

# SANTA ANA POLICE DEPARTMENT

DAVID VALENTIN · CHIEF OF POLICE

## TRAINING BULLETIN

*"Education promotes professional and responsive law enforcement"*

### Police Response to Structure Fires

#### Purpose

The purpose of this training bulletin is to provide police personnel with the necessary knowledge when confronted with structure fire incidents. Basic actions and the avoidance of errors by police personnel can aid in the saving of lives and property.

#### Introduction

Santa Ana Police personnel are frequently dispatched to various types of structure fires. Sometimes police personnel are the first to arrive at a structure fire. Therefore, it is important that police personnel take proper action to ensure the preservation of life and property. In order for police personnel to take appropriate actions, they must have basic knowledge of the phases of a fire, as well as be aware of common mistakes that can be made by public safety personnel.

#### I. Responsibilities

When responding to a fire, arrival and approach are important. The need for a “code 3” response will be determined on a case by case basis. If a “code 3” response is necessary, officers shall adhere to procedures outlined in the departments emergency response policy, Department Order No. 310.

Upon arrival, officers must be cognizant of pedestrians and bystanders, as fires tend to attract crowds. If police personnel arrive prior to the fire department, it is important for officers to take a close look at the structure in question. If the responding officer drives past the structure he/she will be able to see three sides of the structure and can identify whether there is smoke or flame showing. After driving past the location, the officer should park the police unit at a location where it will not be in the way of the responding fire department vehicles and equipment.

Upon making contact at the scene, the number one priority for police personnel is to determine if everyone has exited the structure safely. If it is believed that someone may still be in the structure, police personnel shall immediately relay the information to responding fire department personnel. If it is safe to do so officers should walk around the structure to see if the “victim” may have already exited elsewhere. Officers may knock on windows and doors to alert occupants. In the helpless frustration of waiting for fire personnel to arrive, when it is believed that there is a person inside a burning structure, officers sometimes

attempt a rescue. In doing so, some important points are overlooked. During this time it is critical for officers to have a basic understanding of the phases of fire and common mistakes made by rescuers.

## II. Phases of a Fire

Fire starts when an ignition source heats fuel in the presence of oxygen, starting a chemical reaction known as combustion. During this early phase, flame, heat, light, smoke, and toxic gases are formed. The room where the fire is at will be relatively warm at this phase, but is still relatively safe to be in. The fire may be easily extinguished with a portable fire extinguisher at this time. If an officer decides to make a rescue attempt, they should remember that cooler, breathable air will be closer to the floor, therefore, they should stay low to the ground. During this early stage of a fire, if there are no means available to extinguish the fire, simply close the door to the involved room and pass this information to the first arriving fire unit. Officers should also be aware of the escape routes at all times. Due to the rapidly changing conditions of a fire, officers should be absolutely certain that they can get out if they have to.

As the fire heats up it moves to the flame spread phase. In this phase, objects in the room begin to heat up and start to give out combustible gases as the fire spreads. During this phase the fire and heat increase rapidly. A great deal of smoke and several highly toxic gases form. Anyone in a room during this phase will quickly be overcome by gases and lose consciousness. Likewise, anyone entering the room to rescue a victim without protective clothing and a self contained breathing apparatus is likely to be burned and lose consciousness. Police issued gas masks will not protect you under these circumstances.

As the fire grows and flammable gases continue to produce, several things can occur. (1) If sufficient oxygen is available the room temperature can rise over 1000 degrees, and a simultaneous ignition of everything in the room will occur. This is referred to as a "flash over". A police officer in the typical polyester uniform will not survive a flash over. (2) If there is not sufficient oxygen for a flash over, the fire will become very hot and smoky with very little visible flame. This condition is very deceptive. During this phase an officer may feel compelled to open a door or window to provide the victim with fresh air. However, such an action will provide the gases with a burst of oxygen and a back draft will occur.

During the back draft stage, gases ignite blowing out doors and windows, this will probably result in fatal injuries to anyone that is inside the room as well to any unprotected rescuer.

During the extreme phases of a fire, police personnel should concentrate their efforts towards interviewing escaped occupants, clearing the entry way and the street of any obstructions that would delay the fire department, and relaying any pertinent information to responding fire department and police personnel.

## III. Common Mistakes

Sometimes police personnel will enter a burning structure without considering the dynamics of a fire. Therefore, the dangerous conditions during the various phases of a fire are

overlooked. Failure to consider toxic gases and the lack of protective clothing has led to numerous injuries and even deaths of law enforcement officers. In most structure fires the best course of action by police officers is to not enter the structure but to wait for fire department personnel that have the proper training and equipment to enter the structure.

## Summary

It is critical that officers are aware of the potential hazards during structure fire responses. The basic knowledge of fire dynamics contained in this training bulletin and common sense should dictate an officer's actions at the scene of a fire. The guidelines in this bulletin will allow police personnel to ensure the safety and security of individuals during emergency fire responses.

**Acknowledgment:** This training bulletin was researched and prepared by Cpl. Rojas #2031 with the assistance of William Lackey of the Santa Ana Fire Department. 8/01

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