EVALUATION OF
FIRE SAFETY IN
RESIDENTIAL FACILITIES
FOR DISABLED PERSONS
June 4, 1982

PROGRAM EVALUATION DIVISION
Office of the Legislative Auditor
State of Minnesota
EVALUATION OF
FIRE SAFETY IN
RESIDENTIAL FACILITIES
FOR DISABLED PERSONS
June 4, 1982

Program Evaluation Division
Office of the Legislative Auditor
State of Minnesota
In June 1981, the Legislative Audit Commission directed the Program Evaluation Division to investigate the state's fire safety inspection program for residential facilities housing mentally ill, mentally retarded, and chemically dependent people. The study was prompted by a 1980 evaluation of the Department of Public Welfare's licensing program for residential facilities for the mentally ill which reported that some facilities operate for long periods without fire safety inspections.

During our study, we received the full cooperation of the Department of Public Welfare, the Minnesota Health Department, and the State Fire Marshal's Office. We were also assisted by many local offices, and we wish to thank all of them for their help. In addition, we wish to thank Richard T. Cox, a consulting fire protection engineer, who assisted us in our independent assessment of a sample of residential facilities. This study was conducted by Thomas Sims and Roger Brooks.

Gerald W. Christenson
Legislative Auditor

James Nobles
Deputy Legislative Auditor for Program Evaluation

June 4, 1982
The Program Evaluation Division was established to conduct studies at the direction of the Legislative Audit Commission (LAC). The Division's responsibility, as set forth in statute, is to determine the degree to which activities and programs entered into or funded by the state are accomplishing their goals and objectives and utilizing resources efficiently. A list of the Division's studies appears at the end of this report.

Since 1979, the findings, conclusions, and recommendations in Program Evaluation Division reports are solely the product of the Division's staff and do not necessarily reflect the position of the LAC. Upon completion, reports are sent to the LAC for review and are distributed to other interested legislators and legislative staff.

Currently the Legislative Audit Commission is comprised of the following members:

**Senate**
- Donald Moe, Chairman
- Robert Ashbach
- John Bernhagen
- Jack Davies
- Frank Knoll
- Steven Lindgren
- Robert Tennessen
- Gerald Willet

**House**
- Ann Wynia, Vice-Chairman
- Lon Heinitz, Secretary
- John Clawson
- William Dean
- Shirley Hokanson
- Joel Jacobs
- Randy Kelly
- Tony Onnen
# TABLE OF CONTENTS

EXECUTIVE SUMMARY ix

INTRODUCTION 1

A. Background
B. State Agencies With Fire Safety Responsibilities

I. THE FREQUENCY OF FIRE SAFETY INSPECTIONS 5

II. HOW AGENCIES RESPOND TO CODE VIOLATIONS 13

A. Frequencies of Code Violations and Follow-up Inspections
B. Enforcement of the State Smoke Detector Law

III. AN INDEPENDENT ASSESSMENT OF FOURTEEN FACILITIES 19

A. Inspection Methodology
B. Inspection Results

CONCLUDING REMARKS 25

APPENDIX 29

STUDIES OF THE PROGRAM EVALUATION DIVISION 33
LIST OF TABLES AND FIGURES

Table 1  Summary of Fire Safety Requirements  4
Table 2  General Characteristics of Facilities for the Mentally Retarded, Chemically Dependent, and Mentally Ill  5
Table 3  Licensing Characteristics of Facilities for the Mentally Retarded, Chemically Dependent, and Mentally Ill  6
Table 4  Comparative Data on Inspection Frequencies  10
Table 5  Summary of Orders and Follow-up Inspections  14
Table 6  Fire Safety Evaluations of Selected Facilities  21

Figure 1  Inspection Frequencies for Residential Facilities: 1976 - 1980  8
EXECUTIVE SUMMARY

The purpose of our study was to determine whether the legal and administrative framework for fire safety inspections in Minnesota is adequate to ensure regular inspections of residential facilities which serve mentally retarded, mentally ill, and chemically dependent persons. In other states, recent fires have caused deaths in half-way houses and boarding homes serving disabled persons. We sought to establish the potential for such problems in Minnesota. In our study we pursued five research objectives:

1. to determine the frequency of fire safety inspections;
2. to determine what factors influence the frequency of fire inspections;
3. to determine how state agencies respond to substandard conditions;
4. to independently assess fire safety conditions in a sample of facilities; and
5. to evaluate the adequacy of inspection procedures.

To complete our research, we reviewed state laws and agency rules, interviewed staff in the Minnesota Departments of Public Welfare and Health and the State Fire Marshal's Office, and reviewed fire safety inspection records and fire incident data for 426 residential facilities. In addition, we hired an independent fire protection engineer to inspect fire safety conditions in selected residential facilities.

Our major findings and recommendations are summarized below. In our opinion, state and local fire officials fulfill their obligations under state law. However, the state lacks a comprehensive and coordinated fire inspection framework for all residential facilities serving the disabled. The existing patchwork of state laws and licensing categories leaves many facilities free of the administrative mechanisms which trigger fire inspections. We found that many residential facilities are inspected infrequently by state and local fire authorities and that some may be unsafe.

A. THE FREQUENCY OF FIRE SAFETY INSPECTIONS

We identified 426 residential facilities which serve five or more disabled persons and which we believe are eligible for licensure by the state Welfare Department under the Public Welfare Licensing Act.
We reviewed state and local fire inspection reports for all these facilities between 1976 and 1981 and found:

- Approximately 60 percent of the 167 facilities for chemically dependent and mentally ill people which we investigated operated for periods of two years or more between inspections; twenty-three percent operated for periods of four years or more between inspections. Fourteen percent were apparently not inspected at all (no records found).

- On the other hand, most facilities for the mentally retarded were inspected annually. In 1980, 98 percent of 252 facilities for the mentally retarded were inspected by the State Fire Marshal.

State laws do not currently mandate routine fire safety inspections for all residential facilities for the disabled. In general, fire inspections are triggered according to the way a facility is licensed and certified by health and welfare agencies.

Most facilities have licenses from state or local health authorities. A "health care facility" (hospital, nursing home, supervised living facility, or boarding care) license requires compliance with State Fire Marshal rules, but there is no inspection mandate. In addition, many residential facilities (including about half of all mental illness and chemical dependency facilities) possess only a "board and lodging" license. Many of these licenses are issued by local health authorities. Board and lodging licenses, per se, entail no general fire safety requirements, but many may meet the state's definition of "hotel" and, as a result, may be required by state law to pass a fire safety inspection every three years.

Any facility certified for Medicaid (including most mental retardation facilities) is required by federal rules to pass an annual fire safety inspection. Until October 1981, the costs for these inspections were underwritten by the federal government. Current state funding for Medicaid fire inspections is about half of the previous levels.

Licensure by the state Welfare Department under the Public Welfare Licensure Act involves no significant fire safety requirements, but a one-time request for an inspection is generally made to the Fire Marshal upon initial licensure. But since continued licensure is not contingent on passing periodic fire inspections, many facilities may operate for years without further fire safety inspections. In addition, welfare licensing rules generally permit a facility to have any category of state or local health license, including a board and lodging license.

Significantly, many facilities which we judged eligible for welfare licensure are not in fact licensed by the Welfare Department. The licensure programs for mental illness and detoxification facilities have not been fully implemented. A facility which is not licensed by the state Welfare Department and which possesses only a local board and lodging health license may not come to the attention of state fire officials.
Since many facilities serving the disabled are licensed as hotels or lodging houses, we reviewed certain aspects of the State Fire Marshal's hotel inspection program. In 1981, 29 of the state's 800 local fire departments had active contracts to conduct hotel inspections for the State Fire Marshal. According to the terms of these contracts (negotiated when the state required annual rather than triennial hotel inspections), the State Fire Marshal was required to review the local inspection programs annually with attention to code interpretation, enforcement procedures, inspection results and frequency, records completeness, and staff training. However, we found that:

- The State Fire Marshal does not currently monitor hotel and lodging house inspections performed under contract by local fire departments.

However, the State Fire Marshal has plans to begin such contract monitoring in the future.

B. CODE VIOLATIONS AND FOLLOW-UP INSPECTIONS

We also examined fire inspection records to determine how frequently follow-up inspections were conducted to verify the correction of code violations. State regulations do not formally require follow-up inspections, but it has been a written State Fire Marshal policy to conduct reinspections to assure compliance with the state fire code. A major exception to this policy existed between the early 1970s and 1981 when inspections of Medicare and Medicaid certified facilities were done according to the terms of a formal contract between the State Fire Marshal and the state Health Department. As a result, reinspections of these facilities were done only when health authorities requested them.

Prior to October 1981, fire inspections of federally certified health facilities were paid for by the federal government. When the state assumed the financial responsibility for such inspections, total funding was cut and the State Fire Marshal held that the limited funds would not permit follow-up inspections.

Our review of state and local fire inspection records between 1976 and 1981 shows that as a result of these circumstances:

- Fire officials did not conduct follow-up inspections for two-thirds of the facilities for chemically dependent and mentally ill people which were cited for code violations.

- Records at the State Fire Marshal's Office indicate that for a majority of the orders issued to chemical dependency facilities, officials relied on correspondence from facility operators that deficiencies had been corrected and required no substantiating evidence such as invoices for materials or labor. The records further show that some corrections were in fact not made as reported by a facility.
• Follow-up inspections were conducted much more often for mental retardation facilities. The Fire Marshal conducted follow-up visits for 86 percent of the cases where orders were issued to mental retardation facilities to correct code violations.

Because some facilities for the disabled are licensed as lodging establishments and because smoke detectors are required by state law for all sleeping rooms in hotels and lodging houses, we checked the enforcement of this requirement and found that:

• In at least one municipality, a more lenient local ordinance regarding the placement of smoke detectors is apparently enforced by local fire officials in lieu of the state law.

• In cities of the first class, fire inspections are the responsibility of local authorities and the State Fire Marshal assumes no responsibility to give technical advice on whether local ordinances and fire inspection practices are consistent with state law.

C. AN ASSESSMENT OF FACILITY CONDITIONS

With the help of an independent fire protection engineer, we conducted on-site inspections to assess the fire safety conditions in a non-random sample of 14 residential facilities for the disabled in the Twin Cities metro area. In the judgment of our consultant:

• There were severe fire safety problems in all seven mental illness facilities in our sample.

Safety levels of mental illness facilities were low because of unprotected wood frame construction, vertical openings which permit the spread of fire and smoke, inadequate alarm systems, confusing floor plans, and inadequate supervision. Many facilities were older buildings converted from single-family dwellings to higher density usage. Many facilities had not been inspected recently by state or local fire officials.

In contrast, our consultant found that:

• Fewer fire safety problems existed in the seven facilities serving mentally retarded and chemically dependent persons in our sample.

Mental retardation facilities scored well because of relatively new construction, low population densities, good alarm systems, and constant staff supervision. Chemical dependency facilities scored well because they had good alarm systems, good evacuation conditions, good staff supervision, and sprinklers.
Some factors frequently associated with fire-related deaths such as careless smoking, propped-open fire doors, and poor staff supervision depend more on human behavior than on a building's physical characteristics. Since these conditions can change as soon as a fire inspector leaves a facility, periodic safety inspections are not panaceas. Inspections must be coupled with other efforts which improve facility operating procedures and staff capabilities.

D. RECOMMENDATIONS

1. The state should require fire safety inspections at least every two years for all residential facilities serving five or more disabled persons (as defined in Minn. Stat. Section 245.782, Subd. 6). The Legislature should require the State Fire Marshal to conduct regular inspections and require the state Welfare and Health Departments to clarify their respective agency rules to make facility licensure contingent on certification by the Fire Marshal that a facility has met the standards established in the state fire code. An inspection mandate would constitute a workload of 80-100 additional inspections per year and would probably require additional appropriations for the State Fire Marshal.

2. The State Fire Marshal should consult with state and local health and welfare agencies to identify and locate all residential facilities which serve five or more mentally retarded, mentally ill, and chemically dependent persons (including facilities which are currently unlicensed by the state) to ensure that regular fire inspections are conducted. Far from mitigating the need for fire safety inspections, the fact that some facilities do not have health facility licenses, welfare program licenses, or federal certification enhances the importance of regular inspections by state fire officials.

3. The state Health and Welfare Departments should periodically review the various combinations of health and welfare licensure to ensure that adequate fire safety requirements apply to each. In addition, the Welfare Department should review the categories of health licensure required of residential facilities which it licenses under the Public Welfare Licensing Act to determine if it is appropriate for some facilities to possess a board and lodging license in lieu of a health care facility license.

4. In conducting fire safety inspections of residential facilities for the disabled, the State Fire Marshal should give highest priority to facilities located in older converted single- or multi-family dwellings since these may pose the greatest fire hazards.

5. The State Fire Marshal should follow-up all facility inspections to verify that code violations and serious hazards are corrected. The Fire Marshal should set guidelines to distinguish between minor corrections which might be verified by appropriate documentation--such as invoices for work or materials--and those which must be verified by means of a second on-site inspection.
6. The Legislature should extend the state law requiring smoke detectors in hotel and lodging house sleeping rooms to include all residential facilities which serve the mentally retarded, mentally ill, and chemically dependent.

7. The Legislature should empower the State Fire Marshal to review local ordinances and fire inspection procedures and give technical advice to local fire officials when ordinances or procedures are judged by the State Fire Marshal to be inconsistent with state law or administrative rules.

8. The State Fire Marshal should establish an effective contract management function to monitor local fire safety inspections done on behalf of the state.

9. The State Fire Marshal should establish a training and education program to encourage self-inspections by facility operators to supplement (but not replace) the regular program of official fire safety inspections.

10. The State Fire Marshal should establish a training and education program for inspection personnel from the state Welfare and Health Departments to help them identify fire hazards and code violations—and refer them to fire officials—during their own inspections of residential facilities.
INTRODUCTION

A. BACKGROUND

National attention has recently focused on fire safety in residential facilities serving impaired populations such as the mentally retarded, mentally ill, and chemically dependent. The interest has been prompted by the growing number of such facilities (principally a result of the deinstitutionalization of state hospital populations) and by a rising death toll from fires in various localities.

In April 1979, a Missouri home for the aged was destroyed by fire, killing 25 persons. In the same month a fire in a Washington, D.C. half-way house for the mentally ill killed 10 persons. In November 1979, 14 persons died in an Ohio boarding house for the elderly and the mentally retarded.

Minnesota has been spared similar incidents so far, but a potential for tragedy may exist. As elsewhere, the number of community-based facilities has increased significantly over the past ten years. In Minnesota today, there are approximately 430 group homes, half-way houses, and community-based residential facilities which serve five or more mentally retarded, mentally ill, and chemically dependent persons. These facilities have a combined population of approximately 8,600. Several small fires have occurred in these facilities in recent years, most notably a 1980 fire in a Minneapolis residence for the mentally ill in which one person died and a 1981 fire in a Duluth home for the mentally handicapped which caused property losses estimated at $70,000.

According to reports of the National Fire Protection Association, recent fires in these kinds of facilities in other states had the following characteristics:

a. Residents who were certified as capable of "self-preservation" often failed to take appropriate action when there was a fire.

b. Alarm systems including heat and smoke detectors were often inadequate, failing to provide sufficient warning to residents.

c. Facilities housing 20 to 30 residents typically had only a single attendant on duty at night, the time when most of the fires occurred.

d. Smoke, not fire, was most often the cause of death, and in many cases, the smoke spread rapidly due to open stairways and propped-open doors.

e. There was a lack of training for both staff and residents for dealing with fire emergencies.
Although the causes of fires in such residential facilities are often unknown, they are probably similar to those in single-family homes (where heating systems are the leading cause), apartment houses (where cooking facilities figure prominently), and hotels (where personal smoking materials are most often the cause of fires).

Since residential facilities for the disabled are not separated as a distinct category by the National Fire Incident Reporting System, we can only speculate as to the causes of fires in such facilities. Where independent living privileges are granted, the patterns are probably similar to those for single-family homes and apartments. For other facilities, especially those with transient populations, the patterns may resemble those for hotels and motels.

B. STATE FIRE SAFETY INSPECTION REQUIREMENTS

State law does not currently require the State Fire Marshal to conduct fire inspections for all residential facilities serving the disabled. Residential facilities fall under a variety of federal, state, and local requirements depending on the nature of their clientele and their licensing and funding status. As a result, some facilities must meet stringent fire inspection requirements while others operate under few specific fire safety obligations.

In general, fire safety inspections are triggered according to the way a facility is licensed and certified by state and local health and welfare agencies. The state Health Department grants "health facility" licenses such as those for hospitals, nursing homes, boarding care homes, and supervised living facilities as well as "board and lodging" licenses for hotels, lodging houses, and resorts. In many parts of the state (including Minneapolis and St. Paul) the responsibility to license and monitor board and lodging establishments has been transferred by the state Health Department to local health authorities.

Any facility licensed as a hospital, nursing home, or boarding care home is supposed to "maintain a clearance by the State Fire Marshal in order to qualify for continued licensure," but there is no explicit mandate in state laws or rules that such facilities must undergo periodic fire inspections. Similarly, any facility licensed as a supervised living facility (a licensing category expressly established for community-based facilities housing persons who need moderate levels of supervision on account of a disability such as mental retardation, mental illness, or chemical dependency) is supposed to be in compliance with fire safety standards of the State Fire Marshal, but there is no explicit fire inspection mandate.
A facility which holds a board and lodging license may simultaneously meet the legal definition of "hotel" contained in state law and may, as a result, be required to pass a fire safety inspection every three years.

Any health facility which is certified under the Medicare or Medicaid program is required to pass an annual fire inspection in order to remain eligible for and receive federal funds. Since this is a federal mandate, federal funds were made available to the State Fire Marshal until October 1981, to cover the costs for such inspections. The State Fire Marshal conducted inspections according to the terms of a formal contract with the state Health Department. However, when federal funds for this activity were eliminated in 1981, the state Legislative Advisory Commission chose to fund such fire inspections at about half the previous level and the Fire Marshal's formal contract with the Health Department was allowed to expire.

State Welfare Department licensing requirements are defined in the 1976 Public Welfare Licensing Act. The act establishes standards for programs serving the mentally retarded, mentally ill, and chemically dependent, but it contains no significant provisions regarding fire safety beyond stipulating that the Fire Marshal must report to the Welfare Commissioner on matters of fire safety. It is significant, however, that many facilities for the mentally ill and chemically dependent are not licensed by the Department of Public Welfare at the present time because the licensing programs for those facilities have not yet been fully implemented.

Table 1 summarizes the fire safety requirements applicable to residential facilities which serve the disabled in Minnesota. The fire code and inspection requirements for facilities licensed by the Department of Public Welfare are shown in the top half of the table; those for facilities licensed by the state Health Department are shown in the bottom half. Facilities which have both health and welfare licenses must, of course, meet the requirements of both agencies.

We conclude that Minnesota's existing framework of laws and agency rules governing fire safety in residential facilities for the disabled is complex and does not establish a uniform state fire safety inspection requirement for all residential facilities serving the disabled. In addition, there is a lack of clarity in the definitions of facilities in these laws and rules and facilities are not licensed by health and welfare agencies in a consistent manner. As a result, some facilities may be subject to frequent scrutiny by fire safety authorities while others receive little or no attention.

---

1Minn. Stat. §§299F.46, Subd. 1; 299F.391.
# TABLE 1
SUMMARY OF FIRE SAFETY REQUIREMENTS

<table>
<thead>
<tr>
<th>FACILITIES</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fire Code Compliance&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>DPW Rule 34 (MR)</td>
<td>Meet SFM Requirements</td>
</tr>
<tr>
<td>DPW Rule 35 (CD)</td>
<td>None</td>
</tr>
<tr>
<td>DPW Rule 36 (MI)</td>
<td>None&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Hospitals and Nursing Homes</td>
<td>Meet MUFC Requirements</td>
</tr>
<tr>
<td>Supervised Living Facilities</td>
<td>Meet SFM Requirements</td>
</tr>
<tr>
<td>Hotels and Lodging Houses</td>
<td>Meet MUFC</td>
</tr>
</tbody>
</table>

Source: Minnesota Statutes and Agency Rules.

<sup>a</sup>Refers to specific requirements in addition to the general provision regarding statewide applicability of the Minnesota Uniform Fire Code (MUFC).

<sup>b</sup>DPW's revised Rule 36, effective February 8, 1982, requires documented compliance with fire code.

Note:

DPW = Department of Public Welfare

SFM = State Fire Marshal

MDH = Minnesota Department of Health
I. THE FREQUENCY OF FIRE SAFETY INSPECTIONS

A basic assumption of our research was that inspections are fundamental to fire safety and our immediate objective was to find out how often residential facilities are inspected.

Most of the facilities we studied are "home" for their residents, although there is considerable variation in the formality of their operations and the amount of supervision. The amount of services vary according to whether facilities were established expressly to serve handicapped populations or whether they operate simply as rental properties to which disabled clients are regularly referred by county welfare agencies.

We worked with five lists provided by the Department of Public Welfare, one each for Rule 34 facilities (mental retardation), Rule 35 facilities (chemical dependency), unlicensed detoxification centers, Rule 36 facilities (mental illness), and unlicensed mental illness residential facilities. Most of these facilities hold a Health Department license either as a hospital, nursing home, boarding care home, supervised living facility, lodging house, or hotel (or in some cases a facility may hold more than one license). Table 2 shows the general characteristics of the facilities included in our research; Table 3 shows how the facilities are licensed by state and local health and welfare agencies.

TABLE 2

GENERAL CHARACTERISTICS OF FACILITIES
FOR THE MENTALLY RETARDED, CHEMICALLY DEPENDENT,
AND MENTALLY ILL

<table>
<thead>
<tr>
<th></th>
<th>MR^a</th>
<th>CD^b</th>
<th>Detox^c</th>
<th>MI^d</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Facilities</td>
<td>259</td>
<td>69</td>
<td>19</td>
<td>79</td>
<td>426</td>
</tr>
<tr>
<td>Average Capacity</td>
<td>17</td>
<td>31</td>
<td>13</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Total Capacity</td>
<td>4,400</td>
<td>2,110</td>
<td>428</td>
<td>1,659</td>
<td>8,573</td>
</tr>
<tr>
<td>Percent in Twin Cities</td>
<td>37%</td>
<td>57%</td>
<td>21%</td>
<td>51%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Source: Department of Public Welfare, 1981.

^aMental Retardation.
^bChemical Dependency.
^cDetoxification centers which were co-located with other chemical dependency programs were excluded from our analysis because records indicate that co-located facilities are typically inspected together.
^dMental Illness.
<table>
<thead>
<tr>
<th>Health Licenses</th>
<th>MR</th>
<th>CD</th>
<th>Detox</th>
<th>MI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital/Nursing Home</td>
<td>2%</td>
<td>4%</td>
<td>---</td>
<td>4%</td>
</tr>
<tr>
<td>Supervised Living Facility</td>
<td>87%</td>
<td>51%</td>
<td>---</td>
<td>7%</td>
</tr>
<tr>
<td>Boarding Care</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>24%</td>
</tr>
<tr>
<td>State Board and Lodging</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>37%</td>
</tr>
<tr>
<td>Local Board and Lodging</td>
<td>---</td>
<td>45%</td>
<td>---</td>
<td>23%</td>
</tr>
<tr>
<td>None</td>
<td>11%a</td>
<td>---</td>
<td>100%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Welfare Licenses b</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DPW Rule 32</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>DPW Rule 34</td>
<td>100%</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>DPW Rule 35</td>
<td>---</td>
<td>100%</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>DPW Rule 36</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>10%</td>
</tr>
<tr>
<td>None</td>
<td>---</td>
<td>---</td>
<td>100%</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>N =</td>
<td>259</td>
<td>69</td>
<td>19</td>
<td>79</td>
</tr>
</tbody>
</table>

*a All have applied for Supervised Living Facility licenses.

*b Some facilities have multiple DPW licenses.
We reviewed nearly 1,600 state and local fire safety inspection reports to determine how often these facilities have been inspected since 1976. Records on most facilities were found at the State Fire Marshal's Office; data for other facilities were provided by local fire departments. On occasion, we found evidence suggesting that a facility had been inspected, but we could not find any official inspection report. In such cases, we did not count a facility as having been inspected. Some fire departments informed us that they do not maintain any inspection records.

Finding: According to official records, in any given year, less than one-half of all facilities for the chemically dependent and the mentally ill are inspected for fire safety. Sixty percent of the 167 facilities for the chemically dependent and the mentally ill which we investigated have operated for periods of two years or more without inspections. Twenty-three percent have operated for periods of four years or more between inspections. Fourteen percent were apparently not inspected at all.

However, we found that facilities for the mentally retarded have been inspected virtually every year; some are inspected more often. Figure 1 compares facility groups by the number inspected during each year from 1976 to 1980.

1. FACILITIES FOR THE MENTALLY RETARDED

During each year from 1976-1980, an average of 94 percent of all facilities for the mentally retarded were inspected. In 1980, 248 out of 252, or 98 percent, were inspected at least once. All of these inspections were conducted by the State Fire Marshal's Office. During the period from 1976 to 1981, only 17 facilities (seven percent) went more than one full year between inspections, and no facility went longer than two years without an inspection. During the six-year period, as many as 47 facilities (18 percent) averaged more than one inspection per year.

All 259 facilities for the mentally retarded hold Department of Public Welfare licenses under Rule 34. According to the 1980 Health Department Directory of Health Care Facilities, 226 (87 percent) are licensed as supervised living facilities and five are licensed as nursing homes. Health Department staff informed us that the remaining 28 facilities have all since received or applied for supervised living facility licenses. Furthermore, all of the supervised living facilities are federally certified under Medicaid.
FIGURE 1

INSPECTION FREQUENCIES FOR RESIDENTIAL FACILITIES
1976 - 1980

KEY:
- Number of Facilities Inspected
- Number of Facilities Not Inspected

Source: State Fire Marshal and local fire departments.
2. FACILITIES FOR THE CHEMICALLY DEPENDENT

Overall, chemical dependency facilities are inspected much less frequently than are mental retardation facilities. During the 1976-1980 period, an annual average of only 45 percent of all chemical dependency facilities were inspected. We found that some chemical dependency facilities received regular inspections and others received none. From 1976 to 1981, 77 percent of the facilities went two years or more between inspections, and 30 percent went four years or more between inspections. Seven of the 88 facilities had apparently never been inspected at all.

We also analyzed chemical dependency treatment facilities and detoxification centers separately. Of the 69 chemical dependency treatment centers, 58 (84 percent) operated two years or more between inspections; 22 (32 percent) operated four years or more without inspections. Three treatment centers have never been inspected since 1976. All 69 treatment centers are licensed under Department of Public Welfare Rule 35. Thirty-five facilities (51 percent) hold supervised living facility licenses from the Health Department and another three are licensed as nursing homes. The remaining 31 (45 percent) chemical dependency facilities apparently hold only local boarding house licenses.

Overall, 10 of the 19 detox centers (53 percent) operated two years or more between inspections; four (21 percent) operated four years or more. We could find no inspection records since 1976 for four of the facilities.

None of the detoxification centers are licensed by the Department of Public Welfare because Rule 32 which governs them has never been enforced. Nor could we identify any detox centers that hold a separate state Health Department license.

In reviewing the records for all chemical dependency facilities, we found that the five most frequently inspected were all located in hospitals or nursing homes.

3. FACILITIES FOR THE MENTALLY ILL

During each year from 1976 to 1980, an average of 47 percent of all mental illness facilities were inspected. During the six-year period, 68 percent of the facilities went two years or more between inspections, and 30 percent went four years or more. No records of inspections since 1976 could be found for 16 (20 percent) of the 79 mental illness facilities.

Only eight of the 79 mental illness facilities hold Department of Public Welfare licenses under Rule 36. However, we found that all but four mental illness facilities hold some kind of state or local health licenses. Twenty-eight hold state health care facility licenses (3 nursing homes, 19 boarding care homes, and 6 supervised living facility), 29 hold state board and lodging house licenses, and 18 hold local lodging house licenses.
Table 4 shows how the three categories of mental retardation, chemical dependency, and mental illness facilities compare.

### TABLE 4
COMPARATIVE DATA ON INSPECTION FREQUENCIES

<table>
<thead>
<tr>
<th></th>
<th>MR</th>
<th>CD</th>
<th>MI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td>259</td>
<td>88</td>
<td>79</td>
</tr>
<tr>
<td>Average Inspected in One Year</td>
<td>94%</td>
<td>45%</td>
<td>47%</td>
</tr>
<tr>
<td>Inspected More Than Six Times in Six Years</td>
<td>18%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>Two Years or More Between Inspections</td>
<td>0%</td>
<td>77%</td>
<td>68%</td>
</tr>
<tr>
<td>Four Years or More Between Inspections</td>
<td>0%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>No Inspection Records Found</td>
<td>1%</td>
<td>8%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: State and local fire safety inspection records, 1981.

**Recommendation:** The state should require fire safety inspections at least every two years for all residential facilities housing five or more disabled persons (as defined in Minn. Stat. 245.782, Subd. 6), including facilities eligible for Health or Welfare licenses but currently unlicensed. Based on past inspection frequencies for facilities housing disabled persons, this requirement would constitute an additional workload of approximately 80-100 additional facilities each year and would probably require additional appropriations for the State Fire Marshal. The Legislature should require the State Fire Marshal to conduct periodic inspections and require the state Health and Welfare Departments to clarify their respective agency rules to make facility licensure contingent on certification by the Fire Marshal that a facility has met the standards established in the state fire code.
Recommendation: The State Fire Marshal should consult with state and local health and welfare agencies to identify and locate all residential facilities which serve five or more mentally retarded, mentally ill, and chemically dependent persons (including facilities which are currently unlicensed by the state) to ensure that regular fire inspections are conducted. Far from mitigating the need for fire safety inspections, the fact that some facilities do not have health facility licenses, welfare program licenses, or federal certification enhances the importance of regular inspections by state fire officials.

Recommendation: The state Health and Welfare Departments should periodically review the various combinations of health and welfare licensure to ensure that adequate fire safety requirements apply to each. In addition, the Welfare Department should review the categories of health licensure required of residential facilities which it licenses under the Public Welfare Licensing Act to determine if it is appropriate for some facilities to possess a board and lodging license in lieu of a health care facility license.

Two recent changes in state law and administrative rules could increase the number of fire safety inspections for some chemical dependency and mental illness facilities.

First, when the Legislature passed an amendment in 1981 requiring the State Fire Marshal to inspect hotels once every three years instead of annually, it modified the definition of "hotel" to include facilities licensed as board and lodging houses. Previously, the state law applied to any building containing six or more guest rooms and "licensed as a hotel pursuant to Chapter 157." Deleting the words "as a hotel" has the effect of including facilities licensed as boarding and lodging houses with six or more guest rooms.

We found during our research that facilities holding health care licenses were usually inspected more often than those holding lodging house licenses. Since lodging house inspections are now mandated at least once every three years, this imbalance may soon diminish.

Second, facilities housing the mentally ill have been infrequently inspected, in part, because many have not been licensed by the Department of Public Welfare. However, the department has recently promulgated a revision of Rule 36 which it considers more workable than the original version. The new rule, coupled with recent state funding for facilities licensed under Rule 36, may result in more comprehensive licensing of mental illness facilities. Consequently, many facilities could be subject to fire safety inspections immediately upon application for license by the Department of Public Welfare.

Since many facilities serving the disabled are licensed as hotels or lodging houses, we reviewed certain aspects of the State Fire Marshal's hotel inspection program. In 1981, 29 of the state's
800 local fire departments had active contracts to conduct hotel inspections for the State Fire Marshal. According to the terms of these contracts (negotiated when the state required annual rather than triennial hotel inspections), the State Fire Marshal was required to review the local inspection programs annually with attention to code interpretation, enforcement procedures, inspection results and frequency, records completeness, and staff training.

Finding: The State Fire Marshal does not currently monitor hotel and lodging house inspections performed under contract by local fire departments.

However, the State Fire Marshal has plans to begin such contract monitoring in the future.

Recommendation: The State Fire Marshal should establish an effective contract management function to monitor local fire safety inspections done on behalf of the state.
II. HOW AGENCIES RESPOND TO CODE VIOLATIONS

In this chapter we describe what happens when violations and hazards are identified in fire safety inspections. A single inspection may not be sufficient to ensure that existing hazards are eliminated or that future hazards are prevented. Follow-up activities or repeated inspections are often needed to keep a facility free from fire hazards and in compliance with applicable fire codes.

A. FREQUENCIES OF CODE VIOLATIONS AND FOLLOW-UP INSPECTIONS

When fire hazards are discovered during inspections, the State Fire Marshal is supposed to issue a "deficiency report" if the problem is relatively minor or a "written order" if the problem is major and requires corrective action by the facility owner. Orders specify the corrective action that must be taken and a period of time to reach compliance; Minnesota Statutes §299F.011, Subdivision 6 states:

A person who violates a provision of the uniform fire code shall be guilty of a misdemeanor. No person shall be convicted for violating the uniform fire code unless he shall have been given notice of the violation in writing and reasonable time to comply.

While reviewing fire safety inspection reports, we noted whether orders had been issued as an indicator of significant code violations. In addition, we checked for follow-up activities for the orders issued to the various categories of facilities.

Finding: Between 1976 and 1981, fire officials did not conduct follow-up inspections for two-thirds of the chemical dependency and mental illness facilities cited for code violations. Moreover, records at the State Fire Marshal's office indicate that for a majority of orders issued to chemical dependency facilities, state officials relied on correspondence from facility operators that deficiencies had been corrected. Occasionally the claim of compliance proved to be false.

According to the interpretation of the State Fire Marshal, the terms of the recently expired formal contract between the state Health Department and the Fire Marshal called for follow-up inspections of Medicare and Medicaid certified facilities only when health authorities expressly requested them. Now that the state has assumed funding responsibility for these inspections, reduced monies signify that follow ups will continue to be problematic.

Table 5 summarizes our findings concerning the frequency of initial inspections, orders, and follow-up inspections for residential facilities.
### TABLE 5
**SUMMARY OF ORDERS AND FOLLOW-UP INSPECTIONS**

<table>
<thead>
<tr>
<th></th>
<th>MR&lt;sup&gt;a&lt;/sup&gt;</th>
<th>CD&lt;sup&gt;b&lt;/sup&gt; and Detox</th>
<th>MI&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Facilities</strong></td>
<td>259</td>
<td>88</td>
<td>79</td>
</tr>
<tr>
<td><strong>Inspections</strong></td>
<td>1,310</td>
<td>258</td>
<td>270</td>
</tr>
<tr>
<td><strong>Orders or SDPCs</strong></td>
<td>301</td>
<td>95</td>
<td>59</td>
</tr>
<tr>
<td><strong>Follow-up Inspections</strong></td>
<td>259</td>
<td>33</td>
<td>16</td>
</tr>
<tr>
<td><strong>Percent of Inspections Resulting in Orders</strong></td>
<td>23%</td>
<td>37%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Percent of Orders Resulting in Follow-up Inspections</strong></td>
<td>86%</td>
<td>35%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: State and local fire safety inspection records.

<sup>a</sup>Mental Retardation  
<sup>b</sup>Chemical Dependency and Detoxification  
<sup>c</sup>Mental Illness

In reviewing files and interviewing staff, we learned that there is some latitude in issuing deficiency reports and written orders and in taking follow-up measures. We were informed by the State Fire Marshal that deficiency reports are issued when deficiencies are not serious and can be corrected quickly and inexpensively. In contrast, written orders are issued in cases involving more serious deficiencies requiring time-consuming and expensive corrective action. However, this rule of thumb was not always reflected in the records; for example, written orders were occasionally issued for discontinuing the use of extension cords. In these cases, issuing written orders had the effect of establishing legal liability with the facility owners or managers.

Moreover, fire safety inspectors have their own views about when to issue reports or orders. Some inspectors believe that facility operators are more cooperative and more likely to take corrective action when inspectors use the least formal means of enforcement. Others believe that deficiencies need to be recorded in order to prevent misunderstandings between facility staff and the State Fire Marshal and further believe that documentation is important for ensuring public accountability.
Follow-up inspections are desirable because of their potential for eliminating fire hazards and code violations. One fire inspector suggested that as many as 80 percent of all orders warrant a follow-up inspection to confirm corrective action. One would expect to find follow-up inspection reports for particularly hazardous facilities, when orders have been issued, and where direct confirmation is desirable. Ironically, just the opposite occurs. In contrast to chemical dependency and mental illness facilities, mental retardation facilities, which appear to be in the best condition, received the most frequent follow-up inspections. It appears that continued eligibility under Medicaid and Medicare or the availability of state or federal funds to cover the cost of inspections are the critical factors determining whether follow-up inspections occur, not fire safety per se.

During our review of fire safety inspection reports, we occasionally found recommendations sent to the Department of Public Welfare by the State Fire Marshal to deny a license, approximately 15 times among 1,600 reports. Upon reviewing a small sample of Department of Public Welfare license files, we found that the department sometimes places facilities "on probation" or issues provisional licenses during a facility's first year of operation because of non-compliance with fire safety rules. We also found that some facilities later drop their license, go out of business, or change businesses. However, we found no instance in which the Department of Public Welfare suspended or revoked a license for failure to comply with fire code standards. Neither did we find any evidence that any state agency has ever brought legal action against a residential facility for failure to comply with written orders.

1. FACILITIES FOR THE MENTALLY RETARDED

The State Fire Marshal issued a Statement of Deficiency and Plan of Correction (a written order under the federal program) for 23 percent of the 1,310 inspections we identified for mental retardation facilities. For seven percent of the inspections, the State Fire Marshal also issued a state written order. According to our review of the files, the State Fire Marshal conducted follow-up inspections for 86 percent of the federal orders. For the remaining 14 percent, state agencies relied on word from the facility that corrective action had been taken or believed that no follow-up action was warranted.

2. FACILITIES FOR THE CHEMICALLY DEPENDENT

Chemical dependency facilities received written orders much more frequently (37 percent of the time) than mental retardation facilities, but only 35 percent of these resulted in follow-up inspections. For over one-half the orders issued to chemical dependency facilities, state agencies relied on correspondence from facilities stating that corrections had been made. In one case, a facility assured the Fire Marshal by letter that smoke detectors had been put in place as required, but an inspection four years later revealed that detectors were still missing.
3. FACILITIES FOR THE MENTALLY ILL

Follow-up inspections for mental illness facilities were more difficult to document. Over one-half of the mental illness facility inspections were conducted by local fire departments, and local units do not always maintain records as comprehensively as the State Fire Marshal. Some local fire departments maintain complete inspection reports, some record only inspection dates, and some keep no records at all. Nonetheless, we managed to locate records which indicate that from 1976 to 1981, written orders were issued for approximately 22 percent of the inspections. For these orders, we found that follow-up inspections were conducted for only 27 percent of the cases.

Recommendation: The State Fire Marshal should follow-up all facility inspections to verify that code violations and serious hazards are corrected. The Fire Marshal should set guidelines to distinguish between minor corrections which might be verified by appropriate documentation—such as invoices for work or materials—and those which must be verified by means of a second on-site inspection.

B. ENFORCEMENT OF THE STATE SMOKE DETECTOR LAW

There is evidence that smoke detectors save lives and property. Data from the National Fire Information Reporting System show that when a fire occurs, the risk of death in a private home without detectors is almost twice the risk in a home with detectors.

Minnesota laws require that "every dwelling unit within an apartment house and every guest room in a lodging house or hotel used for sleeping purposes shall be provided with a smoke detector. When actuated, the detector shall provide an alarm in the guest room."3

Because some residential facilities may fall under these requirements—many are licensed as lodging establishments—we checked the enforcement of the state's smoke detector provisions.

Minnesota Statutes §299F.362, Subdivision 7 prohibits a local unit of government from adopting standards different from those provided in state law except that, for new construction, a local unit of government may require that smoke detectors be attached to a centralized electrical power source. Yet, it appears that a Minneapolis ordinance does not satisfy this provision and is sometimes enforced in lieu of the state law.

3Minnesota Statutes §299F.362, Subdivision 4.
During an inspection of a Minneapolis board and lodging house, we accompanied a Minneapolis fire inspector and a State Fire Marshal inspector. We observed that the Minneapolis inspector did not require smoke detectors in each sleeping room of the facility. He explained that because the facility had fewer than 15 such rooms, it was inspected according to standards established by the city for a "dormitory," which do not require detectors in each sleeping room.

We checked the Minneapolis ordinance regarding smoke detectors and found the following requirement regarding location:

"Smoke detectors shall be provided in rooming houses in such numbers that, when activated, the alarm is audible in all sleeping rooms and shall be provided on each and every floor used for sleeping purposes and within fifteen (15) feet of a doorway leading to every room used for sleeping purposes."

The Minneapolis ordinance does not require detectors in each sleeping room. Depending on a legal interpretation of the state's definition of what constitutes a "lodging house or hotel," the Minneapolis ordinance (on the books prior to the passage of the state law) may not meet the standard established in state law. However, in cities of the first class, fire inspections are the responsibility of local authorities and the State Fire Marshal assumes no responsibility to give technical advice on whether local ordinances and fire inspection practices are consistent with state law.

Recommendation: The Legislature should empower the State Fire Marshal to review local ordinances and fire inspection procedures and give technical advice to local fire officials when ordinances or procedures are judged by the State Fire Marshal to be inconsistent with state law or administrative rules.

In order to investigate this issue further, we reviewed orders issued by the State Fire Marshal to see how often smoke detectors were checked as deficient. This was the only specific code violation we monitored. We found that smoke and heat detectors or alarms were mentioned in orders for 35 percent of the mental retardation facilities, 31 percent of the chemical dependency facilities, and 14 percent of the mental illness facilities. These frequencies suggest that deficient detectors are a common problem which fire inspectors are attempting to correct.

However, upon reviewing the corrective action specified in State Fire Marshal orders, we found many cases, including some orders issued as recently as 1981, where the State Fire Marshal required that "smoke detectors be centrally located on each floor level of the facility," in accordance with the National Fire Protection Association Life Safety Code published in 1973. Smoke detector violations were usually cited in reference to the Life Safety Code rather than the more stringent provisions of the Minnesota Statute or the Fire Marshal Rules.
In contrast, St. Paul fire inspectors use an inspection form stating that "In accordance with Minnesota Statutes §299F.362, the smoke detector must be located in the guest room that is used for sleeping purposes (bedroom)."

The location of smoke detectors is critical for two reasons: (1) they must be within hearing distance of residents to give them sufficient warning to escape, and (2) the smoke detectors should be located close to probable sources of fire so as to provide the earliest possible warning. Facilities licensed as hotels or lodging establishments are required to have self-closing, fire-rated doors for all bedrooms, and tests have shown that remote alarms are not always heard in the rooms when the doors are closed. Because abandoned smoking material is a leading cause of fire and because people often smoke in their bedrooms, locating detectors within sleeping areas may be advantageous.

Recommendation: The Legislature should extend the state law requiring smoke detectors in hotel and lodging house sleeping rooms to include all residential facilities which serve the mentally retarded, mentally ill, and chemically dependent.
III. AN INDEPENDENT ASSESSMENT OF FOURTEEN FACILITIES

In this chapter, we report on the actual safety conditions found in a sample of facilities, assess whether inspected facilities appear to be in better condition than uninspected facilities, and assess the merits of existing inspection procedures. Specifically, we address the following questions:

- Do facilities which have not been inspected nonetheless meet minimum fire safety standards?
- Do facilities which house disabled persons meet the special fire safety needs of their residents?
- Are fire safety inspection procedures sufficient to eliminate fire hazards and code violations?

During our research, we reviewed the inspection materials used by various fire prevention bureaus and accompanied a state fire inspector on some actual inspections. In addition, we hired a consultant, a fire protection engineer with 20 years of experience, to review the State Fire Marshal inspection procedures and inspect some facilities for an independent appraisal of fire safety conditions.

A. INSPECTION METHODOLOGY

We selected a non-random sample of 14 residential facilities in the Twin Cities metropolitan area. In order to learn about the range of potential fire safety problems, we selected some facilities which had been inspected frequently and some which had not been inspected at all. All were facilities which we believed eligible for state licensure under the Public Welfare Licensing Act.

Our consultant visited each facility unannounced and in person. His inspection routine lasted approximately two hours and was sometimes conducted in the presence of personnel from the State Fire Marshal's Office or the local fire authority as well as the Program Evaluation Division staff.

Although our consultant conducted his inspections according to criteria developed for health care facility inspections by the National Bureau of Standards, his analyses and conclusions are subjective and should not be construed as definitive. Through the entire procedure our goal was to obtain a general impression about the kinds of fire safety conditions which exist in facilities serving the disabled.

Our consultant's overall evaluations were summarized in terms of four general criteria:
• Containment Safety: Building construction, interior finish, number of vertical openings, and number of hazardous areas.

• Extinguishment Safety: Smoke detection and alarm systems, presence of extinguishment equipment, and overall fire suppression capability.

• People Movement: Adequacy of smoke detection and control, doors to corridors, and building exits.

• General Safety: Overall safety conditions, including adequacy of staff supervision and fire emergency plans.

People residing in facilities for the mentally retarded, chemically dependent, and mentally ill have many combinations of physical, sensory, or mental impairments. Some are as capable of protecting themselves in a fire emergency as are unimpaired people while others are highly dependent on other persons for assistance. During his visits to our sample of residential facilities, our consultant was sensitive to the special needs of the specific individuals who lived there and his evaluations reflect those needs.

B. INSPECTION RESULTS

Table 6 shows the ratings each facility in our sample received based on our consultant's evaluations. Only two facilities were judged to have sufficient fire containment safety, primarily because they contained automatic sprinklers. The containment safety of other facilities was often insufficient due to unprotected wood frame construction, interior finish, and vertical openings.

Only four of the facilities were judged to possess sufficient fire extinguishment safety. Two were sufficient primarily because of the presence of sprinklers, and another two were sufficient because of their construction and the installation of alarm systems. Fire extinguishment was insufficient in other facilities because of unprotected wood frame construction and inadequate fire alarm systems.

Over one-half of the facilities, all of them facilities for the mentally ill, were judged inadequate for people movement, primarily because of inadequate escape routes and vertical openings. Other facilities were rated favorably because of low patient densities, good alarm systems, multiple escape routes, and sprinklers.

Finding: For general safety, all of the mental retardation and chemical dependency facilities were judged to be relatively safe. However, all of the mental illness facilities were judged to have moderate to severe fire safety problems. General safety ratings were most affected by emergency escape routes, vertical openings, type of construction, and alarm systems.
### Table 6
**FIRE SAFETY EVALUATIONS OF SELECTED FACILITIES**

<table>
<thead>
<tr>
<th>Sample Facilities</th>
<th>Containment Safety&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Extinguishment Safety&lt;sup&gt;a&lt;/sup&gt;</th>
<th>People Movement&lt;sup&gt;a&lt;/sup&gt;</th>
<th>General Safety&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (MR)</td>
<td>-</td>
<td>+</td>
<td>++</td>
<td>6</td>
</tr>
<tr>
<td>2. (MR)</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>6</td>
</tr>
<tr>
<td>3. (MR)</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>7</td>
</tr>
<tr>
<td>4. (MR)</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>9</td>
</tr>
<tr>
<td>5. (CD)</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>7</td>
</tr>
<tr>
<td>6. (CD)</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>9</td>
</tr>
<tr>
<td>7. (CD)</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>10</td>
</tr>
<tr>
<td>8. (MI)</td>
<td>--</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>9. (MI)</td>
<td>--</td>
<td>--</td>
<td>+</td>
<td>1</td>
</tr>
<tr>
<td>10. (MI)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>4</td>
</tr>
<tr>
<td>11. (MI)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td>12. (MI)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>13. (MI)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>14. (MI)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2</td>
</tr>
</tbody>
</table>

<sup>a</sup>Key to consultant's judgement:

++ Very Good  
+ Adequate  
- Deficient  
-- Very Deficient

<sup>b</sup>Overall ratings on 1-10 scale.

1. **CONDITIONS IN FACILITIES FOR THE MENTALLY RETARDED**

The four mental retardation facilities which our consultant visited were rated good to excellent regarding general safety. Fire containment was rated low in all four facilities, but only by small margins because self-closing fire doors and fire-resistive walls in these facilities would make it difficult for fire to spread from one area of a facility to another.

Fire extinguishment was generally good in all four facilities, largely because of the presence of smoke and fire alarms and extinguishers. Nevertheless, extinguishment capacity was limited by typical frame construction for new residences, the absence of sprinklers, and no automatic, direct alarm connection with local fire departments.
People movement was rated good to excellent. Facility layouts were generally conducive to good people movement and three of the four facilities housed only half a dozen people. However, the ratings were occasionally down-graded to reflect the dependence of residents on staff supervision and the questionable competence of some supervisors.

In part, the mental retardation facilities achieved relatively high ratings because the generally newer buildings almost always included design features appropriate for housing an impaired population and because staff are almost always present to assist residents in cases of emergency.

2. CONDITIONS IN FACILITIES FOR THE CHEMICALLY DEPENDENT

The three chemical dependency facilities which our consultant visited were also rated good to excellent. However, chemical dependency facilities are not as homogeneous a group as are MR facilities. For example, two of the facilities are detoxification centers which are more likely to house people who are temporarily incapacitated than are long-term treatment programs. Thus, the needs for safety in detox centers may be greater.

Fire containment was rated good to excellent in all three facilities. All three programs are located in institutional or commercial buildings, providing good zoning and barriers which would inhibit the spread of fire. The excellent ratings for two facilities were due primarily to the presence of sprinkler systems.

Fire extinguishment was also rated good to excellent. All facilities had alarm systems and extinguishers and two facilities were wholly sprinklered.

People movement was rated excellent in all three facilities. The placement of smoke detectors and straight-forward floor plans would enhance quick evacuation. One facility was down-graded, however, because of two-story sleeping accommodations and the lack of lighted exit signs.

The chemical dependency facilities achieved high ratings because the three programs we visited were all located in institutional-type structures (one office building, one warehouse, and one converted church) with typical institutional safety devices such as sprinklers, signal-activated closers for fire doors, kitchen range hoods with automatic fire extinguishing systems, and a general absence of flammable materials.
3. CONDITIONS IN FACILITIES FOR THE MENTALLY ILL

The seven mental illness facilities our consultant visited were all rated poor. Fire containment was rated poor in all of the facilities because fire doors tended to be unrated or propped open, and there was poor zoning, combustible materials, and no self-closers on doors. However, the two most serious deficiencies were consistently unprotected wood frame construction and vertical openings.

Fire extinguishment was rated poor in all of the facilities because of the absence of sprinklering, inadequate smoke detectors, and predominantly unprotected wood frame construction.

People movement was also rated poor, because of inadequate alarm systems, little or no staff supervision, inadequate exits, and confusing floor plans. Again, vertical openings were a common, serious deficiency.

Two of the seven mental illness facilities we visited have been inspected repeatedly during the past six years. Even these facilities were rated as unacceptable for safety, but their scores for general safety did not fall nearly as low as those for the other five.

In some facilities, fire safety depended heavily on constant staff supervision, the strict enforcement of house rules regarding smoking, and periodic fire drills.

The mental illness facilities lack some of the advantages of the chemical dependency and mental retardation facilities, possessing neither good institutional physical settings nor constant staff supervision. Some mentally ill people appear to have been moved from home and from safeguarded institutions into alternative residential settings without appropriate safeguards.

Recommendation: In conducting fire safety inspections of residential facilities for the disabled, the State Fire Marshal should give highest priority to facilities located in older converted single- or multi-family dwellings since these may pose the greatest fire hazards.
CONCLUDING REMARKS

Minnesota's system for scheduling and conducting fire safety inspections is basically sound. Only a few modifications are necessary to correct the deficiencies which we found during our investigation. In general, we recommend a clearer legislative mandate, more rigorous enforcement of existing requirements, and improved coordination among state agencies.

In addition, upon reviewing the overall operations of Minnesota's regulation-by-inspection system, we find that there are two broad issues deserving attention: organizational restructuring and the limitations of inspections. Each of these are discussed below.

During our research, we considered certain organizational alternatives, each of which offers some advantage over the existing arrangement, but we dismissed them because on balance they could not be justified. Some of these alternatives could affect more than just fire safety inspections, the focus of our research, and thus more research would have to be done before we could make any recommendation regarding the implementation of these options. Nonetheless, we believe it worthwhile to review at least the potential benefits and costs of the following options:

a. consolidation of inspection responsibilities in a new state regulatory agency;

b. consolidation of inspection responsibilities in an existing agency; and

c. delegation of inspection responsibilities to local fire departments.

Consolidating all inspection functions into a new single state agency might offer certain advantages, such as administrative efficiencies in scheduling and recordkeeping, and operational efficiencies in the actual performance of inspections. Inspection generalists could be cross-trained to perform inspections for building and fire codes as well as health and welfare regulations so that one person could perform all required inspections. Alternatively, inspection specialists could simply coordinate their activities, functioning as members of an interdisciplinary team.

Utilizing generalists would result in fewer visits to each facility and might require fewer staff overall. The increased responsibility could justify greater compensation to attract and retain qualified people. The use of inspection generalists in a consolidated inspection agency could also reduce some of the current duplication of effort in such areas as building and fire codes, and reduce what facility operators sometimes perceive as troublesome intrusions.
In addition, consolidating the inspection function would separate program regulation from program support, avoiding a potential conflict of interest which arises when an agency promotes the operation of service programs to meet clients needs and simultaneously is responsible for enforcing minimum standards for such programs. Also, the single agency approach would replace a fragmented system with an integrated one, reducing the possibility that some facilities are inspected too often while others are not inspected often enough.

Offsetting these advantages would be the considerable costs of establishing an entirely new agency. Such an apparent expansion of state government would be particularly unpopular at a time when government officials are looking for ways to reduce programs and cut spending.

In addition, the task of cross-training inspectors in many diverse areas would be difficult. Some combination of both specialists and generalists would most likely be necessary. Another disadvantage would be that facilities would receive less overall attention from state regulatory agencies in any given year. It is presently not uncommon for facilities to be visited three or four times a year by various officials, thus providing inspectors numerous opportunities to identify problems and assist facility staff in improving conditions.

We also believe that creating a consolidated inspection agency would complicate efforts to coordinate the inspection function with program development. In addition, without an effort to take account of local inspection programs, all inspection functions would still not be integrated in a single agency.

Consolidating inspection responsibilities in an existing state agency presents a similar situation. In this case, however, there would still be the continuing potential conflict in attempting to function as both a service advocate and a service regulator. In addition, selecting the existing state agency in which to locate the consolidated regulatory function would be a difficult decision for state authorities. There has already been debate over the location of a combined program and facility inspection unit in either the Health or Welfare Departments. Two issues are raised in this debate: first, which profession, health or welfare, best lends itself to the monitoring of health and/or welfare program facilities; and second, which department is most capable of managing such an operation?

Granting inspection authority to local fire departments would transfer the inspection task from the state to local units of government. There are numerous reasons why local participation would be attractive. First, local fire departments are physically closer to the facilities and part of the community in which they operate. Local fire officials may also prefer being responsible for all activities within their own jurisdictions, and inspecting the facilities would permit local fire officials to become familiar with conditions in facilities in which they might someday be fighting a fire. Also, local fire departments constitute a considerable labor force, albeit in most cases a largely volunteer force.
However, logistical and administrative obstacles would likely make any significant shift of responsibilities to local authorities extremely difficult and expensive. All of the local units are independent of the State Fire Marshal and report to their own municipal authorities. Consequently, local units do not function under the authority of the State Fire Marshal, but rather as the result of cooperation, incentives, and state legal requirements. Because it would be impractical to rely too heavily on the cooperation of 800 independent units, local responsibility would most likely have to be mandated by the state. However, considerable local opposition is predicted, because at this time federal and state governments are simultaneously reducing aids and delegating greater responsibility to local units. Moreover, the training and supervision of 800 mostly volunteer fire inspection units might prove to be a costly and cumbersome procedure for the state.

In our estimation, the most cost-effective solution to current shortcomings is to make minor alterations to the existing system. The essential pieces are already in place: the legal authority to inspect and regulate, and qualified personnel who know the regulations and how to apply them. However, missing elements include a clear legislative mandate to periodically inspect facilities for disabled persons, the designation of one state agency as the ultimate authority in the scheduling and execution of inspections, and better coordination between health and welfare agencies to bring greater uniformity to the current pattern of residential facility licensure.

Not all fire safety hazards can be effectively policed by periodic fire safety inspections because conditions simply change too quickly. Yet some conditions are clearly linked to fatal fires, including careless smoking, bedroom doors and fire doors being left open, and a lack of training for responding to fire emergencies. Inspection reports show that fire officials commonly bring such matters to the attention of facility operators and encourage corrective action such as self-closing doors and monthly fire drills. However, concerns which are largely a matter of human behavior are quickly subject to change, and our consultant observed many such problems during his inspections.

To supplement the work of official fire inspectors, we think the State Fire Marshal should establish a program to encourage voluntary self-inspections. Such a program might include the use of self-explanatory inspection forms for facility staff, special instructional materials, and periodic training sessions at which the fire marshal and facility staff could discuss the problems of fire safety in residential facilities.

The St. Paul Fire Prevention Bureau uses a type of inspection report form which we believe would be useful for self-inspections. The form covers the same items checked by the State Fire Marshal form but is 10 pages long and asks such self-explanatory questions as "Does every sleeping room have access to two separate means of egress?" and "Are all the hallways from the sleeping rooms to the outside of the building at least three feet wide?" The St. Paul form helps explain to facility operators what is expected of them.
A well-developed self-inspection program could draw upon existing staff resources and increase the capabilities of on-site staff to monitor facility safety. Perhaps the greatest advantage of such a program would be that it would raise the fire safety consciousness of facility operators by recruiting them as active participants in a program integrated with the traditional inspection program. Although the program would require facility staff to assume greater responsibility for fire safety, it would be a voluntary and supplementary effort. All facilities would still be subject to official inspections by the fire marshal.

As we have noted, fire safety in residential facilities is only partly dependent on structural conditions. To a high degree, safety depends on the ingenuity, attention, and capabilities of facility staff to identify and correct problems on their own. For that reason, we think a self-inspection program has merit.

We also believe that inspection staff from other state agencies might contribute to increased fire safety vigilance. As we mentioned earlier, it is not uncommon for facilities to be visited three or four times a year by various officials, including licensing consultants from the Departments of Health and Welfare. These people could be trained along with facility operators to help them identify fire hazards and code violations during their own inspections and refer them to fire officials. Health inspectors already receive some training in the provisions of the Life Safety Code as part of their basic federal surveyor training orientation program.

Recommendation: The State Fire Marshal should use inspection forms which better explain to operators the requirements they must satisfy. Training and educational materials should be provided which permit facility operators to monitor their own fire safety practices during periods between official inspections. Moreover, staff of other state agencies such as the Health Department and the Department of Public Welfare should receive training to enable them to detect possible fire hazards and code violations and bring them to the attention of fire officials.
APPENDIX

STATE LAWS AND RULES REGARDING
FIRE SAFETY REGULATION OF RESIDENTIAL FACILITIES

COMPLIANCE REQUIREMENTS

Hospitals, MHD 83 (b) Fire Protection: Fire protection for the hospital shall be provided in accordance with the requirements of the State Fire Marshal. Approval by the State Fire Marshal of the fire protection of a hospital shall be a prerequisite for licensure.

Nursing Homes and Boarding Care Homes, MHD 62 (g) State Fire Marshal: Fire protection shall be provided in accordance with the requirements of the State Fire Marshal and of these regulations. The State Fire Marshal's approval of plans for new construction and of the fire protection of the completed facility shall be prerequisite for licensure. Facilities shall maintain a clearance by the State Fire Marshal in order to qualify for continued licensure.

Supervised Living Facilities, MHD 392 (5): Facilities which have been determined by the State Fire Marshal to be out of compliance with fire safety requirements of the State Fire Marshal are not eligible for licensure by the Board.

All Other Lodgings, MHD 153 (q) Fire Protection: All lodging establishments shall provide suitable fire escapes which shall be kept in good repair and accessible at all times. Hallways shall be marked and exit lights provided; fire extinguishers shall be provided and shall be recharged annually and kept accessible for use. No sleeping quarters shall be maintained in rooms which do not have unobstructed egress to the outside or to a central hall leading to a fire escape. ALL FIRE PROTECTION MEASURES SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE STATE FIRE MARSHAL.

DIVISION OF AUTHORITY

Hospitals, M.S. 144.653: The state commissioner of health shall enforce its rules subject only to the authority of the department of public safety respecting the enforcement of fire and safety standards in licensed health care facilities and the responsibility of the commissioner of public welfare pursuant to sections 245.78; 252.28; and 257.081 to 257.123.
Subd. 3. Enforcement: With the exception of the department of public safety which has the exclusive jurisdiction to enforce state fire and safety standards, the state commissioner of health is the exclusive state agency charged with the responsibility and duty of inspecting facilities required to be licensed under the provisions of sections 144.50 to 144.58 and enforcing the rules, regulations and standards prescribed by it.

Nursing Homes and Boarding Care Homes, M.S. 144A.10: The commissioner of health shall enforce the rules established pursuant to sections 144A.01 to 144A.17, subject only to the authority of the department of public safety respecting the enforcement of fire and safety standards in nursing homes and the responsibility of the commissioner of public welfare under sections 245.781 to 245.821 or 252.28.

Supervised Living Facilities, MHD 391: These regulations establish minimum standards as to the construction, equipment, maintenance, and operation of supervised living facilities insofar as they relate to sanitation and safety of the buildings, and to the health, treatment, comfort, safety, and well-being of the persons accommodated for care, except for standards of the Department of Public Safety, which has the exclusive jurisdiction to enforce state fire and safety standards.

INSPECTION REQUIREMENTS

Hospitals, M.S. 144.653 Subd. 2. Periodic inspection: All facilities required to be licensed under the provisions of sections 144.50 to 144.58 shall be periodically inspected by the state commissioner of health to insure compliance with its rules, regulations and standards. Inspections shall occur at different times throughout the calendar year. The state commissioner of health may enter into agreements with political subdivisions providing for the inspection of such facilities by locally employed inspectors.

Nursing Homes and Boarding Care Homes, M.S. 144A.10 Subd. 2. Inspections: The commissioner of health shall annually inspect each nursing home to assure compliance with sections 144A.01 to 144A.17 and the rules promulgated thereunder. The annual inspection shall be a full inspection of the nursing home. If upon a reinspection provided for in subdivision 5 the representative of the commissioner of health finds one or more uncorrected violations, a second inspection of the facility shall be conducted.
Supervised Living Facilities:

DPW Rule 32 (c) All receiving centers must be licensed by the Department of Public Welfare and comply with rules of the Department of Health.

(i) The building in which the receiving center is housed shall conform to the state building code and fire-safety code of either the state or the unit of government in which it is located.

DPW Rule 34 (3) Applicable requirements of the State Fire Marshal or his agent shall be met.

(4) Applicable requirements of the State Department of Health or its agent shall be met.

DPW Rule 35 5. Every residential program shall hold or have applied for a facility license from the Minnesota Department of Health.

DPW Rule 36 5. Each residential program shall hold or have applied for a facility license from the Minnesota Department of Health.

All Other Lodgings, M.S. 299F.46 (SFM) Subd. I. (l): It shall be the duty of the commissioner of public safety to inspect or cause to be inspected at least once every three years, every hotel in this state; and, for that purpose, he, or any of his deputies, or designated alternates or agents shall have the right to enter or have access thereto at any reasonable hour; and when, upon such inspection, it shall be found that the hotel so inspected does not conform to or is not being operated in accordance with the provisions of sections 157.01 to 157.14, in so far as the same relate to fire prevention or fire protection of hotels, or the rules promulgated thereunder, or is being maintained or operated in such manner as to violate the uniform fire code promulgated pursuant to section 299F.011 or any other law of this state relating to fire prevention and fire protection of hotels, the commissioner and his deputies or designated alternates or agents shall report such a situation to the hotel inspector who shall proceed as provided for in sections 157.01 to 157.14.

The revised Rule 36, promulgated in February 1982, requires licenses to "document compliance with all . . . fire and safety codes . . . ." Category I programs "shall be licensed as a supervised living facility, a board care home, or a hospital." Category II programs "shall have a board and lodging license from the Minnesota Department of Health or its equivalent from a local health department or a health care license."
Final reports and staff papers from the following studies can be obtained from the Program Evaluation Division, 122 Veterans Service Building, Saint Paul, Minnesota 55155, 612/296-8315.

1977
1. Regulation and Control of Human Service Facilities
2. Minnesota Housing Finance Agency
3. Federal Aids Coordination

1978
4. Unemployment Compensation
5. State Board of Investment: Investment Performance
6. Department of Revenue: Assessment/Sales Ratio Studies
7. Department of Personnel

1979
8. State-sponsored Chemical Dependency Programs
9. Minnesota's Agricultural Commodities Promotion Councils
10. Liquor Control
11. Department of Public Service
13. Nursing Home Rates
14. Department of Personnel, Follow-up Study

1980
15. Board of Electricity
16. Twin Cities Metropolitan Transit Commission
17. Information Services Bureau
18. Department of Economic Security
19. Statewide Bicycle Registration Program
20. State Arts Board: Individual Artists Grants Program

1981
21. Department of Human Rights
22. Hospital Regulation
23. Department of Public Welfare's Regulation of Residential Facilities for the Mentally Ill
24. State Designer Selection Board
25. Corporate Income Tax Processing
26. Computer Support for Tax Processing
27. State-sponsored Chemical Dependency Programs, Follow-up Study
28. Construction Cost Overrun at the Minnesota Correctional Facility - Oak Park Heights
29. Individual Income Tax Processing and Auditing
30. State Office Space Management and Leasing

1982

31. Procurement Set-Asides
32. State Timber Sales
33. Department of Education Information System
34. State Purchasing
35. Fire Safety in Residential Facilities for Disabled Persons

In Progress

36. State Mineral Leasing
37. Post-Secondary Vocational Education
38. Direct Property Tax Relief Programs