

POLICY INTERIM LIFE SAFETY MEASURES

DATED: February 2009, rev DEC2014, rev FEB2021, rev DEC2023

TOPIC: LIFE SAFETY MANAGEMENT

SUBJECT: INTERIM LIFE SAFETY

REFERENCE: LS.01.02.01: The hospital protects occupants during periods when the Life Safety Code is not met or periods of construction.

The hospital has a written interim life safety measure (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, EP's 2-15 to compensate for increased fire safety risk. The criteria include the assessment process to determine when interim life safety measures are implemented.

POLICY:

Interim Life Safety Measures

When requirements for fire protection or environment and grounds safety are affected by construction, the hospital institutes and documents interim life safety measures to temporarily compensate for the hazard posed by existing life safety deficiencies based on the criteria specified in the interim life safety policy.

Interim Life Safety Measures are selected from the following list (referenced by EP) based upon professional judgment, and are instituted during major construction, renovation, or improvement projects. Parties responsible for compliance are identified parenthetically:

1. (EP 2) A fire watch is initiated, and emergency forces are notified when a fire system is out of service for more than 4 hours out of 24 hours, or a sprinkler system is out of service for more than 10 hours out of 24-hour period in an occupied building. Notification and fire watch times are documented. (*Construction Manager/Fire Protection Inspector*)
2. (EP 3) Free and unobstructed exits are ensured. When alternative exits must be designated, affected personnel receive notification. Escape routes for construction workers are maintained at all times. (*Construction Manager/Fire Protection Inspector*)
3. (EP 4) Exits in affected areas are inspected daily. (*Construction Manager/Fire Protection Inspector*)
4. (EP 5) Fire alarm, detection, and suppression systems are maintained in good working order, and a temporary but equivalent system is provided when any fire system is impaired. Temporary systems are inspected and tested monthly. (*Construction Manager/Fire Protection Inspector*)
5. (EP 6) Additional fire-fighting equipment is provided (*Construction Manager/Fire Protection Inspector*)
6. (EP 7) Temporary construction partitions are smoke tight and built of noncombustible or limited combustible materials that will not contribute to the development or spread of fire. (*Construction Manager/Fire Protection Inspector*)
7. (EP 8) Increased hazard surveillance of buildings, grounds, and equipment with special attention to excavations, construction areas/storage and field offices. (*Construction Manager/Fire Protection Inspector*)
8. (EP 9) Storage, housekeeping and debris removal practices are developed and enforced to reduce the building's flammable and combustible fire load to the lowest feasible level. (*Construction Manager/Fire Protection Inspector*)

9. (EP 10) Construction and other affected personnel are trained in the use of firefighting equipment. (*Construction Manager/Fire Protection Inspector*)
10. (EP 11) An additional fire drill per shift per quarter is conducted, for a total of two drills per shift per quarter for areas under and adjacent to construction. Drills are reported to the Safety Manager. (*Construction Manager/Fire Protection Inspector*)
11. (EP 12) Temporary systems are inspected and tested monthly. (*Construction Manager/Fire Protection Inspector*)
12. (EP 13) Organization-wide safety education programs are conducted to promote awareness of Life Safety Code deficiencies, construction hazards, and ILSM. (*Safety Manager and Fire Protection Inspector*)
13. (EP 14) Affected personnel are trained to compensate for impaired structural or compartmentalization features of fire safety. (*Construction Manager/Fire Protection Inspector*)
14. (EP 15) Provide documentation for other ILSM's not specifically addressed in EP 2-14 (*Construction Manager/Fire Protection Inspector*)

The decision to implement any or all of these measures depends on the scope of the project, the life safety systems that are disrupted, and the length of time the systems are disrupted. The Life Safety Code provides the basis for the decision. Additionally, a matrix has been designed to provide the criteria for implementing Interim Life Safety Measures and document any deficiencies along with the associated measures taken to address them. The following criteria are to be used to implement Interim Life Safety Measures and complete the ILSM Matrix:

1. Exit paths impaired or blocked – Implement ILSM Matrix Column #2 & #3.
2. Emergency forces access is impaired – Implement ILSM Matrix Column #2 and #3.
3. Fire detection and/or suppression systems impaired – Implement ILSM Matrix Column #2 and/or Column #6.
4. The occupied area is not separated from the construction area by a smoke barrier – Implement ILSM Matrix Column #7.
5. Additional fire hazards are present due to construction – Implement ILSM Matrix Column #6, #8 and/or #9 as needed.
6. Smoke compartments are impaired and/or horizontal exits are changed for areas adjacent to construction – Implement ILSM Matrix Column #11 and #14 as needed.
7. Staff, patients, and visitors are in close proximity to the construction area – Implement ILSM Matrix Column #8.
8. Fire safety features, including compartmentalization, structural and alarms are impaired - Implement ILSM Matrix Column #11, #13 and/or #14 as needed.

The Director of Health System Physical Plant is responsible for managing the Interim Life Safety Program for both Health System Physical Plant (HSPP) and Capital Construction & Renovation (CC&R) projects. The Director of HSPP maintains a current list of all areas where ILSM are in effect.

Inspections

The CC&R Construction Manager will be responsible for the interim life safety compliance for all applicable CC&R managed projects. Similarly, the HSPP Renovations Superintendent will be responsible for all HSPP managed projects. The Construction Manager or the Renovations Superintendent will fill out the interim life safety compliance matrix before the project commences and will ensure that the Fire Protection Inspector (FPI) certifies the interim life safety measures before construction starts.

The Construction Manager/Renovations Superintendent will be responsible for the day-to-day interim life safety measures and will annotate the interim life safety compliance matrix whenever the ILSM are changed. The FPI will certify the compliance monthly in conjunction with the Construction Manager or

Renovations Superintendent. Records will be maintained with the dates of all the inspections, issues identified, actions taken, and follow-up plans as necessary.

Construction identification signs must be placed so they are visible on the construction site and must include the project title and the project manager's name and telephone number.

Exception Reporting

Violation notices are submitted by the FPI to the Construction Manager for any life safety code violation identified during inspections or through other means; the construction manager then issues a notice of non-compliance to the contractor. A follow-up inspection is performed within the stated period, and resolution is documented. If the violation is not corrected within the specified time period, project continuation will be reconsidered. As a tool for monitoring program compliance and assuring quality improvement, exception reports will be submitted for all instances of non-compliance identified. This documentation will be submitted to HSPP, and quarterly summaries of identified problems/actions taken will be reported to the Fire Safety Work Group.

ILSM Matrix		Interim Life Safety Measures (LS 01.02.01, EP 2-15)											
Date: Project: Location (BLD#/Rm#): Project No/WO#: UVA PM: UVA CM: GC: GC Supervisor: User Contact: Submitted By: Approved By:		Check if Applicable or N/A											
		EP 2 - Notify emergency forces/initiate fire watch for impaired fire alarm detection/suppression systems											
		EP 3 - Ensure egress: Post signage to identify locations of alternative exits											
		EP 4 - Ensure egress: Inspect exits daily											
		EP 5 - Ensure operational life-safety systems: provide temporary but equivalent fire alarm & detection system											
		EP 6 - Provide additional fire-fighting equipment											
		EP 7 - Provide temporary construction barriers, smoke-tight, made of non (or limited) combustible materials											
		EP 8 - Increased hazard surveillance of buildings, grounds and equipment											
		EP 9 - Control flammable/combustible loading, e.g. storage, housekeeping and debris-removal practices											
		EP 10 - Provide additional training of personnel on the use of firefighting equipment											
		EP 11 - Conduct one additional fire drill per shift per quarter											
		EP 12 - Inspect and test temporary systems monthly											
		EP 13 - Conduct organizational training on life/fire safety building deficiencies, construction hazards, and ILSMs											
		EP 14 - Train personnel to compensate for impaired structural or compartmental fire safety features											
		EP 15 - Other ILSM not addressed in EP 2-14; provide documentation											
Existing Code Deficiencies 1) Patient/fire/smoke door latching problem 2) Lacking a code complying smoke barrier 3) Fire exit stairs discharge improperly 4) Excessive travel distance to an approved exit 5) Lack of two remote exits 6) Nonconforming bldg. construction type 7) Improperly protected vertical openings 8) Penetrations in fire or smoke barriers 9) Corridor walls do not extend to the structure 10) Hazardous areas not properly protected													
Construction Related Issues 11) Blocking off an approved exit 12) Rerouting of traffic to emergency room 13) Renovation of an unoccupied/occupied area 14) Replacing fire alarm system (out-of-service) 15) Installing sprinkler system (out-of-service) 16) Modifying smoke/fire barrier walls 17) Adding an addition to an existing structure 18) Evaluate risk of accidental sprinkler activations: shut down system during construction													
Maintenance and Testing 19) Taking a fire alarm system out-of-service >4 hrs. 20) Taking a sprinkler system out-of-service >10 hrs. 21) Disconnection of alarm devices													
**NOTES:													

Construction Risk Assessment		Facilities Impact Risk Assessment											
Date: Submitted by: Approved by:		Check if Applicable or N/A											
		No Risk-Not Applicable to this project											
		Low Risk-Low-Limited Risk of impact to this system											
		Medium Risk-Potential impacts likely; counter measures to be considered to lower risk and mitigate possible impact											
		High Risk-Assumes impact to affected system and carries significant risks as a result. Develop counter measures and formal plan with responsible parties to											
a) Air Quality b) Infection Control c) Utilities e) Noise f) Emergency Procedures													