

## Experts can help ASC leaders solidify building safety

**F**or an ambulatory surgery center (ASC), maintaining a safe physical environment for patients generally falls to the administrator and governing board. For those who lack expertise in healthcare architecture, building codes, and risk management, it may pay to hire a consultant. Even so, ASC managers remain responsible for compliance. Fortunately, according to survey reports, some of the most common deficiencies are things even an untrained person could control by knowing the rules and having a procedure to implement them.

### **CMS and the Life Safety Code**

The Joint Commission, Accreditation Association for Ambulatory Health Care (AAAHC), and other accreditation agencies have been paying closer attention to structures housing ASCs ever since the Centers for Medicare & Medicaid Services (CMS) adopted the 2012 edition of the Life Safety Code (NFPA 101) and instructed surveyors to see that ASCs follow it.

CMS published its final rule about the Life Safety Code (LSC) on May 4, and healthcare providers are expected to comply with all regulations within 60 days of that date.

The code is published by the National Fire Protection Association (NFPA), Quincy, Massachusetts. CMS periodically issues waivers and additional requirements for certain elements of the Life Safety Code and another NFPA standard, the Health Care Facilities Code (NFPA 99). In Appendix I of the State Operations Manual, a guidance document for surveyors, CMS lists criteria for the LSC portion of surveys, including surveys of ASCs.

William Lindeman, AIA, president of WEL Designs, Tucson, says the areas where ASCs are most likely to fall short in LSC surveys are those related to following schedules for inspection, testing, and maintenance of building systems. Those ASCs that do comply may neglect to keep proper documentation and thus receive a separate citation.

"Some requirements are almost entirely operational, like providing and maintaining portable fire extinguishers. Others deal with things many ASCs would never consider, like testing fusible links in smoke dampers every 4 years," Lindeman says.



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Debra Stinchcomb, MBA, BSN, RN, CASC, a consultant with Progressive Surgical Solutions, Fayetteville, Arkansas, recalls that at first, surveyors with both LSC expertise and knowledge of ASC regulations were hard to find. "But more and more people developed expertise, and now are flooding the markets," she says. However, even these new experts often are not aware of ASC-specific issues. For example, they may not know that ASCs are not open at night, so regulations regarding overnight activities do not apply.

Now, accreditation organizations can be a resource, Stinchcomb notes. "Go to your accrediting body and ask for help," she advises. If the ASC has a contract for facility management, that vendor can also help. Because fire marshals may inspect ASCs for compliance with local codes, they should also be consulted.

## Learning the code

ASCs that do not already subscribe to the Life Safety Code Handbook can order it from NFPA for \$185.50. (Visit [catalog.nfpa.org](http://catalog.nfpa.org).) The Health Care Facilities Code Handbook is available for \$155.50. NFPA offers a 3-day healthcare seminar at various sites, and also can provide on-site training about the codes.

Don't forget local building, health, and fire departments, state regulators, and accrediting organizations.

Denver architect John Marasco, who has designed some 350 ASCs across the US and abroad, says one critical mistake ASC developers can make is to start before consulting state regulators.

"Although it is inconceivable to me," Marasco says, "we've actually encountered several facilities that have neglected to consult their state departments of health until after completing construction."

It is the state, not federal, government that signs off on an ASC's Medicare certification and issues a billing number, along with any state license that may be required. At the local level, city or town building departments must approve construction and issue building and occupancy permits.

## Make compliance a team effort



Angie Jimenez,  
MHSA, MPHE

Angie Jimenez, MHSA, MPHE, administrator of Guaynabo Ambulatory Surgical Group dba Vista Ophthalmic Ambulatory Center, Guaynabo, Puerto Rico, says education about the LSC is important at all levels. Since opening the four-OR Guaynabo center, she has been working to establish a second one.

"It is crucial that every stakeholder in the ASC understand their role and responsibility in terms of compliance," she says. The board of directors, for example, must allocate sufficient resources for building design and staff training.

Managers were first in line for education they would need to work with architects, local fire and health departments, and surveyors.

"They read, attended seminars, and studied the LSC inspection form," she recalls. In addition to training nurses and other staff, managers consulted with physicians. "They are the main client of the ASC, and need to feel that their patients are in a secure and fully compliant environment," she explains.

Guaynabo had one additional stakeholder: the landlord of the building where the ASC was located. "They needed to understand the regulations and be sensitive to efforts the ASC needed to make to comply with the LSC," Jimenez notes.

To stay abreast of changes and to prepare for surveys, Guaynabo invites both an architect and a consultant for periodic reviews. The main effort, however, is from the staff operating as a team.

"Last year, we divided all the accreditation standards, including LSC, among the staff. Each member verified our compliance with the assigned standard, and then made a presentation to the rest of the staff. It has been an easy and fun way to learn and share information," Jimenez says.

## Common survey questions

The LSC primarily addresses fire prevention and related risks, such as toxic fumes. According to the NFPA's website, 43 states have adopted the code, titled NFPA 101, for building design, construction, operation, and maintenance. For locations that do not have building codes, NFPA can be used alone.

Appendix I of the CMS State Operations Manual covers ASCs along with other

healthcare facilities, and tells surveyors how to inspect for LSC compliance. If the facility is an ASC, it is inspected based on the requirements of the Ambulatory Health Care Occupancies chapter of the LSC.

The surveyor may begin with questions about the building's construction and layout, and then about specific items such as:

- whether there is an emergency generator
- if any patients require life support equipment
- the fire evacuation plan
- fire drills
- alarm testing
- sprinkler maintenance
- fire extinguisher maintenance
- interior finishes (for flame resistance)
- fireproofing materials.

If the ASC has a kitchen, the surveyor will ask about maintenance of the range hood. Although the NFPA does not report statistics for ASCs specifically, it does track fires at healthcare facilities. In the category of "clinic or doctor's office," the NFPA reports the following annual averages for the years 2003 to 2006:

- 700 structure fires
- 6 civilian injuries
- \$18.7 million in direct property damage.

The NFPA reports the most common type of fire in this category originated in the kitchen and was related to cooking materials and equipment. Other leading origin sites were heating equipment, electrical and lighting equipment, and offices.

### **Find a specialist**

"An ASC is very different from a bank or a school," says John Crowder, Jr, PG, CFPS, CHFM, principal of Life Safety Healthcare Consultants, Gallatin, Tennessee, when reminding clients of the need for specialized training. To start them on the right track, Crowder, who also is an AAAHC surveyor, begins each new project with a free telephone conference and onsite survey. Any discrepancies provide the basis for staff training and policy revision. Crowder and others say a half-dozen places in the ASC account for most deficiencies. Of those, most are easily remedied once the staff understand the rules and reasons.

Areas to watch include:



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**Fire doors.** The doors should close and latch automatically. Staff may not notice as hardware malfunctions over time or if doors have been unknowingly modified in a manner that may nullify the rating of the door system. The doors should be on the regular rotation of life safety items to check.

**Doors to hazardous areas.** The LSC now requires all doors to hazardous areas in ASCs to be self-closing or automatic-closing. According to CMS, 35 states have adopted this requirement, accounting for an estimated 3,684 ASCs. CMS estimates the cost per door at \$349, and is assuming the average facility has three hazardous areas that would require a replacement door closing mechanism for a total estimated cost of \$1,047 per facility.

**Exit corridors.** Hallways must be a specified width and kept clear of obstacles. Staff sometimes leave crash carts, stretchers, or wheel chairs in locations that could hinder passage in an emergency. Exit signs must be properly located and maintained in accordance with LSC and other applicable codes.

**Power strips.** In the past, CMS did not allow power strips in anesthesia areas and on medical equipment. A 2014 CMS ruling allows healthcare facilities to install

power strips containing multiple outlets in patient care areas. The ruling establishes a waiver of the 2000 edition of the LSC that requires enough receptacles to eliminate the need for extension cords or power strips. The 2012 update of the LSC permits use of power strips in healthcare settings if all regulations are properly followed and documented.

**Electrical distribution panels.** In an ASC, power enters the building through a main distribution panel; in most instances, an OR will have an isolation panel serving only specific electrical components in that space. Such panels must be properly labeled and locked, and have 36 inches of clearance (or more, depending on voltage).

**Sprinklers and fire protection systems.** Current codes require sprinklers in most healthcare facilities. Sprinklers must be maintained and tested at specified intervals, be free of dust and debris, and have a clear area of 18 inches below the sprinkler head.

**Air pressure and quality.** Pressure must be positive in the OR, but it may be compromised in ways that are not easily noticed. For example, surgeons may say the minimum temperature range of 68 °F to 73 °F and 30% to 60% relative humidity range are uncomfortable, so they change the setting or prop the OR door open, thus losing positive pressure and lowering humidity. Static charge is another OR risk.

**Medical gases.** Gas use and storage offer many chances for survey citations. Following a visual inspection, the surveyor will ask for documentation of the annual certification and testing of the medical gas system. Pressure must be maintained within NFPA 99 parameters, and each zone valve must be labeled to note the area it specifically serves. Emergency shutoff controls must be properly located and readily accessible.

NFPA 101 section 4-3.1.2.3 states that each medical gas line shall have a shutoff valve in each critical care area, as well as outside each location where anesthesia is administered.

To keep up with the more esoteric rules, Crowder advises ASCs to get help from a life safety consultant or healthcare architect.

“Even without specialized training, staff can take certain measures,” he says.

Every ASC should have a life safety team similar to the infection control team that meets regularly. The team can assign people to perform weekly or monthly tracers that include simple checks for positive pressure, humidity levels, fire doors, and egress paths.

“These are just simple things that anyone with general knowledge of code requirements can do,” Crowder says. ❖

—Paula DeJohn

## Reference

Centers for Medicare & Medicaid Services. State Operations Manual—Appendix I. Survey Procedures and Interpretive Guidelines for Life Safety Code Surveys (Rev. 1, 05-21-04). Part I—Survey Procedures for Life Safety Code Surveys. <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/LSC.html>.