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A STATE-BY-STATE ANALYSIS OF FIRE SAFETY IN NURSING FACILITIES

A STAFF REPORT

OF THE

SPECIAL COMMITTEE ON AGING
UNITED STATES SENATE

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PREFACE

Because there are more people living longer and more long-term care facilities than ever before, long-term care continues to gain much attention. However, one rarely thinks of fire safety as a long-term care issue. Yet, the Committee feels that it is necessary to take an indepth look at fire safety in nursing facilities because of the numerous fires in these facilities and the vulnerability of those who live in them.

From 1983 to 1987, an estimated 3,200 fires occurred per year in facilities for the aged with a nursing staff. These fires accounted for $2.9 million in property loss, 163 civilian injuries, and 12 civilian fatalities per year.

Despite today's fire technology and fire codes, multiple-death fires still occur in these facilities where residents are often too mentally and/or physically disabled to protect themselves from fire. Unfortunately, one of these devastating fires arose in my home State of Arkansas. On March 13, 1990, a nursing facility fire in Dardanelle, Arkansas, claimed the lives of 4 residents, and at least 10 others were hospitalized.

Throughout the years, the Committee has been responsible for research, hearings, and legislative action to ensure appropriate fire protection for nursing facility residents. As the result of a report by the Committee, all long-term care facilities participating in the Medicare and Medicaid programs were required to comply with the fire codes as of January 1, 1970. The Aging Committee renews its concern and interest in fire safety for nursing facility residents by presenting this report.

To appraise whether nursing facility residents are adequately protected from fire, this study examines the fire safety requirements for nursing facilities in each of the 50 States, plus Washington, D.C. It is my hope that this study raises the level of awareness on fire safety in nursing facilities, highlights and fills in the gaps of information on this topic, and provides suggestions for improvements in the fire safety of nursing facilities.

The Committee would like to thank the many people whose contributions made this report possible. We are grateful to the members of the fire community and the supporters of fire safety reform in nursing facilities: Pete Sparber and John Coburn of the National Association of State Fire Marshals; Jack Gerard of the National Fire Protection Association; and Janet Wells of the National Citizen's Coalition for Nursing Home Reform. We thank the 51 State fire marshals who provided the valuable information on which this study is based.

We would also like to thank Drs. Eileen Crimmins and Fernando Torres-Gil of the Leonard Davis School of Gerontology at the University of Southern California, and Holly Bode and Portia Mittelman of the Aging Committee.

Finally, Committee Fellow Wendy Fox, the principal author and researcher of this study, merits special thanks and recognition for her efforts.

The Committee dedicates this report to the residents who have been injured or lost their lives in nursing facility fires and to the courageous firefighters who risk their lives fighting these fires. We hope that this study will bring us one step closer to providing the greatest possible fire protection in nursing facilities.

Sincerely,

DAVID PRYOR,
Chairman.

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Chapter I: Introduction

Thousands of fires in facilities that care for the aged are reported each year. These fires result in millions of dollars in property damage, hundreds of injuries, and many deaths. Given the prevalence of physical and mental disabilities in the elderly, they are a high-risk age group in the face of fire. Despite these facts, little attention on this issue has been asserted at the Federal level within the last decade. In addition, there is minimal, current information on the requirements for fire safety in nursing facilities. For these reasons, it is important to study the requirements for fire safety in nursing facilities at this time.

From 1983 to 1987, an estimated 3,200 fires occurred *per year* in facilities for the aged with a nursing staff. These fires accounted for $2.9 million in direct property loss, 163 civilian injuries, and 12 civilian fatalities *per year* (Taylor, 1991). Civilian injuries and fatalities refer to the injuries and fatalities of the public, not those of the firefighters.

The elderly have a fire death rate per million population that is twice the rate for all ages and three times the rate for young adults. The risk of death from fire continues to rise as people get older. The fire risk of those persons 75 years old and over is three times the risk for all ages. Those persons 85 years old and over have a fire risk four times the risk for all ages (Karter and Miller, 1990).

Older adults are one of the largest, most distinguishable high risk groups in the United States. Older adults are more numerous than pre-school age children, the only other age group with a comparably high risk of dying in fire. Older adults are the fastest growing part of the high risk population (Hall, 1990).

Politically, fire safety in nursing facilities made great progress in the 1960's and 1970's, as politicians were concerned about the many multiple death fires in these facilities. Both the U.S. House and Senate Committees on Aging held hearings on this matter. In the late 1960's, Congress required all nursing facilities to comply with a set of fire codes. In the mid-1970's, Congress proposed Federal legislation which called for greater fire safety standards in nursing facilities, such as a national requirement for the installation of automatic fire sprinkler systems in nursing facilities.

In contrast to these advances, little Federal legislative action on this issue occurred during the past decade. Not a single hearing or act of legislation was introduced to the U.S. Congress during the 1980's. Today, many of the fire safety requirements for nursing facilities are still largely determined by the States. Thus, fire safety regulations and practices vary State by State.

However, there is sparse information on State requirements concerning fire safety in nursing facilities. In addition, the history of States' efforts toward fire safety in nursing facilities is unknown. A

complete computer search found much of the literature on this subject to center around the need for basic fire safety components in nursing facilities. The computer search also discovered much research on the past fires in nursing facilities and their causes, as well as fire retardant materials, construction specifications of nursing facilities, and the effectiveness of fire protection devices. Through the computer search and acknowledgement from experts within fire safety organizations, such as the National Fire Protection Association (NFPA), the U.S. Fire Administration, and the National Association of State Fire Marshals, very little information about the current fire safety requirements and practices of nursing facilities within each State was found.

Therefore, this study investigates the fire safety requirements for nursing facilities in each of the 50 States, plus Washington, D.C. The study examines whether nursing facility owners are required to ensure the greatest fire protection possible for their residents. Specifically, this study documents the State requirements for the following fire safety elements in nursing facilities: compliance with the fire codes, automatic fire sprinkler systems, emergency preparedness plans, smoke detectors, fire safety training programs, and fire safety inspections. Based on this data, the study will provide recommendations for improvements of fire safety in nursing facilities.

The objectives of this study are as follows:

1. To raise the level of awareness on fire safety in nursing facilities;
2. To highlight the gaps of information on this topic;
3. To fill in some of these gaps in information by studying the fire safety requirements for nursing facilities in each State, plus Washington, D.C.; and
4. To provide suggestions for improvements in the fire safety of nursing facilities based on the study's data.

The ultimate goal of the study is to enhance the protection of nursing facility residents from fire. Hopefully, the data and recommendations from this study will better enable members of the legislative bodies, as well as members of the nursing facility and fire communities, to further fire safety in these facilities.

Chapter II: Literature Review

Although fire safety in nursing facilities has concerned nursing facility administrators, firefighters, and public policymakers for over 25 years, there is minimal information about the fire safety requirements in each State. Fire safety requirements for nursing facilities is molded by each State. From a computerized literature search, sparse information was found on the State requirements for fire safety in nursing facilities. Much research on fire safety in these facilities involves the construction, design, and development of nursing facilities. The literature mainly focuses on the number of nursing facility fires and its causes, as well as the necessity and effectiveness of certain fire protection standards and equipment.

The Number of Nursing Facility Fires and Its Causes

Despite the lack of literature on State requirements for fire safety in nursing facilities, a large amount of information on the number of fires in nursing facilities and the causes of these fires is accessible. The NFPA keeps records of nursing facility fires, and it investigates the causes of these fires. The NFPA estimates the following number of fires in facilities that house the aged:

> In 1983–87, an estimated 4,130 structure fires occurred per year in facilities that care for the aged. These fires accounted for 202 civilian injuries and 19 civilian fatalities and resulted in $4.3 million in direct property loss. More than three-fourths of the fires—3,200 or 77 percent—involved facilities having nursing staff, which also accounted for more than two-thirds of the direct property loss ($2.9 million or 67 percent), most of the civilian injuries (163 injuries or 81 percent), and more than half of the civilian fatalities (12 fatalities or 63 percent). (Taylor, 1991)

Smoking materials are the leading causes of civilian fire deaths and injuries. Smoking materials, both lighted tobacco products and the implements used to light them, account for 72 percent of the fires which caused civilian deaths and injuries in facilities that care for the aged (Hall, 1991). The most common area of fire occurrence in a nursing facility is a patient's room, and the most common first material ignited in these fires is either the patient's clothing or bedding material (Dunn, 1984).

In 1988, the NFPA examined patient smoking policies in health care facilities by surveying some of its members. The NFPA found that most of the facilities had recently implemented stricter policies or were in the process of it. Yet, they found that the patient smoking policies in these facilities were weak and uncertain (NFPA, 1988).

The United States has experienced a growth of its older adult population and a massive expansion of its nursing facilities.

> In 1987, there were an estimated 29.8 million Americans who were at least age 65. Between 1985 and 2030, the 65 and over population is expected to more than double. Those 85 years old and over are expected to nearly triple in size between 1980 and 2030, and to be five times larger in 2050 than in 1980. (U.S. Senate Special Committee on Aging, 1990)

From 1971–86, nursing and related care facilities grew from 1 million patients to 1.6 million patients, a 44 percent increase: Statistical Abstract of the United States, 1989 (cited in Hall, 1990).

Since January 1970, nursing facilities have been required to comply with fire codes. Over the years, fire safety technology has advanced, and these advances have been incorporated into updated editions of fire codes. Thus, these facility fires have greatly decreased. Fires in facilities that care for older adults declined 10 percent from 1980 to 1987 (Hall, 1990). This 10 percent decline is a fairly large reduction of fires given the rapid growth of nursing facilities.

Despite this decline, deaths and multiple death fires still occur in these facilities as demonstrated by the following cases:

> On October 5, 1989, a nursing facility fire in Norfolk, Virginia, resulted in the death of 12 patients and required hospital treatment or relocation of 96 others. In this nonsprinklered facility, the probable cause of the fire was careless resident smoking (NFPA, 1989). Five months after the fire, the nursing facility started to install a fire sprinkler system. Today, the State of Virginia requires all nursing facilities to install fire sprinklers.
>
> On March 13, 1990, a nursing facility fire in Dardanelle, Arkansas killed 4 residents, and at least 10 others were hospitalized (NFPA, 1990). This facility was not fully equipped with fire sprinklers.

Though fire safety has improved, fire safety in nursing facilities has not been satisfactorily addressed. This study will better the understanding of fire safety in nursing facilities and uncover the need for strong fire safety standards in nursing facilities.

The Need for Strong Fire Safety Standards in Nursing Facilities

Fire safety in nursing facilities should receive special consideration because residents of nursing facilities are generally incapable of defending themselves against a fire. Nursing facility occupants often have the following impairments: mental and/or physical disabilities; reduced mobility; sensory impairment, such as loss of hearing, vision, and smell; reduced tolerance to heat, smoke, and gases; and greater susceptibility to shock. Self-protection from fire is further complicated for many nursing facility residents because they are bound by restraints and sedated.

Fires in facilities that house members of this high risk group are dangerous because many facilities are understaffed. Most fires occur at night when residents may be under heavy sedation and when nursing staff is minimal. In addition, very little time exists before a fire goes from a flame to a raging fire. All of these conditions result in the need for nursing facilities to have the necessary fire safety elements.

The Necessary Fire Safety Elements

Some important fire safety elements are fire codes, automatic fire sprinkler systems, emergency preparedness plans, smoke detectors, fire safety training for nursing facility employees, and inspections of nursing facilities. They are vital to the protection of nursing facility employees and residents from deadly fires. In this study, each State was asked about its requirements for these fire safety elements. These fire safety practices and devices are the basis of this study.

FIRE CODES

The Life Safety Code (LSC), a specific type of fire code, establishes minimum requirements which provide a reasonable degree of safety from fire in buildings and structures. The LSC addresses the following topics: safety from fire and similar emergencies; those construction, protection, and occupancy features necessary to minimize danger to occupants from fire, smoke, fumes, or panic; and minimum criteria for the design of facilities to permit occupants' prompt escape from buildings or, where desirable, into safe areas within the building.

The LSC is different from many other fire codes in that it does not attempt to address those general fire prevention or building construction features which are normally a function of fire prevention and building codes. States often comply with the LSC, in addition to a fire prevention and building code, such as the Standard Building and Prevention Code or the Uniform Building and Fire Code.

The LSC is the most widely used fire code in the United States. It is developed by the National Fire Protection Association (NFPA), whose members range from fire safety engineers to nursing facility administrators.

The NFPA revises the LSC every 3 to 4 years. The newest edition is generally used for the new facilities, whereas the older editions of the LSC are still used for the older, existing facilities. The most recent edition of the LSC, published in 1991, requires for the first time *all* new nursing facilities to install fire sprinkler systems.

In 1967, Congress required all nursing facilities to comply with the LSC by January 1, 1970. To receive certification, all long-term care facilities participating in the Medicare and Medicaid programs are now required to comply with the LSC. Because of the interest and involvement by the Senate Special Committee on Aging in the early 1970's, the incorporation of the LSC into the requirements for Medicare and Medicaid funding eligibility has reduced the number of major fatal fires in nursing facilities.

The Health Care Financing Administration (HCFA) assures compliance with these requirements by Skilled Nursing Facilities (SNFs) and Intermediate Care Facilities (ICFs) through annual inspections. These inspections are usually performed by the Department of Health and Human Services or the fire authority having jurisdiction as part of the State inspection process.

HCFA is responsible for the enforcement of fire safety rules in the participating SNFs and NFs. HCFA keeps records of the inspections, and it determines which editions of the LSC existing facilities must follow in order to receive Medicare and Medicaid reimbursement. Currently, HCFA allows nursing facilities to follow the 1967, 1973, 1981, or 1985 editions of the LSC.

There are several ways that States can use and enforce fire codes:

1. States can use any fire code that they wish as long as it meets or exceeds the requirements of the LSC. States can enforce, for example, the LSC by reference to the Uniform Fire Code or the Standard Building Code.
2. States can adopt the LSC into law. Some States adopt more recent editions of the LSC into State law.
3. States can adopt certain editions of the LSC with State amendments. For example, some States require that all nursing facilities, including new and existing facilities, install fire sprinkler systems.

As of January 1991, nearly 27,000 health care facilities were in the LSC Medicare and Medicaid reimbursement program. Of these facilities, 1,181 were new health care facilities, while the majority (25,796) were existing facilities in the LSC Medicare and Medicaid program (NFPA, 1991).

AUTOMATIC FIRE SPRINKLER SYSTEMS

Automatic fire sprinklers are heralded as the greatest life safety feature available in the fire protection field. Fire sprinklers reduce the danger of burns and carbon monoxide poisoning in most cases by actually eliminating the flame and production of smoke. According to the NFPA, there has never been a multiple-death fire in any facility fully protected with an automatic fire sprinkler system.

One of the most controversial topics in fire safety deals with mandating through legislation the retrofitting of hardware, such as sprinkler systems in existing facilities (Levitt, 1983). New nursing facilities usually follow the most recent edition of the LSC. The 1991 edition of the LSC requires new nursing facilities, i.e., those facilities built during or after 1991, to install fire sprinklers. The existing nursing facilities generally comply with past editions of the LSC, so many of them do not have automatic fire sprinklers.

If a Federal requirement in the future mandates all nursing facilities to have sprinklers, older facilities would have to retrofit their structures for fire sprinklers. Many nursing facility administrators argue that retrofitting is very costly. To protect the high risk residents, fire community organizations, however, support the need for a fire sprinkler regulation.

Since the early 1970's, experts have agreed that automatic sprinkler systems are the most effective known method to prevent mul-

tiple death fires in nursing facilities (U.S. House of Representatives, 1976). For many years, recognized national organizations have endorsed the concept of fully automatic sprinkler systems for nursing facilities. Endorsements have come from: (1) the National Safety Council, (2) the NFPA, (3) the Fire Marshals of North America, (4) the [then] Joint Commission on the Accreditation of Hospitals, and (5) the American College of Nursing Home Administrators (U.S. House of Representatives, 1976).

Since 1965, a mandate of automatic fire sprinklers in both new and existing nursing facilities has been recommended. The Fire Marshals Association of North America has within its membership the State Fire Marshals as well as those persons serving local governments. In its 1965 convention, this association adopted a resolution endorsing the principle of complete automatic sprinkler protection for all institutions and homes caring for the aged, regardless of construction, detection systems, or other protection (U.S. House of Representatives, 1972). Congressional committees have also recommended sprinklers in nursing facilities since 1972. In a recent study of the LSC, the most common recommendation for improvements to the LSC was a requirement for all nursing facilities to have sprinklers (NFPA, 1991).

In 1976, two bills, H.R. 14406 and H.R. 15576, were introduced in Congress; both bills called for all nursing facilities to install automatic fire sprinklers. H.R. 14406 was introduced by Representative Claude Pepper on June 16, 1976. It required automatic sprinkler systems in all nursing facilities certified for participation in the Medicare or Medicaid program. It also provided direct low-interest Federal loans to assist such facilities in purchasing and installing automatic sprinkler systems. H.R. 15576 was introduced by Senator John Heinz on September 15, 1976. It required automatic sprinkler systems in all nursing facilities as a condition of certification under the Medicare, Medicaid, or Veterans' Administration programs. It authorized loans and grants to assist such facilities in purchasing and installing such systems. Neither one of these bills became law.

After several attempts to require fire sprinklers in nursing facilities failed, Congress even recommended that all States enact legislation requiring automatic sprinkler systems in each of their long-term care facilities (U.S. Senate, 1975). To date, there is no current, published record of how many States have taken this suggestion.

THE EMERGENCY PREPAREDNESS PLAN

Though the emergency preparedness plan is not nearly as controversial as automatic fire sprinklers, it is one of the most vital fire safety components in nursing facilities:

> The emergency preparedness plan is a plan, used in times of disaster, that should detail the policies and procedures for locating a fire, reporting a fire, activating fire alarms, using pull stations, contacting the fire department, evacuating each floor, reacting the enunciator panel, communicating with the fire department upon arrival, using fire extinguishers and other equipment, setting up a preventative maintenance program, establishing support serv-

ices, and providing emergency power. (Neuman and Peters, 1985)

An emergency preparedness plan should be developed by each nursing facility with guidance from the fire authority having jurisdiction, and it should be reviewed regularly. Currently, there is no published information on the number of nursing facilities that have a plan, the number of plans that are reviewed by the fire authority, or the frequency in which nursing facility plans are reviewed.

SMOKE DETECTORS

There are two means of detection—human and automatic. Reliance on human detection *alone* is asking for trouble in the nursing home setting (U.S. Senate Committee on Aging, 1975). The length of time between a fire's beginning and its first detection can have a critical effect on lives saved and damage sustained. Because nursing facility residents are often disabled and many facilities are understaffed, human detection is unpredictable.

Smoke detectors are critical to fire detection because the first moments of fire are most important. A detection system or an alarm system is needed to make staff and residents aware of fire. Smoke detectors alert nursing facility employees and residents of fires, whereas the traditional fire sprinkler systems contain fires.

An unresolved issue concerning smoke detectors is whether smoke detectors are necessary in the residents' bedrooms, as well as other parts of the facility. Some nursing facility administrators argue that smoke detectors in the residents' rooms would be more harmful than helpful. Because many residents smoke in their rooms, many false alarms would sound, causing the staff to deter from their duties and the residents to panic. Many fire safety experts, however, believe smoke detectors are needed in the residents' rooms because of the large number of nursing facility fires which occur in them.

FIRE SAFETY TRAINING FOR NURSING FACILITY EMPLOYEES

The second type of detection, human detection, is particularly vital to protecting life and property. By educating a nursing facility's staff about fire prevention, evacuation procedures, and the steps to take in the event of a fire, a facility will be assured of greater fire protection.

Federal congressional committees have even recommended for States to undertake training programs for nursing home employees and to assist them in the prevention of nursing home fires and the evacuation of patients. Drills should be conducted regularly. Local fire departments should be the primary agencies that provide training several times a year. Such fire departments should establish contingency plans to deal with possible emergencies in long-term care facilities (U.S. Senate Special Committee on Aging, 1975).

FIRE SAFETY ENFORCEMENT AND INSPECTIONS

A nursing facility's fire safety equipment should be inspected regularly by the proper authority. These fire safety features include automatic fire sprinkler systems, smoke detectors, fire doors,

door latches, and fire extinguishers. Obviously, maintenance of fire safety equipment is crucial to fire protection.

The Need for Greater Understanding

The basic fire safety elements are used in many nursing facilities throughout the Nation, and these elements have improved over the years. Yet, not every nursing facility throughout the Nation is required to have all of these elements. Each State has different requirements for the fire safety elements listed above.

Despite recommendations from congressional committees and the need for automatic fire sprinklers, emergency preparedness plans, fire safety enforcement, smoke detectors, fire safety training for nursing facility employees, and compliance with the Life Safety Code, there is minimal information on State requirements for the fire safety components of nursing facilities.

Given this lack of information, this study will provide data on each State's requirements for these basic fire safety elements in order to provide a greater understanding of fire safety in nursing facilities.

Chapter III: Purpose and Methodology

The purpose of this study is to provide a State-by-State analysis of the fire safety requirements in nursing facilities, so policymakers, nursing facility administrators, and fire experts will be better informed to promote the safety of nursing facility residents from fire.

The objectives of this study are as follows: One objective is to raise the level of awareness of fire safety in nursing facilities. Gerontology is usually associated with topics, such as long-term care, retirement, pensions, and diseases, like Alzheimer's disease and osteoporosis, but the topic of fire safety is rarely studied within the field of gerontology. Fire safety in nursing facilities is an important part of the level of care provided by nursing facilities. Furthermore, families need to be aware of fire safety features within these facilities when choosing a nursing facility for their loved ones.

The second objective of this study is to highlight the gaps in the information on this topic. Much fire safety research centers around the construction, design, and fire resistance of building materials. In addition, a considerable amount of literature concerns the fire safety elements which are necessary to maintain adequate fire safety in nursing facilities. Currently, little information deals with the State requirements for fire safety in nursing facilities. Fire safety requirements in nursing facilities vary from State to State. Yet, minimal information on each of the States' requirements exists.

The third objective is to fill in some of the gaps in the information on this topic. For this study, fire safety regulations and practices in nursing facilities are investigated in each of the 50 States, plus Washington, D.C. The study examines the following State requirements for fire safety in nursing facilities:

- Compliance with the Life Safety Code,
- Automatic fire sprinkler systems,
- Emergency preparedness plans,
- Smoke detectors,
- Fire safety training programs for nursing facility personnel, and
- Fire safety inspections and enforcement.

The fourth objective is to provide suggestions for improvements in the fire safety of nursing facilities based on the study's data. The recommendations are intended primarily for researchers, public policymakers, nursing facility administrators, and the fire community.

To collect data on the State requirements for fire safety in nursing facilities, an original questionnaire was mailed to the 50 State fire marshals, plus the chief fire authority of Washington, D.C. In some instances, the fire marshals forwarded the questionnaires to

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Departments of Health and Human Services for further assistance. The questionnaire consisted of 12 questions with many subparts. A copy of the questionnaire is located in Appendix A.

A total of 51 out of 51 State fire marshals completed the questionnaires, resulting in a response rate of 100 percent. To achieve this response rate, questionnaires were first mailed out on July 1, 1991. On September 1, 1991, questionnaires were mailed out a second time to those State fire marshals who had not yet returned their questionnaires. On October 10, 1991, those States, which had not completed their questionnaires, were called. By late October, the 100 percent response rate was accomplished. Frequencies were used to analyze the data from this study.

Chapter IV: Results

State Requirements For Compliance With the Life Safety Code

The States differ greatly on their use of the various LSC editions. Under current HCFA regulations, nursing facilities must comply with the 1967, 1973, 1981, and 1985 editions of the LSC in order to receive Medicare and Medicaid funding. Many States, however, require nursing facilities to abide by more recent editions.

Approximately one-half of the States (26 or 51 percent) require nursing facilities to adhere to either the 1985, 1988, or 1991 editions of the LSC. Six States (12 percent) require nursing facilities to follow the 1981, 1985, 1988, or 1991 LSC editions. Fourteen States (27 percent) allow nursing facilities to follow the 1967, 1973, 1981, or 1985 LSC editions. Five States either did not comment on this issue or claimed that it was not applicable.

In addition, some States have adopted even stricter amendments to the LSC, while other States comply with other fire codes that either meet or exceed the LSC. A majority (33 or 65 percent) of the States have adopted the LSC into State law, whereas 18 States (35 percent) enforce the LSC for nursing facilities to simply receive Medicare and Medicaid funding from HCFA. This report is not a complete study on the use of various fire codes. Yet, more information on the State requirements for use of the LSC editions is located on Table 1 in Appendix B.

TABLE 1.—STATE REQUIREMENTS FOR COMPLIANCE WITH THE LSC EDITIONS

States	Numbers	Percent
States requiring facilities to comply with the 1985, 1988, or 1991 LSC editions	26	(51)
States requiring facilities to comply with the 1981, 1985, 1988, or 1991 LSC editions	6	(12)
States requiring facilities to comply with the 1967, 1973, 1981, or 1985 LSC editions	14	(27)
No comment or N/A	5	(10)

State Requirements for Automatic Fire Sprinklers in Nursing Facilities

Most States do not require every nursing facility to be equipped with automatic fire sprinkler systems. About one-half of the States (47 percent) do not require nursing facilities to install fire sprinklers. Fifteen States (29 percent) require only new nursing facilities to have fire sprinklers. In other words, these 15 States have State legislation which mandates fire sprinklers in nursing facilities, but these pieces of legislation include a grandfather clause. In these States, only the nursing facilities constructed *after* the passage of legislation are required to have fire sprinklers. Only 12 States (24

percent) require fire sprinklers in all nursing facilities, including both new and existing nursing facilities.

TABLE 2.—STATE REQUIREMENTS FOR AUTOMATIC FIRE SPRINKLERS IN NURSING FACILITIES

States	Numbers	Percent
States with a sprinkler requirement for all facilities	12	(24)
States with a sprinkler requirement for only new facilities	15	(29)
States with no sprinkler requirements	24	(47)

STATE REQUIREMENTS FOR AUTOMATIC FIRE SPRINKLERS IN NEW NURSING FACILITIES ONLY

The passage of legislation requiring fire sprinklers in only new nursing facilities is especially important because of the grandfather clauses with such State legislation. The majority of the 15 States first required new nursing facilities to have fire sprinkler systems within the last decade. Three States (20 percent) require fire sprinklers in new nursing facilities as of 1991. In reality, new nursing facilities will be equipped with fire sprinklers because of the 1991 edition of the LSC. Hence, these three States might be referring to the 1991 LSC edition, instead of separate State legislation. Seven States (47 percent) first required new nursing facilities to install fire sprinklers within the years of 1981 to 1990, whereas only 3 States (20 percent) first required new nursing facilities to have fire sprinklers between the years of 1971 and 1980. Two States (13 percent) did not remark on the years when fire sprinklers were first required in new nursing facilities.

TABLE 3.—STATE REQUIREMENTS FOR AUTOMATIC FIRE SPRINKLERS IN NEW NURSING FACILITIES ONLY

Dates	Numbers	Percent
States requiring fire sprinklers in 1991	3	(20)
States requiring fire sprinklers in 1981–90	7	(47)
States requiring fire sprinklers in 1971–80	3	(20)
No response	2	(13)

These dates are crucial to understanding how many nursing facilities might be equipped with fire sprinklers. For example, if a State passed legislation requiring new nursing facilities to have fire sprinklers in 1989, only the nursing facilities constructed during or after 1989 are required to have them. Thus, a significant number of facilities in this state are not required to have fire sprinkler systems.

The 24 States, which do not require sprinklers in any nursing facility, should be affected by the 1991 edition of the LSC which requires only new nursing facilities to have fire sprinklers. Only the nursing facilities built during or after 1991 will be required to install fire sprinklers in these States.

In this study, the dates, which denote when the 12 States passed State legislation requiring *all* nursing facilities to have fire sprin-

kler systems, will not be detailed in text. Regardless of when these pieces of legislation were passed, all nursing facilities in these 12 States are required to be equipped with fire sprinklers. These dates, however, are located in Table 2 of Appendix B.

Of the 12 States that require both new and existing nursing facilities to be equipped with automatic fire sprinklers, all 12 States require fire sprinklers to be in the following areas—residents' bedrooms, kitchens, halls, and utility rooms.

In three States, Colorado, Georgia, and New Jersey, State legislation requiring new and existing nursing facilities to have fire sprinklers is proposed.

State Requirements for Emergency Preparedness Plans in Nursing Facilities

THE NUMBER OF STATES REQUIRING NURSING FACILITIES TO HAVE EMERGENCY PREPAREDNESS PLANS

A large number of States (45 or 88 percent) require all nursing facilities to have emergency preparedness plans. However, five States (10 percent) do not require nursing facilities to have this fire safety plan. One respondent did not know if nursing facilities are required to have emergency preparedness plans in his/her State.

TABLE 4.—STATE REQUIREMENTS FOR EMERGENCY PREPAREDNESS PLANS IN NURSING FACILITIES

States	Numbers	Percent
States with a requirement for emergency preparedness plans in nursing facilities	45	(88)
States with no emergency preparedness plan requirement for nursing facilities	5	(10)
Unknown	1	(2)

THE NUMBER OF STATES WHERE THE FIRE AUTHORITY REVIEWS THE EMERGENCY PREPAREDNESS PLANS

Two-thirds (65 percent) of the States report that the fire authority having jurisdiction reviews the nursing facilities' emergency preparedness plans, while 9 (18 percent) of the States report that another agency solely reviews the plans. In 7 States (14 percent), the fire authority and another agency share the responsibility of reviewing the nursing facilities' plans. Thus, in 16 States, another agency either solely reviews the plans or shares the responsibility with the fire authority. In 14 out of the 16 States, the health department is the "other" agency responsible for the review of emergency preparedness plans. Two States do not have any agency that is responsible for reviewing the nursing facilities' plans.

TABLE 5.—STATE REQUIREMENTS FOR THE AGENCY RESPONSIBLE FOR THE REVIEW OF EMERGENCY PREPAREDNESS PLANS

States	Numbers	Percent
States where the fire authority reviews the plans	33	(65)
States where another agency solely reviews the plans	9	(18)
States where both the fire authority and another agency review the plans	7	(14)
States where no agency reviews the plans	2	(3)

THE FREQUENCY OF THE EMERGENCY PREPAREDNESS PLAN REVIEWS

Most States (75 percent) require nursing facility plans to be reviewed annually. Nine respondents (18 percent) did not know how often the emergency preparedness plans are reviewed each year. Two States report that it varies. One State requires the nursing facility plans to be reviewed only once, and another State mandates a quarterly review schedule. Table 3 in Appendix B details further information about emergency preparedness plans in nursing facilities.

TABLE 6.—STATE REQUIREMENTS FOR THE FREQUENCY OF EMERGENCY PREPAREDNESS PLAN REVIEWS

States	Numbers	Percent
States with a quarterly review of plans	1	(2)
States with an annual review of plans	38	(75)
States with a varying review of plans	2	(4)
States with a one time only review of plans	1	(2)
Unknown	9	(18)

STATE REQUIREMENTS FOR SMOKE DETECTORS IN NURSING FACILITIES

Most States require some form of smoke detection in nursing facilities, but the findings show that a small portion of the States mandate smoke detectors in both residents' rooms and hallways. Only one-fifth (20 percent) of the States require all nursing facilities to install smoke detectors in both residents' bedrooms and halls. A little more than half (55 percent) of the States require nursing facilities to install smoke detectors but not in both the residents' rooms and hallways. One-quarter (25 percent) of the states have *no* smoke detector requirement for all nursing facilities. Table 4 in Appendix B gives more detailed information.

TABLE 7.—STATE REQUIREMENTS FOR SMOKE DETECTORS IN NURSING FACILITIES

States	Numbers	Percent
States requiring smoke detectors in both bedrooms and corridors	10	(20)
States requiring smoke detectors in corridors only	28	(55)
States requiring no smoke detectors in all facilities	13	(25)

State Requirements for the Fire Safety Training of Nursing Facility Employees

THE FREQUENCY OF FIRE SAFETY TRAINING FOR NURSING FACILITY EMPLOYEES

The frequency of fire safety training for nursing facility employees ranges from monthly to never. Twenty-two States (43 percent) require nursing facility employees to receive fire safety training annually. Eight percent of the States require nursing facility employees to take a fire safety program once only, and one-tenth of the States do *not* require the employees to attend a fire safety program. One State did not comment on the frequency of fire safety training.

Nineteen States (37 percent) indicate "other" frequencies. Nine States in this category require fire drills as the only fire safety component in the training program. In this "other" category, three States require training of nursing facility employees quarterly. Each of the following answers within this category was given one response: monthly training, periodic training, no State training requirement because there is only local level training requirements, and inservice training only. In one State, most nursing facility employees receive training only once, but some employees receive training annually. Another State requires some training annually and some training quarterly. In another State, most nursing facility employees receive fire safety training only once, but some employees are never required to receive training. Table 5 in Appendix B displays supplemental information.

TABLE 8.—STATE REQUIREMENTS FOR THE FIRE SAFETY TRAINING OF NURSING FACILITY EMPLOYEES

States	Numbers	Percent
States requiring training annually	22	(43)
States requiring training only once	4	(8)
States requiring training at other frequencies	19	(37)
States requiring no training	5	(10)
No response	1	(2)

COMPONENTS OF THE FIRE SAFETY TRAINING PROGRAMS FOR NURSING FACILITY EMPLOYEES

In a multiple response question about the components of fire safety training programs in nursing facilities, 20 States (39 percent) report that their training programs include the following components: The value of closing doors in fire control, the functionality of fire sprinklers if the facility is equipped with them, the operation of fire extinguishers, knowledge of the emergency preparedness plan, the importance of fire prevention, the steps to take in the event of a fire, and knowledge of when and how to call the fire department in the event of a fire. Ten States (20 percent) report a combination of some of the above components. Eight States (16 percent) claim that nursing facility employees are *not* required to be taught any of the above fire safety and prevention components,

except fire drills. Eight States (16 percent) report that their fire safety programs include all of the elements listed above, except the teaching of the functionality of sprinklers. The teaching of the functionality of fire sprinklers is the most commonly excluded component of the States' fire safety programs. One State's training program includes an additional component of lifts and carries, while another State's program contains the teaching of evacuation methods in addition to the fire safety elements listed above. In one State, fire safety training programs are not applicable. Four States did not respond to the question. Table 6 in Appendix B displays more in-depth information.

State Requirements for Fire Safety Inspections/Enforcement in Nursing Facilities

A majority of States (44 or 86 percent) report that the fire authority having jurisdiction inspects the following nursing facility fire safety devices: automatic fire sprinklers, smoke detectors, fire doors, door latches, and fire extinguishers. Two States inspect all of the above fire features, except the fire sprinklers and smoke detectors. One State inspects the above fire safety components, except for the fire sprinklers. Another State inspects the above list of items, except for the door latches. One State's fire authority does not inspect any of the fire safety features listed above. Two respondents did not comment on this item.

In addition to the above list of fire safety devices, the fire authorities in several States inspect some of the following features: construction type, fire and smoke dampers, interior finish, means of egress, exits, doors, stairs, horizontal exits, ramps, hazardous areas, travel distances, vertical openings, cooking facilities, corridor walls, electrical wiring, window heights, utilities, fire alarm systems, generators for emergency power, exhaust hoods, housekeeping, attic/storage areas, smoke barriers, mattresses, furniture, and heating systems. Table 7 in Appendix B contains more detailed information.

Chapter V. Discussion

This study reveals a great variance in State requirements for fire safety in nursing facilities. The study also discloses some definite areas of fire safety which need further attention. This chapter will discuss the study's results, its ramifications, and its limitations.

State Requirements for Compliance With the Life Safety Code

This study clearly displays very different State requirements for compliance with the LSC editions. Some States allow nursing facilities to comply with the LSC editions dating as far back to 1967, while other States will only permit nursing facilities to follow the 1988 edition.

A complete understanding of fire safety in nursing facilities cannot be obtained by simply examining the States which comply with the most recent editions of the LSC. For example, States that allow a nursing facility to comply with the 1967 LSC edition might have strong fire safety requirements for nursing facilities. If these States have State amendments which require all nursing facilities to have fire sprinkler systems, smoke detectors, and fire safety training programs, a great amount of fire protection is ensured in their nursing facilities, regardless of the LSC edition. Hence, a report of each State's requirements for the LSC gives only a partial yet necessary picture of fire safety in nursing facilities. The State requirements for fire sprinklers, smoke detectors, and other such fire safety elements in nursing facilities are equally important to examine.

The differences between the 1967, 1973, 1981, 1985, and 1988 LSC editions are minor, compared to the 1991 edition. The 1991 LSC edition contains the most significant alteration from past codes. The 1991 LSC edition requires new nursing facilities to install fire sprinkler systems.

State Requirements for Automatic Fire Sprinklers in Nursing Facilities

Though fire sprinklers are called the greatest life safety feature, there is no national requirement for all nursing facilities to have fire sprinkler systems. For over 20 years, major fire organizations have favored mandatory fire sprinkler installations in nursing facilities. Nursing facilities, however, do not have to install fire sprinklers to receive Medicare and Medicaid funding under current HCFA regulations. As this study discloses, almost half of the States do not require any nursing facilities to have fire sprinkler systems.

Although there is no national requirement for fire sprinklers in nursing facilities, the 1991 LSC edition requires *new* nursing facilities to have fire sprinklers. This edition signifies a major step in fire safety. Yet, there is still no requirement for both new and ex-

isting nursing facilities to have fire sprinkler protection. As a result, only one-quarter of the States require both new and existing nursing facilities to have automatic fire sprinkler systems.

Even with the 1991 LSC edition, a vast majority of the nursing facilities will not be required to install fire sprinklers. According to a recent NFPA study, of the total number of facilities complying with the LSC, only 1,181 are new health care facilities that are participants in the Medicare and Medicaid program. The majority (25,796) are existing facilities that are participants in the LSC Medicare and Medicaid program (NFPA, 1991).

State Requirements for Emergency Preparedness Plans

The emergency preparedness plan, one of the most important fire safety features, is the overall plan that is used in times of disaster, such as fires. It details the policies and procedures ranging from notifying the fire department to evacuating each floor. Prior to this study, there was very little literature or information about the number of States requiring nursing facilities to have them, the agencies that review and update them, or the frequency in which they are reviewed.

This study finds most States to have excellent requirements concerning the emergency preparedness plan in nursing facilities. A majority of States (88 percent), such as California and Ohio, require all nursing facilities to have emergency plans. Unfortunately, this study also found that five States do not require nursing facilities to have emergency plans. Given the importance of the emergency preparedness plan, it is disturbing to find five States that do not require all nursing facilities to have them. After all, the emergency preparedness plan is the basic foundation to fire safety.

Overall, the fire authority and the Department of Health and Human Services are the two agencies that are responsible for reviewing the nursing facility emergency plans throughout the Nation. Only two States report other agencies that review the plans. This finding is no surprise. As explained earlier, this issue is controversial. Many people in the fire community want the fire authority to have the sole responsibility for the reviews. This study shows that the fire authority is the sole agency which reviews the plans in only 65 percent of the States.

As the study reveals, most States (75 percent) require an annual review of nursing facility emergency plans. Yet, a notable proportion (18 percent) of the respondents did not know how frequently the emergency plans are reviewed. These respondents might not have known about this matter because the majority of respondents were State fire marshals. The fire marshals are not responsible for reviewing and updating the emergency preparedness plans in many States. Thus, the Department of Health and Human Services in these States might have known how often the emergency plans are reviewed. Nonetheless, the State requirements concerning the emergency preparedness plan for the most part are commendable.

State Requirements for Smoke Detectors

Today, there seems to be little consensus on whether smoke detectors in residents' rooms are absolutely necessary. This study con-

firms this uncertainty. Only one-fifth of the States require all nursing facilities to have detectors in both the residents' rooms and corridors.

The States are obviously divided on this matter. Because of the large number of fires in residents' rooms, a strong argument for smoke detectors in these bedrooms is prevalent. On the other hand, some nursing facility administrators believe smoke detectors in residents' rooms to be more harmful than helpful; false alarms are probable because of the number of residents who smoke in their rooms. These administrators feel that these false alarms would upset the residents and necessitate the time of the nursing staff who are already understaffed. These arguments have yet to be resolved.

Surprisingly, one-quarter of the States do not require all nursing facilities to install smoke detectors in either the residents' rooms or the corridors. Conclusions, however, cannot yet be drawn from this finding. Additional information needs to be collected on this matter. For example, the quick response sprinkler systems are equipped with an alarm system. Since this particular type of fire sprinkler system is linked into an alarm system, a facility with a quick response sprinkler system does not need smoke detectors.

This study does not delve into the reasons why these States (25 percent) do not require all nursing facilities to have smoke detectors. Therefore, the States without a smoke detector requirement for all nursing facilities could be referring to those nursing facilities with quick response fire sprinkler systems. Of course, these States simply might not require any automatic fire detection system in nursing facilities. Nonetheless, this study contributes to the current knowledge of smoke detectors in nursing facilities.

State Requirements for the Fire Safety Training of Nursing Facility Employees

Of the States that require nursing facility employees to receive fire safety training, the training programs contain most, if not all, of the following components: the value of closing doors in fire control, the functionality of fire sprinklers if the facility is equipped with them, the operation of fire extinguishers, knowledge of the emergency preparedness plan, the importance of fire prevention, the steps to take in the event of a fire, and knowledge of when and how to call the fire department in the event of a fire.

Though there does not seem to be a major problem with the content of the States' fire safety programs, an alarming finding is the number of States that either do not require nursing facility employees to receive fire safety training or require employees to receive fire safety training only once. Five States do not require nursing facility employees to receive fire safety training, while four States require the employees to receive training only once. In one State, most nursing facility employees receive the training once, but some never do. Thus, 10 States require nursing facility employee training in fire safety once or less. In addition, this study finds several States that require only fire drills as the entire fire safety training program.

Due to the high risk occupants living in nursing facilities, it is important for the nursing facility employees in every State to be skilled with fire safety knowledge. Human detection and protection often can stop the spread of fire and prevent deaths from fire. To act quickly and sensibly in the event of a fire, nursing facility employees must be knowledgeable in the procedures and practices of fire safety.

State Requirements for Fire Safety Inspections in Nursing Facilities

The State requirements for nursing facility inspections are excellent. All of the States, except one, inspect some, if not most, of the following fire safety features in nursing facilities: automatic fire sprinklers, smoke detectors, fire doors, door latches, and fire extinguishers. Specifically, 46 States (86 percent) inspect all of the above fire safety features. The most common feature excluded from nursing facility inspections is the automatic fire sprinklers. However, only four States do not inspect fire sprinkler systems in nursing facilities. Overall, the State requirements for nursing facility inspections are outstanding.

The Study's Limitations

The biggest limitation of this study is that it only examines the State requirements, instead of the practices of nursing facility administrators toward fire safety protection. The actual fire safety practices of nursing facilities are not investigated in this report. To gain an accurate picture of fire safety in nursing facilities, another fire safety study consisting of a sample of nursing facilities from each State should be conducted.

Also, this study is limited to fire safety in one type of facility that cares for the aged: nursing facilities. This study does not examine fire safety requirements in other facilities that care for the aged, such as board and care facilities or high rise retirement communities.

Board and care facilities are particularly challenging to study. Small board and care facilities are often private homes where the homeowners rent rooms to older adults and offer them care in exchange for rent. Often, the proper authorities are unaware of these small board and care facilities; they are difficult to identify and therefore difficult to regulate.

Chapter VI: Summary

Due to the number of fires and the high risk population that lives in nursing facilities, strict fire safety requirements are necessary. In a long-term care setting where the residents are often mentally and/or physically disabled, the risk of a multiple-death fire is great. With the adoption of the LSC into the HCFA regulations and the technological advances in fire safety equipment, significant action was taken in the 1960's and 1970's to raise the fire safety standards of nursing facilities. These actions resulted in a decline of health care fire fatalities and a strengthening of fire protection requirements, but serious gaps still exist in protecting nursing facility residents from fire.

Given the findings of this study, the following solutions are recommended to State and Federal Governments, nursing facility administrators, fire experts, gerontologists, and researchers to ensure greater fire safety protection in nursing facilities.

Recommendations

1. HCFA should require all nursing facilities to comply with the 1991 edition of the Life Safety Code (LSC)

If HCFA adopted only the 1991 LSC edition into Federal regulations, greater fire protection in these facilities would be achieved. With the adoption of only the 1991 LSC edition into Federal regulations, all new nursing facilities would be required to install automatic fire sprinklers in order to receive Medicare and Medicaid funding.

This study found that 27 percent of the States allow nursing facilities to comply with LSC editions dating back to 1967. Under current HCFA regulations, nursing facilities are allowed to comply with the 1967, 1973, 1981, and 1985 editions of the LSC. Because of a grandfather clause, older nursing facilities are not required by HCFA to comply with the more recent editions of the LSC. For example, a nursing facility built in the early 1960's can comply with the 1967 edition of the LSC under HCFA regulations to receive Medicare and Medicaid funding.

Nonetheless, many States enforce stricter fire safety standards than the HCFA regulations require. This study found approximately one-half of the States (51 percent) to enforce either the 1985, 1988, or 1991 editions of the LSC. Twelve percent of the States mandate nursing facilities to adhere to the LSC editions dating back to 1981. Though the majority of States enforce more recent editions of the LSC, it is important for States to enforce the 1991 edition for all nursing facilities given the fire sprinkler requirement of this edition.

2. THERE IS A NEED FOR FEDERAL LEGISLATION REQUIRING ALL NURSING FACILITIES TO INSTALL AUTOMATIC FIRE SPRINKLER SYSTEMS

Since the 1970's, a national requirement for automatic fire sprinklers in all nursing facilities has been recommended. Automatic fire sprinklers are the greatest life safety feature available in the fire protection field. There is no record of a multiple death fire in nursing facilities with complete sprinkler protection.

Despite the effectiveness of fire sprinklers, there is still no national requirement for both new and existing nursing facilities to install fire sprinklers. Consequently, this study shows that only one-fourth of the States (24 percent) have State legislation requiring both new and existing facilities to install sprinklers. And, nearly one-half of the States (47 percent) do *not* require any nursing facilities to install fire sprinklers.

3. A NATIONAL STUDY SHOULD BE CONDUCTED TO DETERMINE IF "OTHER" AGENCIES, SUCH AS THE DEPARTMENT OF HEALTH AND HUMAN SERVICES, ARE QUALIFIED TO REVIEW THE EMERGENCY PREPAREDNESS PLANS AND LEAD NURSING FACILITY INSPECTIONS

Currently, there is controversy whether agencies, other than the fire authorities, are qualified to enforce fire safety regulations. According to many fire experts, the fire authority should be the sole agency that reviews emergency preparedness plans, as well as inspecting nursing facilities. In approximately two-thirds of the States (65 percent), the fire authority is the sole agency responsible for reviewing the emergency preparedness plans.

Yet, there is no concrete evidence that the other agencies, such as the Department of Health and Human Services, are not qualified to enforce such fire safety provisions. These other agencies receive an educational program on fire safety in order to perform fire safety duties in nursing facilities. This training program needs to be further examined in a national study. The training program should be revised based on the recommendations of the national study.

4. ON A NATIONAL LEVEL, ALL NURSING FACILITIES SHOULD BE REQUIRED TO INSTALL FIRE DETECTION EQUIPMENT, E.G., SMOKE DETECTORS, IF THEIR STRUCTURES ARE NOT EQUIPPED WITH QUICK RESPONSE, AUTOMATIC FIRE SPRINKLER SYSTEMS

Quick response, automatic fire sprinkler systems are tied into a structure's alarm system. Thus, when quick response, automatic fire sprinkler systems activate during a fire, an alarm system is sounded. If nursing facilities are not equipped with this quick response system, a nursing facility should have smoke detectors.

This study makes a disturbing finding—one-fourth of the States (13 or 25 percent) do not require all nursing facilities to have smoke detectors. Of these 13 States, 6 States also do not require any nursing facilities to have fire sprinklers. Seven States do not require nursing facilities to install smoke detectors but do require new nursing facilities to be equipped with fire sprinklers.

Another unresolved topic of fire safety is the necessity of smoke detectors in both residents' rooms and hallways. Currently, not

enough evidence exists to prove whether smoke detectors in the residents' rooms are absolutely necessary.

5. FEDERAL LEGISLATION, WHICH REQUIRES FIRE SAFETY TRAINING FOR ALL NURSING FACILITY EMPLOYEES, IS OF GREAT NECESSITY

Not only is it important for nursing facilities to be equipped with the proper fire safety devices, such as smoke detectors and automatic fire sprinklers, but it is also important for all nursing facility employees to receive fire safety training. Through fire safety training programs, nursing facility employees should gain knowledge of *both* fire prevention and protection.

The human element is vital to any nursing facility's fire protection program. For example, a nursing facility employee can prevent the rapid spread of smoke and fire by simply closing the door to the origin of fire. In many States, the fire authority having jurisdiction provides fire safety training to nursing facilities free of charge to the nursing facility owners.

As the report shows, many States (43 percent) require annual fire safety training for nursing facility employees. Four other States require these employees to receive quarterly or even more frequent training. However, a significant proportion of States (12 percent) do not require the employees to attend a fire safety program, and 10 percent of the States require nursing facility employees to attend a fire safety program only once.

In light of the high risk population living in nursing facilities, 12 percent is too large of a proportion of nursing facility employees who are not required to receive fire safety training. Nursing facility employees should learn about fire safety annually, as well as part of their initial orientation. The employees must be prepared to act quickly and knowledgeably in the event of a fire.

6. THE PROGRESS OF FIRE SAFETY STANDARDS IN NURSING FACILITIES SHOULD BE MONITORED AT REGULAR INTERVALS

Due to the great differences in State fire safety requirements, a State-by-State analysis of fire safety in nursing facilities should be conducted every 5 years to determine the progress of fire safety standards in nursing facilities. By monitoring the progress of fire safety standards in these facilities, public policymakers, fire safety experts, and nursing facility administrators will know what has and has not been accomplished. With this knowledge, they can strive toward greater fire safety protection in these facilities.

7. NURSING FACILITY ADMINISTRATORS NEED TO CONSIDER ADOPTING RESIDENT SMOKING POLICIES

Given the large number of fires in the residents' bedrooms, nursing facility administrators need to consider smoking policies for the residents. Specifically, administrators might think about designating a smoking lounge that is well-monitored with automatic fire protection devices and staff supervision. The NFPA's informal study of its membership found resident smoking policies to be weak and uncertain (NFPA, 1988).

8. THE STUDY OF FIRE SAFETY IN NURSING FACILITIES SHOULD INCORPORATE THE FIRE SAFETY PRACTICES OF NURSING FACILITIES. IN ADDITION, A STUDY OF FIRE SAFETY IN OTHER FACILITIES THAT CARE FOR THE AGED IS NEEDED

This study does not provide a complete picture of fire safety for facilities that care for the aged. It only examines the fire safety requirements for nursing facilities in each State. There is a big difference between the State requirements and the actual fire safety practices of nursing facilities. This study, however, does not delve into the common fire safety practices of nursing facilities.

In addition, this study does not explore the fire safety requirements for other facilities that care for the aged, such as board and care facilities and high-rise retirement communities. With these proposed studies, a better understanding of fire safety concerning older adults can be achieved.

To ensure greater protection from fire, nursing facilities need to be equipped with automatic fire sprinklers, emergency preparedness plans, smoke detectors (if not equipped with quick response sprinkler systems), employee fire safety training programs, and detailed fire safety inspections; they also need to comply with the most recent LSC edition. This report shows the following States to have almost all of these fire safety requirements: Alaska, California, Maine, Nevada, New Hampshire, Ohio, Oregon, Utah, Washington, and West Virginia. These States can serve as models of fire safety reform in nursing facilities.

> Only by putting more effort into existing strategies, such as public fire safety education and residential sprinkler systems, and by developing new strategies will we be able to again reduce the number of fire fatalities that occur. In particular, effective strategies for high risk populations, the very young, the elderly, and the poor need to be implemented. (Karter, 1989)

CONCLUSION: CONTRIBUTIONS OF THIS STUDY

This study provides a State-by-State analysis of fire safety requirements in nursing facilities. It raises the level of awareness of fire safety in nursing facilities by presenting information on the following topics:

- The number of nursing facility fires and deaths caused by them,
- The basic fire safety elements in nursing facilities,
- The roles of Federal and State governments in this matter,
- The gaps in information on this topic, and
- The findings of this study.

This study highlights the gaps in the information on this topic and fills in these gaps with current information. Through a complete, computer search of the literature and the acknowledgment by experts within fire safety organizations, such as the NFPA, the U.S. Fire Administration, and the National Association of State Fire Marshals, it was discovered that little information on each State's fire safety requirements for nursing facilities existed. Yet,

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5. In your State, are the nursing homes' emergency preparedness plans reviewed by the *fire authority having jurisdiction*?

☐ Yes
☐ No

If no, does some other authority review them?

☐ Yes: _____
(Specify the name of the authority)
☐ No

6. How often are emergency preparedness plans reviewed by a given authority?

☐ Annually
☐ Never
☐ Unknown
☐ Other: _____

SECTION C: STATE REQUIREMENTS FOR FIRE SAFETY ENFORCEMENT

7. Please, check the following fire safety requirements in nursing homes that the *fire authority having jurisdiction* inspects:

☐ Automatic fire sprinklers
☐ Smoke detectors
☐ Fire doors
☐ Door latches
☐ Fire extinguishers
☐ Other: _____
☐ None of the above

SECTION D: STATE REQUIREMENTS FOR SMOKE DETECTORS

8. Are **BOTH** newly constructed *and* existing nursing homes required to install smoke detectors in your State?

☐ Yes
☐ No

If yes, are **ALL** nursing homes in your State required to install smoke detectors in **BOTH** the residents rooms *and* the halls?

☐ Yes
☐ No

SECTION E: STATE REQUIREMENTS FOR FIRE SAFETY TRAINING

9. How often are **ALL** nursing home employees in your State *required* to receive fire safety training?

☐ Annually
☐ Once only
☐ Never
☐ Other: _____

If these employees are *not* required to receive fire safety training, skip question 10.

10. Please, check the following components of the fire safety training programs that nursing home employees **MUST** be taught:

☐ The value of closing doors in fire control
☐ The functionality of fire sprinklers (if the facility is equipped with sprinklers)
☐ The operation of fire extinguishers
☐ Knowledge of the emergency preparedness plan
☐ The importance of fire prevention
☐ The steps to take in the event of a fire
☐ Knowledge of when and how to call the fire department in the event of a fire
☐ Other: _____

SECTION F: STATE REQUIREMENTS FOR THE LIFE SAFETY CODE

11. What edition, or editions, of the Life Safety Code are nursing homes required to follow in your State? _____

12. Is the Life Safety Code actually adopted by your State, or is it enforced as a requirement for nursing homes to receive funding from Medicare and Medicaid which are issued by HCFA?

☐ Life Safety Code is adopted by your State
☐ Life Safety Code is enforced as a requirement for nursing homes to receive funding
☐ Other: _____

Thank you for your time and effort.

TABLE B1

STATE REQUIREMENTS FOR THE LIFE SAFETY CODE (L.S.C.)

STATES	EDITIONS OF L.S.C.	L.S.C. ADOPTED BY YOUR STATE	L.S.C. ENFORCED FOR FACILITIES' FUNDING ONLY
Kentucky	1967; 1973; 1981; 1985; 1988	X	
Louisiana	1988	X	
Maine	1991	X	
Maryland	1988	X	
Massachusetts			X
Michigan	1967; 1981; 1985	X-Adopted 1985 L.S.C. with amendments	
Minnesota	1988	X	
Mississippi	1985	X	
Missouri	1967; 1973; 1981; 1985	X	
Montana	1967; 1973; 1981; 1985		X
Nebraska	1985	X	
Nevada	1988	X-L.S.C. & I.C.B.O. Codes	
New Hampshire	1988	X	
New Jersey	N/A		X-By reference to Uniform Fire Code
New Mexico	1988	X	
New York	1985	X-1985 L.S.C. with an amendment	
North Carolina	1985		X

TABLE B1

STATE REQUIREMENTS FOR THE LIFE SAFETY CODE (L.S.C.)

STATES	EDITIONS OF L.S.C.	L.S.C. ADOPTED BY YOUR STATE	L.S.C. ENFORCED FOR FACILITIES' FUNDING ONLY
North Dakota	1967; 1973; 1981; 1985; 1988		X
Ohio	1981	X	
Oklahoma	1988	X	
Oregon	1981; 1985		X
Pennsylvania	1967; 1973; 1981; 1985		X
Rhode Island	1988	X-Health Care Section only adopted by state	
South Carolina	N/A		X-By reference to Standard Fire Prevention Code
South Dakota	1967; 1973; 1981; 1985	X	
Tennessee	1981	X-L.S.C. & Standard Building Code	
Texas	1985	X	
Utah	1991	X	
Vermont	1988	X	
Virginia	1967; 1973; 1981; 1985		X
Washington	1985	X-By reference to Uniform Fire Code	
West Virginia	1988	X	
Wisconsin	1985	X	
Wyoming	1967; 1973; 1981; 1985; 1988; 1991	X	

TABLE B2

STATE REQUIREMENTS FOR FIRE SPRINKLERS IN NURSING FACILITIES				
STATES	INSTALLED IN NEW FACILITIES	INSTALLED IN ALL FACILITIES	PROPOSED LEGISLATION	SPRINKLERED THROUGHOUT ALL STRUCTURE
Alabama	X - 1988			
Alaska	X - 1980	X - 1980		X
Arizona	X - 1979			
Arkansas			No response	
California	X - 1971	X - 1971		X
Colorado			X	
Connecticut				
Delaware	X - 1989			
District of Columbia			Unknown	
Florida				
Georgia			X	
Hawaii	X			
Idaho	X			
Illinois			Unknown	
Indiana	X - 1985			

TABLE B2

STATE REQUIREMENTS FOR FIRE SPRINKLERS IN NURSING FACILITIES

STATES	INSTALLED IN NEW FACILITIES	INSTALLED IN ALL FACILITIES	PROPOSED LEGISLATION	SPRINKLERED THROUGHOUT ALL STRUCTURE
Iowa				
Kansas				
Kentucky				
Louisiana				
Maine	X - 1965	X - 1965		X
Maryland	X - 1975			
Massachusetts	X	X		X
Michigan	X - 1991			
Minnesota	X - 1973			
Mississippi				
Missouri	X - 1981		Unknown	
Montana	X - 1988			
Nebraska				
Nevada	X - 1973	X - 1973		X
New Hampshire	X - 1986	X - 1986		X
New Jersey	X - 1991		X	

TABLE B2

STATE REQUIREMENTS FOR FIRE SPRINKLERS IN NURSING FACILITIES

STATES	INSTALLED IN NEW FACILITIES	INSTALLED IN ALL FACILITIES	PROPOSED LEGISLATION	SPRINKLERED THROUGHOUT ALL STRUCTURE
New Mexico				
New York				
North Carolina			Unknown	
North Dakota				
Ohio	X - 1976	X - 1976		X
Oklahoma				
Oregon	X - 1975	X - 1975		X
Pennsylvania				
Rhode Island	X - 1990			
South Carolina	X - 1984		Unknown	
South Dakota				
Tennessee				
Texas				
Utah	X	X		X
Vermont				

TABLE B2

STATE REQUIREMENTS FOR FIRE SPRINKLERS IN NURSING FACILITIES				
STATES	INSTALLED IN NEW FACILITIES	INSTALLED IN ALL FACILITIES	PROPOSED LEGISLATION	SPRINKLERED THROUGHOUT ALL STRUCTURE
Virginia	X - 1975	X - 1990		X
Washington	X - 1977	X - 1986		X
West Virginia	X - 1968	X - 1968		X
Wisconsin				
Wyoming	X -1991			

TABLE B3

STATE REQUIREMENTS FOR EMERGENCY PREPAREDNESS PLANS IN NURSING FACILITIES

STATES	ALL FACILITIES REQUIRED TO HAVE PLANS	PLANS REVIEWED BY FIRE AUTHORITY	PLANS REVIEWED BY OTHER AUTHORITY	FREQUENCY OF PLANS' REVIEW
Alabama	X		Department of Public Health	Annually
Alaska	X	X		Annually
Arizona	X	X		Annually
Arkansas	X	X		Annually
California	X	X		Annually
Colorado		X	Department of Health	Unknown
Connecticut	X	X		Annually
Delaware	X		Board of Health	Once
District of Columbia	X	X		Annually
Florida	X	X		Annually
Georgia			Health & Human Services	Unknown
Hawaii	X	X		Annually
Idaho	X	X	Health & Welfare	Unknown

TABLE B3

STATE REQUIREMENTS FOR EMERGENCY PREPAREDNESS PLANS IN NURSING FACILITIES

STATES	ALL FACILITIES REQUIRED TO HAVE PLANS	PLANS REVIEWED BY FIRE AUTHORITY	PLANS REVIEWED BY OTHER AUTHORITY	FREQUENCY OF PLANS' REVIEW
Illinois	X		Department of Public Health	Unknown
Indiana		X		Annually
Iowa				Unknown
Kansas	X	X		Annually
Kentucky	X	X		Annually
Louisiana	X	X	Health & Human Services	Annually
Maine	X	X		Annually
Maryland	X	X		Annually
Massachusetts	X	X		Quarterly
Michigan	X	X		Annually
Minnesota	X	X		Annually
Mississippi	X	X	Department of Health	Annually
Missouri	X		Department of Aging	Annually

TABLE B3

STATE REQUIREMENTS FOR EMERGENCY PREPAREDNESS PLANS IN NURSING FACILITIES

STATES	ALL FACILITIES REQUIRED TO HAVE PLANS	PLANS REVIEWED BY FIRE AUTHORITY	PLANS REVIEWED BY OTHER AUTHORITY	FREQUENCY OF PLANS' REVIEW
Montana	X	X		Annually
Nebraska	X	X		Annually
Nevada	X	X		Unknown
New Hampshire	X	X		Annually
New Jersey	X	X		As prepared or revised
New Mexico	X	X	State Health Certification Agency	Annually
New York	X		Department of Health	Varies
North Carolina	X	X		Annually
North Dakota	X	X		Annually
Ohio	X	X	Department of Health	Annually
Oklahoma	Unknown		Department of Health	Unknown
Oregon	X	X		Annually

TABLE B3

STATE REQUIREMENTS FOR EMERGENCY PREPAREDNESS PLANS IN NURSING FACILITIES

STATES	ALL FACILITIES REQUIRED TO HAVE PLANS	PLANS REVIEWED BY FIRE AUTHORITY	PLANS REVIEWED BY OTHER AUTHORITY	FREQUENCY OF PLANS' REVIEW
Pennsylvania	X			Unknown
Rhode Island	X	X		Annually
South Carolina	X		Law Enforcement Division	Unknown
South Dakota		X		Annually
Tennessee	X	X	Department of Health	Annually
Texas	X	X		Annually
Utah	X	X		Annually
Vermont	X	X		Annually
Virginia	X	X		Annually
Washington	X	X		Annually
West Virginia	X	X		Annually
Wisconsin	X		Health & Social Services	Annually
Wyoming	X	X		Annually

TABLE B4

STATE REQUIREMENTS FOR SMOKE DETECTORS IN NURSING FACILITIES

STATES	ALL FACILITIES INSTALL SMOKE DETECTORS	ALL FACILITIES INSTALL SMOKE DETECTORS IN BEDROOMS & HALLS
Alabama	X	
Alaska	X	X
Arizona	X	
Arkansas	X	
California	X	
Colorado		
Connecticut		
Delaware	X	
District of Columbia	X	
Florida	X	
Georgia		
Hawaii		
Idaho	X	X
Illinois	X	
Indiana		
Iowa		

TABLE B4

STATE REQUIREMENTS FOR SMOKE DETECTORS IN NURSING FACILITIES

STATES	ALL FACILITIES INSTALL SMOKE DETECTORS	ALL FACILITIES INSTALL SMOKE DETECTORS IN BEDROOMS & HALLS
Kansas	X	
Kentucky	X	
Louisiana	X	
Maine		
Maryland	X	
Massachusetts	X	X
Michigan		
Minnesota		
Mississippi	X	X
Missouri		
Montana	X	X
Nebraska	X	
Nevada	X	X
New Hampshire	X	X
New Jersey	X	
New Mexico		

TABLE B4

STATE REQUIREMENTS FOR SMOKE DETECTORS IN NURSING FACILITIES

STATES	ALL FACILITIES INSTALL SMOKE DETECTORS	ALL FACILITIES INSTALL SMOKE DETECTORS IN BEDROOMS & HALLS
New York	X	X
North Carolina	X	
North Dakota	X	
Ohio	X	X
Oklahoma	X	
Oregon	X	
Pennsylvania	X	
Rhode Island	X	
South Carolina	X	
South Dakota		
Tennessee	X	
Texas	X	
Utah	X	
Vermont	X	
Virginia	X	
Washington	X	X

TABLE B4

STATE REQUIREMENTS FOR SMOKE DETECTORS IN NURSING FACILITIES

STATES	ALL FACILITIES INSTALL SMOKE DETECTORS	ALL FACILITIES INSTALL SMOKE DETECTORS IN BEDROOMS & HALLS
West Virginia	X	
Wisconsin	X	
Wyoming		

TABLE B5

STATE REQUIREMENTS FOR FREQUENCY OF FIRE SAFETY TRAINING FOR NURSING FACILITY EMPLOYEES

STATES	ANNUALLY	ONCE ONLY	NEVER	OTHER
Alabama	X			
Alaska				Quarterly
Arizona				Requirement for inservice
Arkansas	X			
California				Quarterly
Colorado				Once only/Never
Connecticut	X			
Delaware				Once only/Annually
District of Columbia		X		
Florida				Annually/ Quarterly
Georgia				Periodically
Hawaii	X			
Idaho			X	
Illinois				Quarterly
Indiana				Quarterly fire drills

TABLE B5

STATE REQUIREMENTS FOR FREQUENCY OF FIRE SAFETY TRAINING FOR NURSING FACILITY EMPLOYEES

STATES	ANNUALLY	ONCE ONLY	NEVER	OTHER
Iowa			X	
Kansas	X			
Kentucky	X			
Louisiana			X	
Maine	X			
Maryland		X		
Massachusetts	No response	No response	No response	No response
Michigan			X	
Minnesota	X			
Mississippi				Fire drills
Missouri	X			
Montana	X			
Nebraska	X			
Nevada	X			
New Hampshire				Quarterly fire drills

TABLE B5

STATE REQUIREMENTS FOR FREQUENCY OF FIRE SAFETY TRAINING FOR NURSING FACILITY EMPLOYEES

STATES	ANNUALLY	ONCE ONLY	NEVER	OTHER
New Jersey				Quarterly fire drills
New Mexico	X			
New York				Quarterly fire drills
North Carolina				No state requirement/ Determined at local level
North Dakota				Fire drills
Ohio	X			
Oklahoma	X			
Oregon				Monthly
Pennsylvania	X			
Rhode Island				Quarterly fire drills
South Carolina		X		
South Dakota				Quarterly fire drills

TABLE B5

STATE REQUIREMENTS FOR FREQUENCY OF FIRE SAFETY TRAINING FOR NURSING FACILITY EMPLOYEES

STATES	ANNUALLY	ONCE ONLY	NEVER	OTHER
Tennessee			X	
Texas				Quarterly fire drills
Utah	X			
Vermont	X			
Virginia	X			
Washington	X			
West Virginia	X			
Wisconsin	X			
Wyoming		X		

TABLE B6

STATE REQUIREMENTS FOR THE SPECIFIC COMPONENTS OF FIRE SAFETY TRAINING PROGRAMS IN NURSING FACILITIES

STATES	CLOSING DOORS FOR FIRE CONTROL	FUNCTION OF SPRINKLERS	OPERATION OF EXTIN-GUISHERS	KNOWLEDGE OF EMERGENCY PLAN	FIRE PREVEN-TION	ACTION TO TAKE IN A FIRE	NOTIFY FIRE DEPART-MENT
Alabama	X		X	X	X	X	X
Alaska	X			X		X	
Arizona				X		X	X
Arkansas	X	X	X	X	X	X	X
Cal-ifornia	X	X	X	X	X	X	X
Colorado	X	X	X	X	X	X	X
Connect-icut	X	X	X	X	X	X	X
Delaware	X	X	X	X	X	X	X
District of Columbia	X	X	X	X	X	X	X
Florida	X	X	X	X	X	X	X
Georgia	X	X	X	X	X	X	X
Hawaii			X	X	X	X	X

TABLE B6

STATE REQUIREMENTS FOR THE SPECIFIC COMPONENTS OF FIRE SAFETY TRAINING PROGRAMS IN NURSING FACILITIES

STATES	CLOSING DOORS FOR FIRE CONTROL	FUNCTION OF SPRINKLERS	OPERATION OF EXTIN-GUISHERS	KNOWLEDGE OF EMERGENCY PLAN	FIRE PREVEN-TION	ACTION TO TAKE IN A FIRE	NOTIFY FIRE DEPART-MENT
Idaho							
Illinois	X		X	X	X	X	X
Indiana	X	X	X	X	X	X	X
Iowa							
Kansas	X		X	X	X	X	X
Kentucky	X	X	X	X	X	X	X
Louisiana							
Maine	X	X	X	X	X	X	X
Maryland	X	X	X	X	X	X	X
Mass-achusetts	No response	No response	No response	No response	No response	No response	No response
Michigan							
Minnesota	X		X	X	X	X	X
Miss-issippi							

TABLE B6

STATE REQUIREMENTS FOR THE SPECIFIC COMPONENTS OF FIRE SAFETY TRAINING PROGRAMS IN NURSING FACILITIES

STATES	CLOSING DOORS FOR FIRE CONTROL	FUNCTION OF SPRINKLERS	OPERATION OF EXTIN-GUISHERS	KNOWLEDGE OF EMERGENCY PLAN	FIRE PREVEN-TION	ACTION TO TAKE IN A FIRE	NOTIFY FIRE DEPART-MENT
Missouri	X	X	X	X	X	X	X
Montana	X		X	X	X	X	X
Nebraska	No response	No response	No response	No response	No response	No response	No response
Nevada	X	X	X	X		X	X
New Hampshire	X	X	X	X	X	X	X
New Jersey							
New Mexico	X		X	X	X	X	X
New York							
North Carolina							
North Dakota	X		X	X		X	X

TABLE B6

STATE REQUIREMENTS FOR THE SPECIFIC COMPONENTS OF FIRE SAFETY TRAINING PROGRAMS IN NURSING FACILITIES

STATES	CLOSING DOORS FOR FIRE CONTROL	FUNCTION OF SPRINKLERS	OPERATION OF EXTIN-GUISHERS	KNOWLEDGE OF EMERGENCY PLAN	FIRE PREVEN-TION	ACTION TO TAKE IN A FIRE	NOTIFY FIRE DEPART-MENT
Ohio	X	X	X	X	X	X	X
Oklahoma			X		X	X	X
Oregon	X	X	X	X	X	X	X
Penn-sylvania	X	X	X	X	X	X	X
Rhode Island	X		X	X	X	X	X
South Carolina	X		X		X	X	X
South Dakota					X	X	X
Tennessee	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texas	X	X	X	X	X	X	X
Utah	X		X	X	X	X	X
Vermont			X	X		X	X

TABLE B6

STATE REQUIREMENTS FOR THE SPECIFIC COMPONENTS OF FIRE SAFETY TRAINING PROGRAMS IN NURSING FACILITIES

STATES	CLOSING DOORS FOR FIRE CONTROL	FUNCTION OF SPRINKLERS	OPERATION OF EXTIN-GUISHERS	KNOWLEDGE OF EMERGENCY PLAN	FIRE PREVEN-TION	ACTION TO TAKE IN A FIRE	NOTIFY FIRE DEPART-MENT
Virginia	No response	No response	No response	No response	No response	No response	No response
Wash-ington	X	X	X	X	X	X	X
West Virginia	X	X	X		X	X	X
Wisconsin	X	X	X	X	X	X	X
Wyoming	No response	No response	No response	No response	No response	No response	No response

TABLE B7

STATE REQUIREMENTS FOR FIRE SAFETY ENFORCEMENT IN NURSING FACILITIES

STATES	FIRE SPRINKLERS	SMOKE DETECTORS	FIRE DOORS	DOOR LATCHES	EXTINGUISHERS
Alabama	X	X	X	X	X
Alaska	X	X	X	X	X
Arizona	X	X	X	X	X
Arkansas	X	X	X	X	X
California	X	X	X	X	X
Colorado					
Connecticut	X	X	X	X	X
Delaware	X	X	X	X	X
District of Columbia	X	X	X	X	X
Florida	X	X	X	X	X
Georgia	X	X	X	X	X
Hawaii	X	X	X	X	X
Idaho	X	X	X	X	X
Illinois			X	X	X
Indiana	X	X	X	X	X

TABLE B7

STATE REQUIREMENTS FOR FIRE SAFETY ENFORCEMENT IN NURSING FACILITIES

STATES	FIRE SPRINKLERS	SMOKE DETECTORS	FIRE DOORS	DOOR LATCHES	EXTINGUISHERS
Iowa	X	X	X	X	X
Kansas	X	X	X	X	X
Kentucky	X	X	X	X	X
Louisiana	X	X	X	X	X
Maine	X	X	X	X	X
Maryland	X	X	X	X	X
Massachusetts	X	X	X	X	X
Michigan	X	X	X	X	X
Minnesota	X	X	X	X	X
Mississippi	No response	No response	No response	No response	No response
Missouri	X	X	X	X	X
Montana	X	X	X	X	X
Nebraska	X	X	X	X	X
Nevada	X	X	X	X	X
New Hampshire	X	X	X	X	X

TABLE B7

STATE REQUIREMENTS FOR FIRE SAFETY ENFORCEMENT IN NURSING FACILITIES

STATES	FIRE SPRINKLERS	SMOKE DETECTORS	FIRE DOORS	DOOR LATCHES	EXTINGUISHERS
New Jersey	X	X	X	X	X
New Mexico	X	X	X	X	X
New York	No response	No response	No response	No response	No response
North Carolina	X	X	X	X	X
North Dakota	X	X	X	X	X
Ohio	X	X	X		X
Oklahoma	X	X	X	X	X
Oregon	X	X	X	X	X
Pennsylvania		X	X	X	X
Rhode Island	X	X	X	X	X
South Carolina	X	X	X	X	X
South Dakota	X	X	X	X	X
Tennessee	X	X	X	X	X
Texas	X	X	X	X	X
Utah	X	X	X	X	X

TABLE B7

STATE REQUIREMENTS FOR FIRE SAFETY ENFORCEMENT IN NURSING FACILITIES

STATES	FIRE SPRINKLERS	SMOKE DETECTORS	FIRE DOORS	DOOR LATCHES	EXTINGUISHERS
Vermont	X	X	X	X	X
Virginia	X	X	X	X	X
Washington	X	X	X	X	X
West Virginia	X	X	X	X	X
Wisconsin	X	X	X	X	X
Wyoming			X	X	X

APPENDIX C

National Association of State Fire Marshals

P.O. Box 844, Jefferson City, Missouri 65102

March 16, 1992

Senator David Pryor, Chairman
Senate Select Committee on Aging
628 Senate Hart Office Building
Washington, DC 20510

Dear Senator Pryor:

The National Association of State Fire Marshals represents chief state fire and life safety officials nationwide. We have no higher prioritiy than the safety of persons in health care facilities in general and nursing facilities in particular.

These past 12 months have had their disappointments. We unsuccessfully fought an effort to eliminate the requirement for hospitals to have both monitored smoke detectors and sprinklers in patient rooms. A hospitalized California woman died soon thereafter in a fire that erupted too fast for sprinklers to help but would have been reported quickly by smoke detectors.

But, these past 12 months also have had their highlights. Our involvement with Ms. Wendy Fox, a graduate student working with your committee, is high on that list. Working in a determined, professional and objective fashion, Ms. Fox examined the reality of fire safety in nursing facilities. She found a patchwork of fire safety regulations and enforcement and; in our estimation, has well documented many tragedies yet to come.

According to many nursing home operators, the fire statistics on nursing facilities appear to be modest. Our members play a major role in the collection and analysis of the data and, I assure you, we are not satisfied that the statistical picture is at all complete. Many fires go unreported. We strongly suspect that some deaths and injuries caused by fire are attributed to other causes.

Ms. Fox has done her job admirably well. We offer to you, Mr. Chairman, our full support for actions that intelligently address the concerns raised by Ms. Fox.

Thank you for giving her the opportunity to conduct this study, and thank you in advance for allowing us a chance to work with you to resolve the shameful situations Ms. Fox has uncovered.

Sincerely,

Francis A. McGarry
Interim President

National Fire Protection Association
International

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Fax: (703) 516-4350

Friday, March 27, 1992

Honorable David Pryor
Chairman, Special Committee on Aging
U.S. Senate
Washington, DC, 20510-0402

Dear Senator Pryor,

I recently reviewed a draft copy of the Aging Committee's report, "A State-by-State Analysis of Fire Safety in Nursing Facilities", by Wendy Fox with great interest. When Wendy first discussed the committee's plans for this report I wondered if it would be possible for anyone to collect, collate and analyze the mountain of data associated with this subject. It would appear that she and the staff have climbed that mountain.

NFPA has been concerned about fire and life safety in all health care facilities for many decades. As you know, the Life Safety Code® addresses this issue in great detail. But the final determining factor is the application, use and enforcement of the LSC requirements. This report is a giant step toward a comprehensive understanding of the current status of its use in nursing homes.

Nursing homes, their operators and, most importantly, their residents will benefit from the results of your committee's work and this study.

We look forward to working with you and the Senate Special Committee on Aging in our mutual and continuing efforts to improve fire and life safety for the elderly.

Sincerely,

John C. Gerard,
Washington Representative

BCC: Wendy Fox

National Citizens' Coalition for
NURSING HOME REFORM

1224 M Street, N.W., Suite 301
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Elma Holder, *Executive Director*
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Susan Titus, *President*

Phone: 202-393-2018
FAX: 202-393-4122

March 27, 1992

Senator David Pryor
Chairman
Special Committee on Aging
United States Senate
Washington, D.C. 20510

Dear Senator Pryor:

Thank you for sharing a draft of **State-by-State Analysis of Fire Safety in Nursing Facilities** with NCCNHR.

One of the most poignant but telling comments I have read on fire safety in nursing homes was the statement of a police officer in Dardanelle, Arkansas, after a "small" nursing home fire killed four elderly residents and hospitalized 40 others: "You don't expect it to happen in our town, something like this." This attitude is so prevalent that there has not been an adequate public demand for stronger fire codes, prevention training and enforcement -- even though, as the report shows, the risk of dying in a fire is three to four times greater for persons in the age group who typically live in nursing homes. As co-chair of a Washington, D.C., consumer group, Washingtonians for Improvement of Nursing Homes and Long Term Care (WINH), I have been reviewing nursing home inspection reports and civil penalty citations. I was shocked to find that nursing homes with multiple, serious fire hazards were not fined or given other sanctions. Here, as in other states and communities, tragedy apparently must occur before preventive action is taken.

One barrier to improving fire safety standards nationally has been the lack of information about what is required with regard to fire prevention in nursing facilities in the various states. As you know, after the disastrous fires in homes for the aging in 1989-90, your staff, NCCNHR and others tried to get that information from a number of sources and found that it had not been compiled.

I'm pleased that the Special Committee on Aging plans to publish this new research so that in the future we will have a stronger factual base from which to develop proposals for change. Thank you for this excellent contribution to improving the safety of nursing home residents.

Sincerely,

Janet Wells