

## OVERVIEW

Following the January 28 Anderson Guest House Residential Care Facility fire in which 11 deaths occurred, the Department of Health and Senior Services (DHSS) and the Department of Mental Health (DMH) reviewed their respective fire safety and related regulations for residential care facilities. The purpose of the review was to identify areas for enhancing requirements to assure the safety and quality of care for residents.

## PROCESS

Both departments compared the fire safety regulations for residential settings that each license and/or certifies. A Comparison of Fire Safety Requirements for DMH Residential Facilities is presented in [Appendix A](#), which outlines fire safety requirements and provisions among facility types, sizes, services and programs.

Table 1 summarizes the numbers of residential-only providers by licensure and certification categories. The categories of DHSS/DMH Dual License and DMH License apply for the MRDD and CPS Divisions. It should be noted that ADA programs are exempt from licensure as described in section 630.705, RSMo.

| Community Providers | DHSS/DMH Dual License | DMH License | DMH Certification |
|---------------------|-----------------------|-------------|-------------------|
| MRDD                | 220                   | 163         | 325               |
| CPS                 |                       |             | 0                 |
| ADA                 | 0                     | 0           | 29                |

Table 1 - Numbers of Residential Providers

### **Several methodologies were used to generate ideas and recommendations for improving safety provisions in residential settings in Missouri.**

- A sample of regulations for mental health programs and facilities from other states was reviewed. The sample consisted of the following states: Arizona, Connecticut, Massachusetts, Oregon and Tennessee. The scope of the regulations reviewed included prevention, application, practices, interventions, training, staffing, planning, and policy/procedure development. Missouri's mental health regulations compared favorably with the sample. However, the review was also the source of some of the recommendations summarized later in this report.
- A sample of nationwide sprinkler and staffing information was reviewed and is provided with this report as [Appendix B](#).
- DMH staff consulted with the Missouri State Fire Marshal's office. Currently, the Fire Marshal's office conducts the fire safety inspections for residential programs solely licensed by DMH and for the residential habilitation programs under the MRDD Medicaid Waiver.

- DMH requested assistance from the Human Services Research Institute, a consulting group specializing in mental health issues. They reviewed DMH licensure and MRDD certification regulations and survey instruments, and provided recommendations to enhance oversight.

Based on the departments' review of their respective safety laws and recommendations pertaining to **Residential Care Facilities and Assisted Living Facilities**, the following recommendations are offered:

## **RECOMMENDATIONS**

### **I. PHYSICAL PLANT**

#### **Recommendation 1: Sprinkler Systems**

##### **Current Requirements**

All facilities initially licensed after October 2000, must have either a National Fire Protection Association (NFPA) 13 (commercial) or NFPA 13R (residential) sprinkler system installed. (See [Appendix B](#) for *National Comparison of Sprinkler System Requirements*.) Approximately 89% of all skilled nursing facilities (SNFs) and intermediate care facilities (ICFs) have an NFPA 13 system installed. Approximately 42% of RCFs and ALFs have sprinkler systems installed. (See [Appendix C](#) for a *statewide map of RCFs and ALFs with and without installed sprinkler systems*.) CMS is proposing that all certified long-term care facilities be fitted with NFPA 13 sprinkler system. (See [Appendix D](#) for the *proposed rules*.)

An NFPA 13 system requires sprinkler coverage in all areas of the facility (including attic spaces), while a 13R system only requires coverage in resident occupied areas. Facilities licensed before October 2000 may or may not be required to have a sprinkler system, depending on the date of initial licensure, the number of building stories and the construction type. (See [Appendix E](#) for *specific requirements*.)

##### **Concerns with Current Requirements**

Only the NFPA 13 system requires full sprinkler coverage for a building. Specifically, a 13R system does not require attic coverage. In addition, legislation passed last year allows hospice residents, many of whom are bed-bound, to reside in Assisted Living Facilities (ALFs) with no sprinkler system (see Section 198.073.5, RSMo).

##### **Recommended Changes to Current Requirements**

**RCF** – all facilities must install and maintain an approved NFPA 13 sprinkler system unless the facility can show, in writing from a certified sprinkler system representative or licensed engineer that the facility is unable to install an approved NFPA 13 system due to the unavailability of water supply requirements associated with this system. In those cases, the facility must install and maintain a NFPA 13R sprinkler system.

**ALF** – All multi-story ALFs and single story ALFs caring for residents who cannot exit the facility with minimal assistance, even if the resident is on hospice, must install and maintain an approved NFPA 13 sprinkler system. Single story ALFs that provide care only to residents who can exit the building with minimal assistance, must install and maintain an approved NFPA 13 sprinkler system unless the facility can show, in writing from a certified sprinkler system representative or licensed engineer, that the facility is unable to install an approved NFPA 13 system due to the unavailability of water supply requirements associated with this system. In those cases, the facility must install and maintain an approved NFPA 13R sprinkler system. DHSS recommends revising section 198.073.5, RSMo to remove the exception allowing bed-bound hospice residents to remain in a facility without a sprinkler system.

Approximately 58% of RCF/ALFs (approximately 367 facilities) do not have complete sprinkler systems. If the above recommendations are implemented, installation of required sprinkler systems will result in costs to the industry. There is also a concern for DMH of a potential loss of placements if beds are reduced because of the cost for compliance. Phasing in the requirement for sprinklers can afford DMH the opportunity to work with the legislature to fund rate enhancements that support a single standard of fire safety as proposed. For those reasons, the departments recommend that a sufficient period of time be given facilities without sprinkler systems to complete installation.

DHSS recommends the aforementioned requirements be incorporated as statutory requirements in chapter 198, RSMo rather than solely as regulatory requirements. (See [Appendix B](#) for national comparisons.) The departments also recommend that a statewide standard for qualified sprinkler system service representatives be developed.

## **Recommendation 2: Fire Alarm Systems**

### **Current Requirements**

Under current requirements, facilities may have various types of fire alarm systems, ranging from home smoke detectors to complete fire alarm systems. There is currently no specific requirement for heat detection.

### **Concerns with Current Requirements**

Any system short of a complete fire alarm system as described below does not provide for full detection coverage of the entire facility.

### **Recommended Changes to Current Requirements**

All facilities must install and maintain a complete approved fire alarm system. All components of a complete approved fire alarm system shall be UL (Underwriters Laboratories) or Factory Mutual (FM) listed for use with a fire alarm system and compatible with the existing fire alarm system. If the component is not listed for this use, the fire alarm is not in compliance with NFPA 72. A complete fire alarm system contains, but is not limited to, the following components:

- An emergency power supply;
- Dual ionization/photo electric smoke detectors in corridors every 30 feet, with no smoke detector farther than 15 feet from ends of corridors. All smoke detectors and other initiating devices must be interconnected to the fire alarm system. In facilities licensed

for twenty or fewer residents, interconnected smoke detectors shall be provided in all corridors and resident use space;

- Carbon monoxide detection devices installed and maintained according to manufacturer's specifications. Carbon monoxide detectors shall not be interconnected to the alarm system;
- Rate to rise heat detectors (containing both a fixed temperature activation and a sensing element to detect a sudden change in temperature) installed in attic spaces, kitchens, furnace rooms and other mechanical or concealed spaces and other areas deemed necessary by DHSS and in accordance with manufacturer's specifications. All heat detectors must be interconnected to the fire alarm system. Heat detectors would not be required for facilities with an approved NFPA 13 sprinkler system because an approved NFPA 13 system requires sprinkler coverage in these areas;
- Automatic transmission of the alarm activation to a local fire department which is staffed 24 hours a day or to an offsite monitoring station which is staffed 24 hours a day;
- Annunciation and transmission upon activation of any fire suppression system, including but not limited to, the sprinkler system;
- Manual activation by pull station at all exits and attendants' work stations;
- Audibility in all areas of the building.

DHSS recommends the aforementioned requirements be incorporated as statutory requirements in chapter 198, RSMo rather than solely as regulatory requirements. The departments also recommend that a statewide standard for qualified fire alarm service representatives be developed.

### **Recommendation 3: Electrical Wiring**

#### **Current Requirements**

1. All facilities at all levels of care and licensure require a "qualified electrician" to inspect the electrical wiring every two years. There is no definition of a qualified electrician, nor is there any state certification of electricians. However, some cities and counties have specific requirements relating to electricians.
2. For RCFs and ALFs built prior to September 28, 1979, electrical wiring shall be maintained in good repair and shall not present a safety hazard.
3. There are no requirements or standards for upgrading or replacing electrical wiring, and no current regulatory guidance for electrical inspections.

#### **Concerns with Current Requirements**

The departments feel a qualified electrician should annually inspect the electrical system. Without a definition of qualified electrician, there are no requirements that facilities contract with a qualified individual. RCFs and ALFs built before September 28, 1979 have virtually no requirements with which to comply. In the absence of local electrical codes, there is no guidance on compliance requirements for upgrades to or replacement of electrical systems.

#### **Recommended Changes to Current Requirements**

1. The departments recommend that a statewide standard for who is deemed a "qualified electrician" be developed. Such a standard may incorporate a person or company licensed or

certified in the city or county in which the facility is located and should include one who is bonded and/or insured.

2. Electrical wiring for RCFs and ALFs built prior to September 28, 1979 shall be installed and maintained in accordance with the 1985 National Electric Code.
3. Any upgrades, additions or replacement of the electrical wiring system shall comply with the 1999 or newer edition of NFPA 70, *National Electric Code*. A qualified electrician shall complete any upgrades, additions or replacement of the electrical wiring system.
4. For all facilities at all levels of care and licensure, the electrical inspection shall contain an inspection of the following components:
  - a. Flexible Cords (including those on appliances)
  - b. Plugs and Connectors
  - c. Extension Cords
  - d. Multiple Current Taps
  - e. Appliances
  - f. Heating Appliances
  - g. Hot-Water Heaters
  - h. Office Equipment
  - i. Receptacle Outlets
  - j. Portable Equipment (Tools, Extension Lamps, and Extension Cords)
  - k. Lighting Fixtures
  - l. Equipment Grounding
  - m. Yard Transformer Stations
  - n. Services/Weatherheads (Outside meter covers, surge capacitors, grounding conductors, grounds/switches)
  - o. Switch Rooms and Motor Control Centers
  - p. Grouped Electrical Control Equipment (such as might be mounted on walls)
  - q. Enclosures of Electrical Parts (Motor Control Equipment, Junction Boxes, Switches, etc.)
  - r. Hazardous (Classified) Location Equipment
  - s. Emergency Equipment

## **II. FIRE SAFETY REGULATIONS/EMERGENCY PLANNING**

### **Recommendation 4: Fire Safety Regulations/Inspections:**

DMH should further examine its fire safety rules to address any inconsistencies between the residential requirements for licensure and those for certified programs. As the Comparison of Fire Safety Requirements for DMH Residential Facilities (attached as [Appendix A](#)) demonstrated, there is a level of consistency in some areas, yet there are gaps and/or conflicts in others. Although the needs of the individuals and populations served may vary, as well as the nature and physical plant configurations vary by programs, the baseline set of provisions for fire safety should reflect a single standard. This approach was one supported by the State Fire Marshal's office as we consulted with them for this report. Upon further review, the same scrutiny should be applied to day program facilities.

Addressing this can be accomplished through the rule-making process.

DHSS' Section for Long-Term Care (SLTC) is currently working with the State Fire Marshal's Office to arrange for and provide fire inspector training for SLTC staff. This training course is designed to provide a comprehensive program of instruction for fire inspection. This training would be in addition to the mandatory training required by CMS. This additional training will help ensure that DHSS surveyors have the necessary knowledge to detect any fire safety-related shortcomings in long term-care facilities, thereby improving the level of safety in these facilities. DHSS is also exploring the possibility of contracting with the Division of Fire Safety to conduct fire safety inspections in accordance with DHSS requirements.

### **Recommendation 5: Fire Drills**

#### **Current Requirements**

All RCFs and ALFs must conduct a minimum of 12 fire drills annually with at least one every three months on each shift. The fire drills shall include a resident evacuation at least once a year.

#### **Concerns with Current Requirements**

Unannounced drills are necessary to accurately evaluate the facility's evacuation plan, to evaluate staff's ability to follow the plan, and to evaluate resident abilities. The local fire department should be involved to assist the facility with any problems they feel need to be addressed and to provide recommendations for improvements.

#### **Recommended Changes to Current Requirements**

A minimum of two fire drills shall include a resident evacuation and shall be unannounced to staff and residents. Staff must demonstrate their ability to evacuate bed-bound residents. Bed-bound residents shall not be required to be evacuated during the fire drills. The facility shall contact the local fire department and request they be onsite during the resident evacuations to note any problems with evacuation. If the local fire department cannot be onsite, the facility shall inform DHSS so alternative arrangements can be made.

These recommendations could be accomplished through the rule-making process.

### **Recommendation 6: Notification Requirements/Fire Watches**

#### **Current Requirements**

1. All facilities must immediately notify DHSS of any fire involving death or harm to a resident requiring medical attention by a physician or substantial damage to the facility. For all other fires, the facility shall notify the department in writing within seven (7) days, regardless of the size of the fire or the loss involved.
2. RCFs and ALFs must notify the department when the fire alarm or sprinkler system is out of service for more than four hours in a 24-hour period and the facility shall immediately implement an approved fire watch until the fire alarm or sprinkler system has been returned to full service. An approved fire watch shall include dedicated staff to monitor all areas of the facility, with provisions to notify the occupants and fire department upon discovery of a fire (NFPA 101, 9.6.1.8 and 9.7.6; NFPA 601).
3. There is currently no requirement for a fire watch following a fire in the facility.

4. All facilities must request annual consultation and assistance from a local fire unit.

#### **Concerns with Current Requirements**

The departments feel it is important to have current information on each facility related to fires and inoperable fire or sprinkler systems. If this information is available, timely assistance to residents and facilities can more easily and effectively be provided. Such assistance can obviously help ensure the safety of residents in facilities. In addition, the departments feel it is important to provide direction on the information discussed during the annual consultation with the local fire unit.

#### **Recommended Changes to Current Requirements**

1. All facilities must immediately notify DHSS of any fire, regardless of the size of the fire or the loss involved. DHSS will in turn report to DMH the occurrence of a fire at a dual licensed facility.
2. All facilities must notify DHSS when the fire alarm or sprinkler system is out of service for more than four hours in a 24-hour period or the fire alarm or sprinkler system is unexpectedly out of service. The facility shall immediately implement a fire watch approved by the Division until the fire alarm or sprinkler system has been returned to full service.
3. All facilities shall conduct a fire watch for at least 24 consecutive hours following a fire at the facility and maintenance work that involves the heating/cooling and electrical systems. This would require rounds at frequent intervals to be alert for any signs of a threat of fire. Based on the requirements of other states and consultation with the Fire Marshal, this is an accepted practice. It raises the level of oversight and could reduce the potential of unexpected flare-ups developing into larger and more dangerous fires.
4. All facilities at all levels of care and licensure must document annual consultation with the local fire service on the Annual Fire Department Consultation Form provided by DHSS. All areas on the forms must be discussed/evaluated during the annual consultation. The form must be signed by both the facility representative and the local fire service representative. The form shall be maintained at the facility for inspection by DHSS staff.

These recommendations could be accomplished through the rule-making process.

### **Recommendation 7: Fire Training**

#### **Current Requirements**

For all facilities, staff must be trained on how to proceed in the event of a fire. There is no requirement on the qualifications of the person providing this training.

#### **Concerns with Current Requirements**

The current requirements do not ensure consistent and/or appropriate training for facility staff.

#### **Recommended Changes to Current Requirements**

Facilities must contract with the local fire department or the state Fire Marshal to conduct annual training for facility staff on how to proceed in the event of a fire. In addition, all new staff must be trained within two weeks of the date of hire using the content of the training provided by the local fire department.

These recommendations could be accomplished through the rule-making process.

### **Recommendation 8: Evacuation/Emergency Plans**

#### **Current Requirements**

All facilities at all levels of care and licensure shall develop a written plan for fire drills and evacuation and shall request consultation and assistance from a local fire unit. The plan shall include written instructions for evacuation of each floor.

#### **Concerns with Current Requirements**

Facility fire and evacuation plans may only address emergency evacuation as it relates to fire or other natural disasters. However, the current Code of State Regulations is written in more general terms and does not spell out what specific components should be included in those policies and procedures. Many facilities have not developed working relationships with local emergency planning officials or local public health authorities. Improving planning will better assure the safety of residents in licensed facilities. Realistic practice and testing can generate feedback to improve planning and performance in evacuation, improving the likelihood that evacuations can be accomplished safely.

#### **Recommended Changes to Current Requirements**

1. All facilities shall develop and routinely practice emergency evacuation/disaster preparedness plans. These plans should be detailed and practice should include differing scenarios for effective evacuation under many circumstances, such as the disasters outlined in the plan template attached as [Appendix F](#). The plans, as well as documentation of improvements made due to practice events, would be reviewed at the time of licensure inspection by both departments. Facility staff should be trained regarding the procedures contained in the emergency evacuation plan and know the location of the plan in the facility.
2. DMH and DHSS should add to their respective regulations requirements that specific components be included and competently addressed in the facility's emergency policies and procedures.
3. All facilities shall work with local or regional emergency planning authorities, including the State Fire Marshal or local fire authority, on local disaster preparedness activities. A signed document indicating this partnership shall be integrated in the facility's disaster preparedness plan.
4. All facilities shall have written mutual aid agreements or memoranda of understanding for evacuation and housing of residents in case of emergencies. These documents should be reviewed and updated on a yearly basis.
5. Individual emergency plans should be developed for residents at particular risk in the event of an emergency. A risk assessment with specific components identified by DMH or DHSS, as applicable, should be conducted yearly and when a change in function occurs, perhaps linked to treatment and habilitation planning requirements. The results of the assessment would provide a foundation for developing the individual's emergency plan. The plan would also afford staff an opportunity to determine and put in place

necessary individual supports or technology required to assist individual residents to safety in emergencies.

These recommendations could be accomplished through the rule-making process.

### **III. GENERAL SAFETY REQUIREMENTS**

#### **Recommendation 9: Resident Smoking**

##### **Current Requirements**

**RCF/ALF** - Residents are allowed to smoke in sleeping quarters under direct supervision. A resident may smoke unsupervised in a designated smoking area as long as they have informed facility staff that the area is being used for smoking.

##### **Concerns with Current Requirements**

Current requirements are not stringent enough. Residents should not be allowed to smoke in their rooms. Resident rooms contain many items that are not flame resistant, including furniture and mattresses. Allowing residents to smoke in their rooms creates an additional, unnecessary fire hazard. Even though current requirements require direct supervision, this does not always happen. In 1998, a resident was refilling his/her lighter in bed and ignited his/her bedding. The resident died as a result of the burns.

##### **Recommended Changes to Current Requirements**

**RCF/ALF** - Residents shall be allowed to smoke in designated smoking areas only and prohibited from smoking in resident sleeping quarters. Residents should only be allowed to smoke without direct supervision if the resident has been assessed as no safety risk to himself/herself or others.

This recommendation could be accomplished through the rule-making process.

#### **Recommendation 10: Staffing**

##### **Current Requirements**

For RCFs formerly licensed as RCF Is with twelve or fewer residents, staff may be asleep during the night hours. For such facilities, the staff person may be asleep if there is a sprinkler system or a complete automatic fire detection system.

##### **Concerns with Current Requirements**

Sleeping attendants cannot provide 24-hour protective oversight and would have difficulty responding to emergencies.

##### **Recommended Changes to Current Requirements**

Require all staff in all RCFs to be awake, dressed and prepared to assist residents in case of emergency.

This recommendation could be accomplished through the rule-making process.

### **Recommendation 11: Civil Monetary Penalties**

DHSS recommends allowing the department to administratively impose civil monetary penalties for violation of fire safety regulations instead of pursuing a fine through circuit court. This would increase the Department's ability to impose fines in a timely manner and would allow fines to be an effective tool to help ensure correction. In addition, DHSS recommends revising section 198.067, RSMo to allow the department to impose fines for repeat Class II and Class III deficiencies regardless of subsequent corrections.