## APPLICATION OF OCCUPATIONAL SAFETY MEASURES IN THE GROCERY STORES

#### Research paper

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### Abstract

The aim of the article is to show how and for what reasons safety work measures are applied in the grocery stores. Research was conducted through an online survey (163 respondents). 42% of respondents know the answers to questions related to the safety rules at work. 50% of respondents do not know who oversees controlling the implementation of safety measures at work. By summarizing the results related to personal protective equipment, employees largely know how to wear prescribed work shoes and clothing full-time, while a smaller part actually wears them. Further research should be carried out to educate employees about the importance of applying measures for their own safety and the safety of all people in their working environment.

Key words: occupational safety, measures, application, trade

### 1. Introduction

Occupational safety as a set of measures, principles and regulations serves to protect employees from possible harmful effects of work. In order to reach sufficient safety level, it is necessary to know the measures of safety at work in order to apply them. In the foreword to the book "Law on Occupational Safety with Comments and Interpretations" (Šokčević, 2014), Ucur considers occupational safety to be the right and obligation of all entities that participate at that time (relationship) regardless of "affiliation" in accordance with the provisions of Article 14 of the Constitution of the Republic of Croatia. A healthy work environment is the foundation for any successful business. In order to ensure a healthy working environment, it is necessary to implement safety at work based on the general principles of prevention, assess the risks, and certainly implement measures to reduce or eliminate them. According to Zanos (2020), the purpose and goal of occupational safety is achieved primarily by detecting and eliminating hazards that in certain circumstances may cause injury at work, occupational disease or other disease related to work and to provide all persons at work with working conditions without danger to life and health.

Back in 1919, the International Labor Organization (ILO) was founded, dedicated to achieving equal opportunities for women and men to work honestly and productively in conditions of freedom, equality, security and human dignity, thus promoting labor rights, employment opportunities and improved social protection as well as strengthening social dialogue. Conventions and recommendations are the ILO standard, achieving international influence and harmonizing all ILO member countries in terms of work. According to the member states, the organization's recommendations are not mandatory for implementation, but they are largely related to labor issues, provide instructions and thus contribute to easier navigation in national policy and measures to be taken, is facilitate the implementation of a specific convention.

Member States of the European Union may adopt stricter rules to protect workers, but their legislation must be in line with minimum standards. It is precisely because of this possibility that national legislations differ in terms of safety and health throughout Europe. (European Agency for Safety and Health at Work, 2021). OSHA is part of the United States Department of Labor. The OSHA Administrator is the Assistant Minister for Occupational Safety and Health. OSHA is an organization created to ensure safe and healthy conditions for workers, which is achieved by setting and enforcing standards and providing training, information, education and assistance. (United States Department of Labor, 2015).

The aim of this paper is to examine the level of understanding and level of application of occupational safety measures in the grocery stores. Trade as an activity has a daily role in the lives of all the inhabitants of the Earth. Regardless of the method of purchase, the products we buy either physically or online need to be produced, packaged, prepared, sold. Given that trade is ubiquitous in everyday life and employs the largest number of employees, or about 15% of the total number of employees indefinitely in Croatia, the application of occupational safety measures is extremely important to preserve the health and safety of many employees.

According to Jezerčić (2021), the total number of injuries at work has decreased in the past five years due to the lower intensity of work and travel in certain activities during the Covid crisis. According to official data from the Croatian Institute of Public Health (table 1), is the service for occupational medicine in the Republic of Croatia in 2020, 8.13% of employees in service and trade occupations had injuries at work. Given that the percentage of injuries is high and taking into account that not all injuries that occur are reported or not classified as injuries at work, we launched a study on the application of occupational safety measures in the store.

Table 1.Number of reported injuries and injury rate per 1000 employees at the place of work by<br/>occupation (according to NKZ-10)

NKZ 10 - genus	At work (N)	On-the-job injuries at work rate per 1000 employees
0 Military occupations	149	10.46
1 Legislators, officials, and directors	55	0.66
2 Scientists, engineers, and experts	653	2.13
<b>3</b> Technicians and professional associates	1196	5.00
4 Administrative clerks	800	5.00
5 Service and trade occupations	2236	8.13
<b>6</b> Farmers, foresters, fishermen, hunters	272	3.80
7 Occupations in crafts and individual production	2584	12.71
<b>8</b> Plant and machinery operators, industrial manufacturers, and product assemblers	1554	9.09
9 Simple occupations	2837	22.12

Every employer and employee are obliged to take care of work-related safety.

In order to guarantee workers safety at work, the Labor Act (NN 2014) prescribes measures that every employer must comply with.

The specific aim of this research is to indicate the level of education and training of workers in trade in accordance with their age, gender, expertise and job.

The basic hypotheses are stated in the research:

1- Workers who are not sufficiently educated are less likely to comply with the measure.

2-Measures are not applied due to insufficient control.

3-Personal protective equipment is not used due to the prejudice that it makes it difficult to perform work.

In accordance with the Croatian Institute for Public Health, statistics and data on the number of injuries at work in service and trade occupations, hypotheses were previously set for the online survey, which will confirm the research at the end of the survey as correct, which would mean that the cause of injuries at work is insufficient education and lack of control over the application of occupational safety measures.

#### 2. Methods

To examine the application of occupational safety measures in the grocery stores, an online questionnaire was created to check their knowledge about occupational safety and its purpose. The study was conducted among 163 respondents (74% female). Basic descriptive statistics was used in order to describe the received answers. Regarding to the age of the respondents, the largest percentage are respondents aged 36 to 45 with a share of 31.3%. This is followed by respondents aged 26 to 35 with a share of 25.2%, while respondents aged 25 and 46 to 55 in the same percentage of 20.9%. The lowest percentage of respondents is over the age of 56, which could be due to poor internet use and inability to cope. The education of the respondents is in line with the expectations in the research area. The majority of respondents, 64.4% of them, have a high school diploma. 17.8% of respondents have a university degree, while the remaining 17.8% are unqualified, qualified, highly educated and other respondents. According to the position, most respondents are from the position of salesman, cashier 41.7%. Respondents working in other positions participated with 27%, followed by managers, shift managers with 26.8% and storekeepers with 4.5%. To investigate the application of occupational safety measures in trade, we created a series of questions to test their knowledge of occupational safety and its purpose.

### **3.** Results

# **3.1** Hypothesis 1 - Workers who are not sufficiently educated are less likely to comply with the measure

To examine the application of occupational safety measures in trade, a series of questions to test their knowledge of occupational safety and its purpose were created.



*Figure 1.* . What is safety at work?

According to the answers to the question "What is safety at work?", We would conclude that workers in trade know the same and apply measures in their daily work.



Figure 2. The basic rules of occupational safety are?

According to the answers to the question what are the basic rules of occupational safety, it is evident that the majority of respondents, 50% answered incorrectly, 8% of respondents are unsure while 42% know what the basic rules of occupational safety.

### 3.2 Hypothesis 2 - Measures are not applied due to insufficient control

Assuming that the measures are not applied due to insufficient control, the title hypothesis was set. According to the answers from the survey, the hypothesis will prove to be correct because 50% of employees do not even know who is in charge of controlling the implementation of safety measures at work.



*Figure 3.* Who controls the application of occupational safety measures?



Figure 4. How often should the application of occupational safety measures be monitored?

The question of how often the control of the application of safety measures at work in the work environment is carried out the hypothesis that it is insufficient was confirmed by the respondents. 34% of respondents answered that it is implemented continuously, while a total of 66% of respondents answered that it is not implemented, is not implemented enough or is implemented occasionally.

# **3.3** Hypothesis 3 - Personal protective equipment is not used due to the prejudice that it makes it difficult to perform tasks

Although most respondents know that the prescribed protective footwear should be worn full time and why it is important to wear it, they do not apply the same when working.





Figure 6. Do you use personal protective equipment?

After the question whether they use personal protective equipment, the respondents, in accordance with the answer to the question, had an additional sub-question with which they had to explain their previous answer. Out of 129 respondents, ie 72% of the total respondents who answered that they use personal protective equipment, 36% use it for the wrong reasons.



Figure 7. I use personal protective equipment



In the total number of respondents, 28% of them do not use personal protective equipment at all.

Figure 8. I do not use personal protective equipment

The reasons why 28% of respondents do not use personal protective equipment at all are an indication that they do not understand the purpose of safety at work and do not apply measures that endanger not only their own but also the safety of all others in their environment. Including 36% of respondents who

use personal protective equipment but do not know the real reason, the devastating fact about the number of uneducated workers on occupational safety measures.

### 4. Discussion and conclusion

Failure to apply occupational safety measures not only violates the general principles of occupational safety but also endangers the health and safety of both workers and persons at work. According to the statistics of the Croatian Institute of Public Health, the largest number of injuries at work according to the workplace is in the workplace. The largest number of respondents who participated in the survey are trade workers. Considering that the percentage of injuries at work is 99.3% of the total number of injuries, the conclusion is that they are not sufficiently educated and there is no control over the application of safety measures at work, which results in this percentage. According to the activity according to the HZJZ, the largest share of injuries at work per 1000 employees is in the activity we researched, and it amounts to 26.62% of the total number of injuries at work. The results of the survey, as previously presented in the description of methods and hypotheses, clearly show the need for continuous education and training of workers and regular and timely control of the application of occupational safety measures to reduce risks and protect the health and safety of workers and persons at work. Safety at work and the application of all necessary measures must be an integral part of every job. Uneducated employees and lack of control lead to a state of extreme insecurity not only of the individual but of all workers and ultimately the entire business of the company in which measures are not respected. According to the answers to the questions in the survey, the basic hypotheses were confirmed. 48% of respondents do not know the basic rules of safety at work, whereby the first hypothesis "The measure is less adhered to by workers who are not sufficiently educated" turned out to be correct. To the questions posed for the second hypothesis "Measures are not applied due to insufficient control", the result of 50% of incorrect answers will show how often the control of the application of safety measures at work is carried out or not carried out. As many as 15% of the respondents do not even know who should carry out the control of the application of safety measures at work, while 51% of the respondents do not even know how often it should be carried out. According to the answers to the questions based on the third hypothesis "Personal protective equipment is not used because of the prejudice that it makes it difficult to perform work", the conclusion is that 72% of respondents use personal protective equipment, while 28% of respondents use it for the wrong reasons. 96% of respondents who do not use personal protective equipment do not use it precisely because of the prejudice that it makes it difficult to perform their work, that is, they think that they do not need it, while the remaining 4% do not know why they do not use it. The first measures of protection at work began to be applied in the time of the ancient Egyptians, so the fact that in the 21st century there are workers who do not understand the purpose of the measures is worrying. Further research should be carried out to educate employees about the importance of applying measures for their own safety and the safety of all people in their working environment.

### References

Active population in the Republic of Croatia in 2021 - average of the year

https://podaci.dzs.hr/2022/hr/29256, Approached: April, 2022.

Beović i dr., (2016) "Konzum d.d Regular training of workers to work in a safe manner is an important preventive activity

https://uznr.mrms.hr/konzum-dd-redovito-osposobljavanje-radnika-za-rad-na-siguran-nacin-vazna-je-preventivna-aktivnost/, Approached: April, 2022.

Croatian Institute of Public Health-Occupational Medicinehttps://docs.google.com/forms/u/0/, Approached: March, 2022.

European Agency for Safety and Health at Work

https://osha.europa.eu/en/safety-and-health-legislation/national-legislation-safety-and-health-work, Approached: April, 2022.

European directives on safety and health at work

https://osha.europa.eu/en/safety-and-health-legislation/european-directives, Approached: April, 2022. International Labor Organization

https://www.hup.hr/medjunarodna-organizacija-rada-ilo-i-medjunarodna-konferencija-rada-ilc.aspx, Approached: March, 2022.

Šokčević, (2014) "Law on Occupational Safety and Health with Comments and Interpretations"https://www.zanos.hr/wp-content/uploads/2020/03/Skripta-Za%C5%A1tita-na-radu-Trgovina.pdf, Approached: May, 2022.

Jezerčić, (2021) "Injuries at work" Saffety and protection at work", Chem. Ind. 70 (9-10) (2021) 622–625 <u>http://silverstripe.fkit.hr/kui/assets/Uploads/Sigurnost-zastita-na-radu-KUI-2021-09-10-622-625.pdf</u>, Approached: May, 2022.

Krmek I., (2020) "Occupational safety - obligations of the employer in the Republic of Croatia", Center for Occupational SafetySafety at work Obligations of employers in the Republic of Croatia (centarznr.hr), Approached: June, 2022.

Labor market in Croatia

https://www.hgk.hr/documents/trziste-rada-nezaposlenost-mladih-obrazovanje-radni-vijek-final-12201557b6ebf8a8c13.pdf, Approached: April, 2022.

Occupational safety training (Zanos, 2020)

https://www.zanos.hr/wp-content/uploads/2020/03/Skripta-Za%C5%A1tita-na-radu-Trgovina.pdf, Approached: April, 2022.

Ordinance on the performance of occupational safety activities (OG 112/2014)https://narodne-novine.nn.hr/clanci/sluzbeni/2014\_09\_112\_2155.html, Approached: April, 2022.

Ordinance on the preparation of risk assessment (OG 112/2014),https://narodne-novine.nn.hr/clanci/sluzbeni/2014\_09\_112\_2154.html, Approached: April, 2022.

Ordinance on safety at work for work and auxiliary premises and spaces

http://www.zagrebinspekt.hr/propisi/Propisi\_ZNR/knjiga\_CD1/Pravilnik\_radne\_pros.htm,

Approached: April, 2022.

Research on the application of occupational safety measures in trade

https://docs.google.com/forms/u/0/, Approached: March, 2022.

Safety at work in trade, Preventa doo <u>https://preventa.hr/zastita-na-radu-upit/zastita-na-radu-u-trgovini</u>, Approached: June, 2022.

Šokčević, (2014) "Law on Occupational Safety and Health with Comments and Interpretations" <u>https://www.zanos.hr/wp-content/uploads/2020/03/Skripta-Za%C5%A1tita-na-radu-Trgovina.pdf</u>, Approached: July, 2022.

Approached. Jury, 2022.

Trade, analysis of injuries at work HZJZ

http://www.hzzzsr.hr/wp-content/uploads/2020/10/G\_TRGOVINA\_-ANALIZA\_ONR\_-2019WEB.pdf, Approached: May, 2022.

Trade occupations

https://esco.ec.europa.eu/en/classification/occupation?uri=http://data.europa.eu/esco/isco/C52 Occupational Safety and Health Act (OG 71/14, 118/14, 94/18

 $and 96/18), https://www.zakon.hr/z/167/Zakon-o-za\%C5\%A1 titi-na-radu, \ Approached: \ April, \ 2022.$ 

United States Department of Labor (2019), "Occupational Safety and Health Administration" https://www.osha.gov/, Approached: July 2022.

Vidović, (2014) Business in trade, Collection of regulations in the field of trade

https://www.rrif.hr/dok/propisi/trgovina/1.PDF, Approached: July, 2022