

# 住宅火災資料統計分析與對策

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## 摘要

**關鍵詞：住宅火災、防火對策、防火趨勢**

本論文共分為四章。第一章為緒論，主要是說明本研究緣起及進行的方法和步驟。第二章為我國、日本及美國火災數據分析比較及個別的防火對策說明；在我國，由近五年來火災次數統計顯示，在火災總數方面，2002年較2001年增加，但比2000年稍減一些。相對的，近幾年來住宅火災次數幾乎是持平不變；但日、美兩國兩者皆呈下降趨勢。在火災原因方面，若扣除美國及日本因冬天須使用暖氣設備的因素，則三個國家的前四位的起火原因完全相同，換句話說住宅起火的主要原因有共通性。若再仔細分析，可以發現美、日甚至連起火原因的排名都完全相同，在我國則是電器火災居首而廚房火災墊後，與美日兩國恰好相反，至於在縱火及菸蒂火災則是三國排序皆同，分居二、三名。三個國家的防火對策基本上是大體相同，只是在我國比較偏重於消防及建管方面的手段，而不像美日比較有全面性的思考，例如美日兩國就有考慮到高齡者及幼童的防火安全對策，另外對此兩弱勢族群的衣物應具有的防焰性能亦有特別的說明，這些都值得我們在推動防火對策時，可以加以考慮的因素。第三章則是設計專門針對住宅防火火災數據的調查表格，內容包括有一般建築物與住宅火災統計、住宅起火原因、發生處所、住宅建築物資料、火災發生時間及死亡和受傷人數、損失金額及是否有保火險等；此外亦對各縣市推動住宅防火現況作個說明，並建議一執行評量表，提供政府部門作使用參考。最後在第四章執行的結論與建議。

## Statistical Analysis and Policy of Fire Prevention Data of Residences

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### Abstract

This thesis consists of four chapters. The first chapter is an introduction, which includes background, research approaching method and procedure. The second chapter makes the analyses and comparisons of fire data between Taiwan, Japan and United States, and describes the respective fire protection policy. In Taiwan, the number of fire incidents in 2002 is little more than that in 2001, but is less than that of 2000. However, the number of residential fire is almost retained constant for these recent years in Taiwan, whereas the trend is reduced continuously in Japan and U.S. The leading four fire causes are the same for these three countries, except that the factor of heating appliance used in snowing winter for Japan and U.S. is not encountered. In other words, the residential fire causes are in common. To analyze further, it can be found that the rankings are even the same for both Japan and U.S. In Taiwan, electrical fire is the leading fire cause and the kitchen fire is the fourth, which show the reverse trend of the former two countries. The basic fire protection policies for residence are the same for these three countries. However, it puts more emphases on the means of fire fighting and architecture management in Taiwan, whereas the other two have more complete considerations, such as the fire protection for the elders and children. For example, they have very restricted rules for regulating the ignition performance of clothes used for these specified persons. These can be taken as the references for promoting the fire protection concerns for the residential fires. Chapter three describes a designed survey form for the record of residential fire. It includes the statistics of general building and residential fires, the causes of residential fire, the area of fire initiation, building data, occurrence time, numbers of death and injury, fire loss and the insurance condition. An evaluation form for the performance to promote the residential fire protection in each county is suggested to the Fire Administration. Finally, the conclusions and suggestions from this research are given in the Chapter Four.

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