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Fire Inspectors Occupational Safety - What are the biggest risks and threats?

Suutarinen, Henrik

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Fire Inspectors Occupational Safety - What are the biggest risks and threats?

Henrik Suutarinen
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Henrik Suutarinen

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The purpose of this thesis was to evaluate the occupational safety of Fire Inspectors or someone with a different job title doing fire inspections. Main focus was to map out the biggest risks and threats faced by people who are doing fire inspections as their work. This study is based largely on the experiences of the people who are doing the inspections.

The implementation method of this research was selected to be a qualitative case study. The study included three different types of data collection which allowed multiple perspectives on the topic being researched. The empirical material consisted of interviews, observing the work and a questionnaire. The topic for this research came from the Helsinki City Rescue Department.

This study shows that the risks faced by the people doing fire inspections as their work is relatively low. Individual accidents and incidents do happen but in general the work is very safe. The challenges faced during work are associated largely on working with people and facing them. Actual work-related accidents occur very little and they are minor.

In the future investing in particular to the orientation of the people that are doing the inspections is desirable. Success at the work requires good skills to work with the customers also in sometimes challenging situations. Carrying out the inspections objectively, carefully and in a professional manner allows the work to be safe also in the future.

Keywords: Fire Inspector, fire inspection, occupational safety

Henrik Suutarinen

Palotarkastajan työturvallisuus - Mitkä ovat isoimmat riskit ja uhkat?

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Tämän opinnäytetyön tarkoituksena oli arvioida Palotarkastajan tai jollain muulla työnimikkeellä vastaavaa tarkastustyötä tekevien henkilöiden työturvallisuutta. Erityishuomio tässä opinnäytetyössä kiinnittyi palotarkastuksia työkseen tekevien ihmisten kohtaamiin yleisimpien riskien ja uhkien kartoittamiseen. Tutkimus keskittyy isoksi osaksi palotarkastustyötä tekevien ihmisten omiin kokemuksiin heidän työstään.

Tämän työn toteutustavaksi valikoitui kvalitatiivinen tutkimus. Tutkimukseen sisältyi kolme erilaista tiedonkeruumenetelmää, joka mahdollisti useamman eri näkökulman tutkittavaan aiheeseen. Tutkimuksen empiirinen aineisto koostui haastatteluista, työn havainnoinnista sekä kyselystä. Tutkimusaihe opinnäytetyöhön tuli Helsingin kaupungin pelastuslaitokselta.

Tutkimuksen perusteella voidaan todeta, että palotarkastustyötä tekevien ihmisten työssä kohtaamat riskit ovat melko vähäisiä. Yksittäisiä tapaturmia ja vaaratilanteita sattuu, mutta yleisellä tasolla työ on hyvin turvallista. Työn sisältämät haasteet liittyvät pitkälti ihmisten kanssa toimimiseen ja heidän kohtaamiseen. Varsinaisia työtapaturmia tapahtuu hyvin vähän ja ne ovat lieviä.

Tulevaisuudessa erityisesti tarkastustyötä tekevien perehdyttämiseen panostaminen on suotavaa. Työssä menestyminen vaatii hyviä taitoja toimia asiakkaiden kanssa toisinaan haastavissakin tilanteissa. Tarkastusten suorittaminen asiallisesti, huolellisesti ja ammattitaidolla mahdollistavat turvallisen työn jatkossakin.

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1 Introduction

Fire inspectors are doing work where they are pointing out deficiencies, advising and giving guidance in matters of fire safety on various sites. The purpose is to monitor and increase fire safety on sites. In an early stage of making this research it became clear that there is a need to study this subject because the work of fire inspectors provides many risks as well.

The topic of fire inspectors' occupational safety is current because it has not been studied a lot. Working as a fire inspector provides many risks and possibly dangerous situations. Fire inspectors face lots of customers in their work and they work in dangerous places so it brings many risks and challenges for the work.

There is a similar thesis called "The Work Safety of Fire Inspectors" done by Jukka Mursu in the year of 2012 for Fire Officers (Engineer) degree programme in Savonia University of Applied Sciences. It was done in Finnish and it was used as a reference in this research. However the vast majority of the ideas around this research I have discovered myself.

The purpose of this thesis is to monitor, evaluate and develop the occupational safety of fire inspectors. The goal is to analyse what type of potential risks there are in fire inspectors' work, how to prepare for these type of situations and is there something that could be developed to make the work safer.

2 Research background

Idea for the research began from my personal interest towards the work of a fire inspector. It would be interesting to be able to work as a fire inspector someday. I got in contact with Helsinki City Rescue Department and asked if there would be any available topics to do thesis for them especially related to fire inspectors' work.

Helsinki City Rescue Department asked me to come visit them and discuss more about the thesis. They had already discussed within their work group about the needs of a certain area of fire inspectors work that would be useful to research more. They had come to conclusion that fire inspectors' occupational safety would be an interesting and useful topic to research.

The research topic was later agreed with my school Laurea University of Applied Sciences and Kaci Bourdache became the supervisor of this thesis. Kaci Bourdache was selected to be the supervisor as I knew he had a background of working as a fire inspector so it would be very helpful in this research. Research plan was created in November 2016 and writing process of

the research began immediately. Some research and collecting information had been done already before the writing process.

2.1 Research idea

Idea for the research is to map out what are the biggest and most common hazards and risks of fire inspectors' or other inspectors with a different job title who are doing fire inspections. This research is based largely on the experiences of fire inspectors and their work. By analyzing the results of the data collected for this study the goal is to develop new ideas on how the work of fire inspectors could be made safer.

Working any type of work with customers can many times produce many different type of risks. The risks can be even bigger when you are working as an inspector as it many times involves things that are asked to be changed and it can cause extra costs for the customer. For me it was an interesting case to begin to work with and gather information about the experiences of the fire inspectors and how they feel about their occupational safety.

2.2 Research question

The research problem of this study is to evaluate the level of fire inspectors' occupational safety and resolve how it could be developed. The research question is "What are the biggest risks in fire inspectors' work and is there something that could make the work safer?" Purpose of the research question is to map out the lacks in the safety of fire inspectors and get new ideas on what could be developed by analyzing the results of the research methods.

2.3 Helsinki City Rescue Department - Helsingin kaupungin pelastuslaitos

Helsinki City Rescue Department is working for the safety of capital of Finland, its citizens and visitors. They monitor the safety risks, trying to prevent accidents and be prepared for different types of emergency situations. Helsinki City Rescue Department is part of the organization of the city of Helsinki and one of Finland's 22 regional rescue departments. (Helsingin Kaupunki Pelastuslaitos 2016)

Helsinki City Rescue Department was the main partner in this thesis. Idea for this subject became from them since they had noticed this topic had yet not been researched that much. I was several times in contact with people from Helsinki City Rescue Department by doing interviews and attending meetings with them.

2.4 Research strategy

Research strategy is to approach the topic with emphasis on fire inspectors own experiences and accidents that they have faced. Fire inspectors are working in the field and have the

most knowledge of typical hazards or risks that can happen while working. Strategy is to get a wide view of the most common accidents faced by fire inspectors, analyze the results and make conclusions out of them.

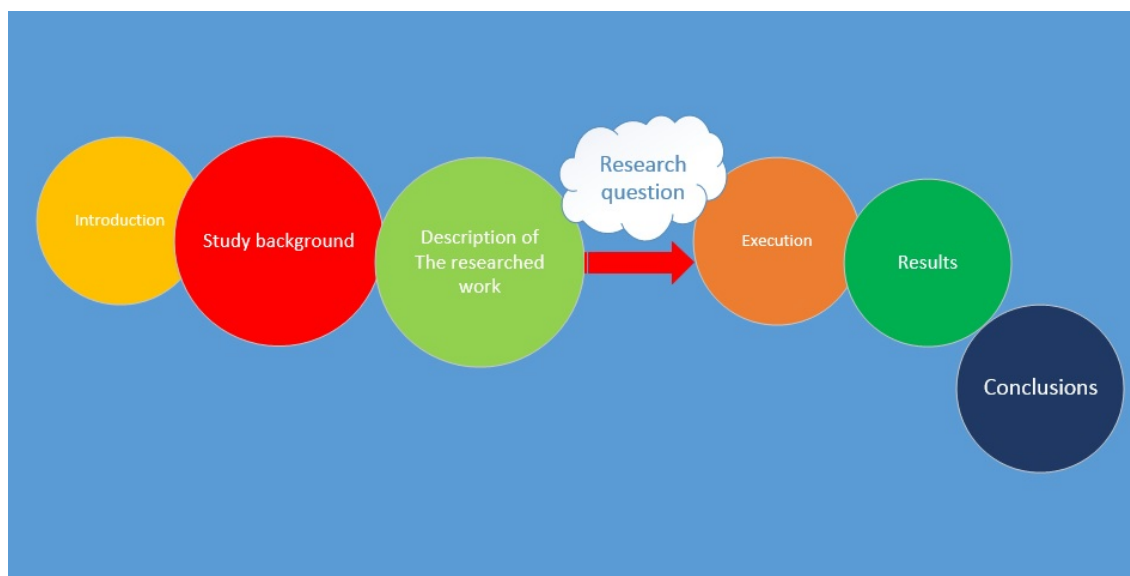


Figure 1: The research framework and process

Research strategy does not only include monitoring, questioning and interviewing people but also trying to learn from what I hear and see during this research. I try to focus on the things I see that are possibly done somehow wrong or could be done better. As a security management student and observer I believe I have good possibilities to do this.

3 Research methods

There are three different research methods used in this research. The point of using different research methods was to have a broader view of fire inspectors work safety and detect more potential risks. In this research I wanted to emphasize fire inspectors own experiences in their work so the questionnaire became one of the most important parts of this study as a research method.

Data collection carried in this research was done by doing interviews, questionnaire and acquiring statistics of accidents from rescue departments. Also other researches and books about occupational safety were looked at. Statistics about occupational safety gave lots of valuable information to the research.

3.1 Questionnaire

Questionnaire became maybe the most valuable research method in this research. It gave a wide range of answers from many different people working as a fire inspector or doing similar

type of inspection work with different job title. Interviewing just a few people about the topic would have been a lot less useful and informative than a larger questionnaire where lots of people had a chance to answer anonymously.

Questionnaire was created with Google Docs and sent out to rescue departments. Questions were answered online directly to the questionnaire form so that the respondents did not have to send the answers back separately via email but instead I was able to analyze the answers directly from the form where the answers were set. Questionnaire contained questions where you could click on several different options and questions where you could explain more thoroughly some issues if you wanted.

3.2 Interviews

Interviews were done via email and face-to-face. The questions that were done via email were created into a Word-document where the interviewees could place their answers. Questions were then analyzed to support some issues where it was needed to get more information from the management side or have answers to some more specific questions.

Interviews gave also a good support for the questionnaire. It was possible to get answers to the questions that the questionnaire did not answer. The goal was to attain answers from different perspectives instead of just the experiences of fire inspectors.

3.3 Observing fire inspectors work

Observing fire inspectors work was done to get to monitor fire inspectors work and get to see the possible work safety risks there can be. The process included interview with the fire inspector before the inspection, observing the inspection and interview after the inspection. Results of the observations were then gathered and analyzed in this research.

Observing fire inspections was a new experience for me and provided lots of valuable information. I could see with my own eyes the process of a fire inspection and at the same time pay attention to the possible risks there can be. Observing fire inspectors work gave another perspective to study occupational safety and it was useful in this research.

4 Occupational safety in Finland

Occupational safety and well-being significantly affect the functioning and productivity of the workplace. Once they are in place work is going smoothly, employees are doing well and working productively. It is important that at the workplace employers and employees work together in cooperation in order to achieve occupational safety and well-being. (Työturvallisuuskeskus)

Many jobs in Finland require that you have an occupational safety card which you can get when you apply for a course about occupational safety. Occupational Safety Card training provides basic information about the dangers and safety of a common work environment. A personal safety card will be handed out after passing the course and the card is valid for five years. (Työturvallisuuskeskus)

There are approximately 130 000 occupational accidents happening in Finland yearly. 50 000 of these accidents lead to 4 days absence of work and cause 50 deaths every year. Commuting is also a big cause of occupational accidents. On the way from home to work or the opposite there are 20 000 occupational accidents happening yearly from which 15-20 cause deaths. (Työterveyslaitos 2016)

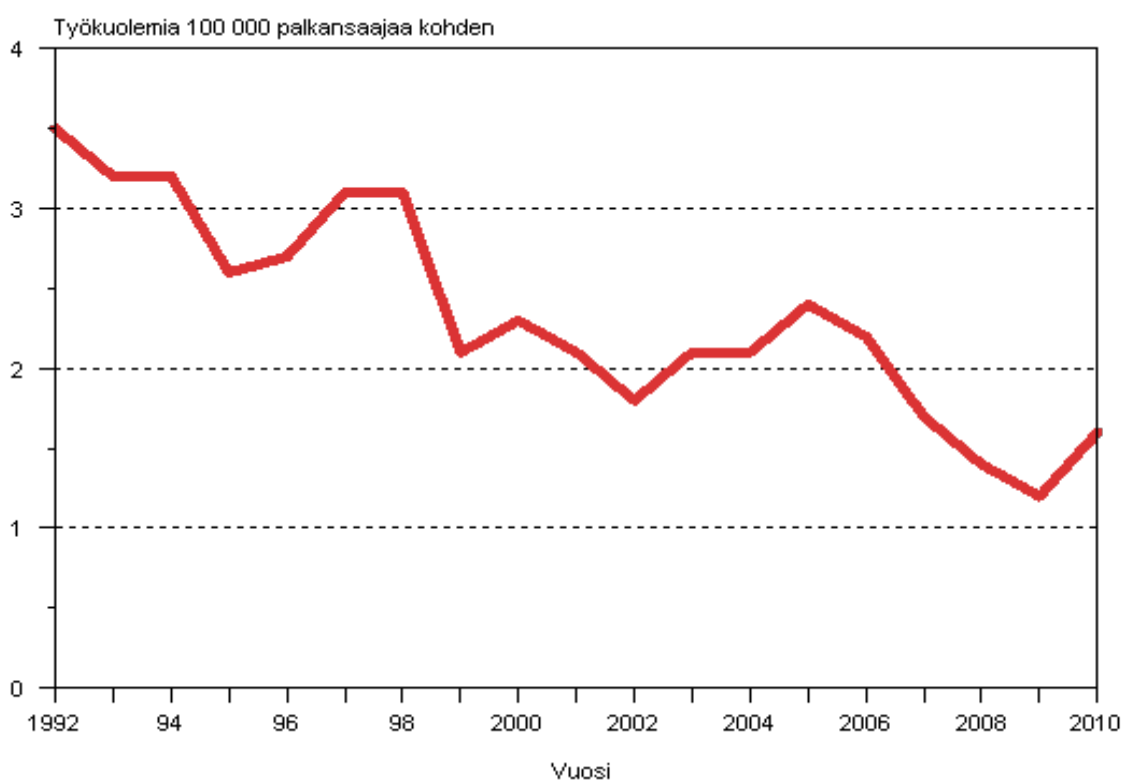


Figure 2: Fatal accidents at work amongst 100 000 wage earners between years 1992 and 2010

Occupational accidents seem to be more of men's problem: 68,7% of the accidents occurring at the work place happen to men. The risk of men becoming victim of an accident at work has traditionally been way higher than women's. The main reason for this is that men usually work more in industries or work tasks where risk of accidents is higher than average (Tilastokeskus 2012). There were approximately 13 500 occupational safety accidents at construction sites and 16 000 accidents in industrial work in 2016 (Tapaturmavakuutuskeskus TVK, 2017).

Even minor things such as dereliction of safety causing slippings can be considered as a crime when it comes to occupational safety issues in Finland. On 15th of December 2016 Court of Appeal in Turku sentenced a terminal master of a transport and logistics company to 25 days of fine worth of 775€ when he was found guilty of safety crime. A logistics driver had fallen on a slippery yard of the terminal and got injured. Occupational safety and health authority considered that the terminal yard area maintenance did not meet with the safety regulations of the job and working locations on the access roads and other areas where workers are moving. Because of their work the roads need to be safe and must be kept in a safe condition. (Työsuojelu, 2016)

4.1 Violence at work in Finland

Work place violence refers to events where people are verbally hurt, threatened or maltreated at their work and who directly or indirectly endanger their safety, health or well-being. The most common source for workplace violence comes from outside caused by customer, patient or student but it may also be internal (eg. co-workers). Violence at work can be threatening or offensive behavior which takes place outside the workplace but is clearly linked to work or professional status of workers. (Työväkivallan riskiammatit, 2010)

Work areas and job titles where violence at work is most common to happen are police, guarding, traffic, hotel industry, restaurant industry, health care, medical care, social services and trade sector. The risks are increasing if working alone or if the number of employees is small. Also working late at night or early in the morning and the fact that during work there is a possibility of facing intoxicated or mentally unstable people is increasing the risk of violence. Violence at work can be physical such as pushing, beating or kicking. It can also be emotional such as taunting or verbal intimidation. (Työturvallisuuskeskus)

Work which involves obvious threats should be organized in such way that the threat of violence and situations of violence are prevented as far as possible in advance. In this case the workplace must have restricts to violence, appropriate safety equipment as well as the possibility to call for help. The employer shall draw up rules of conduct which in advance pay attention to the management of threatening situations. If necessary security arrangements and the functioning of the equipment must be checked. (Occupational Safety and Health Act 738/2002)

4.2 Development of occupational safety in Finland

Finland had 123 849 accidents at work in 2014. 34 of these accidents were fatal (Tilastokeskus, 2016). As a comparison Sweden had a total of 115 558 accidents at work in 2014

(Arbetsmiljöverket, 2015). There was a big decrease in work accidents between years 2012-2014. In the year 2013 there were 135 000 accidents at work in Finland and in 2012 there were 139 000 accidents. (Tilastokeskus, 2016)

The development of occupational safety in Finland is reflected in a variety of ways. There are new contracts, laws and more cooperation done aiming for better safety in working life. Finland has excellent statistics and insurance system which allows to monitor the occupational accidents very carefully. Looking at statistics it might seem that Finland has lots of occupational accidents but it is only the cause of good reporting which is a positive thing (Turvalisuusuutiset, 2013).

There was a change in the way of how work accidents began to be counted in 2005. In the year 2005 Statistics of Finland began to use the EU's occupational accident definition in their statistics. The definition will count the statistics of work accidents that have led to "at least four days absence of work". (Tilastokeskus, 2016) This means that it will count out the minor injuries or accidents where only 1-2 days of rest from work is needed.

4.3 Occupational Safety and Health Act

The Occupational Safety and Health Act (738/2002) was set in 2002 and it was set to be used from the beginning of 1st of January 2003 in Finland. The purpose of this act is to improve working environment and working conditions to secure employees ability to work and also to prevent accidents at work, occupational diseases and other health issues or injuries caused by work. This law is applied in a work on the basis of a contract of employment, service relationship or a comparable public-law contract in relation to the work. (Occupational Safety and Health Act 738/2002)

Occupational Safety and Health Act (738/2002) consists issues of general obligations of the employer, cooperation, the employee's obligations and the right to work abstinence, more detailed provisions on working conditions, specific job situations, obligations of other persons affecting the safety of work, penalties and various provisions. It contains provisions on labor and working conditions for example rules of work ergonomics, physical, mental and social strain of work as well as other hazards. The law improves employees' safety in a big way as it demands workplace conditions to be so that they don't cause harm or danger to employee's health. (Occupational Safety and Health Act 738/2002)

According to the Occupational Safety and Health Act the employee also has the responsibility for their own work. The employee must pay attention to the regulations and instructions given by the employer in accordance with jurisdiction. The employee must also comply with

the work and working conditions in order to maintain safety and health as well as carefulness and caution. (Occupational Safety and Health Act 738/2002)

The Occupational Safety and Health Act says that the employee's responsibilities are to:

1. Use protective equipment given to him by the employer
2. Removal of defects and deficiencies and notifying about them
3. Comply with the regulations and instructions given by the employer in accordance with its jurisdiction
4. Ensure all available means to their own safety and the safety and health of other workers
5. Follow the safety instructions
6. Refrain from doing work if it causes serious danger to the employee's or other worker's life or health. (Occupational Safety and Health Act 738/2002)

There are also some issues that are more difficult to pay attention to just by looking at the law. The root cause of mental illnesses are complex and these diseases are developing after long periods of time. The connection between work and mental illnesses at the individual level can be extremely difficult to evaluate. This is why the Occupational Safety and Health does not regulate in detail the mental illnesses even though in itself it protects a person's health. (Kuikko 2006) Because of this it is important to pay attention to employee's behavior at work and occasionally make discussions with them.

All and all understanding the Occupational Safety and Health act is essential to every employer and supervisor. It is good to remember that employer has always the overall responsibility of health and safety. Every employer is obliged to ensure the safety and health of their employees. (Kuikko 2006)

4.4 Monitoring of Occupational Safety

There are different ways that the occupational safety is being monitored in working life. Occupational safety violation can be punished with a fine. Occupational safety violations means violating The Occupational Safety Act or a provision imposed on it by virtue of intentional or negligent dereliction. Occupational Safety and Health Act's provision 63 § has a list of obligations that if they have been derelict they will be considered as a violation of occupational safety. (Occupational Safety and Health Act 738/2002)

If such device which is intended to avoid the risk of accident or illness is being defaced or removed without permission or a valid reason it can be punished. Same thing applies for removal or demolition of information or warning labels. This penalty applies to all such acts who are guilty including the employees. (Kuikko 2006, 139)

Monitoring of the Occupational Safety and Health Act and compliance with the acts around it are supervised by occupational safety and health authorities. Occupational safety and health authorities are the Ministry of Social Affairs, The Ministry of Health Affairs and occupational safety and health districts offices. (Kuikko 2006, 140)

Act of the supervision of occupational safety provides surveillance procedures of occupational safety and health authorities and the coercive measures that they are allowed to use. The law says that the occupational safety authority has a possibility to use administrative coercive measures to intensify its obligations in order to eliminate defects or prevent incidents. This type of coercive measures are ban of the use, the imposition of a penalty payment or a threat of having action taken. (Occupational Safety and Health Act 738/2002)

5 Fire inspection

The purpose of fire inspections is to monitor the possible risks to people, property or environment caused by fire or other accidents. Fire inspections include monitoring of buildings and properties safety and also preparedness and management for accidents or different incidents. Fire inspection work also includes guidance and consultation of preventing fires and accidents. (Rescue Act 379/2011)

Usually the date of a fire inspection is informed in advance. Fire inspector must have access to all the spaces inspected. Afterwards fire inspector will compile a record from the inspection which will be mailed or given after inspection to the owner, occupant or their representative. (Mannila 2017, Interview)

There can be different type of fire inspections and other services provided by rescue departments. Each rescue department can determine their own ways to categorize their fire inspections. In Helsinki fire inspections are carried out in accordance with the Helsinki City Rescue Department's supervision plan of 2017. The supervision plan is prepared in the basis of the Rescue Act 79 §. Helsinki City Rescue Department has defined the following categories of fire inspections and other services:

- General fire inspection - General fire inspection is done regularly. Usually the rescue department is contacting the inspected site about the inspection.
- Special fire inspection - Done to new sites. Customer needs to ask a fire inspector to come visit the site.
- Follow-up inspection - Done to check that all of the shortcomings in the previous inspection have been fixed.

- Self-supervision - In a self-supervision a resident does the fire inspection individually to their home.
- Chemical monitoring - The purpose is to prevent environment or property damages caused by manufacturing, using, transferring, storing or handling of dangerous chemicals or explosives.
- Exit safety report sites monitoring - Rescue Department is monitoring the exit safety on medical institutions and service/support housing.
- Monitoring of events and temporary housing - Special features such as number of persons, nature of the event, location, hazards, risks and actions in a case of accidents are some of the issues monitored.
- Handling notifications of the accident risks and monitoring fire risk apartments - Rescue Department receives notices about risk of accidents at certain sites and is doing cooperation with the authorities around these issues.
- Changes in the operating environment and additional fire inspections - Additional fire inspections are carried out throughout the year based on changes in the operating environment, risk-based selection and the requests received by rescue department.
- Ensuring operating conditions of the sites that need operative special reviewing - Fire Chiefs are making operational special inspections to various sites selected after the results of risk analysis.
- Monitoring of chimney sweeping - Rescue department is monitoring the implementation of chimney sweeping agreements.
- Consultancy of designers (new construction and renovation building) - Rescue department is affecting the structural fire safety solutions for construction projects in the design and implementation phase by providing advising and guidance.
- Statements - Statements related to zoning, building permits and changes of activities in production plants given to other authorities.
- On Call - Fire inspector - Guidance on weekdays and directing of contact requests to various experts in rescue department if necessary. (Helsinki City Rescue Department)

Special fire inspection is also not monitoring at the same way as the other inspection categories but more of expert level work and record from that inspection is also a statement for the building supervision authority. (Mannila 2017, Interview)

If there are lacks in obligations of Rescue Law or regulations have not been respected the inspector has the right to determine the rescue deficiencies to be fixed. If the deficiencies

can't be fixed immediately a deadline for revision will be set. If there appear to be immediate accident risks during inspection the inspector can determine immediate cancel of activities to the property. (Rescue Act 379/2011)

On 2017 Helsinki City Rescue Department conducted a customer survey about fire inspections. The survey was aimed towards customers and it showed excellent results: 92% of the respondents felt that the fire inspection was useful. 80% of the respondents felt that the inspection had helped with their safety. (Helsinki City Rescue Department 2017)

5.1 Rescue Act

Goal of the Rescue Act is trying to increase the safety of people and decrease accidents. Rescue Act law is trying to save people effectively, secure all the important functions and minimize the consequences in case of an accident (Rescue Act 379/2011). Rescue Act has sections that are linked to fire inspections and therefore rescue departments must pay attention to it.

According to the Rescue Act 379/2011 fire inspections can be performed by a rescue authority of the area. Fire inspection shall be carried out to buildings, other structures, apartments, other locations and homes belonging to them. Fire inspector must have access to all of the inspected facilities and destinations. The representative of the inspected site must provide all of the required plans, documents and other arrangements mentioned in the law. A record from fire inspections must be created and shall be delivered to all of the parties involved in the inspection without delay. (Rescue Act 379/2011, Section 80)

Rescue act states that rescue departments must draw up a monitoring plan for the implementation of the supervisory task. Supervision must be based on the evaluation of risks and it must be high quality, regular and efficient. Supervision plan must determine fire inspections and other supervision arrangements and also describe how the implementation of the supervision plan is evaluated. (Rescue Act 379/2011, Section 79)

The owner and occupants of a building must make sure that the building and its environment is in such condition that the risk of a fire is minimum. They must also make sure that in a case of a fire or other dangerous situation it is possible for people to exit the building and that the rescue authorities can do their work. (Rescue Act 379/2011, Section 9) This is something that the fire inspectors are monitoring during their inspections.

In the Rescue Act there are also sections about exits of buildings, rescue routes of properties, maintenance of equipment, maintenance of ventilation equipment, self-preparedness, rescue plan, smoke detectors and more (Rescue Act 379/2011). All of these things are something that should be monitored during inspections if they exist at the inspected site. The Rescue

Act defines the operation of the fire inspectors in a big way as there are many things to be monitored.

5.2 Fire inspectors work

Fire inspections are done by rescue departments rescue authorities. Inspectors are usually wearing uniform in accordance with the model established by the Ministry of Interior as well as rescue authority identification card. However exceptions are allowed with the use of uniform. Fire inspections can not only be performed by fire inspectors but also other job titles such as fireman, fire manager, fire chief or assistant fire chief can conduct them (Kainuu Pelastuslaitos 2016).

Working as a fire inspector is very much individual work. Fire inspectors have their own schedules and many times their supervisors might not know the exact location where they are working at the moment because of their own work plan. This can cause many risks in the work safety because the inspectors face many new people in their work and they might act unpredictably. (Mursu 2012, 6)

5.3 Normal progression of a periodic fire inspection at Helsinki City Rescue Department - Interview with Tanja Mannila

Interview with fire inspector Tanja Mannila was carried out via email on 17th of February 2017. The main focus of the interview was to get to know more about the orientation of fire inspectors, how occupational safety issues are considered when the inspectors are trained and how they are prepared to face difficult situations in their work. Tanja Mannila was the head responsible of the previous fire inspectors' orientation course.

Periodic fire inspection is determined in accordance with the monitoring plan of the rescue department. All of the sites have defined with individual inspection interval which is usually 1-5 years. The defined inspection interval is decided on the basis of the criticality class specified for the site and the risk number of the previous inspections for the site. (Mannila 2017, Interview)

The process begins at the end of a calendar year when all the fire inspection sites are given for the head fire inspectors who then divide the sites to be inspected by individual fire inspectors. Individual fire inspectors then contact the representatives of the sites via email or by calling and agree on the inspection date with them. Representatives of the sites will also receive a reminder email and instructions on how to prepare for the inspection. (Mannila 2017, Interview)

The inspection will be carried out on the agreed date. Fire inspector can arrive to the site on foot, on public transportation or by a car. The inspection consists going through different parts of the site and execution of the self-precautionary audit. Facilities of the site are gone through randomly and all the places are not necessarily checked. Essential places and things for the inspection are at least: various technical areas, exits, safety technology and a possible raid shelter. In addition to the essential places in the site attention is also paid for the conditions for possible rescue operations. (Mannila 2017, Interview)

The audit part is generally carried out by sitting down at the table and same time the needed documents such as rescue plans will be gone through. At the end of the inspection the fire inspector will point out again the needed repair orders, recommendations and a deadline for the repairs. The inspector will then create a record of the inspection within two weeks and submit it to the customer. When the deadline reaches implementation of the repairs will be monitored by doing a new supervision visit to the site or as in most cases customer will deliver documents or pictures that are then document controlled. (Mannila 2017, Interview)

5.4 Training of fire inspectors - Interview with Tanja Mannila

The orientation of a new fire inspector takes approximately 4 weeks. Orientation can include hands-on instruction and taking part in fire inspections with a more experienced inspector. It usually takes a few inspections with another inspector before the new fire inspector can begin to work independently. (Mannila 2017, Interview)

The orientation of a new fire inspector depends on the person's background and previous work experience. If there are many new people starting to work as a fire inspector it also affects the orientation plan because it allows a mutual orientation plan to be created. If there is only one new fire inspector starting to work then an individual orientation plan will be created. (Mannila 2017, Interview)

The main focus of occupational safety issues during the orientation of fire inspectors is the use of safety equipment. Building site safety equipment can include: helmet, safety shoes and reflective vest. Fire risk apartments can include: safety shoes, shoe bags, rubber gloves and respirator if needed. Fire inspectors don't have any emergency button or communication tools for emergency situations to obtain assistance if needed other than a cell phone if they have it with them. (Mannila 2017, Interview)

There are no clear written instructions for fire inspectors on how to act in difficult or challenging situations. Fire risk apartments which are considered to be more challenging and risky places to inspect are instructed to be inspected with a colleague. If there is a suspicion that the site has a possibility to be seriously dangerous fire inspectors can then ask police to come

to the site and secure the inspection. Usually police are aware of these sites beforehand and they can propose to come along to the inspection. (Mannila 2017, Interview)

There are no instructions for fire inspectors on what to do if the representative of the site begins to get aggressive during an inspection. Usually fire inspections consist also other people than the inspector and the representative of the site. There can be a serviceman or other people who are somehow involved in the inspection. Just the fact that the inspector doesn't have to be alone in the inspection situation can calm down the representative so that he / she stays calm and doesn't get aggressive. (Mannila 2017, Interview)

It is more common that the representative of the site begins to behave tricky or unwilling to cooperate instead of becoming physically aggressive or threatening. Raising voice, shouting or unjustified behavior against fire inspector is something that is more common to happen. What many times can cause customer to behave tricky are divergence of views about the issued corrective orders or other requirements that are set out. Some fire inspectors can feel that even a strong-willed customers can feel challenging even though they would behave well. (Mannila 2017, Interview)

There are no clear instructions on what to do if a customer doesn't have a general key to certain spaces in the inspected site or doesn't want to let inspector in from a certain door. Rescue Act Section 80 points out that the person carrying out the fire inspection must have access to all inspected premises. If there is a situation where a key is missing or not accessible at the moment it leaves the consideration to the inspector whether he/she wants the space to be checked or not. The inspector must also consider that the Administrative Procedure Act says that the conduct of the inspection shall not cause unreasonable harm which means that much is left to the discretion of the inspector. If the customer is strongly against the entire inspection the inspector can then ask the police for executive assistance. (Mannila 2017, Interview)

5.5 Preparing for fire inspection as an auditee

The purpose of a fire inspection is to support the preparedness for independent operators as well as to monitor the 2nd and 3rd chapter of the Rescue Act 379/2011. General fire inspections are carried out in accordance with the emergency rescue accident prevention work plan. The owner, holder, operator or someone directly responsible for the safety must participate in the inspection according to Administrative Law 434/2003 11§. Other individuals can also participate for the inspection at the discretion of the site's representative. (Helsinki City Rescue Department 2016)

Access to all premises must be granted for the Rescue Authority. Possibility to explore the following documents (depending on the nature of activity) must be accessed:

1. Rescue plan and other documents related to safety
2. Service and maintenance programs
3. Periodic inspection registers
4. Certificates of interior flammability

Documents can also be submitted in electronic format. Before the fire inspection it is recommended to carry out the self-assessment of the self-preparedness level. (Helsinki City Rescue Department 2016)

Fire inspection is carried out in accordance with the precautionary self-audit model. The audit evaluates the site's operation in accordance with the audit model elements by discussing, checking the documents and doing the inspection tour. Self-preparedness audit model is covering the following areas:

1. Security management
2. Accident risk management
3. Structural fire protection
4. Security technology
5. Safety communication and skills
6. Safety-related documents

After the fire inspection a register will be created within two weeks where the main observations, statements provided by the representative of the site, findings and conclusions are recorded. After that the requirements for repairs are recorded. As an attachment the audit report and an indication of the provisions related to the audit are submitted. (Helsinki City Rescue Department 2016)

At the end of a fire inspection the site representative should be prepared to agree of the timing of a possible post-visit. Corrective measures must be done until the end of the date agreed. Implementation of the measures is verified with a manner agreed with the inspector such as through documents or a post-visit. (Helsinki City Rescue Department 2016)

6 Risk management process

It is always good to keep in mind the risks and the risk management before making decisions. Risk management process is a good tool that helps with the decision-making as well as evaluating risks. As a result of the questionnaire and the fire inspections that were observed in this research it is useful to analyze the information and conditions that have an effect to the safety of the fire inspections and clarify how risk management could help as a tool.

When assessing the risks it is important to understand the external and internal environment of the organization. In this case matters covered by external operating environment can be: Finnish law, society, customers and resources. Internal environment can conclude: organizational structure, goals, strategy, organizational culture, internal guidelines, the flow of information and information systems.

Before evaluating the actual risks any deeper it is important to define the risk criteria. The criteria shall also take into account the laws and requirements of the authorities and any other obligations that the organization has. Risk criteria can be affected by the following factors:

- the way the risks are measured
- how the overall level of risk is determined
- what level of risks are acceptable or tolerable and which ones should be avoided
- how the combination of multiple risks are taken into account (Suomen Riskienhallintayhdistys, 2015-2017).

Up-to-date information is essential in order to identify risks. The identification of risks covers the sources of risk, the effects of the risks, their causes and consequences. Risk identification should also cover risks which the source / cause of them is not under control of the organization. (Suomen Riskienhallintayhdistys, 2015-2017)

The risk analysis is trying to evaluate meanings of the risks identified and the analysis is the starting point for decisions on how the risks are perceived and what kind of measures are needed to handle them. The aim is to help make decisions about which risks are relevant and meaningful from the perspective of the organization's objectives. (Suomen Riskienhallintayhdistys, 2015-2017) In this case it is the safety of the fire inspectors.

Risk handling will be the final phase of a risk analysis. Risk handling can have its own document or it can be incorporated in the document with the results of identification and assessment of risks.

Risk handling plan can consist:

- the order in which the individual steps are taken
- justify the handling procedures of the risks
- document of the timing of the plan
- document the people responsible of implementation of the plan
- the decided risk management actions
- indicators that follow the success of the actions
- reporting and monitoring procedures (Suomen Riskienhallintayhdistys, 2015-2017).

It is also important to monitor changes in risks. If there are changes in the operating environment, new risks or changes in criteria then the risk management process might need something to be changed. There is always something new to learn in successes and failures and that way it is possible to risk management to be improved. (Suomen Riskienhallintayhdistys, 2015-2017)

7 Interview with security manager Kirsi Teittinen

Interview with Kirsi Teittinen happened via email on 23rd of November 2016. Kirsi Teittinen is the security manager of Helsinki City Rescue Department. Purpose of the interview was to get more information about fire inspectors' occupational safety from security manager's point of view and to get answers to some more specific questions.

When asked if Helsinki City Rescue Department pays attention to risks that can happen in fire inspectors' work, working times, workspaces or working conditions that can affect employees' safety or health Teittinen replied that they do pay attention to these issues. "Risk assessment is a process where the employer and employees together identify and evaluate the hazards and stress factors of the workplace. The employer is responsible for ensuring that the working conditions are safe for employees." Hazards and risk factors that can affect fire inspector's health or safety such as working conditions, working environment or working hours are taken into account in workplaces job hazard evaluation and statements. Evaluating risks is a process where both the employer and employees evaluate and recognize risks of the workplace. Employer is responsible for the working conditions to be safe for the employees. (Teittinen 2016, Interview)

According to Teittinen all accidents at work must be looked at and investigated. Work accidents must be investigated as soon as possible after they have occurred. The purpose of investigating work accidents is to find out what caused the accident instead of looking for people who are responsible of it. Manager at work is responsible of the process of organizing and realization of work accident investigation. The investigation begins by getting information that there has been a work accident. After that a manager is gathering a group to investigate and handle the case. (Teittinen 2016, Interview)

The purpose of investigating work accidents is to find and recognize the factors that caused the accident and trying to avoid similar situations in the future or minimize the seriousness of similar situations. A checklist is being used as a tool when resolving the cause of the work accidents. Handling and investigating a work accident can be considered successful when there will be a list of reasons causing the deviation and the actions which allows the deviation to be

prevented in the future or at least being lowered to a reasonable level. The results of the investigation and the resolutions that were planned should be notified also for the staff. (Teittinen 2016, Interview)

The actions that are agreed on as a result of the investigation can be handled by the working units own resources or they can require taking them to upper level. Results of the work accident investigation must be recorded by the manager. If the investigation shows that no further actions or fixing is needed it must also be recorded with a reasoning. (Teittinen 2016, Interview)

Person responsible and schedule for the execution of the operation as a result of the work accident investigation will be recorded. When all of the needed actions are completed manager will sign actions to be completed and definition of a risk number will be set to be able to see whether the assigned actions have deleted the detected risk or if the risk is on an acceptable level. Despite the managers final responsibility of the execution of addressed actions the actual operations can be implemented somewhere else. (Teittinen 2016, Interview)

The statistics show that during the years 2012-2016 there were 8 close calls, 2 observed risk factors and no violence or threatening situations in Helsinki City Rescue Department amongst fire inspectors. Fire inspectors had a total of 32 absence days from work. The causes that had led to accidents were: slips / stumbling in yard areas or stairs and workplaces physical activities. (Teittinen 2016, Interview)

When asked if there is something that the inspectors can do to prepare for the risks at the inspections Teittinen replied that fire Inspectors can partially find information about the inspection site in advance by using for example databases. Getting to know the inspected site beforehand is important in order to fire inspectors prepare for the professional aspects before going to the site. Mapping risks, target history and current information clarify the inspected target's risk situation. (Teittinen 2016, Interview)

8 Observing fire inspectors work

There were two different fire inspections that were observed in this thesis. The purpose of these observings was to get a better view of the risks that the fire inspectors might face during their work and pay attention to things that they might not notice themselves while they are paying attention to other issues than their own safety. This section will go through these two fire inspections.

The first fire inspection was carried out with Roni Räsänen on 15th of February 2017. Roni Räsänen is a fire inspector at the Helsinki City Rescue Department and his post is a rescue

station located in Erottaja Helsinki. Räsänen has more than three years of experience working as a fire inspector.

First I entered the rescue station and we began with an interview that I had prepared for R. Räsänen. The questions were about fire inspector's work in general and also about the fire inspection he was doing on that day. The preliminary data that was available about the site which was to be inspected were:

- The dates of the previous inspections to the site
- General information about the site (squares, year of built, fire technology)
- What type of activities there are at the property.

This particular inspection was a fixed-period inspection which are done in regular intervals. Length of the interval depends on the evaluation of the previous audit. Usually the inspection takes place once a year but if the site has received a good evaluation of the previous inspection then the interval can be longer.

When asked about what expectations does R. Räsänen have for the inspection he was very neutral. There was no special needs to prepare for this particular inspection or have any special safety equipment taken for the inspection. However the site was not post-inspected so there can be some unfixed lacks after previous inspection. Räsänen pointed out that there can always be surprises at the site that you can't prepare for.

We started the inspection by walking to the site as the distance from the rescue station was very short. First place where an occupational accident can happen is the way from the work desk to the inspection site. Whether the journey is done by walking or with a car there is always a possibility that something can happen on the way. We arrived safely to the site.

The inspection began by talking with the representative of the site. The representative seemed to be very calm and co-operative. There were no signs of aggressive or any suspicious behavior. Then we started walking through the different sections of the property with the representative and a maintenance man.

The site's targets customers reacted very helpfully and positively towards the inspection when we arrived. They were very cooperative and not nervous or aggressive. Even though Räsänen noticed some lacks in the fire safety the customers were still very calm and understanding what was wrong and why it needed to be fixed.

As expected this was a routine inspection and there was not many risks or issues that could possibly affect the occupational safety of fire inspector. Räsänen was very calm throughout

the inspection and did not seem stressed. He observed the surroundings constantly very carefully.

The only thing during this particular inspection that we both paid attention to was that there was some very narrow and cramped spaces. There was a cellar that we went to and because the property was so old the roof of it was built to be very low. There was a chance of hitting your head in the ceiling if you were not careful. Another space where it was extremely cramped was a hallway that was full of miscellaneous items. The possibility of stumbling was very high and Räsänen set also a mark about that to the report because the equipment laying on the floor was also blocking an emergency exit.

Observing of another fire inspection was done to get more variety and possibly different happenings during the inspection in addition to the first inspection. The first fire inspection that was observed in this research turned out to be a very conventional one. Second fire inspection was carried out on 6th of March 2017.

Second fire inspection that I was observing was categorized as a special fire inspection. Fire inspector in this case wanted to stay anonymous so his name will not be mentioned in this case. Information that the fire inspector had received about this inspection beforehand was that it was going to be a residential apartment building line renovation site to be inspected. Otherwise information about the site to be inspected were minimal.

First we drove from Erottaja Rescue Station to Kallio Rescue Department because the inspected site was close by. The inspection started off with a discussion with the site representative in a same way as the previous inspection. The necessary papers and certificates were reviewed and discussed about. The discussion took around 20 minutes and after that strolling around the site began.

The fire inspector that was doing the inspection and myself were prepared for the inspection with safety helmets (including safety glasses), safety vests and safety shoes. It was not just for our own safety but also because everyone at a construction site must be wearing the necessary safety equipment. I took notes and photographs during the inspection while the fire inspector was doing his work and going through different areas of the construction area with the representative of the site.



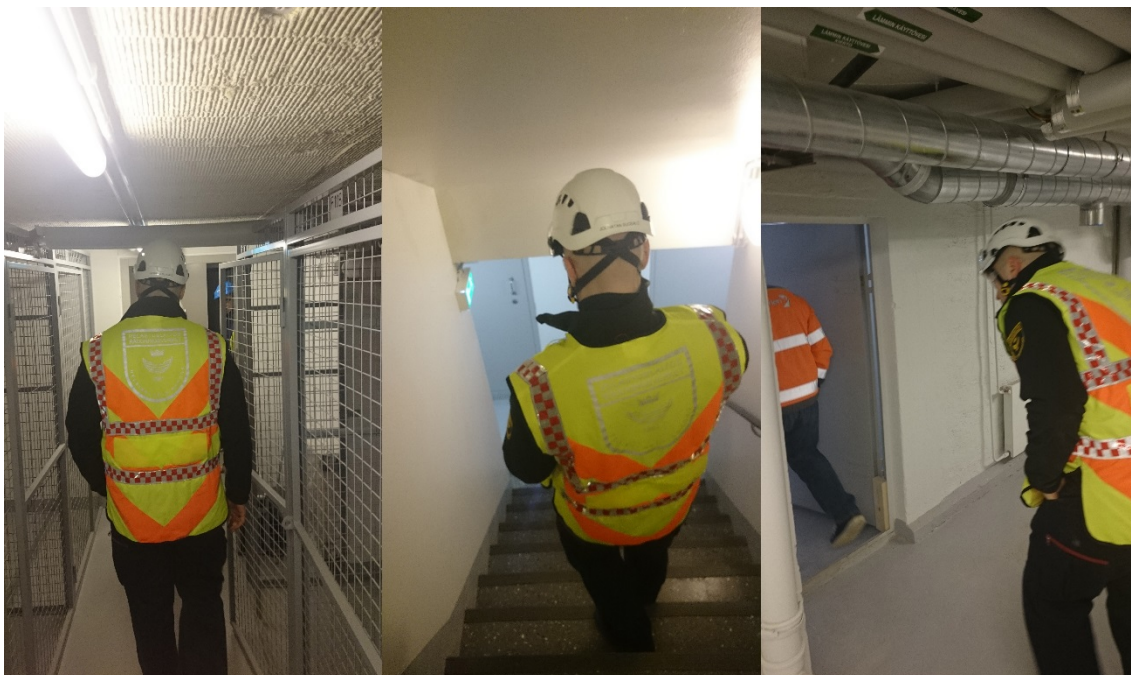
Photograph 1: Site representative showing the inspected site to the fire inspector

During the inspection I noticed a few occupational safety risks that were very common at a construction site. There were lots of miscellaneous tools and items everywhere lying on the ground. Especially cable reels were here and there. I noticed situations where the fire inspector was not looking on the ground while paying more attention to the inspection issues and he stumbled to one of these cable wires.



Photograph 2: Cable wires laying around everywhere

One point during the inspection we went to the cellar facilities of the site. You had to be very careful at the cellar because the ceiling of it was very low at some points. You would hit your head to some pipes or sharp edges if you were not paying attention to them. Passageways in the basement were also very narrow and there were lots of tools and cables again laying on the ground.



Photograph 3: Low ceilings and sharp edges in cellar spaces

An event that also occurred during the inspection which was not that much safety related was when the fire inspector accidentally stepped on a cement that was just casted. The cement was not marked in any way. This was just another example of how you should mind your step while going through a construction site as it can increase your own safety and prevent stepping somewhere that you shouldn't or where you even have a possibility to fall.

As a conclusion the inspection of the construction site was slightly more risky than a regular inspection. Construction site is a place where you need to wear safety equipment and there is a bigger risk of slipping, falling, hitting your head, twisting your ankle or other minor physical injuries compared to the regular inspection sites. Paying attention to your surroundings while inspecting a construction site is a key element of preventing unnecessary accidents.

9 Questionnaire

Questionnaire about fire inspectors occupational safety was sent to fire inspectors and other people who do similar type of fire inspection duties but have a different working title. The questionnaire was sent on 22nd of November 2016 to all of the 22 Rescue Departments in Finland and asked to be delivered to the inspectors. 96 people answered to the questionnaire by the end of 2016.

Areas where the answers came from were distributed very evenly around Finland. Most of the answers came from Helsinki and Etelä-Pohjanmaa. 12 answers from Helsinki and 12 answers from Etelä-Pohjanmaa.

The amount of answers received to the questionnaire was a positive surprise. The reason why so many people wanted to answer can be that they felt that the topic is interesting and they wanted to say their own word about the issues that they face in their work. What was told about the questionnaire to the respondents (translated in English) was:

“This is a questionnaire done by a student in Laurea University of Applied Sciences (Security Management) and the goal is to get a broad view of work safety of fire inspectors or a person who does similar type of inspection work. This questionnaire is conducted anonymously and statistical analysis will be created on the basis of the responses as well as trying to analyze occupational safety problems with the help of the results.

I would be glad if you can take part in this survey in order for me to get valuable information for my thesis!

Responding to the survey will only take couple of minutes!”

Most of the people answering the questionnaire were working with the title fire inspector (palotarkastaja). Second popular title was fire chief (palomestari). There were also other titles such as:

- Fireman (palomies)
- Fire inspection engineer (palotarkastusinsinööri)
- Rescue trainer (pelastuskouluttaja)
- Safety trainer (turvallisuuskouluttaja) and
- Station master (asemamestari).

The questionnaire revealed that there is not that much education around this topic in fire inspectors' work. The matter of occupational safety is not that much addressed and personnel are not especially well trained about the safety issues of the work. 34,4% of the respondents felt that they would need more orientation to work in difficult situations as a fire inspector. This means that there is a small gap that could be filled in the orientation of the inspectors so that more information about difficult situations could be conducted.

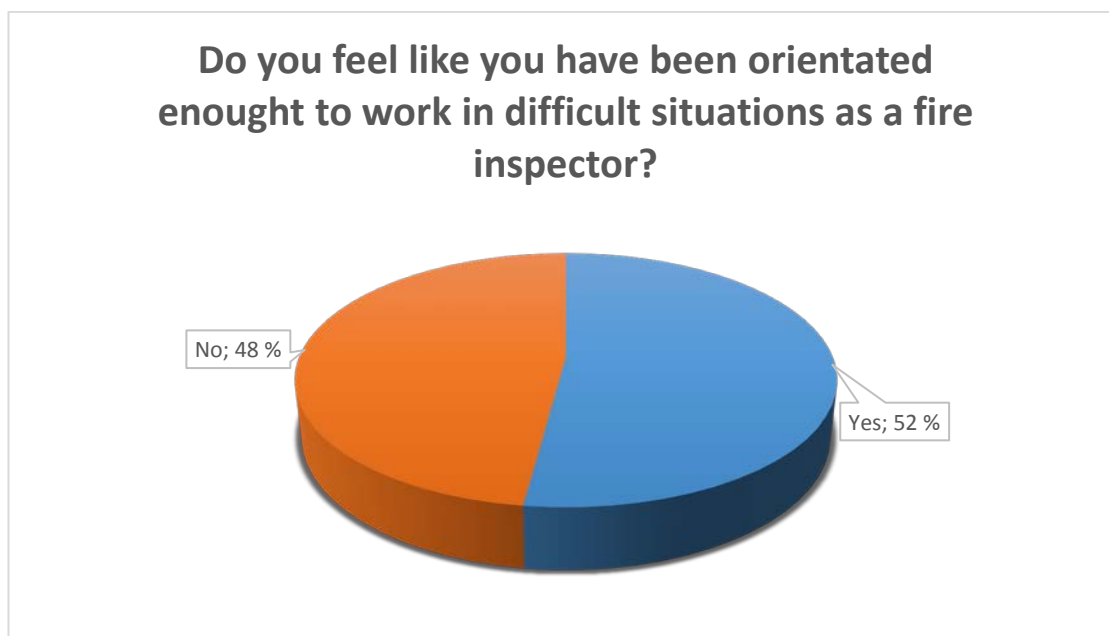


Figure 3: Orientation satisfaction of fire inspectors

83,3% of the 96 people had never faced any type of occupational accidents while doing fire inspection work. 9,4% had faced an occupational accident one time and 7,3% 2-3 times. None of the respondents had faced occupational hazards 4 times or more. The fact that more than 80% out of the respondents had never faced an occupational accident at their work is a very good indicator of how safe the work is.

Only 8,3% of the respondents which is 8/96 felt that they often take risks that can danger their occupational safety. This is a very positive number and it tells that the inspectors have lots of self-protection in their work. The question was asked to see if there are situations where the inspectors might take too many unnecessary risks and is it something that would need to be addressed more in the future. However the results show that the people who are doing inspection work can do the work in a safe way so that they don't take unnecessary risks.

The questionnaire had a question where was asked whether the fire inspectors had faced occupational safety risks or not and did they report about them. Almost half (46,2%) of the respondents had faced some kind of occupational safety risks and let the management know about them. 15,1% had faced risks but did not tell about them.



Figure 4: Have you faced occupational safety risks in your work?

Many of the respondents named unsafe ladders as a safety risk in their work as inspectors might have to go and inspect fire insulations in places that are located somewhere you need to access through ladders. Ladders in these sites can be in a very poor or even dangerous condition and cause trouble when climbing up or down. Sometimes the representative of the site might notify the inspector about dangerous ladders if they happen to know about their condition. However much is left to the inspector's own precaution.

One risk that the inspectors also pointed out in their answers were sites where they go and find out only when arriving to the site that what is located there is motorcycle club facilities. Fire inspectors felt that these sites can be unpredictable and most of the cases inspectors don't have any proper communication tools with them that they can ask help with if needed. When entering motorcycle club facilities alone and doing an inspection it can be dangerous and provide a distressing situation for the inspector.

The questionnaire revealed also few risks that weren't so common amongst respondents but were still very serious. Drug syringes laying on the ground is an extremely severe risk that even inspectors can face in their work. If an inspector doesn't wear safety shoes the needle can easily hit their foot. Private residences are another thing: anything can happen there. Inspectors might have to go in these residences without proper communication tools. In case there is an emergency during inspection it can be very difficult to get help without proper

communication tools such as Finnish "Virve" phone (government radio network) or an emergency call button.

9.1 Most common occupational hazards in fire inspectors work

When asked more specifically what type of occupational accidents, risk factors or other issues are affecting the inspection work there were a few things that clearly were more common than the others. 60% of the people had faced stress during their inspection work. "Stress refers to a situation where an employee feels unable to cope with the requirements and expectations directed against him. Both the work and the characteristics of the employee affect the development of stress" (Työterveyslaitos, 2017).

Second most common risk factor that the inspectors had faced was threatening / aggressive customer which 49,3% had come across with. There were a total of 59 answers on how was the threatening customer situation was solved. Solution for handling aggressive, threatening or especially difficult customers was usually talking, staying calm and discussing about the case with the client. Also explaining thoroughly to the customer what the law says and how the right obligations will protect both the employees and customers own safety has helped many times to resolve the situation. If the situation involves some other risk factors such as the customer's angry dog that can sense the mood of the situation then the inspector might have left the situation and gone away.

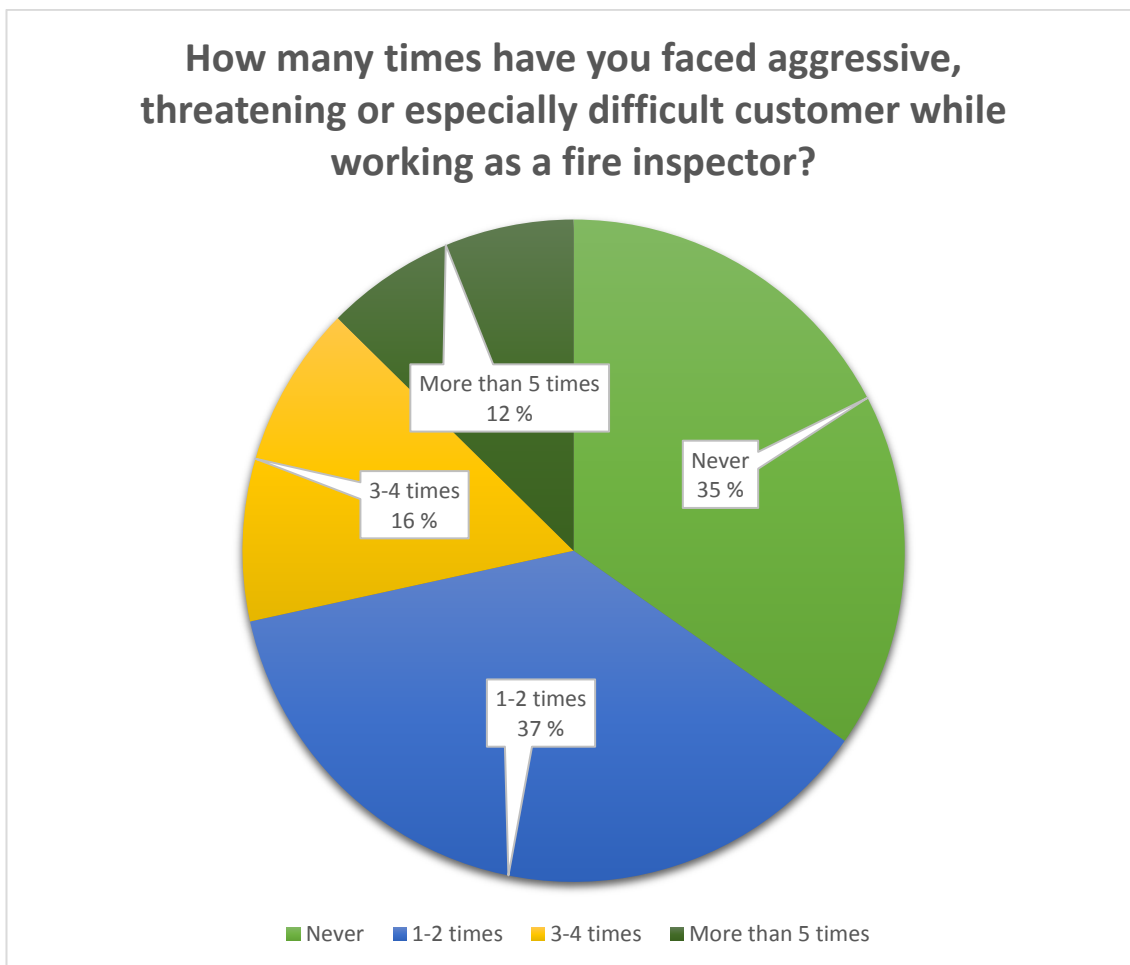


Figure 5: How many times during your work as a fire inspector have you faced aggressive, threaten-ing or especially difficult customers?

Third most common risk that the fire inspectors had come across with was an aggressive animal which 42,7% of the respondents had faced. Some answers had just faced an aggressive animal but it didn't do anything. Some had a dog biting them during inspection. However it was a risk that the inspectors wanted to pointed out and some even mentioned it separately so that is something worth paying attention to.

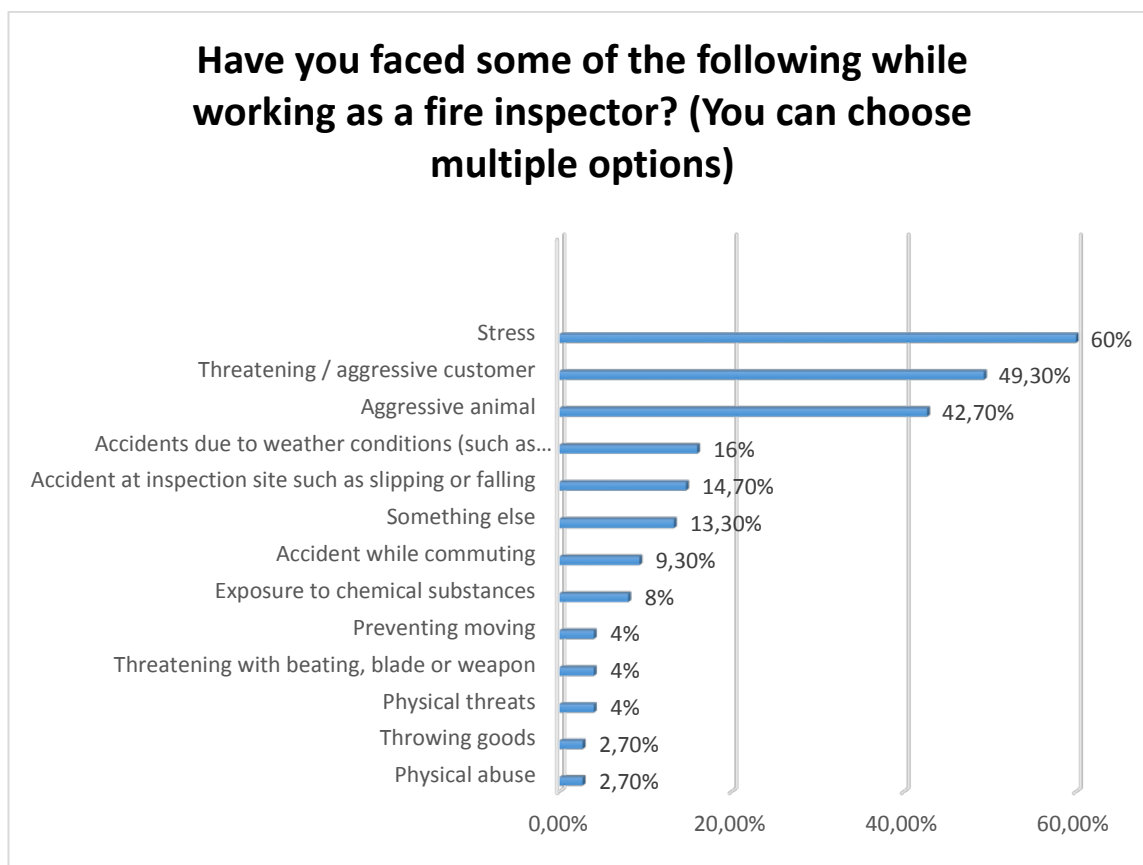


Figure 6: The risks or disadvantages that the respondent fire inspectors have encountered in their work

When asked about the inspection situations that have led to occupational accidents there were a variety of different answers. Most common accidents were near-miss situations or situations that were not so much related with the actual work of a fire inspector. Most of the situations that the inspectors mentioned were slippings, traffic accidents or falling from a ladder. These are sort of cases that can also happen during daily life and not just during working hours and it makes it really difficult to prepare for this happenings from the aspect of work safety.

9.2 Risk management process as a tool in fire inspections

The use of risk management process could develop fire inspectors' safety and make the work safer. This section will provide ideas about how the risks could possibly be prevented and what is there to do to increase safety of inspectors with the help of risk management process. A template of 4-step risk management process tool will be used in this section.



Figure 7: Risk management process

1. Identify

According to the questionnaire the three most common risks that are present in fire inspections are: stress, threatening/aggressive customer and aggressive animal. All and all there seem to be less than 5 risks that are more common and likely to happen. Identifying the risks begins from people that are doing the inspections letting their supervisors know about the challenges that they face during inspections. By identifying the risks it is possible to move on to the next step which is to analyze the risks.

2. Assess and analyze

Risk levels can be determined as follows:

1 Minimal - Little or no impact on achieving outcome objectives
2 Minor - Minor impact on achieving wanted results, objectives will fall below goals but well above minimum acceptable levels
3 Moderate - Moderate impact on achieving wanted results, objectives will fall above will fall below goals but achieve minimum acceptable levels
4 Significant - Significant impact on achieving wanted results, objectives will fall below acceptable levels
5 Severe - Severe impact on achieving wanted results, one or more outcome objectives will not be achieved

It is also possible to analyze the likelihood of the risks. How rare is it for a certain risk to happen and what the consequences of that risk are. As a result of the questionnaire and this research it is extremely difficult to evaluate the likelihood of accidents and risks because they are individual situations which happen very rarely.

3. Plan Action

Planning the actions for different risks can be done for example by using a safety manual (which is not yet created) targeted to the people who are performing fire inspections. Safety manual can help to handle different risk situations and guidance on how to solve them correctly and in a safe way. It can also give the organization's view on certain things and how they want them to be handled. The orientation of the fire inspectors should also include various scenarios that can happen during inspections and in that way instruct the inspectors to act in a correct way in different situations.

4. Implement

Implementation of the risk management process can be executed by monitoring inspectors work, doing discussions with them occasionally and making surveys. Making sure that the inspectors have a clear vision about the goals of their work and the risks that come along with it can help to prevent the risks. If the preparation for an inspection is done properly it will lower the chances of mistakes happening that could have prevented.

9.3 Questionnaire analysis

There were a few more common risks and hazards in fire inspectors work which showed up in the questionnaire results. Some of the things were faced by many of the respondents which means that these issues would be good to go through more deeply. These risks will be analyzed in this section.

9.4 Impact of stress with the ability to work

Stress was the single thing that fire inspectors were most encountered in their work on the basis of the questionnaire carried out in this research. When you are stressed it can have an effect on how well you can do your work and stay concentrated and focused while doing it. Working while stressed can also increase the potential mistakes happening while working. Working stressed can not only impact your working life but also your life outside of the work if you can't close the negative and stressful sides of the work outside of your mind and forget them when you leave work.

Nowadays working life demands a lot from people. More and more cooperation and interaction skills are needed. There are many things that can cause stress at work: rush at work, time pressure, working overtime, surprising situations, overly high demands, atmosphere at work, too intensive work, conflicts with colleagues, bullying and inappropriate treatment. If the work associated with the overload situation continues for a long time it can lead to fatigue and depressive symptoms and in these situations managers must know how to identify and solve them. (Nummelin 2008, 15)

Work-related stress has two different sides; at its best work is a source of mental growth and at worst it is a health hazard. Work or people are not the issues that are needed to fix but the relationship between work and the employee is worth developing; a well-organized work increases well-being and results. What creates the framework for the organization's management and the development of managerial work has the well-being decisive impact on staffs' well-being. (Nummelin 2008)

Solutions for lowering the stress levels of the fire inspectors could be discussing with the colleagues and peer support. Many times fire inspectors might have been in similar situations and have experiences that can help others if they are shared. If a fire inspector has had a particularly stressful situation at work it would be good to go through it as soon as possible with supervisors so that it is not left only for the employee to go through by themselves. Difficult or especially stressful situations could also be good to use as an examples at the orientation of the new fire inspectors so that they could prepare for similar situations and know that it is not only happening to them.

9.5 Dealing with difficult or aggressive customers

As it became clear by looking at the results of the questionnaire made for this research many respondents had faced difficult or aggressive customers in their work. Also some fire inspectors mentioned separately through email or through the discussions that I had with them that difficult or uncooperative customers are many times a problem in fire inspectors' work. To be able to cope with these customers seems to be essential in fire inspectors' profession.

The first rule of dealing with difficult people is that you need to learn how to deal with the person instead of thinking that the person you are dealing with is difficult. Don't take anything personally but instead ask yourself what is the purpose of the certain encounter. What do you want to achieve through the discussion with the person and do you need to change your own behavior to be able to get the most out of the encounter. (Lilley 2013)

What is your response to the difficult customer depends a lot on the type of difficult customer you are dealing with. If the customer is very silent and unresponsive then your behavior should be different than dealing with a customer who complains a lot or is very hostile. (Lilley 2013) Key is to understand and try to read the customers behavior and then respond with the most suitable manner.

There are many things that can cause the conflict situation or disagreements with the customer. Differences between the opinions, emotions and perception can be the cause for a disagreement and then a conflict is ready to start. It is very important that the both sides will have their needs addressed at the end after mutually agreed solution. If possible being able to compromise can solve many situations. (Lilley 2013)

J. Velemir has some good points in his thesis (2011) on how to solve and handle difficult situations with a customer. He points out that it is important to pay attention to the customer's gestures, facial expressions and the use of voice. Being prepared means observing and based on observations taking measures to improve own safety. In a difficult situations with a customer being well prepared gives time to guide the already tensed situation in the right direction and it is possible to avoid a bigger conflict. (Velemir 2011, 17)

Own attitude has also a big part of the preparedness. If you are tired at work or you just don't care about the work issues then it is possible to predispose yourself to danger in difficult customer situations. It can affect the situation so that you notice the signs of a possible threatening situations too late, you won't notice them at all or that you don't even want to notice them. Key issues for the preparedness towards difficult customer situations are educating, being aware of your own attitude and being aware of the circumstances in the working environment. (Velemir 2011, 17-18)

Trusting your own intuition is also very important when working with customers. Intuition can tell you that there is something wrong in some situation even though nothing has really happened yet. (Velemir 2011, 18) This reminds me of the situations that some fire inspectors told me during this research such as inspection on motorcycle club premises or private apartments. You can never be sure of what is waiting for you at the site but what you can do is you can be prepared if you feel that something is not right.

9.6 Preparing for unpredictable situations at the inspections

As it came clear through this research there can sometimes be unpredictable situations at the inspection sites that you really can't fully be prepared for. When arriving to the site there can be an aggressive customer, truculent dog or even facilities of a motorcycle club that the inspector has to face. Preparing for these situations can be challenging and difficult if not impossible to do especially if they are not revealed before the inspection.

There are some things that can be done to be more be prepared for the inspections. A lot depends on the own activity of the inspector. Searching information about the inspected site as much as possible beforehand can reveal more about the site. While agreeing with the site representative about the date of the inspection the intended use of the site can possibly be asked as thoroughly as possible to get to know more about the site, people that are using it and what is there to be expected. If there is any doubt that there might be a dog at the site it can be asked for the site representative to remove the dog before the inspection or at least have it on a leash.

Entering private apartments is one of the challenging situations that the inspectors have to face in their work. You really don't know what to expect when entering a private apartment but occasionally it is known before the inspection that there can be someone who is known by police to be a difficult customer or someone with criminal background. In case the police know about the customer's background they can offer themselves to come and secure the inspection.

To be better prepared for unpredictable situations the following can be done:

1. Investing in the orientation and training of new inspectors
2. Making sure that the personnel understand what they have learned and know how to act according to the instructions
3. Learning how to manage with aggressive customers by using different ways on interaction and practicing them
4. Setting guidelines in case of incidents, informing inspectors about them, making sure that they are followed and updating if needed

5. Making sure that the working environment is as safe as possible and ensuring that the communication tools are working
6. Avoiding working alone if the threat of violence is obvious and ensuring that those who are working alone get help if needed
7. Ensuring the safety at work by arranging work under the framework of threat of violence by specifying which sites are inspected as a pair and how the communication is done
8. Organizing the after-care to those who have ended up in dangerous situations, providing relevant information about the situation to the staff and monitoring the coping of employees after threatening situations
9. Creating tracking and evaluation system for violent or threatening situations and requiring employees to inform the employer about them (Ennakoi väkivaltaa työssä)

Some respondents answered to the questionnaire which was a part of this research that there were a few things they could have done differently to avoid situations where something went wrong. If a road had been sanded or the inspector would have had better footwear a slipping could have been avoided. Also keeping themselves ready to a physical attack situation and believing the "beware of the dog" sign could have helped in some situations. Precaution sites could also be marked to the fire inspectors databases so that for example locations of the motorcycle clubs could be known beforehand as they are known to be risky sites.

10 Conclusions

The research methods in this thesis were interviews, questionnaire and observing fire inspectors work. All of these areas provided valuable results and different views of approaching occupational safety for the study. All of these sections complemented each other and gave support in some issues that some other section might not have given answers to.

Questionnaire gave very valuable information for this study from the inspector's point of view. Many people answered the questionnaire which made it more valuable and interesting to look at as you could see the differences in the results. At the same time you could clearly see what are the biggest and most common risks in fire inspectors work that they most commonly face. Questionnaire gave the inspectors a chance to let their voice be heard in sort of feedback kind of way of their work safety issues.

Interviews were done after looking at the results from the questionnaire. There were some issues that needed more clarification or different point of view on things and the interviews gave an excellent support to the questionnaire. Without the interviews and relying purely on the questionnaire would have let this thesis much less informative and incomplete.

Observing fire inspectors work was an important part of this research as well. The specific inspections that were observed for this thesis were very common and sort of easy inspections. The more difficult and challenging inspections could have given more results from the occupational safety point of view to this study but as it turned out from the interviews and questionnaire the work is fairly safe and the individual occupational safety risks that occur at the inspections might even need some luck to be able to be along and observe for this type of study. It would probably need continuous observing of the inspections to be able to detect the more challenging situations and be there to report about them.

As a result of the questionnaire more than half of the respondents had faced stress while working as an inspector. Then again stress is an individual feeling and different people get more stressed than others. Some people might get stressed very easily while others might handle situations much more calmly and don't really get stressed about anything. It is very difficult to say whether fire inspectors' work is especially stressful or not.

All in all there are risks when working as a fire inspector as there are risks in just about every profession. The risks that fire inspectors usually face seem to be fairly small. Many of the risks that fire inspectors face are something that you really can't be fully prepared for. If you enter premises where there is an aggressive dog on the loose before you realize it there is not much you can do. One thing that fire inspectors can try to do for their own safety is to find out about the inspected site as much as they can before doing the inspection. Preparation is the key.

You can never be fully prepared of being perfectly safe while working. You can't predict how a customer will act during an inspection. Spending time on training fire inspectors to face challenging situations in their work is one way that can possibly increase their work safety. You need to have good communication skills, stress tolerance, resistance to pressure and the ability to stay calm. If an inspector knows what to do or what to say it can help to cope better with the difficult situations.

Based on the results of this study the work of a fire inspector is fairly safe. Paying attention to own concentration and observation of the environment while working can increase the safety of a fire inspector. Individual work-related accidents will always be there but the risk of them happening is very low.

10.1 The validity and reliability of the study

The research question of this study was: "What are the biggest risks in fire inspectors' work and is there something that could make the work safer?". The goal of the research question

was to find out if there were some risks at the fire inspectors work that were possibly not known before or were not expected to be that common. By analyzing the results of the study it was easy to see the most common risks and by looking at them figure out solutions on what could possibly make the work safer.

The questionnaire of this study had answers from 96 people who were fire inspectors or people who are doing fire inspections with a different job title. 96 answers were a lot more than I had anticipated and it gave a broad range of answers to be analyzed. The fact that there were 96 people answering a questionnaire about fire inspectors' safety from all around Finland which is in terms of population a small country is a valid meter about the researched topic.

There were two sides to the questionnaire which factors may have influenced the answers:

1. The questionnaire was answered anonymously so the respondents had the possibility to answer as honestly and directly as they wanted (if they usually are afraid of pointing out things).
2. The questionnaire was answered anonymously so the respondents had the possibility to answer the questionnaire just the way they wanted (because it was not linked to their names) and they could have lied and mislead with their answers.

Also the fact that people feel different things such as stress in different ways can affect the way that they answer.

During this research it was occasionally difficult to find any risks in fire inspections. The risks that were revealed were minor and the few more severe risks that were found were individual events. That does not mean that the fire inspection is just the actual thing that generally leads to these risks. The fact that the risks were difficult to find is just another indicator of how safe the work actually is.

83,3% of the 96 people had never faced any type of occupational accidents while doing fire inspection work according to the questionnaire of this research. There were also only 8 occupational safety accidents that happened to the fire inspectors of Helsinki City Rescue Department between years 2012-2016. According to these indicators it is safe to say that the work is generally on a very safe level.

10.2 Self-assessment of the thesis process

The topic of this research was a personal interest to the creator of this thesis. Fire inspectors' work is something that I was really interested in before starting to work with this study and

the interest grew even bigger during making of this research. Getting to talk with the fire inspectors and study their profession gave motivation towards the working life and it deepened the feeling of wanting to work around safety and security issues in the future.

The goal before starting to work with this study was to research the topic as thoroughly as the planned timetable allowed. However there were some changes with the timetable along this study and the amount of time spent around this topic took a lot more time than anticipated. Also inspections done with the fire inspectors took time because of some problems with the coordination of scheduling with the inspectors.

Fire inspectors' work included very much new information for me. I knew the basics of what the fire inspectors do but all of the details were new to me although I had an interest towards fire inspectors' work before starting this research. The interest started from my studies when I learned that many people graduated from my school had begun to work as a fire inspector. That made me interested to find out more information about what their work is like and what possibilities would there be for me to possibly work as a fire inspector some day in the future.

I have learnt a lot about occupational safety when doing this research. I already knew some things because of my work experience and my second internship where I was reading some Finnish law including issues about work safety. Work safety is one area that really interests me and I could possibly see myself working with that topic some day in the future.

There were risks in fire inspectors work safety that I had already anticipated before starting to work around this research. I had an assumption that fire inspectors face lots of difficult or even aggressive customers and as the results of the questionnaire it showed that it really was the case. Many of the respondents had faced difficult customers and had experiences about it. Also the interviews showed that differences between the views of the inspector and the customer can be the reason causing customer to become aggressive and this is probably the biggest and most common risk in fire inspectors' work.

Working around this study has developed the working proficiency of the writer. There have been development of terminology, English language, writing and brainstorming of the writer throughout this study. This study also developed from the original plan during the research partly as a reaction after the questionnaire results and what I learned about the topic along the way.

If something would have to be changed in this research or the way that it was done I would ask more questions in the questionnaire. There were not unanswered questions but there could have been a few questions more which could have supported some of the things and

give more additional answers to some issues. Throughout this study so much new information was learned about the fire inspectors profession that there were issues that could have been asked which were not appealed at the beginning of this research.

As a whole it can be said that the research was successful and there were the results that were wanted to find out before starting this study. After this research the writer did not have the feeling that there would have been some unanswered questions. Helsinki City Rescue Department gave also good support throughout this study, helped with the questions that appeared and set up suitable fire inspections that the writer had a possibility to go and observe.

11 Development suggestions

General level of occupational safety is on a very good level in Finland. However there are always things that can be improved. One key thing is that every single work place accident is reported. From the accident reports it is possible to learn about what has led to the accident, when it happened, detailed description about the accident and after that the work can possibly be made safer when learning things about what went wrong.

Work of the fire inspectors is fairly safe compared to many other professions. High risk accident work sectors in Finland are: postal work, courier activities, sawmill work, timber work and construction work (Tilastokeskus 2012). However there are always a chance of some serious accidents that can occur if something goes wrong in any type of work.

One thing that I noticed and what caught my attention was that the fire inspectors didn't have any type of manual about how to handle difficult or unusual situations. Safety manual would help fire inspectors' safety and it could easily be updated if needed. Safety manual is very common in many workplaces and it is a useful tool to have.

Another issue that causes risks and insecurity is that many times the fire inspectors need to work alone. Working alone puts a lot more pressure to an individual instead of the inspector having a co-worker working with them. Even though the work is fairly safe it is always good to have backup if needed especially at the more risky inspection sites. Also a view from another inspector might be useful in some cases.

As a manager I would emphasis fire inspectors to report all the detected risks or dangerous situations that they face while doing inspections. Risks should always be avoided but when they do occur you can learn from them. This is why it is very important to report every case and by doing this it is possible to get valuable information and statistics about the reasons that cause occupational hazards and by doing this they can possibly be prevented in the future.

According to the questionnaire done for this research almost half of the respondents felt that they haven't got enough of orientation to work in problematic situations. This is a very worrying number and my suggestion is that managers would focus on this topic more in the future. Good orientation will give fire inspectors capabilities to work better in threatening, dangerous or hazardous situations. This will possibly lower sick leaves, accidents and increase work safety.

At the moment I don't see that there are any serious lacks in the safety of the fire inspectors' work that would need immediate actions to be taken. Safety can be improved by paying attention to the minor accidents that do occur and try to learn from them so that they can possibly be prevented in the future. Challenges in the future might increase the risks at fire inspectors' work but preparing for those challenges at this moment can be difficult.

11.1 Safety Manual

I had this development idea after my second meeting with the Helsinki City Rescue Department. As we talked about the orientation of the fire inspectors and what it includes it came out that there is not any kind of safety manual for the fire inspectors. The fact that they did not have any safety manual really caught my attention and I thought right away that it should be something they should have.

Safety manual usually consists of instructions on how to act in different situations related to exceptional happenings or safety. There can be safety instructions, information about different hazards, information about necessary protective equipment and how to act during emergency situations. Safety manual is something that you can rely on situations where you want to look at some things you might have forgotten about safety issues or ensure that you are doing things in a right way that they should be done. Every workplace should have a safety manual of their own; it can improve safety of the employees, make employees preparedness better and give a good support in exceptional situations if you are not sure what to do.

My suggestions what the safety manual for fire inspectors could include would be:

1. Facing a threatening or aggressive customer / Situation awareness

When working alone fire inspectors can end up in situations where they face a threatening customer by themselves. It is important to know how to keep both; themselves and the customer calm in these situations. Safety manual can give instructions step-by-step on how to behave in these type of situations and what to do if the situation doesn't get solved and the customer will not calm down.

2. Facing an aggressive animal

As a result of this study revealed that there had been a few cases where fire inspectors had faced aggressive animals and even got bitten by them. Safety manual can give instructions on how to act if there is an animal in the inspected site. Being cautious right away can possibly prevent accidents from happening.

3. Safety equipment

There are some safety equipment that fire inspectors have a possibility to use in their work. Safety manual can introduce these equipment and give information about them. It can also give examples of situations where it is useful for fire inspectors to use their equipment and instructions on how to use them correctly.

4. Preparing for different inspections sites

Safety manual could also conclude information about how to prepare for different types of inspection sites. Preparing to inspect a construction site can provide different challenges than an inspection of a restaurant and safety manual can provide instruction on how to prepare for different sites. Instructions can include what is useful to know about the site beforehand, what equipment is needed at the site and what to prepare for overall.

5. Reporting of work accidents

It is very important that every work accident is reported. By doing this possibly the future accidents can be prevented or minimized. Safety manual can give instructions on how to fill the report in correct way, what kind of issues should be reported and where to send the report.

6. Reporting of near miss situations

Reporting of near miss situations to supervisor is a very important safety act. If there are situations where an accident didn't happen but it was very close it can happen to the next person. Even if one person doesn't make a mistake it doesn't mean that the next one can avoid the mistake the same way. Safety manual can provide information where to report near miss situations or "good to know" information whether it's directly to the supervisor or a mutual database.

7. First aid instructions

Every safety manual should include first aid instructions. The more the people will know how to give first aid the better chances there are that a person's life can be saved in case of an accident and damages can possibly be minimized. Safety manual can be used to revise first aid instructions every now and then.

8. Important phone numbers

It is good to have all the important phone numbers collected in to one page. If there is a case of emergency you can search from one page the correct number where to call for help / further instructions. Cases like work place accidents, chemical accidents or reporting about accidents can all be found on one page in a case of emergency.

9. How to operate in a case of fire

Every safety manual should contain instructions on how to operate in a case of fire. What to do first, what to do next, where to call whether the fire is happening at the rescue site or at the site that is being inspected. Keeping calm and knowing what to do in a case of fire can possibly save lives. It can be helpful if fire inspectors know how to use fire extinguishers and other fire-fighting equipment.

10. How to operate if exposed to chemical substances

Sometimes fire inspectors need to go to sites where there can be chemical substances being handled. If a fire inspector has been exposed to chemicals during an inspection the safety manual can contain instructions about what to do. Being exposed to chemical substances can be a serious case and you need to know what to do and be able to act quickly.

11. Ergonomics

The work of a fire inspector includes also a lot of time sitting at the computer. When sitting for a long time and using computer it is useful to know about the ergonomics. Safety manual can also provide information about this topic and what type of activities are useful to do during spare time in order to be able to keep a good shape and maximum focus at work.

12. Injury and illness prevention

Injury and illness prevention section can introduce fire inspectors on what is there to do to stay healthy at work and prevent injuries. There can be examples about the most common injuries and what is possible to do to avoid them. Staying healthy and being able to work gives benefits to both the employee and the employer.

13. Travelling to the inspection site

Fire inspectors can go to the inspection site by walking, with a car or by public transportation. This section can provide the basic guidelines about the travelling to the site. It can provide information about how to access the inspection site safely and responsibly.

14. Identifying sources of stress

Safety manual can provide suggestions and ideas on how to handle stressful situations at work. Working while stressed can cause mistakes at work and that is why it is important to know how to handle it and solve the situation. Safety manual can provide information about who to get contact with in a case of continuous stress.

11.2 Future research

In the future there will be new ways of building, new fire systems, increasing safety risks, increase of population and many other things that can have an effect on fire inspections. All of these issues need to be taken into account in the way fire inspections are conducted in the future. The challenges, risks and possibilities of fire inspections and the safety of them in the future is something that could be research more.

As the future brings many new challenges it can also provide more tension amongst the customers during fire inspections. What could be researched more in the future would be the way how new fire inspectors are trained. Orientation of fire inspectors plays a big role in the way of how they will act and behave once they begin to work as inspectors. Orientation could emphasize the way of how difficult customers are faced and what to do if the situation gets out of control. There could be an actual manual to be created about dealing with a difficult customer as a fire inspector.

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Appendix 1: Original interview form for Teittinen

Henrik Suutarinen
Laurea Ammattikorkeakoulu
Security Management

~~Fire Inspector's Occupational Safety~~ – Haastattelu turvallisuusvastaavalle

Onko teillä kiinnitetty huomiota palotarkastajan työstä, työajoista, työtiloista ja työolosuhteista aiheutuviin haitta- ja vaaratekijöihin työntekijöiden turvallisuuden ja terveyden kannalta? Millä tavoin?

Miten usein palotarkastajille havaitaan käyneen tapaturmia, ammattitauteja, työperäisiä sairauksia tai vaaratilanteita. Jos havaitaan vakavampi työtapaturma, millä tavoin asia käydään läpi?

Tuovatko palotarkastajat esille koskaan heidän työhönsä liittyneitä vaaratilanteita / potentiaalisia vaaratilanteita ja millä tavoin näitä tilanteita käydään läpi?

A large, empty rectangular box with a thin black border, intended for the respondent to provide their answer to the question above.

Millaisia asioita näet isoimpina ongelmina Palotarkastajien työturvallisuudessa?

A large, empty rectangular box with a thin black border, intended for the respondent to provide their answer to the question above.

Onko palotarkastajan oma tehtävä selvittää etukäteen kohteessa mahdollisesti olevat vaaratekijät?
(esimerkiksi kohteessa käsiteltävät kemialliset aineet) Vai mennäänkö jokaiseen kohteeseen samalla tavalla valmistautuneena?



Ovatko jotkin ~~tietyt~~ kohteet erityisen haastavia työturvallisuuden kannalta muihin kohteisiin verrattuna?



Appendix 2: Original questionnaire form

KYSYMYKSET

VASTAUKSET

96

Palotarkastajan työturvallisuus -kysely

Laurea Ammattikorkeakoulun turvallisuusalan (Security Management) opiskelijan laatima kysely, jonka tavoite on saada kokonaiskuva palotarkastajan/jonkin muun vastaavaa tarkastajatyötä tekevän työturvallisuudesta. Kysely toteutetaan nimettömänä ja vastausten perusteella tehdään opinnäytetyöhön tilastoanalyysi sekä pyritään analysoimaan työturvallisuusongelmia.

Olisin iloinen jos jaksat ottaa osaa tähän kyselyyn jotta saan arvokasta tietoa opinnäytetyötäni varten!

Kyselyyn vastaamiseen ei mene kuin muutama minuutti!

Kiitos!!

T: Henrik Suutarinen

Virkanimikkeesi:

Lyhyt vastausteksti

Alueesi jossa työskentelet palotarkastajana:

Lyhyt vastausteksti

Kuinka monta kertaa olet palotarkastajan työssäsi joutunut työtapaturmaan?

- En kertaakaan
- Yhden kerran
- 2-3 kertaa
- 4-5 kertaa
- Useammin kuin 5 kertaa

Oletko palotarkastajan työssäsi kohdannut jotain seuraavista? (Voit valita usean vaihtoehdon)

- Stressi
- Uhkaavasti / agressiivisesti käyttäytyvä asiakas
- Fyysinen uhkailu
- Uhkailu lyönti, terä tai tuliaseella
- Fyysinen pahoinpitely / käsiksi käyminen
- Tavaroiden heittäminen
- Liikkumisen estäminen
- Työmatkalla sattunut tapaturma
- Sääoloista johtuva tapaturma (esim. liukas sää -> liukastuminen)
- Kohteessa tapahtunut tapaturma kuten liukastuminen, kompastuminen, putoaminen
- Kemialliselle aineelle altistuminen
- Jonkin koneen/laitteen aiheuttama tapaturma
- Agressiivinen eläin
- Muu...

Jos olet joutunut tarkastustehtävässä työtaturmaan kerro lyhesti kuvaus yhdestä tilanteesta, kohde yleisellä tasolla, sekä työtehtävä (esim. Kohde: Virastorakennus/koulu/yökerho. Työtehtävä: määräaikainen perustarkastus jne.)

Pitkä vastausteksti

Olisiko mielestäsi toisenlaisella varautumisella kohteessa voinut välttää kyseisen tilanteen? Millä tavoin?

Pitkä vastausteksti

Kuinka usein olet palotarkastajan työssäsi kohdannut aggressiivisia, uhkaavia tai erityisen hankalia asiakkaita?

- En kertaakaan
- 1-2 kertaa
- 3-4 kertaa
- Useammin kuin 5 kertaa

Jos olet kohdannut yllä olevia asiakkaita, miten selvitit tilanteen?

Pitkä vastausteksti

Koetko usein ottavasti riskejä jotka voivat vaarantaa työturvallisuutta työssäsi?

- Kyllä
 - En
-

Havaitsetko usein työtä tehdessäsi työturvallisuusriskejä? Luettele lyhyesti kyseisiä riskejä:

Pitkä vastausteksti

Välitätkö kyseisistä riskeistä ja oletko kertonut niistä eteenpäin esimiehellesi?

- Olen havainnut työturvallisuusriskejä ja kertonut niistä eteenpäin
- En ole kohdannut riskejä
- Olen havainnut työturvallisuusriskejä, mutta en kertonut niistä eteenpäin

Kaipaisitko työssäsi enemmän opastusta ongelmatilanteissa toimimiseen kohteissa?

- Kyllä
- En

Koetko että olet saanut tarpeeksi hyvän perehdytyksen toimimiseen ongelmatilanteissa palotarkastajan työssä?

- Kyllä
- En

Ottavatko esimiehesi mielestäsi työturvallisuusasiat tarpeeksi huomioon?

- Kyllä
 - Ei
-

Appendix 3: Original interview for Mannila

Kysymyksiä palotarkastajien perehdyttämisestä:

Miten kauan uuden palotarkastajan perehdyttäminen kestää? Minkä ajan jälkeen uusi palotarkastaja pääsee suorittamaan itsenäisesti tarkastuksia?

Millä tavoin työturvallisuusasioita otetaan perehdyttämisen aikana huomioon?

Millä tavoin palotarkastajia neuvotaan toimimaan hankalissa / vaativissa tilanteissa, kuten uhkaavan tai aggressiivisesti käyttäytyvän asiakkaan kohtaamisessa? Onko tällaisten tilanteiden varalle mitään selkeää ohjetta?

Onko palotarkastajilla koskaan käytössään minkäänlaista hätäpainiketta / kommunikointivälinettä avun saantiin?

Muita kysymyksiä:

Kerrotko miten normaali määräaikaistarkastus käytännössä etenee? (lyhyesti riittää) Alkaen siitä kun tarkastuksesta päätetään ja päättyen siihen kun tarkastus on suoritettu ja hyväksytty/toimenpiteitä vaativa?

"Palotarkastaja ottaa yhteyden tarkastettavaan kohteeseen... Päivämäärä sovitaan.... Palotarkastaja ajaa autolla kohteeseen... jne."

Millaisten syiden takia luulet että asiakas useimmiten saattaa tarkastus tilanteessa hermostua / muuttua aggressiiviseksi?

Miten toimitaan / mitä tapahtuu jos asiakas estää pääsyn johonkin tarkastettavan kohteen paikkaan? (esimerkiksi ei avaa jotain ovea / selittää että avain on kadonnut tms.)