how to avoid risky situations. The various traffic participants must also wear the relevant personal protective equipment and wear high-visibility clothing.



Tips and recommendations for a traffic plan can be found at www.cgvm.nl/verkeersplan



Markings

The various zones can be indicated by markings which are easy to distinguish from each other, such as lines or signs. Text and infographics must be used to state what the traffic rules and rules of conduct are in the various areas, because that prevents confusion. Everybody on the company's outdoor premises or in the warehouse must be informed in advance of the traffic rules and the rules of conduct.

Efficiency

People often think that the entire layout of a warehouse must be changed when setting up a traffic plan and, in many cases, a rack must indeed be removed or placed in a different location because it obstructs the view, or a fence must be erected to protect pedestrians. But in most cases, this goes hand in hand with efficiency. If a location has good visibility and it is clear who has priority, forklift truck drivers can continue driving at a suitable speed, less mistakes are made and fewer accidents occur.



Chapter 6

PEDESTRIANS IN A WAREHOUSE



Just like pedestrians in the street, pedestrians in a warehouse are also a vulnerable group. Analysis from the Inspectorate SZW (Social Affairs and Employment) has shown that almost half (43%) of the reported accidents involving a forklift truck concern a collision with a pedestrian. Often, the pedestrian is the only person injured.

Conduct

There will almost always be pedestrians in a warehouse. They can be order pickers, but also forklift truck drivers who are not driving a forklift truck at that moment in time, suppliers or customers. How to deal with the risks varies for each group. It is important to mention that pedestrians are often totally unaware of the risks they face. In most cases, the risks are caused by their own conduct. By tackling this, many accidents can be prevented.

Responsibility

Not only forklift truck drivers, but also pedestrians are responsible for preventing accidents involving a forklift truck. Research as part of an SZW project amongst evofenedex members showed that more than half (51%) of pedestrians are of the opinion that working safely with a forklift truck is mainly the responsibility of the forklift truck driver, while 98% of forklift truck drivers say that they pay extra attention if they know that there are pedestrians in a warehouse. Analysis by RIVM/RPS, though, showed that pedestrians play an important role when confronted with a forklift truck. This has undoubtedly something to do with a pedestrian's lack of understanding of what the forklift truck driver is capable of and, in particular, of what he can see; for both parties, it is difficult to put themselves in the other person's shoes.



according to 51 % of the pedestrians the responsibility of working safely with the forklift truck is the drivers responsibility.

98 % of the forklift truck drivers is paying extra attention when they know there are pedestrians in the warehouse



It is, therefore, very important that pedestrians, regardless of their role – office worker, team leader, order picker, visitor or even the forklift truck driver as a pedestrian – have insight into the risks of their unexpected conduct. For that reason, it is necessary to help them understand what a forklift truck driver can and cannot see through instruction. And: walking straight through the middle of a warehouse to quickly collect something from the other side is always extremely dangerous.



The short film on www.cgvm.nl/zichtbaarheid clearly shows what a forklift truck driver can and cannot see. The film illustrates how difficult it is for a forklift truck driver to see pedestrians, while at the same time, the driver thinks that he has everything under control.





Tips regarding the risks for pedestrians in a warehouse

- Draw up rules of conduct, ensure that they are known by everybody and make sure the rules are enforced. Good conduct by the people in charge is half the work done.
- Footpaths? They are a good thing to have, but make sure the route is logical, so that people are not tempted to take a shortcut. Clearly mark the footpaths and include safe crossings (zebra crossings).
- Instruct visitors, give them a high-visibility vest and personal protective equipment, such as safety shoes. Do not allow visitors to walk through the warehouse unaccompanied, make them follow a fixed route within a fixed time and inform all the warehouse workers of this. Use large signs and screens for communication and regularly hold staff meetings.

Risk hotspot 1

LOADING DOCK

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Suppliers' and customers' lorries, forklift trucks that are loading and unloading the lorries: it is always busy at a loading dock. At the same time, the lorry drivers stand around waiting until it is their turn and warehouse employees walk back and forth giving instructions or checking the delivery notes. Loading docks are very dangerous hotspots.

more information about this risk-hotspot? look at www.cgvm.nl



The biggest safety risks in loading docks are:

- The lorry drives away while the forklift truck driver is still loading or unloading the lorry.
- Internal transport equipment drives into a lorry's cargo space while there is somebody already in there.
- An accident with a driver that is assisting in the work.

Solutions

To prevent a lorry driving away too soon: Remove the keys from the vehicle and only return them after all the loading/unloading work has been completed. For example, fit a hook to the loading dock door where the warehouse employee can hang the keys before he opens the door and where nobody else can reach them until the door is closed again. Placing a wedge behind the wheels of the lorry might be sufficient. Make sure the wedge is an easily noticeable color, so that it is not forgotten about. Fix wedge holders to the wall and observe the procedure to always hang the wedge back into the holder on the wall.

To prevent internal transport equipment from driving into a lorry's cargo space while there is somebody in there: Wear a high-visibility vest and have proper lighting which illuminates the work areas around the dock and which also shines into the back of the lorry.

To prevent accidents with the assisting lorry driver: Decide in advance whether it is necessary for the lorry driver to help with the loading or unloading. The company where the loading or unloading takes place is responsible for the working conditions, also for those of the driver. If help from the driver is required or even contractually agreed, make sure he or she is well informed of the safety procedures and/or rules.

Good practices

Technische Unie assigns an area to drivers that unload their own lorry. That area is marked off by tape. By using tape, it is easy to make the area larger or smaller, depending on the size of the shipment. The driver may only unload the shipment in the assigned area. Nobody else may enter the area. The driver may only exit the area once he has completed his work and the person in charge of the unloading work has given the all clear signal. The person in charge of the unloading work then removes the tape, which is a sign for the warehouse employees that it is safe to remove the shipment. Of course, everybody must have been informed of this measure.

Risk hotspot 2

AISLES

36



There is often too little space in an aisle, while a lot of work has to be carried out there, such as picking orders, cleaning and replenishing. An aisle often also acts as a walking route or a driving route to the next hall.

more information about this risk-hotspot? look at www.cgvm.nl



The biggest safety risks in aisles are:

- Collisions between forklift trucks and pedestrians.
- Tripping over waste, such as packing materials.

Solutions

To prevent collisions between pedestrians and forklift trucks: Mark the floor so that it is clear what a certain area is designated for. For example, green paint can be used for a walking route and yellow paint can be used to indicate a forklift truck route. Curved mirrors are very useful for improving the safety of situations with poor visibility. Good lighting also helps. Hang the lights in the middle of an aisle and not above a rack. When using motion-sensitive lighting, it is recommended to adjust the reaction time and the reaction distance so that the lighting is already on when a worker arrives in the aisle, either walking or driving a forklift truck or a reach truck.

To prevent tripping over waste: Place waste bins in an aisle, for example, in free picking locations or at the end of a rack, so that workers never have to walk far to deposit waste.

Good practices

In a warehouse, everything had been tried to keep the aisles clean, but without success. One of the employees was so annoyed that he said he would be responsible for three aisles if the other employees took responsibility for the other aisles. The manager thought it was a good idea and decided to make things more interesting by awarding the team with a cake at the end of the week if the aisles were clean. There was still some rubbish on the floor, every now and then, but the employees started to correct each other if they thought that somebody was not doing their best to keep the aisles clean. After all, they risked losing their cake.



Risk hotspot 3

RACKS

38



In most warehouses, the (pallets with) goods are stored in racks.

more information about this risk-hotspot? look at www.cgvm.nl



The biggest safety risks for racks are:

- Collisions involving internal transport equipment, causing damage with all the consequences involved, sometimes even long-term consequences.
- Pallets that fall off the other side of the rack because they have not been placed on the rack correctly. This is very dangerous for employees who are working in the other aisle.

Solutions

To prevent driving into racks: Make sure the driver of internal transport equipment is well trained before he is allowed to drive the vehicle. Use collision protection on the racks, so that any damage is limited if things do go wrong. Regularly check the racks for collision damage. Also make sure any damage is always reported. An open culture is extremely important for this, so that employees are not scared to admit they have driven into a rack with a forklift truck.

To prevent loads from falling: Install cameras on the forks of reach trucks so that a driver can see what he is doing. Or hang chains from the ceiling, which will move when touched by a load.

Good practices

A company believed that reporting damage should be rewarded, not punished. This company approached this issue in a very professional manner and developed software to show where the most damage occurred – this can also easily be done on a whiteboard using a floorplan and a pen – and a large number of team members felt that it was their duty to add new damage reports. They also thought about ways to prevent damage in the places where it occurred most frequently and where a simple solution was possible. After three months, the number of damage incidents at the corners of racks had been considerably reduced.

Another company introduced weekly inspections and a rotating safety officer (together with a person in charge). This led to a widely accepted feeling of responsibility and a keener eye for unsafe situations.

A number of other companies have installed fall protection in the form of grilles to prevent products from falling on the floor. These grilles can be attached to the front, rear and bottom of pallet storage locations.

Risk hotspot 4

DOORWAYS

40



The situation is often unclear for traffic – pedestrians and vehicles – that enters a warehouse from a different location.

more information about this risk-hotspot? look at www.cgvm.nl



The biggest safety risks for doorways are:

- A collision between pedestrians and a forklift truck.
- A collision between two forklift trucks.

Solutions

To prevent collisions between pedestrians and a forklift truck: Have a separate door for pedestrians, preferably in the middle of the footpath, so that pedestrians are not inclined to walk through a doorway used by forklift trucks. Instruct people, make them responsible for their own actions and enforce the rules for the use of the various doors. Erect fencing parallel to the transport route, so that pedestrians are protected. Have the fencing continue for a meter further on the left-hand and right-hand sides of a door or aisle to prevent pedestrians unintentionally walking into the path of a forklift truck.

To prevent collisions between forklift trucks: Make sure the doors have transparent panels, which give the driver a good view of the situation in the space that he is entering. Curved mirrors enlarge the driver's view. Make driving routes narrower at the doorway using raised collision protection so as to reduce the speed. Introduce traffic rules that state who has priority and what the maximum speed is. Give good instructions. Make sure everybody knows the rules and enforce them.

Good practices

At some company, forklift trucks regularly drove through doorways at a high speed. This led to dangerous and unclear situations. They introduced a practical and effective solution to this problem: a mobile narrowing of the route. Since the drivers are obliged to reduce their speed, the chance of unexpected hazardous situations has been considerably reduced. However, instruction and inspections remain necessary in order to prevent the employees from falling back into their old ways.



Risk hotspot 5

INTERSECTIONS

42



The routes for forklift trucks and paths for pedestrians can cross each other in a warehouse and that sometimes results in a dangerous situation.

more information about this risk-hotspot? look at www.cgvm.nl



The biggest risk at an intersection is:

- A collision between a forklift truck and a pedestrian.

Solutions

To prevent collisions between forklift trucks and pedestrians and between two forklift trucks: Draw up traffic rules and make sure everybody knows them, including temporary employees and foreigners, for whom you can use pictograms. Continue to provide instruction and ensure the rules are enforced. Support this with aids, such as mirrors, lighting, markings, warning signs and traffic signs.

Good practices

One company has installed blue spots on all of its reach trucks, so that they are easily recognizable a long distance away.

Another company does not fully stock the section at the end of a rack, so that drivers have a better view around the ends of the racks.



Risk hotspot 6

WALKING AND DRIVING ROUTES

44



In a warehouse, pedestrians and internal transport equipment share the same space. To prevent accidents, the walking and driving routes must be clearly separated from each other.

more information about this risk-hotspot? look at www.cgvm.nl



The biggest risk for walking and driving routes is:

- A collision between a pedestrian and a forklift truck.

Solutions

To prevent collisions between a pedestrian and a forklift truck: A relatively simple measure is to put markings on the floor so that the difference between a driving route and a walking route is clear. Where the routes cross each other, it is recommended to erect a barrier, such as a fence or collision protection. Reflective clothing helps to make pedestrians more easily visible and flashing lights, sound signals and blue or red spots make forklift trucks more easily visible and audible. Curved mirrors on walls and racks ensure that employees see each other more easily. All employees must be well instructed on the rules and the rules must also be enforced.

Good practices

One company has colored floor markings throughout its premises: green for walking routes and yellow for driving routes. (See www.cgvm.nl for more tips on using markings.)

Another company has chosen to erect physical barriers at all corners with poor visibility. These include raised edges, collision protection and fencing. For the walking and driving routes in the outdoor area, the company has developed the 'I see you and you see me' procedure: employees must make eye contact and acknowledge that by a nod of the head or a thumbs up, before they assume priority according to the applicable traffic rules. This has turned out to be of great value at intersections. The company emphasizes that good communication and enforcing the rules are essential for a good result.



Risk hotspot 7

PACKING AND REPACKING STATIONS



Incoming or outgoing shipments are unpacked, packed or repacked in packing and repacking stations. The work on packing and repacking stations includes lifting heavy loads.

more information about this risk-hotspot? look at www.cgvm.nl



Most important risks at packing- and repackingstations are:

- Physical stress due to a lot of manual lifting, repacking and moving loads.
- Collisions with internal transport equipment.

Solutions

To prevent physical stress: Teach employees how to lift loads correctly and inform them of their own responsibility and the long-term consequences of lifting loads incorrectly. Stimulate the correct use of the correct aids. Check the work area: is the packing/repacking table at the correct height? Are the goods easily reachable? Make sure there is enough space to move around, so that employees can walk around the goods and do not have to stretch too much. If possible, have two people lift heavy boxes.

To prevent collisions with internal transport equipment: Make sure the work area is in a good location; not too close to a driving route and protected by, for example, fencing.

Good practices

There was a high level of absence from work due to physical stress in the Kawasaki warehouse. The first step to a lower level of absence from work was to make the employees aware of the specific occupational risks for their own body, especially in the long term. They now have a better understanding of the risks and have become motivated to address the problems and come up with ideas to improve the situation. Since their employer clearly took their problems seriously, the employees were stimulated to observe the instructions. As a result of this approach, the level of absence from work has fallen by 50% over a period of two years.

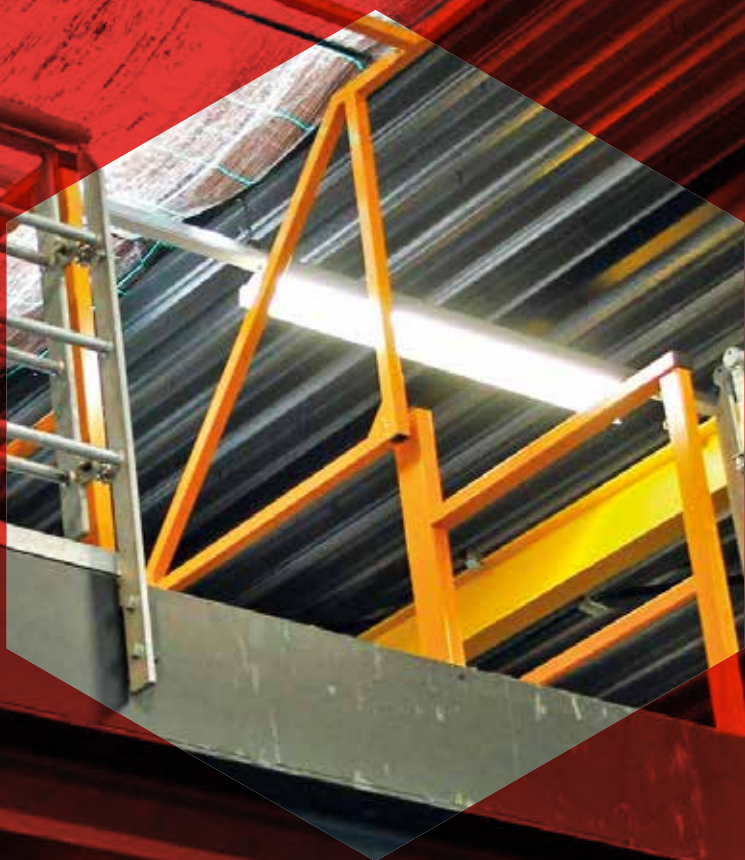


More examples of good practices to reduce physical stress can be found at www.cgvm.nl



Risk hotspot 8

MEZZANINE



48

A mezzanine is a self-supporting floor between two stories of a building. They create extra storage space for a company.

more information about this risk-hotspot? look at www.cgvm.nl



Most important risks of the mezzanine are:

- Collapse because too much weight is placed on the floor or because the floor is not maintained well enough.
- Employees or goods falling from the mezzanine.
- Tripping or slipping on the steps.

Solutions

To prevent the mezzanine from collapsing: Make sure the maximum load (in kilograms per square meter) is clearly visible to every employee by, for example, stating this on the stairs to the mezzanine. The load must be regularly checked by an expert in the company. The floor must be inspected once a year by an external expert in accordance with standard NPR 5055.

To prevent employees from falling from the mezzanine: Protect the locations where goods are placed or removed from with tilt gates instead of chains and individual fences, because there is a good chance that an employee will accidentally leave them open. Make sure there is sufficient space at the locations where goods are placed or removed from and around the steps, so that employees can move around easily.

To prevent employees from tripping or slipping: Make sure the area is kept neat and tidy and that the steps and routes are always easily accessible and are not obstructed. Place an antislip coating on the steps.

Good practices

A technical wholesaler decided to construct a mezzanine for the storage of its slow-moving goods when it expanded its range of products. Through time, though, almost every order included an item that had to be collected from the mezzanine. The employees thought it took too much work placing the products on a pallet every time and using a forklift truck to collect the goods from the mezzanine order by order. So, employees walked down the steps with the product under their arm. A number of employee missed a step and fell. As a result, there was a high level of absence from work. The solution was very easy: partial orders were created in the WMS for the mezzanine zone and only one employee had to go up to the mezzanine once every two hours or so. The partial orders were collected in batches and placed on a pallet, after which a forklift truck removed the pallet from a tilt gate and took the load to the consolidation zone in the expedition area. A webshop rented a warehouse with a mezzanine, which it thought would be a great advantage. It very quickly found out, though, that the floor's weight-bearing strength was insufficient. To prevent it from collapsing, the forklift truck was equipped with Bluetooth weight sensors, so that the forklift truck driver knows exactly what weight he can place on the mezzanine. Furthermore, floor markings are used to make sure the load is evenly distributed.

Risk hotspot 9

BATTERY CHARGING STATION



The batteries in electric internal transport resources must be regularly charged. Most companies have a battery charging station for this purpose.

more information about this risk-hotspot? look at www.cgvm.nl



The biggest risks for battery charging stations are:

- Damaged cable insulation.
- Production of oxyhydrogen (risk of explosion).
- Acid on hands and/or in eyes.

Solutions

To prevent the cable insulation from becoming damaged: Make sure there are clear procedures for tidying up the cables after use and enforce these rules. Certainly do not leave the cables on the floor. A forklift truck may drive over them and damage them. Introduce a rule that only well trained employees are allowed to connect and disconnect the charging cables and regularly check the quality of the cables.

To prevent the production of oxyhydrogen: Hydrogen gas is produced when batteries are charged. If this gas comes into contact with oxygen, the extremely explosive oxyhydrogen gas can be produced. The area where the batteries are charged must, therefore, be well ventilated. It is recommended to ask the supplier whether the intended location meets the requirements as far as this is concerned.

To prevent employees getting acid on their hands or in their eyes: Make sure safety gloves and face protection are available in a fixed location in the battery charging station and make it compulsory to wear them. Also install an eye shower, so that employees can rinse their eyes in the unlikely event that something does go wrong.

Good practices

After a number of incidents, which luckily ended well, a company decided to take action. Two employees were put in charge of changing the batteries. They received instruction on how to do this. A list was drawn up stating the compulsory work tasks and the matters that demanded attention. They also had to sign this list. The manager now also regularly checks the battery charging area, also to check whether all the accessories are present and work correctly. It has been agreed with all the employees that they report it if something is missing or if they see that something is not quite right. Since the company introduced these measures, there have been no more incidents.

Risk hotspot 10

COMPANY PREMISES

52



There are many groups of traffic participants on company premises, such as pedestrians, van drivers, lorry drivers and forklift truck drivers.

more information about this risk-hotspot? look at www.cgvm.nl



The biggest risks on company premises are:

- A collision involving a forklift truck and a van or lorry..
- A collision between a pedestrian and a vehicle.

Solutions

To prevent a collision between a forklift truck and a van or lorry: Draw up a traffic plan for the company premises, make sure everybody is familiar with the rules – including visitors – and enforce the rules. Use road markings to separate the various traffic routes from each other, as well as to mark out areas where goods may be left and to mark out areas where goods must not be left. Appoint somebody to supervise the company premises. Implement the rule that lorry drivers must remain with their vehicle or make sure there is a safe route for them to follow to go to the employees in charge of loading or unloading the goods. Do not stack pallets or goods too high in places where they obstruct the view.

To prevent a collision between a pedestrian and a vehicle: Make sure that pedestrian routes and driving routes are separated from each other and use different colors to mark them.

Good practices

A company found it difficult to give instructions to drivers who did not speak English, Dutch or German. The first step they took was to use pictograms to explain the rules and to use an infographic to clearly explain the information. This approach was successful, but the company thought it could be improved further. An additional solution was found in cooperation with the Purchasing department: instructions were sent with every order and the supplier who received them was obliged to forward them to the logistic supplier in the relevant language. Finally, the logistic supplier had to sign the rules to confirm that they had been read and understood, even before the goods were collected. The instructions are now available in many different languages.

There was not enough space on a company's premises, which led to unsafe situations because of a restricted view of the premises and the many different traffic flows that criss-crossed each other. Together with an advisor, all the various goods flows were mapped out on a spaghetti diagram, as was the storage needs in the outdoor areas. The solution was simple: by implementing a one-way system, space which was otherwise required for two-way traffic was freed up. Also, the maximum storage height was reduced in areas with poor visibility.

GOOD PRACTICES

The warehouses that have won “The Safest Warehouse in the Netherlands” award are exemplary warehouses in a number of different ways. They are safe, they have a high level of productivity, they make fewer mistakes and they have a low level of absence from work. Furthermore, they have a larger percentage of employees that are happy, which results in fewer employees leaving and, therefore, in a more stable organization. As you can see, safety has many advantages, certainly in a business-economics sense.

What is particularly striking for these companies is:

- They are aware that a clean and tidy warehouse is a good basis for safety. Almost every winner of The Safest Warehouse in the Netherlands has consciously or unconsciously implemented the 5S method, which is a method intended for improving an organization with the workplace as the main point of attention.
- In a safe warehouse, damage and accidents are analyzed and evaluated. The winning companies all have a damage and accident registration system, whether it is an Excel worksheet or an advanced computerized system.
- The person who caused the damage is addressed, but does not have to pay for the damage.

2015 prize winners



Akzo Nobel Decorative Coatings

Paint producer Akzo Nobel Decorative Coatings in Groot-Ammers uses the 'halo principle' for forklift trucks and ensures that pedestrians also know this principle: within the yellow zone, an area of 2 meters around a forklift truck, eye contact and communication between the driver and the pedestrian are compulsory and the driver must reduce his speed to 5 km/h. In the red zone, an area of 1 meter around a forklift truck, the load must be placed on the ground and the driver must hold his hands in the air to make it clear to the pedestrian that he will not make any unexpected movements.



Ceva Logistics Netherlands

Logistics service provider Ceva Logistics Netherlands in Oud Gastel places a lot of responsibility on the employees. As a result, the employees are more focused on safety. 'Direct-correct' boards are hung up in various locations. They are boards on which employees can report any dangerous situation that must be corrected immediately. As an extension of this approach to safety, the manager discusses a new safety topic with the employees each month.



Albert Heijn

Supermarket group Albert Heijn has brought safety to the constant attention of the employees in a fun way by holding 'Forklift Truck Heroes' competitions in every distribution center. In the spring, two finalists battled it out for the trophy. The winner, Richard Jansen, a forklift truck driver in the distribution center in Zwolle said, "New forklift truck drivers wear a yellow high-visibility vest, so that they are more easily recognizable. This way, colleagues are able to take their low level of experience into consideration. They can do so by being more patient, keeping more distance between them or offering them help." Marco van Grinsven, Vice President Logistics at Albert Heijn, said the following about Forklift Truck Heroes: "The combination of a serious matter and the element of fun raises the level of skill and safety."

2014 prize winners



Valeo Service Benelux

At Valeo Service Benelux, a wholesaler in the automotive sector, everybody is encouraged to think about safety and come up with ideas. For that reason, an 'improvement' board has been hung up in the warehouse. This is a bulletin board on which all warehouse employees can make suggestions to improve safety. The pink color of the paper ensures they are noticed. Every employee is encouraged to submit seven suggestions every three months and they are rewarded if they manage to do so. The suggestions are always discussed seriously by the management and, if possible, introduced.



NedTrain

At NedTrain in Berkel-Enschot, a maintenance company for railway equipment, inspection rounds are held and the employees address each other regarding unsafe situations. A safety lunch is held every six weeks. To make it easier to pick heavy products, reach trucks are used to bring the pallets forwards as close as possible to the expedition area. Also, the height of an employee's work area is adjusted to the height of the individual employee.

2013 prize winners



Abbott Biologicals

Characteristic of the culture at Abbott Biologicals in Olst, a producer of pharmaceutical products, is that a team formed of employees from both warehouses has set up and implemented the safety policy. They continually come up with new ideas to improve safety and the logistics processes. Not handed down from the top, but supported and implemented by the organization itself. A 'stand-up meeting' is held every day at a large bulletin board on which the points of attention are given and that is updated every day. The employees are aware of the risks; they are regularly tested on them during the safety inspection rounds. The day's work is divided amongst the employees every new day and, as a result, the different work tasks are naturally rotated amongst the employees.



Jabil Circuit Netherlands

In order to change its culture, Jabil Circuit Netherlands in Venray, a producer of electronic equipment, developed a training program for its forklift truck drivers. New employees, including temporary employees, receive theory training that is in keeping with the type of equipment that they are going to operate. They are also tested at the end of the training. This has considerably improved safety. They stated that changing the culture is a long-term process.

2012 prize winners



Brabant Philips Lighting distribution center

By making the rules and traffic regulations easily visible on signs and by clearly marking the floor and walls of the warehouse of Philips Lighting in Eindhoven, every employee is constantly reminded of the need to work safely. Visual aids can greatly support the safety approach used.



Geodis Logistics Netherlands

Logistics service provider Geodis Logistics Netherlands in Venlo developed its own awareness campaign. A number of self-chosen themes to do with working conditions and safety are brought to the employees' attention in a stimulating way using, for example, posters and toolbox talks (for the foremen). For each theme, the employees are further motivated using gadgets and workshops. A permanent character of this campaign is the self-developed mascot VIC (Veiligheid Is Cruciaal=Safety is Crucial). To ensure that attention for a certain theme is not lost, the themes are repeated every year in a new format.

Kloosterboer



Daalimpex Velsen

The forklift truck drivers and managers of the logistics service provider Daalimpex in Velsen have decided to set up a joint safety team, in which every department is represented, in order to get broader support for the safety program.

Quotes from Forklift Truck Heroes

The boss

"Safety can also be fun. For example, we have started safety bingo. For every accident-free day, we draw a bingo ball the following day."

The warehouse manager

"When drawing up the procedures and work instructions, I ask for help from experienced workers, the process specialists. They know better than anybody how to work quickly and productively without compromising safety and quality. Together, we look for the most practical solution through a combination of theory and practice."

The Occupational Health and Safety Act (Arbowet) says a lot, but it is sometimes difficult to translate it into practice. For example, when setting up procedures and specific work instructions. Where possible, I involve experienced employees. We call them process specialists. They know how to work quickly and productively without compromising safety and quality."

I provide the theory and they provide the practical knowledge. We then look for the most practical solution. This is the ideal way to draw up the occupational health and safety guidelines.”

The warehouse employee

The people who give valuable tips are rewarded. Thanks to Jan’s idea, a warehouse employee, the lowest shelves of the racks are now placed higher. That makes it easier to clean under them without the tires of the reach trucks damaging the shelves.

Warehouse employee Jan: “It is not only the forklift trucks that have to be in good working order. The racks also have to be checked for damage. A dent in a rack can easily reduce the bearing capacity by 50%.”

The forklift truck hero

“In order to avoid accidents, I need to have a good view from the truck. That is why I had the computer terminal on my truck moved to another position. It used to hang above me on my right-hand side. It is now located on the side of my truck. This gives me a much better view.”

The forklift truck hero

“The work atmosphere is good here. We respect each other and the work is varied. That means that I enjoy my work. I am not distracted by irritations or conflicts and I can concentrate better. Good concentration is important if you want to work safely.”

FREQUENTLY ASKED QUESTIONS

Forklift truck

Must a forklift truck driver have received training?

According to article 7.17c, paragraph 1, of the Dutch Working Conditions Decree (Arbobesluit), an employee must have specific skills for operating this piece of work equipment and the employer is responsible for ensuring the driver receives that training. Therefore, a forklift truck driver must indeed have received training. The user must know how to operate the machine and must be familiar with the nature of the work. In short, he must have received demonstrable machine-related and work-related training. This means that he must have received training for the machine he is going to use and a certificate is a way to prove this.

Whether a driver is competent can be demonstrated by his professional skills, such as positioning a forklift truck, positioning a pallet in a rack and loading a lorry, but also by his theoretical knowledge and whether he knows the traffic and priority rules in a company, such as the maximum speed, the driving routes and the maintenance responsibilities.

The Health and Safety in the Warehouse Code places extra emphasis on conduct; how aware of safety is the driver and has he been trained in this regard?

When must the forklift truck training be repeated?

There is no legal time period within which the training must be repeated. A large percentage of the industry and most training institutes, though, support the unwritten rule that training for internal transport equipment has to be repeated every five years in order to keep knowledge, safety awareness and skills at the desired level.

What is the employer's responsibility in this?

It is a shared responsibility between the employer and the employee: in order for the work to be carried out safely, the employer is obliged to provide instruction and the employee must participate in the instruction sessions. The employer decides in which form the instruction is given and facilitates the employee in taking part.

What are suitable instructions?

Instructions are suitable if they cover all aspects which allow a person to carry out their work correctly. It is very important that a company does not limit itself to merely providing information, but that it tests the employee and monitors compliance.

May the training for internal transport equipment be given by the company itself?

Yes, that is permitted. However, training internal transport equipment operators is skilled work and should not be given by just anybody. The instructor must have followed a suitable and expert instruction course before he can work as a company instructor and train the company's employees.

Can an employee who has a forklift truck certificate also drive other transport equipment?

No, he or she cannot simply drive other transport equipment. An employee must have received machine-specific and work-specific training. It is also important that transport equipment is not used for purposes other than the ones for which it has been designed. That is why training and enforcing the rules is so important. If transport equipment is used for purposes other than those intended, it is possible that this will cause other risks, for which no safety measures have been taken. An example of improper use of a forklift truck is lifting people on the forks.

Is there a maximum speed for forklift trucks?

The maximum speed for forklift trucks must be in keeping with the work environment and must in no way cause a danger. Forklift trucks with solid tires have a maximum speed of 6 km/h. Forklift trucks with pneumatic tires have a maximum speed of 16 km/h. Forklift trucks may only be driven at walking pace when driven in reverse.

From which age is it permitted to drive a forklift truck?

You may drive a forklift truck from the age of 16, but until the age of 18, a forklift truck driver may only drive the vehicle under expert supervision. This is because, as a result of a lack of experience, this age group forms a potential risk. Even if a 16-year-old or 17-year-old has received training in how to operate a forklift truck, it is not recommended to allow them to work unsupervised. 0

Expert supervision should remove any risks involved in the work. The expert supervision must be organized in such a way that it prevents the young workers from encountering the risks that have been identified by the RI&E as required by the Occupational Health and Safety Act.

Traffic plan

Is a traffic plan compulsory?

A traffic plan is a way for an employer to meet the obligation to provide a safe working environment. A traffic plan is not explicitly specified by law, but it plays an essential role in guaranteeing safety in every working environment where there is (internal) transport equipment.

What are the rules concerning floor markings?

The Occupational Health and Safety Act does not include any specific rules concerning markings on the floor, also not with regard to, for example, the color or the type of material to be used. Good floor lines and floor markings are, however, very important. They bring structure and order to a warehouse. A structured work area improves visibility, calm and focus. An important side effect is that, in time, it also increases productivity.

Personal protective equipment

Are safety shoes always compulsory?

If, from the RI&E for a warehouse where there are both pedestrians and internal transport equipment, it appears that there is a risk of feet being run over or there is a risk that items may fall out of the racks, then it is compulsory to wear safety shoes. Note: there are no exceptions to this rule and the rule also applies to office staff, visitors or somebody who "quickly wants to grab" something from the warehouse.

Are safety shoes compulsory on walking routes?

In principle, there is no obligation. Aside from the fact that a forklift truck cannot be held back by a line on the floor, it is highly recommended to make safety shoes in a warehouse compulsory and to facilitate this.

Is it compulsory to wear a high-visibility vest in a warehouse?

There is no legal obligation to wear a high-visibility vest, but it is an essential addition towards the creation of a safe warehouse. Do not forget visitors and temporary employees.

Is it compulsory to wear a seat belt when driving internal transport equipment?

If the internal transport equipment has a seat belt, then the employee is obliged to wear it. If a driver must regularly get off a forklift truck, the use of a seat belt

may be unhandy and interfere with the work. It is then worthwhile trying to come up with a different measure to minimize the risk of becoming trapped under the forklift truck if it tips over. You could use brackets or a barrier, or equip the forklift truck with a cabin. This consideration should form part of the RI&E.

Inspecting racks

Is it compulsory to inspect racks?

According to the Dutch Working Conditions Decree (Arbobesluit), work equipment - which includes racks - must be inspected before it is used and also after being damaged; for example, after being driven into by a forklift truck.

The employer is responsible for providing a safe work area. It is, therefore, recommended to regularly have the racks in a warehouse where transport equipment is used inspected by an expert. After a rack has been damaged or involved in a collision, the employer must assess whether the work can still be carried out safely. If that is not possible, the employer must take action and consult an expert. That can be an inspection institute or the company that supplied the racks.

May a company's own employee inspect racks?

Yes, as long as the employee has been expertly and demonstrably trained to do so.

Colophon

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The Code is an addition to, and an interpretation of legal obligations. It will not replace these legal obligations, nor will it replace binding agreements in occupational Health and Safety Catalogues or RI&E instruments for your sector. In this inventory of Good Practises, we have, among the input of the participating stakeholders, industry and science, used several good examples from the approved occupational Health and Safety Catalogues. Also we used sites as "Arboportaal", "OSHA", "STL Werkt" and "HeftruckHelden" and the Handreiking Intern Transport en Logistiek".



HEALTH AND SAFETY IN THE WAREHOUSE CODE