

Research on Improving Firefighting and Rescue Capabilities of Fire Rescue Teams Under the New Situation

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Abstract: *Under the new situation, improving the firefighting and rescue capabilities of fire rescue teams has become an important task for ensuring public safety. This paper explores strategies such as scientifically formulating practical training plans, applying high-tech means to modernize disaster relief work, and developing reasonable emergency plans to systematically enhance the overall quality and response capabilities of fire rescue teams. These methods not only improve rescue efficiency but also ensure the safety and effectiveness of rescue activities, laying a solid foundation for responding to various emergencies in the future.*

Keywords: New Situation; Fire Rescue Teams; Firefighting and Rescue Capabilities; Improvement Strategies.

1. INTRODUCTION

With the acceleration of urbanization and the complexity of disaster situations, fire rescue teams are facing new challenges and opportunities. Improving firefighting and rescue capabilities is not only related to the construction of fire teams but also directly affects social public safety. Effectively integrating high-tech means, improving training methods, and optimizing emergency plans will provide fire rescue teams with stronger response capabilities. Through these strategies, fire teams can quickly and efficiently carry out rescue operations when facing complex fires and other emergencies, ensuring the safety of people's lives and property.

2. THE ROLE OF STRENGTHENING PRACTICAL CONSTRUCTION OF FIRE RESCUE IN FIRE RESCUE TEAMS

First, practical construction helps optimize the professional skills of the team. Fire rescue work involves various professional technologies, requiring team members to have solid professional knowledge and operational skills. By establishing a practical training mechanism, team members can repeatedly drill in simulated real scenarios to improve their adaptability and skill proficiency. This kind of training can not only enable team members to master the use of various rescue equipment proficiently but also enhance their ability to quickly judge and make decisions in complex environments, ensuring efficient response to emergencies in actual rescue operations.

Second, combat-oriented development promotes the improvement of team collaboration and communication skills. In fire rescue work, it is often difficult to complete tasks relying solely on individual abilities. Through combat-oriented drills, team members can cooperate with each other in a highly tense and stressful environment, enhancing mutual trust and understanding. Good team collaboration can effectively reduce the risk of misoperations and improve the success rate of task completion. In addition, combat-oriented training can help team members understand each other's roles and responsibilities, strengthen the cohesion of the entire team, which is crucial for efficiently completing rescue tasks.

Finally, combat-oriented development provides an effective way to improve the psychological quality of the fire rescue team. In real emergency situations, team members face life-or-death challenges, and maintaining calmness and rationality is crucial. By simulating rescue drills in high-pressure environments, team members can gradually adapt to such pressure and learn to manage emotions effectively. This psychological quality training helps team members maintain clear thinking during real emergency rescues, thereby making accurate judgments and decisions, and improving the success rate of rescue operations.

3. STRATEGIES FOR IMPROVING THE FIREFIGHTING AND RESCUE CAPABILITIES OF FIRE RESCUE TEAMS UNDER THE NEW SITUATION

3.1 Formulating Scientific and Reasonable Combat Training Plans

Before formulating a combat training plan, it is first necessary to conduct a comprehensive analysis of the current fire rescue situation. This includes summarizing past fire cases, identifying shortcomings and deficiencies in fire rescue, as well as the current professional skill level of the team and equipment allocation. By accurately identifying problems, a clear basis can be provided for the subsequent training direction, ensuring the pertinence and effectiveness of the training. A scientific and reasonable training plan should have clear hierarchical and phased training objectives. These objectives should be formulated based on the actual situation and functional needs of the team. For example, for new firefighters, basic training objectives should be set, including fire theory knowledge, basic use of rescue equipment, teamwork, etc. For experienced team members, higher-level objectives can be set, such as improving rapid decision-making and command coordination capabilities in complex scenarios. Through this clear division of training objectives at different levels, the enthusiasm and initiative of team members at different levels can be effectively stimulated, making the improvement of fire rescue capabilities more systematic.

Firefighting and rescue work is not limited to fire scenes but also covers various types of rescue tasks such as traffic accidents and building collapses. Therefore, actual training plans should comprehensively consider multiple possible rescue scenarios, including high-altitude rescue, chemical leaks, and forest fires. Through scenario simulations, train team members' response and handling capabilities in different environments and situations to ensure they can quickly adapt and effectively carry out rescues in real situations. In the process of implementing training plans, establishing an effective evaluation and feedback mechanism is crucial. Regularly evaluate training effectiveness, analyze the strengths and weaknesses of team members' performance during training, and adjust training content and methods based on evaluation results. The feedback mechanism should apply not only to individual team members but also include evaluations of the overall training plan to continuously optimize training programs and ensure the continuous improvement of team capabilities.

3.2 Strengthen practical training to enable rescuers to apply the theoretical knowledge they have learned to rescue work

In fire rescue work, theory and practice complement each other. Although pure theoretical learning can provide necessary knowledge support for rescue work, without practical testing, this knowledge often appears ineffective. Therefore, strengthening practical training can prompt rescuers to effectively apply the theoretical knowledge they have learned to practical work and improve their comprehensive firefighting and rescue capabilities. To enhance the effectiveness of practical training, diverse training content should be designed, which is not limited to traditional fire drills but also covers different types of rescue scenarios, such as hazardous chemical handling and emergency rescue in special situations. This diverse training content can effectively improve team members' ability to respond to complex situations and ensure they can flexibly handle The ever-changing rescue environments.

Humanitarian relief often requires close cooperation among multiple departments; therefore, conducting cross-departmental collaboration training is an important means to improve rescue efficiency. By conducting joint training with other departments such as the police and medical assistance, the ability to share information and allocate resources can be enhanced, ensuring the formation of a cohesive force in actual rescue operations and improving overall work efficiency and effectiveness. In fire rescue, the speed and accuracy of decision-making are directly related to the success of the rescue. Actual combat drills should be conducted with complex scenarios to prompt team members to make decisions under pressure. This type of training not only tests the abilities of team members but also helps them improve their ability to respond quickly and make scientific decisions under pressure, thereby enhancing the emergency response level of the entire team. To ensure the transfer of training effects, a strict training assessment system needs to be established. The assessment should include theoretical knowledge tests, practical operation ability evaluations, and team collaboration ability assessments. Through these comprehensive assessments, the ability level of team members can be fully evaluated, problems can be identified in a timely manner, and targeted training can be conducted to ensure that each team member can efficiently respond to various situations in actual rescue operations.

3.3 Using High Technology to Modernize Disaster Relief Work

In modern fire rescue, information technology is an important tool to improve work efficiency. Adopting advanced information management systems to timely obtain fire information, disaster site environmental conditions, and personnel positions will provide reliable data support for command and dispatch. By real-time tracking and analyzing fire dynamics, commanders can make decisions more quickly and adjust rescue plans in a timely manner, thereby improving rescue efficiency and safety. In addition, using tools such as drones and remote sensing technology to obtain on-site fire information can help fire teams more comprehensively understand the disaster situation and provide a basis for formulating rescue plans. With the development of science and technology, various high-tech equipment continues to emerge, and these equipment play an irreplaceable important role in fire rescue. It is worth noting that the introduction of fire-fighting equipment with automatic control technology, such as automatic sprinkler systems and intelligent fire-fighting robots, can significantly improve fire-fighting efficiency. These equipment can not only replace manual operations in dangerous environments but also reduce casualties and accident risks. In addition, using advanced equipment such as high-pressure water guns and main battle fire trucks can employ more effective fire-fighting methods and improve the success rate of fire suppression.

Big data technology also plays an important role in fire rescue work. By conducting in-depth analysis of historical fire data, fire departments can predict high-risk areas and fire occurrence trends, thereby making scientific arrangements in resource allocation and training plans. Cloud computing can provide fire teams with powerful data storage and processing capabilities. Through cloud platforms, information sharing and team collaboration will become more efficient, ensuring that all rescue personnel can obtain key information and real-time data in the first place. The combination of these technologies forms an intelligent, refined modern disaster relief system, effectively improving the coordination and response capabilities of rescue work.

3.4 Formulating Reasonable Emergency Response Plans

Before formulating an emergency response plan, conducting a comprehensive risk assessment is crucial. By systematically analyzing fire hazards in different areas, identifying high-risk regions and the characteristics of their potential disasters, we ensure that the emergency response plan can address specific issues in a targeted manner. The risk assessment should cover various environments such as communities, commercial areas, and large event venues to respond to emergencies in different scenarios. This all-round assessment helps identify key issues in advance and provides a scientific basis for formulating the plan. A reasonable emergency response plan should clarify the goals and scope of rescue, including rescue personnel, equipment deployment, and organizational structure. The goals should be clearly defined and feasible, ensuring that all rescue personnel can clarify their responsibilities and roles during operations. At the same time, the scope of the plan should cover all possible fire rescue situations, including emergency responses in special circumstances such as natural disasters and hazardous chemical leaks. In this way, it can ensure that the fire rescue team can carry out operations in an orderly manner when facing emergencies, avoiding unnecessary confusion and resource waste. Due to the rapid changes in urban development, the environment and conditions of fire rescue are constantly evolving. Therefore, the effectiveness of the emergency response plan needs to be regularly evaluated and adjusted. Establish a dynamic adjustment mechanism to ensure that the emergency response plan can timely reflect changes in the actual situation in the summary after each drill or actual combat, so as to adapt to new challenges and needs. Regularly review and optimize the content of the plan to ensure its timeliness and operability, thereby improving the scientificity and targeting of the plan. Only when a well-formulated emergency response plan is verified and improved in actual drills can it play a role in emergencies. Therefore, strengthening the drilling of the plan and transforming the operational procedures, command system and other contents of the plan into actual combat capabilities is an effective way to improve the rescue team's ability to respond to fires and other emergencies. Through drills, team members are familiar with each link in the plan, enhancing their adaptability and teamwork ability in emergency situations. In addition, experience and lessons should be learned during the drill process, and the plan should be revised and improved in a timely manner to ensure that the team can respond efficiently in potential crises.

4. CONCLUSION

Under the new situation, improving the fire fighting and rescue capabilities of the fire rescue team is an important measure to deal with complex disasters. It is particularly crucial to improve the comprehensive capabilities and response speed of the rescue team through scientific training plans, the application of high-tech means, and reasonable emergency response plans. This not only improves rescue efficiency but also provides a strong guarantee for maintaining public safety. Looking forward to the future, continuously promoting the modernization

and scientization of fire work will enable the fire rescue team to more effectively respond to various sudden disasters and protect the peace and safety of the people.

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