

# UNIVERSITY OF TOLEDO HEALTH SCIENCE CAMPUS

SUBJECT: FIRE SAFETY PLAN

Procedure: LS-08-000

---

## PROCEDURE

The University of Toledo Health Science Campus (UT HSC) shall have a Fire Safety Plan.

## PURPOSE

To meet the mandates of The Joint Commission (TJC) Environment of Care (EC) standards, and to provide protocols and procedures for ensuring the creation and maintenance of a system that is fire safe and equipped with all of the proper operational features necessary to handle fire safety/life safety issues effectively and expeditiously; to ensure that employees are protected and well-educated on the major tenets of fire safety/life safety response.

## SCOPE

The Fire Safety Management Plan describes how the organization will provide a physical environment free of hazards associated with fire and life safety hazards and manage staff activities to reduce the risk of injuries. The Management Plan applies to the UT Medical Center and all associated facilities and clinics. These facilities have inherent safety risks associated with providing services for patients, the performance of daily activities by staff, and the physical environment in which services occur. The Fire Safety Management Plan has been designed to work in concert with the other Environment of Care Management Plans (i.e. Utility Systems, Hazardous Materials, Medical Equipment, Security Plan and Safety Plan). The Fire Safety Management Plan serves to establish a safe environment from the risks associated with fire and life safety to allow for compliance with TJC standards. The plans are reviewed and accessed annually to determine their effectiveness and ensure that they function as unit to allow for continued improvement and functioning within the Environment of Care.

## RESPONSIBILITY

The Fire Safety Management Plan has been assigned a leader with the appropriate background and skill set to allow for continuous satisfaction of the assigned elements of performance. This individual is required to sign after reviewing the plan on an annual basis. Staff from Facilities Services is assigned responsibilities to complete elements of the plan. They work closely with both Hospital Security and Environmental Health and Radiation Safety to ensure continued implementation. Reports on the plan's implementation are reported to the Safety and Health Committee on a regular basis. A representative from hospital administration sits on the Safety and Health Committee. On an annual basis the assessment of the effectiveness of each individual management plan is presented to the Board of Trustees of the University of Toledo.

## PROCESSES AND PROCEDURES

The UT HSC protects patients, staff, visitors and property from the dangers of fire, smoke and combustion primarily by ensuring that all buildings are constructed in compliance with the NFPA's Life Safety Code 101 and with guidelines and recommendations issued by the American Institute of Architects (AIA). The ban on smoking inside any building and anywhere on the HSC contributes a great deal to ensuring a fire-safe environment. In addition, the structural safeguards in place in buildings of the UT HSC, such as smoke detectors, pull station alarms, heat detectors, damper alarms, sprinkler systems and fire extinguishers all contribute greatly to the fire safety/fire prevention record the UT HSC has recorded over the last decade. The "required-by-building-code" compartmentalization features of in-patient buildings, coupled with regular education of employees in life safety matters, complete the circle of life safety protections.

The UT HSC develops and maintains a written plan and assigns an individual for managing fire/life safety. A vital component of that plan describes the processes and practices that are implemented to effectively manage fire safety, including the following:

**The hospital manages fire risks:**

- The hospital minimizes the potential for harm from fire, smoke, and other products of combustion: This is achieved primarily by the patient care buildings being built in compliance with established codes of the local and state fire marshal authorities and Ohio Building Code provisions, and in accordance with guidelines delineated by the American Institute of Architects (AIA). Facilities Maintenance, Hospital Security and Environmental Health and Radiation Safety staff provide protection to all occupants by conducting life safety rounds, security patrols and fire drills that test staff knowledge of and response to fire situations. Many other protections, safeguards and life safety compliance controls (including employee education) go into the composition of this protection for patients, personnel, visitors and property (See Life Safety Procedures LS-08-001 through LS-08-008).
  
- The hospital maintains free and unobstructed access to all exits: Maintaining exits in a free and unobstructed state at all times is one of the primary requirements for an area's successful passing of a safety inspection. Environmental Health and Radiation Safety staff, maintenance staff, and Hospital Administration staff, in addition to security officer patrols in patient care units every day, ensure that exits are always maintained in a full and easily accessible condition.
  
- The written fire response plan (LS-08-001) describes the specific roles of staff and licensed independent practitioners at and away from the fire's point of origin, including:
  1. when and how to sound fire alarms
  2. how to contain smoke and fire
  3. how to use a fire extinguisher
  4. how to evacuate to areas of refuge

The components of effective fire response mentioned above are addressed in Procedure LS-08-001 (Code Red–Campus Fire Response). Staff and licensed independent practitioners are periodically instructed on and kept informed of their duties under the plan using annual on line training via the UT test bank. A copy of the plan is available on line and is readily accessible by security.
  
- Periodic evaluations, as determined by the hospital, are made of potential fire hazards that could be encountered during surgical procedures. Written fire prevention and response procedures, including safety precautions related to the use of flammable germicides or antiseptics, are established. Written procedures are included in Policy #3364-124-27 Fire Response. Periodic evaluations are completed through annual education and simulated fire emergencies.
  
- When flammable germicides or antiseptics are used during surgeries utilizing electrosurgery, cautery, or lasers, the following are required:
  - Nonflammable packaging
  - Unit-dose applicators
  - Preoperative "time-out" prior to the initiation of any surgical procedure to verify the following:
  - Application site is dry prior to draping and use of surgical equipment
  - Pooling of solution has not occurred or has been corrected
  - Solution-soaked materials have been removed from the operating room prior to draping and use of surgical devices.

Written procedures for LASER operations can be found in Policy #3364-124-56. Written Electrosurgical procedures can be found in Policy# 3364-124-29 Electrosurgical Units.
  
- The hospital meets all other Health Care Facilities Code fire protection requirements, as related to NFPA 99-2012: Chapter 15.

**The hospital conducts fire drills:**

- The hospital conducts fire drills once per shift per quarter in each building defined as a health care occupancy by the Life Safety Code. In addition, the hospital conducts quarterly fire drills in each building defined as an ambulatory health care occupancy by the Life Safety Code.
- The hospital conducts fire drills every 12 months from the date of the last drill in all freestanding buildings classified as business occupancies and in which patients are seen or treated. All fire drills are unannounced. Fire drills are held an unexpected times and under varying conditions. Fire drills include transmission of fire alarm signal and simulation of emergency fire conditions. The hospital critiques fire drills to evaluate fire safety equipment, fire safety building features, and staff response to fire, and that evaluation is documented. All of these assessments and critiques are completed and noted on the Code Red Drill Sheet that is completed by hospital staff and/or HSC Security after each and every fire drill.
- Staff who work in buildings where patients are housed or treated participate in drills according to the hospital's fire response plan. When drills are conducted between 9:00 p.m. and 6:00 a.m. UTMC may use alternative methods to notify staff instead of activating the buildings fire alarm system.
- The hospital critiques fire drills to evaluate fire safety equipment, fire safety building features, and staff response to fire. The evaluation is documented. Drills will be properly documented and evaluated after completion to access the staff who work in the buildings where patients are housed or treated relative to the fire response plan. In addition, after fire drills are completed, the drill conductor confers with supervisory staff in the department(s) drilled, and identifies any deficiencies, failures, user errors or staff knowledge gaps to those supervisors, so the issues identified can be immediately addressed and corrected.

**The hospital maintains fire safety equipment and fire safety building features.**

The UT HSC provides clear processes for the inspection, testing and maintaining of its fire alarm, automatic fire extinguishing systems, and other fire control systems (EC.02.03.05). The fire alarm testing is conducted as required on the fire alarm circuits by in-house Facilities Maintenance staff. The automatic fire extinguishing system is inspected, tested and maintained in accordance with State of Ohio, City of Toledo and TJC stipulations by a contracted services. The logs and reports of testing, and documentation of this testing are maintained in the Facilities Maintenance Department.

- At least monthly, the hospital inspects portable fire extinguishers. The completion date of the test is documented. The UT HSC Environmental Health and Radiation Safety Department has the responsibility to identify, place, inspect monthly and maintain annually portable fire extinguishers on the campus. The annual servicing and recharging (if necessary) of fire extinguishers is performed by a certified outside contractor, familiar with the requirements of fire extinguisher maintenance protocols. The records of monthly fire extinguisher checks are kept in the Environmental Health and Radiation Safety Department. Recharging of fire extinguishers is handled through a local certified contractor.
- Every 12 months, the hospital performs maintenance on portable fire extinguishers, including recharging. Individuals performing annual maintenance on extinguishers are certified. The completion date of the maintenance is documented. The annual maintenance is completed by a third party and documented on the tag.
- Every 12 months, the hospital tests sliding and rolling fire doors, smoke barrier sliding or rolling doors, and sliding and rolling fire doors in cooridoor walls and particians for proper operation and full closure. Ther results and dates are documented.
- The hospital has written documentation of annual inspection and testing of door assemblies by individuals who can demonstrate knowledge and understanding of the operating components of the door being tested. Testing begins with a pre-test visual inspection including both sides of the opening.

- Elevators with fire fighter's emergency operations are tested monthly. The test completion dates and results are documented.
- For hospitals that use Joint Commission accreditation for deemed status purposes: Documentation of maintenance, testing, and inspection activities for the fire alarm and water-based fire protection systems includes the following:
  1. Name of the activity
  2. Date of the activity
  3. Required frequency of the activity
  4. Name and contact information, including affiliation, of the person who performed the activity
  5. NFPA standard referenced for the activity
  6. Results of the activity
  7. Certification number of the person performing the test

### **The hospital designs and manages the physical environment to comply with the Life Safety Code.**

- The hospital assigns an individual(s) to assess compliance with the Life Safety Code, complete the electronic Statement of Conditions (E-SOC), and manage the resolution of deficiencies. This statement is maintained electronically. The Facilities Compliance Officer fills this role.
- In time frames defined by the hospital, the hospital performs a building assessment to determine compliance with the Life Safety chapter. An annual LSA is completed and documented.
- The hospital maintains current and accurate drawings denoting features of fire safety and related square footage to include:
  - Areas of the building that are fully sprinklered
  - Locations of all hazardous storage areas
  - Locations of all fire rated barriers
  - Locations of all smoke barriers
  - Sleeping and non-sleeping suite boundaries, including the size of the identified suites
  - Locations of dedicated smoke compartments
  - Locations of chutes and shafts
  - Any approved equivalencies or waivers
- When the hospital plans to resolve a deficiency through a Survey Related Plan for Improvement (SPFI), the hospital meets the 60 day timeframe.
- For Hospitals that use Joint Commission accreditation for deemed status purposes: The hospital maintains documentation of any inspections and approvals made by state or local fire control agencies. An important component of the life safety program at the UT HSC is the strong partnership that exists between the UT HSC and the local and state fire marshals' bureaus. The local fire marshal conducts an intensive "wall-to-wall" survey of all campus buildings regularly. The emphasis is on patient care areas and fire safety and fire prevention: fire extinguishers, pull stations, smoke detectors, sprinkler head caps, functionality of fire doors, and heat detectors. During these fire marshal inspections, particular attention is given to the importance of maintaining "free and unobstructed access to all exits". In addition, maintaining free and open exits is a vital goal during environmental rounds conducted by Environmental Health and Radiation Safety, Facilities Maintenance and Hospital Administration's environmental rounds group.

The fire marshal makes detailed recommendations for change or correction as needed. These recommendations are reported to the Facilities Maintenance Department for action and follow-up. Maintenance takes ownership for

making the corrections needed to maintain the UT HSC in compliance with all applicable fire codes and regulations. The fire marshal returns, if needed, to ensure that the changes ordered have been implemented.

- The hospital does not remove or minimize an existing life safety feature when such feature is a requirement for new construction. Existing life safety features, if not required by the Life Safety Code, can be either maintained or removed.
- The hospital maintains current Basic Building Information (BBI) within the Statement of Conditions (SOC).

**The hospital protects occupants during periods when the Life Safety Code is not met or during periods of construction.**

- The hospital has a written interim life safety (ILSM) policy that covers situations when Life Safety Code deficiencies cannot be immediately corrected or during periods of construction. The policy includes criteria for evaluating when and to what extent the hospital implements LS.01.02.01 to compensate for increased life safety risk. The criteria include the assessment process to determine when life safety measures are implemented. All UT HSC staff have the responsibility for ensuring the institution's compliance with life safety code or fire prevention provisions. They are asked to report any suspected deficiency in life safety code processes. This is accomplished through the initiation of work orders submitted to the Facilities Maintenance Department, or by immediately notifying the Environmental Health and Radiation Safety Department (419-530-3600) to report a life safety code violation or concern. Facilities Maintenance and University Police staff submit work orders to initiate repairs of or to draw attention to suspected or actual life safety code violations/problems.

The Director of Environmental Health and Radiation Safety has the authority to mandate the immediate correction or alleviation of any life safety code violations she deems serious enough to warrant such immediate action. Her authority for such action is fully supported by UT HSC Administration.

The hospital has developed a procedure for the use of interim life safety measures (ILSM) that includes written criteria to evaluate various deficiencies and construction hazards, to be used to determine when and to what extent one or more of the ILSM are applicable and need to be implemented: interim life safety measures procedure (#LS-08-008) clearly delineates written criteria/guidelines for ILSM implementation on any particular project.

- When the hospital identifies Life Safety Code violations that cannot be immediately corrected or during periods of construction, the hospital notifies the fire department and initiates a fire watch when a fire alarm or sprinkler system is out of service for more than 4 hours in a 24-hour period in an occupied building. Notification and fire watch times are documented. The UT HSC institutes Interim Life Safety Measures during periods of construction when certain features of life safety protections will be curtailed or interrupted. These safety measures and the process for instituting them are stated in the applicable life safety procedure covering this issue (Interim Life Safety Measures and Infection Control LS-08-008).
- When the hospital identifies Life Safety Code violations that cannot be immediately corrected or during periods of construction based on the ILSM procedure LS-08-008:
  - The hospital posts signage identifying the location of alternative exits to everyone affected.
  - Inspect Exits in affected areas on a daily basis based on LS-08-008.
  - Provides temporary but equivalent fire alarm and detection systems for use when a fire system is impaired. Systems are inspected and tested if used monthly
  - Provides additional fire fighting equipment.
  - Uses temporary construction partitions that are smoke tight, or made of noncombustible or limited combustible material that will not contribute to the development or spread of fire.
  - Increase surveillance of buildings, grounds, and equipment, giving special attention to construction areas and storage, excavation, and field offices.
  - Enforces storage, housekeeping, and debris-removal practices that reduce the buildings flammable and combustible fire load to the lowest feasible level.

- Provides additional training to those who work in the hospital on the use of fire fighting equipment.
  - Conducts additional fire drills per shift/per quarter.
  - Inspects and tests temporary systems monthly.
  - Allows for the use of other ILSM not addressed above.
- The hospital conducts education to promote awareness of building deficiencies, construction hazards, and temporary measures implemented to maintain fire safety. The Hospital trains those who work in the hospital to compensate for impaired structural or compartmental fire safety features. The need for education is based on criteria in the hospitals interim life safety (ILSM) policy. The fire prevention plan encompasses provisions for the education of staff, volunteers and others on fire safety/fire prevention protocols. The UT HSC has implemented and follows the R.A.C.E. (R=Rescue, A=Alarm, C=Confine, E=Extinguish or Evacuate) acronym in training persons on the hazards of fire. In addition, the level of staff knowledge of fire safety is assessed by random queries made during weekly Environmental Safety Rounds, and by reinforcement through the employee computerized Safety Test Bank, an educational tool for refreshing staff knowledge on a variety of topics. All current clinical employees are required to either take a yearly fire safety/fire prevention test online, or attend a session of new employee safety orientation for this information. For further information on what is involved in education of the various constituencies on campus regarding fire response, see Procedure LS-08-001 (Code Red–Campus Fire Response Procedure). Additional, unit specific training is provided during pre-construction meetings and communicated to staff through the Departmental Manager.

**Building and fire protection are designed and maintained to minimize the effects of fire, smoke, and heat.**

The UT HSC fire prevention plan has been established to provide guidelines to the HSC Safety and Health Committee and the appropriate maintenance/construction support activities so that the UT HSC meets the guidelines set forth in NFPA Life Safety Code 101-2012 as they relate to existing occupancies. Architects retained by the University follow all Ohio Building Code for new construction projects.

The UT HSC utilizes the Statement of Condition (SOC) as published by The Joint Commission (TJC) for evaluating the effectiveness of life safety measures. The SOC acts as an indicator of whether or not the UT HSC is meeting its current requirements regarding life safety/fire prevention standards.

The Environmental Health and Radiation Safety Department, and the Director of Environmental Health and Radiation Safety are charged by University of Toledo Administration to work with the Facilities Department to assist with helping create, maintain, monitor and improve the fire prevention plan at the UT HSC.

**The hospital maintains the integrity of the means of egress**

UTMC ensures there are sufficient exits and are configured as such to provide protection from fire. Egress doors are not locked in a way that restricts passage to safety. This includes corridors, stairways, and doors that allow individuals to leave a building or to move between buildings. Means of egress and all other Life Safety Codes means of egress are maintained per NFPA 101-2012. Means of egress are adequately illuminated and exits signs are properly lit.

**The hospital provides and maintains building features to protect individuals from the hazards of fire and smoke.**

This plan lays out procedures and processes for protecting patients, visitors, staff and property from fire and the products of combustion by identifying and maintaining all applicable required structural features of fire protection to meet Life Safety Code regulations. This is also accomplished by the continuing use of the Statement of Condition (SOC), which has been mentioned previously.

The Purchasing Department works with vendors who verify, through written affidavits or certifications, the fire safety features of the acquisitions listed above. Purchases of bedding, curtains and furnishings are usually done through national companies whose products comply with University Hospital Consortium (UHC) mandates regarding fire prevention/life safety safeguards. In addition, UT HSC follows the guidelines spelled out in California Technical Bulletin 133 and NFPA 701.

**The hospital provides and maintains fire alarm systems.**

The fire alarm signal automatically transmits to a central station service as described in NFPA 101-2012. The master control alarm panel is located in a protected environment in the basement of Mulford Library and is continuously occupied. The remote ancillary annunciator panel is located in the Facility Support Building and is approved by the local fire department. The hospital meets all other Life Safety Code fire alarm requirements related to NFPA 101-2012.

**The hospital provides and maintains systems for extinguishing fires.**

The fire alarm system monitors approved automatic sprinkler system components in accordance with NFPA 101-2012. The systems are physically maintained and the space below the sprinkler head is maintained open by 18 inches or more of space.

UTMC limits the travel distance from any point to the nearest fire extinguisher to 75 feet or less per NFPA 101-2012 and NFPA 10-2010. Class K-type portable fire extinguishers are located within 30 feet of grease-producing cooking devices. Grease producing cooking devices are equipped with fire protection as required by NFPA 101-2012 and NFPA 96-2011. A placard is conspicuously placed near the extinguisher stating that the fire protection system should be activated prior to using the fire extinguisher.

**The hospital provides and maintains special features and building services protect individuals from the hazards of fire and smoke.**

Building features and services are equipped and maintained per NFPA 101-2012.

**Building and fire protection features are designed and maintained to minimize the effects of fire, smoke, and heat.**

UT HSC meets the guidelines set forth in NFPA Life Safety Code 101-2012 as they relate to existing occupancies. Architects retained by the University follow all Ohio Building Code for new construction projects.

**The hospital provides and maintains operating features that conform to fire and smoke prevention requirements.**

The hospital prohibits combustible decorations that are not flame retardant per the Holiday Decorations Procedure #LS-08-007. Soiled linen and trash receptacles are larger than 32 gallons are located in a room protected as a hazardous area. Space heaters are prohibited per Portable Space Heater Procedure #S-08-009. UTMC meets all other life Safety Code operating features related to NFPA 101-2012.

ANNUAL REPORT

The objectives, scope, performance and effectiveness of the fire safety management program/plan will be evaluated in an annual report to Administration. Evaluation will include all areas of safety management.

SUPPORTING DOCUMENTATION AND PERFORMANCE MEASURES

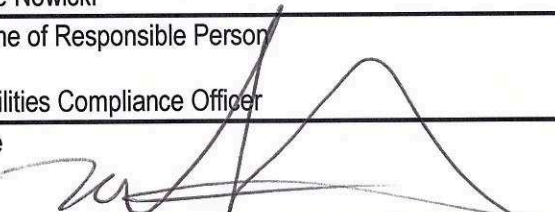
Other written procedures that support this management plan can be found at <http://www.utoledo.edu/depts/safety/UT%20Procedures%20and%20Plans.html>. Performance measures for the fire safety management program include the following:

- Fire Drills
- Preventative Maintenance Completion
- Work Orders

Effective Date: 7/1/96

Recent Review/Revision Date:

6/08/03  
8/04  
3/05  
9/06  
8/07  
2/08  
1/09  
3/10  
5/11  
5/12  
5/13  
1/14  
1/15  
1/16  
1/17  
1/18  
1/19  
1/21  
1/22  
1/23  
1/24

Mike Nowicki
Name of Responsible Person
Facilities Compliance Officer
Title

Signature
January 29, 2024
Date