

Reporting Firefighter Injuries



One in 10 firefighters

in our study reported they were injured on the job and reported that injury to NFIRS. However, our research showed there are gaps in knowledge of why and how to report injuries our fire service experiences.

Key Findings

24%

Of injured firefighters reported an injury to NFIRS but did not report it to their supervisor

84%

Of firefighters believe reporting injuries is important to their career

63%

Of injuries not reported to a supervisor happened at the fireground

What if you're injured on the job?

- Get treatment & report the injury to your supervisor.
- Report your injury to OSHA within 24 hours.
- Report your injury to worker's compensation within 90 days.
- Report your injury using NFIRS's Fire Service Casualty Module.



Did you know?

By reporting your on-the-job injury, you can prevent future injury and illness to yourself and your fire service colleagues.

Background

In 2016, according to NFIRS, 193 firefighters were injured, with 45 of those injuries severe enough to result in time off from work. In the same year, 210 injuries to firefighters were reported to OSHA. Comparison between the NFIRS and OSHA databases shows the number of firefighter injuries is underreported in NFIRS. Underreporting is problematic for the State of South Carolina, as firefighter safety initiatives cannot be implemented to dramatically reduce the frequency of all injuries occurring due to insufficient data. A project to analyze issues and circumstances surrounding firefighter injury reporting in South Carolina began in 2019.

Methodology

The first study (1,640 responses in an anonymous survey) involved analyzing the findings from an online survey disseminated to active fire personnel in South Carolina. The second study (208 interviews) was based off the responses from the first study, with an emphasis on how familiar firefighters were with the injury reporting process.

Findings

The first study showed that 11.0% of survey respondents reported an injury to NFIRS. For those injuries, 23.8% did not report it to an officer; 20.8% did not report it to Human Resources (HR); 39.3% were transported to a medical facility for treatment. About one in four respondents had an on-the-job injury they did not report. When looking at “why” injuries were not reported, respondents believed their injury was not reportable (lack of knowledge) or would cause some kind of perception of retaliation or loss of work and pay (fear). Eighty-three percent of fire service personnel believe reporting fire service injuries is important to them and their career. Most fire service personnel believed their department encourages reporting to supervisors or HR, but not to NFIRS.

The second study’s findings showed in two out of every five situations, the first step after the injury occurs is to notify another authority or agency about the injury. When a supervisor is aware of the injury, providing proper care was the next step 20% of the time. Six percent of supervisors admitted not knowing what to do in the event of an injury reported to them. Thirteen percent of respondents did not know who reports injuries to Worker’s Compensation, and 14.4% did not know who reports an injury to OSHA. In fact, OSHA requires a 24-hour reporting deadline for amputations, eye loss, and hospitalizations; only 12.5% of respondents answered this correctly. Workers’ Compensation requires a report to be made within 90 days, and no respondents answered this correctly.

According to OSHA, employee injury records must remain on file for 30 years after the duration of employment; only 2.80% were able to provide a correct response to the interviewers. Sixty-nine percent of respondents reported that training on how to report an injury is conducted at their department during new hire orientation. Eighty-two percent of respondents believed there was a benefit of reporting injuries in their department to include medical treatment, financial concerns, and prevention, among others. Forty-eight percent of respondents believed there was a drawback of reporting injuries in their department. This included, among others, fear of harassment or change in employment, too much paperwork, or a dislike of working with OSHA or Workers’ Compensation.

Recommendations

Based on the findings from the study, we recommend specific actions to help combat the issues facing underreporting of fire service injuries. These actions, which fall under the categories of research, advocacy, and outreach, should be completed with various stakeholders in mind. These stakeholders include individual fire departments, fire service organizations, and partnering agencies which have a vested interest in reducing firefighter injuries throughout the state. A detailed list of these specific recommendations can be found in the full report.

Frequency of Reporting Firefighter Injuries in South Carolina

By
Samantha Quizon
Statistical Research Analyst III

Julie McCabe
EMS Section Chief

July 1, 2020

Abstract

A project consisting of two studies was conducted in 2019 to discover if firefighters had not reported an on-the-job injury to appropriate parties and, if so, why did they not report it. A workgroup consisting of various state agencies, including State Fire, South Carolina Firefighters' Association, Myrtle Beach Fire Department, OSHA, and State Accident Fund, assisted with the direction of the studies.

The project's goals included:

- Improve safety culture¹, in regards to the values, norms, assumptions and expectations regarding safety, in the South Carolina fire service
- Understand why firefighters do not report injuries accurately in NFIRS
- Gain additional insight to better understand firefighter injuries in the South Carolina fire service

The project could inspire future recommendations:

- Create policies and procedures statewide for reporting firefighter injuries
- Implement training which may reduce the frequency of injuries happening to firefighters each year
- Provide advocacy for injured parties and fire departments
- Further research into improving safety culture in fire departments and what injuries have already been reported to NFIRS

The project confirmed injuries are happening inside fire departments, and there are personnel who are choosing not to report their injuries. The reasons typically are lack of knowledge of the process and a fear of consequences after reporting, such as removal from duty or employment. Firefighters believe injury reporting is important to their personal well-being and their career, but there is still an incomplete data set of injuries because they are not reporting every injury. Both studies completed in this project show there is a prevalent belief in negative consequences from reporting and injury. However, an incomplete data set will not target those issues which are the greatest contributing factors causing injuries. Fire service personnel should be encouraged to report their injuries to supervisors, OSHA, and Workers' Compensation. In turn, supervisors should encourage a positive safety culture and transparency in their department. All employees deserve a safe place to work and a confidential, supportive environment to report their injuries.

Background

In South Carolina, in 2016:

- 384,579 incidents were reported to NFIRS, the standard reporting system for fire department response.
- 155 (0.04%) of these incidents had at least one firefighter injury reported.
- In these 155 incidents, 193 firefighters were injured, with injuries of various severities reported.
- 45 (23%) of these reported injuries had a severity² which caused the firefighter to lose time or be temporarily out-of-service with their fire department³.

Additionally, workplace injuries are reported to Occupational Safety and Health Administration (OSHA) when the injury causes the employee to lose time from work.

¹ Retrieved from United States Fire Administration National Safety Culture Change Initiative FA-342/April 2015, United States Fire Administration. June 30, 2020. www.usfa.fema.gov/downloads/pdf/publications/fa_342.pdf

² Codes for Severity used were numbers 4 – 7, which document Lost Time as a requirement for its use.

³ Retrieved from the National Fire Incident Report System, United States Fire Administration. October 17, 2018. www.nfirs.fema.gov

In South Carolina, in 2016:

- 210 injuries to firefighters employed by local governments were reported to OSHA.
- The median amount of days away from work was seven, with 38% of injuries requiring the employee to be away for five working days or fewer⁴.

Comparison between the NFIRS and OSHA databases shows the number of firefighter injuries is underreported in NFIRS. The incomplete reporting of injuries results in inaccurate data collection. This is problematic for the State of South Carolina, as firefighter safety initiatives cannot be implemented to dramatically reduce the frequency of all injuries occurring. If it is assumed the 45 injuries reported to NFIRS were reported additionally to OSHA, there are still potentially hundreds of injuries happening to firefighters each year missing in the NFIRS database.

While NFIRS and OSHA collect different information regarding workplace injuries, both databases store information related to part of body affected, nature of injury, event causing injuries, and time and day of injury. The purpose of NFIRS is to collect information related to an incident in a community, while the purpose of OSHA is to document when a person cannot temporarily contribute with work, which causes various burdens to the agency and the community. The authors of this project believe firefighters are not reporting to at least one of these databases, although the reasons must be further investigated in a research project.

Methodology

In order to ensure the research conducted meets expected performance standards, methodology was reviewed by an oversight panel comprised of impartial members. This included representatives from State Fire, the State Firefighters' Association – Health and Safety Section, a high-volume fire department (Myrtle Beach Fire Department), OSHA, State Accident Fund, and Municipal Association of South Carolina. This workgroup convened bimonthly (in-person and virtually) to review previously collected data and provide suggestions for the next steps in the study.

The first study involved analyzing the findings from an online survey disseminated to active fire personnel in South Carolina. The survey was completed by 1,640 fire personnel, which the panel believed was a successful response (about 9% of all registered fire personnel in the state). The survey was open for two weeks in February 2019. A copy of the survey is attached to this document.

The second study was based off the responses from the first study, with an emphasis on how familiar firefighters are with the process of reporting. In order to ask more detailed questions, the panel assisted in conducting interviews during the South Carolina Fire-Rescue Conference in June 2019. There were 208 interviews conducted over a three-day period. A copy of these interview questions is attached.

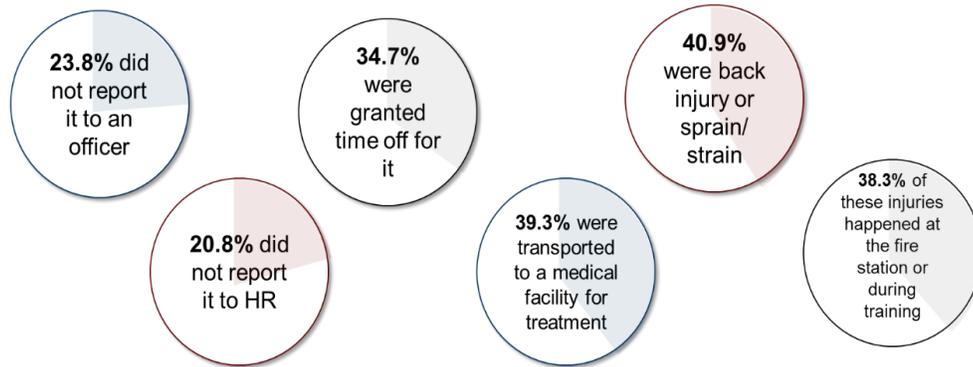
The third study was postponed until the winter of 2019 as the group wanted to ensure the best possible method of collecting the necessary information. The goal of this study was to involve at least one fire department self-reporting any injuries after each shift to a private data collector for a given period of time. By the time the study was to begin, the COVID-19 pandemic introduced preventive restrictions, and it was no longer feasible to do. The project organizers decided to postpone the study indefinitely and present the findings of the study to the workgroup and State Fire leadership.

⁴ Retrieved from Bureau of Labor Statistics. October 17, 2018. www.bls.gov

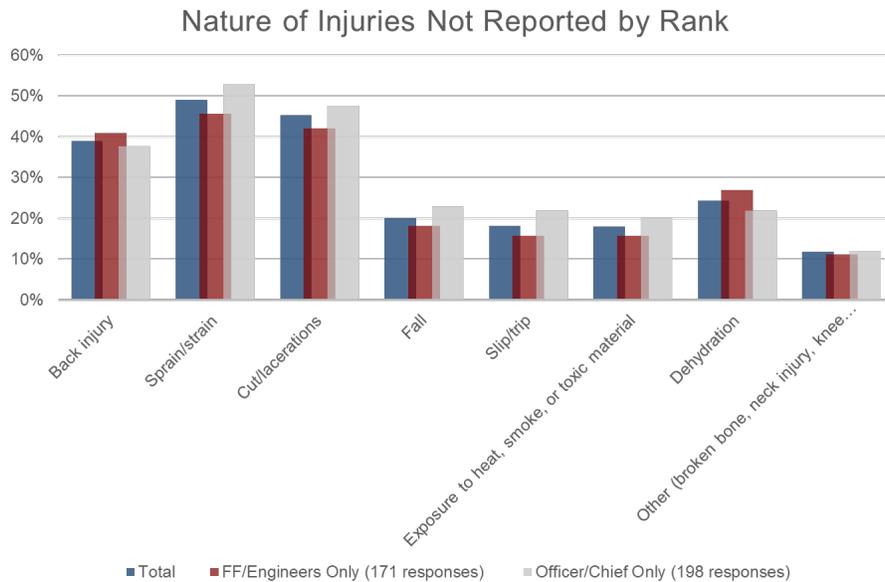
Findings

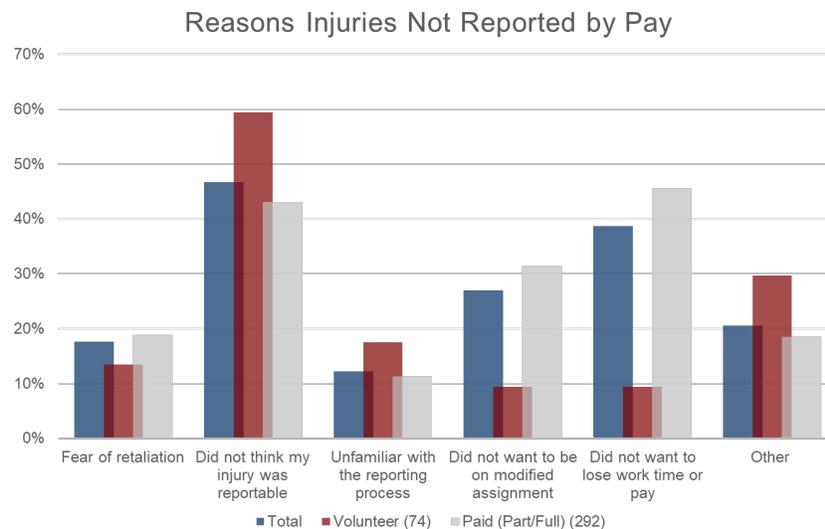
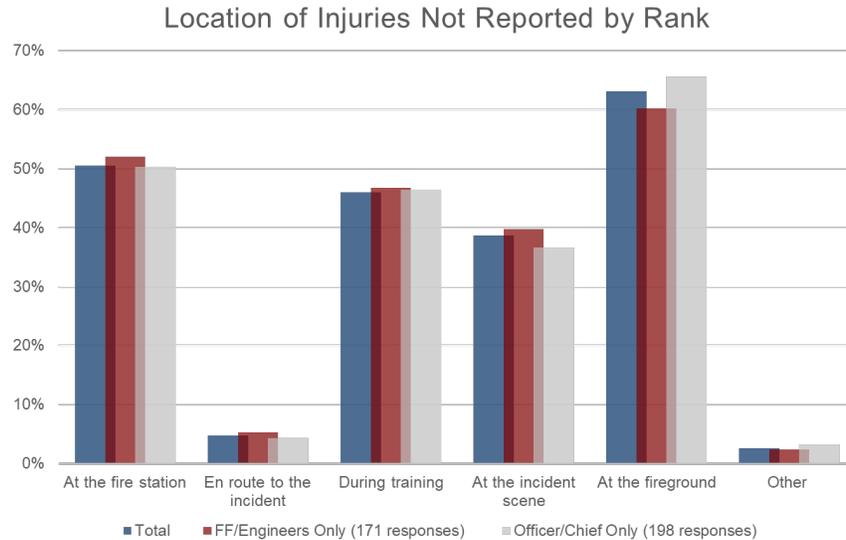
In the survey with more than 1,600 responses, 11.0% of fire personnel reported an injury to NFIRS from 2016-2018.

For those injuries reported to NFIRS:



Of all responses, 24.2% of personnel had an on-the-job injury they did not report at all. In the following three bar charts, respondents were able to choose all answers which apply to the injury or injuries they did not report. Injuries not reported tended to be sprains, strains, cuts, and back injuries, and they overwhelmingly happened at the fireground (or on-scene). When looking at “why” the injuries were not reported, respondents believed their injury was not reportable (lack of knowledge) or would cause some kind of retaliation or loss of work and pay (fear).





A large concern about injury reporting is the confidentiality of the report among relevant parties. Approximately **one out of four** personnel do not have confidence in the confidentiality of injury information. Chiefs and officers who responded have a higher confidence level in injury information protection (**59.7%**) than firefighters and engineers (**45.27%**).

The final set of questions asked fire service personnel to “agree,” “disagree,” or “neither agree or disagree” with various statements about reporting culture.

- **Statement: Reporting fire service injuries is important to my department.**
 - Total – 84% agree
 - Officers/Chiefs – 86% agree
 - Firefighters/Engineers – 81% agree
 - Volunteers – 87% agree
 - Paid Staff – 81% agree

- **Statement: My department encourages us to report injuries to supervisors or HR.**
 - Total – 85% agree
 - Officers/Chiefs – 89% agree
 - Firefighters/Engineers – 81% agree
 - Volunteers – 86% agree
 - Paid Staff – 84% agree

- **Statement: My department encourages us to report injuries to NFIRS**
 - Total – 48% agree
 - Officers/Chiefs – 51% agree
 - Firefighters/Engineers – 46% agree
 - Volunteers – 57% agree
 - Paid Staff – 43% agree

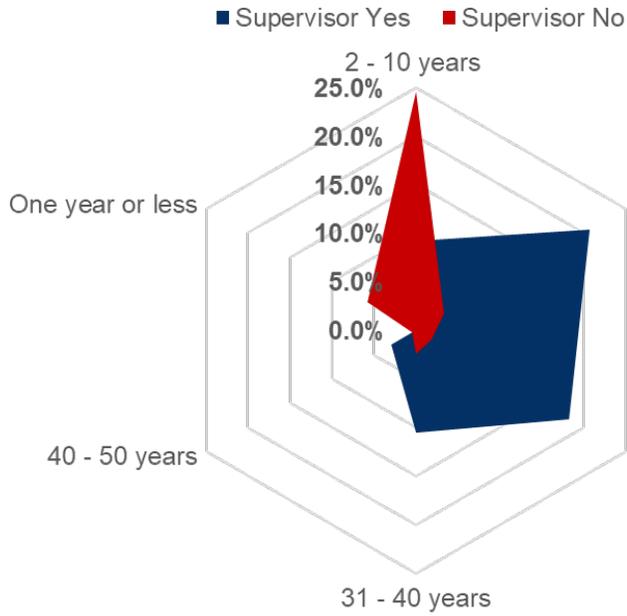
- **Statement: Reporting fire service injuries is important to me and my career.**
 - Total – 83% agree
 - Officers/Chiefs – 84% agree
 - Firefighters/Engineers – 81% agree
 - Volunteers – 85% agree
 - Paid Staff – 82% agree

It should be noted generally, fire personnel find injury reporting important on a personal or department level, but there is a pattern of not reporting injuries to NFIRS. This is could be due to end users completing only the basic information in a report. While departments want their staff to report injuries to supervisors and HR, there is a fear of retaliation as well as lack of knowledge on the reporting process.

The study workgroup recognizes that not all cases of managerial action towards an injured firefighter would be classified as “retaliation.” Managerial actions could include the transfer of the injured party to a light duty assignment. However, the workgroup would be remiss to discount situations where a respondent may be harassed by his peers or other supervisors for becoming injured during the course of his or her job. Perception of harassment or retaliation can sometimes be attributed to a communication breakdown between supervisor and subordinate, as the subordinate has an emotional reaction to his or her change in job function. Still, in some situations there is workplace intimidation which must not be ignored.

In the second study, there were 208 responses from a cross-section of South Carolina’s fire service.

- Chiefs - 15.4%
- Line-level firefighters – 40.4%
- Supervisors – 61.5%



Those who responded were generally supervisors with between 11 – 30 years in the fire service.

Those who did not have supervisor experience generally had between 2 – 10 years of experience.

Figure 1. Interview Participants' Years of Experience

Respondents were asked what their supervisor’s next actions were supposed to be once they were notified of an injury. After putting all responses in general categories, “notification to another authority or agency” was reported as the next step in two out of every five situations. Approximately one out of four supervisors completed some sort of form, most typically a “First Report of Injury” form. Surprisingly, some answers said the supervisor directs the patient to do his own paperwork or to take the next steps.

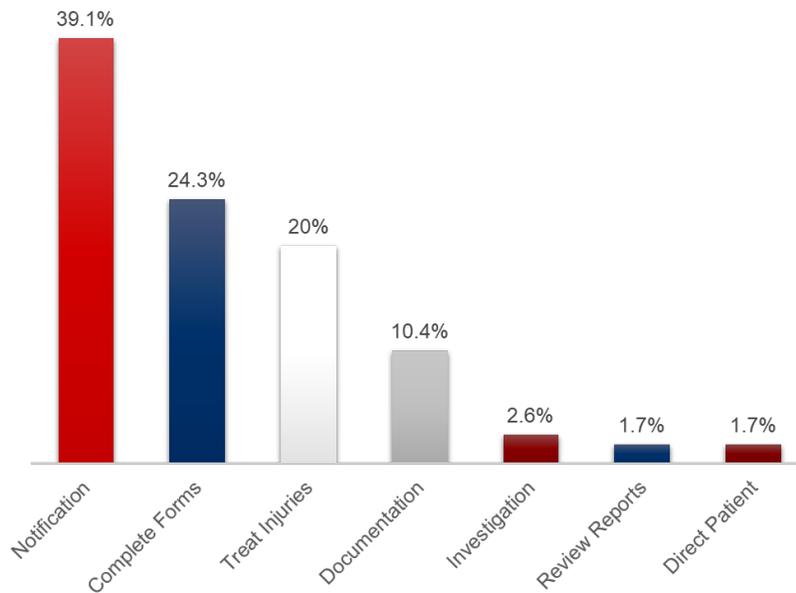


Figure 2. Supervisor's Next Actions (Grouped into Categories)

When ungrouping the supervisor’s next actions, some interesting trends appear. When the supervisor is aware of the process, he or she will ensure proper care is provided just 20% of the time. Six percent of supervisors admitted not knowing what to do in the event of an injury reported to them.

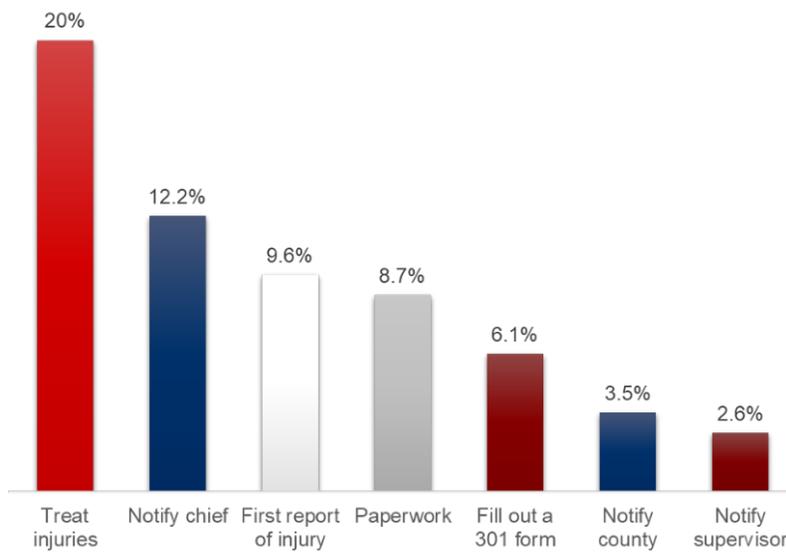


Figure 3. Supervisor's Next Actions (Ungrouped)

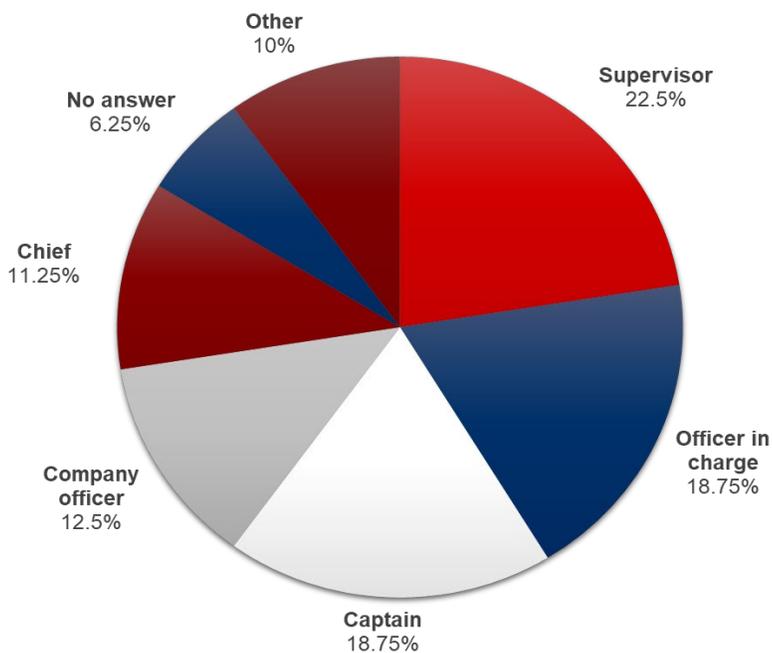


Figure 4. Subordinate's Reporting Person by Rank

Respondents were asked whom the subordinate was required to report to in the event of their injury.

It was found a subordinate is more likely to report their injury to an officer in charge or supervisor rather than their chief directly.

It is important to note the chief may receive the initial notice of the injury because he or she is the supervisor or the officer in charge. A chief may not receive notice right away if they are not an immediate supervisor or not on scene/in the firehouse to receive such a report.

Interviewees were asked about who reports to both OSHA and to Workers' Compensation if it was necessary in the event. Results show 157 out of 208 (75%) responses said the same person who

reports to OSHA also reports to Workers' Compensation. Thirteen percent did not know who reported information to Workers' Compensation, and 14.4% did not know who reported to OSHA.

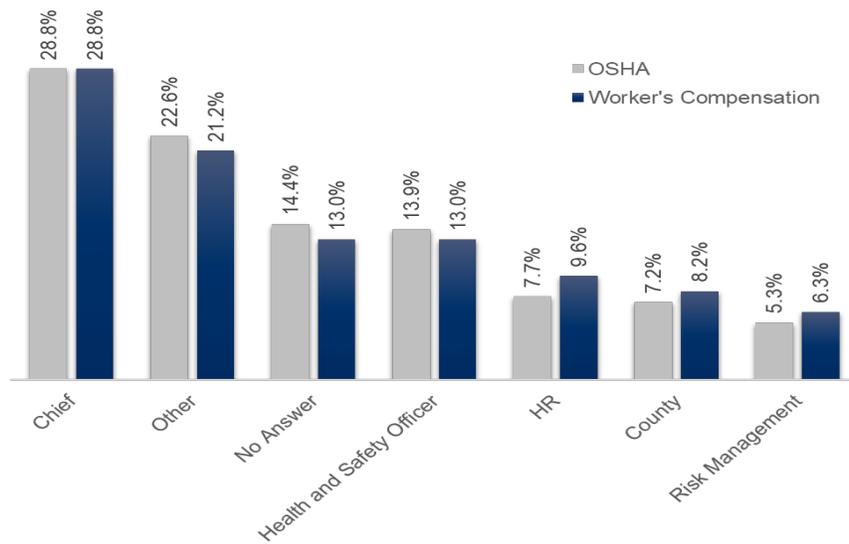


Figure 5. Rank of person who reports an injury to OSHA or Workers' Compensation

Only 25% of respondents were willing to provide a confident numeric response to “How long after the on-the-job (OTJ) injury are you able to report it to OSHA?” This number increased to 32% confident numeric responses for reporting to Workers’ Compensation, and 57% for reporting to the fire department. Figure 6 shows what respondents believed were reporting length deadlines to relevant agencies. OSHA requires a 24-hour reporting deadline for amputations, eye loss, and hospitalizations. South Carolina Workers’ Compensation Commission requires a report to be made within 90 days. Local departments should follow the guidance of their city commission or county authority to report an injured worker, if there is no department policy in place.

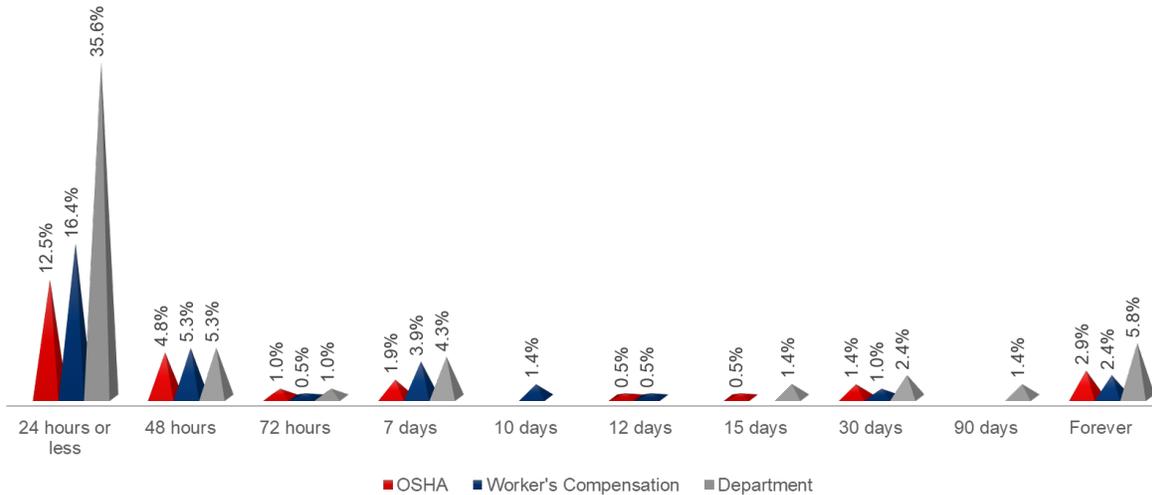


Figure 6. Reporting Length Deadlines by Agency

Thirty-eight percent of respondents believe there is a time limit on how long a record of injury can remain in place. OSHA’s requirement is employee injury records must remain for 30 years after the duration of employment. Only 2.80% were able to correctly articulate this information.

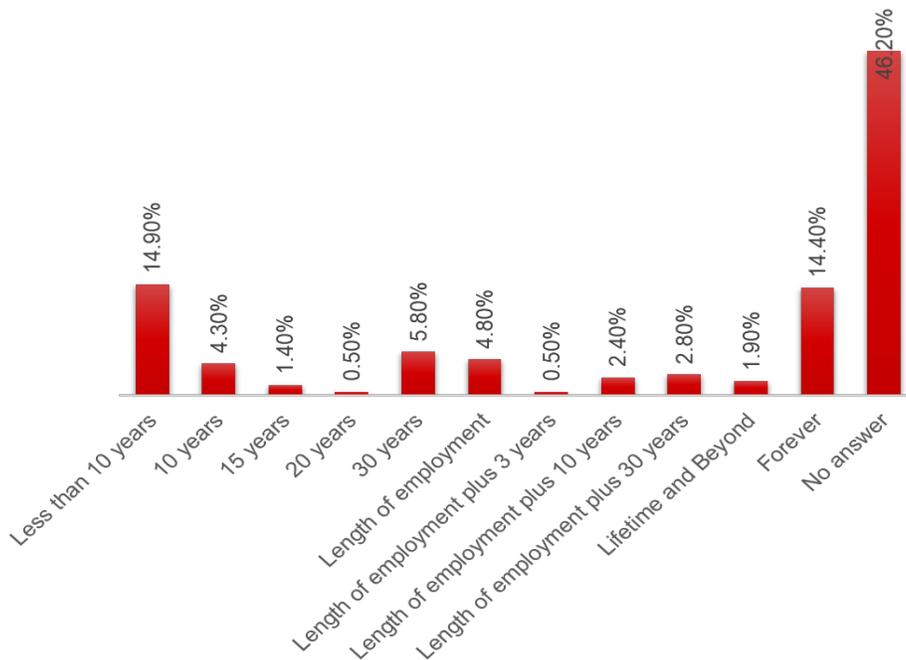


Figure 7. Record Keeping for a Reported Injury

Respondents generally felt confident in reporting the frequency of minor and major injuries, regardless of their definition. It is interesting to see, more often than not, injuries are occurring regularly among fire personnel – even if it is only perceived by personnel and not necessarily happening.

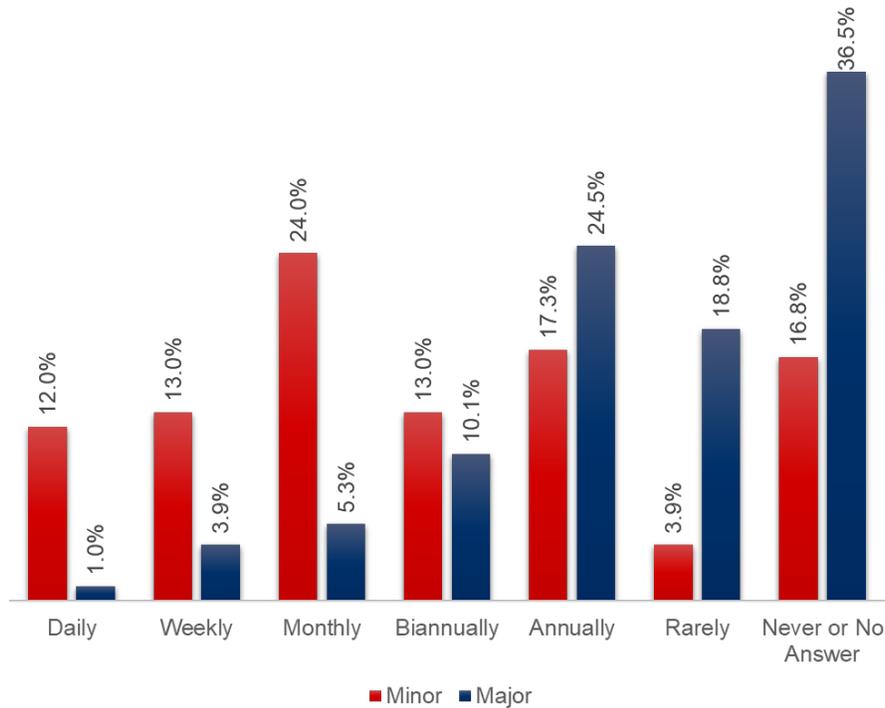


Figure 8. Injury Frequency Perceptions by Type of Injury

Sixty-nine percent of respondents reported there is an orientation for how to report in the department.

Of the 25% who said they did not have a process, half said they would find an orientation beneficial. Orientation for the reporting process lasted less than one hour in 34% of cases, and less than one day in 13.5% of cases.

Orientation covered a wide variety of topics, including how to notify, what treatment to get, how Human Resources play a role, policies and procedures, and who to report the injury. This pie chart shows if the respondent’s department has an orientation on how to report injuries in the department.

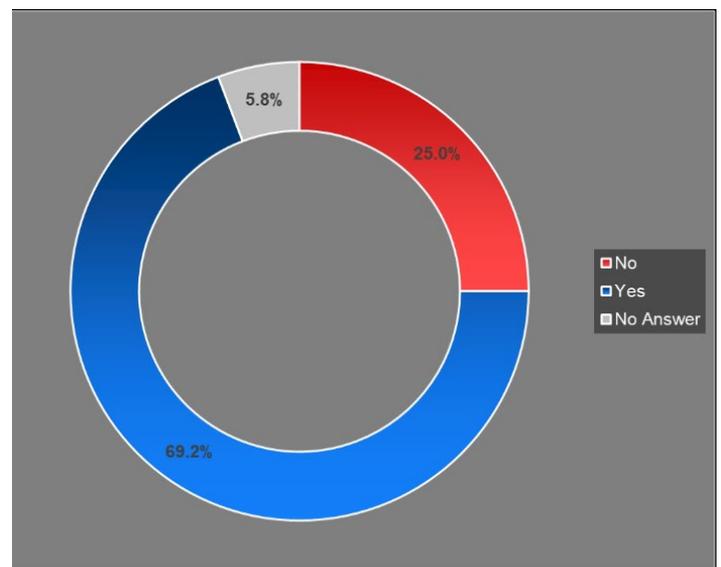


Figure 9. Injury Reporting Orientation

Eighty-two percent of respondents believed there was a benefit of reporting injuries in their department. Some of the common responses as to what these specific benefits are could be grouped into the follow categories:

- Medical treatment
- Improved department culture
- Coverage and documentation
- Financial or insurance concerns
- Statistics
- Prevent future injuries

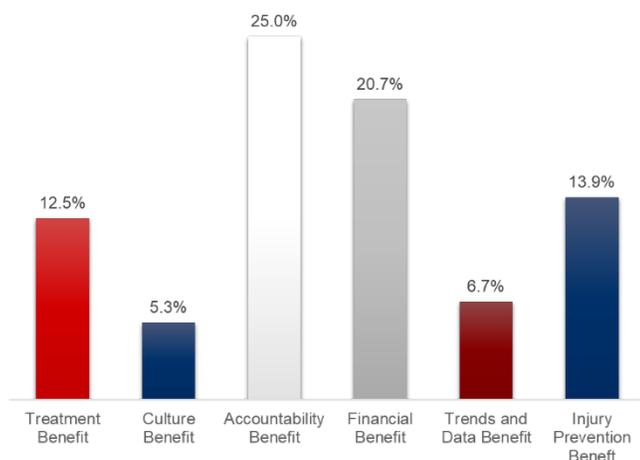


Figure 10. Perceived Benefits of Reporting Injuries

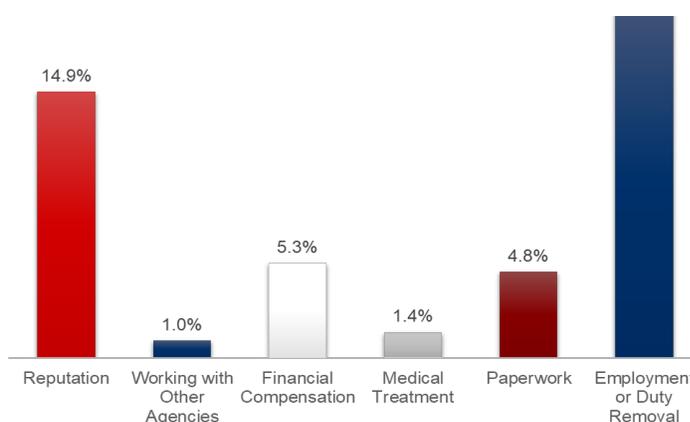


Figure 11. Perceived Drawbacks of Reporting Injuries

Forty-eight percent of respondents believed there was a drawback of reporting injuries in their department. Some of the common responses, which were obtained from the respondents' own perceptions, were grouped into the follow categories:

- Harassment or retaliation⁵
- Does not like working with OSHA or Workers' Compensation
- Financial or insurance concerns
- Difficult to receive medical treatment
- Too much paperwork
- Fear of being removed from duty or relieved from job

Forty-five percent of respondents had at least one recommendation for improving the reporting process in their department. The most common requests for improving the reporting process were:

- More training, including more frequent refreshers
- More personnel involved in the reporting process
- Make the forms electronic
- Simplify paperwork
- Educate personnel on the importance of reporting
- Eradicate the fear of retaliation if reporting happened

⁵ See Page 6.

Conclusion

Firefighter injuries are difficult to quantify due to the lack of reporting on-the-job injuries, which can be attributed to a lack of knowledge of the reporting process and the safety culture within fire and emergency services. This project's goal was to quantify how often fire service personnel are injured while on the job. However, the findings show there are circumstances why injured personnel do not report an injury, resulting in less than accurate data to answer the question. One in four personnel have had an on-the-job injury they did not report, whether it is due to lack of knowledge or fear for the consequences. Few respondents to the study could articulate who injuries should be reported to, the deadline for reporting injuries to the appropriate entity, and how long a record should be kept regarding an injury. There may not be an orientation for new employees about safety and injury reporting, leaving the affected personnel to navigate this stressful time on their own. Nearly half of respondents believed there is a drawback of reporting injuries in the department, from too much paperwork to a removal from employment or change in reputation in the department.

Without reporting to the appropriate agencies and systems, including NFIRS, there is questionable data quality as to who is being injured and by what mechanism. An incomplete data set will not target those issues which are contributing most to injuries. Firefighters will continue to be at risk for injury until we can protect them, including more training, more personnel involvement in the process, more education on the importance of reporting, and eradicating the perception of retaliation if an injury is reported.

Despite this, firefighters believe injury reporting is important to their personal well-being and career. Firefighters appreciate the accountability that comes with injury reporting, and are aware of a benefit for preventing future injuries to themselves and the fire service at large. It is easy to advocate for a culture in which there is no disadvantage in reporting a fire service injury in the department on paper, but there is still work to do. Employees deserve a safe place to work and a confidential, supportive environment to report their injuries. In order to obtain quality firefighter injury reporting data, we need to promote safety, discourage negative perceptions, encourage injury reporting, and provide the resources and tools to assist firefighters through the injury reporting process.

Recommendations

Based on the findings from the study, we recommend specific actions to help combat the issues facing underreporting of fire service injuries. These actions, which fall under the categories of research, advocacy, and outreach, should be completed with various stakeholders in mind. These stakeholders include individual fire departments, fire service organizations, and partnering agencies which have a vested interest in reducing firefighter injuries throughout the state.

- Utilize OSHA training for employers for how to report an on-the-job injury and record-keeping. Information about the class can be found at <http://www.scosha.llronline.com/pdfs/CourseList.2.5.20.pdf>
- Advertise the location of a federal poster download to fire departments which will clarify rights and responsibilities of the injured party and their agency. This poster can be downloaded at <https://www.osha.gov/sites/default/files/publications/osha3165.pdf>
- Provide state-supported classes to fire departments to improve the safety culture such as U.S. Fire Administration's *W0349 Fire Service Safety Culture: Who Protects Firefighters From Firefighters*.
- Incorporate the Everyone Goes Home: 16 Firefighter Life Safety Initiatives⁶, emphasizing the importance of firefighter safety, in training evolutions.
- Research ways to improve the safety culture inside the fire department. This can start with a new hire orientation and continuing to educate about the injury reporting process at least annually.
- Advocate for safety by the employer and employee during training, incident response, and station activities
- Investigate trends in injuries reported to NFIRS and regularly share findings with statewide stakeholders
- Recommend "May Day Mondays" – A health and safety initiative during the month of May to focus each Monday on mental health, physical health, injury prevention, and injury policies and reporting

⁶ Retrieved from Everyone Goes Home – Firefighter Life Safety Initiatives, National Fallen Firefighters Foundation. April 30, 2021. www.everyonegoeshome.com