

# **FIRE PREVENTION AND CONTROL PROGRAM OF THE BUREAU OF FIRE PROTECTION IN ZONE 33, BARANGAY 327 STA. CRUZ, MANILA FIRE DISTRICT**

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## **INTRODUCTION**

Fire has an element of nature to give some light to the world and also fire is the most important part of the life of a person especially in daily necessities like cooking, and protection to defend themselves from harmful elements, and fire is also a reason why burns many homes because it is not used properly so many people lose their homes. These are some examples of a using a fire.

The important things of using how to learn effectiveness reactions in the event of fire is essential to a successful fire prevention program. For more information of the fire is chemical reaction needs three elements of the triangle (Fuel, Heat, and Oxygen), that causes of fire, To reduce the impact and possibility of fire, we should place the proper shelves of fire hazards make sure after use the LPG tank is always closed, Our

human society could not exist without fire and we often forget it's positive impacts. A fire may be accidentally started, but that's enough information to help your analysis. You'll need to know why the accident occurred. Examples: electrical wiring such as overloading jumpers overheat open flames like lighted candles, but the cause might have been due to individuals lack of fire safety knowledge, poor judgment or perhaps.

To incorporate fire prevention devices, alarm and exit; frequently the cases of fires are listed as being accidental, careless, defective equipment, arson, natural so on. To isolate equipment and materials that could cause a fire or explode if exposed to fire.

From the primary function and responsibility of BFP is ensuring public safety through prevention

and for suppression of all destructive fires on houses, forests, buildings, land transportation vehicles, and also to protect people to fire.

The enactment of Republic Act 6975, otherwise known as the Department of Interior and Local Government IDILAI, Act of 1990 which took effect on January 1, 1991 paved the way for the Establishment of the Philippines National Police (PNP), Bureau of Fire Protection (BFP), and Bureau of Jail Management and Penology (BJMP), as separate entities. The Bureau of Fire Protection is a government agency wherein its primary role is to suppress, control and prevent the possible outbreak of fire, enforce as well the relevant laws, provide, medical emergencies and rescue services provided by the Fire Code of the Philippines which is PD 1185 including complaints/cases. thereof the filing of appropriate

This study focuses on the assessment of the fire prevention and controlled program of the Bureau of Fire Protection in Sta. Cruz, Manila Fire District. This researchers want to determine the fire prevention and program in the Barangay where Quiricada Sta. Cruz, Manila Fire District belong and to learn basic disaster.

## STATEMENT OF THE PROBLEM

This study aims to assess, the Fire Prevention and Control Program of Bureau of Fire Protection in Ita. Cruz

1. How do the Fire officers, Barangay Officials, Fire Volunteer assess the fire prevention and control program of BFP in terms of:

1.1 Fire Safety Inspection, and

1.2 Emergency Rescue

2. Is there a significant difference between the ment of the (3) groups respondents regarding fire prevention and control program?

3. What are the problems encountered by the respondents in fire prevention and control program in Quiricada Sta. Cruz, Manila Fire District?

4. From the findings of the study, what are solutions and recommendations that may be proposed to enhance the fire prevention and control program of Bureau of Fire and Protection in Sta. Cruz, Manila Fire District.

## METHODOLOGY

This study employed the descriptive method of research to investigate and assess the Fire Prevention and Control Program in Sta. Cruz, Manila Fire District, academic year 2017-2018.

According to Delos Reyes (2013), descriptive method of research is purposive process of gathering detailed information to be use as a basis for judging the safety, emergency rescues and programs in term of best practices and standard assessment through survey. Through this research design, detection can be made for improving, maintaining and rejecting assessment to make it effective and efficient.

#### DATA GATHERING PROCEDURE

Three of the most data gathering techniques used in quantitative research involve interviewing, observing and reviewing documents/reports. Interviewing and reviewing existing data were two main techniques used in this study. Data were collected primarily by use of interview guide while demographic data were gathered using the survey form.

#### STATISTICAL TREATMENT OF DATA

The following statistical tools analysis of data. were used in the

Variables:

a. Profile of the respondents Percentages, Average

b. Respondents assessment in the fire prevention and control program of the BFP, Percentages, Ranking.

c. Significant difference the assessment of th

respondents regarding in fire prevention an

control program to six (6) standard rules.

T-test, F-test, Correlation

1. Frequencies and Percentages.

This will used to determine the demographic profile of the respondents.

F

Formula:  $P = \frac{\quad}{\quad} \times 100$

Where:

P - Percent

N - Number of Respondents

F - Number of responses

100 - Constant value or factor

## 2. Weighted Mean.

The Averages weighted mean (AWN) was utilized to measure the central tendency in relation by the respondent. The average weighted mean refers to the accumulated responses which determine the corresponding weight using the formula:

$$\Sigma Fx$$

$$WM = \frac{\Sigma Fx}{N}$$

N

Where:

WM - Weighted mean

$\Sigma$  - Summation sign

F - Frequency obtained from the number of responses

X - Weighted of each value of the scale

N - Total number of respondents

## 3. F-test.

Calculating F and comparing it with sampling distribution permits Us to an applicable determine the probability that any aggregate or combined differences among the observed sample means is due to sampling error alone if the null hypothesis is true that is the probability that the samples were all drawn from the same population. The great advantage of this approach to testing for differences among means is that it is applicable with any number of samples (Categories of the independent variables corresponding sample means).

## SUMMARY OF FINDINGS

Sub problem No. 1 How do the respondents assess the fire prevention and control program of BFP in terms of fire safety inspection and emergency rescue?

The assessment of respondents on the fire prevention and control program of BFP in inspection are presented in Table 5. terms of fire safety

Summary of Assessment on Fire Prevention and Control Program of BFP

CRITERIA	Fire		Fire		Baran		Compo	
	Volun	ter	Fire	floor	Offi	cer	Weg	ite
	WM	VI	WM	VI	WM	VI	WM	VI
1. Safety inspection	4.30	HI	4.30	HI	4.15	I	4.25	HI
2. Emergency rescue	4.35	HI	4.61	HI	4.31	HI	4.42	HI
Overall Mean	4.33	HI	4.20	HI	4.23	HI	4.34	HI

As viewed in the table, on the fire prevention and control program of BFP in terms of fire safety inspection, rank 1 is "Check packing hose tightness (slight leak or no flow). (Tingnan ang mga hose, tingnan kung may leak o tagas)- was rated as highly implemented as evidenced by the obtained weighted mean value of 4.49. Rank 2 is "They inspect the fire extinguisher in every establishment in their area of Jurisdiction. (Sinusuri nila ang pamatay ng apoy sa bawat establisimyento sa kanilang lugar ng hurisdiksiyon)- was rated as highly implemented as evidenced by the obtained weighted mean value of 4.39. Rank 3 is "They inspect the Fireextinguisher in every establishment in their area of Jurisdiction. (Sinusuri nila ang pamatay ng apoy sa bawat establisyemento sa kanilang lugar ng hurisdiksiyon)" was rated as highly implemented as evidenced by the obtained weighted mean value of 4.29. Bank 4 is "Check controller alarms. (Tingnan din ang controller alarm) was rated as highly Implemented as evidenced by the obtained weighted mean value of 4.25. Rank 5 is "Record time pump runs after pumping. (Itala o isulat ang bawat pagtakbo o pag galaw ng pump o tubo/host ng tubig) was rated as highly

implemented as evidenced by the obtained weighted mean value of 4.24. rank 6 is "Fire permit forms are accomplish first and checked by the local authorities before going out to the area. may mga permite papel bago pumunta aa isang lugar) was rated as highly implemented as evidenced by the obtained weighted mean value of 4.23. Rank 7 is "Observe time for motor to accelerate to full speed. (Tingnan palagi ang motor o ang wastong pag ikot ng motor) was rated as highly implemented as evidenced by the obtained weighted mean value of 4.22. Rank 8 is "Check for unusual nose ar vibration. (Tingnan baka may kakaibang tunog o pag vibrate ng kagamitan sa sunog) was rated as highly implemented as evidenced by the obtained weighted mean value of 4.21. Rank 9 is "Check heat exchange for cooling water flow. (Tingnan din ang init hanggang sa malamig na pag agos ng tubig) was rated as implemented as evidenced by the obtained weighted mean value of 4.13. Rank 10 is "Operate fire pump for 10 minutes (30 minutes for diesel pump. (Paganahin ang fire pump ng sampung minute lamang) was rated as implemented as evidenced by the obtained weighted mean value of 4.01. This shows that the fire prevention and control program of BFP in terms of fire safety inspection was highly implemented as to the assessment of the respondents supported by the obtained overall weighted mean value of 4.25.

Sub problem No. 2 Is there a significant difference between the assessment the three groups of respondent on fire prevention and control program of BFP?

The results of significant difference on the assessment

of respondents on fire prevention and control program of BFP are presented in Table 4.

Result of Significant Difference						
Source of Variation	ss	df	MS	F-ratio	Decision	VI
Between	0.051	2	0.0255	1.2327	Accept Ho	Not Significant
Within	0.0621	3	0.0207			
Total	0.1131	5	5			
Critical value at .05=			9.95			

As shown by the data in Table, it could be noticed that the assessment of the respondents on on fire prevention and control program of BFP obtained a computed F value of 1.2327 were found to be of less value than the F tabular value of 9.55 at five percent level of significance with 2 and 3 degrees of freedom and verbally interpreted not significant.

Since the computed F value is less than the critical value, there is a strong indication that there is no significant difference on the assessment of respondents on fire prevention and control program of BFP in terms of safety inspection and emergency rescue. This implies that the fire volunteer, fire officer and barangay officers gave the same perception on the

variables presented under the safety inspection and emergency rescue of fire prevention and control program of BFP.

Sub problem No. 3 What are the problems encountered by the respondents in fire prevention and control program Quiricada Sta. Cruz, Manila Fire District.

The problems encountered by the respondents on the safety inspection and emergency rescue of fire prevention and control program of BFP, rank 1 in "Explain common causes of fire. (Ipaliwanag ang mga pwedeng dahil bakit may sunog)" was rated as highly encountered as evidenced by the obtained weighted mean value of 4.67. Rank 2.5 are "Reminds the public or barangay the importance of practicing awareness on fire prevention. (Sinasabihan ang mamamayan na magkaroon ng paki-alam sa programa tungkol sa sunog)" and "Firemen distributes leaflets regarding fire safety tips to residence. (Namimigay ng babasahin pangkaligtasang dapat sundin)" was rated as highly encountered as evidenced by the obtained weighted mean value of 4.60. Rank 4.5 are "Conduct fire drill twice a month. (Nagsasagawa ng fire drill dalawang beses sa isang buwan)" and "Reminds to call 911 or call nearest fire station for assistance. (Matutong tumawag sa 911 o malapit sa istasyon ng pulis para matulungan)" was rated as highly Implemented as evidenced

by the obtained weighted mean value of 4.57.

Sub problem No. 4 From the findings of the study, what are the solutions and recommendations and control program of Bureau of Fire and Protection in Sta. Cruz, Manila.

Based on the results of the study, the following recommendations may be proposed to address the problems encountered by the respondents.

1. The Barangay Official should inform the importance of fire prevention.

2. The Barangay Officials should encouraged community to participate in the conduct fire drill.

3. The Fire Officials must distribute leaflets or brochures on fire safety tips to the community.

4. The fire officials together with the Barangay Official should conduct seminar about common causes of fire.

## CONCLUSIONS

Based on the findings revealed in the study, following conclusions were formulated. the

1. A highly implemented assessment of respondents on the fire prevention and control program of BFP in terms of safety inspection and emergency rescue.

2. The fire officer and barangay officers gave the same perception on the variables presented under the safety inspection and emergency rescue of fire prevention and control program of BFP.

3. There is a strong manifestation that the respondents signifies that they encountered problems on inspection and emergency rescue of fire prevention and control program of BFP.

4. There are some recommendations to enhance the fire prevention and control program of Bureau of Fire Protection.

## RECOMMENDATIONS

In the light of the findings and conclusions, following are strongly recommended. the

1. The Barangay Officials should encouraged the community to participate in the conduct fire drill.

2. Information dissemination on fire prevention.

3. Address to the management the encountered problems of the fire volunteer and fire officers.