



# IN CASE OF EMERGENCY

## Fire protection and life safety solutions for behavioral health facilities

BY JENNIFER A. WETZEL

Designing effective fire and life safety systems for a behavioral health facility comes with a unique set of challenges. To begin, the term behavioral health itself is somewhat of a misnomer, as it covers a vast number of facility options for a diverse patient population.

In fact, The Joint Commission defines behavioral health as, “a broad array of care, treatment, or services for individuals with mental health issues, foster care needs, addictive behaviors, chemical dependency issues or intellectual/developmental disabilities.” These services can be located in a host of settings including inpatient/crisis stabilization units, residential day programs, outpatient facilities and community-based locations.

The design of fire sprinkler and fire alarm systems for one of these facilities goes beyond simple adherence to code and requires a careful evaluation of each setting, as well as the specific needs of its patient population. While there isn’t a one-size-fits-all solution, the following provides some best practices for different types of behavioral health facilities.

### Memory care facilities for Alzheimer’s and related dementias

There is great diversity among the various memory care facilities within the U.S. Not only are there Alzheimer’s wings within hospitals, many retirement communities offer special accommodations for memory care patients, and standalone facilities are also abundant. Each living

arrangement requires careful study, but some fire and life safety commonalities do exist.

For example, Alzheimer’s disease often produces anxieties and paranoia. Moreover, patients may inadvertently cause false alarms via manual fire alarm pull stations. One solution is to utilize key-operated manual pull stations at egress doors. Another option is to provide a single pull station at the nurse’s station, which only staff have the ability to activate.

During the later stages of Alzheimer’s, wandering is another common occurrence. The cognitive decline of the disease gives rise to the feeling that a patient needs to be somewhere. This leads not only to agitation, but also to wandering and even elopement attempts.

Access to exits also presents a significant danger to these patients, as an individual could wander out an egress door and become confused,

lost or seriously injured. The IBC and NFPA 101 cover various healthcare occupancies (hospitals, memory care facilities, nursing homes) and provide for the use of a controlled egress application meeting certain conditions. These include situations where the clinical needs of patients require specialized security measures or where patients themselves may pose a security threat.

In this case, the IBC allows controlled egress locks to be used where the clinical needs of the patients require their containment. In these occupancies, controlled access can be employed to maintain security. If necessary, staff should have the ability to unlock the doors via a key or electronic lock to allow for egress.

### Autism spectrum spaces

The behaviors associated with those on the autism spectrum, including sensory sensitivity and difficulty quickly

transitioning, can make the average day — with its tumult of sounds, sights and busyness — challenging. When crisis strikes, from fire, natural disaster or other catastrophic event, the whirl of activity becomes a virtual assault. Keeping these patients safe in case of emergency requires the use of special sensory-friendly alternatives, or modifications, to traditional fire alarms and notification systems.

For example, intense sensitivity to sound is common for those on the autism spectrum. Therefore, loud fire alarms (such as Code 3 temporal horns or other strident tones) could cause panic or severe reactions in these patients, and an alternate means for alerting occupants should be employed. The fire alarm system for this type of facility could utilize an alternate audible signal, such as a specific chime. This solution is far gentler than a harsh horn for sensitive patients, yet is still instantly recognizable as an emergency signal.

Additionally, many people on the autism spectrum are hypersensitive to bright lights. So, rather than white strobes, the addition of a lens in a red or blue color emits light far less harsh to the eye. Alternatively, a strobe could be placed at a constantly attended location, such as a central nurses’ station, to more quickly notify staff of an emergency.

### Psychiatric hospitals

In facilities treating patients suffering from serious psychiatric afflictions, false alarms and sprinkler tampering present a serious challenge. Tamper-resistant institutional sprinklers make false activation, or the ability to tamper with them, much more difficult. In

addition, the use of key-operated manual pull stations will reduce false fire alarm activations.

For psychiatric facilities, as with memory care occupancies, elopement is a very real problem. In a psychiatric facility, absconding may occur for multiple reasons — from psychosocial issues, to staff and patient interactions, to the patient’s own attitude toward hospitalization. Therefore, restricted access to egress is of paramount importance. In psychiatric treatment areas within a hospital or a psychiatric treatment facility, the IBC allows some areas to be equipped with a listed egress control system.

NFPA 99 establishes criteria for levels of healthcare services or systems based on risk to the patients, staff or visitors in healthcare facilities to minimize the hazards of fire, explosion and electricity. These modifications to the standard sprinkler systems, fire alarm systems and methods of egress, typically found in other buildings, are meant to maintain life safety, while also keeping these high-risk patient populations safe. These modifications can only prove successful, however, when there are specific emergency plans in place and staff has been, and continues to be, well trained.

One constant exists when developing the fire and life safety systems for a behavioral health facility: involving fire protection engineering and life safety experts in the early stages of design and planning will result in systems that best serve the patients’ needs.

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